

# Annual Cumulated Index

ACCESSION NOS. A69-10001 to A69-43818

of ILL. LIBRARY

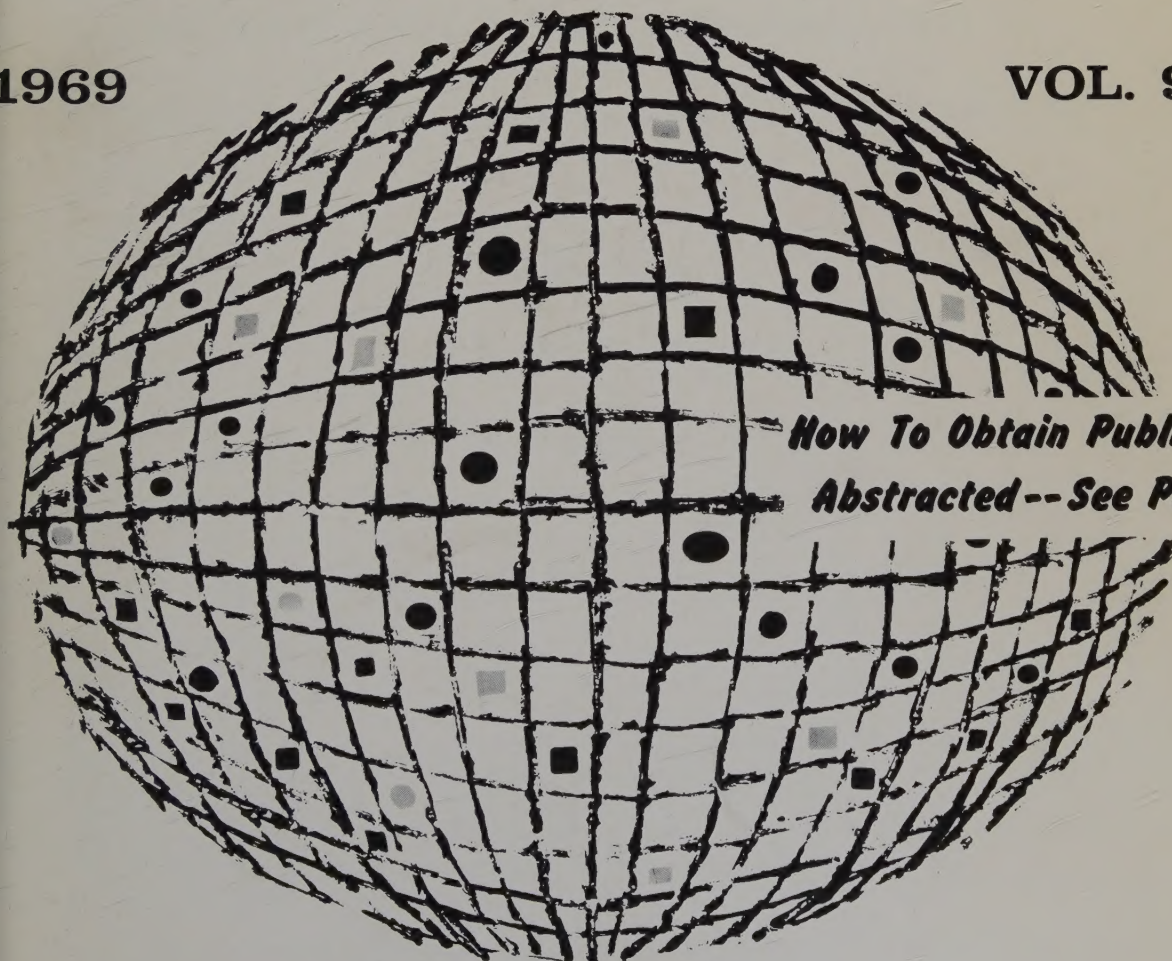
JAN 9 1970

CHICAGO CIRCLE

ART 3, PERSONAL AUTHOR, CONTRACT NUMBER, MEETING  
PER & REPORT NO., AND ACCESSION NUMBER INDEXES

1969

VOL. 9



*How To Obtain Publications  
Abstracted -- See Page IV*

PUBLISHED BY THE TECHNICAL INFORMATION SERVICE  
AMERICAN INSTITUTE OF AERONAUTICS AND ASTRONAUTICS





# INTERNATIONAL AEROSPACE ABSTRACTS

TL  
500  
I57  
vol. 9  
1969  
index  
pt. 3  
N/c

ANNUAL

CUMULATED

INDEX

PART 3

PERSONAL AUTHOR, CONTRACT NUMBER, MEETING

PAPER & REPORT NO., AND ACCESSION NUMBER INDEXES

VOLUME 9

JANUARY-DECEMBER

1969

ACCESSION NUMBERS A69-10001 to A69-43818

INTERNATIONAL AEROSPACE ABSTRACTS is prepared and published semimonthly (except March, June, September, and December, which have three issues) by the Technical Information Service, American Institute of Aeronautics and Astronautics, Inc., for the Institute and the National Aeronautics and Space Administration under Contract No. NSR 33-003-009. Editorial and Subscription Offices: 750 Third Avenue, New York, N. Y. 10017. Copyright © 1969 by the American Institute of Aeronautics and Astronautics, Inc.  
Telephone: 212 TN-7-8300 TWX: 212 867-7265

**SUBSCRIPTION INFORMATION.** Semimonthly issues: United States and Possessions, 1 year, \$54 postpaid; Foreign Countries, 1 year, \$68.25 postpaid. Cumulated Index Volumes: United States and Possessions, 1 year, \$30 postpaid; Foreign Countries, 1 year, \$35 postpaid. Second-class postage paid at Phillipsburg, N.J.

## CONTENTS

Pages

### PART 1

LIST OF PERIODICALS SCANNED

SUBJECT INDEX, A – L

### PART 2

SUBJECT INDEX, M – Z

### PART 3

INTRODUCTION ..... iii

HOW TO OBTAIN PUBLICATIONS ABSTRACTED ..... iv

PERSONAL AUTHOR INDEX ..... B1 – B885

CONTRACT NUMBER INDEX ..... C1 – C72

MEETING PAPER AND REPORT NO. INDEX ..... D1 – D31

ACCESSION NUMBER INDEX ..... E1 – E151

**STAFF, AIAA Administrator—Technical Information Programs**, Robert R. Dexter  
**STAFF, TECHNICAL INFORMATION SERVICE Director**, John J. Glennon • **Associate Director—Administrative**, Thomas J. Meskel • **Associate Director—Technical**, Irene W. Bogolubsky • **Manager—Information Systems**, William T. Morris, Jr. • **Chief Librarian**, Patricia M. Marshall

Sheridan Printing Company, Inc.  
Phillipsburg, N. J.



## INTRODUCTION

INTERNATIONAL AEROSPACE ABSTRACTS (IAA) is an abstracting and indexing service covering the world's published literature in the field of aeronautics and space science and technology. IAA is issued semimonthly, on the 1st and 15th of each month (except March, June, September, and December, which have three issues).

### Coverage of Published Literature

The following types of publications are covered in IAA:

- Periodicals (including government-sponsored journals) and books.
- Meeting papers and conference proceedings issued by professional societies and academic organizations.
- Translations of journals and journal articles.

### Coverage of Reports ("Unpublished" Literature)

Abstracts and indexes of report literature are issued in SCIENTIFIC AND TECHNICAL AEROSPACE REPORTS (STAR), which is published by the Scientific and Technical Information Division, National Aeronautics and Space Administration.

By special arrangement between NASA and the American Institute of Aeronautics and Astronautics, IAA is issued in coordination with the twice-monthly schedule of STAR, which appears on the 8th and 23rd of each month.

IAA and STAR both utilize identical subject categories and indexes, which are described below.

Thus the two services provide comprehensive access to the national and international unclassified report and published literature of current significance to aerospace science and technology.

### Arrangement of the Semimonthly Issues

IAA is arranged in two major sections:

- (1) Abstracts Section. This section contains complete bibliographic citations with informative abstracts, arranged by appropriate subject categories to facilitate scanning. The subject categories are numbered from 01 to 34, and the scope of each category is outlined in the Table of Contents and again at the beginning of each category in the Abstracts Section. Each abstract is prefixed by the IAA accession number.
- (2) Index Section. Five indexes are contained in this section: Subject, Personal Author, Contract Number, Meeting Paper and Report Number, and Accession Number. Each index is prefaced by explanatory notes to guide the user to the desired abstract.

### Cumulated Indexes

Cumulated indexes are prepared and issued promptly at the end of each quarter year, with the 4th quarterly being the Annual Index.

Each cumulated index contains the following sections: A—Subject Index, B—Personal Author Index, C—Contract Number Index, D—Meeting Paper and Report Number Index, and E—Accession Number Index.

### Indexing Vocabulary

The Preliminary Edition of the NASA THESAURUS (December 1967) (NASA SP-7030) is the authority for the indexing vocabulary that appears in the subject indexes to STAR and IAA. The NASA Thesaurus should be consulted for a total picture of the current indexing vocabulary and associated cross-reference structure. Copies of the NASA Thesaurus may be obtained from the Clearinghouse for Federal Scientific and Technical Information or the U.S. Government Printing Office at a price of \$8.50 for the three-volume set.

---

Information regarding SCIENTIFIC AND TECHNICAL AEROSPACE REPORTS and the availability of INTERNATIONAL AEROSPACE ABSTRACTS to organizations having contractual arrangements with NASA may be obtained from the following address:

National Aeronautics and Space Administration  
Scientific and Technical Information Division  
Attention: Code USI  
Washington, D.C. 20546



# how to obtain publications abstracted

Address all inquiries and requests to:

Technical Information Service  
American Institute of Aeronautics  
and Astronautics, Inc.  
750 Third Avenue, New York, N. Y. 10017

Telephone: 212 TN-7-8300  
TWX: 212 867-7265

All documents abstracted are available from the AIAA Technical Information Service as follows:

- Paper copies of accessions announced in IAA and of other published articles in the TIS library are available at \$3.00 per document up to a maximum of 20 pages. The charge for each additional page is \$0.25.
- Paper copies of accessions announced in *Scientific and Technical Aerospace Reports* (STAR) and of similar unpublished reports in the TIS library are available at the rate of \$0.25 per page, minimum order \$3.00.
- Microfiche of documents announced in IAA are available at the rate of \$0.50 per microfiche on demand. Documents available in this manner are identified by the symbol # following the accession number in the Abstracts Section and in the Meeting Paper and Report Number and the Accession Number Indexes.
- Minimum air-mail postage to foreign countries is \$1.00.
- A number of publications, because of their special characteristics, are available only for reference in the library.

**PLEASE REFER TO THE ACCESSION NUMBER WHEN  
REQUESTING PUBLICATIONS**

---

## CROSS REFERENCES

The subject index includes two types of cross references to aid the user of the index in locating the material being sought:

1. "USE" references (U) direct the user to alternate headings under which material on the subject will be found, for example

COLUMBIUM  
U NIOBIUM

2. "NARROWER TERM" references (NT) refer the user to more specific headings in the same subject area, for example

LUMINESCENCE  
NT ELECTROLUMINESCENCE



The title of the publication—not the Notation of Content—appears under each author listing. In the case of a foreign-language title, the English translation appears first. The accession number is located under and to the right of the title. It is preceded by numbers identifying the issue and page of *International Aerospace Abstracts* where the abstract is located.

To illustrate:

Issue Number	Page Number	Accession Number
01	p0006	A69-11016

A

AALDERS, B. G. M.

Use of the infrared camera for the solution of special problems in spaceflight technology /Ueber die Verwendung einer Infrarot-Kamera zur Loesung spezieller Probleme in der Raumfahrttechnik/.

08 p1315 A69-20455

AAMODT, R. E.

Nonlinear interactions of positive and negative energy waves.

01 p0133 A69-11212

AARON, H.

Construction practice for hot-mix bituminous pavements.

01 p0057 A69-11276

AARONS, J.

The spectra of selected radio events of March and July 1966.

01 p0069 A69-11121

Latitudinal movements in the auroral ionosphere as shown by scintillation measurements.

01 p0069 A69-11127

Electron content latitude dependence - March 1966 period.

01 p0146 A69-11128

Midlatitude nighttime total electron content behavior during magnetically disturbed periods.

03 p0426 A69-14030

The scintillation boundary.

07 p1125 A69-18846

Scintillation fading of VHF beacons on synchronous satellites.

09 p1457 A69-22461

A proposed index for measuring ionospheric scintillations.

16 p2752 A69-32106

Spectral considerations of microwave solar bursts.

24 p4372 A69-43616

AARSNES, K.

Measurement of medium-energy protons /Experiment S.71C/.

13 p2328 A69-27756

AARTS, J. F. M.

Emission cross sections of the first negative band

system of N sub 2 by electron impact.

05 p0795 A69-15617

ABAKIANTS, G. M.

Generation-recombination waves in semiconductors /Generatsionno-rekombinatsionnye volny v poluprovodnikakh/.

22 p3997 A69-41173

ABAKUMOV, G. A.

Ultraviolet lasers using organic-scintillator molecules.

13 p2271 A69-27657

ABAKUMOVA, I. A.

Obtaining a Chlorella biomass with an enhanced content of sulphur-containing amino acids and its nutritive value /Polucheniye biomassy Khlorelly s povyshennym soderzhaniem serusoderzhashchikh aminokislot i ee pishchevaia tsennost'/.  
13 p2216 A69-28620

ABARBANEL, S.

Development of viscous channel flow with suction.

14 p2429 A69-29015

An iterative finite-difference method for hyperbolic systems.

24 p4340 A69-43226

ABAS, S.

The effect of a parallel magnetic field on the stability of free boundary-layer type flows of low magnetic Reynolds number.

24 p4298 A69-42596

ABASOV, A. M.

The second one-dimensional nonideal boundary value problem of thermal contact /O vtoroi odnomennoi neideal'noi teplokontaktno-kraevoi zadache/.

15 p2718 A69-31066

ABBAS, M.

Propagation of hydromagnetic waves in current-carrying regions of the ionosphere and magnetosphere /parallel propagation/.

01 p0067 A69-10972

Propagation of hydromagnetic waves normal to the magnetic field in the presence of currents.

09 p1547 A69-21662

ABBATE, M. J.

Thermionic boundary conditions for two-dimensional thermal analysis of converters.

09 p1440 A69-21834

External-fuel thermionic reactors.

14 p2480 A69-29185

Comparison of methods for calculating radiative heat transfer.

14 p2539 A69-29223

ABBINK, H. C.

Silicon surface structure.

02 p0301 A69-12660

ABBITT, M. W., JR.

Rotational locks for near-symmetric satellites.

19 p3397 A69-35609

ABBOTT, D. D.

Lightweight large area solar arrays.

23 p4073 A69-42291

ABBOTT, D. E.

Investigation of a method for the general analysis of time dependent two-dimensional laminar boundary layers.

[ASME PAPER 68-FE-10] 05 p0748 A69-16076

Analytical prediction of the incompressible turbulent boundary layer with arbitrary pressure distribution.

[AIAA PAPER 69-397] 15 p2591 A69-30478

ABBOTT, K. M.

Design of optimal multivariable linear control systems.

11 p1861 A69-25663

ABBOTT, W. D.

With maraging steels, heat input is critical.

08 p1320 A69-20407

ABBOTT, W. R.

Flight failure analysis.

18 p3145 A69-34502

ABBUD, K. A.

A theory for base pressures in multi-nozzle rocket configurations.

[AIAA PAPER 69-570] 16 p2733 A69-32751

ABBY, D. G.

Photomultiplier reception of satellite beacon flashes.

17 p2919 A69-33083

Definition of the refraction and shimmer problem affecting geodetic observations of satellites.

18 p3104 A69-35202

ABDEL KARIM, A. I.

A theorem for the stability of general predictor-corrector methods for the solution of systems of differential equations.

01 p0105 A69-10807

A study of missile control by rudders during the propulsion period with special reference to lateral wind effect.

01 p0163 A69-11297

Sufficient conditions for the instability of numerical integration methods.

24 p4339 A69-42646

ABDEL-GAWAD, M.

The origin of meteorites and the constrained equilibrium condensation theory.

17 p3034 A69-33585

ABDELHAMID, A. N.

Mach disc and Riemann wave in underexpanded jet flows.

[AIAA PAPER 69-665] 17 p2954 A69-33460

Shock structure in transversely impinging jet flows.

[ASME PAPER 69-FLCS-41] 20 p3515 A69-37975

ABDILDIN, M.

Relation between gravitation and electromagnetism /K svyazi gravitatsii s elektromagnitizmom/.

09 p1540 A69-22134

ABDUL KALAM, A. P. J.

Nosecone ejection system with pyrotechnic devices used in Centaure rocket for RFMS experiment.

10 p1635 A69-23034

ABDUL-LATIF, A.

The feasibility of joining metal using a solar furnace.

16 p2793 A69-31818

ABDURAGIMOV, I. M.

Disaster in the Apollo spacecraft cabin and measures of increasing fire and explosion safety during space flights /O katastrofe v kabine kosmicheskogo korablia "Apollon" i merakh, povyshaiushchikh pozharo-i vzyryvobezopasnost' kosmicheskikh poletoy/.

07 p1071 A69-18970

On the catastrophe in the cabin of space ship "Apollo-1" and on improved measures for the prevention of fire and explosion during space flights.

20 p3483 A69-38218

ABDURAKHMANOV, A. KH.

Energy spectrum of slow atmospheric neutrons /Energeticheskii spektr medlennykh atmosferykh neitronov/.

10 p1758 A69-22831

ABDUSALIAMOVA, M. N.

Viscosity and density of thallium sulfide /TI sub 2 S / /Viazkost' i plotnost' sul'fida tallia /TI sub 2 S/ /.

04 p0643 A69-14998

ABDYBAEV, Z.

Stability of a system of two equations in a critical case /K ustoychivosti sistemy dvukh uravnenii v odnom kriticheskom sluchae/.

21 p3755 A69-39107

ABE, G.

An electronic tensile testing machine for automatic control of strain rate between the gage marks at elevated temperatures.

21 p3727 A69-39811

ABE, H.

A non-linear shell theory and its application to circular cylinders.

19 p3440 A69-36636



ABE, K.

ABE, K.

A numerical analysis of plane Couette flow of rarefied binary gas mixture. 22 p3931 A69-40778

ABE, T.

Crystallographic study of yield condition of polycrystalline metals. II - HCP metal. 01 p0094 A69-10304

Analysis of an up-converter using a varactor. 15 p2578 A69-30797

ABE, Y.

Experimental consideration on Griffith's crack in brittle material. 06 p1020 A69-17128

ABEL, G. C.

Engineering assessment and flight testing of aircraft systems. 13 p2201 A69-27539

ABEL, W. G.

Measurements of the afternoon radio aurora at 1295 MHz. 05 p0754 A69-16265

ABELL, C.

Operational aspects of the supersonic transport. 11 p2004 A69-24373

ABELMANN, W. H.

Impaired orthostatic tolerance after bed rest in patients with myocardial infarction. 10 p1648 A69-24189

Registration of intravascular pressure and sound by a fiberoptic catheter. 17 p2917 A69-34172

Increased tolerance of orthostatic stress in patients with heart disease. 19 p3258 A69-36374

ABEN, H.

Optical theory of the multilayer-reflection technique for three-dimensional photoelastic studies. 04 p0683 A69-15496

Axi-symmetric problems in photoelasticity. 08 p1412 A69-20259

ABEN, KH.

Reversibility principle in three-dimensional photoelasticity /Printsip obratimosti v trekhmernoi fotouprugosti/. 12 p2180 A69-26339

Principle of reversibility in three-dimensional photoelasticity /Printsip obratimosti v trekhmernoi fotouprugosti/. 14 p2535 A69-29359

ABERG, G.

A comparative study of some cardiovascular effects of sotalol /MJ 1999/ and propranolol. 23 p4080 A69-41403

ABERL, M.

Measurement of the modulation transfer function of the living human eye in reflected light /Zur Messung der Modulationsuebertragungsfunktion des lebenden menschlichen Auges im reflektierten Licht/. 22 p3884 A69-40888

ABERNETHY, R. B.

The ICRPG measurement uncertainty model. [AIAA PAPER 69-734] 16 p2846 A69-32781

ABERTH, W.

Differential scattering of Li super plus ions by He, N sub 2 and O sub 2 in the range 3-400 ev. 24 p4354 A69-43817

ABEY, A. E.

The change in work function of the /100/ surface of tungsten as O sub 2, N sub 2, CO sub 2, and H sub 2 are adsorbed. 09 p1521 A69-21338

ABGARIAN, K. A.

Stability of motion over a finite interval of time /Ob ustoyichivosti dvizheniya na konechnom promezhtutke vremeni/. 08 p1351 A69-20321

Stability of motion over a finite interval of time /Ob ustoyichivosti dvizheniya na konechnom promezhtutke vremeni/. 09 p1539 A69-21881

Canonical transformations of the equations of an unsteady control system /Kanonicheskie preobrazovaniya uravnenii nestatsionarnoi sistemy regulirovaniya/. 12 p2045 A69-25960

On the stability of motion within a finite interval of time. 17 p3005 A69-33314

ABHYANKAR, K. D.

Scattering of visible radiation around the spherical atmosphere of Venus. 07 p1213 A69-18609

ABIR, D.

Contributions to Mechanics. 20 p3623 A69-37580

ABLES, J. G.

Possible time variation of the radio emission from Sco X-1. 09 p1603 A69-22268

Fourier transform photography - A new method for X-ray astronomy. 09 p1502 A69-22768

ABLIN, A. N.

Stability of regenerative amplifiers during the simultaneous charge in reactive parameters and negative resistance. 04 p0577 A69-14778

Influence of reactive-parameter scatter on the frequency characteristics of regenerative amplifiers /O vliyani razbrosa reaktivnykh parametrov na chastotnye kharakteristiki regenerativnykh usilitel'/. 13 p2235 A69-28515

ABLOVA, M. S.

Electromechanical effect in cadmium sulfide /Ob elektromekhanicheskom effekte v sul'fide kadmia/. 21 p3781 A69-39072

ABOIAN, G. M.

Effect of the posture on the sensorimotor coordination of man /Vliyaniye pozy na sensorno-motornuyu koordinatsiyu cheloveka/. 20 p3470 A69-37246

ABOM, C.

Effects of polar cap absorption events on VLF transmissions. 18 p3103 A69-35185

ABOUDI, J.

Impulsive sound propagation in a fluid sphere of variable internal friction. 14 p2485 A69-29026

ABRAHAM-SHRAUNER, B.

Double-adiabatic, hydromagnetic equations for electrons with pressure gradients. 08 p1369 A69-20815

ABRAHAM, C. T.

Stochastic model for manufacturing cost estimating. 20 p3633 A69-36924

ABRAHAM, G. A.

The advancement of controls with modern gas turbines. 12 p2146 A69-25786

ABRAHAM, J. K.

Lattice parameters as a function of titanium in austenitic Fe-Ni-Ti alloys. 03 p0443 A69-13123

The transformation and structure of Fe-Ni-Ti alloys. 13 p2279 A69-27765

ABRAHAM, L. G.

Indirect atmospheric measurements utilizing Rake tropospheric scatter techniques. I - The Rake tropospheric scatter technique. 14 p2448 A69-29524

ABRAHAMSON, A. A.

Born-Mayer-type interatomic potential for neutral ground-state atoms with Z equals 2 to Z equals 105. 13 p2301 A69-27453

ABRAMCHUK, V. S.

Synthesis of linear systems on the basis of characteristics prescribed in a range of imaginary frequencies /Sintez liniinykh sistem za kharakteristikami, zadanimi v oblasti uivnykh chastot/. 06 p0899 A69-16829

ABRAMENKO, T. N.

Kinetic theory of heat conduction of gas mixtures at low temperatures. I /Kineticheskaya teoriya teploprovodnosti gazovykh smesey pri nizkikh temperaturakh. I/. 21 p3848 A69-38638

ABRAMENKOV, A. D.

Structure and phase composition of transition zones in titanium/stainless steel bimetal /Struktura i fazovyy sostav perekhodnykh zon bimetal' titan-nerzhavayushchaya stal'. 13 p2283 A69-28490

ABRAMI, A.

The solar activity in 1967 from optical and radio observations of the Trieste Astronomical Observatory. 16 p2858 A69-32206

ABRAMIAN, IU. A.

Statistical studies of the current-voltage characteristics of zinc-doped diodes /Statisticheskie issledovaniya vol't-ampernykh kharakteristik diodov s primes'yu tsinka/. 05 p0732 A69-16425

Investigation of the transient characteristics of diodes with a negative resistance /Issledovanie perekhodnykh kharakteristik diodov s otritsatel'nykh soprotivleniyem/. 10 p1662 A69-23157

ABRAMOV, A. A.

Self-focusing of ultrashort laser pulses. 24 p4328 A69-43068

ABRAMOV, L. A.

Magnetic field directed propagation of hydromagnetic waves through the lower layers of the ionosphere /O rasprostraneni gidromagnitnykh voln, napravlyayemykh magnitnym polem, skvoz' nizhnije sloi ionosfer/. 10 p1687 A69-23926

Propagation of low-frequency hydromagnetic waves, directed by the geomagnetic field, through a gyrotronic ionosphere /O rasprostraneni nizkochastotnykh gidromagnitnykh voln, napravlyayemykh geomagnitnym polem, skvoz' girotropnuu ionosferu/. 23 p4157 A69-41864

ABRAMOV, R. A.

Application of the invariance principle in gyro stabilizers /O primeneni printsiipa invariantnosti v girostabilizatorakh/. 04 p0597 A69-14603

ABRAMOV, V. A.

Radiation transfer in a plasma /O perenose izlucheniya v plazme/. 07 p1188 A69-18282

ABRAMOVA, G. M.

Radiobiological evidence on the importance of local protection of the astronaut. 08 p1263 A69-19939

ABRAMOVA, ZH. V.

Some properties of tellurium-doped silicon. 04 p0644 A69-15267

ABRAMOVICH, B. G.

Thermophysical characteristics of heat sensitive paints. 18 p3161 A69-34697

ABRAMOVICH, G. N.

Turbulent Jets of Air, Plasma, and Real Gas. 07 p1049 A69-18392

Turbulent submerged jets of real gases. 07 p1049 A69-18398

An investigation of the turbulent jets of different gases in a general stream. 13 p2200 A69-28501

ABRAMOVICH, IU. I.

Accuracy of the measurement of the initial phase of a coherently and discretely processed signal /Tochnost izmereniya nachal'noi fazy signala pri kogerentnoi diskretnoi obrabotke/. 15 p2574 A69-30130

Instrumental accuracy of a discrete phase meter /Instrumental'naia tochnost' diskretnogo fazovogo izmeritel'ia/. 15 p2574 A69-30139

ABRAMOVICH, K. G.

Aviation Forecasting of the Cloud Cover, High-Altitude Wind, and Turbulence /Prognostirovaniye dlia Aviat'skiy Oblachnosti, Vetra na Vysotakh i Turbulentnosti/. 14 p2473 A69-29734

ABRAMOVSKII, E. R.

Aerodynamic characteristics of blunted bodies of revolution in hypersonic flow at small angles of attack /Aerodinamicheskie kharakteristiki zatuplennykh tel vrashchayemiy pri giperzvukovom obtekanii s malymi ugami ataki/. 17 p2889 A69-33122

ABRAMOWITZ, I. A.

Evaluation of hologram imaging by ray tracing. 11 p1885 A69-24848

ABRAMOWITZ, S.

Time-resolved emission and absorption studies of exploding wire spectra. 01 p0118 A69-10664

Infrared matrix spectra of lithium fluoride. 02 p0205 A69-12465

ABRAMS, R. H., JR.

Periodic pulling and turbulence in a bounded plasma. 07 p1194 A69-19400



- ABRAMS, R. L.**  
Color and appearance properties of paint films.  
04 p0620 A69-14886  
Rotational relaxation rate of CO sub 2 laser levels.  
10 p1701 A69-22948  
Cross saturation of 10.6- $\mu$ m signals in SF sub 6.  
14 p2460 A69-29602
- ABRAMSON, H. N.**  
Hydroelasticity - A review of hydrofoil flutter.  
09 p1614 A69-21898
- ABRAMSON, N.**  
The holo-diagram - A practical device for making and evaluating holograms.  
24 p4317 A69-43760
- ABRIKOSOV, A. A.**  
Theory of semimetals /Teoriia Polumetallov/.  
09 p1556 A69-21615
- ABRIKOSOV, N. KH.**  
Semiconductor Compounds, their Production and Properties /Poluprovodnikovye Soedineniia, ikh Poluchenie i Svoistva/.  
01 p0137 A69-10353
- ABRIKOSOVA, I. I.**  
Breakdown of liquid and gaseous helium by a laser beam, and observation of stimulated Mandel'shtam-Brikouin scattering in liquid helium.  
16 p2796 A69-31799
- ABRIKOSOVA, M. A.**  
Change of orthostatic stability in athletes after 40-day hypokinesia.  
10 p1646 A69-23581
- ABRITSKA, M. IU.**  
Comparison of the characteristics of an ideal MHD induction converter during its pumping and generating modes of operation, taking into account the current conductivity of the channel walls /Svravnenie kharakteristik ideal'nogo induktsionnogo MGD-preobrazovatel'ia v nasosnom i generatsionnom rezhimakh s uchetom tokoprovodiashchikh stenok kanala/.  
14 p2393 A69-28887
- ABROSIMOV, A. T.**  
Study of the structure of extensive air showers at sea level with the modernized hodoscope system of the Moscow University installation.  
13 p2332 A69-28405  
Phenomenological characteristics of extensive air showers at sea level.  
13 p2332 A69-28406  
Observation of radio emission from extensive air showers with an array of half-wave antennas at the Moscow University installation.  
13 p2332 A69-28407  
Some aspects of the use of a half-wave antenna to investigate radio emission from extensive air showers.  
13 p2332 A69-28408
- ABROSIMOV, V. P.**  
Effect of moment stresses on the stress concentration during bending of plates with a hole of common type /O vlianii momentnykh napriazhenii na konsentratsiiu napriazhenii pri izgibe plit s otverstiem obshchego vida/.  
11 p1971 A69-24646
- ABSHAIEV, M. T.**  
Radar methods of measuring the microstructural characteristics of clouds /Radiolokatsionnye metody izmereniia mikrostrukturnykh kharakteristik oblakov/.  
16 p2807 A69-32268
- ABT, H. A.**  
Research possibilities with moderate dispersion.  
07 p1074 A69-19202  
Accuracies of radial-velocity measurements.  
24 p4386 A69-43347
- ABU-AKEEL, A. K.**  
Damping of high-frequency brake vibrations in aircraft landing gear.  
[AIAA PAPER 69-312] 11 p1823 A69-25370
- ABU-ROMIA, M. M.**  
Experimental determination of the radiative properties of high-temperature plasmas.  
[AIAA PAPER 69-601] 17 p3010 A69-33310
- ABUR-ROBB, M. F. K.**  
On the day and night reversal in NmF2 north-south asymmetry.  
06 p0918 A69-17384  
Combined world-wide neutral air wind and electrodynamic drift effect on the F2-layer.  
16 p2781 A69-32316
- ABZGILDIN, F. IU.**  
Cements for sticking mica-ceramics to titanium.  
05 p0786 A69-16799
- ACAMPORA, F. L.**  
High photovoltages in cadmium sulfide films.  
06 p0980 A69-17772
- ACCARDO, A. F.**  
Displacement of the torsion nodal line with the frequency of the flexural and torsional beam bending /Spostamento della linea dei nodi torsione con la frequenza del moto oscillatorio flessio-torsionale di una trave/.  
18 p3223 A69-34998
- ACCINELLI, J. B.**  
Composite materials development for cryogenic bearing retainers.  
[ASME PAPER 68-WA/LUB-10] 05 p0768 A69-16133
- ACEL, ST.**  
Aluminum-plastic sandwich products /Aluminium/Kunststoff-Verbundhalbzeug/.  
02 p0348 A69-12749
- ACHENBACH, D.**  
Influencing coarse grain formation in extruded sections of aluminum alloys /Beeinflussung der Grobkornbildung bei Pressprofilen aus Aluminiumlegierungen/.  
18 p3160 A69-35472
- ACHENBACH, E.**  
Distribution of local pressure and skin friction around a circular cylinder in cross-flow up to Re equals 5 x 10 super 6.  
05 p0744 A69-15716
- ACHENBACH, J. D.**  
On the vibrations of a laminated body.  
[ASME PAPER 68-WA/APM-10] 04 p0668 A69-14392  
Wave motion in solids with lamellar structuring.  
04 p0675 A69-14685  
Longitudinal force on an embedded filament.  
05 p0831 A69-15577  
Applications of theories of generalized Cosserat continua to the dynamics of composite materials.  
10 p1798 A69-23148  
An asymptotic method to analyze the vibration of an elastic layer.  
13 p2363 A69-28126
- ACHESON, R. J.**  
Thermal decomposition of ammonium perchlorate plus magnesium perchlorate mixtures.  
[AIAA PAPER 69-500] 16 p2833 A69-32661
- ACHILLES, D.**  
Pulse compression using Hermitian functions /Impulskompression mit Hermiteischen Funktionen/.  
16 p2755 A69-32585
- ACHITOFF, L.**  
Controlling ground traffic.  
11 p1913 A69-24267
- ACHTER, M. R.**  
Fatigue crack growth rates in Type 316 stainless steel at elevated temperature as a function of oxygen pressure.  
17 p2987 A69-33074  
The weakening effect of oxygen on nickel in creep rupture.  
23 p4176 A69-41504
- ACHYUTA RAO BAPAT, V.**  
Response spectrum of non-linear spring mass system subjected to transient disturbances.  
08 p1413 A69-20402
- ACKERBERG, R. C.**  
On an integral method for backward boundary layers.  
05 p0752 A69-16737
- ACKERMAN, M.**  
Absorption in the spectral range of the Schumann-Runge bands.  
06 p0960 A69-17090  
Measurement of solar UV radiation by stratospheric balloon /Mesure du rayonnement ultraviolet solaire par ballon stratospherique/.  
11 p1945 A69-24410
- ACKERMANN, J.**  
Time-optimal multivariable sampled-data control systems /Zeitoptimale Mehrfach-Abtastregelsysteme/.  
12 p2050 A69-26088  
Attitude control of spin-stabilized bodies /Ueber die Lageregelung von drallstabilisierten Koerpern/.  
18 p3208 A69-34775
- ACKERMANN, R. A.**  
Small cryogenic regenerator performance.  
[ASME PAPER 68-WA/PID-2] 05 p0706 A69-16163  
Small cryogenic regenerator performance.  
[ASME PAPER 68-WA/PID-2]
- ACKET, G. A.**  
Galvanomagnetic effects of hot electrons in gallium arsenide.  
01 p0139 A69-10819  
Reduced build-up of domains in sheet-type gallium-arsenide Gunn oscillators.  
02 p0215 A69-11933  
The effect of inhomogeneities on limited space-charge accumulation /L.S.A./ in n-type gallium arsenide.  
07 p1196 A69-18446  
Relaxation oscillations due to impact ionisation in epitaxial sheet-type Gunn oscillators.  
13 p2227 A69-27236
- ACKLES, K. N.**  
Effects of hyperbaric nitrogen and oxygen on auditory evoked responses in man.  
14 p2407 A69-29302
- ACLOQUE, P.**  
Dynamic study of the shape of the fracture front in the thickness of a toughened glass plate /Etude dynamique de la forme du front de fracture dans l'epaisseur d'une plaque de verre trempé/.  
12 p2118 A69-26194
- ACQUAVIVA, S. J.**  
Structural Ceramics and Testing of Brittle Materials, U.S. Army Materials and Mechanics Research Center, Seminar, Chicago, Ill., March 28-30, 1967, Proceedings.  
24 p4333 A69-43337
- ACQUISTA, N.**  
Infrared matrix spectra of lithium fluoride.  
02 p0205 A69-12465
- ACTON, E. W. V.**  
Thermal-balance test chambers and their application to spacecraft.  
13 p2241 A69-28079
- ACTON, O.**  
Errors in the determination of the efficiency of a gas turbine /Errori nella determinazione del rendimento di una turbina a gas/.  
14 p2509 A69-29509
- ADADUROV, G. A.**  
Parameters of Mach reflection in Plexiglas cylinders /Parametry makhovskogo otrazheniia v plek-siglasovykh tsilindrakh/.  
19 p3302 A69-36845
- ADAIR, A. M.**  
Influence of processing variables on the microstructure of extruded titanium 5Al-2.5Sn alloy.  
20 p3557 A69-36955  
Influence of extrusion variables on the microstructure of the titanium 5Al-2.5Sn alloy.  
[ASM PAPER W9-8.2] 21 p3729 A69-38660
- ADAM, J.**  
Study of the stability and the conditions of the propagation of low-frequency waves in a central-conductor configuration /Etude de la stabilite et des conditions de propagation des ondes de basse frequence dans une configuration a conducteur central/.  
11 p1931 A69-25362
- ADAM, L. H.**  
Atmospheric exposure of light metals.  
01 p0100 A69-11353
- ADAM, S. F.**  
A new precision automatic microwave measurement system.  
12 p2037 A69-26048
- ADAMCHUK, I. D.**  
Electronic simulation of the dynamic stability of an elastic beam-type structure /Elektronnoe modelirovanie dinamicheskoi ustoiichivosti uprugoi konstruktzii balochnogo tipa/.  
11 p1986 A69-25344
- ADAMCZYK, J.**  
Precipitation processes and their effect on the properties of Cr-Ni-W-Ti heat-resistant austenitic steel /Procesy wydzielenia i ich wplyw na wzascnosci stali austenitycznej zarowytzymalaj Cr-Ni-W-Ti/.  
17 p2984 A69-32833
- ADAMESKU, R. A.**  
Texture of cold-rolled alloyed titanium /Tekstura kholodnoi prokatki legirovannogo titana/.  
04 p0617 A69-15077
- ADAMOVA, A. S.**  
The zirconium corner of the phase diagram of the zirconium-molybdenum-niobium system /Tsrkonievyy ugol diagrammy sostoianiia sistemy tsirkonii-molibden-niobii/.  
02 p0264 A69-11856



## ADAMOVICH, B. A.

- Corrosion properties of zirconium-molybdenum-niobium alloys /Korroziionnye svoystva splavov tsirkonii-molibden-niobii/.  
02 p0264 A69-11857
- Effect of beryllium, cerium, vanadium, and titanium on the oxidizability of Nb-Mo-Cr alloys /Vliianie berillia, tseriiia, vanadiia i titana na okisliaemost' splavov Nb-Mo-Cr/.  
04 p0618 A69-15081
- Phase diagram and oxidizability of Nb-mo-Cr alloys /Diagramma sostoiianiia i okisliaemost' splavov Nb-Mo-Cr/.  
18 p3157 A69-35248
- ADAMOVICH, B. A.**  
Life in the spacecraft and planetary station.  
01 p0020 A69-11075
- Man as the main component of the closed ecological system of the spacecraft or planetary station.  
01 p0020 A69-11076
- Mathematical modeling of temperature and humidity processes in sections of sealed spaceship cabins.  
02 p0200 A69-11489
- Biotechnological problems concerning the habitability of spacecraft and planetary stations /Biologotekhnicheskie voprosy obitaemosti kosmicheskikh korablei i planetnykh stantsii/.  
[UN PAPER 68-95778] 06 p0879 A69-17040
- A year-long medical-technological experiment in a ground-based life-support system facility /Godovoi mediko-tehnicheskii eksperiment v nazemnom komplekse sistem zhizneobespecheniia/.  
13 p2216 A69-28612
- Synthetic monosaccharides for nutrition of man in space.  
15 p2557 A69-31471
- ADAMOVICH, V. K.**  
Plasticity of the alloy E1929 /Plastichnost' splava E1929/.  
13 p2283 A69-28489
- ADAMS, A. L.**  
The emerging composites.  
20 p3565 A69-37291
- ADAMS, A. T.**  
A highly reliable multi-channel microwave amplifier.  
09 p1466 A69-22446
- ADAMS, A., JR.**  
Nonuniform emission characteristics of electron-beam-pumped dislocation-free GaAs lasers.  
22 p3963 A69-40565
- ADAMS, C.**  
Nondestructive testing of brazed rocket engine components.  
10 p1699 A69-23054
- ADAMS, C. J.**  
Nondestructive testing of brazed rocket engine components.  
01 p0085 A69-10534
- ADAMS, D. F.**  
Axial loading of a unidirectional composite - Anisotropic filaments.  
07 p1170 A69-18724
- The influence of random filament packing on the transverse stiffness of unidirectional composites.  
20 p3626 A69-37758
- ADAMS, D. J.**  
A sky-scan for discrete sources of gamma-rays in the energy region 240 to 1000 kev.  
11 p1946 A69-24593
- Rocket observations of Virgo XR-1.  
15 p2701 A69-31535
- ADAMS, D. K.**  
Wideband multiplexers using directional filters.  
15 p2581 A69-31524
- ADAMS, D. M.**  
A realistic measure of combustion efficiency.  
23 p4239 A69-41919
- ADAMS, E.**  
Hydrodynamic stability and entropy production /Hydrodynamische Stabilitaet und Entropieproduktion/.  
10 p1808 A69-22892
- Application of ablation techniques to aerodynamic heat shielding /Anwendungen der Ablationstechnik zum aerodynamischen Waermeschutz/.  
12 p2011 A69-25854
- ADAMS, G. W.**  
Riometer measurements, solar proton intensities and radiation dose rates.  
16 p2850 A69-32321

- ADAMS, H. W.**  
Reliability and operational economics of the next decade of jet transports.  
[AIAA PAPER 68-207] 01 p0011 A69-11022
- ADAMS, J. A. S.**  
The radioactivity of the Ivory Coast tektites and the formation of the Bosumtwi Crater /Ghana/.  
23 p4210 A69-41347
- ADAMS, J. B.**  
Progress towards a nuclear fusion reactor.  
08 p1361 A69-20124
- Spectral reflectivity of Mars.  
09 p1587 A69-21308
- Strategy for scientific exploration of the terrestrial planets.  
22 p4022 A69-40449
- Mars - Interpretation of spectral reflectivity of light and dark regions.  
23 p4209 A69-41319
- ADAMS, J. C.**  
Effects of chemical nonequilibrium, mass transfer, and viscous interaction on spherically blunted cones at hypersonic conditions.  
[AIAA PAPER 69-168] 06 p0862 A69-18047
- ADAMS, J. C., JR.**  
Thin viscous shock layer analysis of blunt body stagnation-point air ionization.  
23 p4060 A69-41917
- ADAMS, J. D., JR.**  
Mission analysis for electrically propelled interplanetary spacecraft.  
09 p1585 A69-21210
- The evolution of eccentric satellite orbits.  
[AIAA PAPER 69-928] 21 p3808 A69-39357
- ADAMS, J. M.**  
Light extinction photometer for measurement of particle sizes in polydispersions.  
03 p0428 A69-13110
- Apparent optical absorption index of molten beryllium oxide.  
08 p1351 A69-20149
- ADAMS, M. C.**  
The aerospace stimulus to technological advance.  
[UN PAPER 68-95321] 01 p0178 A69-10467
- ADAMS, M. J.**  
Theoretical effects of exponential band tails on the properties of the injection laser.  
22 p3959 A69-40012
- ADAMS, N. J. I.**  
Techniques for the recording and measurement of crack growth during fatigue and fracture toughness testing.  
15 p2713 A69-31109
- ADAMS, R. E.**  
Study of stress corrosion cracking of commercial titanium alloys.  
19 p3353 A69-36908
- ADAMS, R. F.**  
Temperature sensitivity of frequency of integrated oscillators.  
07 p1103 A69-48882
- ADAMS, R. J.**  
Improved North Atlantic air navigation using an aeronautical satellite.  
03 p0464 A69-13237
- ADAMS, R. M.**  
Electric-field disturbances near the human body.  
23 p4101 A69-41449
- ADAMS, R. O.**  
Adsorption of nitrogen, hydrogen, oxygen, and carbon monoxide on a beryllium film.  
13 p2322 A69-28017
- ADAMS, W. M.**  
Seismic refraction study of the internal structure of a volcanic cinder cone.  
02 p0236 A69-11465
- ADAMSKY, R. F.**  
Effect of oxygen on the formation of germanium films.  
24 p4361 A69-43345
- ADAMSON, T. C.**  
Solutions for supersonic rotational flow around a corner using a new co-ordinate system.  
05 p0697 A69-15722
- ADARKAR, D. B.**  
The "fountain effect" and VTOL exhaust ingestion.  
[AIAA PAPER 68-79] 12 p2012 A69-26761

## ADATI, K.

- Thermalization of the kinetic energy of a plasma flow by a magnetic mirror field in BSG-I experiments.  
02 p0289 A69-12176
- ADCOCK, C.**  
Theoretical analysis of extensive air showers. IV - Muon showers deep underground.  
23 p4207 A69-42497
- ADELMAN, H. M.**  
A geometrically exact finite element for thin shells of revolution.  
[AIAA PAPER 69-56] 06 p1029 A69-18193
- ADENSTEDT, R. K.**  
Weather regimes in stochastic meteorological models.  
18 p3166 A69-34822
- ADEY, W. R.**  
Simian EEG activity related to problem solving during a simulated space flight.  
17 p2910 A69-33749
- EEG monitoring during the treatment of decompression illness /"bends"/.  
19 p3261 A69-36268
- Combined telephone and radiotelemetry of the EEG.  
21 p3664 A69-38978
- Central nervous, cardiovascular and metabolic data of a Macaca nemestrina during a 30-day experiment.  
24 p4260 A69-42703
- ADGIE, R. L.**  
On the optical identification of 3C 230.  
12 p2173 A69-27171
- ADIKS, T. G.**  
Molecular parameters of the 0.7620 mu absorption band of O sub 2 and calculations of the transmission function on their basis /O molekuliarnykh parametrokh polosy pogloshcheniia O sub 2 0,7620 mkm i raschete po nim funktsii propuskaniia/.  
03 p0458 A69-13272
- Molecular parameters of the O sub 2 absorption band at 0.7620 mu and their use in calculating the transmission function.  
14 p2487 A69-28780
- ADIROVICH, E. I.**  
Photoelectric phenomena in thin-film diodes with a CdS-CdTe heterojunction /Fotoelektricheskie iavleniia v plenochnykh diodakh s geteroperekhodom CdS-CdTe/.  
13 p2230 A69-27882
- ADITYA, P. K.**  
The flux of primary helium nuclei near Hyderabad during 1965.  
06 p0988 A69-17275
- Rigidity spectrum of cosmic ray helium nuclei greater than 12 bv.  
06 p0988 A69-17276
- Flux and spectrum of primary hydrogen nuclei near geomagnetic equator.  
22 p4005 A69-40520
- ADKHAMOV, A. A.**  
Investigation of the dependence of the viscosity of simple fluids on the density /K issledovaniuu zavisimosti viazkosti prostykh zhidkostei ot plotnosti/.  
13 p2299 A69-28036
- ADKINS, C. J.**  
Equilibrium Thermodynamics.  
18 p3229 A69-34533
- ADKINS, J. W.**  
Electrophysiological correlates of visual perceptual masking in monkeys.  
22 p3876 A69-40265
- ADLER, A.**  
Electron beam radiation curing of liquid mercaptan terminated butadiene-acrylonitrile copolymers.  
09 p1512 A69-22368
- ADLER, A. J.**  
Wireless temperature measurement with radio telemetry.  
15 p2607 A69-30156
- ADLER, D.**  
The amorphous threat.  
23 p4198 A69-41560
- ADLER, I.**  
An integrated experiment for compositional analysis from an orbiter.  
[AAS PAPER 68-197] 02 p0312 A69-11475
- Some parameters affecting Auger and photoelectron spectroscopy as an analytical technique.  
07 p1075 A69-19775



- ADLER, J.**  
Thermal boundary layer on a hot gas bubble in a time-varying chemically reactive stream.  
01 p0058 A69-10162  
Thermal stability of a hot inert gas bubble in a cool reactive liquid.  
11 p1998 A69-24475
- ADLER, J. E. M.**  
Circularity of lunar craters.  
13 p2344 A69-27645  
Behavior of water in vacuum - Implications for "lunar rivers."  
14 p2485 A69-28873
- ADLER, R. J.**  
Computing polynomial resultants - Bezout's determinant vs. Collins' reduced P.R.S. algorithm.  
06 p0892 A69-17884  
Polyurethane protective coatings for radome covers.  
24 p4338 A69-43456
- ADLER, R. P. I.**  
Macrostructural integrity of vapor-deposited boron and silicon carbide filament.  
18 p3160 A69-34266
- ADLON, G. L.**  
Effects of simulated Mars dust erosion environment on thermal control coatings.  
[AIAA PAPER 69-1023]  
22 p3923 A69-40393
- ADMIRAAL, J.**  
Significance of substrate inhibition of dehydrogenases.  
01 p0015 A69-10931  
The subunits of dogfish M sub 4 lactic dehydrogenase.  
24 p4280 A69-43051
- ADORJAN, A. S.**  
Temperature distribution in shadowed lunar craters.  
[AIAA PAPER 69-595]  
17 p3033 A69-33291
- ADRIAN, F. J.**  
ESR spectrum of Ho sub 2 in solutions of hydrogen peroxide in water at 77 deg K.  
01 p0024 A69-10683
- ADRIANOVA, I. I.**  
Broadband intrasensor SHF modulation of a He-Ne laser /Shirokopolosnaia vnutrizonatonnaia SVCh moduliatsiia He-Ne-lazera/.  
17 p2981 A69-33112
- ADSIT, N. R.**  
Temperature effects on fracture.  
17 p2990 A69-33567  
Fracture toughness of aluminum-boron composites.  
24 p4335 A69-43451
- ADVANI, S.**  
Large amplitude axisymmetric transverse vibrations of spinning membrane disks.  
15 p2704 A69-30303
- ADVANI, S. H.**  
Non-linear transverse vibrations and waves in spinning membrane discs.  
19 p3440 A69-36637
- AEBISCHER, J. F.**  
Interatomic potential model for ion-atom systems including a charge-exchange contribution.  
16 p2815 A69-32464
- AERTS, E.**  
Aeronomical phenomena associated with the Apollo 8 lunar flight /Les phenomenes aeronomiques associes au vol lunaire d'Apollo 8/.  
11 p1957 A69-24411
- AFANASENKOV, A. N.**  
Determination of the temperatures of organic substances in shock waves /Opredelenie temperatur organicheskikh veshchestv v udarnykh volnakh/.  
02 p0230 A69-11979  
Determination of the temperature of organic substances in shock waves.  
15 p2561 A69-30264
- AFANASEV, A. A.**  
Determination of the economic effectiveness of commercial transport aircraft designs /Opredelenie ekonomicheskoi effektivnosti transportnykh grazhdanskikh samoletov pri proektirovani/.  
21 p3855 A69-38873
- AFANASEV, A. IU.**  
Continuity of optimal control of a nonlinear plant /O nepreeryvnosti optimal'nogo upravleniia nelineinym ob'ektom/.  
21 p3686 A69-38884
- AFANASEV, IU. V.**  
Magnetometer instruments of Luna-10 and Venera-4 space stations.  
15 p2610 A69-30752  
Study of gasdynamic processes occurring during the vaporization of a solid material under the action of laser emission /Issledovanie gazodinamicheskikh protsessov, vznikaiushchikh pri isparenii tverdogo veshchestva pod deistviem izlucheniia lazera/.  
21 p3740 A69-39551
- AFANASEV, M. I.**  
Study of the electrical conductivity of the plasma in coaxial-type MHD generator models /Issledovanie elektroprovodnosti plazmy v modeliakh MGD-generatorov koaksial'nogo tipa/.  
10 p1735 A69-23463
- AFANASEV, N. N.**  
Successive approximation techniques for solving problems in optimum control theory /O metodakh posledovatel'nykh priblizhenii resheniia zadach teorii optimal'nogo upravleniia/.  
11 p1908 A69-24771  
A problem of optimum cooling of a massive body /Ob odnoi zadache optimal'nogo okhlazhdeniia massivnogo tela/.  
11 p1976 A69-24772
- AFANASEV, V. F.**  
Statistical method of monitoring parameter homogeneity in semiconductor materials /Statisticheskii metod kontrolia odnorodnosti parametrov poluprovodnikovykh materialov/.  
04 p0642 A69-14856  
Statistical method of checking the homogeneity of the parameters of semiconductor materials.  
15 p2667 A69-30248
- AFANASEVA, L. M.**  
Supercritical bending of thermoelastic uniformly loaded circular plates /Zakriticheskii izgbg termoprupkikh ravnomerno nagruzhennykh kruglykh plastin/.  
19 p3434 A69-35829
- AFANASEVA, V. I.**  
Families of geomagnetic storms over the period from 1957 to 1964. I - Two velocity regimes of solar corpuscular streams during various years of the solar cycle /Semeistva geomagnitnykh bur' za 1957-1964 gg. I - Dva rezhima skorosti solnechnykh korpuskuliarnykh potokov v raznye gody solnechnogo tsikla/.  
20 p3587 A69-37036  
Families of geomagnetic storms in the period from 1957 to 1964. II - 27-day recurrence of geomagnetic storms with sudden and gradual onsets /Semeistva geomagnitnykh bur' za 1957-1964 gg. II - 27-dnevnaia povtoriaemost' geomagnitnykh bur' s vnezapnymi i postepennymi nachalami/.  
23 p4156 A69-41849
- AFANASIEV, E. F.**  
On some examples of media with microstructure of continuous particles.  
19 p3446 A69-36833
- AFANASVEV, IU. V.**  
The magnetometric equipment on Luna 10 and Venera 4 space stations /Magnitometricheskaya apparatura kosmicheskikh stantsii "Luna-10," "Venera-4"/.  
01 p0080 A69-10582
- AFASHAGOV, M. S.**  
Internal waves in an inhomogeneous atmosphere /O vnutrennikh volnakh v neodnorodnoi atmosfere/.  
18 p3167 A69-35338
- AFFELD, K.**  
The vibrating camera - A photographic method for measuring velocity /Die vibrierende Kamera - Ein photographisches Verfahren zur Geschwindigkeitmessung/.  
13 p2261 A69-27913
- AFFLECK, W. S.**  
The controlling role of cool flames in two-stage ignition.  
11 p1998 A69-24479
- AFFOLTER, H. R.**  
On the electrojet in South America.  
02 p0246 A69-12771
- AFONINA, R. G.**  
The form of the equivalent current system of polar geomagnetic disturbances /O forme ekvivalentnoi tokovoi sistemy poliarnykh geomagnitnykh vozmushchenii/.  
10 p1688 A69-23937  
Boundary of the captured electrons with E greater than or equal to 280 keV and the position of current electrojets in the ionosphere /Granitsa zakhvachen-
- nykh elektronov s E greater than or equal to 280 keV i polozhenie takovykh elektrostrii v ionosfere/.  
13 p2327 A69-27700  
Magnetic activity at high latitudes in the Northern Hemisphere during the solar cycle maximum and minimum /Magnitnaia aktivnost' v vysokikh shirotakh severnogo polushariia v period maksimuma i minimuma solnechnogo tsikla/.  
17 p2965 A69-33966
- AFRAIMOVICH, E. L.**  
Certain problems of studying the ionosphere with the aid of the phase method /Nekotorye voprosy issledovaniia ionosfery s pomoshch'iu fazovogo metoda/.  
02 p0237 A69-11668  
Statistical characteristics of continuous short-wave radio signals at frequencies above the MUF.  
03 p0394 A69-13522  
Device for investigating frequency correlation.  
06 p0897 A69-17740  
Determination of ionospheric plasma density from phase-frequency characteristics.  
12 p2070 A69-26685  
An automatic data processing system for ionospheric investigations /Sistema avtomaticheskoi obrabotki dannykh pri issledovanii ionosfery/.  
13 p2225 A69-27610  
Some problems in the investigation of the ionosphere by the phase method.  
13 p2257 A69-28699  
Radio pulse compression as a method of investigating the ionosphere /Shtatie radioimpul'sa kak metod issledovaniia ionosfery/.  
21 p3674 A69-39082
- AFRICANO, R. C.**  
Enhancing the Saturn V translunar payload capability.  
[AIAA PAPER 69-451]  
16 p2839 A69-32669
- AFROSIMOV, V. V.**  
Investigation, by the coincidence method, of the elementary processes involved in charged-state variations during an interaction between protons and inert gas atoms /Issledovanie metodom sovpadenii elementarnykh protsessov izmeneniia zariadovyykh sostoianii pri vzaimodeistvii protonov s atomami inertnykh gazov/.  
12 p2133 A69-26543  
Elementary processes involved in the change in the charge states during interactions between protons and hydrogen molecules /Elementarnye protsessy izmeneniia zariadovyykh sostoianii pri vzaimodeistvii protonov s molekulami vodoroda/.  
15 p2655 A69-30963
- AGABABOV, S. G.**  
Effect of the roughness of the surface of a solid body on its radiation properties and methods for their experimental determination.  
02 p0350 A69-11575
- AGABEKIAN, A. S.**  
Energy exchange in uranyl-phosphate liquids and glasses /Peredacha energii v uranil-fosfatnykh zhidkostiakh i steklakh/.  
14 p2485 A69-29034
- AGADZHANIAN, N. A.**  
Correlation of changes in EEG and food-procuring reflex of rabbits during increasing hypoxia.  
02 p0197 A69-11492  
Influence of high oxygen concentrations on animal organisms /Vliianie povysennykh kontsentratsii kisloroda na organizm zhivotnykh/.  
05 p0709 A69-16512  
Influence of high oxygen concentration on the conditioned reflex activity and biological activity of certain cortical areas and subcortical formations of rabbits /Vliianie vysokikh kontsentratsii kisloroda na uslovnorefleksionnuu deiatel'nost' i bioelektricheskuiu aktivnost' nekotorykh oblastei kory i podkorokovykh obrazovaniu krol'kov/.  
07 p1065 A69-18976  
The effect of high oxygen concentrations on the animal organism.  
08 p1262 A69-19831  
Influence of prolonged hypokinesia on the altitude tolerance of white rats.  
08 p1262 A69-19929  
Influence of high-altitude mountain acclimatization on the tolerance of the organism to environmental effects /Vliianie vysokogornoi akklimatizatsii na ustoiichivost' organizma k vozdeistviu faktorov vneshnei sredy/.  
13 p2212 A69-28623  
Phagocytic activity and certain characteristics of the carbohydrate metabolism in neutrophils of men exposed to an atmosphere with increased oxygen content /Fagotsitarnaia aktivnost' i nekotorye pokazateli



- uglevodnogo obmena neitrofilov u liudei, nakhodivshikhsia v atmosfere s povyshennym soderzhaniiem kisloroda./ 17 p2907 A69-32942
- Effects of high oxygen concentrations on animals. 18 p3095 A69-34731
- Effect of high oxygen concentrations on conditioned reflexes and bioelectrical activity of certain areas of the cortex and subcortical formations of rabbits. 20 p3479 A69-38224
- AGAFITEI, A.**
- Laser radiation in a hollow cathode glow discharge /Laser in descarcarea luminescenta cu catod tubular/. 09 p1519 A69-22245
- AGAFONNIKOV, V. F.**
- Influence of anisotropic pressure on the parameters of silicon diodes /Vliianie anizotropnogo davlennia na parametry kremnievykh diodov/. 02 p0223 A69-12839
- AGAMALIAN, S. G.**
- The character of crack propagation during fatigue failure of polymethyl methacrylate. 09 p1529 A69-21854
- AGANINA, M. U.**
- Spectral inhomogeneities of the lunar surface in the mid-ultraviolet according to data of the Zond-3 automatic interplanetary station /Spektral'nye neodnorodnosti lunnoi poverkhnosti v srednei ul'trafioletovoi oblasti po dannym AMS "Zond-3"/. 12 p2154 A69-25817
- AGAR, J.**
- Frequency modulating transducers. 22 p3946 A69-40309
- AGARBICEANU, I.**
- Laser radiation in a hollow cathode glow discharge /Laser in descarcarea luminescenta cu catod tubular/. 09 p1519 A69-22245
- AGARKOV, G. D.**
- Some problems associated with the improvement of the production technology and increasing the quality of titanium alloy blanks /Nekotorye voprosy sovershenstvovaniia tekhnologii proizvodstva i povysheniia kachestva polufabrikatov iz titanovykh splavov/. 07 p1161 A69-18765
- AGARWAL, G. S.**
- Master equations in phase-space formulation of quantum optics. 15 p2633 A69-30307
- AGARWAL, U.**
- Numerical investigation of unsteady laminar incompressible boundary layer flows with cylindrical symmetry. [ASME PAPER 69-FE-47] 20 p3517 A69-37997
- AGASANDIAN, G. A.**
- Certain problems of the theory of automata with a variable structure /Nekotorye voprosy teorii avtomatov s peremennoi strukturoi/. 13 p2239 A69-28553
- AGEEV, N. V.**
- Physicochemical Studies of Heat-Resistant Alloys /Fiziko-khimicheskie issledovaniia zharoprochnykh splavov/. 09 p1524 A69-22135
- Texture of acicular crystals and the crystallographic orientation of dendrites in molybdenum ingots /Tekstura stobchatykh kristallov i kristallograficheskaiia orientirovka dendritov v slitkakh molibdena/. 11 p1903 A69-24538
- Superconductivity of alloys of the system Nb sub 3 Al-Nb sub 3 Ge. 13 p2316 A69-27659
- Strengthening of nickel solid solutions during deformation /Uprochnenie tverdykh rastvorov nikelia pri deformatsii/. 18 p3157 A69-35246
- Elastic properties of a titanium beta-alloy /IVT1/ /Uprugie svoistva beta-splava titana /IVT1/. 22 p3969 A69-40072
- AGEEV, V. A.**
- Spatiotemporal distortions of a signal in the case of multiple scattering /K voprosu o prostranstvenno-vremennykh iskazheniiakh signala pri mnogokratnom rasseianii/. 22 p3899 A69-40247
- AGEEV, ZH. S.**
- Automatic optimization of space vehicle flight under maximum L/D ratio conditions /Avtomaticheskaiia optimizatsiia poleta kosmicheskogo apparata na rezhime maksimal'nogo aerodinamicheskogo kachestva/. 05 p0830 A69-16045
- Automatic optimization of the flight of a space vehicle for a regime corresponding to maximum aerodynamic performance. 20 p3618 A69-37954
- AGESHIN, P. N.**
- The proton flares on 7 July, 2 September 1966, and 28 January 1967. 10 p1767 A69-23764
- Proton flares of July 7 and September 2, 1966, and January 28, 1967 /Protonnye vspyshki 7 iul'ia, 2 sentiabria 1966 g. i 28 ianvaria 1967 g./ 20 p3587 A69-37045
- AGGARWAL, S.**
- Ionospheric effect of the first large active region of the sun in the current cycle /March 21-25, 1966/. 03 p0512 A69-13517
- AGGARWAL, A. K.**
- Nonlinear demodulation of an amplitude modulated wave in a plasma - Elementary approach. 04 p0559 A69-15210
- AGGARWAL, G. K.**
- Sampled-data multichannel telemetry using pseudorandom sequences. 12 p2028 A69-25925
- AGGARWAL, H. R.**
- The effect of couple-stresses on the diffraction of plane elastic waves by cylindrical discontinuities. 13 p2369 A69-28351
- AGGARWAL, J. K.**
- On the convergence of an improper integral evaluated along the solution of a differential equation. 05 p0788 A69-16481
- Some remarks on the stability of time-varying systems. 11 p1861 A69-25452
- Sensitivity of linear control systems to large parameter variations. 21 p3685 A69-38726
- AGGARWAL, M.**
- Hydromagnetic stability of a spiral arm embedded in a gravitating medium. 13 p2346 A69-27705
- Contraststreaming instability in gravitating fluids with thermal effects. 24 p4388 A69-43638
- AGGARWALA, B. D.**
- Radiant heating of a solid spherical satellite. 16 p2877 A69-31922
- On limiting Nusselt numbers from membrane analogy for combined free and forced convection through vertical ducts. 21 p3851 A69-38974
- Temperature distribution and curvature produced in long solid cylinders in space. 22 p4043 A69-40546
- AGGSON, T. L.**
- Probe measurements of electric fields in space. 21 p3710 A69-38508
- AGID, R.**
- Effects of corporeal temperature on glucose metabolism in a homeotherm, the rat, and a hibernator, the garden dormouse. 10 p1642 A69-23118
- AGLAMAZOV, V. A.**
- Investigation of the spectrum of ionization bursts produced by the penetrating component of extensive air showers. 13 p2332 A69-28403
- AGNESE, A.**
- Numerical limitations on the cosmological constant and on the deceleration parameter in a closed radiation-type universe. 15 p2700 A69-31496
- Use of the azimuthal distribution for the analysis of cosmic-ray jets. 16 p2849 A69-32045
- Transverse momentum of particles in jets and determination of fireball parameters in accelerators. 19 p3396 A69-36644
- On the cosmological constant in a closed universe. 22 p4029 A69-40757
- AGNEW, J. T.**
- Flame velocities of tetrafluoroethylene-oxygen mixtures. 11 p1940 A69-24485
- AGOSTINI, P.**
- Multiphoton ionization of hydrogen and rare gases /Ionisation multiphotonique de l'hydrogene et des gaz rares/. 02 p0283 A69-11701
- AGRAWAL, J. C.**
- Electrical end losses in liquid-metal MHD generators with variable conductivity. 13 p2206 A69-27493
- AGRAWAL, P. C.**
- Spark chambers for study of cosmic rays at balloon altitudes. 06 p0924 A69-17285
- Proposed experiments to measure the spectra and time variation of X-ray sources. 06 p0992 A69-17312
- AGRAWALA, A. K.**
- On pattern classification algorithms - Introduction and survey. 05 p0725 A69-16571
- On pattern classification algorithms - Introduction and survey. 11 p1843 A69-25445
- AGRE, A. L.**
- Possibility of Chlorella cultivation of solutions with mineralized human wastes. 02 p0200 A69-11511
- AGREST, E. M.**
- A quasi-one-dimensional two-layer model for calculating nozzle flows of gas mixtures containing foreign particles /Dvustoinaia kvaziodnomernaia model' dlia rascheta tekheniia smesi gaza s inorodnymi chastitsami v soplakh/. 19 p3298 A69-36389
- AGRINIER, B.**
- Gamma rays and high-energy electrons in cosmic radiation /Rayons gamma et electrons de grande energie dans le rayonnement cosmique/. 05 p0817 A69-16712
- East-west asymmetry and charge sign ratio of primary cosmic-ray electrons at 8.3 Gv rigidity cut-off. 15 p2678 A69-31497
- AGRIOS, J. P.**
- A 500 kw X-band air-cooled ferrite latching switch. 13 p2229 A69-27674
- AGU, M.**
- Radiation fields from an electrical dipole moving in a compressible isotropic plasma. 23 p4114 A69-41359
- AGUER, J.**
- Characteristics and developments of the new generations of subsonic jet engines /Caracteristiques et developpement des reacteurs subsoniques des nouvelles generations/. 24 p4363 A69-42569
- AGUILAR, M. L.**
- The spectrum of HR 3817. 12 p2172 A69-27160
- AGY, V.**
- Doppler shifts on high-frequency ground backscatter. 05 p0755 A69-16269
- AHARRAH, R. C.**
- Approach flying qualities - Another chapter. [AIAA PAPER 69-895] 21 p3648 A69-39419
- AHERN, C. J.**
- Introduction to digital elements and circuits. 10 p1638 A69-23553
- AHL, W. H.**
- Rational weight estimation based on statistical data. [SAWE PAPER 791] 18 p3220 A69-34866
- AHLBORN, B.**
- Fronts of HII regions. 10 p1782 A69-23683
- Stability and space-time measurements of concentric detonations. 20 p3632 A69-37215
- Detonation driven shocks of high Mach number. 23 p4198 A69-41545
- AHLQUIST, C. N.**
- The influence of ausforming on the stress-corrosion susceptibility of some high-strength steels. 04 p0604 A69-14528
- AHLSTROM, E. R.**
- Solid-state laser with vibrating reflector. 22 p3962 A69-40562
- AHLSTROM, H. G.**
- Energy transfer mechanism in shock-tube arc-heated drivers. 23 p4147 A69-41895
- AHLUWALIA, H. S.**
- Solar cosmic rays of July 13, 1961. 09 p1576 A69-21707

- The increase in low-energy cosmic ray intensity on 7 July 1966.  
10 p1766 A69-23762
- AHMAD, M. S.**  
Measurement of upper atmosphere winds and temperature from rocket-grenade-TMA experiments conducted from Sonmiani in spring and autumn of 1966-67.  
15 p2598 A69-31317
- AHMAD, N.**  
Scattering of laser light in radiation-driven breakdown waves in gases.  
11 p1915 A69-24420  
Enhanced plasma heating in laser-induced gas breakdown at the shock front of a blast wave.  
14 p2460 A69-29604  
Experimental and theoretical studies of the time and space development of plasma parameters in a laser induced spark in helium.  
14 p2492 A69-29636
- AHMAD, S.**  
Pseudo-isoparametric finite elements for shell and plate analysis.  
21 p3845 A69-39329
- AHMAD, S. M. W.**  
A new theory of quasars.  
09 p1597 A69-22084
- AHMED, H.**  
An Introduction to Physical Electronics.  
05 p0735 A69-16666
- AHMED, N.**  
Estimation of the settling time of a class of time-varying feedback control systems.  
06 p0902 A69-17399
- AHMED, S. A.**  
RF inductively excited ion laser with aperture-magnetic confinement.  
19 p3338 A69-36690
- AHOUSE, D. R.**  
An experimental flow field study of the rarefied blunt body problem.  
[AIAA PAPER 69-656] 17 p2893 A69-33498
- AHRENS, L. H.**  
Origin and Distribution of the Elements, Proceedings of the International Symposium, Paris, France, May 8-11, 1967.  
08 p1398 A69-20892  
Fractionation of some abundant lithophile element ratios in chondrites.  
08 p1403 A69-20915  
The composition of stony meteorites. I - Analytical techniques.  
11 p1953 A69-24358  
The composition of stony meteorites. II - The analytical data and an assessment of their quality.  
11 p1953 A69-24359  
The composition of stony meteorites. III - Some inter-element relationships.  
11 p1954 A69-24360  
Fractionation of some abundant lithophile element ratios in chondrites.  
19 p3409 A69-36087  
The composition of the stony meteorites. IV - Some analytical data on Orgueil, Nogoya, Ornans and Ngawi.  
24 p4382 A69-42927  
The composition of stony meteorites. V - Some aspects of the composition of the basaltic achondrites.  
24 p4382 A69-42928
- AHRENS, T. J.**  
Shock wave data and the study of the earth.  
22 p3937 A69-40188
- AICHERT, H.**  
Wind tunnel measurements on a model of an integrated shrouded propeller /Windkanalmessungen an einem Modell der integrierten Mantelschraube/.  
07 p1052 A69-19633
- AIDALA, V. J.**  
Scattering by a finite perfectly conducting wedge.  
08 p1274 A69-20047
- AIDLA, A.**  
Infrared effects in cadmium sulfide crystals with edge emission /Infrakrasnye efekty v kristallakh sulfida kadmii s kraevym izlucheniem/.  
10 p1746 A69-23565
- AIELLO, W. P.**  
Vela-4 satellite energetic particle experiment.  
[IEEE PAPER 3C-2] 07 p1134 A69-19196
- AIHARA, S.**  
Quenching of ion oscillations at the sheath-plasma resonance.  
03 p0476 A69-13323  
Harmonics of ion oscillations in a neutralized ion beam plasma.  
05 p0804 A69-16459  
Plasma ion oscillations in discharges produced by back diffusion plasma sources.  
13 p2304 A69-27301
- AIHARA, Y.**  
Characteristics and applications of the arc-heated wind tunnel at the National Aerospace Laboratory.  
22 p3927 A69-40595
- AIKIN, A. C.**  
The lower ionosphere of Mars.  
07 p1213 A69-18607
- AILLOUD, P.**  
The chemisorption of carbon and oxygen on the surface of molybdenum /Sur la chimisorption du carbone et de l'oxygene a la surface du molybdene/.  
20 p3562 A69-37782
- AILOR, W. H., JR.**  
Atmospheric exposure of nonferrous metals and alloys - Aluminum - Seven-year data.  
01 p0101 A69-11354
- AIMEN, W. R.**  
The chemical arc - A spectrometric study.  
[WSCI PAPER 69-10] 16 p2831 A69-32350
- AINOLA, L.**  
Variational principles of dynamic shell theory /K variatsionnym printsipam dinamicheskoi teorii obolochek/.  
01 p0166 A69-10262  
Variational principles and general formulas for the mixed problem of the wave equation /Variatsionnye printsipy i obshchie formuly dlia smeshannoi zadachi volnovogo uravneniia/.  
14 p2485 A69-29354
- AINOLA, L. IA.**  
Variational principles for dynamic problems in nonlinear elasticity theory /Variatsionnye printsipy dlia dinamicheskikh zadach nelineinnoi teorii uprugosti/.  
05 p0840 A69-16202
- AINSCOW, K.**  
An investigation into the performance of a N.A.C.A. submerged intake at a Mach number of 2.5.  
19 p3242 A69-36819
- AINSWORTH, A.**  
The topography of the afferent projections in the circumstriate visual cortex of the monkey studied by the Nauta method.  
22 p3881 A69-40858
- AINSWORTH, C. A., III**  
Aircraft accident toxicology.  
12 p2022 A69-25842
- AINTABLIAN, A. A.**  
Interplanetary missions and rendezvous.  
03 p0511 A69-13401
- AIREY, L.**  
Fluidic sensors for jet engine control.  
[AIAA PAPER 69-542] 16 p2843 A69-32699
- AIRHART, T. P.**  
Attachment concepts for brittle materials.  
09 p1477 A69-22370  
Off-axis tensile coupon testing.  
20 p3628 A69-37775
- AISENBERG, S.**  
Ion drag and current partitioning at the cathode of a plasma accelerator.  
[AIAA PAPER 67-657] 13 p2312 A69-28219  
A system for the measurement of the absorptivity and emissivity of a vehicle during flight conditions.  
15 p2613 A69-31269
- AITCHISON, C. S.**  
A low noise wideband parametric amplifier for satellite communications.  
07 p1099 A69-18462  
Self-pumped Gunn-effect parametric amplifier.  
07 p1107 A69-19450
- AIVAZIAN, G. M.**  
Bimodal distribution and interstellar attenuation /Bimodal'noe raspredelenie i mezhzvezdnoe oslablenie/.  
20 p3608 A69-38048
- AIYA, S. V. C.**  
VHF atmospheric radio noise.  
23 p4126 A69-42355
- AIZENBERG, M. V.**  
Resonance waves in a hollow cylinder /O rezonansnykh volnakh v polom tsilindre/.  
18 p3215 A69-34567
- AIZENMAN, M. L.**  
On the interpretation of the color-magnitude diagrams of M67 and NGC 188.  
10 p1789 A69-24128
- AIZU, K.**  
Formation of galaxies from hydrogen gas.  
15 p2680 A69-30204
- AJIOKA, J. S.**  
Experimental performance of a multimode radial transmission line beam forming network.  
04 p0576 A69-14768
- AJOVALASIT, A.**  
Separation of principal stresses along sections of symmetry by means of isopachic patterns.  
08 p1412 A69-20256  
Turbine wheels with welded blades - Thermal stresses during loading of blades /I dischi di turbina con palette saldate - Tensioni termiche all'attacco delle palette/.  
15 p2715 A69-31488
- AKABANE, K.**  
A morphological study of galactic HII regions.  
01 p0151 A69-10552  
Radio observation of galactic HII regions at 4170 MHz. II.  
06 p1008 A69-17696
- AKAGI, J. M.**  
Ferredoxin from two thermophilic Clostridia.  
22 p3897 A69-41068
- AKAIKE, H.**  
Load history effects in structural fatigue.  
15 p2705 A69-30363
- AKAMATSU, T.**  
The two-parameter integral method for unsteady laminar incompressible boundary layer over a semi-infinite flat plate.  
11 p1871 A69-25026  
Piston driven shock tube of Kyoto University.  
22 p3928 A69-41046  
A generalized solution of quasi-steady laminar flat plate boundary layer in a shock tube.  
24 p4305 A69-43632
- AKAMATSU, Y.**  
Smoothing by the method of least squares - Application to the eigenmodes of a structure /Lissage par les moindres carres - Application aux formes propres d'une structure/.  
18 p3218 A69-34642
- AKANAEV, B. A.**  
Induced combinational scattering on infrared-active transitions /O vyzhuzhennom kombinatsionnom rasseyanii na infrakrasno-aktivnykh perekhodakh/.  
02 p0282 A69-12636  
Parametric effects in the infrared region /Parametricheskie efekty v infrakrasnoi oblasti/.  
03 p0439 A69-13054
- AKASAKA, T.**  
Wrinkling of the pressurized fixed-free membrane column.  
22 p4045 A69-40814  
On the standing waves in the shell wall of running tyre.  
22 p4048 A69-41185
- AKASOFU, S.-I.**  
Auroral observations by the constant local time flight.  
02 p0245 A69-12738  
A study of polar magnetic substorms.  
05 p0755 A69-16271  
Polar and Magnetospheric Substorms.  
06 p0915 A69-16832  
Irregular pulsations of the morning sky brightness.  
09 p1594 A69-21666  
Magnetospheric substorm as a discharge process.  
11 p1879 A69-25249  
A model midnight meridian magnetospheric field.  
13 p2252 A69-27532  
Non-uniform growth of the ring current belt.  
14 p2513 A69-29123  
Dynamics of the aurora and associated phenomena.  
15 p2595 A69-30214  
The auroral and polar magnetic substorms over Alaska.  
15 p2595 A69-30215



- Airborne observation of the midday aurora.  
18 p3126 A69-34258
- The absence of the hydrogen emission /H beta/ in the westward traveling surge.  
18 p3130 A69-35189
- A study of polar magnetic substorms. II.  
20 p3533 A69-38085
- Magnetospheric substorm.  
21 p3710 A69-38504
- The geomagnetic and cosmic-ray storm of May 25/26, 1967.  
22 p4004 A69-40307
- Characteristics of polar cap auroras.  
22 p3940 A69-40522

**AKATOV, IU. A.**

- Results of experimental investigations of dosimetry and shielding on board the Cosmos 110 artificial satellite /Rezultaty eksperimental'nykh issledovaniy po dozimetrii i zashchite na ISZ "Kosmos-110"/.  
13 p2356 A69-27702

**AKAZAKI, M.**

- Some excitation temperature measurements of induction-coupled argon plasmas.  
06 p0964 A69-17193

**AKER, J. L.**

- Distance measuring equipment for the supersonic transport and the corporate twin.  
[SAE PAPER 690344] 11 p1914 A69-24490

**AKERS, A.**

- Pressure due to inertia in a journal bearing.  
20 p3548 A69-37085

**AKHABABIAN, N.**

- Influence of meteorological effects on the mean diurnal variations of the neutron component of cosmic rays /Vliianie na meteorologichesknye efekty v'rkhu srednedenonoshchnite variatsii na neutronnata komponenta na kosmichnoto l'chenie/.  
21 p3791 A69-38840

**AKHIEZER, A. I.**

- Theory of magnetoplasticity.  
05 p0844 A69-16804
- Stresses and waves in a magnetoplastic medium /Napriazheniia i volny v magnitoplasticheskoi srede/.  
09 p1551 A69-22033

**AKHIEZER, I. A.**

- Theory of wave fluctuations and scattering in a plasma located in strong electric and magnetic fields /K teorii fluktuatsii i rassaiianiia voln v plazme, nakhodiasheisia v sil'nykh elektricheskoi i magnitnom poliakh/.  
09 p1453 A69-21569

**AKHIEZER, I. O.**

- Nonlinear waves in a plasma immersed in a magnetic field and having an arbitrary distribution of electron velocities.  
05 p0804 A69-16370

- Fluctuations of a partially ionized plasma situated in external electric and magnetic fields /Fluktuatsii v chastkovo ionizovannii plazmi, shcho znakhodit'sia u zovnishnikh elektrichnomu ta magnitnomu poliakh/.  
08 p1370 A69-21079

- Scattering and transformation of waves in a plasma situated in external electric and magnetic fields /Rozsiianiia ta transformatsiia elektrichnomu ta magnitnomu poliakh/.  
08 p1277 A69-21080

**AKHIEZER, O. I.**

- Theory of nonlinear ferromagnetic resonance /Do teorii nelineinogo feromagnitnogo rezonansu/.  
14 p2503 A69-28989

**AKHMADEEV, I. A.**

- Investigation of a gyroplatform for stabilizing a gravimetric device on an aircraft /K issledovaniyu giroplatformy dlia stabilizatsii gravimetricheskoi apparatury na samolete/.  
21 p3723 A69-38885

**AKHMANOV, S. A.**

- Induced combinational scattering on infrared-active transitions /O vyzhzhennom kombinatsionnom rassaiiani o aktivnykh perekhodakh/.  
02 p0282 A69-12636

- Unsteady phenomena and space-time analogy in nonlinear optics /Nestatsionarnye iavleniia i prostranstvenno-vremennaia analogiia v nelineinoy optike/.  
02 p0259 A69-12646

- Theory of parametric light generators /K teorii parametricheskikh generatorov sveta/.  
03 p0437 A69-13044

- Tunable parametric generator employing a KDP crystal /Perestraivaemyi parametricheskii generator sveta na kristalle KDP/.  
03 p0437 A69-13045

**Thermal self-actions of laser beams.**

- [IEEE PAPER E-12] 05 p0774 A69-16311
- Nonstationary nonlinear optical effects and ultrashort light pulse formation.  
[IEEE PAPER H-5] 05 p0774 A69-16316
- Parametric interactions in optics and tunable light oscillators.  
[IEEE PAPER K-5] 07 p1152 A69-19066
- Observation of stimulated Mandelstam-Brillouin scattering in the field of laser optical harmonics.  
09 p1520 A69-22684
- New developments in non-linear optics.  
20 p3555 A69-38014

**AKHMEDOV, A. R.**

- Investigation of the screw instability of a positive column in a longitudinal magnetic field /Issledovanie vintovoi neustoiichivosti polozhitel'nogo stolba v prodol'nom magnitnom pole/.  
13 p2315 A69-28526

**AKHMEDOV, D. B.**

- Computer calculation of the kinetic characteristics of the normal propagation of a flame /Vychislenie kineticheskikh kharakteristik normal'nogo rasprostraneniia plameni na EVM/.  
17 p3069 A69-33138

**AKHMEROV, A. F.**

- Use of linearly gliding and linearly rotating strengthening moduli in the solution of certain engineering problems in plasticity theory /Primenenie lineino-skol'ziashego i lineino-vrashchaishego moduli uprochneniia pri reshenii nekotorykh tekhnologicheskikh zadach teorii plastichnosti/.  
11 p1986 A69-25342

**AKHMETOV, M. S.**

- Accuracy of wind determination in the atmosphere by means of radar /Tochnost' opredeleniia vetra v atmosfere metodom radiolokatsii/.  
20 p3572 A69-37698

**AKHUNDOV, G. A.**

- Interband transitions in A super III B super VI multiple-layer-structure semiconductors /O mezhzonnnykh perekhodakh v sloistvykh poluprovodnikakh A super III B super VI/.  
13 p2317 A69-27883

**AKHUNDOV, S. K.**

- Boundary conditions of the regular thermal regime.  
11 p2003 A69-25702

**AKHUNOV, A. A.**

- Experimental verification of the permissible radiation doses for extended space missions /"Chronic experiments" with dogs/ /K eksperimental'nomu obosnovaniyu dopustimnykh doz radiatsii pri dlitel'nykh kosmicheskikh poletakh /provedenie khronicheskogo eksperimenta na sobakakh/.  
05 p0708 A69-16508

- Experimental verification of permissible radiation doses during prolonged space flights - A "chronic experiment" on dogs.  
18 p3095 A69-34727

**AKHUNOV, I. SH.**

- Electrical and photoelectric properties of heterojunctions prepared by germanium epitaxy on gallium arsenide bases /Elektricheskie i fotoelektricheskie svoistva geteroperekhodov, poluchennykh epitaksiei germaniia na podlozhkakh arsenaia galliia/.  
15 p2667 A69-30078

**AKHURST, D. O.**

- An investigation of the ionization mechanisms in the ignited mode cesium thermionic converter.  
14 p2404 A69-29258

**AKI, K.**

- Continuous and discrete inverse-scattering problems in a stratified elastic medium. I - Plane waves at normal incidence.  
13 p2300 A69-28664

**AKIBA, R.**

- Static firing tests of the solid rocket motor in low pressure environment.  
22 p4000 A69-40593

**AKIMENKO, N. I.**

- The effect of antimony additions on the electrical properties of lead telluride.  
11 p1939 A69-25706

**AKIMOTO, M.**

- Heat transfer to fully developed turbulent flow in a circular tube with a nonsteady circumferential heat flux.  
22 p4051 A69-40921

**AKIMOV, A. G.**

- The effect of alloying on the electrochemical oxidation of alloys Ti-Nb and Ti-Ni /Vliianie legirovaniia na elektrokhimicheskoe okislenie spлавov Ti-Nb i Ti-Ni/.  
13 p2275 A69-27292

**AKIN, C. M.**

- Combined effects of mass addition and nose bluntness on boundary-layer transition.  
[AIAA PAPER 67-706] 17 p2955 A69-33476

**AKISHIN, A. I.**

- Simulation of the radiation effect of a space medium on spacecraft elements /Modelirovanie radiatsionnogo vozdeistviia kosmicheskoi sredy na elementy kosmicheskikh apparatov/.  
06 p0906 A69-17612

**AKITT, D. P.**

- Correlation effects in H sub 2 O and D sub 2 O laser transitions.  
09 p1515 A69-21349
- Measurement of far-infrared laser power.  
09 p1515 A69-21424
- Laser emission in ammonia.  
10 p1704 A69-23666

**AKIYAMA, T.**

- Method of estimating whole-body cold tolerance and its relation to seasonal variation of BMR.  
06 p0876 A69-18024
- Hypothermia induced by hypoxia in the rat.  
13 p2210 A69-28532

**AKKAYA, I.**

- A comparative study of several models of the magnetoplasma.  
07 p1190 A69-18919

**AKKERMAN, A. F.**

- Calculation of the spectra and absorbed doses behind a shield due to electrons of the earth's radiation belt /K raschetu spektrov i pogloshchennykh doz za zashchitoi, obuslovlennykh elektronami radiatsionnogo poliasa zemli/.  
08 p1377 A69-19843

**AKMANOV, A. G.**

- Parametric interactions in optics and tunable light oscillators.  
[IEEE PAPER K-5] 07 p1152 A69-19066
- Frequency discrimination in optical harmonic generators /Razlichenie chastoty v opticheskikh generatorakh harmonik/.  
22 p3965 A69-40964

**AKOLZINA, L. D.**

- Study of the distribution of Sc, Ce, and Eu in various phases of meteorite material /Izuchenie raspredeleniia Sc, Ce i Eu mezhdu razlichnymi fazami meteoritnogo veshchestva/.  
01 p0026 A69-11376

**AKOVETSKII, V. I.**

- The problem of transition from radar image coordinates to geodetic coordinates /K voprosu o perekhode ot koordinat radiolokatsionnogo izobrazheniia k geodezicheskim/.  
15 p2596 A69-30574

**AKPEROV, M. M.**

- Thermoelectric properties of the GeTe-GaTe system /Termoelektricheskie svoistva sistemy GeTe-GaTe/.  
01 p0138 A69-10404

**AKSELROD, L. S.**

- Some results of an investigation into heat transfer from a liquid to a highly overheated wall.  
11 p1996 A69-24228

**AKSENCHIKOV, A. P.**

- Holograms on photochromic films.  
[IEEE PAPER F-1] 07 p1133 A69-19053
- Holograms on photochromic films.  
11 p1881 A69-24631

**AKSENOV, B. E.**

- A method of investigating error sequences in communications channels /Ob odnom metode issledovaniia potokov oshibok v kanalakh svyazi/.  
09 p1454 A69-21795

**AKSENOV, E. P.**

- Canonical equations of satellite motion /Kanonicheskie uravneniia dvizheniia sputnika/.  
09 p1589 A69-21374

- Mechanical interpretation of the force function in the generalized problem of two fixed centers.  
11 p1952 A69-24254

- Canonical equations of motion for a satellite.  
18 p3198 A69-34762

**AKSENOV, G. I.**

- Hardenability of a porous ShKh-15 steel /Prokalivaemost' poristoii stali ShKh-15/.  
04 p0619 A69-15390

- Investigation of the basic angles and force parameters in rolling /Issledovanie osnovnykh uglov i silovykh parametrov prokatki/.  
15 p2630 A69-31933



**AKSIANTSEV, A. M.**  
Stability conditions in the critical case of four pairs of pure imaginary roots /K usloviyam ustoiichivosti v kriticheskom sluchae chetyrekh par chisto mnimyykh kornei/.  
21 p3770 A69-38883

**AKSNES, E. G.**  
Studies on Arctic survival.  
23 p4088 A69-41810

**AKTCHISON, C. S.**  
Active reactance compensation of parametric amplifiers.  
12 p2039 A69-26380

**AKULENKO, L. D.**  
On the oscillatory and rotational resonant motions.  
04 p0631 A69-15536  
Steady rotational-oscillatory motions in a system whose unperturbed motion is stable.  
14 p2482 A69-28812  
Problem of the Liapunov stability of resonance solutions to some multifrequency systems with a weak coupling /K voprosu ob ustoiichivosti po Liapunovu rezonansnykh reshenii nekotorykh mnogochastotnykh sistem so slaboi svyaz'iu/.  
15 p2654 A69-31258  
Steady motions in autonomous systems with a deviating argument /Ob ustanovivshisya dvizheniiakh v avtonomnykh sistemakh s otkloniaushchimsya argumentom/.  
18 p3175 A69-35323  
Study of the self-rotary motions of certain nearly conservative systems with one degree of freedom /Issledovanie avtovrashchatel'nykh dvizhenii nekotorykh sistem s odnoi stepen'iu svobody, blizkikh k konservativnym/.  
19 p3374 A69-36466

**AKULINICHEV, I. T.**  
Certain data concerning the conditions of the cosmonauts during the flight of the first space expedition on the Voskhod spacecraft /Nekotorye dannye o sostoianii kosmonavtov vo vremia poleta pervoi kosmicheskoi ekspeditsii na korable "Voskhod"/.  
07 p1060 A69-18571  
Certain reactions of the cardiovascular and respiratory systems of cosmonauts during orbital flight on the Voskhod 2 spacecraft /Nekotorye reaktsii serdechnosudistoi i dykhatel'noi sistem kosmonavtov v orbital'nom polete na kosmicheskom korable "Voskhod 2"/.  
07 p1062 A69-18585  
Oculomotor activity of cosmonauts during orbital flights /Glazodvigatel'naia aktivnost' u kosmonavtov vo vremia orbital'nykh poletov/.  
07 p1063 A69-18594

**AKUTAGAWA, T.**  
A study of a parametric amplifier as a tracking filter.  
13 p2225 A69-27183

**AKUTIN, M. S.**  
Reaction of epoxy and polyester resins with glass fibre.  
19 p3358 A69-35902

**AKYLBAEV, ZH. S.**  
Flow structure in the wake behind a cylinder in a channel /Struktura techeniia v slede za tsilindrom v kanale/.  
21 p3698 A69-39850

**AL-MOUFTI, M. N.**  
Calculating Gunn-diode output.  
01 p0049 A69-11195

**AL-NAJAFI, A. M. J.**  
Free vibration of thin cylindrical shells with a discontinuity in the thickness.  
21 p3836 A69-38984

**AL-SIKAFI, Q. H.**  
Stress distribution around holes at the ends of a crack.  
08 p1412 A69-20257

**AL-TIKRITI, M. N.**  
General control-system analysis by digital computer using operational-array technique.  
22 p3909 A69-41255

**ALADAG, E.**  
Structure of the parent taenite of the Gibeon meteorite.  
17 p3034 A69-33586

**ALADEV, I. T.**  
Experimental study of heat transfer during boiling in conduits during weightlessness.  
01 p0177 A69-11313

Experimental study of the critical heat flow during forced motion of fluids under conditions of weightlessness.  
07 p1243 A69-19616  
The effective electrical conductivity of a two-phase liquid-metal flow /Effektivnaia elektroprovodnost' dvukhfaznogo zhidkometallicheskogo potoka/.  
13 p2306 A69-27480  
Investigation of two-phase Laval nozzles /Issledovanie dvukhfaznykh sopel Laval'ia/.  
13 p2245 A69-27481

**ALADINSKII, V. K.**  
Tunnel breakdown in p-n junctions and the generation of microwave oscillations.  
03 p0492 A69-14163  
Avalanche-transit effects in p-n junctions.  
03 p0492 A69-14164

**ALAIS, M.**  
Thermoelectric generators heated by radioisotopes /Les generateurs thermoelectriques chauffes aux radioisotopes/.  
21 p3768 A69-38458

**ALAKA, M. A.**  
Numerical experiments pertinent to the design of optimum aerological networks.  
19 p3364 A69-36505

**ALAKOZ, A. V.**  
Cross section for pionization in interactions of 100 Gev cosmic ray neutrons and pions with carbon and lead nuclei.  
13 p2330 A69-28382

**ALANAKIAN, IU. R.**  
Localized electromagnetic oscillations in a plasma /Lokalizovannye elektromagnitnye kolebaniia v plazme/.  
02 p0292 A69-12643

**ALANIIA, M. B.**  
Specific features of the asymmetrical solar wind and cosmic-ray absorption in the earth's atmosphere /Osobennosti asimmetrichnogo solnechnogo vetra i pogloshchenie kosmicheskikh luchej v zemnoi atmosfere/.  
10 p1760 A69-22844

**ALAVATINSKII, S. A.**  
Concerning the accuracy of ionization calorimeter energy measurements.  
13 p2331 A69-28394

**ALAVIDZE, G. R.**  
Calculation of the unsteady flow of a conducting gas in an MHD generator duct /Raschet nestatsionarnogo techeniia provodiashchego gaza v kanale MGD-generatora/.  
13 p2309 A69-28027

**ALBANO, E.**  
A doublet-lattice method for calculating lift distributions on oscillating surfaces in subsonic flows. [AIAA PAPER 68-73]  
09 p1430 A69-21946

**ALBANY, H. J.**  
Effect of doping on the diffusion of phonons in gallium antimonide at low temperature /Effet du dopage sur la diffusion des phonons dans l'antimoniure de gallium a basse temperature/.  
12 p2142 A69-26294

**ALBAUGH, N.**  
A novel way of beam switching, particularly suitable at millimeter wavelengths.  
11 p1836 A69-24996

**ALBE, F.**  
Strioscopic methods for measuring mass volume in hypersonic wakes in a hot-shot tunnel /Methodes strioscopiques de mesure des masses volumiques dans les sillages hypersoniques en tunnel de tir/.  
19 p3293 A69-35740

**ALBEE, P. R.**  
Aspect sensitivity of HF auroral echoes.  
09 p1488 A69-21700

**ALBER, I. E.**  
Analytical investigations of equilibrium and nonequilibrium compressible turbulent boundary layers. [AIAA PAPER 69-689]  
17 p2955 A69-33481  
Finite difference solution for the laminar near-wake recompression behavior. [AIAA PAPER 69-713]  
18 p3085 A69-34417

**ALBERNHIE, F.**  
Determination of the spectrum and the flux of fast atmospheric neutrons during a quiet-sun period at a geomagnetic latitude of 46 deg North /Determination du spectre et du flux de neutrons atmospheriques rapides en periode de soleil calme et a une latitude geomagnetique de 46 deg Nord/.  
16 p2851 A69-32616

**ALBERS, H.**  
Infrared surveys of the southern Milky Way. I - Suspected supergiant stars.  
13 p2335 A69-27314

**ALBERT, A.**  
Conditions for positive and nonnegative definiteness in terms of pseudoinverses.  
21 p3756 A69-39497

**ALBERT, D. J.**  
Hyperphagia in rats with cuts between the ventromedial and lateral hypothalamus.  
21 p3650 A69-38322

**ALBERT, L. V.**  
Similarity of fluid amplifiers - Theoretical study of the flow in the feed nozzle - Influence of the boundary layer /Similitude des amplificateurs fluides - Etude theorique de l'ecoulement dans la buse d'alimentation - Influence de la couche limite/.  
07 p1059 A69-19320

**ALBERTIN, L.**  
Effects of planishing and thermal treatments on welded Ti-6Al-4V alloy.  
08 p1319 A69-19966

**ALBION, N.**  
Flight simulation of the CH-46 helicopter. [AHS PAPER 361]  
17 p2946 A69-33521

**ALBLAS, J. B.**  
On the state of stress in a semi-infinite elastic body with a cylindrical hole. I, II.  
01 p0172 A69-11332

**ALBRECHT, H.**  
Investigations on semiconducting collector materials.  
09 p1558 A69-21825  
Investigations on noble gas converters.  
14 p2403 A69-29249

**ALBRECHT, H. J.**  
Theoretical analysis of a variable scatter mechanism in a tropospheric propagation medium.  
17 p2927 A69-33856

**ALBRECHT, P.**  
Solving partial differential equations with modern computers /Zur Loesung linearer partieller Differenzgleichungen mittels moderner Rechenanlagen/.  
05 p0723 A69-15705

**ALBRECHT, W.**  
How thickness and material properties influence thermal shock stresses in flat plates and cylinders. [ASME PAPER 69-GT-107]  
09 p1619 A69-22523

**ALBREKHT, E. G.**  
Control of the motion of nonlinear systems.  
04 p0583 A69-15096  
Effect of a nonholonomic constraint on the stabilizability of a mechanical system.  
14 p2482 A69-28814

**ALBRIGHT, G. A.**  
An orbital biomedical laboratory.  
23 p4223 A69-41801

**ALBRIGHT, M. L.**  
Intermediary metabolism in hypothermic rat livers.  
10 p1642 A69-23119

**ALBRITTON, O. W.**  
A study of sensitization in types 304 and 304L stainless steels using Mossbauer spectroscopy.  
06 p0944 A69-17852

**ALBUM, H. H.**  
Comment on "An investigation of the effect of suction on hypersonic laminar boundary-layer separation."  
16 p2771 A69-31928

**ALCAINO, G.**  
The globular clusters NGC 2808 and NGC 1851.  
18 p3190 A69-34290

**ALCALAY, J. A.**  
Molecular-beam time-of-flight spectroscopy.  
10 p1652 A69-23340  
Classification and dynamic calibration of ionization sensors and detectors.  
13 p2262 A69-28083

**ALCARAZ, E. C.**  
Coherent light propagation through a turbulent atmosphere - Measurements of the optical filter function.  
24 p4344 A69-43114



## ALCAYDE, D.

Calculation of the light emissions associated with PCA in the 3914 and 5577-angstrom units bands /Calcul des émissions lumineuses associées aux P.C.A. dans les bandes 3914 Angstrom units et 5577 Angstrom units/.

08 p1378 A69-20186

Numerical study of the local and overall response of the thermosphere to localized heating in the auroral zone /Etude numérique de la réponse locale et globale de la thermosphère à un chauffage localisé en zone aurorale/.

22 p3941 A69-40717

## ALCOCK, A. J.

Self-focusing effects associated with laser-induced air breakdown.

01 p0092 A69-11246

A mode-locked laser as a light source for schlieren photography. [IEEE PAPER H-1]

05 p0774 A69-16315

Preliminary evidence for self-focusing in gas breakdown produced by picosecond laser pulses.

13 p2270 A69-27196

Schlieren photography using a mode-locked laser as the light source.

21 p3736 A69-38795

## ALCOCK, C. B.

The production of refractory crystals by vapour transport reactions.

03 p0453 A69-13619

## ALDER, V. G.

Sterilization by low temperature steam and formaldehyde under sub-atmospheric pressures at 80 deg C.

05 p0713 A69-15946

## ALDRED, A. H.

Avionics in forest resource inventories.

01 p0080 A69-10352

## ALDRICH, R. C.

Remote sensing and the forest survey... present applications, research, and a look at the future.

12 p2097 A69-26991

## ALDRIDGE, M. D.

Enhancement of photon-bunching effects.

16 p2749 A69-31694

## ALDRIDGE, R. V.

Low frequency wave mixing in a magneto-plasma.

16 p2820 A69-31769

## ALDUSEVA, V. IA.

The 10,830-angstrom units He I line in the beta-Lyr shell /Linia He I 10,830 angstrom units v obolochke beta Lyr/.

11 p1955 A69-24391

Gradual changes in the beta Lyr system /Medlennye izmeneniia v sisteme beta Lyr/.

15 p2688 A69-30557

The 10,830 angstrom units He I line in the envelope of beta Lyrae.

24 p4390 A69-43781

## ALEGRE, C. E.

Effect of induced stress on convergent and divergent thinking.

24 p4269 A69-42555

## ALEKSAKHIN, I. S.

Ionization of alkali metal atoms by slow electrons.

15 p2655 A69-30726

## ALEKSAKHIN, I. V.

Emergence of a material point from the plane of an initial orbit with minimum orbital transfer in a central gravitational field without restrictions on the orientation of the plane of final orbit /Vykhod material'noi tochki iz ploskosti nachal'noi orbity pri minimal'nom orbital'nom perekhode v tsentral'nom gravitatsionnom pole bez ogranichenii na orientatsiiu ploskosti konechnoi orbity/.

13 p2346 A69-27698

Methodical errors of a simplified prediction of the rotation period of a correctable artificial earth satellite /Metodicheskie oshibki uproschennogo prognoza perioda obrashcheniia korrekturnogo ISZ/.

22 p4033 A69-41086

## ALEKSANDAR, R. I.

The effect of positive pressure breathing on the cerebral circulation and the content of catecholamines in hypothalamus and adrenals.

24 p4265 A69-43371

## ALEKSANDROV, A. F.

Study of the complex admittance of a plasma in the low-frequency region /Issledovanie kompleksnoi provodimosti plazmy v oblasti nizkikh chastot/.

03 p0477 A69-13713

Study of space-charge layers by the plasma capacitor method /Issledovanie sloev prostranstvennogo zariada metodom plazmennogo kondensatora/.

03 p0477 A69-13714

## ALEKSANDROV, A. M.

A method of investigating error sequences in communications channels /Ob odnom metode issledovaniia potokov oshibok v kanalakh svyazi/.

09 p1454 A69-21795

## ALEKSANDROV, IU. N.

An investigation of the backscattering diagram of Venus at 40-cm wavelength.

02 p0314 A69-11639

Diffuse scattering and the radar reflectivity of planetary surfaces.

04 p0662 A69-15245

## ALEKSANDROV, L. N.

Synthesis and study of the properties of semiconductor films /Poluchenie i izuchenie svoystv poluprovodnikovykh plenok/.

15 p2670 A69-31046

## ALEKSANDROV, M. V.

Onset of bubble boiling in a forced fluid flow /K voprosu o nachale puzyr'kovogo kipeniia v vynuzhennom potoke zhidkosti/.

16 p2878 A69-31954

## ALEKSANDROV, V. I.

Threshold conditions for laser pumping with the emission of a perfect black body /Porogovye uslovia nakachki OKG izlucheniem absolutno chernogo tela/.

03 p0442 A69-14220

## ALEKSANDROV, V. IA.

Relaxation method of determining the nature of a continuum in nonequilibrium arc discharges /Relaksatsionnyi metod opredeleniia prirody kontinuumu v neravnovesnykh dugovykh razriadakh/.

04 p0639 A69-15369

Study of the mechanism of spectral excitation in a helium arc plasma /Issledovanie mekhanizma vzbuzhdeniia spektra v plazme geliovoi dugi/.

10 p1742 A69-24077

Relaxation method for determining the nature of continuum in nonequilibrium arc discharges.

16 p2822 A69-32116

## ALEKSANDROV, V. K.

Quantitative method for estimating the accuracy of periodic structures of electronic-device networks by means of measurement automatization /Kolichestvennyi metod otsenki tochnosti periodicheskikh struktur setok elektronnykh priborov pri avtomatizatsii izmerenii/.

01 p0045 A69-10732

## ALEKSANDROV, V. M.

Asymptotic methods in mixed problems of elasticity theory for nonclassical regions /Asimptoticheskie metody v smeshannykh zadachakh teorii uprugosti dlia neklassicheskikh oblastei/.

11 p1971 A69-24647

## ALEKSANDROV, V. S.

Investigation of the static electrification of aircraft /Issledovanie staticheskoi elektrizatsii samoletov/.

04 p0549 A69-15107

## ALEKSANDROV, V. V.

A modification of Newton's method for solving optimum control problems /O modifitsirovannom metode N'yutona dlia resheniia zadach optimal'nogo upravleniia/.

13 p2239 A69-28436

## ALEKSANDROVA, I. V.

Possibility of Chlorella cultivation of solutions with mineralized human wastes.

02 p0200 A69-11511

Investigation of the oxidative-catalytic method of mineralization of wastes in a closed ecological system.

10 p1649 A69-23579

## ALEKSANDROVA, L. N.

Niobium-hafnium system /Sistema niobii-gafnii/.

18 p3157 A69-35247

## ALEKSANDROVA, L. V.

Determination of the velocity and direction of the motion of large E sub s structures by an inclined backscatter method /Opredelenie skorosti i napravleniia dvizhenii krupnykh obrazovaniy E sub s metodom VNZ/.

20 p3528 A69-37682

## ALEKSEENKO, G. K.

Niobium-hafnium system /Sistema niobii-gafnii/.

18 p3157 A69-35247

## ALEKSEENKO, L. V.

Changes in the radiation effect on plants under the influence of space flight factors /K voprosu ob izmenenii radiatsionnogo efekta u rastenii pod vlianiem faktorov kosmicheskogo poleta/.

05 p0708 A69-16510

Radiosensitivity of potatoes to gamma-ray and proton irradiation applied to whole tubers and to isolated eyes before planting /Radiochuvstvitel'nost' kartofelia k gamma- lucham i protonam pri predposadochnom obluhenii tselnykh klubnei i izolirovannykh glazkov/.

05 p0709 A69-16511

Combined effect of Cosmos 110 space flight factors on plants /Kombinirovannoe deistvie faktorov kosmicheskogo poleta sputnikna zemli "Kosmos-110" na rasteniia/.

07 p1064 A69-18972

Change in the nature of the radioprotective effect of propyl gallate during proton and gamma irradiation of potatoes.

08 p1262 A69-19927

On the problem of changes in effect of radiation on plants subjected to cosmic flight factors.

18 p3095 A69-34729

Combined effect of spaceflight factors on plants in the Kosmos-110 satellite.

20 p3479 A69-38220

## ALEKSEENKO, M. F.

Damping capacity and resistance to resonance fatigue of steels and alloys based on titanium and aluminum.

03 p0443 A69-13025

Damping ability of EI961 chromium-nickel steel after various heat treatment regimes /Dempfiruiushchaia sposobnost' khromo- nikel'voi stali EI961 posle razlichnykh rezhimov termooobrabotki/.

17 p2990 A69-33933

## ALEKSEEV, A. S.

Investigation of the dynamics of single-loop nonlinear sampled-data systems with an integrator /K issledovaniiu dinamiki odnokonturnykh nelineinykh impul'snykh sistem s integriruiushchim zvenom/.

04 p0583 A69-15135

## ALEKSEEV, B. V.

Transfer phenomena in reacting gas mixtures /O iavleniiakh perenosa v reagiruiushchikh smesiakh gazov/.

01 p0006 A69-10400

Transport phenomena in reacting gas mixtures.

12 p2062 A69-26668

## ALEKSEEV, E. I.

Effect of filtering of the pump light on the frequency of the 0-0 transition of Rb87.

04 p0611 A69-14779

## ALEKSEEV, G. A.

Scattering of regular and noise signals by an uneven surface /Rasseianie reguliarnykh i shumovykh signalov nerovnoi poverkhnosti/.

01 p0032 A69-10886

Dispersion of signal and noise by a rough surface.

12 p2031 A69-26650

## ALEKSEEV, G. V.

Measurement of the geomagnetic-field components in motion using astroorientation /Ob izmerenii sostavliaiushchikh geomagnitnogo polia v dvizhenii s ispol'zovaniem astroorientatsii/.

02 p0277 A69-11674

Use of the vertical and solar components for the exact measurement of magnetic declination from a moving object /Ob ispol'zovanii vertikal'noi i solnechnoi sostavliaiushchikh dlia tochnogo izmereniia magnitnogo skloneniia s dvizhushchegosia ob'ekta/.

09 p1486 A69-21538

Measurement of the geomagnetic field components while in motion, using celestial orientation.

13 p2257 A69-28705

Use of the vertical and solar components for the exact measurement of magnetic declination from a moving object.

16 p2783 A69-32533

## ALEKSEEV, IU. N.

Aircraft Construction and Air-Fleet Equipment /Samoletostroenie i Tekhnika Vozdushnogo Flota/.

04 p0672 A69-14483

Calculation of a circular cylindrical shell subjected to the action of a dynamic load /Raschet krugovoi tsilindricheskoi obolochki na deistvie dinamicheskoi nagruзки/.

04 p0673 A69-14499

Plastic bending during the shaping of corrugated panels by the method of constrained bending



/Plasticheskie izgib pri formobrazovanii gofirovannykh panelei metodom stesennogo izgiba/.  
19 p3324 A69-35833

**ALEKSEEV, K. B.**  
Contribution to the theory of synthesis of satellite attitude stabilization by means of flywheels /K teorii sinteza sistem orientatsii ISZ s makhovikami/.  
21 p3768 A69-39831

**ALEKSEEV, L. V.**  
Transmission characteristics of a cascade coupling of four-poles.  
05 p0729 A69-16081

**ALEKSEEV, N. E.**  
Features of energy transfer and dissipation in lumiphors based on phosphate glasses activated by neodymium /Osobennosti perenos i dissipatsii energii v luminoforakh na osnove fosfatnykh stekol, aktivirovannykh neodimom/.  
20 p3552 A69-37017

**ALEKSEEV, N. I.**  
Breakdown in alkali-halide crystals caused by laser radiation.  
10 p1745 A69-23322  
The effect of laser radiation on metals /Vliianie izlucheniia OKG na metally/.  
11 p1906 A69-25684

**ALEKSEEV, V. A.**  
Thermal conditions of the upper blanket of the moon and its integral radio emission during an eclipse /Teplovoi rezhim verkhnego pokrova luny i ee integral'noe radioizluchenie vo vremia zatmenia/.  
03 p0506 A69-13088  
A possibility of signal matching in a radio interferometer with autonomous receivers /Ob odnoi vozmozhnosti sovmeshcheniia signalov radiointerferometra s avtonomnymi priemnikami/.  
03 p0431 A69-13706  
Polarization characteristics of lunar radio emission, taking into account the averaging effect of a radiation pattern of knife-edge type /Polarizatsionnye kharakteristiki radioizlucheniia luny pri uchete usredniaushchego deistviia diagrammy napravlenosti nozhevoogo tipa/.  
08 p1391 A69-20423  
Reduction of observations on a large-base radio interferometer /K reduktzii nabludenii radiointerferometrom s bol'shoi bazoi/.  
08 p1314 A69-20434  
Certain electrical properties of a dense plasma /Nekotorye elektricheskie svoystva plotnoi plazmy/.  
10 p1739 A69-23492  
Peculiarity in the radio-emission spectrum of the Crab Nebula in the decimeter wavelength range /Ob osobennosti v spektre radioizlucheniia krabovidnoi tumannosti v desimetrovom diapazone voln/.  
10 p1784 A69-23941  
Thermal conditions of the lunar topsoil and the integrated radio emission of the eclipsed moon.  
14 p2515 A69-28770  
Transformation of laser radiation by stimulated Raman scattering.  
14 p2460 A69-29648  
A possible means of synthesizing a multielement radio interferometer with autonomous reception for studying radio images of radiation sources /Ob odnoi vozmozhnosti sintezirovaniia mnogoelementnogo radiointerferometra s avtonomnym priemom dlia issledovaniia radioizobrazheniia istochnikov izlucheniia/.  
15 p2578 A69-30936  
Investigation of the radio brightness distribution over a source by means of a radio interferometer with independent heterodynes /Ob issledovanii raspredeleniia radioarkosti po istochniku geterodinamii/.  
15 p2578 A69-30937

**ALEKSEEV, V. M.**  
Quasi-random dynamic systems. II - One-dimensional nonlinear oscillations in a periodically perturbed field /Kvazisluchainye dinamicheskie sistemy. II - Odnomernye nelineinye kolebaniia v periodicheski voz-mushchaemom pole/.  
06 p0948 A69-17657  
Quasi-stochastic dynamic systems. III - Quasi-stochastic oscillations of one-dimensional oscillators /Kvazisluchainye dinamicheskie sistemy. III - Kvazisluchainye kolebaniia odnomernykh osttsil'iatorov/.  
12 p2130 A69-26373

**ALEKSEVA, G. D.**  
The magnetometric equipment on Luna 10 and Venera 4 space stations /Magnetometricheskaia apparatura kosmicheskikh stantsii "Luna-10," "Venera-4"/.  
01 p0080 A69-10582

Magnetometer instruments of Luna-10 and Venera-4 space stations.  
15 p2610 A69-30752

**ALEKSEVA, L. M.**  
The role of the dynamo mechanism associated with small-scale motions of neutrals in the creation of magnetic disturbances and ionospheric discontinuities /Rol' mekhanizma dinamo, svyazannogo s melkomasshtabnym dvizheniem neutralov, v sozdanii magnitnykh voz-mushchenii i ionosfernykh neodnorodnostei/.  
20 p3519 A69-37026

**ALEKSEVSKII, N. E.**  
Superconductivity of alloys of the system Nb sub 3 Al-Nb sub 3 Ge.  
13 p2316 A69-27659  
New superconductors.  
20 p3584 A69-38015

**ALESIN, V. F.**  
Three-turn helical magnetic configuration with shear and minimum B.  
02 p0288 A69-12168

**ALEKSIUK, L. I.**  
Changes in the functional state of the cardiovascular system during locomotions /Pro zmini funktsional'nogo stanu sertsevo-sudinnoi sistemi pri lokomotsiakh/.  
22 p3885 A69-40966

**ALEKSOFF, C. C.**  
Time average holography extended.  
09 p1495 A69-21749  
Modulated reference wave holography.  
10 p1694 A69-23368

**ALEKSENKO, L. V.**  
Radiosensitivity of potatoes to gamma and proton irradiation applied to whole tubers and isolated eyes before planting.  
18 p3095 A69-34730

**ALESHIN, V. D.**  
Combustion of certain organic perchlorates /O gorenii nekotorykh organicheskikh perkhlorotov/.  
15 p2716 A69-30108

**ALESHEVICH, V. A.**  
Neodymium laser with regulated pulse duration.  
14 p2460 A69-29670

**ALEXANDER, C., JR.**  
Potential constants of nitric acid.  
15 p2561 A69-30467

**ALEXANDER, G. J.**  
The legal frontier in the United States space program.  
20 p3639 A69-37132

**ALEXANDER, H.**  
An application of the extended Kantorovich method to the stress analysis of a clamped rectangular plate.  
05 p0835 A69-15872

**ALEXANDER, J. A.**  
Silicon carbide - High strength at high temperatures.  
09 p1524 A69-22072  
The characteristics of the Mg-B composite system.  
09 p1507 A69-22332  
Continuous casting as a composite fabrication process.  
19 p3318 A69-35511

**ALEXANDER, J. K.**  
Measurements in the ionosphere of the aspect dependence of antenna reactance. I - Variations arising from the inhomogeneous plasma distribution about the vehicle.  
22 p3934 A69-39964  
Type III radio bursts in the outer corona.  
22 p4003 A69-40300  
The spectrum of the cosmic radio background between 0.4 and 6.5 MHz.  
23 p4219 A69-42375

**ALEXANDER, M.**  
Possible contamination of earth by lunar or Martian life.  
13 p2210 A69-28467

**ALEXANDER, N.**  
Miniature floated inertial platform.  
[AIAA PAPER 69-835] 21 p3761 A69-39366

**ALEXANDER, P. D.**  
Model hydrogen and helium ion concentrations in the plasmasphere.  
15 p2677 A69-31447

**ALEXANDER, R. H.**  
Remote sensing of urban environments.  
12 p2193 A69-27012

**ALEXANDER, R. M.**  
A simple high accuracy logarithmic count rate circuit suitable for spacecraft use.  
[IEEE PAPER 3A-3] 07 p1134 A69-19191

**ALEXANDER, T.**  
The unexpected payoff of project Apollo.  
18 p3233 A69-34649

**ALEXANDER, W. E.**  
A cryogenic liquid level/temperature transducer.  
17 p2975 A69-33670

**ALEXANDER, W. M.**  
Mariner IV and OGO III - Recent measurements of picogram dust particle flux in interplanetary and cislunar space.  
15 p2699 A69-31394  
Lunar Explorer 35 - 1967-1968 measurements of picogram dust particle flux in selenocentric space.  
15 p2699 A69-31396

**ALEXANDER, W. T.**  
Measurement and evaluation of helicopter flight loads spectra data.  
[AHS PAPER 301] 17 p2901 A69-33548

**ALEXANIAN, M.**  
Covariant black-body and the 3 deg K radiation field.  
15 p2657 A69-31494

**ALEXEFF, I.**  
Simultaneous measurements of ion-acoustic-wave potential and plasma density perturbation to yield gamma sub e.  
03 p0475 A69-13148  
Transient plasma sheath - Discovered by ion-acoustic waves.  
11 p1929 A69-25272  
Experimental strong turbulent heating.  
17 p3014 A69-33827

**ALEXIS, R.**  
ELDO radio guidance station at Gove /La station de guidage radioelectrique ELDO de Gove/.  
22 p3919 A69-39920

**ALFEROV, V. I.**  
Experimental investigation of a vortex flow past a smooth body of revolution and past a body of revolution with a wing and ribs at a Mach number of two /Eksperimental'noe issledovanie vikhrevoogo techeniia okolo izolirovannogo tela vrashcheniia i tela vrashcheniia s krylom i rebrami pri chisle Makha, ravnom dvum/.  
02 p0191 A69-12586

**ALFEROV, ZH. I.**  
Energy spectrum of silicon-doped gallium arsenide /Energeticheskie spektr arsenida galliia, legirovannogo kremniem/.  
01 p0139 A69-10833  
Photosensitivity spectra of GaP sub x As sub 1-x - GaAs n-n heterojunctions.  
02 p0294 A69-11630  
Photoluminescence of n-type epitaxial gallium arsenide films /Fotoluminesentsiia epitaksial'nykh sloev arsenida galliia n-tipa/.  
03 p0488 A69-13887  
Coherent emission in epitaxial structures with heterojunctions in the AlAs-GaAs system /Kogerent-noe izluchenie v epitaksial'nykh strukturakh s geteroperekhodami v sisteme AlAs-GaAs/.  
03 p0489 A69-13896  
Injection properties of n-Al sub x Ga sub 1-x As-p-GaAs heterojunctions.  
06 p0979 A69-16993  
The energy spectrum of gallium arsenide doped with silicon.  
11 p1936 A69-24700  
Photoluminescence of epitaxial n-type gallium arsenide films.  
11 p1939 A69-25688  
Coherent radiation of epitaxial heterojunction structures in the AlAs-GaAs system.  
11 p1939 A69-25697  
Photoelectric properties of p-n junctions in silicon-doped gallium arsenide /Fotoelektricheskie svoystva p-n-perekhodov v arsenide galliia, legirovannom kremniem/.  
15 p2666 A69-30067  
Radiative recombination in gallium arsenide p-n structures with a germanium-doped p region /Izluchatel'naia rekombinatsiia v arsenidgallievykh p-n-strukturakh s p-oblast'iu, legirovannoi germaniim/.  
21 p3780 A69-39044  
Spontaneous emission sources based on structures with heterojunctions in the AlAs-GaAs system /Istochniki spontannogo izlucheniia na osnove struktur s geteroperekhodami v sisteme AlAs-GaAs/.  
22 p3964 A69-40608



- Diagonal tunneling and radiation polarization in Al sub x Ga sub 1-x As-GaAs heterojunctions and in p-n junctions in GaAs /Diagonal'noe tunnelirovanie i polarizatsiia izlucheniia v geteroperekhodakh Al sub x Ga sub 1-x As-GaAs i p-n-perekhodakh v GaAs/. 24 p4362 A69-43737
- ALFHEROV, A. M.**  
Density and temperature variations in the atmosphere at altitudes of 200-600 km. 15 p2599 A69-31343
- ALFIERI, G.**  
Effects of the solar radiation pressure on two artificial satellite models /Effetti della pressione di radiazione solare su due modelli di satellite artificiale/. 14 p2522 A69-29595
- ALFIREVIC, I.**  
Photoelastic determination of the stress concentration factors in anisotropic materials. 15 p2713 A69-31053
- ALFIREVICH, I.**  
Application of birefringent coatings to glass-fiber-reinforced plastics. 11 p1995 A69-25647
- ALFORD, J. S.**  
Design criteria for turbomachinery periodic structures to improve tolerance to inflow distortion and resonant oscillatory flows. [SAE PAPER 690388] 23 p4201 A69-41666
- ALFREDDSON, L.**  
A mathematical model of a radar display. 07 p1136 A69-19504
- ALFRIEND, K. T.**  
Stability of the triangular points in the elliptic restricted problem of three bodies. [AAS PAPER 68-090] 20 p3595 A69-37175
- ALFS, A.**  
Laser Stroboscopy in the Megahertz range /Laserstroboskop im Megahertzbereich/. 11 p1893 A69-24368  
Production of a small series of partial ruby laser giant pulses /Erzeugung einer kleinen Serie von partiellen Rubinlaser-Riesenspulsen/. 12 p2086 A69-26167
- ALFUTOV, N. A.**  
Stress analysis of a reinforced cylindrical shell under external loading /Raschet na ustoiichivost' podkreplennoi tsilindricheskoi obolochki, nagruzhennoi vneshnim davleniem/. 11 p1982 A69-24949
- ALFVEN, H.**  
Electric currents and solar flares. 06 p0995 A69-17444  
Antimatter, quasi-stellar objects, and the evolution of galaxies. 15 p2690 A69-30670  
Asteroidal jet streams. 17 p3030 A69-33070  
Two alternatives for the history of the moon. 18 p3198 A69-34823
- ALGER, D. L.**  
A solution to tritium pump contamination for small accelerators. 12 p2059 A69-26499
- ALGERMISSEN, J.**  
Chemical relaxation and optimum propellant mixture ratio in space propulsion systems /Chemische Relaxation und optimale Treibstoffmischungsverhaeltnis in Raumfahrttriebwerken/. 18 p3229 A69-34773
- ALI, A. W.**  
Hydrogen molecular vacuum ultraviolet laser theory. 05 p0771 A69-15814  
A study of the nitrogen laser power density and some design considerations. 21 p3742 A69-39779
- ALI, M. R. M. H.**  
Noise and flow characteristics of coaxial jets. 20 p3513 A69-37063
- ALIAKRINSKAIA, I. O.**  
Qualitative and quantitative distribution of bone marrow in adult dogs. 08 p1262 A69-19835
- ALIAKRINSKII, B. S.**  
Mechanisms of spatial orientation in flight and some causes of its disturbance. 08 p1263 A69-19938  
Problems of latent desynchronization. 15 p2557 A69-31457
- ALIBEKOV, M. I.**  
Energy characteristics of the interaction of cosmic-ray particles with carbon nuclei. 13 p2330 A69-28379
- ALIEV, M. I.**  
The Dirichlet problem for degenerate elliptic equations with nonlinear lower-order terms. 03 p0456 A69-13601
- ALIEV, R. L.**  
Large deflections of a nonlinearly elastic ring under external pressure /Bol'shie progiby nelineino-uprugogo kol'tsa pod vneshnim davleniem/. 17 p3062 A69-33715
- ALIEV, R. S.**  
Characteristic reflection curves with normal irradiation of a surface. 03 p0534 A69-14161
- ALIEV, S. A.**  
Determination of indium arsenide parameters /Opredelenie parametrov arsenida india/. 15 p2666 A69-30066
- ALIEVA, N.**  
Exact positions of minor planets according to photographic observations on the normal astrophot at Tashkent in 1963 and 1964 /Tochnye polozeniia mal'kikh planet po fotograficheskim nabludeniiam na normal'nom astrografe v Tashkente v 1963-1964 gg./. 20 p3596 A69-37312
- ALIKAEV, V. V.**  
Determination of a plasma electron distribution function from the bremsstrahlung spectrum /Opredelenie funktsii raspredeleniia elektronov plazmy po spektru tormoznogo izlucheniia/. 08 p1365 A69-20547  
Measurement of plasma electron temperature from the bremsstrahlung spectrum in the X-ray region /Izmerenie temperatury elektronov plazmy po spektru tormoznogo izlucheniia v rentgenovskoi oblasti/. 14 p2496 A69-29783  
Investigation of the broadening of plasmoids with the aid of quasi-optical microwave systems /Issledovanie rasshireniia plazmennyykh sgustkov pri pomoshchi kvaziopticheskikh SVCh-sistem/. 14 p2497 A69-29793
- ALIKHANOV, S. G.**  
Development of a collisionless shock wave program /Razvitie programmy po udarnym volnam bez stolknovenii/. 17 p3012 A69-33818
- ALIMPIEV, A. I.**  
Experimental study of the stability of fuel droplet combustion in a turbulent flow /Eksperimental'noe issledovanie ustoiichivosti goreniia kapel' topliva v turbulentnom potoke/. 08 p1421 A69-20345
- ALIMPIEV, S. S.**  
Influence of dissociation of the inversion on a CO sub 2 laser with pulsed pumping. 18 p3151 A69-34620
- ALINOVSKII, N. I.**  
Averaged cross sections of the ionization of neutral particle beams by electrons with a Maxwellian velocity distribution /Usrednennye sечeniia ionizatsii puchkov neutral'nykh chastits elektronami, imeushchimi maksvellovskoe raspredelenie skorosti/. 12 p2138 A69-26542  
Facility for plasma diagnostics by a multicomponent beam of fast neutral particles /Ustanovka dlia diagnostiki plazmy mnogokomponentnym puchkom bystrykh neutral'nykh chastits/. 14 p2452 A69-29812  
Time-of-flight mass spectrometers for investigating plasmoids /Proletnye mass-spektrometry dlia issledovaniia plazmennyykh sgustkov/. 14 p2498 A69-29813  
Development of a collisionless shock wave program /Razvitie programmy po udarnym volnam bez stolknovenii/. 17 p3012 A69-33818
- ALISINA, V. V.**  
Selection of basic orientation systems for controlling the motion of a spacecraft about its center of mass /Vybór bazovykh sistem orientatsii v upravlenii dvizheniiami kosmicheskogo letatel'nogo apparata vokrug sobstvennogo tsentra mass/. 21 p3830 A69-39838  
Nutation-free controlled motion of a space vehicle about its center of mass /Upravliaemoe beznutatsionnoe dvizhenie kosmicheskogo letatel'nogo apparata vokrug tsentra mass/. 21 p3830 A69-39839
- ALKSNE, A. Y.**  
External aerodynamics of the magnetosphere. 07 p1128 A69-19360  
Effect of neutral sheet currents on the shape and magnetic field of the magnetosphere tail. 09 p1488 A69-21661  
Plasma flow around the magnetosphere. 12 p2150 A69-26736
- ALLABERDYEV, D.**  
Possible trajectory shapes of waves emitted by a source located in the ionosphere /Vozmozhnye vidy traektorii voln, izluchaemykh istochnikom raspolozhenym v ionosfere/. 17 p2969 A69-34001
- ALLAIRE, T.**  
Reticulocyte counts before and after exercise - Trained vs. sedentary. 21 p3654 A69-38907
- ALLAM, D. S.**  
Helical detector and alarm system for 2450 MHz and applications. 24 p4312 A69-42573
- ALLAN, R. R.**  
Evolution of Mimas-Tethys commensurability. 16 p2861 A69-32241
- ALLARD, A.**  
Calculation of the air flow in a conical nozzle with chemical and vibrational nonequilibrium effects /Calcul d'un écoulement d'air dans une tuyère conique avec effets de déséquilibre chimique et vibratoire/. 09 p1433 A69-22610  
Norms for quantitative vectorcardiography with special emphasis on the medical evaluation of flying personnel. 24 p4277 A69-43390
- ALLARIO, F.**  
Onset of rotating disturbance in the interelectrode region and exhaust jet of an MPD arc. [AIAA PAPER 69-232] 09 p1562 A69-21225  
Onset of rotating disturbance in linear Hall current accelerator. [AIAA PAPER 69-381] 09 p1568 A69-21731  
Electric-field distribution in pulsed high-current-density discharges in helium and helium-hydrogen mixtures. 10 p1739 A69-23660
- ALLEAU, T.**  
Study of cesium adsorption on tungsten single crystals /Etude de l'adsorption du césium sur des monocristaux de tungstène/. 14 p2506 A69-29271
- ALLEGRE, C. J.**  
Study of the distribution and abundance of transition elements in the earth's crust compared to the rare earths /Etude de la distribution et de l'abondance des éléments de transition dans l'écorce terrestre, comparée à celles des terres rares/. 08 p1310 A69-20943
- ALLEGRE, J.**  
Effects of angle of attack and blunting on the aerodynamic characteristics of a flat plate in a hypersonic flow at low Reynolds numbers /Effets d'incidence et d'émoussement sur les caractéristiques aérodynamiques d'une plaque plane dans un écoulement hypersonique aux faibles nombres de Reynolds/. 13 p2200 A69-28358  
Measurement of wall pressures and heat fluxes in a hypersonic flow at low Reynolds numbers /Mesures de pressions pariétales et de flux thermiques dans un écoulement hypersonique aux faibles nombres de Reynolds/. 16 p2731 A69-31605
- ALLEMANDOU, P.**  
Transfer functions of RLC filters. 08 p1300 A69-21176
- ALLEN, A. S.**  
Titanium chemical milling. 21 p3669 A69-38966
- ALLEN, B. C.**  
The surface free energy of solid molybdenum. 12 p2117 A69-27137  
Kinetics of grain boundary grooving in chromium, molybdenum, and tungsten. 21 p3744 A69-38740
- ALLEN, B. R.**  
National Transportation Safety Board Bureau of Aviation Safety. 06 p1041 A69-16842

ALLEN, C. M.  
Load support and leakage from microasperity-lubricated face seals.  
[ASLE FICFS PREPRINT 21] 15 p2622 A69-30500

ALLEN, C. W.  
Elastohydrodynamic lubrication of a spinning ball in a nonconforming groove.  
[ASME PAPER 69-LUBS-11] 18 p3140 A69-34381  
Systematic photometry of XUV solar images. 20 p3603 A69-37546

ALLEN, D. A.  
The infrared sources in the Trapezium region of M42. 10 p1786 A69-24105  
Lunar thermal anomalies - Infrared observations. 12 p2171 A69-27092

ALLEN, D. R.  
Acoustic frequency shifts and peak power insertion losses /A preliminary note/. 07 p1117 A69-19700  
Titanium chemical milling. 21 p3669 A69-38966

ALLEN, E. M.  
Emerging philosophy in VTOL handling qualities. 11 p1823 A69-25387

ALLEN, E. R.  
On the origin of metal atomic ions associated with sporadic E layers. 01 p0071 A69-11167

ALLEN, F. M.  
Tolerance limits for an uncertain requirements vector in LP.  
[AAS PAPER 69-079] 24 p4340 A69-42821

ALLEN, G.  
Viscosity measurements of dilute solutions of helium-3 in superfluid helium-4 between 0.1 and 1.2 deg K. 21 p3772 A69-39582

ALLEN, H. G.  
Analysis and Design of Structural Sandwich Panels. 19 p3438 A69-36380

ALLEN, J. H.  
Long-term stability of self-oscillating rubidium magnetometers. 02 p0250 A69-12394

ALLEN, J. L.  
Ferrite elements for hybrid microwave integrated systems. 01 p0040 A69-10191

ALLEN, J. W.  
Calculations of ionization equilibria for oxygen, neon, silicon, and iron. 09 p1543 A69-22404

ALLEN, L.  
Variation with cavity Q of the beat frequency between axial modes of a gas laser. 07 p1156 A69-19412  
Mode self-locking in gas lasers. 07 p1156 A69-19413  
The intensity of a single-mode gas laser as a function of cavity Q. 07 p1157 A69-19414  
Comparison of semi-classical and quantum theories for a single-mode laser. 22 p3961 A69-40415

ALLEN, L. H.  
Operation of the Surveyor television system in the photon-integration mode.  
[SMPT PAPER 105-72] 12 p2078 A69-25772

ALLEN, L. H., JR.  
Fitting the 747 to operation.  
[RAES PAPER 12] 22 p3864 A69-40621

ALLEN, M. M.  
Applications of powder metallurgy to superalloy forgings.  
[ASM PAPER GG-8-3-3] 21 p3745 A69-38929

ALLEN, P. B.  
Superconductivity and band structure from a single pseudopotential - Zinc and cadmium. 04 p0642 A69-14965

ALLEN, R. B.  
Continuous operation of a YAIG-Nd laser by injection luminescent pumping. 13 p2270 A69-27192

ALLEN, R. C.  
SCID-operated aircraft seat ejection systems. 06 p0877 A69-16957

ALLEN, R. M.  
Summation of Gaussians for ion-implantation profile control. 11 p1857 A69-24546

ALLEN, R. S.  
Comparison of scintillation depths of radio star and satellite scintillations. 07 p1215 A69-18821  
Scintillation fading of VHF beacons on synchronous satellites. 09 p1457 A69-22461

ALLEN, S. J.  
Heat conduction in fluids with substructure. 02 p0351 A69-12052  
On continuum theories of suspensions of deformable particles. 05 p0752 A69-16738  
A theory of mixtures with microstructure. 13 p2371 A69-27318

ALLEN, T. H.  
Space-cabin and suit pressures for avoidance of decompression sickness and alleviation of fire hazard. 22 p3890 A69-40212  
Abdominal gas volume at altitude and at ground level. 23 p4076 A69-41291  
Decompression sickness in simulated "zoom" flights. 23 p4077 A69-41292

ALLEN, T. J.  
Information flow in research and development laboratories. 20 p3640 A69-38019  
A model for the description and evaluation of technical problem solving. 20 p3640 A69-38020

ALLEN, W.  
The use of fibre optics. 16 p2789 A69-31933

ALLEN, W. A.  
Interaction of light with a plant canopy. 12 p2097 A69-26985  
Reflectance of cotton leaves and their structure. 15 p2558 A69-30456  
Differential corrections applied to an Izsak-Borchers ballistic trajectory. 16 p2857 A69-32156

ALLEN, W. H.  
Irradiation and manual navigation. 07 p1177 A69-19208  
Satellite maintenance using remote manipulator spacecraft. 19 p3430 A69-36001

ALLENBY, R. J.  
Lunar orbital mission plans. 18 p3193 A69-34362

ALLER, L. H.  
Spectra of the central stars of planetary nebulae. 02 p0325 A69-12624  
Spectrophotometric studies of gaseous nebulae. [ARL-68-0200] 02 p0327 A69-12708  
Analysis of stellar spectra and the determination of f-values. 03 p0508 A69-13174  
Astrophysical determination of f-values for TiII, CrII, FeII. 03 p0508 A69-13175  
Spectral line intensity variations in planetary nebulae. 08 p1383 A69-19898  
The chemical composition of normal stellar atmospheres. 08 p1402 A69-20904  
Chemical compositions of diffuse nebulae. 08 p1402 A69-20908  
The chemical composition of the sun and the solar system. 09 p1608 A69-22745  
Spectrophotometric studies of gaseous nebulae. XII. 10 p1787 A69-24117  
The supergiant HD-33579. 14 p2529 A69-29979  
Some problems concerning the collisional excitation of forbidden lines in planetary nebulae. 19 p3422 A69-36221  
The planetary nebulae. IV. 20 p3598 A69-37425  
The planetary nebulae. V. 21 p3817 A69-39785

A spectroscopic study of the remarkable nebula NGC 6302. 22 p4026 A69-40647  
Spectrophotometric studies of gaseous nebulae. XIV - The bright moderate-excitation planetary IC 5217. 24 p4376 A69-42663

ALLERY, M. B. P.  
The fabrication of fibre-reinforced metals by filament-winding and electrodeposition - An evaluation of some electroplating solutions. 11 p1890 A69-24337

ALLEY, C. O.  
Laser scatter measurements in the mesosphere and above. 05 p0758 A69-16414  
Correlations in light from a laser at threshold. 13 p2271 A69-27399  
Some implications for physics and geophysics of laser range measurements from earth to a lunar retro-reflector. 22 p3960 A69-40190

ALLGAIER, R. S.  
A model for liquid "semiconductors." 19 p3391 A69-36560

ALLIKAS, R.  
Energy processes in a static ferromagnetic frequency doubler /Energeticheskie protsessy v staticheskome ferromagnitnom udvoitele chastoty/. 10 p1663 A69-23566

ALLIS, J. B.  
Value analyses during the design phase. 13 p2383 A69-28097

ALLISON, A. C.  
Photodissociation of molecular hydrogen on Venus. 20 p3609 A69-38102  
Electron impact excitation of CN. 21 p3773 A69-38476

ALLISON, H. J.  
Economic high-pressure hydrogen-oxygen regenerative fuel-cell systems. 23 p4076 A69-42308

ALLISON, I. M.  
Composites call for new design philosophy. 16 p2802 A69-32380  
The analysis of photoelastic data for stress separations. 21 p3843 A69-39316

ALLISON, L. J.  
Satellite mapping of the Pacific tropical cloudiness. 17 p2996 A69-33001

ALLISON, W. S.  
The subunits of dogfish M sub 4 lactic dehydrogenase. 24 p4280 A69-43051

ALLKOEFER, O. C.  
Cosmic rays latitude survey at solar minimum. 19 p3396 A69-36411

ALLOIN, D.  
Spectrophotometry of the nucleus of the galaxy NGC 1052 from 3400 to 6300 angstrom units /Spectrophotometrie du noyau de la galaxie NGC 1052 de 3400 a 6300 angstrom units/. 16 p2853 A69-31610  
Spectrophotometry of the nucleus of the galaxy of NGC 3031 from 3400 to 8800 angstrom units /Spectrophotometrie du noyau de la galaxie NGC 3031, de 3400 a 8800 angstrom units/. 17 p3034 A69-33396

ALLOUCHE, D.  
Application of a successive approximation method to the calculation of the electron distribution function of a homogeneous Lorentzian plasma subjected to a frequency-modulated electric field /Application d'une methode d'approximations successives au calcul de la fonction de distribution electronique d'un plasma lorentzien homogene soumis a un champ electrique module en frequence/. 02 p0285 A69-11543  
Nonlinear electron conductivity of a Lorentzian plasma subjected to the action of a frequency-modulated electric field /Conductivite electronique non lineaire d'un plasma Lorentzien soumis a l'action d'un champ electrique module en frequence/. 21 p3778 A69-39573

ALLRED, J. E.  
Two electronic stethoscopes for use in high noise level environments. 21 p3667 A69-39444



## ALLRED, W.

Local-mode absorption and defects in compensated silicon-doped gallium arsenide.

02 p0299 A69-12402

## ALLUM, F. R.

Measurement of cosmic ray anisotropy of solar origin by Explorer 34 satellite.

24 p4373 A69-43619

## ALLWOOD, R. J.

A polygonal finite element for plate bending problems using the assumed stress approach.

15 p2710 A69-30867

## ALM, G. V.

Bonding materials - Diffusion bonding.

[ASME PAPER 69-DE-7] 14 p2454 A69-28840

## ALMAR, I.

Some problems involved in the processing of visual satellite observations by Lozinskii's method /Nekotorye problemy obrabotki vizual'nykh nabludenii isskustvennykh sputnikov zemli s pomoshch'iu metoda A. M. Lozinskogo/.

12 p2069 A69-26438

## ALMASOV, L. A.

Propagation of electromagnetic waves in a plate-like semiconductor at nonstandard dispersion law of carrier energy.

22 p3994 A69-40751

## ALMAZOV, A. B.

Determination of the resistance of a metal-semiconductor contact /Opredelenie soprotivleniia kontakta metall-poluprovodnik/.

21 p3780 A69-39046

## ALMEY, E. N.

Mosaic-mirror camera for multiple image, high resolution photography.

17 p2972 A69-33089

## ALMGREN, D. W.

The inception of nucleate boiling with liquid nitrogen.

[ASME PAPER 68-WA/PID-10]

05 p0848 A69-16167

## ALMOULI, J. A.

Heat resistant polyamides and polyimides for electrical insulation.

13 p2286 A69-27988

## ALMROTH, B.

Buckling of cylinders with cutouts.

[AIAA PAPER 69-92] 06 p1027 A69-18060

## ALOKHIN, O. D.

Study of light scattering in single-component systems near a critical point with allowance for the gravitational effect /Vivchennia svitlorozsiannia v odnokomponentnykh sistemakh pobliu kritichnoi točki z vrakhuvanniam gravitatsiinogo efektu/.

14 p2485 A69-28995

## ALON, Y.

Thermistor thermometer for linearized magnetic recording and telemetry.

14 p2449 A69-29562

## ALOUGES, A.

Stabilization system of the Diademe satellites /Systeme de stabilisation des satellites "Diademe"/.

17 p3046 A69-33224

## ALPERN, M.

Encoding of nerve signals from retinal rods.

23 p4099 A69-42119

## ALPEROVICH, L. S.

Geomagnetic pulsations with an intensity maximum at mid-latitudes /Geomagnitnye pul'satsii s maksimumom intensivnosti v srednikh shirotakh/.

20 p3522 A69-37059

## ALPERT, I. A. L.

Certain studies of the ionosphere with the aid of radio waves emitted from satellites /O nekotorykh issledovaniakh ionosfery s pomoshch'iu radiovoln, izluchaemykh s ISZ/.

13 p2252 A69-27349

On the local and integral electron density of the ionosphere measured by means of coherent radio waves emitted from artificial earth satellites. I.

14 p2438 A69-29106

Results of investigations of the local and integral electron concentration in the ionosphere with the aid of coherent radio waves emitted from a satellite. I /O rezul'tatakh issledovaniia lokal'noi i integral'noi elektronnoi konsentratsii ionosfery s pomoshch'iu kogerentnykh radiovoln, izluchaemykh s ISZ. II/.

20 p3519 A69-37022

## ALPERT, V. N.

Theoretical investigation of the process of obtaining profiles by drawing a metal strip through an instrumental draw plate with a continuously sliding application of the compressing force in the course of angle shaping /Teoreticheskoe issledovanie protsessy polucheniiia profiliei pri protiaživanii cherez instrumental'nuu fil'eru metallicheskoii lentu s neprevino skol'ziaschim prilozheniem szhimaushchego usiliia v protsessie formoobrazovaniia ugla/.

03 p0432 A69-12962

The load-carrying capacity of antisymmetrically loaded circular plates.

16 p2875 A69-32289

## ALSAJI, S. J.

Temperature laws for a turbulent boundary layer with injection and heat transfer.

04 p0685 A69-14729

## ALSMILLER, R. G., JR.

Thermal-neutron flux generation by high-energy protons.

02 p0279 A69-11837

An estimate of the prompt photon spectrum arising from cosmic-ray bombardment of the moon.

09 p1597 A69-22088

The effects of multiple Coulomb scattering and range straggling in shielding against solar-flare protons.

10 p1723 A69-23164

Calculations of the radiation hazard due to exposure of supersonic aircraft to solar-flare protons.

11 p1949 A69-24864

High-energy /less than 400-Mev/ neutron transport using the method of discrete ordinates.

14 p2481 A69-29592

Calculation of the radiation hazard at supersonic aircraft altitudes produced by an energetic solar flare.

23 p4204 A69-41337

## ALSOP, L. E.

Torsional free periods of the earth observed at six stations around the earth.

02 p0243 A69-12007

## ALTENHOFEN, R. E.

Use of high-altitude jet photography for topographic mapping.

18 p3134 A69-34339

## ALTENPOHL, D.

Aluminum-plastic sandwich products /Aluminium/Kunststoff-Verbundhalbzeug/.

02 p0348 A69-12749

## ALTERMAN, Z. S.

Impulsive sound propagation in a fluid sphere of variable internal friction.

14 p2485 A69-29026

## ALTHAUS, H. L.

Transfer functions of a DDA program.

12 p2053 A69-26509

## ALTHOF, W.

Metal bonding in satellites and space vehicles - Strength behavior /Metallklebungen in Satelliten und Raumfahrzeugen - Festigkeitsverhalten/.

12 p2101 A69-25858

## ALTICK, P. L.

Extension of the integral formulation of scattering theory to Coulomb interactions.

14 p2489 A69-29995

## ALTMAN, C.

The simple thin-film optical method in electromagnetic wave propagation.

16 p2752 A69-32392

The generalized thin-film optical method in electromagnetic wave propagation.

16 p2753 A69-32393

The generalized thin-film optical technique in radio propagation.

17 p2927 A69-33863

The transmission of electromagnetic waves through the ionosphere at micropulsation frequencies.

17 p2927 A69-33864

## ALTMAN, D. E.

Some considerations in the design of a high power, pulsed N sub 2 laser.

01 p0091 A69-10842

## ALTMAN, M.

The determination of thermal diffusivities of thermal energy storage materials. II. [ASME PAPER 68-WA/ENER-5]

05 p0848 A69-16161

A study of thermal transpiration for the development of a new type of gas pump.

[ASME PAPER 68-WA/ENER-4]

05 p0706 A69-16166

Elements of Solid-State Energy Conversion.

13 p2322 A69-28033

Rotation of a conducting fluid in a finite cylinder due to crossed electric and magnetic fields. [AIAA PAPER 69-726]

17 p3011 A69-33477

Transient temperature response of cylindrical, composite energy storage devices.

22 p3868 A69-40132

## ALTMAN, P. L.

Metabolism.

04 p0553 A69-14902

## ALTMAN, S. P.

Manual onboard computation procedures and devices for orbital navigation and guidance.

08 p1348 A69-21184

## ALTMANN, H.

Optimal controls for active nutation damping of spin-stabilized bodies /Optimale Steuerungen zur aktiven Nutationsdaempfung von drallstabilisierten Flugkoerpern/.

18 p3208 A69-34774

## ALTMANN, M.

The corneal arc, a warning sign of atheromatosis in flight crews /L'arc corneen signe evocateur d'atheromatose chez les membres du personnel navigant/.

05 p0711 A69-16633

## ALTON, G. D.

Collecting a sample of solar wind - An experimental study of its capture in metal films.

23 p4205 A69-41539

## ALTOV, V. A.

Explosive magnetohydrodynamic generator with a superconducting magnetic system /Vzryvnoi magnitogidrodinamicheskii generator so sverkhprovodiashchei magnitnoi sistemoi/.

14 p2393 A69-28911

## ALTROCK, R. C.

A new method for the analysis of equivalent widths and its application to solar photospheric oxygen.

03 p0515 A69-14034

Source functions of infrared Fraunhofer lines from equivalent widths.

14 p2528 A69-29961

Interpretation of infrared oxygen spectroheliograms.

18 p3204 A69-35388

## ALTSCHULER, M. D.

A possible acceleration mechanism for a solar surge.

03 p0516 A69-14044

## ALTSCHULER, B. L.

General covariant quantization of gravitation and cosmology /Obshchekovariantnoe kvantovanie gravitatsii i kosmologii/.

02 p0326 A69-12640

## ALTSCHULER, E. E.

A troposcatter propagation experiment at 15.7 GHz over a 500 km path.

01 p0043 A69-10560

New applications at millimeter wavelengths.

03 p0397 A69-13722

## ALTTSTETTER, C.

Transformation strain in stressed cobalt-nickel single crystals.

13 p2279 A69-27761

## ALURKAR, S. K.

Metre and decametre solar radio bursts recorded during July 6-11, 1968.

03 p0518 A69-14259

Solar radio spectroscopy /frequency range 40-240 MHz/ at Ahmedabad /Lat.23 deg 01'N, Long.72 deg 36'E/, India.

06 p0925 A69-17318

Antennas for radio astronomy in the metre-wavelength region at Ahmedabad.

23 p4143 A69-42353

## ALVAREZ DE TOLEDO, F.

Study of the stability and the conditions of the propagation of low-frequency waves in a central-conductor configuration /Etude de la stabilite et des conditions de propagation des ondes de basse frequence dans une configuration a conducteur central/.

11 p1931 A69-25362

## ALVAREZ, L. W.

Recent developments in particle physics.

24 p4352 A69-43039

## ALVERSON, R. C.

The effect of couple-stresses on the diffraction of plane elastic waves by cylindrical discontinuities.

13 p2369 A69-28351

## ALWANG, W. G.

- Visualization of standing acoustic waves using time-averaged optical holographic interferometry.  
06 p0923 A69-17150
- Holographic measurement of compressor blade, turbine blade and airframe panel vibration distribution. [SAE PAPER 690265]  
07 p1130 A69-18313
- Continuous butt welding using a carbon dioxide laser.  
15 p2617 A69-30099
- The observation of three dimensional shadow-graphlike images in holography of phase objects.  
24 p4317 A69-43764

## ALYBIN, V. G.

- Magnetron amplifier with a stepped interaction space /Magnetronnyi usilitel' so stupenchatym prostranstvom vzaimodeistviia/.  
03 p0407 A69-13977

## ALZIARY DE ROQUEFORT, T.

- Influence of a heat flux on the separation of the laminar boundary layer in a supersonic regime /Influence d'un flux de chaleur sur le décollement de la couche limite laminaire en regime supersonique/.  
09 p1429 A69-21690

## ALZIARY DE ROQUEFORT, TH.

- A type of supersonic recycling wind tunnel for training and research /Sur un type de soufflerie supersonique a recyclage pour l'enseignement et la recherche/.  
07 p1116 A69-19289

## ALZNER, E.

- Laminar boundary layer with constant wall shear stress.  
02 p0233 A69-12535

## AMACKER, J. Z.

- Certifying an inertial navigator. [SAE PAPER 680299]  
13 p2296 A69-28103

## AMADIO, C. R.

- New Kodak machines and processes for color aerial photography.  
22 p3949 A69-40992

## AMANN, H. O.

- Experimental study of the starting process in a reflection nozzle.  
18 p3085 A69-34471

## AMANO, M.

- Quench-aging of niobium-hydrogen alloys at minus 196 deg C.  
14 p2463 A69-29288

## AMANO, T.

- Parametric effects of an alternating field on inhomogeneous plasmas.  
13 p2304 A69-27298

## AMARANTINIS, TH.

- Franco-British cooperation and the agreement of November 29, 1962, for the development of the Concorde /La cooperation franco-britannique et l'Accord du 29 novembre 1962 pour la realisation du Concorde/.  
17 p3075 A69-32840

## AMATO, I.

- Niobium-hydrogen and tantalum-hydrogen systems /Sui sistemi niobio-idrogeno e tantalio-idrogeno/.  
09 p1448 A69-21599

## AMAYENC, P.

- Characteristics of the results of measurements of ionospheric absorption by means of a beacon satellite /Caracteristiques des resultats de mesure de l'absorption ionospherique a l'aide d'un satellite balise/.  
02 p0246 A69-12742

## AMAZIGO, J. C.

- Buckling under axial compression of long cylindrical shells with random axisymmetric imperfections.  
07 p1236 A69-19473

## AMBA-RAO, C. L.

- Fourier transform methods in elasticity problems and an application.  
20 p3622 A69-37282

## AMBARTSUMIAN, M. A.

- Infrared absorption and reflection in degenerate gallium antimonide.  
03 p0492 A69-14174

## AMBARTSUMIAN, R. V.

- Frequency stability of a He-Xe laser with nonresonant feedback.  
12 p2105 A69-26049

## AMBARTSUMIAN, S. A.

- Specific features of the theory of shells made of currently available materials /Spetsificheskie osobennosti teorii obolochek iz sovremennykh materialov/.  
09 p1611 A69-21481

- The theory of symmetrically loaded weakmoment shells of revolution, made of different modulus material.  
11 p1980 A69-24819

- Theory of weak-moment shells prepared from materials with different moduli /Teoriia slabomomentnykh obolochek, izgotovlennyykh iz raznomodul'nogo materiala/.  
18 p3225 A69-35367

- Basic equations and relations in the theory of elasticity of anisotropic bodies with differing moduli /Osnovnye uravneniia i sootnosheniia raznomodul'noi teorii uprugosti anizotropnogo tela/.  
21 p3838 A69-39184

- Contribution to the elasticity theory of materials with variable modulus of elasticity /K voprosu teorii uprugosti raznomodul'nogo materiala/.  
22 p4047 A69-41171

## AMBARTSUMIAN, S. M.

- New light alloys of aluminum with lithium and magnesium.  
03 p0443 A69-13026

## AMBARTSUMIAN, V. A.

- Galactic nuclei /Iadra galaktik/.  
11 p1953 A69-24351

- Activity of galactic nuclei /Ob aktivnosti iader galaktik/.  
12 p2163 A69-27016

- Galactic nuclei /Iadra galaktik/.  
14 p2527 A69-29896

- Problems of Present-Day Cosmogony /Problemy Sovremennoi Kosmogonii/.  
21 p3813 A69-39525

## AMBID, L.

- Effects of corporeal temperature on glucose metabolism in a homeotherm, the rat, and a hibernator, the garden dormouse.  
10 p1642 A69-23118

## AMBOSS, K.

- Analysis of the expected thrust misalignment of Kaufman thrusters. [AIAA PAPER 69-303]  
10 p1753 A69-23362
- The analysis of dense electron beams.  
22 p3985 A69-40668

## AMBROZY, A.

- Semiautomatic high-frequency transistor noise meter /Felaotomatikus nagyfrekvencias tranzistorzajmero/.  
07 p1090 A69-18292

- Transistor thermal-resistance measurement using the ultralinear-thermometer principle.  
09 p1468 A69-22592

## AMDUR, I.

- Perturbation of the velocity distribution in the scattering of molecular beams - A thermal beam effect.  
19 p3376 A69-36173

- Scattering of high-velocity neutral particles. XVI - Ar-Ar, Ar-He, and Ar-H sub 2.  
22 p3988 A69-41187

## AMELCHENKO, V. V.

- Solution of nonlinear problems of the theory of shallow shells by means of variational iterations /Reshenie nelineinykh zadach teorii pologikh obolochek putem variatsionnykh iteratsii/.  
21 p3838 A69-39185

## AMENDT, R. O.

- Telemetry in industrial and efficiency medicine with special consideration of pulse rate measurement /Die Telemetrie in der Arbeits- und Leistungs-mezizin unter besonderer Beruecksichtigung der Pulsfrequenzmessung/.  
15 p2559 A69-31228

## AMENZADE, IU. A.

- Static and Dynamic Problems in Elasticity and Plasticity Theory /Staticheskie i dinamicheskie zadachi teorii uprugosti i plastichnosti/.  
22 p4038 A69-39911

## AMENZADE, R. I.

- Natural oscillations of plates of curvilinear planform /Sobstvennye kolebaniia plastinok krivolineinogo ocheraniia/.  
22 p4038 A69-39912

## AMER, S. H.

- Mechanics of near-earth satellite clusters. [AIAA PAPER 69-929]  
21 p3809 A69-39358

## AMES, B. A.

- Ptois and proptosis following Valsalva maneuver.  
17 p2909 A69-33186

## AMES, W. F.

- Nonlinear Ordinary Differential Equations in Transport Processes.  
04 p0622 A69-14599

- Recent developments in the nonlinear equations of transport processes.  
[AICHE PAPER 31A]  
08 p1302 A69-19849

- Recent developments in the nonlinear equations of transport processes.  
21 p3697 A69-39729

## AMIALE, R.

- Use of statistical reliability methods in pyrotechnics - Application to detonating cutting fuses /Emploi des methodes statistiques fiabilistes en pyrotechnie - Application aux cordeaux detonants de decoupage/.  
10 p1749 A69-23004

## AMIANTOV, I. N.

- Characteristics of digital receivers of radar signals /Kharakteristiki tsifrovyykh priemnikov radiolokatsionnykh signalov/.  
15 p2563 A69-30136

## AMICK, J. A.

- Isolation techniques for fabricating integrated circuits. I - Laminate substrates.  
07 p1100 A69-18617

- Diffusion characteristics and applications of doped silicon dioxide layers deposited from silane, /SiH sub 4/.  
07 p1198 A69-18619

- Diffusion characteristics of doped silicon dioxide layers deposited from premixed hydrides.  
07 p1198 A69-18620

## AMIET, J. P.

- On the origin of the heavy nuclei.  
17 p3009 A69-34190

## AMIN, B. S.

- On the flux of low-energy particles in the solar system during the last 10 million years.  
19 p3411 A69-36097

## AMIRKHANOV, KH. I.

- Impurity band in gallium antimonide crystals.  
04 p0643 A69-15259

## AMIRKHANOVA, D. KH.

- Impurity band in gallium antimonide crystals.  
04 p0643 A69-15259

## AMIRO, I. IA.

- Study of the effect of the reinforcement parameters of ribbed cylindrical shells on the magnitude of critical axial loading /Issledovanie vlianiia parametrov podkrepleniia rebriстыkh tsilindricheskikh obolochek na velichinu osevoi kriticheskoi nagruzki/.  
11 p1985 A69-25173

- Investigation of the carrying capacity of rib-reinforced cylindrical shells /Issledovanie nesushchei sposobnosti rebriстыkh tsilindricheskikh obolochek/.  
11 p1985 A69-25177

## AMIROV, A. D.

- The effect of an artificial heat source upon the development of a cumulus cloud - A numerical experiment.  
02 p0274 A69-11436

## AMITAY, N.

- The analysis of circular waveguide phased arrays.  
03 p0406 A69-13829

- A note on the radiation characteristics and forced surface wave phenomena in triangular-grid circular waveguide phased arrays.  
08 p1282 A69-20038

## AMITONOV, R. V.

- Evaluation of the aftereffect asymmetric spherical temperature field /Otsenka asimetricheskogo sfericheskogo temperaturnogo polia posledetstviia/.  
14 p2537 A69-28888

## AMLINGER, P. R.

- Routine telemetry of electrocardiograms and computer analysis.  
19 p3262 A69-36273

## AMMANN, E. O.

- Modified forms for Glan-Thompson and Rochon prisms.  
02 p0280 A69-11924

## AMME, R. C.

- Multiple velocity dispersion in normal hydrogen and in normal hydrogen-helium mixtures.  
01 p0121 A69-11284



- Charge-transfer cross sections for N sub 2 super plus ions incident on H sub 2 and D sub 2 between 20 and 1000 ev. 05 p0796 A69-15914
- Excitation resonances for the production of metastable atoms in low-energy argon ion-atom collisions. 08 p1354 A69-19809
- Ionization in low-energy atomic collisions of neon with neon and krypton with krypton. 08 p1356 A69-20740
- Rotational relaxation in parahydrogen and its mixtures with helium, neon, and argon at 300 deg K. 16 p2815 A69-32791
- Origin of secondary electrons ejected from gas-covered surfaces by fast neutral beams. 17 p3008 A69-33000
- AMON, R.**  
Clamped annular plate under a concentrated force. 04 p0676 A69-14725
- AMOSOV, N. M.**  
Simulation in Biology and Medicine /Modelirovaniye v Biologii i Meditsine/. 19 p3260 A69-35894
- Planning of behavior on the basis of received information /Planirovaniye povedeniya na osnove vosprinyatoy informatsii/. 23 p4109 A69-41976
- Learning model of motor behavior /Samoobuchaiushchaya model' dvigatel'nogo povedeniya/. 23 p4109 A69-41977
- AMRHEIM, A. T.**  
Conversion of range telemetry systems /CORTS/ program. 05 p0743 A69-16306
- AMRINOV, N. M.**  
Nonequilibrium carriers during depolarization in semiconductors /Neravnovesnye nositeli pri depolarizatsii v poluprovodnikakh/. 01 p0138 A69-10434
- AMY, J.**  
Approximate theoretical study of the entrainment, in the presence of a magnetic induction field, of an electrically conducting liquid evolving in a narrow duct of rectangular cross section, in the case where the mean of the induced currents in the right section of the flow assumes a nonzero value /Etude theorique approchee de mouvements d'entrainement, en presence d'un champ d'induction magnetique, d'un liquide electroconducteur evoluant dans une conduite de section rectangulaire de faible epaisseur, dans le cas ou la moyenne des courants induits dans la section droite de l'ecoulement prend un valeur non nulle/. 16 p2816 A69-31606
- AN, V. K.**  
Equilibrium plasma configurations in the magnetic field of a two-dimensional dipole. I /Ravnovesnye konfiguratsii plazmy v magnitnom pole dvumernogo dipolia. I/. 23 p4205 A69-41835
- ANAMOV, N. I.**  
Measurement of Radio-Thermal and Plasma Radiation in the Microwave Range /Izmereniye Radioteplovyykh i Plazmennyykh Izlucheniye v SVCh Diapazone/. 03 p0420 A69-12919
- ANAND, D. K.**  
Attitude perturbations on a slowly spinning multibody satellite. [AIAA PAPER 68-856] 12 p2174 A69-26795
- The capture and stability of the LIDOS gravity-gradient satellite in an eccentric orbit. [AIAA PAPER 69-921] 21 p3821 A69-39351
- The dynamic modeling of hysteresis and application to damping of spacecraft librations. [AIAA PAPER 69-833] 21 p3821 A69-39364
- ANAND, K. C.**  
Rigidity spectrum of cosmic ray helium nuclei greater than 12 bv. 06 p0988 A69-17276
- Cosmic ray electrons in the Galaxy. 06 p0991 A69-17309
- Electrons in metagalaxy and their implications. 06 p0991 A69-17310
- On the existence of the galactic radio halo. 09 p1590 A69-21395
- ANAND, S. P. S.**  
Slowly rotating convective models with radiation pressure. 09 p1606 A69-22422
- On the angular momenta of stars, planets and asteroids. 09 p1608 A69-22716
- The equilibrium and stability of magnetopolypoles. 21 p3797 A69-38534
- ANAND, Y.**  
A burnout criterion for Schottky-Barrier mixer diodes. 04 p0574 A69-14352
- ANANDA, M.**  
Generalized multistep methods for second-order equations and applications to orbit computation. [AIAA PAPER 69-948] 22 p4021 A69-40331
- ANANEV, I. V.**  
Impact damping of vibrations /Udamnoye dempfirovaniye kolebaniy/. 17 p3066 A69-33946
- ANANEV, I. U. A.**  
Transverse mode selection in a laser with convex mirrors. 03 p0440 A69-13426
- A fluorite - Samarium laser. 14 p2458 A69-29328
- Properties of a laser with an unstable resonator. 15 p2634 A69-30730
- ANANEV, L. M.**  
Compact betatrons for nondestructive testing applications. 18 p3136 A69-34779
- ANANEVA, N. M.**  
Winds at heights of 150-400 km in the atmosphere. 06 p0921 A69-17747
- ANANOV, G. D.**  
Influence of deviations from the mutual perpendicularity of the gimbal axes on the kinematics of a four-gimbal Cardan mounting /Vliyaniye otkloneniya ot vzaimnoi perpendikuliarnosti osi kolets na kinematiku chetyrehkholeznogo kardanova podvesa giroskopa/. 09 p1502 A69-22705
- ANANTHANARAYANAN, N. I.**  
Metallographic study of recrystallization in 50 Ni - 50 Fe alloy. 13 p2281 A69-28155
- ANANTHASAYANAM, M. R.**  
Approximate solutions for the structure of shock waves. 12 p2063 A69-27112
- ANASHKIN, G. A.**  
Effect of the electric-field frequency on the cyclotron resonance during a gas discharge /O vliyaniy chastoty elektricheskogo polya na tsiklotronnyy rezonans pri razriade v gazakh/. 13 p2315 A69-28577
- ANASHKIN, O. D.**  
Functional state of the blood-clotting system in dogs after a 22-day flight in the "Kosmos-110" artificial earth satellite. 08 p1262 A69-19830
- Influence of hypokinesia, overloads, and nutrition deficiency on the human blood coagulation system /Vliyaniye gipokinezii, peregruzok i ponizhennogo pitaniya na sostoyaniye svertyvaiushchei sistemy krovi cheloveka/. 13 p2212 A69-28625
- ANASHKIN, O. P.**  
Use of helium at a supercritical pressure for cooling superconducting systems under spaceflight conditions. 04 p0585 A69-15407
- ANASTASSAKIS, E.**  
Electric field induced infrared absorption and Raman scattering by optical phonons in centrosymmetric crystals. 02 p0295 A69-11779
- ANASTASSIADIS, M.**  
Electron content measurements by beacon S-66 satellite during the May 20, 1966, solar eclipse. 22 p4007 A69-40916
- ANCEAU, F.**  
System of treating descriptions in CASSANDRE applications to simulation /Systeme de traitement des descriptions en CASSANDRE applications a la simulation/. 03 p0401 A69-14178
- ANCHUGOVA, R. A.**  
Dynamics of radio-echo development in cumulonimbus clouds /K voprosu o dinamike razvitiya radioekho ot kuchevo-dozhdnykh oblakov/. 03 p0459 A69-13288
- ANCIENT, B. J.**  
The development of balsa wood laminates. 01 p0101 A69-10595
- ANCKER-JOHNSON, B.**  
Magnetoeconductance of nonequilibrium plasmas in InSb. 03 p0486 A69-1346
- Plasma effects in semiconductors. 19 p3389 A69-36545
- ANCONA, C.**  
Phase centers and astigmatism of antennas /Centre de phase et astigmatisme des antennes/. 10 p1664 A69-23798
- ANDA, R.**  
Sudden increases in cosmic ray intensity. 14 p2514 A69-29773
- ANDANOV, A.**  
Space stations of the future - A Soviet view. 19 p3431 A69-36465
- ANDARELLI, G.**  
Friction-induced plastic deformation of single crystals of hcp metals - Beryllium, cobalt, and zinc /Deformation plastique par frottement, de quelques monocristaux metaliques a structure hexagonale - Beryllium, cobalt et zinc/. 02 p0254 A69-12627
- ANDEEN, R. E.**  
Automatic flight control. 18 p3170 A69-34856
- ANDERLE, R. J.**  
Effect of neglected gravity coefficients on computed satellite orbits and geodetic parameters. 22 p4023 A69-40556
- ANDERS, E.**  
Ages of calcium-rich achondrites. I - Eucrites. 05 p0819 A69-15623
- Chemical processes in the early solar system, as inferred from meteorites. 07 p1224 A69-19710
- Elements 112 to 119 - Were they present in meteorites/ques/. 15 p2681 A69-30325
- Aluminum-26 in meteorites. VI - Achondrites. 17 p3034 A69-33584
- Ages of the Ca-rich achondrites. 19 p3413 A69-36107
- Orbital clues to the nature of meteorite parent bodies. 19 p3414 A69-36117
- Ages of calcium-rich achondrites. II - Howardites, nakhlites, and the Angras dos Reis angrite. 20 p3602 A69-37535
- Chemical processes during the formation of the planetary system /Chemische Vorgaenge waehrend der Entstehung des Planetensystems/. 21 p3804 A69-39200
- ANDERSEN, F. A.**  
Evidence for a function for the UAA codon in vivo. 20 p3480 A69-38265
- ANDERSEN, H. C.**  
Derivation of hydrodynamic equations from the Boltzmann equation. 23 p4151 A69-41513
- ANDERSEN, R. J.**  
Electron density and temperature measurements of the ignited mode plasma in a thermionic converter. 09 p1439 A69-21826
- ANDERSEN, S. A.**  
Continuous supersonic plasma wind tunnel. 15 p2589 A69-30909
- ANDERSEN, S. E.**  
Parallax and orbital motion of the spectroscopic binary Tau Persei. 13 p2349 A69-27812
- ANDERSEN, W. H.**  
Turbulent diffusion in a blast wave. [AIAA PAPER 69-672] 17 p2953 A69-33439
- ANDERSON, A. C.**  
Superconducting leads for cryogenic applications. 22 p3997 A69-41236
- ANDERSON, A. D.**  
Dust in the lower atmosphere of Venus. 06 p1001 A69-17172
- ANDERSON, A. P.**  
Simple microwave holograms and moire fringes, using the "spinning-dipole" field-perturbation technique. 19 p3315 A69-36824

- ANDERSON, B. D.**  
Invariant of a noisy two-port.  
07 p1104 A69-18891
- ANDERSON, B. D. O.**  
Optimal state estimation in high noise.  
04 p0582 A69-14877  
Discrete positive-real functions and their application to system stability.  
05 p0739 A69-16349  
Properties of optimal linear smoothing.  
12 p2122 A69-26524
- ANDERSON, B. T.**  
Probability of growth /pG/ of viable microorganisms in Martian environments.  
01 p0018 A69-11091
- ANDERSON, C. H.**  
Asymptotic oscillation results for solutions to first-order nonlinear differential-difference equations of advanced type.  
04 p0624 A69-14950
- ANDERSON, D. C.**  
Wall attachment at high Knudsen numbers - Experimental results.  
[ASME PAPER 69-FLCS-37]  
21 p3692 A69-38602
- ANDERSON, D. E.**  
Reliability of a special class of redundant systems.  
12 p2102 A69-26569  
Recent developments in vacuum technology.  
17 p3006 A69-33683
- ANDERSON, D. L.**  
Tidal dissipation in the earth and planets.  
08 p1393 A69-20581  
An exploratory study of the interplanetary environmental effects on solar-cell cover glasses.  
19 p3253 A69-35702  
The early thermal history of the earth.  
22 p3936 A69-40136  
The evolution of terrestrial-type planets.  
23 p4212 A69-41613
- ANDERSON, D. R.**  
A satellite communication system using PN codes.  
09 p1457 A69-22460
- ANDERSON, E. E.**  
Calculation of the sublattice magnetization of yttrium iron garnet by the Oguchi method.  
03 p0485 A69-13297
- ANDERSON, E. J.**  
Design considerations for a telemetry ground support system.  
[AIAA PAPER 69-971]  
22 p3907 A69-40351
- ANDERSON, F.**  
Major avionics considerations for tactical fighters.  
17 p2902 A69-34128
- ANDERSON, G.**  
On the determination of finite integral transforms for forced vibrations of circular plates.  
15 p2704 A69-30306
- ANDERSON, G. F.**  
Laminar boundary layer control by combined blowing and suction in the presence of roughness.  
[AIAA PAPER 69-387]  
15 p2591 A69-30477  
Laminar boundary-layer control by combined blowing and suction in the presence of surface roughness.  
[AIAA PAPER 68-641]  
17 p2957 A69-34015
- ANDERSON, G. L.**  
Free vibrations of an infinite plate based on the linear coupled theory of thermoelasticity.  
11 p1976 A69-24793
- ANDERSON, G. M.**  
Relativistic rocket flight with constant acceleration.  
09 p1609 A69-21959  
Optimal interstellar trajectories with acceleration-limited relativistic rockets.  
20 p3602 A69-37530
- ANDERSON, G. P.**  
Satellite observations of the vertical ozone distribution in the upper stratosphere.  
16 p2788 A69-32645  
Mariner 6 - Ultraviolet spectrum of Mars upper atmosphere.  
22 p4023 A69-40568
- ANDERSON, H. H., JR.**  
Using tests and analyses to achieve reliable microwave equipment.  
19 p3282 A69-35785
- ANDERSON, H. R.**  
A lunar-surface electric-field detector.  
03 p0429 A69-13221
- Nonuniformity of solar protons over the polar caps on March 24, 1966.  
16 p2848 A69-31967
- ANDERSON, J. A.**  
Search for nanosecond optical pulses from Crab pulsar NP 0532.  
16 p2865 A69-32801
- ANDERSON, J. B.**  
Energy requirements for the hydrogen iodide reaction.  
01 p0123 A69-10686  
Molecular beam experiments in the lunar environment.  
18 p3113 A69-34240
- ANDERSON, J. D.**  
Venus - Lower atmosphere not measured.  
01 p0157 A69-11197  
The radius of Venus as determined by planetary radar and Mariner 5 radio tracking data.  
03 p0508 A69-13348  
Improvement of astronomical constants and ephemerides from Pioneer radio-tracking data.  
[AAS PAPER 68-130]  
20 p3595 A69-37179
- ANDERSON, J. D., JR.**  
An engineering survey of radiating shock layers.  
[AIAA PAPER 68-1151]  
03 p0532 A69-13560  
A time-dependent analysis for vibrational and chemical nonequilibrium nozzle flows.  
[AIAA PAPER 69-668]  
17 p2893 A69-33491  
An engineering survey of radiating shock layers.  
[AIAA PAPER 68-1151]  
24 p4414 A69-43567
- ANDERSON, J. H. B.**  
Experimental determination of the Gladstone-Dale constants for dissociating oxygen.  
18 p3176 A69-34452
- ANDERSON, J. L.**  
Parametric analysis of some requirements for life support systems applied to earth orbital missions.  
[SAE PAPER 68-0746]  
03 p0379 A69-13438  
A nuclear thermionic space power concept using rod control and heat pipes.  
04 p0630 A69-14799  
Electromagnetic radiation in accelerated systems.  
21 p3772 A69-39466
- ANDERSON, J. M.**  
Vibration of a cantilever subjected to a tensile follower force.  
16 p2871 A69-31899
- ANDERSON, J. S.**  
Noise and flow characteristics of coaxial jets.  
20 p3513 A69-37063
- ANDERSON, K. A.**  
Energetic electrons of terrestrial origin behind the bow shock and upstream in the solar wind.  
05 p0815 A69-16253  
Electrons and protons in long lived streams of energetic solar particles.  
07 p1206 A69-19249  
The magnetospheric substorm.  
15 p2593 A69-30008  
Observation of interplanetary field lines in the magnetotail.  
20 p3609 A69-38078  
Relation of energetic particles in the plasma sheet to the auroral zone.  
21 p3711 A69-38510
- ANDERSON, L. J.**  
Radar analysis reveals satellite parameters.  
20 p3488 A69-37295  
Radar analysis of satellite rotation.  
22 p3900 A69-40682
- ANDERSON, L. K.**  
Holographic optical memory for bulk data storage.  
03 p0428 A69-13116
- ANDERSON, L. R.**  
Liapunov functions for autonomous systems of second order.  
01 p0103 A69-10007  
Systematic evaluation of cooled turbine efficiency.  
[ASME PAPER 69-GT-63]  
09 p1572 A69-22517
- ANDERSON, L. W.**  
An evaluation of ablation mechanisms for the Apollo heat shield material.  
[AIAA PAPER 69-98]  
06 p1038 A69-18149  
Charge-exchange collisions between hydrogen ions and cesium vapor in the energy range 0.5-20 kev.  
08 p1356 A69-20737
- ANDERSON, M. D.**  
Analog computer solution of a third-order Pontryagin optimum control system.  
05 p0739 A69-16473
- ANDERSON, N.**  
Variational solutions of nonlinear Poisson-Boltzmann boundary-value problems.  
06 p0968 A69-17784
- ANDERSON, O. L.**  
On the high-temperature equation of state of solids.  
08 p1419 A69-19814
- ANDERSON, P. A.**  
Manual optimal guidance techniques.  
02 p0279 A69-12365
- ANDERSON, R.**  
Satellites and air safety.  
22 p3901 A69-41147  
Mixing, ignition, and combustion analysis of air-augmented solid rockets with boron particles.  
[AIAA PAPER 67-481]  
24 p4365 A69-43668
- ANDERSON, R. B.**  
A mechanical model of fatigue crack propagation.  
10 p1796 A69-23072
- ANDERSON, R. C.**  
Investigation of environmental effects on pure fluid amplifiers.  
[ASME PAPER 68-WA/FE-31]  
05 p0705 A69-16104  
Measurements of the pressure and thermal environment in an Aerobee 150 sounding rocket.  
09 p1610 A69-22005
- ANDERSON, R. E.**  
Transoceanic air traffic control using satellites.  
03 p0464 A69-13236  
Improvement of ejector-diffuser performance by reduction of backflow.  
11 p1819 A69-25382  
Advanced fuels and oxidizers.  
16 p2828 A69-31747
- ANDERSON, R. K.**  
The analysis and use of APT data.  
[UN PAPER 68-95300]  
01 p0108 A69-10462
- ANDERSON, R. L.**  
Spark plugs - Yesterday, today and tomorrow.  
13 p2324 A69-27333  
GaAs-GaP heterojunctions.  
21 p3779 A69-38424
- ANDERSON, R. M.**  
Matrix properties controlling torsional fatigue life of fiber reinforced composites.  
08 p3339 A69-20495  
Handling risk in defense contracting.  
18 p3233 A69-34655
- ANDERSON, R. R.**  
Initial observations of VLF electric and magnetic fields with the Injun 5 satellite.  
22 p3938 A69-40503  
The use of color aerial photography in marshland and estuarine studies.  
22 p3942 A69-40993  
Thermal design for the OSO-F University of Minnesota experiment.  
[AAS PAPER 69-173]  
24 p4393 A69-42873
- ANDERSON, R. V.**  
Universal diurnal variations in air-earth current density.  
10 p1682 A69-23415
- ANDERSON, S. B.**  
A review of facilities and test techniques used in low-speed flight.  
05 p0741 A69-15575
- ANDERSON, S. P.**  
The calibration of a satellite infrared spectrometer.  
06 p0926 A69-17621
- ANDERSON, T. O.**  
Digital-data transition tracking loops.  
07 p1082 A69-19108  
Digital transition tracking symbol synchronizer for low SNR coded systems.  
23 p4130 A69-42513
- ANDERSON, W. C.**  
Environmental control for radiation testing of lunar rock samples.  
20 p3512 A69-38271
- ANDERSON, W. E.**  
A two-dimensional, mixed-compression inlet system designed to self-restart at a Mach number of 3.5.  
[AIAA PAPER 69-447]  
16 p2845 A69-32732



- ANDERSON, W. J.**  
EHD lubrication. 01 p0088 A69-11324  
Rayleigh step journal bearing. II - Incompressible fluid. 04 p0605 A69-14587  
Experimental stability studies of the herringbone-grooved gas-lubricated journal bearing. [ASME PAPER 68-LUBS-25] 13 p2266 A69-27271  
Contact conformity effects on spinning torque and friction. [ASME PAPER 68-LUB-10] 15 p2628 A69-30901  
Effect of three advanced lubricants on high-temperature bearing life. [ASME PAPER 69-LUBS-18] 18 p3140 A69-34378  
Membrane flutter paradox - An explanation by singular-perturbation methods. 24 p4403 A69-43573
- ANDERSON, W. L.**  
Processing biomedical information by optical methods. 21 p3666 A69-39440
- ANDERSSSEN, R. S.**  
New analysis for the geomagnetic D sub st field of the magnetic storm on June 18-19, 1936. 14 p2444 A69-29883  
The numerical solution of parabolic differential equations using variational methods. 18 p3164 A69-34841
- ANDERSSON, A. O.**  
Development of engineering practices in jet and compressor noise. [AIAA PAPER 68-550] 17 p3022 A69-34019
- ANDERT, K.**  
Splitting of an EPR line by intense optical pumping in a ruby /Aufspaltung einer EPR-Linie durch intensive optisches Pumpen beim Rubin/. 21 p3735 A69-38582
- ANDERTON, H. L.**  
Progress in pilot warning indicators. 05 p0790 A69-16726
- ANDES, A. S.**  
Cost reduction criteria /rocket engines/. [AIAA PAPER 69-440] 16 p2883 A69-32748
- ANDING, D.**  
Band-model methods for computing atmospheric slant-path molecular absorption and emission. 19 p3375 A69-36052
- ANDO, H.**  
On the 40 cm Goettingen type wind tunnel. II. 03 p0420 A69-14238
- ANDRADE, C. A.**  
Radiofrequency signal transmission during Mars orbital entry. 09 p1455 A69-22002
- ANDRADE, O. O.**  
Mode conversion and transmission by a circular aperture. 11 p1899 A69-25056
- ANDRAE, H.**  
An in-core thermionic reactor for powering space vehicles /Der Incore-Thermionik-Reaktor zur Energieversorgung von Raumflugkoepfern/. 02 p0279 A69-12666
- ANDRAE, K.**  
Cyclic niobium /V/ and tantalum /V/ esters /Cyclische Niob/V/- und Tantal/V/saureester/. 11 p1832 A69-24575
- ANDRE-TALAMON, T.**  
Nonlinear diffusion of heat /Sur la diffusion non-lineaire de la chaleur/. 01 p0177 A69-11404  
The propagation of a thermal wave in a nonlinear medium /La propagation d'une onde thermique en milieu non lineaire/. 22 p4051 A69-40712
- ANDRE, B.**  
Effects of ionizing radiation on MOS devices. 08 p1373 A69-20864  
Study of the influence of surface properties on the reliability of planar bipolar transistors /Etude de l'influence des proprietes de surface sur la fiabilite des transistors bipolaires planars/. 15 p2625 A69-30826
- ANDREEV, A. D.**  
Investigation of certain electrical characteristics of a plasma in a high-frequency field /Issledovanie nekotorykh elektricheskikh kharakteristik plazmy v pole vysokoi chastoty/. 10 p1741 A69-23946
- ANDREEV, A. M.**  
Experimental investigation of a single-wave MHD machine /Eksperimental'noe issledovanie odnovoynoi MGD-mashiny/. 07 p1058 A69-19026  
Investigation of the longitudinal edge effect in the primary circuit of a linear MHD machine /Issledovanie prodol'nogo kraevogo effekta v pervichnoi tsepi lineinoi MGD-mashiny/. 07 p1058 A69-19027
- ANDREEV, B. N.**  
Results of a determination of the dynamics of the Venusian atmosphere from measurements of the radial velocity of the Venera 4 automatic interplanetary station /Rezultaty opredeleniya dinamiki atmosfery Venero po dannym izmerenii radial'noi skorosti AMS "Venera-4"/. 22 p4034 A69-41099
- ANDREEV, E. G.**  
Equipment for studying the drift of small-scale ionospheric inhomogeneities /Apparatura dlia issledovaniia dreifa melkomasshtabnykh neodnorodnosti ionosfery/. 14 p2452 A69-29875
- ANDREEV, G. A.**  
Statistical analysis and synthesis of processes and optimal automatic systems with stochastic loads /Statisticheskii analiz i sintez professov i optimal'nykh avtomaticheskikh sistem so sluchainymi nagruzkami/. 21 p3688 A69-39861
- ANDREEV, G. P.**  
New method of complex load impedance determination according to voltage distribution in the line /Novyi metod opredeleniya kompleksnogo soprotivleniya nagruzki po raspredeleniiu napriazheniya v linii/. 15 p2582 A69-30123
- ANDREEV, I. U. I. A.**  
Fundamentals of electroplating titanium, vanadium, and their alloys from molten salts /Osnovy polucheniia pokrytii iz titana, vanadiia i ikh splavov elektrolizom rasplavlennykh solei/. 03 p0446 A69-13574
- ANDREEV, L. S.**  
Verification of the isotropy hypothesis /O proverke postulata izotropii/. 23 p4227 A69-41714
- ANDREEV, L. V.**  
Problems of the stability of a cylindrical shell of variable rigidity under external pressure /Zadachi ustoiichivosti tsilindricheskoi obolochki s peremennoi zhestkost'iu pri vneshnem davlenii/. 08 p1419 A69-21180  
Experimental study of the stability of a cylindrical shell subjected to local loading by external pressure /Eksperimental'noe issledovanie ustoiichivosti tsilindricheskoi obolochki pri lokal'nom nagruzhении vneshnim davleniem/. 15 p2715 A69-31204  
Approximate method of determining the stress-strain state of ribs reinforcing a cantilever shell /Priblizhennyy metod opredeleniya napriazhenno-deformirovannogo sostoiianiia shpangoutov, podkrepliaushchikh konsol'nuu obolochku/. 18 p3223 A69-34980  
Stability of a cylindrical shell loaded by uniform external pressure along a part of its cross-sectional contour /Ustoiichivost' tsilindricheskoi obolochki, nagruzhennoi ravnomernym vneshnim davleniem po chasti kontura poperechnogo secheniia/. 21 p3846 A69-39715
- ANDREEV, M. P.**  
Oscillations produced by an external electromagnetic field in a positive glow-discharge column /Kolebaniia v polozhitel'nom stolbe tleiushego razriada, poluchennye pod vlianiem prilozhennogo izvne elektromagnitnogo polia/. 13 p2313 A69-28332
- ANDREEV, N. I.**  
Correlation Theory of Statistically Optimal Systems. 16 p2764 A69-32114
- ANDREEV, R. B.**  
Second harmonic generation of nonmonochromatic laser emission in a nonlinear crystal /Generatsiia vtoroi garmoniki nemonokhromatichnogo izlucheniia lazera v nelineinom kristalle/. 20 p3554 A69-37727
- ANDREEV, S. D.**  
Comparison of calculated infrared spectra of H sub 2 O and CO sub 2 with data of laboratory measurements /Sravnenie raschetnykh infrakrasnykh spektrov H sub 2 O i CO sub 2 s dannymi laboratornykh izmerenii/. 05 p0759 A69-16638  
The theoretical infrared spectra of H sub 2 O and CO sub 2 as compared with laboratory measurements. 14 p2433 A69-28794
- ANDREEV, S. I.**  
Thermionic emission and expansion of a plasma formed by focused single-pulse laser radiation on a solid target. 03 p0441 A69-14141  
Temperature distribution in a xenon plasma discharge plasma over the cross section of a quartz tube /Raspredelenie temperatury plazmy impul'snogo razriada v ksenone po secheniiu kvartsevoi trubki/. 10 p1742 A69-24081
- ANDREEV, V.**  
Nonadiabatic rise of individual volumes of air in a stably stratified atmosphere. 02 p0274 A69-11441
- ANDREEV, V. B.**  
Convergence of difference schemes approximating the second and third boundary-value problems of elliptic equations /O skhodimosti raznostnykh skhem, approksimiruiushchikh vtoriui i tret'iu kraevye zadachi dlia ellipticheskikh uravnenii/. 09 p1532 A69-21788  
Splitting operator difference schemes for general second order p-dimensional parabolic equations with mixed derivatives. 18 p3164 A69-34702
- ANDREEV, V. D.**  
Theory of inertial systems without gyroscopic sensors. 16 p2791 A69-32283  
Theory of finite rotations of a solid body /K teorii konechnykh povorotov tverdogo tela/. 21 p3772 A69-39183
- ANDREEV, V. G.**  
Thermoelastic destruction of transparent media by laser radiation /Termopругoe razrushenie prozrachnykh sred izlucheniem opticheskikh kvantovykh generatorov/. 07 p1149 A69-18925  
Technique and device for measuring the amplitude of the high-frequency harmonic oscillations of a plasma surface /Sposob i ustroistvo dlia izmereniia amplitudy vysokochastotnykh garmonicheskikh kolebaniu povorkhnosti plazmy/. 14 p2497 A69-29794
- ANDREEV, V. M.**  
Coherent emission in epitaxial structures with heterojunctions in the AlAs-GaAs system /Kogerentnoe izluchenie v epitaksial'nykh strukturakh s geteroperekhodami v sisteme AlAs-GaAs/. 03 p0489 A69-13896  
Injection properties of n-Al sub x Ga sub 1-x As-p-GaAs heterojunctions. 06 p0979 A69-16993  
Coherent radiation of epitaxial heterojunction structures in the AlAs-GaAs system. 11 p1939 A69-25697  
Recombination radiation in solid Al sub x Ga sub 1-x As solutions with a variable forbidden band width /Rekombinatsionnoe izluchenie v tverdykh rastvorakh Al sub x Ga sub 1-x As s peremennoi shirinai zapreshchennoi zony/. 19 p3391 A69-36606  
Spontaneous emission sources based on structures with heterojunctions in the AlAs-GaAs system /Istochniki spontannogo izlucheniia na osnove struktur s geteroperekhodami v sisteme AlAs-GaAs/. 22 p3964 A69-40608
- ANDREEV, V. S.**  
The Gunn effect and its application in microwave technology /Effekt Ganna i ego primeneniye v tekhnike SVCh/. 18 p3183 A69-35263
- ANDREEVA, E. I. U.**  
Zeeman effect in a multimode He-Ne laser operating at 0.63 and 3.39 mu simultaneously. 06 p0932 A69-16912
- ANDREEVA, E. P.**  
Faraday effect of free carriers in InSb and GaAs. 06 p0979 A69-16996
- ANDREEVA, N. I.**  
Spectral brightness of clouds and landscape features in the visible and near infrared spectral regions /Spektral'naia iarkost' oblakov i ob'ektov landshtafta v vidimom i blizhnem infrakrasnom uchastkakh spektra/. 06 p0953 A69-17991

**ANDREEVA, T. L.**  
On the gas laser regime at high pressures.  
06 p0934 A69-17680

**ANDREICHEV, V. A.**  
Certain method of compensating for the optical inhomogeneity of active laser elements /Ob odnom sposobe kompensatsii opticheskoi neodnorodnosti aktivnykh elementov OKG/.  
17 p2983 A69-33970

**ANDREIKIV, A. E.**  
Limiting equilibrium of an unbounded brittle body weakened by an external crack /O predel'nom rav-novesii neogranichennogo khрупkogo tela, oslablen-nogo vneshnei treshchينوi/.  
12 p2178 A69-25997  
The limiting equilibrium state of an unbounded brittle body with an arbitrarily oriented elliptical crack /Predel'no-ravnovesnoe sostoyanie neogranichennogo khрупkogo tela s proizvol'no orientirovannoi ellipticheskoi treshchينوi/.  
19 p3441 A69-36745  
Determination of limiting loads for an unbounded body with an external circular crack /Opredelenie predel'nykh nagruzok dlia neogranichennogo tela s vnesh-nei krugovoi treshchينوi/.  
21 p3839 A69-39195

**ANDREIKIV, O. E.**  
A three-dimensional problem in crack theory /Pro odnu prostorovu zadachu teorii trishchin/.  
15 p2708 A69-30658

**ANDREIS-SANDRUCCI, L.**  
The Forbush decrease of March 1966 observed in the neutron, sea-level meson, and underground meson components.  
01 p0146 A69-11129

**ANDRENKO, G. I.**  
Analytical calculation of the trajectory of the air-borne phase of aircraft takeoff /Analiticheskii raschet traektorii vozdushnogo uchastka vzleta samoleta/.  
19 p3247 A69-35817

**ANDRENKO, S. D.**  
A zoned parabolic antenna /Zonirovannaa parabolshekaia anten-na/.  
17 p2939 A69-33904

**ANDREOLETTI, J.**  
Critical pressure in a mean magnetic well /Pression critique dans un puits magnetique moyen/.  
03 p0476 A69-13382

**ANDRES, K.**  
Superconductors with magnetic impurities in a singlet ground state.  
02 p0295 A69-11778

**ANDRESCIANI, V.**  
Two-port scattering parameters in the characteriza-tion of microwave transistors and their conversion into admittance parameters - Errors /Parametri di diffu-sione a due porte nella caratterizzazione di transistori per microonde e loro trasformazioni in parametri di ammettenza - Errori/.  
11 p1852 A69-25200

**ANDRESEN, H. G.**  
Atomic beam preparation for hydrogen maser opera-tion with unpolarized atoms.  
15 p2635 A69-31103

**ANDRESEN, J. H., JR.**  
Air-data systems.  
18 p3169 A69-34854

**ANDRESEN, R. D.**  
Cosmic rays latitude survey at solar minimum.  
19 p3396 A69-36411

**ANDREW, A. L.**  
Non-radial oscillations of massive stars by variational methods.  
10 p1785 A69-24036

**ANDREW, B. H.**  
Optical identifications of Ohio radio sources with peculiar spectra.  
01 p0153 A69-10854  
Parkes 2134 plus 004 - A quasi-stellar object with a very unusual radio spectrum.  
07 p1224 A69-19708  
A survey of the anticentre region of the Galaxy at a frequency of 13.1 MHz.  
14 p2519 A69-29370  
Radio emission of Cygnus X-2.  
16 p2865 A69-32804  
Rapid radio variations in BL Lac.  
21 p3798 A69-38545

Three radio sources with unusual intensity varia-tions.  
22 p4029 A69-40764

**ANDREW, C.**  
Optimization of vibration absorbers - Application to complex structures.  
20 p3620 A69-36996

**ANDREW, K. L.**  
Theoretical calculations of the d-, f-, and g-electron transition series.  
08 p1355 A69-20734

**ANDREWS, A. D.**  
The meteorite of April 25, 1969.  
15 p2701 A69-31528

**ANDREWS, C.**  
Aircraft cabin fire protection.  
19 p3256 A69-36863

**ANDREWS, C. L.**  
Surface measurements of disk antennas.  
02 p0219 A69-12342

**ANDREWS, D.**  
Gamma Type 2 rocket engine for Black Arrow - Test techniques and development experience.  
01 p0143 A69-10834

**ANDREWS, F. A.**  
Measurement of the phase of vibrational displace-ment by a laser interferometer.  
20 p3538 A69-37320

**ANDREWS, G. A.**  
Radiation accidents and their management.  
03 p0374 A69-13502

**ANDREWS, H. C.**  
Television bandwidth reduction by encoding spatial frequencies.  
04 p0556 A69-14429  
Hadamard transform image coding.  
07 p1078 A69-18859

**ANDREWS, J. C.**  
Measurements of the total radiant intensity of air.  
04 p0685 A69-14719

**ANDREWS, M. H.**  
Intensities of radio recombination lines.  
14 p2517 A69-29088  
A theoretical analysis of methods of interpreting radio-line data from H II regions.  
22 p4025 A69-40645

**ANDREWS, M. K.**  
Transpolar exospheric plasma. I.  
03 p0425 A69-14018  
Electron density distribution above the winter pole.  
06 p0922 A69-18224  
The trans-polar exospheric plasma. III - A unified picture.  
12 p2151 A69-26952

**ANDREWS, P. J.**  
Measurements of the strength of H alpha in 951 early-type stars.  
03 p0511 A69-13435  
Supernova in M 83.  
15 p2682 A69-30451

**ANDREWS, R. D.**  
Unsteady heat transfer from a rotating disk.  
08 p1422 A69-20996

**ANDREWS, R. H.**  
Optimum climb trajectories at constant lift coeffi-cient.  
24 p4254 A69-43727

**ANDREWS, W. G.**  
Predictive design for spacecraft propulsion.  
[SAWE PAPER 775] 18 p3184 A69-34873

**ANDRIAKHIN, V. M.**  
Increase of CO sub 2 laser power under the influence of a beam of fast protons.  
08 p1323 A69-19802

**ANDRIANKIN, E. I.**  
Penetration depth during meteorite particle impact at prethreshold velocities /Glubina probivaniia pri udare meteornykh chastits s doporogovymi skorostiami/.  
01 p0152 A69-10579  
Penetration depth due to impact of meteor particles having subthreshold velocities.  
15 p2709 A69-30749

**ANDRIANOV, IU. G.**  
Latitudinal dependence of the spectral intensities of terrestrial radiation into space according to observa-tions of Cosmos 45 and Cosmos 65 satellites.  
03 p0422 A69-13507

Estimation of corrections for nonuniformity of mea-surement to the correlation relationships between spec-tral densities of radiation from the earth /Otsenka popravok na neodnovremennost' izmereniia k korre-liatsionnym zavisimostiam mezhdu spektral'nyimi inten-sivnostiami izlucheniia zemli/.  
14 p2435 A69-29043

**ANDRIANOV, N. K.**  
Certain results of visual observations of the Red Spot on Jupiter in 1966 and 1967 /Nekotorye rezul'taty vizual'nykh nabludeniia krasnogo piatna na Iupitere v 1966-1967 gg./.  
04 p0659 A69-14963  
Visual mapping and photometric measurement of Saturn during the "disappearance" of its rings.  
15 p2697 A69-31256  
Some results of visual observations of Jupiter's Red Spot during 1966-1967.  
18 p3197 A69-34726  
Jupiter from observations in 1966 and 1967 /Iupiter po nabludeniiam 1966-1967 gg./.  
18 p3203 A69-35337

**ANDRIANOV, V. A.**  
Limits of applicability of the concept of "equivalent radius" of the earth /O granitsakh primenimosti kont-septsii "ekvivalentnogo radiusa" zemli/.  
09 p1456 A69-22284  
Asymptotic solution of the problem of diffraction on a sphere placed in a nonuniform medium.  
09 p1459 A69-22628  
Influence of a planetary atmosphere on the Fresnel diffraction of ultrashort radio waves /Vliianie atmo-sfery planety na difraktsiiu Frenelia ul'trakortkikh radiovoln/.  
22 p3901 A69-40948

**ANDRIANOVA, L. A.**  
Effect of lateral acceleration on neurosecretory function of nuclei in anterior hypothalamus.  
08 p1262 A69-19930  
Role of the central adrenergic mechanisms in changes in the neurosecretory function of the hypothalamo-hypophyseal system under the action of accelerations /O roli tsentral'nykh adrenergicheskikh mekhanizmov v izmenenii neurosekretnoi funktsii gipotalamogipofizarnoi sistemy pri vozeistvii uskoreniia/.  
15 p2554 A69-30055

**ANDRIENKO, A. IA.**  
Statistical synthesis of optimal sampled-data control systems with limited memory capacity in the control device.  
09 p1476 A69-22673  
Statistical synthesis of optimal pulsed control systems for space vehicles with allowance for con-straints imposed on the system structure /Statisticheskii sintz optimal'nykh impul'snykh sistem upravleniia kosmicheskikh ob'ektov s uchetom ogranichenii po strukture sistemy/.  
21 p3767 A69-39651

**ANDRIEVSKII, R. A.**  
Investigation of the physicomechanical properties of zirconium nitride in the homogeneity range /Izuchenie fiziko- mekhanicheskikh svoystv nitrida tsirkoniia v oblasti gomogenosti/.  
20 p3558 A69-37014

**ANDRIIAKHIN, V. M.**  
Automatic frequency control of a laser and regenera-tive amplifier.  
15 p2633 A69-30238

**ANDRILLAT, Y.**  
Spectrophotometry of the nucleus of the galaxy NGC 1052 from 3400 to 6300 angstrom units /Spec-trophotometrie du noyau de la galaxie NGC 1052 de 3400 a 6300 angstrom units/.  
16 p2853 A69-31610  
Spectrophotometry of the nucleus of the galaxy of NGC 3031 from 3400 to 8800 angstrom units /Spec-trophotometrie du noyau de la galaxie NGC 3031, de 3400 a 8800 angstrom units/.  
17 p3034 A69-33396  
Spectroscopic study of some Be stars in the photo-graphic near infrared. II - HD 217050 /Etude spec-troscopique de quelques etoiles Be dans le proche in-frarouge photographique. II - HD 217050/.  
18 p3201 A69-35144  
Forbidden lines in the infrared spectra of NGC 1976, IC 418, and II 4997 /Raies interdites dans le spectre in-frarouge de NGC 1976, IC 418 et II 4997/.  
19 p3422 A69-36222

**ANDRONIK, I. K.**  
Electrical properties of indium- and copper- doped cadmium antimonide crystals.  
04 p0643 A69-15264



## ANDRONIKASHVILI, E. L.

Inelastic interaction cross section of  $7 \times 10$  super 10 to 10 super 12 eV nuclear-interacting particles in carbon and iron.

13 p2330 A69-28383

## ANDRONOV, A. A.

Theory of a thin cylindrical antenna in an isotropic plasma /K teorii tonkoj tsilindricheskoi anteny v izotropnoi plazme/.

11 p1853 A69-25551

## ANDRONOV, I. M.

Experimental space meteorological "Meteor" system.

06 p1013 A69-17053

## ANDRONOV, I. S.

Coherent diversity reception in the presence of concentrated noise /Kogerentnyi raznesenniy priem pri nalichii sosredotochennykh pomekh/.

01 p0028 A69-10376

## ANDRONOVA, I. A.

Experimental study of the intensity fluctuations of a single-frequency gas laser at a wavelength of 3.39  $\mu$  /Eksperimental'noe issledovanie fluktuatsii intensivnosti odnochastotnogo gazovogo lazera na volne 3,39  $\mu$  m/.

11 p1900 A69-25750

## ANDROPOV, V. G.

Electrophysical and radiative properties of a nonequilibrium argon-potassium plasma as a possible working fluid for an MHD generator /Elektrofizicheskie i radiatsionnye svoystva neravnovesnoi argon-kalievoy plazmy-vozmoghnogo rabocheho tela MGD-generators/.

10 p1732 A69-23441

## ANDROULAKIS, J. G.

A guarded disk type sample emissometer. [AIAA PAPER 69-600]

17 p2973 A69-33280

Effective thermal conductivity parallel to the laminations, and total conductance of multilayer insulation. [AIAA PAPER 68-765]

21 p3853 A69-39763

## ANDRUS, A. M. G.

Tracking and data relay satellite system.

23 p4120 A69-41755

## ANDRUSHCHENKO, V. G.

Influence of rare-earth element additions on the threshold properties of ferrites having garnet and spinel structures /Vliianie dobavok redkozemel'nykh elementov na porogovye svoystva ferritov so strukturami granata i shpineli/.

13 p2320 A69-27999

## ANDRZHEIUK, N. I.

Study of the effects of various work and rest schedules on subjects under conditions of relative isolation /Izuchenie vliianiia razlichnykh rezhimov truda i otdykha na ispytatelei, nakhodiaschikhsia v usloviyakh otosnoi'noi izolatsii/.

03 p0381 A69-14201

## ANEKEEVA, L. A.

Analysis of the air flowfields in cyclones according to television cloud images from the Cosmos 122 satellite /Analiz polia vozdushnykh techenii v tsiklonakh po televizionnym izobrazheniiam oblachnosti so sputnika "Kosmos-122"/.

11 p1912 A69-24825

Use of cloud data obtained with the aid of satellites in an objective analysis of a wind field /Ispol'zovanie dannykh ob oblachnosti, poluchennykh s pomoshch'yu ISZ, v ob'ektivnom analize polia vetra/.

19 p3365 A69-36668

## ANEMA, S. L.

An FMFB demodulator for satellite communications.

09 p1457 A69-22464

## ANG, A. H.-S.

Nonlinear analysis method for circular plates.

20 p3628 A69-37787

## ANG, C. Y.

Physics of control of electronic devices.

18 p3143 A69-34488

## ANGALET, B. W.

The prime technical information source - The local work environment.

02 p0204 A69-12219

## ANGEID, E.

Noncontacting torque meters utilizing magnetoelastic properties of steel shafts. [ASME PAPER 69-GT-64]

09 p1500 A69-22480

## ANGEL, E.

Dynamic programming and linear partial differential equations.

01 p0103 A69-10006

A building block technique for elliptic boundary value problems over irregular regions.

11 p1910 A69-25411

## ANGEL, J. R. P.

Search for X-ray polarization in Sco X-1.

12 p2149 A69-26315

## ANGEL, R.

Visual suppression during smooth following and saccadic eye movements.

22 p3879 A69-40842

## ANGELE, W.

Flat conductor cable technology. [ASME PAPER 69-DE-8]

14 p2393 A69-28855

## ANGELEIKO, V. V.

Transformation and scattering of electromagnetic waves in a plasma in an external electric field.

06 p0886 A69-16894

Fluctuations of a partially ionized plasma situated in external electric and magnetic fields /Fluktuatsii v chastkovo ionizovannii plazmi, shcho znakhodit'sia u zovnishnikh elektrichnomu ta magnitnomu poliakh/.

08 p1380 A69-21079

Scattering and transformation of waves in a plasma situated in external electric and magnetic fields /Rozsianniia ta transformatsiia elektrichnomu ta magnitnomu poliakh/.

08 p1277 A69-21080

Theory of wave fluctuations and scattering in a plasma located in strong electric and magnetic fields /K teorii fluktuatsii i rasseianiia voln v plazme, nakhodiaschiesia v sil'nykh elektricheskoi magnitnom poliakh/.

09 p1453 A69-21569

## ANGELL, J. K.

Eddy velocities in the planetary boundary layer as obtained from tetron flights at Idaho Falls.

04 p0626 A69-14912

Temperate latitude 200-mb zonal winds from ghost balloon flights in the Southern Hemisphere.

17 p2997 A69-33163

## ANGELO, E. J., JR.

Electronics- BJTs, FETs, and Microcircuits.

20 p3505 A69-37147

## ANGELO, J. A., JR.

Isolation - The major barrier to the intellectual cross-fertilization of scientific personnel in an Air Force-industry research and development program.

11 p2004 A69-25303

## ANGELOS, T. G.

Area navigation equipment role. [AIAA PAPER 69-798]

19 p3367 A69-35632

## ANGELOTTI, R.

Protective mechanisms affecting dry-heat sterilization.

05 p0712 A69-15939

## ANGER, C. D.

High-altitude observations of a luminous wake behind two Black Brant II rockets.

06 p0918 A69-17511

## ANGERT, N. B.

Excitation and propagation of longitudinal elastic waves with frequencies from 200 to 2000 MHz in lithium niobate crystals.

03 p0487 A69-13729

## ANGIBOUST, R.

Analysis of the efficiency of a group of radar operators adapted to night work in a series of unaccustomed psychomotor tasks accomplished at night /Analyse du rendement d'un groupe d'opérateurs radar adaptés au travail nocturne dans une série de tâches psychomotrices inhabituelles effectuées de nuit/.

21 p3666 A69-39268

## ANGLADE, P.

Method for the measurement of signal-to-noise ratio in a PCM bit synchronizer.

19 p3271 A69-36248

## ANGREJI, P. D.

The second Umkehr observed in zenith sky twilight and its interpretation.

16 p2786 A69-32634

## ANGUS, J. C.

Motion measurement by laser Doppler techniques.

09 p1492 A69-21398

Application of the laser Doppler flowmeter to fluid flow measurements.

12 p2093 A69-26546

Flow measurements with Doppler shifted laser light.

15 p2616 A69-31291

## ANICHIN, B.

Influence of refraction on radio interferometric electron density distribution measurements /Vliianie refraktsii na radiointerferometricheskie izmereniia raspredeleniia elektronnoi plotnosti/.

13 p2312 A69-28113

## ANIL KUMAR, N. M.

Graphical methods, design considerations, practical circuits and test results of multi-input sine comparators.

12 p2039 A69-26350

## ANISHCHENKO, V. V.

Application of a plate-like analog to the determination of thermal stresses in a two-dimensional problem of the theory of elasticity /Primenenie plastinchatoi analogii k opredeleniiu temperaturnykh napriazhenii v ploskoi zadache teorii uprugosti/.

04 p0668 A69-14272

## ANISIMOV, A. A.

Plastic bending of thin walled pipes with allowance for the flattening of the cross section /Plasticheskie izgib tonkostennykh trub s ucheto m splushchivaniia secheniia/.

21 p3835 A69-38868

## ANISIMOV, A. M.

Application of finite-difference methods to the calculation of the axisymmetric oscillations of shells of revolution containing a liquid /Primenenie konechno-raznostnykh metodov k raschetu osesimmetrichnykh kolebani obolochek vrascheniia s zhidkost'iu/.

03 p0523 A69-12951

Axisymmetric oscillations of a spherical vessel partially filled with a liquid /Osesimmetrichnye kolebaniia sfericheskogo sosuda, chastichno zapolnennogo zhidkost'iu/.

24 p4300 A69-43069

## ANISIMOV, S. A.

Theory and Design of Turbocompressors /Teoriia i raschet turbokompresorov/.

20 p3459 A69-37238

## ANISIMOV, S. I.

Evaporation of a light-absorbing metal.

02 p0350 A69-11577

## ANISIMOV, V. D.

Smoothing and prediction of the orbital elements of artificial earth satellites by means of the stochastic approximation method.

01 p0158 A69-11319

## ANISIMOV, V. I.

Analysis of transistor circuits by the method of graphs /Analiz tranzistornykh skhem metodom grafov/.

04 p0575 A69-14461

Analysis of transistor circuits by a graph method.

14 p2418 A69-28832

## ANISIMOV, V. M.

Experimental determination of saturated lithium vapor pressure /Eksperimental'noe opredelenie davleniia nasyshchennogo para litia/.

15 p2656 A69-30997

## ANISIMOVA, G. V.

Structure and properties of forgings of KhN73MB-Ti /El698/ alloy /Struktura i svoystva pokovok iz splava KhN73MBTi/El698//.

03 p0452 A69-14122

## ANISIMOVA, I. D.

Self-modulation of coherent radiation emitted by an indium arsenide laser.

07 p1148 A69-18685

Automodulation of coherent radiation from indium arsenide laser.

19 p3338 A69-36537

## ANISIMOVA, M. P.

On the motion of fluid particles in a one-dimensional gas flow /O dvizhenii kapel' zhidkosti v odnomernom gazovom potoke/.

03 p0419 A69-13920

## ANTOV, I. S.

Influence of purity of the charge materials on the properties of beta titanium alloys /Vliianie chistoty shikhtovykh materialov na svoystva beta-titanovykh splavov/.

01 p0094 A69-10216

Effect of charge material purity on the properties of beta-titanium alloys.

15 p2638 A69-30272

## ANJARD, R. P.

Bubble leak testing.

09 p1503 A69-21391

**ANKUDINOV, V. A.**  
Threshold behavior of the cross section for the excitation of Cs II resonance lines in the process Cs super plus He. 17 p3008 A69-33388

**ANLIKER, M.**  
The dissipation and dispersion of small waves in arteries and veins with viscoelastic wall properties. 02 p0204 A69-12602  
Dispersion and attenuation of small artificial pressure waves in the canine aorta. 04 p0553 A69-14692  
Transmission characteristics of axial waves in blood vessels. [SESA PAPER 1350] 07 p1069 A69-19726

**ANNESE, J. F.**  
A double sideband-quadrature carrier multiplex telemetry system. 07 p1084 A69-19131

**ANNO, J. N.**  
Load support and leakage from microasperity-lubricated face seals. [ASLE FICFS PREPRINT 21] 15 p2622 A69-30500

**ANOSHKIN, N. F.**  
Some problems associated with the improvement of the production technology and increasing the quality of titanium alloy blanks /Nekotorye voprosy sovershenstvovaniia tekhnologii proizvodstva i povysheniia kachestva polufabrikatov iz titanovykh splavov/. 07 p1161 A69-18765  
Corrosion-resistant titanium alloy with 32 percent Mo /Korroziionnostoiikii splav titana s 32 percent Mo/. 07 p1163 A69-18781  
Features of the production of ingots and semifinished products made from corrosion-resistant titanium alloys of type 4201 /Osobennosti tekhnologii proizvodstva slitkov i polufabrikatov iz korroziionnostoiikikh titanovykh splavov tipa 4201/. 11 p1902 A69-24273

**ANSART, F.**  
Airport equipment for retracted gear landing on a foam carpet /L'equipement des aerodromes pour atterrissage "train rentre" sur tapis de mousse/. 10 p1674 A69-23708

**ANSDALE, R. F.**  
The Wankel RC Engine- Design and Performance. 11 p1942 A69-25237

**ANSELL, G. S.**  
Estimate of the temperature rise of micron- sized silver particles in the electron microscope due to electron-beam heating. 04 p0640 A69-14449  
The plastic deformation of internally oxidized silver-magnesium single crystals. 07 p1159 A69-18627  
Estimation of electronic influences on vibrational entropy in dilute-solid-solution alloys. 16 p2798 A69-31706  
The effect of quench rate on the M sub s temperature and the structure of an Fe-C and an Fe-C-Ni steel. 20 p3557 A69-36956  
Hydrogen permeation through alpha-palladium. 23 p4175 A69-41502

**ANSLEY, D. A.**  
Coherent pulse laser holography. 11 p1895 A69-24686

**ANSON, A.**  
Developments in aerial color photography for terrain analysis. 01 p0077 A69-10023  
Comparative photointerpretation from panchromatic, color, and Ektachrome IR photography. 22 p3944 A69-40039

**ANSON, W. A.**  
Density measurements in a valve driven shock tube. 10 p1673 A69-23342  
Calibration of shock tubes for studying aerodynamic loading. 18 p3085 A69-34469

**ANSORGE, R.**  
Convergence of difference methods for quasi-linear initial value problems /Konvergenz von differenzenverfahren fuer quasilineare anfangswertaufgaben/. 20 p3568 A69-37833

**ANSPACH, W. F.**  
Advances in hydrofluorocarbon integral fuel tank sealant development. 19 p3356 A69-35533

**ANSTEAD, R. J.**  
Thermal effects on the integrity of aluminum to silicon contacts in silicon integrated circuits. 17 p2936 A69-32893  
Current status of scanning electron microscopy in semiconductor device reliability physics. 19 p3382 A69-35788

**ANSTEE, R. F. W.**  
A preliminary study of the creep and recovery behaviour of DTD 5070A aluminum alloy. 21 p3747 A69-39323

**ANTHONY, A.**  
Urinary excretion of electrolytes in mice during acute hypoxia exposure. 01 p0015 A69-10921  
Blood volume changes in altitude exposed rats returned to ambient pressure. 01 p0015 A69-10922  
Spectral analysis of hematoxylin in tissue sections. 01 p0015 A69-10924

**ANTHONY, A. M.**  
Thermal, electrical, and thermoelectronic properties of various refractory oxide materials /Proprietes thermiques, electriques et thermoelectroniques de divers materiaux d'oxydes refractaires/. 13 p2316 A69-27470

**ANTHONY, F. M.**  
Lithium spray structural cooling. [AIAA PAPER 68-358] 04 p0688 A69-15509  
Spray-cooled structures combine simplicity with high performance. 11 p1966 A69-24532  
Design of attachments and connections with brittle materials. 17 p3061 A69-33569

**ANTIER, G.**  
Study and development of a wire-type space memory /Etude et realisation d'une memoire a fils spatiale/. 20 p3503 A69-37403

**ANTIMIROV, M. IA.**  
Solution to the thermal contact problem of a rectangle with a concentrated heat capacity condition given on one of its sides, while its other sides are thermally insulated /Reshenie kontaktnoi teplovoi zadachi dlia priamougol'nika, na odnoi iz storon kotorogo zadano uslovie sosredotochennoi emkosti, a ostal'nye storony teploizolirovany/. 03 p0533 A69-13863

**ANTINENKO, V. A.**  
Simplified methods for calculating nonlinear distortion and oscillator tube operating conditions when amplifying a single-sideband signal. 14 p2418 A69-28828

**ANTIPOV, A. B.**  
Possibility of determining the radiation wavelength of an active ruby from its temperature. I, II /O vozmozhnosti opredeleniia dliny volny izlucheniia aktivnogo rubina po ego temperature. I, II/. 20 p3552 A69-36967

**ANTIPOV, V. A.**  
Methods for experimental studies of the stressed state of shells made of glass fiber reinforced plastics /O metodakh eksperimental'nogo issledovaniia napriazhennogo sostoiianiia obolochek iz stekloplastika/. 11 p1995 A69-25681

**ANTIPOV, V. V.**  
Stimulation of growth in certain biological objects subjected to vertical vibrations /Stimuliatsiia rosta u nekotorykh biologicheskikh ob'ektov pod vozdeistviem vertikal'noi vibratsii/. 01 p0014 A69-10584  
The effect of space flight on Cosmos-110 on the microspores of Tradescantia paludosa. 01 p0018 A69-11317  
Results of biological experiments conducted under flight conditions on the Vostok spacecraft with the participation of cosmonauts A. G. Nikolaev, P. R. Popovich, and V. F. Bykovskii /Rezultaty biologicheskikh eksperimentov, provedennykh v usloviakh poleta na korabliakh "Vostok" s uchastiem kosmonavtov A. G. Nikolaeva, P. R. Popovicha i V. F. Bykovskogo/. 07 p1063 A69-18597  
Establishment of permissible irradiation doses during spaceflight planning. 07 p1069 A69-19618  
Outlines of Space Radiobiology /Ocherki Kosmicheskoi Radiobiologii/. 11 p1827 A69-24263  
Growth stimulation of certain biological specimens subjected to vertical vibrations. 15 p2555 A69-30754

The effect of overstrain on the sensitivity of animal organisms to cystamine /Vliianie peregruzok na chuvstvitel'nost' organizma zhivotnykh k tsistaminu/. 17 p2909 A69-33386

**ANTIPOVA, L. I.**  
Analysis of the CN absorption bands in the spectrum of Nova Herculis 1934 /Analiz polos pogloshcheniia CN v spektre Novoi Gerkulesa 1934 g./. 15 p2688 A69-30558

**ANTISARI, O. V.**  
Instrumental measurement of the visual range of a runway /Misura strumentale della portata visuale di pista/. 07 p1132 A69-18673  
Atmospheric incoming long-wave radiation at high altitude. 13 p2256 A69-28647

**ANTOGNETTI, P.**  
Sensitivity of active RC low-pass filters /Sulla sensibilita di filtri passa-basso RC attivi/. 04 p0578 A69-15070

**ANTON-TAY, F.**  
Regional uptake of super 3 H-melatonin from blood or cerebrospinal fluid by rat brain. 09 p1444 A69-21466

**ANTON, I.**  
Approximate method for calculating a laminar boundary layer /O metoda aproximativa pentru calculul straturui-limita laminar/. 15 p2593 A69-31263

**ANTONA, E.**  
Duality between problems of effect and problems of influence in linear elastoplasticity /Dualita fra problemi di effetto e di influenza nella elastoplasticita lineare/. 09 p1612 A69-21604

**ANTONENKO, V. M.**  
Device for programming the heat-resistance tension on brittle materials. 10 p1696 A69-23845

**ANTONIAK, C. E.**  
A distribution-free sequential probability- ratio test for multiple-resolution-element radars. 05 p0717 A69-15609

**ANTONIOU, A.**  
3-terminal gyrator circuits using operational amplifiers. 06 p0893 A69-16936

**ANTONOV, A. A.**  
On the thermodynamics of ions. 03 p0473 A69-14156

**ANTONOV, A. M.**  
Calculation of characteristics of hydrostatic journal gas bearings /Raschet kharakteristik opornykh gazostaticheskikh podshipnikov/. 03 p0432 A69-12960  
Approximate method of calculating a gas flow in a channel with broken generatrices /Nablizhenii metod rozrakhunku rukhu gazu v kanali iz zlomom tvirnikh/. 06 p0908 A69-16828

**ANTONOV, A. V.**  
Universal automatic device for measuring impedances and complex transmission factors at meter and decimeter wavelengths /Universal'nyi avtomaticheskii pribor dlia izmereniia impedansov i kompleksnykh koeffitsientov peredachi v diapazone metrovykh i dekametrovykh radiovoln/. 13 p2235 A69-28520

**ANTONOV, G. G.**  
Performance of a He-Ne laser excited by microwave pulses /O rabote He-Ne-lazera v rezhime vozbuzhdeniia impul'sami sverkhvysokoi chastoty/. 04 p0610 A69-14423

**ANTONOV, N.**  
Influence of gamma-radiation on certain parameters of transistors and diodes /Vliianie na gama-l'chenieto v'rkhu niakoi parametri na tranzistori i diodi/. 05 p0728 A69-15695

**ANTONOV, O. E.**  
Detection of signal in noise by receivers with nonlinear fourpoles at the input. 04 p0557 A69-14776

**ANTONOV, V. B.**  
Facility for automatic recording of the spectral distribution of the photoconductivity of high-resistance semiconductors /Ustanovka dlia avtomaticheskoi registratsii spektral'nogo raspredeleniia fotoprovodimosti vysokoomnykh poluprovodnikov/. 14 p2447 A69-29409



## ANTONOVA, A. E.

Structure of the geomagnetic field at great distances from the earth /O strukture geomagnitnogo polia na bol'shikh rassstoyaniyakh ot zemli/.

02 p0236 A69-11655

Topology of the particle drift envelopes in the magnetosphere /Topologiya obolochek dreyfa chastits v magnitosfere/.

09 p1574 A69-21521

Motion of charged particles in the geomagnetic field /O dvizhenii zaryazhennykh chastits v geomagnitnom pole/.

10 p1756 A69-22818

Structure of the geomagnetic field at great distances from the earth.

13 p2256 A69-28686

Topology of the drift shells of particles in the magnetosphere.

16 p2851 A69-32516

## ANTONOVA, L. A.

Estimates of the composition of the upper atmosphere from the vertical density distribution.

03 p0423 A69-13532

Diurnal temperature variations and fluxes of matter in the upper atmosphere.

03 p0423 A69-13533

Measurement of electron fluxes in the upper atmosphere at middle latitudes.

15 p2677 A69-31413

## ANTONOVA, T. D.

Results of radio-astronomical studies of interplanetary plasma inhomogeneities according to data for 1965 and 1966 /Rezultaty radioastronomicheskikh issledovaniy neodnorodnosti mezplanetnoi plazmy po dannym 1965-1966 gg./.

03 p0505 A69-13081

Results of radio observations of irregularities in the interplanetary plasma, 1965-1966.

14 p2515 A69-28763

## ANTROPOV, E. T.

Gain measurement in the CO sub 2 laser discharge.

07 p1151 A69-19060

## ANTSIFEROV, V. N.

Fabrication of nichrome bars containing dispersed oxide inclusions /Poluchenie prutkov nikhroma, soderzhashchego dispersnye vklucheniya oksidov/.

01 p0085 A69-10397

## ANTSIFEROV, V. V.

A method of reducing the number of ruby-laser lasing modes /Ob odnom metode sokrashcheniya chisla generiruemym mod rubinovogo OKG/.

03 p0439 A69-13059

Effect of the inhomogeneity of the radiation field in the active rod on the dynamics of a ruby laser /Vliianie neodnorodnosti polia izlucheniya v aktivnom sterzhne na dinamiku OKG na rubine/.

11 p1901 A69-25756

Generation kinetics, radiation spectrum, and directivity of a ruby laser with a spatially homogeneous inverted population.

15 p2634 A69-30729

Experimental study of the spectral, angular, and temporal characteristics of the emission of a traveling-wave ruby laser /Eksperimental'noe issledovanie spektral'nykh, uglovyykh i vremennykh kharakteristik izlucheniya OKG begushchei volny na rubine/.

21 p3741 A69-39554

## ANTSILEVICH, M. G.

The initial phase of certain ionospheric storms /O nachal'noi faze nekotorykh ionosfernykh bur/.

17 p2967 A69-33988

## ANUFF, A.

An approach to calculating interchannel distortion of linearly filtered angle-modulated signals using a hybrid computer.

14 p2417 A69-29556

## ANUFRIEV, A. N.

Determination of the stressed state over the entire volume of upset metal /Opredelenie napriazhennogo sostoyaniya po vsemu ob'emu osazhivaemogo metalla/.

03 p0435 A69-14118

## ANUFRIEV, V. M.

Application of a shock wind tunnel to a study of diffusers /Primenenie udarnoi aerodinamicheskoi trubki dlya issledovaniya diffuzorov/.

14 p2391 A69-29622

## ANUFRIEVA, T. A.

Influence of solar activity on the postsunset altitude peak of the equatorial F region /Vliianie solnechnoi aktivnosti na poslezakhodnyi pik vysot ekvatorial'noi oblasti F/.

17 p2966 A69-33983

Prognostic maps for the geometric parameters of the F2 layer /Karty prognoza geometricheskikh parametrov sloia F2/.

20 p3526 A69-37663

## ANUPYLD, A. IU.

Breakdown localization in p-n junctions.

04 p0577 A69-14782

## ANZEL, B. M.

A simplified approach for correction of perturbations on a stationary orbit. [AIAA PAPER 68-456]

21 p3817 A69-39757

## ANZER, U.

Stability analysis of the Kippenhahn-Schlueter model of solar filaments.

20 p3588 A69-37544

## AOKI, K.

Eigenvalues of the axially symmetrical electromagnetic waves along an infinitely long and conductive circular cylinder in a homogeneous magnetoionic medium.

16 p2754 A69-32568

## AOKI, M.

Effects of various doping elements on the transition temperature of vanadium oxide semiconductors.

23 p4198 A69-41564

## AOKI, S.

Friction between mantle and core of the earth as a cause of the secular change in obliquity.

13 p2253 A69-27821

## AOKI, T.

Estimation of rotational line widths of carbon dioxide bands.

09 p1543 A69-22250

## AOKI, Y.

Application of holographic techniques in radio and sound wave regions.

09 p1498 A69-22133

Acoustical holograms and optical reconstruction.

10 p1696 A69-23549

Space division multiplexing holography.

12 p2079 A69-25921

Microwave holograms and their optical reconstruction.

15 p2610 A69-30802

Microwave holography using a two-beam interference method.

24 p4314 A69-42976

## AONO, Y.

Surface effects on breakdown characteristics of GaAs bulk diodes.

05 p0733 A69-16561

Stratification of F region during solar minimum and its variation comparing with solar maximum's.

17 p2959 A69-33005

## AOSHIMA, N.

The measurement of the flexural wave propagation velocity by correlation techniques.

15 p2562 A69-30094

## AOYAGI, K.

Guided-wave propagation through magnetoelectric media.

14 p2416 A69-29540

Response of detectors for two noise-modulated waves and background noise.

15 p2569 A69-30805

## AOYAGI, S.

Precision microwave admittance measurements of active elements.

12 p2038 A69-26054

## AOYAMA, I.

The effect on the geomagnetic field of the solar eclipse of Nov. 12, 1966 at and near the dip equator.

02 p0241 A69-11727

## AOYAMA, K.

Analysis on transverse secondary injection penetration into confined supersonic flow.

06 p0913 A69-18080

## APANASENKO, A. V.

Nuclear interactions with E super gamma greater than 1000 Gev in graphite.

13 p2330 A69-28377

Spectrum of 10 super 11 to 10 super 13 ev photons in the upper atmosphere.

13 p2330 A69-28378

## APARICIO, B.

Sudden increases in cosmic ray intensity.

14 p2514 A69-29773

## APARICIO, P. J.

Mechanism of nitrate reduction in Chlorella.

24 p4263 A69-43136

## APEL, J. R.

Experimental studies of linear beam-plasma instabilities in a magnetic field.

11 p1929 A69-25267

Quantum effects in electron cyclotron resonance in InSb.

13 p2270 A69-27200

Nonlinear effects and turbulent behavior in a beam-plasma instability.

15 p2660 A69-30917

## APELBLAT, A.

Application of the Laplace transform to the solution of the boundary layer equations. II.

01 p0127 A69-10337

Application of the Laplace transform to the solution of the boundary layer equations. III - Magnetohydrodynamic Falkner-Skan problem.

21 p3693 A69-38750

## APIKIAN, ZH. G.

Supersonic flow of a linearly elastic medium past a rigid wedge /Sverkhzvukovoe obtekanie zhestkogo klina lineino-uprugoi sredoi/.

20 p3515 A69-37439

## APOLLONSKII, S. M.

Calculation of the flow of an ionized gas in a magnetohydrodynamic channel of rectangular cross section /K voprosu o raschete techeniya ionizirovannogo gaza v magnitogidrodinamicheskom kanale priamougol'nogo sечeniya/.

14 p2500 A69-29904

## APOSTOLESU, N.

Combustion of a fuel drop at high pressure.

15 p2719 A69-31476

## APPA RAO, M. V. K.

Proposed experiments to measure the spectra and time variation of X-ray sources.

06 p0992 A69-17312

## APPARAO, K. M. V.

Very heavy nuclei in cosmic rays.

04 p0649 A69-15422

## APPARAO, M. V. K.

Upper limits on low energy cosmic ray protons and heavy nuclei in interstellar space.

03 p0501 A69-13934

Propagation of cosmic radiation in the interstellar space /Invited talk/.

06 p0988 A69-17269

Gamma radiation from NP 0532.

20 p3588 A69-37410

## APPEL-HANSEN, J.

Coupling in reflector arrays.

08 p1282 A69-20037

Optimization of the reradiation pattern of a Van Atta array.

17 p2929 A69-33878

## APPEL, A.

Modeling in three dimensions.

05 p0724 A69-16383

## APPELDOORN, J. K.

The ball-on-cylinder test for evaluating jet fuel lubricity.

[ASLE PREPRINT 68AM 4A-2]

01 p0083 A69-10914

## APPERLEY, R. H.

Self-focussing aerial arrays for airborne communications.

08 p1289 A69-20971

## APPELDOORN, J. K.

Corrosive wear by atmospheric oxygen and moisture. [ASLE PAPER 68-LC-10]

15 p2622 A69-30608

## APPLETON, J. P.

Calibration and use of electrostatic probes for hypersonic wake diagnostics.

19 p3291 A69-35717

## APPUN, P.

Induction phenomena in MHD converters with constant and travelling magnetic field.

11 p1827 A69-25399

Cylindrically constructed MHD induction converters.

13 p2207 A69-27505

## APRAHAMIAN, R.

Energy dissipation in an oscillating sphere filled with a viscous fluid.

24 p4305 A69-43587

## APRAUSHEVA, N. N.

Combined use of satellite data and data from a thin network of aerological stations in reconstructing the fields of meteorological elements /O sovmeestnom

- ispol'zovani dannykh nabliudeni so sputnikov i redkoi seti aerologicheskikh stantsii dlia vosstanovleniia polei meteorologicheskikh elementov/.  
13 p2292 A69-27732
- APRIL, G. C.**  
Nonequilibrium flow and the kinetics of chemical reactions in the char zone.  
24 p4409 A69-43512
- APSHEV, S. ZH.**  
Angular distribution of penetrating particles formed in nuclear interactions of cosmic rays with matter.  
13 p2330 A69-28381
- APTEKAR, R. L.**  
Micrometeorite investigations on the Cosmos 135 satellite /mikrometeornye issledovaniia na sputnike "Kosmos-135"/.  
01 p0152 A69-10578  
Micrometeoroid investigations on the satellite "Cosmos-135".  
15 p2691 A69-30748
- APTER, J. T.**  
A relation between positive phase shift and elastic modulus enhancement of smooth muscle.  
23 p4083 A69-41459
- AR, E.**  
On the electromagnetic inverse scattering problem.  
05 p0719 A69-15929
- ARAI, T.**  
A study on the oxygenation velocity factor of the red blood cell by use of the rapid flow method combined with a Pt-electrode as the oxygenation detector.  
20 p3480 A69-38283
- ARAKAKI, G.**  
The growth and development of the wake behind inclined flat plates at low Reynolds numbers.  
16 p2768 A69-31767
- ARAKELIAN, M. A.**  
Unsteady Phenomena in Galaxies, International Astronomical Union, Symposium, Biurakan, Armenian SSR, May 4-12, 1966, Proceedings /Nestatsionarnye iavleniia v Galaktikakh, International Astronomical Union, Symposium, Biurakan, Armenian SSR, May 4-12, 1966, Proceedings/.  
12 p2161 A69-27015  
Luminosity function and stellar density in the proximity of the sun /Funktsiia svetimosti i zvezdnaia plotnost' v okrestnosti solntsa/.  
13 p2351 A69-27869
- ARAKELIAN, S. N.**  
The nature of the galaxies NGC 4402 and 4438 /O prirode galaktik NGC 4402 i 4438/.  
12 p2169 A69-27058
- ARAKELIAN, V. S.**  
Bleachable filter in a CO sub 2 laser in the case of active Q-switching /Prosvetliaushchisia fil'tr v CO sub 2 -lazere pri aktivnoi moduliatsii dobrotnosti/.  
11 p1894 A69-24454  
Use of luminophors in the visualization of CO sub 2 laser radiation /Primenenie luminoforov dlia vizualizatsii izlucheniia lazerov na CO sub 2/.  
18 p3153 A69-35259
- ARAKI, K.**  
Anomalous X-rays observed on Explorer 30.  
21 p3792 A69-39808
- ARAKI, T.**  
Magnetic field oscillations near the earth's bow shock front.  
02 p0241 A69-11729  
Transequatorial reception of VLF radio waves from Australia.  
12 p2032 A69-26860
- ARAKI, Y.**  
Ladder-type delay equalizer for millimeter-wave communication systems.  
23 p4135 A69-41361
- ARALOV, M. S.**  
An optimal pentode frequency quadrupler /Optimal'nyi pentodnyi umnozhitel' chastoty na chetyre/.  
22 p3912 A69-40260
- ARAMAKI, S.**  
Experimental study on reading efficiency of round and vertical type displays in aircraft.  
06 p0883 A69-18025
- ARAMATA, M.**  
On the resistance of a class of two-dimensional inhomogeneous conductors.  
14 p2422 A69-29554
- ARANGO, H.**  
Tristable fluid amplifiers.  
24 p4255 A69-43298
- ARAO, K.**  
Hemispherical distribution of turbidity coefficient as estimated from direct solar radiation measurements.  
05 p0789 A69-16585
- ARAPOV, IU. G.**  
Increasing the stability of scintillation spectrometers for X radiation /Povyshenie stabil'nosti stintillatsionnykh spektrometrov rentgenovskogo izlucheniia/.  
21 p3727 A69-39856
- ARASLANOV, A. M.**  
Equally stressed structures under the action of random loads representing a steady vector random function /Ravnonapriazhennye konstruktssii pri deistvii sluchainykh nagruzok, predstavliaiushchikh soboi stacionarnuiu vektornuiu sluchainuiu funktsiiu/.  
21 p3731 A69-38870
- ARATANI, T.**  
Numerical solution for two dimensional unsteady state heat conduction problems.  
09 p1623 A69-22280
- ARATO, M.**  
Evaluation of the confidence limits for the "decay" parameter of a complex stationary Gaussian Markov process.  
11 p1910 A69-25700
- ARAZMEDOV, B.**  
Optimum operating conditions of a solar thermoelectric generator with thermal contacts /Optimal'nyi rezhim raboty solnechnogo termoelektrorigeneratora pri nalichii teplovykh kontaktov/.  
16 p2741 A69-32797
- ARAZOV, G. T.**  
Existence of nearly periodic motions of a satellite of a spheroidal planet /O sushchestvovanii pochti periodicheskikh dvizhenii sputnika sferoidal'noi planety/.  
02 p0317 A69-11959
- ARBEL, A.**  
Some mechanical properties of electron beam welds with unconventional geometries.  
18 p3151 A69-35432
- ARBES, J.**  
Active stabilization of a stratospheric balloon gondola /Stabilisation active d'une nacelle pour ballons stratospheriques/.  
17 p2898 A69-33242
- ARBIT, H. A.**  
Lithium-fluorine-hydrogen tripropellant investigation.  
24 p4362 A69-43128
- ARBOCZ, J.**  
The effect of general imperfections on the buckling of cylindrical shells.  
13 p2362 A69-28122
- ARBORELIUS, M., JR.**  
Influence of unilateral hypoventilation on distribution of pulmonary blood flow in man.  
22 p3875 A69-40229
- ARBUZOV, B. A.**  
A unified description of gravitation and electromagnetism /O edinom opisanii tiagoteniia i elektromagnetizma/.  
13 p2300 A69-28450
- ARBUZOVA, K. S.**  
Some aspects of utilization of higher plants as nutrition source in space missions.  
15 p2560 A69-31408
- ARCAND, G. M.**  
Effects of gamma radiation on the behavior of nickel and cadmium electrodes.  
20 p3466 A69-38072
- ARCELLA, F. G.**  
Heat pipes function isothermally and adaptably.  
21 p3852 A69-39475  
Experimental study of vapor velocity limit in a sodium heat pipe. [ASME PAPER 69-HT-21]  
24 p4412 A69-43547
- ARCHAKOV, IU. I.**  
Methods of protecting steel against hydrogen "corrosion."  
04 p0613 A69-14432
- ARCHBOLD, E.**  
Visual observation of surface vibration nodal patterns.  
12 p2099 A69-27176
- ARCHBOLD, T. F.**  
The effect of gas flow rate on the oxidation kinetics of zirconium.  
18 p3154 A69-34272
- ARCHER, G.**  
Fiber polymer composite flexible insulating materials.  
13 p2286 A69-27989
- ARCHER, R. D.**  
The Soviet bombers.  
14 p2392 A69-29431  
Generation of implosions by area change in a shock tube.  
16 p2766 A69-31919
- ARDASHEV, A. IU.**  
The electromagnetic field of a coherent light beam.  
05 p0777 A69-16789  
Some properties of a narrow monochromatic light beam /Nekotorye svoistva uzko monokhromaticheskogo svetovogo puchka/.  
07 p1147 A69-18524
- ARDEBERG, A.**  
Investigations of a Milky Way field in Scorpius, V.  
08 p1389 A69-20250
- ARDELL, A. J.**  
The coherent solubilities of gamma' in Ni-Al, Ni-Si and Ni-Ti alloys.  
13 p2276 A69-27370
- ARDITI, I.**  
Passive Q-switching of a hydrochloric acid chemical laser /Decenchement passif d'un laser chimique a acide chlorhydrique/.  
16 p2796 A69-31840
- ARDUINI, C.**  
Thermoelastic effects on gravity gradient stabilization of artificial satellites.  
06 p1025 A69-17613  
Thermal gradients in artificial satellites - The problem of a cavity with conduction and internal radiation /Gradienti termici nei satelliti artificiali - Il problema della cavit  con conduzione a radiazione interna/.  
08 p1421 A69-20157
- ARECCHI, F. T.**  
Electromagnetic propagation in a resonant medium.  
21 p3769 A69-38382
- AREFEV, B. A.**  
Process optimization in closed-cycle plants.  
07 p1116 A69-19759
- ARENDAR, V. N.**  
Utilization of presprayed subsidiary metals for preparing GaAs-Sn, GaAs-In, and GaAs-Pb ohmic contacts /Ispol'zovanie predvaritel'no napylennykh vspomagatel'nykh metallov dlia sozdaniia omicheskikh kontaktov GaAs-Sn, GaAs-In, GaAs-Pb/.  
10 p1748 A69-24214
- ARENDT, P. R.**  
Onset of severe amplitude scintillations of satellite radio signals during sunrise.  
01 p0067 A69-10980  
Quick-look system for virtual real-time telemetry reception of topside ionograms.  
20 p3508 A69-37862
- ARENS, M.**  
Long term modulation of cosmic rays caused by solar activity.  
08 p1379 A69-20533
- ARENSBURGER, D. S.**  
Properties of electrolytic and reduced titanium powders and sinterability of porous compacts from such powders.  
05 p0782 A69-16795
- ARENZ, R. J.**  
Influence of hypervelocity projectile size and density on the ballistic limit of dual-sheet structures. [AIAA PAPER 69-376]  
13 p2367 A69-28306
- ARESHIDZE, KH. I.**  
Improving the antidetonation properties of benzines with the aid of synthetic zeolite /Povyshenie antidekatsionnykh svoistyv benzinov s pomoshch'iu sinteticheskogo tseluita/.  
23 p4199 A69-42479
- ARETS, J.**  
Aspects of international responsibility of international space organizations /Aspect de la responsabilite internationale des organisations internationales de l'espace/.  
20 p3635 A69-37108
- ARFEL, G.**  
Dynamic aspects of the human electroencephalogram - Initial results of a radiotelemetric study /Aspects dynamiques de l'electroencephalogramme humain - Premiers resultas d'une etude radio-telemetrique/.  
22 p3889 A69-40158



## ARGADE, S. D.

Dependence of friction at wet contacts upon interfacial potential.  
12 p2129 A69-25982

## ARGANO, E. S.

A dual reference electrode system for molten carbonate cells with immobilized electrolyte.  
05 p0706 A69-16237

## ARGENT, B. B.

The creep of niobium-molybdenum alloys.  
10 p1711 A69-23375

## ARGO, H. V.

16-40 angstrom units coronal X-ray emission during the 12 November 1966 eclipse.  
04 p0650 A69-15531

## ARGON, A. S.

Statistical theory of strength of laminated composites. II.  
07 p1170 A69-18712

## ARGUE, G. R.

Solid state batteries.  
[AICHE PAPER 22D]  
Solid state batteries.  
10 p1640 A69-23998

Effects of gamma radiation on the behavior of nickel and cadmium electrodes.  
20 p3466 A69-38072

## ARGYRIS, J. H.

The SHEBA family of shell elements for the matrix displacement method.  
01 p0170 A69-10865

A sequel to Technical Note 14 on the TUBA family of plate elements.  
03 p0530 A69-14090

The changes in the /two-dimensional/ stress distribution round a rectangular hole with rounded corners, caused by a varying internal pressure and temperature.  
06 p1025 A69-17611

A sequel to technical note 13 - The curved tetrahedral and triangular elements TEC and TRIC for the matrix displacement method.  
08 p1415 A69-20631

Elastoplastic calculation of general structures and continua /Die elastoplastische Berechnung von allgemeinen Tragwerken und Kontinua/.  
08 p1416 A69-20705

Some general considerations on the natural mode technique. I.  
11 p1969 A69-24374

Some general considerations on the natural mode technique. II - Large displacements.  
13 p2362 A69-27838

The SHEBA family of shell elements for the matrix displacement method. III.  
16 p2872 A69-32025

A further sequel to technical note 14 - The FUGA family of elements for folded plate structures.  
19 p3447 A69-36852

## ARGYROPOULOS, G. S.

Compressible turbulent magnetohydrodynamic boundary layers.  
08 p1366 A69-20786

## ARHIPOVA, V. P.

The study of the forbidden lines in the planetary-nebula spectra.  
19 p3423 A69-36223

## ARHO, R.

The lifetime of satellite 1958 a 1 /Explorer 1/.  
22 p4036 A69-39973

## ARIARATNAM, S. T.

Dynamic stability under random excitation.  
02 p0339 A69-11988

Instability in an elastic-plastic cylindrical shell under axial compression.  
13 p2363 A69-28124

## ARIAS, A.

Chemical reactions of ductile metals during comminution.  
13 p2216 A69-27762

The release of hydrogen on ball milling chromium in water.  
21 p3728 A69-38567

## ARIE, M.

The effects of buoyancy on the velocity and temperature distributions in a vertical wake of a heated body.  
19 p3296 A69-35761

A contribution to the spreading of an axisymmetric wake with streamwise pressure gradient.  
19 p3296 A69-35762

## ARIEL, N. Z.

Evaluation of the deformations and errors in calculation of spectra according to experimental data /Otsenka iskazhenii i pogreshnostei rascheta spektrov po eksperimental'nym dannym/.  
20 p3571 A69-37697

## ARIFOV, A.

Current-voltage characteristics of silicon tunnel p-n junctions /Vol't-ampernaia kharakteristika kremnievykh tunnel'nykh p-n-perekhodov/.  
10 p1746 A69-23574

## ARIFOV, L. IA.

Relativistic theory of annual parallaxes /Relativistskaia teoriia godichnykh parallaksov/.  
03 p0506 A69-13091

The relativistic theory of annual parallaxes.  
14 p2516 A69-28773

## ARIFOV, T. U.

Ionizing action of radiation due to heating of substance in the focus of a laser beam and production of a plasma with high degree of ionization.  
03 p0479 A69-13998

Ionization of a medium by ultraviolet radiation from a substance heated in the focus of a laser beam /Ionizatsiia sredy ul'trafioletovym izlucheniem ot veshchestva, nagretogo v fokuse lucha lazera/.  
11 p1901 A69-25754

Laser-induced current pulses from a target in a gas.  
18 p3152 A69-35124

## ARIFOV, U. A.

Peaked electron emission from a nickel surface under the action of laser radiation /Pichkovaia elektronnaia emissiia s poverkhnosti nikelia pod deistviem lazernogo izlucheniia/.  
10 p1703 A69-23572

Matching of a thermionic converter with a solar cell in a solar power array /K voprosu soglasovaniia termoemissionnogo preobrazovatelja s geliopriemnikom v solnechnoi energeticheskoi ustanovke/.  
13 p2209 A69-27970

## ARIMA, Y.

Simple method of receiving picture signals from a satellite.  
06 p0888 A69-17651

## ARIMAN, T.

Some problems in bending of micropolar plates. I, II.  
01 p0167 A69-10324

On circular micropolar plates.  
04 p0682 A69-15291

## ARINShteIN, E. A.

Control of the electric current in anisotropic semiconductors.  
06 p0978 A69-16991

## ARISKIN, V. I.

Relation between the discrete radio source W 43 and neutral hydrogen /Sviaz' diskretnogo istochnika radioizlucheniia W 43 s neutral'nym vodorodom/.  
15 p2687 A69-30543

## ARISTOV, V. V.

The Bormann effect and extinction in holography.  
09 p1494 A69-21492

Holography without a reference beam for three-dimensional holograms.  
23 p4166 A69-41969

## ARIYOSHI, H.

Observation on stress effect in Schottky barrier diodes.  
16 p2758 A69-31619

## ARIZUMI, N.

Japanese meteorological rocket sounding.  
20 p3543 A69-37795

## ARKHANGELSKII, G. E.

Effect of color centers on the Cr super 3 plus spectrum in ruby /Vliianie tsentrov okraski na spektr Cr super 3 plus v rubine/.  
19 p3335 A69-36166

## ARKHANGELSKII, M. E.

Reduction of dry dynamic friction by means of ultrasonic oscillations /Umen'shenie sukhnogo dinamicheskogo treniia posredstvom ul'trazvukovykh kolebani/.  
18 p3135 A69-34587

## ARKHIPOV, V. N.

Chemical relaxation in a viscous shock wave /Khimicheskaja relaksatsiia v viazkom skachke uplotneniia/.  
24 p4302 A69-43487

## ARKHIPOV, V. T.

Temperature field of a plate placed in a solidifying gas /O temperaturum pole plastiny, pomeshchennoi v otverdevshii gaz/.  
16 p2878 A69-31957

## ARKHIPOVA, V. P.

Photoelectric observations of the nuclei of planetary nebulae He 1-5 and NGC 1514 /Fotoelektricheskie nabludeniiia iader planetarnykh tumannostei He 1-5 i NGC 1514/.  
09 p1590 A69-21379

Photoelectric observations of the nuclei of planetary nebulae He 1-5 and NGC 1514.  
18 p3198 A69-34767

## ARKIN, E. S. A.

Thermal resistance of multilayer cylindrical elements in the thermionic converters.  
14 p2539 A69-29218

Theoretical study of transient thermal conditions during the start-up of a thermionic converter.  
14 p2400 A69-29226

## ARKOVENKO, G. I.

Elastic properties of a titanium beta-alloy /IVT1/ /Uprugie svoistva beta-splava titana /IVT1//.  
22 p3969 A69-40072

## ARLETT, P. L.

Application of finite elements to the solution of Helmholtz's equation.  
03 p0404 A69-13598

## ARLINGER, B.

Three-dimensional compressible potential flow in a curved duct.  
11 p1867 A69-24607

## ARLT, H.-J.

Kaufman ion thruster of the DFVLR Braunschweig.  
17 p3022 A69-33605

Experimental results of the electrostatic ion propulsion system ESKA 18 /Experimentelle Ergebnisse ueber das elektrostatische Ionentriebwerk ESKA 18/.  
23 p4203 A69-41934

## ARM, D. L.

Journeys in Science - Small Steps - Great Strides, U.S. Air Force Office of Scientific Research, Science Seminar, 12th, Albuquerque, N. Mex., June 1967, Proceedings.  
07 p1181 A69-18927

Vistas in Science, U.S. Air Force Office of Scientific Research, Science Seminar, 13th, Albuquerque, N. Mex., June 12-19, 1968, Proceedings.  
08 p1423 A69-21123

## ARM, M.

Holographic processing of radar returns.  
19 p3314 A69-36598

Holographic storage of electric signals.  
23 p4164 A69-41626

## ARMALY, B. F.

Analysis of lateral conduction and radiation along two parallel long plates.  
24 p4415 A69-43594

## ARMAND, M.

Preliminary results of a study of heat pipes at high temperature /Resultats preliminaires d'une etude sur les caloducs a haute temperature/.  
14 p2539 A69-29208

## ARMAND, N. A.

Influence of the observation time on the resolution limit of interferometers due to radio-wave phase fluctuations /Vliianie vremeni nabludeniiia na razreshaiushchuiu sposobnost' interferometrov, ograničivaemuiu fluktuatsiiami faz radiovoln/.  
21 p3682 A69-39122

## ARMAND, S. A.

Self-focusing of a power laser beam in gases and liquids.  
04 p0611 A69-14792

Propagation of a weakly divergent intense light beam in a laminar optically inhomogeneous medium /Rasprostranenie slaboraskhodiashegosia intensivnogo puchka sveta v opticheski sloisto-neodnorodnoi srede/.  
13 p2223 A69-28568

## ARMENDARIZ, M.

On the measurement of winds by the AN/FPS-16 radar/ spherical balloon method.  
18 p3139 A69-35428

## ARMENIADES, C. D.

Mechanical behavior of poly(ethylene terephthalate) at cryogenic temperatures.  
05 p0785 A69-16494

- ARMJO, L.**  
A theory for the determination of wind and precipitation velocities with Doppler radars.  
17 p2919 A69-33162
- ARMINGTON, J. C.**  
Electrophysiology of the human visual system.  
24 p4271 A69-42644
- ARMITAGE, H. B.**  
A pilot's evaluation of the C-141 category IIIB all weather landing system.  
14 p2479 A69-29701
- ARMSTRONG, D. R.**  
A method for the control of gas pressure in the xenon laser.  
07 p1155 A69-19090
- ARMSTRONG, E. B.**  
Doppler shifts in the wavelength of the O I  $\lambda$ 6300 line in the night airglow.  
16 p2776 A69-32093
- ARMSTRONG, G. M.**  
Plan shear indicator for real-time Doppler radar identification of hazardous storm winds.  
18 p3139 A69-35427
- ARMSTRONG, G. T.**  
The heat of combustion of beryllium in fluorine.  
21 p3853 A69-39703
- ARMSTRONG, J. B.**  
Advanced display techniques.  
04 p0600 A69-15029
- ARMSTRONG, J. G.**  
Low-noise Microwave Amplifiers.  
03 p0402 A69-13017
- ARMSTRONG, J. P.**  
The advantages of three-shaft turbofan engines for civil transport operation.  
08 p1376 A69-20627
- ARMSTRONG, L. D.**  
High-efficiency X-band GaAs IMPATT diodes.  
07 p1102 A69-18660  
High-power and high-efficiency GaAs avalanche diodes.  
16 p2760 A69-32015  
Gallium arsenide IMPATT diodes.  
20 p3504 A69-36914
- ARMSTRONG, R. L.**  
Torsion of thick walled rectangular bars.  
13 p2358 A69-27212
- ARMSTRONG, R. W.**  
On the hardness and recrystallized grain size of alpha titanium.  
06 p0943 A69-17235  
The polycrystal ductile-brittle transition.  
10 p1795 A69-23063
- ARMSTRONG, T. P.**  
Nonlinear development of the two-stream instability.  
08 p1367 A69-20800  
Observations of the solar particle event of 7 July 1966 with University of Iowa detectors.  
10 p1768 A69-23768  
Solar particle observations inside the magnetosphere during the 7 July 1966 proton flare event.  
10 p1768 A69-23778
- ARMSTRONG, T. W.**  
An estimate of the prompt photon spectrum arising from cosmic-ray bombardment of the moon.  
09 p1597 A69-22088  
Monte Carlo calculations of residual nuclei production in thick iron targets bombarded by 1- and 3-Gev protons and comparison with experiment.  
10 p1760 A69-23411  
Calculation of the radiation hazard at supersonic aircraft altitudes produced by an energetic solar flare.  
23 p4204 A69-41337
- ARNAS, O. A.**  
A new solution for the skin-friction drag on a cylinder.  
11 p1819 A69-25384  
Transport processes in magnetosolidmechanics-adiabatic conditions.  
13 p2299 A69-28129
- ARNASON, G.**  
Numerical simulation of the macrophysical and microphysical processes of moist convection.  
19 p3362 A69-36497
- ARNAUD, G.**  
The unsteady flow of an incompressible viscous fluid in an infinite cylindrical tube /Sur l'écoulement instationnaire d'un fluide visqueux incompressible dans un tube cylindrique infini/.  
16 p2769 A69-31831
- ARNAUD, H.**  
Thrust modulation in hybrid propellant engines and its applications /La modulation de la poussee des moteurs a lithergol et ses applications/.  
17 p3019 A69-33337
- ARNAUD, J. A.**  
Enhancement of optical receiver sensitivities by amplification of the carrier.  
[IEEE PAPER R-5] 07 p1154 A69-19079
- ARNAUD, J. F.**  
Frequency assignment plans for synchronous communication satellites.  
[AIAA PAPER 68-454] 21 p3674 A69-39226
- ARNAUDON, J. F.**  
A type of supersonic recycling wind tunnel for training and research /Sur un type de soufflerie supersonique a recyclage pour l'enseignement et la recherche/.  
07 p1116 A69-19289  
Some results for the three-dimensional boundary layer /Quelques resultats sur la couche limite tridimensionnelle/.  
19 p3241 A69-36762
- ARNAUDON, J.-F.**  
Influence of the wall temperature on the transverse flow in a three-dimensional laminar boundary layer /Influence de la temperature parietale sur l'écoulement transversal dans une couche limite laminaire tridimensionnelle/.  
08 p1251 A69-20274
- ARNDT, F.**  
A locally dependent electromagnetically coupled TEM waveguide as a wideband directional coupler /Ortsabhaengig elektromagnetisch gekoppelte TEM-Wellenleitungen als Breitband- Richtkoppler/.  
11 p1855 A69-25629
- ARNDT, G. D.**  
An analysis of the telecommunications performance of a lunar relay satellite system.  
23 p4129 A69-42508
- ARNDT, R.**  
Temperature dependence of the dislocation interaction in niobium /Die Temperaturabhaengigkeit der Versetzungswechselwirkung in niob/.  
08 p1333 A69-20446
- ARNEBERG, R. N.**  
Practical quality problems in micro-electronic applications.  
15 p2580 A69-31129
- ARNESSEN, W. T.**  
Magnetic attitude control for synchronous satellites.  
06 p1017 A69-17944  
The ORBIS-CAL satellite.  
07 p1226 A69-18323
- ARNETT, G. M.**  
Optical absorption in tetracyanoquinodimethan.  
18 p3183 A69-35477
- ARNETT, W. D.**  
Nucleosynthesis in supernova explosions.  
08 p1401 A69-20898  
Pulsars and neutron star formation.  
13 p2337 A69-27517  
Carbon-burning nucleosynthesis at constant temperature.  
20 p3612 A69-38163
- ARNO, R. D.**  
Computer analysis of space power systems for mission analysis.  
23 p4068 A69-42240
- ARNOLD, D. H.**  
Measurement of the stimulated emission cross section of Nd super 3 super plus in CaWO sub 4.  
11 p1938 A69-25049  
Transverse-mode selection of rotating-mirror Q switched lasers.  
22 p3961 A69-40316
- ARNOLD, D. I.**  
Investigation of the optical homogeneity of gallium arsenide.  
04 p0644 A69-15266
- ARNOLD, E.**  
Surface charges and surface potential in silicon surface inversion layers.  
10 p1744 A69-23178
- ARNOLD, F.**  
Mass spectrometer measurements of positive ions and neutral gas between 100 and 233 km above Andøya, Norway.  
21 p3702 A69-38354
- ARNOLD, J. I.**  
Flight test evaluation of an advanced stability augmentation system for B-52 aircraft.  
[AIAA PAPER 68-1068] 20 p3461 A69-37157
- ARNOLD, J. O.**  
A shock tube determination of the electronic transition moment of the C sub 2 /Swan/ bands.  
02 p0285 A69-12833  
Line by line calculation of spectra from diatomic molecules and atoms assuming a Voigt line profile.  
18 p3177 A69-35239
- ARNOLD, J. R.**  
Cosmic-ray produced radionuclides and rare gases near the surface of Saint-Severin meteorite.  
19 p3410 A69-36093
- ARNOLD, K.**  
Considerations concerning the inertial frame of dynamic satellite geodesy /Betrachtungen zum Inertialsystem der dynamischen Satellitengeodäsie/.  
01 p0150 A69-10445
- ARNOLD, T. E.**  
Calibration and use of electrostatic probes for hypersonic wake diagnostics.  
19 p3291 A69-35717
- ARNOLD, W. H.**  
Recent NERVA technology development.  
[AIAA PAPER 68-612] 19 p3371 A69-35942
- ARNOLDOV, V. N.**  
Effect of the air intake of a lifting engine on the aerodynamic characteristics of a wing /Vliianie vozdukhozabornika pod'emnogo dvigatel'ia na aerodinamicheskie kharakteristiki kryla/.  
19 p3239 A69-36400
- ARNOLDY, R. F.**  
Development and selection of filler metals for bulk welding.  
11 p1891 A69-24931
- ARNOLDY, R. L.**  
Particle substorms observed at the geostationary orbit.  
24 p4367 A69-43173
- ARNOULD, J.**  
Simulation of a computer and its environment /Simulation d'un calculateur et de son environnement/.  
20 p3502 A69-37395
- ARNOULD, M.**  
Possibility of synthesis of proton-rich nuclei in highly evolved stars. I /Possibilite de synthese de noyaux riches en protons dans des etoiles tres evoluees. I/.  
19 p3428 A69-36837
- ARNOULT, M. D.**  
Magnitude estimation of perceived distance over various distance ranges.  
07 p1069 A69-19501  
Distance discrimination in a simulated space environment.  
12 p2022 A69-26372
- ARNY, T.**  
Star formation in interstellar clouds - Studies with a modified virial theorem.  
10 p1787 A69-24119
- AROIAN, L. A.**  
Temperature and humidity effects on silicon solar cells.  
19 p3253 A69-35706
- ARON, I.**  
Electric power systems for modern transport aircraft /Sisteme electroenergetice pentru avioane moderne de transport/.  
02 p0196 A69-12166  
Gyroscopic stabilization of a platform on board a flight vehicle.  
21 p3760 A69-38734
- ARONIN, L. R.**  
Deformation and fracture of beryllium bicrystals.  
06 p0942 A69-17225
- ARONOV, B. M.**  
Theoretical determination of the discharge coefficient of convergent conical nozzles /Raschetnoe opredelenie koeffitsienta raskhoda suzhaiushchikh konicheskikh sope/.  
24 p4364 A69-43074



## ARONOWITZ, L.

Electrostatic potential generated by rockets on vehicles in space.  
03 p0522 A69-13903

## ARONSON, A. H.

Very-short-time, very-high-temperature creep rupture of type 347 stainless steel and correlation of data. [ASME PAPER 68-WA/MET-2]  
14 p2464 A69-29439

## ARONSON, D. G.

Non-negative solutions of linear parabolic equations.  
13 p2290 A69-28539

## ARONSON, E. A.

On the bistatic scattering cross section of a reentry capsule with ionized wake.  
23 p4116 A69-41593

## ARONSON, R.

What good is holography/ques/  
06 p0928 A69-17873

## ARONSSON, B.

A microfractographic investigation of fatigue crack propagation in a cast steel and some aluminum alloys.  
12 p2116 A69-26916

## ARONSSON, G.

On the partial differential equation  $u_{xx} + u_{yy} + u_{zz} + u_{tt} = 0$ .  
02 p0273 A69-12779

## ARORA, A. K.

Microwave free-carrier Faraday effect in piezoelectric semiconductors.  
04 p0643 A69-15201

Nonlinear demodulation of an amplitude modulated wave in a plasma - Elementary approach.  
04 p0559 A69-15210

Amplitude modulation of electromagnetic waves by modulated magnetic fields - Modified theory and application to communications during blackout.  
14 p2417 A69-29591

## ARORA, K. L.

Magnetohydrodynamic flow due to an oscillating infinite plane.  
22 p3991 A69-41036

## ARORA, N. L.

An integral-transform method for shock-shock interaction studies.  
03 p0413 A69-13010

Integral transforms for shock-shock interaction - Three dimensional planar wings.  
13 p2199 A69-27323

## ARORA, R. K.

Synthesis of unequally spaced arrays using dynamic programming.  
02 p0219 A69-12338

## ARORA, R. P.

A power supply for ruby laser.  
02 p0256 A69-12095

## ARP, H.

A spectroscopic flare of Wolf 359.  
16 p2852 A69-32817

Red-shifts of very young objects.  
20 p3597 A69-37411

## ARPACI, V. S.

A thick gas model near boundaries.  
16 p2769 A69-31871

## ARPISHKIN, V. M.

The application of lasers with regulated pulses for photographing distant objects with selection in regard to the range.  
12 p2089 A69-26190

## ARRATHOON, R.

Current pushing of the oscillation frequency of a 6328-angstrom units He-Ne laser.  
02 p0260 A69-12658

Further measurements of quantum phase noise in a He-Ne laser.  
10 p1704 A69-23669

Positive column population calculations for the evaluation of dispersive effects in He-Ne lasers.  
20 p3556 A69-38124

## ARRHENIUS, G.

Two alternatives for the history of the moon.  
18 p3198 A69-34823

## ARRIDGE, R. G. C.

Fracture of fibre reinforced materials.  
22 p3974 A69-41212

## ARROWSMITH, H. W.

Electrolytic polisher-etcher for standard metallographs.  
13 p2281 A69-28156

## ARROYO, M. L.

Study of the importance of sunspots and their variation /Estudio de la importancia de las manchas solares y su variacion temporal/.  
10 p1770 A69-24000

## ARSENAULT, H.

Optical filter synthesis by holographic methods.  
02 p0249 A69-11927

## ARSENAULT, R. J.

Work-hardening characteristics of Ta and Ta-base alloys.  
05 p0778 A69-15758

Solid solution strengthening and weakening of b.c.c. solid solutions.  
23 p4178 A69-42358

## ARSENEV, P. A.

Investigation of a high-frequency gas discharge.  
02 p0286 A69-11572

## ARSENEV, V. V.

Neodymium laser with regulated pulse duration.  
14 p2460 A69-29670

## ARSENEVA, S. M.

Realization of single-mode operation for a CO sub 2 laser /O realizatsii odnomodovogo rezhima v opticheskom generatore na CO sub 2/.  
07 p1156 A69-19157

## ARSENI, K. A.

Diffusion and solubility of gold in indium phosphide /Diffuziia i rastvorimost' zolota v fosfide indii/.  
09 p1555 A69-21470

Diffusion and solubility of gold in indium phosphide.  
15 p2669 A69-30715

## ARSENIE, D.

Occurrence of turbulence in the flow between two parallel walls with a given periodic roughness /Asupra aparitiei turbulentei la miscarea intre doi pereti paraleli cu rugozitate periodica data/.  
05 p0747 A69-16034

## ARSENIN, V. IA.

Determination of a plasma electron distribution function from the bremsstrahlung spectrum /Opredelenie funktsii raspredelenia elektronov plazmy po spektru tormoznogo izlucheniia/.  
08 p1365 A69-20547

On optimal regularization.  
10 p1721 A69-23882

Long-distance tropospheric propagation at short and moderate wavelengths /O dal'nem troposfernom rasprostraneniui korotkikh i srednikh voln/.  
19 p3279 A69-36879

## ARSENIN, V. V.

A possible stabilization of the trough-shaped plasma instability through a feedback system.  
06 p0966 A69-17544

Stability of a rarefied plasma enclosed by a surface with complex admittance.  
12 p2139 A69-26712

Current-convective instability of a weakly ionized plasma in the presence of feedbacks /Tokovo-konvektivnaia neustoiichivost' slabo ionizovannoi plazmy v prisutstvii obratnykh svyazei/.  
13 p2311 A69-28106

## ARSON, L. D.

Calculation of the optimum parameters of forked attachments /Raschet optimal'nykh parametrov vil'chatykh stykovykh uzlov/.  
04 p0673 A69-14496

## ARTAMONOV, A. IA.

Increasing the wear resistance of light alloys.  
10 p1711 A69-23339

Grinding and classification of micropowders of high-melting-point compounds /Izmel'chenie i klassifikatsiia mikroporoshkov tugoplavkikh soedinenii/.  
12 p2113 A69-26256

Methods of investigating regularities of external friction of refractory materials at high temperature in vacuum.  
21 p3690 A69-39154

## ARTEMEV, V. V.

Distortion of coherence by atmospheric turbulence /Ob iskazhenii kogerentnosti atmosferno turbulentnost'iu/.  
11 p1894 A69-24452

Outward winding of the planets by elliptically moving particles /O raskruchivanii planet ellipticheski dvizhushchimisia chastitsami/.  
12 p2154 A69-25818

On the problem of magnetogravitational capture.  
18 p3197 A69-34725

## ARTEMEV, V. V.

Variation in the time correlation of photons /Izmerenie vremennoi korreliatsii fotonov/.  
02 p0255 A69-11611

Detection of coherent light fluxes /Registratsiia kogerentnykh svetovykh potokov/.  
09 p1515 A69-21438

Measurement of time correlation of photons.  
11 p1895 A69-24718

## ARTEMOV, E. A.

Vibrations of an unbalanced rotor with hydraulic dampers on elastic supports.  
16 p2837 A69-32136

## ARTHUR, C. W.

Mariner IV and OGO III - Recent measurements of picogram dust particle flux in interplanetary and cislunar space.  
15 p2699 A69-31394

Lunar Explorer 35 - 1967-1968 measurements of picogram dust particle flux in selenocentric space.  
15 p2699 A69-31396

## ARTHUR, D. W. G.

A comparator method for determining relative lunar altitudes.  
07 p1225 A69-19770

Relative altitudes from three Yerkes photographs.  
07 p1225 A69-19771

Selenodetic measures on 25 star-trailed photographs.  
07 p1225 A69-19772

A new secondary selenodetic triangulation.  
07 p1225 A69-19773

The Tucson selenodetic triangulation.  
07 p1225 A69-19774

## ARTHUR, M.

Gondola azimuth stabilization using a simple lunar tracker.  
20 p3538 A69-37300

## ARTHUR, P. F.

The effect of the shape of plastic zone size and crack opening displacement.  
10 p1795 A69-23064

## ARTHURS, A. M.

Momentum operators in quantum mechanics.  
01 p0106 A69-10930

Variational solutions of nonlinear Poisson-Boltzmann boundary-value problems.  
06 p0968 A69-17784

## ARTIAGA, L.

A local existence theorem for quasi-linear partial differential equations.  
17 p2994 A69-32843

## ARTICOLO, G. A.

Derivation of an equivalent dielectric tensor for a warm, drifting, lossy, electron plasma.  
16 p2820 A69-31701

## ARTINSON, I.

Mean lives of some doubly excited levels in lithium.  
13 p2301 A69-27454

## ARTIUKH, A. T.

Categorical structures of thinking and the theory of relativity /Kategorial'nye struktury myshleniia i teoriia otnositel'nostei/.  
14 p2484 A69-28861

## ARTIUKH, L. IU.

Numerical solution of the problem of unsteady heating of a fuel mixture in a container /Chislennoe reshenie zadachi o nestatsionarnom nagreve goriuchi smesi v sosude/.  
11 p2001 A69-25192

Heat problem for a semibounded jet propagating along a porous surface /Teplovaia zadacha dlia poluogranichennoi strui vdol' poristoii poverkhnosti/.  
21 p3854 A69-39846

## ARTIUKH, V. S.

Flux densities and spectral indices for the sources in the 3C and 3CR catalogs at 86-MHz frequency.  
11 p1951 A69-24237

Determination of the brightness distribution over the source /O vosstanovlenii raspredeleniia radioiarkosti po istochniku/.  
20 p3606 A69-38033

## ARTIKHINA, N. M.

The structure of the Pleiades /Stroenie Pleiad/.  
09 p1589 A69-21369

The structure of the Pleiades.  
18 p3198 A69-34758

- ARTTIKHINA, T. V.**  
Some effects developing during hypokinesia.  
02 p0198 A69-11502
- ARTIUSHKOV, E. V.**  
Study of the stability of longitudinal short-wave oscillations in a quasi-one-dimensional flow of conducting gas /Issledovanie ustoychivosti prodl'nykh korotkovolnovykh kolebaniy v kvaziodnomernom potoke provodiashchego gaza/.  
02 p0233 A69-12487  
Investigation of the stability of transverse unfrozen oscillations in a quasi-one-dimensional conducting gas flow /Issledovanie ustoychivosti poperechnykh razmorozhennykh kolebaniy v kvaziodnomernom potoke provodiashchego gaza/.  
11 p1928 A69-25222
- ARTMANN, J.**  
Nonequilibrium calculations for a plasma parallel beam produced by means of a Laval nozzle /Nichtgleichgewichtsrechnungen zu einem mittels einer Laval-Dueseeerzeugten Plasma-Parallelstrahl/. [DVL-875]  
07 p1188 A69-18277
- ARTSIMOVICH, L. A.**  
Physics of high-temperature plasmas /Fizika vysokotemperaturnoi plazmy/.  
23 p4196 A69-42167
- ARTURA, C. J.**  
Spectrum of the two-photon emission from the metastable state of singly ionized helium.  
23 p4220 A69-42378
- ARTYKOV, I. Z.**  
Many-particle interactions in the high and superhigh energy region /new types of elementary particle interactions/.  
13 p2303 A69-28369
- ARUSHANOV, E. K.**  
Electrical properties of indium- and copper-doped cadmium antimonide crystals.  
04 p0643 A69-15264
- ARUTIUNIAN, G. M.**  
Shape of a diffracted shock wave /O forme diffragirovannoi udarnoi volny/.  
02 p0234 A69-12588  
Weak shock waves in a thermorelaxing medium /Slabye udarnye volny v termorelaksiruiushchei srede/.  
15 p2590 A69-30103  
Interaction between a shock wave and a wedge moving at a supersonic velocity /O vzaimodeistvii udarnoi volny s klinom, dvizhushchimsia so sverkhzvukovoi skorosti/.  
19 p2339 A69-36398  
Structure of weak shock waves in relaxation media /O strukture slabykh udarnykh voln v relaksiruiushchikh sredakh/.  
19 p3301 A69-36842
- ARUTIUNIAN, N. KH.**  
Contact problem for a half-plane with elastic reinforcement.  
14 p2531 A69-28804
- ARUTIUNIAN, V. M.**  
Problem of current flow through semiconductors containing deep levels /K voprosu o prokhozhenii toka cherez poluprovodnik, soderzhashchii glubokie urovni/.  
02 p0299 A69-12562  
Averaged equations for electromagnetic wave intensity in a medium, with allowance for interference /Usrednennyye uravneniya dlia intensivnosti elektromagnitnykh voln v srede, uchityvaiushchie interferentsii/.  
22 p3966 A69-41172
- ARUTIUNIAN, ZH. G.**  
Effect of various factors on the characteristics of a slope wind /O vlianii razlichnykh faktorov na kharakteristi sklonovogo vetra/.  
15 p2648 A69-30577
- ARVESEN, J.**  
Handbook of Solar Simulation for Thermal Vacuum Testing.  
21 p3690 A69-38894
- ARYA, S. P. S.**  
Hot-wire measurements in non-isothermal flow.  
11 p1886 A69-25088
- ARYSHENSKII, IU. M.**  
Certain problems concerning the plasticity of orthotropic media /Nekotorye voprosy plastichnosti ortotropnykh sred/.  
24 p4400 A69-43083
- ARZELIES, H.**  
One-dimensional flow of perfect compressible relativistic fluids /Ecoulement unidimensionnel des fluides parfaits relativistes compressibles/.  
22 p3931 A69-40711
- ASADA, H.**  
Static and fatigue strength of end-closed filament-wound vessels under internal pressure.  
21 p3846 A69-39797
- ASADOV, F.**  
Calculating the bending of rectangular plates in refined formulations /O raschete izgiba priamougol'nykh plit v utochnennykh postanovkakh/.  
18 p3215 A69-34535
- ASAI, A.**  
Low-noise antenna.  
05 p0728 A69-15669
- ASAI, S.**  
Supersonic panel flutter boundary of clamped rectangular plates.  
22 p3930 A69-40584
- ASAKURA, T.**  
Fluctuation distribution of collimated and focused Gaussian beams propagated through a random medium.  
12 p2130 A69-26393
- ASANO, N.**  
Primordial helium and the luminosity of horizontal-branch stars.  
09 p1601 A69-22211
- ASANO, S.**  
Evaluation of the amplitude-dependent internal friction of materials under inhomogeneous strain.  
08 p1331 A69-20175  
A simplified method for calculation of strain dependence of internal friction in transverse vibrations.  
17 p3051 A69-32961  
Progress report on recent improvements in the analysis of surface wave observations.  
23 p4157 A69-42018
- ASAPOVICH, I. S.**  
The Leonids meteor stream and its comet Tempel-Tuttle /Meteornyi potok Leonid i ego kometa Tempella-Tuttli/.  
14 p2525 A69-29715
- ASATUROV, S. A.**  
Formation of carbide coatings on graphite in molten media /K voprosu obrazovaniia karbidnykh pokrytii na grafit v rasplavlennykh sredakh/.  
20 p3566 A69-37372
- ASAY, J. R.**  
Pressure and temperature dependence of the acoustic velocities in polymethylmethacrylate.  
16 p2825 A69-31695
- ASAYAMA, Y.**  
Study on application of maraging stainless steel to liquid rocket propellant tank.  
07 p1166 A69-19236
- ASBRIDGE, J. R.**  
Plasma flow pattern in the earth's magnetosheath.  
16 p2773 A69-31961
- ASCHOFF, J.**  
Desynchronization and resynchronization of human circadian rhythms.  
21 p3660 A69-39173  
Circadian rhythm in man under the effect of light-dark cycles of different periods /Circadiane Periodik des Menschen unter dem Einfluss von Licht-dunkel-Wechseln unterschiedlicher Periode/.  
23 p4094 A69-42070  
Diurnal rhythms of orthostatic cardiovascular responses /Tagesperiodik der orthostatischen Kreislaufreaktion/.  
23 p4094 A69-42072
- ASCHOFF, J. C.**  
The importance of the EEG for aviation medicine with particular consideration of telemetric in-flight leads /Die Bedeutung des EEG fuer die Flugmedizin mit besonderer Beruecksichtigung telemetrischer In-flight-Ableitungen/.  
15 p2560 A69-31233  
Circadian periodicity of reaction-times.  
24 p4267 A69-43387
- ASCOLI-BARTOLI, U.**  
Use of the image orthicon tube for detecting low intensity pulsed light signals.  
08 p1317 A69-21085
- ASEEV, G. I.**  
Multiphoton excitation of luminescence and photoconductivity in KCl-Eu single crystals by ruby and neodymium lasers /Mnogofotonnoe возбуждение люминесценции и фотопроводимости монокристаллов KCl-Eu рубиновым и неодимовым лазерами/.  
19 p3335 A69-36165
- ASEEV, V. N.**  
Accuracy of recognizing groups of objects by discrete decision functions /Effektivnost' raspoznavaniia grupy ob'ektov s pomoshch'iu diskretnykh reshaushchikh funktsii/.  
17 p2932 A69-33119
- ASH, E. A.**  
Acoustic bulk-surface-wave transducer.  
15 p2607 A69-30167  
Acoustic-surface-wave dispersive delay line.  
19 p3267 A69-35929
- ASHBURN, E. V.**  
Distribution of lengths of high-altitude clear air turbulent regions.  
20 p3570 A69-37168
- ASHBY, G. C., JR.**  
Some topics in hypersonic body shaping. [AIAA PAPER 69-181]  
06 p0863 A69-18052
- ASHBY, M. F.**  
On the interaction of inclusions with migrating grain boundaries.  
03 p0449 A69-13880
- ASHCROFT, N. W.**  
Metallic hydrogen - A high-temperature superconductor/ques/.  
04 p0642 A69-14680
- ASHDOWN, F. A.**  
Metallographic technique for filament-reinforced, metal-matrix composites.  
01 p0103 A69-11269
- ASHER, N. J.**  
Demand for intercity passenger transportation by VTOL aircraft.  
24 p4254 A69-43721
- ASHFORD, N. A.**  
Electron paramagnetic resonance in irradiated Ag sub 2 CO sub 3.  
05 p0716 A69-15915  
Electron paramagnetic resonance and X-ray studies in doped silver carbonate.  
22 p3993 A69-40720
- ASHIHARA, O.**  
A numerical study of particle acceleration in the magnetosphere.  
15 p2594 A69-30095
- ASHIKIAN, B.**  
The response of cavity-mounted pressure transducers.  
14 p2445 A69-28874
- ASHINO, I.**  
On the theory of the additional loss at the pipe entrance in viscous fluid. I - On the influence of rounded entrance.  
01 p0059 A69-10308  
Theory of laminar flows in rounded pipe entrance. I - In very slow flows when mass force is negligible.  
13 p2244 A69-27258
- ASHKALIEV, IA. F.**  
Propagation of short radio waves through the E sub s layer /Rasprostranenie korotkikh radiovoln cherez sloi E sub s/.  
10 p1657 A69-23933  
Dependence of the level of a high-frequency signal of ionospheric scatter links on the height of the receiving antenna.  
12 p2032 A69-26705  
Results of absorption measurements in the ionosphere by the A3 method /Rezultaty izmereniiia pogloshcheniia v ionosfere metodom A3/.  
20 p3528 A69-37675
- ASHKENAS, I. L.**  
Summary and interpretation of recent longitudinal flying qualities results. [AIAA PAPER 69-898]  
21 p3648 A69-39422
- ASHKINADZE, B. M.**  
Gallium phosphide emission near the indirect transition during multiphoton excitation /Izluichenie fosfida galliia vblizi nepriamogo perekhoda pri mnogofotonnom vobuzhdenii/.  
03 p0489 A69-13892  
Luminescence of gallium phosphide near an indirect transition in the multiphoton excitation case.  
11 p1939 A69-25693



## ASHLEY, H.

## ASHLEY, H.

On the calculation of unsteady nonlinear three-dimensional supersonic flow past wings.  
[ASME PAPER 68-FE-31] 05 p0698 A69-16078

## ASHLEY, J. R.

Microwave oscillator noise reduction by a transmission stabilizing cavity.  
02 p0220 A69-12451

The measurement of oscillator noise at microwave frequencies.  
02 p0220 A69-12453

Hybrid computer integration of partial differential equations by use of an assumed sum separation of variables.  
04 p0566 A69-15346

## ASHMARIN, I. U. A.

Stress concentration around a circular opening in an orthotropic cylindrical shell.  
06 p1021 A69-17180

## ASHOUR, A. A.

The effect of the earth's conductivity on ionospheric shielding.  
17 p2959 A69-32925

## ASHTON, F.

Search for heavy mass particles in the sea level cosmic radiation.  
16 p2846 A69-31600

## ASHTON, J. E.

Analysis of anisotropic plates.  
07 p1232 A69-18719

Approximate solutions for unsymmetrically laminated plates.  
07 p1232 A69-18725

Primer on Composite Materials- Analysis.  
12 p2179 A69-26238

Natural modes of vibration of tapered plates.  
13 p2358 A69-27211

Free vibration of linearly tapered clamped plates.  
13 p2361 A69-27442

Shear stability of clamped linearly tapered plates.  
13 p2361 A69-27443

Experimental study of the stability of composite plates.  
13 p2287 A69-28669

An analogy for certain anisotropic plates.  
13 p2371 A69-28678

Analysis of anisotropic plates. II.  
20 p3627 A69-37766

Off-axis tensile coupon testing.  
20 p3628 A69-37775

## ASHURST, W. T.

Use of heavy gases in explosive-driven shock tubes.  
[AIAA PAPER 68-730] 24 p4297 A69-43577

## ASHWELL, D. G.

A stiffness matrix for shallow shell finite elements.  
10 p1802 A69-23892

Small- and large-amplitude free vibrations of square shallow shells.  
12 p2179 A69-26211

## ASHWELL, G. E.

Simultaneous lidar and refractometer soundings of layer structure in the troposphere.  
13 p2254 A69-28475

## ASHWORTH, D. G.

Permissible modes of nonthermal convection in planetary interiors.  
07 p1213 A69-18611

The combined effect of thermal and nonthermal convection in planetary interiors.  
07 p1214 A69-18613

The dependence of convection in planetary interiors upon the magnitude of the Rayleigh number.  
12 p2155 A69-26208

The combined effect of thermal and nonthermal convection in planetary mantles.  
13 p2344 A69-27644

## ASIALA, C. F., JR.

Perception of laser light.  
[AAS PAPER 69-464] 24 p4272 A69-42843

## ASIAMOLOV, B. F.

Bioelectric activity of skeletal muscles under conditions of alternating periods of acceleration and weightlessness /Bioelektricheskaia aktivnost' skeletnoi muskulatury v usloviakh peremezhishchegosa deistviia peregruzok i nevesomosti/.  
07 p1062 A69-18591

Effects of immobilization of dogs for two weeks on their cardiovascular reactions to orthostatic tests and lateral acceleration.  
10 p1645 A69-23499

## ASINOVSKII, E. I.

Analysis of the temperature field in a cylindrically symmetrical column of an electric arc.  
03 p0481 A69-14155

Experimental investigation of the transport properties of a partially ionized plasma /Eksperimental'noe issledovanie transportnykh svoistv chastichno ionizirovannoi plazmy/.  
06 p0969 A69-17907

Calculation of the electrical conductivity of a partially ionized plasma /K raschetu elektroprovodnosti chastichno ionizovannoi plazmy/.  
09 p1546 A69-21584

Electrophysical and radiative properties of a nonequilibrium argon-potassium plasma as a possible working fluid for an MHD generator /Elektrofizicheskie i radiatsionnye svoistva neravnovesnoi argon-kalievoy plazmy-vozmozhnoho rabocheho tela MGD-generatora/.  
10 p1732 A69-23441

Effect of sectionalizing on the electrical characteristics of an MHD generator at high magnetic Reynolds numbers.  
11 p1824 A69-24224

Continuous radiation of nitrogen plasma.  
11 p1922 A69-24231

Explosive magnetohydrodynamic generator with a superconducting magnetic system /Vzryvnoi magnitogidrodinamicheskii generator so sverkhprovodiashchei magnitnoi sistemoi/.  
14 p2393 A69-28911

Experimental study of the electrical and thermal conductivity coefficients of an air plasma /Eksperimental'noe issledovanie koefitsientov elektroprovodnosti i teploprovodnosti plazmy vozdukh/.  
15 p2663 A69-30979

## ASKAR, A.

A structural model of a micropolar continuum.  
01 p0169 A69-10810

## ASKARIAN, G. A.

Waveguide properties of a tubular light beam /Volnovodnye svoistva trubchatogo svetovogo lucha/.  
02 p0258 A69-12644

Ionizing action of radiation due to heating of substance in the focus of a laser beam and production of a plasma with high degree of ionization.  
03 p0479 A69-13998

Production of high-energy particles by acceleration of a plasma scattering a strong beam of fast electrons.  
08 p1358 A69-19805

Ionization of a medium by ultraviolet radiation from a substance heated in the focus of a laser beam /Ionizatsiia sredy ul'trafioletovym izlucheniem ot veshchestva, nagretogo v fokuse lucha lazera/.  
11 p1901 A69-25754

Laser-induced current pulses from a target in a gas.  
18 p3152 A69-35124

## ASKEGAARD, V.

Production and application of model materials with desired physical constants.  
21 p3844 A69-39319

## ASKENAZY, S.

Magnetophonon oscillations of the transverse magnetoresistance of n-type epitaxial GaAs /Oscillations de magnetophonons de la magnetoresistance transverse du GaAs epitaxial de type n/.  
08 p1373 A69-20760

## ASKEY, R.

Integral representations for Jacobi polynomials and some applications.  
14 p2470 A69-28905

## ASKLAND, C. L., JR.

Brightness discrimination in reflected laser light.  
24 p4276 A69-43323

## ASKNE, J.

Wave reflection from and propagation in a pumped semi-infinite medium.  
17 p2928 A69-33871

## ASKOVIC, R.

Proof of the uniqueness of the solution of the boundary layer of a flow of revolution /Une preuve de l'unicite de la solution de la couche limite d'un ecoulement de revolution/.  
13 p2248 A69-28195

Three-dimensional thermal laminar boundary layer around an obstacle moving at a uniformly accelerated velocity /Couche limite thermique laminaire tridimensionnelle autour d'un obstacle anime d'un mouvement uniformement accelere/.  
13 p2380 A69-28631

## ASKOVIC, R. V.

A qualitative experimental verification of a phenomenon involving a three-dimensional periodic boundary layer on a body in harmonic motion /Une verification experimentale qualitative d'un phenomene de la couche limite periodique tridimensionnelle sur un corps en mouvement harmonique/.  
15 p2548 A69-31008

## ASKREN, W. B.

Mathematical modeling of human performance reliability.  
18 p3097 A69-34478

Quantifying human performance for reliability analysis of systems.  
21 p3664 A69-38971

## ASLAKSEN, E. W.

Integrated microwave power distribution network.  
02 p0222 A69-12475

## ASLANIAN, A. M.

Low-frequency spectra of extragalactic radio sources /Nizkochastotnye spektry vnegalakticheskikh radioistochnikov/.  
13 p2351 A69-27867

## ASLANOV, I. A.

Investigation of the 2 by 2 prismatic, Cassegrainian-focus spectrograph of the two-meter telescope of the Shemakha Astronomical Observatory /Issledovanie 2 x 2 prizmennogo spektrografa fokvsa Kassegrena dvukh-metrovogo teleskopa ShAO/.  
19 p3313 A69-36582

## ASLANOV, S. K.

Investigation of the hydrodynamic stability of normal combustion in gases /K issledovaniyu gidrodinamicheskoi ustoiichivosti normal'nogo goreniia v gazakh/.  
01 p0173 A69-10087

One-dimensional stability of normal combustion of gases /Odnomernaiia ustoiichivost' normal'nogo goreniia gazov/.  
01 p0174 A69-10107

Study of the stability of slow combustion in a viscous gas mixture.  
11 p1999 A69-24554

An investigation of gasdynamic stability of a detonation wave of arbitrary profile.  
12 p2062 A69-26672

Instability criterion of developed deflagration and analogy of the combustion processes in a detonation wave and a rocket engine.  
16 p2837 A69-32137

Theory of hydrodynamic stability of solid fuel combustion /Pro gidrodinamichnu stiiikist' gorinnia tverdogo paliva/.  
18 p3231 A69-35150

Stability of strong discontinuities governed by equations of hydrodynamics and simulating combustion and detonation processes /Ob ustoiichivosti sil'nykh razryvov, upravliaemykh uravneniiami gidrodinamiki i modeliruiushchikh protsessy goreniia i detonatsii/.  
23 p4239 A69-41961

Detonation instability and damping in two-phase media /Nestiiikist' i zatukhannia detonatsii u dvofaznykh sredovishchakh/.  
23 p4240 A69-42339

## ASMUS, J. F.

Pulse broadening in a MHD copper vapor laser.  
07 p1149 A69-18904

A high-power laser shutter.  
24 p4330 A69-43762

## ASMUSSEN, J., JR.

Microwave harmonic generation in a plasma capacitor.  
12 p2037 A69-25939

## ASNANI, G. C.

Space meteorological studies in India.  
[UN PAPER 68-9555] 01 p0109 A69-10502

New hypothesis on atmospheric tides.  
17 p2996 A69-32862

## ASO, T.

Rocket observations of the winter ionosphere by plasma probes.  
15 p2606 A69-31446

## ASPDEN, H.

The law of electrodynamics.  
14 p2485 A69-29320

## ASRATIAN, K. KH.

Theory of galvanomagnetic phenomena in semiconductors in a strong electric field /K teorii gal'vanomagnitnykh iavlenii v poluprovodnikakh v sil'nom elektricheskom pole/.  
14 p2505 A69-29037

- ASROROV, A.**  
Kinetic theory of the propagation of acoustic waves in a plasma /K kineticheskoi teorii rasprostraneniia zvukovykh voln v plazme/. 23 p4196 A69-41726
- ASSELBERGH, B.**  
On the ionization of H and He in planetary nebulae. 14 p2518 A69-29133
- ASSEO, S. J.**  
On the optimal gain problem and its applications. 24 p4293 A69-43305
- ASTAFEV, V. A.**  
Recovery of the differential bremsstrahlung and pair production cross sections by the inverse problem method. 13 p2303 A69-28415
- ASTAPCHIK, S. A.**  
Study of the properties of maraging steels with increased cobalt and molybdenum content /Issledovanie svoystv martensitno stareiushchikh staley s povyshenym soderzhaniiem kobal'ta i molibdena/. 01 p0098 A69-10731
- ASTAPENKO, P. D.**  
Certain features of atmospheric circulation over the Southern Hemisphere /Nekotorye osobennosti atmosfernoii tsirkulatsii nad iuzhnym polushariem/. 14 p2477 A69-29832
- ASTHOLZ, P. T.**  
Air traffic control. 18 p3170 A69-34859
- ASTILL, K. N.**  
The developing tangential velocity profile for axial flow in an annulus with a rotating inner cylinder. 01 p0058 A69-10143
- ASTRAKHANTSEV, G. V.**  
Electrical properties of the ionosphere in a variable field /Elektricheskie svoystva ionosfery v peremennom pole/. 10 p1686 A69-23908
- ASTRAND, I.**  
Physical demands on cabin personnel in civil aviation. 21 p3665 A69-39180
- ASTROEM, K. J.**  
Optimal control of Markov processes with incomplete state-information. II - The convexity of the lossfunction. 14 p2470 A69-28903
- ASTRUC, J. M.**  
Study of heat exchanges in cryogenic fluids /Etude des echanges thermiques dans les fluides cryogeniques/. 08 p1420 A69-19914
- ASUNMAA, S. K.**  
Electron microautoradiography of induced radioactivity in solids. 13 p2297 A69-28157  
Electron microautoradiography and its applications. 13 p2263 A69-28168
- ASVADUROVA, E. I.**  
Method of calculating the thermal stability of power transistors /Metod rascheta teplovykh soprotivlenii moshchnykh tranzistorov/. 12 p2042 A69-26881  
Application of the method of simplified equivalents to the calculation of the thermal stability of complex transistorized structures /Primenenie metoda uproshchennykh ekvivalentov dlia rascheta teplovykh soprotivlenii slozhnykh tranzistornykh struktur/. 12 p2042 A69-26882
- ASWATHA NARAYANA, P. A.**  
Friction coefficient for turbulent flow through smooth pipes. 11 p1874 A69-25429
- ATAEV, D. I.**  
Reliability in the elimination of multivaluedness in phase measurements /O nadezhnosti ustraneniia mnogoznachnosti fazovykh izmerenii/. 02 p0206 A69-11603  
The reliability of eliminating phase measurement ambiguities. 11 p1835 A69-24710
- ATALLA, M. M.**  
Emitter controlled negative resistance in GaAs. 22 p3911 A69-40010
- ATANASSOVA, Y.**  
Transient processes with double injection in CdS single crystals. 21 p3780 A69-38833
- ATEMA, J.**  
Behavioral responses to short periods of lowered gravitational force in blind goldfish. 11 p1828 A69-25464
- ATEMEV, A. V.**  
Problem of magnetogravitational capture /K voprosu o magnitogravitatsionnom zakhvate/. 04 p0659 A69-14962
- ATHANS, M.**  
On the design of linear systems with piecewise-constant feedback gains. 02 p0224 A69-11964  
On the design of optimal linear systems using only output-variable feedback. 06 p0903 A69-17406  
Suboptimal state estimation for continuous-time nonlinear systems from discrete noisy measurements. 06 p0904 A69-17939  
On the estimation of the state of noisy nonlinear multivariable systems. 12 p2046 A69-26062  
On the optimal angular velocity control of asymmetrical space vehicles. 12 p2054 A69-26516  
A comparison of three non-linear filters. 23 p4146 A69-42447
- ATHAY, R. G.**  
Theoretical line intensities. VII - Wavelength and depth dependence of line- blanketing effects for pure absorption and non-coherent scattering. 09 p1606 A69-22424  
Computed profiles for solar Mg b- and Na D-lines. 15 p2693 A69-30779  
Theoretical line intensities. VIII - Comment on the effectively thin approximation. 20 p3612 A69-38159
- ATHERTON, D.**  
Design of high homogeneity inside-notch- corrected superconducting solenoids. 10 p1665 A69-23857
- ATKIN, F. N.**  
Low temperature magnesium dip brazing. 09 p1509 A69-22346
- ATKINS, A. R.**  
A study of temperature regulation in the human body with the aid of an analogue computer. 23 p4111 A69-42079
- ATKINS, H.**  
Subject classification bibliography for thermal contact resistance studies. [ASME PAPER 68-WA/HT-18] 05 p0847 A69-16122
- ATKINSON, A. C.**  
A mathematical basis for the selection of research projects. 15 p2721 A69-31068
- ATKINSON, A. S.**  
Rationale for a military aircraft engine development program. 24 p4364 A69-43042
- ATKINSON, F. V.**  
On asymptotically periodic linear systems. 05 p0788 A69-16483
- ATKINSON, G.**  
Two-dimensional Chapman-Ferraro problem with neutral sheet. I - The boundary. 03 p0425 A69-14011  
Two-dimensional Chapman-Ferraro problem with neutral sheet. II - The interior field. 18 p3129 A69-34955
- ATKINSON, J.**  
Effect of time at temperature on the mechanical properties of a fabric reinforced phenolic heat shield material. 12 p2119 A69-26825
- ATKINSON, J. B.**  
Laser action in carbon and nitrogen atoms following dissociative excitation transfer. 05 p0795 A69-15663
- ATKINSON, P.**  
Feedback Control Theory for Engineers. 08 p1295 A69-19841
- ATLAN, H.**  
Application of information theory to the study of the stimulating effects of ionizing radiation, thermal energy, and other environmental factors - Preliminary ideas for a theory of organization. 03 p0369 A69-13434
- Differences between radiation-induced life shortening and natural aging in *Drosophila melanogaster*. 15 p2555 A69-30444  
Viruslike particles in the fat body, oenocytes, and central nervous tissue of *Drosophila melanogaster* imagoes. 23 p4091 A69-42021
- ATLAS, D.**  
Wind shear and reflectivity gradient effects on Doppler radar spectra. 03 p0461 A69-13341  
Precipitation-induced mesoscale wind perturbations in the melting layer. 20 p3572 A69-37909
- ATNIP, F. K.**  
Turbulence at low altitudes - Summary of the results of LO-LOCAT Phases I and II. 17 p2999 A69-33737
- ATRASHKEVICH, V. B.**  
Study of the structure of extensive air showers at sea level with the modernized hodoscope system of the Moscow University installation. 13 p2332 A69-28405  
Phenomenological characteristics of extensive air showers at sea level. 13 p2332 A69-28406  
Observation of radio emission from extensive air showers with an array of half-wave antennas at the Moscow University installation. 13 p2332 A69-28407  
Some aspects of the use of a half-wave antenna to investigate radio emission from extensive air showers. 13 p2332 A69-28408
- ATSARKIN, V. A.**  
Relation between electron spin-spin interactions and the polarization and relaxation of ruby nuclei /Sviaz' elektronnykh spin-spinovykh vzaimodeistvii s polarizatsiei i relaksatsiei iader v rubine/. 08 p1372 A69-20541
- ATSUMI, A.**  
Transient thermoelastic problem for a transversely anisotropic hollow cylinder with temperature-dependent properties. 01 p0166 A69-10302  
The effect of couple-stresses on the stress concentration of a plate containing an infinite row of holes. 15 p2708 A69-30640
- ATTEN, P.**  
Determination of the solution of the equation for an electric field affected by a permanent flux of identical ions in the "weakly ionized" case /Determination de la solution de l'equation du champ electrique affecte par un flux permanent d'ions identiques dans le cas "faiblement ionise"/. 01 p0128 A69-10364
- ATTINGER, E. O.**  
Analysis of pulsatile blood flow. 22 p3878 A69-40785
- ATTMANNSPACHER, W.**  
Ozone and temperature change in the upper stratosphere. 16 p2787 A69-32640
- ATTOLINI, M.**  
A computing program derived from Chree's method. 13 p2225 A69-27617
- ATTWOOD, D. A.**  
Training for vigilance - Combined cueing and knowledge of results. 13 p2213 A69-28256
- ATTWOOD, W. L.**  
The CFE clutter model, with application to automatic detection. 23 p4117 A69-41604  
The accuracy of an approximate method of calculating performance of delay-line M.T.I. receivers. 23 p4117 A69-41605
- ATWARD, A. G.**  
A proposed low cost proximity warning device for aircraft. 17 p2917 A69-34103
- ATWOOD, W.**  
A multistub filter for microstripline. 01 p0041 A69-10200
- ATZEI, A.**  
Measurement of atmospheric pressure by rockets up to 95 km /Mesure de la pression atmospherique jusqu'a 95 km par fusées/. 17 p2971 A69-33037  
Photoconductivity study of annealing of radiation defects in lithium-doped silicon. 19 p3382 A69-35696



## ATZENI, C.

Ultrasonic diffraction line as a radar chirp signal correlator /La linea ultrasonica a diffrazione quale correlatore per segnali radar chirp/.

01 p0026 A69-10072

A simplified optical correlator for radar- signal processing.

12 p2028 A69-25911

## AU, G. F.

Electric Propulsion Systems for Spacecraft- Physical Foundations and Technological Developments /Elektrische Antriebe von Raumfahrzeugen- physikalische Grundlagen und technologische Entwicklungen/.

02 p0305 A69-12233

Electrostatic propulsion and mission analysis in the Federal Republic of Germany. [AIAA PAPER 69-288]

09 p1565 A69-21248

Kaufman ion thruster of the DFVLR Braunschweig.

17 p3022 A69-33605

Experimental results of the electrostatic ion propulsion system ESKA 18 /Experimentelle Ergebnisse ueber das elektrostatische Ionentriebwerk ESKA 18/.

23 p4203 A69-41934

## AU, H. K.

An experimental study of high peak power Gunn effect oscillators.

07 p1097 A69-18447

## AUBRECHT, L.

Ion waves in a partially ionized gas in an external electric field.

06 p0963 A69-17079

Modulation of discharge parameters caused by acoustic wave.

16 p2752 A69-32364

## AUBRY, B.

Study of metals' fatigue in vacuum and ultrahigh vacuum /Etude de la fatigue des metaux sous vide et ultra-vide/.

13 p2280 A69-28088

## AUBRY, C.

Increase of the resolving power of an antenna - Multiple channels and statistical decision /Augmentation du pouvoir separateur d'une antenne - Voies multiples et decision statistique/.

10 p1664 A69-23797

## AUBRY, J.-Y.

Measurements of dielectric materials at high temperature /Mesures des materiaux dielectriques a haute temperature/.

07 p1136 A69-19515

## AUBUCHON, K. G.

MOS field effect transistors formed by gate masked ion implantation.

05 p0734 A69-16563

Radiation effects in modified oxide insulators in MOS structures.

06 p0976 A69-16876

## AUCLAIR, G. F.

Advanced reaction wheel controller for spacecraft attitude control.

21 p3822 A69-39383

## AUCOIN, P. J.

The prediction of rocket exhaust flow field with embedded shocks and nozzle boundary layers.

16 p2842 A69-32696

## AUCOUTURIER, M.

New applications of autoradiographic methods in studies of diffusion and phase transformation in iron-chromium alloys /Nouvelles applications des methodes autoradiographiques dans les etudes de diffusion et de transformation de phase dans les alliages fer-chrome/.

20 p3561 A69-37416

Demonstration, by radioisotopes, of the structural heredity of iron-nickel alloys with less than 20 percent nickel content in the course of transformations by cooling /Mise en evidence par les radio-isotopes de l'heredite structurale au cours des transformations au refroidissement des alliages fer-nickel de teneurs inferieures a 20 percent en nickel/.

20 p3562 A69-37781

## AUCOUTURIER, P.

UHF high power klystrons for DESY.

07 p1096 A69-18434

## AUCUTT, C.

Effect of chronic hypoxic hypoxia on the O sub 2-Hb dissociation curve and respiratory gas transport in man.

21 p3650 A69-38383

## AUDEH, N. F.

The point-matching solution of uniform nonsymmetric waveguides.

14 p2423 A69-29758

## AUDETTE, R. R.

Correlation of gas turbine exhaust silencer performance in the laboratory and in service.

[ASME PAPER 68-WA/GT-9]

05 p0812 A69-16144

## AUDOIN, C.

Design of a double focalization in a hydrogen maser.

12 p2105 A69-26050

Efficiency of a single-hyperfine-state selector for hydrogen masers.

18 p3153 A69-35306

## AUDOUZE, J.

The spectrum of accelerated particles on the surface of stars, revealed by observation of photospheric lithium and beryllium /Le spectre de particules accelerees a la surface des etoiles, revele par l'observation du lithium et du beryllium photospheriques/.

05 p0817 A69-16711

Heat generation in meteorites during the early stage of the solar system.

19 p3411 A69-36098

Primitive low-energy particle irradiation of meteoritic crystals.

20 p3590 A69-37569

## AUDZIONIS, A. I.

Peculiarities of the optical characteristics of antimony trisulfide in the near- and mid-infrared region of the spectrum /Osobennosti opticheskikh svoystv trekhsernistoi sur'my v blizhnei i srednei infrakrasnoi oblasti spektra/.

19 p3384 A69-36481

## AUER, L. H.

Non-LTE model atmospheres. I - Radiative equilibrium models with Lyman-alpha.

13 p2338 A69-27560

Non-LTE model atmospheres. II - Effects of Balmer alpha.

15 p2693 A69-30777

## AUFDERHAAR, W. B.

Application of new concepts to the design of an advanced nickel-base superalloy - Udimet 710. [SAE PAPER 690103]

09 p1522 A69-21556

## AUFFRET

Resistance of the human body to high accelerations of short duration /Resistance du corps humain aux accelerations elevees et de courte duree/.

13 p2215 A69-28591

Comparative study of the effects of three hypnosis-inducing agents on reaction and response times /Etude comparative de trois hypnogenes sur les temps de reaction et de reponse/.

21 p3661 A69-39274

## AUFFRET, R.

Passive transverse mode locking in a confocal Nd super 3 super plus glass laser.

12 p2107 A69-26327

The role of radiology in medical investigations after ejection of military jet pilots /La part de la radiologie dans l'enquete medicale apres ejection des pilotes militaires d'avions a reaction/.

24 p4266 A69-43379

Human resistance to accelerations of high intensity and short duration - Mechanical and circulatory effects /Resistance du corps humain aux accelerations elevees de courte duree - Effets mecaniques et hemodynamiques/.

24 p4266 A69-43380

## AUGENSTEIN, L.

Excitation, dissipative, and emissive mechanisms in biochemicals.

03 p0372 A69-13487

## AUGUST, A.

Design, fabrication and test of a boron wing structure.

24 p4323 A69-43418

## AUGUSTI, G.

Instability of struts subject to radiant heat.

02 p0337 A69-11716

## AUGUSTINE, A. F.

Turbine-blade vibration - Automatic charting of static tests.

15 p2672 A69-31209

## AUGUSTINE, C. F.

Microwave holograms using liquid crystal displays.

12 p2079 A69-25917

## AUGUSTINE, F.

The mechanism of the photovoltaic effect in high efficiency CdS thin-film solar cells.

19 p3250 A69-35683

## AUGUSTYNSKI, J.

Study of zinc oxidation in weakly alkaline solutions /Etude de l'oxydation du zinc dans les solutions faiblement basiques/.

08 p1268 A69-21050

Study of the oxidation of zinc in weakly basic solutions /Etude de l'oxydation du zinc dans les solutions faiblement basiques/.

16 p2740 A69-32421

## AUKERMAN, L. W.

Radiation effects.

04 p0641 A69-14504

## AULT, C. R.

Microtubules in spermatozoa of Chlidia /Turbellaria/ acoela/ revealed by negative staining.

07 p1066 A69-19263

## AULT, R. M.

Structural efficiency of diffusion bonded titanium honeycomb sandwich.

12 p2115 A69-26828

## AUMAN, J. R., JR.

Model atmospheres of late-type stars.

22 p4027 A69-40654

## AUMANN, H. H.

The infrared spectrum, diameter, and polarization of the galactic nucleus.

22 p4029 A69-40767

## AUSFRESSER, H. D.

Computer correction of distortion in ATS-SSCC photographs.

10 p1689 A69-22945

## AUSLANDER, D. M.

Simulation and design of fluidic systems with long lines. [ASME PAPER 68-WA/AUT-12]

05 p0706 A69-16178

## AUSSENEGG, F.

Special features of the darkening process in photographic layers /Besonderheiten bei der Schwarzung fotografischer Schichten durch Laserimpulse/.

13 p2260 A69-27612

## AUST, K. T.

Mechanical effects of grain boundaries.

03 p0449 A69-13875

## AUSTIN, F.

Zero mass-shift passive damper for the reduction of precession in a rotating space vehicle.

19 p3429 A69-35913

## AUSTIN, G. L.

On the nature of the irregularities that produce partial reflections of radio waves from the lower ionosphere /70-100 km/.

07 p1078 A69-18914

Amplitude distributions resulting from curvature distributions of a reflector.

07 p1086 A69-19225

The phase of waves partially reflected from the lower ionosphere /70-120 km/.

21 p3672 A69-38558

## AUSTIN, M. E.

Ray tracing in a sectioned and layered atmosphere using a shifting coordinate system.

23 p4154 A69-41532

## AUSTIN, P. R.

Space craft sterilization.

16 p2746 A69-32435

## AUSTING, J. L.

Insensitive trigger for insensitive explosives.

04 p0646 A69-15300

## AUTH, D. C.

Experimental investigation of thermally scanned Fabry-Perot interferometry.

24 p4329 A69-43757

## AUTH, G.

Thermal design of an airborne, one kilowatt HF power amplifier.

22 p3909 A69-39942

## AUTHIER, B.

Wide-field astronomical camera for the study of extended light sources - Design technique /Camera astronomique a grand champ pour l'etude de sources lumineuses etendues - Technique de realisation/.

12 p2080 A69-26127

## AUXER, W. L.

Heat transfer to steps and cavities in hypersonic turbulent flow. [AIAA PAPER 68-673]

23 p4060 A69-41902

## AUZANNEAU, M.

Study of solid-fuel ablation by liquid and physically homogeneous nitric acid.

24 p4363 A69-43568

## AUZEL, F.

Contribution to the spectroscopic study of glasses doped with Er super 3 super plus to obtain the laser effect /Contribution a l'etude spectroscopique de verres dopes avec Er super 3 super plus pour obtenir l'effet laser/.

22 p3962 A69-40476

## AVAKIAN, R. M.

Polytropic models according to the nonrelativistic generalized theory of gravitation /Politropnye modeli po nerelativistskoi obobshchennoi teorii gravitatsii/.

13 p2352 A69-27872

## AVAKIANTS, G. M.

Problem of current flow through semiconductors containing deep levels /K voprosu o prokhozhenii toka cherez poluprovodnik, soderzhashchii glubokie urovni/.

02 p0299 A69-12562

Statistical studies of the current-voltage characteristics of zinc-doped diodes /Statisticheskie issledovaniia vol't-ampernykh kharakteristik diodov s primes'iu tsinka/.

05 p0732 A69-16425

Current-voltage characteristic of a p-n-p-n structure in the switched-on state /Vol't- ampernaia kharakteristika p-n-p-n-struktury vo vkluchennom sostoianii/.

10 p1742 A69-22997

Investigation of the transient characteristics of diodes with a negative resistance /Issledovanie perekhodnykh kharakteristik diodov s otritsatel'nyim soprotivleniem/.

10 p1662 A69-23157

Current-voltage characteristic of four-layer structures in chetyrekh sloynnykh struktur v diodnom vkluchении/.

13 p2236 A69-28531

## AVANESOVA, G. I.

Stability and oscillations of a cylindrical shell under a ring-shaped load /Ob ustoychivosti i kolebaniyakh tsilindricheskoi obolochki pod kol'tsevoi nagruzkoj/.

22 p4049 A69-41280

## AVANZOLINI, G.

Self-excited oscillations in system with one non-linearity.

21 p3685 A69-38463

## AVARBE, R. G.

Investigation of the laws governing high-temperature vaporization from an open surface in a vacuum of the monocarbide phases of the transition metals of the IV-V groups. I.

02 p0260 A69-11583

## AVAZOV, IU. A.

Investigation of the aging of steel with an iron-nickel-chromium base /Issledovanie starenia stali na zhelezonikel'-khromovoi osnove/.

11 p1906 A69-25439

## AVDEEV, V. N.

Quantitative method for estimating the accuracy of periodic structures of electronic-device networks by means of measurement automatization /Kolichestvennyi metod otsenki tochnosti periodicheskikh struktur setok elektronnykh priborov pri avtomatizatsii izmerenii/.

01 p0045 A69-10732

## AVDEEV, V. V.

Optimum-echo-pulse quantization threshold during measurement of a target azimuth /Ob optimal'nom poroge kvantovaniia ekho-impul'sov pri izmerenii azimuta tseli/.

15 p2563 A69-30138

Determination of the center of a binary-quantized signal packet /Opredelenie tsentra pachki binarnokvantovannykh signalov/.

15 p2566 A69-30332

Potential accuracy of a pulsed direction-finding radar in the case of binary-quantized signals /Potentsial'naia tochnost' pelengovaniia impul'snoi RLS pri binarnom kvantovanii signalov/.

15 p2566 A69-30333

## AVDONIN, A. S.

Applied Methods of Calculating Shells and Thin-Walled Structures /Prikladnye metody rascheta obolochek i tonkostennykh konstruktсий/.

20 p3630 A69-38199

## AVDUEVSKII, V. S.

Separation of a three-dimensional boundary layer.

07 p1050 A69-18736

Results of measurements of the parameters of the Venusian atmosphere on the Soviet Venera 4 automatic interplanetary station /Rezultaty izmerenii parametrov atmosfery Venery na sovet'skoi AMS "-Venera-4"/.

13 p2345 A69-27689

## AVEN, M.

P-n junctions as artificial diffusion barriers for native defects.

05 p0808 A69-16286

## AVEN, O. I.

Evaluation and selection of the computational equipment for automatic control systems /Otsenka i vybor vychislitel'nogo oborudovaniia dlia avtomatizirovannykh sistem upravleniia/.

24 p4285 A69-42952

## AVERBACH, B. L.

Some physical aspects of fracture.

13 p2275 A69-27227

Phase transformations and strengthening mechanisms in the alloy Ti-6Al-4V.

20 p3556 A69-36954

## AVERBUKH, I. I.

Application of ultrasonic spectrometry to thickness measurement.

18 p3137 A69-35110

## AVERCHENKO, P. A.

Apparatus for determining the damping capacity and torsional fatigue strength of specimens in various media.

03 p0431 A69-13917

## AVERIN, V. V.

Physicochemical principles of the melting of heat-resistant alloys /Fiziko-khimicheskie osnovy vyplavki zharoprochnykh splavov/.

09 p1524 A69-22136

## AVERSANO, F.

Compression effects on transformers, relays, and other piece parts in an encapsulated structure - Lunar module signal conditioner.

22 p3910 A69-39953

## AVERSON, A. E.

Certain laws of the dynamic conditions of ignition /O nekotorykh zakononernostiakh dinamicheskikh rezhimov zazhiganiia/.

11 p2000 A69-25188

Approximate methods of calculating the critical conditions of ignition /Priblizhennyye metody rascheta kriticheskikh uslovii zazhiganiia/.

11 p2001 A69-25191

## AVERY, D. H.

The role of surfaces in superplasticity.

03 p0449 A69-13879

## AVERY, L. W.

Radiative transport in finite homogeneous cylinders by the Monte Carlo technique.

12 p2191 A69-26970

## AVETISIAN, A. S.

Stress concentration around a rhombic hole in an isotropic physically nonlinear plate under pure shear /Kontsentratsiia napriazhenii okolo rombisheskogo otverstiiia v izotropnoi, fizicheski nelineinoy plastinke pri chistom sdvige/.

14 p2533 A69-28987

## AVETISIAN, D. A.

Search for a maximum along suitable admissible directions /Poisk maksimuma vdol' podkhodiashchikh dopustimnykh napravlenii/.

19 p3286 A69-35988

## AVGUSTINIK, A. I.

The phase diagram of the ZrC-Re system /Diagramma sostoianiiia sistemy ZrC-Re/.

04 p0617 A69-14900

Densification of nonstoichiometric niobium-carbide phases.

10 p1711 A69-23337

Phase diagram of the system TiC-Re.

15 p2641 A69-31247

Theory of heat resistance of ceramic coatings /K teorii termostoikosti keramicheskikh pokrytii/.

20 p3565 A69-37359

## AVI-ITZHAK, B.

Mathematical models for outgoing traffic flow in an airport terminal.

09 p1476 A69-21439

## AVICOLA, K.

Wideband fiberoptic analog information link.

23 p4121 A69-41768

## AVILOVA, I. V.

The optical properties of hot air. I - Basic processes and spectral properties /Opticheskie svoistva goriachego vozdukh. I - Osnovnye protsessy i spektral'nye kharakteristiki/.

07 p1185 A69-19166

The optical properties of hot air. II - Integral characteristics between 4000 and 20,000 K /Opticheskie svoistva goriachego vozdukh. II - Integral'nye kharakteristiki 4000-20 000 deg K/.

07 p1185 A69-19167

## AVIV, Y.

Spectral emissivity of NO in the infrared.

17 p3009 A69-34156

## AVIZIENIS, A.

Design methods for fault-tolerant navigation computers.

19 p3279 A69-35798

Automatic maintenance of aerospace computers and spacecraft information and control systems. [AIAA PAPER 69-966]

22 p3906 A69-40347

## AVIZONIS, P. V.

Effects of radiation pressure on a laser-produced plasma.

07 p1190 A69-18902

## AVKHIMOVICH, B. M.

Calculation of unsteady heat conductivity of multilayer plates.

21 p3851 A69-39083

## AVRAMCHUK, V. V.

Distribution of methane absorption in the 6190-angstrom units band over the Jupiter disk /O raspredelenii metanovogo pogloscheniia v polose 6190 angstrom units po disku Iupitera/.

11 p1960 A69-24730

Distribution of methane absorption in the 6190-angstrom units band over the Saturn disk in 1966 /Raspredelenie metanovogo pogloscheniia v polose 6190 angstrom units po disku Saturna v 1966 g./.

11 p1960 A69-24731

## AVRAMENKO, V. B.

Investigation of near-electrode plasma formations in a high-current pulsed discharge with separated flames at atmospheric pressure. II /Issledovanie prieklektroodnykh plazmooobrazovani sil'notochnogo impul'snogo razriada s razdelennymi fakelami pri atmosfernom davlenii. II/.

11 p1927 A69-25219

## AVRAMESCO, A.

A moving charge on a stratified elastic half-space /Charge mobile sur un semi-espace elastique stratifie/.

08 p1417 A69-20753

A moving load at a plane interface between two elastic media /Charge mobile a l'interface plane de deux milieux elastiques/.

16 p2870 A69-31829

## AVRAMI, L.

Design of a large explosive containment capsule for nuclear reactor irradiation.

04 p0629 A69-14480

## AVTOKRATOVA, N. D.

Thermal properties of reinforced compositions.

15 p2642 A69-30466

## AVULA, X. J. R.

A combined method for determining velocity of starting flow in a long circular tube.

22 p3931 A69-40688

## AVVAKUMOVA, L. K.

Gallium distribution in yttrium-iron garnet single crystals /Raspredelenie galliia v monokristallakh itrii-zhelezistogo granata/.

13 p2321 A69-28002

## AWADALLA, E. S.

A direct matrix method for the elastic stability analysis of plates.

03 p0522 A69-12866

## AWAN, A. M.

Resonance scattering of electrons by diatomic molecules.

11 p1921 A69-24418

## AWATANI, J.

Wear properties of plastics.

11 p1892 A69-25021

## AWIPI, M.

Periodically switched lossless networks - System functions and power relations.

18 p3111 A69-34682

## AXELBAND, E. I.

Quasi-optimum proportional navigation.

24 p4348 A69-43292



## AXELRAD, D. R.

## AXELRAD, D. R.

Application of the laser-beam technique in mechanical testing of high-temperature materials.  
15 p2636 A69-31512

## AXELROD, J.

Stimulation of C super 14-melatonin synthesis from C super 14-tryptophan by noradrenaline in rat pineal in organ culture.  
22 p3871 A69-40051

Incorporation of super 14 C-tryptophan into super 14 C-protein by cultured rat pineals - Stimulation by 1-norepinephrine.  
22 p3871 A69-40054

## AXFORD, D. N.

Divergence measurements from an aircraft.  
08 p1346 A69-20317

## AXFORD, W. L.

The polar wind and the terrestrial helium budget.  
01 p0077 A69-11240

The Compton-getting effect.  
05 p0817 A69-16651

Solar modulation of galactic cosmic rays.  
09 p1580 A69-22202

Magnetospheric convection.  
12 p2073 A69-26749

Production and loss of He super 3 in the earth's atmosphere.  
14 p2435 A69-28965

Anisotropies of solar cosmic rays.  
18 p3189 A69-35400

Helium in the atmosphere, aurora and solar wind.  
21 p3710 A69-38509

Solar modulation of galactic cosmic rays. I.  
24 p4367 A69-43169

## AXISA, F.

Solar proton events /Les evenements a protons solaires/.  
04 p0649 A69-15327

## AXON, H. J.

Structural variations in iron meteorites.  
09 p1597 A69-22154

Pre-terrestrial deformation effects in iron meteorites.  
19 p3418 A69-36134

## AXT, C. J.

Resistance minimum in type-II superconductors.  
07 p1198 A69-18642

## AYACHE, K.

A fluid damper for spacecraft nutation.  
16 p2868 A69-32561

## AYBERS, N. M.

The motion of gas bubbles rising through stagnant liquid.  
24 p4299 A69-42918

## AYDIN, C.

The spectral variations of CU Virginis /HD 124224/.  
16 p2859 A69-32223

## AYER, D. R.

The evolution of strip transmission line.  
15 p2721 A69-31074

## AZAREVICH, A. IA.

Theory of electrodynamic acceleration of a plasma in a high-current pulsed accelerator /K teorii elektrodinamicheskogo uskorenii plazmy v sil'notochnom impul'snom uskoritele/.  
21 p3778 A69-39548

## AZAREWICZ, J. L.

Recombination statistics for neutron bombarded silicon transistors.  
06 p0975 A69-16871

## AZCARRAGA, A.

Meteorological rocket probes in Spain /Sondeos meteorologicos con cohete en Espana/.  
11 p1877 A69-24519

On the structure of mesospheric winds.  
15 p2604 A69-31415

## AZHAEV, A. N.

Application of high temperatures as a functional-diagnostic test /K voprosu o primeneni vysokikh temperatur v kachestve funktsional'no-diagnosticheskoi proby/.  
05 p0710 A69-16523

Use of high temperatures as provocative tests.  
18 p3096 A69-34742

## AZHAYEV, A. N.

Influence of the combined effect of hypoxic hypoxia and high ambient temperature on human heat exchange /Vlianie odnovermennogo vozdeistviia gipoksicheskoi gipoksii i vysokoi temperatury okruzhaiushchei sredy na teploobmen cheloveka/.  
13 p2212 A69-28628

## AZHAZHA, V. M.

Influence of silicide coatings on the mechanical properties of molybdenum /Vlianie silitsidnykh pokrytii na molybden na ego mekhanicheskie svoistva/.  
02 p0264 A69-11883

Effect of silicide coatings on the mechanical properties of molybdenum.  
18 p3156 A69-35043

## AZHEVSKII, P. IA.

Evaporation under low atmospheric pressure conditions.  
10 p1647 A69-23591

## AZHUSENIS, A.

Improved response curves and parameters of the U, B, V system - Summary of the results /Utochnenie krivyykh reaktiv i parametrov sistemy U, B, V - Svodka rezul'tatov/.  
15 p2689 A69-30562

Effect of red leak of an ultraviolet filter on the color U-V indices /K voprosu vlianiia krasnogo propuskaniia ul'traioletovogo filtra na kolor-indexy U-V/.  
19 p3426 A69-36566

## AZIMOV, S. M.

Investigation of the 2 by 2 prismatic, Cassegrainian-focus spectrograph of the two-meter telescope of the Shemakha Astronomical Observatory /Issledovanie 2 x 2 prizmennogo spektrografa fokusa Kassegrena dvukh-metrovogo teleskopa ShAO/.  
19 p3313 A69-36582

## AZIZOV, A.

Study of the influence of the temperature factor on the transition from a laminar to a turbulent flow regime in the boundary layer /Issledovanie vlianiia temperaturnogo faktora na perekhod ot laminarnogo k turbulentnomu rezhimu techeniia v pogranichnom sloe/.  
13 p2251 A69-28558

## AZIZOV, E. A.

Cascade acceleration of a plasma /Kaskadnoe uskorenii plazmy/.  
03 p0482 A69-14215

## AZOVSKII, IU. S.

Interaction between plasmoids and an axisymmetric magnetic field /Vzaimodeistvie plazmennyykh sgustkov s aksial'no-simmetrichnym magnitnym polem/.  
24 p4358 A69-43472

Interaction between plasmoids and an axisymmetric magnetic field of acute-angle geometry /Vzaimodeistvie plazmennyykh sgustkov s aksial'no-simmetrichnym magnitnym polem ostrougol'noi geometrii/.  
24 p4358 A69-43473

## AZUMA, A.

A new running test facility for the study of flight dynamics.  
17 p2944 A69-32851

## AZUMI, K.

Considerations on requirements to capacities of navigation satellite system around Japan. [UN PAPER 68-95226]  
01 p0113 A69-10520

## AZZAM, N. A.

Protein catabolism in young mice following whole-body X irradiation.  
23 p4099 A69-42151

## B

## BAAK, T.

Thermal coefficient of refractive index of optical glasses.  
18 p3172 A69-35013

## BAARLI, J.

Radiological physics of pions.  
03 p0371 A69-13478

## BAARS, E. P.

Digital recording of radar echo signals with the Radicord device /Digitale Registrierung von Radarechosignalen mit dem Radicord-Gerat/.  
05 p0721 A69-16618

## BABA, H.

Electron beam exposure system for integrated circuits.  
15 p2579 A69-31039

## BABAA, I. M. H.

Analytic solutions of limit cycles in a feedback-regulated converter system with hysteresis.  
06 p0904 A69-17941

DC to DC converter regulated by a constant-frequency duty-cycle generator.  
09 p1442 A69-22454

## BABADZHANIAN, G. G.

Theory of sign-variable loading of an elastoplastic medium /K teorii znakovremennogo nagryzheniia uprugoplasticheskoi sredy/.  
18 p3222 A69-34909

## BABADZHANIANTS, L. K.

Analytical methods for calculating perturbations in planetary coordinates. I /Analiticheskie metody vychisleniia vozmushchenii v koordinatakh planet. I/.  
18 p3199 A69-34912

## BABADZHANOV, P. B.

Simultaneous photographic and radar observations of meteors /Parallel'nye fotograficheskie i radiolokatsionnye nabludeniia meteorov/.  
08 p1390 A69-20331

Luminescence and ionization of meteors /Svechenie i ionizatsiia meteorov/.  
10 p1783 A69-23895

## BABAIEV, A.

Frequency characteristics of the sporadic E layer /O chastotnykh kharakteristikakh sporadicheskogo sloia E/.  
14 p2442 A69-29733

## BABAIEV, I. K.

Measurement of the amplification coefficients in 00 deg 1 - 10 deg 0 and 00 deg 1 - 02 deg 0 transitions of CO sub 2 /Izmerenie koeffitsientov usileniia na perekhodakh 00 deg 1 - 10 deg 0 i 00 deg 1 - 02 deg 0 CO sub 2/.  
04 p0611 A69-14426

Possibility of a thermodynamic approach to the calculation of a molecular laser /O vozmozhnosti termodinamicheskogo podkhoda k raschetu molekuliarnogo lazera/.  
06 p0934 A69-17465

A thermodynamic approach to the analysis of a molecular laser.  
20 p3555 A69-37948

## BABAIEV, M. K.

Energy characteristics of the interaction of cosmic-ray particles with carbon nuclei.  
13 p2330 A69-28379

## BABAIEV, R. M.

Electrical properties of In sub 1-x Ga sub x As solid solutions /x equals 0.2-0.25/.  
07 p1199 A69-18689

## BABAIEVSKII, P. G.

Influence of mineral powder fillers on the structure formation of phenolformaldehyde oligomers and the mechanical properties of compacts /Vlianie poroshkovykh mineral'nykh napolnitelei na strukturnoobrazovanie fenolformal'degidnykh oligomerov i mekhanicheskie svoistva pressmaterialov/.  
08 p1335 A69-20331

## BABAIAN, KH. P.

Measurements with a large ionization calorimeter of the energies of nuclear-active particles in extensive air showers.  
13 p2331 A69-28387

Investigation of nuclear interactions of high-energy particles by the controlled nuclear emulsion method.  
13 p2331 A69-28388

## BABAKOV, N. A.

Controllability conditions in a pursuit problem /Ob usloviakh upravliaemosti v odnoi zadache sblizheniia/.  
21 p3825 A69-39629

## BABANIN, V. I.

Radial and tangential stresses in double glass fibers /Radial'nye i tangentsial'nye napriazheniia v dvoynykh stekliannykh voloknakh/.  
09 p1614 A69-21741

Radial and tangential stress in clad glass fibers.  
20 p3630 A69-38217

## BABANOV, IU. A.

Plasma oscillations of collective electrons.  
20 p3580 A69-37818

## BABANOV, IU. N.

Optimal AM radio reception in the presence of fluctuating noise and one AM interference signal with a random initial phase of the carrier oscillation /Optimal'nyi radiopriem AM pri fluktuatsionnom shume i odnom meshaushchem AM signale so sluchainoi nachal'noi fazoi nesushchego kolebaniia/.  
01 p0031 A69-10782

Optimum AM reception in the presence of fluctuating noise and a signal with random initial phase of the carrier.  
10 p1653 A69-23111

Estimation of the effectiveness of a method for separating the envelope of an AM signal in the presence of AM interference and fluctuation noise /Ot-

senka effektivnosti odnogo metoda vydeleniia ogibaiushchei 0AM signala pri deistvii 0AM pomekhi i fluktuatsionnogo shuma/.  
19 p3277 A69-36568

**BABASHEV, S. V.**  
Threshold behavior of the cross section for the excitation of Cs II resonance lines in the process Cs super plus plus He.  
17 p3008 A69-33388

**BABCHINSKII, F. V.**  
Histological investigation of the internal organs of mice exposed for 20 days to an atmosphere with a high oxygen content /Gistologicheskoe issledovanie vnutrennykh organov myshei, nakhodivshikhsia 20 dnei v atmosfere s povyshennym soderzhaniiem kisloroda/.  
05 p0709 A69-16513  
Electron microscopic changes in the lungs of rats after repeated exposure to pure oxygen /Elektronomikroskopicheskie izmeneniia v legkikh u krysov posle povtornogo vozdeistviia chistogo kisloroda/.  
05 p0709 A69-16514  
Immunological and histochemical characteristic of the reactivity of mice placed in a medium with a high oxygen content /Immunologicheskaiia i gistokhimicheskaia kharakteristika reaktivnosti myshei, nakhodivshikhsia v srede s povyshennym soderzhaniiem kisloroda/.  
07 p1065 A69-18975  
Effect of hyperoxia on the thoracic organs of albino rats.  
10 p1646 A69-23577  
Histological examination of the internal organs of mice after twenty days in a hyperoxic atmosphere.  
18 p3096 A69-34732  
Electron microscopic changes in the lungs of rats after repeated exposure to pure oxygen.  
18 p3096 A69-34733  
Immunological and histological study on the reactivity of mice exposed to a hyperoxic atmosphere.  
20 p3479 A69-38223

**BABCOCK, C. D., JR.**  
The effect of general imperfections on the buckling of cylindrical shells.  
13 p2362 A69-28122

**BABCOCK, J. E.**  
Micromation and micrographics.  
18 p3234 A69-35059

**BABCOCK, L. F.**  
Computer determination of electromagnetic wave shielding effectiveness.  
03 p0398 A69-13901  
Direct graphical determination of optimum shielding and suppression.  
12 p2030 A69-26471

**BABCOCK, S. G.**  
High-velocity deformation properties of polyurethane foams.  
11 p1907 A69-25648  
Ablation test specimen environment at high temperature.  
12 p2191 A69-26815

**BABCOCK, W.**  
Development of a laser-Doppler particle sensor for the measurement of velocities in rocket exhausts. [AIAA PAPER 68-723]  
12 p2094 A69-26783

**BABEL, H. W.**  
A biaxial fracture criterion for porous brittle materials. [ASME PAPER 68-WA/MET-12]  
05 p0838 A69-16152  
Reliability of analysis techniques and sensitivity to material properties.  
12 p2115 A69-26845

**BABENKO, B. I.**  
Postcritical deformations of conical shells under external pressure /Pro zakritichni deformatsii konichnikh obolonok pid zovnishnim tiskom/.  
12 p2181 A69-26609

**BABENKO, K. I.**  
Three-dimensional Flow of Ideal Gases around Smooth Bodies.  
16 p2771 A69-32003

**BABER, B. B.**  
A bearing deposition test for evaluating aircraft gas turbine engine lubricants.  
10 p1700 A69-24070

**BABESHKO, V. A.**  
Asymptotic properties of solutions to a class of integral equations occurring in the theory of elasticity and in mathematical physics /Asimptoticheskie svoist-

va reshenii odnogo klassa integral'nykh uravnenii, voz-nikaioushchikh v teorii uprugosti i matematicheskoi fizike/.  
21 p3772 A69-39618

**BABIC, G. M.**  
Engine vane control. [ASME PAPER 69-GT-14]  
09 p1571 A69-22502

**BABICH, D. V.**  
Free oscillations of a plate with concentrated masses /Svobodnye kolebaniia plastinki s sosredotochennymi massami/.  
18 p3226 A69-35377

**BABICH, I. I. U.**  
Stability of a cylindrical panel /Ob ustoichivosti tsilindricheskoi paneli/.  
08 p1419 A69-21182  
Influence of the properties of a plate material on the critical strength value /O vlianii svoistv materiala plastinki na velichinu kriticheskoi sily/.  
18 p3225 A69-35361  
Deformational instability of sandwich materials /O neustoiichivosti deformirovaniia sloistykh materialov/.  
18 p3226 A69-35374

**BABICH, M. D.**  
Investigation of the total error in problems of minimization of functionals in the presence of constraints /Issledovanie polnoi pogreshnosti v zadachakh minimizatsii funktsionalov pri nalichii ograniichenii/.  
08 p1342 A69-20319

**BABICH, M. M.**  
Low-temperature oxidation of hard-alloy mixtures /K voprosu nizkotemperaturnogo okisleniia tverdos-plavnykh smesei/.  
13 p2275 A69-27345

**BABICKY, A.**  
Some effects of laser upon the bones.  
23 p4101 A69-41464

**BABIAK, V. I.**  
Some reflexes of semicircular canals as applied to the professional selection and appraisal of the flight crew /Nekotorye refleksy polukruzhnykh kanalov primenitel'no k profotboru i ekspertize letnogo sostava/.  
20 p3481 A69-37271  
Electronystagmography and its prospects /Elektronistagmografiia i ee perspektivy/.  
20 p3481 A69-37273

**BABIAK, V. P.**  
Functional relationship between semicircular canals and the otolithic apparatus /O funktsional'noi sviazi mezhdu polukruzhnymi kanalami i otolitovym apparatom/.  
20 p3471 A69-37257

**BABIHAKH, V. M.**  
Certain dynamic characteristics of the vestibular analyser under the action of Coriolis forces /Nekotorye dinamicheskie pokazateli vestibuliarnogo analizatora pri deistvii uskorennia koriolisa/.  
20 p3472 A69-37262

**BABIKOVA, R. F.**  
Structure and properties of forgings of KhN73MB-Tlu /El698/ alloy /Struktura i svoistva pokovok iz splava KhN73MB-Tlu /El698//.  
03 p0452 A69-14122

**BABIN, I. U. A.**  
Study of the influence of prolonged heating in vacuum and thermal cycling on the properties of SAP sheets /Issledovanie vlianiia dlitel'nykh nagrevo-v v vakuume i teplosmen na svoistva listovykh polu-fabrikatov SAPa/.  
02 p0266 A69-12126

**BABINA, F. L.**  
The cathode materials of the thermoemission converters research /TEC/.  
14 p2505 A69-29265

**BABKIN, V. F.**  
Selection of the interrogation frequency for a source of analog information /O vybere chastoty oprosov istochnika analogovoi informatsii/.  
13 p2219 A69-27697

**BABKIN, V. S.**  
Analysis of equations for determining the normal flame speed by the constant-volume bomb method /Analiz uravnenii dlia opredeleniia normal'noi skorosti plameni metodom bomby postoiannogo ob'ema/.  
17 p3069 A69-33137

**BABLOYANTZ, A.**  
Variational study of plasma oscillations with diffusion in velocity space.  
11 p1925 A69-24316

**BABONAS, G. A.**  
Electroabsorption in CdTe.  
19 p3386 A69-36523

**BABSKII, V. G.**  
Hydrodynamics in weak force fields - Onset of steady thermocapillary convection in a spherical fluid film under weightlessness conditions /Gidrodinamika v slabykh silovykh poliakh - Vozniknovenie statsionarnoi termokapilliarnoi konveksii v sharovom sloe zhidkosti v usloviakh nevesomosti/.  
19 p3452 A69-36392

**BABUCKE, G.**  
Separation in an argon-mercury moderate- pressure discharge /Die Entmischung in der Argon-Quecksilber-Mitteldruckentladung/.  
14 p2493 A69-29690

**BABUEL-PEYRISSAC, J. P.**  
Radiative transfer in novae /Transfert de rayonnement dans les novae/.  
22 p4031 A69-40907

**BABUROVA, O. P.**  
The systems niobium-iron-boron and niobium-cobalt-boron.  
15 p2641 A69-31246

**BABYKIN, M. V.**  
Structure of collisionless shock waves and the dissipation of strong alternating magnetic fields in a plasma /Struktura besstoiknovitel'nykh udarnykh voln i dissipatsiia sil'nykh peremennykh magnitnykh poliv v plazme/.  
17 p3013 A69-33824

**BACAL, M.**  
Investigation of a Ne-Ar thermionic generator.  
14 p2398 A69-29180

**BACCAGLINI, G.**  
Heat transfer to cylinders in nitrogen-helium and nitrogen-neon mixtures.  
21 p3848 A69-38706

**BACCHI, H.**  
Ultrahigh-speed picture taking devices with exposure times ranging between 5 and 500 nsec /Dispositifs de prise de vues ultra-rapides a temps de pose compris entre 5 et 500 ns/.  
12 p2083 A69-26146  
Integral image camera with a 1-nsec exposure time /Camera a image integrale de 1 nsec de duree d'ouverture/.  
12 p2084 A69-26147

**BACH, G. G.**  
Higher-order perturbation solutions for blast waves.  
16 p2770 A69-31900  
Initial propagation of impulsively generated converging cylindrical and spherical shock waves.  
21 p3692 A69-38688

**BACH, H.**  
Studies of binding materials of group VIa metals /Untersuchungen ueber Verbundwerkstoffe der VIa-Metalle/.  
05 p0780 A69-15991

**BACH, J.**  
First results of ignition tests on rocket engines in high vacuum /Erste Ergebnisse von Anfahrversuchen mit Raketentriebwerken im Hochvakuum/. [DVL-831]  
10 p1754 A69-24022

**BACH, R. E., JR.**  
A circuit analysis program for educational use.  
18 p3111 A69-34680  
NASAP revisited - An educational tool.  
21 p3856 A69-39662

**BACHELET, F.**  
Modulation of galactic cosmic rays at energies in excess of 1 gev /La modulazione dei raggi cosmici galattici ad energie superiori a 1 gev/.  
08 p1378 A69-20224

**BACHELIS, R. D.**  
Solution of a Stefan-type problem by the method of straight lines /Reshenie zadachi tipa Stefana metodom priamykh/.  
20 p3567 A69-36992

**BACHER, J.**  
The analysis of voltage-limited battery charging systems.  
01 p0013 A69-11010

**BACHERT, H.**  
The influence of external optical coupling on the threshold current density of GaAs injection lasers.  
02 p0260 A69-12687

**BACHIN, V. A.**  
Ultrasonic welding of thin-film components.  
04 p0605 A69-14561



## BACHMANN, B. A.

Propulsion requirements for a heavy-lift helicopter system. [AHS PAPER 330] 17 p2901 A69-33532

## BACHMANN, G.

Photometry of the line cores of H alpha, H beta, H and K in plasmas and the evaluation of excitation temperatures. 22 p4010 A69-39993

## BACHMANN, W.

Radar and sonar pulse modulation using binary frequency-shift keying /Modulation von Radar- und Sonar-Impulsen durch binaere Frequenzumtastung/. 15 p2568 A69-30628

## BACHOFER, B. T.

Considerations in choosing the orbit for an earth resources survey satellite. 21 p3798 A69-38628

## BACHRACH, H. S.

Synthesis of an automatic support system for the AH-56A Cheyenne. 11 p1865 A69-25075

## BACHYNSKI, M. P.

Antenna pattern distortion by an isotropic plasma slab. 02 p0218 A69-12335

Propagation of strong-field electromagnetic waves through plasmas near the electron cyclotron frequency. 10 p1728 A69-23167

Plasma density measurement by electromagnetic wave propagation at small angles to magnetic field. 11 p1930 A69-25286

## BACK, L. H.

Laminar heat transfer in electrically conducting fluids flowing in parallel plate channels. [JPL-TR-32-1335] 06 p1033 A69-17555

Flow and heat-transfer measurements in subsonic air flow through a contraction section. [JPL-TR-32-1348] 10 p1809 A69-23194

Heat transfer and laminar boundary-layer distributions in an internal subsonic gas stream at temperatures up to 13,900 deg R. [ASME PAPER 68-HT-16] 13 p2374 A69-27776

Laminarization of a turbulent boundary layer in nozzle flow. [JPL-TR-32-1407] 16 p2732 A69-31894

Transonic flowfield in a supersonic nozzle with small throat radius of curvature. 23 p4060 A69-41900

Laminarization of a turbulent boundary layer in nozzle flow - Boundary layer and heat transfer measurements with wall cooling. [ASME PAPER 69-HT-56] 24 p4303 A69-43538

Laminar, transition, and turbulent boundary-layer heat-transfer measurements with wall cooling in turbulent airflow through a tube. [ASME PAPER 69-HT-8] 24 p4414 A69-43560

Flow and heat transfer in laminar boundary layers with swirl. 24 p4304 A69-43584

## BACKE, R. J.

Relay coil temperature rise at simulated outer space pressure levels. 13 p2231 A69-28048

## BACKER, D. C.

Declination measurements of selected 4C sources using the Arecibo 1000-ft reflector. 22 p4014 A69-40128

## BACKHAUS, G.

Determination of the strain tensor from measurements of plastic deformations /Zur Bestimmung des Verzerrungstensors aus der Messung plastischer Verformungen/. 15 p2707 A69-30639

## BACKHAUSEN, F.

Dependence of tilt-table and acceleration tolerance on body build and physical fitness /Die Abhaengigkeit der Orthostase- und Beschleunigungstoleranz von Koerperbau und Leistungsfahigkeit/. [DVL-834] 09 p1444 A69-21304

## BACKMANN, M.

Aid rendered by CAD in choosing components with a view to circuit optimization /Aide apportee par le CAO pour le choix des composants en vue de l'optimisation des circuits/. 15 p2628 A69-30849

## BACKOFEN, W. A.

Metal processing and fracture. 17 p2988 A69-33552

## BACKSHALL, R. G.

The boundary-layer velocity distribution in turbulent swirling pipe flow. [ASME PAPER 69-FE-14] 20 p3516 A69-37990

## BACON, J. M.

Superdirective aerial array containing only one fed element. 09 p1468 A69-22603

## BACON, J. W., JR.

Amplified laminar boundary layer oscillations and transition at the front attachment line of a 45 deg swept flat-nosed wing with and without boundary layer suction. 17 p2890 A69-33251

## BACON, M. E.

Effects of strong collisions and lower-state broadening on the H sub gamma profile. 20 p3579 A69-37305

## BACON, R.

Where graphite serves. 09 p1529 A69-22071

## BACONNET, J. P.

Scattering of laser light by a laboratory plasma /Diffusion de la lumiere laser par un plasma de laboratoire/. 05 p0798 A69-15586

90 deg laser light scattering by a dense plasma focus. 11 p1899 A69-25324

## BACONNET, J.-P.

Axial striograms of a noncylindrical focusing discharge /Striogrammes axiaux d'une decharge non cylindrique focalisante/. 08 p1362 A69-20279

Study of the collective scattering of laser light at an angle of 90 deg by a cold dense plasma /Etude de la diffusion collective a 90 deg de la lumiere laser par un plasma dense et froid/. 13 p2273 A69-28366

## BACRI, J.

Explanation of the variation of the electron density during the change of regime of discharges excited by a high-frequency capacitance and external electrodes /Explication de la variation de la densite electronique lors du changement de regime des decharges a excitation electrique capacitive de haute frequence et electrodes externes/. 04 p0637 A69-15060

## BADALIAN, F. G.

Laser with a nonreciprocal element. 03 p0435 A69-12983

## BADALOV, F.

Some methods for calculating the bending of plates of fiberglass-reinforced plastics with allowance for creep /Nekotorye metody rascheta izgiba plastin iz stekloplastikov s uchetom polzuchesti/. 21 p3835 A69-38831

## BADAVAS, P. C.

Identification of distributed parameter systems by stochastic approximation. 06 p0900 A69-17358

## BADEKAS, J.

Interpolation of the vertical deflection from horizontal gravity gradients. 02 p0243 A69-12012

## BADERKO, E. A.

A Dirichlet problem for degenerate elliptic problems /K zadache Dirikhle dlia vyrozhdaiushchikhsia ellipticheskikh sistem/. 12 p2123 A69-26729

## BADHWAR, G. D.

Flux of hydrogen, helium, and electrons at Fort Churchill in 1967. 05 p0756 A69-16277

Differential energy spectrum of protons, helium nuclei, and electrons. 07 p1204 A69-18833

## BADIAGIN, A. A.

Flight vehicle take-off weight increase factor. 16 p2735 A69-32144

## BADIAN, E. E.

Device for precision measurement of creep strain at high temperatures. 20 p3544 A69-37815

## BADILLO, V. L.

The proton flare of 9 June 1968. 20 p3587 A69-37332

## BADINOV, I. IA.

Aerosol structure of the troposphere and the stratosphere /Aeroroznaia struktura troposfery i stratosfery/. 18 p3132 A69-35340

## BADLEVSKII, IU. N.

Influence of the lamination effect on the performance of a traveling wave tube /Vliianie effekta rassloeniia na rabotu LBV/. 05 p0727 A69-15642

Effect of stratification on TWT operation. 16 p2762 A69-32496

## BADRI NARAYANAN, M. A.

Reverse transition from turbulent to laminar boundary layer in a highly accelerated flow. 01 p0058 A69-10066

On the criteria for reverse transition in a two-dimensional boundary layer flow. 11 p1872 A69-25121

## BADRUKHIN, IU. I.

Effect of heating on the stability of shells /Vliianie nagreva na ustoiichivost' obolochek/. 21 p3838 A69-39190

## BADZIAK, W.

Measurement of the spectrum of laser emission by a Fabry-Perot interferometer /Zagadnienie pomiaru widma promieniowania laserowego interferometrem Fabry-Perot/. 20 p3536 A69-36945

## BAECHLER, D. O.

Trends in the design of aerospace digital computers. 03 p0401 A69-14181

## BAECHTOLD, W.

Noise in microwave transistors. 02 p0219 A69-12427

## BAEDE, A. P. M.

Ionization cross sections of alkalis on diatomic halogens in the ev-region. 19 p3378 A69-36187

## BAEDECKER, P. A.

The distribution of gold and iridium in meteoritic and terrestrial materials. 08 p1404 A69-20918

## BAEHR, A.

Liquid-vapour interaction and evaporation in heat pipes. 14 p2539 A69-29207

## BAEHR, H. D.

Thermodynamic functions of ideal gases for temperatures up to 6000 K /Thermodynamische Funktionen idealer Gase fuer Temperaturen bis 6000 deg K/. 04 p0686 A69-15153

## BAER, A. D.

Characterization of solid-propellant reactions from hot-wire-ignition data. [WSCI PAPER 68-36] 07 p1201 A69-18354

The chemical arc - A spectrometric study. [WSCI PAPER 69-10] 16 p2831 A69-32350

## BAER, E.

Mechanical behavior of poly(ethylene terephthalate) at cryogenic temperatures. 05 p0785 A69-16494

## BAERTSCH, R. D.

An Ag-GaAs Schottky-barrier ultraviolet detector. 09 p1462 A69-21334

## BAERWALD, D. L.

Active microwave scattering arrays. 08 p1290 A69-20975

## BAESSLER, H.

Relationship between electric field strength and helix pitch in induced cholesteric-nematic phase transitions. 04 p0555 A69-14964

## BAEU, D.

Nondestructive testing by high-speed thermography. 15 p2618 A69-30316

## BAEUERLEIN, R.

Radiation effects on electronic components in space flight /Strahlenbeeinflussung von Bauelementen der Elektronik in der Raumfahrt/. 11 p1946 A69-24521

## BAEV, B. S.

Comparative analysis of the effect of the type of mechanization on aircraft balancing under landing conditions /Sravnitel'nyi analiz vliianiia vidov mekhanizatsii na balansirovku samoletov v usloviakh posadki/. 19 p3247 A69-35818

## BAEV, V. K.

Calculation of the flame location in a turbulent flow /Raschet polozheniia plameni v turbulentnom potoke/. 19 p3448 A69-35854

Investigation of the stability of a diffusion flame /Issledovanie ustoiichivosti diffuzionnogo plameni/. 19 p3448 A69-35855

## BAEVSKII, R. M.

Outlines of Space Physiology /Ocherki po Kosmicheskoi Fiziologii/. 01 p0014 A69-10743

Clinical aspects of interplanetary flights /Klinicheskie aspekty mezhplanetykh poletov/. 02 p0202 A69-12121

Changes in cardiac function during orthostatic tests and problems in predicting the reactions of cosmonauts in flight /Izmeneniia funktsii serdchnogo avtomatizma pri probe dilitel'nogo stoianiia i voprosy prognozirovaniia reakttsii kosmonavtov v polet/. 03 p0381 A69-14229

Reactions of the cardiovascular system of man and animals under conditions of weightlessness /Rektsiia serdchno-sosudistoi sistemy cheloveka i zhivotnykh v usloviakh nevesomosti/. 07 p1061 A69-18583

Principles of medical supervision on long space flights. 10 p1649 A69-23505

Study of the working capacity of a human operator during 64-hour wakefulness /Issledovanie rabotosposobnosti cheloveka-operatora pri 64-chasovom lishenii sna/. 22 p3877 A69-40280

## BAGAEV, S. N.

Stabilization of reproducibility of frequencies of He-Ne lasers at 0.63 mu. [IEEE PAPER P-4] 07 p1153 A69-19073

## BAGAEV, V. S.

Mobile electrical domains in seminsulating gallium arsenide. 04 p0643 A69-15261

## BAGBY, J. P.

Terrestrial satellites - Some direct and indirect evidence. 13 p2344 A69-27642

## BAGDASARIAN, A. B.

The propagation of elastic waves in a semibounded elastic bar having various elasticity moduli /O rasprostraneniі uprugikh voln v poluogranichenom raznomodi'nom uprugom sterzhnei/. 10 p1799 A69-23155

## BAGDASARIAN, G. E.

Oscillations of coaxial cylindrical shells with a gap partly filled with a liquid /Kolebaniia koaksial'nykh tsilindricheskikh obolochek s zazorom, chastichno zapolnennym zhidkost'iu/. 09 p1612 A69-21483

## BAGDASARIAN, S. A.

Experimental study of the carrying capacity of aluminum alloy rods under compression loads applied nonuniformly with respect to eccentricity /Eksperimental'noe issledovanie nesushchei sposobnosti szhatykh sterzhnei iz aluminievolgo splava pri neodnakovykh eksstentsititetakh prilozheniia nagruzki/. 11 p1986 A69-25326

## BAGDOEV, A. G.

Determination of the pressure in the vicinity of a shock wave collision point /Opredelenie davleniia v okrestnosti vstrechi udarnykh voln/. 13 p2246 A69-27523

## BAGGALEY, W. J.

HF backscatter observations of sporadic E during the IQSY. 09 p1489 A69-21701

## BAGGE, E.

The Origin of Cosmic Radiation and the Expansion of the Universe. 02 p0315 A69-11713

Cosmic rays latitude survey at solar minimum. 19 p3396 A69-36411

## BAGLEY, J. A.

Some aerodynamic problems of powerplant installation on swept-winged aircraft. I. 17 p2898 A69-33214

## BAGLIN, A.

On the radial pulsation frequencies of dense white dwarfs. 14 p2517 A69-29090

Pulsars as nonradial oscillators. 18 p3196 A69-34645

Pulsars /Les pulsars/. 18 p3202 A69-35283

## BAGLIN, F. G.

Infrared and Raman investigation of condensed phases of methylamine and its deuterium derivatives. 01 p0023 A69-10287

## BAGLIN, R.

The rigidity of the contact between two solid surfaces and its role in causing friction in the presence of vibrations /Sur la rigidite de contact entre deux surfaces solides, et son role dans le frottement en presence de vibrations/. 12 p2102 A69-26290

## BAGMUT, G. I.

Finite difference schemes of a high order of accuracy for an ordinary differential equation with a regular singularity /Raznostnye skhemy vysokogo poriadka tochnosti dlia obyknovennogo differentsial'nogo uravneniia s reguliarnoi osobennost'iu/. 10 p1719 A69-23365

## BAGOTSKII, V. S.

Special features of electrodes for fuel cells operating under weightlessness conditions /Particularites des electrodes pour piles a combustible fonctionnant en conditions d'apesanteur/. 08 p1259 A69-21038

## BAGOTZKII, V. S.

Particulars concerning electrodes for fuel cells operating under weightless conditions /Particularites des electrodes pour piles a combustible fonctionnant en conditions d'apesanteur/. 16 p2738 A69-32409

## BAGRAMIAN, A. L.

Electrochemical dimensioning of turbine blades. 04 p0605 A69-14560

## BAGRASH, F. M.

Selective stimulation of two form-sensitive mechanisms. 22 p3880 A69-40852

## BAGROV, N. A.

Classification of synoptic processes /O klassifikatsii sinopticheskikh protsessov/. 18 p3166 A69-34815

## BAHADUR, K.

The inevitable appearance of protocells on the primitive earth. 23 p4085 A69-41479

## BAHAR, E.

Wave scattering in nonuniform waveguides with large flare angles and near cutoff. 01 p0044 A69-10622

Inhomogeneous dielectric filling to simulate curvature in model earth-ionosphere waveguide. 05 p0732 A69-16346

Analysis of mode conversion in waveguide transition sections with surface impedance boundaries applied to VLF radio propagation. 08 p1272 A69-20020

Fields in waveguide bends expressed in terms of coupled local annular waveguide modes. 16 p2760 A69-31943

## BAHCALL, J. N.

Fine-structure transitions and the background microwave radiation. 09 p1590 A69-21445

The effect of the Brans-Dicke cosmology on solar evolution and neutrino fluxes. 09 p1605 A69-22415

Some models of the emission-line region of 3C 273. 10 p1790 A69-24137

On the absorption spectrum of Ton 1530. 13 p2334 A69-27306

Statistical tests for the origin of absorption lines observed in quasi-stellar sources. 13 p2334 A69-27307

Sensitivity of the solar-neutrino fluxes. 15 p2675 A69-30768

Absorption lines produced by galactic halos. 15 p2695 A69-30884

Neutrinos from the sun. 18 p3185 A69-34278

What next with solar neutrinos/ques/. 20 p3588 A69-37420

Are some quasi-stellar objects associated with clusters of galaxies/ques/. 22 p4029 A69-40763

Lepton non-conservation and solar neutrinos. 23 p4194 A69-41596

## BAHCALL, N. A.

Sensitivity of the solar-neutrino fluxes. 15 p2675 A69-30768

## BAHN, G. S.

Selection of recombination rate constants for H-F-O reactions. 04 p0646 A69-14743

"Grey" and "very grey" thermochemical tables for some C-H and C-H-O species. [WSCI PAPER 68-38] 06 p0885 A69-17795

A summary of auxiliary activities in the area of finite-kinetics calculations. [WSCI PAPER 68-54] 07 p1072 A69-18314

Evolution of a first-round reaction kinetics package for pyrolysis/combustion of a large aliphatic hydrocarbon molecule. [WSCI PAPER 68-37] 07 p1073 A69-18353

Finite-kinetics expansions of reaction products among aluminum or boron, hydrogen, chlorine, and fluorine. [AIAA PAPER 69-182] 11 p1940 A69-24907

Investigation of the concept of nitrogen reaction in ramjet engines. [WSCI PAPER 69-12] 16 p2831 A69-32351

## BAHNG, J.

Infra-red colours of G, K and M stars. 14 p2520 A69-29375

## BAHR, A. J.

Proposal for a microwave rotation sensor. 04 p0573 A69-14342

## BAHR, D. W.

Development of low smoke emission combustors for large aircraft turbine engines. [AIAA PAPER 69-493] 19 p3394 A69-36299

## BAHRANI, A. K.

Application of finite elements to the solution of Helmholtz's equation. 03 p0404 A69-13598

## BAHUUAU, J.

Secondary radar and its latest developments in connection with the automation of air traffic control centers /Le radar secondaire et ses dernieres developpements lies a l'automatisation des centres de controle de la circulation aerienne/. 10 p1723 A69-23705

## BAHUN, C. J.

Influence of load, speed, and coating thickness on the wear life of a bonded solid lubricant. [ASLE PREPRINT 69AM SC-3] 15 p2619 A69-30474

## BAIAREVICH, V. V.

Proton flares of July 7 and September 2, 1966, and January 28, 1967 /Protonnye vspyshki 7 iuliia, 2 sentiabria 1966 g. i 28 ianvaria 1967 g./ 20 p3587 A69-37045

## BAIBULATOV, F. KH.

Some demonstrations of the Doppler-effect and interference in the centimeter band /Neskol'ko demonstratsii po efektu Dopplera i interferentsii v santimetrovom radi diapazone/. 03 p0393 A69-13333

## BAIBUZ, V. F.

Temperature dependence of model potentials of an intermolecular interaction /O zavisimosti model'nykh potentsialov mezhmolekuliarnogo vzaimodeistviia ot temperatury/. 15 p2655 A69-30982

Calculation of transfer coefficients of rarefied gases by the Monte Carlo method. 18 p3121 A69-34710

## BAIDA, M. M.

Realization of a numerical solution to a heat-transfer problem /O realizatsii chislennogo resheniia odnoi zadachi perenosa tepla/. 07 p1241 A69-18923

## BAIER, W.

Calculation of the limiting frequencies of inhomogeneously filled rectangular waveguides and of field states arising at these frequencies /Berechnung der Grenzfrequenzen inhomogen gefueller Rechteckhohlleiter und der bei diesen Frequenzen auftretenden Feldzustaende/. 11 p1855 A69-25620

Calculation of the cutoff frequencies of inhomogeneously filled rectangular waveguides and the field states found at these frequencies /Berechnung der Grenzfrequenzen inhomogen gefueller Rechteckhohlleiter und der bei diesen Frequenzen auftretenden Feldzustaende/. 15 p2577 A69-30627

Studies on the energy metabolism of human leukocytes. II. 15 p2555 A69-30413

Lunar laser ranging and the Brans-Dicke theory. 05 p0825 A69-16362

## BAIERLEIN, J. L.

Studies on the energy metabolism of human leukocytes. II. 15 p2555 A69-30413

## BAIERLEIN, R.

Lunar laser ranging and the Brans-Dicke theory. 05 p0825 A69-16362



## BAIGUBEKOV, A. S.

On measuring the energy spectrum of nuclear-active particles with an ionization calorimeter having a small absorber thickness.

13 p2331 A69-28392

## BAIKIN, K. I.

Experimental investigation of self-adaptive systems with damping estimate based on the phase shift /Eksperimental'noe issledovanie samonastroyivshisya sistem s otsenkoi dempfirovaniya po fazovomu sdvigu/.

01 p0052 A69-10796

## BAIKOV, A. E.

Certain reactions of the cardiovascular and respiratory systems of cosmonauts during orbital flight on the Voskhod 2 spacecraft /Nekotorye reaktsii serdechnosudistoi i dykhatel'noi sistem kosmonavtov v orbital'nom polete na kosmicheskom korabe "Voskhod 2"/.

07 p1062 A69-18585

## BAIKOV, I. S.

Low-frequency hydrodynamic instabilities in an inhomogeneous current-carrying plasma /Nizkочастотные гидродинамические неустойчивости неоднородной плазмы с током/.

11 p1932 A69-25537

Drift oscillations in a weakly ionized plasma.

15 p2658 A69-30250

## BAIKOV, I. U. G.

Investigation of tunnel diode amplifier operation in the presence of noise.

09 p1469 A69-22630

## BAIKOV, S. S.

Investigation of a He-Ne traveling wave laser with a nonresonant feedback /Issledovanie He-Ne lazera begushchei volny s nerezonansnoi obratnoi svyaz'iu/.

09 p1517 A69-21796

Study of the amplification factor of an He-Ne traveling-wave amplifier at lambda equal 3.39 mu /Issledovanie koefitsienta usileniya He-Ne-usilitelia begushchei volny na lambda equal 3,39 mkm/.

11 p1894 A69-24623

Traveling wave emission in a He-Ne laser at the lambda equals 3.39 mu line /Rezhim generatsii na begushchei volne v He-Ne lazere na linii lambda equals 3,39 mkm/.

14 p2458 A69-29165

## BAIKOV, T. S.

Excitation of drift oscillations in a weakly ionized plasma /Vozbuzhdenie dreifovykh kolebaniy v slaboionizovannoi plazme/.

02 p0291 A69-12553

## BAIKOV, V. D.

Analysis of the operation of a switching circuit using MOS unित्रons and having a nonlinear load /Analiz raboty kluchevoi skhemy s nelineinoy nagruzkoj na MDP: unित्रonakh/.

13 p2234 A69-28507

Influence of the substrate potential on the current-voltage characteristics of unित्रon with a metal-dielectric-semiconductor /MDS/ structure /Vliianie potentsiala podlozhki na vol'tampernye kharakteristiki unित्रona so strukturoi metall-dielektrik-poluprovodnik /MDP//.

19 p3284 A69-36592

## BAILEY, A. L.

Learning model approach for nonlinear system identification.

05 p0737 A69-15805

## BAILEY, C. C.

Adaptive receiver techniques for digital communication through selective fading channels.

09 p1458 A69-22471

## BAILEY, C. D.

Modal coupling in thermally stressed plates.

11 p1990 A69-25509

## BAILEY, E. O.

Air carrier liability for nuclear damage.

11 p2003 A69-24260

## BAILEY, G. J.

Solution of the coupled ion and neutral air equations of the mid-latitude ionospheric F2-layer.

07 p1123 A69-18818

Continuity of air motion in the mid-latitude thermosphere.

21 p3714 A69-38553

## BAILEY, H. E.

Integration of the equations governing the one-dimensional flow of a chemically reactive gas.

07 p1118 A69-18317

## BAILEY, J. A.

Accurate positions of CP 0950 and CP 1133.

17 p3036 A69-33639

The plane strain forging of aluminum and an aluminum alloy at low strain rates and elevated temperatures.

17 p2979 A69-34137

## BAILEY, J. B.

The application of filament composites to aeroelastic models.

11 p1990 A69-25508

## BAILEY, J. M.

The moon may be a former planet.

20 p3603 A69-37562

## BAILEY, P.

A neutral buoyancy micro-electrode for prolonged recording from single nerve units.

02 p0202 A69-11865

## BAILEY, P. B.

Nonlinear Two Point Boundary Value Problems.

04 p0622 A69-14600

Existence from uniqueness for two point boundary value problems.

11 p1909 A69-24883

## BAILEY, P. T.

Free-carrier and exciton recombination radiation in GaAs.

01 p0140 A69-11253

## BAILEY, R. L.

A broad-band, high-gain, L-band power-amplifier module.

14 p2418 A69-28892

Evaluation of concepts for reuse of large booster nozzles. [AIAA PAPER 68-657]

19 p3394 A69-35944

## BAILEY, T. L.

Differential elastic scattering of low-energy protons by argon atoms.

20 p3580 A69-37499

## BAIMBETOV, F.

Influence of ion-acoustic oscillations on the electrical conductivity of a weakly ionized plasma /Vliianie ionno-zvukovykh kolebaniy na elektroprovodnost' slaboionizirovannoi plazmy/.

15 p2662 A69-30970

## BAIMBETOV, F. B.

Electronic viscosity coefficients of a slightly turbulent plasma.

03 p0480 A69-14136

## BAIN, W. C.

Comparison of Russian and British electron density distributions derived from the same V.L.F. and L.F. propagation data.

14 p2439 A69-29112

## BAIN, W. F.

Direct D-layer reflection as a factor in oblique propagation on the lower high frequencies.

16 p2752 A69-32389

## BAINES, D. J.

A satellite rotational kinetic energy dissipator.

21 p3828 A69-39767

## BAINOV, D. D.

Stability of periodic oscillations of quasi-linear nonautonomous systems with delay /Ustoichivost' periodicheskikh kolebaniy kvazilineinykh neavtonomnykh sistem s zapazdyvaniem/.

02 p0280 A69-11705

Method of averaging for a two-point boundary value problem /Metod usredneniya dlia odnoi dvukhtocheknoi kraevoi zadachi/.

15 p2644 A69-30449

Theory of n-circuit tunnel-diode LC oscillators /O teorii n-konturnykh LC-generatorov na tunel'nykh diodakh/.

16 p2764 A69-32256

Method for asymptotic integration of the equations of motion of quasi-linear nonautonomous systems with many degrees of freedom /Metod asimptoticheskogo integrirvaniya uravnenii dvizheniya kvazilineinykh neavtonomnykh sistem so mnogimi stepeniami svobody/.

23 p4183 A69-42477

## BAINUM, P. M.

Gravity-gradient stabilization of synchronous orbiting satellites.

03 p0504 A69-12857

Magnetic sample-and-hold damping of a gravity-gradient stabilized satellite.

07 p1227 A69-18337

On the motion and stability of a rotating space station-cable-counterweight configuration.

[AIAA PAPER 69-919] 21 p3820 A69-39349-4

On the motion and stability of a dual spin satellite with nutation damping. [AIAA PAPER 69-857]

21 p3823 A69-39385-1

## BAIR, B. L.

Economical reliability program design.

18 p3232 A69-34496-1

## BAIR, E. K.

Evaluation of a twin-spool hydrogen turbopump at zero NPSP. [AIAA PAPER 69-550]

18 p3140 A69-34414-1

## BAIR, F. H.

Soldering, brazing and welding.

14 p2455 A69-29344-1

## BAIR, H. Q.

Parawing precision aerial delivery system.

[AIAA PAPER 68-958] 24 p4254 A69-43723-3

## BAIRD, C. A., JR.

Modified quasilinearization technique for the solution of boundary-value problems for ordinary differential equations.

17 p2994 A69-32835-1

## BAIRD, J. K.

Status of VHF to UHF conversion at White Sands Missile Range.

07 p1077 A69-18828

## BAIRD, S. S.

Failure analysis.

22 p3953 A69-40032

## BAIRD, W. S.

Derivation of design and test criteria.

15 p2618 A69-30368

## BAIRIOT, H.

Design and study of a low-power nuclear reactor for space propulsion /Conception et etude d'un reacteur nucleaire de faible puissance destine a la propulsion spatiale/.

17 p3004 A69-33342

## BAITMAN, M. M.

Synthesis of optimal second-order systems with linear control /Sintez optimal'nykh sistem vtorogo poriadka, lineinykh po upravleniyu/.

03 p0410 A69-13864

## BAITZ, E.

Relations between electronegativity and potential energy in the alkali metal molecules.

03 p0472 A69-13805

## BAIXERAS, J.

Hall effect and transverse voltages in type-II superconductors in the mixed state.

16 p2827 A69-31827

## BAIZE, P.

Orbital elements of the visual double star ADS 12145 equals Se 2 /sigma 2481 BC/ /Elements orbitaux de l'etoile double visuelle ADS 12145 equals Se 2 /sigma 2481 BC//.

08 p1393 A69-20568

## BAJAJ, N. K.

Magnetogravitational instability of a Vlasov plasma.

06 p0965 A69-17515

## BAJAN, R. L.

Free vibration analysis by the modal substitution method.

02 p0338 A69-11747

## BAJON, J.

Photographing and transmitting pictures from space vehicles /Prise de vue et transmission d'images a partir de vehicules spatiaux/.

02 p0207 A69-11829

A method for experimental determination of the characteristics of a hyperabrupt-junction varactor /Sur une methode de determination experimentale des caracteristiques d'un varactor a jonction hyperabrupte/.

12 p2039 A69-26375

## BAJPAL, S. D.

Use of Gauss' hypergeometric function and Meijer's G-function in the production of heat in a cylinder.

04 p0687 A69-15188

Special functions and forced symmetrical vibrations of a circular elastic plate.

24 p4397 A69-42746

## BAJWA, G. S.

Hydromagnetic waves in a finitely conducting fluid mass immersed in a nonuniform magnetic field.

14 p2491 A69-29336

- BAKAI, A. S.**  
Effect of a sinusoidal force with a slowly varying frequency on a nonlinear vibrator /Vliianie sinusoidal'noi sily s medlenno izmeniaiusheisia chastotoi na nelineinyi vibrator/.  
11 p1916 A69-24760  
Interaction of high-frequency and low-frequency waves in nonlinear dispersive media.  
15 p2568 A69-30733
- BAKAI, O. S.**  
Theory of nonlinear ferromagnetic resonance /Do teorii nelineinogo feromagnitnogo rezonansu/.  
14 p2503 A69-28989
- BAKAN, H. M.**  
Extremal and optimal systems - The optimization of processes with incomplete information.  
09 p1473 A69-21856
- BAKAN, P.**  
Resting EEG alpha and asymmetry of reflective lateral eye movements.  
22 p3887 A69-41213
- BAKANOV, IU. A.**  
Investigation of a liquid-metal induction MHD generator /Issledovanie zhidkometallicheskogo MGD-generatora induktsionnogo tipa/.  
13 p2208 A69-27513
- BAKANOVICH, G. I.**  
Spectroscopic methods of determining charged particle concentrations under the conditions prevailing in a pulsed plasma generator /Spektroskopicheskie metody opredeleniia kontsentratsii zariazhennykh chastits v usloviakh impul'snogo plazmennogo generatora/.  
15 p2663 A69-30991
- BAKANSKA, V. V.**  
Effect of acute hypoxia on blood coagulation in various animals /Vpliv gostroi gipoksii na zsidannia krovi u tvarin raznykh vidiv/.  
12 p2019 A69-26348
- BAKEEV, A. A.**  
The effect of laser frequency drift on the operation of a three-mirror interferometer.  
11 p1895 A69-24720
- BAKELMAN, I. IA.**  
Mean curvature and quasi-linear elliptic equations /Sredniaia krivizna i kvazilineinye ellipticheskie uravneniia/.  
02 p0272 A69-12221  
Mean curvature and quasilinear elliptic equations.  
23 p4182 A69-41972
- BAKER, A.**  
Fourier analysis and nonlinear optical systems.  
17 p3005 A69-33080
- BAKER, A. A.**  
Mechanical behavior of a fiber reinforced metal and its effect upon engineering applications.  
06 p0940 A69-16949  
The fabrication of fibre-reinforced metals by filament-winding and electrodeposition - An evaluation of some electroplating solutions.  
11 p1890 A69-24337
- BAKER, B. L.**  
Porphyrins in meteorites - Metal complexes in Orgueil, Murray, Cold Bokkeveld, and Mokoia carbonaceous chondrites.  
22 p4008 A69-39889  
Trace porphyrin complexes - Fluorescence detection by demetallation with methanesulfonic acid.  
24 p4279 A69-42557
- BAKER, B. O.**  
High efficiency emission mechanisms in hot cathode low pressure discharges.  
06 p0896 A69-17475
- BAKER, B. R.**  
Tearing of viscous fibers.  
10 p1803 A69-24029  
Yielding of viscous bonds /O razrushenii viazkikh sviazei/.  
18 p3215 A69-34569
- BAKER, B., III**  
An equilibrium theory of the parametric pump.  
09 p1481 A69-21910
- BAKER, C.**  
Variations of mechanical properties, toughness and texture in two differently fabricated high strength aluminum alloy plates /7179-T651/.  
19 p3346 A69-36437
- BAKER, C. E.**  
Laser display technology.  
03 p0431 A69-13850
- BAKER, C. T. H.**  
On the nature of certain quadrature formulas and their errors.  
10 p1719 A69-23521
- BAKER, D. E.**  
Aircraft window temperature controlled with simple static tap changer.  
22 p3869 A69-40414
- BAKER, D. J.**  
Mid-latitude OI green emission and high-energy electron flux.  
02 p0309 A69-12743  
Studies of earth airglow.  
02 p0247 A69-12810
- BAKER, D. J., JR.**  
Concerning the existence of Taylor columns in atmospheres.  
02 p0326 A69-12697
- BAKER, D. M.**  
Comparison between formulas for ionospheric radio propagation and atmospheric wave propagation.  
10 p1655 A69-23419
- BAKER, D. W.**  
Emission spectroscopy as a tool in nondestructive testing.  
20 p3551 A69-38313
- BAKER, G.**  
Six well-preserved australites from the Port Campbell-Princeton region, Western Australia.  
03 p0507 A69-13096
- BAKER, G. K.**  
Carbon foam - A cellular structural material for high-temperature application.  
17 p2992 A69-33373
- BAKER, G. L.**  
Automatic tuning of a superconducting cavity using optical feedback.  
17 p2937 A69-33781  
An X-band oscillator using a superconducting cavity.  
21 p3683 A69-39453
- BAKER, G. ST. G.**  
A study of the interaction between a primary aerofoil and a jet flapped secondary aerofoil.  
19 p3242 A69-36820
- BAKER, H. D.**  
Dark adaptation - An interocular light-adaptation effect.  
16 p2745 A69-32448
- BAKER, J. A.**  
Mass spectrometric analysis of silicon carbide.  
09 p1448 A69-22313
- BAKER, J. C.**  
Temporal plasma echoes.  
21 p3777 A69-38713
- BAKER, J. G.**  
On improving the effectiveness of large telescopes.  
13 p2261 A69-27949
- BAKER, J. K.**  
Practical examples of the attenuation of vibrations by sandwich damping.  
15 p2622 A69-30705
- BAKER, J. L.**  
Free vibrations of multilayer anisotropic cylindrical shells.  
20 p3627 A69-37767
- BAKER, J. R.**  
The dynamic simulation of turbine engine compressors.  
[AIAA PAPER 69-486] 16 p2842 A69-32697
- BAKER, K. D.**  
Digital plasma frequency probe for fine scale ionospheric measurements.  
20 p3542 A69-37791  
Coordinated measurements from two multi-experiment rockets in an aurora.  
21 p3703 A69-38361
- BAKER, K. L.**  
A photographic and analytic study of composite propellant combustion in an acceleration field.  
[AIAA PAPER 69-173] 06 p0983 A69-18151
- BAKER, L. E.**  
Comparative evaluation of the thoracic impedance and isotope dilution methods for measuring cardiac output.  
14 p2408 A69-29304  
A simple mathematical derivation of the Stewart-Hamilton formula for the determination of cardiac output.  
24 p4271 A69-42784
- BAKER, L. L.**  
Entry vehicle weight evaluations.  
[SAWE PAPER 770] 18 p3208 A69-34876
- BAKER, L. T.**  
Planning an independent Research and Development program.  
17 p3077 A69-34129
- BAKER, L., JR.**  
Heat transfer from spheres into subcooled liquid sodium during forced convection.  
[ASME PAPER 67-WA/HT-32] 02 p0351 A69-12202
- BAKER, M. A.**  
Degradation of lubricating fluids in a vacuum.  
[IME PAPER 11] 07 p1137 A69-18558
- BAKER, M. B.**  
Modeling of solar cosmic ray events based on recent observations.  
[AIAA PAPER 69-14] 06 p0997 A69-18160
- BAKER, R.**  
Ocean wave profile and spectra measurement using an airborne magnetometer.  
12 p2075 A69-26998
- BAKER, R. D.**  
Prediction of flight performance of a throttling bipropellant rocket engine utilizing an ablative combustion chamber.  
[AIAA PAPER 69-452] 16 p2841 A69-32690
- BAKER, R. G.**  
Weldable and structural efficiency.  
20 p3550 A69-37457
- BAKER, R. L.**  
Binary scaling of air ionization on slender cones at small yaw.  
09 p1430 A69-21965
- BAKER, R. M. L., JR.**  
Surveillance-system sensor misassociation of one object with another.  
02 p0210 A69-12388  
Preliminary orbit determination for high-data-rate sensors.  
03 p0518 A69-14249
- BAKER, S. G.**  
Turbine blade cooling - The global picture.  
17 p3020 A69-33352
- BAKER, W.**  
Obtain the correct dope on receiver sensitivity.  
08 p1275 A69-20226
- BAKER, W. E.**  
Multicomponent force transducer for use on rocket sleds.  
[ASME PAPER 69-VIBR-21] 10 p1698 A69-24168  
Modeling the blast response of structures using dissimilar materials.  
16 p2874 A69-32164
- BAKHAREV, A. M.**  
The Dzhaus bolide /Dzhausovskii bolid/.  
18 p3196 A69-34536
- BAKHAREVA, M. F.**  
Frequency-space correlation of field fluctuations, amplitude and intensity in a medium with random inhomogeneities.  
04 p0557 A69-14774
- BAKHAN, N. N.**  
Effect of the component ratio on the rate of combustion of condensed mixtures. III - Effect of composition on the pressure dependence of the rate of burning.  
12 p2027 A69-26474
- BAKHSHIAN, B. TS.**  
Determination of the flight trajectory of a spacecraft in the absence of information concerning the distribution law of the measurement errors /Opredelenie traektorii poleta kosmicheskogo apparata pri otsutstvii svedenii o zakone raspredeleniia oshibok izmerenii/.  
09 p1595 A69-21757  
Optimal selection of information used in the determination of a spacecraft trajectory /Optimal'nyi vybor informatsii, ispol'zuemoi pri opredelenii traektorii dvizheniia kosmicheskogo apparata/.  
19 p3427 A69-36627
- BAKHTIN, V. D.**  
Determination of permittivity from the ratio between the amplitudes of the E-components of waves reflected and transmitted by the dielectric /Opredelenie dielektricheskoi prinitsaemosti po otnosheniiu amplitud E-komponent otrazhennoi i proshedshei cherez dielektrik voln/.  
23 p4123 A69-41950



## BAKKE, E.

Inverse transition in radial diffusers.  
[ASME PAPER 69-HT-33] 24 p2427 A69-43530

## BAKKE, J. C.

A low-energy channel-multiplier spectrometer for  
ATS-E. [IEEE PAPER 3C-5] 07 p1135 A69-19199

## BAKKE, O.

Planning for the supersonic future.  
22 p4054 A69-41131

## BAKKENSON, R. A.

Manufacturing small rocket motors.  
[AIAA PAPER 69-520] 16 p2795 A69-32779

## BAKLANOV, E. V.

Fluctuations of emission buildup in gas lasers /O  
fluktuatsiakh narastaniia izlucheniia v gazovykh kvan-  
tovykh generatorakh/. 15 p2634 A69-30960

## BAKLITSKII, V. K.

The synthesis of optimal direction-finding systems /O  
sintezе optimal'nykh pelengatsionnykh sistem/.  
13 p2219 A69-27254

## BAKSHI, O. A.

Method of determining the impact hardness of  
materials. 10 p1801 A69-23850

## BAKSHT, F. G.

Ionization combined with free electron Maxwelliza-  
tion in a plasma - Calculation of ionization for a cesium  
plasma /Ionizatsiia v plazme sovmetno s maksvelizat-  
siei svobodnykh elektronov - Raschet ionizatsii dlia  
tseziyovoi plazmy/. 02 p0292 A69-12559

Low-voltage arc in thermionic converters - Com-  
parison between theory and experiment. 06 p0963 A69-16910

Current-voltage characteristics of a thermionic con-  
verter at a high current density - Ionization equilibrium  
in the plasma of a low-voltage arc /Vol'tampernye  
kharakteristiki termoeemionnogo preobrazovatel'ia  
pri vysokoi plotnosti toka - Ionizatsionnoe ravnovesie v  
plazme nizkovol'noi dugi/. 11 p1933 A69-25554

Calculation of the near-electrode layer in a low-tem-  
perature plasma /K raschetu priekletrdnogo sloia v  
nizkoterperaturnoi plazme/. 13 p2312 A69-28117

Theoretical and experimental investigation of low-  
voltage arc in thermionic converter. 14 p2404 A69-29254

The electron energy distribution function and the  
rate of nonequilibrium ionization in the near-cathode  
layer of the thermionic converter. 14 p2404 A69-29255

On the plasma sheath theory. 14 p2491 A69-29257

Ionization in a cesium plasma and simultaneous free-  
electron Maxwellization in a plasma. 15 p2658 A69-30256

## BAKSHT, KH. S.

Investigation of wideband impedance decoupling  
structures /Issledovanie shirokopolosnykh impedan-  
snykh razviyaziushchikh struktur/. 23 p4138 A69-41938

## BAKSHT, R. B.

Dynamic characteristics of ferrites in strong pulsed  
fields /Dinamicheskie kharakteristiki ferritov v sil'nykh  
impul'snykh poliakh/. 13 p2320 A69-27994

## BAKULEV, P. A.

Allowance for the amplitude and phase instability of  
the subsystems of moving-target selector radars on the  
effectiveness of the suppression of signals from fixed  
targets /Uchet vliianiia amplitudnoi i fazovoi nestabil'-  
nosti uzlov radiolokatorov SDTs na effektivnost'  
cheresperiodnogo vychitaniia signalov nepodvizhnykh  
tseli/. 15 p2576 A69-30339

## BAKULEV, V. I.

The calculation of turbulent jets of real gases.  
07 p1118 A69-18394

Turbulent submerged jets of real gases.  
07 p1049 A69-18398

## BAKULIN, E. A.

A multielectrode probe with potentials which are  
negative with respect to the plasma /Mnogoelektroodnyi  
zond pri otritsatel'nykh potentsialakh otноситel'no plaz-  
my/. 12 p2138 A69-26538

Application of the delay method in plasma studies  
/Primenenie metoda zaderzhki dlia issledovaniia plaz-  
my/. 12 p2138 A69-26539

## BAKULIN, V. N.

Determination of the turbulence parameters from the  
vertical distribution of Tn and ThB in the ground  
layer /Opredelenie parametrov turbulentnosti po ver-  
tikal'nomu raspredeleniiu Tn i ThB v prizemnom sloe/.  
03 p0459 A69-13273

The determination of turbulence parameters from the  
vertical distribution of Tn and ThB in the lower  
layer of the atmosphere. 14 p2472 A69-28781

## BAKUMENKO, V. L.

Investigation of the optical homogeneity of gallium  
arsenide. 04 p0644 A69-15266

## BAKUN, F. I.

Conductivity of CdS under the action of an intense  
electron beam /Provodimost' CdS pod deistviem inten-  
sivnogo puchka elektronov/. 13 p2318 A69-27886

## BALABAN, H.

A Bayesian approach to reliability demonstration.  
19 p3327 A69-36039

## BALABAN, P.

Noise due to flutter and skew in recording of pseu-  
dorandom scanned TV signals. 01 p0033 A69-10999

## BALABUKH, L. I.

Investigation of thermal stresses in a cylindrical shell  
reinforced by longitudinal ribs /Issledovanie tem-  
peraturnykh napriazhenii v tsilindricheskoii obolochke,  
podkreplennoi prodol'nymi rebrami/. 11 p1981 A69-24942

Two problems concerning the natural oscillations of  
elastic systems containing a liquid /Dve zadachi o  
sobstvennykh kolebaniiax uprugikh sistem s zhidkim  
napolneniem/. 11 p1870 A69-24951

Plane oscillations of a liquid in a rectangular elastic  
vessel /Ploskie kolebaniia zhidkosti v priamougol'nom  
uprugom sosude/. 17 p2950 A69-33200

Allowance for initial shear deformation in the  
problem of the stability of a long cylindrical shell under  
torsion /Ob uchete nachal'noi deformatsii sdviga v  
zadache ustoiichivosti dlinnoi tsilindricheskoii  
obolochki pri kruchenii/. 21 p3838 A69-39187

## BALACEANU, J. C.

General characteristics of combustion reactions  
/Caracteristiques generales des reactions de com-  
bustion/. 06 p1031 A69-17413

General theory of chain reactions /Theorie generale  
des reactions en chaines/. 06 p1031 A69-17415

## BALACHANDRAN, N. K.

Infrasound at long range from Saturn V, 1967.  
03 p0509 A69-13358

## BALAEVA, I. A.

On the problem of determining control forces.  
16 p2764 A69-32299

## BALAGEAS, D.

Measurement of the total transmission factor of  
phenolic resin and silica cloth laminates /Mesure du  
facteur de transmission total de stratifies resine  
phenolique et tissus de silice/. 18 p3136 A69-34640

## BALAGUROV, V. A.

Ignition Devices /Apparaty Zazhiganiia/.  
12 p2146 A69-26756

## BALAKHANOV, V. IA.

Turbulent heating of a plasma in a toroidal system  
with current /Turbulentnyi nagrev plazmy v toroidal'-  
noi sisteme s tokom/. 11 p1935 A69-25752

Coupled Fabry-Perot interferometers in the  
microwave spectral range /Sviazannye interferometry  
Fabri-Pero v mikrovolnovoi oblasti spektra/.  
22 p3947 A69-40800

## BALAKHOVSKII, I. S.

Results of physiological-biochemical study of mem-  
bers of the crew of the spacecraft Voskhod /Rezultaty  
fiziologo- biokhimicheskogo obsledovaniia chlenov  
ekipazha kosmicheskogo korablia "Voskhod"/.  
03 p0377 A69-14195

Biochemical indicators of the reaction of pilots to  
complex conditions of flight /Biokhimicheskie

pokazатели reaktsii letchikov na slozhnye uslovia  
poleta/. 05 p0710 A69-16525

Biochemical indices of the response of fliers to com-  
plex conditions of flight. 18 p3096 A69-34744

## BALAKLITSKII, I. M.

Investigation of open resonators used in diffraction  
electronics /Issledovanie otkrytykh rezonatorov  
primeniamykh v difraktsionnoi elektronike/.  
23 p4139 A69-42045

## BALAKRISHNAN, A. V.

Advances in Communication Systems- Theory and  
Applications. Volume 3. 03 p0383 A69-12867

On a new computing technique in optimal control  
and its application to minimal time flight profile op-  
timization. 09 p1595 A69-21798

On a new computing technique in optimal control  
and its application to minimal-time flight profile op-  
timization. 24 p4383 A69-42954

## BALAKRISHNAN, K.

A theoretical and experimental investigation of a  
mechanical seal. [ASLE FICFS PREPRINT 17]  
15 p2621 A69-30499

## BALAKRISHNAN, M.

Photographic studies of explosive reactions.  
21 p3719 A69-38446

## BALAN, J. C.

PCM television via satellite relay.  
23 p4130 A69-42520

## BALAN, L.

The propagation of the Alfvén waves in non-  
homogeneous systems in the relativistic mag-  
netohydrodynamics. 02 p0290 A69-12254

## BALANIS, C. A.

Analysis of aperture radiation from an axially slotted  
circular conducting cylinder using geometrical theory  
of diffraction. 11 p1836 A69-24993

Aperture radiation from an axially slotted elliptical  
conducting cylinder using geometrical theory of dif-  
fraction. 22 p3914 A69-40703

Equatorial plane pattern of an axial-TEM slot on a  
finite size ground plane. 23 p4116 A69-41588

## BALAS, M. J.

Multiplexing sampled data. 07 p1078 A69-18830

## BALASHOV, I. F.

Generation of microsecond pulses in a ruby laser.  
03 p0441 A69-14142

Single-pulse ruby lasers with opto-mechanical shut-  
ters. 12 p2107 A69-26588

Heat removal from a laser rod by means of a metallic  
conductor. 12 p2108 A69-26592

## BALASHOVA, A. A.

Self-oscillations of an angular velocity sensor /Av-  
tokolebaniia datchika uglovoi skorosti/.  
09 p1497 A69-22106

## BALASUBRAHMANYAN, V. K.

Solar activity and the 11-year modulation of cosmic  
rays. 14 p2515 A69-29967

## BALASUBRAMANIAN, V.

Some investigations on dielectric rod aerial excited  
in mixed HE sub 11 and E sub 01 modes. 12 p2035 A69-25900

## BALAZS, N. L.

Semiclassical dispersion theory of lasers.  
08 p1326 A69-20571

## BALCERAK, J. C.

Higher harmonic pitch control. 18 p3089 A69-35233

## BALCEWICZ, J. F.

Results of an experimental study of coherent PSK in  
a multipath environment. 03 p0393 A69-13255

## BALCH, D. C.

Hand operated visual signaling devices.  
06 p0878 A69-16962

- BALCHITIS, A. A.**  
Certain new electrohydrodynamic effects analogous to known effects of magnetohydrodynamics /O nekotorykh novykh elektrogidrodinamicheskikh iavleniakh, analogichnykh izvestnym iavleniam magnitnoi gidrodinamiki/.  
01 p0131 A69-10775
- BALCHUNAS, W. J.**  
Computer-aided wiring and cabling design as applied to aircraft avionics systems. [AIAA PAPER 69-976]  
22 p3912 A69-40356
- BALCON, R.**  
Incidence and management of supraventricular arrhythmias after acute myocardial infarction.  
24 p4262 A69-42729
- BALCZEWSKI, L.**  
Methods of measuring the energy and power of a laser beam /Metody pomiaru energii i mocy wiązki laserowej/.  
11 p1899 A69-25196
- BALDANZA, B.**  
Dynamically deformed structures in some meteorites.  
19 p3418 A69-36135
- BALDERSTON, H. L.**  
Incipient failure detection - The detection of incipient failure in certain hydraulic components.  
19 p3255 A69-36018
- BALDESCHWIELER, J. D.**  
Determination of the structures of the ions produced in the single and double McLafferty rearrangements by ion cyclotron resonance spectroscopy.  
19 p3265 A69-36288  
Ion-molecule reactions in hydrogen cyanide.  
20 p3485 A69-38262
- BALDWIN, D. E.**  
Kinetic model of Tonks-Dattner resonances in plasma columns.  
11 p1929 A69-25266  
Resonant absorption in zero-temperature nonuniform plasma.  
15 p2661 A69-30922
- BALDWIN, G. D.**  
Behavior of photochromic film under high power laser excitation.  
23 p4173 A69-41629
- BALDWIN, G. L.**  
New techniques for drift compensation in integrated differential amplifiers.  
07 p1102 A69-18874
- BALDWIN, H. A.**  
Telemetry with unrestrained animals.  
07 p1071 A69-19136
- BALDWIN, R. B.**  
Lunar mascons - Another interpretation.  
04 p0654 A69-14632  
A determination of the elastic limit of the outer layer of the moon.  
07 p1212 A69-18600  
AVCO 3-D composites - A tailored materials concept.  
08 p1340 A69-20509  
Ancient giant craters and the age of the lunar surface.  
16 p2863 A69-32404
- BALES, B. L.**  
EPR of neutral Ag site conversion in gamma-irradiated frozen AgNO sub 3 ices.  
22 p3992 A69-40574
- BALICK, B.**  
The complex galactic radio source W51.  
12 p2153 A69-25807
- BALIM, G. M.**  
Analysis of complex semiconductor structures with p-n junctions /K voprosu ob analize slozhnykh poluprovodnikovykh struktur s p-n perekhodami/.  
05 p0806 A69-15658  
The analysis of complex semiconductor structures with p-n junctions.  
16 p2827 A69-32515
- BALIULIS, P. P.**  
Peculiarities of the optical characteristics of antimony trisulfide in the near- and mid-infrared region of the spectrum /Osobenosti opticheskikh svoystv trekhsernstoi sur'my v blizhnei i srednei infrakrasnoi oblasti spektra/.  
19 p3384 A69-36481
- BALKANSKI, M.**  
Effect of temperature on the radiative emission of PbSe diode lasers.  
19 p3337 A69-36533
- BALKE, R. W.**  
Tail rotor design. II - Structural dynamics. [AHS PAPER 342]  
17 p3059 A69-33504
- BALKO, V.**  
Some nonlinear functional models of frequency discrimination of the human ear.  
18 p3097 A69-35440
- BALL, C. J.**  
Model materials for three-dimensional photoelasticity.  
22 p4042 A69-40311
- BALL, J. A.**  
The pointing calibration of the Haystack antenna.  
08 p1281 A69-20032  
Time variations in galactic OH emission sources.  
14 p2517 A69-29085
- BALL, J. T.**  
A numerical experiment on the spatial distribution of cloud seeding nuclei.  
09 p1535 A69-21639
- BALL, K.**  
Regenerable carbon dioxide sorbents.  
09 p1447 A69-22552
- BALL, K. O. W.**  
Effects of flap length and slot suction on separated laminar boundary layers. [AIAA PAPER 69-36]  
06 p0866 A69-18214
- BALL, L. C.**  
S-1C propulsion system performance evaluation. [AIAA PAPER 69-733]  
16 p2839 A69-32672
- BALL, L. L.**  
The use of super 184 W as a thermal flux monitor at high temperatures.  
24 p4315 A69-43192
- BALL, R. H.**  
Determination of surface motions of the earth's core.  
18 p3129 A69-34951  
Prediction of geomagnetic secular change confirmed.  
20 p3523 A69-37490
- BALL, V. W.**  
The Paca-70 camera, a development for a unique approach to panoramic photography.  
09 p1499 A69-22246
- BALLANCE, J. O.**  
In-situ molecular beam experiments in earth orbit.  
19 p3377 A69-36182
- BALLARD, H. N.**  
Corrections to observed rocketsonde and balloonsonde temperatures.  
01 p0081 A69-10697  
A Guide to Stratospheric Temperature and Wind Measurements /COSPAR Technique Manual Series/.  
05 p0752 A69-15706  
Solar eclipse - Temperature, wind, and ozone in the stratosphere.  
06 p0916 A69-17008
- BALLARD, P. J.**  
Black Arrow propellant pressurization systems.  
14 p2509 A69-29629
- BALLARIO, M. C.**  
On the loop-motion in flares.  
06 p0993 A69-17429  
On the special events of March 1966 - Correlation between solar and terrestrial phenomena.  
16 p2852 A69-32621
- BALLAUER, A. C.**  
The twin-engine BO-105.  
24 p4252 A69-42937
- BALLERINI, R.**  
Design and calibration of a counter for the measurement of the atmospheric and earth leakage flux of secondary cosmic-ray neutrons.  
07 p1209 A69-19454
- BALLETT, J. T.**  
Fatigue crack propagation in clad RR58 sheet to DTD 5070A - Analysis and correlation of test results.  
13 p2280 A69-27835
- BALLI, E.**  
On the sunspot groups classification.  
05 p0826 A69-16388
- BALSLEV, I.**  
Sunspot observations in 1966 /Observations des taches solaires en 1966/.  
08 p1387 A69-20118
- BALLIF, J. R.**  
Further evidence on the correlation between transverse fluctuations in the interplanetary magnetic field and Kp.  
14 p2510 A69-28948  
Flares, Forbush decreases, and geomagnetic storms.  
18 p3187 A69-34937  
Morphology of a solar-terrestrial event in March 1966.  
18 p3199 A69-34938  
A comparison of the photospheric and interplanetary magnetic fields during the flight of Mariner IV.  
18 p3205 A69-35399
- BALLIN, H. M.**  
Hypoxia and edema of the perfused isolated canine lung.  
22 p3887 A69-41189
- BALLING, L. C.**  
Optical pumping at high temperatures.  
07 p1148 A69-18893
- BALLINGER, J. G.**  
An air-launched windsonde.  
10 p1692 A69-23254
- BALLIO, G.**  
Elastic-plastic dynamic behavior of a beam-column model.  
02 p0337 A69-11717
- BALLMAN, A. A.**  
Coherent emission from rare earth ions in electrooptic crystals.  
09 p1514 A69-21339
- BALLMAN, R. L.**  
Prediction of polystyrene melt tensile behavior.  
21 p3753 A69-39730
- BALLMANN, J.**  
Calculation of supersonic flows past slender bodies by means of moving singularities /Berechnung von Ueberschallstroemungen um schlanke Koerper mit Hilfe bewegter Singularitaeten/.  
08 p1252 A69-20721  
Calculation of supersonic flows around slender bodies by the method of moving singularities /Berechnung von Ueberschallstroemungen um schlanke Koerper mit Hilfe bewegter Singularitaeten/.  
23 p4061 A69-42407
- BALOEV, A. A.**  
Selection of a stabilizer of optimum planform /K voprosu o vybore stabilizatora optimal'noi formy v plane/.  
11 p1966 A69-25327  
Selection of a tail plane of an optimal shape /O vybore stabilizatora optimal'noi formy v plane/.  
21 p3647 A69-38845  
Optimal control of elastic flight vehicles /Ob optimal'nom upravlenii uprugimi letatel'nymi apparatami/.  
21 p3760 A69-38852  
Optimal control of elastic flight vehicles /Ob optimal'nom upravlenii uprugimi letatel'nymi apparatami/.  
21 p3760 A69-38890
- BALOGH, A.**  
On some problems of estimation after selection in the reliability theory.  
08 p1322 A69-21099
- BALOGH, S. E.**  
Design principles for shock load protection through energy absorption and dissipation methods. [ASME PAPER 69-DE-37]  
14 p2531 A69-28846
- BALOTIN, I. U. L.**  
Fluctuations and scattering of electromagnetic waves in a ferromagnet with an easy-plane anisotropy.  
05 p0809 A69-16547
- BALSAM, R. E.**  
A simplified approach for correction of perturbations on a stationary orbit. [AIAA PAPER 68-456]  
21 p3817 A69-39757
- BALSIGER, H.**  
Vanadium isotopic composition in meteoritic and terrestrial matter.  
20 p3601 A69-37501
- BALSLEV, I.**  
Inter-valence-band transitions in uniaxially stressed Ge and GaAs.  
10 p1745 A69-23359



## BALSLEY, B. B.

## BALSLEY, B. B.

- Nighttime electric fields and vertical ionospheric drifts near the magnetic equator.  
09 p1489 A69-21705
- Measurement of electron drift velocities in the nighttime equatorial electrojet.  
10 p1769 A69-23837
- Some characteristics of non-two-stream irregularities in the equatorial electrojet.  
14 p2511 A69-28953

On the control of the F-region drift velocity by the E-region electric field - Experimental evidence.  
16 p2779 A69-32193

## BALTOV, A.

- Certain axisymmetric problems in thermoviscous plasticity /Nekotorye osesimmetricheskie zadachi termoviazko-plastichnosti/.  
10 p1802 A69-24025

## BALTOVSKII, I. S.

- Dynamics of extremal single-channel relay systems of differential type /Dinamika odnokanal'nykh releinykh ekstremal'nykh sistem raznostnogo tipa/.  
12 p2052 A69-26278

The tracking process in extremal differential-type systems /O protsesse slezheniia v ekstremal'nykh sistemakh raznostnogo tipa/.  
12 p2052 A69-26279

## BALUEVA, A. S.

- Numerical solution of the problem of the transformation of fields of meteorological elements /K voprosu o chislennom reshenii zadachi o transformatsii polei meteorologicheskikh elementov/.  
15 p2649 A69-30647

## BALYBERDIN, V. V.

- Investigation of the outflow of evaporation products during the electrical explosion of a wire cone /Issledovanie istecheniia produktov ispareniia pri elektricheskom vzryve provolochnogo konusa/.  
19 p3372 A69-35823

## BALZANO, Q.

- Analysis of periodic phased arrays of circular apertures.  
20 p3507 A69-37844

## BALZER, K.

- Efficiency of forecasts of categorized parameters - A contribution to the evaluation of forecasts /Ueber die Leistungsfahigkeit von vorhersagen kategorial gegliederter Parameter - Ein Beitrag zum Problem der Prognosenbewertung/.  
09 p1534 A69-21510

## BAM-ZELIKOVICH, G. M.

- Acceleration of a conducting gas in a strong unsteady electromagnetic field /Ob uskorenii provodiashchego gaza v sil'nom nestatsionarnom elektromagnitnom pole/.  
07 p1191 A69-18988

Flow of a fully ionized gas with a finite duration of the energy exchange between the electrons and ions /Tehenie polnost'iu ionizovannogo gaza s konechnym vremenem obmena energiei mezhdu elektronami i ionami/.  
19 p3379 A69-36383

On the acceleration of a conducting gas to high speeds.  
19 p3381 A69-36772

## BAMBAKIDIS, G.

- Electrical resistivity versus deuterium concentration in palladium.  
10 p1745 A69-23357

## BAMBERGER, E. N.

- Effect of three advanced lubricants on high-temperature bearing life. [ASME PAPER 69-LUBS-18]  
18 p3140 A69-34378

## BAMBINI, A.

- Gain interaction and dynamical behavior of a multimode He-Ne laser.  
05 p0773 A69-16289

## BAME, S. J.

- Plasma flow pattern in the earth's magnetosheath.  
16 p2773 A69-31961

## BAMFORD, R.

- Computer analysis of large structural systems. [AIAA PAPER 67-955]  
21 p3839 A69-39216

## BAMFORD, R. M.

- Efficient solution of load-deflection equations.  
13 p2358 A69-27208

## BAMGBOYE, D. K.

- North-south ionospheric drifts near the magnetic equator.  
01 p0062 A69-10138

## BAN, S. D.

- The interaction region in the boundary layer of a shock tube.  
22 p3932 A69-40894

## BAN, V. S.

- Vaporization of antimony and tellurium in the vicinity of the critical point.  
22 p3993 A69-40719

## BANCAREL, J. P.

- Ozone and weather forecasting /Ozone et prevision meteorologique/.  
16 p2786 A69-32629

## BANCROFT, R. W.

- Comparative cardiovascular responses of baboons and dogs to near-vacuum pressures.  
06 p0875 A69-17846

Function of the Bird respirator at high altitude.  
14 p2406 A69-29290

Space-cabin and suit pressures for avoidance of decompression sickness and alleviation of fire hazard.  
22 p3890 A69-40212

Abdominal gas volume at altitude and at ground level.  
23 p4076 A69-41291

## BANDEEN, W. R.

- Observations of the reflection properties of the earth-atmosphere system and the cloud formation above the equatorial Pacific from a synchronous satellite /Beobachtungen der Reflexionseigenschaften des Systems Erde-Atmosphäre und der Bewölkung ueber dem äquatorialen Pazifik von einem synchronen Satelliten aus/.  
24 p4346 A69-43154

## BANDERMANN, L. W.

- Interpretation of Doppler shifts in the zodiacal light spectrum.  
06 p1012 A69-18227

## BANDLER, J. W.

- Microwave absorption and series resistance of silicon-mesa parametric-amplifier diodes.  
05 p0732 A69-16347

## BANDO, S.

- The abundances of arsenic, tin and antimony in chondritic meteorites.  
13 p2344 A69-27630

## BANDY, G. C.

- MERA modules - How good in an array/ques/  
22 p3912 A69-40067

## BANERJEE, B.

- Large amplitude free vibration of an isosceles right-angled triangular plate with simply supported edges.  
10 p1800 A69-23236

## BANERJEE, K.

- He-Ne laser communication.  
19 p3279 A69-36756

## BANERJEE, M. B.

- On the stability of nonhomogeneous shear flows.  
21 p3697 A69-39743

## BANERJEE, M. R.

- Reflex responses of human sweat glands to different rates of skin cooling.  
23 p4082 A69-41446

## BANERJEE, P. K.

- Stress-freezing in a transversely loaded plate supported at four corners.  
22 p4045 A69-40900

## BANERJEE, S.

- Source of helium in natural gas.  
08 p1311 A69-20947

## BANFI, C.

- Determination of periodic solutions of periodic nonlinear differential equations /Sulla determinazione delle soluzioni periodiche di equazioni differenziali non lineari periodiche/.  
02 p0271 A69-11550

## BANG, N. T.

- Optimal problem of terminal control /Optimal'naia zadacha terminal'nogo upravleniia/.  
18 p3175 A69-35324

Method of successive approximations for solving a certain problem of optimal control /Metod posledovatel'nykh priblizhenii dlia resheniia odnoi zadachi optimal'nogo upravleniia/.  
21 p3685 A69-38452

## BANGERT, W.

- Rocket experiments in optical determination of trace gas concentrations in the upper atmosphere /Raketensexperimente zur optischen Bestimmung von Spurengaskonzentrationen in der hohen Atmosphäre/.  
22 p4035 A69-39910

## BANICHUK, N. V.

- The solution of variational and boundary value problems by the method of local variations.  
04 p0622 A69-14616

Load analysis for elastoplastic bodies /Raschet nagruzheniia uprugoplasticheskogo tela/.  
18 p3216 A69-34571

Local-variation method for variational problems with nonadditive functionals /Metod lokal'nykh variatsii dlia variatsionnykh zadach s neadditivnymi funktsionalami/.  
20 p3513 A69-36990

## BANIN, V.

- On the development and activity of the active region associated with the proton flare event of July 1966 - Summary of observations and conclusions.  
10 p1766 A69-23760

## BANKINA, B. F.

- Semiconductor Compounds, their Production and Properties /Poluprovodnikovye Soedineniia, ikh Polucheniie i Svoistva/.  
01 p0137 A69-10353

## BANKS, E. E.

- The fragmentation behavior of thin-walled metal cylinders.  
09 p1611 A69-21352

## BANKS, H. T.

- A maximum principle for optimal control problems with functional differential systems.  
10 p1718 A69-23038

Representations for solutions of linear functional differential equations.  
10 p1721 A69-23642

Variational problems involving functional differential equations.  
21 p3754 A69-38429

## BANKS, P. M.

- The polar wind.  
01 p0077 A69-11239

The thermal structure of the ionosphere.  
12 p2063 A69-25903

Accidentally resonant charge exchange and ion momentum transfer.  
16 p2822 A69-32108

The polar wind and its implications.  
21 p3713 A69-38528

## BANKSTON, C. A.

- Prediction of tube wall temperatures with axial variation of heating rate and gas property variation.  
18 p3227 A69-34315

Numerical predictions for circular tube laminarization by heating. [ASME PAPER 69-HT-52]  
24 p4409 A69-43520

The transition from turbulent to laminar gas flow in a heated pipe. [ASME PAPER 69-HT-54]  
24 p4303 A69-43539

## BANNAIA, V. F.

- Electrical conductivity of n-type InSb at 0.3-20 deg K.  
06 p0978 A69-16990

## BANNINK, W. J.

- Determination of the position of a shock wave from pitot tube experiments.  
16 p2771 A69-31927

## BANNISTER, J. D.

- Heat exchangers for cryogenic service.  
17 p3074 A69-33681

## BANNISTER, J. R.

- Space flight nutrition /Nahrung fuer den Weltraumflug/.  
04 p0554 A69-15388

## BANNISTER, L. R.

- The Black Arrow control system.  
14 p2530 A69-29630

## BANNISTER, T. C.

- Microscopic observation of interfacial phenomena. [AIAA PAPER 69-95]  
06 p1038 A69-18126

## BANOS, G.

- Contribution to the study of turbulence in the solar photosphere /Contribution a l'etude de la turbulence dans la photosphere solaire/.  
02 p0328 A69-12752

## BANSAGI, T.

- Stability of ammonium halates in the solid state - Kinetic investigation of the thermal decomposition and ignition of ammonium chlorate.  
21 p3669 A69-38800

- BANSAL, J. L.**  
Boundary-layer on a flat plate with homogeneous suction. 05 p0752 A69-16744  
Forced convection in laminar flow between two parallel walls and in a circular pipe with suction. 08 p1303 A69-20371  
Heat and mass transfer in a laminar boundary layer on a flat plate with variable suction or injection velocity and constant wall temperature. 12 p2061 A69-25947
- BANSAL, T. D.**  
Empirical relationship for computation of free convection from a single horizontal cylinder to fluids. 09 p1625 A69-22693
- BANSE, K.**  
Nonresonant continuous laser oscillation in the visible. 01 p0091 A69-10815  
High power ion laser /Hochleistungs- Ionenlaser/. 09 p1515 A69-21487
- BAO, V. T.**  
Optimisation of efficiency of shallow reflectors. 06 p0899 A69-17825  
Influence of correlation interval and illumination taper in antenna tolerance theory. 08 p1284 A69-20294
- BAPAT, V. A.**  
Response of undamped non-linear spring mass systems subjected to constant force excitation. 21 p3836 A69-38985
- BAPESWARA RAO, V. V.**  
Enumeration of all circuits of a graph. 14 p2421 A69-29541
- BAPPU, M. K. V.**  
An analysis of the cepheid variable RT Aurigae. 10 p1778 A69-23605  
Excitation temperatures of the Wolf-Rayet stars. 12 p2160 A69-26904
- BAR-ITZHACK, I. Y.**  
Strapdown gyros in a back-to-back configuration. 04 p0603 A69-15473  
Orthogonalization techniques of a direction cosine matrix. 23 p4134 A69-42543
- BAR-SHALOM, Y.**  
On the optimal control of discrete-time linear systems with random parameters. 12 p2052 A69-26501
- BAR-TOUV, J.**  
Inelastic scattering calculations with Wood-Saxon Hartree-Fock wave functions. 14 p2504 A69-29006
- BAR, O.**  
Application of operational array techniques for analysis of multivariable control systems by digital computer. 12 p2046 A69-26064
- BARABANENKOV, IU. N.**  
Theory of wave diffraction at a body in a scattering medium /K teorii difraktsii voln na tele v rasseyvayushchei srede/. 10 p1658 A69-23957
- BARABANOV, A. T.**  
Theory of linear nonstationary systems with a singular point - Stability of systems /Teoriia lineinykh nestatsionarnykh sistem s osoboi tochkoi - Ustoichivost' sistem/. 21 p3685 A69-38451
- BARABASH, M. B.**  
Low-voltage cesium arc in thermionic converter with extended cathode surface. 14 p2403 A69-29250
- BARABASHOV, N. P.**  
Brightness distribution over the Martian disk and its stellar magnitude /O raspredelenii iarkosti na diske Marsa i ego zvezdnoi velichine/. 15 p2689 A69-30565
- BARACH, J. P.**  
Plasma flux transport. 11 p1925 A69-24311  
Electrically driven blast waves. 16 p2768 A69-31664
- BARADAT, J.**  
Developments and trends in aircraft simulation /Evolution et tendance de la simulation d'aeronefs/. 19 p3296 A69-36707
- BARADZEI, L. T.**  
Some characteristics of neutral pion production in interactions of nucleons with energies above 10 super 13 ev. 13 p2303 A69-28376  
Spectrum of 10 super 11 to 10 super 13 ev photons in the upper atmosphere. 13 p2330 A69-28378
- BARAFF, G. A.**  
Experimental evidence for the correlation-produced magnetoplasma mode in potassium. 10 p1728 A69-23168
- BARAK, S.**  
Enhanced and stimulated multiphoton processes in free atoms. [IEEE PAPER S-8] 07 p1154 A69-19080  
Induced versus parametric scattering processes in potassium. 23 p4171 A69-41391
- BARAKAT, R.**  
Diffraction images of coherently illuminated objects in the presence of aberrations. 13 p2297 A69-27451
- BARAKOV, A. G.**  
Influence of transverse acceleration on the secretory activity of the canine gastrointestinal tract. 10 p1645 A69-23498
- BARAL, M. C.**  
Flow of two conducting immiscible liquids between two parallel porous moving plates under a transverse magnetic field. 05 p0743 A69-15600  
On the hydromagnetic flow of viscous conducting fluid between two porous co-axial cylinders in the presence of a radial magnetic field. 12 p2135 A69-26276
- BARALT, G.**  
Aerial measurement of radiation temperatures over Mt. Fuji and Tokyo areas and their application to the determination of ground- and water-surface temperatures. 01 p0110 A69-10693
- BARAM, M. S.**  
Trade secrets - What price loyalty/ques/. 01 p0180 A69-10991
- BARAN, A. S.**  
Techniques for recording shock and vibration data. 01 p0083 A69-11050
- BARANENKO, V. A.**  
Application of the dynamic programming method to a study of large deflections in compressed rods /Primenenie metoda dinamicheskogo programmirovaniia k issledovaniu bol'shikh progibov szhatykh sterzheni/. 14 p2533 A69-28988
- BARANENKOV, A. I.**  
Current-voltage characteristics of long diodes prepared from compensated semiconductors /Vol'tampernye kharakteristiki dlennykh diodov iz kompensirovannykh poluprovodnikov/. 13 p2230 A69-27877  
Gradient-recombination current instability in semiconductors /Gradientno-rekombinatsionnaia neustoiichivost' toka v poluprovodnikakh/. 15 p2665 A69-30041
- BARANIUK, V. V.**  
Determination of the heat-excess thermodynamic functions of binary gas mixtures on the basis of the temperature effects during stationary mutual diffusion /Opredelenie teplovyykh izbytochnykh termodinamicheskikh funktsii binarnykh gazovykh smesey po temperaturnym efektam pri statsionarnoi vzaimnoi diffuzii/. 11 p2003 A69-25552
- BARANOV, G. A.**  
Experimental investigation of liquid-metal MHD generators /Eksperimental'nye issledovaniia zhidkometallicheskh MGD-generatorov/. 13 p2208 A69-27512
- BARANOV, I. A.**  
Influence of centrifugal forces, acting on the balls, on the axial rigidity of a rapidly rotating radial-thrust bearing /Vliianie tsentrobzhezhnykh sil, deistvuiushchikh na shariki, na osevuuiu zhestkost' bystrovrashchayushchegosia radial'no-upornogo podshipnika/. 04 p0605 A69-14606  
Measurement of the axial rigidity of gyromotor flanges /Izmerenie osevoi zhestkosti flantsev gyromotorov/. 09 p1513 A69-22704
- BARANTSEV, R. G.**  
Influence of a lubrication film on the axial rigidity of a high-speed radially resistant ball bearing /Vliianie maslianoi plenki na osevuuiu zhestkost' bystrovrashchayushchegosia radial'no-upornogo sharikopodshipnika/. 23 p4169 A69-41555
- BARANOV, M. A.**  
Radio profilograph and its utilization in aerial radio leveling /Radioprofilograf i ego ispol'zovanie pri aeroradionivelirovani/. 07 p1132 A69-19006
- BARANOV, V. B.**  
Simulation of the flow of interplanetary plasma around the earth's magnetosphere and planets /K voprosu modelirovaniia obtekanii magnitosfery zemli i planet mezhplanetnoi plazmoi/. 09 p1577 A69-21768
- BARANOV, V. I.**  
Modified nonstationary method of determining the absorptivity of materials /Modifitsirovannyi nestatsionarnyi metod opredeleniia pogloschatel'noi sposobnosti materialov/. 09 p1528 A69-22720  
Growth of bodies of the solar system /Vozrast tel solnechnoi sistemy/. 11 p1961 A69-24972  
Some problems of consolidation and differentiation of the matter of the solar system in relation to the time stages of its formation /O nekotorykh voprosakh konsolidatsii i differentsiatsii veshchestva solnechnoi sistemy v svyazi s vremennymi etapami ee stanovleniia/. 19 p3406 A69-36076
- BARANOV, V. IU.**  
Electric arc in a stream of argon with cesium in the presence of a magnetic field. 02 p0285 A69-11570  
Contraction of a positive column. I, II /Kontraktsiia polozhitel'nogo stolba. I, II/. 11 p1932 A69-25539
- BARANOVA, A. M.**  
Extended electron-hole junctions in single crystals of gallium antimonide. 10 p1745 A69-23329
- BARANOVA, L. A.**  
The change of the belts and details on Jupiter in the years 1962 to 1965. 03 p0512 A69-13696
- BARANOVA, V. P.**  
Changes in functions of the nervous system and of some analyzers during the combined action of hypokinesia and radial accelerations. 02 p0197 A69-11496  
Influence of high-altitude mountain acclimatization on the tolerance of the organism to environmental effects /Vliianie vysokogornoi akklimatizatsii na ustoiichivost' organizma k vozeistviyu faktorov vneshnei sredy/. 13 p2212 A69-28623  
Effect of prolonged slow rotation on hearing /Vliianie dlitel'nogo medlennogo vrashcheniia na slukh/. 20 p3470 A69-37251
- BARANOWSKI, J. J.**  
Gallium arsenide IMPATT diodes. 20 p3504 A69-36914
- BARANSKI, W.**  
Statics of fibrous surface media /Statyka powierzchniowych osrodkow wlokniстых/. 19 p3447 A69-36858
- BARANSKII, L. N.**  
Spectral characteristics of geomagnetic field pulsations of the P12 type /Spektral'nye kharakteristiki pulsatsii geomagnitnogo polia tipa P12/. 20 p3520 A69-37038
- BARANSKII, P. I.**  
Longitudinal magnetoresistance of n-type InSb. 04 p0643 A69-15262  
Magnetoresistance and Hall effect of n-InSb single crystals having a high dislocation density. 14 p2503 A69-28734  
Nature of inhomogeneities revealed by anodic etching of n-GaAs single crystals /Priroda neodnorodnostei, vyivliaemykh anodnym travleniem v monokristallakh n-GaAs/. 20 p3582 A69-37013
- BARANTSEV, R. G.**  
Moments of high rank in a weakly rarefied gas. 04 p0587 A69-14542  
Boundary conditions for the moment equations of a rarefied gas /O granichnykh usloviyakh dlia momentnykh uravnenii razrezhenno go gaza/. 13 p2250 A69-28320



## BARASHENKOV, V. S.

Many-particle interactions in the high and superhigh energy region /new types of elementary particle interactions/. 13 p2303 A69-28369

Contribution to the calculation of inelastic interactions of cosmic nuclei. 13 p2330 A69-28370

## BARASHEV, P. P.

Multiquantum photoemissive effect /Vneshni mnogokvantovyi fotoeffekt/. 22 p3964 A69-40690

## BARASHKOVA, E. P.

Experiments in comparing the results of ground, aircraft, and spacecraft measurements /Opyt sravneniya rezul'tatov nazemnykh, samoletnykh i sputnikovyykh izmerenii/. 06 p0951 A69-17982

Certain laws of the vertical distribution of ascending long-wave radiation /Nekotorye zakonomernosti vertikal'nogo raspredeleniya voskhodiashego dlinnovolnovogo izlucheniya/. 06 p0953 A69-17990

## BARAT, C.

A program for studying the space reliability of low-energy detectors /Programme d'etude sur la fiabilité spatiale des détecteurs de faible énergie/. 11 p1848 A69-24868

## BARAT, J.

Short-period motions at the level of the turbopause /Mouvements a courte periode au niveau de la turbopause/. 15 p2606 A69-31449

Structure of the turbulent field from 90 to 120 km. 21 p3713 A69-38524

## BARATS, N. K.

Magneto-metallographic investigation of martensite transformation in stainless steels in connection with embrittlement during cold deformation. 18 p3138 A69-35117

## BARAVIAN, G.

Study of the postdischarge of a laser-produced plasma /Etude de la post-decharge d'un plasma produit par laser/. 01 p0128 A69-10394

## BARBA, P. M.

An integrated 3-axis gravity-gradient stabilization system. 07 p1226 A69-18329

## BARBARO, G.

Possibility of mass loss in the red-giant stage from H-R diagrams of galactic clusters. 08 p1396 A69-20642

## BARBASHIN, E. A.

Construction of Liapunov functions /O postroenii funktsii Liapunova/. 07 p1181 A69-19002

## BARBASHIN, N. N.

Effect of powdering temperature on the structure and properties of pressed semifinished products of sintered aluminum alloys with iron and chromium additions /Vliianie temperatury raspysleniya na strukturu i svoystva pressovannykh polufabrikatov iz spechennykh aluminievyykh spлавov s dobavkami zheleza i khroma/. 03 p0452 A69-14119

## BARBATO, M.

Remarks on converters for microwave reception /Considerazioni sui convertitori di ricezione di oscillazione a microonda/. 08 p1285 A69-20594

## BARBEE, D. G.

A differential thermistor gauge for macroscopic velocity measurements in rarefied gases. 04 p0601 A69-15117

## BARBEE, T. W.

Spinodal decomposition in Al/Zn alloys. I - Mechanical properties. 09 p1522 A69-21501

Spinodal decomposition in Al/Zn alloys. III - Metallography and electron microscopy. 09 p1522 A69-21503

## BARBER, M. R.

Digital-reflection-type microwave phase shifters. 15 p2580 A69-31076

## BARBER, R. E.

Effect of pressure ratio on the performance of supersonic turbine-nozzles. 23 p4203 A69-42250

## BARBER, T. A.

Mission analysis model requirements for electric propulsion. 09 p1584 A69-21202

Simplification of solar-electric propulsion missions by a new staging concept. [AIAA PAPER 69-251] 09 p1586 A69-21245

## BARBER, W. J., JR.

Environmental and reliability demonstration testing. 18 p3143 A69-34482

## BARBERA, F. J.

An analytical technique for studying the anomalous roll behavior of ballistic re-entry vehicles. [AIAA PAPER 69-103] 06 p1019 A69-18168

## BARBIAN, E. P.

Ionization and current growth in an E x B discharge. 09 p1552 A69-22042

Rotating plasma and gravitational instability. 09 p1552 A69-22043

## BARBIER, M.

Determination of the galactic rotation constant A from 52 O, B, and A stars /Determination de la constante de la rotation galactique a partir de 52 etoiles O, B, A/. 07 p1214 A69-18664

Galactic rotation in a region of Cassiopeia /Rotation galactique dans une region de Cassiopee/. 18 p3201 A69-35142

Measurement of radial velocities in the objective prism. XXI - Revision and new results in the SA8 /La mesure des vitesses radiales au prisme objectif. XXI - Revision et resultats nouveaux dans la SA8/. 18 p3201 A69-35143

## BARBIERI, C.

Optical monitoring of quasi stellar objects at the Observatory of Asiago. 05 p0826 A69-16387

On the red shift of quasars. 06 p1009 A69-17968

## BARBON, R.

The frequency of supernovae in clusters of galaxies. 10 p1774 A69-22966

The open cluster NGC 7128. 20 p3598 A69-37465

Spectroscopic and photographic observations of compact galaxies. I. 20 p3600 A69-37483

## BARBOUR, J. P.

Cineradiography using field emission technology. 12 p2086 A69-26163

3 nanosecond exposures with X-rays, electrons and light. 12 p2086 A69-26164

Nanosecond photography with super radiant light, X rays or electrons. 19 p3305 A69-35721

## BARCAL, R.

Genetic background of circadian rhythms. 04 p0553 A69-15152

## BARCHAS, J. D.

Enzymatic synthesis of adrenaline in mammalian brain. 07 p1066 A69-19260

Adrenal epinephrine and phenylethanolamine n-methyl transferase /PNMT/ activity in the rat bearing a transplantable pituitary tumor. 08 p1263 A69-20374

Epinephrine metabolism in mammalian brain after intravenous and intraventricular administration. 21 p3650 A69-38323

Compensatory hypertrophy and phenylethanolamine n-methyl transferase /PNMT/ activity in the rat adrenal. 23 p4080 A69-41404

## BARCHAS, R. E.

Enzymatic synthesis of adrenaline in mammalian brain. 07 p1066 A69-19260

## BARCHE, J.

Jet influence on V/STOL aircraft in transitional and high-speed flight /Strahlfluss an V/STOL-Flugzeugen im Ubergangs- und Hochgeschwindigkeitsflug/. 16 p2734 A69-31937

## BARCHILON, M. S.

Contribution to the Study of Return Currents Produced by a Confined Jet /Contribution a l'etude des courants de retour engendres par un jet confine/. 13 p2250 A69-28335

## BARCUS, J. R.

Diurnal variation in low-energy cosmic ray cutoffs. 16 p2850 A69-32308

Solar protons E greater than 100 Mev incident over Antarctica during January-February 1967. 20 p3589 A69-37556

Increase in cosmic-ray cutoffs at high latitudes during magnetospheric substorms. 22 p4005 A69-40509

## BARDEAU, H.

Study and development of a PTU meteorological probe for study of the lower atmospheric layers /Etude et mise au point d'une sonde meteorologique PTU pour l'etude des basses couches atmospheriques/. 04 p0601 A69-15229

Fluctuation of the electromagnetic field received after transhorizon propagation /Fluctuation du champ electromagnetique recu apres une propagation transhorizon/. 20 p3494 A69-37810

Spectral density gradient of the temperature as a function of the altitude between zero and 1500 m /Pente de densite spectrale de la temperature en fonction de l'altitude, entre 0 et 1500 m/. 24 p4342 A69-42677

## BARDEI, G.

Determination of the total number of electrons in the ionosphere from the Faraday effect with the aid of signals from the ATS-3 satellite /Opredelenie obshchego chisla elektronov ionosfery po efektu Faradeia s pomoshch'yu signalov sputnika ATS-3/. 02 p0237 A69-11660

Determination of the total number of electrons in the ionosphere from the Faraday effect by means of signals from the ATS-3 satellite. 13 p2256 A69-28691

## BARDET, M.

Balloon observations of the far-infrared spectrum and brightness temperature of the sun. 04 p0652 A69-14419

## BARDHAN, P.

Preprecipitation in Al/Zn/Mg alloys studied by hardness and small-angle X-ray scattering measurements. 03 p0447 A69-13613

## BARDO, W. S.

Transients in an ammonia-maser oscillator. 19 p3339 A69-36825

## BAREEVA, G. N.

Stability of flexibly clamped annular plates /Ustoichivost' uprugoi zashchlemlennykh kol'tsevykh plastin/. 17 p3057 A69-33197

## BAREISHA, L. I.

Noise generator employing avalanche transit-time diodes /Generator shuma na lavinno-proletnom diode/. 07 p1107 A69-19156

## BARENBLATT, G. I.

Certain problems of the mechanics of brittle failure /O nekotorykh voprosakh mekhaniki khrupkogo razrusheniya/. 07 p1238 A69-19690

Effect of stresses on the orientation of laser damage cracks in transparent dielectrics. 10 p1703 A69-23621

## BARER, A. S.

Acceleration tolerance of man under low barometric pressure /Perenosimost' chelovekom uskorenii pri ponizhenom barometricheskom davlenii/. 07 p1065 A69-18982

Man-operator under conditions of acceleration. 08 p1265 A69-19936

Changes in the enzymatic activity of cellular and subcellular structures in response to accelerations. 10 p1645 A69-23496

Blood circulation in the cerebral and surface vessels of the human head under the action of accelerations /Krovoobraschenie v tserbral'nykh i poverkhnostnykh sosudakh golovy cheloveka pri deistvii uskorenii/. 13 p2212 A69-28626

Human tolerance to acceleration at low barometric pressures. 20 p3480 A69-38230

## BARFIELD, J. N.

Magnetospheric substorms observed at the synchronous orbit. 01 p0075 A69-11225

## BARG, I. A.

Stability of thin cylindrical shells /K voprosu ustoychivosti tonkikh tsilindricheskikh obolochek/. 05 p0840 A69-16199

- BARGELLINI, P. L.**  
Extension of the concept of satellite communication system capacity to a two dimensional model.  
23 p4131 A69-42521
- BARGER, A. R.**  
The atmosphere of Venus - A review of recent observations and theories.  
02 p0330 A69-12803
- BARGER, R. L.**  
Pressure shift and broadening of methane line at 3.39  $\mu$  studied by laser-saturated molecular absorption.  
04 p0633 A69-15424
- BARGESKI, A. J.**  
Digital transmission systems.  
11 p1834 A69-24545
- BARGMANN, H.**  
Buckling of viscoelastic Maxwell plates under random temperature.  
12 p2188 A69-27113
- BARINOV, I. S.**  
Flow mass measurement method for determining the gas stagnation temperature in an transition region /Raskhodnyi metod opredeleniia temperatury tormozheniia gaza v perekhodnoi oblasti/.  
24 p4408 A69-43492
- BARIS, J. M.**  
The chemical partitioning of elements in gamma prime separated from precipitation-hardened, high-temperature nickel-base alloys.  
13 p2277 A69-27408
- BARISH, J.**  
The effects of multiple Coulomb scattering and range straggling in shielding against solar-flare protons.  
10 p1723 A69-23164  
High-energy /less than 400-Mev/ neutron transport using the method of discrete ordinates.  
14 p2481 A69-29592  
Calculation of the radiation hazard at supersonic aircraft altitudes produced by an energetic solar flare.  
23 p4204 A69-41337
- BARJON, D.**  
Study of the conduction band of GaSb-InSb compounds at low InSb concentrations.  
19 p3390 A69-36555
- BARJOT, G.**  
Multiphoton ionization of hydrogen and rare gases /Ionisation multiphotonique de l'hydrogene et des gaz rares/.  
02 p0283 A69-11701
- BARK, P.**  
Study of the influence of the roughness of a solid surface on the reflection of molecular jets /Etudes sur l'influence de la rugosite d'une surface solide sur la reflexion de jets moleculaires/.  
19 p3377 A69-36180
- BARKALOV, S. S.**  
Generator of sinusoidally modulated current pulses for supplying semiconductor lasers.  
15 p2633 A69-30235
- BARKER, A. A.**  
Radial distribution functions for a hydrogenous plasma in equilibrium.  
14 p2502 A69-29998
- BARKER, E.**  
High dispersion spectroscopic observations of Venus. IV - The weak carbon dioxide band at 7883 angstrom units.  
16 p2852 A69-31563
- BARKER, E. S.**  
High-dispersion spectroscopic studies of Venus. II - The water vapor variations.  
13 p2345 A69-27650  
High dispersion spectroscopic observations of Venus. III - The carbon dioxide band at 7820 angstroms.  
20 p3614 A69-38254
- BARKER, H. A.**  
Linear modelling of multivariable systems with pseudo-random binary input signals.  
04 p0583 A69-15113
- BARKER, J. F.**  
Effect of processing upon properties and phase reactions in Rene 63 sheet.  
05 p0781 A69-16446
- BARKER, R. C.**  
Threshold switching delayed response in ferrite memory cores.  
[IEEE PAPER 16.4] 01 p0045 A69-10719
- Origin of threshold-response delay in ferrite memory cores.  
15 p2668 A69-30688
- BARKER, R. S.**  
Parametric analysis of some requirements for life support systems applied to earth orbital missions.  
[SAE PAPER 680746] 03 p0379 A69-13438  
Parametric thermal control requirements for future spacecraft.  
[AIAA PAPER 69-621] 17 p2914 A69-33305
- BARKER, V. A.**  
Heat pipe channel flow distributions.  
[ASME PAPER 69-HT-22] 24 p4412 A69-43546
- BARKER, W. B.**  
Single-mode power from a 6328 angstrom units laser incorporating neon absorption.  
07 p1149 A69-18901
- BARKER, W. H.**  
Natural orbitals for H sub 2.  
06 p0960 A69-17112
- BARKHEM, A.**  
Skin-friction formula for tapered and delta wings.  
17 p2896 A69-34037
- BARKHUDARIAN, A. M.**  
Flow over a disk near a screen /Obtekanie diska vblizi ekrana/.  
13 p2199 A69-27524  
Steady oscillations of a disk near a screen /Ustanovivshiesia kolebaniia diska vblizi ekrana/.  
15 p2547 A69-30576  
Motion of a wing of circular planform near a screen /Dvizhenie kryla krugovoi v plane formy vblizi ekrana/.  
15 p2547 A69-30583
- BARKHUDAROV, E. M.**  
Excitation of standing ion-acoustic waves in a weakly ionized plasma /Vozbuzhdenie stoiachikh ionno-akusticheskikh voln v slaboionizovannoi plazme/.  
02 p0292 A69-12555  
Excitation of ion-acoustic standing waves in a weakly ionized plasma.  
15 p2658 A69-30252  
Suppression and parametric amplification of ion sound in a plasma.  
16 p2821 A69-31797
- BARKHUDAROVA, T. M.**  
Dependence of the second-harmonic conversion factor on the space-time distribution of the radiation of a powerful laser /Zavisimost' koeffitsienta transformatsii vo vtoruiu garmoniku ot prostranstvenno-vremennogo raspredeleniia izlucheniia moshchnogo lazera/.  
12 p2104 A69-26022
- BARKLEY, H. B., JR.**  
Significant experiences of the NASA Plum Brook Reactor Facility.  
03 p0465 A69-13128
- BARKLEY, L.**  
The use of the "baseband equation" for satellite system design.  
07 p1085 A69-19180
- BARKSDALE, T. R.**  
Criteria for passive propellant control schemes.  
[AIAA PAPER 69-531] 16 p2833 A69-32691
- BARLETTI, R.**  
Solar X-ray flux deduced from flare effects on VLF propagation.  
14 p2411 A69-29105
- BARLIER, F.**  
First results of Doppler measurements from the French satellite Diapason /Premiers resultats dus aux mesures Doppler sur le satellite francais Diapason/.  
01 p0065 A69-10543  
Systematic analysis of the density variations of the upper atmosphere with respect to reference models /Analyse systematique des ecarts des densites de la haute atmosphere par rapport a des modeles de reference/.  
08 p1397 A69-20761  
Initial processing of French DIA satellite experience /Premieres reductions de l'experience francaise sur satellite DIA/.  
21 p3701 A69-38336
- BARLIEV, E.**  
Density variations in the upper atmosphere - Role of the "Eurobs" system /Variatsii plotnosti v verkhnei atmosfere - Rol' sistemy "Eurobs"/.  
12 p2069 A69-26437
- BARLOW, B. V.**  
Should we ban the boom/ques/  
24 p4252 A69-42997
- BARLOW, H. M.**  
Hybrid TEM-dual surface wave in a coaxial cable.  
11 p1856 A69-25659  
Channel-dropping filter for millimetre waves in circular waveguide.  
17 p2936 A69-33032
- BARLOW, J.**  
A stiffness matrix for a curved membrane shell.  
21 p3842 A69-39305
- BARLOW, J. S.**  
Intrinsic and induced EEG rhythms in severe hypothyroidism secondary to panhypopituitarism - A case report.  
07 p1064 A69-18634
- BARMBY, J. G.**  
Constraints for on-board spacecraft payload data processing.  
[AIAA PAPER 69-942] 22 p3904 A69-40325  
Survey effectiveness of spacecraft remote sensors.  
23 p4163 A69-41567
- BARMIN, A. A.**  
Variation of the gas velocity in a normal ionizing shock wave and the problem of a conducting piston /Izmenenie skorosti gaza v normal'noi ionizuiushchei udarnoi volne i zadacha o provodiashchem porshne/.  
05 p0801 A69-15787  
Gas velocity variation in ionizing shock waves - The problem of the conductive piston.  
11 p1935 A69-25740  
Variation of gas velocity in a normal ionizing shock wave and the problem of the conductive piston.  
18 p3181 A69-35038  
Gas-ionizing shock waves in an arbitrarily oriented magnetic field.  
19 p3381 A69-36773
- BARMORE, W. L.**  
High-temperature plastic deformation of polycrystalline rhenium.  
13 p2280 A69-27767
- BARNA, A.**  
Pseudorandom frequency modulation in range-Doppler radar.  
13 p2221 A69-27944
- BARNA, G. J.**  
Study of a 300 kWe Rankine cycle advanced nuclear-electric space power system.  
23 p4189 A69-42266
- BARNARD, J. A.**  
Calculated profiles of He I 4471 and 4922 angstrom units and their forbidden components.  
07 p1224 A69-19713
- BARNARD, H. R.**  
Transonic buffet characteristics of a 60 degree swept wing with design variations.  
[AIAA PAPER 69-793] 19 p3238 A69-36297
- BARNARD, M. C. S.**  
Radial gas turbines.  
[IME PAPER 7] 12 p2146 A69-25787
- BARNATSKII, V. N.**  
Autonomic phenomena during motion sickness.  
08 p1263 A69-19935  
Motion sickness in dogs before and after intravenous administration of sodium hydrocarbonate /Bolezni' dvizheniia u sobak do i posle vnutrivennogo vvedeniia gidrokarbonata natriia/.  
20 p3473 A69-37269  
New equipment for studying the vestibular analyzer /Novye ustanovki dlia issledovaniia vestibuliarnogo analizatora/.  
20 p3481 A69-37274
- BARNAUD, G.**  
Influence of the wall temperature on the transverse flow in a three-dimensional laminar boundary layer /Influence de la temperature parietale sur l'ecoulement transversal dans une couche limite laminaire tridimensionnelle/.  
08 p1251 A69-20274
- BARNES, A.**  
Collisionless heating of the solar-wind plasma. I.  
02 p0309 A69-12714  
Quasilinear theory of hydromagnetic waves in collisionless plasma.  
08 p1367 A69-20797  
Collisionless heating of the solar-wind plasma. II.  
09 p1607 A69-22426
- BARNES, C. B.**  
Background and state of the art of vacuum pumping in large space-simulation chambers.  
13 p2241 A69-28078



## BARNES, D. A.

- BARNES, D. A.**  
Missile and space support. 19 p3295 A69-36327
- BARNES, F. S.**  
Rare-gas pumping efficiencies for neodymium lasers. 17 p2980 A69-32958
- BARNES, I. L.**  
Developments in volcanic gas research in Hawaii. 02 p0236 A69-11466
- BARNES, J. A.**  
Spin-other-orbit matrix elements for f super 3 configurations. 06 p0962 A69-17819
- BARNES, J. C.**  
Apollo landmark sighting - An application of computer simulation to a problem in applied meteorology. 01 p0110 A69-10692  
Satellite snow surveillance - A down-to-earth use of space technology. 18 p3167 A69-35084
- BARNES, J. F.**  
Some aerodynamic aspects of turbine blade cooling. [ASME PAPER 69-GT-15] 09 p1432 A69-22501  
Aerodynamic and thermal considerations in designing axial flow turbine blades. [IME PAPER 2] 12 p2146 A69-25788  
Advances in engine technology - Cooled turbines. [RAES PAPER 22] 22 p4000 A69-40500
- BARNES, J. V.**  
Four-color and H-beta photometry of open clusters. II - Coma and Ursa Major. 16 p2860 A69-32234
- BARNES, M. B.**  
Techniques for earth-pointing attitude control of a spacecraft. 21 p3760 A69-38620
- BARNES, P. A.**  
Laser induced underwater sparks. 05 p0771 A69-15818
- BARNES, R. F.**  
Anaerobic adhesives for structural aircraft bonding. 24 p4338 A69-43464
- BARNES, V. E.**  
Petrology of moldavites. 23 p4210 A69-41350
- BARNES, W. S.**  
Application of maximum likelihood methods to ion swarm experiments. 16 p2788 A69-31670
- BARNETT, E. H.**  
Computerized Markov system effectiveness models. 18 p3195 A69-34527
- BARNETT, R. L.**  
Prestressed brittle structures. 17 p3060 A69-33568  
The design-testing interface. 24 p4333 A69-43339
- BARNETT, T. L.**  
Application of a nonlinear least-squares method to atmospheric temperature sounding. 17 p2960 A69-33156
- BARNEY, G. O.**  
Double vortex flows in plasmas axially traversing multipole magnetic fields. 15 p2661 A69-30924
- BARNHART, H. E.**  
New connectors for avionics packaging. 22 p3910 A69-39946
- BARNIKOL, W. K. R.**  
Dissociation of human hemoglobin /Zur Dissoziation des Human-Haemoglobins/. 23 p4097 A69-42096  
Interpretation of the oxygen-dissociation curve of human hemoglobin /Zur Interpretation der O sub 2- Bindungskurve des Human- Haemoglobins/. 23 p4097 A69-42097
- BARNLA, J. D.**  
SPOT - A versatile navigation/traffic control satellite system for transoceanic aircraft and marine traffic. 03 p0463 A69-13234  
A multi-function satellite system for transoceanic service. 16 p2809 A69-32054
- BARNOSKI, R. L.**  
Time dependence of the maximum structural response under random loading. 15 p2705 A69-30365

Mean-square response of simple mechanical systems to nonstationary random excitation. [ASME PAPER 69-APM-25] 18 p3214 A69-34398

Ordinary coherence functions and mechanical systems. 20 p3537 A69-37162

**BARNOTHY, J.**  
Anomalous Hubble plot of quasi-stellar objects. 15 p2701 A69-31536

**BARNOTHY, J. M.**  
The Hoyle-Fowler model of quasi-stellar objects. 13 p2340 A69-27575

**BARNOTHY, M. F.**  
Anomalous Hubble plot of quasi-stellar objects. 15 p2701 A69-31536

**BARON, H. G.**  
Effect of shot peening on the fatigue properties of maraging steel and Al-Zn-Mg alloy. 02 p0253 A69-12061  
Improving the fatigue properties of butt welds in maraging steels. 03 p0434 A69-13762

**BARON, J. R.**  
Application of the method of parametric differentiation to radiative gasdynamics. [AIAA PAPER 68-668] 23 p4059 A69-41892

**BARON, N.**  
Alpha-gamma angular correlations in super 120 Sn. 03 p0469 A69-13098  
Alpha-gamma angular correlations on super 58 Ni. 03 p0470 A69-13100  
Elastic scattering of 21-Mev protons from nitrogen-14, oxygen-16, argon-40, nickel-58, and tin-116. 18 p3179 A69-35489

**BARON, S.**  
The human as an optimal controller and information processor. 12 p2022 A69-25929

**BARON, V. V.**  
Transition temperature of V sub 3 Ga to the superconducting state. 03 p0483 A69-13023  
Physical Metallurgy of Superconducting Materials /Metalovedenie sverkhprovodiashchikh materialov/. 16 p2802 A69-32051  
Influence of the tempering time and temperature on the structure and superconducting properties of a recrystallized and deformed alloy of niobium with 75 at. percent titanium /Vlianie vremeni i temperatury otpuska na stroenie i sverkhprovodiashchie svoystva rekristallizovannogo i deformirovannogo splava niobiia s 75 atomn. percent titana/. 19 p3345 A69-36302

**BARONNET, F.**  
Study of solid-fuel ablation by liquid and physically homogeneous nitric acid. 24 p4363 A69-43568

**BAROUH, E.**  
Study, arrangement, and expected service for a production line of metal film resistors for space use /Etude, mise en place et services attendus d'une chaine de fabrication des resistances a couche metallique pour usage spatial/. 15 p2628 A69-30847

**BARQUINS, M.**  
Friction-induced plastic deformation of single crystals of hcp metals - Beryllium, cobalt, and zinc /Deformation plastique par frottement, de quelques monocristaux metalliques a structure hexagonale - Beryllium, cobalt et zinc/. 02 p0254 A69-12627

**BARR, A. D. S.**  
Acoustic and internal damping in uniform beams. 20 p3620 A69-37062

**BARR, G. W.**  
Aeroelastic stability characteristics of cylindrical shells considering imperfections and edge constraint. [AIAA PAPER 68-285] 16 p2874 A69-32159

**BARR, N. F.**  
Space Radiation Biology, Workshop Conference, University of California, Berkeley, Calif., September 7-10, 1965, Proceedings. 03 p0370 A69-13476

**BARR, R. C.**  
Computing inverse solutions for an on-off heart model. 21 p3668 A69-39865

**BARR, R. E.**  
Comparative aspects of radio-resistance with depressed metabolism. 10 p1643 A69-23126

**BARR, T. A., JR.**  
Performance characteristics of a multiple-arcjet wind tunnel. [AIAA PAPER 68-229] 22 p3927 A69-40541

**BARRACK, J. P.**  
Reingestion characteristics and inlet flow distortion of V/STOL lift-engine fighter configurations. [AIAA PAPER 68-78] 12 p2012 A69-26762

**BARRAND, P.**  
Magnetomechanical damping effects in iron and mu metal. 15 p2639 A69-30586

**BARRAULT, M. R.**  
Stationary equilibrium of a two-dimensional plasma in a magnetic field. 24 p4356 A69-43365

**BARRENTINE, E. M.**  
Novel fire retardant polyesters based on bromine. 08 p1340 A69-20504

**BARRERE, M.**  
Analytical and experimental studies of the steady state combustion mechanism of solid propellants. 16 p2829 A69-31995

**BARRETT, A. H.**  
Radio signals from hydroxyl radicals. 02 p0324 A69-12493  
Water vapor - Observations of galactic sources. 18 p3205 A69-35435

**BARRETT, D. L.**  
Multi-junction solar cells. 19 p3251 A69-35690

**BARRETT, G. V.**  
Human factors evaluation of a computer based information storage and retrieval system. 02 p0204 A69-12220  
Field dependence and target identification. 06 p0880 A69-17211  
Evaluation of a motion simulator not requiring cockpit motion. 17 p2947 A69-34007

**BARRETT, J. M.**  
Aged boric-acid-coated silica reaction vessels. 02 p0205 A69-12322

**BARRETT, K. E.**  
The impulsive rotation of a dipole-magnetized sphere. 03 p0477 A69-13793

**BARRETT, N. T.**  
The structural setting and operation of large paraboloid radio antennae for optimum performance. 06 p1023 A69-17372

**BARRETT, P. J.**  
Dispersion of electron plasma waves. 01 p0126 A69-10277

**BARRIA, D.**  
Demonstration of monoenergetic beams during auroral electron showers /Mise en evidence de faisceaux monoenergetiques lors de precipitations electroniques aurorales/. 12 p2066 A69-26295

**BARRIAGE, J. B.**  
STOL/VTOL aircraft characteristics, terminal navigation and air traffic control. [SAE PAPER 680666] 03 p0465 A69-13452

**BARRICELLI, N. A.**  
The lunar surface and early history of the earth's satellite system. 13 p2345 A69-27654

**BARRINGER, A. R.**  
Surveillance of air pollution from airborne and space platforms. 12 p2096 A69-26981  
Radiophase - A new system of conductivity mapping. 12 p2075 A69-26982

**BARRINGTON, D. K.**  
Contemporary solid rocket motor performance prediction techniques. [AIAA PAPER 69-732] 16 p2840 A69-32674

**BARRINGTON, R. E.**  
Ion composition derived from observations of very low frequency waves. 15 p2604 A69-31410

Ionospheric ion composition deduced from VLF observations.  
20 p3530 A69-37873

Nonlinear plasma effects in the Alouette recordings.  
20 p3495 A69-37886

A preliminary rocket investigation of very low frequency ionospheric resonances.  
21 p3671 A69-38356

**BARRIOL, R.**  
Contribution to the study of pulsating flows - Outline of a method for measuring transient velocity by using an ion probe and a hot wire /Contribution a l'etude des ecoulements pulses - Presentation d'une methode de mesure de la vitesse instantanee par l'utilisation d'une sonde a ions et d'un fil chaud/.  
22 p3951 A69-41257

**BARRITT, P. F.**  
Data relay satellites for support of NASA R and D missions.  
11 p1839 A69-25296

Tracking and data relay satellite system.  
23 p4120 A69-41755

**BARROIS, W.**  
Influence of frequency and test temperature on the fatigue life of test pieces and assemblies of A-U2GN-T6 sheet /Influence de la frequence et de la temperature d'essai sur la duree en fatigue d'eprouvettes et d'assemblages en tole A-U2GN-T6/.  
12 p2180 A69-26359

**BARRON, R. L.**  
Self-organizing and learning control systems.  
07 p1114 A69-18382

Inference of vehicle and atmosphere parameters from free-flight motions.  
[AIAA PAPER 67-600]  
21 p3819 A69-39013

**BARRON, S.**  
Thermocouple cements for nuclear rocket engine nozzles.  
21 p3753 A69-39699

**BARROW, B. B.**  
Indirect atmospheric measurements utilizing Rake tropospheric scatter techniques. I - The Rake tropospheric scatter technique.  
14 p2448 A69-29524

**BARRY, J. D.**  
Day-night variation of Alouette II secondary resonances.  
20 p3496 A69-37889

**BARRY, J. E.**  
Flame emission analysis for sodium in silicon oxide films and on silicon surfaces.  
[ECS PAPER 306]  
08 p1314 A69-20367

**BARRY, R. F.**  
Evaluation criterion for automatic test equipment.  
03 p0428 A69-13187

A note on integral equations and Wolf's theorem.  
08 p1271 A69-19865

Fault isolation by parameter identification.  
11 p1865 A69-25077

**BARRY, R. G.**  
"Weather-type" frequencies and the recent temperature fluctuation.  
13 p2222 A69-28474

**BARRY, S. J.**  
Comparison of speech materials recorded in room air at ground level and in a helium-oxygen mixture at a simulated altitude of 18,000 feet.  
12 p2019 A69-26548

**BARRY, W. T.**  
Design and testing of ablation models with controlled pressure gradients.  
12 p2059 A69-26816

**BARSCZUS, H. G.**  
Geomagnetic micropulsations, pi2, at low latitudes.  
12 p2074 A69-26959

On diurnal variation of geomagnetic pulsations Pc at M'Bour /West Africa/.  
23 p4161 A69-42441

**BARSEGAN, M. G.**  
Hydraulic losses during unstable accelerated laminar motion of a fluid /Gidravlicheskie poteri pri laminarnom rezhime neustanovivshegosia uskorenogo dvizheniia zhidkosti/.  
20 p3513 A69-36973

**BARSONY-NAGY, A.**  
Kutta-Joukowski theorem concerning jet profiles /Asupra teoremei lui Kutta-Jukovski la profile cu jet/.  
11 p1867 A69-24355

A Volterra problem with given singularities for the exterior of a circle /Asupra problemei lui Volterra cu singularitati date pentru exteriorul cercului/.  
24 p4339 A69-42679

**BARSUKOV, I. U. K.**  
Dispersion in a parametric waveguide /O dispersii v parametricheskom volnovode/.  
23 p4123 A69-41943

**BARSUKOV, V. I.**  
Calculation of the thermal conductivity of a chemically reacting gas mixture /K raschetu teploprovodnosti khimicheskii reagiiruiushchei gazovoi smesi/.  
20 p3483 A69-36974

**BARSUKOV, V. N.**  
Rolling and recrystallization textures of nickel - Cobalt alloys.  
04 p0615 A69-14643

**BART, R. K.**  
Precision studies of ASTM thermal conductivity test for refractories.  
22 p3956 A69-40671

**BARTANIAN, I. U. L.**  
Influence of neutron irradiation on the critical parameters of isothermal white dwarfs /Vliianie neutronizatsii na kriticheskie parametry izotermicheskikh belykh karlikov/.  
13 p2351 A69-27871

**BARTASHEVICH, A. I. U.**  
Stability of cylindrical shells during creep with hardening /Ustoichivost' tsilindricheskikh obolochek pri polzuchesti s uprochneniem/.  
18 p3217 A69-34597

**BARTELSTONE, H. J.**  
Cardiac muscle - Changes in optimal length during inotropic interventions.  
23 p4084 A69-41461

**BARTENEV, G. M.**  
The structure and strength of glass fibers of different chemical composition.  
10 p1717 A69-24045

Strength and Failure of Visco-elastic Materials.  
11 p1970 A69-24610

Construction of Green's function for generalized boundary-value problems of the heat-conduction equation using the method of integral equations /Postroenie funktsii Grina obobshchennykh kraevykh zadach uravneniia teploprovodnosti metodom integral'nykh uravnenii/.  
13 p2380 A69-28548

Method of integral equations for constructing the Green's functions of generalized boundary value problems in the analytical theory of heat conduction /Metod integral'nykh uravnenii v analiticheskoi teorii teploprovodnosti pri postroenii funktsii grina kraevykh zadach obobshchennogo tipa/.  
15 p2716 A69-30075

Constitution and strength of glass fibers.  
22 p3974 A69-41039

**BARTENEVA, O. N.**  
Determination of the definitive orbit of Comet Whipple-Fedtko-Tevsadze 1943 I /Opredelenie okonchatel'noi orbity komety uipl-fedke-tevsadze 1943 I/.  
20 p3596 A69-37310

**BARTH, C. A.**  
Planetary ultraviolet experiments.  
[AAS PAPER 68-184]  
02 p0311 A69-11469

Upper atmosphere of Venus.  
02 p0330 A69-12802

Satellite observations of the vertical ozone distribution in the upper stratosphere.  
16 p2788 A69-32645

OGO-IV ultraviolet airglow spectrometer.  
19 p3315 A69-36682

Mariner 6 - Ultraviolet spectrum of Mars upper atmosphere.  
22 p4023 A69-40568

Planetary ultraviolet spectroscopy.  
23 p4113 A69-41616

**BARTH, C. F.**  
Titanium alloys - Stress corrosion susceptibility to fuel tank sealants.  
12 p2112 A69-25945

**BARTHELEMY, C.**  
Flash spectroscopy by Q-switched laser excitation - Application to the study of naphthalene /Spectroscopie par eclair a excitation par laser declenche - Application a l'etude du naphthalene/.  
02 p0254 A69-11544

**BARTHELEMY, L.**  
Preliminary data on a limitation of the use of an oxygen-hydrogen mixture for deep submersion to the saturation point /Premieres donnees sur une limitation de l'utilisation du melange oxygene-hydrogene pour la plongee profonde a saturation/.  
24 p4262 A69-43025

**BARTHE, R. C.**  
Global system of commercial satellite communications.  
09 p1457 A69-22466

**BARTKEVICH, A.**  
Color indices of Nova Delphini 1967 /HR Del/ in the UPXYZV system /Kolor-indeksi Novoi Del'fina 1967 /HR Del/ v sisteme UPXYZV/.  
19 p3426 A69-36564

**BARTKUS, R.**  
Motion of a charged interstellar dust particle in an ionized gas /Dvizhenie zariazhennoi mezhzvezdnoi pylinki v ionizovannom gaze/.  
19 p3425 A69-36562

**BARTKY, C. E.**  
Absorption of infrared radiant energy by CO sub 2 and H sub 2 O. IV.  
12 p2132 A69-26248

**BARTI, E.**  
Observation of the Nova Delphini 1967 with the 2 metre-universal reflecting telescope.  
15 p2682 A69-30439

**BARTLE, P. M.**  
The background to the weldable Al-Zn-Mg alloys.  
02 p0266 A69-12063

**BARTLESON, C. J.**  
Retinal burns from intense light sources.  
02 p0204 A69-12496

**BARTLETT, E. P.**  
An evaluation of ablation mechanisms for the Apollo heat shield material.  
[AIAA PAPER 69-98]  
06 p1038 A69-18149

**BARTLETT, J. F.**  
Discovery of an intense OH emission source.  
09 p1591 A69-21448

**BARTLETT, J. H.**  
Motion under a periodic cubic force.  
02 p0280 A69-11816

Galvanostatic transients in passive iron.  
[ECS PAPER 84]  
03 p0382 A69-13858

**BARTLETT, R. O.**  
Cesium contact ion microthruster experiment aboard applications technology satellite /ATS/ IV.  
[AIAA PAPER 69-297]  
09 p1561 A69-21218

Cesium contact ion microthruster experiment aboard applications technology satellite /ATS/ - iv.  
[AIAA PAPER 69-297]  
24 p4365 A69-43238

**BARTLEY-DENNISS, G. A.**  
The laser in the measurement of velocity and length of materials.  
22 p3955 A69-40237

**BARTLEY, W. C.**  
Measurement of cosmic ray anisotropy of solar origin by Explorer 34 satellite.  
24 p4373 A69-43619

**BARTLING, J. Q.**  
The use of the Alford and Gold effect as a ranging technique.  
21 p3672 A69-38409

Propagation of an electromagnetic wave in an infinite rectangular dielectric wave guide.  
23 p4115 A69-41570

**BARTLMAE, F.**  
Boundary conditions in oblique reaction waves in supersonic flow /Randbedingungen bei schiefen Reaktionsfronten in Ueberschallstroemung/.  
05 p0697 A69-15828

**BARTOCCI, R. S.**  
Erosion tests of compressor alloys and coatings for aircraft gas turbines.  
01 p0099 A69-11058

**BARTOK, S. J.**  
Cardiovascular changes during tilt and leg negative pressure tests.  
01 p0021 A69-11334

**BARTOLINI, C.**  
Photoelectric observations of Nova Delphini 1967.  
20 p3599 A69-37475

**BARTOLOME, Z. M.**  
Neutron radiative capture and transmission measurements of W and Zr isotopes in the key region.  
18 p3175 A69-34314



## BARTOLOTTA, C.

An optical spectrum analyzer for power spectral density measurements.  
08 p1317 A69-21086

## BARTON, D. K.

Handbook of Radar Measurement.  
21 p3678 A69-39668  
Simple procedures for radar detection calculations.  
23 p4132 A69-42547

## BARTON, M. P.

Speculations on the application of pattern recognition techniques to earth resource satellite data.  
21 p3721 A69-38630

## BARTON, R. S.

AVCO 3-D composites - A tailored materials concept.  
08 p1340 A69-20509

## BARTONE, L. M.

Evaluation of advanced gear forging techniques.  
[SAE PAPER 680632] 08 p1321 A69-20732

## BARTOV, A. V.

Absorption of magnetoacoustic waves in a plasma.  
06 p0963 A69-16904

## BARTTER, F. C.

Agreement in endpoints from circadian rhythmometry on healthy human beings living on different continents.  
23 p4083 A69-41457

## BARTZ, D. R.

Survey of the relationship between theory and experiment for convective heat transfer from rocket combustion gases.  
16 p2878 A69-32000

## BARTZ, J. A.

Surface measurements on sharp flat plates and wedges in low-density hypersonic flow.  
20 p3458 A69-37186

## BARUCH, M.

Buckling of cylindrical panels under lateral pressure.  
09 p1621 A69-22782

## BARYSHEV, I. V.

A method of compensating for the amplitude fluctuations of a signal reflected from an aircraft /Spособ kompensatsii amplitudnykh fluktuatsii signala, otrazhennogo ot letatel'nogo apparata/.  
04 p0556 A69-14490

## BARYSHEV, V. A.

Oriental Control of Meteorological Satellites /Kontrol' Orientatsii Meteorologicheskikh Sputnikov/.  
04 p0666 A69-15012

## BARZAKOVSKII, V. P.

Composition and certain properties of the lower oxides of silicon.  
15 p2643 A69-31245

## BARZYKIN, V. V.

Certain laws of the dynamic conditions of ignition /O nekotorykh zakonomernostiakh dinamicheskikh rezhimov zazhiganiia/.  
11 p2000 A69-25188

## BASAVA RAJU, B.

Bending of swept cantilever thin elastic plates.  
20 p3621 A69-37207

## BASAVAIAH, S.

Superconductivity in beta-tungsten films.  
04 p0640 A69-14447

## BASCHEK, B.

The chemical composition of the lambda Bootis stars.  
08 p1385 A69-20062  
On the microturbulence in A and F stars.  
17 p3039 A69-33729  
Abundances of iron and some other elements in the sun and in meteorites.  
24 p4385 A69-43223

## BASETSKII, V. IA.

Role of vacancies and substitutional impurities in the formation of the 1.7-ev luminescence band of gallium phosphide.  
04 p0643 A69-15258

## BASEVICH, V. IA.

Burning and stabilization of a hydrogen flame in an axisymmetric flow /Gorenie i stabilizatsiia plameni vodoroda v osesimmetrichnom potoke/.  
02 p0355 A69-12673  
Promotion of combustion /Promotirovanie goreniia/.  
17 p3069 A69-33139

## BASH, V. IA.

Strain studies by means of a thermoelectric method /Issledovanie deformatsii s pomoshch'iu termoelektricheskogo metoda/.  
11 p1985 A69-25178

## BASHAM, G. R.

MSI 12 bit digital to analog converter.  
[AIAA PAPER 69-968] 22 p3906 A69-40349

## BASHARINOV, A. E.

Measurement of Radio-Thermal and Plasma Radiation in the Microwave Range /Izmerenie Radioteplovyykh i Plazmennyykh Izlucheni v SVCh Diapazone/.  
03 p0420 A69-12919

Study of the radio emission and absorption in a cloudy atmosphere in the millimeter and centimeter wavelength ranges /Issledovanie radioizlucheniia i pogloshcheniia oblachnoi atmosfery v millimetrovom i santimetrovom diapazonakh voln/.  
06 p0954 A69-17998

Specific features of the method of microwave radiometric sounding of the atmosphere from on board aircraft /Osobennosti metoda sverkhvysokochastotno radiometricheskogo zondirovaniia atmosfery s letatel'nykh apparatov/.  
06 p0954 A69-18001

Investigations of the radio emission and absorption of a cloudy atmosphere at millimeter and centimeter wavelengths /Issledovaniia radioizlucheniia i pogloshcheniia oblachnoi atmosfery v millimetrovom i santimetrovom diapazonakh voln/.  
16 p2807 A69-32270

## BASHAROV, R.

Investigation of the current layer expansion in a direction opposite to that of the electrodynamic force /Issledovanie rasprostraneniia sloia toka protiv elektrodinamicheskoi sily/.  
12 p2141 A69-27130

Structural changes in a molybdenum single crystal under the action of laser radiation /Strukturnye izmeneniia monokristalla molibdena pod deistviem lazernogo oblucheniia/.  
21 p3750 A69-39842

## BASHKIN, S.

Beam-Foil Spectroscopy, Proceedings of the Conference, University of Arizona, Tucson, Ariz., November 20-22, 1967. Volume 1.  
03 p0470 A69-13160  
General review of beam-foil spectroscopy.  
03 p0470 A69-13161

Beam-foil Spectroscopy, Proceedings of the Conference, University of Arizona, Tucson, Ariz., November 20-22, 1967. Volume 2.  
03 p0507 A69-13168

Beam foil spectroscopy.  
04 p0595 A69-14276

Mean life of the 2p super 2 super 1 D level in C III.  
07 p1184 A69-18643

Mean life of the 2p super 2 super 1 D level in N IV.  
17 p3009 A69-34187

Mean lives of the ip super 2 super 1 D level in F VI and O V.  
17 p3009 A69-34188

Beam-foil excitation of levels in S II and S III.  
18 p3177 A69-35015

Measurement of the transition probabilities of some N I ultraviolet multiplets /Mesure des probabilites de transition de quelques multiplets ultraviolets de N I/.  
18 p3178 A69-35413

Relative intensities and exponential decay of a doublet in N V.  
21 p3774 A69-38760

## BASHKIN, V. A.

Uniqueness of self-similar solutions of the three-dimensional laminar boundary layer equations /Ob edinstvennosti avtomodel'nykh reshenii uravnenii prostranstvennogo laminarnogo pogranichnogo sloia/.  
02 p0233 A69-12572

Calculation of the equations of a three-dimensional laminar boundary layer by the integral relation method /Ruschet uravnenii prostranstvennogo pogranichnogo sloia metodom integral'nykh sootnoshenii/.  
09 p1430 A69-21789

Investigation of the heat exchange on sharp elliptical cones in a supersonic flow at large angles of attack /Issledovanie teploobmena na ostrykh elipticheskikh konusakh v sverkhzvukovom potoke pri bol'shikh uglokh ataki/.  
11 p1821 A69-25477

## BASHKOW, T. R.

Engineering Applications of Digital Computers.  
04 p0563 A69-14514

## Introductory concepts.

04 p0563 A69-14515

## Problem analysis.

04 p0563 A69-14516

## BASHTA, O. T.

Some problems associated with the vibrations of rectangular pipelines containing a flowing liquid /Nekotorye voprosy kolebaniy priamolineinykh trub s boprovodov s protekaushchei zhidkost'iu/.  
17 p2904 A69-33930

The logarithmic vibration decrement during various modes of vibration of prismatic rods /O logarifmicheskomo dekremente kolebani pri raznykh formakh kolebaniy prizmaticheskikh sterzheni/.  
17 p3065 A69-33936

## BASIEV, A. G.

Automatic frequency control of a laser and regenerative amplifier.  
15 p2633 A69-30238

## BASIULIS, A.

An electrically insulated heat pipe for depressed collectors.  
11 p1847 A69-24746

Heat pipe design for electron tube cooling.  
[ASME PAPER 69-HT-25] 24 p4412 A69-43543

## BASKAKOVA, Z. A.

Power amplification of a laser pulse acting on a substance in the presence of induced Mandelstam-Brillouin backscattering.  
04 p0612 A69-15414

Measurement of the power of reflected and transmitted light when focusing a laser beam in a liquid /Izmerenie moshchnosti otrazhennogo i prokhodiashego sveta pri fokusirovke lazernogo луча v zhidkosti/.  
14 p2459 A69-29392

## BASKETT, J. R.

A high gain, time-resolving spectrograph for the diagnosis of laboratory simulated reentry.  
24 p4317 A69-43759

## BASKIN, H. B.

A multilevel modeling structure for interactive graphic design.  
05 p0724 A69-16381

## BASKIN, V. E.

Linear theory of unsteady gas motion under the action of nonpotential external forces /K lineinoi teorii nestatsionarnogo dvizheniia gaza pod deistviem nepotentsial'nykh vneshnikh sil/.  
24 p4246 A69-43483

## BASKIND, D.

A-V-I-A-R-M-F-I-C-S - Avionics-Armament-Fire Control System for the Cheyenne Weapon System.  
[AHS PAPER 312] 17 p2903 A69-33542

## BASL, G.

Detection of titanium hydride by neutron radiography.  
24 p4320 A69-42998

## BASNETT, D.

Environmental assessment of thin silicon solar cells from pilot production.  
19 p3252 A69-35699

## BASNIGHT, A. O.

Human engineering in SST development.  
01 p0019 A69-10451

The impact of structures at airports on flight operations.  
[AIAA PAPER 69-809] 19 p3289 A69-35622

## BASON, R.

An attempt to produce acclimatization to hypoxia by intermittent altitude exposure with vigorous exercise.  
23 p4086 A69-41678

## BASORE, B. L.

Analysis of cross-polarized components of radar reflection data.  
14 p2416 A69-29536

## BASOV, N. G.

Generation and amplification of ultrashort optical pulses.  
[IEEE PAPER H-12] 05 p0774 A69-16317

Obtaining population inversion for molecules in a supersonic binary-gas flow in a Laval nozzle /Poluchenie invernoi naselennosti molekul v sverkhzvukovom potoke binarnogo gaza v sople Lavalia/.  
07 p1118 A69-18540

Dynamics of injection lasers.  
[IEEE PAPER O-1] 07 p1153 A69-19071

Experiments on the observation of neutron emission at a focus of high-power laser radiation on a lithium deuteride surface.  
[IEEE PAPER O-11] 07 p1153 A69-19072

- Generation and amplification of high-intensity light pulses in neodymium glass.  
08 p1323 A69-19946
- Semiconductor laser with an external resonator /Poluprovodnikoviyi kvantoviyi generator s vneshnim rezonatorom/.  
08 p1326 A69-20543
- High temperature effects of intense laser emission focused on a solid target.  
09 p1520 A69-22656
- Optical frequency standards /Opticheskie standarty chastoty/.  
10 p1702 A69-23299
- Laser application for investigations of the high-temperature and plasma phenomena.  
10 p1741 A69-23809
- Frequency stability of a He-Xe laser with nonresonant feedback.  
12 p2105 A69-26049
- Investigation of ultrashort light pulses employing time-base image converter tube.  
12 p2083 A69-26139
- Laser beam usage for high-speed photography.  
12 p2086 A69-26165
- Generation spectrum of a chemical laser using a mixture of H sub 2 and Cl sub 2.  
14 p2461 A69-29672
- Dynamics of the emission of injection semiconductor lasers /Dinamika izlucheniia inzhetsionnykh poluprovodnikovykh lazerov/.  
16 p2796 A69-31949
- Measurement of the time variation of the temperature of the plasma of a laser flare by means of its X-radiation.  
18 p3154 A69-35496
- Molecular population inversion in the supersonic flow of a binary gas in a Laval nozzle.  
21 p3693 A69-38692
- Study of gasdynamic processes occurring during the vaporization of a solid material under the action of laser emission /Issledovanie gazodinamicheskikh protsessov, vznikaiushchikh pri isparenii tverdogo veshchestva pod deistviem izlucheniia lazera/.  
21 p3740 A69-39551
- Emission spectrum of a chemical laser using an H sub 2 plus F sub 2 mixture.  
23 p4172 A69-41493
- Two-level gas laser with coherent optical pumping.  
24 p4327 A69-43067
- BASQUE, M.**  
Temporary storage unit with a cycle time of 500 nsec /Memoire temporaire a temps de cycle de 500 ns/.  
04 p0564 A69-15222
- BASS, A. M.**  
Matrix-isolation spectra of discharge "sputtered" metals.  
06 p0957 A69-17113
- The fourth positive system of carbon monoxide observed in absorption at high resolution in the vacuum ultraviolet region.  
09 p1607 A69-22429
- BASS, C. D.**  
Fatigue behavior of titanium castings. [ASME PAPER 69-GT-22]  
09 p1619 A69-22497
- BASS, D.**  
Buckling of twisted bars as an example of the application of Schaefer's theory of two-parameter eigenvalue problems /Die Knickung verwundener Staebel als technisches Beispiel zur Schaefer'schen Theorie zweiparametrischer Eigenwertprobleme/.  
04 p0682 A69-15290
- BASS, F. G.**  
Theory of electromagnetic wave propagation in nonlinear media /K teorii rasprostraneniia elektromagnitnykh voln v nelineinykh sredakh/.  
03 p0396 A69-13707
- BASS, J. C.**  
Pulsed J band /12.4-18 GHz/ Gunn-effect oscillators.  
09 p1468 A69-22594
- BASS, M.**  
Frequency- and time-dependent gain characteristics of laser- and flashlamp-pumped dye solution lasers.  
02 p0257 A69-12616
- Locking in multimode solid-state lasers.  
09 p1514 A69-21344
- Frequency- and time-dependent gain characteristics of dye lasers.  
17 p2980 A69-33025
- BASS, R. F.**  
Annealing of 10 Mev electron damage in silicon.  
06 p0974 A69-16865
- BASS, R. L.**  
Some correlations of theory and experiment for developing turbulent free shear layers. [ASME PAPER 68-FE-9]  
05 p0748 A69-16077
- BASS, S. D.**  
Automatic telemetry data processing.  
05 p0727 A69-16770
- BASSANINI, P.**  
Influence of the accommodation coefficient on the heat transfer in a rarefied gas.  
01 p0177 A69-11405
- BASSETT, A. L.**  
Cardiac muscle - Changes in optimal length during isotropic interventions.  
23 p4084 A69-41461
- BASSETT, D. A.**  
Small precessional motion of axisymmetric spinning bodies due to disturbing moments.  
10 p1724 A69-22932
- BASSETT, R. J.**  
A novel method for the direct determination of the small signal bulk minority carrier lifetime in the middle region of a semiconductor sandwich.  
01 p0136 A69-10242
- Observations on a method of determining the carrier lifetime in p super plus -nu-n super plus diodes.  
16 p2757 A69-31615
- BASSHAM, L. B.**  
A liquid rocket performance model based on vaporization interactions. [AIAA PAPER 69-470]  
16 p2838 A69-32663
- BASTIAN, R. P.**  
A systematic approach to accelerated testing. [AIAA PAPER 69-1036]  
22 p3925 A69-40403
- BASTIANON, R. A.**  
Unsteady solution of the flowfield over concave bodies. [AIAA PAPER 68-946]  
13 p2199 A69-28228
- BASTIN, J. A.**  
Continuous spectrum of Taurus A at 1.2 mm wavelength.  
09 p1597 A69-22156
- Submillimetre solar radiation at sea level.  
13 p2327 A69-27590
- Millimetre and submillimetre astronomy.  
13 p2343 A69-27603
- BASTOW, T. J.**  
Surface layer fracture of brittle materials by giant laser pulses.  
11 p1899 A69-25402
- BASTUN, V. N.**  
A case of the dependence of the reduced modulus of elasticity on the form of the stressed state /Ob odnom sluchae zavisimosti privedennogo modulia uprugosti ot vida napriazhennogo sostoiianiia/.  
11 p1986 A69-25182
- BASU, B.**  
Photoelectric observations of ET Pegasi.  
15 p2694 A69-30787
- BASU, D.**  
Relation between the visibility of Jupiter's red spot and solar activity.  
11 p1964 A69-25404
- BASU, D. K.**  
A wide-range linear delay circuit.  
01 p0041 A69-10241
- BASU, J.**  
RF impedance method for determining the electron density and collision frequency in a plasma.  
14 p2492 A69-29352
- BASU, M. K.**  
A wire calorimeter for energy measurement of pulsed ruby laser.  
19 p3339 A69-36755
- BASU, S.**  
Scintillations of satellite signals by ionospheric irregularities with sharp boundary.  
09 p1489 A69-21713
- Correlation of sudden frequency deviations with solar microwave bursts.  
20 p3592 A69-38101
- BATALOV, I. U. V.**  
Calculation of the optimal shape of modulation for a light emission flux /Raschet optimal'noi formy moduliatsii potoka svetovogo izlucheniia/.  
04 p0560 A69-15376
- Calculation of the optimum shape of light flux modulation.  
16 p2752 A69-32123
- BATCHELDER, O. R.**  
The support elements of a multipurpose tester.  
11 p1864 A69-25069
- BATCHELOR, R. A.**  
A multi-channel spectral line receiver for radio astronomy.  
24 p4283 A69-43115
- BATDORF, S. B.**  
On the application of inverse differential operators to the solution of cylinder buckling and other problems.  
12 p2186 A69-26841
- BATE, R. T.**  
Electrical properties of nonuniform crystals.  
04 p0641 A69-14506
- BATENIN, V. M.**  
Experimental investigation of the transport properties of a partially ionized plasma /Eksperimental'noe issledovanie transportnykh svoystv chastichno ionizirovannoi plazmy/.  
06 p0969 A69-17907
- Calculation of the electrical conductivity of a partially ionized plasma /K raschetu elektroprovodnosti chastichno ionizovannoi plazmy/.  
09 p1546 A69-21584
- Diagnostics of a low-current arc discharge plasma by means of a light probe /Dagnostika plazmy slabotochnogo dugovogo razriada pri pomoshchi svetovogo zonda/.  
09 p1546 A69-21586
- Electrophysical and radiative properties of a nonequilibrium argon-potassium plasma as a possible working fluid for an MHD generator /Elektrofizicheskie i radiatsionnye svoystva neravnovesnoi argon-kalievoy plazmy-vozmozhnogo rabocheho tela MGD-generatora/.  
10 p1732 A69-23441
- Temperature on the axis of an electric arc in argon /O temperature na osi elektricheskoi dugi v argone/.  
15 p2662 A69-30977
- BATES, C.**  
Measurement of the probability density function of a microwave noise generator.  
02 p0221 A69-12459
- BATES, C. P.**  
A factorization procedure for Wiener-Hopf kernels.  
11 p1851 A69-24998
- Quasi-optical theory of diffraction by a semi-infinite waveguide with applications to open resonators.  
17 p2930 A69-33888
- BATES, D. R.**  
Response of a planetary thermosphere to heating by solar radiation. [AFCLR-69-0363].  
04 p0649 A69-15130
- Simple treatments of three-body ionic recombination.  
05 p0795 A69-15661
- Three-body ionic recombination at moderate and high gas densities.  
09 p1542 A69-21624
- Charge transfer and vibrational excitations in H super plus sub 2 - H sub 2 collisions.  
13 p2302 A69-28196
- BATES, G.**  
Survival aspects - Third generation jets.  
22 p4054 A69-41142
- BATES, G. P., JR.**  
Aircraft operations - V/STOL.  
05 p0703 A69-16723
- BATES, H. E.**  
Controlled solidification of metal matrix composites utilising monovariant eutectic reactions.  
07 p1166 A69-19145
- BATES, H. F.**  
Spatial relationships between HF radar aurora, optical aurora and electron precipitation.  
06 p0918 A69-17383
- Aspect sensitivity of HF auroral echoes.  
09 p1488 A69-21700
- Survey of polar and auroral region effects on HF propagation.  
12 p2032 A69-26859
- BATES, H. S.**  
Built-in-test for aircraft solid state electric systems.  
17 p2977 A69-34110



## BATES, L. G.

BATES, L. G.

Metallographic technique for filament-reinforced, metal-matrix composites.

01 p0103 A69-11269

BATES, P.

The Tucson selenodetic triangulation.

07 p1225 A69-19774

BATES, R. C.

Fractography and fracture mechanics.

20 p3557 A69-36957

BATES, R. E.

Progress on the DC-10 development program.

[AIAA PAPER 69-830] 19 p3248 A69-36296

BATES, R. H. T.

Contributions to the theory of intensity interferometry.

11 p1888 A69-25256

Radar calibration test satellite.

20 p3617 A69-37714

BATESON, F. M.

Optical and radio observations of the flare star UV Ceti in Australasia during September-October 1967.

07 p1214 A69-18666

BATHAM, J. P.

A reattachment criterion for turbulent supersonic separated flows.

04 p0588 A69-14727

BATHKER, D. A.

The ultra cone - An ultra-low-noise space communication ground radio-frequency system.

[JPL-TR-32-1340] 02 p0220 A69-12429

BATICLE, A.-M.

Contribution to the study of the conduction mode in single-crystal tungsten oxide /WO sub 3 /Contribution a l'etude du mode de conduction dans l'oxyde de tungstene WO sub 3 monocristallin/.

16 p2825 A69-31609

BATIFFOL, J.-M.

Statistical model for the signal of a single-mode gas laser /Modele statistique pour le signal d'un laser a gaz monomode/.

18 p3152 A69-34820

BATKA, J. J.

Development of a turbine inlet temperature sensor.

[AIAA PAPER 69-544] 16 p2792 A69-32692

BATKOV, A. M.

General problems in guidance theory /Obshchie voprosy teorii navedeniia/.

21 p3687 A69-39643

BATRA, N. N.

Tail rotor design. I - Aerodynamics.

[AHS PAPER 300] 17 p2895 A69-33549

BATS, A.

Toward the orbital station /Vers la station orbitale/.

06 p1013 A69-17266

BATSON, B. H.

Transmission characteristics of split-phase PCM codes.

21 p3676 A69-39451

An analysis of the telecommunications performance of a lunar relay satellite system.

23 p4129 A69-42508

BATSON, P. Y.

Behavior of primates following injection of monomethylhydrazine with and without pyridoxine.

03 p0375 A69-14068

BATSON, R. M.

Photogrammetry with surface-based images.

23 p4164 A69-41618

BATTERMAN, S. C.

Plastic stability of spherical shells.

13 p2361 A69-27439

BATTERSBY, E. J.

Computer assisted instruction in the diagnosis of cardiac arrhythmias.

21 p3667 A69-39606

BATTERSBY, W. S.

Neural limitations of visual excitability - After-effects of subliminal stimulation.

22 p3881 A69-40860

BATTERSHALL, B. W.

Optimization of diode structures for monolithic integrated microwave circuits.

01 p0040 A69-10195

BATTERSON, S. A.

Principal science results from Surveyor 5.

02 p0321 A69-12224

Lunar surface mechanical properties.

02 p0321 A69-12225

BATTISTA, R. A.

Experimental studies bearing on mechanistic modeling of composite solid propellant combustion.

[WSCI PAPER 69-16] 16 p2831 A69-32354

BATTISTINI, P.

Photoelectric observations of Nova Delphini 1967.

20 p3599 A69-37475

BATTOCLETTI, J. H.

The magnetic resonance flowmeter.

15 p2616 A69-31290

BATUEVA, N. B.

Influence of polar flattening of Jupiter on the motion of an artificial satellite around one of the Galilean satellites of Jupiter /Vliianie poliarnogo szhatiia Iupitera na dvizhenie iskusstvennogo sputnika odnogo iz galileevykh sputnikov Iupitera/.

18 p3199 A69-34913

BATULEV, V. N.

Nature of the propagation of high-power light beams in certain transparent cubic crystalline media /O kharaktere rasprostraneniia moshchnykh svetovykh puchkov v nekotorykh prozrachnykh kubicheskikh kristallicheskikh sredakh/.

03 p0438 A69-13051

Investigation of the mechanism of two-photon absorption and stimulated emission of CdS-CdSe mixed crystals /Issledovanie mekhanizma dvukhfotonnogo pogloshcheniia i vyznuzhdenno izlucheniia smeshannykh kristallov CdS-CdSe/.

03 p0438 A69-13052

BATY, D. L.

Human information processing rates during certain multiaxis tracking tasks with a concurrent auditory task.

10 p1650 A69-23880

BATY, J.

Orthogonal formulation of structural network problems using the concepts of open and closed paths.

03 p0526 A69-13735

BATYREVA, O. V.

Calculation of the significance of the multiple correlation coefficient and selection of the optimal number of predictors /Raschet znachimosti koeffitsienta mnozhestvennoi korreliatsii i vybor optimal'nogo chisla predskazatelei/.

13 p2293 A69-27843

Statistical prediction of surface pressure for 1, 3, and 5 days /Statisticheskii prognoz prizemnogo davleniia na 1, 3, 5 dnei/.

23 p4184 A69-42491

BATZIES, P.

Preparation and investigation of tungsten surfaces with preferred orientations.

14 p2506 A69-29267

The influence of oxygen on the work function of tungsten.

14 p2507 A69-29273

BATZINGER, A. F.

Computerized shake facility for testing the Saturn V moon rocket.

10 p1672 A69-23285

BAUCH, H. W., SR.

Ceramic Fibers and Fibrous Composite Materials.

12 p2118 A69-26340

BAUDER, U.

Investigation of plasmas at very high pressure.

15 p2659 A69-30377

BAUDET, J.

Construction of a Kerr effect apparatus /Construction d'un appareil d'effet Kerr/.

01 p0078 A69-10039

BAUDIN, G.

A device for the direct measurement of permanent deformations /Un appareil destine a la mesure directe des deformations permanentes/.

11 p1884 A69-24757

BAUDO, G.

Inter-crystalline corrosion of stainless austenitic steels measured on the basis of internal friction at audio frequencies /Interkristalline Korrosion nichtrostender austenitischer Staehle, gemessen auf Grund der inneren Reibung bei Schallfrequenzen/.

10 p1713 A69-23819

BAUDRY, H. G.

Study of the surface dividing of air lanes in two /Etude sur le dedoublement en surface des voies aeriennes/.

15 p2651 A69-30293

BAUDU, N.

Aerodynamic field induced by a plate moving rapidly at a velocity normal to its plane in an atmosphere initially at rest /Champ aerodynamique induit par une plaque animee rapidement d'une vitesse normale a son plan dans une atmosphere initialement au repos/.

12 p2011 A69-26288

BAUE, A. E.

Effect of carbon monoxide on function and structure of the lung.

22 p3874 A69-40224

BAUER, E.

A review of atomic and molecular excitation mechanisms in nonequilibrium gases up to 20000 de K.

08 p1354 A69-20146

Energy transfer mechanisms in hypersonic shocks.

12 p2063 A69-26969

The influence of impurities on the formation of single-crystal films.

22 p3992 A69-39899

Methods for calculating inelastic collision cross sections in low-energy collisions.

23 p4194 A69-41520

BAUER, H.

Design of a circulation pump for liquid hydrogen.

01 p0087 A69-11148

BAUER, H.-J.

Homogeneous mechanical stresses in amorphous and crystalline gallium films /Homogene mechanische Spannungen in amorphen und kristallinen Galliumschichten/.

01 p0141 A69-11420

BAUER, L. O.

Microwave scattering and noise emission from afterglow plasmas in a magnetic field.

18 p3127 A69-34436

BAUER, S. F.

Power conditioning development for the Sert II ion thruster.

23 p4075 A69-42301

BAUER, S. H.

Bimolecular reaction of N sub 2 O with CO and the recombination of O and CO as studied in a single-pulse shock tube.

16 p2748 A69-32793

Single-pulse shock-tube studies of the pyrolysis of fluorocarbons and of the oxidation of perfluoroethylene.

18 p3099 A69-34467

BAUER, S. J.

Diffusive equilibrium in the topside ionosphere.

20 p3531 A69-37887

BAUES, P.

Investigation of selected natural oscillations in a CaWo sub 4 -Nd super 3 super plus laser /Untersuchung von selektierten Eigenschwingungen eines CaWo sub 4 -Nd super 3 super plus Lasers/.

11 p1894 A69-24471

BAUM, G.

Rheology of dispersions of high aspect ratio sub-microscopic whiskers.

01 p0102 A69-11260

Calculation of the immobile portion of the space charge in a MOS-structure semiconductor /Berechnung des unbeweglichen Anteiles der Raumladung im Halbleiter einer MOS-Struktur/.

06 p0979 A69-17153

BAUM, H.

Transmitter equipment of the Raisting ground station for radio communications via the Intelsat 3 satellites /Die Sendeeinrichtungen der Erdefunkstelle Raisting fuer den Nachrichtenverkehr ueber die Intelsat-III-OSATELLITEN/.

22 p3902 A69-41249

BAUM, H. R.

A model kinetic equation for an electron plasma.

04 p0636 A69-15042

BAUM, M.

Properties of a fire-retardant, thermally-stable, electrical-grade thermoset.

08 p1340 A69-20506

BAUM, W.

Vacuum-engineering problems during the testing of rocket engines /Vakuuntechnische Probleme bei der Erprobung von Raketenmotoren/.

[TR-781-O] 09 p1570 A69-22300

BAUMAN, A. J.

Sterile soil from Antarctica - Organic analysis.

16 p2746 A69-31552

- BAUMAN, E. J.**  
Two-level optimization techniques for dynamic systems. 01 p0051 A69-10440  
Multilevel optimization techniques with application to trajectory decomposition. 04 p0581 A69-14570  
Some recent results in aerospace vehicle trajectory optimization techniques. 06 p1006 A69-17569
- BAUMAN, V. A.**  
Influence of the rotation of the earth and the actual speed of the aircraft on the behavior of vertical gyroscopes during banking /O vliiani vrashchenia zemli i sobstvennoi skorosti samoleta na povedenie girovertikalей pri virazhe/. 09 p1498 A69-22107
- BAUMANIS, A. M.**  
Bending-torsion mode of a rotating tapered- twisted turbomachine blade. [ASME PAPER 68-WA/GT-6] 05 p0838 A69-16141  
Bending-bending mode of a rotating tapered- twisted turbomachine blade including rotatory inertia and shear deformation. [ASME PAPER 69-VIBR-50] 10 p1804 A69-24148
- BAUMANN, G.**  
A spherically symmetrical water-bag model /Modele de l'outre en symetrie spherique/. 16 p2866 A69-32813
- BAUMANN, H.**  
Evaluation of multisensory signal-processing in cortical and brain stem regions of the albino rat /Evaluation multisensorischer Signalverarbeitungsprozesse in kortikalen und Stammhirn-Bereichen der Albino-Ratte/. 23 p4092 A69-42055
- BAUMEISTER, J.**  
Regulator for generating or increasing the static and dynamic stability of high-performance aircraft /Ueber einen Regler zur Erzeugung oder Erhoehung statischer und dynamischer Stabilitaet von Hochleistungsflugzeugen/. 08 p1255 A69-20719
- BAUMEISTER, K. J.**  
Creeping flow solution of Leidenfrost boiling with a moving surface. [AICHE PAPER 20] 15 p2718 A69-31116  
Hyperbolic heat-conduction equation - A solution for the semi-infinite body problem. [ASME PAPER 69-HT-1] 24 p4414 A69-43564
- BAUMEISTER, P. W.**  
Radiant power flow and absorbance in thin films. 11 p1896 A69-24850
- BAUMGAERTEL, G.**  
The laminar flame speeds of propane-ammonia-air mixtures. 21 p3849 A69-38809
- BAUMGART, H.**  
Data collection system for climatological stations /Messwerterfassungsanlage fuer Klimastationen/. 20 p3538 A69-37428
- BAUMGARTH, S.**  
Kaufman ion thruster of the DFVLR Braunschweig. 17 p3022 A69-33605  
Experimental results of the electrostatic ion propulsion system ESKA 18 /Experimentelle Ergebnisse ueber das elektrostatische Ionentriebwerk ESKA 18/. 23 p4203 A69-41934
- BAUMGARTNER, W. E.**  
Thermal decomposition behavior of perchlorate oxidizers studied by flash mass thermal analysis. [WSCI PAPER 69-19] 16 p2832 A69-32357
- BAUR, F.**  
Cosmic aspects of organic evolution - A supplement to the contribution by Prof. G. Simpson /Kosmische Aspekte der organischen Evolution - Eine Ergaenzung zum Beitrag von Prof. G. Simpson/. 21 p3652 A69-38786
- BAURDOUX, H. I.**  
An application of the n-strip method of integral relations for analyzing the flow around a circular cone. 20 p3460 A69-38128
- BAUS, M.**  
Interactions in a classical relativistic plasma. 05 p0801 A69-15770
- BAUSCH, W. E.**  
Helicopter rotor noise prediction and control. 22 p3864 A69-40676
- BAUSSET, M.**  
Application of the method of Pade to the determination of shock waves. 19 p3241 A69-36778
- BAUST, W.**  
Gastric motility and pH during natural human sleep /Das Verhalten von pH und Motilitaet des Magens im natuerlichen Schlaf des Menschen/. 23 p4093 A69-42063
- BAUZE, V. R. E.**  
Orbital trajectories about a planet with reentry to the earth /Traektorii obleta planety s vozvrashcheniem k zemle/. 05 p0823 A69-16042  
Trajectories of a flight around a planet with return to the earth. 20 p3606 A69-37951
- BAVA, E.**  
Intermodulation noise in a wideband amplifier with multicarrier input. 08 p1285 A69-20595
- BAVA, G. P.**  
Intermodulation noise in a wideband amplifier with multicarrier input. 08 p1285 A69-20595
- BAVAGNOLI, F.**  
Performances of a fluidic power switch. 08 p1256 A69-20304
- BAVRO, G. V.**  
Heat stress dynamics and limits of heat tolerance in man. 08 p1263 A69-19940
- BAVYKIN, I. B.**  
An optical method of measuring the burning- surface temperature of condensed systems. 13 p2379 A69-28453
- BAWN, C. E. H.**  
Structure and performance. 18 p3099 A69-34606
- BAXI, C. B.**  
A theoretical study of pulsating combustion. 09 p1625 A69-22694  
Theoretical evaluation of the normal velocity of flame propagation. 09 p1625 A69-22695
- BAXTER, A. J.**  
Calculations on the arrival-time distribution and energy content of extensive air showers at large core distances. 07 p1186 A69-19410  
The diffuse X-radiation spectrum below 4 kev. 10 p1770 A69-24094  
A spectral measurement of the cosmic X-ray background down to 2 kev. 21 p3787 A69-38351
- BAXTER, D. C.**  
Techniques for the design of linear digital simulations. 06 p0906 A69-17491
- BAXTER, R. E.**  
Semiconductor impressed voltage preconditioning/screening. 16 p2758 A69-31713
- BAXTER, R. J.**  
Ornstein-Zernike relation for a disordered fluid. 04 p0591 A69-15435
- BAY, Z.**  
Locking a laser frequency to the time standard. 05 p0773 A69-16291
- BAYER, L.**  
Behavioral and physiological changes during prolonged immobilization plus perceptual deprivation. 24 p4256 A69-42554
- BAYER, R. G.**  
On the significance of surface fatigue in sliding wear. 01 p0085 A69-10368
- BAYER, Z.**  
Thermal efficiencies of liquid-metal MHD generator cycles. 13 p2205 A69-27484
- BAYLE, A.**  
Experimental study of an antiflexure cylinder for a large astronomical mirror conducted for the benefit of the European Southern Observatory /ESO/ /Recherche experimentale d'un barillet antiflexion pour un grand miroir d'astronomie, effectuee pour le compte de l'European Southern Observatory /ESO/. 12 p2056 A69-26409
- BAYLE, D.**  
The properties linked to the concept of a family of eigenfunctions in a continuous isotropic medium /Sur les proprietes liees a la notion de famille de fonctions propres en milieu continu isotrope/. 08 p1417 A69-20752
- BAYLESS, J. R.**  
LM cathode electron bombardment thrusters. [AIAA PAPER 69-302] 09 p1569 A69-21876  
Interaction of an electron beam with a whistler /helicon/ wave in a semiconductor plasma. 10 p1742 A69-24107
- BAYLESS, J. W.**  
Linear processing of digital communication signals. 03 p0391 A69-13226  
Threshold investigation of phase-locked discriminators. 04 p0580 A69-15471
- BAYLEY, F. J.**  
The heat transfer performance of porous gas turbine blades. 05 p0812 A69-16400
- BAYNHAM, A. C.**  
Space harmonics in a drifted solid-state plasma. 02 p0287 A69-11945
- BAYROCK, L. A.**  
Vilna meteorite - Camera, visual, seismic and analytic records. 13 p2334 A69-27189
- BAYSINGER, F. R.**  
Welding aluminum to steel using transition insert pieces. 11 p1891 A69-24929
- BAZAJ, D. K.**  
Machined fastened joints - Their use in aerospace structures. 19 p3319 A69-35553
- BAZAROV, E. N.**  
Effect of filtering of the pump light on the frequency of the 0-0 transition of Rb87. 04 p0611 A69-14779  
Short-term frequency stability of a Rb super 87 vapor laser /Kratkovremennaya stabil'nost chastoty kvantovogo generatora na parakh Rb super 87/. 05 p0770 A69-15656  
Dependence of the Rb laser frequency on the pump radiation intensity. 09 p1520 A69-22636  
A gas laser using atmospheric air /Gazovyi lazer na atmosfernom vozdukh/. 11 p1895 A69-24625  
A laser based on CO sub 2 formed chemically in an electrical discharge /Opticheskii kvantovyi generator na khimicheskii obrazovannom v elektricheskoi razriade CO sub 2/. 13 p2274 A69-28585  
Short-term frequency stability of an Rb87 vapor maser. 16 p2798 A69-32513  
Approximate theory of Rb super 87 -vapor laser with optical pumping /Priblizhennaya teoriya kvantovogo generatora s opticheskoi nakachkoi na parakh Rb super 87/. 19 p3335 A69-36342  
Experimental investigation of the steady-state operation of an Rb super 87-vapor laser with optical pumping /Eksperimental'noe issledovanie statsionarnogo rezhima raboty kvantovogo generatora na parakh Rb super 87 opticheskoi nakachkoi/. 19 p3336 A69-36343  
Light-induced shift of rubidium laser frequency during modulated optical pumping /Svetovoi sdvig chastoty rubidiovogo kvantovogo generatora pri modulirovannoi opticheskoi nakachke/. 19 p3336 A69-36344  
Investigation of the frequency shift in the S sub 1/2, F equals 2, m sub F equals 0 S sub 1/2, F equals 1, m sub F equals 0 transition of Rb super 87 atoms during pulsed optical pumping /Issledovanie sdviga chastoty perekhoda S sub 1/2, F equals 2, m sub F equals 0 S sub 1/2, F equals 1, m sub F equals 0 atomov Rb super 87 pri impul'snoi opticheskoi nakachke/. 19 p3336 A69-36345
- BAZAROV, V. D.**  
Dynamic current-voltage characteristics of thin-film diodes on a chalcogenide-glass base /Dinamicheskie vol'tampernye kharakteristiki tonkoplennocnykh diodov na osnove khal'kogenidnykh stekol/. 02 p0223 A69-12834



## BAZARZHAPOV, A. D.

Analytic description of the planetary distribution of ionospheric parameters.

06 p0921 A69-17745

Analytical description of the space-time variations of  $f_{sub 0} F_2$  /Analiticheskoe opisanie prostranstvenno-vremennyykh variatsii  $f_{sub 0} F_2$ /.

09 p1486 A69-21545

Worldwide Isopor charts for the period from 1960 through 1965 /Mirovye karty izopor dlia perioda 1960-1965 gg./.

10 p1687 A69-23920

Analytical description of the space-time variations of  $f_{sub 0} F_{sub 2}$ .

16 p2783 A69-32540

## BAZEEV, E. T.

Liquid-metal MHD systems with laminar flow and electric power generation by the synchronous principle /Zhidkometallicheskie MGD-sistemy so sloistym potokom i otborom elektricheskoi moshchnosti po sinkhronnomu printsipu/.

13 p2206 A69-27491

## BAZER, J.

Wave propagation in two-dimensional anisotropic media - A study of the fundamental solution and its lacunas.

17 p2925 A69-33841

## BAZERGUI, A.

Embedded strain gauges.

21 p3725 A69-39327

## BAZHENOV, V. A.

Annular stresses in cylindrical shells reinforced by longitudinal ribs /O kol'tsevykh napriazheniyakh v tsilindricheskikh obolochkakh, usilennykh prodol'nymi rebrami/.

05 p0841 A69-16208

## BAZHENOV, V. G.

Improvement of solutions to boundary value problems in elasticity theory for nonstar-shaped doubly connected regions /Utochnenie resheniya kraevykh zadach teorii uprugosti dlia nezvezdchatykh dvukhsviaznykh oblastei/.

12 p2178 A69-25998

## BAZHENOVA, T. V.

Shock Waves in Real Gases /Udarnye Volny v Real'nykh Gazakh/.

04 p0589 A69-14937

Experimental studies of the parameters of the flow behind a shock wave moving in relaxing gas.

19 p3298 A69-36362

Mach reflection of shock waves in real gases.

19 p3450 A69-36363

## BAZHULIN, A. P.

Obtaining a visible image of radio emission in the millimeter band.

04 p0560 A69-15272

## BAZILEVICH, R. P.

Specialized machine for expanding matrix determinants /Spetsializirovannaya mashina dlia raskrytiya opredelitelei matrits/.

09 p1460 A69-21782

## BAZILEVSKAIA, G. A.

Relation between solar activity and 19- to 24-day variations in the cosmic-ray intensity /19-24-dnevnye variatsii intensivnosti kosmicheskikh luchej i solnechnaia aktivnost'/.

10 p1759 A69-22843

## BAZOVSKY, I.

Readiness of dormant systems subject to periodic checkout.

18 p3142 A69-34477

Reliability approach to aircraft safety.

22 p3867 A69-41129

## BAZYKIN, V. V.

Soviet artificial earth satellites and space vehicles and their characteristics /Sovetskie ikusstvennye spurniki zemli, kosmicheskoe letatel'nye apparaty, ikh kharakteristiki/.

13 p2355 A69-27359

## BCHNAROV, I.

Estimate of the increases of the Newtonian potential and its derivatives /Otsenki na narastvaniia na niutonovii potentsial i na negovite proizvodni/.

13 p2300 A69-28545

## BCHVAROV, S.

Natural longitudinal single-frequency oscillations of a system consisting of  $n$  material points with allowance for energy dissipation /Sobstvenni nadl'zhni ednochestotni trepteniia na sistemii ot  $n$  materialni tochki s otcitane na razseivaveto na energiiata/.

05 p0832 A69-15687

## BEARLEY, M. N.

The hazard of atmospheric wind shears during parachute recovery of instruments.

17 p2975 A69-33613

## BEACH, A. D.

High-resolution measurements of plasma density.

06 p0972 A69-18220

## BEACH, R.

Flickering, a 10-cps fluctuation within bright auroras.

04 p0594 A69-15129

## BEACH, S. P.

MITOL - Machine independent telemetry oriented language.

22 p3905 A69-40340

## BEACHEM, C. D.

Microscopic fracture processes.

13 p2274 A69-27224

## BEACHLEY, N. H.

Wobble-spin technique for spacecraft inversion and earth photography.

12 p2174 A69-26780

## BEADLE, W. E.

Design, fabrication, and characterization of a germanium microwave transistor.

12 p2037 A69-25940

## BEAIRD, H. G., JR.

Totally anti-icing the business jet.

06 p0868 A69-17669

## BEAL, J. L.

Experimental studies of drop breakup in hypersonic flow.

12 p2063 A69-26802

## BEAL, R. T.

Gravity gradient flight experience acquired with the Naval Research Lab satellites.

07 p1228 A69-18344

## BEALE, J. S.

Neutral hydrogen asymmetry in the galaxy M101 as evidence for tidal effects.

08 p1394 A69-20625

## BEAM, B. H.

Thermoelectric radiometer.

[AIAA PAPER 68-403]

02 p0250 A69-12392

Hydrocarbon gas absorption by a HeNe laser beam at a 3.39- $\mu$  wavelength.

23 p4174 A69-42192

## BEAN, E. E.

Field failure rates for selected KSC ground support equipment.

19 p3295 A69-36023

## BEAN, X.

Induced stresses improve casting performance.

13 p2269 A69-28184

## BEANS, E. W.

Compressible flow processes involving area, friction, and total temperature change.

12 p2063 A69-26799

## BEARD, C. I.

A multiwavelength line-of-sight experiment for remote atmospheric sensing.

14 p2415 A69-29516

## BEARD, D. S.

Thermionic fuel element development.

23 p4186 A69-42246

## BEARD, D. W.

A numerical study of wide-gap Taylor vortices.

15 p2593 A69-31518

## BEARD, M.

A low latitude survey from I II equals 27 deg to 38 deg at 1410 and 2650 Mhz.

14 p2526 A69-29772

## BEARD, M. J.

Temperature instrumentation accuracy.

22 p3954 A69-40037

## BEARD, S. E.

Space-cabin and suit pressures for avoidance of decompression sickness and alleviation of fire hazard.

22 p3890 A69-40212

Decompression sickness in simulated "zoom" flights.

23 p4077 A69-41292

## BEARD, T. W.

Deployable elements of the orbiting geophysical observatories

06 p1017 A69-17606

## BEARDMORE, P.

Temperature dependence of yield and fracture in polymethylmethacrylate.

08 p1335 A69-20219

On the temperature dependence of the flow stress of nickel-base alloys.

21 p3744 A69-38732

## BEARDSLEY, W. R.

Recording of star spectra with a fiber optic electrostatic image intensifier.

[WERL-68-1C2-TAEC-P1]

04 p0603 A69-15444

## BEARMAN, P. W.

On vortex shedding from a circular cylinder in the critical Reynolds number regime.

21 p3644 A69-38690

## BEARNSON, L. W.

Error Detecting Logic for Digital Computers.

02 p0212 A69-11455

## BEASOR, C. E.

The history and evolution of fiber optics.

06 p0958 A69-17675

## BEATRIX, C.

Study of servo-controls by the modal response /L'etude d'une servo-commande par le schema modal/.

[ONERA-TP-668]

06 p0869 A69-171000

Techniques used in aeroelasticity for the representation of an aircraft in flight /Les techniques utilisees en aeroelasticite pour la representation de l'avion en vol/.

[ONERA-TP-697]

20 p3626 A69-37755

## BEATTY, R. W.

An attenuation and phase shift divider circuit.

04 p0573 A69-14337

Progress in radio measurement methods and standards.

19 p3276 A69-36426

## BEATY, E. C.

Sunlight photodetachment rate of ground state O super minus.

16 p2848 A69-31973

## BEAUBIEN, M. J.

An accurate finite-difference method for higher order waveguide modes.

13 p2228 A69-27670

## BEAUCHAMP, J. J.

Simultaneous estimation by partial totals for compartmental models.

01 p0106 A69-10926

Spearman simultaneous estimation for a compartmental model.

24 p4339 A69-42765

## BEAUCHENE, J. H.

The design and performance of a versatile 25 solar constant simulator.

15 p2586 A69-30383

## BEAUNET, C.

The 200-W membrane cell "ABEPAC" /La pile a membrane de 200W "ABEPAC"/.

08 p1259 A69-21040

The 200-W "ABEPAC" membrane cell /La pile a membrane de 200 W "ABEPAC"/.

16 p2738 A69-32411

## BEAUNET, G.

Models for carbon-rich stars.

09 p1606 A69-22419

## BEAULIEU, W.

Measurement of XB-70 propulsion performance incorporating the gas generator method.

[AIAA PAPER 68-594]

20 p3461 A69-37152

## BEAUMONT, P. W. R.

Silane coupling in carbon fibre-reinforced polyesters resin.

16 p2803 A69-31806

## BEAUSSE, J.

Tests on 1-Mev electrons of a logic family for space use /Tests aux electrons de 1 Mev d'une famille logique a usage spatial/.

15 p2625 A69-30830

## BEAUSSIER, J.

Multichannel telemetry for magnetically suspended models /Telemetrie multivoies pour maquettes en suspension magnetique/.

[ONERA-TP-643]

02 p0226 A69-11623

Reliability of an accelerometer with a very high resolution /Fiabilite d'un accelerometre a pouvoir de resolution tres eleve/.

15 p2627 A69-30843

**BEAUVAIS, C.**  
Kinetic study of the transformations of the titanium alloy TA 6 V under isothermal conditions /Etude cinétique des transformations de l'alliage de titane TA 6 V en conditions isothermes/.  
16 p2802 A69-32180

**BEBCHUK, A. S.**  
Generation of optical harmonics in lithium niobate /Generirovanie opticheskikh harmonik v niobate litia/.  
03 p0437 A69-13046  
Q-switching of a ruby laser with the aid of an electrooptical LiNbO sub 3 shutter /Modulatsiia dobrotosti rubinovogo lazera pri pomoshchi elektroopticheskogo zatvora iz LiNbO sub 3/.  
19 p3336 A69-36346

**BEBENIN, G. G.**  
Contribution to the theory of synthesis of satellite attitude stabilization by means of flywheels /K teorii sinteza sistem orientatsii ISZ s makhovikami/.  
21 p3768 A69-39831

**BEC, A.**  
Determination of the mass of Jupiter by studying the motion of its ninth satellite /Determination de la masse de Jupiter par l'étude du mouvement de son neuvième satellite/.  
21 p3795 A69-38468

**BECHER, J.**  
Performance of ultraviolet gratings as affected by simulated space environment.  
08 p1318 A69-21097

**BECHTEL, M. E.**  
Scattering-center theory and radar glint analysis.  
01 p0033 A69-11007  
Vertically polarized radar backscattering from the rear of a cone or cylinder.  
20 p3495 A69-37851

**BECHTEL, R. T.**  
Performance and control of a 30-centimeter diameter, low impulse Kaufman thruster.  
[AIAA PAPER 69-238] 09 p1566 A69-21256

**BECHTOLD, J. H.**  
Fracture in the refractory metals.  
17 p2989 A69-33556

**BECK, A.**  
Flow hysteresis in spool valves.  
11 p1827 A69-25645

**BECK, A. E.**  
Energy changes in an expanding earth.  
22 p3936 A69-40180

**BECK, A. F.**  
The relationship between structure and susceptibility to stress corrosion in aluminum-magnesium alloys.  
19 p3350 A69-36896

**BECK, A. H.**  
High-powered microwave interactions in a pulsed electron beam-plasma klystron.  
07 p1095 A69-18433

**BECK, A. H. W.**  
An Introduction to Physical Electronics.  
05 p0735 A69-16666

**BECK, C. W., II**  
Description of Ames Research Center earth albedo experiment on OSO-III spacecraft.  
15 p2614 A69-31279

**BECK, D.**  
Pressure control of flight configuration cryogenic containers during heat leak evaluation tests.  
15 p2702 A69-30397

**BECK, E. W.**  
The use of high strength, room temperature vulcanizing silicone rubber in tooling and fabrication of aircraft and missile components.  
09 p1507 A69-22331  
RTV silicone rubber applications in aircraft structures.  
24 p4338 A69-43457

**BECK, J. V.**  
Load support of spherical squeeze-film gas bearings.  
[ASME PAPER 68-LUBS-3] 13 p2266 A69-27279  
Experiment and analysis of a flat disk squeeze-film bearing including effects of supported mass motion.  
[ASME PAPER 68-LUBS-35] 13 p2266 A69-27280  
Determination of optimum, transient experiments for thermal contact conductance.  
20 p3632 A69-37521

**BECK, L. A.**  
Titan III propulsion system performance evaluation.  
[AIAA PAPER 68-585] 19 p3394 A69-35945

**BECK, P. A.**  
V and E phases in ternary systems with transition metals and silicon or germanium.  
10 p1708 A69-22992

**BECK, T. R.**  
An electrochemical mass transport-kinetic model for stress corrosion cracking of titanium.  
[ECS PAPER 147] 08 p1332 A69-20359  
Electrochemical aspects of titanium stress corrosion cracking.  
19 p3351 A69-36901

**BECK, W.**  
Wear protection of a pressure-loaded titanium alloy by lubricated electroless nickel coatings.  
24 p4331 A69-42786

**BECK, W. A.**  
Recent advances in explosive forming.  
09 p1512 A69-22371  
Explosive forming - Handling the parameters.  
24 p4320 A69-43038

**BECKER, E.**  
Gas Dynamics.  
09 p1483 A69-22400

**BECKER, E. B.**  
Stress wave propagation using the extended Ritz method.  
11 p1993 A69-25527  
Dynamic stresses in a case-bonded cylinder due to transient angular accelerations.  
13 p2364 A69-28209

**BECKER, H.**  
Earth resources technology satellites /Erderkundungs- und Erderforschungssatelliten/.  
05 p0830 A69-15921  
Sensors for earth resources and technology satellites /Sensoren fuer Erderkundungs- und Erderforschungssatelliten/.  
15 p2607 A69-30231  
On the existence of optimal random controls.  
21 p3756 A69-39266  
Determining isoclinics from fringe patterns.  
24 p4396 A69-42738

**BECKER, H. S.**  
Adapting space plans to changing times.  
10 p1811 A69-22863  
Planning future space programs - Are we on the right track/ques/.  
[AAS PAPER 69-083] 24 p4418 A69-42820

**BECKER, J. F.**  
Determination of the complex index of refraction of rocks and minerals.  
17 p2973 A69-33093

**BECKER, J. V.**  
The X-15 program in retrospect.  
12 p2014 A69-26872

**BECKER, K. F.**  
High-temperature pneumatic controls for aerospace systems.  
22 p3870 A69-41240

**BECKER, K.-D.**  
Propagation of electromagnetic waves over irregular terrain in a vertically continuously variable atmosphere /Zur ausbreitung elektromagnetischer wellen ueber unebenner erde in einer vertikal stetig veraenderlichen atmosphaere/.  
24 p4281 A69-42611

**BECKER, M.**  
Status of measurement techniques in the DVL-plasma wind tunnel PK 1 /Stand der Messtechnik am DVL-Plasmawindkanal PK 1/.  
[DVL-849] 04 p0584 A69-14823  
A flat plate in a low-density hypersonic flow /Die ebene Platte in hypersonischer Stroemung geringer Dichte/.  
11 p1819 A69-25424

**BECKER, P. M.**  
Temperature profiles of an opposed-jet diffusion flame subjected to an electric field.  
21 p3852 A69-39597

**BECKER, R.**  
Investigation of a jet turbine with a small hub ratio in the case of complete and partial admission /Untersuchungen an einer Reaktionsturbine mit kleinem Nabenverhaeltnis bei Voll- und Teilbeaufschlagung/.  
20 p3586 A69-37924

**BECKER, R. A.**  
A new solar observatory in California.  
11 p1862 A69-24792

**BECKERS, J. M.**  
Photospheric brightness differences associated with the solar supergranulation.  
03 p0515 A69-14037  
Magnetic field and material flows in isolated symmetrical sunspots /Magnetfeld und Materiestroemungen in symmetrischen Einzelflecken/.  
06 p0999 A69-16978  
Solar magnetic-field measurements using Babinet compensators /Research note/.  
11 p1880 A69-24433  
The intensity, velocity and magnetic structure of a sunspot region. III - On the origin of the apparent pi component in sunspot umbrae.  
14 p2528 A69-29964  
Chromospheric inhomogeneities in sunspot umbrae.  
18 p3204 A69-35389  
The microstructure of sunspots.  
24 p4378 A69-42690

**BECKERS, P.**  
Coplanar impulsive transfers and the second variation test.  
19 p3400 A69-35676

**BECKETT, W. C.**  
Legislation for hovercraft.  
04 p0689 A69-14942

**BECKLAKE, E. J.**  
Gas lasers for the far infra-red.  
11 p1898 A69-25051

**BECKLAKE, E. J. S.**  
Spectral response of a point-contact diode in the sub-millimetre range.  
06 p0893 A69-16939

**BECKLIN, E.**  
A study of visual and infrared observations of SCO XR-1.  
09 p1604 A69-22401

**BECKLIN, E. E.**  
On the nature of Ryle and Bailey's candidate star for the pulsating radio source CP 1919.  
09 p1591 A69-21455  
Spectrophotometry and infrared photometry of BL Lacertae.  
13 p2335 A69-27315  
Infrared and optical measurements of the Crab pulsar NP 0532.  
18 p3191 A69-34318  
UBVRIHKL photometry of the central region of M31.  
20 p3610 A69-38141  
1.65-19.5-micron observations of the galactic center.  
21 p3799 A69-38650

**BECKMAN, D. L.**  
Hyperoxia compared to surfactant washout on pulmonary compliance in rats.  
21 p3659 A69-39066  
Hyperoxia compared to surfactant washout on pulmonary compliance in rats.  
23 p4081 A69-41440

**BECKMAN, E. L.**  
A review of current concepts and practices used to control body heat loss during water immersion.  
[AGARDOGRAPH-111] 08 p1267 A69-20681

**BECKMAN, J. E.**  
Continuous spectrum of Taurus A at 1.2 mm wavelength.  
09 p1597 A69-22156

**BECKMAN, P.**  
The Depolarization of Electromagnetic Waves.  
14 p2412 A69-29315

**BECKSTEAD, M. W.**  
Low frequency instability - A comparison of theory and experiment.  
[WSCIP PAPER 67-13] 02 p0352 A69-12311  
The effect of oxidizer particle size and binder type on nonacoustic instability.  
[AIAA PAPER 69-175] 06 p0983 A69-18152

**BECKWITH, I. E.**  
Calculation of nonequilibrium hypersonic turbulent boundary layers and comparisons with experimental data.  
[AIAA PAPER 69-684] 17 p2955 A69-33474

**BECKWITH, R. E.**  
Survival analysis for marine air cushion vehicles.  
01 p0008 A69-10027



- Space vehicles and the distribution of future position.  
20 p3617 A69-37528
- BECKWITH, W. B.**  
Airport fog dispersal will soon enter operational phase.  
01 p0054 A69-10149
- BECSEL, I.**  
Coronary circulation response to hyperoxia after vagotomy and combined alpha and beta adrenergic receptors blockade in the anesthetized intact dog.  
23 p4096 A69-42088
- BEDARD, A. M.**  
Differential thermal analyses on an ammonium perchlorate base propellant /Essais d'analyse thermique differentielle sur un propergol a base de perchlorate d'ammonium/.  
02 p0303 A69-11529
- BEDELL, R. H. S.**  
Aircraft accidents by older persons.  
14 p2541 A69-29308
- BEDFORD, L. H.**  
Television by satellite.  
03 p0394 A69-13578
- BEDIENT, C. K.**  
The Lockheed hybrid system - A giant step.  
04 p0567 A69-15349
- BEDILOV, M. R.**  
Interaction between a strong plasma flux and a laser /Vzaimodeistvie moshchnogo potoka plazmy s opticheskim kvantovym generatorom/.  
13 p2273 A69-28530
- BEDINGER, J.**  
The Boeing model 747 - A status report.  
[SAWE PAPER 746] 18 p3091 A69-34907
- BEDINGER, J. F.**  
Time dependent relation of electron density profiles and wind profiles in the E region.  
01 p0072 A69-11172  
Vapor trails and turbulence in the lower thermosphere.  
15 p2602 A69-31393  
Observed redistribution of E region ionization by neutral winds.  
15 p2677 A69-31395
- BEDNARCZYK, H.**  
Some dynamic compatibility conditions for the interaction of vertical instability surfaces /Einige dynamische Kompatibilitaetsbedingungen bei der Wechselwirkung senkrechter Unstetigkeitsflaechen/.  
05 p0745 A69-15867
- BEDNAREK, K.**  
Design and calibration of measuring probes for studies of jet engine combustion chambers /Konstrukcja i wzorcowanie sond pomiarowych do badan komor spalania silnikow przeplywowych/.  
17 p2945 A69-32947
- BEDNAROVA-NOVAKOVA, B.**  
New method of forecasting geomagnetic activity using features of the solar corona.  
01 p0150 A69-10372  
A universal interpretation of the generation of geomagnetic storms using features of the solar corona.  
16 p2777 A69-32100
- BEEK, W. J.**  
Local mass transfer with chemical reaction. I, II.  
02 p0232 A69-12234
- BEEKEN, B. B.**  
A theoretical and experimental study of a Coanda curved wall attachment device.  
[ASME PAPER 68-WA/FE-27] 05 p0749 A69-16101  
An acoustic fluidic sensor.  
15 p2616 A69-31302
- BEELER, E. F.**  
Lift fan design considerations.  
05 p0696 A69-15554
- BEELITZ, H. R.**  
Monolithic sense amplifier for laminated ferrite memories.  
01 p0039 A69-10174
- BEEMAN, E. R.**  
A method for determining the complete flow field around conical wings at supersonic/hypersonic speeds.  
[AIAA PAPER 69-646] 17 p2893 A69-33486
- BEER, A.**  
Vistas in Astronomy. Volume 11.  
17 p3031 A69-33096
- BEER, A. C.**  
Semiconductors and Semimetals. Volume 4 - Physics of III-V Compounds.  
04 p0641 A69-14501
- BEER, F. P.**  
On the response of a structure moving through a random field.  
[ASME PAPER 69-VIBR-38] 10 p1807 A69-24176
- BEER, J. M.**  
Impinging jet flames.  
06 p1035 A69-17933
- BEER, T. I.**  
D-region parameters measured by partial reflections at varying pulsewidths.  
08 p1307 A69-20189
- BEERBOWER, A.**  
Emulsified fuel for aircraft.  
[ASME PAPER 68-GT-24] 06 p0982 A69-17190  
Advanced methods for predicting elastomer/ fluids interactions.  
[ASLE PAPER 68-LC-21] 07 p1171 A69-19306
- BEERE, G. I. M.**  
The angular motion of the Europa vehicle during first stage cut-off.  
03 p0519 A69-12856
- BEERS, M. D.**  
High strength, self-bonding RTV silicone rubber adhesive sealants.  
19 p3356 A69-35532
- BEERWALD, H.**  
Study of hydrogen ionization in annular electric fields, including microwave diagnostics /Untersuchung der Ionisierung von Wasserstoff in elektrischen Ringfeldern mit Mikrowellendiagnostik/.  
09 p1543 A69-21299
- BEEUWKES, R., JR.**  
Characteristics of crack failure.  
03 p0528 A69-13876
- BEEVERS, C. J.**  
The role of twinning in the fatigue behaviour of alpha-titanium.  
12 p2116 A69-26913  
Some observations on the influence of oxygen content on the fatigue behaviour of alpha-titanium.  
12 p2116 A69-27134  
The influence of internal defects on the fatigue behaviour of alpha-titanium.  
23 p4178 A69-42360
- BEEZHOLD, W.**  
Models for predicting transient radiation responses in microcircuits.  
06 p0977 A69-16887
- BEGELINGER, A.**  
Influence of the atmosphere on the endurance of some solid lubricants compared at constant layer thickness.  
[IME PAPER 3] 07 p1138 A69-18563
- BEGEMANN, F.**  
Content and isotopic composition of carbon in the light and dark portions of gas-rich chondrites.  
19 p3408 A69-36081  
Cosmic-ray produced radionuclides in the Barwell and Saint-Severin meteorites.  
19 p3410 A69-36094  
Chlorine-36 and argon-39 production rates in the metal of stone and stony-iron meteorites.  
19 p3411 A69-36100  
Super 39 K /n, p/-produced super 39 Ar in chondrites - New data and their interpretation in terms of size, exposure age and orbital elements.  
19 p3411 A69-36101  
Short exposure ages of meteorites determined from the spallogenic super 36 Ar/super 38 Ar ratios.  
19 p3418 A69-36138
- BEGG, R. D.**  
The effect of downstream pressure asymmetry on the flow from two-dimensional orifices.  
02 p0231 A69-12075
- BEGGS, J. E.**  
Nonelectric cathode heating.  
11 p1848 A69-24748
- BEGLEY, R. T.**  
Refractory Metal Alloys- Metallurgy and Technology. Proceedings of a Symposium on Metallurgy and Technology of Refractory Metals, Washington, D.C., April 25, 26, 1968.  
07 p1164 A69-18790
- BEGLINGER, V.**  
Analytical determination of the stress distribution in rotating shells /Zur analytischen Bestimmung der Spannungsverteilung in rotierenden Schalen/.  
15 p2703 A69-30158
- BEGUIER, C.**  
Asymmetric plane flows in an incompressible turbulent regime /Ecoulements plans dissymetriques en regime turbulent incompressible/.  
07 p1121 A69-19330
- BEHANNON, K. W.**  
Measurements of the perturbed-interplanetary magnetic field in the lunar wake.  
01 p0157 A69-11228  
Intrinsic magnetic properties of the lunar body.  
03 p0514 A69-14002  
Satellite studies of the earth's magnetic tail.  
07 p1208 A69-19363
- BEHAR, M. G.**  
Blood oxygen content measured by oxygen tension after release by carbon monoxide.  
22 p3873 A69-40203
- BEHBAHANI, DJ.**  
Extension of the Rayleigh criteria for boundary layers of rotationally symmetrical bodies /Erweiterung der Rayleighschen Kriterien fuer Grenzschichten an rotationssymmetrischen Koerpern/.  
19 p3298 A69-36309
- BEHN, R. C.**  
Artificial earth satellites.  
01 p0162 A69-10937  
Ionospheric electron density studies.  
01 p0067 A69-10944  
Communications satellites.  
01 p0032 A69-10949  
Satellite meteorology.  
01 p0111 A69-10950
- BEHRENDT, D. L.**  
Modular packaging of spacecraft integration electronics.  
22 p3910 A69-39949
- BEHRENS, E.**  
Elastic constants of composite materials.  
07 p1236 A69-19457  
Elastic constants of filamentary composites with hexagonal symmetry.  
17 p3061 A69-33666
- BEHRENS, W.**  
Fluctuation measurements in the near wake of a wedge with and without base injection.  
[AIAA PAPER 68-100] 16 p2732 A69-31882
- BEHRENS, W. H.**  
Procurement document reviews move upstream.  
15 p2719 A69-30314
- BEHRINGER, W.**  
Etching of mold parts and spray etching at WMD-SIAT /Formteilaeetzung-Spruehaetzung bei der WMD-SIAT/.  
12 p2102 A69-26370
- BEHRNDT, K. H.**  
Adhesion mechanism of gold-underlayer film combinations to oxide substrates.  
13 p2321 A69-28007  
Film formation and structure-sensitive properties. An introduction.  
24 p4361 A69-43344  
Effect of oxygen on the formation of germanium films.  
24 p4361 A69-43345
- BEIERSDORF, R.**  
Monte Carlo studies on the hadronic component of extensive air showers.  
15 p2678 A69-31482
- BEIGHLEY, C. M.**  
Advanced fuels and oxidizers.  
16 p2828 A69-31747
- BEIGMAN, I. L.**  
Dielectronic recombination.  
20 p3580 A69-38016
- BEIKO, I. V.**  
Numerical method of solving the nonlinear problems of optimal pursuit /Chislennyy metod resheniya nelineynykh zadach optimal'nogo presledovaniya/.  
21 p3757 A69-39536
- BEILIN, V. M.**  
Temperature dependence of the elastic constants of highly doped GaAs /Temperaturnaya zavisimost' uprugikh postoiannykh sil'no legirovannogo GaAs/.  
03 p0484 A69-13282

Temperature dependence of the elastic constants of heavily-doped gallium arsenide. 14 p2508 A69-29655

**BELKE, S.**  
New results regarding washout of atmospheric trace gases and aerosols /Neue Ergebnisse ueber das Auswaschen atmosphaerischer Spurengase und Aerosole/. 24 p4345 A69-43146

**BELMAN, J. L.**  
A linear, omnidirectional, vector resolving airspeed system. 05 p0767 A69-16774

**BEINART, J. H.**  
Threshold logic for LSI. 17 p2943 A69-34122

**BEINER, L.**  
Study of an optimal rendezvous maneuver using minimum fuel in the approach stage in the case of elliptic and hyperbolic orbits /nonlinear theory/ /Studiul manevrei optime de intilnire cu minimum de combustibil in faza de apropiere pe orbite eliptice si hiperbolice /teoria neliniara/. 15 p2701 A69-31548  
Rigorous solution for the rendezvous problem with minimum fuel for a circular orbit /O solutie riguroasa in problema intilnirii cu minimum de combustibil pe orbite circulare/. 16 p2852 A69-31558

**BEISCHER, D. E.**  
Generation of low magnetic field environment for study of space null magnetic field effects on man. 15 p2586 A69-30382

**BEISER, L.**  
Display technology - Today and tomorrow. III - Laser displays - Some direct views and projections of theory and practice. 06 p0928 A69-17924

**BEJCZY, A. K.**  
The reverse Goddard problem. [AIAA PAPER 69-868] 21 p3809 A69-39394

**BEK, S. S.**  
Statistical characteristics of the individual magnetoionic components of an obliquely incident wave /Statistichekie kharakteristiki ot del'nykh magnitoionnykh komponent volny pri naklonnom padenii/. 02 p0314 A69-11691  
Statistical characteristics of individual magnetoionic wave components in oblique incidence. 13 p2355 A69-28722

**BEKEY, G. A.**  
Synthesizing optimal controls for modulated discrete-time systems. 02 p0226 A69-12732  
An analysis of continuous parameter identification methods. 05 p0725 A69-16474  
Identification of sampling intervals in sampled-data models of human operators. 10 p1650 A69-23881  
Estimation of the parameters of sampled-data systems by means of stochastic approximation. 24 p4295 A69-43319  
Model of the adaptive behavior of the human operator in response to a sudden change in the control situation. 24 p4276 A69-43325

**BEKMUHAMBETOV, E. S.**  
Recombination coefficients for a dense weakly ionized cesium plasma /Koeffitsienty rekombinatsii v plotnoi slaboionizovanoi tsezievoi plazme/. 08 p1359 A69-19844

**BEKORIUKOV, V. I.**  
Problems of ozone circulation in the earth's atmosphere /Problemy tsirkulatsii ozona v zemnoi atmosfere/. 14 p2442 A69-29830

**BEKTURSUNOV, U.**  
Elastoplastic solution of the problem of transverse impact /Uprugo-plasticheskoe reshenie zadachi o poperechnom udare/. 12 p2178 A69-26034

**BEL, L.**  
Kinetic theory of cosmology. 09 p1605 A69-22410

**BELAN, E. P.**  
Principle of reduction in the theory of stability of linear differential equations /O printsipe svedeniia v teorii ustoiichivosti lineinykh differentsialnykh uravnenii/. 01 p0106 A69-10956

**BELAN, N. V.**  
Automatic charging device for storage capacitors /Avtomaticheskoe zariadnoe ustroistvo emkostnykh nakopitelei/. 04 p0580 A69-14493

**BELAVIN, O. V.**  
Errors in bearings taken from radio beacons with a rotating radiation pattern, due to the effects of local objects /Oshibki pri opredelenii pelenga po radiomaiakam s vrashchaiushcheisia diagrammoi, vyzvannye vliianiem mestnykh predmetov/. 15 p2567 A69-30343

**BELCHER, J. W.**  
Large-amplitude Alfvén waves in the interplanetary medium - Mariner 5. 14 p2510 A69-28949

**BELENKII, I. M.**  
Final motions of conservative systems /O final'nykh dvizheniiakh konservativnykh sistem/. 09 p1540 A69-21882  
The motion of conservative systems in harmonic force fields. 11 p1920 A69-25745

**BELENKII, IA. E.**  
Frequency ranges of a wideband transistor amplifier /O chastotnykh diapazonakh shirokopolosnogo tranzistorного usilitelia/. 15 p2573 A69-30113

**BELENOV, E. M.**  
Shift of light frequency in an accelerated rotating ring laser. 02 p0257 A69-12417  
Features of wave propagation in inertial-nonlinear media /Osobennosti rasprostraneniia voln v inertsionno-nelineinykh sredakh/. 03 p0437 A69-13040  
Spatial field distribution in a ring laser. 03 p0441 A69-14140  
Emission modes of a gas laser with a circular resonator. 04 p0611 A69-14545  
Effect of amplitude fluctuations on the stability of the beat frequency of traveling waves in an annular laser /Vliianie amplitudnykh fluktuatsii na stabil'nost' chastoty bieni begushchikh voln kol'tsevo go lazera/. 12 p2107 A69-26541  
Coherent effects associated with the propagation of an ultrashort light pulse in a medium with two-photon resonance absorption /Kogerentnye efekty pri rasprostraneni ul'trakorotkogo impul'sa sveta v srede s dvukhfotonnym rezonansnym pogloscheniem/. 15 p2634 A69-30966  
The effect of coherence on the laser mode of operation /Vliianie kogerentnosti na rezhim raboty lazera/. 17 p2983 A69-33695  
Coherent effects in pulsed laser emission /Kogerentnye efekty v izluchenii impul'snogo lazera/. 21 p3737 A69-38999

**BELESIN, D. B.**  
Evoked release of 5-HT and NEFA from the hypothalamus of the conscious monkey during thermoregulation. 23 p4084 A69-41472

**BELETSKII, V. V.**  
On the motion of a pulsating system in a gravitational field. 01 p0158 A69-11318  
On determination of atmosphere parameters from drag data of the satellite Proton-2, its orientation being taken into account. 15 p2602 A69-31392  
Results of a determination of orientation from on-board measurement data. 17 p3001 A69-33221  
Relative motion of two connected bodies in orbit /Ob otноситel'nom dvizhenii svyazki dvukh tel na orbite/. 19 p3427 A69-36618  
Results of a determination of the orientation of the Proton 2 satellite and description of its motion with respect to its center of mass /Rezultaty opredeleniia orientatsii sputnika "Proton-2" i opisaniie ego dvizheniia otноситel'no tsentra mass/. 22 p4037 A69-41090

**BELEVTSSEV, A. T.**  
Electrodynamic generator. 03 p0369 A69-14153  
Determination of the transient contact resistance of high-precision potentiometers /Ob opredelenii perekhodnogo kontaktного soprotivleniia vysokotochnykh potentsiometrov/. 23 p4166 A69-41996

**BELFORD, G. G.**  
An initial value problem approach to the solution of eigenvalue problems. 21 p3754 A69-38747

**BELGAUMKAR, B. M.**  
Effect of root-fixture conditions on the damping characteristics of cantilever beams. 10 p1800 A69-23244

**BELIAEV, A. F.**  
Detonation capacity of mixtures with an ammonium perchlorate base /O detonatsionnoi sposobnosti smesi na osnove perkhlorata ammoniia/. 02 p0305 A69-12674  
Combustion and ignition of finely dispersed aluminum particles /O goreanii i vosplamenenii chastits melkodispersnogo aluminium/. 08 p1375 A69-20341  
Combustion, Detonation, and Explosive Energy of Condensed Systems /Gorenie, Detonatsiia i Rabota Vzyryva Kondensirovannykh Sistem/. 12 p2190 A69-26757

**BELIAEV, IU. N.**  
Collision integrals for components of dissociating air. 02 p0283 A69-11586

**BELIAEV, L. M.**  
Pyroelectric response of a triglycine sulfate crystal to laser pulse action /Piroelektricheski otklik kristalla triglitsinsul'fata na deistvie impul'sa OKG/. 03 p0438 A69-13050  
Destruction of a group of alkali halide crystals by laser radiation and an estimation of their optical strength /Razrushenie riada shchelochnogaloidnykh kristallov izlucheniem OKG i otsenka ikh opticheskoi prochnosti/. 08 p1328 A69-21188  
Decomposition of several alkali-halide crystals by laser radiation and evaluation of their optical stability. 18 p3152 A69-35157

**BELIAEV, N. M.**  
Flow of a compressible gas into a cavity /K zadache o napolnenii emkosti szhimaemym gazom/. 24 p4298 A69-42587  
Calculation of the unsteady temperature fields in an n-layer cylindrical wall for boundary conditions of the third kind /Raschet nestatsionarnykh temperaturnykh polei n-sloinnoi tsilindricheskoi stenki pri granichnykh usloviakh tret'ego roda/. 24 p4407 A69-42588

**BELIAEV, G. M.**  
Motion of a gyroscopic integrator of linear accelerations /O dvizhenii giroskopicheskogo integratora lineinykh uskorenii/. 06 p0927 A69-17688

**BELIAEVA, I. F.**  
Study of the structure of extensive air showers at sea level with the modernized hodoscope system of the Moscow University installation. 13 p2332 A69-28405  
Phenomenological characteristics of extensive air showers at sea level. 13 p2332 A69-28406

**BELIAEVA, M. A.**  
Hydrostatics in weak force fields /Gidrostatika v slabyykh silovykh poliakh/. 03 p0417 A69-13809

**BELIAKOV, A. A.**  
Temperature dependence of internal friction in molybdenum wire in the moderate and high temperature range /Temperaturnaia zavisimost' vnutrennego treniia molibdenovoi provoloki v oblasti umerennykh i vysokikh temperatur/. 03 p0446 A69-13576

**BELIAKOV, IU. I.**  
Desorption of O super plus and H super plus ions from a graphite surface under slow electron irradiation /Desorbsiia ionov O super plus i H super plus s poverkhnosti grafita pri obluchenii medlennymi elektronami/. 22 p3972 A69-39957

**BELIAKOV, L. N.**  
The alpha goes to gamma transformation in maraging steel N18K9M5T. 04 p0616 A69-14648

**BELIAKOVA, M. I.**  
Investigation of the decomposition of urea by urease in relation to space cabin life support systems. 08 p1265 A69-19834

**BELIAKOVA, M. N.**  
Effect of molybdenum on the kinetic recrystallization parameters of deformed nickel /Vliianie molib-



- dena na kineticheskie parametry rekristallizatsii deformirovannogo nikelia/.  
12 p2114 A69-26454
- Influence of metal purity on the kinetic parameters of recrystallization of a strongly deformed single crystal of nickel or nickel-molybdenum alloy /Vliianie chistoty metalla na kineticheskie parametry rekristallizatsii sil'no deformirovannogo monokristalla nikelia i ego splava s molibdenom/.  
18 p3159 A69-35449
- BELIAKOVA, S. I.**  
Development of a polar storm.  
12 p2071 A69-26694
- BELIANIN, N. M.**  
Generalization of the characteristics of a two-chamber electric-arc heater /Obobshchenie kharakteristik dvukhkamernogo elektrodugovogo podogrevatel'ia/.  
13 p2244 A69-28557
- BELIANINA, R. G.**  
Insulating materials of thermoemission converters.  
14 p2467 A69-29214
- BELIAVSKII, E. D.**  
Application of variational methods to the solution of interaction problems in microwave devices.  
04 p0577 A69-14791
- BELIK, E. B.**  
Structural changes and cold shortness of molybdenum subjected to deformation.  
04 p0615 A69-14637
- BELIK, I. A.**  
Simulation of visual remoteness perception during vertical takeoff and landing of a flight vehicle /Modelirovanie zritel'nogo vospriyatia udalennosti pri vertikal'nom vzlete i pri posadke letatel'nogo apparata/.  
22 p3892 A69-40282
- BELIK, N. P.**  
Determining the natural frequencies of fluid oscillations in complex pipelines.  
07 p1119 A69-18745
- Flow of a compressible gas into a cavity /K zadache o napolnenii emkosti szhimaemym gazom/.  
24 p4298 A69-42587
- BELIKOV, V. S.**  
Stability of a magnetoactive plasma with a monoenergetic component /Ustoichivost' magnitoaktivnoi plazmy s monoenerzhichnoi komponentoi/.  
09 p1546 A69-21566
- BELIKOVA, E. V.**  
Influence of "artificial Mars" conditions on some enzymes /Vliianie uslovii "iskusstvennogo Marsa" na nekotorye fermenty/.  
07 p1065 A69-18974
- Effect of a simulated Martian environment on certain enzymes.  
20 p3479 A69-38222
- BELIKOVICH, V. V.**  
On frequency dependence of abnormal ionospheric absorption in auroral zone.  
01 p0063 A69-10425
- Results of measurements of cosmic radio noise absorption in the ionosphere within half of a solar activity cycle.  
06 p1008 A69-17727
- Method of finding the electron concentration profile in the D-layer of the ionosphere from the frequency dependence of radio wave absorption.  
06 p0920 A69-17729
- Polar-type absorption in the mid-latitude ionosphere during the global magnetic storm of May 26, 1967 /Pogloschenie poliarnogo tipa v ionosfere srednikh shirot vo vremia mirovoi geomagnitnoi buri 26 maia 1967 g./.  
10 p1688 A69-23935
- A method of processing riometric data /O metodike obrabotki riometricheskikh dannykh/.  
14 p2436 A69-29056
- Frequency dependence of anomalous absorption of cosmic radio emission in the ionospheric auroral zone /Chastotnaia zavisimost' anomal'nogo pogloscheniia kosmicheskogo radioizlucheniia v ionosfere v zone poliarnykh siiani/.  
20 p3587 A69-37033
- PCA in July, August, and September 1966 according to observations in the auroral zone /Ppsh v iuile, avguste i sentiabre 1966 g. po nabludeniiam v avroral'noi zone/.  
23 p4156 A69-41845
- BELINNE, F.**  
Flight testing and evaluation of airborne multisensor display systems.  
[AIAA PAPER 69-317] 09 p1500 A69-22387
- BELINSKAIA, G. I.**  
High-speed SFR camera for use in the visual and ultraviolet spectral ranges - For dissection, stereoscopic and spectral photography.  
12 p2085 A69-26155
- BELINSKAIA, L. V.**  
Reconstruction of the fields of meteorological elements from data of satellite observations /O vostanovlenii polei meteorologicheskikh elementov po dannym nabludenii so sputnikov/.  
13 p2292 A69-27733
- BELINSKI, C.**  
Analysis of the infrared spectrum of diborene hydrazine /Analyse du spectre infrarouge de l'hydrazine diborene/.  
12 p2027 A69-26917
- BELINSKII, V. A.**  
Ultraviolet Radiation of the Sun and Sky /Ultravioletovaia radiatsiia solntsa i neba/.  
07 p1221 A69-19506
- The nature of the singularities in the general solutions of the gravitational equations /K voprosu o kharaktere osobennosti v obshchikh resheniiakh uravnenii gravitatsii/.  
18 p3173 A69-35018
- BELITSKII, B. M.**  
Use of helium at a supercritical pressure for cooling superconducting systems under spaceflight conditions.  
04 p0585 A69-15407
- BELITSKII, M. E.**  
Cements for sticking mica-ceramics to titanium.  
05 p0786 A69-16799
- Erosion wear of mica-ceramic materials /Eroziionnyi iznos sludokeramicheskikh materialov/.  
15 p2643 A69-31186
- Investigation of the heat resistance and certain strength properties of nickel-base cermet materials with small additions of natural mica /Issledovanie zharostoikosti i nekotorykh prochnostnykh svoistv metallokeramicheskikh materialov na nikel'voi osnove s malymi dobavkami prirodnoi sludy/.  
21 p3751 A69-38615
- BELKINA, I. L.**  
Investigation of solar activity on the basis of calcium flocculi in 1964-1965 /Issledovanie solnechnoi aktivnosti po kal'tsievym flokkulam v 1964-1965 gg./.  
14 p2525 A69-29722
- BELKINA, L. M.**  
Space-time variation of radio wave absorption in the ionosphere.  
03 p0394 A69-13521
- Absorption of cosmic radio emission during the IQSY above Alma-Ata /Pogloschenie kosmicheskogo radioizlucheniia v period MGSS nad Alma-Atoi/.  
17 p2968 A69-33992
- BELKNAP, C. E.**  
Symmetric 3 sigma weight and C.G. program.  
[SAWE PAPER 734] 18 p3221 A69-34892
- BELKNAP, D. J.**  
An experimental measurement of the detection capability of a linear FM pulse compression system.  
03 p0390 A69-13218
- BELL, B. O.**  
"Fire until touchdown" - A demonstration of the effects of impacting the LM descent engine upon the lunar surface.  
[AIAA PAPER 69-1020] 22 p3923 A69-40391
- BELL, C. V.**  
Microwave components for wide-band phased arrays.  
04 p0571 A69-14318
- BELL, D. L.**  
Io, a Jovian unipolar inductor.  
13 p2337 A69-27552
- BELL, F.**  
Encapsulation of electrical components utilizing liquid resin molding techniques.  
04 p0607 A69-14955
- BELL, J. C.**  
Simulation of ball-bearing lubrication with a rolling-disk apparatus.  
[ASME PAPER 69-LUBS-16] 18 p3140 A69-34380
- BELL, J. E.**  
Graphite-epoxy composite material properties.  
19 p3354 A69-35518
- BELL, J. F.**  
An experimental study of instability phenomena in the initiation of plastic waves in long rods.  
02 p0342 A69-12279
- The dynamic plasticity of non-symmetrical free-flight collision impact.  
21 p3840 A69-39298
- BELL, J. H., JR.**  
No-loss cryogenic storage on the lunar surface.  
[AAS PAPER 69-051] 24 p4296 A69-42882
- BELL, J. P.**  
Flow orientation of short fiber composites.  
13 p2287 A69-28670
- BELL, K.**  
A refined triangular plate bending finite element.  
15 p2706 A69-30434
- BELL, M. B.**  
Observations of intense radio sources with a 1.5-minute fan beam.  
04 p0663 A69-15379
- BELL, N. L.**  
Current research on regenerative systems.  
20 p3477 A69-37623
- BELL, R. A.**  
The influence of line blanketing upon the colours of cepheids and F-K supergiants.  
10 p1771 A69-22854
- BELL, R. J.**  
Some new approaches to shallow impurity states.  
10 p1745 A69-23361
- BELL, R. L.**  
The use of grain strain measurements in studies of high-temperature creep.  
06 p0943 A69-17231
- BELL, R. O.**  
Use of Rayleigh waves for the detection of stress-corrosion cracking /SCC/ in aluminum alloys.  
12 p2114 A69-26306
- BELL, R. R.**  
Determination of threshold failure levels of semiconductor diodes and transistors due to pulse voltages.  
06 p0977 A69-16883
- BELL, T. F.**  
Radiation resistance of a short dipole immersed in a cold magnetoionic medium.  
07 p1107 A69-19226
- BELL, V. L.**  
Preparation and compression molding of salt-like intermediate Pyrrone /BTDA-EG-DAB/.  
14 p2469 A69-29415
- Radiation stability of unfilled pyrrone moldings.  
19 p3356 A69-35529
- BELL, W. R.**  
Controlled factorial experiments on high voltage vacuum breakdown.  
05 p0731 A69-16244
- BELLAMY, H. J.**  
Space vehicle data system synthesizer.  
21 p3680 A69-39633
- BELLAMY, N. W.**  
Methods of profile optimisation by iterative analogue computation.  
15 p2709 A69-30671
- BELLAND, P.**  
Simple determination of electron densities in plasmas submitted to magnetic fields.  
15 p2657 A69-30027
- BELLANGER, M.**  
Some applications of the fast Fourier transform, a powerful and economical technique for calculating sampled Fourier spectra /Quelques applications de la transformation de Fourier rapide, technique puissante et economique de calcul des spectres de Fourier echantillonnees/.  
04 p0625 A69-15223
- Adaptation of the fast Fourier transform to particular problems /Sur l'adaptation de la transformation de Fourier rapide a des problemes particuliers/.  
15 p2572 A69-31092
- BELLATO, L.**  
Transistorized amplifier with a 75-w output for conveyed-wave systems /Amplificatore transistorizzato con 75W di uscita per sistemi ad onde convogliate/.  
01 p0038 A69-10074
- BELLEAU, L. J.**  
Interrelationship of physical factors affecting sodium reabsorption in the dog.  
13 p2210 A69-28482

**BELLERT, S.**  
On a new hypothesis concerning the red shift.  
11 p1961 A69-25108

**BELLET, J.**  
Remarks concerning superheterodyne millimeter and submillimeter wave detection /Remarques concernant la detection superheterodyne en ondes millimetriques et submillimetriques/.  
15 p2570 A69-31093

**BELLET, J.-C.**  
Propagation of detonations in hydrogen-oxygen mixtures in a supersonic flow /Propagation des detonations dans les melanges hydrogene-oxygene en ecoulement supersonique/.  
08 p1420 A69-19882

**BELLEVILLE, R. E.**  
Avoidance and escape behavior controlled by artificial gravity.  
21 p3665 A69-39174

**BELLHOUSE, B. J.**  
Thin-film gauges for the measurement of velocity or skin friction in air, water or blood.  
04 p0601 A69-15118

**BELLHOUSE, F. H.**  
Thin-film gauges for the measurement of velocity or skin friction in air, water or blood.  
04 p0601 A69-15118

**BELLINI, A.**  
ELDO satellite command decoder performance.  
11 p1834 A69-24563

**BELLMAN, D. R.**  
The flight investigation of pressure phenomena in the air intake of an F-111A airplane.  
[AIAA PAPER 69-488] 16 p2843 A69-32706

**BELLMAN, R.**  
Invariant imbedding and multipoint boundary-value problems.  
05 p0787 A69-16478  
A note on asymptotic control theory.  
14 p2425 A69-28904  
Functional equations in the theory of dynamic programming. XIV - Upper and lower bounds for solutions of nonlinear partial differential equations.  
22 p3976 A69-41034

**BELLO, L. M.**  
Central data system concepts for spacecraft data management.  
24 p4284 A69-42621

**BELLO, M.**  
Model for the prediction of closed compartment fire propagation.  
[AIAA PAPER 69-618] 17 p3074 A69-33704

**BELLOC, A.**  
Study and development of a reading amplifier for thin magnetic film memory stores /Etude et realisation d'un amplificateur de lecture pour memoires a couche magnetique mince/.  
04 p0579 A69-15319

**BELLOC, P.**  
Reliability of passive components subjected to the action of ionizing radiation /Fiabilite des composants passifs soumis a l'action des radiations ionisantes/.  
15 p2627 A69-30838

**BELLOMO, A. F.**  
Gain and noise considerations in RF feedback amplifier.  
02 p0217 A69-12150

**BELLOMO, E.**  
Transverse disturbances in plane Poiseuille flow - Two examples as a check on a numerical program for finite-amplitude disturbances in parallel flows.  
21 p3691 A69-38464

**BELLOWS, G.**  
Surface integrity - Its effect on product quality.  
18 p3149 A69-35129

**BELLUS, J.**  
An alternative solution to the interface problem for display systems /Adatmegjelenoies rendszer interface problemainak lehetséges megoldása/.  
22 p3908 A69-40936

**BELOIVAN, A. F.**  
Mechanical properties of metal-glass materials obtained by impregnation /Mekhanicheskie svoystva metallostekliannykh materialov, poluchennykh propitkoj/.  
15 p2643 A69-31188

**BELOKON, V. A.**  
Interpolation formula for the thickness of a shock front.  
07 p1119 A69-18704

**BELOKRITSKII, N. S.**  
Energy exchange between active centers in glass /Ob obmene energiei mezhdu aktivnymi tsentrami v stekle/.  
15 p2632 A69-30053

**BELOMYTSEV, I. U. S.**  
The cathode materials of the thermoemission converters research /TEC/.  
14 p2505 A69-29265

**BELON, A. E.**  
Conjugacy of visual auroras during magnetically quiet periods.  
05 p0753 A69-16247  
Spatial relationships between HF radar aurora, optical aurora and electron precipitation.  
06 p0918 A69-17383

**BELOGOGOV, G. G.**  
Automated Information-Retrieval Systems /Avtomatizirovannyye Informatsionno-Poiskovyye Sistemy/.  
13 p2225 A69-27933

**BELOSTOTSKII, B. R.**  
Thermal conditions of continuous wave solid-state lasers /Teplovoy rezhim tverdotel'nykh opticheskikh kvantovykh generatorov nepreryvnogo deystviya/.  
01 p0089 A69-10105  
Temperature regime of a pulse-laser active medium made in the shape of a hollow cylinder /Temperaturnyy rezhim vypolnennogo v forme pologo tsilindra aktivnogo tela impul'snogo OKG/.  
12 p2104 A69-26025  
Vortex-flow cooled laser.  
21 p3734 A69-38399

**BELOTSERKOVSKII, O. M.**  
The supersonic flow round blunt bodies of revolution with a break in the generator.  
03 p0362 A69-13406  
Algorithms for numerical schemes of the method of integral relations for calculating mixed gas flows.  
04 p0587 A69-14621  
Use of electronic computers for determining the aerodynamic characteristics of aircraft /Ispol'zovanie elektronno-schetnykh mashin dlia opredeleniya aerodinamicheskikh kharakteristik letatel'nykh apparatov/.  
06 p0859 A69-17582  
Calculation of radiating gas flows in a shock layer /Raschet techenii izluchaushchego gaza v udarnom sloe/.  
14 p2390 A69-29477  
Heating due to hypersonic gas flow past blunt bodies, taking radiative transport into account /Obtekanie i nagrev zatuplennykh tel giperzvukovym potokom gaza s vchetom perenosa izlucheniya/.  
20 p3457 A69-36981  
Transonic flows behind a separated shock wave /Tranzvukovyye techeniya za otoshedshei udarnoi volnoi/.  
23 p4151 A69-41526

**BELOTSERKOVSKII, S. M.**  
The technique of measuring instantaneous pressures.  
07 p1050 A69-18752  
Applications and perspectives of optical methods in gas dynamics /Anwendungsmoeglichkeiten und Perspektiven optischer Methoden in der Gasdynamik/.  
12 p2011 A69-26191  
Method of calculating the aerodynamic characteristics of wings of complex planar form with subsonic leading and trailing edges /Metod rascheta aerodinamicheskikh kharakteristik kryl'ev slozhnoy formy v plane s dozvukovymi perednimi i zadnimi kromkami/.  
14 p2391 A69-29624

**BELOTSKII, D. P.**  
Physicochemical study of the CdSb-Ge cross section of the Cd-Sb-Ge-ternary system /Fiziko-khimichne doslidzhennia rozrizu CdSb-Ge potriinoi sistemi Cd-Sb-Ge/.  
14 p2503 A69-28975

**BELOTSVETOV, I. U. V.**  
Circuitry of a quartz crystal FM generator /Skhema kvartsovannogo ChM generatora/.  
05 p0732 A69-16532

**BELOUSOV, A. G.**  
Circuitry of a quartz crystal FM generator /Skhema kvartsovannogo ChM generatora/.  
05 p0732 A69-16532

**BELOUSOV, A. I.**  
Certain design features of radial hydrostatic bearings used in high-speed machines /Nekotorye osobennosti rascheta radial'nykh gidrostaticheskikh podshipnikov bystrokhodnykh mashin/.  
24 p4321 A69-43091

**BELOUSOV, I. U.**  
Determination of optimal moments for measurement /Opredelenie optimal'nykh momentov izmereniya/.  
09 p1495 A69-21758

**BELOUSOV, S. L.**  
Processing of Operational Meteorological Information with the Aid of Computers /Obработка operativnoi meteorologicheskoi informatsii s pomoshch'yu elektronnykh vychislitel'nykh mashin/.  
18 p3105 A69-34332  
Method of taking into account small-scale components in an objective analysis of pressure trend fields and surface pressure /Sposob ucheta melkomasshtabnykh sostavlyayushchikh pri ob'ektivnom analize poлей baricheskoi tendentsii i prizemnogo davleniya/.  
18 p3166 A69-34816

**BELOUSOVA, I. M.**  
Study of the causes of the effect of the gas temperature on He-Ne laser power output at lambda equals 6328 angstrom units /Issledovanie prichin vliyaniia temperatury gaza na moshchnost' generatsii He-Ne lazera na lambda equals 6328 angstrom units/.  
10 p1706 A69-24078

**BELOUSOVA, L. I.**  
Critical frequencies and amplitude spectrum of the intrinsic waves of a rectangular waveguide with a longitudinal strip array /Kriticheskie chastoty i amplitudnyi spektr sobstvennykh voln priamougol'nogo volnovoda s prodol'noi lentochnoi reshetkoj/.  
23 p4124 A69-42036  
Rectangular waveguide with transverse slots radiating into a plane-parallel region /Priamougol'nyi volnovod s poperechnymi shcheliami, izluchaishchii v ploskoparallelnuiu oblast'/.  
23 p4124 A69-42037

**BELOV, A. F.**  
Status and aspects of the development of titanium-alloy ingot and blank production /Sostoianie i perspektivy razvitiya proizvodstva slitkov i polufabrikatov iz titanovykh spлавov/.  
07 p1161 A69-18762

**BELOV, A. I.**  
Method of calculating the illuminance of a space vehicle due to reflected solar radiation /Sposob rascheta osveshchennosti kosmicheskogo apparata otrazhennoi solnechnoi radiatsiei/.  
01 p0151 A69-10576  
Method of calculating illumination of a space vehicle due to reflected solar radiation.  
15 p2691 A69-30746

**BELOV, A. V.**  
Distortion of the outer anisotropic flux of galactic cosmic rays in the solar system /Ob iskazhenii vneshnego anizotropnogo potoka galakticheskikh kosmicheskikh luchey v solnechnoi sisteme/.  
23 p4205 A69-41837

**BELOV, B. I.**  
Laboratory clamp-type diode holders for injection lasers and electroluminescent diodes.  
03 p0435 A69-12985

**BELOV, I. A.**  
Effect of turbulence on heat transfer in a supersonic jet with plane obstacle.  
07 p1243 A69-19738

**BELOV, I. U. K.**  
Vacuum-diffused protective coatings of nickel alloys /Vakuumdiffuzionnye zashchitnye pokrytiia nikelovykh spлавov/.  
10 p1715 A69-24013

**BELOV, K. P.**  
The Hall effect in ferrites /Effekt Kholla v ferritakh/.  
01 p0135 A69-10185

**BELOV, L. A.**  
Certain features of the transient processes in a tuned amplifier /O nekotorykh osobennostiakh perekhodnykh protsessov v rezonansnom usilete/.  
01 p0047 A69-10786  
Influence of automatic phase control on the nature of the transient processes in a resonant amplifier in the presence of arbitrary phase discontinuities of the input signal /O vliyani avtopodstroiki fazy na kharakter perekhodnykh protsessov v rezonansnom usilete pri proizvol'nykh skachkakh fazy vkhodnogo signala/.  
05 p0721 A69-16533  
Some properties of transients in a tuned amplifier.  
10 p1662 A69-23115



Influence of automatic phasing on the transients in a tuned amplifier resulting from arbitrary input signal phase jumps.

16 p2753 A69-32474

## BELOV, L. V.

Statistical characteristics of the individual magnetoionic components of an obliquely incident wave /Statisticheskie kharakteristiki otidel'nykh magnitoni-nykh komponent volny pri naklonnom padenii/.

02 p0314 A69-11691

## BELOV, P. N.

Tropical-zone weather in the infrared /Pogoda tropicheskoi zony v infrakrasnykh luchakh/.

[UN PAPER 68-95774] 06 p0949 A69-17039

Satellite Meteorology /Sputnikovaya Meteorologiya/.

13 p2291 A69-27723

Certain characteristics of the outgoing radiation fields /Nekotorye kharakteristiki poei ukhodiasheei radiatsii/.

13 p2291 A69-27726

Radiation fields of large-scale atmospheric disturbances /Radiatsionnye polia krupnomasshtabnykh atmosferynykh vozmushchenii/.

13 p2291 A69-27727

Evaluation of the use of radiative information from satellites in operative synoptic work /Opyt ispol'zovaniia radiatsionnoi informatsii so sputnikov v operativnoi sinopticheskoi rabote/.

14 p2473 A69-29729

## BELOV, P. V.

Statistical characteristics of individual magnetoionic wave components in oblique incidence.

13 p2355 A69-28722

## BELOV, S. N.

Coefficient of continuous absorption of a hydrogen-carbon plasma at a temperature of 40,000 deg K and a pressure of 70 atm /Koeffitsient nepreryvnogo pogloshcheniia vodorodno-uglerodnoi plazmy pri temperature 40 000 deg K i davlenii 70 atm/.

04 p0639 A69-15371

Reversible opacity of an optical quartz occurring during contact with a dense plasma /Obratimaia neprozrachnost' opticheskogo kvartsa, voz-nikaushchaia pri kontakte s plotnoi plazmoi/.

14 p2490 A69-29159

Coefficient of continuous absorption of hydrogen-carbon plasma at 40,000 deg K and 70 atm.

16 p2822 A69-32118

## BELOV, V. A.

Calculation of the thermal conductivity of a chemically reacting gas mixture /K raschetu teploprovodnosti khimicheskii reagiruiushchei gazovoi smesi/.

20 p3483 A69-36974

## BELOV, V. D.

Application of a finite difference technique to the problem of the natural longitudinal oscillations of straight rods of variable cross section /O primeneniia metoda konechnykh raznostei k zadache o sobstvennykh prodol'nykh kolebaniiax priamykh sterzhnei peremennogo secheniia/.

18 p3217 A69-34581

## BELOV, V. P.

Experimental study of the process of combustion of heterogeneous condensed systems /Eksperimental'noe issledovanie protsessa goreniia geterogennykh kondensirovannykh sistem/.

17 p3069 A69-33135

## BELOVA, G. N.

Ultrasonic modulation of a laser /Ul'trazvukovaia modulatsiia opticheskogo kvantovogo generatora/.

13 p2271 A69-27534

Ultrasonic modulation of a laser.

20 p3556 A69-38201

## BELOVA, M. M.

Bounded solutions of systems of ordinary second-order differential equations.

03 p0455 A69-13257

## BELOVA, O. S.

Microheterogeneity of monophase /according to the phase diagram/ titanium alpha-alloys /Mikroneodnorodnost' odnofaznykh po ravновесnym diagrammam sostoiianiia alpha-splavov titanai/.

04 p0617 A69-14939

Thin-film electron microscope structure studies of certain titanium alloys.

05 p0782 A69-16807

## BELOVE, L.

Cell design optimization.

10 p1639 A69-23992

## BELOZEROV, A. F.

Application of a Mach-Zehnder interferometer for obtaining holograms of transparent objects /O

primeneniia interferometra Tsendera- Makha dlia polucheniiia gologramm prozrachnykh ob'ektov/.

12 p2091 A69-26369

## BELOZEROV, A. N.

The initial ionization of hydrogen in a strong shock wave.

16 p2815 A69-31590

## BELSKII, N. K.

Negative dispersion of light in a CaWO sub 4 -Nd super 3 super plus crystal /Otritsatel'naia dispersiia sveta v kristalle CaWO sub 4 -Nd super 3 super plus/.

15 p2632 A69-30051

## BELSKII, S. A.

Meteoric variation of cosmic-ray intensity.

03 p0500 A69-13509

Determination of coupling coefficients from the azimuthal effect of cosmic rays /Opredelenie koeffitsientov svyazi po azimutal'nomu efektu kosmicheskikh luchei/.

10 p1770 A69-23925

## BELSTERLING, C. A.

Digital and proportional jet-interaction devices and circuits.

05 p0704 A69-16004

Fluidic component descriptions and systems synthesis.

05 p0705 A69-16007

## BELT, R. F.

Etching and X-ray topography of flux-grown magnetic garnets.

16 p2825 A69-31692

## BELTISHCHEV, N. F.

Effect of stratification on the formation of convective cells in the atmosphere /Vliianie stratifikatsii na formirovanie konvektivnykh iacheek v atmosfere/.

13 p2291 A69-27725

## BELTON, M. J. S.

Quantitative spectroscopy of Venus in the region 8,000-11,000 angstrom units.

02 p0319 A69-12107

An estimate of the abundance and the rotational temperature of CH sub 4 on Jupiter.

20 p3613 A69-38174

## BELTRACCHI, L.

Design, simulation and flight performance of the Radio Astronomy Explorer-A satellite.

07 p1226 A69-18328

## BELTRAN, A. M.

The high temperature properties of MarM-509.

01 p0095 A69-10546

The oxidation and hot-corrosion resistance of cobalt-base superalloys. [ASM PAPER D8-21.5]

20 p3564 A69-38134

## BELUGA, I. SH.

Design of waveguides and cavities by the methods of partial regions /scalar problem/.

09 p1469 A69-22626

## BELUGOU, J. L.

Use of primates in space research /Utilisation des primates dans les recherches spatiales/.

09 p1445 A69-22723

## BELUKHINA, I. G.

Difference schemes for solving the plane dynamic problem of the theory of elasticity with mixed boundary conditions /Raznostnye skhemy dlia resheniia ploskoi dinamicheskoi zadachi teorii uprugosti so smeshannymi kraevymi usloviiami/.

14 p2536 A69-29474

## BELVER, T. L.

Effect of transmission errors in image data compression techniques.

19 p3272 A69-36261

## BELY, O.

Electron detachment from H super minus by electron impact.

09 p1542 A69-21622

Ionization of highly charged positive ions.

09 p1596 A69-22054

## BELYI, I. M.

Recovery in alloys of the nimonic type /Vozvrat v splavakh tipa "Nimonic"/.

07 p1159 A69-18533

## BELYI, M. I.

A probability method for calculating the accuracy of inductive converters operating in the steady-state regime /O veroiatnostnom metode rascheta tochnosti induktsionnykh preobrazovatelei, rabotaiushchikh v ustanovivshemsia rezhime/.

13 p2259 A69-27424

## BELYI, V. A.

Device for investigation of wear resistance and anti-friction properties of thin polymer coatings in vacuum.

23 p4169 A69-41599

## BELYKH, V. N.

Phase-locked automatic frequency control system with a nonlinear filter in the phase control loop /Chastotno-fazovaiia avtopodstroika chastoty s nelineinym fil'trom v fazovoi tsepi upravleniia/.

04 p0559 A69-15140

## BELYTSCHKO, T.

Numerical methods for the limit analysis of plates. [ASME PAPER 68-WA/APM-21]

04 p0670 A69-14405

Quadratic programming and plasticity.

18 p3218 A69-34661

## BELZ, R. A.

Holographic techniques for the study of dynamic particle fields.

21 p3726 A69-39776

## BEM, D. J.

Electric-field distribution in the focal region of an offset paraboloid.

13 p2234 A69-28427

## BEN-DAVID, E.

Results of micrometeoroid collection experiments flown on rockets and satellites.

15 p2700 A69-31440

## BEN-MENAHAM, A.

On the summation of certain Legendre series.

01 p0171 A69-11072

## BENBADIS, H.

Comparative action of various annealings of a 2n 2907 p-n-p transistor subjected to 10 super 7 rads of cobalt 60 gamma rays /Action comparee de divers recuits d'un transistor pnp 2n 2907 soumis a 10 super 7 rads de rayons gamma du cobalt 60/.

15 p2625 A69-30827

Incidence of unitary sorting on the reliability of planar transistors subjected to irradiation recovery cycles /Incidence d'un tri unitaire sur la fiabilite de transistors planars soumis a des cycles irradiation-restauration/.

15 p2626 A69-30834

## BENBOW, T. G.

A solar flare monitor for Concorde.

07 p1131 A69-18551

## BENCE, A. E.

Chemistry and mineralogy of the silicates and metal of the Kodaikanal meteorite.

11 p1953 A69-24335

## BENCEMY, C.

Analysis of breathable liquid oxygen - Determination of its impurities /Analyse de l'oxygene liquide respirable - Dosage de ses impuretes/.

21 p3666 A69-39273

## BENDAVID, D.

Buckling of electroformed conical shells under hydrostatic pressure.

02 p0347 A69-12515

Systematic computation of lumped weight and inertia representations of arbitrary structures.

14 p2533 A69-29025

## BENDER, J. H.

International Metallographic Society, Annual Technical Meeting, 1st, Denver, Colo., November 11-13, 1968, Proceedings.

13 p2280 A69-28154

## BENDER, K. W.

Human factors evaluation of aircraft engine instrument displays. [SAE PAPER 690328]

11 p1829 A69-24488

## BENDER, L. S.

Optimization of nonequilibrium nozzle performance for selected system considerations. [AIAA PAPER 69-472]

16 p2733 A69-32652

## BENDER, M. A.

The Gemini XI S-4 spaceflight-radiation interaction experiment - The human blood experiment.

23 p4085 A69-41600

## BENDER, P. L.

Some implications for physics and geophysics of laser range measurements from earth to a lunar retro-reflector.

22 p3960 A69-40190

## BENDER, P. R.

Recurrent solutions to systems of ordinary differential equations.

10 p1720 A69-23636

- BENDER, R. L.**  
Analytical and experimental investigations of a jet exhausting into an oncoming supersonic stream. [AIAA PAPER 69-69] 06 p0864 A69-18164  
Saturn V/S-IC stage model and flight test base thermal environment. [AIAA PAPER 69-318] 09 p1611 A69-22383
- BENDRIKOV, G. A.**  
Trajectories of roots of two-channel systems with antisymmetric cross couplings /Traektorii kornei dvukhkanal'nykh sistem s antisimmetrichnymi perekrestnymi svyaziami/. 21 p3686 A69-38886
- BENDURA, R. J.**  
Dynamic stability characteristics of large-size 120 deg blunted conical spacecraft in a simulated Martian environment. [AIAA PAPER 69-104] 06 p1019 A69-18210  
Damping derivatives of 120 deg conical spacecraft from flights in a low-density environment. 22 p4036 A69-40550
- BENEDETTO, K. R.**  
Investigation of errors in measuring magnetic fields in high-temperature plasma discharges. [AIAA PAPER 68-727] 24 p4316 A69-43571
- BENEDICT, R. P.**  
Engineering analysis of experimental data. [ASME PAPER 68-WA/PTC-1] 05 p0768 A69-16192  
Fundamentals of Temperature, Pressure, and Flow Measurements. 07 p1131 A69-18410  
Army Materiel Command planning principles and philosophy. 08 p1423 A69-21153
- BENEDICT, W. S.**  
The water-vapor laser. 12 p2106 A69-26325
- BENEDIKTOV, E. A.**  
On frequency dependence of abnormal ionospheric absorption in auroral zone. 01 p0063 A69-10425  
Results of observations of sudden cosmic noise absorption in the ionosphere /Rezultaty nabludeniya vnezapnykh vyspyhek pogloshcheniya kosmicheskogo radioizlucheniya v ionosfere/. 02 p0306 A69-11667  
Certain features of the anomalous radio-wave absorption in the ionosphere in the polar aurora region /O nekotorykh osobennostiakh anomal'nogo pogloshcheniya radiovoln v ionosfere v zone poliarnykh siiani/. 02 p0207 A69-11688  
Relation between sporadic radio emission, recorded by Elektron satellites, and geomagnetic activity /O svyazi sporadicheskogo radioizlucheniya, zaregistrirovannogo na sputnikakh "Elektron," s geomagnitnoi aktivnost'yu/. 05 p0824 A69-16059  
Type 3 solar bursts recorded by the Elektron 4 artificial earth satellite /Solnechnyye vspleski III, tipa, zaregistrirovannyye na ISZ "Elektron-4"/. 05 p0824 A69-16060  
Results of measurements of cosmic radio noise absorption in the ionosphere within half of a solar activity cycle. 06 p1008 A69-17727  
Variations in the mean radio emission level at frequencies of 1.1 and 2.3 MHz according to measurements on the Elektron 4 artificial earth satellite /Variatsii srednego urovnya radioizlucheniya na chastotakh 1,1 i 2,3 MGts po izmereniyam na ISZ Elektron-4/. 09 p1578 A69-21776  
Polar-type absorption in the mid-latitude ionosphere during the global magnetic storm of May 26, 1967 /Pogloshchenie poliarnogo tipa v ionosfere srednikh shirot vo vremya mirovoi geomagnitnoi buri 26 maiya 1967 g./l. 10 p1688 A69-23935  
Results of observations on sudden flare-ups of cosmic noise absorption in the ionosphere. 13 p2334 A69-28698  
Some characteristics of anomalous radio wave absorption in the ionosphere in the auroral zone. 13 p2224 A69-28719  
A method of processing riometric data /O metodike obrabotki riometricheskikh dannykh/. 14 p2436 A69-29056  
Influence of radio wave absorption in the interstellar medium on the distribution of cosmic radio emission over the firmament /Vliianie pogloshcheniya radiovoln v mezhzvezdnoi srede na raspredelenie kosmicheskogo radioizlucheniya po nebosvodu/. 15 p2687 A69-30545  
Frequency dependence of anomalous absorption of cosmic radio emission in the ionospheric auroral zone /Chastotnaia zavisimost' anomal'nogo pogloshcheniya kosmicheskogo radioizlucheniya v ionosfere v zone poliarnykh siiani/. 20 p3587 A69-37033  
Type-III solar bursts recorded by the Elektron-4 satellite. 20 p3591 A69-37970  
PCA in July, August, and September 1966 according to observations in the auroral zone /Ppsh v iuile, avguste i sentiabre 1966 g. po nabludeniyam v avroral'noi zone/. 23 p4156 A69-41845
- BENEDIKTOV, E. A.**  
Relation between geomagnetic activity and the sporadic radio emission recorded by the Elektron satellites. 20 p3606 A69-37969
- BENEKEN, J. E. W.**  
The use of multiple models in cardiovascular system studies - Transport and perturbation methods. 03 p0380 A69-13855  
Coronary perfusion pressure and left ventricular function. 23 p4092 A69-42061
- BENENSON, E. B.**  
End effects in a magnetogasdynamic channel with terminal insulators of finite dimensions /Kontsevye efekty v magnetogazodinamicheskom kanale pri konechnykh razmerakh okonechnykh izolatorov/. 07 p1193 A69-19030
- BENENSON, H.**  
Computer data processing to compute NERVA transfer functions. [IEEE PAPER 2B-2] 07 p1179 A69-19187
- BENENSON, L. S.**  
Calculation of the mutual impedances of array radiators /K raschetu vzaimnykh soprotivleniy izluchatelei v reshetkakh/. 21 p3682 A69-39126
- BENES, M.**  
Relative and absolute orientation error analysis. [JPL-TR-32-1344] 03 p0429 A69-13299  
Calibration of Surveyor VII stereo mirror. [JPL-TR-32-1390] 13 p2263 A69-28199
- BENESOVSKY, F.**  
Experiments on deoxidation of sintered molybdenum with carbon, boron, and silicon /Versuche zur Desoxidation von Sintermolybdaen mit Kohleinstoff, Bor und Silizium/. 02 p0265 A69-12002  
Diffusion of silicon in molybdenum /Die Diffusion von Silizium in Molybdaen/. 05 p0780 A69-15990
- BENEVOLENSKAIA, T. V.**  
Combined effect of two-month hypokinesia and acceleration on the cardiovascular system. 02 p0197 A69-11495  
Influence of high-altitude mountain acclimatization on the tolerance of the organism to environmental effects /Vliianie vysokogornoj akklimatizatsii na ustoiichivost' organizma k vozddeystviyu faktorov vneshnei sredy/. 13 p2212 A69-28623
- BENEVOLENSKII, V. N.**  
Quantitative laws of the postirradiation recovery of yeast cells after exposure to heavy high-energy C super 12 ions /Kolichestvennyye zakonomernosti postradiatsionnogo vosstanovleniya drozhdzhevykh kletok pri deystvii vysokoenenergetichnykh tiazhelykh ionov C sub 12/. 14 p2406 A69-28915
- BENFORD, J.**  
Ion and electron temperature and density by Thomson scattering with a low resolution monochromator. 11 p1925 A69-24310
- BENGEL, H.**  
Gravity as a biological determinant. 06 p0872 A69-17011  
Methods of simulating weightlessness. 06 p0879 A69-17012
- BENGEL, H. H.**  
Decreased antidiuretic activity measured in the blood of chronically centrifuged rats. 14 p2407 A69-29301  
Urine solute composition of rats exposed to chronic centrifugation. 24 p4262 A69-42904
- BENGTSON, R.**  
Atomic spectroscopy with the shock tube. 18 p3176 A69-34446
- BENGTSON, R. D.**  
Relative transition probabilities for silicon. 13 p2340 A69-27580  
Measurements of the Stark broadening of H gamma. 22 p3985 A69-40664
- BENHAM, R.**  
Performance of epoxy molding compounds on DIP integrated circuits. 19 p3280 A69-35546
- BENIAMINOV, D. M.**  
Variational principle for the equations of the mixed method in the nonlinear theory of shallow shells /Variatsionnyi printsip dlia uravnenii smeshannogo metoda nelineinoi teorii pologikh obolochek/. 21 p3838 A69-39191
- BENIMA, B.**  
The Gauss method for solving Kepler's equation in nearly parabolic orbits. 12 p2171 A69-27154
- BENINGFIELD, H. W.**  
Design and operational considerations for the course line computer. [SAE PAPER 690345] 11 p1913 A69-24489
- BENISH, O. J.**  
Evaluation of lubricants for anti-friction bearings in a thrust reversing actuator drive. [SAWE PAPER 68-LC-1] 18 p3148 A69-35003
- BENKE, IU.**  
On the Langmuir paradox. 06 p0960 A69-16922
- BENKO, D.**  
Monte Carlo calculations of the nuclear cascade process in the atmosphere. 13 p2331 A69-28397
- BENKOVA, N.**  
Synoptic observations of the F2 layer in the magnetically conjugate regions of Kerguelen and Archangel /Les observations synoptiques de la couche F2 dans les regions magnetiquement conjuguees de Kerguelen et Arkangelsk/. 16 p2784 A69-32612
- BENKOVA, N. P.**  
Synoptic observations of the F sub 2 -layer of the ionosphere in the magnetically conjugate regions Kerguelen-Arkhangelsk province. 06 p0919 A69-17723  
Ionospheric disturbances after the proton flare of 7 July 1966. 10 p1684 A69-23784
- BENN, E.**  
Compatibility of refractory metals, precious metals and several coatings. 09 p1477 A69-22325
- BENNER, D. C.**  
Arizona-NASA atlas of infrared solar spectrum. VI. 21 p3800 A69-38683
- BENNETT, A.**  
A new method for constructing periodic orbits in nonlinear dynamical systems. [AAS PAPER 68-085] 20 p3595 A69-37171
- BENNETT, F. D.**  
Vaporization waves in metals. 01 p0117 A69-10655
- BENNETT, F. O.**  
Prediction of interstitial gas pressure in a multilayer insulation during rapid evacuation. [AIAA PAPER 69-608] 17 p3072 A69-33275
- BENNETT, G.**  
Medical wastage of military and civil aircrew in Great Britain 1963-68. 24 p4277 A69-43391
- BENNETT, G. E.**  
YIG magnetoelastic two-ports for microwave pulse compression. 02 p0217 A69-12149
- BENNETT, J. A.**  
On the application of variation techniques to the ray theory of radio propagation. 21 p3675 A69-39279
- BENNETT, J. E.**  
Design of low sensitivity sample-data control systems. [ASME PAPER 68-WA/AUT-15] 05 p0738 A69-16177



**BENNETT, J. H.**

Electron energy distribution functions and vibrational excitation rates in CO sub 2 laser mixtures.  
14 p2460 A69-29603

**BENNETT, M. G.**

Application of high voltage electron beam welding of structural assemblies.  
[SBAC PAPER 12] 20 p3550 A69-37456

**BENNETT, P. B.**

Effects of hyperbaric nitrogen and oxygen on auditory evoked responses in man.  
14 p2407 A69-29302

Action of selected drugs on decompression sickness in rats.  
17 p2913 A69-33172

Measurement and mechanisms of inert gas narcosis.  
21 p3655 A69-38912

**BENNETT, R. A.**

Nuclear magnetic resonance study of the niobium-nitrogen system NbN sub x.  
19 p3383 A69-36445

**BENNETT, R. G. T.**

The phase of waves partially reflected from the lower ionosphere /70-120 km/.  
21 p3672 A69-38558

**BENNETT, R. L.**

Tail rotor design. II - Structural dynamics.  
[AHS PAPER 342] 17 p3059 A69-33504

**BENNETT, R. T.**

Latitude dependence of 6300 angstrom units /O I/ twilight airglow enhancement.  
05 p0756 A69-16280

**BENNETT, S. J.**

Holography of diffusely reflecting objects using a double focus lens.  
11 p1880 A69-24467

**BENNETT, W. R., JR.**

Collision processes in the argon ion laser.  
07 p1157 A69-19656  
Charge-exchange excitation and CW oscillation in the zinc-ion laser.  
21 p3735 A69-38598

**BENNICKE, A.**

Homogeneous main sequence models with convective cores. II.  
05 p0829 A69-16777

**BENNIGHT, J. D.**

An investigation of the decoupling effects in a magnetic forming beryllium coil assembly.  
11 p1888 A69-25310

**BENNING, F. N.**

Simulation of average sea level sunlight /air mass two/.  
09 p1476 A69-21648  
Handbook of Solar Simulation for Thermal Vacuum Testing.  
21 p3690 A69-38894

Design and adaptation of a 2 S.C. solar simulator to an existing multiwall ultrahigh vacuum chamber.  
[AIAA PAPER 69-1001] 22 p3921 A69-40377

**BENNING, G. L.**

Avionics systems for the SST era.  
02 p0279 A69-12364

**BENNINGHOVEN, A.**

Mechanism of ion formation and ion emission during sputtering /Zum Mechanismus der Ionenbildung und Ionenemission bei der Festkoerperzerstaeubung/.  
08 p1355 A69-20616

**BENNION, D. R.**

Digital Magnetic Logic.  
20 p3498 A69-37144

**BENNOUN, J.-F.**

Concerning the interaction between the electromagnetic field and the polarizable elastic medium in the theory of gravitation - Definition of electromagnetic energy in matter /Sur l'interaction entre le champ electromagnetique et le milieu elastique polarisable en theorie de la gravitation - Definition de l'energie electromagnetique dans la matiere/.  
02 p0279 A69-11537

**BENO, E. A.**

Airload, blade response, and hub force measurements on the NH-3A compound helicopter.  
[AIAA PAPER 68-980] 24 p4250 A69-43712

**BENOIT, A.**

Signal attenuation due to neutral oxygen and water vapour, rain and clouds.  
03 p0397 A69-13727

An experimental study of spherical combustion waves in a hemispherical chamber.  
06 p1034 A69-17927

Distribution of television by satellite with special reference to the size of the earth-station aerials.  
10 p1654 A69-23389

Thermodynamic properties for gaseous mixtures used in hypervelocity techniques.  
22 p4049 A69-40266

**BENSEMA, W. D.**

Pulse spacing in high-frequency atmospheric noise bursts.  
14 p2445 A69-29885

**BENSIECK, H. J.**

Plane reflector with variable reflection coefficient for electromagnetic centimeter waves.  
03 p0406 A69-13938

**BENSO, M. T.**

Study of the globular cluster omega Centauri /Studio sull'ammasso globulare omega Centauri/.  
16 p2859 A69-32220

**BENSON, A. J.**

Effect of diphenidol and prochlorperazine on semicircular canal function in man.  
17 p2913 A69-33168

**BENSON, D.**

An approximate theoretical analysis of the static and dynamic characteristics of the herringbone grooved, gas lubricated journal bearing, and comparison with experiment.  
[ASME PAPER 68-LUBS-7] 13 p2265 A69-27269

**BENSON, D. K.**

The effects of the surface on the mechanical properties of metals.  
03 p0448 A69-13869

**BENSON, F. A.**

Temperature effects in glow-discharge tubes.  
09 p1468 A69-22602

**BENSON, H. E.**

Lunar surface mechanical properties.  
02 p0321 A69-12225

**BENSON, R. B., JR.**

Hydrogen embrittlement of stainless steel.  
01 p0093 A69-10062

**BENSON, R. F.**

Frequency shifts observed in the Alouette cyclotron harmonic plasma resonances.  
20 p3496 A69-37892

**BENSON, R. L.**

Airframe cost element prediction and application to cost control.  
[SAWE PAPER 731] 18 p3221 A69-34894

**BENSON, R. S.**

Radial gas turbines.  
[IME PAPER 7] 12 p2146 A69-25787

**BENSON, V.**

Beta heat treatment of Ti-6Al-4V fasteners.  
21 p3729 A69-38661

**BENT, R. B.**

Measurement of terrestrial radio noise.  
21 p3759 A69-39259  
Determination of the attitude of the Ariel III satellite.  
21 p3820 A69-39260

**BENTFIELD, G.**

Length requirements for takeoff and landing /Laengenbedarf bei Starts und Landungen/.  
08 p1301 A69-20717

**BENTINI, G. G.**

Influence of hydrogen content on the relaxation spectrum of alpha titanium.  
01 p0096 A69-10614

**BENTLEY, S. B.**

Shock ionization kinetics of pure nitrogen.  
24 p4302 A69-43367

**BENTON, E. R.**

Influence of an axial magnetic field on the steady linear Ekman boundary layer.  
03 p0474 A69-13141  
A composite Ekman boundary layer problem.  
05 p0744 A69-15665

**BENTWICH, M.**

Incompressible viscous flows resulting from the steady rotation of a finite disk.  
18 p3121 A69-34784

**BENTZ, C. E.**

Controlling future jet engines.  
[ASME PAPER 68-GT-62] 08 p1376 A69-19846

Development of a turbine inlet temperature sensor.  
[AIAA PAPER 69-544] 16 p2792 A69-32692

**BENYON, P. R.**

A review of numerical methods for digital simulation.  
03 p0401 A69-13763

**BENZAKEIN, M. J.**

Fan compressor noise reduction.  
[ASME PAPER 69-GT-9] 09 p1571 A69-22505

**BERA, K.**

Note on an interesting metric of the field equations in general relativity.  
07 p1182 A69-19418

**BERA, R.**

Stability of an anisotropic right-angled isosceles triangular plate with simply supported edges due to large deflections.  
12 p2180 A69-26270

**BERAN, D.**

Cirrus cloud influence on 6.4-6.9 mu observations.  
12 p2075 A69-27003

**BERAN, D. W.**

Apollo landmark sighting - An application of computer simulation to a problem in applied meteorology.  
01 p0110 A69-10692

**BERAN, M. J.**

Propagation of the fourth-order coherence function in a random medium /a non-perturbative formulation/.  
10 p1724 A69-23042  
Scattering of partially coherent radiation.  
16 p2797 A69-32050

**BERANEK, L. L.**

General aircraft noise.  
14 p2392 A69-29154

**BERARD, A.**

Certain aspects of superconductivity /Sur quelques aspects de la supraconductivite/.  
04 p0644 A69-15321

**BERBENTE, C.**

Determination of pressures and shock-wave configuration for plane supersonic and low hypersonic flows /Bestimmung der Drucke und der Stosswellenform bei ebener ueberschall-bzw. maessiger Hyperschallstroemung/.  
01 p0008 A69-11299  
Pressure distribution on conical delta wings in supersonic-moderate hypersonic flow.  
20 p3459 A69-37593

**BERBRIDGE, E. M.**

Spectra of quasi-stellar radio sources /Spektry kvazizvezdnykh radioistochnikov/.  
12 p2167 A69-27046

**BERCAW, R. W.**

Deuteron break-up by 42 Mev alpha particles.  
03 p0472 A69-13469

**BERCHTOLD, K.**

Technological applications of heterojunctions /Zur technischen Anwendung von Hetero- Uebergaengen/.  
02 p0294 A69-11598  
Transport properties of indium antimonide thin films.  
18 p3182 A69-34348

**BERCOVITCH, M.**

Atmospheric effects on cosmic ray monitors.  
03 p0498 A69-12936

**BERDICHEVSKAIA, V.**

Longitude distribution of sunspots in new cycles during the initial phase of solar activity.  
02 p0314 A69-11647

**BERDICHEVSKII, M. N.**

Magnetovariational sounding using the spatial derivatives of the field /Magnitovariatsionnoe zondirovanie s ispol'zovaniem prostranstvennykh proizvodnykh polia/.  
14 p2438 A69-29081

Frequency probing of the earth on the basis of the results of a spherical analysis of electromagnetic variations /Chastotnoe zondirovanie zemli po rezul'tatam sfericheskogo analiza elektromagnitnykh variatsii/.  
14 p2438 A69-29082

Theoretical foundations of the use of electromagnetic variations in studying the electrical conductivity of the earth /O teoreticheskikh osnovakh ispol'zovaniia elektromagnitnykh variatsii dlia izucheniia elektroprovodnosti zemli/.  
20 p3522 A69-37058

Geomagnetic pulsations with an intensity maximum at mid-latitudes /Geomagnitnye pul'satsii s maksimum intensivnosti v srednikh shirotakh/.  
20 p3522 A69-37059

- Impedance of an inhomogeneous earth /Impedansy neodnorodnoi zemli/.  
23 p4157 A69-41867
- BERDNIKOV, E. P.**  
Electromechanical effect in cadmium sulfide /Ob elektromekhanicheskome effekte v sul'fide kadmia/.  
21 p3781 A69-39072
- BERENBERG, V. A.**  
Generation of microsecond pulses in a ruby laser.  
03 p0441 A69-14142  
Single-pulse ruby lasers with opto-mechanical shutters.  
12 p2107 A69-26588
- BERENBLIUM, A. S.**  
Roentgenographic and metallographic investigations of chromium-silicon diffusion layers on titanium /Rentgenograficheskie i metallograficheskie issledovaniia khromosilitsirovannykh diffuzionnykh sloev na titane/.  
04 p0614 A69-14578  
X-ray and metallographic analysis of chromosilicide coatings on titanium.  
15 p2638 A69-30279
- BERENIKASHVILI, N. N.**  
Analysis of heuristic experiments concerning the planning and forecasting of scientific research /Analiz evristicheskikh eksperimentov po planirovaniu i prognozirovaniu nauchnykh issledovaniy/.  
15 p2720 A69-30969
- BERESKINA, M. K.**  
The interaction of a shock wave in a body in the presense of ionization relaxation.  
19 p3450 A69-36361
- BERESNEV, B. I.**  
Effect of hydro-extrusion on the mechanical properties of molybdenum.  
02 p0267 A69-12189  
Mechanical properties of molybdenum after hydroextrusion.  
16 p2803 A69-32491  
Mechanical properties of hydro-extruded molybdenum after annealing.  
18 p3156 A69-34719  
Anomalous grain growth and the deformation of single crystals during annealing of hydraulically extruded molybdenum /Anomal'nyi rost zeren i obrazovanie monokristallov pri ozhigie gidroekstrudirovannogo molibdena/.  
21 p3745 A69-38953
- BERESNEV, G. A.**  
High-strength maraging steel N18K9M5T /MS 200/.  
04 p0615 A69-14645  
Susceptibility to brittle fracture of maraging steel N18K9M5T /MS 200/ and high-strength martensitic steel.  
04 p0615 A69-14647
- BERESNEV, N. P.**  
Control system of the automatic station "Luna-9."  
10 p1792 A69-24197
- BEREZHOVI, V. D.**  
Apparatus for study of the boiling of potassium in tubes.  
03 p0534 A69-14150
- BEREZIN, B. G.**  
Heat removal from a laser rod by means of a metallic conductor.  
12 p2108 A69-26592
- BEREZIN, IU. A.**  
Waves of finite amplitude in a hot plasma.  
07 p1190 A69-18692  
Collisionless shock waves in rarefied plasma.  
08 p1303 A69-19996  
A one-dimensional nonlinear model of anisotropic plasma instability /Odnomernaia nelineinaia model' neustoiichivosti anizotropnoi plazmy/.  
10 p1741 A69-23961
- BEREZIN, IU. V.**  
Polarization of scattered electromagnetic waves /Polarizatsiia rassaiannykh elektromagnitnykh voln/.  
09 p1453 A69-21527  
Ionospheric Studies /Ionosfernye Issledovaniia/.  
14 p2443 A69-29861  
Effect of the frequency instability of a reference oscillator during phase measurements /Vliianie nestabil'nosti chastoty opornogo generatora pri fazovykh izmereniiax/.  
14 p2444 A69-29873  
Polarization of scattered electromagnetic waves.  
16 p2754 A69-32522
- BEREZIN, V. M.**  
On the influence function for a problem occurring in determining the wind from the pressure field.  
09 p1536 A69-21867  
Problems of ozone circulation in the earth's atmosphere /Problemy tsirkulatsii ozona v zemnoi atmosfere/.  
14 p2442 A69-29830
- BEREZINA, A. L.**  
Changes of electrical and magnetic properties during the formation of a modulated structure in the alloy Co-Ti /Izmenenie elektricheskikh i magnitnykh svoystv pri obrazovanii modulirovannoi struktury v splave Co-Ti/.  
11 p1904 A69-24707  
State of a precipitated phase during aging of a cobalt-titanium solid solution /O sostoianii fazy vydeleniia pri starenii tverdogo rastvora kobal'titana/.  
12 p2112 A69-26037
- BEREZINA, G. A.**  
Study of the working capacity of a human operator during 64-hour wakefulness /Issledovanie rabotosposobnosti cheloveka- operatora pri 64-chasovom lishenii sna/.  
22 p3877 A69-40280
- BEREZINA, L. IA.**  
Metric theory of a straight-line complex /K metricheskoi teorii kompleksa priamykh/.  
03 p0457 A69-13865
- BEREZKIN, A. N.**  
Shadow images of bodies obtained at hypersonic speeds by means of a single-pulse laser /Poluchenie tenevykh izobrazhenii tel pri giperzvukovykh skorostiakh s pomoshch'iu monoimpul'snogo opticheskogo kvantovogo generatora/.  
22 p3963 A69-40601
- BEREZOVSKII, V. A.**  
Effect of lobeline on oxygen pressure in the region of the gigantocellular nucleus of the medulla oblongata of dogs /Vpliv lobelinu na napruzheniia kisniu v oblasti gigantoklittinnogo iadra dovgastogo mozku sobak/.  
22 p3888 A69-41273
- BERG, O. E.**  
A new criterion for the identification of micrometeor impact sites on aluminized glass.  
18 p3199 A69-34952
- BERG, W. F.**  
Photographic material as a three-dimensional recording medium /Das photographische Material als dreidimensionales Registriermedium/.  
12 p2089 A69-26196
- BERGE, G.**  
Estimate of a toroidal, magnetohydrodynamically stable, high-beta dynamic equilibrium.  
15 p2660 A69-30877
- BERGE, G. L.**  
Recent observations of Saturn, Uranus, and Neptune at 3.12 cm.  
01 p0148 A69-10052  
High-resolution interferometry of Venus at 3.12-cm wavelength.  
18 p3191 A69-34302  
Polarization measurements of extragalactic radio sources at 3.12-cm wavelength.  
20 p3610 A69-38139
- BERGE, K. G.**  
Histology of papillary muscles of the left ventricle in myocardial infarction.  
24 p4261 A69-42724
- BERGEMANN, G. T.**  
Avionics systems for the SST era.  
02 p0279 A69-12364
- BERGEN, A. R.**  
Absolute input-output stability of feedback systems with a single time-varying gain.  
01 p0054 A69-11414
- BERGENS, D.**  
Photon switch eliminates noise in subsystem intercommunication.  
20 p3505 A69-37289
- BERGER, E. G.**  
Dynamics of a rigid shaft rotating in hinged and elastic bearings /Dinamika zhestkogo vala, vrashchaiushchegosia v sharnirnoi i uprugoi oporakh/.  
23 p4171 A69-42483
- BERGER, E. L.**  
Interaction of astrodynamics and a Mars imaging mission.  
[AIAA PAPER 69-127] 06 p1011 A69-18169
- BERGER, H.**  
Transient electromagnetic guided wave propagation in moving media.  
04 p0557 A69-14752  
A theoretical appraisal of the quenched multiple domain mode in GaAs microwave diodes.  
08 p1282 A69-20107  
Ultrasonic imaging systems for nondestructive testing.  
13 p2269 A69-28661
- BERGER, L. S.**  
Processing biomedical information by optical methods.  
21 p3666 A69-39440
- BERGER, M.**  
Comparison of statistical models for the purpose of designing an optimum predictor.  
01 p0043 A69-10558
- BERGER, R. A.**  
Solar CII resonance-line profiles.  
09 p1592 A69-21456
- BERGER, S. A.**  
Analysis of the boundary layer preceding an accelerating flame.  
19 p3450 A69-36359
- BERGESON, J. E.**  
Power radiated by oscillating magnetic and oscillating electric dipoles in a cold, streaming plasma.  
09 p1544 A69-21329
- BERGEY, J. A.**  
16-40 angstrom units coronal X-ray emission during the 12 November 1966 eclipse.  
04 p0650 A69-15531
- BERGFELD, D. B.**  
Special purpose automatic test set development techniques.  
11 p1851 A69-25063
- BERGH, A. A.**  
The temperature dependence of ideal gain in double diffused silicon transistors.  
05 p0733 A69-16558
- BERGHOFER, W.**  
Q-measurements of microwave cavities /Zur Messung des Gütefaktors von Mikrowellenresonatoren/.  
13 p2223 A69-28606  
Electronically variable phase shifters and attenuators in strip line technology /Elektronisch steuerbare Phasenschieber und Dämpfungsglieder in Streifenleitungstechnik/.  
16 p2763 A69-32582
- BERGLES, A. E.**  
Analysis of combined free and forced convection for fully developed laminar flow in horizontal tubes.  
24 p4409 A69-43519
- BERGMAN, P.**  
Construction and operation of a hot corrosion test facility.  
22 p3928 A69-40673
- BERGMAN, P. A.**  
Erosion tests of compressor alloys and coatings for aircraft gas turbines.  
01 p0099 A69-11058
- BERGMAN, R. M.**  
Asymptotic analysis of certain two-dimensional problems in the moment theory of elasticity /Asimptoticheskie analiz nekotorykh ploskikh zadach momentnoi teorii uprugosti/.  
09 p1614 A69-21884
- BERGMAN, R. R.**  
Laser-beam scintillation over horizontal paths from 5.5 to 145 kilometers.  
09 p1517 A69-22080
- BERGMAN, S.**  
Application of the kernel function for the computation of flows of compressible fluids.  
01 p0058 A69-10225  
Integral Operators in the Theory of Linear Partial Differential Equations /2nd Edition/.  
08 p1343 A69-20725
- BERGON, J. CL.**  
Pressing problems in the utilization of rotating-mirror streak cameras in the study of extreme compressions by shock waves /Probleme actuels d'Utilisation des cameras a fente a miroir tournant dans l'etude des compressions extremes par ondes de choc/.  
12 p2084 A69-26151
- BERGOT**  
Attempt at rational treatment of the medical aid problem after a large capacity aircraft accident at an



airport/Tentative de traitement rationnel du probleme des secours medicaux apres accident d'un avion a grande capacite sur un aeroport/.  
24 p4270 A69-42602

## BERGOT, G.

Attempt at rational treatment of the problem of medical aid after aircraft accidents at the airport/Tentative de traitement rationnel du probleme des secours medicaux apres accident aerien sur aeroport/.  
23 p4107 A69-41812

## BERGSTEDT, K.

Effect of diffusion and mass flows in plasma on the degree of ionization/Die Beeinflussung des Ionisationsgrades durch Diffusions- und Massenstroeme im Plasma/.  
12 p2141 A69-27146

## BERGSTEDT, M.

Disturbances of the balance system in man during alcoholic hangover.  
23 p4089 A69-41817

## BERGSTROEM, I.

Mean lives of some doubly excited levels in lithium.  
I.  
13 p2301 A69-27454  
Mean lives of some excited levels of Li I and Li II.  
18 p3177 A69-35012

## BERGSTROM, L.

Nondestructive testing by high-speed thermography.  
15 p2618 A69-30316

## BERGVELD, P.

The influence of substrate bias upon the AC characteristics of MOS transistors.  
07 p1102 A69-18860

## BERIOZKIN, A. N.

Optical quantum generator application for high-speed photography and holography in ballistic investigations.  
12 p2088 A69-26177

## BERIULEV, G. P.

Radar equation for precipitations and radar calibration in the measurement of multiple-target reflectivity/Uravnienie radiolokatsii osadkov i kalibrovka radiolokatora pri izmerenii otzrahaemosti mnozhestvennoi tseli/.  
16 p2806 A69-32264

## BERK, H. L.

Plasma wave regeneration in inhomogeneous media.  
15 p2660 A69-30918

## BERKA, L.

On tensors of the deformation of area.  
11 p1994 A69-25603

## BERKE, J. G.

Equation of state of polydiethylene glycol-bis-allyl carbonate.  
16 p2879 A69-32179

## BERKE, L.

Experimental studies of the postbuckling behavior of complete spherical shells.  
03 p0524 A69-13062

Automated large deflection and stability analysis of three-dimensional bar structures.  
23 p4232 A69-42141

## BERKELIEV, M.

Mechanism of formation of the daytime ionization anomaly in the F region at mid-latitudes/O mekhanizme obrazovaniia dnevoi anomalii ionizatsii v F-oblasti na perekhodnykh shirotakhl/.  
05 p0753 A69-16031

Nighttime variation of ionization in the F region of the ionosphere at mid-latitudes/Nochnoe izmenenie ionizatsii F-oblasti ionosfery na perekhodnykh shirotakhl/.  
12 p2064 A69-26007

Influence of zonal drift on the formation of a morning ionization anomaly in the F region/O vliianiia zonal'nogo dreifa na obrazovanie predpoludnennoi anomalii ionizatsii v F-oblasti/.  
14 p2442 A69-29732

## BERKENGEIM, A. A.

Experimental study of heat transfer by natural convection in a closed space/Ekspperimental'noe issledovanie peredachi tepla estestvennoi konveksiei v zamknutom prostranstve/.  
07 p1242 A69-18926

## BERKEY, E.

Distribution of trace elements in Smithsonian iron meteorite by spark source mass spectrometry.  
08 p1404 A69-20922

Chlorine as an indicator of terrestrial contamination in iron meteorites.  
08 p1405 A69-20923

## BERKHOUT, J.

Simian EEG activity related to problem solving during a simulated space flight.  
17 p2910 A69-33749

## BERKHOUT, J. I.

Central nervous, cardiovascular and metabolic data of a Macaca nemestrina during a 30-day experiment.  
24 p4260 A69-42703

## BERKINBAEV, D.

A critical case of stable motion/Ob odnom kriticheskom sluchae ustoychivosti dvizheniia/.  
21 p3771 A69-39108

## BERKLEY, S. G.

Materials for advanced airbreathing aircraft engines. [ASM PAPER D8-25.2]  
20 p3586 A69-38133

## BERKMAN, F.

Complete response of distributed systems controlled by a finite number of linear feedback loops. [ASME PAPER 69-VIBR-61]  
10 p1668 A69-24145

## BERKOVSKY, L.

A numerical model for investigation of upper atmosphere effects.  
19 p3363 A69-36502

## BERKOVICH, E. M.

Convergence of difference approximations for optimal control problems/O skhodimosti raznostnykh aproksimatsii dlia zadach optimal'nogo upravleniia/.  
20 p3509 A69-36989

Difference approximations in optimal control problems.  
21 p3684 A69-38430

## BERKOVICH, L. V.

Certain characteristics of the outgoing radiation fields/Nekotorye kharakteristiki polei ukhodiaschei radiatsii/.  
13 p2291 A69-27726

## BERKOVITS, G.

Beam-lead Schottky-barrier diodes for low-noise integrated microwave mixers.  
02 p0222 A69-12474

## BERKOVITS, S.

Exponential distributions in Markov chain models for communication channels.  
01 p0027 A69-10267

## BERKOVSKII, B. M.

Occurrence of convection in cavities with a variable wall temperature/O vozniknovenii konveksii v polostiakh s peremennoi temperaturoi stenok/.  
07 p1241 A69-18921

Class of analytical solutions of the nonlinear equation of heat conduction/Klass analiticheskikh reshenii nelineinogo uravneniia teploprovodnosti/.  
13 p2372 A69-27434

Weakly damped transverse and thermal waves in a fluid/Slabozatukhaushchie poperechnye i teplovye volny v zhidkosti/.  
15 p2718 A69-31168

Heat convection waves in viscoelastic fluids/Termokonvektivnye volny v viazko-uprugikh zhidkostiakh/.  
16 p2878 A69-31952

## BERKOWITZ-MATTUCK, J. B.

Mechanisms of oxidation of Ta-10W alloy coated with tungsten disilicide.  
13 p2280 A69-28137

## BERKOWITZ, H. M.

Dynamic analysis and development of response histories and tradeoff study charts for spherical impact limiters.  
04 p0683 A69-15508

A theory of simple beams and columns for anisotropic materials.  
07 p1171 A69-18727

## BERKOWITZ, R. S.

Multiple-target monopulse radar processing techniques.  
04 p0562 A69-15470

## BERKOWITZ, W. D.

Relative roles of sympathetic and parasympathetic nervous systems in the carotid sinus reflex in dogs.  
24 p4257 A69-42629

## BERKSHIRE, J. R.

Development of an aviation combat criterion.  
09 p1447 A69-22549

## BERL, S.

Compartmentation of glutamic acid metabolism in brain slices.  
18 p3096 A69-35172

## BERLEKAMP, E. R.

Block coding for the binary symmetric channel with noiseless, delayless feedback.  
06 p0891 A69-17864

## BERLIN, A. B.

Radiometer for the 4-cm range with a receiver using tunnel and parametric amplifiers/Radiometr 4-cm diapazona s priemnikom na tunnel'nykh i parametricheskikh usiliteliakh/.  
21 p3724 A69-39076

## BERLIN, A. S.

Measurement of the characteristics of millimeter-wavelength diodes with nonlinear capacitance/Voprosy izmereniia kharakteristik diodov diapazona millimetrovnykh voln s nelineinoi emkost'iu/.  
12 p2043 A69-26885

## BERLIN, I. I.

Film boiling of subcooled liquid nitrogen in turbulent flow.  
07 p1243 A69-19737

## BERLIN, R. E.

A silicon-germanium solar thermoelectric generator.  
05 p0704 A69-15674

## BERLING, J. T.

A proposed method for predicting the low-cycle fatigue behavior of 304 and 316 stainless steel.  
17 p2987 A69-33079

## BERMAN, B. L.

Threshold photoneutron cross section for Mg super 26 and a source of stellar neutrons.  
21 p3788 A69-38599

## BERMAN, L.

Oscillator with electronic temperature compensation/OCET/Oscillateur a compensation electronique de temperature "OCET"/.  
14 p2420 A69-29398

## BERMAN, M. I.

Turbulent heat transfer in the flow of an electrically conducting fluid through a circular tube in a longitudinal magnetic field/Teploobmen pri turbulentnom techenii elektroprovodnoi zhidkosti v krugloi trube v prodol'nom magnitnom pole/.  
09 p1621 A69-21590

## BERMAN, N. S.

Laminar velocity profiles in developing flows using a laser Doppler technique.  
15 p2589 A69-30001

## BERMAN, P. A.

Status of lithium solar cell development.  
19 p3251 A69-35692

## BERNACCA, P. L.

Mass and luminosity distribution in galaxies. III - NGC 681, NGC 972 and NGC 1084.  
20 p3599 A69-37476

## BERNARD, J.

Recombination transients in argon-caesium discharges/Transitoire de recombinaison dans les charges argon-caesium/.  
10 p1733 A69-23445

Drift of MOS transistors under radiation/Derives de transistors MOS sous radiations/.  
11 p1848 A69-24873

The problem of equivalence for the degradations in single-crystal solar cells/Probleme de l'equivalence pour les degradations dans les cellules monocristallines/.  
11 p1826 A69-24876

Tests on 1-Mev electrons of a logic family for space use/Tests aux electrons de 1 Mev d'une famille logique a usage spatial/.  
15 p2625 A69-30830

The determination of a general law for the total stress of turbulent two-dimensional boundary layers/Sur la determination d'une loi generale de la tension totale des couches limites bidimensionnelles turbulentes/.  
16 p2769 A69-31832

## BERNARD, M.

Some trends in quantum electronics.  
07 p1144 A69-18468

InSb sub 1-x Bi sub x alloy, a small band gap semiconductor.  
19 p3390 A69-36552

## BERNARD, M. L.

Influence of the oxidizer concentration in the hypergolic ignition of the nitric acid paraphenylene-diamine system/Influence de la concentration du comburant dans l'inflammation hypergolique du systeme acide nitrique-paraphenylenediamine/.  
15 p2561 A69-30185

- Study of solid-fuel ablation by liquid and physically homogeneous nitric acid. 24 p4363 A69-43568
- BERNARDET, H.**  
Study of metals' fatigue in vacuum and ultrahigh vacuum /Etude de la fatigue des metaux sous vide et ultra-vide/. 13 p2280 A69-28088
- BERNARDI, P.**  
A tunable absorbing band-stop filter - The field rotation filter. 14 p2422 A69-29751  
Improved mode filters for oversized rectangular waveguides. 16 p2760 A69-31948  
Wave propagation in rectangular guides having a time-space periodically modulated side-wall. 17 p2925 A69-33843
- BERNARDINI, A.**  
Necessity for an exhaustive criteriology in the simulation of complex piloting /Necessite d'une criterologie exhaustive dans la simulation des pilotages complexes/. 12 p2025 A69-27083
- BERNARDINI, A. T.**  
Glucose tolerance in dogs exposed to altitude and drug administration. I - Chlorpromazine. 14 p2408 A69-29305
- BERNARDO, J. V.**  
Educational materials produced by the space program. [UN PAPER 68-95291] 01 p0180 A69-10519  
The influence of space exploration on science education. 18 p3235 A69-35077
- BERNAS, R.**  
Nucleosynthesis of lithium, beryllium, and boron, and the formation of the solar system /Sur la nucleosynthese du lithium, du beryllium et du bore et la formation du systeme solaire/. 08 p1401 A69-20901  
Formation cross sections of lithium, beryllium, and boron isotopes produced by the spallation of oxygen by high-energy protons. 14 p2512 A69-28968  
Isotopic composition of lithium in some meteorites and the role of neutrons in the nucleosynthesis of the light elements in the solar system. 19 p3408 A69-36084
- BERNASCONI, A. A.**  
Concerning the geometrical aspect in the determination of the orientation of comet tails - A favourable occurrence. 20 p3599 A69-37467
- BERNEAU**  
Electronic counterrotating antenna of high directivity /Antenne contre-rotative electronique a grande directivite/. 04 p0578 A69-15065
- BERND, L. H.**  
Survey of the theory of mechanical face seals. II. 02 p0253 A69-12160  
Survey of the theory of mechanical face seals. III - Dynamic and interfacial fluid effects. 04 p0606 A69-14798
- BERNER, W. H.**  
Alcohol question in aircraft accident investigation. 01 p0022 A69-11345
- BERNHARD, F.**  
French sounding rockets /Les fusees-sondes francaises/. 02 p0333 A69-11916
- BERNHARDT, K.**  
Moist-adiabatic vertical gradient of the virtual temperature /Der feuchtadiabatische vertikale Gradient der virtuellen Temperatur/. 16 p2808 A69-32454
- BERNHOF, O. A.**  
Industry views on optimized contracting for systems engineering management, MIL-STD-XXX. 19 p3454 A69-36005
- BERNIER, H.**  
Study of the generation of a detonation in a granular explosive subjected to a shock wave /Etude de la generation de la detonation dans un explosif granulaire soumis a une onde de choc/. 02 p0349 A69-11527
- BERNOT, P. T.**  
Center-of-gravity requirements for trim of several axisymmetric bodies. 21 p3644 A69-39237
- BERNSHTEIN, M. L.**  
Stability of the dislocation structure in nimonic-type alloys. 04 p0615 A69-14636
- BERNST, R.**  
Some development trends in the area of thermochemical surface treatment /Einige Entwicklungstendenzen auf dem Gebiet der chemisch-thermischen Oberflaechenbehandlung/. 05 p0769 A69-16540
- BERNSTEIN, A. I.**  
Concepts for more efficient bulkhead designs for launch and space vehicles. [AIAA PAPER 68-355] 02 p0334 A69-12370
- BERNSTEIN, E. L.**  
Bending of normally loaded simply supported rectangular plates in the large-deflection range. 19 p3445 A69-36828
- BERNSTEIN, I. B.**  
Expansion of a resistive spherical plasma in a magnetic field. 01 p0132 A69-11211  
Variational calculation of transport coefficients in a binary mixture. 11 p1997 A69-24285
- BERNSTEIN, K.**  
Noninterference wind tunnel instrumentation. 10 p1672 A69-23266
- BERNSTEIN, L.**  
Heat transfer and transition to turbulence in the shock-induced boundary layer on a semi-infinite flat plate. 11 p1869 A69-24890  
Production of free sodium atoms for the spectrum-line reversal technique. 24 p4297 A69-43589
- BERNSTEIN, R. B.**  
A resonance theory of thermolecular recombination kinetics - H plus H plus M goes to H sub 2 plus M. 01 p0122 A69-10034  
Phenomenological analysis of reactive scattering. 04 p0554 A69-14859  
Dissociation energy and vibrational terms of ground-state /X super 1 sigma sub g super plus/ hydrogen. 05 p0796 A69-15908  
Inelastic transition probabilities and their role in the quenching of glory extrema in atom-diatom scattering. 07 p1185 A69-19302  
Molecular collisions. IX - Restricted distorted-wave approximation for rotational excitation and scattering of diatomic molecules. 10 p1726 A69-23524  
Role of potential curve crossing in subexcitation molecular collisions - Exact /two-state/ computations vs decoupling approximations for resonance positions. 12 p2131 A69-25983  
Reactive scattering of K by HBr, DBr in crossed molecular beams - Angular and velocity distributions of KBr in laboratory and C.M. systems. 18 p3178 A69-35476  
Resonance theory of thermolecular recombination kinetics - H plus H plus M yields H sub 2 plus M. 20 p3579 A69-37345
- BERNSTEIN, W.**  
Measurements of precipitated 1-20 kev protons and electrons during a breakup aurora. 18 p3187 A69-34946
- BERNY, F.**  
Study on the formation of retinal images and determination of spherical aberration of the human eye /Etude de la formation des images retiniennes et determination de l'aberration de sphericite de l'oeil humain/. 22 p3882 A69-40873
- BEROZASHVILI, I. U. N.**  
Mobile electrical domains in semiinsulating gallium arsenide. 04 p0643 A69-15261
- BERRIEL, L. R.**  
Construction of helium-neon lasers operating at 6328 angstrom units. 14 p2459 A69-29429
- BERROIR, A.**  
Determination of the transport coefficients for low-density polyatomic gases /Determination des coefficients de transport pour les gaz polyatomiques de faible densite/. 01 p0123 A69-10388
- BERRY, C. A.**  
The medical legacy of Gemini. 01 p0017 A69-11074
- Preliminary clinical report of the medical aspects of Apollos VII and VIII. 09 p1446 A69-22542
- Lunar medicine. 13 p2210 A69-27909
- Chromosome analyses of Gemini astronauts. 17 p2908 A69-33173
- Status report on space medicine in the United States. 19 p3456 A69-36460
- A status report on space medicine in the USA. 23 p4087 A69-41803
- BERRY, D. A.**  
A preliminary study of the creep and recovery behaviour of DTD 5070A aluminum alloy. 21 p3747 A69-39323
- BERRY, E. X.**  
A mathematical framework for cloud models. 07 p1176 A69-19041
- BERRY, G. A.**  
Test facility for simulation of system-environment interaction during Martian entry. 15 p2587 A69-30390
- BERRY, H. G.**  
Mean lives of the ip super 2 super 1 D level in F VI and O V. 17 p3009 A69-34188  
Measurement of the transition probabilities of some N I ultraviolet multiplets /Mesure des probabilites de transition de quelques multiplets ultraviolets de N I/. 18 p3178 A69-35413  
Observations of Lamb shifts in H using spatially periodic potentials. 18 p3179 A69-35488  
Relative intensities and exponential decay of a doublet in N V. 21 p3774 A69-38760
- BERRY, J.**  
Sea-level observations of the 7 July 1966 solar proton event. 10 p1767 A69-23765
- BERRY, M. V.**  
Uniform approximation - A new concept in wave theory. 15 p2653 A69-31165
- BERRY, R. L.**  
Time-optimal flight paths. 01 p0009 A69-10414  
Real-time targeting for the Apollo lunar orbit insertion maneuver. [AIAA PAPER 68-848] 21 p3828 A69-39760
- BERRY, T. F.**  
Diffusion bonding of superalloys. 19 p3320 A69-35559
- BERSHADER, D.**  
An interferometric study of the shock-reflection process in ionizing argon. 16 p2771 A69-31918  
Thermal conductivity of shock-heated argon. 18 p3228 A69-34459
- BERSHTEIN, I. L.**  
A possible method of measuring the inversion temperature of a medium. 07 p1137 A69-19761
- BERSHTEIN, P. IA.**  
Dynamic strains in an orthotropic ring having elastic moduli varying across its thickness and subjected to uniform dynamic compression /Dinamicheskie deformatsii ortotropnogo kol'tsa s peremennymi po tolschine moduliami uprugosti, podvergnutogo ravnomernomu dinamicheskomu davleniu/. 19 p3434 A69-35828
- BERSHTEIN, S. A.**  
Changes in the functional state of the cardiovascular system during locomotions /Pro zmini funktsional'nogo stanu sertshevo-sudinoi sistemi pri lokomotsiakh/. 22 p3885 A69-40966
- BERSOFF, E. H.**  
CLASP, computer language for aeronautics and space programming. [AIAA PAPER 69-957] 22 p3905 A69-40339
- BERSON, B. E.**  
Push-pull operation of transferred-electron oscillators. 15 p2574 A69-30168
- BERSSENBRUGGE, M.**  
Derivation of reliability specifications for avionics systems. 15 p2581 A69-31136



## BERT, C. W.

Theoretical and experimental bases for more precise elastic properties of epoxy.

01 p0103 A69-11268

Ductile creep rupture of shells with strain hardening and time-dependent loading.

[ASME PAPER 68-WA/MET-15]

05 p0838 A69-16153

Creep tensile instability in pressurized shells of revolution.

07 p1234 A69-19378

Buckling of cylindrical and conical sandwich shells with orthotropic facings.

[AIAA PAPER 68-294]

09 p1616 A69-21942

Nonlinear vibrations of a beam with pinned ends.

[ASME PAPER 69-VIBR-43]

10 p1807 A69-24181

Free vibrations of unsymmetrically laminated anisotropic plates with clamped edges.

13 p2371 A69-28673

Free vibrations of multilayer anisotropic cylindrical shells.

20 p3627 A69-37767

Vibrations of orthotropic sandwich conical shells with free edges.

23 p4235 A69-42462

Unusual Poisson's ratios of pyrolytic graphite.

24 p4338 A69-43599

## BERTAGNA, J. C.

Interrogators and responders for secondary radars

/Interrogeurs et repondeurs de radars secondaires/.

05 p0721 A69-16591

## BERTAILS, A.

Necessity for an exhaustive criteriology in the simulation of complex piloting /Necessite d'une criterologie exhaustive dans la simulation des pilotages complexes/.

12 p2025 A69-27083

## BERTAUD, D.

A self-adaptive system for recognition of dynamic shapes /Un systeme autoadaptatif a reconnaissance des formes dynamiques/.

12 p2054 A69-27080

## BERTAUX, J. L.

OGO-V measurements of Lyman-alpha intensity distribution and linewidth up to 6 earth radii.

15 p2699 A69-31412

## BERTEL, L.

First-order ionospheric Doppler effect /Effet Doppler ionospherique de 1er ordre/.

16 p2755 A69-32614

Use of the Diademe satellites for the determination of the electron content /Utilisation des satellites Diademe pour la determination des contenus electroniques/.

16 p2785 A69-32615

## BERTELE, U.

A new algorithm for the solution of the secondary optimization problem in non-serial dynamic programming.

22 p3976 A69-41037

## BERTELSEN, W. R.

The evolution of integrated lift, propulsion and control in the aeromobile air cushion vehicle.

13 p2201 A69-27543

## BERTHELOT, G.

Radome testing for thermokinetic and rain-induced erosion /Essais de radomes a l'erosion thermocinetique et a la pluvio-erosion/.

07 p1054 A69-19541

## BERTHOLD, W.

Mass spectrometer measurements of positive ions and neutral gas between 100 and 233 km above Andoya, Norway.

21 p3702 A69-38354

## BERTHOMIER, C.

A V.L.F. and particle rocket experiment at Kerguelen Islands. II.

15 p2571 A69-31424

## BERTHOUMIEU, H.

Experimental study of ionospheric perturbations caused by a strong explosion on the ground /Etude experimentale de la perturbation engendree dans l'ionosphere par une forte explosion au sol/.

09 p1488 A69-21694

## BERTIN, F.

Determination of the vertical profile of the ionosphere from measurements of the total electron content /Determination du profil vertical de l'ionosphere a partir de la mesure du contenu total d'electrons/.

22 p3941 A69-40718

## BERTIN, J.

ASTRE - A programming language oriented toward a better use of memory /Un langage de programmation oriente vers une meilleure utilisation de la memoire - ASTRE/.

03 p0401 A69-14180

## BERTIN, J. J.

Effect of upstream mass injection on the pressure field in a cavity.

16 p2770 A69-31902

## BERTINOV, A. I.

Electric arc source of a low-temperature plasma.

05 p0802 A69-15902

Methods of determining induced magnetic fields in linear DC MHD generators /Metody opredeleniya induirovannykh magnitnykh polei v lineinykh MGD-generatorakh postoianogo toka/.

10 p1636 A69-23454

## BERTNOLLI, E. C.

Time-domain analysis and measurement techniques for distributed RC structures. II - Impulse measurement techniques.

09 p1471 A69-21328

## BERTOLA, F.

Possible radial gas motions in NGC 3432 /Vozmozhnye radial'nye dvizheniia gaza v NGC 3432/.

12 p2164 A69-27024

Instability of the interacting system NGC 4485-90 /Neustoiichivost' vzaimodeistviushchei sistemy NGC 4485-90/.

12 p2169 A69-27056

Mass and luminosity distribution in galaxies. III - NGC 681, NGC 972 and NGC 1084.

20 p3599 A69-37476

Observations of M82 in the optical infrared.

21 p3799 A69-38649

## BERTOLINI, A.

Suboptimal state estimation for continuous-time nonlinear systems from discrete noisy measurements.

06 p0904 A69-17939

## BERTOLINI, E.

Subsonic constant-area MHD generator experiments with the CNEN blow-down loop facility.

10 p1637 A69-23481

Performance of the CNEN MHD blow-down loop facility.

10 p1674 A69-23482

## BERTOLINO, A. V.

Beam control of optically fed two-axis airborne electronically scanned phased arrays.

17 p2942 A69-34085

## BERTOLOTTI, M.

Interferometric study of phase fluctuations of a laser beam through the turbulent atmosphere.

01 p0091 A69-10845

Light scattering by particles suspended in a turbulent fluid.

07 p1157 A69-19417

On the possibility of measuring optical visibility by using a ruby laser.

08 p1327 A69-21089

Phase fluctuations of laser beam propagating in turbulent atmosphere.

17 p2927 A69-33855

Influence of thermal turbulence in a convective ascending stream on phase fluctuations of a laser beam.

24 p4329 A69-43754

## BERTOLUCCI, M.

A study of bonding between glass and plastic in glass reinforced plastics. II.

08 p1341 A69-20514

## BERTONI, G.

Graphic interpretation of a condition of absolute stability for unsteady systems /Interpretazione grafica di una condizione di stabilita assoluta per sistemi non stazionari/.

16 p2764 A69-32440

Comparison of some graphic methods for determining the absolute stability of nonautonomous systems /Confronto tra alcuni metodi grafici per la determinazione della stabilita assoluta di sistemi non autonomi/.

16 p2765 A69-32441

Self-excited oscillations in system with one nonlinearity.

21 p3685 A69-38463

## BERTONI, H. L.

Ray description for point source excited surface waves in stratified anisotropic media.

07 p1079 A69-18918

## BERTOTTI, B.

Rotating neutron stars and pulsar emission.

08 p1383 A69-19895

Longitudinal inhomogeneities in Q-machines.

14 p2502 A69-29959

## BERTRAIS, J.

Applications and trends of microelectronics in France /Applications et tendances de la microelectronique en France/.

[AGARDOGRAPH-114]

08 p1292 A69-20993

## BERTRAND, R.

Experimental results of MHD conversion using a rare gas /Resultats d'experiences de conversion MHD a gaz rare/.

10 p1738 A69-23475

## BERTRAND, R. R.

Perturbation of the velocity distribution in the scattering of molecular beams - A thermal beam effect.

19 p3376 A69-36173

## BERTSCH, L. L.

Enzymatic synthesis of deoxyribonucleic acid. XXVI.

22 p3898 A69-41070

## BERUBE, R. H.

Noise dynamics of the phase-locked loop with signal clipping.

08 p1270 A69-19857

Noise dynamics of a phase-locked loop with nonlinear signal processing.

17 p2931 A69-34115

## BERULIS, I. I.

Relation between the discrete radio source W 43 and neutral hydrogen /Sviaz' diskretnogo istochnika radioizlucheniia W 43 s neutral'nym vodorodom/.

15 p2687 A69-30543

## BERWANGER, C.

The evaluation of a strain gage having long-time stability characteristics.

22 p3945 A69-40078

## BERZ, G.

Calculations of the energy balance of the earth's surface as a contribution to the study of propagation processes /Berechnungen des Energiehaushaltes der Erdoberflaeche als Beitrag zum Studium von Ausbreitungsvorgaengen/.

09 p1535 A69-21514

## BERZIN, L. E.

A new type of organic semiconductors /O novom tipe organicheskikh poluprovodnikov/.

13 p2317 A69-27799

## BERZING, E. G.

Q switching of a laser based on the triplet-triplet transitions of organic molecules.

09 p1520 A69-22682

## BESANT, R. W.

Small precessional motion of axisymmetric spinning bodies due to disturbing moments.

10 p1724 A69-22932

A fluidic digital position sensor.

15 p2554 A69-31301

Density effects on fluidic feedback oscillators.

[ASME PAPER 69-FLCS-39]

20 p3465 A69-37988

Heat transfer measurements in cylindrical wall jets.

21 p3695 A69-38972

## BESEDIN, A. I.

Investigation of the transition zone in a two-layer steel-titanium sheet /Issledovanie granichnoi zony dvukhsloinogo lista stal'-titan/.

18 p3159 A69-35450

## BESEDIN, B. A.

Dual compensation of Markovian drift of the extremum in systems employing learning experiments.

05 p0741 A69-16671

## BESEDINA, L. P.

Determination of a thermoelastic state of a cylindrical shell /Ob opredelenii termoprugogo sostoiianiia tsilindricheskoi obolochki/.

14 p2532 A69-28980

## BESEKERSKII, V. A.

Two-rotor gyroorbit theory /Teoriia dvukhrotornoi giroorbity/.

21 p3765 A69-39636

## BESIERIS, I. M.

Analysis of electromagnetic radiation in the presence of a uniformly moving, uniaxially anisotropic medium.

20 p3576 A69-37578

- ESINGER, M.**  
Some economic aspects in the design of passenger aircraft / Einige wirtschaftliche Aspekte beim Entwurf von Verkehrsflugzeugen/.  
04 p0546 A69-14804
- ESKIN, V. A.**  
Actinometric instruments on board Soviet meteorological satellites / Aktinometricheskaya apparatura sovetskikh meteorologicheskikh sputnikov zemli/.  
06 p0929 A69-17977
- ESKROVNYI, I. M.**  
Calculation of the spectra and absorbed doses behind a shield due to electrons of the earth's radiation belt / K raschetu spektrov i pogloshchennykh doz za zashchitoy, obuslovlennyykh elektronami radiatsionnogo poiasa zemli/.  
08 p1377 A69-19843
- ESPALOV, V. I.**  
Limiting parameters of ultra-short pulses emitted by a laser with resonance modulation of losses / Predel'nye parametry sverkhkrotkikh impul'sov, izluchayemykh OKO pri rezonansnoi modulatsii poter'/.  
02 p0258 A69-12641  
Frequency doubling of light emitted by a Q-switched laser.  
07 p1158 A69-19753
- ESPALOVA, E. I.**  
Deformation of shells with opposite edges hinged and rigidly clamped / Deformatsiya obolochek s sharnirno opertym i zhestko zashchemlennym protivopolozhnyimi kraiami/.  
11 p1985 A69-25174  
Stressed state of open cylindrical shells of arbitrary profile / Napriazhennoe sostoyaniye nezamknutykh tsilindricheskikh obolochek proizvol'nogo profil'a/.  
18 p3225 A69-35372
- ESPALOVA, L. V.**  
Dynamic systems with impulsive interactions in the theory of nonlinear oscillations.  
16 p2875 A69-32295  
Influence of viscous friction on the stability of an impact vibrator / Vliianie вязкого трения на устойчивость vibродвигателя/.  
18 p3172 A69-34588
- ESPIATYI, V. A.**  
Study of the failure characteristics of reinforced nickel by the method of high-temperature metallography. I / Issledovanie osobennosti razrusheniya armirovannogo nikelia metodom vysokotemperaturnoi metallografii. I/.  
21 p3743 A69-38616
- ESPOLOV, I. E.**  
Effect of aromatic hydrocarbons on the combustion characteristics of jet fuel / O vlianii aromaticheskikh uglevodородov na kharakteristiki sgoraniya reaktivnogo topliva/.  
18 p3184 A69-35382
- BESSE, A. L.**  
Expansion of laser beam in only one dimension.  
01 p0091 A69-10852  
Evaluation of the driver chamber efficiency for an arc driven shock tube.  
18 p3116 A69-34456
- BESSE, R.**  
Problems in the development of an isotopic propulsion engine / Problemes de developpement d'un moteur pour la propulsion isotopique/.  
05 p0811 A69-15596
- BESSELL, M. S.**  
An investigation of short-period variable stars. I - The delta Scuti stars.  
22 p4015 A69-40150
- BESSENRODT, R.**  
Electromagnetic radiation of electron plasma waves in the absence of a magnetic field under isotropic and anisotropic gas pressures / Zur elektromagnetischen Strahlung magnetfeldfreier Elektronenplasmawellen bei isotropem und anisotropem Gasdruck/.  
12 p2141 A69-27147
- BESSHAPOSHNIKOV, A. A.**  
Experimental investigation of a pulsed high-frequency plasma on the basis of laser light scattering / Eksperimental'noe issledovanie impul'snoi vysokochastotnoi plazmy po rasseianiiu izlucheniya lazera/.  
14 p2451 A69-29781  
Laser facility for plasma diagnostics / Lazernaia apparatura dlia diagnostiki plazmy/.  
14 p2461 A69-29782  
Observation of the effect of spectral line distortion in a pulse high-frequency plasma / Nabluzhdenie effekta is-
- krivleniya spektral'nykh liniy v impul'snoi vysokochastotnoi plazme/.  
14 p2497 A69-29791
- BESSLICH, P. W.**  
On the suitability of the compatible SSB modulation for broadcasting.  
23 p4125 A69-42111
- BESSON, J.**  
In-flight synchronization of atomic clocks / Synchronisation d'horloges atomiques par simple survol/.  
17 p2975 A69-33593
- BESSON, J. M.**  
Effect of temperature on the radiative emission of PbSe diode lasers.  
19 p3337 A69-36533
- BESSONOV, V. I.**  
Calculation of the coupling constants of waves in a three-frequency parametric TWT amplifier / Raschet koefitsientov svyazi voln v trekhchastotnom parametricheskom LBV-usilitel'e/.  
11 p1844 A69-24446
- BEST, A.**  
Climate tests by means of geomagnetic scales / Klimatest bei geomagnetischen Feldwaagen/.  
09 p1494 A69-21518  
The variations of the geomagnetic field in middle and high latitudes during the proton flare event of July 1966.  
10 p1683 A69-23780
- BEST, J. B.**  
Fissioning in planarians - Control by the brain.  
14 p2406 A69-28871  
Complex synaptic configurations in planarian brain.  
16 p2741 A69-31555
- BESTENREINER, F.**  
Expanded fundamentals of holography / Erweiterte Grundlagen der Holografie/.  
24 p4312 A69-42616
- BESTUZHEV, A. S.**  
Second virial coefficients of atomic nitrogen and oxygen.  
03 p0473 A69-14158
- BETEKHTIN, V. I.**  
Common features in the failure of metals with different types of crystal lattice.  
08 p1328 A69-19793  
Mosaic block misorientation and the strengthening of aluminium by low-temperature predeformation.  
20 p3562 A69-37819
- BETEROV, I. M.**  
Selection and self-locking of modes in a He-Ne laser with nonlinear absorption. [IEEE PAPER G-13]  
07 p1151 A69-19059  
Three-level gas laser.  
14 p2460 A69-29671  
Selection and self-synchronization of oscillation modes in a laser with nonlinear absorption / Seleksiia i samosinkhronizatsiia tipov kolebaniy v lazere s nelineinym pogloshcheniem/.  
19 p3336 A69-36350
- BETEV, B.**  
Determination of exponential-absorption parameters from the zenith-angle distribution using a counter telescope for particle detection / Opredeliiane na parametrite na eksponentsialnata absorbtisiia ot zenitno'glovoto razpredelenie pri detektsiia s broiachen teleskop/.  
21 p3723 A69-38841
- BETH, M.-U.**  
Spectroscopic azimuthal and axial measurement of velocity in the MPD thruster X9 / Spektroskopische azimutale und axiale Geschwindigkeitsmessung am MPD-Triebwerk X9/. [DGLR-69-0248]  
23 p4202 A69-41925
- BETHEL, H. E.**  
An improved reversed-flow formulation of the Galerkin-Kantorovich-Dorodnitsyn multi-moment integral method.  
17 p2958 A69-34054
- BETHKE, G. W.**  
Microwave-induced plasma shield propagation in rare gases.  
16 p2818 A69-31671
- BETIN, P.**  
Study of the internal ballistics of solid fuel rockets / Etude de la balistique interieure des fusées a poudre/.  
16 p2836 A69-31994
- BETSII, O. V.**  
Magnetron amplifier with a stepped interaction space / Magnetrnyi usilitel' so stupenchatym prostranstvom vzaimodeistviia/.  
03 p0407 A69-13977  
M-type backward wave tube with a step interaction space / Usilitel' tipa lov-M so stupenchatym prostranstvom vzaimodeistviia/.  
13 p2237 A69-28583
- BETTEN, J.**  
Stress fields in plane plastic flow as solutions to boundary-value problems / Spannungsfelder bei ebenem plastischen Fließen als Lösungen von Randwertaufgaben/.  
15 p2711 A69-30932
- BETTINGER, R. T.**  
Laser scatter measurements in the mesosphere and above.  
05 p0758 A69-16414
- BETTIS, D. G.**  
Stabilization of Cowell's method.  
18 p3165 A69-34842
- BETTLE, J. F.**  
Solar eclipse - Temperature, wind, and ozone in the stratosphere.  
06 p0916 A69-17008
- BETZ, B.**  
Mass spectrometer measurements of positive ions and neutral gas between 100 and 233 km above Andøya, Norway.  
21 p3702 A69-38354
- BETZ, F. E.**  
Parametric charge studies for aerospace nickel-cadmium batteries.  
23 p4071 A69-42282
- BETZ, H. D.**  
An asymmetry method for high precision alignment with laser light.  
21 p3742 A69-39781
- BETZ, H. R.**  
Ground traces of artificial earth satellites.  
19 p3398 A69-35614
- BEUERMANN, K. P.**  
Cosmic-ray negatron and positron spectra between 12 and 220 Mev.  
08 p1380 A69-20728
- BEUS, A. A.**  
On statistical distribution of the average abundances of chemical elements in the earth's crust and meteorites.  
08 p1310 A69-20941
- BEUTLER, A. E.**  
Ionospheric electron temperature calculations including protonospheric and conjugate effects.  
22 p3939 A69-40506
- BEUTLER, F. J.**  
On a new approach to the analysis of stationary inventory problems.  
12 p2192 A69-26750
- BEVANS, J. T.**  
High-temperature reflectance measurements with the paraboloid reflectometer. [AIAA PAPER 68-25]  
04 p0604 A69-15512  
Thermal Design Principles of Spacecraft and Entry Bodies.  
18 p3227 A69-34372
- BEVC, V.**  
Power flow in plasma-filled waveguides. II.  
06 p0897 A69-17760  
Surface and bulk waves on axially magnetized plasma columns.  
10 p1739 A69-23659
- BEVER, M. B.**  
Phase transformations and strengthening mechanisms in the alloy Ti-6Al-4V.  
20 p3556 A69-36954  
Effects of cold work on silver-rich silver-magnesium solid solution alloys.  
24 p4332 A69-43029
- BEVERINA, B.**  
Failure analysis - The tool for reliability improvement.  
15 p2627 A69-30840
- BEVIERRE, P.**  
Numerical calculation of subcritical wing profiles by the hodograph method / Calcul numerique de profils d'ailes subcritiques par la methode de l'hodographe/. [ONERA-TP-631]  
07 p1049 A69-18416



## BEY, P. P.

Phase-matched optical harmonic generation in liquid media employing anomalous dispersion.  
[IEEE PAPER V-9] 07 p1155 A69-19086

## BEYER, G. A.

Fatigue life gage evaluation on operational aircraft.  
15 p2613 A69-31271

## BEYER, J. B.

Diagnostics of an anisotropic plasma with a microwave Fabry-Perot resonator.  
04 p0635 A69-14757

Microwave harmonic generation in a plasma capacitor.  
12 p2037 A69-25939

## BEYERMANN, W. E.

Noninterference wind tunnel instrumentation.  
10 p1672 A69-23266

## BEYLICH, A. E.

Shock-wave structure in binary gas mixtures /Stosswellenstruktur in binären Gasgemischen/.  
08 p1304 A69-20711

Kinetic model for the shock structure in a binary gas mixture.  
08 p1304 A69-20813

Measurement of the shock structure in N sub 2 - H sub 2 gas mixtures.  
18 p3134 A69-34458

## BEYNON, J. D. E.

A 377 mu m CW maser interferometer for plasma diagnostics.  
08 p1359 A69-19987

The direct measurement of electron density in an MHD duct.  
10 p1731 A69-23436

## BEYNON, W. J. G.

Ionospheric measurements from a rocket radio propagation experiment.  
02 p0245 A69-12736

Ionospheric drift measurements on adjacent aerial arrays.  
05 p0757 A69-16409

Model electron density profiles for the lower ionosphere.  
18 p3125 A69-34248

Geomagnetic disturbance and the troposphere.  
18 p3127 A69-34648

## BEYS, L.

Raman effect in the Cr sub 2 O sub 3 sub 7 K sub 2 single crystal - The He-Ne laser /Effet Raman du monocristal Cr sub 2 O sub 3 sub 7 K sub 2 - Laser He-Ne/.  
12 p2105 A69-26285

## BEZPALKO, L. A.

Influence of temperature on the mechanical properties of fiberglass-reinforced textolites /Vliyaniye temperatury na mekhanicheskie svoystva stekloekstolitov/.  
23 p4179 A69-41993

## BEZPROZVANNAIA, A. S.

Geomagnetic control of the geographic distribution of the midday ionization of the F2 layer /Geomagnitnyi kontrol' geograficheskogo raspredeleniia poludennoi ionizatsii sloia F2/.  
17 p2966 A69-33982

## BEZRUK, A. I.

A study of the servo systems of precision electric-spark machines by the statistical method.  
23 p4168 A69-41307

## BEZRUKIKH, V. V.

Plasma measurements in the vicinity of Venus by the space vehicle "Venus-4".  
07 p1222 A69-19613

## BEZRUKOVA, E. A.

Zone structure of yttrium garnet ferrite crystals grown by the Czochralski method from an inductor crucible /O zonal'noi strukture kristallov itrievogo ferrito-granata, vyrashchennykh metodom Chokhralskogo iz induktora-tigla/.  
13 p2321 A69-28001

## BEZUGLOVA, V. D.

The change of the belts and details on Jupiter in the years 1962 to 1965.  
03 p0512 A69-13696

## BEZUS, V. A.

Study of cosmic-ray electrons and gamma quanta at altitudes up to 27.5 km /Issledovanie elektronov i gamma-kvantov kosmicheskikh luchei na vysoatakh do 27,5 km/.  
10 p1758 A69-22830

Variations in the electron and gamma quanta intensities in the atmosphere /Ob izmeneniiakh intensivnosti elektronov i gamma-kvantov v atmosfere/.  
20 p3587 A69-37046

## BEZUSYI, L. G.

Liquid-metal MHD systems with laminar flow and electric power generation by the synchronous principle /Zhidkometallicheskie MGD-sistemy so sloistym potokom i otborom elektricheskoi moshnosti po sinkhronnomu printsipu/.  
13 p2206 A69-27491

## BHADRA, D.

Dispersion of the upper hybrid mode in a spatially inhomogeneous plasma.  
11 p1924 A69-24302

## BHADRA, D. K.

Asymptotic solution of the Fokker-Planck equation at low collision frequency.  
11 p1930 A69-25358

## BHADURI, D.

A theoretical study of pulsating combustion.  
09 p1625 A69-22694

Theoretical evaluation of the normal velocity of flame propagation.  
09 p1625 A69-22695

## BHAGAVAT, G. K.

Investigation of the damped oscillations in plasma.  
03 p0479 A69-14050

Energy density and velocity of energy transport of a R.F. wave in plasma when the wave frequency approaches the frequency of damped oscillations. I, II.  
08 p1365 A69-20553

Analysis and detection of backward waves in plasma in the region of anomalous dispersion.  
11 p1927 A69-25116

Analysis of absorption of a R.F. wave in plasma in the region of anomalous dispersion.  
23 p4195 A69-41385

## BHANDARI, N.

A selective and versatile low level beta-, X-, and gamma-ray detector assembly.  
17 p2975 A69-33747

## BHANDARI, N. G.

Cosmic-ray produced radionuclides and rare gases near the surface of Saint-Severin meteorite.  
19 p3410 A69-36093

## BHARATHA, S.

Generalized flexure problems.  
23 p4226 A69-41521

## BHARGAVA, B. N.

On 26-month periodicity in quiet-day range of geomagnetic horizontal force and in sunspot number.  
01 p0063 A69-10427

A high resolution spectral analysis of daily relative sunspot number and 10.7 cm solar flux.  
09 p1574 A69-21397

Solar cycle response in the horizontal force of the earth's magnetic field.  
18 p3205 A69-35414

## BHARGAVA, R. D.

Stresses in an elastic cone due to an axial force at a point on the axis.  
08 p1415 A69-20689

## BHARGAVA, R. N.

Negative resistance in GaP electroluminescent diodes.  
13 p2226 A69-27194

## BHASKARA RAO N. S.

Correlation between clear air turbulence and temperature gradients at standard isobaric levels.  
02 p0275 A69-11818

## BHASKARA RAO, A.

An improved experimental arrangement to study geomagnetic effect of extensive air showers.  
03 p0430 A69-13303

## BHAT, P. K.

Motion of a charged particle in superposed heliotron and biconical cusp fields.  
16 p2817 A69-31643

## BHAT, S. J.

VHF atmospheric radio noise.  
23 p4126 A69-42355

## BHATIA, J. C.

Laminar compressible /subsonic/ boundary layer flow on a cylinder with symmetric cross-section bounded by two equal circular arcs.  
12 p2062 A69-26272

## BHATIA, P. K.

Gravitational instability of a rotating anisotropic plasma with the inclusion of finite Larmor radius effect.  
05 p0827 A69-16596

Influence of finite Larmor radius and finite conductivity on the gravitational instability of a plasma.  
10 p1729 A69-23408

Gravitational instability of a plasma with finite Larmor radius.  
13 p2346 A69-27704

Larmor radius and collisional effects on the gravitational instability of a plasma.  
13 p2346 A69-27708

## BHATIA, V. B.

Electromagnetic radiation from solar flares.  
05 p0813 A69-15603

## BHATIA, V. S.

Charge composition and energy spectra of cosmic ray nuclei with Z equals 10-28.  
06 p0988 A69-17274

## BHATNAGAR, A.

A method to obtain a solar velocity map directly in one spectroheliogram.  
17 p3030 A69-33061

## BHATNAGAR, M. L.

A simple technique for the determination of Young's modulus.  
22 p4042 A69-40443

## BHATNAGAR, P. L.

Heat transfer in plane Couette flow of a rarefied gas using Bhatnagar-Gross-Krook model.  
16 p2876 A69-31688

Secondary flows in non-Newtonian fluids.  
20 p3519 A69-38319

## BHATNAGAR, V. P.

Time lag in occurrence of Q-T point on Faraday rotation records at widely spaced frequencies.  
18 p3100 A69-34251

Daytime ion composition in the height range of 150-1500 km for solar minimum condition.  
21 p3714 A69-38555

## BHATTACHARJEE, N. C.

Photographic studies of explosive reactions.  
21 p3719 A69-38446

## BHATTACHARJIE, A.

Large amplitude axisymmetric transverse vibrations of spinning membrane disks.  
15 p2704 A69-30303

## BHATTACHARYA, A. R.

Function-theoretic solution of a class of dual integral equations having application in supersonic flow past a body.  
19 p3239 A69-36311

## BHATTACHARYYA, A. B.

Drift-field photovoltaic cell performance with bulk and surface recombinations.  
06 p0870 A69-17473

## BHATTACHARYYA, A. K.

Numerical computation method for the evaluation of the transition matrix.  
11 p1910 A69-25660

## BHATTACHARYYA, A. N.

Q-switching techniques for solid state lasers operating at room temperature.  
10 p1706 A69-24018

A wire calorimeter for energy measurement of pulsed ruby laser.  
19 p3339 A69-36755

## BHATTACHARYYA, S.

Wear and friction of fiber-metal molybdenum bodies impregnated with molybdenum disulfide.  
20 p3547 A69-36953

## BHATTACHERJEE, B.

Breakdown of gases in a high-frequency electric field with and without a steady transverse magnetic field.  
07 p1194 A69-19415

## BHAVILAI, R.

The bright streaks in the H alpha disk chromosphere.  
04 p0664 A69-15525

## BHAVSAR, P. D.

Eighth Annual Report of the Indian National Committee for Space Research.  
15 p2723 A69-31431

Balloon observations of cosmic X rays in the energy range 20-200 keV.  
24 p4368 A69-43185

- HONSLE, R. V.**  
Metre and decametre solar radio bursts recorded during July 6-11, 1968.  
03 p0518 A69-14259  
Solar radio spectroscopy /frequency range 40-240 MHz/ at Ahmedabad /Lat.23 deg 01'N, Long.72 deg 36'E/, India.  
06 p0925 A69-17318  
Antennas for radio astronomy in the metre-wavelength region at Ahmedabad.  
23 p4143 A69-42353
- SHOWMICK, G.**  
Hydromagnetic stability of a spiral arm embedded in a gravitating medium.  
13 p2346 A69-27705
- SHOWMIK, B.**  
Rigidity spectrum of cosmic ray helium nuclei greater than 12 bv.  
06 p0988 A69-17276
- BIAOSTOCKI, S.**  
High-temperature combustion chamber for laboratory purposes /Wysokotemperaturowa komora spalania do celow laboratoryjnych/.  
18 p3184 A69-34931
- BIALECKE, E. P.**  
Vacuum ultraviolet perturbation spectroscopy on the argon ion laser.  
08 p1324 A69-20161
- BIALKO, A. V.**  
Investigation of the stability of an isotropic universe with a cosmological constant.  
15 p2690 A69-30735
- BIAMINO, G.**  
Dependence of the spontaneous rhythm and contractile tonus of an isolated rat aorta on extracellular concentration of noradrenalin, K super plus, and Ca super plus /Spontanrhythmic und contractiler Tonus der isolierten Rattenaorta in Abhaengigkeit von der extracellulaeren Noradrenalin-, K super plus- und Ca super plus- Konzentration/.  
23 p4093 A69-42069
- BIASHIMOV, M.**  
Experimental investigation of the initial portion of a circular free jet /Eksperimental'noe issledovanie krugloi svobodnoi strui v nachal'nom uchastke/.  
05 p0747 A69-16032
- BIASINI, H.**  
An original method of measuring atmospheric diffusion, using a radioactive gas emitted from a point source /Une methode originale de mesure de la diffusion atmospherique utilisant un gaz radioactif emis depuis un point source/.  
01 p0144 A69-10043
- BIAUME, F.**  
Absorption in the spectral range of the Schumann-Runge bands.  
06 p0960 A69-17090
- BIBBY, R. J.**  
A data acquisition and processing system for mass producing topside ionograms.  
20 p3503 A69-37860
- BIBERMAN, L. M.**  
Theory of heating in hypersonic flow /K teorii nagreva pri giperzvukovom obtekanii/.  
01 p0006 A69-10378  
Nonequilibrium low-temperature plasma. II - Energy distribution of the free electrons.  
05 p0802 A69-15889  
Theory of nonequilibrium low-temperature plasma /K teorii neravnovesnoi nizkotemperaturnoi plazmy/.  
06 p0969 A69-17906  
The optical properties of hot air. I - Basic processes and spectral properties /Opticheskie svoystva gorjachego vozdukh. I - Osnovnye protsessy i spektral'nye kharakteristiki/.  
07 p1185 A69-19166  
The optical properties of hot air. II - Integral characteristics between 4000 and 20,000 K /Opticheskie svoystva gorjachego vozdukh. II - Integral'nye kharakteristiki 4000-20 000 deg K/.  
07 p1185 A69-19167  
Contribution to the theory of nonequilibrium ionization in a low-temperature plasma /K teorii neravnovesnoi ionizatsii v nizkotemperaturnoi plazme/.  
10 p1732 A69-23440  
Theory of heating in hypersonic flow.  
12 p2012 A69-26669  
Low-temperature nonequilibrium plasma. III - Electron concentration in a nonequilibrium plasma /Neravnovesnaia nizkotemperaturnaia plazma. III - Kontsentratsiia elektronov v neravnovesnoi plazme/.  
15 p2662 A69-30975
- Heating due to hypersonic gas flow past blunt bodies, taking radiative transport into account /Obtekanie i nagrev zatuplennykh tel giperzvukovym potokom gaza s vchetom perenosa izlucheniia/.  
20 p3457 A69-36981
- BIBIK, B. A.**  
Influence of temperature on the mechanical properties of fiberglass-reinforced textiles /Vliianie temperatury na mekhanicheskie svoystva steklo tekstolitov/.  
23 p4179 A69-41993
- BIBLARZ, O.**  
Discharge characteristics in a seeded plasma flow.  
10 p1733 A69-23449
- BIBLER, D. S.**  
Power spectrum of the impedance pneumograph - A data reduction system producing an analytical parameter of potential clinical usefulness.  
12 p2024 A69-26558
- BIBRING, H.**  
Oriented crystallization in the cobalt-tantalum-carbon system /Crystallisation orientee dans le systeme cobalt-tantale-carbone/.  
[ONERA-TP-673]  
07 p1167 A69-19339  
Heat-resistant fiber composites produced by oriented crystallization in the Co-Cr-Ta-C and Ni-Cr-Ta-C systems /Composites refractaires a fibres, realisees par cristallisation orientee dans les systemes Co-Cr-Ta-C et Ni-Cr-Ta-C/.  
[ONERA-TP-710]  
16 p2799 A69-31765
- BICHARA, R. T.**  
Analysis and modeling of the vortex amplifier.  
[ASME PAPER 69-FLCS-20]  
20 p3465 A69-37980
- BICHENKOV, E. I.**  
A self-similar electrical skin explosion of a conductor /Avtomodel'nyi elektricheskii skinovyi vzryv provodnika/.  
22 p3982 A69-41019
- BICHTLER, K.**  
On the existence of noncontinuous irreducible representations of a locally compact group.  
23 p4183 A69-42022
- BICKART, T. A.**  
A geometrical stability criterion, similar to the Popov criterion, for time-varying, nonlinear, continuous systems.  
09 p1476 A69-22784
- BICKEL, F. W.**  
Epichlorohydrin-ethylene oxide rubber in seals.  
19 p3356 A69-35534
- BICKEL, S. H.**  
Radar calibration test satellite.  
20 p3617 A69-37714
- BICKEL, W. S.**  
Intensity measurements in the visible and ultraviolet.  
03 p0471 A69-13166  
Mean life measurements using the beam foil light source.  
04 p0595 A69-14278  
Mean life of the 2p super 2 super I D level in C III.  
07 p1184 A69-18643  
Mean lives of some doubly excited levels in lithium.  
13 p2301 A69-27454  
Mean life of the 2p super 2 super I D level in N IV.  
17 p3009 A69-34187  
Mean lives of the ip super 2 super I D level in F VI and O V.  
17 p3009 A69-34188  
Mean lives of some excited levels of Li I and Li II.  
18 p3177 A69-35012  
Beam-foil excitation of levels in S II and S III.  
18 p3177 A69-35015  
Measurement of the transition probabilities of some N I ultraviolet multiplets /Mesure des probabilites de transition de quelques multiplets ultraviolets de N I/.  
18 p3178 A69-35413  
Observations of Lamb shifts in H using spatially periodic potentials.  
18 p3179 A69-35488  
Relative intensities and exponential decay of a doublet in N V.  
21 p3774 A69-38760
- BICKFORD, L. L.**  
Dynamic behavior of thrust-balance systems.  
04 p0647 A69-15521
- BICKFORD, W. J.**  
A signal processing technique for predetection combining.  
09 p1458 A69-22472
- BIDARD, R.**  
Study of two-phase media for use in MHD devices /Etude des milieux biphases en vue de leur utilisation dans des dispositifs MHD/.  
13 p2306 A69-27479
- BIDELMAN, W. P.**  
Microturbulence in 3 Centauri A.  
07 p1211 A69-18407  
Abundances in the magnetic stars.  
08 p1403 A69-20911
- BIEBER, C. G.**  
Sigma - Its occurrence, effect, and control in nickel-base superalloys.  
06 p0942 A69-17223
- BIEBER, T.**  
Pulse velocity in a self-locked He-Ne laser.  
09 p1514 A69-21347
- BIEDERMAN-THORSON, M.**  
Objective measure of the dynamics of a visual movement illusion.  
16 p2746 A69-31556
- BIEGER, W.**  
Investigations of plasma acceleration by a pulsed electromagnetic traveling wave /Untersuchungen zur Beschleunigung eines Plasmas durch ein gepulstes elektromagnetisches Wanderfeld/.  
09 p1544 A69-21301
- BIELLE, J.**  
Simulation of the effects of ionizing radiation bursts by laser /Simulation des effets des rayonnements ionisants pulses par laser/.  
11 p1896 A69-24877
- BIEMANN, K.**  
Recent developments in mass-spectrometric structural analysis of organic compounds /Neuere Entwicklungen in der massenspektrometrischen Strukturanalyse organischer Verbindungen/.  
18 p3099 A69-34553  
Acidic components of Green River shale identified by a gas chromatography-mass spectrometry-computer system.  
21 p3669 A69-38983
- BIENERT, W.**  
Heat pipes for temperature control.  
23 p4240 A69-42307
- BIENIECKI, H. S.**  
Effect of a central circular hole on fundamental plate frequency.  
[ASME PAPER 69-VIBR-62]  
10 p1805 A69-24156
- BIENKOWSKA-LIPINSKA, K.**  
A certain Tricomi type problem /Pewne zagadnienie typu Tricomiego/.  
23 p4181 A69-41409
- BIERITZ, J. H.**  
The Cygnus X region. V - Catalogue and distances of optically visible H II regions.  
09 p1596 A69-22053
- BIESS, J.**  
Power conditioning suitable for electric spacecraft.  
[AIAA PAPER 69-240]  
09 p1568 A69-21732
- BIGAY, J. H.**  
Photoelectric photometry of artificial satellites in France /Photometrie photoelectrique des satellites artificiels en France/.  
15 p2616 A69-31391
- BIGG, E. K.**  
Daytime photograph of a group of meteor trails.  
12 p2157 A69-26231  
New satellites for Jupiter.  
13 p2343 A69-27622
- BIGGERS, R. A.**  
Role of impurities in cryogenic propellant corrosion.  
21 p3783 A69-39486
- BIGGS, W. D.**  
Low endurance fatigue in metals and polymers. I, II, III.  
18 p3155 A69-34633
- BIGLIERI, E.**  
Errors due to fluctuations in the delay in measuring correlation functions /Errori dovuti alle fluttuazioni del ritardo nella misura delle funzioni di correlazione/.  
08 p1296 A69-19923  
Waveform transmission with permutation modulation.  
12 p2030 A69-26386



## BIGNELL, R. C.

BIGNELL, R. C.

Observations of intense radio sources with a 1.5-minute fan beam.

04 p0663 A69-15379

BIGOT, M. C.

The boosters /Les lanceurs/.

02 p0334 A69-11919

BIGUN, G. I.

Specific heat of an electron gas at low temperatures according to the method of displacements and collective variables /Teploemnist' elektronnogo gazu pri niz'kikh temperaturakh u metodi zmishchen' ta kolektivnykh zmynnikh/.

11 p1927 A69-24918

BIGUN, M. M.

Specific heat of an electron gas at low temperatures according to the method of displacements and collective variables /Teploemnist' elektronnogo gazu pri niz'kikh temperaturakh u metodi zmishchen' ta kolektivnykh zmynnikh/.

11 p1927 A69-24918

BIHARI, I.

On the second order half-linear differential equation.

07 p1172 A69-18262

BIHRLE, W., JR.

Aircraft characteristics that influence the longitudinal handling qualities during a carrier approach. [AIAA PAPER 69-894]

21 p3648 A69-39418

BIJL, L. A.

Arizona-NASA atlas of infrared solar spectrum. II.

06 p1008 A69-17809

Arizona-NASA atlas of infrared solar spectrum. IV, V.

21 p3800 A69-38682

Arizona-NASA atlas of infrared solar spectrum. VI.

21 p3800 A69-38683

BIKBULATOV, SH. KH.

Approximate solution of the two-dimensional problem in the hydrodynamic theory of gas lubrication of radial sliding bearings /Priblizhennoe reshenie ploskoi zadachi gidrodinamicheskoi teorii gazovoi smazki radial'nykh podshipnikov skol'zheniya/.

23 p4168 A69-41412

BIKCHANTAEV, M. KH.

Optimum averaging of a profile in a linearized supersonic flow /Ob optimal'nom osrednenii profil'ia v sverkhzvukovom linearizovannom potoke/.

11 p1818 A69-25328

BIKETOV, V. D.

Short-term frequency stability of a Rb super 87 vapor laser /Kratkovremennaya stabil'nost' chastoty kvantovogo generatora na parakh Rb super 87/.

05 p0770 A69-15656

Short-term frequency stability of an Rb87 vapor maser.

16 p2798 A69-32513

BIKFAVMI, I.

Pneumatic diode function generator for simulating nonlinear control systems /Pneumatikus diodas fueggyenygenerator nemlinearis szabalyozasi rendszerek modellezesehez/.

11 p1858 A69-24580

BIKOV, I. I.

Initial dynamics of the EKG during an electrical defibrillation of the heart /Pochatkovaya dinamika EKG pri elektrichnoi defibrilatsii sertsia/.

19 p3257 A69-36168

BIL, V. S.

Thermal properties of reinforced compositions.

15 p2642 A69-30466

BILANIUK, O.-M.

Causality and space-like signals.

20 p3598 A69-37412

BILBY, B. A.

Dislocations and the theory of fracture.

13 p3258 A69-27222

BILELLO, J. C.

Temperature dependence of micro-yielding and the transition to macro-strain for tungsten.

11 p1905 A69-25183

BILGER, H. R.

Noise and equivalent circuit of double injection.

06 p0898 A69-17762

BILLAUD, G.

Medium-temperature fuel cells /Piles a combustibles a moyenne temperature/.

08 p1260 A69-21046

Medium temperature fuel cells /Piles a combustibles a moyenne temperature/.

16 p2739 A69-32417

BILLHEIMER, J. S.

Feasibility of algorithmic definition of solid propellant for functional selection. [AIAA PAPER 69-432]

16 p2828 A69-31845

BILLIG, F. S.

External burning in supersonic streams.

11 p1941 A69-24261

BILLIG, L. O.

Adaptive controls. I - A survey.

24 p4289 A69-42946

BILLINGS, C. E.

An attempt to produce acclimatization to hypoxia by intermittent altitude exposure with vigorous exercise.

23 p4086 A69-41678

The effects of mild acute physical stress on delivery and neonatal mortality in rats.

24 p4266 A69-43381

BILLINGS, D. E.

A coronal enhancement in the extreme ultraviolet.

15 p2693 A69-30781

Physical properties of lambda 5303 coronal emission regions.

15 p2693 A69-30782

BILLINGS, J. K.

L super 2 S super 2 - A packaging system for orbit.

01 p0038 A69-10145

BILLINGSLEY, D. G.

A real-time processing system for determination of metabolic rates of a suited astronaut. [AIAA PAPER 69-493]

22 p3893 A69-40371

BILLINGSLEY, J. P.

Comparison of experimental and predicted axial pressure variation for semi-infinite metallic targets. [AIAA PAPER 69-361]

13 p2366 A69-28294

BILLINGTON, E. W.

Measurement of the electrical properties of a flowing plasma, including a critical comparison of probe experiment and theory.

16 p2816 A69-31637

BILLINGTON, I. J.

The spring supported hydrostatic seal.

[ASME PAPER 68-WA/LUB-9]

05 p0768 A69-16132

BILLIOTTE, M.

Application of the ion laser to flow diagnostics in shock tubes /Application du laser ionique aux diagnostics d'ecoulements en tube a chocs/.

08 p1323 A69-19879

BILLMAN, K. W.

Temperature tuning of an organic dye laser.

02 p0258 A69-12617

Picosecond pulse measurement by two-photon excitation of photographic film.

08 p1313 A69-20165

BILLMEYER, F. W., JR.

Rapid osmometry with diffusible polymers.

01 p0024 A69-10933

Optimized equations for MacAdam color differences.

04 p0564 A69-14883

Evaluating dispersion in gel permeation chromatography. II.

04 p0555 A69-14884

Evaluating dispersion in gel permeation chromatography. I.

04 p0555 A69-14885

Color and appearance properties of paint films.

04 p0620 A69-14886

Molecular structure and polymer properties.

10 p1717 A69-24187

Synthesis of linear aliphatic polyesters.

19 p3265 A69-36372

Gel permeation chromatography of nominally linear aliphatic polyesters.

21 p3670 A69-39806

Evaluating dispersion in gel permeation chromatography - Axial dispersion of polymer molecules in packed beds of nonporous glass beads.

22 p3894 A69-39873

Particle-size determination by low-angle light scattering - New instrumentation and a rapid method of interpreting data.

24 p4313 A69-42764

BILLUPS, C. W.

Attitude control of a manned earth orbiting space station. [AIAA PAPER 69-846]

21 p3822 A69-39376

BILOTTI, A.

Applications of a monolithic analog multiplier.

07 p1103 A69-18880

BIMAL KHEDKAR, M. M.

Multiplicity spectrum of a IGY neutron monitor at Gulmarg.

06 p0925 A69-17297

BIMBERG, G. P.

Statistical characteristics of signals from infrared scanning equipment /Statisticheskie kharakteristiki signalov skaniruiushchei infrakrasnoi apparatury/.

06 p0929 A69-17980

BINCKLEY, E. T.

Is general aviation ready for all-weather flying/ques/

01 p0111 A69-11049

BINDER, A. A.

Reconfiguration and control of avionics multiprocessor systems.

17 p2977 A69-34072

BINDER, A. B.

Minor constituents in the atmosphere of Jupiter.

12 p2155 A69-26205

Martian craters - Comparison of statistical counts.

12 p2157 A69-26309

Internal structure of Mars.

17 p3037 A69-33652

BINDER, D.

Rapid annealing in silicon transistors.

06 p0975 A69-16870

A strain gage dosimeter for pulsed radiation environment.

06 p0922 A69-16892

BINDER, H. I.

High temperature measurement using passive temperature indicators.

15 p2613 A69-31273

BINGELIS, A. IU.

Analysis of the transient response of a transistor with allowance for the switching-pulse parameters /Analiz perekhodnykh protsessov v tranzistore s uchetom parametrov perekliuchaiushchego impul'sa/.

12 p2043 A69-26884

BINGHAM, J. T.

A fastener that clamps and seals.

22 p3957 A69-40831

BINGHAM, P. E.

Liquid fluorine no-vent loading studies. [AIAA PAPER 69-579]

16 p2767 A69-32715

BINGHAM, W. L.

On the experimental stress analysis of fracture models.

07 p1234 A69-19379

BINH-DY, H.

Partial maser effect in the recombination lines of hydrogen atoms in a nebular plasma /Effet maser partiel dans les raies de recombinaison des atomes d'hydrogene dans un plasma nebulaire/.

01 p0148 A69-10042

Solution of an infinite system of statistical-equilibrium equations /Sur la resolution d'un systeme infini d'equations d'equilibre statistique/.

01 p0150 A69-10395

BINION, T. W., JR.

A V/STOL wind tunnel wall interference study. [AIAA PAPER 69-171]

06 p0908 A69-18203

BINKEVICH, E. V.

Investigation of stresses in a frame of variable rigidity reinforcing a cylindrical shell /Issledovanie napriazhenii v shpangoutile peremennoi zhestkosti, podkrepliaushchem tsilindricheskuiu obolochku/.

17 p3055 A69-33131

Rational distribution of material in a set of longitudinal shell elements /O ratsional'nom raspredelenii materiala v elementakh prodol'nogo nabora obolochki/.

23 p4228 A69-41988

BINKHORST, R. A.

The effect of training on some isometric contraction characteristics of a fast muscle.

23 p4097 A69-42095

BINKLEY, W. O.

Millimeter wavelengths for space communications/ques/

03 p0397 A69-13721

BINNARD, R.

Differences between radiation-induced life shortening and natural aging in Drosophila melanogaster.

15 p2555 A69-30444

BINNENDIJK, L.

The light variation and orbital elements of TZ Bootis.

13 p2348 A69-27808

Photoelectric observations of V502 Ophiuchi.

13 p2348 A69-27809

- BINNIE, C. D.**  
The influence of end-tidal carbon dioxide tension on EEG changes during routine hyperventilation in different age groups. 22 p3872 A69-40162
- BINNS, D. L.**  
Welding airframe components - Electron beam installations at B.A.C. works. [SBAC PAPER 13] 20 p3550 A69-37455
- BINNS, R. A.**  
Ringwoodite, natural /Mg, Fe/ sub 2 SiO sub 4 spinel in the Tenham meteorite. 09 p1597 A69-22155  
A chondritic inclusion of unique type in the Cumberland Falls meteorite. 19 p3416 A69-36127
- BINSACK, J. H.**  
Experimental evidence for a detached lunar compression wave. 05 p0824 A69-16251  
Shock and magnetopause boundary observations with IMP-2. 07 p1129 A69-19372  
Observations of the interplanetary plasma subsequent to the 7 July 1966 proton flare. 10 p1783 A69-23775
- BIONDI, M. A.**  
Electron temperature dependence of recombination of O super plus sub 2 and N super plus sub 2 ions with electrons. 18 p3176 A69-34789
- BIRAUD, F.**  
Polarization measurements with the Nancay radio telescope - Detection of circular polarization in quasars at 2695 MHz /Mesures de polarisation avec le radiotelescope de Nancay - Detection de polarisation circulaire dans les quasars a 2695 MHz/. 08 p1392 A69-20567
- BIRAUD, Y.**  
A new approach for increasing the resolving power by data processing. 07 p1137 A69-19721  
Atmospheric transmission and solar spectroscopy in the submillimeter wavelength range /Transmission atmospherique et spectroscopie solaire en ondes submillimetriques/. 21 p3796 A69-38472
- BIRCH, J. R.**  
Observation of atmospheric absorption using submillimetre maser sources. 20 p3553 A69-37296
- BIRCHON, D.**  
Non-destructive testing techniques and their relationship to design problems. 24 p4318 A69-42769
- BIRD, G. A.**  
Theoretical and experimental study of rarefied supersonic flows about several simple shapes. 02 p0189 A69-12523  
Leading edge flow by the Monte Carlo direct simulation technique. [AIAA PAPER 69-141] 06 p0866 A69-18208  
The structure of rarefied gas flows past simple aerodynamic shapes. 14 p2390 A69-29580
- BIRD, G. T.**  
MIL-STD-471, maintainability demonstration. 20 p3551 A69-38268
- BIRD, H. H.**  
Transverse wave propagation and instabilities within the magnetosphere. 20 p3533 A69-38081
- BIRD, J. F.**  
Gravitational instability of spheroidal expansions - A cosmogonic fragmentation mechanism. 11 p1962 A69-25112  
Visual transient phenomenon- Its polarity and a paradox. 21 p3650 A69-38320
- BIRD, J. W. C.**  
Growth of noncollagen-nitrogen concentration /NCN/ in an antigravity muscle as influenced by body mass of mice. 23 p4080 A69-41406
- BIRD, T. H.**  
Summary results of the Surveyor Program - Large-scale photo investigations of the lunar surface. 22 p4011 A69-40043
- BIRDSALL, C. K.**  
Clouds-in-clouds, clouds-in-cells physics for many-body plasma simulation. 12 p2138 A69-26625
- BIRDSALL, R. L.**  
A strain gage dosimeter for pulsed radiation environment. 06 p0922 A69-16892
- BIRDWELL, C., JR.**  
A-7 Corsair II status report - Fleet introduction and combat operations. 06 p0867 A69-17660
- BIRENBAUM, L.**  
Effect of microwaves on the eye. 10 p1648 A69-23185
- BIRGE, S. J., JR.**  
Bone. 06 p0873 A69-17019
- BIRGENHEIER, R. A.**  
A high-gain self-steering microwave array. 04 p0573 A69-14330  
A high-gain self-steering microwave repeater. 11 p1839 A69-25294
- BIRGER, B. L.**  
Calculation of the field in the coil area of x plane linear induction MHD machines with allowance for the finiteness of the magnetic permeability of iron /Расчет поля в обмоточной зоне плоскостных индукционных MGD-машин с учетом конечности магнитной проницаемости железа/. 07 p1059 A69-19028  
Calculation of fields in plane-parallel induction MHD machines with allowance for the finiteness of the winding zone thickness and the magnetic permeability of iron /Расчет поля в плоскостных индукционных MGD-машинках с учетом конечности токопроводящих обмоточной зоны и магнитной проницаемости железа/. 14 p2405 A69-29914
- BIRGER, E. S.**  
Numerical calculation of radio-wave propagation in a vertically inhomogeneous troposphere /Численный расчет распространения радиоволн в вертикально-неоднородной тропосфере/. 21 p3674 A69-39121
- BIRGER, I. A.**  
Strength, Stability, Oscillations. Handbook. Volume 1 /Prochnost', Ustoichivost', Kolebania. Spravochnik. Volume 1/. 04 p0683 A69-15499  
Strength, Stability, Oscillations. Handbook. Volume 2 /Prochnost', Ustoichivost', Kolebania. Spravochnik. Volume 2/. 04 p0683 A69-15500  
Plasticity theories for nonisothermal loading /Teorii plastichnosti pri neizotermicheskom nagruzhenii/. 07 p1237 A69-19681  
Plastic flow theory and the calculation of disks /Teoriia plasticheskogo techeniia i raschet diskov/. 11 p1982 A69-24945  
Strength, Stability, and Vibrations Handbook. Volume 3 /Prochnost', Ustoichivost', Kolebania. Spravochnik. Volume 3/. 12 p2182 A69-26755
- BIRUKOV, A. S.**  
Obtaining an inverse population of vibrational levels in polyatomic molecules /O poluchenii invernoi zaselenosti na kolebatel'nykh urovniakh mnogoatomnykh molekul/. 02 p0259 A69-12647
- BIRUKOV, G. A.**  
Measurement of the irregular component of the satellite-signal phase lead due to ionospheric inhomogeneities by the method of coherent frequencies /Izmerenie metodom kogerentnykh chastot neregulyarnoi sostavliayushchei nabega fazy signalov ISZ za schet neodnorodnosti ionosfery/. 06 p0890 A69-17799  
Measurement of effects arising in the ionosphere on the basis of radio waves propagating from satellites /Izmerenie effektiv, voznikaushchikh v ionosfere pri rasprostranении радиоволн от искусственных спутников земли/. 20 p3486 A69-37027
- BIRUKOV, O. V.**  
A "min B" magnetic trap /Magnitnaia lovushka s "min B"/. 04 p0634 A69-14299
- BIRULIN, I. A.**  
Polarization of scattered electromagnetic waves /Polarizatsiia rasseiannykh elektromagnitnykh voln/. 09 p1453 A69-21527
- Effect of inhomogeneities on the state of polarization of radio waves reflected from the ionosphere /O vliyanii neodnorodnosti na sostoianie polarizatsii radiovoln, otrazhennykh ot ionosfery/. 14 p2417 A69-29862  
Polarization of scattered electromagnetic waves. 16 p2754 A69-32522
- BIRK, R. F.**  
Airports for future aircraft - A planning guide. [AIAA PAPER 69-808] 19 p3289 A69-35623
- BIRKEBAK, R. C.**  
Laminar free convection from a horizontal infinite strip facing downwards. 21 p3853 A69-39672
- BIRKEMEIER, W. P.**  
Indirect atmospheric measurements utilizing Rake tropospheric scatter techniques. II - Radiometeorological interpretation of Rake channel-sounding observations. 14 p2448 A69-29525
- BIRKHOFF, G.**  
Similarity and the transport equation. 19 p3361 A69-36774  
Third order positive cyclic systems of linear differential equations. 24 p4340 A69-43131
- BIRKHOLZ, U.**  
Electrical transport in semiconducting FeSi sub 2. 19 p3390 A69-36556
- BIRMINGHAM, T. J.**  
Charged particle diffusion by violation of the third adiabatic invariant. 07 p1209 A69-19375  
Guiding center drifts in time-dependent meridional magnetic fields. 08 p1368 A69-20809  
Convection electric fields and the diffusion of trapped magnetospheric radiation. 14 p2510 A69-28936  
Collisional absorption and emission of longitudinal waves in a one-dimensional plasma. 15 p2661 A69-30921
- BIRNBAUM, M.**  
Reflectivity enhancement of semiconductors by Q-switched ruby lasers. 06 p0935 A69-17768  
Self-Q-switched Nd super 3 super plus -YAG and ruby lasers. 17 p2979 A69-32916
- BIRNBAUM, M. R.**  
Creep stress concentration at a circular hole in an infinite plate. [AIAA PAPER 68-175] 04 p0676 A69-14708
- BIRTWISTLE, G. M.**  
The explicit solution of the equation of heat conduction. 01 p0107 A69-11365
- BISA, K.**  
Microbiological studies on the radiation environment of the ionosphere and stratosphere. 01 p0018 A69-11088
- BISANZ, H.**  
Production of high grade forgings in titanium and titanium alloys - Their properties and machinability /Herstellung hochwertiger Schmiedestuecke aus Titan und Titanlegierungen, deren Eigenschaften und Spanbarkeit/. 16 p2801 A69-31785
- BISBERG, A.**  
Application of pulse techniques to sonic anemometry. 10 p1692 A69-23255
- BISCH, C.**  
Detachment distance of the shock wave in front of spheres and cylinders placed in a hypersonic flow /Distance de detachement de l'onde de choc devant des spheres et des cylindres places dans un ecoulement hypersonique/. 22 p3931 A69-40710
- BISCHOFF, K.**  
A note on scintillation indices. 16 p2777 A69-32104
- BISCONDI, M.**  
Intergranular creep of oriented aluminum bicrystals /Fluage intergranulaire de bicristaux orientes d'aluminium/. 17 p2985 A69-32906
- BISHIMOV, E.**  
One-dimensional unsteady flows of a combustible gas mixture, taking into account the finite rates of



- chemical reactions /Odnomernye nestatsionarnye techenia goruchei smesi gazov s ucheto konechnoi skorosti khimicheskikh reaktsii/.  
06 p0909 A69-17325
- BISHOP, B. E.**  
VHF to UHF conversion - A status report from the Corona Laboratories.  
05 p0732 A69-16305
- BISHOP, D. E.**  
Judged noisiness of modulated and multiple tones in broad-band noise.  
11 p1830 A69-24796
- BISHOP, E. H.**  
Natural convective oscillatory flow in cylindrical annuli.  
09 p1481 A69-21902
- BISHOP, J. A.**  
Maintenance practices for rigid pavement.  
01 p0057 A69-11277
- BISHOP, R. E. D.**  
Linear analysis of transient vibration.  
18 p3211 A69-34326
- BISHOP, S. G.**  
Infrared studies of combined resonance in n-type InSb.  
19 p3385 A69-36520
- BISHOP, V. S.**  
Cardiovascular effects of low-oxygen atmospheres in conscious and anesthetized dogs.  
23 p4078 A69-41314
- BISIAUX, P.**  
Radioisotopic propulsion stage - Structural and performance problems /Etage radio-isotopique - Problemes de structure et de performances/.  
05 p0811 A69-15595
- BISIGNANI, W. T.**  
Multipath fading in FSK communication links - An experimental investigation.  
14 p2414 A69-29498
- BISKAMP, D.**  
Comments on "Turbulent shock waves in plasmas."  
15 p2661 A69-30927
- BISMUT, M.**  
Interception of the umbra by Titus rockets during the 1966 solar eclipse /Interception de l'ombre par les fusées Titus lors de l'éclipse de soleil de 1966/.  
06 p0986 A69-17101  
Optimization of a stabilization system using flywheels desaturated by magnetic action /Optimisation d'un système de stabilisation à volants désaturés par action magnétique/.  
[ONERA-TP-732] 17 p3049 A69-33241
- BISNOVATYI-KOGAN, G. S.**  
Stability of bodies of revolution relative to radial disturbances /Ob ustoiichivosti tel vrashchenia otositel'no radial'nykh vozmushchenii/.  
02 p0317 A69-11978  
The stability of solids of revolution with respect to radial perturbations.  
15 p2680 A69-30260  
Theory of the formation and stability of ejections from the nuclei of radio galaxies and quasars /K teorii obrazovaniia i ustoiichivosti vybrosov iz iader radiogalaktik i kvazarov/.  
20 p3606 A69-38032  
Theory of the gravitational stability of a rotating cylinder /Teoriia gravitatsionnoi ustoiichivosti vrashchaiushchegosia tsilindra/.  
22 p4032 A69-41017
- BISPHAM, K.**  
Observations of polar faeculae.  
12 p2160 A69-26897
- BISPLINGHOFF, R. L.**  
The effects of the space program in stimulating education, science and engineering.  
01 p0179 A69-10500  
Designing a space program.  
17 p3076 A69-34042  
Development of needed technology.  
17 p3076 A69-34045
- BISSELL, J. R.**  
Analytical and experimental studies of the sound field in a propeller duct.  
04 p0544 A69-14867
- BISSELL, W. R.**  
An analysis of two-phase flow in LH sub 2 pumps for O sub 2 /H sub 2 rocket engines.  
[AIAA PAPER 69-549] 16 p2845 A69-32759
- BISSINGER, B.**  
Thermal plants for space-simulation chambers.  
01 p0057 A69-11154
- BISSON, E. E.**  
Various modes of wear and their controlling factors.  
13 p2265 A69-27231
- BISTRUP, J. H.**  
PCM - Advantages and disadvantages.  
22 p3900 A69-40678
- BISWAS, B. N.**  
The phenomenon of pulsed subharmonic oscillation.  
03 p0385 A69-12918
- BISWAS, R. N.**  
Contact problem of a pair of non-homogeneous semicircular regions with a source point.  
02 p0336 A69-11553
- BISWAS, S.**  
Interstellar helium spectrum, H super 2 /He super 4 and He super 3 /He ratios in cosmic rays and the amount of matter traversed at low energies.  
06 p0988 A69-17270  
Charge composition and energy spectra of cosmic ray nuclei with Z equals 10-28.  
06 p0988 A69-17274  
Proposed experiments to measure the spectra and time variation of X-ray sources.  
06 p0992 A69-17312  
Note on plane-strain thermo-elastic stress in a semiinfinite solid with a constant heat flux into the solid through an infinite strip on the free surface.  
15 p2712 A69-31006  
Composition of cosmic rays.  
21 p3789 A69-38814
- BISWAS, S. K.**  
On forced torsional oscillation of a cylindrical shell of non-homogeneous material by the application of a periodic shearing force at one end.  
13 p2361 A69-27462
- BISWAS, S. N.**  
Temperature dependence of the total stimulated light power from semiconductor junction lasers.  
21 p3734 A69-38437  
Dependence of the differential external quantum efficiency and gain in GaAs laser diodes on laser reflectivity.  
24 p4330 A69-43766  
On the dependence of the differential external quantum efficiency and gain in GaAs laser diodes on laser length.  
24 p4330 A69-43767
- BITER, C.**  
An automated aircraft instrumentation system for cloud nucleation studies.  
01 p0080 A69-10542
- BITETTO, V. E.**  
Control of human vigilance by concurrent schedules.  
23 p4081 A69-41438
- BITIUGIN, I. A.**  
Wavemeter employing an open resonator with spherical mirrors /Volnomer na otkrytom rezonatore so sfericheskimi zerkalami/.  
03 p0407 A69-13983
- BITOUN, J.**  
Method of determination of the velocity and group index in an anisotropic medium /Methode de détermination de la vitesse et de l'indice de groupe dans un milieu anisotrope/.  
01 p0131 A69-11117
- BITRAN, M.**  
Ultrasonic inspection of soundness and penetration of corner welds for Zircaloy 2 casings /Contrôle par ultrasons de la compacité et de la pénétration des soudures d'angle de boîtiers en Zircaloy 2/.  
07 p1141 A69-19346
- BITTER, H. L.**  
Preferential shifts in consumption of metabolic fuels following exposure to rocket fuel substances.  
14 p2407 A69-29303
- BITTERBERG, W.**  
Neutral particle density ratios in the thermosphere as derived from mass spectrometric measurements above Sardinia.  
21 p3704 A69-38368
- BITTERLI, C.**  
Ruby as a macroscopic fluorescing and laser material.  
07 p1201 A69-19646
- BITTERMAN, S.**  
Survey of vibrational relaxation data for processes important in the CO sub 2-N sub 2 laser system.  
10 p1706 A69-24083  
Experimental measurements of the resonant vibrational energy transfer between mode nu sub 3 of CO sub 2 and N sub 2.  
12 p2131 A69-25984
- BITTNER, B. J.**  
Miniature current discontinuity device antennas.  
07 p1105 A69-19111
- BIURO, E. D.**  
Measurements of some neutral components of the Arctic thermosphere.  
21 p3704 A69-38367
- BIUTNER, E. K.**  
Distribution of atomic oxygen in the polar mesosphere at night.  
12 p2070 A69-26690
- BIVIN, I. K.**  
Buckling of an elastic rod under a dynamic load /O vypuchivanii uprugogo sterzhnia pri dinamicheskom nagruzhении/.  
04 p0679 A69-14926
- BIZOUARD, P.**  
Stratospheric balloons and space research.  
03 p0366 A69-13589  
Active stabilization of a stratospheric balloon gondola /Stabilisation active d'une nacelle pour ballons stratosphériques/.  
17 p2898 A69-33242
- BJERHAMMAR, A.**  
On Gravity.  
13 p2254 A69-27929
- BJERKLIE, J.**  
Rankine cycle working fluid selection and specification rationale.  
[SAE PAPER 690063] 07 p1057 A69-18308
- BJERKLIE, J. W.**  
Configurations for gas turbine compressor end seals.  
[ASLE PREPRINT 68AM 4B-4] 13 p2267 A69-27366  
A liquid-metal MHD power generation scheme using intermittent vaporization.  
13 p2206 A69-27492  
Low power nuclear energy conversion for long duration space missions.  
16 p2810 A69-31748
- BJERNES, J.**  
Atmospheric teleconnections from the equatorial Pacific.  
11 p1911 A69-24322  
Satellite mapping of the Pacific tropical cloudiness.  
17 p2996 A69-33001
- BJOERKVIST, K.**  
Lattice location of dopant elements implanted into Ge.  
07 p1199 A69-18903
- BJORK, R. L.**  
Ballistic limit determination in impacts on multi-material laminated targets.  
[AIAA PAPER 69-356] 13 p2366 A69-28289
- BJORKHOLM, P. J.**  
Charge-exchange collisions between hydrogen ions and cesium vapor in the energy range 0.5-20 kev.  
08 p1356 A69-20737
- BJORKLUND, H. A.**  
Space-support package for aerospace computer emulation.  
[AIAA PAPER 69-974] 22 p3907 A69-40354
- BJORKLUND, S.**  
Fluorescence spectra of homogeneous and mixed europium complexes.  
01 p0024 A69-10893
- BKHUSHAN, B. A.**  
Operational features and calculation of nonlinear switching amplifiers with tunnel diodes and transistors /Osobennosti raboty i raschet nelineinogo perekliuchaushchego usilitelia na tunnel'nykh diodakh i tranzistorakh/.  
05 p0730 A69-16221
- BLABLA, J.**  
General physical properties of atomic and molecular systems in quantum electronics /Obecne fyzikalni vlastnosti atomovych a molekularnich soustav v kvantove elektronice/.  
18 p3178 A69-35406  
Optical quantum generators and amplifiers - Lasers /Pticke kvantove generatory a zesilovace - Lasery/.  
18 p3154 A69-35408

- Some effects of laser upon the bones.  
23 p4101 A69-41464
- LACHIER, B. L.**  
Telecommunication satellite multiplexer problems.  
14 p2417 A69-29688
- LACHMAN, N. M.**  
Position determination from radio bearings.  
14 p2479 A69-29499  
The spectrum of a high-index FM waveform - Woodward's theorem revisited.  
[IEEE PAPER 68-TP-74-COM]  
19 p3276 A69-36485
- LACK, D. C.**  
Pulsars - White dwarf atmospheric pulsations.  
05 p0828 A69-16659  
Trapped neon in meteorites. II.  
24 p3485 A69-43217
- LACK, F. W., JR.**  
An aerospace industry report on TPDT.  
10 p1700 A69-23355
- LACK, G.**  
The Application of Systems Analysis to Government Operations.  
08 p1422 A69-19842
- LACK, J. I.**  
Feasibility study of fluidic turbine temperature sensors in gas turbine engines.  
[ASME PAPER 69-GT-70]  
09 p1572 A69-22512
- LACK, J. R.**  
Device failure causes by high temperature.  
06 p0894 A69-17218
- LACK, R. J.**  
Tire parameters for landing-gear shimmy studies.  
[AIAA PAPER 68-311]  
17 p2902 A69-34029
- LACK, R. L.**  
High-speed store separation - Correlation between wind-tunnel and flight-test data.  
[AIAA PAPER 68-361]  
11 p1819 A69-25373
- LACK, W. G.**  
Technical note - The role of impurities in corrosion by fluorine oxidizers.  
21 p3784 A69-39487
- BLACK, W. L.**  
An electromagnetic attitude control system for a synchronous satellite.  
21 p3827 A69-39755
- BLACK, W. M.**  
Longitudinal waves in a plasma half-space.  
01 p0134 A69-11287
- BLACKADAR, A. K.**  
Asymptotic similarity in neutral barotropic planetary boundary layers.  
03 p0460 A69-13336
- BLACKBAND, W. T.**  
Signal Processing Arrays. Proceedings of the Twelfth Symposium, Duesseldorf, West Germany, July 7-13, 1966.  
08 p1287 A69-20957  
Active aerials for aircraft communications.  
08 p1289 A69-20972  
Variable phase shifters.  
08 p1290 A69-20978
- BLACKBURN, E. J.**  
A strain multiplier for fatigue sensors.  
02 p0250 A69-12230
- BLACKBURN, J. H.**  
Shock front reaction and initiation of detonation in low density ammonium perchlorate.  
21 p3784 A69-39590
- BLACKBURN, M. J.**  
Phase transformations in Ti-Mo and Ti-V alloys.  
06 p0943 A69-17230  
Metallurgical aspects of the stress corrosion cracking of titanium alloys.  
19 p3352 A69-36902  
Strength, deformation modes and fracture in titanium-aluminum alloys.  
20 p3557 A69-36959
- BLACKBURN, W. S.**  
The effect of the shape of plastic zone size and crack opening displacement.  
10 p1795 A69-23064
- BLACKKETTER, D. O.**  
Elasticity solution by a modified Galerkin method.  
02 p0338 A69-11748  
Contact stress between two-dimensional finite elastic bodies.  
[ASME PAPER 69-APMW-9]  
24 p4402 A69-43104
- Permanent deformation of an axial rod subjected to dynamic loading.  
24 p4406 A69-43699
- BLACKLOCK, J. R.**  
Finite element analysis of inelastic structures.  
[AIAA PAPER 68-291]  
13 p2364 A69-28208
- BLACKMER, R. H., JR.**  
Studies for aerospace global cloud models.  
02 p0275 A69-12381
- BLACKMON, C. M.**  
Buckling of eccentrically stiffened, thin circular plates.  
20 p3622 A69-37221
- BLACKMON, J. B.**  
Analytical approaches for the design of orbital refueling systems.  
[AIAA PAPER 69-567]  
16 p2868 A69-32721
- BLACKSHEAR, W. T.**  
Results on the mass and the gravitational field of the moon as determined from dynamics of lunar satellites.  
15 p2699 A69-31405
- BLACKSMITH, P.**  
Electronic scanning.  
01 p0049 A69-11348
- BLACKSTOCK, A. W.**  
Experiments using a 25 kw hollow cathode lithium vapor MPD arc jet.  
[AIAA PAPER 69-241]  
09 p1561 A69-21222
- BLACKWELL, J. R.**  
What should engineering administration do for the chief project engineer/ques/  
[SAE PAPER 680682]  
03 p0535 A69-13447
- BLACKWELL, K. C.**  
Proper motions on the system of the FK4. I.  
15 p2696 A69-31221
- BLACKWELL, R.**  
A modified Ke torsional pendulum for stress and strain relaxation measurements.  
01 p0079 A69-10221
- BLACKWOOD, D.**  
Pulse motor for spacecraft attitude control.  
02 p0194 A69-11762
- BLADER, F. B.**  
Errors in the use of shock spectra.  
20 p3548 A69-37301
- BLADOWSKI, R.**  
A high-speed ten-bit analog-to-digital converter employing MSI elements /Ein schneller 10-Bit-Analog-Digital-Umsetzer mit MSI-Elementen/  
11 p1845 A69-24520
- BLAES, H. M.**  
Materials for a minimum cost space launch vehicle.  
12 p2175 A69-26844
- BLAGHIKH, A.**  
Investigations of T associations. IV - Comparative study of Orion variables /Ricerche sulle associazioni I. IV - Studio comparativo delle variabili di Orione/  
06 p1002 A69-17264
- BLAGOJEVIC, D.**  
On the general solution for torsion of polar elastic media.  
08 p1414 A69-20527
- BLAGOSKLONSKAIA, L. E.**  
Electron scattering on neutral acceptors in semiconductors /Рассеяние электронов на нейтральных акцепторах в полупроводниках/.  
03 p0484 A69-13280  
Electron scattering by neutral acceptors in semiconductors.  
14 p2508 A69-29653
- BLAGOVESHCHENSKAIA, N. S.**  
Effect of visual stimuli on the nystagmus according to electronystagmographic data for tumoral posterior cranial fossa /Влияние зрительного раздражения на нистагм, по данным электронистагмографии, при опухоли задней черепной ямки/.  
20 p3470 A69-37250
- BLAHA, B. J.**  
Flight and wind tunnel investigation of installation effects on supersonic cruise exhaust nozzles at transonic speeds.  
[AIAA PAPER 69-427]  
16 p2734 A69-32769
- BLAHA, M.**  
Collision excitation of positive ions in p super q configurations - Transitions between levels of the P term. II.  
07 p1187 A69-19714
- Effective Gaunt factors g sub eff for excitation of positive ions by electron collisions in a simplified Coulomb-Born approximation.  
20 p3581 A69-38175
- BLAIKLOCK, P. M.**  
Development of a pneumatic stepping motor.  
02 p0196 A69-12086
- BLAIR, D. W.**  
Experimental determination of the radiative properties of high-temperature plasmas.  
[AIAA PAPER 69-601]  
17 p3010 A69-33310  
A sensitive method for investigating the effect of electric fields on the burning velocities of premixed laminar flames.  
21 p3852 A69-39596  
Solid-propellant flame zone radiation.  
24 p4415 A69-43595
- BLAIR, E.**  
Physiologic and metabolic effects of hypothermia in man.  
10 p1643 A69-23125
- BLAIR, J. C.**  
Results of an experimental study of coherent PSK in a multipath environment.  
03 p0393 A69-13255  
H.F. ionospheric radar ground-scatter map showing land-sea boundaries by a spectral-separation technique.  
09 p1454 A69-21681  
Electromigration in thin gold films.  
17 p2936 A69-32896
- BLAIR, L. K.**  
Gas-phase acidities of alcohols - Effects of alkyl groups.  
19 p3265 A69-36289  
Gas-phase acidities of carbon acids.  
19 p3265 A69-36291  
Gas-phase acidities of amines.  
19 p3265 A69-36293
- BLAIR, L. S.**  
Recombination in the hydrogen-oxygen reaction - A shock tube study with nitrogen and water vapour as third bodies.  
21 p3669 A69-38801
- BLAISDELL, L.**  
Design evolution of mechanically despun antennas from ATS to Intelsat.  
03 p0403 A69-13239  
SYMMTRAC I and SYMMTRAC II feeds for low noise antennas.  
11 p1852 A69-25317  
ATS mechanically despun communications satellite antenna.  
22 p3913 A69-40692
- BLAKE, B. B.**  
Flight simulation of the CH-46 helicopter.  
[AHS PAPER 361]  
17 p2946 A69-33521
- BLAKE, C.**  
Transistors versus vacuum tubes in UHF phased-array radars.  
01 p0048 A69-11041
- BLAKE, F. A.**  
The "hot spot" failure mode for solar arrays.  
23 p4142 A69-42273
- BLAKE, I. F.**  
The linear random process.  
01 p0029 A69-10555  
Linear filtering and piecewise linear correlation functions.  
17 p2933 A69-33621
- BLAKE, J. B.**  
Penetration of solar protons to synchronous altitude.  
14 p2509 A69-28935
- BLAKE, L. V.**  
Radio ray /radar/ range-height-angle charts.  
01 p0031 A69-10633
- BLAKE, R. E.**  
Derivation of design and test criteria.  
15 p2618 A69-30368
- BLAKE, R. L.**  
Reinterpretation of the feature at 23.28 angstrom units in solar soft-X-ray spectra.  
09 p1580 A69-22232
- BLAKELEY, R. H.**  
How and where load-determining bolts are used.  
22 p3957 A69-40829



## BLAKELOCK, H. D.

High modulus reinforcing carbon.  
08 p1338 A69-20488

## BLAKELY, J. M.

A study of faceting of tungsten single crystal surfaces.  
08 p1330 A69-20137

The kinetics of oxygen adsorption on the (112) and (110) planes of tungsten.  
18 p3183 A69-35106

## BLAKELY, R. L.

Computer analysis techniques for spacecraft adsorption beds.  
[AICHE PAPER 19C] 09 p1446 A69-21931

## BLAKEMORE, R. H.

The analysis of photoelastic data for stress separations.  
21 p3843 A69-39316

## BLAMONT, J.

Structure of the turbulent field from 90 to 120 km.  
21 p3713 A69-38524

## BLAMONT, J. E.

Effects of energetic particles on photomultipliers in earth orbits up to 1500 km.  
06 p0923 A69-16932

OGO-V measurements of Lyman-alpha intensity distribution and linewidth up to 6 earth radii.  
15 p2699 A69-31412

Temperature measurements of the upper atmosphere in the northern polar zone.  
15 p2606 A69-31448

## BLANC, C.

Statistical data on grounding of crew members in an airline due to psychic disorders.  
21 p3665 A69-39181

## BLANC, C. J.

Psychopathology of airline stewardesses.  
07 p1067 A69-19434

Psychotherapeutic treatment of depressions and neuroses in aviation medicine.  
23 p4086 A69-41690

Psychotherapy and chemotherapy in aviation medicine /Psychotherapies et chimiotherapies en medecine aeronautique/.  
24 p4266 A69-43378

## BLANC, D.

An original method of measuring atmospheric diffusion, using a radioactive gas emitted from a point source /Une methode originale de mesure de la diffusion atmospherique utilisant un gaz radioactif emis depuis un point source/.  
01 p0144 A69-10043

Measurement of effective charge-exchange and stripping cross sections of incident ions and atoms /masses of 1, 2, and 3/ encountering a vapor target at energies ranging from 1 to 50 kev /Mesure des sections efficaces d'echange de charge et de "stripping" pour des ions et des atomes incidents /masses 1, 2, et 3/ d'energie comprise entre 1 et 50 kev rencontrant une cible de vapeur d'eau/.  
19 p3378 A69-36190

## BLANC, F.

Propagation of an electromagnetic wave in a waveguide containing a birefringent medium, and detailed study of the case of a waveguide of rectangular cross section /Propagation d'une onde electromagnetique dans un guide contenant un milieu birefringent et etude detaillee du cas d'un guide de section rectangulaire/.  
11 p1853 A69-25350

## BLANC, J. J.

Air breathing booster propelled by a supersonic ramjet /Lanceur atmospherique propulse par statoracteur a combustion supersonique/.  
09 p1573 A69-22608

## BLANCETT, A. L.

A gas bath cryostat for operation between 50 deg and -190 deg C.  
17 p2975 A69-33669

## BLANCHARD, B. S.

Cost effectiveness analysis - A case study approach.  
15 p2722 A69-31125

## BLANCHARD, B. S., JR.

Maintainability- Principles and Practices.  
21 p3734 A69-39815

## BLANCHARD, D. L.

Design, simulation and flight performance of the Radio Astronomy Explorer-A satellite.  
07 p1226 A69-18328

## BLANCHARD, J.

A simple telemetering system for strain measurement.  
22 p3946 A69-40314

## BLANCHARD, J. W.

Advanced display techniques.  
04 p0600 A69-15029

## BLANCHARD, L. E.

The design of postlanding television system photometric charts for the Surveyor spacecraft.  
[SMPTE PAPER 105-71] 12 p2078 A69-25771

## BLANCHARD, R. E.

Field test of a technique for establishing personnel performance requirements.  
19 p3261 A69-36025

## BLANCHET, M.

Device for the determination of the Kerr constant of liquids - Properties of new electrooptic liquids - Installation for refilling Kerr cells /Dispositif pour la determination de la constante de Kerr des liquides - Proprietes de nouveaux liquides electro-optiques - Installation de remplissage de cellules de Kerr/.  
12 p2084 A69-26148

## BLANCO, C.

Research on magnetic stars at the Catania Astrophysical Observatory. I.  
16 p2858 A69-32208

## BLANCO, V. M.

Two-color composite photographs of the Magellanic Clouds.  
12 p2152 A69-25801

## BLAND, B. H.

Radio pulse profiles from pulsating white dwarfs.  
17 p3037 A69-33644

## BLANDER, M.

The origin of meteorites and the constrained equilibrium condensation theory.  
17 p3034 A69-33585

## BLANDOV, P. I.

Pressures in packing grooves of hydraulic systems - Pumping action of the moving wall of a hydraulic drive.  
16 p2736 A69-32135

## BLANFORD, G. E., JR.

Observation of trans-iron nuclei in the primary cosmic radiation.  
21 p3787 A69-38327

## BLANK, G. L.

The human operator as an optimal controller.  
06 p0903 A69-17407

## BLANK, I. I.

Second virial coefficients of atomic nitrogen and oxygen.  
03 p0473 A69-14158

## BLANK, J. L.

Response of the moon to the time-varying interplanetary magnetic field.  
07 p1215 A69-18832

Electrostatic potential distribution of the sunlit lunar surface.  
20 p3609 A69-38077

## BLANKEN, R. A.

Synchrotron deceleration of electrons in a plasma and the generation of electromagnetic radiation.  
11 p1931 A69-25363

## BLANQUET, G.

Solar abundances of some representative elements from the standpoint of nucleosynthesis /Abondances solaires de quelques elements representatifs au point de vue de la nucleosynthese/.  
08 p1402 A69-20906

Abundances of the rare earths in the sun.  
20 p3602 A69-37539

## BLASBALG, H.

Air-ground, ground-air communications using pseudonoise through a satellite.  
01 p0033 A69-11009

## BLASER, D. A.

Boundary layer discontinuity on a helicopter rotor blade in hovering.  
[AIAA PAPER 69-197] 07 p1051 A69-19561

## BLASHCHUK, V. E.

The weldability of a thermally stable titanium alloy.  
06 p0940 A69-17092

## BLASSEL, P.

Description of the international scientific satellite ESRO II/IRIS /Presentation du satellite international scientifique ESRO II/IRIS/.  
01 p0162 A69-11101

The launching of the ESRO II/IRIS satellite /Le lancement du satellite ESRO II/IRIS/.  
01 p0163 A69-11104

## BLASZCZAK, Z.

Portable gas laser of small dimensions intended for alignment of optical systems /Prenosny laser gazowy o malych rozmiarow przeznaczony do justowania ukladow optycznych/.  
24 p4327 A69-42924

## BLASZUK, P. R.

Electron radiation temperature measurements in a CO sub 2 laser amplifier.  
04 p0611 A69-14445

## BLATTER, A.

Research and development of a vortex valve for flow modulation of a 16-percent aluminized 550 deg F solid propellant gas.  
[AIAA PAPER 69-424] 16 p2844 A69-32723

## BLATTER, K.

Beta-blockade and emotional tachycardia - Radiotelemetric investigations in ski jumpers.  
23 p4078 A69-41313

## BLAU, F. P.

On the drift-dissipative instabilities.  
11 p1934 A69-25655

## BLAUER, J. G.

Interference-optical measurements of simple, quasi-steady-state thermal stress fields to determine stress-intensity factors /Interferenzoptische Vermessung von einfachen, quasistationaeren Thermospannungsfeldern zur Bestimmung von Spannungsintensitaetsfaktoren/.  
12 p2089 A69-26189

## BLAUER, J. A.

Analog simulation of a chemically reacting system.  
[WSCI PAPER 68-49] 07 p1073 A69-18318  
The thermal dissociation of chlorine-trifluoride behind incident shock waves.  
[WSCI PAPER 68-40] 07 p1202 A69-18355  
The thermal dissociation of chlorine trifluoride behind incident shock waves.  
21 p3670 A69-39739

## BLAZEWICZ, W.

Study of the possibility of decreasing the rate of fatigue crack propagation in duraluminum sheets by means of cold working /Badania mozliwosci zmniejszenia predkosci propagacji pekniecia zmeczeniowego w blachach duralowych przy uzcziu zgniotu/.  
04 p0681 A69-15170  
Mechanical machine for fatigue testing of thin-walled structures /Mechaniczna maszyna zmeczeniowa do badania konstrukcji cienkoscienne/.  
18 p3118 A69-34833

## BLAZEY, R. N.

Characteristics of a high response laser flowmeter.  
15 p2616 A69-31292

## BLAZHKEVICH, B. I.

Specialized machine for expanding matrix determinants /Spetsializirovannaa mashina dlia raskrytiia opredelitelei matrits/.  
09 p1460 A69-21782

## BLAZHNOVA, M. I.

Properties of radiation emitted by pulsed silicone carbide and gallium phosphide diodes.  
14 p2419 A69-29325

## BLAZQUEZ, M.

Influence of the electric field on the characteristics of epitaxial field effect transistors /Influence du champ electrique sur les caracteristiques des transistors a effet de champ epitaxiaux/.  
02 p0294 A69-11541

## BLAZYSKI, T. Z.

Air-cushion effect in the explosive forming of metal sheet. I.  
06 p0930 A69-17001

Air-cushion effect in the explosive forming of metal sheet. II.  
06 p0931 A69-17526

## BLEAK, B. M.

Management of the independent testing laboratory.  
15 p2720 A69-30402

## BLECH, J. J.

Axisymmetric stress distribution in anisotropic cylinders of finite length.  
04 p0676 A69-14709

## BLECHER, M.

Single-proton emission following positive pion absorption in carbon.  
02 p0282 A69-11460

- BLECKER, H. H.**  
Fatty acids in blue-green algae - Possible relation to phylogenetic position.  
05 p0707 A69-15751
- BLEEDNOV, V. A.**  
Compact low-noise nuclear-precession sensor for measuring geomagnetic field components /Malogabaritnyi pomekhozashchishchennyy iadernoprecessionnyy datchik dlia izmereniia komponent geomagnitnogo polia/.  
23 p4165 A69-41868
- BLEEKER, J. A. M.**  
Long-term time variations of the cosmic-ray electron flux above 500 Mev.  
16 p2851 A69-32566
- BLEEKRODE, R.**  
A study of the spontaneous emission from CO sub 2 - N sub 2 -He-H sub 2 laser discharges - C super 3 pi sub u -B super 3 pi sub g emission bands of N sub 2.  
12 p2105 A69-26316  
Near-infrared spontaneous emission spectra of high-power CO sub 2 lasers.  
19 p3339 A69-36697
- BLEISTEIN, N.**  
Diffraction in the asymptotic solution of a dispersive hyperbolic equation.  
05 p0802 A69-15930
- BLEJWAS, T. E.**  
Photothermoelastic investigation of stresses in a composite model.  
24 p4396 A69-42739
- BLANK, H.**  
Wissenschaftliche Gesellschaft fuer Luft- und Raumfahrt, Yearbook 1967 /Wissenschaftliche Gesellschaft fuer Luft- und Raumfahrt, Jahrbuch 1967/.  
04 p0545 A69-14801
- BLESS, R. C.**  
Filter photometry of Saturn in the spectral region lambda lambda 2950-2450.  
09 p1602 A69-22216
- BLTZINGER, P.**  
"Burning" in the electron energy distribution by laser action in the CO sub 2 -N sub 2 -He discharge.  
16 p2796 A69-31772  
Dispersion and stability of moving striations.  
24 p4356 A69-43363
- BLEVIN, H. A.**  
Anomalous skin effect in bounded plasmas.  
12 p2133 A69-25833
- BLEYMAIER, J. S.**  
Systems considerations for aerospace beryllium applications. [SAE PAPER 680648]  
03 p0444 A69-13456  
Future space booster requirements.  
08 p1410 A69-20882
- BLIAUX, J.**  
Evaluation of laboratory studies of life duration of thermionic converters /Bilan des etudes de duree de vie des convertisseurs thermo-ioniques en laboratoire/.  
14 p2398 A69-29179  
In-pile experiments of "Sirene" thermionic conversion, and examination after irradiation of the "Sirene 302" converter /Experiences de conversion thermionique "Sirene" en pile et examen apres irradiation du convertisseur "Sirene 302"/.  
14 p2481 A69-29198
- BLICK, E. F.**  
Compliant coating skin friction experiments. [AIAA PAPER 69-165]  
06 p0912 A69-18043  
Compliant surface drag as a function of speed.  
21 p3695 A69-39039
- BLIGH, J.**  
Respiratory responses of the conscious dog to severe heat stress.  
23 p4081 A69-41432
- BLIN, A.**  
Incidence of unitary sorting on the reliability of planar transistors subjected to irradiation recovery cycles /Incidence d'un tri unitaire sur la fiabilite de transistors planars soumis a des cycles irradiation-restauration/.  
15 p2626 A69-30834
- BLINN, H. O.**  
Analysis of the thermal performance of electrical instruments in a nuclear environment.  
06 p0956 A69-16885
- BLINOV, B. V.**  
Changes in the indices of external respiration, gas exchange, and energy expenditure in humans under conditions of weightlessness /Izmeneniia pokazatelei vneshnego dykhaniia, gazoobmena i energotrat cheloveka v usloviakh nevesomosti/.  
12 p2020 A69-26563
- BLINOVA, E. N.**  
Solution to the nonlinear problem of unsteady atmospheric motions on a planetary scale /Reshenie nelineinoi zadachi o nestatsionarnykh atmosferykh dvizheniakh planetarnogo masshtaba/.  
08 p1311 A69-21158
- BLINOVA, L. D.**  
Backscattering of light "I'echo" from objects with rough surfaces and volume scattering /Rasseianie sveta nazad "I'ekho" ot ob'ektov s sferokhovatoi poverkhnost'iu i ob'emnym rasseianiem/.  
06 p0887 A69-17173
- BLOKH, P. V.**  
Diurnal variations of the natural frequencies of the earth - ionosphere resonator in relation to the eccentricity of the geomagnetic field.  
03 p0422 A69-13512  
Refraction and scattering in the solar corona during eclipsed observations of cosmic sources /Refraktsiia i rasseianie v solnechnoi korone pri zatmennyykh nabliudeniakh kosmicheskikh istochnikov/.  
15 p2688 A69-30555  
Effect of the geomagnetic field on the spectrum of microwave noise in the earth-ionosphere resonator /Vpliv geomagnitnogo polia na spektr nadvysokochastotnikh shumiv v rezonatori zemlia-ionosfera/.  
17 p2918 A69-33034  
Excitation of the earth-ionosphere waveguide by lightning discharges and the influence of geomagnetic field on the ELF noise spectrum.  
17 p2928 A69-33865  
Radio wave focusing by an artificially created ionospheric lens /Fokustirovka radiovoln iskusstvenno sozdannoi ionosfernoi lenzoi/.  
20 p3486 A69-37048
- BLISS, J. C.**  
An information processing model for tactile perception.  
24 p4276 A69-43273
- BLISS, R.**  
Axial support systems utilizing pneumatic or hydraulic cylinders, servo-controlled by measurement of defining pad load.  
12 p2058 A69-26422
- BLIUMBERG, L. M.**  
Direct couplings of noisy quadrupoles /O regulirnykh soedineniakh shumiaschikh chetyrekhpolutisnikov/.  
01 p0043 A69-10591
- BLIZARD, J. B.**  
Solar activity and planetary positions. [AAS PAPER 69-069]  
24 p4366 A69-42880
- BLOCH, M.**  
The spectrum of Nova Vulpeculae 1968 /Le spectre de Nova Vulpeculae 1968/.  
07 p1220 A69-19337  
Presence of /Fe IV/ in the spectrum of MH alpha 328116 /Presence de /Fe IV/ dans le spectre de MH alpha 328116/.  
16 p2866 A69-32815  
Forbidden lines in the MH alpha 328-116 spectrum /Raies interdites dans le spectre de MH alpha 328-116/.  
19 p3424 A69-36233
- BLOCH, S.**  
Upper mantle structure - Are the low velocity layers thin/ques/  
09 p1491 A69-22153  
A technique for the analysis of transient seismic signals.  
22 p3934 A69-39872  
Progress report on recent improvements in the analysis of surface wave observations.  
23 p4157 A69-42018
- BLOCHER, M.**  
Elastic scattering of 600 Mev protons from He super 3.  
03 p0472 A69-13464
- BLOCK, A.**  
Design considerations for an integrated 1.8- GHz parametric amplifier.  
01 p0040 A69-10193
- BLOCK, J.**  
Airports and "facilitation" /Les aeroports et la "facilitation"/.  
24 p4296 A69-42567
- BLOCK, J. V.**  
International airport planning as influenced by aircraft development.  
17 p2948 A69-34203
- BLOCK, L. P.**  
Field aligned currents and auroral precipitation.  
21 p3710 A69-38506
- BLOCK, R. C.**  
Neutron radiative capture and transmission measurements of W and Zr isotopes in the kev region.  
18 p3175 A69-34314
- BLOEMBERGEN, N.**  
Nonlinear optics.  
05 p0793 A69-15771  
Nonlinear optical coefficients in group IV and III-V semiconductors. [IEEE PAPER V-7]  
05 p0776 A69-16329  
Conical refraction in nonlinear optics.  
19 p3330 A69-35604
- BLOGH, J.**  
Method for measuring wind turbulence.  
04 p0628 A69-15149
- BLOK, H.**  
A numerical study of open resonators for lasers.  
17 p2983 A69-33883
- BLOKH, I. A. L.**  
A standard algorithm for a cosmic ray station /Standartnyi algoritm dlia stantsii kosmicheskikh luchei/.  
10 p1770 A69-23906
- BLOKH, M. D.**  
Thermal EMF in epitaxial films /Termoeds v epitaksial'nykh plenkach/.  
09 p1555 A69-21473  
Thermoelectric power of epitaxial films.  
15 p2669 A69-30718
- BLOM, A. P.**  
A theoretical study of the interpretation of emission-absorption intensity ratio temperature measurements in the absence of thermal equilibrium.  
09 p1623 A69-22255
- BLOM, J.**  
The influence of changes in surface roughness on the development of the turbulent boundary layer in the lower layers of the atmosphere.  
12 p2125 A69-26014
- BLOM, J. H.**  
Theoretical and experimental investigation of a nonequilibrium plasma in an MHD channel.  
10 p1736 A69-23465
- BLOMQUIST, R. F.**  
Adhesives.  
21 p3752 A69-38932
- BLOMSTROM, G. D.**  
Finite deformation of a spinning elastic membrane.  
24 p4404 A69-43651
- BLONDEL, J.-P.**  
Examples of hybrid electropneumatic and electrohydraulic servosystems. II - The electrohydraulic guidance system for the second stage of the Diamant /Exemples d'asservissements mixtes electro-pneumatique et electro-hydraulique. II - Le bloc electrohydraulique de pilotage du 2e etage Diamant/.  
04 p0551 A69-15183
- BLONSTEIN, J. L.**  
The role of small earth stations in future civil communication satellite systems. [UN PAPER 68-95751]  
01 p0028 A69-10492
- BLOOM, A. L.**  
Far-field pattern of gas lasers operated in the lowest order Gaussian transverse mode.  
17 p2981 A69-33090  
Near-infrared operating characteristics of the Mercury ion laser.  
23 p4171 A69-41393
- BLOOM, C. O.**  
On the validity of the geometrical theory of diffraction by convex cylinders.  
13 p2299 A69-28194
- BLOOM, D. W.**  
Superconducting leads for cryogenic applications.  
22 p3997 A69-41236
- BLOOM, J. M.**  
Axial loading of a unidirectional composite - Anisotropic filaments.  
07 p1170 A69-18724



## BLOOM, M. H.

Field tracing with electrostatic probes in low density slightly ionized flows. 19 p3291 A69-35718

Laboratory measurements of electron-density distributions in the near wake. [AIAA PAPER 68-161] 24 p4248 A69-43643

## BLOOMQUIST, C. E.

Spacecraft failure rates - Where are we/ques/ 18 p3207 A69-34519

Field failure rates for selected KSC ground support equipment. 19 p3295 A69-36023

## BLOSSEY, R. G.

Nitrogen solubility in liquid Fe-Cr-Ni alloys. 06 p0942 A69-17229

## BLOTTNER, F. G.

Electron number density distribution in the laminar air boundary layer on sharp cones. [AIAA PAPER 68-733] 20 p3458 A69-37181

## BLOUGH, D. S.

Attention shifts in a maintained discrimination. 24 p4275 A69-43198

## BLOWER, R. F.

Solid propellant as a self contained source of energy for starting large engines and the actuation of mechanical devices - Power cartridges. 02 p0302 A69-11524

## BLOWNEY, D. P.

Reconfiguration and control of avionic multiprocessor systems. 17 p2977 A69-34072

## BLUDOV, V. IA.

Measurement of the parameters of the ionosphere by the method of "incoherent" scattering of radio waves /K izmereniiam parametrov ionosfery metodom "nekoherentnogo" rassaiianiia radiovoln/. 01 p0065 A69-10575

Measurements of the parameters of the ionosphere by the "incoherent" radiowave scattering method. 15 p2597 A69-30745

## BLUE, J. L.

Approximate large-signal analysis of IMPATT oscillators. 09 p1463 A69-21846

## BLUE, J. W.

Another study of the decay of I super 123. 03 p0470 A69-13099

## BLUE, R. E.

An experimental investigation of atmospheric effects on an optical PCM data relay. 11 p1888 A69-25308

## BLUESTEIN, M.

Hemolytic effects of energy dissipation in flowing blood. 23 p4100 A69-42533

## BLUHM, J. I.

Fracture arrest. 17 p3060 A69-33560

## BLUM, D. E.

An equilibrium theory of the parametric pump. 09 p1481 A69-21910

## BLUM, F. A.

Microwave scattering and noise emission from afterglow plasmas in a magnetic field. 18 p3127 A69-34436

## BLUM, H. A.

Subject classification bibliography for thermal contact resistance studies. [ASME PAPER 68-WA/HT-18] 05 p0847 A69-16122

## BLUM, J.

A model of the vertebrate central command system. 24 p4273 A69-42910

## BLUM, N. A.

High-field studies of band ferromagnetism in Fe and Ni by Moessbauer and magnetic moment measurements. 19 p3383 A69-36050

## BLUM, P. W.

Possible contributions of fast neutral particles to the formation of the F2 layer. 04 p0592 A69-15009

The delay between solar activity and density changes in the upper atmosphere. 04 p0594 A69-15121

Impact ionization by neutral interplanetary particles. 15 p2699 A69-31390

Solar wind tail and the anisotropic production of fast hydrogen atoms. 22 p4008 A69-41208

## BLUM, S. C.

A 10-watt S-band solid-state amplifier. 02 p0217 A69-12147

## BLUM, S. L.

A metal-fiber-reinforced ceramic system. 06 p0946 A69-17528

## BLUMAN, G. W.

The general similarity solution of the heat equation. 20 p3630 A69-36915

## BLUMBERG, J. M.

The role of the pathologist in aviation accident investigation. 12 p2021 A69-25838

## BLUMEN, W.

On the role of joule heating as a source of gravity-wave energy above 100 km. 12 p2064 A69-26010

The effect of horizontal shear flow on geostrophic adjustment in a barotropic fluid. 15 p2648 A69-30217

## BLUMENAUER, J.

The electric dose variometer - A new discovery for our glider pilots /Das eD-Vario - Eine Neuentwicklung fuer unsere Segelflieger/. 24 p4315 A69-43143

## BLUMENTHAL, D. L.

Experimental study of a rarefied plasma stream and its interaction with simple bodies. [AIAA PAPER 69-79] 06 p0865 A69-18200

## BLUMRICH, J. F.

Concepts for more efficient bulkhead designs for launch and space vehicles. [AIAA PAPER 68-355] 02 p0334 A69-12370

## BLUNDELL, D. R.

Airport restrictions as they affect airline planning. 17 p2948 A69-34206

## BLYTH, A. H.

Design of incentive contracts - Basic principles. 09 p1626 A69-22776

## BLYTHE, J. H.

Computer simulation as an aid to the design of a digital Doppler processor. 12 p2035 A69-27096

The CFE clutter model, with application to automatic detection. 23 p4117 A69-41604

The accuracy of an approximate method of calculating performance of delay-line M.T.I. receivers. 23 p4117 A69-41605

## BLYTHE, P. A.

Non-linear wave propagation in a relaxing gas. 17 p2957 A69-33599

On the structure of a class of aerothermodynamic shocks. 18 p3089 A69-35386

## BOAG, J. W.

Oxygen diffusion and oxygen depletion problems in radiobiology. 23 p4090 A69-41966

## BOAK, A. G.

A study of blockage effects of bluff bodies in closed wind tunnels. 17 p2890 A69-33245

## BOARDMAN, A. D.

Space harmonics in a drifted solid-state plasma. 02 p0287 A69-11945

## BOARDMAN, W. J.

A coronal enhancement in the extreme ultraviolet. 15 p2693 A69-30781

## BOARI, M.

Stability analysis of linear systems with periodic coefficients /Sull'analisi di stabilita dei sistemi lineari a coefficienti periodici/. 21 p3685 A69-38779

## BOATMAN, R. M.

Comparison of measured and theoretical values of electrical conductivity in a low density plasma. [AIAA PAPER 69-277] 09 p1543 A69-21264

Comparison of measured and theoretical values of electrical conductivity in a low density plasma. 18 p3181 A69-35072

## BOATWRIGHT, D. W.

Some effects of interference of three- dimensional bodies on the wake geometry of a hovering rotor. [AIAA PAPER 69-228] 07 p1051 A69-19551

## BOBELDIJK, C.

Stability of the screw pinch. 16 p2821 A69-32037

## BOBER, L.

Measurement of emission and absorption coefficients of the Balmer line H alpha. 16 p2822 A69-32040

## BOBIN, J. L.

Interaction of a very intense laser beam with matter /Interaction d'un faisceau laser tres intense avec la matiere/. 05 p0769 A69-15583

X rays from a laser created deuterium plasma. 06 p0964 A69-17479

Gas breakdown with nanosecond pulses. [IEEE PAPER U-3] 07 p1155 A69-19085

## BOBIS, A. H.

A mathematical basis for the selection of research projects. 15 p2721 A69-31068

## BOBISCH, P.

The step-recovery diode and its mode of operation as a frequency multiplier /Die Speicher-Schaltodiode und ihre Wirkungsweise als Frequenzvervielfacher/. 21 p3684 A69-39736

## BOBKOV, V. P.

Method of computing temperature fields in noncircular channels. 07 p1243 A69-19734

## BOBOLEV, V. K.

Measurement of the radiation from flames on a microcalorimeter /Izmerenie izlucheniia plamen mikrokalorimetrami/. 02 p0355 A69-12671

Effect of aluminum on the combustion of ammonium perchlorate and polyformaldehyde /Vliianie aluminia na gorenie perklorata ammoniia s poliformal'-degidom/. 08 p1375 A69-20338

Effect of the initial temperature on the combustion of ammonium perchlorate /Vliianie nachal'noi temperatury na gorenie perklorata ammoniia/. 14 p2508 A69-28914

## BOBOVICH, IA. S.

The latest advances in the spectroscopy of spontaneous combination scattering of light /Poslednie dostizheniia v spektroskopii spontannogo kombinatsionnogo rassaiianiia sveta/. 12 p2108 A69-26618

New phenomena during the irradiation of cyanine molecules by a high-power ruby laser pulse /Novye iavleniia pri obluichenii molekul kriptotsianina moshchnym impul'som rubinovogo lazera/. 21 p3740 A69-39546

## BOBRUKOV, L. P.

Determination of the elastic moduli and tensile strength of oriented glassfiber-reinforced plastics based on nondestructive testing of their composition and structure parameters /Opredelenie modulei uprugosti i prochnosti pri rastiazhenii orientirovannykh stekloplastikov na osnove nerazrushaiushchego kontroli parametrov ikh sostava i strukturny/. 18 p3162 A69-35359

## BOBRINEV, V. I.

Methods of increasing the volume depth in hologram photography /Sposoby uvelicheniia glubiny ob'ema pri s'emke gologramm/. 05 p0761 A69-15651

Holograms on photochromic films. [IEEE PAPER F-1] 07 p1133 A69-19053

Feasibility of using holographic techniques for creating new types of storage devices /Vozmozhnosti primeneniia metodov golografii dlia sozdaniia novykh tipov zapominaishchikh ustroistv/. 07 p1133 A69-19158

Holograms on photochromic films. 11 p1881 A69-24631

Methods of increasing the depth of holograms. 16 p2791 A69-32508

## BOBRONNIKOV, V. T.

Statistical linearization of a considerable nonlinearity connected in series with a random-gain amplifier unit /Statisticheskaia linearizatsiia suschestvennoi nelineinosti, soedinennoi posledovatel'no s usilitel'nyim zvenom so sluchainym koeffitsientom usileniia/. 14 p2425 A69-28920

## BOBROV, I. N.

Methods of realizing functional amplitude characteristics in parametric amplifiers /Sposoby realizatsii funktsional'nykh amplitudnykh kharakteristik v parametricheskikh usilitel'nykh/. 11 p1849 A69-24957

## BOBROV, V. N.

Measurement of the H and Z components of the geomagnetic field with the aid of a proton magnetometer /Izmerenie H- i Z- sostavlyaiushchikh zemnogo magnitnogo polia s pomoshch'yu protonnogo magnetometra/.

Quartz Z-magnetometer /Kvartsevyi Z- magnetometr/.

Measurement of the H and Z components of the geomagnetic field with a proton magnetometer.

A magnetosensitive quartz element /Kvartsevyi magnito chuvstvitel'nyi element/.

Quartz Z-magnetometer.

Quartz compasses /Kvartsevyi bussoli/.

## BOBROV, V. T.

High-speed ultrasonic instrument for on-line inspection of welded tube seams.

Duk-15TsLAM device for the automatic ultrasonic inspection of tube welds.

## BOBROVNIKOFF, N. T.

Astronomical investigations above the terrestrial atmosphere.

Soviet attitudes concerning the existence of life in space.

## BOBROVNIKOV, M. S.

Diffraction of cylindrical waves at an impedance wedge in an anisotropic plasma /Difraktsiia tsilindricheskikh voln na impedansnom kline v anizotropnoi plazme/.

The diffraction of electromagnetic waves at a surface impedance discontinuity in a coaxial waveguide.

## BOBROVSKII, G. A.

Transport coefficients of the plasma in the Tokamak TM-3 apparatus.

## BOBROW, D. G.

A limited speech recognition system.

## BOBYLEVA, I. M.

Structural characteristics of the surface wind for aviation needs /Strukturnye kharakteristiki prizemnogo vetra dlia nuzhd aviatsii/.

## BOCCON-GIBOD, D.

Franz-Keldysh effect with Gunn domains in bulk GaAs.

Rectangular-pulse generator and memory element with a Gunn diode.

Possibilities of application of the Gunn effect to digital electronics /Possibilites d'application de l'effet Gunn a l'electronique digitale/.

## BOCHAROV, V. I.

Statistical characteristics of continuous short-wave radio signals at frequencies above the MUF.

Absorption of cosmic radio emission during the IQSY above Alma-Ata /Pogloshchenie kosmicheskogo radioizlucheniia v period MGSS nad Alma-Atoi/.

Results of absorption measurements in the ionosphere by the A3 method /Rezultaty izmereniia pogloshcheniia v ionosfere metodom A3/.

## BOCHAROV, V. V.

Stimulated combination scattering of neodymium laser radiation in liquid nitrogen /Vynuzhdennoe kombinatsionnoe rassaianie izlucheniia neodimovogo lazera v zhidkom azote/.

## BOCHAROVA, L. A.

Damping properties of certain materials for turbine blades at high temperatures /Dempiruiushchie svoistva nekotorykh turbolopatochnykh materialov pri vysokikh temperaturakh/.

Evaluation of the effect of air resistance on the energy dissipation during transverse vibrations of flat specimens /Otsenka vliianiia soprotivleniia vozdukhnoi sredy na rassaianie energii pri poperechnykh kolebaniakh ploskikh obraztsov/.

## BOCHENKOV, I. U.

Reliability of Semiconductor Radio Devices of Flight Vehicles /Nadezhnost' poluprovodnikovyykh radioustroystv letatel'nykh apparatov/.

## BOCHET, J. C.

Photoconductivity study of annealing of radiation defects in lithium-doped silicon.

## BOCHEV, A.

A dipole approximating to the highest possible degree the earth's magnetic field.

Two and three dipoles approximating the earth's main magnetic field.

## BOCHEV, AL.

Representation of the secular variations of the earth's magnetic field in the form of changes in the field of optimum geomagnetic dipoles /Predstavlenie vekovykh variatsii magnitnogo polia zemli kak izmeneniia polia optimal'nykh geomagnitnykh dipolei/.

## BOCHKOVA, O. M.

Breakdown of liquid and gaseous helium by a laser beam, and observation of stimulated Mandel'shtam-Brillouin scattering in liquid helium.

## BOCHNICEK, J.

Effect of the lower ionosphere on electromagnetic disturbances with periods corresponding to micropulsations.

## BOCHSLER, P.

Rare-gas measurements in separate mineral phases of the Otis and Elenovka chondrites.

## BOCK, G.

Necessity for an exhaustive criteriologi in the simulation of complex piloting /Necessite d'une criteriologie exhaustive dans la simulation des pilotages complexes/.

## BOCK, P.

Survey effectiveness of spacecraft remote sensors.

## BOCKEMUELLER, E. A.

On properties of trajectories of ballistic reentry.

## BOCKRATH, R. C., JR.

Calculated energy deposits from the decay of tritium and other radioisotopes incorporated into bacteria.

The mechanism of inactivation of T4 bacteriophage by tritium decay.

Nonsense suppression in a multiauxotrophic derivative of Escherichia coli 15T super minus - Identification and consequences of an amber triplet in the deoxyribomutase gene.

## BOCKRIS, J. OM.

Indications for the design of porous gas diffusion electrodes arising from analyses of their electrode kinetics.

Dependence of friction at wet contacts upon interfacial potential.

## BOCKSRUKER, R. W.

Mass properties measurements at extremely low angular rates. [SAWE PAPER 739]

## BOCLET, D.

Diffuse X radiation - Observation and origin /Rayonnement X diffus - Observation et origine/.

Observation of celestial X-ray sources /Observation de sources X celestes/.

Observation of five sources of cosmic X-rays in the 15-150 Kev energy range.

## BOCTOR, S.

High efficiency conditions for an ideal nonlinear capacitor frequency multiplier.

## BOCTOR, S. A.

Envelope detection at low signal-to-noise ratios.

## BODDY, J. A.

The impact of computer aided design on mass property engineering. [SAWE PAPER 795]

## BODE, R.

Radiation hardening in single crystal niobium - The temperature dependence of yielding.

## BODECHTEL, J.

The methodology of tectonic measurements in the evaluation of geological aerial photographs /Zur Methodik tektonischer Messungen in der geologischen Luftbildauswertung/.

## BODEN, P. J.

Election of electrolytes for electrochemical machining.

## BODEN, R. H.

Ion propulsion.

## BODENHEIMER, D. W.

A technique for magnetic field susceptibility testing.

## BODENSCHATZ, M.

Problems of liability in air law /Haftungsprobleme im Luftrecht/.

## BODIAKO, M. N.

Study of the properties of maraging steels with increased cobalt and molybdenum content /Issledovanie svoystv martensitno stareiushchikh stalei s povyshennym soderzhaniiem kobal'ta i molibdena/.

## BODLAJ, V.

Frequency stabilization of a He-Ne laser with an external Ne-absorption tube in a variable magnetic field /Frequenzstabilisierung des He-Ne-Lasers mit einer aeußeren Ne- Absorptionsroehre im magnetischen Wechselfeld/.

## BODLEY, C.

A method for digital computation of spacecraft response in the docking maneuver.

## BODNAR, M. J.

Effect of outdoor aging on unstressed, adhesive-bonded aluminum to aluminum lap shear joints.

Effect of outdoor aging on unstressed, adhesive-bonded aluminum to aluminum lap shear joints.

Development of adhesive-bonded joints for glass resin composite sandwich structures.

## BODNARCHUK, A.

A maintenance simulation for complex assemblies.

## BODNARCHUK, R. V.

Methodical errors of a simplified prediction of the rotation period of a correctable artificial earth satellite /Metodicheskie oshibki uproshchennogo prognoza perioda obrashcheniia korrekiruemogo ISZ/.

## BODNER, S. E.

Turbulence theory with a time-varying Wiener-Hermite basis.

## BODNER, S. R.

Constitutive equations for dynamic material behavior.

Repeated discontinuous yielding of 2024 aluminum alloy.

## BODNER, V. A.

Estimate of the reliability of automatically controlled dynamic systems /K otsenke bezopasnosti raboty avtomaticheskii upravliaemykh dinamicheskikh sistem/.



## BODNEVAS, A.

Bright nickel plating /Blestiaschsee nikelirovani/.  
22 p3959 A69-41264

## BODRETSCOVA, A. I.

Quasi-CW lasers with pyrotechnic excitation /Kvazinepreryvnye OKG s pirotekhnicheskimi vzbuzhdeniyami/.  
13 p2272 A69-28116

## BODROV, V. I.

Determination of the differential equation of a plant from its time characteristic /Opredelenie differentsial'nogo uravneniya ob'ekta po ego vremennoi kharakteristike/.  
01 p0053 A69-10804

## BODTMANN, W. F.

Microwave and millimeter wave hybrid integrated circuits for radio systems.  
21 p3684 A69-39563

## BODUNOV, M. N.

Investigation of the heat transfer between the gas and certain elements of the flow area of a turbine /Issledovanie teploobmena mezdu gazom i nekotoryimi elementami protochnoi chasti turbiny/.  
21 p3849 A69-38858

## BOE, R. O.

Hypersonic propulsion facility at Ogden, Utah.  
02 p0227 A69-11756

## BOEHLE, P.

Contribution to explosive forming of aluminum powder /Beitrag zur Explosivformung von Aluminiumpulver/.  
16 p2793 A69-31790

## BOEHM-VITENSE, E.

The pulsar NP 0532 and the implications of the oblique-rotator hypothesis.  
18 p3192 A69-34321  
Line statistics for solar type stars.  
21 p3801 A69-38762

## BOEHM, B. M.

Developing interactive graphics systems for aerospace applications. [AIAA PAPER 69-954]  
22 p3905 A69-40336

## BOEHM, K. H.

Atmospheres and extended envelopes of central stars of planetary nebulae.  
08 p1393 A69-20570

## BOEHME, A.

Some relationships between type IV bursts at centimeter and decimeter waves with special consideration of the type IV burst from October 4, 1965.  
22 p4001 A69-39983

The spectrum of type IV bursts at cm and dm waves and its relation to PCA. I - The mean spectral behaviour and theoretical consequences.  
24 p4366 A69-42964

## BOEHME, G.

Strength of the frozen shock in steady one-dimensional flow of relaxing gases.  
08 p1304 A69-20785

Some properties of steady compression waves in relaxing gases with an arbitrary equation of state /Einige Eigenschaften stationaerer Verdichtungsstellen in relaxierenden Gasen mit beliebiger Zustandsgleichung/.  
10 p1631 A69-22893

## BOEHMER, H.

Generation of smeared out electron beams for experiments on weak plasma turbulence.  
04 p0636 A69-15020

## BOEKE, U.

Simple representation of the possibilities of distance measurement by means of a distance relay composed of intermediate current transformers and rectifier bridges /Einfache Darstellung der Moeglichkeiten der Distanzmessung mit einem aus Zwischenwandlern und Gleichrichterbruecken aufgebauten Distanzmessglied/.  
05 p0765 A69-16746

## BOELKOW, L.

Problems and possibilities of future U.S.-European cooperation in the space field.  
03 p0536 A69-13595

## BOELLA, G.

Design and calibration of a counter for the measurement of the atmospheric and earth leakage flux of secondary cosmic-ray neutrons.  
07 p1209 A69-19454

East-west asymmetry and charge sign ratio of primary cosmic-ray electrons at 8.3 Gv rigidity cut-off.  
15 p2678 A69-31497

## BOENKOVA, N. M.

Planetary distribution of the seasonal anomaly in the ionospheric F2 layer /O planetarnom raspredelenii sezonnoi anomalii sloia F2 ionosfery/.  
20 p3526 A69-37666

Seasonal anomaly in the F2 layer and the geomagnetic effect /Sezonnaia anomalii sloia F2 i geomagnitnyi effekt/.  
20 p3526 A69-37667

## BOEREMA, I.

Decompression disease.  
24 p4269 A69-43414

## BOERGER, G.

Studies on the functional significance of efferent innervation in the auditory system - Afferent neuronal activity as influenced by contralaterally applied sound.  
23 p4094 A69-42073

## BOERNER, C. J.

Reverse flow profiles in turbulent freejet mixing with streamwise pressure gradient.  
24 p4306 A69-43684

## BOERNER, M.

A Maxwellian field and a second-order invariant system in a three-dimensional Riemannian space with a positive-definite metric /Das Maxwellsche Feld und das Invariantensystem zweiter Ordnung im drei-dimensionalen Riemannschen Raume positiv-definiten Metrik/.  
09 p1541 A69-22392

## BOERNER, W. M.

An inverse scattering technique for electromagnetic bistatic scattering.  
16 p2754 A69-32569

## BOERNGEN, F.

Novas in M 31 on Tautenburg Schmidt photographs. I /Novae in M 31 auf Tautenburger Schmidt-Aufnahmen. I/.  
08 p1382 A69-19873

## BOERS, P. M.

Reduced build-up of domains in sheet-type gallium-arsenide Gunn oscillators.  
02 p0215 A69-11933

## BOERSCH, H.

Nonresonant continuous laser oscillation in the visible.  
01 p0091 A69-10815

High power ion laser /Hochleistungs-Ionenlaser/.  
09 p1515 A69-21487

## BOERTH, R. C.

Increased myocardial oxygen consumption and contractile state associated with increased heart rate in dogs.  
24 p4258 A69-42634

## BOESENBERG, W. A.

MOS field-effect transistor drivers for laminated-ferrie memories.  
01 p0039 A69-10172

## BOESGAARD, A. M.

Observational clues to the evolution of M giant stars.  
24 p4387 A69-43349

## BOETTICHER, W.

Measurement of magnetic fields in plasmas.  
08 p1364 A69-20472  
Radiation cooling behind a strong shock in krypton.  
18 p3171 A69-34450

## BOETTIGER, A.

Synthesis of time-optimal control of a second-order nonlinear process.  
24 p4289 A69-42955

## BOETTNER, J.-C.

The nature of the explosive process of the combustion of hydrogen at high pressures /Sur la nature du processus explosif de la combustion de l'hydrogene a hautes pressions/.  
05 p0849 A69-16615

## BOFFA, C.

Temperature measurements by a calorimetric and spectrometric method in an argon plasma jet at atmospheric pressure /Misure di temperatura con metodo calorimetrico e spettrometrico in un getto di plasma d'argon a pressione atmosferica/.  
09 p1547 A69-21602

## BOGACHEV, I. N.

Phase transformations in titanium alloys under nonequilibrium conditions /Fazovye prevrashcheniia v splavakh titana v neravnovesnykh usloviakh/.  
07 p1162 A69-18774

Behavior of ordering alloys under various deformation conditions /Povedenie uporiadochivaiushchikhsia splavov pri razlichnykh usloviakh deformatsii/.  
11 p1904 A69-24706

X-ray study of structural defects in cobalt /Rentgenograficheskie issledovaniia strukturnykh nesovershenstv v kobalte/.  
12 p2113 A69-26042

## BOGACHEVA, A. A.

Application of the Monte Carlo method to the calculation of the aerodynamic characteristics of bodies of complex form in a free molecular flow /Primenenie metoda Monte-Karlo k raschetu aerodinamicheskikh kharakteristik tel slozhnoi formy v svobodnomolekuliarnom potoke/.  
09 p1430 A69-21793

## BOGACHUK-KOZACHUK, K. A.

Film cooling effectiveness of a flat surface for a turbulent boundary layer behind tangential slots.  
20 p3631 A69-37095

## BOGACZ, R.

Self-excited vibration of a moving system of damped oscillators interacting with surface waves of a viscoelastic half-space.  
16 p2873 A69-32063

## BOGARD, D. D.

Ages of silicate inclusions in iron meteorites.  
08 p1405 A69-20927  
Cosmogenic rare gases and the super 40 K-super 40 Ar age of the Kodaikanal iron meteorite.  
09 p1596 A69-22047

## BOGARDUS, K. O.

Extrapolation of creep-rupture data for aluminum alloys. [ASM PAPER D8-9.7]  
07 p1169 A69-19665

## BOGART, D.

Measurement of the super 10 B/n, alpha/super 7 Li, super 7 Li<sup>+</sup> relative cross sections in the kev region.  
17 p3008 A69-33753

## BOGATKO, V. V.

Microwave absorption by free carriers in barium titanate /Pogloshchenie SVCh na svobodnykh nositeliakh v titanate baria/.  
08 p1374 A69-21189

Microwave absorption by free carriers in barium titanate.  
18 p3183 A69-35158

## BOGATYREV, I. U. K.

Frequency doubling of light emitted by a Q-switched laser.  
07 p1158 A69-19753

## BOGDAN, V.

Unit stresses and distortions in a disk in rotational movement /Eforturi unitare si deformatii intr-un disc in miscare de rotatie/.  
05 p0835 A69-15807

## BOGDANKEVICH, O. V.

Temperature dependence of laser threshold current density and emission spectra in electron-beam pumped gallium arsenide lasers.  
02 p0260 A69-12683

Output power and efficiency of a gallium arsenide semiconductor laser excited with an electron beam.  
06 p0933 A69-16994

Semiconductor laser with an external resonator /Poluprovodnikovyi kvantovyi generator s vneshnim rezonatorom/.  
08 p1326 A69-20543

Power, efficiency and temperature dependence of emission spectra and threshold current density in electron-beam pumped gallium arsenide laser.  
19 p3338 A69-36538

Theory of the effects of inhomogeneous excitation of semiconductor lasers using electron beam pumping /Teoria effektivov neodnorodnosti vzbuzhdeniia poluprovodnikovykh lazerov s nakachkoi elektronnym puchkom/.  
21 p3737 A69-39041

## BOGDANOFF, J. L.

A comment on complex structural response to random vibrations.  
23 p4227 A69-41877

## BOGDANOR, J. L.

Nonlinear oscillations in a weakly ionized plasma.  
16 p2820 A69-31702

## BOGDANOV, G. F.

Recording and energy analysis of low-energy H sub 1 super plus, H sub 2 super plus, He super plus ions with surface-barrier silicon counters /Registratsiia i energeticheskii analiz ionov H sub 1 super plus, H sub 2

- super plus, He super plus nizkikh energii s pomoshch'iu poverkhnostno-bar'ernykh kremnievykh schetchikov/.  
14 p2452 A69-29811
- BOGDANOV, S. P.**  
Measurement of the ion temperature of a plasma on the basis of neutron emission /Izmerenie ionnoi temperatury plazmy po neitronnomu izlucheniui/.  
14 p2498 A69-29808
- BOGDANOVA, N.**  
Certain axisymmetric problems in thermoviscous plasticity /Nekotorye osesimmetricheskie zadachi termoviazko-plastichnosti/.  
10 p1802 A69-24025
- BOGDANOVA, N. P.**  
Photolysis of aliphatic amino acids in the presence of salts.  
01 p0025 A69-11094  
Photolysis of aliphatic amino acids in the presence of metal oxides.  
01 p0025 A69-11095  
Photosensitizing effect of cations on amino acids and peptides.  
20 p3477 A69-37626
- BOGDANOVA, V. V.**  
Universal equations of the theory of a three-dimensional boundary layer /Universal'nye uravneniia teorii prostranstvennogo pogranichnogo sloia/.  
06 p0909 A69-17328
- BOGDONOFF, S. M.**  
An experimental flow field study of the rarefied blunt body problem.  
[AIAA PAPER 69-656] 17 p2893 A69-33498  
An experimental study of laminar hypersonic blunt cone wakes.  
[AIAA PAPER 69-714] 17 p2894 A69-33500
- BOGEN, P.**  
X-ray diagnostics of plasmas.  
08 p1315 A69-20469
- BOGENSCHUETZ, A. F.**  
Electrodeposition of tellurium-containing Permalloy films /Galvanische Abscheidung duenner tellurhaltiger Permalloyschichten/.  
11 p1935 A69-24332
- BOGGS, F. W.**  
Relationship between flow pattern, constitutive equation and molecular structure.  
17 p2951 A69-33257
- BOGGS, T. L.**  
The effect of oxidizer particle size and binder type on nonacoustic instability.  
[AIAA PAPER 69-175] 06 p0983 A69-18152  
The deflagration of pure single crystals of ammonium perchlorate.  
[AIAA PAPER 69-142] 09 p1560 A69-21900
- BOGGS, W. A.**  
Changes in aircraft design, fabrication and finish techniques and maintenance requirements dictated by microbe infested jet fuel sources.  
[NACE PAPER 49] 08 p1320 A69-20599  
Corrosion protection of high strength landing gear components.  
21 p3743 A69-38730
- BOGLEVSKAIA, N. M.**  
Changes in functions of the nervous system and of some analyzers during the combined action of hypokinesia and radial accelerations.  
02 p0197 A69-11496
- BOGOIAVLENSKAIA, N. V.**  
A study of the effect of chemical treatment on the mechanical properties of titanium alloy tubes.  
03 p0434 A69-13914
- BOGOLIUBOVA, I. V.**  
Oxygen diffusion parameters in beta-titanium /O parametrahkh diffuzii kisloroda v beta-titane/.  
07 p1163 A69-18783
- BOGOMOLOV, E. N.**  
Lateral efflux of a fluid from a flow through a hole of finite depth /O bokovom istechenii zhidkosti iz potoka cherez otverstie konechnoi glubiny/.  
04 p0586 A69-14274  
Effect on the efficiency of a gas turbine of admitting blade cooling air into the blading.  
21 p3785 A69-39090  
Allowance for edge effects in the determination of the efficiency of air-cooled turbine blade cascades with ejection of the cooling air from the blade trailing edges /Ob uchete kromochnykh iavlenii pri opredelenii effektivnosti turbinnykh reshetok, imeiushchikh vozdukhoe okhlazhdenie s vypuskom okhlazhdaushchego vozdukhazh iz vykhodnykh kromok lopatok/.  
24 p4364 A69-43090
- BOGOMOLOV, G. D.**  
The orotron /Orotron/.  
02 p0250 A69-12248  
Orotron - An electronic oscillator with an open resonator and reflecting grating.  
14 p2421 A69-29546  
Diffusion of carbon in alloys of niobium with titanium, zirconium, tungsten, and molybdenum /Diffuziia ugleroda v splavakh niobiia s titanom, tsirkoniom, vol'framom i molibdenom/.  
18 p3157 A69-35250
- BOGOMOLOV, O. S.**  
Reproduction of the surface pressure field on the basis of meteorological earth satellite data /Vostanovlenie polia prizemnogo davlennia po dannym meteorologicheskikh ISZ/.  
06 p0952 A69-17987
- BOGOMOLOV, S. I.**  
Calculation of the probabilistic frequency spectrum of the natural oscillations of impeller blades of turbomachines /O raschete veroiatnostnogo spektra chastot sobstvennykh kolebaniy rabochikh lopat ok turbomashin/.  
19 p3436 A69-35844
- BOGOMOLOV, V. G.**  
Some results of an investigation of a single-component version of a liquid-metal MHD energy converter /Nekotorye rezul'taty izucheniia odnokomponentnoi skhemy zhidkometallicheskogo MGD-preobrazovaniia energii/.  
13 p2205 A69-27488
- BOGOMOLOV, V. M.**  
Determination of the temperatures of organic substances in shock waves /Opredelenie temperatur organicheskikh veshchestv v udarnykh volnakh/.  
02 p0230 A69-11979  
Determination of the temperature of organic substances in shock waves.  
15 p2561 A69-30264
- BOGORAD, N. M.**  
Beryllium - A new structural metal /Berillii - Novyi konstruktсионnyi metall/.  
11 p1904 A69-24897
- BOGOSIAN, KH. P.**  
Meteorological Investigations - General Circulation of the Atmosphere /Meteorologicheskie Issledovaniia-Obschchaia Tsirkuliatsiia Atmosfery/.  
14 p2475 A69-29818
- BOGOSLOVSKII, K. E.**  
Unsteady flow around models in an electromagnetic shock tube.  
07 p1119 A69-18744
- BOGUICKI, A.**  
Approximation of transient responses in automatic control systems with delay using the complex frequency method /Aproksimatsiia przebiegów przejściowych w układach automatycznej regulacji z opóźnieniem metoda charakterystyk odtłumionych/.  
18 p3112 A69-35458
- BOGUE, R. K.**  
Advanced air data sensing techniques.  
05 p0766 A69-16755
- BOGUSZ, W.**  
Liapunov's stability in engineering.  
16 p2874 A69-32244
- BOHANDY, J.**  
Electric effect in ruby.  
03 p0485 A69-13320
- BOHDANSKY, J.**  
Calorimetric measurements with a heat pipe thermionic converter.  
14 p2402 A69-29238  
A new interpretation of the thermionic emission from bare and covered metal surfaces.  
14 p2505 A69-29264
- BOHLA, F.**  
Contributions to the investigation of semiconductivity in europium sesquioxides /Beitraege zur Untersuchung der Halbleitung in den Europiumsesquioxiden/.  
02 p0296 A69-11874  
Contribution to the study of semiconductivity in europium monoxide EuO /Ein Beitrag zur Untersuchung der Halbleitung in Europiummonoxid EuO/.  
02 p0296 A69-11875
- BOHLEY, P.**  
Antenna impedance in a reentry environment.  
02 p0218 A69-12333
- BOHLIN, R. C.**  
Rocket observations of Orion stars with an all-reflective ultraviolet spectrograph.  
02 p0327 A69-12712
- BOHLKE, W. H.**  
Effect of 50 Mev electrons of the ultimate Fermi level in germanium.  
04 p0640 A69-14444
- BOHM, K.-H.**  
Outer convection zones and internal temperatures of cool white dwarfs.  
14 p2529 A69-29982
- BOHN, E. V.**  
Second-variation methods in dynamic optimization.  
15 p2645 A69-31235
- BOHN, J. L.**  
Mariner IV and OGO III - Recent measurements of picogram dust particle flux in interplanetary and cislunar space.  
15 p2699 A69-31394  
Lunar Explorer 35 - 1967-1968 measurements of picogram dust particle flux in selenocentric space.  
15 p2699 A69-31396
- BOHN, T.**  
Measurements of several transport coefficients of MHD working gases.  
10 p1733 A69-23446  
The first measurements at the Argas test loop.  
10 p1673 A69-23478
- BOHN, W. I.**  
Radial pressure profile in a MPD-arc jet.  
[AIAA PAPER 69-246] 09 p1562 A69-21226  
Activities in the field of MPD-propulsion in Germany.  
[AIAA PAPER 69-279] 09 p1564 A69-21238  
Effect of mass entrainment on the pressure distribution in a plasma jet of the MPD thruster X9 /Einfluss der Masseneinstromung auf die Druckverteilung im Plasmastrahl des MPD-Triebwerks X9/.  
[DGLR-69-024A] 23 p4202 A69-41924
- BOHNHOFF, K.**  
Fluid propulsion modules for 24-hour satellites /Fluissigkeits-Antriebsmodule fuer 24h-Satelliten/.  
[DGLR-69-014] 23 p4202 A69-41929
- BOHON, H. L.**  
Development status of attached inflatable decelerators.  
[AIAA PAPER 68-929] 21 p3647 A69-39015
- BOHUS, M.**  
Analysis of passive adaptive systems containing conditional feedback.  
13 p2238 A69-27394
- BOIADZHIAN, N. G.**  
Measurements with a large ionization calorimeter of the energies of nuclear-active particles in extensive air showers.  
13 p2331 A69-28387  
Contribution to the study of the central regions of high-energy extensive air showers.  
13 p2332 A69-28404
- BOIADZHIEV, G.**  
Asymptotic solutions to second-order differential equations with slowly varying parameters in the presence of a large resistance /Ob asymptoticheskikh resheniiakh differentsial'nykh uravnenii vtorogo poriadka s medlenno izmeniaushchimisia parametrami pri bol'shom soprotivlenii/.  
16 p2804 A69-32253
- BOIADZHIEVA, M.**  
Nonlinear resonant vibrations of a certain two-degrees-of-freedom system /Nelineinye kolebaniia nekotoroj sistemy s dvumia stepeniami svobody pri rezonanse/.  
16 p2875 A69-32255
- BOIAREVICH, V. V.**  
The proton flares on 7 July, 2 September 1966, and 28 January 1967.  
10 p1767 A69-23764
- BOIARSKI, A. A.**  
Direct analysis of the properties of molecular oxygen in hypervelocity flows.  
13 p2302 A69-28265
- BOICHUK, L. M.**  
Method of structure synthesis of nonlinear multivariable control systems on given transients.  
12 p2048 A69-26077  
The theory of invariance in automatic control systems /Teoriia invariantnosti sistem avtomaticheskogo upravleniia/.  
23 p4145 A69-42368  
Necessary and sufficient conditions of absolute invariance of automatic systems with indirect measurement of perturbations /Pro neobkhidni i dostatni umovi absoliutnoi invariantnosti avtomaticheskikh sistem z poserednim vimiriuvanniam zburven'/.  
23 p4145 A69-42369



## BOICHUK, O. F.

Vibrations of a stabilized platform in an inertial navigation system /O kolebaniakh stabilizirovannoi platformy v inertial'noi sisteme navigatsii/.  
01 p0112 A69-10086

Vibrations of a stabilized platform of an inertial navigation system /O kolebaniakh stabilizirovannoi platformy inertial'noi sistemy navigatsii/.  
18 p3134 A69-34555

## BOICHUK, O. P.

Solution of the equations for the errors arising from inexact reading-in of insertion of initial conditions in the autonomous determination of coordinates /Pro roz'iazok rinvian' pokhibok avtonomnogo viznachennia koordinat, obumovlenikh netochnim vvedenniam pochatkovikh umov/.  
02 p0281 A69-12137

Stability of the stabilized platform of an inertial navigation system with friction in the accelerometers /Pro stitskii stabilizovanoi platformi sistemi inertial'noi navigatsii z tertiam v akselerometrakh/.  
06 p0954 A69-16824

## BOIES, D.

Detection and minimization of chemically induced ignition hazards of glycol fluids.  
19 p3359 A69-36028

## BOIES, D. B.

Aluminum corrosion - Possible mechanisms of inhibition.  
02 p0265 A69-11895

Inhibition of corrosion of aluminum in ethylene glycol/water systems.  
14 p2466 A69-29932

## BOIKO, A. G.

R-functions in problems concerning the stability of motion of a solid body /R-funktsii v zadachakh ustoiichivosti dvizhenia tverdogo tela/.  
23 p4191 A69-41704

## BOIKO, B. B.

Certain method of compensating for the optical inhomogeneity of active laser elements /Ob odnom sposobe kompensatsii opticheskoi neodnorodnosti aktivnykh elementov OKG/.  
17 p2983 A69-33970

## BOIKO, I. I.

Properties of semiconductors in a high-frequency electromagnetic field /O svoistvakh poluprovodnikov v vysokochastotnom elektromagnitnom pole/.  
22 p3993 A69-40605

## BOIKO, V. A.

Measurement of the time variation of the temperature of the plasma of a laser flare by means of its X-radiation.  
18 p3154 A69-35496

## BOIKO, V. G.

Capacitance of a germanium tunnel diode as a function of bias voltage and signal magnitude /Zavisimost' emkosti germanievykh tunnel'nykh diodov ot napriazheniia smeshcheniia i velichiny signal/.  
02 p0214 A69-11614

Characteriograph for recording of the capacitance characteristics of p-n junctions.  
04 p0602 A69-15406

The dependence of the capacitance of germanium tunnel diodes on the bias voltage and signal magnitude.  
11 p1847 A69-24722

## BOIKOV, G. P.

Laws of regular thermal conditions in solid bodies with radiative heat transfer.  
05 p0845 A69-15896

## BOIKOVA, O. I.

Combined effect of two-month hypokinesia and acceleration on the cardiovascular system.  
02 p0197 A69-11495

Influence of high-altitude mountain acclimatization on the tolerance of the organism to environmental effects /Vliianie vysokogornoi akklimatizatsii na ustoiichivost' organizma k vozdeistviu faktorov vneshnei sredy/.  
13 p2212 A69-28623

## BOIKOVA, R. F.

Rotational and vibrational excitation of molecular ions by electrons.  
10 p1726 A69-23627

Possibility of parasitic emission in a regenerative traveling wave amplifier /O vozmozhnosti vozniknoveniia parazitnoi generatsii v regenerativnom usilitele hegushchei volny/.  
20 p3506 A69-37724

## BOILEAU, A. R.

Atmospheric optical measurements in the vicinity of Crater Lake, Oregon. II.  
01 p0111 A69-10846

## BOILEAU, E.

Statistical model for the signal of a single-mode gas laser /Modele statistique pour le signal d'un laser a gaz monomode/.  
18 p3152 A69-34820

## BOILLAT, G.

A relativistic exceptional wave propagating heat.  
16 p2827 A69-32042

## BOIS, P.-A.

Influence of the flow of a conducting fluid on the magnetic field of a dipole located in the center of a sphere /Influence de l'ecoulement d'un fluide conducteur sur le champ magnetique d'un dipole place au centre d'une sphere/.  
01 p0128 A69-10363

## BOISCHOT, A.

Some characteristics of type IV bursts. II - Study of the spectrum - Effect of the plasma on synchrotron emission /Sur quelques caracteristiques des sursauts de type IV. II - Etude du spectre - Effet du plasma sur l'emission synchrotron/.  
02 p0309 A69-12754

Solar radio bursts.  
02 p0329 A69-12786

## BOISSEAU, J.-F.

Mobile acceleration sensor /Capteur acclerometrique mobile/.  
17 p2975 A69-33594

## BOISSON, A.

The Aerodynamics of Aircraft Flight /L'aerodynamique du Vol de l'Avion/.  
11 p1817 A69-24583

## BOISSON, J.

Study of the internal ballistics of solid fuel rockets /Etude de la balistique interieure des fusées a poudre/.  
16 p2836 A69-31994

## BOIVIN, A.

Optical filter synthesis by holographic methods.  
02 p0249 A69-11927

Holographic method of a posteriori restoration of images formed by coherent and incoherent light by "spatial frequency retrieval."  
19 p3304 A69-35603

## BOJKOV, R. D.

Features of the vertical ozone distribution deduced from five years observation at Belsk, Poland.  
08 p1307 A69-20260

Computing the vertical ozone distribution from its relationship with total ozone amount.  
15 p2597 A69-30896

Some characteristics of the total ozone deduced from Dobson spectrophotometer and filter-ozonometer data and their application to a determination of the effectiveness of the ozone station network.  
16 p2787 A69-32639

## BOK, B. J.

The Magellanic Clouds.  
19 p3401 A69-35757

## BOKHAN, N. A.

Standardization of astronomical calculations by means of electronic computers /O standartizatsii astronomicheskikh vychislenii na elektronno-vychislitel'nykh mashinakh/.  
20 p3596 A69-37317

## BOKHAN, P. A.

Possibility of optical pumping of gases by their self-radiation /O vozmozhnosti opticheskoi nakachki gazov sobstvennym izlucheniem/.  
04 p0610 A69-14382

On a possibility of using noncontracted discharge to enhance the power of a CO sub 2-N sub 2-He laser.  
09 p1520 A69-22681

On the possibility of optical pumping of gases by their own radiation.  
14 p2456 A69-28755

Optical pumping of a molecular laser by blackbody radiation /Ob opticheskoi nakachke molekuliarnogo lazera izlucheniem chernogo tela/.  
20 p3554 A69-37722

## BOKHOV, B. B.

Nonspecificity of vestibular training /O nespecifichnosti vestibuliarnoi trenirovki/.  
20 p3473 A69-37267

## BOKK, O. F.

Calculation of the amplitude of the third-order combination component of a small-signal transistor amplifier /Raschet amplitudy kombinatsionnoi sostavliushchei tret'ego poriadka v tranzistornom usilitele pri malom signale/.  
13 p2226 A69-27218

## BOKOR, A.

General method for the evaluation of natural frequencies of transverse beam vibration according to the Timoshenko theory.  
11 p1970 A69-24586

Variation of initial strains with impact velocity for central transverse impacts on free-free beams.  
23 p4235 A69-42435

## BOKOV, V. A.

The study of the magnetic properties of several rare earth niobates in strong pulsed fields.  
15 p2667 A69-30193

Ferroelectric and magnetic properties of /1-x/BiMnO sub 3-xPbTiO sub 3 solid solutions /Segnetoelektricheskie i magnitnye svoista tverdykh rastvorov /1-x/BiMnO sub 3-xPbTiO sub 3/.  
22 p3996 A69-41163

## BOKSENBERG, A.

Preliminary study of a new charge image detector.  
02 p0248 A69-11822

## BOKSSTEIN, S. Z.

Possibility of attaining high strength with help of whisker crystals /Vozmozhnost' dostizheniia vysokoi prochnosti s pomoshch'iu nitevidnykh kristallov/.  
09 p1525 A69-22143

Study of the diffusion mobility of nickel in the beta-phase of titanium and its alloys /Issledovanie diffuzionnoi podvizhnosti nikelia v beta-faze titana i ego spлавov/.  
11 p1902 A69-24274

## BOKUT, B. V.

Mixing of ruby laser radiation with radiation excited by this laser in a liquid laser based on complex molecular solutions /Smeshenie izlucheniia rubinovogo i vozvuzhdennogo im izlucheniia zhidkostnogo OKG na osnovie rastvorov slozhnykh molekul/.  
04 p0610 A69-14424

Contribution to optical rectification theory /K teorii opticheskogo vypryamleniia/.  
23 p4174 A69-41874

## BOL RAAP, B. E.

X-ray heliography by means of a Fresnel-Soret type zoneplate camera.  
20 p3544 A69-37803

## BOLDMAN, D. R.

Heat transfer and thermal boundary layer in a conical nozzle. [AIAA PAPER 69-474]  
16 p2881 A69-32780

## BOLDT, E.

Cosmic X-ray bremsstrahlung associated with suprathermal protons.  
22 p4006 A69-40643

## BOLDT, E. A.

Iron line emission from X-ray sources.  
09 p1580 A69-22231

2-20 kev spectrum of X-rays from the Crab Nebula and the diffuse background near galactic anticenter.  
15 p2675 A69-30759

Pulsed X-ray emission of NP 0532 in March 1968.  
20 p3590 A69-37574

## BOLDYREV, E. I.

Machine for in vacuo testing of samples at high temperatures /Mashina dlia ispytaniia obrabzov v vakuumе pri vysokoi temperature/.  
18 p3117 A69-34600

## BOLDYREV, V. G.

Light and heat of a planet - Satellite actinometry. [UN PAPER 68-95763]  
06 p0916 A69-17038

Statistical structure of outgoing radiation fields /O statisticheskoi strukture polei ukhodiashei radiatsii/.  
11 p1913 A69-24832

Correlation functions and the spectral densities of the intensity of outgoing radiation in the spectral range from 0.6 to 0.8 micron /according to Cosmos 45 satellite measurements/ /Korrelatsionnye funktsii i spektral'nye plotnosti intensivnosti ukhodiashego izlucheniia v intervale spektra 0.6-0.8 mkm /po izmereniam so sputnikn "Kosmos-45"/.  
19 p3366 A69-36672

## BOLDYREV, V. M.

Thermodynamic analysis of new liquid-metal MHD-generator cycles /Termodinamicheskii analiz novykh tsiklov s zhidkometallicheskim MGD-generatorom/.  
13 p2372 A69-27489

## BOLEF, D. I.

Interaction of ultrasound with Moessbauer gamma rays.  
10 p1724 A69-23088

## BOLES, D. M.

Fill-to-warp ratio effects in woven roving laminates.  
14 p2469 A69-29414

- BOLGAR, A. S.**  
Study of the vaporization and thermodynamic properties of silicon nitride /Issledovanie isparenii i termodinamicheskikh svoystv nitrda kremniia/.  
12 p2118 A69-26261
- Study of the rate of vaporization of titanium, zirconium, hafnium, niobium, and tantalum carbides at high temperatures /Issledovanie skorosti isparenii karbidov titana, tsirkonia, gafniia, niobiia i tantala pri vysokikh temperaturakh/.  
15 p2640 A69-30983
- BOLGER, P. H.**  
System safety - A management system for safety used in manned space flight.  
[AAS PAPER 69-522] 24 p4418 A69-42851
- BOLICHEVTSV, O. D.**  
Centralized control with variable-step interrogation of the control points. II /Tsentralizovani kontrol' iz zminim krokom opitu kontrol'ovanih punktiv. II/.  
08 p1298 A69-20422
- BOLIUNOVA, A. D.**  
Radiation effects of the American high-altitude thermonuclear explosion, "Star Fish," measured by the "Cosmos-6" satellite.  
20 p3532 A69-37960
- Radioactivity of the Cosmos 6 satellite and the probable points of radioactive debris collection at altitudes from 300 to 350 km /Radioaktivnost' isz "Kosmos-6" i predpolagaemye mesta nabora radioaktivnykh oskolkov na vysote 300-350 km/.  
23 p4205 A69-41836
- BOLL, C.**  
Cannibalization in multicomponent systems and the theory of reliability.  
01 p0086 A69-10651
- BOLL, R.**  
Miniaturized transformers and inductors with high-permeability cores /Kleinuebertrager und Drosseln mit hochpermeablen Kernen/.  
13 p2237 A69-28586
- BOLLAY, W.**  
University projects in space system engineering and their potential benefits for developing countries.  
[UN PAPER 68-95870] 01 p0178 A69-10485
- Television satellites for educational purposes /Fernsehsatelliten fuer Unterrichtszwecke/.  
02 p0335 A69-12747
- BOLLE, D. M.**  
Scattering by a finite perfectly conducting wedge.  
08 p1274 A69-20047
- Monopole and conic antennas on spherical vehicles.  
22 p3908 A69-40699
- BOLLE, H.-J.**  
Feasible orbits and an infrared scanning radiometer for a European geostationary satellite.  
15 p2650 A69-31389
- BOLLER, P.**  
Simultaneous Umkehr observations with two instruments.  
16 p2786 A69-32631
- BOLLER, T. J.**  
Manufacturing concepts in application of molded advanced composites to aerospace components.  
24 p4326 A69-43448
- BOLLINGER, L. L.**  
Decision-making to determine early advent of STOL.  
20 p3462 A69-37352
- BOLLINI, D.**  
An underground search for leptonic quarks in the cosmic radiation.  
02 p0306 A69-11547
- BOLLMAN, W. E.**  
A simplified technique for estimating the navigational accuracy of an interplanetary spacecraft.  
[AIAA PAPER 69-899] 21 p3761 A69-39334
- BOLOGNA, J. M.**  
Polarization of discrete sources at 21.2-cm wavelength, and galactic depolarization.  
18 p3190 A69-34287
- BOLONKIN, A. A.**  
Pulse solutions in optimal control problems /Impul'snye resheniia v zadachakh optimal'nogo upravleniia/.  
09 p1471 A69-21435
- Unique extremals in optimum control problems /Spetsial'nye ekstremali v zadachakh optimal'nogo upravleniia/.  
16 p2764 A69-31629
- Solution of discrete problems of optimal control on the basis of the general minimum principle /Reshenie diskretnykh zadach optimal'nogo upravleniia na osnove obshchego printsipa minimuma/.  
20 p3509 A69-38295
- BOLOTIN, G. A.**  
Interband transitions in molybdenum.  
03 p0442 A69-12986
- BOLOTIN, I. M.**  
A method for the construction of a pulse-width modulator /Ob odnom sposobe postroeniia shirotnoim-pul'nogo moduliatora/.  
10 p1664 A69-23817
- BOLOTIN, L. I.**  
Propagation of high-intensity electromagnetic waves in plasma waveguides /Rasprostraneniie elektromagnitnykh voln bol'shoi intensivnosti v plazmennyykh volnovodakh/.  
03 p0482 A69-14228
- BOLOTIN, V. V.**  
Stability of the combustion process in elastic combustion chambers /Ob ustoiichivosti protsessa goreniia v uprugikh kamerakh sgoraniia/.  
07 p1242 A69-18993
- Two-dimensional problem in elasticity theory for components made of reinforced materials /Ploskaia zadacha teorii uprugosti dlia detaiei iz armirovannykh materialov/.  
11 p1981 A69-24941
- Calculation of the residual stresses and strains in products made of wound reinforced plastics /Raschet ostatocnykh napriazhenii i deformatsii v namotochnykh izdeliakh iz armirovannykh plastikov/.  
11 p1907 A69-25679
- Correlation theory of precritical deformations of thin elastic shells.  
11 p1996 A69-25732
- Random oscillations of elastoacoustic systems /Sluchainye kolebaniia v uprugookusticheskikh sistemakh/.  
17 p3057 A69-33199
- Calculation of the macroscopic constants of highly isotropic composite materials /K raschetu makroskopicheskikh postoiannykh sil'no izotropnykh kompozitnykh materialov/.  
21 p3752 A69-39193
- Effects of damping on stability of elastic systems subjected to nonconservative forces.  
22 p4040 A69-39981
- BOLOTINA, K. C.**  
Calculation of the residual stresses and strains in products made of wound reinforced plastics /Raschet ostatocnykh napriazhenii i deformatsii v namotochnykh izdeliakh iz armirovannykh plastikov/.  
11 p1907 A69-25679
- BOLOTOV, IU. N.**  
Selection of the code value and redundancy in single-command channels /O vybere znachnosti koda i iz-bytochnosti v kanalakh razovykh komand/.  
19 p3278 A69-36595
- BOLOTOV, V. N.**  
Cross section for pionization in interactions of 100 GeV cosmic ray neutrons and pions with carbon and lead nuclei.  
13 p2330 A69-28382
- BOLSHAKOV, G. F.**  
Effect of sulfur-organic compounds on the composition of the solid phase which forms during the oxidation of jet fuel /Vliianie sseraorganicheskikh soedinenii na sostav tverdoi fazy, obrazuiushcheisia pri okislenii reaktivnogo topliva/.  
01 p0142 A69-11097
- BOLSHAKOV, I. A.**  
Optimal energy distribution for determining a random number of weak signals.  
14 p2410 A69-28817
- BOLSHAKOV, L. P.**  
Thermal EMF in p-type indium antimonide /Termoeds v antimonide indii p-tipa/.  
06 p0981 A69-17881
- Thermoelectric power of p-type indium antimonide.  
14 p2503 A69-28790
- BOLSHAKOV, V. B.**  
Influence of the velocity diagram on the electric field induced by an electrically conducting fluid flowing through a circular channel in the fringe field of a unidirectional inductor /O vlianii epiryu skorostei na elektricheskoe pole, indutsirovannoe pri techenii elektroprovodiashchei zhidkosti v kruglom kanale v pole rassaiiiaia odnostoronnnego induktora/.  
14 p2501 A69-29915
- BOLSHAKOVA, O. V.**  
Some aspects of the excitation of micropulsations during the solar activity cycle /Osobennosti vzbuzhdeniia mikropul'satsii v tsikle solnechnoi aktivnosti/.  
10 p1687 A69-23919
- BOLSHOI, A. A.**  
Fluctuations of the polarization-fading periods of short-wave signals from artificial earth satellites and the inhomogeneous structure of the ionosphere /Fluktuatsii perioda polarizatsionnykh zamirani k v signalov isz i neodnorodnaia struktura ionosfery/.  
22 p3942 A69-41095
- BOLSHOV, M. A.**  
Experiments concerning stimulated Mandel'shtam-Brillouin scattering /Eksperimenty po vyzhdennomu rassaiiuiu sveta Mandel'shtama-Brillouena/.  
03 p0438 A69-13053
- Observation of stimulated Mandel'shtam-Brillouin scattering in the field of laser optical harmonics.  
09 p1520 A69-22684
- BOLSHOVA, K. V.**  
Temperature dependence of helium-neon laser output at low temperatures.  
03 p0441 A69-13845
- BOLSTAD, J. O.**  
An interferometric technique for measuring the spatial correlation function of optical radiation fields.  
15 p2653 A69-31164
- BOLSTER, W. J.**  
Design, development, and testing of a series of air-launched sounding rockets.  
21 p3820 A69-39218
- BOLT, B. A.**  
Free bodily vibrations of the terrestrial planets.  
17 p3031 A69-33097
- BOLTAKS, B. I.**  
Effect of dislocations on the decomposition of solid solutions of copper-group elements in indium arsenide /Vliianie dislokatsii na raspad tverdykh rastvorov elementov gruppy medi v arsenide indii/.  
03 p0484 A69-13283
- BOLTHOUSE, A. S.**  
Field experiments - How they help solve operational problems and validate models.  
[AAS PAPER 69-478] 24 p4296 A69-42884
- BOLTIANSKII, V. G.**  
The method of local cross sections in the theory of optimal processes /Metod lokal'nykh sechenii v teorii optimal'nykh protsessov/.  
07 p1115 A69-19003
- A linear optimal control problem /Lineinaia zadacha optimal'nogo upravleniia/.  
19 p3285 A69-35859
- Mathematical Methods of Optimal Control /Matematicheskie metody optimal'nogo upravleniia/ /2nd Revised and Enlarged Edition/.  
21 p3757 A69-39524
- BOLTVETS, N. S.**  
Certain properties of solid solutions of the GaAs-ZnGa sub 2 Se sub 4 system /Nekotorye svoista tverdykh rastvorov sistemy GaAs-ZnGa sub 2 Se sub 4/.  
15 p2670 A69-31050
- BOLTON, J. G.**  
Redshifts of fifteen radio sources.  
09 p1602 A69-22224
- Redshifts of twelve quasi-stellar objects.  
09 p1602 A69-22225
- Extragalactic radio sources.  
13 p2348 A69-27801
- Large variations in the brightness of some quasi-stellar objects.  
18 p3201 A69-35206
- BOLTON, R.**  
Study of moving striations in plasmas. V - A study of the saturation process in large amplitude moving striations.  
10 p1741 A69-23859
- BOLVANOVICH, E. I.**  
Optical and electrical properties of quasi-binary solid solutions of some A super III B super V compounds.  
19 p3390 A69-36554
- BOLZINGER, T.**  
Study of a synthesized plasma /Etude d'un plasma de synthese/.  
14 p2502 A69-29956
- BOMBERGER, H. B.**  
Titanium for the chemical process industries.  
14 p2466 A69-29931



- Methods used to improve corrosion resistance of titanium.  
16 p2802 A69-32436
- BOMBLED**  
Spreading of jets from miniature nozzles for satellites /Eclatement de jets de microtuyeres pour satellites/.  
19 p3395 A69-36760
- BOMMER, J.**  
Estimation of the maximum transportation capacity and comparative analysis of one-way transportation systems to the moon and Mars /Abschaetzung der maximalen Transportkapazitaet und vergleichende Analyse von Einwegtransportsystemen zum Mond und Mars/.  
09 p1586 A69-21297
- BOMPAS-SMITH, J. H.**  
The determination of distributions that describe the failures of mechanical components.  
19 p3327 A69-36031
- BONA, B. E.**  
Applications of observers and optimum filters to inertial systems.  
12 p2128 A69-26065  
Observer theory and hybrid inertial systems.  
17 p3003 A69-34099
- BONATTI, E.**  
Excess argon in deep-sea rocks.  
02 p0244 A69-12568
- BONAVENTURA, V. E.**  
An airport surface traffic control system /STRACS/.  
05 p0790 A69-16724
- BONCH-BRUEVICH, A. M.**  
Investigation of the variation in the absorption spectrum of condensed systems subjected to high-density radiation /Issledovanie izmeneniiia spektra pogloscheniia kondensirovannykh sistem pod deistviem izlucheniia bol'shoi plotnosti/.  
03 p0436 A69-13036  
Stimulated emission in a laser having an active medium of arbitrary shape.  
12 p2109 A69-26715
- BONCH-BRUEVICH, V. L.**  
Theory of static electrical domains in semiconductors containing hot electrons - Ambipolar case.  
06 p0978 A69-16989
- BONCHEV, L.**  
Capacitive changes in sintered CdS under pulse radiation /Kapatsitivni izmeneniia v sinterovan CdS pri impulsno osvetsiavane/.  
05 p0806 A69-15694
- BONCHKOVSKAIA, T. V.**  
Test simulation of certain circulation schemes and of the atmospheric heat exchange /Opyt modelirovaniia nekotorykh skhem tsirkuliatsii i teploobmena atmosfery/.  
14 p2478 A69-29840
- BONCZAK, B.**  
Lateral distribution of the muon component in the central region of extensive air showers.  
15 p2677 A69-31481
- BONCZYK, P. A.**  
Observation of hyperfine level crossing in stimulated emission.  
07 p1156 A69-19398
- BOND, F. R.**  
Auroral morphological similarities at two magnetically conjugate stations - Buckles bay and Kotzebue.  
20 p3535 A69-38187
- BOND, G. H.**  
Plasma enzyme responses to blood withdrawal in chickens.  
10 p1644 A69-23158
- BOND, R. F.**  
Intravascular gas emboli - A selected literature critique.  
21 p3655 A69-38916
- BOND, R. L.**  
Processing biomedical information by optical methods.  
21 p3666 A69-39440
- BONDAR, B. G.**  
Meteor Communications /Meteornaia Sviaz/.  
04 p0562 A69-15488  
Transmitting and antenna systems of a meteor station with a high effective sensitivity /Peredaushchee i antennoe ustroistva meteornois stantsii vysokoi effektivnoi chuvstvitel'nosti/.  
17 p2939 A69-33902
- A directional short-wave antenna for meteor studies /Napravleniiaia korotkovolnovaia antenna dlia issledovaniia meteorov/.  
17 p2939 A69-33903
- BONDAR, L. N.**  
Absolute measurements of radio-emission intensity of the discrete sources Cassiopeia-A and Cygnus-A at 30-60 cm wavelengths /Absolutnye izmereniia intensivnosti radioizlucheniia diskretnykh istochnikov Kassiopeia-A i Lebed'-A na volnakh 30-60 cm/.  
19 p3428 A69-36876
- BONDAR, V. A.**  
Use of a pulse discharge with a restricted channel cross section in experimental spectroscopy /K voprosu o primeneniі impuls'nogo razriada s ogranichenным secheniem kanala v eksperimental'noi spektroskopii/.  
06 p0964 A69-17253
- BONDARENKO, A. A.**  
Effect of vibration and elevated temperature on the strength of fiberglass-reinforced plastic /Vliianie vibratsii i povyshennoi temperatury na prochnost' stekloplastika/.  
15 p2643 A69-31203
- BONDARENKO, A. N.**  
An electrooptically Q-switched ruby laser with a saturable absorber in the cavity /OKG na rubine s elektroopticheskim moduliatorom dobrotnosti i nasyshchaiushchimsia poglotitelem v rezonatore/.  
07 p1147 A69-18531  
Single-frequency ruby laser with active Q-switch.  
13 p2272 A69-27911  
Investigation of the time-dependent characteristics of a Q-switched ruby laser driven by an external signal.  
15 p2634 A69-30727  
A single-frequency ruby laser with a tunable emission frequency in the giant pulse mode /Odnochastotnyi OKG na rubine s perestraivamoio chastotoi izlucheniia v rezhime gigantskogo impul'sa/.  
21 p3737 A69-38991
- BONDARENKO, A. V.**  
Diffraction effects during the passage of plane shock waves through a channel-diaphragm /Difraktsionnye iavleniia pri prokhozhenii ploskikh udarnykh voln cherez kanal-diafragmu/.  
02 p0234 A69-12589
- BONDARENKO, B. A.**  
A class of polyharmonic functions and their applications in the theory of elasticity /Ob odnom klasse poligarmonicheskikh funktsii i ikh prilozheniiaakh v teorii uprugosti/.  
13 p2369 A69-28522
- BONDARENKO, L. N.**  
Polarization studies of the lunar surface /Polarizatsionnye issledovaniia lunnoi poverkhnosti/.  
04 p0658 A69-14958  
Polarization of the lunar surface.  
18 p3196 A69-34721  
Recording of low-energy protons on a scintillation counter /Registratsiia protonov malykh energii tsintil'liatsionnym schetnikom/.  
18 p3138 A69-35255
- BONDARENKO, M. D.**  
Holographic reconstruction of the spatial distribution of a laser light field /Golograficheskie vidovlenniia prostорового rozpodilu svitlovogo polia OKG/.  
11 p1885 A69-24919  
Holographic method of transforming coherent light fields /Golograficheskii metod preobrazovaniia kogerentnykh svetovykh polei/.  
22 p3950 A69-41115
- BONDARENKO, M. F.**  
Simulation of the statics of hearing and vision adaptation /Modelirovanie statiki adaptatsii slukha i zreniia/.  
23 p4109 A69-41979  
Simulation of the dynamics of vision and hearing adaptation /Modelirovanie dinamiki adaptatsii zreniia i slukha/.  
23 p4110 A69-41984  
Construction of a mathematical model of human vision, taking into account adaptation to light /K postroeniiu matematicheskoi modeli zreniia cheloveka s uchedom tsvetovoi adaptatsii/.  
23 p4110 A69-41985
- BONDARENKO, V. D.**  
The characteristics of thermionic converters filled with vapour mixture.  
14 p2402 A69-29239
- BONDARENKO, V. L.**  
Insulating materials of thermoemission converters.  
14 p2467 A69-29214
- BONDAREV, B. V.**  
Preliminary results of a search for fractional charged particles in the cosmic rays at sea level.  
13 p2333 A69-2844
- BONDAREV, D. E.**  
Radiation and temperature stability of ferrites with rectangular hysteresis characteristic /Radiatsionnaia, temperaturnaia ustoiichivost' ferritov s priamougol'no gisteriezisnoi kharakteristikoi/.  
12 p2142 A69-2626
- BONDAREV, E. N.**  
Separation of boundary layers on conical bodies /Otryv pogranichnogo sloia na konicheskikh telakh/.  
24 p2455 A69-4340
- BONDAREV, E. V.**  
Use of a two-gas artificial atmosphere in manned spacecraft /O primeneniі dvukhgasovoi iskusstvennoi atmosfery v obitaemykh kosmicheskikh korabliakh/.  
17 p2912 A69-3296
- BONDI, H.**  
Gravitational bounce in general relativity.  
10 p1779 A69-2366
- BONESS, A. J.**  
A cost-benefit analysis of military aircraft replacement policies.  
24 p4253 A69-43095
- BONESS, R. J.**  
Cage and roller slip in high-speed roller bearings.  
20 p3547 A69-3706
- BONETTI, A. F.**  
Establishing flight worthiness of mishandled electronic equipment.  
15 p2576 A69-3036
- BONEV, N.**  
Satellite Observations. Number 7 /Nabliudeniia Iskusstvennykh Sputnikov Zemli. Number 7/.  
12 p2067 A69-2642
- BONFIG, K. W.**  
Fluidic components /Fluidic-Bauelemente/.  
09 p1443 A69-2253  
Analog simulation of nonlinear functions of a single independent variable /Analoge Nachbildung von nichtlinearen Funktionen einer unabhaengigen Veranderlichen/.  
13 p2224 A69-2753
- BONFIGLIO, G.**  
Design of a local oscillator for a space telecommunications repeater /Realizzazione di un oscillatore locale per ripetitore spaziale di telecomunicazioni/.  
08 p1286 A69-2059
- BONGIANNI, W. L.**  
Performance of ultra-bandwidth YIG pulse compression networks.  
13 p2230 A69-2768
- BONHOUS, J.**  
Evacuation of maxilla-facially wounded persons by air /L'evacuation du blesse maxillo-facial par voie aerienne/.  
24 p4270 A69-4260
- BONIFACIO, R.**  
Short-pulse propagation in a laser amplifier with saturable losses.  
16 p2797 A69-3204
- BONILLA H., R. A.**  
Flame stabilization on rectangular burners.  
02 p0353 A69-1232
- BONIN, L.**  
An optimum filter for determining the trajectory of maneuverable objects.  
19 p3307 A69-3579
- BONIS, A. J.**  
Reliability math for managers.  
12 p2101 A69-2584
- BONIVENTO, C.**  
Sufficient condition for the stability of a class of nonautonomous linear systems /Condizione sufficiente per la stabilita di una classe di sistemi lineari non autonomi/.  
08 p1296 A69-1992  
Graphic interpretation of a condition of absolute stability for unsteady systems /Interpretazione grafica di una condizione di stabilita assoluta per sistemi non stazionari/.  
16 p2764 A69-3244  
Stability analysis of linear systems with periodic coefficients /Sull'analisi di stabilita dei sistemi lineari coefficienti periodici/.  
21 p3685 A69-3877

**BONNARD, P.**  
ASTRE - A programming language oriented toward a better use of memory /Un langage de programmation oriente vers une meilleure utilisation de la memoire - ASTRE/.  
03 p0401 A69-14180

**BONNAVAL, P.**  
Some applications of the fast Fourier transform, a powerful and economical technique for calculating sampled Fourier spectra /Quelques applications de la transformation de Fourier rapide, technique puissante et economique de calcul des spectres de Fourier echantillonnes/.  
04 p0625 A69-15223

**BONNEAU, E.**  
Determination of the vibration characteristics of a structure with the aid of the expression of the complex power supplied /Determination des caracteristiques vibratoires d'une structure a l'aide de l'expression de la puissance complexe fournie/.  
[ONERA-TP-724] 18 p3218 A69-34639

**BONNEAU, R.**  
Flash spectroscopy by Q-switched laser excitation - Application to the study of naphthalene /Spectroscopie par eclairement a excitation par laser declenche - Application a l'etude du naphthalene/.  
02 p0254 A69-11544

**BONNEVILLE, R.**  
Development of a liquid flow MHD alternating current generator /Determination d'un generateur alternatif MHD a veine liquide/.  
13 p2206 A69-27495

**BONNELL, C. R.**  
Outside looking in attitude gyros.  
[SAE PAPER 690326] 11 p1890 A69-24507

**BONNEMAY, M.**  
Fundamental problems relative to low-temperature fuel cells using carbon fuels /Problemes fondamentaux relatifs aux piles a basse temperature utilisant des combustibles carbones/.  
08 p1259 A69-21037

Study of electrochemical oxidation of hydrocarbons on platinum /Etude de l'oxydation electrochimique des hydrocarbures sur le platine/.  
08 p1268 A69-21052

Basic problems of low temperature cells using carbon-containing fuels /Problemes fondamentaux relatifs aux piles a basse temperature utilisant des combustibles carbones/.  
16 p2738 A69-32408

Study of electrochemical oxidation of hydrocarbons on platinum /Etude de l'oxydation electrochimique des hydrocarbures sur le platine/.  
16 p2740 A69-32423

**BONNER, F. M.**  
Ion depletion in the high-latitude exosphere - SimultaneousOGO 2 observations of the light ion trough and the VLF cutoff.  
18 p3187 A69-34939

**BONNER, G. P.**  
Light scattering by manned spacecraft atmospheres.  
09 p1487 A69-21654

Space contamination due to manned vehicles.  
21 p3793 A69-38341

**BONNER, W. A.**  
Variable time-lapse videooscintoscope - A modification of the scintillation camera designed for rapid flow studies.  
18 p3134 A69-34541

**BONNER, W. D.**  
Satellite studies of clouds and cloud bands near the low-level jet.  
20 p3570 A69-37404

Gridding scheme for APT satellite pictures.  
21 p3718 A69-39749

**BONNET, D.**  
Method of strain analysis on an insulating specimen in the presence of a thermal gradient by means of a strain gauge /Methode d'analyse des deformees sur specimen isolant en presence d'un gradient thermique, au moyen de jauge d'extensometrie/.  
13 p2264 A69-28599

**BONNET, G.**  
Random filters and stabilization of periodic signals mixed with noise /Filtres aleatoires et stationnarisation de signaux periodiques meles de bruits/.  
07 p1089 A69-18281

Hybrid correlators with sampling /Correlateurs hybrides a echantillonnage/.  
24 p4283 A69-43139

**BONNET, G. R.**  
New trends in the development of heat-resistant nickel alloys cast by the lost wax method /Nouvelles tendances dans le developpement des alliages de nickel refractaires moules a la cire perdue/.  
09 p1522 A69-21608

**BONNET, P.**  
The creep behaviour of aluminium-alumina /SAP/alloys.  
12 p2120 A69-26938

**BONNET, R.**  
Solar physics /Physique solaire/.  
02 p0316 A69-11905

Research on the solar continuum between 1950 and 3000 angstrom units /Recherches sur l'emission continue du soleil entre 1950 et 3000 angstrom units/.  
05 p0827 A69-16466

**BONNEVILLE, J. M.**  
Propulsion assisted by microwave power.  
[IMPI PAPER D2] 04 p0647 A69-15000

**BONNOT, P.**  
Prospective study of containerization /Etude prospective de la containerisation/.  
02 p0228 A69-11887

**BONOMETTO, S.**  
On the red shift of quasars.  
06 p1009 A69-17968

About some consequences of an explosive origin of spiral arms.  
20 p3599 A69-37468

**BONOMO, P. J.**  
RAE-A attitude determination ground support system.  
[AIAA PAPER 69-983] 22 p3907 A69-40363

**BONTHRON, R. J.**  
Dynamics of continuous multimass rotor systems.  
[ASME PAPER 69-VIBR-51] 10 p1804 A69-24153

**BOOHER, R. K.**  
MOS GP computer.  
04 p0568 A69-15357

**BOOK, D. L.**  
Ion sound instability in a collisionless shock wave.  
11 p1930 A69-25273

Plasma wave regeneration in inhomogeneous media.  
15 p2660 A69-30918

**BOOKER, G. R.**  
A new method for investigating the electric field regions of p-n junctions.  
22 p3994 A69-40752

**BOOKER, J.**  
Chemical conversion coatings retard corrosion of beryllium.  
07 p1169 A69-19762

Corrosion prevention coatings for beryllium.  
14 p2466 A69-29939

**BOOM, R. W.**  
Magnetic suspension and guidance for high speed rockets by superconducting magnets.  
17 p2946 A69-33789

**BOONE, D. H.**  
Metallographic characterization of phases associated with aluminide coated Udimet 700.  
13 p2282 A69-28163

**BOOR, P. M.**  
A computerized data acquisition system for real time fault isolation.  
11 p1843 A69-25082

**BOOR, S. B.**  
Frequency feed-forward - An open loop approach for extending the threshold and linearity of FM demodulators.  
07 p1106 A69-19128

**BOORER, N. W.**  
The characteristics and problems associated with V/S.T.O.L. operations.  
[ICAS PAPER 68-05] 11 p1822 A69-24463

**BOOS, G. H.**  
Integrated management information system /IMIS/.  
11 p2005 A69-25304

**BOOS, J.**  
Production of self-acting gas bearings.  
[ASME PAPER 68-WA/LUB-4] 05 p0768 A69-16130

Mass producing self-acting gas bearings for gyros.  
[ASME PAPER 68-WA/LUB-4] 24 p4320 A69-43035

**BOOT, H. A. H.**  
Ring-laser bias using reciprocal optical components.  
21 p3735 A69-38651

**BOOT, R. D.**  
Development of the Buccaneer.  
09 p1435 A69-22775

**BOOTH, A. L.**  
Meso-scale archive and computer products of digitized video data from ESSA satellites.  
19 p3279 A69-35810

**BOOTH, C. E., JR.**  
Computer simulation of life cycle cost elements.  
15 p2723 A69-31138

**BORBLIK, E. L.**  
Correlation analysis of current fluctuations in plasma.  
11 p1934 A69-25715

Electric-field fluctuations in weakly ionized plasma flows /O fluktuatsiakh elektricheskogo polia v potokakh slaboionizovannoi plazmy/.  
13 p2310 A69-28029

**BORCHI, E.**  
Multiring-antenna arrays.  
06 p0899 A69-17827

Performance of some linear codes for digital communications with space vehicles.  
08 p1276 A69-20597

Electromagnetic field of an infinite helical sheath.  
09 p1463 A69-21682

**BORD, C.**  
Forced heat convection in turbulent flow in tubes of circular cross section /Convection forcee de la chaleur en regime d'ecoulement turbulent dans des tubes de section circulaire/.  
11 p2000 A69-25096

**BORDE, C.**  
Study of the Lamb dip and of rotational competition in a carbon dioxide laser.  
[IEEE PAPER P-6] 07 p1153 A69-19075

**BORDOGNA, J.**  
Comparison of electrooptic modulation methods.  
04 p0562 A69-15474

**BORDURE, G.**  
Faraday effect of n type gallium antimonide at 20 K /Effet Faraday de l'antimoniure de gallium de type n a 20 deg K/.  
02 p0298 A69-12039

**BOREK, R. W.**  
Flight and laboratory tests of an "L-band" telemetry RF system.  
19 p3267 A69-35996

**BOREL, J.**  
Small-signal field-effect transistor model at saturation /Modele du transistor a effet de champ en petits signaux, a la saturation/.  
04 p0579 A69-15226

Equivalent circuit of the MOS transistor for use in the IMAG I program /Schema equivalent du transistor MOS utilisable dans le programme "IMAG I"/.  
08 p1280 A69-19978

Evolution of the noise spectrum as a function of temperature in field effect transistors /Evolution du spectre de bruit en fonction de la temperature dans les transistors a effet de champ/.  
11 p1853 A69-25391

**BORELLI, M. T.**  
Analysis of commutated networks employing feedback circuits.  
08 p1295 A69-19853

**BORETZ, J. E.**  
Orbital refueling techniques.  
[AIAA PAPER 69-564] 16 p2869 A69-32733

Large space station power systems.  
[AIAA PAPER 68-1034] 22 p3869 A69-40549

Advanced design modules for lunar surface solar array power systems.  
23 p4072 A69-42288

Synthesis of an electrical power system for a manned lunar base.  
23 p4076 A69-42541

**BORETZ, J. E., SR.**  
Large solar arrays - The emerging space power workhorse.  
18 p3094 A69-35056

**BORG, K.**  
Computations on interstellar extinction.  
14 p2516 A69-28901



## BORGER, J. G.

Fitting the 747 to operation.  
[RAES PAPER 12] 22 p3864 A69-40621

## BORGIANNI, C.

The behaviour of metal oxides injected into an argon induction plasma.  
13 p2315 A69-28458

## BORGIOTTI, G. V.

Modal analysis of periodic planar phased arrays of apertures.  
04 p0571 A69-14315

Modal analysis of infinite periodic phased arrays.  
17 p2938 A69-33876

Analysis of periodic phased arrays of circular apertures.  
20 p3507 A69-37844

## BORGSTEDT, H. U.

Study of effects of sodium corrosion on metals of subgroups IV and V /Untersuchung von Korrosionseffekten durch Natrium an Metallen der vierten und funften Nebengruppe/.  
10 p1713 A69-23821

## BORING, K. L.

Plasma electron beam development for welding applications.  
19 p3320 A69-35555

## BORIS, J. P.

Closed expressions for the magnetic field in two-dimensional multipole configurations.  
06 p0965 A69-17518

Determination of subdominant solutions using a partial Wronskian.  
15 p2646 A69-31519

## BORISENKO, A. I.

Increasing the energetic cooling efficiency of vortex tubes used for cooling aircraft components /K voprosu o povyshenii energeticheskoi effektivnosti polucheniia kholoda vikhrevymi trubkami pri okhlazhdenii imi aviatsionnykh detalei/.  
04 p0684 A69-14488

## BORISENKO, V. I.

Free oscillations of a plate with concentrated masses /Svobodnye kolebaniia plastinki s sosredotochenymi massami/.  
18 p3226 A69-35377

Investigation of the oscillations of a cylindrical shell containing a liquid /Issledovanie kolebaniy tsilindricheskoi obolochki, soderzhashchei zhidkost'/.  
21 p3834 A69-38718

## BORISENKO, V. M.

Supersonic flow past axisymmetric cones with flares /Obtekanie sverkhzvukovym potokom osesimmetrichnykh konusov s ustupom/.  
19 p3239 A69-36387

## BORISENKOV, E. P.

Energy of general atmospheric circulation /Energetika obshchei tsirkulatsii atmosfery/.  
14 p2477 A69-29825

## BORISENOK, I. T.

Stability of a class of nonlinear control systems /Ob ustoiichivosti odnogo klassa nelineinykh sistem upravleniia/.  
01 p0050 A69-10355

## BORISEVICH, N. A.

Pulsed laser emission of nitrogen atoms in a N sub 2-He mixture /Impul'snoe lazernoe izluchenie atomov azota v smesi N sub 2-He/.  
06 p0933 A69-17258

## BORISKINA, N. G.

Investigation of the phase equilibrium and some properties of titanium-rich alloys of the Ti-Al-Mo-Zr system /Issledovanie fazovogo ravnovesiia i nekotorykh svoistv splavov sistemy Ti-Al-Mo-Zr, bogatykh titanom/.  
07 p1161 A69-18769

Investigation of alloys of the Ti-Al-Mo-Zr system using the bend test method at elevated temperatures /Issledovanie splavov sistemy Ti-Al-Mo-Zr metodom izгиба pri povyshennykh temperaturakh/.  
07 p1163 A69-18779

Corrosion-resistant titanium alloy with 32 percent Mo /Korroziionnostoikii splav titana s 32 percent Mo/.  
07 p1163 A69-18781

## BORISOV, A. A.

Ignition of fuel films behind shock waves in air and oxygen.  
02 p0353 A69-12317

Causes of the occurrence of a spherical detonation in a closed volume /O prichinakh vozniknoveniia sfericheskoi detonatsii v zamknutom ob'eme/.  
10 p1810 A69-23897

A probability method for calculating the accuracy of inductive converters operating in the steady-state regime /O veroiatnostnom metode rascheta tochnosti induktsionnykh preobrazovatelei, rabotaiushchikh v ustanovivshemsia rezhime/.  
13 p2259 A69-27424

## BORISOV, A. S.

Asymptotic behavior of some solutions of the Grad kinetic moment system.  
05 p0752 A69-16678

## BORISOV, B. D.

Investigation of fluctuations in the angle of arrival of laser emission in the atmospheric boundary layer /Issledovanie fluktuatsii uglov prikhoda lazernogo izlucheniia v prizemnom sloe atmosfery/.  
11 p1840 A69-25570

## BORISOV, B. F.

Machine for in vacuo testing of samples at high temperatures /Mashina dlia ispytaniia obraztsov v vakuume pri vysokoi temperature/.  
18 p3117 A69-34604

## BORISOV, E. V.

Diffusion during high-temperature exposure of protective coatings on molybdenum /O difuzii pri vysokotemperaturnoi sluzhbe zashchitnykh pokrytii na molibdene/.  
19 p3345 A69-36156

## BORISOV, I. U. P.

Radio Control of Rocket Missiles and Space Vehicles /Radioupravlenie reaktivnymi snariadami i kosmicheskimi apparatami/.  
20 p3574 A69-37232

## BORISOV, M. I.

On the thermodynamics of ions.  
03 p0473 A69-14156

## BORISOV, N. A.

Temperature dependence of laser threshold current density and emission spectra in electron-beam pumped gallium arsenide lasers.  
02 p0260 A69-12683

Output power and efficiency of a gallium arsenide semiconductor laser excited with an electron beam.  
06 p0933 A69-16994

Power, efficiency and temperature dependence of emission spectra and threshold current density in electron-beam pumped gallium arsenide laser.  
19 p3338 A69-36538

## BORISOV, V. A.

The Gunn effect and its application in microwave technology /Effekt Ganna i ego primeneniie v tekhnike SVCh/.  
18 p3183 A69-35263

## BORISOV, V. M.

On a system of bodies with minimal wave drag.  
05 p0699 A69-16675

## BORISOVA, A. A.

Insulating materials of thermoemission converters.  
14 p2467 A69-29214

## BORISOVA, A. S.

Effect of X-rays on the alpha-amylase and alpha-glucanophosphorylase activity in tissues /Vliianie rentgenovskikh luchei na aktivnost' al'fa-amilazy i al'fa-glukanfosforilazy tkanei/.  
21 p3658 A69-39055

## BORISOVA, L. A.

Nature of small etch pits in low-dislocation crystals of gallium arsenide /O prirode malykh iamok travleniia v malodislotsionnykh kristallakh arsenida galliia/.  
11 p1937 A69-25029

## BORISOVA, V. I.

Operational characteristics of jet fuels purified of mercaptanes /Eksploatatsionnye svoistva reaktivnykh topliv, ochishchennykh ot merkaptanov/.  
01 p0142 A69-11098

## BORISOVICH, I. U. G.

The Cauchy problem for linear nonhomogeneous differential equations with a delayed argument /K zadache Koshi dlia lineinykh neodnorodnykh differentsial'nykh uravnenii s zapazdyvaushchim argumentom/.  
15 p2643 A69-30101

## BORJA, M.

Numerical treatment of the lifting-surface equation /Zur numerischen Behandlung der Tragflaechengleichung/.  
01 p0008 A69-11298

## BORKOWSKI, J.

The spectra of turbulent energy in the surface layer of the atmosphere.  
12 p2067 A69-26355

## BORKOWSKI, S.

Survey of works concerning thermal stresses in solids - 1965-1967 /Przeglad prac dotyczacych naprezen termicznych cialach stalych /Lata 1965-1967//.  
19 p3447 A69-36858

## BORLAND, R. G.

Responsiveness of the cortex and visual pathway during transient hypotension.  
22 p3878 A69-40779

## BORMAN, G. L.

Generation of large amplitude periodic shock-fronted pressure waves in a resonant tube.  
06 p0906 A69-17141

## BORMAN, K. IA.

Heat capacity of /Ba,Sr/TiO sub 3 solid solutions in the ferroelectric phase transition region /Teploemkost' tverdykh rastvorov /Ba,Sr/TiO sub 3 v oblasti segnetoelektricheskogo fazovogo perekhoda/.  
22 p3996 A69-41162

## BORN, A.

Communications system using infrared radiation /Ein nachrichteneubertragungssystem mittels infraroter strahlung/.  
22 p3900 A69-40617

## BORN, G.

A vector airspeed measuring system /VAMS/ for helicopters and other V/STOL aircraft.  
[AHS PAPER 350] 17 p2974 A69-33527

## BORN, G. H.

An approximate solution for the short-term motion of a lunar satellite.  
19 p3402 A69-35934

An Encke-type special perturbation method.  
[AIAA PAPER 69-908] 21 p3807 A69-39340

## BORN, G. K.

Recombination of electrons and molecular helium ions.  
02 p0283 A69-11834

The growth of laser oscillations at high excitation.  
12 p2105 A69-26318

## BORNATICI, M.

Micro-field fluctuations in stable nonequilibrium plasmas.  
14 p2490 A69-29101

Anomalous scattering and absorption of light by decay into plasma waves.  
16 p2822 A69-32046

16 p2822 A69-32046

## BORNEMEIER, D.

A mathematical model for the calculation of time dependent terrain radiance.  
[AIAA PAPER 69-592] 17 p3071 A69-33263

## BORODAI, B. U.

Concerning certain features of the stationary Josephson effect.  
09 p1556 A69-21669

## BORODICH, S. V.

The "Orbita" satellite communication receiving system.  
06 p0886 A69-17043

## BORODIN, N. M.

Ionospheric measurements by the method of incoherent radio wave scattering /K ionosfernym izmereniam metodom nekogerentnogo rasseianiia radiovoln/.  
10 p1686 A69-23910

## BORODIN, V. Z.

Repolarization processes in barium titanate single crystals in sinusoidally variable fields /Protsesi perepolarizatsii monokristaliv titanatu bariu v sinusoidno zmennikh poliaakh/.  
05 p0808 A69-16215

Polarization reversal processes of barium titanate single crystals in sinusoidally varying fields.  
20 p3584 A69-37785

## BORODZICH, E. V.

Detection of radio-frequency spectral lines of excited hydrogen, caused by n goes to n - 1 type transitions for n equals 91 /Obnaruzhenie radiolii vobuzhdennogo vodoroda, obuslovennoi perekhodami tipa n goes to n - 1 dlia n equals 91/.  
13 p2353 A69-28433

## BOROFSKY, A. J.

Verification of device reliability.  
22 p3953 A69-40030

## BOROK, B. A.

Some properties of tungsten and tungsten-base alloys.  
05 p0782 A69-16797

- BORONIN, A. P.**  
Explosion in an external electric field.  
04 p0634 A69-14430
- BOROS, A.**  
Stationary flow conditions in the channels of planar-geometry fluid control elements in the case of laminar flow /Planargeometria ju fluid irányítástechnikai elemek csatornainak stationarius áramlasi viszonyai laminaris áramlasi eseten/.  
07 p1118 A69-18293
- BOROVICH, L. I.**  
Study of the inhomogeneous structure of the ionospheric E layer /Issledovanie neodnorodnoi struktury sloia E ionosfery/.  
17 p2962 A69-33896
- BOROVIK, E. S.**  
Device for obtaining and investigating long high-current high-pressure arcs /Ustanovka dlia polucheniia i issledovaniia sil'notochnykh dlinnykh dug vysokogo davleniia/.  
09 p1547 A69-21593
- BOROVIK, O. E.**  
Nonlinear waves in a plasma immersed in a magnetic field and having an arbitrary distribution of electron velocities.  
05 p0804 A69-16370
- BOROVIKOV, A. S.**  
Ultraviolet illumination in luminescent nondestructive testing.  
18 p3138 A69-35115
- BOROVOI, V. IA.**  
Heat exchange at the surface of a semicone at large supersonic velocities /Teploobmen na poverkhnosti polukonusa pri bol'shikh sverkhzvukovykh skorostiakh/.  
24 p2426 A69-43494
- BOROVSKII, B. I.**  
Flow deflection at the exit from the wheel of a centrifugal pump /Otklonenie potoka na vykhode koleasa tsentrobezhnogo nasosa/.  
15 p2547 A69-30571  
Experimental investigation of the effect of the thermodynamic properties of a liquid on cavitation phenomena.  
21 p3696 A69-39101
- BOROVSKII, I. B.**  
Determining the thickness and composition of thin films with the aid of scattered electrons and the characteristic X-ray radiation.  
10 p1747 A69-23847
- BORSARELLO, J.**  
In-flight medical disorders in the French Air Force - Analytical study from 1961 to 1968 /Les malaises en vol dans l'Armée de l'Air Française - Etude analytique de 1961 à 1968/.  
24 p4277 A69-43383
- BORSHCHENKO, N. K.**  
Deflection of three-layer plates of asymmetric structure with a rigid filler /Izhib trekhsloynnykh plastin nesimmetrichnogo stroeniia s zhestkim zapolnitelem/.  
17 p3055 A69-33129  
Bending of three-layer plates with an asymmetrical structure and a rigid filler /Ob izgibe trekhsloynnykh plastin nesimmetrichnogo stroeniia s zhestkim zapolnitelem/.  
24 p4395 A69-42594
- BORSHCHEVSKII, I. IA.**  
Auditory function of man during exposure to low barometric pressure for several days /Slukhovaia funktsiia pri mnogosutochnom prebyvanii cheloveka v usloviakh ponizhennogo barometricheskogo davleniia/.  
03 p0378 A69-14206
- BORSHKOVSKII, I. A.**  
Some aspects of the use of a half-wave antenna to investigate radio emission from extensive air showers.  
13 p2332 A69-28408
- BORSOOK, H.**  
Studies on erythropoiesis. II.  
22 p3877 A69-40761
- BORTKEVICH, A. V.**  
New phenomena during the irradiation of cyanine molecules by a high-power ruby laser pulse /Noye iavleniia pri obluchenii molekul kriptosianina moshchnym impul'som rubinovogo lazera/.  
21 p3740 A69-39546
- BORTNIKOV, IU. S.**  
Electrodynamic generator.  
03 p0369 A69-14153
- One-dimensional flows in electrogasdynamics /Odnomernye techeniia v elektrogazodinamike/.  
06 p0964 A69-17326
- Electrohydrodynamic flow in channels.  
12 p2135 A69-26400
- BORTOLANI, V.**  
Thermoelectric power for alkali metals and energy-dependent pseudopotential.  
05 p0809 A69-16507
- BORTOLOTT, V. J., JR.**  
Upper limits to the intensity of background radiation at lambda equals 1.32, 0.559, and 0.359 mm.  
07 p1221 A69-19404  
Probable detection of interstellar C super 13 H super plus.  
09 p1603 A69-22266
- BORTZ, S. A.**  
A metal-fiber-reinforced ceramic system.  
06 p0946 A69-17528  
Structural Ceramics and Testing of Brittle Materials, U.S. Army Materials and Mechanics Research Center, Seminar, Chicago, Ill., March 28-30, 1967, Proceedings.  
24 p4333 A69-43337  
Analysis and review of mechanical testing procedure for brittle materials.  
24 p4333 A69-43340
- BORZEIX, J.**  
Application to a shock tube of transistorized triggers adapted to platinum-film probes /Sur l'utilisation au tube a choc de declencheurs transistorises adaptes aux sondes a film de platine/.  
11 p1887 A69-25095
- BORZENKO, V. L.**  
Some peculiarities of I-V curves of the thermionic converters in cesium vapor at the pressure 10- super 2 - 5 torr.  
14 p2402 A69-29241
- BORZESZKOWSKI, H.-H. V.**  
Spherically symmetric vacuum solution of Treder's gravitation theory /Zur kugelsymmetrischen Vakuumloesung der Frederschen Gravitationstheorie/.  
17 p3029 A69-33011
- BORZIAK, P. G.**  
Investigation of luminescence and electron emission centers in dispersed gold films /Doslizhennia tsentriv itinnia ta elektronnoi emisii u dispergovaniakh zolotikh plivkakh/.  
14 p2504 A69-28992  
Photoelectric emission from GaAs /Fotoelektronna emisiia arsenidu galiu/.  
14 p2504 A69-28993
- BORZOV, G. G.**  
Observations of the supernovae Chuadze and Wild /Nabludeniia sverkhnoynykh Chuadze i Vilda/.  
20 p3607 A69-38038
- BORZOV, V. I.**  
Oscillations and stability of relay sampled data system /Kolebania i ustoiichivost' releino-impul'snoi sistemy/.  
14 p2425 A69-28898
- BORZYSZKOWSKI, J.**  
A method of determining the strength of aircraft structures /Metodyka wyznaczania trwalosci konstrukcji lotniczych/.  
11 p1970 A69-24525
- BOSC, H.**  
Application of pseudorandom modulation in coherent pulsed radars /Utilisation de la modulation pseudo-aleatoire dans les radars coherents a impulsions/.  
24 p4282 A69-42743
- BOSCH, B. G.**  
RF triggering of self-sustaining Gunn oscillations.  
05 p0734 A69-16575  
Transferred-electron oscillators and amplifiers.  
07 p1096 A69-18442  
The behavior of Gunn oscillators as a function of the load conditions /Das Verhalten von Gunn-Oszillatoren als Funktion der Lastbedingungen/.  
11 p1853 A69-25609  
Injection synchronization of Gunn oscillators /Injektionssynchronisierung von Gunn-Oszillatoren/.  
11 p1856 A69-25636
- BOSCH, H. B.**  
A formula for hand computation in two-stage vehicle optimization.  
19 p3429 A69-35918
- BOSCHI, A.**  
Discharge characteristic and relaxation processes in a Cs-He thermal plasma.  
10 p1732 A69-23443
- BOSCHITZ, E. T.**  
Elastic scattering of 600 Mev protons from He super 3.  
03 p0472 A69-13464  
Polarization in proton- super 4 He scattering at 540 Mev.  
04 p0632 A69-14966  
The interaction of intermediate energy protons with light nuclei.  
24 p4352 A69-43123  
Elastic scattering of 600 Mev protons from light nuclei.  
24 p4352 A69-43125
- BOSCO, J. S.**  
Effects of progressive hypohydration on maximal isometric muscular strength.  
05 p0708 A69-15983  
Orthostatic intolerance after artificial heat acclimatization in physically fit subjects.  
16 p2746 A69-32810
- BOSE, N. K.**  
A quadratic form representation of polynomials of several variables and its applications.  
07 p1173 A69-18641
- BOSE, S. M.**  
Ground-state energy of the Anderson model by the cluster variation method.  
06 p0958 A69-17712  
Range and spatial variation of the Kondo spin-compensated state.  
22 p3983 A69-40061
- BOSE, T. K.**  
Direct and indirect measurements of the anode fall in a coaxial arc configuration.  
24 p4256 A69-43695
- BOSSIA, G.**  
On delays of particles in extensive air showers.  
22 p4007 A69-41054
- BOSIK, A. J.**  
A high temperature cyclic oxidation apparatus.  
12 p2093 A69-26483
- BOSMAN, F.**  
Analog studies of the human systemic arterial tree.  
17 p2908 A69-33007
- BOSNAK, J. S.**  
High-amplitude torsional oscillations of a disk in a viscous fluid.  
08 p1417 A69-20781
- BOSQUED, J. M.**  
A program for studying the space reliability of low-energy detectors /Programme d'etude sur la fiabilité spatiale des detecteurs de faible energie/.  
11 p1848 A69-24868
- BOSSEL, U.**  
Skimmer interaction - Transition from a "shock beam" to a supersonic nozzle beam.  
19 p3238 A69-36172  
A new approach to drag measurements under space-like conditions. [AIAA PAPER 69-1032]  
22 p3924 A69-40400
- BOSSELER, C.**  
International problems of air traffic control and possible solutions.  
06 p1042 A69-16846
- BOSSLER, F. C.**  
On measuring the properties of adhesives in bonded joints.  
09 p1500 A69-22309
- BOSSO, F. C.**  
A universal transfer-function analyzer.  
15 p2615 A69-31282  
A universal transfer-function analyzer.  
20 p3498 A69-37003
- BOSSOLASCO, M.**  
Some properties of whistlers at Roburent, North Italy.  
01 p0067 A69-11033
- BOSSY, L. G.**  
Ray tracing in an anisotropic, nonpermanent, and slightly absorbing medium within the framework of a four-dimensional Hamiltonian theory /Le trace des rayons dans un milieu anisotrope, non permanent et legerement absorbant dans le cadre d'une theorie Hamiltonienne a quatre dimensions/.  
17 p2924 A69-33836



## BOSTANDZHIAN, S. A.

## BOSTANDZHIAN, S. A.

Thermal explosion in a viscous fluid flow /Teplovoi vzryv pri techenii viazkoi zhidkosti/.  
04 p0686 A69-14986

## BOSTROEM, R.

Auroral current systems.  
21 p3710 A69-38505

## BOSTROM, C. O.

Solar protons observed at 1100 km during March 1966.  
01 p0146 A69-11123  
Proton entry into the magnetosphere on May 26, 1967.  
16 p2849 A69-31984

## BOSTWICK, C. D.

Some observations on the sodium and potassium interactions in the blue-green alga *Anabaena flos-aquae* A-37.  
23 p4079 A69-41386

The electroanalysis of *Anabaena flos-aquae* A-37.  
23 p4079 A69-41387

## BOSTYN, J.

Large-size terrestrial radomes /Radomes terrestres de grandes dimensions/.  
07 p1112 A69-19538

## BOSWORTH, T. J.

Materials selection criteria for aerospace pressure vessel construction.  
24 p4324 A69-43430

## BOTCHERBY, S. C. L.

The laser in the measurement of velocity and length of materials.  
22 p3955 A69-40237

## BOTHE, G. G.

Auditory temporal masking and the perception of order.  
11 p1830 A69-24795

## BOTHMANN, TH.

Normal injection in a three-dimensional laminar boundary layer.  
[DVL-902] 09 p1482 A69-21971  
Numerical stability of three-dimensional boundary layer solutions /Numerische Stabilitaet dreidimensionaler Grenzschichtloesungen/.  
10 p1631 A69-22902

## BOTKA

Observation of some circulatory reactions after cumulation of vegetative stimuli.  
24 p4266 A69-43375

## BOTNIKOV, G. G.

The detection of iron porphyrin proteins by the method of biochemiluminescence in the search for extra-terrestrial life.  
15 p2556 A69-31325

## BOTOMBEKOVA, A. B.

The part played by the thyroid gland in changing the resistance and myoglobin content of skeletal muscles of "flat-land" and high-altitude-acclimatized white rats /Rol' shchitovidnoi zhelezy v izmenenii rezistentnosti skeletnykh myshts i soderzhanii v nikh mioglobina u "ravninnnykh" i akklimatizirovannykh k vysokogoriu belykh krysl/.  
05 p0709 A69-16517

Role of thyroid gland in changes of resistance and myoglobin content of skeletal muscles in "lowland" and Alp-adapted white rats.  
18 p3096 A69-34736

## BOTT, J. F.

Shock-tube studies of sulfur hexafluoride.  
18 p3100 A69-35475

## BOTTARO, D.

Method for determining total burn-in dissipation in a diode.  
15 p2579 A69-31043

## BOTTE, R.

A theoretical and experimental analysis of high-strain-rate tensile tests using Malvern's theory.  
23 p4236 A69-42529

## BOTTEMA, M.

Rocket measurement of ultraviolet spectra of Venus and Jupiter between 1200 and 1800 angstrom units.  
[JHU-TR-15] 10 p1788 A69-24121

## BOTTEMILLER, R. L.

HD 191980 - A peculiar B-type star.  
11 p1958 A69-24594

## BOTTICHER, W.

Experimental investigation of the formation and acceleration of the current layer in a Z-pinch discharge /Experimentelle Untersuchung der Entstehung und

Beschleunigung der stromfuehrenden Schicht in einer Z-Pinch-Entladung/.  
09 p1552 A69-22397

## BOTTOMLEY, R. H.

Turbine-blade vibration - Automatic charting of static tests.  
15 p2672 A69-31209

## BOTTONE, P. W.

Worldwide clock synchronization using a synchronous satellite.  
12 p2080 A69-26053

## BOTTREAU, A.

Interpretation of experimental results obtained with an 8-mm interferometer for an argon plasma /Interpretation des resultats experimentaux obtenus par interferometrie 8 mm pour un plasma d'argon/.  
07 p1194 A69-19324

General method of calculating the complex transmission and reflection coefficients of a dielectric film with a permittivity gradient - Application to plasma diagnostics /Methode generale de calcul des coefficients de transmission et de reflexion complexes d'une lame dielectrique a gradient de permittivite - Application au diagnostic des plasmas/.  
07 p1194 A69-19334

Variations of the complex microwave transmission coefficient of a "nominal cutoff" plasma, assuming different types of electron distribution /Sur les variations du coefficient de transmission complexe aux microondes d'un plasma a la "coupeure nominale" dans l'hypothese de differents types de distributions electriques/.  
08 p1366 A69-20759

Attempt at interpretation of Faraday effect measurements in a hydrogen plasma during guided propagation in the 3-cm band /Essai d'interpretation des mesures d'effet Faraday d'un plasma d'hydrogene, en propagation guidee dans la bande des 3 cm/.  
17 p2919 A69-33394

## BOTVINA, L. R.

Reinforced metallic materials /Armirovannye metallicheskie materialy/.  
11 p1904 A69-24898

## BOTVINKOV, V. M.

Five problems concerning the effect of a solid screen on the apparent mass of floating cylindrical bodies during a vertical impact /Piat' zadach o vlianii tverdogo ekrana na prisoedinnenui massu plavaiushchikh tsilindricheskikh tel pri vertikal'nom udare/.  
11 p1875 A69-25487

## BOUCHER, J.

Different methods of measurement of the field factor in a junction diode /Sur differentes methodes de mesure du facteur de champ dans une diode a jonction/.  
15 p2575 A69-30301

## BOUCHER, R. J.

Simultaneous radar, aircraft and meteorological investigations of clear air turbulence.  
24 p4342 A69-42894

## BOUCHET, P.

Wave propagation at the electron plasma resonance in the F region /Propagation d'une onde a la resonance plasma electronique dans la region-F/.  
10 p1684 A69-23828

## BOUCHIAT, C.

Remarks on the black-body radiation at very high temperature.  
23 p4238 A69-41358

## BOUCKE, G.

Data acquisition equipment for extra-terrestrial experiments /Bausteine zur Datengewinnung bei extraterrestrischen Experimenten/.  
16 p2759 A69-31857

## BOUDART, M.

Kinetics of the branching step in the hydrogen-oxygen reaction.  
02 p0353 A69-12319

## BOUDOURIS, G.

Distribution of carriers in a quasi-intrinsic bar of germanium subjected to an electric field up to several kilovolts per centimeter /Repartition des porteurs dans un barreau de germanium quasi intrinseque, soumis a un champ electrique jusqu'a quelques kilovolts par centimetre/.  
08 p1372 A69-20277

Phenomena of dielectric relaxation /nonresonant absorption and dispersion/ occurring in gases in the microwave range /Phenomenes de relaxation dielectrique /absorption non resonante et dispersion/ presentes par les gaz dans le domaine des microondes/.  
15 p2654 A69-31219

## BOUDREAU, J. S.

Stress corrosion behavior of titanium alloy 6-2-4-2 as related to engine operation.  
01 p0099 A69-11056

## BOUDREAU, R. A.

Attitude-control-rocket exhaust plume effects.  
[AIAA PAPER 69-574] 16 p2870 A69-32774

## BOUEET, M.

The chronology of cold fronts /Sur la chronologie des fronts froids/.  
04 p0628 A69-15089

## BOUGHNER, R. E.

Theoretical predictions of nongray radiant heat transfer in high-temperature nonisothermal CO sub 2 - N sub 2 mixtures.  
[AIAA PAPER 69-636] 17 p3070 A69-33258  
Radiating gas flows under conditions of reentry into planetary atmospheres /Tehenii izluchaiushchego gaza v usloviakh vkhoda v atmosfery planet/.  
20 p3513 A69-36982

## BOUGHNER, R. T.

Calculations of the radiation hazard due to exposure of supersonic aircraft to solar-flare protons.  
11 p1949 A69-24864

## BOUGNOT, G.

Effect of doping on the diffusion of phonons in gallium antimonide at low temperature /Effet du dopage sur la diffusion des phonons dans l'antimoniure de gallium a basse temperature/.  
12 p2142 A69-26294

## BOUGUYON, G.

Pyrotechnic systems for space applications - Design and initiation of electrical explosive devices /Dispositifs pyrotechniques a applications spatiales - Conception et initiation des artifices electriques/.  
01 p0141 A69-10544

Electrical devices for space applications - Problems of design and initiation /Les artifices electriques a applications spatiales - Problemes de conception et d'initiation/.  
10 p1749 A69-23006

## BOUHOURS, G.

Considerations concerning the treatment of partial loss of teeth in the fighter pilot /Considerations sur le traitement de l'edentation partielle chez le pilote de chasse/.  
21 p3661 A69-39277

## BOUILLE, J. R.

Remote disassembly and inspection of NRX-A6 reactor.  
[AIAA PAPER 69-511] 16 p2810 A69-32712

## BOUIX, M.

Rigorous solution of the radiation of an antenna enclosed in a radome /Solution rigoureuse du rayonnement d'une antenne enfermee dans un radome/.  
07 p1112 A69-19543

## BOUJOT, J.

In-flight tests of a gust absorber - System configuration and analysis /Essai en vol d'un dispositif absorbeur de rafales - Configuration du systeme-analyse/.  
[ONERA-TP-698] 20 p3462 A69-37753

## BOUKIN, G.

Synoptic observations of the F2 layer in the magnetically conjugate regions of Kerguelen and Archangel /Les observations synoptiques de la couche F2 dans les regions magnetiquement conjuguées de Kerguelen et Arkangelsk/.  
16 p2784 A69-32612

## BOULANGE, M.

Studies of the nutritional component of fatigue in glider pilots /Recherches sur la composante nutritionnelle de la fatigue chez les pilotes de vol a voile/.  
23 p4106 A69-41796

## BOULGER, F. W.

Fracture toughness comparisons in steels.  
17 p2989 A69-33554

## BOULTON, G. B.

Laser damage in glasses.  
12 p2117 A69-26193

## BOUQUET, D. L.

Systems analysis applications to the C-5.  
[SAE PAPER 680729] 03 p0379 A69-13440

## BOURDEAU, J. P.

Communications between satellite and balloons for the Eole mission.  
07 p1084 A69-19134

## BOURGAREL, M.

A cryogenic propellant tank pressurization analysis.  
01 p0163 A69-11147

**BOURGEOIS, J. L.**

Thermal, electrical, and thermoelectronic properties of various refractory oxide materials /Proprietes thermiques, electriques et thermoelectroniques de divers materiaux d'oxydes refractaires/.  
13 p2316 A69-27470

**BOURGEOIS, M.**

Certification of civil aircraft /La certification des aeronefs civils/.  
19 p3456 A69-36688

**BOURGEOIS, J.**

Structure and hardening of an austenitic alloy - Fe-30 percent Ni-5 percent Nb /Structure et durcissement d'un alliage austenitique - Fe-30 percent Ni-5 percent Nb/.  
01 p0095 A69-10603

**BOURGIER, M.**

Numerical integration of the Navier-Stokes equations in a square region /Integration numerique des equations de Navier-Stokes dans un domaine carre/.  
22 p3932 A69-40928

**BOURGINE, A.**

Method of forecasting vibrations of a linear structure subjected to a random excitation /Methode de prevision des vibrations d'une structure lineaire soumise a une excitation aleatoire/.  
[ONERA-TP-703] 17 p3054 A69-33064

**BOURGOIS, G.**

Interplanetary scintillations of radiosources at 2695 MHz /Scintillations interplanetaires des radiosources a 2695 MHz/.  
17 p3038 A69-33727

**BOURKE, E. R., II**

A unique approach to balloon station keeping.  
22 p3866 A69-40941

**BOURKE, P. J.**

A study of the spatial structure of turbulent flow by intensity-fluctuation spectroscopy.  
09 p1493 A69-21491

**BOURKE, R. D.**

Translational forces on the Mariner V spacecraft stemming from the attitude control system.  
[AIAA PAPER 69-114] 06 p1018 A69-18108  
Translational forces on Mariner V from the attitude control system.  
[AIAA PAPER 69-114] 24 p4394 A69-43256

**BOURNE, G. H.**

Muscle and the weightlessness state.  
06 p0873 A69-17018

Enzyme histochemistry of the cerebral cortex of squirrel monkey and rat.  
12 p2018 A69-25773

Histochemical studies on the nucleus basalis of Meynert of the squirrel monkey /Saimiri sciureus/.  
12 p2018 A69-25774

Enzyme-histochemical studies on the muscle spindle.  
12 p2018 A69-25777

Histochemical mapping of lactate dehydrogenase and monoamine oxidase in the medulla oblongata and cerebellum of squirrel monkey /Saimiri sciureus/.  
12 p2018 A69-25778

Histological and histochemical observations on the capsule of the muscle spindle in normal and denervated muscle.  
15 p2554 A69-30406

Histological and histochemical studies on the subforinal organ of the squirrel monkey.  
20 p3478 A69-37934

**BOURNE, H. C., JR.**

Kerr magnetooptic study of slow to intermediate speed propagation phenomena in thin Ni-Fe films.  
[IEEE PAPER 11.7] 01 p0138 A69-10716

Wall streaming, creeping, and a new parade motion in Ni-Fe films excited by hard-axis pulses.  
[IEEE PAPER 11.8] 01 p0138 A69-10717

Bloch wall motion in ferromagnetic films excited by fast-rising hard-axis pulses.  
20 p3584 A69-38191

**BOURNIQUOT, P.**

Parasitic calcifications of soft parts in flight personnel /Les calcifications parasitaires des parties molles et le personnel navigant/.  
09 p1446 A69-22729

**BOUROT, J.-M.**

Calculation of an irrotational hydrodynamic field around a sphere moving along the axis of a cylindrical tube containing an incompressible fluid /Sur le calcul du champ hydrodynamique irrotationnel autour d'une sphere qui se deplace dans l'axe d'un tube cylindrique contenant un fluide incompressible/.  
03 p0415 A69-13362

Expansion of the stream function of a steady meridional flow of a viscous fluid, at small Reynolds numbers /Sur un developpement de la fonction de courant de l'ecoulement meriden permanent d'un fluide visqueux, interessant les petits nombres de Reynolds/.  
13 p2247 A69-27737

Application of a least-squares method to the approximate solution of the boundary value problem for certain categories of flows /Sur l'application d'une methode de moindres carres a la resolution approchee du probleme aux limites, pour certaines categories d'ecoulements/.  
19 p3299 A69-36475

**BOURQUE, D. J.**

Ground-based guidance for land-landing manned spacecraft equipped with low-velocity descent systems.  
[AIAA PAPER 69-864] 21 p3762 A69-39390

**BOURQUIN, J. J.**

Stability of a class of lumped-distributed systems.  
23 p4144 A69-41568

**BOURY, A.**

Vibrational instability of massive stars and helium formation /Instabilite vibrationnelle des etoiles massives et formation d'helium/.  
08 p1401 A69-20895

Solar abundances of some representative elements from the standpoint of nucleosynthesis /Abondances solaires de quelques elements representatifs au point de vue de la nucleosynthese/.  
08 p1402 A69-20906

**BOUSKA, J.**

Electromagnetic solar-terrestrial events between February 5-9, 1965.  
01 p0156 A69-11120

**BOUTEILLE, D.**

Comparative study of electric, electronic, and fluidic logic circuits /Etude comparative des circuits logiques electriques, electroniques et fluidiques/.  
04 p0583 A69-15083

**BOUTELANT, P.**

Wideband uncooled parametric amplifiers with very low noise temperature /Amplificateurs parametriques large bande non refroidis a tres basse temperature de bruit/.  
07 p1099 A69-18463

**BOUTELIER, C.**

Heat tolerance in the case of ventilation failure in a supersonic transport aircraft /Tolerance a la chaleur dans le cas de panne de la climatisation sur avion de transport supersonique/.  
24 p4277 A69-43382

**BOUTELIER, CH.**

Influence of altitude on human heat exchange /Influence de l'altitude sur les echanges thermiques de l'homme/.  
24 p4267 A69-43384

**BOUTES, J.**

The second TACITE test /Der zweite Tacite- Versuch/.  
11 p1887 A69-25213

**BOUVET, J.**

Project Symphonie /Le Projet Symphonie/.  
05 p0830 A69-16817

**BOUVIER, M. J., JR.**

An approach to adaptive threshold detection.  
11 p1839 A69-25297

**BOVA, N. T.**

Electrically controlled phase shifter in the microwave range /Elektricheski upravliaemy fazovrashchatel' SVCh diapazona/.  
03 p0408 A69-13987

**BOVINA, T. A.**

Destruction of carbides and their compositions at high temperatures in a chemically active gas stream /O razrushenii karbidov i ikh kompozitsii pri vysokikh temperaturakh v potoke khimicheskii aktivnykh gazov/.  
21 p3751 A69-38640

**BOVKUN, G. A.**

Increasing the wear resistance of light alloys.  
10 p1711 A69-23339

**BOVKUN, V. P.**

Universal automatic device for measuring impedances and complex transmission factors at meter and decimeter wavelengths /Universalny avtomaticheskii pribor dlia izmereniia impedansov i kompleksnykh koeffitsientov peredachi v diapazone metrovykh i dekametrovykh radiovoln/.  
13 p2235 A69-28520

**BOVSHEVEROV, V. M.**

Acoustical thermometer-interferometer for temperature measurements in the stratosphere /Akusticheskii

termometr-interferometr dlia izmereniia temperatury v stratosfere/.  
03 p0429 A69-13269

An acoustic thermometer-interferometer for measuring temperatures in the stratosphere.  
14 p2445 A69-28777

**BOWDEN, L. W.**

Remote sensing of urban environments.  
12 p2193 A69-27012

Making color infrared film a more effective high-altitude remote sensor.  
15 p2609 A69-30457

**BOWDEN, M.**

Effect of a radial barrier on the convective flow in a rotating fluid annulus.  
02 p0275 A69-12013

**BOWDEN, R. L.**

Solution of the equations of radiative transfer in a free-electron atmosphere.  
03 p0466 A69-13351

**BOWELL, E.**

The planet Mars - The nature of its surface and the properties of its atmosphere according to the polarization of its light. II - The nature of the soil of the planet mars /La planete Mars - La nature de sa surface et les proprietes de son atmosphere, d'apres la polarisation de sa lumiere. II - La nature du sol de la planete Mars/.  
16 p2855 A69-31660

**BOWEN, C. W.**

Producibility of helicopter power transmission systems.  
[SAE PAPER 680675] 03 p0433 A69-13450

**BOWEN, E. G.**

The Anglo-Australian 150-inch telescope.  
03 p0411 A69-13466

**BOWEN, I. S.**

Lever support systems. II - Optical tests and adjustments of the 200-inch Hale telescope.  
12 p2057 A69-26411

**BOWEN, J. I.**

A comparison of optical receivers for deep space communications.  
03 p0389 A69-13194

**BOWEN, J. R.**

An appraisal of the continuous explosion laser.  
19 p3336 A69-36360

**BOWER, G. M.**

Resins and reinforced plastic laminates for continuous use at 650 deg F. III.  
07 p1171 A69-19545

**BOWER, M. E.**

Aeromagnetic profiles across the Reykjanes ridge southwest of Iceland.  
04 p0592 A69-14660

**BOWER, R. W.**

MOS field effect transistors formed by gate masked ion implantation.  
05 p0734 A69-16563

**BOWERS, A. W.**

Man-computer interactive programming concepts and system.  
[AIAA PAPER 69-955] 22 p3905 A69-40337

**BOWERS, E.**

Fluid equations for a collisionless plasma including finite ion Larmor radius and finite beta effects.  
08 p1368 A69-20802

**BOWERS, E. J., JR.**

Dynamics of RAE satellite boom deployment.  
07 p1228 A69-18346

Optimization of RAE satellite boom deployment timing.  
[AIAA PAPER 69-920] 21 p3821 A69-39350

**BOWERS, J. E.**

The prevention of fretting fatigue in aluminium alloys.  
09 p1526 A69-22148

**BOWERS, M. T.**

Kinetic analysis of the ion-molecule reactions in nitrogen-hydrogen mixtures using ion cyclotron resonance.  
12 p2131 A69-25985

Analysis of the ion-molecule reactions in gaseous H sub 2, D sub 2, and HD by ion cyclotron resonance techniques.  
20 p3578 A69-36934

Energy-level iterative NMR method for sets of magnetically nonequivalent, chemical-shift equivalent nuclei.  
20 p3579 A69-37348



**BOWHILL, S. A.****BOWHILL, S. A.**

Minor atmospheric constituents and the ion composition of the E-region.

05 p0757 A69-16408

Ion chemistry of the D- and E-regions - A survey for Working Group 11 of the Inter-Union Commission on Solar- Terrestrial Physics.

14 p2439 A69-29111

Effects of background winds on atmospheric gravity waves.

18 p3128 A69-34801

Theory of ion collection by a stationary electrostatic probe.

18 p3128 A69-34804

**BOWIE, J. L.**

Practical limitations to the ranging accuracy achievable with a modulated CW laser.

21 p3739 A69-39457

**BOWKER, D. E.**

Investigations of the unique memory properties of 55-Nitinol alloy.

19 p3340 A69-35523

**BOWLES, G. L.**

Changes in acid-base balance induced by 100 percent gradient headward acceleration.

09 p1444 A69-22540

**BOWLEY, C. J.**

Satellite snow surveillance - A down-to-earth use of space technology.

18 p3167 A69-35084

**BOWLEY, W. W.**

Trajectory and spreading of a turbulent jet in the presence of a crossflow of arbitrary velocity distribution. [ASME PAPER 69-GT-33]

09 p1483 A69-22491

**BOWLING, A. G.**

Economics of failure - Management influence.

24 p4416 A69-42777

**BOWLING, T. S.**

Investigations of positive-ion composition and temperature /Experiment S.45/ and electron density and temperature /Experiment S.44/.

13 p2253 A69-27753

**BOWMAN, C. D.**

Threshold photoneutron cross section for Mg super 26 and a source of stellar neutrons.

21 p3788 A69-38599

**BOWMAN, C. T.**

Chemiluminescence in the high-temperature oxidation of methane.

06 p0885 A69-17937

Application of kinetics calculations to the interpretation of shock tube data. [WSCI PAPER 68-50]

07 p1073 A69-18319

Ignition mechanisms of hydrocarbon fuels - Methane and acetylene. [WSCI PAPER 68-41]

07 p1240 A69-18356

**BOWMAN, G. G.**

The nature of spread-F irregularities in Antarctica.

04 p0595 A69-15439

Ionization troughs below the F2-layer maximum.

16 p2775 A69-32080

**BOWMAN, G. H.**

Basic studies on Hirudo medicinalis for a space experiment. II.

24 p4268 A69-43403

**BOWMAN, H. F.**

The influence of nuclear radiation on pool-boiling heat transfer to liquid helium. [ASME PAPER 68-WA/PID-3]

05 p0791 A69-16164

**BOWMAN, J. E.**

Cylindrical afterbodies at M sub infinity equals 2 with hot gas ejection.

02 p0190 A69-12533

**BOWMAN, J. J.**

Effects of absorbers.

03 p0384 A69-12908

On the electromagnetic inverse scattering problem.

05 p0719 A69-15929

**BOWMAN, M. R.**

Atmospheric sodium measured by a tuned laser radar.

09 p1484 A69-21464

**BOWMAN, R. M.**

Improvements in design of thin-film heat transfer gages for a low-pressure shock tube.

18 p3117 A69-34470

**BOWMAN, R. W.**

Electron microscopy of canine cerebellar Purkinje cells after rapid decompression to a near-vacuum.

21 p3660 A69-39177

**BOWMAN, W. C.**

Effect of temperature on microcircuit radiation response.

06 p0977 A69-16881

Models for predicting transient radiation responses in microcircuits.

06 p0977 A69-16887

**BOWYER, C. S.**

Intensity of the soft X-ray background flux.

21 p3788 A69-38541

**BOWYER, M. P.**

Deformation of thermoplastics under different types of tensile loading.

10 p1716 A69-22942

**BOXER, E.**

A method for predicting the performance of high reaction supersonic compressor blade sections. [AIAA PAPER 69-522]

16 p2843 A69-32711

**BOYADJIEV, G.**

Asymptotic solutions of nonlinear systems of differential equations with slowly changing parameters of great resistivity.

06 p0947 A69-17392

**BOYCE, W. M.**

Selenodetic implications of mascons.

17 p3028 A69-32922

**BOYD, C. R., JR.**

Application of reciprocal latching ferrite phase shifters to lightweight electronic scanned phased arrays.

04 p0572 A69-14320

Theory of the suppressed-rotation reciprocal ferrite phase shifter.

06 p0896 A69-17484

**BOYD, D. E.**

Finite, inelastic deformations of clamped shell membranes subjected to impulsive loadings.

09 p1616 A69-21939

Analysis of open noncircular cylindrical shells.

13 p2365 A69-28248

**BOYD, G. D.**

Up-conversion of 10.6 mu radiation to the visible and second harmonic generation in HgS.

01 p0089 A69-10180

Infrared detection by optical mixing.

10 p1704 A69-23656

**BOYD, G. M.**

Doppler observations of associated ionospheric and magnetic fluctuations.

20 p3535 A69-38194

**BOYD, J. E.**

Quantitative metallography of dispersion-strengthened alloys from extraction replicas - Volume fraction and interparticle spacing.

13 p2282 A69-28167

**BOYD, J. S.**

Spatial relationships between HF radar aurora, optical aurora and electron precipitation.

06 p0918 A69-17383

**BOYD, K. E.**

Design of vapor turbines including effects of super-saturation.

23 p4187 A69-42251

**BOYD, R. L. F.**

Preliminary study of a new charge image detector.

02 p0248 A69-11822

Positive ions in the topside ionosphere.

03 p0424 A69-13806

United Kingdom space science in the 1970s.

06 p0997 A69-16853

Langmuir probes on spacecraft.

08 p1316 A69-20474

**BOYD, W. K.**

An electrochemical study of the mechanism of stress corrosion cracking in an aluminum-zinc-magnesium alloy.

19 p3351 A69-36899

Stress corrosion cracking of titanium and its alloys.

19 p3351 A69-36900

**BOYD, W. W.**

Free vibrations of semi-infinite multilayer composite cylinders.

22 p4044 A69-40559

**BOYER, E. L.**

A plasma scanner and data processing system for current-voltage curves.

14 p2450 A69-29568

**BOYER, G.**

Micromachining with a laser beam /Micro-usinage par faisceau laser/.

08 p1324 A69-19980

**BOYER, J. H.**

Nitrosoazomethine derivatives - Oxidation of amidoximes.

10 p1651 A69-23305

The formation of 3,6-diphenylpyridazine and 2,5-diphenylpyrrole from alpha-styryl azide.

10 p1651 A69-23305

Photolysis of vic-triazoles.

19 p3264 A69-35971

Rearrangements involving nitrene intermediates.

20 p3484 A69-37485

Methods of formation of the nitroso group and its reactions.

20 p3484 A69-37486

**BOYER, R.**

Observation of profiles and asymmetries of Fraunhofer lines /Observation des profils et des dissymetries des raies de Fraunhofer/.

21 p3795 A69-38467

**BOYER, R. R.**

Relationship between composition, microstructure, and stress corrosion cracking /in salt solution/ in titanium alloys.

20 p3557 A69-36961

**BOYER, T. H.**

Derivation of the blackbody radiation spectrum without quantum assumptions.

22 p3982 A69-41001

**BOYKIN, W. H., JR.**

Attitude control of stable and unstable satellites in elliptic orbits.

21 p3804 A69-39020

**BOYLAN, D. E.**

Simulation of the Apollo command module aerodynamics at high altitudes.

12 p2012 A69-26800

**BOYLE, W. J.**

Straight-in and straight-out.

01 p0057 A69-11356

**BOYNTON, F. P.**

Numerical computation of steady, supersonic, two-dimensional gas flow in natural coordinates.

10 p1679 A69-23595

**BOYS, J. T.**

Measurements of the coherence ratio of ionospherically propagated radio waves.

01 p0032 A69-10967

Statistical variations in the apparent specular component of ionospherically reflected radio waves.

01 p0032 A69-10968

Differential absorption measurements by a phase difference technique.

12 p2032 A69-26857

**BOZEC, P.**

Influence of thermal conduction on the performance of a thin-film infrared-image receiver - The absorption-edge image transformer /Influence de la conduction thermique sur les performances d'un recepteur d'image infrarouge a couches minces - Le transformateur d'image a bord d'absorption/.

04 p0631 A69-15280

**BOZHINSKII, A. N.**

Buckling of an elastic rod under a dynamic load /O vypuchivani uprugogo sterzhnia pri dinamicheskom nagruzenii/.

04 p0679 A69-14926

**BOZHKO, S. A.**

Study of recrystallization during sintering of powders of niobium and titanium carbides /Issledovanie rekristallizatsii pri spekanii poroshkov karbidov niobia i titana/.

22 p3970 A69-40636

**BOZZONI, E.**

An analysis of the performance of the oscillating limiter driven by FM signals corrupted by noise.

14 p2413 A69-29497

**BRAASCH, D.**

Determination of blood viscosity in vitro with a microglass fiber viscosimeter.

23 p4098 A69-42100

- BRABERS, M. J.**  
Design and characteristics of an actinium fueled thermionic generator.  
14 p2399 A69-29192
- BRACALE, M.**  
Broadband light modulators design.  
11 p1897 A69-25039
- BRACCESI, A.**  
Modern problems of relativistic astrophysics /Problemi moderni di astrofisica relativistica/.  
08 p1388 A69-20222  
An iris photometer of new design.  
16 p2790 A69-32225  
The Italian cross radio telescope. III - Operation of the telescope.  
19 p3295 A69-36643
- BRACE, L. H.**  
Langmuir probe evidence for a nocturnal ionization source at Fort Churchill.  
03 p0502 A69-14008  
Measurements of electron cooling rates in the mid-latitude and auroral-zone thermosphere.  
05 p0755 A69-16267  
Conflicting electron temperature measurements in the upper F region.  
05 p0756 A69-16283  
Radar backscatter and rocket probe measurements of electron temperature above Arcibo.  
11 p1951 A69-25162  
Thermal structure of an Alouette 2 topside profile as deduced from rocket measurements.  
14 p2510 A69-28942  
Electron measurements bearing on the energy and particle balance of the upper F region.  
16 p2848 A69-31975  
Ionospheric and magnetic observations at 1000 kilometers during the geomagnetic storm and aurora of May 25-26, 1967.  
18 p3129 A69-34954  
Cylindrical electrostatic probes employed on Alouette II and Explorer XXXI satellites.  
20 p3544 A69-37876  
Comparison of cylindrical electrostatic probe measurements on Alouette II and Explorer XXXI satellites.  
20 p3544 A69-37877  
Comparison of results of Explorer XXXI direct measurement probes.  
20 p3531 A69-37882  
Response of the 1000-kilometer ionosphere to magnetic storms.  
23 p4161 A69-42438  
Latitudinal observations of the thermal balance in the nighttime protonosphere.  
24 p4310 A69-43181
- BRACEWELL, R. N.**  
The microwave sky.  
08 p1407 A69-21125  
The occulting disk of the sun at radio wavelengths.  
09 p1607 A69-22432
- BRACH, R. M.**  
Optimum design of beams for sudden loading.  
04 p0674 A69-14590
- BRACHET, G.**  
Numerical analysis of the asymptotic solution for earth-to-moon trajectories.  
16 p2857 A69-32155
- BRACKEN, J.**  
Selected Applications of Nonlinear Programming.  
04 p0621 A69-14362
- BRACKHAGE, H.**  
Numerical treatment of the lifting-surface equation /Zur numerischen Behandlung der Tragflaechen-gleichung/.  
01 p0008 A69-11298
- BRACKNEY, R. C.**  
An ultra-linear voltage controlled oscillator with crystal oscillator stability.  
01 p0042 A69-10418
- BRADBURY, J. N.**  
The absence of the hydrogen emission /H beta/ in the westward traveling surge.  
18 p3130 A69-35189
- BRADBURY, R. A.**  
Color centers and ruby laser output energy degradation.  
02 p0256 A69-12358  
Color centers and ruby-laser output-energy degradation.  
16 p2795 A69-31697
- BRADDOCK, C. E.**  
Producibility of helicopter power transmission systems.  
[SAE PAPER 680675] 03 p0433 A69-13450
- BRADFORD, J. N.**  
Compensating for pump-induced distortion in glass laser rods.  
04 p0609 A69-14286
- BRADING, K. F.**  
Direct plotting of vibrating wire strain gauge data.  
08 p1312 A69-20104
- BRADLEY, C. C.**  
Quantum effects in cyclotron resonance using a CW hydrogen-cyanide laser.  
[IEEE PAPER C-6] 07 p1150 A69-19051  
Transient phenomena in the 337-mu M maser.  
17 p2981 A69-33088
- BRADLEY, D. J.**  
Subpicosecond structure in Nd-glass laser relaxation oscillations.  
06 p0938 A69-18231  
Characteristics of organic dye lasers as tunable frequency sources for nanosecond absorption spectroscopy.  
[IEEE PAPER A-3] 07 p1150 A69-19047
- BRADLEY, D. M.**  
The systems approach to test evaluation.  
05 p0742 A69-15803
- BRADLEY, E. F.**  
Jet engine materials for the 1970's.  
09 p1523 A69-22061
- BRADLEY, E. S.**  
Passenger transport at low supersonic speeds.  
[AIAA PAPER 69-776] 19 p3244 A69-35647
- BRADLEY, J. H. S.**  
Some practical aspects of overrelaxation in diagnostic and forecast calculations.  
03 p0458 A69-13033
- BRADLEY, J. N.**  
A mass spectrometric study of the ethylene oxide-oxygen flame.  
11 p1831 A69-24478
- BRADLEY, J. V.**  
Effect of gloves on control operation time.  
10 p1648 A69-23180  
Glove characteristics influencing control manipulability.  
10 p1648 A69-23181  
Desirable dimensions for concentric controls.  
17 p2916 A69-34005  
Optimum knob crowding.  
17 p2916 A69-34006  
Optimum knob diameter.  
21 p3664 A69-38969  
Utilization of multiple cues in paired comparisons.  
21 p3664 A69-38970
- BRADLEY, P. T.**  
Model atmospheres for O-type stars with ultraviolet line blanketing.  
15 p2693 A69-30778
- BRADNER, H.**  
An improved vertical sensor.  
14 p2450 A69-29570
- BRADSHAW, F. J.**  
A study of crack tip deformation and a derivation of fracture energy.  
10 p1709 A69-23056  
Fatigue crack propagation in clad RR58 sheet to DTD 5070A - Analysis and correlation of test results.  
13 p2280 A69-27835
- BRADSHAW, P.**  
The analogy between streamline curvature and buoyancy in turbulent shear flow.  
11 p1870 A69-24894  
Special topics in turbulent flows.  
11 p1871 A69-25017  
A note on reverse transition.  
11 p1873 A69-25134
- BRADSHAW, P. D.**  
Silicon transistor I sub CE sub 0 characteristics on a curve tracer.  
05 p0734 A69-16569
- BRADT, H.**  
X-ray and optical observations of the pulsar NP 0532 in the Crab Nebula.  
15 p2679 A69-31529
- BRADT, H. V.**  
Low-energy X-ray spectra of SCO X-1 and four Sagittarius sources.  
09 p1574 A69-21460  
Chemical composition of primary cosmic rays at 10 super 15 ev.  
13 p2326 A69-27464  
Interstellar absorption of 10-angstrom X-rays.  
21 p3788 A69-38648
- BRADY, F. B.**  
Displays.  
18 p3170 A69-34858
- BRADY, J. F.**  
Optokinetic reflex responses to cross-coupled gyroscopic stimuli.  
14 p2409 A69-29300
- BRADY, J. G.**  
Precision studies of ASTM thermal conductivity test for refractories.  
22 p3956 A69-40671
- BRADY, M. M.**  
Rectangular waveguide-to-coax line transitions - 1968.  
16 p2757 A69-31584
- BRAECKELMANN, W.**  
Waveguide connections for right-angled waveguides /Hohlleiterverbindungen fuer Rechteckhohlleiter/.  
11 p1855 A69-25623
- BRAENDLI, G.**  
Mechanical effects in type II superconductors.  
02 p0294 A69-11776
- BRAFF, R.**  
VLF multirange navigation errors.  
14 p2478 A69-29484
- BRAGA-ILA, A.**  
Transmitted power maximization in communication satellites.  
[AIAA PAPER 68-437] 09 p1442 A69-21990
- BRAGA-ILLA, A.**  
Orbit determination from the satellite.  
12 p2159 A69-26778  
Automatic satellite station-keeping.  
21 p3805 A69-39213  
Preliminary report on the orbital operation of the automatic stationkeeping system of LES-6.  
[AIAA PAPER 69-934] 21 p3824 A69-39428
- BRAGG, G. M.**  
The turbulent boundary layer in a corner.  
14 p2431 A69-29576  
Laminar corner boundary layers with suction.  
21 p3696 A69-39578
- BRAGG, L. R.**  
Fundamental solutions and properties of solutions of the initial value radial Euler- Poisson-Darboux problem.  
09 p1533 A69-22796
- BRAGG, R. H.**  
Crystal structure of vapor-deposited boron filaments.  
02 p0268 A69-12405
- BRAGG, V. C.**  
Audiometer modification and pulse-tone technique for pure-tone threshold determination.  
06 p0882 A69-17836
- BRAGINSKII, S. I.**  
Spherical analyses of the geomagnetic field from angular data and an extrapolated value of the dominant Gaussian coefficient /Sfericheskie analizy geomagnit-nogo polia po uglovym dannym i ekstrapolirovannomu znacheniiu dominant Gaussian coefficient/.  
23 p4157 A69-41866
- BRAHINSKY, H. S.**  
Effects of chemical nonequilibrium, mass transfer, and viscous interaction on spherically blunted cones at hypersonic conditions.  
[AIAA PAPER 69-168] 06 p0862 A69-18047
- BRAIER, A.**  
Composition of collinear oscillations with amplitude modulation.  
02 p0281 A69-12252
- BRAILOVSKAIA, I. IU.**  
Difference schemes for the solution of the Navier-Stokes equations /Review/ /Raznostnye metody resheniia uravnenii Nav'e-Stoksa /obzor//.  
03 p0415 A69-13650
- BRAINARD, W. A.**  
The influence of ordering on the friction and wear of metals in vacuum.  
18 p3149 A69-35183



**BRAINE, M. R.**

The siting of station earths for telecommunication installations. 07 p1117 A69-19348

**BRAINES, S. N.**

Problems of Neurocybernetics and Neurobionics /Problemy neirokibernetiki i neirobioniki/. 19 p3263 A69-36747

**BRAININ, S. M.**

Optimal biased proportional navigation. 02 p0278 A69-11973

**BRAININA, I. S.**

Amplitude correlation of frequency diversity signals in two-path short wave channels. 04 p0560 A69-15401

Carrying capacity of a two-beam short-wave channel with slow fading /O propusknnoi sposobnosti dvukhluchevogo KV kanala s medlennymi zamiraniiami/. 15 p2562 A69-30115

**BRAKE, C. M.**

Some experiences with the routine electrocardiogram in the medical certification of pilots. 19 p3263 A69-36462

Complete left bundle branch block in asymptomatic airmen. 19 p3263 A69-36463

**BRALEY, R. C.**

Inelastic scattering calculations with Wood-Saxon Hartree-Fock wave functions. 14 p2504 A69-29006

Core polarization effects in inelastic scattering. 14 p2487 A69-29007

E2 transition rates for super 20 Ne. 18 p3177 A69-35166

Inelastic scattering calculations with projected Hartree-Fock wave functions. 22 p3988 A69-41045

**BRAMANTI, M.**

Some experiments on microwave dispersion lines /Alcuni esperimenti sulle linee dispersive alle microonde/. 14 p2412 A69-29395

A tapered waveguide-to-waveguide adapter. 14 p2423 A69-29760

Dispersive quadrupole design using digital methods /Sul progetto di quadrupoli dispersivi mediante metodi numerici/. 19 p3287 A69-36740

**BRAMBLE, J. H.**

On the convergence of difference approximations to weak solutions of Dirichlet's problem. 18 p3164 A69-34840

**BRAMFITT, B. L.**

A study of directionally transformed pearlite. 13 p2281 A69-28158

**BRAMLEY, E. N.**

Electric field effects in the middle-latitude F-region. 22 p3941 A69-40917

**BRAMMELL, H. L.**

Two electronic stethoscopes for use in high noise level environments. 21 p3667 A69-39444

**BRANCAZIO, P. J.**

Relation between nuclear level density parameters and mass shell. 14 p2488 A69-29337

**BRANCH, M. C.**

Nonequilibrium combustion effects on propellant performance with equilibrium, kinetic, and frozen nozzle flow. [AIAA PAPER 69-469] 16 p2832 A69-32659

**BRANCHER, J. C.**

Evolution of the boundary layer in the vicinity of the walls of a magnetoaerodynamic generator /Evolution de la couche limite au voisinage des parois d'un generateur magnetoaerodynamique/. 13 p2309 A69-28025

Results of tests on a supersonic magnetoaerodynamic conversion rig /Resultats d'essais sur banc de conversion magnetoaerodynamique supersonique/. 13 p2311 A69-28034

**BRANCHFLOWER, G. A.**

A review of the image dissector meteorological cameras and a view of their future. 18 p3137 A69-35101

**BRAND, A.**

Increased accuracy of a "dual inertia" flutter correcting magnetic tape recorder/reproducer. 10 p1693 A69-23289

**BRAND, F. A.**

Photon-induced current changes in a CO sub 2 laser amplifier. 23 p4172 A69-41398

**BRAND, F. R.**

Histology of papillary muscles of the left ventricle in myocardial infarction. 24 p4261 A69-42724

**BRAND, G. F.**

Hydrogen plasma decay measured by double microwave interferometer. 04 p0600 A69-15024

**BRAND, H.**

Limits of the n-port concept in microwave technology /Grenzen des n-Port-Begriffs in der Mikrowellentechnik/. 11 p1841 A69-25624

**BRAND, R. S.**

Turbulent-flow-excited vibration of a simply supported, rectangular flat plate. 07 p1236 A69-19461

Variational principles for steady heat conduction with mixed boundary conditions. 16 p2880 A69-32378

**BRANDENBURG, L. H.**

Stability properties of shaping filters. 21 p3688 A69-39661

**BRANDEWIE, D. M.**

STOL/VTOL aircraft characteristics, terminal navigation and air traffic control. [SAE PAPER 680666] 03 p0465 A69-13452

**BRANDHORST, H. W., JR.**

Impurity profile and energy band diagram for the Cu sub 2 S-CdS heterojunction. 03 p0368 A69-13075

Effect of bias light on the spectral response of Cu sub 2 S-CdS cells. 05 p0808 A69-16358

High photovoltages in cadmium sulfide films. 06 p0980 A69-17772

**BRANDI, G.**

CO sub 2 washout during hyperventilation in man. 22 p3885 A69-40975

**BRANDIE, G. W.**

Parkes 2134 plus 004 - A quasi-stellar object with a very unusual radio spectrum. 07 p1224 A69-19708

**BRANDIN, V. N.**

Optimum approximation of the realizations of a random process. 09 p1475 A69-22667

**BRANDKAMP, W.**

Laser-induced Teflon char. 24 p4336 A69-43266

**BRANDON, D. G.**

A versatile uniaxial tensile testing machine. 22 p3926 A69-40441

**BRANDON, W. T.**

International satellite system for aircraft communications and air traffic control. 03 p0464 A69-13238

**BRANDT, A.**

Asymptotic approach to Hartmann-Poiseuille flows. 12 p2138 A69-26626

One-dimensional combustor optimization. [AIAA PAPER 68-644] 19 p3448 A69-35943

**BRANDT, G. B.**

Hologram projection on curved image planes. 11 p1889 A69-25653

Image plane holography. 23 p4164 A69-41627

**BRANDT, J. C.**

The Atmospheres of Venus and Mars. 02 p0318 A69-12101

The lower atmosphere of Mars - A progress report. 02 p0319 A69-12104

OSO-III - Preliminary scientific results. 09 p1578 A69-22167

Messier 87 - The galaxy of greatest known mass. 15 p2695 A69-30883

Interplanetary gas. XVI. 18 p3186 A69-34301

**BRANDT, P. B.**

Comparison of the ablation performance of asbestos phenolic with silica phenolic in the CAL wave superheater. 12 p2119 A69-26814

**BRANDT, P. N.**

Frequency spectra of solar image motion. 17 p3029 A69-33047

**BRANDT, S. M.**

Atmospheric exposure of light metals. 01 p0100 A69-11353

**BRANDT, V. E.**

Phase photoelectric device recordings of times of star transits. 04 p0601 A69-15252

**BRANDT, W.**

Band-gap effects in the stopping of Ge super 72 atoms in germanium. 01 p0140 A69-11245

**BRANNEN, E.**

Linearly polarized monochromatic radiation from a water-vapor laser at 118.6 microns. 10 p1702 A69-23160

Far-infrared gas lasers as sources of linearly polarized radiation. 23 p4172 A69-41400

**BRANNEN, J. P.**

Non-iterative solutions to functional equations. 15 p2644 A69-30424

**BRANNON, P. J.**

An extension of Tsao and Curnutte's line broadening calculations. 04 p0633 A69-15231

**BRANOVER, G. G.**

Development of a single semiempirical theory of turbulent flows in tubes situated in a magnetic field /O postroenii edinoi poluempiricheskoi teorii turbulentnykh techenii v trubakh, nakhodiaschikhsia v magnitnom pole/. 01 p0130 A69-10769

Stabilization of a plane-parallel flow in a transverse magnetic field /eksperimental'nye rezultaty/. 01 p0130 A69-10770

Experimental study of turbulence suppression by a transverse magnetic field in tubes with a special configuration /Eksperimental'noe issledovanie podavleniya turbulentnosti poperechnym magnitnym polem v trubakh spetsial'noi konfiguratsii/. 07 p1192 A69-19016

The application of Pitot and Prandtl tubes in magnetohydrodynamic experiments. 10 p1727 A69-23100

Transition criteria and turbulent flows in MHD channels /Kriterii perekhoda i turbulentnye techenia v magnitogidrodinamicheskikh kanalah/. 13 p2307 A69-27500

Turbulent Hartmann flow /Turbulentnoe Gartmanovo techenie/. 14 p2500 A69-29908

Turbulent Hartmann flow between rough walls /Turbulentnoe gartmanovo techenie mezhdu sherokhovatyimi stenkami/. 22 p3989 A69-40255

**BRANSCOMB, L. M.**

The Physics of Electronic and Atomic Collisions, Proceedings of the Fifth International Conference, Leningrad, USSR, July 17-23, 1967. 07 p1186 A69-19651

The role of atomic collision processes in astrophysics. 07 p1224 A69-19653

Sunlight photodetachment rate of ground state O sub 2 super minus. 16 p2848 A69-31973

**BRANTLEY, L. W.**

25 kwe reactor-thermoelectric power system for manned orbiting space stations. 23 p4187 A69-42256

**BRANTON, D.**

Gas vacuole development in a blue-green alga. 10 p1644 A69-23184

**BRASHEAR, R. E.**

Plasma histamine levels and cardiovascular effects after compound 48/80. 22 p3873 A69-40206

**BRASHEARS, S. S.**

Effects of electric fields on annealing of radiation damage in MOSFET's. 05 p0733 A69-16562

Investigation of radiation damage in MOSFETs using bias-temperature treatments. 06 p0976 A69-16877

- BRASKI, D. N.**  
Ultrahigh vacuum electron microscope.  
04 p0599 A69-15016
- BRASS, E. A.**  
A guide for the care of mechanical design engineers.  
17 p3077 A69-34198
- BRASWELL, D. W.**  
Scattered light photoelastic thermal stress analysis of a solid-propellant rocket motor.  
[AIAA PAPER 68-512] 02 p0345 A69-12371
- BRASWELL, R. N.**  
Tolerance limits for an uncertain requirements vector in LP.  
[AAS PAPER 69-079] 24 p4340 A69-42821
- BRATICHUK, M. V.**  
Estimate of the possible error in determining the position of a satellite due to the instability of the earth's atmosphere /Otsenka vozmozhnoi oshibki v opredelenii polozheniia ISZ, vyzvannoi nestabil'nost'iu zemnoi atmosfery/.  
12 p2158 A69-26445
- BRATKOVICH, N. F.**  
Weldability of low alloy steels heat treated after welding.  
12 p2100 A69-25827
- BRATT, J. M.**  
Carbohydrate components of Paleozoic plants.  
21 p3669 A69-39333  
Carbohydrate components of upper carboniferous plant fossils from Radstock, England.  
21 p3661 A69-39534
- BRATTENG, O. M.**  
A feature of the polar F-region.  
18 p3126 A69-34257
- BRATUKHIN, IU. K.**  
Equilibrium figures of a rotating liquid cylinder.  
14 p2428 A69-28816
- BRAU, C. A.**  
Energy transfer in near-resonant molecular collisions due to long-range forces with application to transfer of vibrational energy from nu sub 3 mode of CO sub 2 to N sub 2.  
08 p1358 A69-21011
- BRAUDE, A. Z.**  
Approximate construction of optimal transfers in a near neighborhood of a circular orbit /Priblizhennoe postroenie optimal'nykh pereletov v maloi okrestnosti krugovoi orbity/.  
19 p3427 A69-36612
- BRAUDE, B. V.**  
Possibility of tuning two-mirror antennas in the near zone /O vozmozhnosti nastroiki dvukhzerkal'nykh anten v blizhnei zone/.  
06 p0895 A69-17462  
Possibility of adjustment of double-reflector antennas in the near zone.  
20 p3508 A69-37945
- BRAUDE, S. IA.**  
Anomalies in the spectra of cosmic radioemission sources in the decameter band.  
06 p1004 A69-17538  
Frequency spectra of certain discrete sources in the decameter wave range /Chastotnye spektry nekotorykh diskretnykh istochnikov v oblasti dekametrovnykh voln/.  
12 p2167 A69-27041  
Decametric radio astronomy /Dekametrovaia radioastronomiia/.  
15 p2682 A69-30501  
The spectra of discrete radio sources at decametric wavelengths. I, II.  
18 p3200 A69-35134
- BRAUENINGER, K. F.**  
Heavy press extrusions of light metals.  
04 p0604 A69-14526
- BRAUER, J. R.**  
Cutoff-coupled microwave filters.  
09 p1466 A69-22447
- BRAULT, R. G.**  
Hologram recording on photopolymer materials.  
13 p2258 A69-27199
- BRAUMAN, J. I.**  
Gas-phase acidities of alcohols - Effects of alkyl groups.  
19 p3265 A69-36289  
Gas-phase acidities of carbon acids.  
19 p3265 A69-36291  
Gas-phase acidities of amines.  
19 p3265 A69-36293
- BRAUN, C. A.**  
ORS discrimination from noisy electrocardiograms.  
21 p3667 A69-39442
- BRAUN, E.**  
Reliability - Intrinsic or afterthought.  
[AIAA PAPER 69-476] 16 p2795 A69-32771
- BRAUN, G. S.**  
A gas/oil seal system for closed-cycle turbomachinery in a nuclear power plant.  
13 p2268 A69-27367
- BRAUN, J.**  
A supercritical thermodynamic power cycle with MHD generator.  
16 p2736 A69-31914
- BRAUN, M.**  
Combined time-consumption optimization of a linear oscillator /Kombinierte Zeit- Verbrauchsoptimierung eines linearen Schwingers/.  
10 p1666 A69-22919
- BRAUN, S. M.**  
Structural changes in chromium during creep /Strukturnye izmeneniia v khrome pri polzuchesti/.  
18 p3160 A69-35453
- BRAUNWARTH, C. A.**  
U.S. Space Program projections.  
02 p0355 A69-11744  
Technology flow for future space activities.  
[AAS PAPER 69-494] 24 p4380 A69-42840
- BRAVERMAN, M. I.**  
Influence of the test conditions on the state of the surface layer of nozzle guide vanes /Vliianie uslovii ispytaniia na sostoiianie poverkhnostnogo sloia lopatok soploвого apparata/.  
20 p3561 A69-37370
- BRAVERMAN, N.**  
Separation assurance over the North Atlantic.  
08 p1349 A69-21200  
VLF multirange navigation errors.  
14 p2478 A69-29484
- BRAY, A. D.**  
Emission of radio pulses from cosmic ray extensive air showers.  
21 p3792 A69-39614
- BRAY, K. N. C.**  
Chemical kinetic studies in shock tubes.  
11 p1863 A69-25015  
Steady expansion of shock-heated gases for recombination studies.  
18 p3228 A69-34466
- BRAY, M.**  
The Thomas wave equation and fluid mechanics /Equation d'onde de Thomas et mecanique des fluides/.  
20 p3598 A69-37430
- BRAY, R.**  
Flux-dependent aspects of the evolution of acoustoelectric domains in n-GaAs.  
05 p0806 A69-15815
- BRAY, R. J.**  
High-resolution photography of the solar chromosphere. IV.  
03 p0515 A69-14038
- BRAY, W. J.**  
Basic communication sciences.  
06 p0885 A69-16856
- BRAYBROOK, L. J.**  
Satellites and ocean platforms for civil aviation operations over the North Atlantic.  
[UN PAPER 68-95887] 01 p0113 A69-10521
- BRAYER, K.**  
The improvement of digital HF communication through coding. I - Interleaved cyclic coding.  
10 p1655 A69-23529  
The improvement of digital HF communication through coding. II - Tandem interleaved cyclic coding.  
10 p1655 A69-23530
- BRAZHNIKOVA, E. F.**  
Acceleration of the galactic motion of stars /Ob uskorenii galakticheskogo dvizheniia zvezd/.  
20 p3608 A69-38046
- BRAZIER-SMITH, P. R.**  
Numerical computations of the dynamics of the disintegration of a drop situated in an electric field.  
23 p4151 A69-41694
- BRDLIK, P. M.**  
Heat and mass transfer in a binary turbulent boundary layer /K voprosu teplo- i massoobmena v binarnom turbulentnom pogranchnom sloe/.  
13 p2378 A69-28311
- Heat and mass transfer in a binary laminar boundary layer during natural convection /Teplo- i massoobmen v binarnom laminarnom pogranchnom sloe pri estestvennoi konveksii/.  
13 p2378 A69-28312
- Binary laminar boundary layer on a vertical surface in the simultaneous presence of free and forced convection /Binarnyi laminarnyi pogranchnyi sloi na vertikal'noi poverkhnosti pri sovmetnoi svobodnoi i vynuzhdennoi konveksii/.  
19 p3453 A69-36844
- Heat and mass transfer in a binary laminar boundary layer in the presence of natural convection /Teplo- i massoobmen v binarnom laminarnom pogranchnom sloe pri estestvennoi konveksii/.  
21 p3848 A69-38633
- BREACH, D. R.**  
On the flow past a sphere at low Reynolds number.  
21 p3694 A69-38771
- BREAKWELL, J. V.**  
Minimum-impulse transfer between a circular orbit and a nearby non-coplanar elliptic orbit.  
19 p3400 A69-35675  
Resonant and non-resonant gravity-gradient perturbations of a tumbling tri-axial satellite.  
[AIAA PAPER 69-922] 21 p3821 A69-39353  
Slightly non-linear estimation with noisy data.  
21 p3686 A69-39370  
Minimum-impulse, time-free transfer between neighboring noncoplanar elliptical orbits with major axes perpendicular to the line of nodes.  
[AIAA PAPER 68-94] 23 p4215 A69-41879
- BREARLEY, M. N.**  
The influence of stratospheric winds on a suspended instrument package.  
17 p2961 A69-33612
- BREAUX, J. N.**  
A maximum rms error comparison of several redundancy reduction techniques.  
19 p3273 A69-36264
- BREAZILE, J. E.**  
Sleep, hibernation and hypothermia in the yellow-bellied marmot /M. flaviventris/.  
10 p1643 A69-23122
- BREBBIA, C.**  
Geometrically nonlinear finite-element analysis.  
13 p2361 A69-27441
- BREBNER, J. L.**  
Current carrier mobility in GaTe and SnSe sub 2 semiconducting stratified structures /Die Beweglichkeit der Ladungstraeger in halbleitenden Schichtstrukturen - GaTe und SnSe sub 2/.  
02 p0295 A69-11777
- BRECHER, K.**  
Leakage electrons from normal galaxies - The diffuse cosmic X-ray source.  
24 p4368 A69-43202
- BRECKEL, H.**  
Characteristic values and impact abrasion in metallic materials /Kenngroessen und Verschleiss beim Stoss metallischer Werkstoffe/.  
22 p3966 A69-39876
- BRECKENRIDGE, W. G.**  
Investigation of planetary navigation using spacecraft-based measurements.  
19 p3368 A69-35791
- BREDDY, N. C.**  
Thermal-balance test chambers and their application to spacecraft.  
13 p2241 A69-28079
- BREDERLOW, G.**  
Electrical conductivity of an argon-potassium plasma at low current densities as a function of the gas temperature.  
05 p0798 A69-15614  
Dependence of electrical conductivity in a rare-gas/alkali plasma on the gas temperature and on preionization.  
10 p1733 A69-23451  
Experimental determination of the current density distribution in a simulated MHD generator with allowance for relaxation effects.  
10 p1734 A69-23453
- BREDIKHIN, M. IU.**  
Generation of a dense plasma by injecting an electron beam into a magnetic trap /Utvoreniiia shchil'noi plazmi pri inzhetsii elektronnoho puchka v magnitnii ulovliuvach/.  
22 p3990 A69-40791



## BREDOV, M. M.

Micrometeorite investigations on the Cosmos 135 satellite /mikrometeoritnye issledovaniia na sputnike "Kosmos-135"/.

01 p0152 A69-10578

Analysis of the chemical composition of lunar surface by direct methods.

11 p1832 A69-24629

A multielectrode probe with potentials which are negative with respect to the plasma /Mnogoelektroodnyi zond pri otritsatel'nykh potentsialakh otositel'no plazmy/.

12 p2138 A69-26538

Micrometeoroid investigations on the satellite "Cosmos-135".

15 p2691 A69-30748

## BRELLE, Y.

A compact hydrogen-oxygen cell /Pile hydrogene-oxygene compacte/.

08 p1260 A69-21041

Compact hydrogen-oxygen cell /Pile hydrogene-oxygene compacte/.

16 p2738 A69-32412

## BREEN, B. P.

A basic study of ignition of hypergolic liquid propellants. [WSCI PAPER 68-43]

06 p0983 A69-17792

## BRESE, M. E.

New technique for combining solid-state sources.

02 p0217 A69-12148

## BREITZ, L. D.

World's most powerful VHF transmitting station.

03 p0411 A69-13209

## BREGER, M.

Short-period variability of B, A and F stars. V.

13 p2343 A69-27620

Short-period variability of B, A, and F stars. II - Photometry of new delta Scuti stars.

13 p2348 A69-27803

## BREID, I. I.

Derivation of isophotes for extended celestial objects by the photographic equidensitometry method.

11 p1952 A69-24255

## BREIG, E. L.

Predissociation in the Schumann-Runge band system of O sub 2 - Laboratory measurements and atmospheric effects.

20 p3534 A69-38089

## BREIHAN, E. R.

Construction practice for hot-mix bituminous pavements.

01 p0057 A69-11276

## BREIMAN, L.

Probability and Stochastic Processes- With a View Toward Applications.

13 p2289 A69-28177

## BREINAN, E.

Creep relaxation and kinking of Al sub 3 Ni whiskers at elevated temperature.

03 p0443 A69-13119

## BREITWIESER, R.

Electron cooling and plasma heating of thermionic converters.

03 p0368 A69-13127

Electron cooling and plasma heating of thermionic converters.

09 p1440 A69-21831

## BREKHIN, N. I.

Dynamics of a gyroscope /K dinamike giroskopa/.

19 p3308 A69-35825

## BREKHOV, A. F.

Variation of the circumferential inhomogeneity of a flow passing through the impeller blades of an axial-flow compressor /Izmenenie okruzhnoi neravnomernosti potoka pri prokhozhdenii cherez reshetku rabocheho kola osevoego kompressora/.

03 p0361 A69-12954

## BREKKE, A.

The intensity ratio I/4278/II/5577/ in aurora.

02 p0235 A69-11425

## BRELANT, S.

Glass resin adhesion in filament-wound structures.

14 p2468 A69-29345

## BREME, J.

Effect of deformation and aging on the mechanical properties and creep behavior of TiAl6V4 /Einfluss einer Verformung und Auslagerung auf die mechanischen Eigenschaften und das Kriechverhalten von TiAl6V4/.

[DGLR-69-002] 23 p4177 A69-42163

## BREMNER, H.

The propagation of long electromagnetic waves in the ionosphere and the exosphere /Die Ausbreitung elektromagnetischer Wellen grosser Wellenlaenge in Ionosphäre und Exosphäre/.

03 p0396 A69-13702

Wave propagation in anisotropic media.

17 p2926 A69-33847

Wave propagation in a plasma filled cylindrical wave guide with an axial magnetic field.

17 p2926 A69-33848

## BRENDL, J.

Description of a time indicator /Description d'un marqueur temps/.

05 p0762 A69-15825

## BRENDEL, B. B.

A comparison of acoustical holography methods.

10 p1695 A69-23543

## BRENGAUZ, G. E.

Refractive index of an anisotropic plasma in the case where the radio wave frequency lies between the gyrofrequencies of protons and oxygen ions /O koefitsientie prelomeniia anizotropnoi plazmy v sluchae, kogda chastota radiovolny zakliuchena mezhdu girochastotami protonov i kislorodnykh ionov/.

20 p3486 A69-37052

## BRENGAUZ, V. D.

Generation of magnetoacoustic waves by the stellar wind /K voprosu ob izluchении magnitnoakusticheskikh voln zvezdnym vetrom/.

11 p1955 A69-24385

Existence of short-period magnetic field pulsations in the atmosphere of the sun /K voprosu o sushchestvovanii korotko- periodicheskikh pul'satsii magnitnogo polia v atmosfere solntsa/.

15 p2688 A69-30556

Refractive index of an anisotropic plasma in the case where the radio wave frequency lies between the gyrofrequencies of protons and oxygen ions /O koefitsientie prelomeniia anizotropnoi plazmy v sluchae, kogda chastota radiovolny zakliuchena mezhdu girochastotami protonov i kislorodnykh ionov/.

20 p3486 A69-37052

Radiation by magnetosonic waves generated in a stellar wind.

24 p4390 A69-43775

## BRENELMANN, G. L.

Human metabolic responses to hyperthermia during mild to maximal exercise.

22 p3891 A69-40215

Human cardiovascular adjustments to rapid changes in skin temperature during exercise.

24 p4258 A69-42633

## BRENNAN, J. A.

Cooldown transients in cryogenic transfer lines. [NAS-NRC PAPER I-1]

22 p4050 A69-40625

## BRENNAN, M. H.

Investigation of the plasma produced by a normal ionizing shock wave using polychromator techniques.

14 p2494 A69-29767

## BRENNAN, R. D.

The System/360 Continuous System Modeling Program.

05 p0723 A69-16196

## BRENNER, D.

Regulation of atomic hydrogen flow with a platinum wire detector.

22 p3950 A69-41232

## BRENNER, H.

On the invariance of the heat-transfer coefficient to flow reversal in Stokes and potential streaming flows past particles of arbitrary shape.

04 p0590 A69-15274

Beriev Be-12/Beriev Be-12/.

24 p4251 A69-42796

## BRENNER, W.

Electron beam radiation curing of liquid mercaptan terminated butadiene-acrylonitrile copolymers.

09 p1512 A69-22368

## BRENETON, R. C.

The planar motion of a damped satellite.

10 p1791 A69-22935

Periodic solutions associated with the gravity-gradient-oriented system. I - Analytical and numerical determination.

23 p4224 A69-41876

Periodic solutions associated with the gravity-gradient-oriented system. II - Stability analysis.

24 p4388 A69-43649

## BRESGEN, H.

Two-dimensional analysis of the MHD generator, taking into account the Hall effect /Zweidimensionale Untersuchungen von MHD-Generatoren unter Berücksichtigung des Halleffekts/.

03 p0480 A69-14099

Two-dimensional studies of MHD generators, taking into account the Hall effect /Zweidimensionale Untersuchungen von MHD-Generatoren unter Berücksichtigung des Halleffekts/.

13 p2208 A69-27613

## BRESLER, M. S.

Negative magnetoresistance of tellurium at low temperatures.

06 p0978 A69-16986

## BRESSANIN, G.

Errors in orbit determination. [AIAA PAPER 69-911]

21 p3807 A69-39343

## BRET, G. G.

Transient stimulated Raman scattering in liquids and evaluation of picosecond pulse duration.

07 p1152 A69-19063

## BRETAGNE, J.

Study of the postdischarge of a laser-produced plasma /Etude de la post-decharge d'un plasma produit par laser/.

01 p0128 A69-10394

## BRETHERTON, F. P.

The sea-breeze forerunner.

07 p1126 A69-19038

## BRETON, C.

Study of the expansion of a lithium hydride microplasma in a vacuum /Etude de l'expansion dans le vide d'un microplasma d'hydrure de lithium/.

02 p0286 A69-11704

## BRETTNERBAUER, K.

The effect of the atmosphere on precise satellite ranges obtained by a laser.

18 p3103 A69-35199

## BRETTE, J.

A program of dose calculation /Programme de calcul de dose/.

11 p1949 A69-24862

## BRETTING, J.

TL 4002 satellite traveling-wave tubes for the Symphonie communication satellite /Die Satelliten-wanderfeldroehre TL 4002 fuer den Nachrichtensatelliten "Symphonie"/.

07 p1095 A69-18429

Traveling-wave tube for the communication satellite "Symphonie." [AIAA PAPER 68-430]

12 p2041 A69-26786

Interrelations between efficiency and nonlinearities in TWT's for application in communication satellites.

13 p2232 A69-28060

## BRETTING, Y.

The YH 1160 - A modern traveling wave tube amplifier for radio technology /YH 1160 - Ein moderner Wanderfeldroehrenverstaerker fuer die Richtfunktechnik/.

16 p2759 A69-31863

## BREUER, D. R.

Some techniques for precision monolithic circuits applied to an instrumentation amplifier.

07 p1102 A69-18875

## BREUER, M. A.

Digitalization of continuous control systems.

05 p0725 A69-16470

## BREUER, S.

On the form of the free energy in linear viscoelastic solids.

06 p1022 A69-17241

The minimizing strain-rate history and the resulting greatest lower bound on work in linear viscoelasticity.

15 p2707 A69-30637

## BREUS, T. K.

Plasma measurements in the vicinity of Venus by the space vehicle "Venus-4."

07 p1222 A69-19613

Heat sources in the E region /Ob istochnikakh nagreva oblasti E/.

09 p1490 A69-21771

Corpuscular fluxes and electron gas heating at E region altitudes /Korpuskuliarnye potoki i razogrev elektronnoho gaza na vysotakh oblasti E/.

09 p1490 A69-21772

Interrelation between the electron and ion temperatures and the electron concentration in the ionosphere /Vzaimosviaz' elektronnykh i ionnykh temperatur i elektronnoi kontsentratsii v ionosfere/.

17 p2966 A69-33981

- BREVAUX, P.**  
Approximate calculation of boundary layers and heat transfers at the walls of shock tubes /Calcul approche des couches limites et des transferts de chaleur aux parois d'un tube a choc/.  
[ONERA-TP-647] 03 p0412 A69-12875
- BREVIG, O.**  
The turbulent mixing and combustion of hydrogen injected parallel to a supersonic air stream in an axisymmetric combustor.  
[AIAA PAPER 69-539] 16 p2877 A69-31844
- BREVIK, I.**  
Some aspects of the relativistic coherence theory of black-body radiation within a transparent medium.  
11 p1920 A69-25563
- BREWE, D. E.**  
Lubrication and wear of ball bearings in cryogenic hydrogen.  
01 p0084 A69-10109  
Cooling studies with high-speed ball bearings operating in cold hydrogen gas.  
[ASLE PAPER 68-LC-2] 07 p1141 A69-19310
- BREWER, A. W.**  
Precipitation in quenched and aged beryllium ingot sheet.  
08 p1330 A69-20008
- BREWER, G. R.**  
Analysis of the expected thrust misalignment of Kaufman thrusters.  
[AIAA PAPER 69-303] 10 p1753 A69-23362
- BREWER, H. R.**  
Origin of drift-periodic echoes in outer-zone electron flux.  
05 p0815 A69-16259
- BREWER, J.**  
Measurement and correlation of some interaction second virial coefficients from -125 deg to 50 deg C. I.  
14 p2488 A69-29927
- BREWER, J. H.**  
Sampling and verification in large-scale sterilization procedures.  
05 p0714 A69-15952
- BREWER, L. E.**  
Evaporation processes by laser beams.  
09 p1519 A69-22476
- BREWSTER, C. E.**  
Improved value through weight and cost control of the Boeing 747 airplane.  
13 p2383 A69-28096
- BREWSTER, J. L.**  
Cineradiography using field emission technology.  
12 p2086 A69-26163  
3 nanosecond exposures with X-rays, electrons and light.  
12 p2086 A69-26164  
Nanosecond photography with super radiant light, X rays or electrons.  
19 p3305 A69-35721
- BREZEANU, M.**  
E.S.R. spectra of some molybdenum /V/ polycrystalline complexes.  
22 p3897 A69-40971
- BRIAN, E.**  
Direct entry longitudinal range dispersion of unmanned Mars landers.  
02 p0324 A69-12390
- BRIANOV, I. I.**  
Vestibular reactions of cosmonauts during the flight on the Voskhod spacecraft /Vestibuliarnye reaktsii kosmonavtov pri Plete na korable "Voskhod"/.  
07 p1062 A69-18588  
Significance of some vestibulometric tests in the flight surgeon's appraisal of persons predisposed to illusory sensations during flight /Znachenie nekotorykh vestibulometricheskikh prob pri vrac hebno- letnoi ekspertize lits, predispolozhennykh k illiuzornym oshchushcheniiam v polete/.  
20 p3473 A69-37277
- BRIATORE, L.**  
An underground search for leptonic quarks in the cosmic radiation.  
02 p0306 A69-11547
- BRICE, N.**  
Magnetospheric and high latitude ionospheric disturbance phenomena.  
07 p1128 A69-19370
- BRICKNER, D. R.**  
Solid state synchro data interface techniques.  
11 p1842 A69-24543
- BRICKNER, K. G.**  
New steel has cryogenic potential.  
18 p3158 A69-35417  
High-strength austenitic stainless steel for cryogenic service.  
23 p4175 A69-41475
- BRICTSON, C. A.**  
Operational measures of aircraft carrier landing system performance.  
17 p2916 A69-34012
- BRIDGE, H. S.**  
Experimental evidence for a detached lunar compression wave.  
05 p0824 A69-16251
- BRIDGES, J.**  
An automated system for mass properties data control.  
[SAWE PAPER 811] 18 p3221 A69-34899
- BRIDGES, J. E.**  
In-flight and flight-line checkout techniques for foreign object damage to jet engines.  
01 p0056 A69-11055
- BRIDGES, T. J.**  
Up-conversion of 10.6 mu radiation to the visible and second harmonic generation in HgS.  
01 p0089 A69-10180  
CO sub 2 laser linewidth by measurement of step response.  
05 p0773 A69-16293  
Small-signal step response of laser amplifiers and measurement of CO sub 2 laser linewidth.  
[IEEE PAPER G-9] 07 p1151 A69-19056  
Accurate rotational constants of C super 12 O sub 2 super 16 from measurement of CW beats in bulk GaAs between CO sub 2 vibrational-rotational laser lines.  
12 p2105 A69-26311  
Spontaneous self-pulsing and cavity dumping in a CO sub 2 laser with electro-optic Q-switching.  
16 p2797 A69-32014
- BRIDGES, W. B.**  
Gaussian beam distortion caused by saturable gain or loss.  
[IEEE PAPER J-3] 07 p1152 A69-19065  
Materials and techniques for gas lasers.  
11 p1896 A69-24743  
CW operation of high ionization states in a xenon laser.  
23 p4172 A69-41399
- BRIDLE, A. H.**  
Spectra of some radio sources at centimetre wavelengths.  
07 p1218 A69-19256  
10 MHz absorption in the local spiral arm.  
08 p1383 A69-19900
- BRIDOUX, G.**  
SECAR /SECAR/.  
15 p2571 A69-31501
- BRIDWELL, R. J.**  
Lineament trend analysis of Gemini Red Sea photography.  
02 p0247 A69-12808
- BRIE, C.**  
A plane reaction cell unit for differential flux calorimetry /Bloc a cellules reactionnelles planes pour calorimetrie differentielle a flux/.  
05 p0764 A69-16607
- BRIECHLE, R.**  
On the synthesis of reactance-bridge two-terminal networks with six reactances /Zur Synthese von Reaktanz-Bruecken-Zweipolen mit sechs Reaktanzen/.  
08 p1295 A69-21166
- BRIEGLEB, W.**  
Possibilities and problems for biology in the age of space flight /Moeglichkeiten und Probleme der Biologie im Zeitalter der Raumfahrt/.  
[DVL-847] 04 p0553 A69-14811  
Physiological long-time effects in rotating systems /Physiologische Langzeiteffekte in rotierenden Systemen/.  
08 p1265 A69-21183  
Simulated weightlessness for the ontogenesis of the otolith organ.  
[DVL-855] 10 p1647 A69-24021  
Is there a common geotropic dependency in organisms/ques/.  
18 p3095 A69-34692
- BRIENZA, M. J.**  
Picosecond laser pulses.  
07 p1148 A69-18856
- Passive mode locking of a pulsed Nd-YAG laser.  
16 p2797 A69-32019  
Laser-acoustic signal processing.  
24 p4283 A69-43027
- BRIER, G. W.**  
Long-range prediction of the zonal westerlies and some problems in data analysis.  
07 p1175 A69-18945  
Some statistical and data analysis problems arising from a study of variations in the zonal westerlies associated with the tidal cycles.  
09 p1537 A69-22242
- BRIERLEY, H. G.**  
Transistor-feedback-amplifier stabilisation using admittance measurements.  
05 p0739 A69-16341
- BRIERLEY, J. B.**  
Neuropathological correlates of neurological impairment following prolonged decompression.  
07 p1067 A69-19426  
Neurological study of simulated decompression in supersonic transport aircraft.  
21 p3665 A69-39171
- BRIERS, G. W.**  
Boron autoradiography with the electron microscope.  
20 p3567 A69-38263
- BRIFFA, F. E. J.**  
Some aerodynamic aspects of atomisation.  
15 p2717 A69-30465
- BRIIGGS, B. H.**  
Observations of ionospheric movements by the use of a large aerial array.  
09 p1492 A69-22756  
Buckland Park aerial array.  
24 p4286 A69-42607
- BRIIGGS, F. H.**  
Experimental investigation of hybrid mode operation in oversized Gunn effect devices.  
04 p0639 A69-14339
- BRIIGGS, J.**  
Visibility variations at London/Heathrow Airport.  
18 p3167 A69-35266
- BRIIGGS, J. H.**  
Satellites and ocean platforms for civil aviation operations over the North Atlantic.  
[UN PAPER 68-95887] 01 p0113 A69-10521  
The Terminal Area problem at London.  
19 p3371 A69-36736
- BRIIGGS, J. O.**  
The need for a semi-automatic capability in off-line module testing.  
11 p1865 A69-25076
- BRIIGGS, M. W.**  
Environmental cooling air systems.  
22 p3954 A69-40035
- BRIIGGS, R. A.**  
On the accuracy of celestial MPP's in air navigation.  
07 p1177 A69-19214  
The hypersonic slipper bearing - A test track problem.  
[AIAA PAPER 68-736] 09 p1477 A69-22003
- BRIIGGS, R. M.**  
Removal of meteorological effects from meson-telescope data.  
19 p3308 A69-35991  
Pronounced diurnal variation in cosmic-ray intensity as seen by inclined meson telescopes.  
20 p3593 A69-38109  
Periodic solar time variations in the cosmic-ray muon component near sea level.  
23 p4207 A69-42498
- BRIIGGS, R. W.**  
Power conditioning development for the Sert II ion thruster.  
23 p4075 A69-42301
- BRIIGGS, W. E.**  
Helium leak testing - A new analysis.  
18 p3138 A69-35271
- BRIGHAM, E. O.**  
Optimal processing of satellite down-linked data.  
21 p3677 A69-39462
- BRIGHAM, P. B.**  
Wanted - Realistic alternatives to MIL-STD- 781.  
18 p3145 A69-34507
- BRIGHT, N. F. H.**  
The polymorphism of the oxide Ti sub 3 O sub 5.  
07 p1168 A69-19601



## BRIGHTON, J. A.

Flow separation and reattachment in confined jet mixing.  
[ASME PAPER 69-FE-29] 20 p3517 A69-37994

## BRIGMAN, G. H.

Possible tests of general relativity conducted with a Jupiter probe.  
09 p1597 A69-22089

## BRIGNER, W. L.

Theoretical model for lateral inhibitory interaction in the human retina.  
21 p3653 A69-38898

## BRIHAYE, C.

Possibility of synthesis of proton-rich nuclei in highly evolved stars. I /Possibilite de synthese de noyaux riches en protons dans des etoiles tres evoluees. I/.  
19 p3428 A69-36837

## BRIKKER, S. I.

Investigation of nuclear interactions of high-energy particles by the controlled nuclear emulsion method.  
13 p2331 A69-28388

## BRILEY, B. E.

A self-healing control.  
04 p0569 A69-15457

## BRILL, O. D.

Nuclear Interactions in Spacecraft Shielding /Izmeneniye Vzaimodeystviya v Zashchite Kosmicheskikh Korablei/.  
14 p2481 A69-29817

## BRILLA, J.

Linear viscoelastic bending of anisotropic plates.  
10 p1793 A69-22881

## BRIMELOW, B.

Performance matching of the propulsion system.  
[SAE PAPER 680712] 03 p0496 A69-13445

## BRINDLEY, G. W.

Absorption of pyrimidines, purines, and nucleosides by Li-, Na-, Mg-, and Ca-montmorillonite /clay-organic studies XII/.  
05 p0716 A69-15973

Absorption of pyrimidines, purines, and nucleosides by Co-, Ni-, Cu-, and Fe/III/-montmorillonite /Clay Organic Studies XIII/.  
05 p0716 A69-15974

## BRINE, F. E.

Effect of shot peening on the fatigue properties of maraging steel and Al-Zn-Mg alloy.  
02 p0253 A69-12061

Improving the fatigue properties of butt welds in maraging steels.  
03 p0434 A69-13762

## BRINES, G. L.

Propulsion requirements for the future STOL transport.  
[SAE PAPER 690380] 23 p4201 A69-41668

## BRINGER

Turbopump engine with a thrust of 400 kn /Moteur a turbo-pompe de 400 kilonewtons de pousse/.  
17 p3019 A69-33341

## BRINK, K.

Influence of maintainability and reliability on the utilization and operating costs of commercial aircraft /Einfluss von Wartbarkeit und Zuverlaessigkeit auf den Einsatz und die Betriebskosten von Verkehrsflugzeugen/.  
04 p0547 A69-14806

## BRINKLEY, J. W.

Variations of spinal alignment in egress systems and their effect.  
23 p4102 A69-41681

## BRINKMAN, A. C.

Comments on the ageing effect of gas-filled proportional counters.  
20 p3538 A69-37302

## BRINKMANN, R. T.

Angular dependence of low-energy electron-impact excitation cross section of the lowest triplet states of H sub 2.  
06 p0962 A69-17820

Rotational Raman scattering in planetary atmospheres.  
09 p1601 A69-22207

## BRINKSCHULTE, H. W.

The influence of CO on CO sub 2 laser performance.  
07 p1155 A69-19088

## BRINSON, H. F.

Mechanical and optical viscoelastic characterization of Hysol 4290.  
03 p0524 A69-13064

## BRINTON, H. C.

Evidence of contraction of the earth's thermal plasmasphere subsequent to the solar flare events of 7 and 9 July 1966.  
10 p1683 A69-23777

Multi-experiment detection of the plasmopause from EOGO satellites and antarctic ground stations.  
11 p1878 A69-25153

Observations of hydrogen and helium ions during a period of rising solar activity.  
15 p2599 A69-31326

Implications for ionospheric chemistry and dynamics of a direct measurement of ion composition in the F 2 region.  
16 p2774 A69-31974

Ion depletion in the high-latitude exosphere - SimultaneousOGO 2 observations of the light ion trough and the VLF cutoff.  
18 p3187 A69-34939

Diurnal and seasonal variation of atmospheric ion composition, correlation with solar zenith angle.  
20 p3534 A69-38087

## BRION, K. J.

Detection and correction of materials and processes problems in thin film networks.  
22 p3911 A69-39955

## BRIOSCHI, F.

A new algorithm for the solution of the secondary optimization problem in non-serial dynamic programming.  
22 p3976 A69-41037

## BRIQUET, G.

Production of a giant pulse by coherent pumping /Production d'une impulsion geante a l'aide d'un pompage coherent/.  
07 p1146 A69-18486

Production of a giant pulse with the aid of coherent pumping /Production d'une impulsion geante a l'aide d'un pompage coherent/.  
07 p1156 A69-19333

Generation of a monomode giant pulse laser by coherent pumping.  
16 p2797 A69-32018

## BRISCOE, H. M.

A short survey of European work on lubrication in vacuum.  
[IME PAPER 10] 07 p1138 A69-18564

## BRISCOE, M. G.

Stability of a plane shock wave in free space and in the presence of rigid or interfacial boundaries.  
15 p2592 A69-31145

## BRISKMAN, R. D.

Domestic communications services via satellites - Comsat pilot program.  
[AIAA PAPER 68-412] 21 p3678 A69-39762

## BRISKMAN, V. A.

Parametric instability of a fluid surface in an alternating electric field.  
06 p0957 A69-17542

## BRISTOR, A. A.

Omnitrac - A small general purpose airborne computer.  
10 p1659 A69-22845

## BRITH, M.

Raman spectrum of alpha-N sub 2.  
23 p4194 A69-42204

## BRITOV, A. D.

Conductivity of CdS under the action of an intense electron beam /Provodimost' CdS pod deistviem intensivnogo puchka elektronov/.  
13 p2318 A69-27886

Coherent recombinational radiation of some semiconductors at high levels of excitation.  
19 p3387 A69-36539

Radiative transitions between a deep acceptor and the valence band in gallium arsenide /Izuchatel'nye perekhodnyye blukonii akseptor- valentnaya zona v arsenide galliya/.  
19 p3392 A69-36611

## BRITT, M. A.

Analytical and experimental investigations of a jet exhausting into an oncoming supersonic stream.  
[AIAA PAPER 69-69] 06 p0864 A69-18164

## BRIUKHANOV, A. E.

Anisotropy of Young's modulus in cold-rolled titanium /Anizotropiya modulya lungi v kholodnokatannom titane/.  
01 p0094 A69-10431

Changes of the Young's modulus of titanium sheet during annealing /Izmeneniye modulya lungi listovogo titana pri otzhege/.  
11 p1904 A69-24899

## BRIUKHANOVA, E. N.

Thermal stresses in a round cylinder with regularly distributed round cavities /Temperaturnyye napriazheniya v kruglom tsilindre s reguliarno raspolozhennymi kruglymi polostiami/.  
15 p2714 A69-31190

## BRIUKHATOV, N. L.

Investigation of iron-nickel and iron-nickel-cobalt ferrites /Issledovanie zhelezo-nikelevykh i zhelezo-nikel'-kobalt'nykh ferritov/.  
13 p2319 A69-27992

## BRIUKHOVETS, A. A.

Effect of powdering temperature on the structure and properties of pressed semifinished products of sintered aluminum alloys with iron and chromium additions /Vliyanie temperatury raspyleniya na strukturu i svoystva pressovannykh polufabrikatov iz spechennykh i aluminiyevykh spлавov s dobavkami zheleza i khroma/.  
03 p0452 A69-14111

## BRIUKHOVETSKII, A. S.

Radio wave focusing by an artificially created ionospheric lens /Fokusirovka radiovoln iskusstvenno soderzhashchey dannyi ionosfernoi linzi/.  
20 p3486 A69-37048

## BRIUNELLI, B. E.

Interpretation of Pc3,4 geomagnetic pulsations.  
06 p0921 A69-17737

Energy balance of a magnetic storm /Energeticheskii balans magnitnoi buri/.  
17 p2964 A69-33959

Natural periods of toroidal oscillations of the magnetosphere /Sobstvennyye periody toroidal'nykh kolebaniy magnitosfery/.  
23 p4157 A69-41863

## BROAD, M. S.

Measurement of static strain under rapid heating.  
02 p0341 A69-12229

## BROADFOOT, A. L.

Weak emissions in the near infrared daytime airglow.  
16 p2776 A69-32094

## BROADHURST, R. H.

Explorer 33 and 35 - Reliability achievement by design.  
03 p0519 A69-13232

## BROADWELL, J. E.

Theoretical and experimental study of rarefied supersonic flows about several simple shapes.  
02 p0189 A69-12523

Leading edge flow by the Monte Carlo direct simulation technique.  
[AIAA PAPER 69-141] 06 p0866 A69-18208

## BROCH, J. T.

Peak distribution effects in random load fatigue.  
01 p0172 A69-11355

On the damaging effects of vibration.  
22 p4041 A69-40167

## BROCHE, P.

Ionospheric effects of an acoustic wave /Effets ionospheriques d'une onde acoustique/.  
01 p0068 A69-11110

Experimental study of ionospheric perturbations caused by a strong explosion on the ground /Etude experimentale de la perturbation engendree dans l'ionosphere par une forte explosion au sol/.  
09 p1488 A69-21694

Decimeter-waves Doppler effect produced by an acoustic wave propagating in the ionosphere /Effet Doppler en ondes decimetriques engendree par une onde acoustique se propageant dans l'ionosphere/.  
16 p2755 A69-32610

## BROCHER, E.

Condition of operation of a resonance tube supplied by a subsonic jet /Condition de fonctionnement d'un tube de resonance alimente par un jet subsonique/.  
13 p2247 A69-27738

Studies of resonance tubes excited by a subsonic jet /Recherches sur les tubes de resonance excites par un jet subsonique/.  
13 p2370 A69-28630

## BROCHET, C.

Measuring the mass velocity of detonation products of hydrogen-oxygen mixtures /Mesure de la vitesse materielle des produits de detonations des melanges hydrogene-oxygene/.  
02 p0354 A69-12628

Variation of the gas pressure behind detonation fronts in strictly propane-oxygen mixtures - Influence of the tube diameters and the initial pressure /Variation de la pression des gaz derriere le front des detonations dans les melanges stricts propane-oxygene - Influence du diametre des tubes et de la pression initiale/.  
08 p1421 A69-20757

- Variation of the detonation velocity in liquid nitromethane with initial pressure /Variation, avec la pression initiale, de la celerite de detonation dans le nitromethane liquide/.  
22 p4051 A69-40713
- BROCHU, R. R.**  
COF sub 2 band intensities in the 2 point zero to 6 point zero micron region.  
21 p3669 A69-38759
- BROCK, A. J.**  
Action of selected drugs on decompression sickness in rats.  
17 p2913 A69-33172
- BROCK, T. E.**  
Fluidics Applications- Analysis of the Literature and Bibliography.  
06 p0869 A69-17171
- BROCKER, D. H.**  
Study of a global search algorithm for optimal control.  
17 p2933 A69-33745
- BROCKETT, R. W.**  
Some new rearrangement inequalities having application in stability analysis.  
06 p0904 A69-17943
- BROCKHAUS, R.**  
A method for the stepwise design of linear multivariable control systems.  
12 p2049 A69-26085
- BROCKLEHURST, B.**  
Pink afterglow of nitrogen.  
24 p4353 A69-43749
- BROCKLEHURST, R. J.**  
Seam welded aluminium alloy airframes.  
[SBAC PAPER 5]  
20 p3550 A69-37454
- BROCKMAN, M. H.**  
Power requirements for deep-space telecommunication links.  
10 p1652 A69-22984
- BROCKMEYER, C. H.**  
Anticipated antenna problems on Mars and Venus probes.  
02 p0223 A69-12811
- BRODALE, G. E.**  
The thermal conductivity of silicon dioxide glass from 0.5 to 4.2 K.  
09 p1493 A69-21426
- BRODAN, V.**  
Analysis of changes in the pulse rate during exercise and recovery after sixty hours of complete fasting.  
21 p3655 A69-38910
- BRODE, H. L.**  
Gas dynamic motion with radiation - A general numerical method.  
19 p3450 A69-36356
- BRODERICK, R. F.**  
Doppler return from a random rough surface.  
14 p2413 A69-29488
- BRODERSON, A. B.**  
Coriolis acceleration in the rotating environment - Understanding the Coriolis phenomenon.  
09 p1540 A69-21891  
Simulation of the stress environment of a rocket-borne animal centrifuge.  
13 p2213 A69-28090  
Selection of gravitational environment by locomotion in fields of acceleration.  
19 p3263 A69-36457
- BRODIE, P. M.**  
Roll-resonance effects on controlled rocket-boosted projectiles.  
09 p1610 A69-22001
- BRODIN, M. S.**  
Nature of the propagation of high-power light beams in certain transparent cubic crystalline media /O kharaktere rasprostraneniia moshchnykh svetovykh puchkov v nekotorykh prozrachnykh kubicheskikh kristallicheskikh sredakh/.  
03 p0438 A69-13051  
Investigation of the mechanism of two-photon absorption and stimulated emission of CdS-CdSe mixed crystals /Issledovanie mekhanizma dvukhfotonnogo pogloscheniia i vyzhudenno izlucheniia smeshannykh kristallov CdS-CdSe/.  
03 p0438 A69-13052  
Parameters of the energy structure of ZnTe- CdTe and ZnSe-ZnTe crystals.  
03 p0492 A69-14173
- Increasing the efficiency of laser output from homogeneous semiconductors by use of amplification and increase of resonator Q.  
05 p0777 A69-16378
- Investigation of the effect of intense ruby laser radiation on the optical properties of a CdS crystal /Doslizhennia vplivu intensivnogo viprominiuvannia rubinovogo lazera na optichni vlastivosti kristala CdS/.  
14 p2457 A69-28999
- Investigation of the luminescence of ZnS sub x - CdS sub 1 sub minus x crystals excited by a ruby laser /Issledovanie svecheniia kristallov ZnS sub x - CdS sub 1 sub minus x pri vzbuzhdenii rubinovym lazerom/.  
19 p3331 A69-35866
- Investigation of the laser emission of CdS sub x - CdSe sub 1 sub minus x crystals under two-photon excitation /Issledovanie lazernoi generatsii kristallov CdS sub x - CdSe sub 1 sub minus x pri ikh dvukhfotonom vzbuzhdenii/.  
19 p3332 A69-35867
- Effect of impurities on the optical properties of CdTe. I - Group III and VI impurities /Vliianie primesei na opticheskie svoistva CdTe. I - Primesi III i VI grupp/.  
24 p4362 A69-43735
- BRODKEY, R. S.**  
A visual investigation of the wall region in turbulent flow.  
17 p2956 A69-33598
- BRODOSKII, I. U. IA.**  
Electromagnetic beams in anisotropic media.  
17 p2925 A69-33845
- BRODOVICH, N. A.**  
Broadband intracavity SHF modulation of a He-Ne laser /Shirokopolosnaia vnutrirezonaionnaia SVCh modulatsiia He-Ne-lazera/.  
17 p2981 A69-33112
- BRODOVOI, V. A.**  
Determination of the parameters of recombination centers in copper-doped gallium arsenide.  
02 p0294 A69-11627
- BRODSKII, V. B.**  
Use of helium at a supercritical pressure for cooling superconducting systems under spaceflight conditions.  
04 p0585 A69-15407
- BRODZINSKI, R. L.**  
Cosmic-ray induced radioactivity in astronauts as a measure of radiation dose.  
11 p1831 A69-25463
- BRODZKI, Z.**  
Helicopter rotors with rigid blades /Wirniki smiglowcow o sztywnych lopatach/.  
13 p2201 A69-27295  
Helicopter testing in a wind tunnel /Badania smiglowcow w tunelu aerodynamicznym/.  
16 p2735 A69-32075
- BROEK, D.**  
The effect of intermetallic particles on fatigue crack propagation in aluminium alloys.  
10 p1795 A69-23065
- BROEMER, H. H.**  
Mass spectrometer studies of the ion composition in the pink afterglow.  
08 p1308 A69-20292  
Quantitative analyses of chemiluminescence reactions in atmospheric gases /Quantitative Untersuchungen von Chemolumineszenzreaktionen in atmosphärischen Gasen/.  
08 p1309 A69-20454  
Investigation of the propagation of microwaves in a model plasma /Untersuchungen zur Mikrowellenausbreitung in einem Modellplasma/.  
17 p2932 A69-34218
- BROENLUND, O. E.**  
The changes in the /two-dimensional/ stress distribution round a rectangular hole with rounded corners, caused by a varying internal pressure and temperature.  
06 p1025 A69-17611
- BROERMAN, J. G.**  
Nonlinear background-to-signal coupling in lateral photoeffects.  
07 p1101 A69-18654
- BROGAN, F.**  
Buckling of cylinders with cutouts.  
[AIAA PAPER 69-92]  
06 p1027 A69-18060  
Dynamic behavior of a cylinder with a cutout.  
[AIAA PAPER 68-318]  
16 p2874 A69-32158
- BROGAN, T. R.**  
MHD - Where at and where to ques/  
01 p0013 A69-11394
- BROGAN, W. L.**  
Optimal control theory applied to systems described by partial differential equations.  
04 p0581 A69-14571
- BROGAN, W. T.**  
Effect of oxygen on the formation of germanium films.  
24 p4361 A69-43345
- BROGLIO, L.**  
The San Marco Project - A program of international cooperation.  
[UN PAPER 68-95862]  
01 p0180 A69-10518  
Equatorial atmospheric density obtained from San Marco II satellite between 200 and 350 km.  
21 p3704 A69-38369
- BROIDA, H. P.**  
Observation and identification of I sub 2 fluorescence excited by a 5682-angstrom units krypton-ion laser.  
07 p1156 A69-19304
- BROIEDA, V.**  
Extrapolation of aperiodic step responses /L'extrapolation des reponses indicielles aperiodes/.  
12 p2051 A69-26237
- BROKAW, R. S.**  
Statistical mechanical theories of transport properties.  
01 p0174 A69-10110  
Predicting transport properties of dilute gases.  
21 p3850 A69-38951
- BROKENBROW, B. E.**  
New fibre-filled thermoplastics.  
08 p1337 A69-20479
- BROMANDER, J.**  
Mean lives of some excited levels of Li I and Li II.  
18 p3177 A69-35012
- BROMER, H. H.**  
Experimental investigations of the effect of the wall space charge layer in the extraction of positive ions /Experimentelle Untersuchungen ueber den Einfluss der Wand- Raumladungsschicht bei der Extraktion positiver Ionen/.  
07 p1188 A69-18276
- BROMLEY, K.**  
Vibration analysis by holographic interferometry.  
04 p0598 A69-14871  
Complex spatial filtering by holographic Fourier subtraction.  
10 p1690 A69-22953
- BROMLEY, R. A.**  
Measurements on aircraft echoes using wideband pulse-compression radar.  
21 p3672 A69-38755
- BRONIAREK, C.**  
Investigation of the coupled flexural-torsional vibrations of rotors with continuous parameters.  
16 p2875 A69-32249
- BRONIN, S. IA.**  
Theory of heating in hypersonic flow /K teorii nagreva pri giperzvukovom obtekanii/.  
01 p0006 A69-10378  
Theory of heating in hypersonic flow.  
12 p2012 A69-26669  
Heating due to hypersonic gas flow past blunt bodies, taking radiative transport into account /Obtekanie i nagrev zatuplennykh tel giperzvukovym potokom gaza s vchetom perenosa izlucheniia/.  
20 p3457 A69-36981
- BRONKALLA, W.**  
Extragalactic research.  
15 p2681 A69-30436
- BRONNIKOV, V. N.**  
Noise stability of a wideband phase-modulation radio link /Pomekhoustoichivost' shirokopolosnoi fazovoi radiosv'язi/.  
15 p2564 A69-30147
- BRONNIKOVA, N. M.**  
Determination of photographic magnitudes of the minor planets Harmonia /40/ and Parthenope /11/ /Opredelenie fotograficheskikh velichin mal'kh planet Garmonii /40/ i Partenopy /11/.  
22 p4025 A69-40614
- BRONOEALE G.**  
Study of electrochemical oxidation of hydrocarbons on platinum /Etude de l'oxydation electrochimique des hydrocarbures sur le platine/.  
16 p2740 A69-32423



## BRONOEEL, G.

- Basic problems of low temperature cells using carbon-containing fuels / *Problèmes fondamentaux relatifs aux piles a basse temperature utilisant des combustibles carbonés.* 16 p2738 A69-32408

## BRONOEEL, G.

- Fundamental problems relative to low-temperature fuel cells using carbon fuels / *Problèmes fondamentaux relatifs aux piles a basse temperature utilisant des combustibles carbonés.* 08 p1259 A69-21037

- Study of electrochemical oxidation of hydrocarbons on platinum / *Etude de l'oxydation électrochimique des hydrocarbures sur le platine.* 08 p1268 A69-21052

## BRONSHTEIN, V. A.

- Experimental study of the ablation of meteorites. 15 p2697 A69-31252
- Remarks on the Cosmos and Hypotheses / *Besedy o kosmose i gipotezakh.* 20 p3596 A69-37234

- Penetration of antimatter into the solar system and the earth's atmosphere / *O proniknovenii antiveschestva v solnechnui sistem i atmosferu zemli.* 22 p4034 A69-41100

## BRONZI, G.

- Influence of telecommunications on the development of air traffic / *Influenze delle telecomunicazioni sullo sviluppo del traffico aereo.* 08 p1347 A69-20598

## BRONZINI, P.

- Simplified method for calculating the supplementary attenuation due to auroral absorption for distances less than 4000 km. 11 p1841 A69-25760

## BROOK, A.

- A custom tailored airborne digital guidance and control system for a large booster. [AIAA PAPER 69-988] 22 p3978 A69-40368

## BROOK, J. W.

- Far field approximation for a nozzle exhausting into a vacuum. 19 p3238 A69-35954
- Density field of directed free-molecular flow from an annulus. 21 p3695 A69-39035

## BROOK, M.

- Fluctuating radar echo - Modulation by vibrating drops. 02 p0208 A69-12021
- Charge distribution in thunderstorm clouds. 20 p3572 A69-37908

## BROOK, R. H. W.

- Cumulative damage in fatigue - A step towards its understanding. 20 p3620 A69-36997
- Planning for failures. 24 p4318 A69-42774

## BROOK, R. R.

- Estimation of maximum wind shear in the boundary layer. 06 p0951 A69-17790

## BROOKE, A. W.

- FLOX/methane pump-fed engine systems. [AIAA PAPER 69-510] 16 p2741 A69-32720

## BROOKER, P. I.

- An exact solution of Boltzmann's equation for a rigid sphere gas. 04 p0633 A69-15434

## BROOKNER, E.

- Characterization of millimeter wave earth-space link communications channels. 23 p4129 A69-42506

## BROOKS, C. S.

- The wetting of silicon carbide surfaces. 08 p1341 A69-20515

## BROOKS, D. S.

- The elasto-plastic behaviour of a circular bar loaded by axial force and torque in the strain hardening range. 06 p1023 A69-17371

## BROOKS, D. T.

- Engineering-design influenced cost control program. 13 p2382 A69-28094

## BROOKS, E.

- Control and use of planetary resources. 20 p3639 A69-37134

## BROOKS, H. A.

- Experimental techniques. 03 p0385 A69-12912

## BROOKS, J.

- Evidence for extraterrestrial life-identity of sporopollenin with the insoluble organic matter present in the Orgueil and Murray meteorites and also in some terrestrial microfossils. 21 p3662 A69-39617

## BROOKS, J. W.

- A multi-channel spectral line receiver for radio astronomy. 24 p4283 A69-43115

## BROOKS, L. W.

- Real time digital simulation of the Saturn V system. 18 p3113 A69-34268

## BROOKS, N. H.

- H sub 2 Lyman-band oscillator strengths. 06 p0962 A69-17818
- Far-ultraviolet spectra of zeta Puppis and gamma super 2 Velorum. 10 p1788 A69-24120

## BROOKS, R. E.

- Moire gauging using optical interference patterns. 21 p3726 A69-39775

## BROOKS, R. O.

- Distortions of controlled transients by shock-monitoring systems. 04 p0603 A69-15430

## BROOM, R. F.

- Demultiplexing of fast optical pulse code modulation. 19 p3279 A69-36764

## BROOM, T.

- Progress in research on cycle-dependent fatigue. 01 p0165 A69-10133

## BROPHY, J. H.

- Quantitative metallography of microduplex structures after superplastic deformation. 13 p2278 A69-27411

## BROPHY, J. J.

- Zero-crossing statistics of 1/f noise. 10 p1656 A69-23657
- Influence of lower cutoff frequency on the measured variance of 1/f noise. 10 p1656 A69-23661

## BROPHY, V. A.

- Output properties of the Nd super plus super 3 - SeOCl sub 2 liquid laser. [IEEE PAPER M-8] 07 p1153 A69-19070

## BROSCHKE, P.

- The velocity ellipsoid of the H II regions in M 33 / *Das Geschwindigkeitsellipsoid der H II-Regionen in M 33.* 21 p3797 A69-38538

## BROSOWSKI, B.

- Continuity of the Chebyshev operator / *Zur Stetigkeit des Tschebyscheff-Operators.* 10 p1718 A69-22875

## BROSSARD, J.

- Study of the formation and the propagation of divergent spherical shock waves produced by the explosion of a metallic wire in air / *Etude de la formation et de la propagation d'ondes de choc spheriques divergentes produites par l'explosion d'un fil metallique dans l'air.* 15 p2591 A69-30623

- Comparison of measured and calculated values of the pressure immediately behind a spherically divergent shock wave / *Comparaison des valeurs mesurees et calculees de la pression immediatement derriere une onde de choc spherique divergente.* 16 p2769 A69-31837

- Transfer of energy from an exploding wire to a detonating gas. 19 p3451 A69-36365

## BROSSON, M.

- Rolling and longitudinal stabilization of a satellite stabilized by a flywheel / *Pointage en roulis et en tangage d'un satellite stabilise par roue d'inertie.* 17 p3048 A69-33240

## BROSSON, M. A.

- Controllability of stationary linear multivariable systems using a frequency-domain criterion. 12 p2054 A69-26519

## BROTT, D. L.

- An experimental investigation of the compressible turbulent boundary layer with a favorable pressure gradient. [AIAA PAPER 69-685] 17 p2956 A69-33489

- An experimental investigation of the Preston probe including effects of heat transfer, compressibility and favorable pressure gradient. [AIAA PAPER 69-648] 17 p2893 A69-33496

## BROTZEN, F. R.

- Elastic constants of molybdenum-rich rhenium alloys in the temperature range -190 deg C to plus 100 deg C. 04 p0613 A69-14455

- Effects of impurities on the plastic flow of molybdenum crystals. 10 p1710 A69-23089

## BROUCKE, R.

- Perturbations in rectangular coordinates by iteration. 19 p3398 A69-35615

- Stability of periodic orbits in the elliptic, restricted three-body problem. [AAS PAPER 68-086] 20 p3595 A69-37172

## BROUDY, R. M.

- Silicon surface structure. 02 p0301 A69-12660

## BROUGH, T.

- Recent developments in bird scaring on airfields. 17 p2915 A69-33365

## BROUSSARD, P. H.

- Experiments in hydrodynamic grease bearings. [AIAA PAPER 69-836] 21 p3732 A69-39367

## BROUSSEAU, M.

- Use of microwave techniques for measuring carrier lifetime and mobility in semiconductors. 16 p2825 A69-31617

## BROUTMAN, L. J.

- Progressive damage of a glass reinforced plastic during fatigue. 08 p1338 A69-20494

- Determination of flaws and fracture sites in materials using liquid crystal coatings. 10 p1699 A69-23053

- Mechanical behavior of fiber-reinforced plastics. 21 p3752 A69-38933

## BROUWER, W.

- Lambda-temperature depression in rotating liquid helium. 23 p4192 A69-42335

## BROVMAN, M. IA.

- Approximate method of solving problems of plasticity theory / *Priblizhenniy metod resheniya zadach teorii plastichnosti.* 10 p1793 A69-22850

## BROWDE, A.

- The application of time/frequency technology in the air traffic control environment. [AIAA PAPER 69-795] 19 p3367 A69-35635

## BROWN, A.

- Nonlinear programing is essential. 01 p0035 A69-10067

- Design of a switched multibeam aerial in X-band for use on an experimental C.W. surveillance radar. 08 p1289 A69-20967

- Toward an algebraic theory of the analysis and testing of digital networks. [AAS PAPER 69-236] 24 p4288 A69-42811

## BROWN, A. H.

- Space research - Source of biological knowledge. [UN PAPER 68-95345] 01 p0014 A69-10486

- Life Sciences and Space Research VI, COSPAR, Plenary Meeting, 10th, Open Meeting of Working Group V, London, England, July 27, 28, 1967, Proceedings. 01 p0016 A69-11073

## BROWN, A. L., JR.

- Histology of papillary muscles of the left ventricle in myocardial infarction. 24 p4261 A69-42724

## BROWN, B.

- A hazards model for exploding solid propellant rockets. [AIAA PAPER 69-461] 16 p2869 A69-32749

## BROWN, B. M. K.

- Photoelectric observations of three W Ursae Majoris systems. 16 p2863 A69-32399

## BROWN, B. R.

- Magnitude estimation of perceived distance over various distance ranges. 07 p1069 A69-19501

- Computer-generated binary holograms. 10 p1697 A69-23869

- Distance discrimination in a simulated space environment. 12 p2022 A69-26372

- BROWN, C. A.**  
Aeromedical aspects of the first nonstop transatlantic helicopter flight. II - Heart rate and ECG changes.  
19 p3263 A69-36451
- BROWN, C. K.**  
Are joint fatigue tests realistic/ques/  
22 p4045 A69-40826
- BROWN, D. C.**  
A unified lunar control network.  
05 p0819 A69-15628
- BROWN, D. D.**  
Inlet effects on boiling and near critical hydrogen heat transfer.  
[ASME PAPER 69-HT-27] 24 p4412 A69-43541
- BROWN, D. E.**  
Interferometric laser beam scanner.  
04 p0609 A69-14288  
A differential-capacitance transducer for measuring small displacements.  
22 p3946 A69-40439
- BROWN, D. G.**  
Requirements for future civil aircraft.  
16 p2882 A69-32022  
VTOL transport aircraft - Factors influencing the integration of airframe, power plant and systems.  
17 p2897 A69-33207
- BROWN, D. H.**  
Design and characterization of a step- recovery switching transistor.  
02 p0215 A69-11937
- BROWN, D. J.**  
The ejection of instruments from sounding rocket payloads.  
10 p1635 A69-23032
- BROWN, D. L.**  
Practical methods to obtain improved machine tool dynamic performance.  
22 p3928 A69-40672
- BROWN, D. M.**  
Freeze-out characteristics of the MOS varactor.  
05 p0806 A69-15809  
Refractory metal silicon device technology.  
06 p0930 A69-17152  
Tilt-wing executive transport.  
11 p1821 A69-24321
- BROWN, D. O.**  
Let's try a step forward.  
01 p0114 A69-11357
- BROWN, D. R.**  
RCS enhancement devices.  
03 p0384 A69-12909  
The interpretation of data.  
03 p0385 A69-12913  
Steady-state analysis of the human respiratory system.  
24 p4276 A69-43272
- BROWN, F. T.**  
A quasi method of characteristics with application to fluid lines with frequency dependent wall shear and heat transfer.  
[ASME PAPER 68-WA/AUT-7] 05 p0750 A69-16181  
Small-amplitude frequency behavior of fluid lines with turbulent flow.  
[ASME PAPER 69-FE-11] 20 p3516 A69-37988
- BROWN, G. L.**  
Effects of simulated degrading environment on temperature control surfaces.  
[AIAA PAPER 69-1024] 22 p3923 A69-40394
- BROWN, G. M.**  
Some properties of the day-to-day variability of Sq/H.  
12 p2073 A69-26954  
Theory of holographic interferometry.  
15 p2611 A69-31146  
Holographic technique for determining the phase of vibrating objects.  
17 p2974 A69-33324  
Holographic nondestructive testing /HNDT/ of aircraft materials.  
19 p3322 A69-35576
- BROWN, G. S.**  
Wave propagation in an open, periodic, two-dimensional iris waveguide.  
16 p2753 A69-32394
- BROWN, G. V.**  
High-field cryogenic magnets with pure aluminum conductor.  
12 p2016 A69-26497
- Excitation spectrum for a Bose gas with repulsive core and attractive well.  
17 p3008 A69-33118
- Thickness optimization for dynamically stable superconducting tapes.  
24 p4361 A69-43121
- BROWN, H. J.**  
Measuring elastic modulus and tensile strength of high modulus graphite.  
19 p3355 A69-35520
- BROWN, H. M.**  
Compacting and pressureless sintering of beryllium powders.  
14 p2465 A69-29681
- BROWN, H. P.**  
Thermosetting adhesives.  
14 p2468 A69-29340
- BROWN, H. S.**  
An analytic and experimental study of the heat transfer and erosion in the NOL hypervelocity launcher.  
[AIAA PAPER 69-336] 13 p2242 A69-28272
- BROWN, I. M.**  
Benzene anion radical - Removal of the orbital degeneracy at 4.2 deg K.  
03 p0382 A69-13379
- BROWN, J. A., JR.**  
A numerical investigation of hydrodynamic instability and energy conversions in the quasi-geostrophic atmosphere. I, II.  
17 p2960 A69-33149
- BROWN, J. C.**  
Large deflections of rectangular plates subjected to uniform lateral pressure and compressive edge loading.  
20 p3620 A69-37000
- BROWN, J. H.**  
Therapeutic potential of dimethyl sulfoxide /DMSO/ in aerospace medicine.  
06 p0883 A69-17851
- BROWN, J. L.**  
Fail-operational landing commands using Kalman filtering.  
17 p3003 A69-34106
- BROWN, K. C.**  
The measurement of skin friction in turbulent boundary layers with adverse pressure gradients.  
11 p1889 A69-25557
- BROWN, K. M.**  
On Newton-like iteration functions - General convergence theorems and a specific algorithm.  
01 p0106 A69-10988
- BROWN, L.**  
Designing with diff-amp and op-amp ICs.  
11 p1857 A69-25664  
The changing face of production - The use of numerical control in manufacturing.  
24 p4318 A69-42710
- BROWN, L. C.**  
Rotary transformer utilization in a spin stabilized spacecraft power system.  
17 p3050 A69-34111
- BROWN, L. R.**  
Some observations on the sodium and potassium interactions in the blue-green alga *Anabaena flos-aquae* A-37.  
23 p4079 A69-41386  
The electrodialysis of *Anabaena flos-aquae* A-37.  
23 p4079 A69-41387
- BROWN, L. W.**  
The spectrum of the cosmic radio background between 0.4 and 6.5 MHz.  
23 p4219 A69-42375
- BROWN, P. S.**  
Numerical simulation of the macrophysical and microphysical processes of moist convection.  
19 p3362 A69-36497
- BROWN, R.**  
Closed-cycle MPD experiments with applied electric and magnetic fields.  
10 p1738 A69-23479  
Performance of the CNEN MHD blow-down loop facility.  
10 p1674 A69-23482
- BROWN, R. A.**  
The variation with height of the F-layer lunar tide.  
01 p0063 A69-10424  
The "luni-solar" ionospheric tides.  
10 p1685 A69-23829
- BROWN, R. D.**  
Computerised methods in the analysis of dynamic records.  
07 p1232 A69-19139
- BROWN, R. F.**  
Monitoring equipment for turbine engine development.  
10 p1692 A69-23253  
Spatial distribution of 0.30-0.54 ev gaseous argon atoms scattered from a solid argon surface.  
13 p2300 A69-28658  
Review and comparison of drift-correction schemes for periodic crosscorrelation.  
15 p2564 A69-30169
- BROWN, R. G.**  
An optimum inertial/Doppler-satellite navigation system.  
08 p1349 A69-21199  
Kalman filter with delayed states as observables.  
09 p1473 A69-22438  
Modeling nonstationary random processes with an application to gyro drift rate.  
14 p2479 A69-29486
- BROWN, R. H.**  
Mission planning as affected by sun-orbit plane relationships.  
[AIAA PAPER 69-129] 06 p1011 A69-18093  
Stress corrosion mechanisms for aluminum alloys.  
19 p3350 A69-36895  
Aluminum alloy laminates - Alclad and clad aluminum alloy products.  
21 p3745 A69-38936  
Mission planning as affected by sun-orbit plane relationships.  
[AIAA PAPER 69-164] 24 p4386 A69-43261
- BROWN, R. K.**  
Small twist of a circular cylindrical tube exhibiting cylindrical aeolotropy of a nonorthogonal type.  
05 p0831 A69-15580
- BROWN, R. N.**  
Doppler-inertial navigation and where it's going.  
06 p0956 A69-17859  
Analog simulation of a bilinear hysteretic system undergoing random vibration.  
[ASME PAPER 69-VIBR-25] 10 p1806 A69-24173
- BROWN, R. R.**  
Recovery of gamma dose military specification failures during low and high power life testing of silicon transistors.  
06 p0976 A69-16878  
Low dose ionization-induced failures in active bipolar transistors.  
06 p0977 A69-16880  
Atomic nitrogen ion distribution and lambda 5755 emission in the auroral ionosphere.  
12 p2066 A69-26110  
On green line suppression in type-B aurorae.  
16 p2778 A69-32191  
Electron energy dependence for in-vacuum degradation and recovery in thermal control surfaces.  
[AIAA PAPER 69-643] 17 p3005 A69-33306
- BROWN, R. S.**  
Linear and nonlinear pressure coupled combustion instability of solid propellants.  
[AIAA PAPER 69-479] 16 p2834 A69-32725
- BROWN, R. T.**  
Failure analysis techniques used in a reliability analysis laboratory.  
15 p2722 A69-31133  
Measurements in a two-temperature plasma boundary layer.  
[AIAA PAPER 69-692] 17 p3011 A69-33446  
Integrated circuit failure mechanisms and their detection through failure analysis - 1969 survey.  
19 p3282 A69-35786
- BROWN, S. C.**  
A cloud-cover simulation procedure.  
20 p3573 A69-38120
- BROWN, S. L.**  
Axisymmetric bodies of minimum drag in hypersonic flow.  
10 p1632 A69-23886
- BROWN, S. N.**  
Laminar separation.  
18 p3122 A69-34918  
Flow near the apex of a plane delta wing.  
19 p3240 A69-36590



## BROWN, S. R.

Effect of processing variables on properties of chromate treated aluminum.

19 p3321 A69-35570

## BROWN, T. A.

A plan for the efficient use of Washington's area airports.

22 p4053 A69-40709

## BROWN, W.

Effects of various respiratory maneuvers on the physiological response to angular acceleration.

23 p4102 A69-41679

## BROWN, W. C.

Toroidal microwave discharge heating of gas. [IMPI PAPER A4]

04 p0636 A69-14999

Experiments involving a microwave beam to power and position a helicopter.

23 p4063 A69-42534

## BROWN, W. E.

Maintenance of the tropical night-time F layer.

02 p0242 A69-11825

Analysis of a multiplicative feed system for monopulse tracking applications.

20 p3510 A69-37704

Temperature chamber requirements for reliability demonstration testing.

22 p3954 A69-40034

A 60-GHz multifrequency radiometric sensor for detecting clear air turbulence in the troposphere.

23 p4144 A69-42536

## BROWN, W. E. III

Water vapor - Observations of galactic sources.

18 p3205 A69-35435

## BROWN, W. E., III

Radiometric measurement of attenuation and emission by the earth's atmosphere at wavelengths from 4 cm to 8 mm.

02 p0210 A69-12432

The simultaneous investigation of attenuation and emission by the earth's atmosphere at wavelengths from 4 centimeters to 8 millimeters.

21 p3718 A69-39747

## BROWN, W. E., JR.

Principal science results from Surveyor 5.

02 p0321 A69-12224

Radar studies of the earth.

14 p2416 A69-29531

## BROWN, W. F., JR.

Clevis design for compact tension specimens used in plane strain fracture toughness testing.

15 p2612 A69-31150

## BROWN, W. J.

Brayton-B power system - A progress report.

23 p4071 A69-42278

Complement-fixing antigen from BHK-21 cell cultures infected with lymphocytic choriomeningitis virus.

24 p4263 A69-43336

## BROWN, W. K.

Comparison of the incidence of cardiac arrhythmias during plus G sub x acceleration, treadmill exercise and tilt table testing.

06 p0874 A69-17834

Aeromedical aspects of the first nonstop transatlantic helicopter flight. II - Heart rate and ECG changes.

19 p3263 A69-36451

Changes in ECG contour during prolonged plus g sub z acceleration.

21 p3660 A69-39178

## BROWN, W. M.

Range-Doppler imaging with motion through resolution cells.

08 p1270 A69-19861

Synthetic aperture radar.

08 p1277 A69-20960

Phase analysis in multiple-sensor receivers with high signal-to-noise ratio.

13 p2220 A69-27938

## BROWN, W. P.

Comparison of helicopter combat environments to structural criteria requirements. [AHS PAPER 375]

17 p3059 A69-33513

## BROWNE, A.

The feasibility of locating waveguide arcs by sound ranging.

04 p0576 A69-14762

## BROWNE, I. D.

Cloud height contouring from Apollo 6 photography.

20 p3569 A69-36926

## BROWNE, P. F.

The generation of magnetic fields by viscous forces in a nonuniformly rotating plasma.

06 p1009 A69-17966

## BROWNE, S. D.

A comparison of access systems to present world airports. [AIAA PAPER 68-1072]

12 p2059 A69-26773

## BROWNE, T. D.

Secondary uses of aerospace biomedical technology.

18 p3236 A69-35104

## BROWNELL, D. H., JR.

Ferromagnetic transition in superdense matter and neutron stars.

11 p1965 A69-25564

## BROWNING, G. V.

Failure mechanisms in microcircuits. [AGARDOGRAPH-114]

08 p1292 A69-20987

Survey of failure mechanisms for hybrid microcircuits.

22 p3910 A69-39954

## BROWNING, K. A.

Air motion and precipitation growth in a wave depression.

18 p3166 A69-34419

## BROWNING, L. S.

Mutational responses of insects in the Biosatellite II experiment.

20 p3476 A69-37618

## BROWNLEE, D. E.

Upper limits to the micron and submicron particle flux at satellite altitudes.

07 p1215 A69-18845

Meteor physics and the density of particles satellite and balloon altitudes.

21 p3701 A69-38342

## BROWNLEE, W. G.

Nonlinear longitudinal combustion instability - The influence of propellant composition. [AIAA PAPER 69-480]

16 p2834 A69-32736

## BROWNSWORD, R.

Nodal precipitation and cellular solidification substructure in commercial purity nickel.

08 p1332 A69-20289

## BROXMEYER, C.

Terminal phase navigation.

07 p1177 A69-19213

## BROYDEN, C. G.

A new method of solving nonlinear simultaneous equations.

08 p1344 A69-20832

## BRUCATO, R. J.

Hydrogen line profiles in early-type stars.

01 p0154 A69-10876

## BRUCE, C. W.

Measurements of the time-averaged potentials in low-pressure, RF discharges using an ion-beam probe.

02 p0287 A69-11838

## BRUCE, D. S.

Mineral dynamics during hibernation and chronic immobility - A review.

21 p3660 A69-39175

## BRUCE, J. D.

Discrete Fourier transforms, linear filters, and spectrum weighting.

10 p1666 A69-23888

## BRUCHHAUSEN, K.

Neutral particle density ratios in the thermosphere as derived from mass spectrometric measurements above Sardinia.

21 p3704 A69-38368

## BRUCKER, G. J.

Recovery rate and capacitance measurements on irradiated lithium-containing solar cells.

06 p0974 A69-16867

Long term stability of lithium-doped solar cells irradiated with electrons, protons, or neutrons.

19 p3252 A69-35697

Injection-level effects in irradiated, lithium-containing solar cells.

19 p3252 A69-35698

Electrical studies of electron-irradiated lithium-containing n-type silicon.

24 p4360 A69-42647

## BRUDOS, C. D.

MSI 12 bit digital to analog converter. [AIAA PAPER 69-968]

22 p3906 A69-40349

## BRUECHMANN, P.

Photography in experimental research /Filmaufnahmen in der Versuchstechnik/.

11 p1881 A69-24573

## BRUECK, M. T.

Galactic discontinuity near I super II equals 140 deg.

10 p1776 A69-23214

Electronographic study of the interstellar 4430 band.

10 p1781 A69-23674

Image tube observations of the lambda 4430 interstellar band.

11 p1965 A69-25658

## BRUECKNER, G.

Distribution of magnetic fields in photospheric and chromospheric layers in the active region of 7 July 1966 and their correlation with the flare event of 8 July, 1253-1340 UT.

10 p1762 A69-23727

## BRUECKNER, W.

Helicopter blades in metal-sandwich bonding /Hubschrauberblaetter in Metall-Sandwich Klebe-Bauweise/.

07 p1143 A69-19731

## BRUEGGEMAN, H.

New feedback-stabilised analogue multiplier.

09 p1475 A69-22584

## BRUEL, A.

Problem of operating helicopters from small ships /Probleme de la mise en oeuvre des helicopteres a partir de navires de faible tonnage/.

08 p1255 A69-20654

## BRUENER, H.

Dependence of tilt-table and acceleration tolerance on body build and physical fitness /Die Abhaengigkeit der Orthostase- und Beschleunigungstoleranz von Koerperbau und Leistungsfahigkeit/.

09 p1444 A69-21304

Impairment of pilot efficiency by alcohol and drugs - An attempt to deduce standard limits from experimental results /Die einschaenkung der flugtaeuechtigkeit durch alkohol und medikamente - Versuch einer experimentellen erarbeitung von richtwerten/.

21 p3663 A69-38792

Influence of stature and physical fitness on tilt-table and acceleration tolerance.

22 p3889 A69-39940

Physical fitness and tolerances to environmental extremes.

23 p4102 A69-41683

The influence of stature and physical fitness on tilt-table and acceleration tolerance.

23 p4108 A69-41821

## BRUENING, R.

The effect of deflection on the flow and mixing process in flames /Der Einfluss der Umlenkung auf den Stromungs- und Mischungsverlauf in Flammen/.

17 p3068 A69-32966

## BRUENTRUP, H.

Helium-cooled parametric amplifier for satellite ground stations with 500 MHz bandwidth.

07 p1098 A69-18460

## BRUGGEMAN, G.

Segregation at interphase boundaries.

03 p0450 A69-13883

## BRUGLER, J. S.

Charge pumping in MOS devices.

15 p2573 A69-30033

## BRUINS, P. F.

Plastics for Electrical Insulation.

13 p2285 A69-27982

Heat resistant polyamides and polyimides for electrical insulation.

13 p2286 A69-27988

## BRUKL, C. E.

Revision of the vanadium-carbon and niobium-carbon systems.

05 p0779 A69-15988

## BRUMAN, J. R.

A lunar libration point experiment.

20 p3613 A69-38249

## BRUMBAUGH, D. L.

Telemetry with unrestrained animals.

07 p1071 A69-19136

## BRUMBERG, V. A.

Interpretation of the coordinates in the Schwarzschild problem /K interpretatsii koordinat v zadache Shvartsshil'da/.

03 p0506 A69-13090

- Equations for the rotational motion of planets in general relativity theory.  
11 p1952 A69-24251
- Interpretation of coordinates in the Schwarzschild problem.  
14 p2516 A69-28772
- BRUMMER, S. B.**  
Use of Rayleigh waves for the detection of stress-corrosion cracking /SCC/ in aluminum alloys.  
12 p2114 A69-26306
- The separation of corrosion and stress effects in stress corrosion - The critical role of surface preparation.  
21 p3747 A69-39435
- BRUN, E. A.**  
Contribution to the study of ionized wakes in the free quasi-molecular regime /Contribution a l'etude des sillages ionises dans le regime quasi-moleculaire libre/.  
06 p0966 A69-17639
- Application of similitude in the mechanics of disperse media.  
19 p3300 A69-36775
- BRUN, L.**  
Explicit self-similar strong-shock solutions of the second type /Sur les solutions autosembles explicites a choc fort et du second type/.  
10 p1680 A69-23789
- Energetic methods in linear evolving systems. I - Separation of energies /Methodes energetiques dans les systemes evolutifs lineaires. I - Separation des energies/.  
13 p2370 A69-28634
- Energy methods in evolving linear systems. II - Uniqueness theorems /Methodes energetiques dans les systemes evolutifs lineaires. II - Theoremes d'unicite/.  
19 p3439 A69-36470
- BRUN, P.**  
Nonlinear effects in the output intensity of a He-Ne laser placed in a magnetic field /Effets non lineaires dans l'intensite de sortie d'un laser He-Ne place dans un champ magnetique/.  
20 p3553 A69-37433
- BRUN, R.**  
Influence of vibrational relaxation on the laminar boundary layer downstream of a moving shock wave /Influence de la relaxation de vibration sur la couche limite laminaire a l'aval d'une onde de choc mobile/.  
08 p1303 A69-20269
- Reservoir conditions of a reflected-shock wind tunnel /Sur les conditions de reservoir d'une soufflerie a choc reflechi/.  
13 p2243 A69-28359
- The duration of the hot flow and the structure of the contact surface in a classical shock tube /Sur la duree de l'ecoulement chaud et la structure de la surface de contact dans un tube a chocs classique/.  
15 p2590 A69-30297
- BRUNDAGE, R. K.**  
Carbon stars in a south galactic pole region.  
16 p2860 A69-32232
- BRUNDAGE, W. D.**  
Crab Nebula pulsar NPO527.  
07 p1221 A69-19405
- Searches for pulsars.  
18 p3192 A69-34320
- BRUNDIDGE, K. C.**  
A numerical experiment in predicting stratus clouds.  
15 p2649 A69-30893
- BRUNDLE, C. R.**  
High resolution molecular photoelectron spectroscopy. I - Fine structure in the spectra of hydrogen and oxygen. II - Water and deuterium oxide.  
01 p0023 A69-10141
- BRUNE, G. W.**  
Low-frequency approximation in unsteady aerodynamics.  
24 p4250 A69-43729
- BRUNELLE, E. J.**  
A note concerning a class of nonclassical forced-motion problems.  
09 p1533 A69-21975
- BRUNER, E. C., JR.**  
Hydrogen geocorona and solar Lyman-alpha line. I.  
05 p0815 A69-16254
- Solar CII resonance-line profiles.  
09 p1592 A69-21456
- Rocket observations of profiles of solar ultraviolet emission lines.  
20 p3612 A69-38167
- BRUNER, G.**  
The Boeing 747 /Le Boeing 747/.  
01 p0011 A69-11067
- BRUNET, A.**  
Use of triple probes in the presence of high- or low-frequency perturbations /Utilisation des sondes triples en presence de parasites a haute ou basse frequence/.  
17 p2920 A69-33592
- BRUNI, C.**  
The order of linear continuous systems described by the impulse response matrix.  
11 p1858 A69-24567
- BRUNK, W. E.**  
Photographic results of the Lunar Orbiter program.  
05 p0822 A69-15858
- The Lunar Orbiter program.  
21 p3794 A69-38377
- BRUNNE, M.**  
Some considerations on the relaxation process of ionization in a non-equilibrium plasma.  
03 p0477 A69-13609
- BRUNNE, M. P.**  
Theoretical and experimental study of the EGD power generator.  
10 p1638 A69-23486
- BRUNNER, A.**  
Possibilities of designing doubly curved reflectors for rotating search radar antennas /Moeglichkeiten der Dimensionierung von doppelt gekruemten Reflektoren fuer Rundsuech-Radarantennen/.  
16 p2763 A69-32790
- BRUNNER, M.**  
Structure design for future high-speed aircraft /Bauweisen fuer zukuenftige Hochgeschwindigkeitsflugzeuge/.  
21 p3646 A69-38460
- Structural designs of future high-speed aircraft /Bauweisen zukuenftiger Hochgeschwindigkeitsflugzeuge/.  
23 p4233 A69-42164
- BRUNNER, M. J.**  
Active cooling heat protection.  
[AIAA PAPER 68-1154] 03 p0533 A69-13669
- Active cooling heat protection.  
[AIAA PAPER 68-39016] 21 p3851 A69-39016
- BRUNNER, W.**  
Quantum-mechanical calculation of the photon number and amplitude fluctuation of laser radiation in the case of an inhomogeneously broadened atomic line /Quantenmechanische Berechnung der Photonenanzahl und Amplitudenfluktuation einer Laserstrahlung bei inhomogen verbreiteter Atomlinie/.  
05 p0770 A69-15631
- Investigation of the flow relations in the comas of dust comets /Versuche zu den Stromungsverhaeltnissen in der Koma von Staubkometen/.  
06 p1000 A69-16984
- Mutual influence of two different laser transitions with the same ground level. I - Theory /Gegenseitige Beeinflussung zweier verschiedener Laseruebergaenge mit dem gleichen Grundniveau. I - Theorie/.  
08 p1325 A69-20283
- Simulation of cometary two-phase flow with evaporation.  
10 p1674 A69-23686
- Quantum mechanics calculations of the line width and the intensity correlation of laser radiation /Quantenmechanische Berechnung der Linienbreite und Intensitaetskorrelation der Laserstrahlung/.  
17 p2980 A69-33012
- Quantum-mechanical treatment of a laser with non-resonant feedback. I - Calculation of the photon number and the amplitude fluctuations /Quantenmechanische Behandlung des Lasers mit nichtresonanter Rueckkopplung. I - Berechnung von Photonenanzahl und Amplitudenfluktuation/.  
21 p3735 A69-38581
- Absorption spectroscopy using resonance-broadened atomic lines for density measurement in nozzle jets /Absorptionsspektroskopie an resonanzverbreiterten Atomlinien zur Dichtemessung in Duesenstrahlen/.  
21 p3774 A69-39239
- BRUNO, J.**  
ATM solar cell module performance testing.  
23 p4072 A69-42286
- BRUNO, J. R.**  
Balance for measuring skin friction in the presence of heat transfer.  
19 p3292 A69-35734
- Balance for measuring skin friction in the presence of ablation.  
19 p3292 A69-35735
- BRUNO, L.**  
The new antenna system at the Fucino earth station for satellite communications.  
07 p1075 A69-18493
- BRUNOVSKY, P.**  
Controllability and linear closed-loop controls in linear periodic systems.  
22 p3917 A69-40572
- BRUNS, H.-J.**  
A mathematical model for treating aircraft separation problems in air traffic safety control /Mathematisches Modell fuer die Behandlung von Staefelungsproblemen in der Flugsicherung/.  
08 p1347 A69-20712
- BRUNSTEIN, K.**  
On the transient nature of the galactic halo.  
08 p1386 A69-20084
- BRUNT, G. A.**  
Low-frequency negative resistance of X band Gunn diodes.  
12 p2039 A69-26387
- BRUSH, D. O.**  
Imperfection sensitivity of stringer stiffened cylinders.  
02 p0348 A69-12542
- BRUSHLINSKII, K. V.**  
Method of calculating two-dimensional plasma flows in coaxial channels /Metod rascheta dvumernykh techenii plazmy v koaksial'nykh kanalakh/.  
01 p0130 A69-10723
- Evolutionarity of the equations of magnetohydrodynamics with allowance for the Hall effect /Ob evoliutsionnosti uravnenii magnitnoi gidrodinamiki s uchetom effekta Kholla/.  
05 p0801 A69-15788
- Effect of finite conductivity on stationary self-contracting plasma flows.  
06 p0966 A69-17548
- Two-dimensional steady flow of highly conducting plasma in a coaxial system.  
07 p1190 A69-18757
- On the evolutionarity of equations of magnetohydrodynamics taking the Hall effect into account.  
18 p3181 A69-35039
- BRUSILOVSKII, A. D.**  
Vibration and stability of cylindrical shells in a gas flow.  
16 p2875 A69-32287
- BRUSIN, V. A.**  
Absolute stability of a class of control systems containing a section with distributed parameters.  
07 p1115 A69-19758
- Global stability of a constrained periodic solution to an equation describing the dynamics of the lunar temperature field /Global'naia ustoiichivost' vyzhdeniogo periodicheskogo resheniia uravneniia, opisuyaiushchego dinamiku temperaturnogo polia lunny/.  
12 p2157 A69-26281
- BRUSOV, V. S.**  
Application of the theory of optimum overlappings to the selection of a power plant for a low-thrust space vehicle /Primenenie teorii optimal'nykh pokrytii k vyboru dvigatel'noi ustanovki kosmicheskogo apparata maloi tiagi/.  
04 p0666 A69-14920
- Application of the theory of optimal overlapping to problems of selecting the power of low-thrust engines /Primenenie teorii optimal'nykh pokrytii k zadacham vybora moshchnosti dvigatel'ia maloi tiagi/.  
18 p3184 A69-34583
- BRUSTAD, T.**  
Inactivation at various temperatures of the esterase activity of dried trypsin by radiations of different LET.  
03 p0372 A69-13483
- Inactivation and trapped radicals in dry trypsin exposed to ultraviolet light.  
03 p0372 A69-13486
- BRUTSAERT, D. L.**  
Effects of altered loading on contractile events in isolated cat papillary muscle.  
24 p4258 A69-42631
- BRUZEK, A.**  
On small-scale mass motion associated with flares.  
06 p0993 A69-17431
- Flares in the active region during the proton flare period of July 1966.  
10 p1763 A69-23737
- Motions in arch filament systems.  
20 p3588 A69-37543
- Solar flares.  
24 p4366 A69-42687



- Flare associated optical phenomena.  
24 p4371 A69-43607
- BRYAN, J. W.**  
RFI characteristics of a delay relay satellite system.  
23 p4120 A69-41757
- BRYAN, M. E.**  
Low-frequency noise thresholds.  
21 p3664 A69-38986
- BRYAN, R. N.**  
A linear differential system with general linear boundary conditions.  
07 p1173 A69-18729
- BRYANT, A. W.**  
A study of some palladium-indium, platinum-indium and platinum-tin alloys.  
05 p0779 A69-15832
- BRYANT, D. A.**  
Modulation of auroral electrons at large distances from the earth.  
12 p2065 A69-26108  
Modulation of auroral electrons near the equatorial plane.  
21 p3709 A69-38499
- BRYANT, G. H.**  
The optimization of antenna electrical performance. [UN PAPER 68-95813]  
01 p0043 A69-10517  
Propagation in corrugated waveguides.  
08 p1284 A69-20295
- BRYANT, J. F.**  
Complex spatial filtering by holographic Fourier subtraction.  
10 p1690 A69-22953
- BRYANT, R. A. A.**  
Analysis of proportional fluid amplifiers in cascade and with feedback.  
24 p4255 A69-43268
- BRYANT, R. H.**  
Mises limit load for simply supported conical sandwich shells under internal pressure.  
08 p1416 A69-20702
- BRYANT, T. G.**  
Parameters of microstrip transmission lines and of coupled pairs of microstrip lines.  
13 p2229 A69-27672
- BRYCE, C. A.**  
Nonequilibrium effects on the supersonic combustion of hydrogen and vitiated air. [AIAA PAPER 69-457]  
16 p2881 A69-32767
- BRYDON, G. M.**  
Measurements on some radome materials with superior dielectric and temperature characteristics.  
07 p1109 A69-19514
- BRYLEV, G. B.**  
Complex application of radar and satellite observations in the analysis of meso- and macroscale systems of clouds /Kompleksnoe ispol'zovanie radiolokatsionnykh i sputnikovyykh nabludenii pri analize mezo- i makromasshtabnykh oblachnykh sistem/.  
13 p2294 A69-27853  
Meteorological nature and characteristics of an anomalous radio echo /Meteorologicheskaya priroda i kharakteristiki anomal'nogo radioekho/.  
16 p2808 A69-32277
- BRYNGDAHL, O.**  
Holographic penetration of turbulence.  
09 p1494 A69-21559  
Holographic compensation of motion blur by shutter modulation.  
24 p4314 A69-42972  
Holographic penetration of an inhomogeneous medium.  
24 p4314 A69-42975
- BRYSON, A. E., JR.**  
Linear smoothing using measurements containing correlated noise with an application to inertial navigation.  
06 p0956 A69-17938  
Conjugate gradient methods with an application to V/STOL flight-path optimization.  
12 p2013 A69-26763  
Minimum fuel lateral turns at constant altitude.  
13 p2203 A69-28245  
The separation computation of arcs for optimal flight paths with state variable inequality constraints.  
19 p3399 A69-35667  
A landing approach guidance scheme for unpowered lifting vehicles. [AIAA PAPER 69-865]  
21 p3763 A69-39391
- BRYZGALOV, A. P.**  
Characteristics of digital receivers of radar signals /Kharakteristiki tsifrovyykh priemnikov radiolokatsionnykh signalov/.  
15 p2563 A69-30136
- BRYZGALOV, G. A.**  
Investigation of the outflow of evaporation products during the electrical explosion of a wire cone /Issledovanie istecheniya produktov ispareniiya pri elektricheskom vzryve provolochnogo konusa/.  
19 p3372 A69-35823
- BRYZHINA, M. F.**  
Ferroelectric and magnetic properties of  $1-x/\text{BiMnO}$  sub 3 -  $x/\text{PbTiO}$  sub 3 solid solutions /Segnetoelektricheskie i magnitnye svoystva tverdykh rastvorov  $1-x/\text{BiMnO}$  sub 3 -  $x/\text{PbTiO}$  sub 3/.  
22 p3996 A69-41163
- BRZEZINSKA, Z.**  
Level of acetylcholine in rat brain tissue as affected by a single exposure to mechanical vibration.  
23 p4079 A69-41381  
Regression of changes in acetylcholine concentration induced in rats by a single two-hour exposure to mechanical vibrations.  
23 p4079 A69-41382
- BRZHAZOVSKII, I. U. V.**  
Collision effect on the saturation character of vibration-rotation transitions for 00 deg 1-10 deg 0 band of CO sub 2.  
14 p2457 A69-28928
- BRZHECHKO, L. V.**  
Drift-dissipative instability in a PIG discharge.  
08 p1370 A69-21020  
Dissipative drift instability of a plasma from a discharge with oscillating electrodes /Dreifovodissipativnaia neustoiichivost' plazmy v razriade s ostsiliruiushchimi elektronami/.  
09 p1550 A69-22019
- BRZUSTOWSKI, T. A.**  
A simple quasisteady model of the combustion of a fuel droplet with convection, including the effect of pressure. [AIAA PAPER 69-147]  
06 p1037 A69-18114
- BUBE, R. H.**  
Photovoltaic effect at copper sulfide-cadmium sulfide heterojunctions.  
19 p3382 A69-35684
- BUBIALIS, I. U.**  
Bright cobalt plating /Blestiasheche kobal'tirovanie/.  
22 p3959 A69-41265
- BUBLIK, B. N.**  
Some problems concerning the natural oscillations of three-layer plates /Nekotorye zadachi sobstvennykh kolebaniy trekhslainnykh plastinok/.  
11 p1976 A69-24773
- BUBLIK, L. S.**  
New heat-resistant materials - Polyimides and polybenzimidazoles.  
19 p3358 A69-35901
- BUBLIK, S. A.**  
Experimental investigation of high-frequency defocusing of the beam in a TWT /Eksperimental'noe issledovanie vysokochastotnoi rasfokusirovki puchka v LBV/.  
03 p0407 A69-13975
- BUBNOV, V. A.**  
A spectral analyzer /Analizator spektra/.  
17 p2939 A69-33909
- BUBNOVA, G. I.**  
Dielectric mirrors for parametric light generators /Dielektricheskie zerkala dlia parametricheskikh generatorov sveta/.  
03 p0438 A69-13049
- BURSEY, R. T.**  
Clevis design for compact tension specimens used in plane strain fracture toughness testing.  
15 p2612 A69-31150
- BUCCIARELLI, L. L., JR.**  
Torsional stability of shallow shells of revolution.  
16 p2871 A69-31879
- BUCHACEK, K.**  
A coaxial deviator theory of nonlinear elasticity /Koaksial'no deviatornaia teoriia nelineinoy uprugosti/.  
15 p2592 A69-31058
- BUCHAKLIEV, Z.**  
Oscillations produced by an external electromagnetic field in a positive glow-discharge column /Kolebaniya v polozhitel'nom stolbe tleiushego
- razriada, poluchennyye pod vliyaniem prilozhennogo izvne elektromagnitnogo polia/.  
13 p2313 A69-28332
- BUCHAN, J.**  
Effect of cyclic stresses on the rupture characteristics of a heat-resistant nickel alloy /Influence of cyclic stresses on the rupture characteristics of a heat-resistant nickel alloy/.  
09 p1523 A69-21607
- BUCHANAN, B. G.**  
Applications of artificial intelligence for chemical inference. I - The number of possible organic compounds - Acyclic structures containing C, H, O, and N.  
23 p4114 A69-42214
- BUCHANAN, W. W.**  
Aeronautical satellite communications - A progress review.  
05 p0790 A69-16722
- BUCHARDT, O.**  
Mass spectra of quinoline and isoquinoline N-oxides.  
07 p1075 A69-19496  
A study of the fragmentation processes of some n-acyl-2-indolinols upon electron impact.  
15 p2561 A69-30407
- BUCHAU, J.**  
Airborne observation of the midday aurora.  
18 p3126 A69-34258
- BUCHBERG, H.**  
Conduction cooling of the human body - A biothermal analysis.  
06 p0880 A69-17088
- BUCHELE, D. R.**  
Damping factor for the least-squares method of optical design.  
04 p0630 A69-14295
- BUHELNIKOVA, N. S.**  
Diffusion in an unstable highly inhomogeneous plasma.  
03 p0478 A69-13840  
Turbulent diffusion and ion heating in the presence of a current instability /Turbulentnaia diffuziya i nagrev ionov pri tokovoi neustoiichivosti/.  
15 p2662 A69-30959
- BUCHER, E.**  
Superconductors with magnetic impurities in a singlet ground state.  
02 p0295 A69-11778
- BUCHETON**  
Electronic counterrotating antenna of high directivity /Antenne contre-rotative electronique a grande directivite/.  
04 p0578 A69-15065
- BUCHHEIM, F. W.**  
Improvement of body plethysmographic measurements by means of an analog computer /Verbesserung ganzkoerperplethysmographischer Untersuchungen durch Einsatz eines Analogrechners/.  
23 p4111 A69-42081
- BUCHHEIT, R. D.**  
Some metallographic observations on the Tishomin-go, Oklahoma, meteorite.  
13 p2353 A69-28159
- BUCHSBAUM, M.**  
Stimulus sensitivity and stimulus intensity control.  
21 p3653 A69-38897  
Visual information and evoked responses from the left and right hemispheres.  
21 p3656 A69-38976
- BUCHTA, G.**  
Electronically adjustable ferrite phase shifters and their application in scanning leaky-wave antennas.  
08 p1290 A69-20979  
Miniaturized broadband E-Tee circulator.  
08 p1291 A69-20980
- BUCHTA, R.**  
Mean lives of some doubly excited levels in lithium. I.  
13 p2301 A69-27454  
Mean lives of some excited levels of Li I and Li II.  
18 p3177 A69-35012
- BUCHWALD, J.**  
An analysis of microstructural changes in 52100 steel bearings during cyclic stressing.  
08 p1319 A69-20004
- BUCHWALD, V. F.**  
Iron meteorites - Tables relating the Widmanstaetten angles to the plane of section.  
07 p1217 A69-19235

- BUCHWALD, V. T.**  
The half-plane with an edge crack in plane elastostatics.  
11 p1987 A69-25438
- BUCK, D. C.**  
Propagation in longitudinally magnetized ferrite-loaded waveguide.  
13 p2229 A69-27673
- BUCK, G. J.**  
Phase monopulse error due to nonuniform noise background.  
20 p3492 A69-37707
- BUCK, K. E.**  
A sequel to Technical Note 14 on the TUBA family of plate elements.  
03 p0530 A69-14090
- BUCK, W.**  
Respiratory volume measurements with pyroelectric conductor sensors /Messung des Atemvolumens mit Heissleitersensoren/.  
15 p2559 A69-31230
- BUCKEL, W.**  
Homogeneous mechanical stresses in amorphous and crystalline gallium films /Homogene mechanische Spannungen in amorphen und kristallinen Galliumschichten/.  
01 p0141 A69-11420
- BUCKELEW, V. L.**  
Iterative guidance applied to generalized missions. [AIAA PAPER 67-620]  
04 p0629 A69-15501
- BUCKENDAH, D. E.**  
Design evolution of the Wolf Trap life detector.  
02 p0201 A69-11769
- BUCKHOLD, B.**  
Effect on a flour beetle of irradiation during space flight.  
06 p0876 A69-18177  
Effect of temperature and X-irradiation on pupae of the flour beetle, *Tribolium confusum*.  
17 p2910 A69-33748  
Mutational responses of insects in the Biosatellite II experiment.  
20 p3476 A69-37618  
Biosatellite II - Physiological and somatic effects on insects.  
20 p3476 A69-37619
- BUCKINGHAM, A. G.**  
A hybrid simulation study of a satellite attitude controller using a torqued, 2-axis gimbaled boom as the actuator.  
07 p1227 A69-18335  
Satellite attitude control using a torqued, 2-axis-gimbaled boom as the actuator. [AIAA PAPER 68-857]  
24 p4348 A69-43245
- BUCKINGHAM, I. P. B.**  
Respiratory gas exchange in exercise during helium-oxygen breathing.  
17 p2910 A69-33751  
Respiratory gas exchange in exercise during helium-oxygen breathing.  
22 p3891 A69-40221
- BUCKLE, P. R.**  
A study of blockage effects of bluff bodies in closed wind tunnels.  
17 p2890 A69-33245
- BUCKLEY, C. J.**  
Aeromedical aspects of the first nonstop transatlantic helicopter flight. I - General mission overview and subjective fatigue analyses.  
19 p3262 A69-36450  
Aeromedical aspects of the first nonstop transatlantic helicopter flight. II - Heart rate and ECG changes.  
19 p3263 A69-36451  
Aeromedical aspects of the first nonstop transatlantic helicopter flight. III - Endocrine-metabolic effects.  
19 p3263 A69-36452
- BUCKLEY, D. H.**  
A study of adhesion to a rhenium surface with LEED.  
18 p3156 A69-35182  
The influence of ordering on the friction and wear of metals in vacuum.  
18 p3149 A69-35183
- BUCKLEY, J.**  
Test parameters, material characterization, and the white thermal control coating stability problem. [AIAA PAPER 69-641]  
17 p2993 A69-33762
- BUCKLEY, J. D.**  
Static oxidation and compatibility of boron nitride and boron nitride composite to 2000 deg C.  
19 p3359 A69-36208
- BUCKLEY, R. J.**  
Direct D-layer reflection as a factor in oblique propagation on the lower high frequencies.  
16 p2752 A69-32389
- BUCKLEY, W. J., JR.**  
Liquid explosive testing.  
04 p0646 A69-14481
- BUCKMANN, P. S.**  
Evaluation of wear ring seals for high-speed, high-pressure turbopumps. [ASME PAPER 68-WA/LUB-1]  
05 p0768 A69-16129
- BUCKNALL, C. B.**  
Current research on the structure and mechanical properties of rubber-modified thermoplastics.  
10 p1716 A69-23985
- BUCKO, ST.**  
Analysis of the elastoplastic buckling of cylindrical shells by the methods of generalized power series /Eine Analyse der elastisch-plastischen Beulung von Zylinderschalen anhand der Methode der verallgemeinerten Potenzreihen/.  
02 p0340 A69-12058
- BUCY, R. S.**  
Filtering for Stochastic Processes with Applications to Guidance.  
04 p0580 A69-14386  
Recent results in linear and non-linear filtering.  
04 p0581 A69-14696
- BUDAK, B. M.**  
Convergence of difference approximations for optimal control problems /O skhodimosti raznostnykh aproksimatsii dlia zadach optimal'nogo upravleniia/.  
20 p3509 A69-36989  
Difference approximations in optimal control problems.  
21 p3684 A69-38430
- BUDBERG, P. B.**  
Study of alloys of the Ti-V-Cr-Mo system /Issledovanie splavov sistemy Ti-V-Cr-Mo/.  
04 p0618 A69-15080  
Corrosion-resistant titanium alloy with 32 percent Mo /Korroziionnostoikii splav titana s 32 percent Mo/.  
07 p1163 A69-18781  
The phase diagram of the Ti-Ta-Cr system /Diagramma sostoiianiia sistemy Ti-Ta-Cr/.  
22 p3969 A69-40075
- BUDD, H. F.**  
Transport theory in strong magnetic fields.  
03 p0473 A69-12926
- BUDD, R. W.**  
A new approach to modal vibration testing of complex aerospace structures.  
15 p2585 A69-30358
- BUDDEN, K. G.**  
Full wave solutions for radio waves in a stratified magnetoionic medium.  
17 p2927 A69-33862
- BUDEN, D.**  
Operational characteristics of nuclear rockets. [AIAA PAPER 69-515]  
18 p3170 A69-34809
- BUDENSTEIN, P. P.**  
Destructive breakdown in thin films of SiO, MgF sub 2, CaF sub 2, CeF sub 3, CeO sub 2, and Teflon.  
13 p2322 A69-28012  
Destructive breakdown in thin films of SiO, MgF sub 2, CaF sub 2, CeF sub 3, CeO sub 2, and Teflon.  
16 p2761 A69-32323
- BUDIANSKY, B.**  
Post-buckling behavior of cylinders in torsion.  
11 p1979 A69-24814  
The buckling and post-buckling behavior of spherical caps under axisymmetric load.  
12 p2187 A69-26842  
Remarks on theories of solid and structural mechanics.  
19 p3443 A69-36776
- BUDIN, J. P.**  
Tunable Raman up-converter as a coherent generator. [IEEE PAPER B-2]  
05 p0774 A69-16309  
Noncollinear interactions in parametric luminescence. [IEEE PAPER K-8]  
07 p1152 A69-19067
- BUDINSKY, J.**  
Integrated TTL flip-flop circuits /Integrovane klopne obvody TTL/.  
24 p4287 A69-43130
- BUDKO, I. A.**  
Investigation of the meteoric dust of the Tunguska meteorite /Issledovanie meteornoi pyli tungusskogo meteorita/.  
01 p0160 A69-11386
- BUDKO, N. I.**  
Electric field in the wake of a body moving in a rarefied plasma /Ob elektricheskom pole v slede tela, dvizhushchegosia v razrezhennoi plazme/.  
14 p2517 A69-29068  
Whistler excitation of a lower hybrid resonance near a body moving in a plasma /O vozbuzhdenii svistiaschimi atmosferikami nizhnego gibridnogo rezonansa v okrestnosti dvizhushchegosia v plazme tela/.  
20 p3519 A69-37025  
The wake of a fast moving body in a rarefied plasma /O slede bystro dvizhushchegosia tela v razrezhennoi plazme/.  
20 p3525 A69-37660
- BUDNICK, D.**  
An in-core thermionic reactor for powering space vehicles /Der Incore-Thermionik-Reaktor zur Energieversorgung von Raumflugkoepern/.  
02 p0279 A69-12666
- BUDNIK, P. I.**  
Increasing the efficiency of laser output from homogeneous semiconductors by use of amplification and increase of resonator Q.  
05 p0777 A69-16378
- BUDRIS, R. E.**  
Lumped-model analysis of microcircuit vulnerability.  
06 p0977 A69-16886
- BUDURKA, W. J.**  
RAE-A attitude determination ground support system. [AIAA PAPER 69-983]  
22 p3907 A69-40363
- BUDZIAK, A.**  
Holographic method for measuring temperature distribution /Holograficzna metoda pomiaru rozkladu temperatury/.  
11 p1887 A69-25197
- BUDZILOVICH, P. N.**  
Lasers boost machine tool accuracy.  
04 p0606 A69-14880
- BUDZINSKI, J.**  
Discrepancy between energy criteria for evaluating frequency band changes of certain signals /O sprzeczności energetycznych kryteriów oceny zmian pasm częstotliwości niektórych sygnałów/.  
19 p3278 A69-36716
- BUDZIROVSKII, V. N.**  
An investigation of gasdynamic stability of a detonation wave of arbitrary profile.  
12 p2062 A69-26672
- BUECHL, K.**  
Determination of the blast-wave energy of a laser-induced gas breakdown /Energiebestimmung der Stosswelle eines laserinduzierten Gasdurchbruchs/.  
24 p4299 A69-42651
- BUECHNER, E.**  
Thermodynamic calculations of rocket propellant performance data. VII - Lithium- and halogen-containing hybrid fuel systems /Thermodynamische Berechnung der Leistungsdaten von Raketentreibstoffen. VII - Lithium- und halogenhaltige lithergole Systeme/.  
22 p3997 A69-39919
- BUECHNER, E.-E.**  
The thermal-chemical rocket /Die thermisch-chemische Rakete/.  
03 p0496 A69-13666
- BUECKER, H.**  
The effect of a vacuum and radiation on microorganisms /Zur Wirkung von Vakuum und Strahlung auf Mikroorganismen/.  
07 p1064 A69-18943  
Problems of estimating biological radiation doses and radiation protection in space.  
11 p1831 A69-24866  
Survival of microorganisms under simulated space conditions.  
15 p2557 A69-31388  
Discussion of a possible contamination of space with terrestrial life.  
20 p3475 A69-37615



## BUECKNER, H. F.

An application of diaktotics in the determination of turbine bucket frequencies by the use of perturbations. [ASME PAPER 69-VIBR-57]

10 p1804 A69-24151

## BUEHLER, E.

Magnetic and semiconducting properties of SmB sub 6.

07 p1200 A69-19403

## BUEHN, U.

Design of UHF transistor oscillators with a large tuning range /Entwurf von UHF- Transistor-Oszillatoren mit grossem Durchstimmbereich/.

08 p1285 A69-20380

## BUEHRING, W.

Thermal protection in life raft exposures.

06 p0883 A69-17841

## BUELL, H.

DIRAN - A Doppler-inertial system with a remote attitude capability.

17 p3002 A69-34097

## BUERCK, W.

Causal relations between environment and man in the judgment of noise.

01 p0020 A69-10741

## BUERGENTHAL, T.

Law-Making in the International Civil Aviation Organization.

23 p4240 A69-41297

## BUERGER, E. J.

Passive dampers for gravity gradient stabilization.

07 p1229 A69-18347

Motion simulator facility for spacecraft attitude control evaluation. [AIAA PAPER 69-1029]

22 p3924 A69-40398

## BUERGER, R.

Study of the age-hardening behavior of iron- manganese-nickel alloys with titanium additions /Untersuchung des Aushaarteverhaltens von Eisen-Mangan-Nickel-Legierungen mit Titanzusatz/.

05 p0781 A69-16541

## BUERGER, W.

Weak discontinuities in steady three- dimensional flow of gases with thermodynamic relaxation /Schwache Unstetigkeiten in raumlichen stationaeren Stromungen von Gasen mit thermodynamischer Relaxation/.

10 p1677 A69-22894

## BUERKHOLD, E.

Mechanically despun antenna.

17 p2978 A69-33431

## BUETTNER, L.

Acoustical-optical effects in quantum electronics /Akustisch-optische Effekte in der Quantenelektronik/.

07 p1144 A69-18285

## BUEVICH, I. A.

Diffusion of suspended particles in an isotropic turbulence field /O difuzii vzveshennykh chastits v pole izotropnoi turbulentnosti/.

02 p0234 A69-12579

On the initial stage of the motion in Rayleigh's problem.

07 p1118 A69-18701

Optical properties of a plasma from an electrodeless discharge in an airstream /Opticheskie svoystva plazmy bezelektrodnogo razriada v vozdushnom potoke/.

07 p1191 A69-18995

Experimental study of the ablation of meteorites.

15 p2697 A69-31252

Note concerning the construction of wall turbulence models /Bemerkung ueber die Konstruktion von Modellen fuer wandnahe Turbulenz/.

21 p3695 A69-39010

## BUFFALANO, C.

New conclusions concerning the observation of faint sources from a sunlit spacecraft.

16 p2861 A69-32301

## BUFFARDI, L.

Pattern perception - Integrating information presented in two modalities.

02 p0200 A69-12724

## BUFLER, H.

Theory of discontinuous and continuous joints. /Zur Theorie diskontinuierlicher und kontinuierlicher Verbindungen/.

04 p0682 A69-15292

Calculation of a viscoelastic adhesive bond /Berechnung einer viskoelastischen Klebeverbindung/.

22 p4038 A69-39896

## BUFORD, W. H., JR.

Noninterference wind tunnel instrumentation.

10 p1672 A69-23266

## BUFTON, J. L.

Wavelength dependence of laser-beam scintillation.

07 p1157 A69-19641

Measurement of log-amplitude variance.

14 p2486 A69-29642

## BUGAENKO, L. A.

Electrophotometer for weak light fluxes /Elektrofotometr slabkikh svetovykh potokov/.

11 p1884 A69-24735

## BUGAENKO, O. I.

Count rate meter /CRM/ /Izmeritel' skorosti scheta /ISS/.

11 p1884 A69-24734

Electrophotometer for weak light fluxes /Elektrofotometr slabkikh svetovykh potokov/.

11 p1884 A69-24735

## BUGAEV, V. A.

Satellite meteorology of today and tomorrow.

[UN PAPER 68-95760] 06 p0949 A69-17037

Emission mechanism of a submillimeter water vapor laser /O mekhanizme generatsii submillimetrovogo lazera na parakh vody/.

19 p3336 A69-36349

Analysis of the state of the atmosphere over the globe from a picture obtained by the Zond 5 space station at an altitude of 90,000 km /Analiz sostoianiia atmosfery nad zemnym sharom po snimku s vysoty 90.000 km, poluchennomu kosmicheskoi stantsiei "Zond-5"/.

23 p4184 A69-42486

## BUGAEVA, I. V.

Structure of the zonal and meridional circulation in the stratosphere and mesosphere /O strukture zonal'noi i meridional'noi tsirkulatsii v stratosfere i mezofere/.

12 p2070 A69-26577

Preliminary results of an analysis of mean monthly radiation charts obtained from satellite data /Predvaritel'nye rezul'taty analiza srednikh mesiachnykh radiatsionnykh kart po dannym iskusstvennykh sputnikov zemli/.

15 p2596 A69-30643

## BUGAI, A. A.

Angular dependences of EPR line widths of Cr super 3 super plus in ZnWO sub 4 /Uglovye zavisimosti shirin linii EPR Cr super 3 super plus v ZnWO sub 4/.

10 p1743 A69-23131

## BUGAI, I. P.

Investigation of subthreshold phenomena in excited elements on an analog model /Issledovanie podporogovykh iavlenii v vozбудimyykh elementakh na analogovoi modeli/.

23 p4109 A69-41980

Model of subthreshold phenomena in excited elements /Model' podporogovykh iavlenii v vozбудimyykh elementakh/.

23 p4110 A69-41981

## BUGAKOV, I. I.

Principles of stress and strain addition and creep in polymer materials.

16 p2803 A69-32290

## BUGENSTEIN, W. A.

Transient behavior of AC alternators with rectified outputs.

17 p2905 A69-34089

## BUGES, J. C.

Ultrahigh-speed holography /Holographie ultrarapide/.

05 p0760 A69-15587

Pulsed laser holography.

11 p1895 A69-24683

## BUGES, J.-C.

Holographic interferometry with a double-pulse laser /Interferometrie holographique avec un laser a double impulsion/.

05 p0761 A69-15620

Holographic camera /Camera holographique/.

19 p3315 A69-36726

## BUGGISCH, H.

An analytical solution for the reflection of weak waves in relaxing gases /Eine analytische loesung fuer die reflexion schwacher wellen in relaxierenden gasen/.

24 p4299 A69-42717

## BUGNA, E.

The effect of time of heating on the thermal polymerization of L-lysine.

13 p2218 A69-28439

Determination of the water-soluble dinitrophenyl amino acids by ion-exchange chromatography. 17 p2917 A69-33651

## BUHL, D.

Anomalous cooling of a cratered lunar surface. 04 p0654 A69-14656

Water-vapor clouds in the interstellar medium. 09 p1591 A69-21446

Microwave detection of interstellar formaldehyde. 10 p1786 A69-24108

Detection of interstellar H sub 2 C super 13 O super 16. 23 p4220 A69-42376

## BUIAKAS, V. I.

Analytical design of controllers for systems with a delay in the actuating mechanism /K analiticheskomo konstruirovaniu regulatorov dlia sistem s zapazdyvaniem v ispolnitel'nom mekhanizme/.

12 p2045 A69-25959

## BUIANOV, P. V.

Change in the cardiovascular activity and external respiration function under the influence of prolonged motion restrictions /hypodynamiia/ /Izmenenie serdечно- sosudistoi deiatel'nosti i funktsii vneshnego dykhaniiia pod vlianiem dlitel'nogo ogranicheniia podvizhnosti /gipodinamii/.

03 p0377 A69-14204

Changes in the electropotentials of the heart in flying personnel after flight causing intense neuroemotional stress /Izmeneniia elektropotentsialov serdtsa u letnogo sostava posle poletov, vyzvaiaushchikh bol'shoe nervno-emotsional'noe napriazhenie/.

03 p0378 A69-14207

## BUICK, R. I.

Tangential sensitivity of a microwave receiver. 01 p0048 A69-11038

## BUJIS, H. L.

Spectrum of the night airglow between 3 and 4 microns. 03 p0426 A69-14251

## BUILOVA, N. M.

Experimental studies of the superconductivity of degenerate semiconductors /Eksperimental'nye issledovaniia sverkhprovodimosti v vyzrohdennykh poluprovodnikakh/.

12 p2144 A69-26620

## BUIMISTROV, V. M.

Two-quantum light absorption by conduction electrons in a semiconductor /Dvukhkvantovoe pogloschenie sveta elektronami provodimosti v poluprovodnike/.

03 p0437 A69-13041

## BUINA, E. V.

Limiting equilibrium of plates with pointed stress raisers /K voprosu o predel'nom ravновесii plastin s ostrymi kontsentratorami napriazhenii/.

11 p1973 A69-24658

## BUIUNOV, N. N.

Effect of natural ageing on subsequent artificial ageing of aluminium alloys. 04 p0614 A69-14634

Structure of the alloy Zr-4 percent Nb, and its influence on the critical superconductivity parameters. 05 p0811 A69-16806

Different conditions of ageing and recovery in aluminium-magnesium alloys. 05 p0783 A69-16811

Study of the dependence of the superconductivity properties on the structure of a titanium-47 wt percent niobium alloy /Issledovanie zavisimosti sverkhprovodiashchikh svoystv ot struktury сплава titan-47 ves percent niobia/.

07 p1158 A69-18532

X-ray and electron microscope study of the structure of the alloy Ti-50 wt percent Nb /Rentgenograficheskoe i elektronnomikroskopicheskoe issledovanie struktury сплава Ti-50 ves. percent Nb/.

12 p2112 A69-26036

Electron-microscope and X-ray study of the quenched Ti-25 at. percent Nb alloy /Elektronnomikroskopicheskoe i rentgenograficheskoe issledovanie zakalennogo сплава Ti-25 at. percent Nb/.

12 p2112 A69-26040

Investigation of the dislocation structure of molybdenum deformed by hydroextrusion /Issledovanie dislokatsionnoi struktury molibdena, deformirovanogo gidroekstruziei/.

14 p2463 A69-29311

Influence of the tempering time and temperature on the structure and superconducting properties of a recrystallized and deformed alloy of niobium with 75 at. percent titanium /Vlianie vremeni i temperatury ot-

- puska na stroenie i sverkhprovodiashchie svoistva rekrystalizovannogo i deformirovannogo splava niobia s 75 atom. percent titana/.  
19 p3345 A69-36302
- BUIVOL, V. N.**  
Stability of a cyclically symmetrical system of cylindrical shells in an inviscid fluid flow /Ustoichivost' tsiklicheski-simmetrichnoi sistemy tsilindricheskikh obolochek v potoke neviaskoi zhidkosti/.  
21 p3834 A69-38719
- BUJAKIEWICZ, A.**  
Comparative analysis of methods for determining the relative orientation elements of aerial photographs /Analiza porownawcza metod wyznaczania elementow orientacji wzajemnej zdjec lotniczych/.  
05 p0765 A69-16708
- BUKAEVA, I. A.**  
Some effects developing during hypokinesia.  
02 p0198 A69-11502
- BUKATA, R. P.**  
Pioneer 6 observations of the solar flare particle event of 7 July 1966.  
10 p1768 A69-23769
- BUKHANOVA, A. A.**  
Effect of hydrogen on Young's modulus in titanium beta-alloy VT15 /Vliianie vodoroda na moduli uprugosti titana i beta-titanovogo splava VT15/.  
04 p0618 A69-15178
- BUKHARKINA, A. P.**  
Motion control during reentry into the atmosphere /Upravlenie dvizheniem pri vkhode v atmosferu/.  
13 p2355 A69-27682  
Motion control during entry into the atmosphere /Upravlenie dvizheniem pri vkhode v atmosferu/.  
21 p3767 A69-39649
- BUKIN, G. V.**  
Predawn effect in the F sub 0 F2 variations caused by sunrise at a magnetically conjugate point /Predrassvetnyi effekt v variatsiakh f sub 0 F2 obuslovlennyy vosk-hodom solntsa v magnitno-sopriazhennoi toчке/.  
02 p0238 A69-11681  
Synoptic observations of the F sub 2 -layer of the ionosphere in the magnetically conjugate regions Ker-guelen-Arkhangelsk province.  
06 p0919 A69-17723  
Predawn effect in f sub 0 F sub 2 variations caused by sunrise at a magnetically-conjugate point.  
13 p2257 A69-28712
- BUKONT, E. J.**  
Beta heat treatment of Ti-6Al-4V fasteners.  
21 p3729 A69-38661
- BUKOVSHIN, V. G.**  
Flow with a separated shock wave past a wedge-shaped profile /Obtekanie klinovidnogo profil'a s ot-soedinennoi udarnoi volnoi/.  
14 p2390 A69-29615
- BUKREEV, V. Z.**  
Method of approximate synthesis of an optimal control /Ob odnom metode priblizhnennogo sinteza optimal'nogo upravleniia/.  
08 p1299 A69-21068  
Method of approximate synthesis of optimal control.  
16 p2765 A69-32483
- BUKURI, R. B.**  
Measurement of the characteristics of millimeter-wavelength diodes with nonlinear capacitance /Voprosy izmereniia kharakteristik diodov diapazona millimetrovyykh voln s nelineinnoi emkost'iu/.  
12 p2043 A69-26885
- BUKUS, I. A.**  
Calculation of characteristics of hydrostatic journal gas bearings /Raschet kharakteristik opornyykh gazostatskikh podshipnikov/.  
03 p0432 A69-12960
- BULAKH, B. M.**  
Thermodynamic method of determining the conditions for synthesizing cadmium sulfide single crystals from the gas phase /Termodinamicheskie metod opredeleniia uslovii sinteza monokristallov sul'fida kadmia iz gazovoi fazy/.  
12 p2144 A69-26585  
Preparation of CdS single crystals from the gaseous phase /Poluchenie monokristallov CdS iz gazovoi fazy/.  
23 p4199 A69-42468
- BULANOV, A. B.**  
Some results of an investigation into heat transfer from a liquid to a highly overheated wall.  
11 p1996 A69-24228
- BULANOV, E. A.**  
Heat transfer in the vicinity of the stagnation point in an axisymmetric turbulent jet impinging on a plane obstacle /Teploobmen v okrestnosti kriticheskoi tochki pri natekanii osesimmetrichnoi turbulentnoi strui na ploskuiu pregradu/.  
02 p0354 A69-12491  
Calculation of the basic segment of an axisymmetric turbulent supersonic jet /K raschetu osnovnogo uchastka osesimmetrichnoi turbulentnoi sverkhzvukovoi strui/.  
11 p1818 A69-25346  
Investigation of the influence of vibrations on the strength of two types of structural plastic /Issledovanie vliianiia vibratsii na prochnost' dvukh vidov konstruksionnykh plastmass/.  
15 p2643 A69-30972  
Spreading of a turbulent jet over a plane perpendicularly positioned obstacle /Rastekanie turbulentnoi strui po ploskoi perpendikuliarno raspolozhennoi pregrade/.  
18 p3123 A69-34990
- BULATOV, A. S.**  
Diffusion in vapor-deposited nickel layers on niobium substrate /Diffuziia v sloiakh nikelia, skonden-sirovannogo iz parovoi fazy na niobievuiu podlozhu/.  
20 p3560 A69-37366
- BULATOV, B. P.**  
Some results of neutron flux measurements on the Cosmos 53 artificial earth satellite /Nekotorye rezul'taty izmerenii potokov neutronov na iskusstvennom sputnike zemli "Kosmos-53"/.  
22 p4003 A69-40274
- BULAVS, F. I. A.**  
Strength of reinforced plastics under static loading /Prochnost' armirovannykh plastikov pri staticheskom nagruzenii/.  
18 p3162 A69-35353
- BULAVSKII, V. A.**  
Decomposition of square matrices into products of orthogonal and triangular matrices /O razlozhenii kvadratnykh matrits v proizvedenie ortogonal'noi i treugol'noi/.  
13 p2290 A69-28485
- BULDAKOV, V. F.**  
Experimental study of the process of combustion of heterogeneous condensed systems /Eksperimental'noe issledovanie protsessa goreniia geterogennykh kondensirovannykh sistem/.  
17 p3069 A69-33135
- BULDOVSKII, G. S.**  
Meteorological conditions for the onset of aircraft bumpiness in the stratosphere /Meteorologicheskie uslovia vozniknoveniia boltanki samoletov v stratosfere/.  
14 p2474 A69-29737
- BULEEV, N. I.**  
Simplified formulas for the coefficients of turbulent exchange in fluid flows /Uproshchennye formuly dlia koefitsientov turbulentnogo obmena v potokakh zhidkosti/.  
11 p1873 A69-25228  
Numerical solution to the hydrodynamic equations of a plane flow of incompressible viscous fluid /O chislennom reshenii uravnenii gidrodinamiki dlia ploskogo potoka viazkoi neszchimaemoi zhidkosti/.  
19 p3297 A69-35853
- BULEKSAEV, A.**  
Algorithms for numerical schemes of the method of integral relations for calculating mixed gas flows.  
04 p0587 A69-14621
- BULEWICZ, E. M.**  
Temperature of metal oxide particles in flames.  
21 p3852 A69-39592
- BULEY, L. E.**  
Incidence, causes and results of airline pilot incapacitation while on duty.  
06 p0883 A69-17849  
Provision of solar flare radiation information in support of supersonic transport operations - A review of developments.  
23 p4063 A69-41830
- BULGAKOV, A. A.**  
Instability of spiral waves in finite conductors /Neustoiichivost' spiral'nykh voln v ogranichennykh provodnikakh/.  
21 p3782 A69-39556
- BULGAKOV, I. U. V.**  
Simulation of the radiation effect of a space medium on spacecraft elements /Modelirovanie radiatsionnogo vozdeistviia kosmicheskoi sredy na elementy kosmicheskikh apparatov/.  
06 p0906 A69-17612
- BULGAKOV, V. N.**  
Spatial distribution of radiation defects in materials irradiated by monoenergetic particle beams /Prostranstvennoe raspredelenie radiatsionnykh defektov v materialakh, obлучennykh puchkami monoenergeticheskikh chastits/.  
06 p0981 A69-17878  
Spatial distribution of radiation defects in materials irradiated with beams of monoenergetic particles.  
14 p2503 A69-28787
- BULGAKOV, V. N.**  
Numerical Methods in the Applied Theory of Elasticity /Chislennye metody v prikladnoi teorii uprugosti/.  
18 p3211 A69-34331
- BULKELEY, P. Z.**  
Non-linear transverse vibrations and waves in spinning membrane discs.  
19 p3440 A69-36637
- BULL, D. C.**  
A shock tube study of the oxidation of ammonia.  
06 p0885 A69-17936
- BULL, G.**  
Study of the atmospheric fine structure by means of propagation measurements in the microwave range /Untersuchungen der atmosphärischen Feinstruktur mit Hilfe von Ausbreitungsmessungen im Mikrowellenbereich/.  
04 p0628 A69-15306
- BULL, M. K.**  
Mean shear in a constant-pressure turbulent boundary layer.  
09 p1482 A69-21967  
Velocity profiles of turbulent boundary layers.  
09 p1484 A69-22780
- BULLARD, E.**  
Reversals of the earth's magnetic field /The Bakerian lecture, 1967/.  
04 p0593 A69-15075
- BULLARD, R. W.**  
Reflex responses of human sweat glands to different rates of skin cooling.  
23 p4082 A69-41446
- BULLARD, T. R.**  
Rat body composition - Sensor implantation and lighting effects.  
12 p2020 A69-26557
- BULLEN, J. M.**  
The use of a height model to study night-time recombination.  
10 p1685 A69-23834  
Night-time decreases in F2 layer heights at near conjugate stations in low latitudes.  
16 p2778 A69-32186
- BULLEN, K. E.**  
The interiors of the planets.  
21 p3811 A69-39508
- BULLER, B. T.**  
Quasi-isotropic pattern criterion for S-band TM antennas of sounding rockets.  
19 p3271 A69-36252
- BULLINGER, H. B.**  
Electroluminescent/thermochromic hybrid display.  
24 p4313 A69-42899
- BULLIS, R.**  
The use of the remote computer station for best-fit equation formulation. [SAWE PAPER 799]  
18 p3107 A69-34860
- BULLOCK, B. R.**  
The contribution of infrared cooling to the vertical motion field and its implication in atmospheric energetics.  
17 p2962 A69-33689
- BULLOCK, T. E.**  
Hybrid computer integration of partial differential equations by use of an assumed sum separation of variables.  
04 p0566 A69-15346
- BULLOUGH, K.**  
Satellite evidence for the generation of VLF emissions at medium latitude by the transverse resonance instability.  
12 p2073 A69-26947  
V.L.F. observations on Ariel III.  
21 p3717 A69-39262
- BULLRICH, K.**  
Two methods for calculating multiple scattering in a turbid atmosphere /Ueber zwei Methoden zur Berechnung der Strahlungsmehrfachstreuung in der trüben Atmosphäre/.  
11 p1911 A69-24587



## BULOV, V. A.

Method of studying dynamic stresses induced by laser radiation /Metod issledovaniia dinamicheskikh napriazhenii, vyzvannykh izlucheniem O.K.G./.  
10 p1707 A69-24213

## BULUCEA, C. D.

Diffusion capacitance of p-n junctions and transistors.  
04 p0580 A69-15489

The influence of carrier injection through emitter sidewall on current gain properties of small area double diffused planar transistors.  
05 p0728 A69-15808

## BULYCHEV, D. K.

Effect of hydro-extrusion on the mechanical properties of molybdenum.  
02 p0267 A69-12189

Investigation of the dislocation structure of molybdenum deformed by hydroextrusion /Issledovanie dislokatsionnoi struktury molibdena, deformirovannogo gidroekstruziei/.  
14 p2463 A69-29311

Mechanical properties of molybdenum after hydroextrusion.  
16 p2803 A69-32491

Mechanical properties of hydro-extruded molybdenum after annealing.  
18 p3156 A69-34719

Anomalous grain growth and the deformation of single crystals during annealing of hydraulically extruded molybdenum /Anomal'nyi rost zeren i obrazovanie monokristallov pri otzhige gidroekstrudirovannogo molibdena/.  
21 p3745 A69-38953

## BULYCHEV, V. A.

Two new methods of eliminating the imbalance of parts.  
21 p3732 A69-39097

## BULYGA, A. V.

Effect of surface curvature in the process of transfer through a rarefied gas /Effekt krivizny poverkhnosti v protsessakh perenosa cherez razrezhennyy gaz/.  
01 p0173 A69-10093

## BULYGIN, A. V.

Calculation of the higher harmonics of the natural vibrations of beams with characteristics varying slowly along the length.  
16 p2873 A69-32130

## BULYGINA, E. V.

Hypersonic profile with specified bending strength and minimum drag.  
21 p3644 A69-39099

## BUMBA, V.

Observations of solar magnetic and velocity fields.  
02 p0329 A69-12784

"Bartels' active longitudes" - Sector boundaries and flare activity.  
07 p1205 A69-19248

Some regularities in the distribution of large-scale magnetic fields on the sun.  
08 p1394 A69-20610

On the solar sources of recurrent geophysical effects.  
11 p1964 A69-25415

Magnetic fields, green corona and filaments in high solar latitudes.  
11 p1964 A69-25416

Relation of 1420 MHz radio emission to the distribution of photospheric magnetic fields, coronal emission and filaments.  
11 p1964 A69-25417

Solar activity and recurrences in magnetic-field distribution.  
14 p2528 A69-29966

On long-term forecasts of solar activity.  
24 p4374 A69-43625

On forecasts of interplanetary and geophysical conditions.  
24 p4387 A69-43626

## BUNCH, T. E.

Potassium feldspar in Weekeroo Station, Kodaikanal, and Colomera iron meteorites.  
04 p0659 A69-14979

Electron microprobe analysis of vanadium in the presence of titanium.  
07 p1073 A69-18419

## BUNDAY, D. C.

ESOC achieves operational status with the launch of the ESRO II/IRIS satellite.  
01 p0163 A69-11105

## BUNDE, G. W.

A model to describe long-term performance characteristics of pressure contacted lead-telluride thermoelectric generators.  
23 p4188 A69-42262

## BUNDSCHUH, V.

Work function measurements of refractory metals in a high pressure cesium plasma for low probe temperature range.  
14 p2506 A69-29266

## BUNIAKIN, S. V.

Control of the maneuver of turning the plane of a circular satellite orbit so as to make the satellite pass through a given point /Upravlenie manevrom povorota ploskosti krugovoi orbity sputnika obespechivaiushchee prokhozhdenie sputnika cherez zadannuiu tochku/.  
21 p3765 A69-39640

## BUNIMOVICH, A. I.

Rarefied gas flow past permeable surfaces /Obtekanie pritonitsaemykh poverkhnosti potokom razrezhennogo gaza/.  
20 p3459 A69-37438

## BUNK, W.

Contribution to the study of the relationship between the gas content and impurities in aluminum melts /Beitrag zur Kenntnis des Zusammenhanges zwischen Gasgehalt und Verunreinigungen in Aluminiumschmelzen/.  
01 p0098 A69-10958

## BUNKIN, F. V.

Possibility of the birth of electron-positron pairs in a vacuum during the focusing of laser radiation /O vozmozhnosti rozhdeniya elektronno-pozitronnykh par v vakuume pri fokusirovke lazernogo izlucheniia/.  
22 p3965 A69-41116

Laser spark in the "slow combustion" regime.  
23 p4172 A69-41492

## BUNNER, A. N.

Soft X-ray background flux.  
24 p4368 A69-43220

## BUNT, J. S.

The CO sub 2 compensation point, Hill activity and photorespiration.  
23 p4099 A69-42528

## BUNTING, J. O.

Thermal conductivity of shock-heated argon.  
18 p3228 A69-34459

## BUONGIORNO, C.

Feasibility study of a nuclear stage for space missions /Studio di fattibilita di uno stadio nucleare per missioni spaziali/.  
08 p1409 A69-20158

Experimental analysis of the effect of elastic strains on downwash at supersonic speeds /Un'analisi sperimentale sull'effetto delle deformazioni elastiche sul "downwash" a velocita supersoniche/.  
18 p3086 A69-34999

## BURA, P.

Electromagnetic wave propagation in superconductors.  
01 p0135 A69-10176

Design considerations for an integrated 1.8-GHz parametric amplifier.  
01 p0040 A69-10193

Integrated S-band upconverter.  
16 p2762 A69-32562

## BURAGO, I. D.

On the theory of simple and double-layer potentials for domains with irregular boundaries.  
07 p1173 A69-18496

## BURAK, B. A.

The use of a generalized statistical description of a reflected radio signal for its automatic classification /Ob ispol'zovanii obobshchennogo statisticheskogo opisaniia otrazhennogo radiosignala dlia ego avtomaticheskoi klassifikatsii/.  
14 p2411 A69-28917

## BURAKOV, I. I.

Investigation of the photoelastic method for anisotropic bodies /Issledovanie metoda fotouprugosti anizotropnykh tel/.  
05 p0837 A69-16038

## BURAKOV, V. S.

Measurement of the absorption coefficient of a plasma with the aid of a laser /Izmerenie koeffitsienta poglushcheniia plazmy s pomosh'yu OKG/.  
03 p0442 A69-14218

Determination of the absorption coefficients of a plasma using a gas optical quantum generator.  
05 p0762 A69-15900

Study of an optically dense plasma consisting of one element /Issledovanie opticheskoi plotnoi plazmy odnoelementnogo sostava/.  
06 p0964 A69-17251

## BURBIDGE, E. M.

Optical observation on radio galaxies and quasi-stellar objects.  
02 p0329 A69-12790

The rotation and mass of NGC 1832.  
09 p1599 A69-22188

Spectroscopic observations of twenty-five quasi-stellar objects.  
09 p1602 A69-22226

Absorption redshifts in the quasi-stellar objects PHL 5200 and B194.  
09 p1604 A69-22271

Velocity field of NGC 4038-9 /Pole skorostei v NGC 4038-9/.  
12 p2169 A69-27060

Red-shifts of quasi-stellar objects and related extragalactic systems.  
15 p2701 A69-31532

Survey of current problems in extragalactic astronomy.  
23 p4217 A69-42317

Observational cosmology - Optical wavelengths.  
23 p4219 A69-42328

IC 3258 - A small extragalactic object with a blueshift.  
23 p4219 A69-42374

A very high-velocity gas cloud near the nucleus of NGC 4939.  
24 p4375 A69-42609

The distribution of redshifts in quasi-stellar objects, n-systems, and some radio and compact galaxies.  
02 p0325 A69-12591

The origin of cosmic rays.  
03 p0497 A69-12932

Theories proposed to explain quasi-stellar objects and radio galaxies.  
05 p0821 A69-15851

Condensed objects in the Crab Nebula.  
09 p1592 A69-21485

The galactic magnetic field.  
15 p2694 A69-30857

Cosmic helium.  
16 p2853 A69-31598

## BURBIDGE, G. R.

On the nature of the optical flux from extragalactic systems.  
02 p0326 A69-12706

High-energy astrophysics.  
02 p0310 A69-12793

The rotation and mass of NGC 1832.  
09 p1599 A69-22188

Nature of quasi-stellar objects /Priroda kvazizvezdnykh ob'ektov/.  
12 p2168 A69-27049

Velocity field of NGC 4038-9 /Pole skorostei v NGC 4038-9/.  
12 p2169 A69-27060

Discrete source models to explain the microwave background radiation.  
13 p2339 A69-27574

Red-shifts of quasi-stellar objects and related extragalactic systems.  
15 p2701 A69-31532

Natural frequencies of vibration of isotropic flat plates. I.  
23 p4233 A69-42348

Absorption of infrared radiant energy by CO sub 2 and H sub 2 O. IV.  
12 p2132 A69-26248

Experiments in hydrodynamic grease bearings. [AIAA PAPER 69-836]  
21 p3732 A69-39367

Visual observation of surface vibration nodal patterns.  
12 p2099 A69-27176

Measurement of XB-70 propulsion performance incorporating the gas generator method. [AIAA PAPER 68-594]  
20 p3461 A69-37152

Report on hyperbaric emergency treatment at the Institute for Aviation Medicine of the Luftwaffe /Er-

- fahrungsbericht ueber die hyperbare Therapie bei Notfaellen am Flugmedizinischen Institut der Luftwaffe/, 17 p2911 A69-33775
- BURCHER, E.**  
Radar attitude sensing system. 03 p0388 A69-13183
- BURCHULADZE, T. V.**  
Boundary value problems of thermoelasticity /Granchnye zadachi termouprugosti/. 12 p2182 A69-26726
- BURCK, E.**  
Liquid-vapour interaction and evaporation in heat pipes. 14 p2539 A69-29207  
Contribution to the study of the effect of the Prandtl number on heat transfer and pressure loss in artificially roughened channels /Beitrag zur Untersuchung des Einflusses der Prandtlzahl auf den Waermeuebergang und Druckverlust kuenstlich aufgerauhter Stroemungskanaele/. 15 p2717 A69-30934  
Influence of the Prandtl number on the heat transfer and pressure drop in artificially roughened channels /Der Einfluss der Prandtlzahl auf den Waermeuebergang und Druckverlust kuenstlich aufgerauhter Stroemungskanaele/. 24 p4407 A69-42915
- BURCKHARDT, C. B.**  
Television transmission of holograms with reduced resolution requirements on the camera tube. 17 p2974 A69-33401
- BURCKHARDT, P. L.**  
Topics and objectives of the Third Eurospace U.S.-European Conference. 03 p0535 A69-13594
- BURD, J. W.**  
The laser transition and photon energy of GaAs in the lightly-doped limit. 02 p0257 A69-12615
- BURDICK, H. M.**  
Noise reduction in wideband atmospheric receiving systems. 23 p4128 A69-42504
- BURDIUGOV, A. D.**  
Certain solutions to the problem of the structure of gravitating systems with ellipsoidal velocity distribution /Nekotorye resheniia zadachi o strukture gravitiruiushchikh sistem s ellipsoidnym raspredeleniem skorostei/. 14 p2486 A69-29465
- BUREEVA, L. A.**  
Quasi-classical approximation for the forces of oscillators and for the effective cross sections of radiative transitions /O kvaziklassicheskoy priblizhenii dlia sil ostiliatorov i effektivnykh sechenii radiatsionnykh perekhodov/. 09 p1588 A69-21365  
The quasiclassical approximation for the oscillator strength and effective cross sections of radiative transitions. 18 p3197 A69-34755
- BURENIN, A. N.**  
Radio radiation intensity at 1.68 MHz as measured by "Kosmos-142." 01 p0158 A69-11322
- BURESOVA, M.**  
Effect of tension upon rate of incorporation of amino acids into proteins of cross-striated muscle. 23 p4083 A69-41458
- BURG, K.**  
Transonic flows around a profile in a blocked channel /Schallnahe Profilumstroemungen im blockierten Kanal/. 03 p0361 A69-13018
- BURGE, G. W.**  
Analytical approaches for the design of orbital refueling systems. [AIAA PAPER 69-567] 16 p2868 A69-32721
- BURGE, H. L.**  
Improved liquid film cooling concept. 24 p4408 A69-43127
- BURGEAT-MENGUY, C.**  
Effect of prolonged iterative accelerations and decelerations on the vestibular apparatus /Effet des accelerations et decelerations iteratives prolongees sur l'appareil vestibulaire/. 13 p2211 A69-28592
- BURGEAT, M.**  
Effect of prolonged iterative accelerations and decelerations on the vestibular apparatus /Effet des accelerations et decelerations iteratives prolongees sur l'appareil vestibulaire/. 13 p2211 A69-28592
- BURGER, E. J., JR.**  
Static properties of lungs after oxygen exposure. 22 p3873 A69-40208
- BURGER, J.**  
Thermodynamics of combustion and concepts of aerothermochemistry /Thermodynamique de la combustion et notions d'aerothermochimie/. 06 p1031 A69-17414  
Properties of inflammable gaseous mixtures /Proprietes des melanges gazeux inflammables/. 06 p1031 A69-17417  
Theory of deflagration in the gaseous phase /Theorie de la deflagration en phase gazeuse/. 06 p1031 A69-17418  
Deflagration of solid and hybrid propellants /La deflagration des propergols solides et hybrides/. 06 p0982 A69-17422
- BURGER, J. J.**  
Long-term time variations of the cosmic-ray electron flux above 500 Mev. 16 p2851 A69-32566
- BURGERS, J. M.**  
A phenomenological approach to quantum theory. 20 p3576 A69-37581  
Flow Equations for Composite Gases. 24 p4299 A69-42766
- BURGESS, A.**  
The effects of electron and radiation density on dielectronic recombination. 22 p3985 A69-40666
- BURGESS, B.**  
Propagation effects and lane-ambiguity resolution in Omega. 21 p3673 A69-38756
- BURGESS, D.**  
Application of Halon 1301 to the prevention of or extinguishment of Aerozine-50 fires. 18 p3094 A69-35090
- BURGESS, D. D.**  
Contribution of perturber radiation to the shapes of spectral lines broadened by electron impacts. 06 p0961 A69-17136
- BURGESS, E. L.**  
An investigation of the ionization mechanisms in the ignited mode cesium thermionic converter. 14 p2404 A69-29258
- BURGESS, K.**  
Telemetry-scoring receivers. 23 p4138 A69-41781
- BURGESS, T. E.**  
Flame emission analysis for sodium in silicon oxide films and on silicon surfaces. [ECS PAPER 306] 08 p1314 A69-20367
- BURGESS, W.**  
A family of portable versatile aerosol particle analyzers. 18 p3136 A69-34691
- BURGETT, A. L.**  
Human operator characteristics based on an analog computer oriented parameter identification technique. 24 p4276 A69-43320
- BURGHART, J. H.**  
Suboptimal linear regulators for systems subject to parameter variations. 22 p3918 A69-41012
- BURGHES, D. N.**  
A physical explanation of difficulties appearing in the theory of toroidal magnetohydrodynamic oscillations. 14 p2492 A69-29369
- BURGMAN, H. A.**  
Resins and reinforced plastic laminates for continuous use at 650 deg F. III. 07 p1171 A69-19545
- BURGREEN, D.**  
Structural growth induced by thermal cycling. [ASME PAPER 68-WA/MET-14] 05 p0837 A69-16067
- BURHANS, A. S.**  
Correlation between high performance epoxy cast resin properties and composite performance. 08 p1340 A69-20510
- BURIAKOVSKII, G. IU.**  
Theory of laser emission by four-level centers of two types /Teoriia lazernoi generatsii chetyrekhurovnevnykh tsentrami dvukh sortov/. 19 p3333 A69-35878
- BURITZ, R. S.**  
Beam transmission in electron guns having a single-apertured control grid. 05 p0734 A69-16566
- BURKARD, O. M.**  
A new approach to the atmospheric tide problem /Ein neuer Loesungsansatz zum Gezeitenproblem in der Atmosphaere/. 03 p0426 A69-14098
- BURKE, B. F.**  
Quantum interference paradox. 20 p3538 A69-37415  
Radio studies of galactic structure. 23 p4217 A69-42320
- BURKE, G. J.**  
Radar cross section of a long wire. 23 p4116 A69-41594
- BURKE, H. H.**  
A comprehensive approach to design of the NF106B-VST model follower system. [AIAA PAPER 69-886] 21 p3764 A69-39412
- BURKE, J. E.**  
Scattering by two-component random distributions of spheres. 04 p0555 A69-14282
- BURKE, J. J.**  
Surfaces and Interfaces II, Physical and Mechanical Properties, Proceedings of the Fourteenth Sagamore Army Materials Research Conference, Raquette Lake, N.Y., August 22-25, 1967. 03 p0448 A69-13867  
Studies continue on wavelength dependence of stellar scintillation - New apparatus now detects a color effect in "twinkling". 19 p3401 A69-35809
- BURKE, M. H.**  
The two-input ERF correlator. 03 p0403 A69-13253  
Future developments in plasma arc welding. 04 p0608 A69-15482  
Plasma arc. [SAB PAPER 18] 20 p3550 A69-37453
- BURKE, P. G.**  
Scattering of electrons by C, N, O, N plus, O plus and O plus plus. 23 p4193 A69-41452
- BURKE, P. M.**  
Mechanical Behavior of Crystalline Solids at Elevated Temperature. 14 p2465 A69-29749
- BURKE, T. F.**  
Computer aided design of wide-band integrated microwave transistor amplifiers on high dielectric substrates. 01 p0040 A69-10194
- BURKE, T. P.**  
The electrical conductivity of air in the presence of fog /La conducibilita elettrica dell'aria in presenza di nebbia/. 24 p4347 A69-43509
- BURKES, T. R.**  
A self-adjusting single-degree-of-freedom free-fall environment simulator. 04 p0586 A69-15468
- BURKHARD, D. G.**  
A crater model for lunar thermal radiation. [AIAA PAPER 69-598] 17 p3033 A69-33285  
The lunar photometric function. [AIAA PAPER 69-596] 17 p3033 A69-33308  
An exact solution for thermal conduction through a two-dimensional eccentric constriction. 18 p3228 A69-34375  
Infrared emission from a V-shaped metal groove compared with that from a flat surface of the same metal. 19 p3313 A69-36491
- BURKHART, J. A.**  
Segmented anode, CO sub 2 -H sub 2 performance and hollow cathode erosion tests on a low power MPD arc thruster. [AIAA PAPER 69-242] 09 p1563 A69-21236



## BURKHART, K.

A new method of determining the flow rate in the ascending aorta, the stroke volume and the cardiac output with the aid of ballistocardiography /Ueber eine neue Methode der Bestimmung der Stromungsgeschwindigkeit in der Aorta ascendens, des Schlagvolumens und der Herzleistung mit Hilfe der Ballistokardiographie/.  
17 p2915 A69-33772

## BURKIG, V. C.

Infrared absorption in neutron-irradiated GaAs.  
23 p4198 A69-41540

## BURKLEY, C. J.

Measurement of plasma electron distributions using microwave cavities.  
02 p0290 A69-12404

A comparison of frequency and current modulation methods of observing the internal resonances in a plasma column.  
08 p1365 A69-20552

## BURLACU, L.

On the S-matrix theory of electromagnetic interactions.  
08 p1351 A69-20211

## BURLAGA, L. F.

Plasma observations on Explorer 34.  
01 p0076 A69-11234

Microscale fluctuations in the interplanetary magnetic field.  
10 p1785 A69-24100

Directional discontinuities in the interplanetary magnetic field.  
14 p2528 A69-29970

Large velocity discontinuities in the solar wind.  
14 p2515 A69-29971

Causes of sudden commencements and sudden impulses.  
16 p2847 A69-31963

Hydromagnetic shocks in the solar wind.  
22 p4020 A69-40304

## BURLAGE, D. W.

Digital compensation of tape recorder time-base error.  
19 p3312 A69-36284

## BURLAKOV, A. V.

Fundamentals of the Theory of Plasticity and Creep /Osnovy teorii plastichnosti i polzuchestii/.  
20 p3630 A69-38206

## BURLAKOVA, L. A.

Stability of the steady motions of a gyroscope with a Cardan suspension. II /Ob ustoychivosti statsionarnykh dvizhenii giroskopa v kardanovom podvese. II/.  
21 p3723 A69-38851

## BURLAMACCHI, P.

Gain interaction and dynamical behavior of a multimode He-Ne laser.  
05 p0773 A69-16289

Phase correlation measurements of a laser beam propagated through a turbulent medium.  
17 p2976 A69-33857

## BURLEIGH, C.

Ejection patterns in low-energy sputtering of GaAs and GaP crystals.  
04 p0640 A69-14452

## BURLEY-MEAD, J.

Survey of the region of Lacerta OB1.  
12 p2153 A69-25813

## BURLINGAME, A. L.

Automated heteroatomic plotting as an aid to the presentation and interpretation of high resolution mass spectral data.  
01 p0024 A69-10905

Organic analysis on the Pueblito de Allende meteorite.  
13 p2337 A69-27520

Formation and detection of metastable ions in a double-focusing mass spectrometer.  
15 p2561 A69-30021

A combined electron impact-field ionization source and its application in organic geochemistry.  
15 p2608 A69-30428

High resolution mass spectrometry of Green River Formation kerogen oxidations.  
15 p2606 A69-31533

## BURLINGAME, B.

ICs selection and thermal effects.  
06 p0894 A69-17219

## BURLUTSKII, R. F.

Nature of wind fluctuations in the equatorial stratosphere /O prirode kolebaniy vetra v ekvatorial'noi stratosfere/.  
14 p2442 A69-29726

## BURMAN, R.

A dyadic in the theory of waves in inhomogeneous warm plasmas.  
01 p0129 A69-10561

On coupled wave equations for stratified gyrotropic warm plasmas.  
01 p0129 A69-10611

## BURMINSKII, E. P.

The effect of the construction of the working channel on the flow parameters of a plasma obtained in a shock tube.  
03 p0481 A69-14160

Ambipolar diffusion in the boundary layer formed behind a shock front.  
12 p2139 A69-26713

## BURNISTROV, E. F.

Effect of moment stresses on the stress concentration during bending of plates with a hole of common type /O vliianii momentnykh napriazhenii na konsentratsiiu napriazhenii pri izgibe plit s otverstiem obshchego vida/.  
11 p1971 A69-24646

## BURNISTROV, V. P.

Determination of the deformations of a thick-walled cylinder connected to a rigid chamber in the case of a physically nonlinear elasticity law applied to a solid fuel booster /K opredeleniiu deformatsii tolstostennogo tsilindra, skreplennogo s zhestkoi kameroy, pri fizicheskii-nelineinom zakone uprugosti s prilozheniem k tverdoplyvnomu uskoritelu/.  
11 p1942 A69-25347

## BURNAT, M.

Hyperbolic double waves.  
05 p0751 A69-16646

## BURNAZIAN, A. I.

A year-long medical-technological experiment in a ground-based life-support system facility /Godovoi mediko-tehnicheskii eksperiment v nazemnom komplekse sistem zhizneobespecheniya/.  
13 p2216 A69-28612

Ground experiment and prolonged space flights /Nazemnyi eksperiment i dlitel'nye kosmicheskie polety/.  
18 p3098 A69-35165

## BURNER, A. M.

Biologic effects of radio and microwaves - Present knowledge, future directions.  
23 p4099 A69-42516

## BURNETT, D. S.

Ages of silicate inclusions in iron meteorites.  
08 p1405 A69-20927

Cosmogenic rare gases and the super 40 K-super 40 Ar age of the Kodaikanal iron meteorite.  
09 p1596 A69-22047

Chemistry and mineralogy of the silicates and metal of the Kodaikanal meteorite.  
11 p1953 A69-24335

The status of isotopic age determinations on iron and stone meteorites.  
19 p3413 A69-36108

## BURNETT, S. G.

Helium leak testing - A new analysis.  
18 p3138 A69-35271

## BURNHAM, D. C.

Temperature tuning of an organic dye laser.  
02 p0258 A69-12617

Picosecond pulse measurement by two-photon excitation of photographic film.  
08 p1313 A69-20165

## BURNHAM, J.

Turbulence and the SST.  
16 p2808 A69-32368

Thunderstorm turbulence and its relationship to weather radar echoes.  
24 p4347 A69-43720

## BURNHAM, R. D.

Laser transition to band edge or to impurity states in GaAs-Ge.  
13 p2270 A69-27193

## BURNICHON, M.-L.

Weighted observation of the corona during the total solar eclipse of September 22, 1968.  
13 p2354 A69-28472

Remarks on interstellar absorption in the direction of the IC 1805 cluster /Remarques sur l'absorption interstellaire dans la direction de l'amas IC 1805/.  
21 p3814 A69-39576

A new type of coronal jet associated with chromospheric bursts and with "coronal bulbs" /Sur un type nouveau de jet coronal associe a des eruptions chromospheriques et a des "bulbes coronaux"/.  
22 p4028 A69-40716

Notes on the scale of absolute magnitudes of O stars /Remarques sur l'echelle de magnitudes absolues des etoiles O/.  
23 p4213 A69-41699

## BURNISTON, E. E.

An example of a partially closed Griffith crack.  
15 p2710 A69-30809

## BURNS, D. J.

Absolute cross sections for electron excitation of the second positive bands of nitrogen.  
08 p1355 A69-20208

Growth of part-through and through-thickness fatigue cracks in sheet glassy plastics.  
09 p1617 A69-22013

## BURNS, E. A.

Glass reinforced p13n polyimide laminates having improved processing characteristics.  
19 p3353 A69-35505

A new polyimide resin in boron reinforced composites.  
19 p3354 A69-35514

Investigation of the effect of impurities on the corrosivity of nitrogen tetroxide.  
21 p3748 A69-39488

Fabrication and evaluation of Modmor II carbon fiber reinforced P13N polyimide laminates.  
24 p4325 A69-43445

## BURNS, G.

Properties of new and useful tungsten-bronze niobates.  
05 p0808 A69-16313

Steady-state assumption and the dissociation of Br sub 2 in shock waves.  
18 p3176 A69-34465

## BURNS, H. C.

Design for the future in terminal air traffic control.  
20 p3573 A69-37160

## BURNS, J. A.

Dynamics of a charged particle in a spiral field.  
03 p0503 A69-14015

## BURNS, J. C.

The iterated equation of generalized axially symmetric potential theory. IV.  
10 p1680 A69-23718

## BURNS, J. R.

Large-signal transit-time effects in the MOS transistor.  
14 p2418 A69-28891

## BURNS, R. K.

Downstream radiation flux to blunt entry vehicles.  
02 p0354 A69-12547

Radiating gas flows under conditions of reentry into planetary atmospheres /Tehenia izluchaiushchego gaza v usloviakh vkhoda v atmosfery planet/.  
20 p3513 A69-36982

## BURNS, S. J.

A simulated crack experiment illustrating the energy balance criterion.  
05 p0842 A69-16438

## BURNS, T. B.

The low-frequency cutoff of ELF emissions.  
03 p0399 A69-14021

## BURNS, W. J.

Transonic swirling flow.  
23 p4151 A69-41887

## BURNS, W. R.

Clipping loss in the one-bit autocorrelation spectral line receiver.  
16 p2752 A69-32390

Pulsar search techniques.  
20 p3605 A69-37824

## BURNSIDE, W. D.

The admittance of a parallel-plate waveguide aperture illuminating a metal sheet.  
02 p0218 A69-12328

Reflection coefficient of a TEM mode symmetric parallel-plate waveguide illuminating a dielectric layer.  
18 p3108 A69-34802

Reflection coefficient of a parallel-plate waveguide illuminating a conducting sheet.  
20 p3507 A69-37839

- BURNSWEIG, J.**  
Performance of ultra-bandwidth YIG pulse compression networks.  
13 p2230 A69-27680
- BUROVA, Z. A.**  
Controlling seam welding of aluminium-magnesium alloys on the basis of electrode displacement.  
24 p4319 A69-42919
- BURR, M. J.**  
Hyperventilation-induced hemolysis in the dog.  
22 p3887 A69-41192
- BURR, R.**  
Holographic measurement of compressor blade, turbine blade and airframe panel vibration distribution. [SAE PAPER 690265]  
07 p1130 A69-18313
- BURR, R. H.**  
A control system concept for an axisymmetric supersonic inlet. [AIAA PAPER 68-581]  
20 p3585 A69-37151
- BURRELL, G. J.**  
Beats produced by "negative" Faraday effect in infrared ring lasers.  
01 p0088 A69-10028  
Measurement of Fresnel drag produced by electron motion in semiconductors.  
05 p0807 A69-16026
- BURRELL, R.**  
Approximate cutoff frequency of dielectric ridge waveguide, with application to traveling-wave masers.  
05 p0777 A69-16579
- BURRIDGE, R.**  
Spherically symmetric differential equations, the rotation group, and tensor spherical functions.  
07 p1123 A69-18807  
The self-similar problem of the expanding elliptical crack in an anisotropic solid.  
24 p4397 A69-42749
- BURRIS, P. M.**  
Aircraft performance benefits from modern control systems technology. [AIAA PAPER 69-767]  
19 p3245 A69-35656
- BURROUGHS, E. G.**  
Collection efficiency of continuous dynode electron multiple arrays.  
06 p0897 A69-17699
- BURROUGHS, J. E.**  
Attachment concepts for brittle materials.  
09 p1477 A69-22370
- BURROUGHS, L. R.**  
Evaluation of advanced gear forging techniques. [SAE PAPER 680632]  
08 p1321 A69-20732
- BURROUGHS, W. J.**  
Sub-millimetre wave solar observations.  
03 p0513 A69-13774  
Dimers of the water molecule in the earth's atmosphere.  
05 p0759 A69-16658  
Submillimetre astronomy - Results and prospects.  
13 p2343 A69-27604  
Submillimetre absorption by isotopic and vibrationally excited forms of water vapour.  
15 p2568 A69-30699  
Millimetre wavelength spectroscopic observations of the water dimer in the vapour phase.  
18 p3177 A69-35240  
A study of submillimetre atmospheric absorption using the HCN maser.  
18 p3152 A69-35241  
Observation of atmospheric absorption using submillimetre maser sources.  
20 p3553 A69-37296
- BURROWES, C.**  
Solar cell calibration experiments on LES-6.  
19 p3254 A69-35712
- BURROWS, A.**  
Human factors in flight training.  
22 p3894 A69-41138
- BURROWS, J. R.**  
Morphology of outer radiation zone electron /E greater than 35 kev/ acceleration mechanisms.  
11 p1950 A69-25147  
Dawn-dusk asymmetries in the outer radiation zone at magnetically quiet times.  
18 p3128 A69-34942  
On the high-latitude limit of closed geomagnetic field lines.  
20 p3531 A69-37875
- BURROWS, K.**  
The application of the image orthicon television system to rocket trajectory determination.  
12 p2033 A69-26965
- BURROWS, M. C.**  
Hydrazine-nitrogen tetroxide combustion response to transverse gas flows.  
01 p0175 A69-10112
- BURROWS, M. L.**  
Surface tolerance of a radar calibration sphere.  
08 p1273 A69-20027  
Equivalence of the Rayleigh solution and the extended-boundary-condition solution for scattering problems.  
17 p2920 A69-33422
- BURROWS, R. R.**  
Optimal continuous low-thrust trajectories for co-altitude rendezvous.  
16 p2857 A69-32177
- BURRUS, W. R.**  
Direct and compound-nucleus neutrons from 14-18-Mev protons on super 9 Be, super 14 N, super 27 Al, super 56 Fe, super 115 In, super 181 Ta, and super 208 Pb and from 33-Mev bremsstrahlung on super 27 Al, super 206 Pb, super 208 Pb, and super 209 Bi.  
12 p2192 A69-26299
- BURSA, M.**  
On the figure of the earth's equipotential surface from satellite orbit dynamics.  
09 p1487 A69-21635  
On the determination of parameters of the earth's figure from satellite orbit dynamics.  
15 p2602 A69-31387  
On the determination of the earth's ellipsoid on the basis of satellite observations.  
18 p3131 A69-35195
- BURSILL, A. E.**  
Effect of mild hypoxia on mental performance assessed by a test of selective attention.  
09 p1445 A69-22553
- BURSON, W. C., JR.**  
Alternating current operation of a colloid source. [AIAA PAPER 69-495]  
16 p2846 A69-32773
- BURSTEIN, E.**  
Electric field induced infrared absorption and Raman scattering by optical phonons in centrosymmetric crystals.  
02 p0295 A69-11779  
The interaction of acoustic and electromagnetic waves /"son et lumiere"/ with plasmas in a magnetic field.  
16 p2821 A69-31820
- BURT, E. G. C.**  
The dynamics of low-thrust spacecraft manoeuvres.  
03 p0522 A69-14086  
Space science and electrical propulsion.  
06 p0998 A69-16858  
Optimum functions for mass and energy flow in space manoeuvres.  
24 p4382 A69-42921
- BURTE, H. M.**  
The technical potential for metal matrix composites.  
06 p0939 A69-16941
- BURTIS, W. J.**  
Banded chorus - A new type of VLF radiation observed in the magnetosphere by OGO 1 and OGO 3.  
16 p2774 A69-31981
- BURTON, R. L.**  
Conditions for the steady one-dimensional motion of a current sheet.  
01 p0133 A69-11220  
Effect of mass injection on a high-current arc. [AIAA PAPER 69-266]  
09 p1564 A69-21242
- BURTON, R. R.**  
Criteria for physiological stress produced by increased chronic acceleration.  
10 p1641 A69-23041  
Hematological findings associated with chronic acceleration.  
11 p1828 A69-25458  
Role of hematocrit, heart mass, and high-altitude exposure in acute hypoxia tolerance.  
22 p3874 A69-40214
- BURTON, T. A.**  
On the generalized Lienard equation with forcing function.  
02 p0272 A69-12132
- BURTON, W. M.**  
Solar photography in the extreme ultraviolet.  
20 p3539 A69-37545
- BURTSEV, A. I.**  
Interpretation and use of Satellite Data /Interpretatsiia i Ispol'zovanie Sputnikovykh Dannyykh/.  
11 p1911 A69-24824  
Analysis of the air flowfields in cyclones according to television cloud images from the Cosmos 122 satellite /Analiz polia vozdukhnykh techenii v tsiklonakh po televizionnym izobrazheniiam oblachnosti so sputnika "Kosmos-122"/.  
11 p1912 A69-24825  
Satellite Meteorology /Sputnikovaia Meteorologiya/.  
13 p2291 A69-27723
- BURT, G. J.**  
Ionospheric effect caused by celestial X-rays.  
17 p3024 A69-33378
- BURWELL, W. G.**  
Optimization of nonequilibrium nozzle performance for selected system considerations. [AIAA PAPER 69-472]  
16 p2733 A69-32652
- BURYKINA, A. L.**  
Carbide formation from spherical powders of niobium, molybdenum, and tungsten /Karbidizatsiia sfericheskikh poroshkov niobia, molibdena, vol'frama/.  
19 p3345 A69-36162  
Zirconium and niobium carbide coatings on niobium, tantalum, molybdenum, and tungsten /Pokrytiia iz karbidov tsirkoniia i niobia na niobii, tantale, molibdene i vol'frame/.  
20 p3560 A69-37362  
Diffusion welding and soldering of metallic wire with graphite and graphitized viscose /Diffuzionnaia svarka i paika metallicheskoj provoloki s grafitom i grafitizirovannoi viskozoi/.  
21 p3728 A69-38617  
Study of the interaction of graphite and pyrographite with the disilicides of titanium niobium and tungsten /Issledovanie vzaimodeistviia grafita i pirografita s disilitsidami titana, niobia, molibdena i vol'frama/.  
22 p3970 A69-40638
- BUSANOVICH, C. J.**  
An evaporated heterojunction diode strain sensor.  
14 p2422 A69-29555  
The feasibility of a heterode pressure transducer.  
22 p3950 A69-41222
- BUSBY, D. E.**  
Space Clinical Medicine.  
05 p0711 A69-16801  
Medical problems in space.  
24 p4278 A69-43396
- BUSBY, M. R.**  
Spatial distribution of 0.30-0.54 ev gaseous argon atoms scattered from a solid argon surface.  
13 p2300 A69-28658
- BUSCHOW, A. G.**  
Electroforming of aluminum composite structures by codeposition of high strength, high modulus fibers.  
19 p3318 A69-35510
- BUSCHOW, K. H. J.**  
The intermetallic compounds in the gadolinium-cobalt system.  
11 p1903 A69-24574
- BUSCHULTE, W.**  
Small rocket engine research /Forschungsarbeiten an Raketenkleintriebwerken/.  
08 p1376 A69-20870  
Investigation of an injector concept for throttleable high energy rocket engines.  
16 p2835 A69-31749
- BUSCOMBE, W.**  
Radial velocities of southern OB stars and supergiants.  
14 p2519 A69-29368  
Line strengths for southern OB stars I - Spectrograms with high dispersion. II - Observations with moderate dispersion.  
20 p3600 A69-37491
- BUSECK, P. R.**  
Phosphide from meteorites - Barringerite, a new iron-nickel mineral.  
18 p3205 A69-35433
- BUSELLI, G.**  
The observation of X-rays from the galactic centre and Centaurus regions.  
09 p1583 A69-22765



**BUSEMANN, A.**

Optimum maneuvers of a skip vehicle with bounded lift constraints.

17 p3025 A69-32836

Relations between hodograph and speedgraph.

19 p3300 A69-36777

**BUSH, A. J.**

Strain-gage installations for adverse environments.

12 p2099 A69-27165

**BUSH, H. I.**

Airbreathing propulsion - Opportunities unlimited.

18 p3185 A69-35139

**BUSH, S. F.**

Infrared and Raman investigation of condensed phases of methylamine and its deuterium derivatives.

01 p0023 A69-10287

Vibrational spectra and structure of small-ring compounds. XII.

14 p2410 A69-29922

**BUSH, W. B.**

A theoretical model for the sharp flat plate in rarefied hypersonic flow.

04 p0589 A69-14747

**BUSHNELL, C. L.**

High power density fuel cell.

23 p4076 A69-42309

**BUSHNELL, D.**

Nonlinear analysis for axisymmetric elastic stresses in ring-stiffened, segmented shells of revolution.

12 p2185 A69-26818

**BUSHNELL, D. M.**

Measurement of mean drop sizes for sprays from superheated waterjets.

09 p1483 A69-21995

Velocity fluctuation intensities in a hypersonic turbulent boundary layer.

16 p2770 A69-31908

Calculation of nonequilibrium hypersonic turbulent boundary layers and comparisons with experimental data.

[AIAA PAPER 69-684] 17 p2955 A69-33474

**BUSHNEV, L. S.**

Investigation of the precipitation mechanism of the Ni sub 3 Ti phase in the alloy Ni plus 16.3 percent Cr plus 5.8 percent Ti /Issledovanie mekhanizma vydeleniya fazy Ni sub 3 Ti v splave Ni plus 16.3 percent Cr plus 5.8 percent Ti/.

20 p3558 A69-36968

**BUSHUEV, E. I.**

Geometrical solution of the problem of pulsed transfer between close, nearly circular orbits /O geometricheskom reshenii zadachi impul'snogo perekhoda mezhdublizkimi pochtmi krugovymi orbitami/.

22 p4033 A69-41085

Methodical errors of a simplified prediction of the rotation period of a correctable artificial earth satellite /Metodicheskie oshibki uproschennogo prognoza perioda obrashcheniya korrrektiruemogo ISZ/.

22 p4033 A69-41086

**BUSIGIN, E. P.**

Low-voltage cesium arc in thermionic converter with extended cathode surface.

14 p2403 A69-29250

**BUSINGER, J. A.**

The response of the planetary boundary layer to time varying pressure gradient force.

03 p0460 A69-13337

Sonic anemometer comparison and measurements in the atmospheric surface layer.

16 p2808 A69-32600

**BUSNEL, R. G.**

Prospective considerations concerning bio-acoustics in relation to bird-scaring techniques.

17 p2914 A69-33364

**BUSORGIN, V. I.**

Experimental determination of the forces acting in bracket mounting bolts /Eksperimental'noe opredelenie usilii v boltakh krepleniya kronshteina/.

23 p4168 A69-41417

**BUSS, B.**

Technical and organisational requirements for earth observation satellite programme.

21 p3855 A69-38622

**BUSS, H.**

The near wake of axisymmetric bodies in hypersonic flow.

06 p0860 A69-17633

**BUSSA, S. L.**

Cumulative damage analysis of random stresses.

17 p3053 A69-32988

**BUSSARD, R. W.**

Entry propulsion and lower systems technology.

11 p1945 A69-25723

**BUSSE, C. A.**

Heat pipe research in Europe.

14 p2538 A69-29201

High temperature lithium heat pipes.

14 p2462 A69-29203

Metal-to-ceramic seals for thermionic converters.

14 p2454 A69-29211

Heat pipe thermionic converter research in Europe.

23 p4074 A69-42295

**BUSSE, F. H.**

Bounds on the transport of mass and momentum by turbulent flow between parallel plates.

08 p1305 A69-20840

A new method for the theoretical treatment of turbulent transport processes /Eine neuartige Methode zur theoretischen Behandlung turbulenter Transportvorgaenge/.

10 p1677 A69-22895

**BUSSOLARI, R. J.**

The JT9D engine control system.

[SAE PAPER 690405] 23 p4201 A69-41658

**BUSSOLINI, J. J.**

Improving avionic equipment reliability via test and failure analysis.

19 p3282 A69-35784

The system approach to reliability demonstration.

19 p3327 A69-36003

Reliability testing - Technique or technology/questions/

22 p3952 A69-40022

**BUSTAMANTE, A. C.**

The autorotation characteristics of various shapes for subsonic and hypersonic flows.

[AIAA PAPER 69-132] 06 p0863 A69-18062

**BUT, D. A.**

Electric arc source of a low-temperature plasma.

05 p0802 A69-15902

Methods of determining induced magnetic fields in linear DC MHD generators /Metody opredeleniya induktirovannykh magnitnykh polei v lineinykh MGD-generatorakh postoiannogo toka/.

10 p1636 A69-23454

**BUTCHER, B. M.**

A criterion for the time dependence of dynamic fracture.

10 p1803 A69-24032

**BUTCHER, D. T.**

Rapid annealing in silicon transistors.

06 p0975 A69-16870

**BUTCHER, P. N.**

Theoretical frequency of the L.S.A. mode for gallium arsenide at frequencies above 10 GHz.

01 p0137 A69-10321

**BUTCULESCU, D.**

Generalization of a plane-flow problem with free lines /Generalizarea unei probleme de miscare plana cu linii libere/.

14 p2433 A69-29683

**BUTENKO, S. A.**

A comparative evaluation of different methods for detection of extraterrestrial life.

01 p0021 A69-11093

**BUTIAGIN, O. F.**

Observation of the optical rectification effect in lithium metaniobate crystals /O nabludenii efekta opticheskogo vypryamleniya v kristallakh metaniobata litia/.

14 p2458 A69-29168

**BUTKO, G. I.**

Synthesis of a class of self-adaptive automatic control systems with composite control /Sintez odnogo klassa samonastraiavushchikhsia sistem avtomaticheskogo upravleniya s kombinirovannym regulirovaniem/.

01 p0052 A69-10797

**BUTLER, C. A.**

Narrow-gap welding - A process for all positions.

11 p1891 A69-24930

**BUTLER, H. W.**

Recent developments in variational methods for nonequilibrium flows.

04 p0551 A69-15314

**BUTLER, J.**

The effect of volume history on shunt flow in excised dog lungs.

21 p3651 A69-38386

**BUTLER, J. F.**

Bismuth-doped Pb sub 1-x Sn sub x Te diode lasers with low-threshold currents.

12 p2109 A69-26641

**BUTLER, J. W.**

On the Trouton-Noble experiment.

03 p0517 A69-14106

**BUTLER, R.**

The radio nebula NRAO 591/593.

10 p1790 A69-24136

Observations of W49 at 2800 MHz with an east-west resolution of 1.5.

18 p3195 A69-34427

**BUTLER, S.**

Creep buckling of aircraft compression structure.

21 p3842 A69-39308

**BUTLER, T. G.**

Rosman I dynamic analysis.

23 p4231 A69-42133

**BUTLIN, G. A.**

A scheme for man-machine interactive structural analysis.

12 p2035 A69-27098

**BUTLIN, R. N.**

The inhibition of hydrogen-air flames by hydrogen halides.

02 p0304 A69-12315

**BUTMAN, S.**

A method for optimizing control-free costs in systems with linear controllers.

06 p0905 A69-17945

The effect of coding on rate equalization of digital channels.

07 p1080 A69-19094

Optimum and sub-optimum detection of digital sequences corrupted by white noise.

07 p1081 A69-19097

A general formulation of linear feedback communication systems with solutions.

07 p1085 A69-19181

A general formulation of linear feedback communication systems with solutions.

17 p2944 A69-33626

**BUTROV, M. V.**

Spectral width of frequency-modulated oscillations for several modulating frequencies /O shirine spektra chastotnomodulirovannykh kolebaniy dlia neskol'kikh moduliruushchikh chastot/.

15 p2562 A69-30116

**BUTS, V. A.**

Excitation of a gyrotropic plasma waveguide /Zbudzhennia gyrotropnogo plazmovoogo khvilevodu/.

11 p1927 A69-24916

Theory of ferrite-containing resonators /K teorii rezonatorov s ferritom/.

15 p2579 A69-30954

**BUTSEROGA, V. P.**

Autonomy conditions for a sampled-data multivariable control system for the spectra of random processes.

08 p1296 A69-20233

**BUTTER, D. A.**

On the parameters which control the forward velocity of a Bostick plasmoid.

06 p0964 A69-17480

**BUTTERS, J. N.**

A method for reducing movement in holographic emulsions.

06 p0923 A69-16930

Lasers in the visualization of surface strain and vibrations.

22 p3945 A69-40244

**BUTTERWORTH, J.**

A study of the spatial structure of turbulent flow by intensity-fluctuation spectroscopy.

09 p1493 A69-21491

**BUTTNER, F. H.**

Demand economics of space-age metals.

19 p3346 A69-36635

**BUTTON, K. J.**

Quantum effects in cyclotron resonance using a CW hydrogen-cyanide laser.

[IEEE PAPER C-6] 07 p1150 A69-19051

## BUTTREY, D. E.

The determination of the O sub 2-O collision cross section from shock-tube emission studies.

22 p3983 A69-40099

## BUTTRILL, S. E., JR.

Measurement of ion-molecule reaction rate constants using ion cyclotron resonance.

20 p3579 A69-37495

## BUTWILOWICZ, W.

Measurement of high temperatures of gases by the method of reversed spectral lines. II /Pomiar wysokich temperatur gazow metoda odwrconych linii spektralnych. II/.

05 p0761 A69-15763

## BUTYLSKII, I. T.

Counting circuits with a tunnel diode chain /Schetnye skhemy s tsepochkoi tunnel'nykh diodov/.

14 p2419 A69-28921

## BUTZ, A. R.

Higher order derivatives of Liapunov functions.

12 p2122 A69-26522

## BUX, D.

Digital control of an aircraft with variable flight characteristics /Digitale Regelung fuer ein Flugzeug mit variablen Flugeigenschaften/.

15 p2549 A69-30229

## BUXBAUM, O.

Analytical treatment of load time functions from the standpoint of fatigue strength /Zur analytischen Behandlung von Last-Zeit-Funktionen aus der sicht der Betriebsfestigkeit/.

09 p1620 A69-22572

## BUXO, J.

Effects of ionizing radiation on MOS devices.

08 p1373 A69-20864

Thermal cures of defects created in silica films by ionizing radiation /Guerison therminiques de defauts crees dans les couches de silice par des radiations ionisantes/.

15 p2625 A69-30828

## BUXTON, O. E., JR.

Using the Rankine power cycle for fluid evaluation.

23 p4239 A69-42276

## BUYLE-BODIN, M.

Distribution of carriers in a quasi-intrinsic bar of germanium subjected to an electric field up to several kilovolts per centimeter /Repartition des porteurs dans un barreau de germanium quasi intrinseque, soumis a un champ electrique jusqu'a. quelques kilovolts par centimetre/.

08 p1372 A69-20277

## BUZHINSKII, I. M.

Degradation of neodymium glass parameters in operation /Ukhudshenie parametrov neodimovykh stekol v protsesse ekspluatatsii/.

03 p0442 A69-14219

Experimental determination of the pumping energy absorbed by an active element of neodymium glass /Eksperimental'noe opredelenie energii nakachki, pogloschaemoi v aktivnom elemente iz neodimovogo stekla/.

15 p2635 A69-31104

Features of energy transfer and dissipation in luminophors based on phosphate glasses activated by neodymium /Osobennosti perenosa i dissipatsii energii v luminoforakh na osnove fosfatnykh stekol, aktivirovannykh neodimom/.

20 p3552 A69-37017

Efficiency of neodymium-activated glass laser as a function of active and inactive absorption by the glass /Koeffitsient poleznogo deistviia OKG na stekle, aktivirovannom neodimom, v zavisimosti ot aktivnogo i neaktivnogo pogloscheniia stekla/.

22 p3964 A69-40797

## BUZNIKOVA, L. I.

Approximate solution of the equations for the boundary layer on the walls of an MHD generator /O priblizhennom reshenii uravnenii pogranichnogo sloia na stenkakh MGD-generatora/.

06 p0871 A69-17914

Applicability of the method of successive approximations for calculating the boundary layer during magnetohydrodynamic flow in channels /O primenimosti metoda posledovatel'nykh priblizhenii dlia rascheta pogranichnogo sloia pri magnitogidrodinamicheskom techenii v kanalakh/.

11 p1932 A69-25491

## BUZYNA, G.

Experiments on shock stand-off distance in nonequilibrium flow.

18 p3089 A69-35385

## BUZZARD, R. D.

Description of three-dimensional schlieren system.

12 p2088 A69-26179

## BYATT, D. W. G.

Wullenweber arrays using doublet aeriels.

08 p1288 A69-20963

## BYBEE, J. E.

Automation in photogrammetric compilation.

24 p4316 A69-43566

## BYCHAWSKI, Z.

Creep buckling of a geometrically nonlinear spherical shell /Wyboczenie przy pelzaniu geometrycznie nieliniowej powloki kulistej/.

05 p0831 A69-15679

The constitutive equation of a complete nonlinear viscoelastic material.

05 p0835 A69-15868

Rheological states of geometrically nonlinear rotational membranes.

11 p1980 A69-24821

Creep phenomena and failure of nonlinear rotational membranes.

19 p3444 A69-36806

## BYCHENKOVA, V. N.

Resistance of the protozoan Colpoda maupasi to Martian conditions of atmospheric pressure and low partial pressure of oxygen.

20 p3478 A69-37627

## BYCHKOV, N. G.

Determination of the amplitude of elastic-plastic deformations /strains/ in thermal-fatigue tests.

10 p1801 A69-23844

## BYCHKOV, V. P.

Characteristics of the metabolism of humans sustained on dehydrated-food diets for 120 days /Osobennosti obmena veshchestv u cheloveka pri pitanii ratsionom iz obezvozhennykh produktov v techenie 120 sutok/.

13 p2212 A69-28624

## BYCHKOVA, M. I.

Physical Metallurgy of Superconducting Materials /Metallovedenie sverkhprovodiashchikh materialov/.

16 p2802 A69-32051

Influence of the tempering time and temperature on the structure and superconducting properties of a recrystallized and deformed alloy of niobium with 75 at. percent titanium /Vliianie vremeni i temperatury otpuska na stroenie i sverkhprovodiashchie svoistva rekristallizovannogo i deformirovannogo splava niobiia s 75 atomn. percent titana/.

19 p3345 A69-36302

## BYCROFT, G. N.

Impacting oscillatory devices.

07 p1136 A69-19458

## BYDDER, E. L.

The formal nonequilibrium theory of partially ionized and/or nonuniform gas mixtures.

04 p0633 A69-15436

## BYER, N. E.

Physical basis of noncatastrophic degradation in GaAs injection lasers.

07 p1148 A69-18857

Role of optical flux and of current density in gradual degradation of GaAs injection lasers.

17 p2980 A69-32959

## BYER, R. L.

Visible CW parametric oscillator.

02 p0260 A69-12701

Nonlinear optical properties of Ba sub 2 NaNb sub 5 O sub 15 in the tetragonal phase.

09 p1515 A69-21354

## BYERS, D. C.

An experimental investigation of a high-voltage electron-bombardment ion thruster. [ECS PAPER 170D]

05 p0812 A69-16233

SERT II flight-type thruster system performance. [AIAA PAPER 69-235]

09 p1566 A69-21255

## BYERS, G. S.

Enzymatic synthesis of adrenaline in mammalian brain.

07 p1066 A69-19260

## BYERS, K. G., JR.

Statistical gain characteristics of radar antennas at very short Fresnel zone distances.

12 p2040 A69-26470

## BYERS, R. A.

Active preselection filter techniques for adjacent channel interference suppression at UHF.

23 p4141 A69-42220

## BYKE, R. M.

Resistojet biowaste utilization - Evaluation and system selection.

[AIAA PAPER 68-121] 04 p0554 A69-15506

## BYKHOVSKII, M. A.

Noise immunity of optimal coherent reception of frequency diversity signals in a multipath channel /Pomekhoustoichivost' optimal'nogo kogerentnogo priema chastotnoraznennykh signalov v mnogoluchevom kanale/.

01 p0028 A69-10375

Noise stability of a reception system with spatial beam selection in the short-wave range in the presence of incomplete beam separation /Pomekhoustoichivost' sistemy priema s prostranstvennoi selektsiei luchej v kv diapazone pri nepolnom razdelenii luchej/.

12 p2030 A69-26485

Noise rejection of the method of coherent signal addition in a multibeam channel with incomplete beam separation /Pomekhoustoichivost' metoda kogerentnogo slozheniia signalov v mnogoluchevom kanale pri nepolnom razdelenii luchej/.

13 p2223 A69-28551

## BYKOV, D. L.

Utilization of results of supplementary experiments in the solution of problems in linear viscoelasticity theory /Ob ispol'zovanii rezul'tatov vspomogatel'nykh eksperimentov pri reshenii zadach lineinoi teorii viazko-uprugosti/.

08 p1412 A69-20327

## BYKOV, I. V.

Equipment for simultaneous three-point observations of field and amplitude fluctuations of an ionospheric signal /Apparatura dlia odnovremennykh trekhtochechnykh nabludenii za fluktuatsiami polia i amplitudy ionosfer'nogo signala/.

14 p2452 A69-29874

## BYKOV, L. T.

Calculation of the concentrations of gaseous contaminants in the atmosphere of aircraft cabins.

02 p0200 A69-11512

Application of dimensionality theory to the analysis of the thermovortex effect /Primenenie teorii razmer-nostei k analizu termovikhrevogo efekta/.

03 p0531 A69-12966

## BYKOV, P. A.

Method for calculating the population and the excitation rates of the working levels in a CO sub 2 laser /Metod rascheta zaseleennosti i skorostei vzbuzhdeniia rabochikh urovnei OKG na CO sub 2/.

22 p3964 A69-40795

## BYKOV, V. N.

Dislocation redistribution during annealing and deformation of single crystals of high-melting-point metals of group VI A /Pereraspredelenie dislokatsii pri otzhige i deformatsii v monokristallakh tugoplavkikh metallov VIA gruppy/.

07 p1159 A69-18534

## BYKOV, V. P.

Magnetic field effect on GaAs injection laser emission.

19 p3387 A69-36529

## BYKOVSKII, I. A.

Mass-spectrometer investigation of ions formed by interaction between laser radiation and matter.

06 p0932 A69-16921

Electrothermal domains in semiconductors /Elektrotrepl'nye domeny v poluprovodnikakh/.

06 p0981 A69-17880

Features of the emission of a p-n junction GaAs laser with a nonlinear passive element in the resonator /Osobennosti izlucheniia lazera na p-n-perekhode GaAs s nelineinym passivnym elementom v rezonatore/.

09 p1515 A69-21474

Observation of absorption by nonequilibrium carriers in a GaAs diode in the emission mode /Nabludenie pogloscheniia neravnovesnymi nositeliami v diode GaAs v rezhime generatsii/.

13 p2272 A69-27893

Electrothermal domains in semiconductors.

14 p2503 A69-28789

New high-resolution photographic layers and their study by the method of holographic resolmetry /Novye fotograficheskie sloi vysokogo razresheniia i ikh issledovanie metodom golograficheskoi resol'vometrii/.

15 p2606 A69-30052

Characteristic features of the radiation of a p-n junction GaAs laser with a nonlinear passive element in the resonator.

15 p2633 A69-30719



- Angular distribution of a material vaporized by a laser beam /Uglovoe raspredelenie neshchestva, isparenogo luchom OKG/. 21 p3737 A69-38992
- BYKOVTSSEV, G. I.**  
The relations on surfaces of stress discontinuity in three-dimensional perfectly rigid-plastic bodies. 11 p1996 A69-25738
- BYNUM, J. A.**  
Painted helicopter main rotor blades and flicker-induced vertigo. 17 p2913 A69-33175
- BYRAM, E. T.**  
X-ray spectra of several discrete cosmic sources. 20 p3593 A69-38152
- BYRD, P. F.**  
High accuracy gamma function values for some rational arguments. 03 p0455 A69-13375
- BYRDIN, I. U. A.**  
Probe studies of a Knudsen arc in argon /Zondovye issledovaniia Knudsenovskoi dugi v argone/. 12 p2137 A69-26536
- BYRKIN, A. P.**  
Some self-similar flows of a viscous gas in a channel /O nekotorykh avtomodel'nykh techeniakh viazogo gaza v kanale/. 11 p1875 A69-25482  
An exact solution of the Navier-Stokes equations for a compressible gas /Ob odnom tochnom reshenii uravnenii Nav'e-Stoksa dlia szhimaemogo gaza/. 12 p2061 A69-25887
- BYRNE, J. G.**  
Work-hardening in quenched, fully hardened, and overaged Mg-Mn alloy single crystals. 05 p0778 A69-15757  
The influence of stacking fault energy on fatigue fracture. 10 p1795 A69-23060
- BYRNE, J. J.**  
A high energy density lithium/ dichloroisocyanuric acid battery system. [ECS PAPER 15] 05 p0706 A69-16231
- BYRNE, R. E.**  
Determination of the relative efficiency of an equatorial-mounted solar-energy concentrator in the photoreduction of a solution of lead triacetate in acetic acid. 16 p2736 A69-31814
- BYRON, E. V.**  
On the correlation between wide-band arrays and array simulators. 02 p0219 A69-12343
- BYRON, R. A.**  
Advanced pressurization system for liquid rockets. 02 p0305 A69-12386
- BYRON, S. R.**  
Time-of-flight measurement of particle velocity. 13 p2263 A69-28243
- BYSHEV, V. I.**  
Structural characteristics of atmospheric turbulence in the surface layer over the open sea /Strukturnye kharakteristiki atmosferno turbulentnosti v privodnom sloe nad otkrytym okeanom/. 21 p3758 A69-39111
- BYSTRAMOVICH, S. A.**  
Analysis of measurements by wide-sector instruments of the Cosmos 122 satellite /Analiz izmerenii shirokosekturnykh priborov sputnika "Kosmos-122"/. 11 p1912 A69-24830
- BYSTROVA, N. V.**  
The region of diminished 21-cm line intensity near the radio source W 49. 04 p0662 A69-15253
- BYSTRUSHKIN, G. S.**  
Nondestructive method for checking the early stages of fatigue damage. 07 p1141 A69-19316  
Possibility of determining the early stage in the fatigue damage of chromium steel by the eddy current method. 18 p3136 A69-34777
- BYTSENKO, I. U. V.**  
Evaluation of the exponent in the mass distribution law of meteoric bodies for the Leonids in 1967 /Otsenka pokazatelya stepeni v zakone raspredeleniia meteor-nykh tel po massam dlia potoka Leonid 1967 g./ 18 p3203 A69-35334
- BYNY, R. L.**  
Medical evaluation of missile fuel handlers. 09 p1447 A69-22556
- BYZOVA, N. L.**  
Certain results of measurements of the temperature field characteristics in the lowest 300 meters of the atmosphere /Nekotorye rezul'taty izmerenii kharakteristik temperaturnogo polia v nizhnem 300-metrovom sloe atmosfery/. 13 p2293 A69-27847
- C**
- CABANNES, H.**  
Magnetodynamics of Fluids /Magnetodynamique des fluides/ 2nd Edition/. 19 p3379 A69-35804  
Application of the method of Pade to the determination of shock waves. 19 p3241 A69-36778
- CABE, P. A.**  
Human factors evaluation of a computer based information storage and retrieval system. 02 p0204 A69-12220  
Evaluation of a motion simulator not requiring cockpit motion. 17 p2947 A69-34007
- CABION, P. J.**  
Pseudonoise ionospheric-communication system. 18 p3104 A69-35308
- CABRA, O., JR.**  
Onboard checkout system concept and philosophy. 11 p1866 A69-25081
- CABRAL, J.**  
Time resolved beam distribution functions in a beam-plasma experiment. 17 p3014 A69-33829
- CACCIAMANI, E. R.**  
MAT-1 - A 700-channel time-division multiple-access system with demand-assignment features. 23 p4129 A69-42511
- CACCIANI, A.**  
Instrumentation of the Monte Mario observatory in Rome for measuring weak solar magnetic fields /Strumentazione dell'osservatorio di M. Mario in Roma per la misura dei campi magnetici deboli del sole/. 10 p1693 A69-23311
- CACERES, C. A.**  
Telemetry in medicine and biology. 22 p3893 A69-40787
- CACHA, Z.**  
Development of advanced electroforming techniques for injector and composite thrust chamber fabrication. [AIAA PAPER 69-583] 16 p2794 A69-32757
- CACHEUX, J.**  
Space stresses /Les contraintes spatiales/. 15 p2625 A69-30824
- CACHON, A.**  
The influence of the multiplicity of secondary particles, created in very-high-energy nuclear interactions, on the muon component of extensive air showers /L'influence de la multiplicité des particules secondaires creees dans les interactions nucleaires de tres haute energie, sur la composante, muonique des grandes gerbes de l'air/. 07 p1207 A69-19325
- CADDELL, W. E.**  
On the use of aircraft density in preliminary design. [SAWE PAPER 813] 18 p3221 A69-34897
- CADE, M.**  
French solid-propellant sounding rockets /Les fusées-sondes francaises a perpropol solide/. 03 p0518 A69-12851
- CADENE, J.-C.**  
Different methods of measurement of the field factor in a junction diode /Sur differentes methodes de mesure du facteur de champ dans une diode a jonction/. 15 p2575 A69-30301
- CADEZ, M.**  
Energy transport in the atmosphere and the first law of thermodynamics /Transport de l'energie dans l'atmosphere et premier principe de la thermodynamique/. 01 p0067 A69-11032
- CADY, E. C.**  
An investigation of fluorine-hydrogen main tank injection pressurization. [AIAA PAPER 69-528] 16 p2767 A69-32717
- CAFFIER, E.**  
The SNECMA thrust reverser system of Concorde prototypes. [SAE PAPER 690412] 23 p4200 A69-41646
- CAGGIANI, S.**  
The problem of stopping barriers /Sul problema della barriere d'arresto/. 11 p1862 A69-24354
- CAGLE, C. V.**  
Adhesive Bonding- Techniques and Applications. 01 p0084 A69-10130  
Mounting optical components with adhesives. 24 p4326 A69-43465
- CAHAN, B.**  
Indications for the design of porous gas diffusion electrodes arising from analyses of their electrode kinetics. 04 p0551 A69-15309
- CAHILL, J. E.**  
Raman spectra of solid CO sub 2, N sub 2 O, N sub 2, and CO. 23 p4194 A69-42205  
Raman studies of molecular motion in condensed oxygen. 24 p4353 A69-43808
- CAHILL, L. J., JR.**  
Ring current particle distributions derived from ring current magnetic field measurements. 01 p0147 A69-11227  
Inflation of the inner magnetosphere. 07 p1127 A69-19357  
Resonant vibration of the magnetosphere observed from Explorer 26. 14 p2434 A69-28947  
Electric and magnetic field measurements near an auroral electrojet. 24 p4310 A69-43188
- CAHILL, P.**  
Theory of polarization of molecular line radiation excited by electron impact. 06 p0961 A69-17140
- CAHN, R. W.**  
Newer forms of carbon and their uses. 05 p0786 A69-16657  
Role of grain boundaries in creep. 17 p2985 A69-32905
- CAILLE, C.**  
Means of aerial evacuation at the disposal of a Paris hospital /Les moyens d'evacuations aeriens a la disposition d'un service hospitalier parisien/. 23 p4105 A69-41785
- CAILLE, E. J.**  
Necessity for an exhaustive criteriologic in the simulation of complex piloting /Necessite d'une criteriologie exhaustive dans la simulation des pilotages complexes/. 12 p2025 A69-27083
- CAIN, D.**  
The observation of three dimensional shadow-graphlike images in holography of phase objects. 24 p4317 A69-43764
- CAIN, D. L.**  
The radius of Venus as determined by planetary radar and Mariner 5 radio tracking data. 03 p0508 A69-13348  
Structure of the atmosphere of Venus derived from Mariner V S-band measurements. 21 p3794 A69-38380
- CAIN, F. L.**  
Statistical gain characteristics of radar antennas at very short Fresnel zone distances. 12 p2040 A69-26470
- CAIN, J. C.**  
OGO-2 magnetic field observations during the magnetic storm of March 13-15, 1966. 01 p0069 A69-11125  
Prediction of geomagnetic secular change confirmed. 20 p3523 A69-37490  
The location of the dip equator at E-layer altitude. 23 p4160 A69-42428

- CAIRNS, A. H.**  
The Elliott MCS 920 m computer with particular reference to its application to the inertial guidance of the CECLES-ELDO launcher.  
20 p3501 A69-37391
- CAIRNS, C. D.**  
Helium emission /1.083 mu/ in sunlit aurora.  
16 p2780 A69-32311
- CAIRNS, E. J.**  
Electrocatalysts for the direct electrochemical oxidation of n-octane in fuel cells.  
[ECS PAPER 8] 03 p0368 A69-13856  
Secondary cells with lithium anodes and immobilized fused-salt electrolytes.  
04 p0552 A69-15330  
High-temperature batteries.  
17 p2904 A69-33663  
Increased irreversibility caused by composition changes in fuel cells.  
18 p3093 A69-34781
- CAIRNS, F. V.**  
Ionization in sounding rocket telemetry transmitters.  
02 p0222 A69-12691  
Unattended controller for a frequency synthesizer.  
06 p0897 A69-17704
- CAIRNS, I.**  
Evidence of quarks in air-shower cores.  
24 p4383 A69-42945
- CAIRNS, R. L.**  
18 percent nickel 350-maraging steel.  
08 p1330 A69-20009  
Ultra high-strength maraging steel wire.  
13 p2278 A69-27412
- CAKMAK, A. S.**  
A structural model of a micropolar continuum.  
01 p0169 A69-10810
- CALABI, L.**  
A family of codes for the correction of substitution and synchronization errors.  
09 p1452 A69-21316
- CALABRA, A. E.**  
Metallographic techniques for vacuum-cast rolled ingot beryllium sheet.  
13 p2281 A69-28160  
Simplified metallographic technique for beryllium.  
13 p2281 A69-28161
- CALABRIA, F. M.**  
First-order theory of orbital transfer for geodetic satellite missions.  
21 p3793 A69-38338
- CALAMIA, M.**  
Some experiments on microwave dispersion lines /Alcuni esperimenti sulle linee dispersive alle microonde/.  
14 p2412 A69-29395  
A tapered waveguide-to-waveguide adapter.  
14 p2423 A69-29760
- CALANDRA, C.**  
Thermoelectric power for alkali metals and energy-dependent pseudopotential.  
05 p0809 A69-16507
- CALCAN, V.**  
Dimensional and mass changes in water and oil immersion of a reinforced textolite-type plastic /Modificare le dimensioni e la variazione della massa in immersione in acqua e in oli di un materiale plastico armato di tipo textolit/.  
15 p2643 A69-31550
- CALCATERRA, P. C.**  
Active vibration isolation of human subjects from severe dynamic environments.  
[ASME PAPER 69-VIBR-65] 10 p1650 A69-24157
- CALCOTE, L. R.**  
Introduction to Continuum Mechanics.  
05 p0843 A69-16713
- CALDECOTT, R.**  
Antenna impedance in a reentry environment.  
02 p0218 A69-12333
- CALDERON, S. S.**  
Improvement in effectiveness of an earth orbital mission through utilization of standby systems.  
19 p3430 A69-36010
- CALDIROLA, P.**  
Some remarks on space-charge acceleration of a plasma in an axially nonuniform magnetic field.  
03 p0477 A69-13760
- CALDWELL, G. L.**  
The effect of a spherical protuberance on the local heat transfer to a turbulent boundary layer.  
[ASME PAPER 68-HT-2] 02 p0351 A69-12204  
Flow and heat transfer in a laminarizing turbulent boundary layer.  
[ASME PAPER 69-HT-10] 24 p4413 A69-43558
- CALDWELL, H. R.**  
An introduction to laser reliability.  
18 p3151 A69-34523
- CALDWELL, P. A.**  
Optical observations of the proton flare of 7 July 1966.  
10 p1765 A69-23749
- CALDWELL, R. L.**  
Spatial distribution of 0.30-0.54 eV gaseous argon atoms scattered from a solid argon surface.  
13 p2300 A69-28658
- CALEDONIA, G.**  
Experimental determination of the cross-sections for neutral bremsstrahlung. I.  
15 p2657 A69-31159  
Experimental determination of the cross-sections for neutral bremsstrahlung. II.  
15 p2657 A69-31160
- CALFEE, J. D.**  
Matched metal molding of discontinuous graphite fiber composites.  
08 p1339 A69-20502
- CALHOUN, D. F.**  
High speed modular multiplier and digital filter for LSI development.  
04 p0567 A69-15354
- CALIFANO, F. P.**  
High-efficiency series operation of Gunn devices.  
09 p1463 A69-21684  
Protection of Gunn oscillators from breakdown phenomena /Sulla protezione dei dispositivi di Gunn da fenomeni di "breakdown"/.  
21 p3682 A69-38777
- CALIMBAS, A. T.**  
Long-term influence of vacuum and thermal environment on the thermal resistance across filled, bolted joints.  
[AIAA PAPER 69-628] 17 p3073 A69-33309  
Avionic application of a heat pipe.  
23 p4075 A69-42305  
An avionic heat pipe.  
[ASME PAPER 69-HT-16] 24 p4413 A69-43552
- CALLA, O. P. N.**  
Designing gridded tube oscillators.  
02 p0216 A69-12029  
Constant speed servo system for surveillance radar.  
08 p1274 A69-20108
- CALLADINE, C. R.**  
Time-scales for redistribution of stress in creep of structures.  
11 p1980 A69-24879  
Plastic behaviour of thin cylindrical pressure vessels with circular cutouts and radial branches.  
20 p3629 A69-38027
- CALLAGHAN, J. C.**  
Pressure signal generator for fluidic research.  
[ASME PAPER 69-FLCS-40] 21 p3649 A69-38603
- CALLAHAN, G. M.**  
Attenuation of inlet flow distortion upstream of axial flow compressors.  
[AIAA PAPER 69-485] 16 p2842 A69-32694
- CALLAHAN, R. H.**  
Airports for future aircraft - A planning guide.  
[AIAA PAPER 69-808] 19 p3289 A69-35623
- CALLARI, C. E.**  
The instability of an axially loaded viscoelastic constrained bar in the large displacement range.  
07 p1235 A69-19440  
Determination of the structural damping coefficient in free vibrations /Sulla determinazione del coefficiente di smorzamento strutturale nelle vibrazioni libere/.  
09 p1617 A69-22076
- CALLAWAY, J.**  
Elastic scattering of low-energy electrons from metastable helium.  
03 p0469 A69-12922  
Ferromagnetic transition in superdense matter and neutron stars.  
11 p1965 A69-25564
- CALLEGARI, A. J.**  
Non-linear boundary value problems for the circular membrane.  
07 p1233 A69-19299
- CALLENS, R. A.**  
Ammonia Resistojet station keeping subsystem aboard applications technology satellite /ATS/ IV.  
[AIAA PAPER 69-296] 09 p1560 A69-21212
- CALLOWAY, D. H.**  
Uric acid production of men fed graded amounts of egg protein and yeast nucleic acid.  
05 p0708 A69-15968  
Protein quality of the bacterium *hydrogenomonas eutropha*.  
10 p1644 A69-23306  
Regional and total body sweat composition of men fed controlled diets.  
10 p1644 A69-23314  
Human intolerance to bacteria as food.  
13 p2213 A69-27265  
Human Ecology in Space Flight III, Proceedings of the Third International Interdisciplinary Conference, Princeton, N.J., October 10-13, 1965.  
13 p2213 A69-27266  
Intestinal hydrogen and methane of men fed space diet.  
20 p3482 A69-37622
- CALMON, J.**  
Flow characteristics of a compressible fluid in a turbomachine stage. I /L'écoulement d'un fluide compressible dans un étage de turbomachine. I/.  
21 p3643 A69-38457
- CALOGER, P.**  
The use of multilayer insulation on the LM vehicle.  
[AIAA PAPER 69-609] 17 p3073 A69-33304
- CALOGERAS, J. E.**  
Supersonic wind tunnel investigation of inlet-engine compatibility.  
[AIAA PAPER 69-487] 16 p2840 A69-32676
- CALVAIRE**  
Simulation of magnetic materials /La simulation des matériaux magnétiques/.  
17 p2945 A69-33235
- CALVERT, G. S.**  
Cooled radial turbine for high power-to-weight applications.  
[AIAA PAPER 69-524] 16 p2838 A69-32662
- CALVERT, W.**  
Ionospheric irregularities observed by topside sounders.  
20 p3530 A69-37870  
Topside-sounder resonances.  
20 p3531 A69-37884
- CALVET, J.**  
Crystal growth and deformation-induced recrystallization /Croissance des cristaux et recristallisation induite par déformation/.  
[ONERA-TP-67] 07 p1167 A69-19340
- CALVEZ, C. A.**  
Normalized signal-to-noise power ratios of aperture antennas in random signal and noise fields.  
20 p3494 A69-37845
- CALVIN, M.**  
Organic analysis on the Pueblito de Allende meteorite.  
13 p2337 A69-27520  
Fatty acids and hydrocarbons as evidence of life processes in ancient sediments and crude oils.  
20 p3523 A69-37538
- CALVIT, H. H.**  
On approximate constitutive equations in nonlinear viscoelasticity.  
21 p3840 A69-39288
- CALVO CANALES, F.**  
Ozone and weather forecasting /Ozone et prévision météorologique/.  
16 p2786 A69-32629
- CALZECCHI, F.**  
Bilateral microscopy of dislocations and dislocation diodes in germanium.  
03 p0488 A69-13761
- CALZOLARI, P. U.**  
Two-dimensional theory of the uniform-base transistor at any injection level.  
11 p1845 A69-24569
- CAMAC, M.**  
Wake-temperature turbulent fluctuation decay rates deduced from O sub 2 radiation.  
02 p0190 A69-12525



## CAMAHORT, J. L.

Development of nitrided boron reinforced metal matrix composites.

13 p2283 A69-28671

## CAMBERLEIN, L.

Inertial navigation /Navigation par inertie/.

19 p3371 A69-36703

## CAMBI, E.

The reliability of a space vehicle launcher system.

20 p3618 A69-38278

## CAMBON, L.

Raman effect in glycerol - A 4880-angstrom units ionized argon laser /Effet Raman du glycerol - Laser a argon ionise 4880 angstrom units/.

03 p0440 A69-13366

## CAMBORNAC, M.

Examples of electric servosystems /Exemples d'asservissements de nature electrique/.

04 p0585 A69-15184

Example of an electrical servo - An antenna control /Exemple d'asservissement de nature electrique - Une commande d'antenne/.

11 p1852 A69-25118

## CAMBOU, F.

Recent results in the study of auroral X radiation /Resultats recents sur l'etude du rayonnement X auroral/.

21 p3787 A69-38359

## CAME, P. M.

Some aerodynamic aspects of turbine blade cooling. [ASME PAPER 69-GT-15]

09 p1432 A69-22501

## CAMENZIND, H. R.

An integrated FM multiplex receiver/generator.

19 p3273 A69-36274

## CAMERON-JOHNSON, A.

The undercarriage in aeroplane project design.

08 p1255 A69-21161

## CAMERON, A. G.

A method for determining the performance of a multiple-access satellite communication system..

01 p0032 A69-10966

International satellite system for aircraft communications and air traffic control.

03 p0464 A69-13238

## CAMERON, A. G. W.

The instability of stellar structures intermediate between white dwarfs and neutron stars.

08 p1397 A69-20770

Nucleosynthesis in supernova explosions.

08 p1401 A69-20898

A new table of abundances of the elements in the solar system.

08 p1401 A69-20903

Infrared radiation associated with protostars.

13 p2327 A69-27593

Relation between nuclear level density parameters and mass shell.

14 p2488 A69-29337

Spin down effects in neutron stars.

16 p2865 A69-32803

A schematic model for certain X-ray sources.

18 p3188 A69-35204

Physical conditions in the primitive solar nebula.

19 p3406 A69-36074

Fundamental problems of the solar system.

19 p3419 A69-36209

Abundances of the elements.

21 p3789 A69-38812

Attempts at optical detection of pulsars.

23 p4218 A69-42325

How are neutron stars formed/ques/.

23 p4222 A69-42393

Progress report on pulsars.

24 p4375 A69-42556

Nonthermal phenomena of astrophysics and their relation to plasma physics.

24 p4377 A69-42682

## CAMERON, J. A.

Helicopters on scheduled passenger service.

11 p2004 A69-24378

## CAMERON, M. J.

Fan beam observations of bright galaxies at 408 MHz.

08 p1386 A69-20087

## CAMERON, R. E.

Sterile soil from Antarctica - Organic analysis.

16 p2746 A69-31552

## CAMERON, R. G.

Psycho-physiological effects of flying on air hostesses.

23 p4086 A69-41688

Effect of flying on the menstrual function of air hostesses.

23 p4103 A69-41689

## CAMISA, R.

Design considerations for an integrated 1.8- GHz parametric amplifier.

01 p0040 A69-10193

## CAMP, D. W.

High resolution balloonborne temperature sensor.

09 p1494 A69-21642

Detailed wind and temperature profiles.

17 p2999 A69-33739

## CAMP, J.

Electrical power sources for business aircraft.

[SAE PAPER 690346] 15 p2552 A69-30091

## CAMP, T. F., JR.

Effects of increased gravity on gastroesophageal reflux in monkeys.

06 p0874 A69-17838

## CAMPANARO, P.

A theoretical analysis of combustion chambers with distributed air admission.

09 p1624 A69-22618

## CAMPARGUE, R.

Suction of a pure gas through a free jet shock structure /Aspiration d'un gaz pur a travers une structure de choc de jet libre/.

18 p3086 A69-34819

New aerodynamic effect of separation of molecules across a free jet shock structure /Nouvel effet aerodynamique de separation des molecules a travers une structure de choc de jet libre/.

19 p3240 A69-36650

## CAMPBELL, A. E.

Effective work function determinations of rhenium and molybdenum.

09 p1557 A69-21807

## CAMPBELL, A. E., JR.

Arc-mode thermionic converter performance - Measurements and interpretation.

14 p2398 A69-29177

## CAMPBELL, B.

Shock development in an electrothermal shock tube.

14 p2427 A69-29768

## CAMPBELL, D. A.

Standing waves and single-mode room-temperature laser emission from electron-beam-pumped cadmium sulfide.

12 p2109 A69-26639

## CAMPBELL, D. B.

Measurements of the electron content of the interplanetary medium between earth and Venus.

09 p1594 A69-21697

## CAMPBELL, D. S.

Attitude determination of rocket-released probes from polarization measurements.

02 p0207 A69-11813

## CAMPBELL, G.

Hollow rolling elements for high-performance bearings.

01 p0085 A69-10294

Fabrication of ultrahigh-purity aluminum strip for use in cryogenic magnets.

19 p3318 A69-35541

## CAMPBELL, I. G.

A study of the semi-annual density variation in the upper atmosphere from 1958 to 1966, based on satellite drag analysis.

06 p0918 A69-17380

## CAMPBELL, J. A.

High-energy cosmic-ray muons from a weak interaction.

09 p1583 A69-22758

Lyman-alpha scattering and the solar wind.

09 p1583 A69-22760

Simulated extensive air showers with a medium-strong interaction.

24 p4353 A69-43194

## CAMPBELL, J. D.

Fracture Toughness - An Examination of the Concept in Predicting the Failure of Materials.

02 p0336 A69-11431

## CAMPBELL, J. J.

Symmetrically truncated right-angle corners in parallel-plate and rectangular waveguides.

01 p0044 A69-10624

Impedance characteristics of a class of multiconductor transmission lines.

14 p2423 A69-29756

Stress generation during high-temperature oxidation. I - Oxygen solution effects.

[ECS PAPER 87] 15 p2641 A69-31541

## CAMPBELL, J. P.

V/STOL session introductory and review paper.

05 p0701 A69-15563

## CAMPBELL, M.

Film thickness effect on the wear life of a bonded solid lubricant film.

[ASLE PREPRINT 68AM 7C-4]

07 p1139 A69-18624

Friction and wear-life of selected solid lubricant films at -100 F.R.T., and 400 F.

[ASLE PREPRINT 69AM 6C-1]

15 p2619 A69-30471

## CAMPBELL, M. J.

Moon - Two new mascon basins.

16 p2864 A69-32446

Lunar and planetary mass concentrations.

21 p3803 A69-38980

## CAMPBELL, P. M.

Spin-orbit resonance of the inner planets.

22 p4018 A69-40270

## CAMPBELL, R.

A remotely controlled explosives processing facility.

02 p0226 A69-11523

Measurement of XB-70 propulsion performance incorporating the gas generator method.

[AIAA PAPER 68-594] 20 p3461 A69-37152

## CAMPBELL, R. M.

The Delphi technique - Implementation in the corporate environment.

01 p0180 A69-11250

## CAMPBELL, S. D.

Experiments on decompression bubbles in the circulation using ultrasonic and electromagnetic flowmeters.

21 p3663 A69-38914

Pharmacologic agents in the prevention of decompression sickness.

21 p3655 A69-38917

## CAMPBELL, T.

An approach to cost analysis in low cost launch vehicle studies.

24 p4393 A69-43120

## CAMPBELL, T. G.

Radiation characteristics of a cavity-backed cylindrical gap antenna.

22 p3914 A69-40698

## CAMPBELL, W. E.

Reliability - Intrinsic or afterthought.

[AIAA PAPER 69-476] 16 p2795 A69-32771

Evaluation of a twin-spool hydrogen turbopump at zero NSP.

[AIAA PAPER 69-550] 18 p3140 A69-34414

## CAMPBELL, W. H.

Concurrent equatorial and high-latitude geomagnetic pulsations.

23 p4161 A69-42439

## CAMPEAU, E.

Simian EEG activity related to problem solving during a simulated space flight.

17 p2910 A69-33749

Central nervous, cardiovascular and metabolic data of a Macaca nemestrina during a 30-day experiment.

24 p4260 A69-42703

## CAMPEAU, J. O.

Self-healing and fail-soft operation in the Block-Oriented Computer.

[AIAA PAPER 69-965] 22 p3906 A69-40346

## CAMPHYN, M.

Coronary circulation response to hyperoxia after vagotomy and combined alpha and beta adrenergic receptors blockade in the anesthetized intact dog.

23 p4096 A69-42088

## CAMPILLO, A. J.

RF inductively excited ion laser with aperture-magnetic confinement.

19 p3338 A69-36690

## CAMPION, D. J.

Forming of high strength metals.

23 p4170 A69-42157

- CAMUS, M.**  
Plane waves in plasmas - Dispersion surface, reflection, refraction, application to waveguides / Les ondes planes dans les plasmas - Surface de dispersion, réflexion, refraction, application aux ondes guidees/.  
14 p2492 A69-29399
- CANCRO, C. A.**  
Cosmic ray experiments source-encoding in the IMP-1 spacecraft.  
23 p4118 A69-41738
- CANDY, M. P.**  
Perturbations of galactic orbits by irregularities in the gravitational field. II.  
07 p1223 A69-19634
- CANE, P.**  
Head-Up Display for airlines.  
01 p0020 A69-10635
- CANEVA, A.**  
Some properties of whistlers at Roburent, North Italy.  
01 p0067 A69-11033
- CANFIELD, F. B.**  
A gas bath cryostat for operation between 50 deg and -190 deg C.  
17 p2975 A69-33669
- CANFIELD, R. C.**  
Computed profiles for solar Mg b- and Na D-lines.  
15 p2693 A69-30779  
Reversals of selected Ce II solar lines.  
20 p3613 A69-38168
- CANICAVE, J.-C.**  
Significance of external mechanograms in the interpretation of systolic murmurs when evaluating flight personnel / Interet des mecanogrammes externes dans l'interpretation des souffles systoliques lors de l'expertise du personnel navigant/.  
09 p1445 A69-22726
- CANN, M. W. P.**  
An optical absorption cell with variable path length and temperature.  
12 p2093 A69-26482  
Determination of thermodynamic properties with optical cross-correlation methods.  
[AIAA PAPER 67-149] 16 p2789 A69-31868  
Light sources in the 0.15-20- $\mu$  spectral range.  
23 p4191 A69-42190
- CANNADAY, S. S.**  
Electron energy dependence for in-vacuum degradation and recovery in thermal control surfaces.  
[AIAA PAPER 69-643] 17 p3005 A69-33306
- CANNELLI, G.**  
On the relaxation effect due to the stress-induced diffusion of interstitial oxygen in tantalum.  
07 p1168 A69-19452
- CANNIFF, J.**  
Flight test report of experiments in inertial navigation system updating.  
[AIAA PAPER 69-842] 21 p3765 A69-39429
- CANNIZZARO, J. R.**  
Applications of polyimide materials in electronic circuitry.  
09 p1511 A69-22354
- CANNON, C. J.**  
Power spectral analysis of chromospheric inhomogeneities.  
17 p3040 A69-33811
- CANNON, G. W.**  
Ground coverage of spin stabilized satellites.  
03 p0522 A69-14244
- CANNON, M. W.**  
Mathematical model of the encoding function of the eighth nerve neuron.  
07 p1070 A69-18384
- CANNON, R. H., JR.**  
Flotation technique for laboratory calibration of low-level accelerometers.  
[AIAA PAPER 68-874] 24 p4315 A69-43242
- CANNON, R. W.**  
Global communications - Current techniques and future trends.  
16 p2750 A69-31755
- CANNON, S. M.**  
Ruby as a macroscopic fluorescing and laser material.  
07 p1201 A69-19646
- CANNON, W. A.**  
Solubility of helium in liquid fluorine.  
01 p0142 A69-11258
- CANOBBIO, E.**  
Gyroresonant particle acceleration in a non-uniform magnetostatic field.  
14 p2499 A69-29845
- CANONICO, D. A.**  
Effects of minor additions on weldability of Incoloy 800.  
22 p3967 A69-39884
- CANRIGHT, R. B., JR.**  
Computer-made movies and plotting descriptions of ion-molecule collisions with polar targets.  
24 p4352 A69-43124
- CANTARANO, S.**  
Regulated numerically programmable high-voltage converter for space applications.  
04 p0602 A69-15400
- CANTELAUBE, Y.**  
Evaluation of the ablation rate of Saint-Severin amphoterite on the basis of a study of the tracks of heavy ions in the primary flux of cosmic radiation / Evaluation du taux d'ablation de l'amphoterite de Saint-Severin par l'etude des traces d'ions lourds du flux primaire du rayonnement cosmique/.  
08 p1406 A69-20933  
Reconstruction of the Saint-Severin meteorite in space / Reconstitution de la meteorite Saint-Severin dans l'espace/.  
19 p3416 A69-36128
- CANTIN, A.**  
Observations on electrostatic probe behavior in collision-dominated ionized turbulent gas flows in ballistic ranges.  
19 p3291 A69-35716
- CANTIN, M. R.**  
Techniques for transmission electron microscopy and etch pitting of CoO single crystals.  
12 p2112 A69-25944
- CANTO, C.**  
Theoretical study of the ionization of deuterium under the action of a short-pulse laser / Etude theorique de l'ionisation du deuterium sous l'action d'un laser a impulsion courte/.  
02 p0288 A69-12040  
Gas breakdown with nanosecond pulses.  
[IEEE PAPER U-3] 07 p1155 A69-19085
- CANTONI, D. A.**  
Analog computer studies of a 2 to 10 kilowatts electric Brayton cycle space power system including startup and shutdown.  
23 p4071 A69-42280
- CANTONI, V.**  
Surface distributions of matter in general relativity / Sulle distribuzioni superficiali di materia in relativita generale/.  
22 p3982 A69-40753
- CANTRELL, G. W.**  
The Titan III remote multiplexed instrumentation system.  
19 p3274 A69-36279
- CANTRELL, J. S.**  
Boron modifications produced in an induction-coupled argon plasma.  
08 p1372 A69-20687
- CANTRELL, J. W.**  
Relation between the memory gradient method and the Fletcher - Reeves method.  
24 p4340 A69-42957
- CANTRELL, W. G.**  
Critical examination of direct muon production.  
07 p1209 A69-19406
- CANTU, A. M.**  
On the activity of solar prominences.  
05 p0816 A69-16390
- CANUEL, G. E.**  
Augmentation systems for turbofan engines.  
09 p1573 A69-22617
- CANUTO, V.**  
Quantum theory of an electron gas with anomalous magnetic moments in intense magnetic fields.  
08 p1353 A69-19782  
Nature of radio and optical emissions from pulsars.  
08 p1394 A69-20624  
Radio emission from magnetic neutron stars - A possible model for pulsars.  
08 p1397 A69-20729  
Thermodynamic approach to the equation of state of a magnetized Fermi gas.  
11 p1961 A69-25107  
New state of ferromagnetism in degenerate electron gas and magnetic fields in collapsed bodies.  
21 p3798 A69-38600
- Solution of the Dirac equation in orthogonal electric and magnetic fields.  
23 p4190 A69-41357
- CAP, F.**  
Viscous MGD channel flow in boundary layer approximation with heat conduction.  
06 p0966 A69-17523  
Two-dimensional studies of MHD generators, taking into account the Hall effect / Zweidimensionale Untersuchungen von MHD-Generatoren unter Beruecksichtigung des Halleffektes/.  
13 p2208 A69-27613
- CAPART, J.**  
Photoconductivity study of annealing of radiation defects in lithium-doped silicon.  
19 p3382 A69-35696
- CAPART, J. J.**  
The photovoltaic effect in the Cu-Cd-S system.  
19 p3382 A69-35682
- CAPDEVIELLE, J.-N.**  
The influence of the multiplicity of secondary particles, created in very-high-energy nuclear interactions, on the muon component of extensive air showers / L'influence de la multiplicité des particules secondaires creées dans les interactions nucléaires de très haute énergie, sur la composante muonique des grandes gerbes de l'air/.  
07 p1207 A69-19325
- CAPELLIER, C.**  
Application of the method of unstationary characteristics to the numerical computation of a steady compressible flow / Application de la methode des caracteristiques instationnaires au calcul numerique d'un ecoulement permanent compressible/.  
[ONERA-TP-630] 07 p1049 A69-18413
- CAPES, J. F.**  
Simplified metallographic technique for beryllium.  
13 p2281 A69-28161
- CAPEY, E. C.**  
A relaxation procedure for computing stresses in built-up structures.  
21 p3843 A69-39313
- CAPITELLI, M.**  
A Fortran IV program for the computation of equilibrium compositions of gas mixtures at high temperatures.  
08 p1278 A69-20154  
The behaviour of metal oxides injected into an argon induction plasma.  
13 p2315 A69-28458
- CAPLAN, F. E.**  
High resolution balloonborne temperature sensor.  
09 p1494 A69-21642
- CAPLAN, H.**  
Need for the exchange of safety information.  
06 p1041 A69-16841  
Law for aerospace activities 1966-2066.  
13 p2382 A69-27829
- CAPLINGER, E.**  
A cesium electron-bombardment microthruster system.  
[AIAA PAPER 69-293] 09 p1561 A69-21223
- CAPODANNO, P.**  
The movement of a foil under a free surface / Sur le mouvement d'un profil sous une surface libre/.  
08 p1303 A69-20272
- CAPON, J.**  
High-resolution frequency-wavenumber spectrum analysis.  
22 p3902 A69-41220
- CAPOVANI, M.**  
Vibrations of rotors - The effect of lubricant damping.  
07 p1235 A69-19441
- CAPPELLETTI, C. M.**  
Metal-to-ceramic seals for thermionic converters.  
14 p2454 A69-29211
- CAPPELLINI, V.**  
A class of digital filters with application to the processing of signals transmitted from space vehicles / Una classe di filtri numerici con applicazioni all'elaborazione di segnali trasmessi da veicoli spaziali/.  
01 p0038 A69-10071  
Radar-signal matched-filtering through digital processing.  
05 p0722 A69-16733  
Multiring-antenna arrays.  
06 p0899 A69-17827  
Design and construction of digital filters and their applications to signal processing.  
08 p1297 A69-20303



- Some receiving systems for digital telemetry from space vehicles.  
08 p1276 A69-20591
- Performance of some linear codes for digital communications with space vehicles.  
08 p1276 A69-20597
- Notes on the analysis of scintillation of satellite signals.  
16 p2751 A69-32103
- On board processor for digital filtering and data compression.  
20 p3500 A69-37383
- Application of onboard digital filtering to spectral estimation and data compression.  
[AIAA PAPER 69-969] 24 p4285 A69-43510
- CAPRIO, S. J.**  
Factors affecting the measured value of impulse bandwidth.  
03 p0398 A69-13902
- CAPRIOTE, I.**  
Satellite and heat shield test facilities at Fiat aerospace laboratory.  
16 p2765 A69-31750
- CAPRIOTTI, E. R.**  
Calculation of temperature profiles of high pressure electric arcs using the diffusion approximation for radiation transfer.  
08 p1420 A69-20148
- CAPRIZ, G.**  
On the thermodynamics of viscoelastic continua.  
02 p0350 A69-11714
- CARA, M.**  
Means of aerial evacuation at the disposal of a Paris hospital / Les moyens d'evacuations aeriens a la disposition d'un service hospitalier parisien/.  
23 p4105 A69-41785
- CARABIN, H.**  
Use of statistical reliability methods in pyrotechnics - Application to detonating cutting fuses / Emploi des methodes statistiques fiabilistes en pyrotechnie - Application aux cordeaux detonants de decoupage/.  
10 p1749 A69-23004
- Stage separation by detonating fuses / Le decoupage inter-etage par cordeaux detonants/.  
10 p1752 A69-23023
- CARAFOLI, E.**  
Determination of pressures and shock-wave configuration for plane supersonic and low hypersonic flows / Bestimmung der Drucke und der Stosswellenform bei ebener ueberschall-bzw. maessiger Hyperschallstroemung/.  
01 p0008 A69-11299
- Plane supersonic flows separated by a jet having the shape of a thin film / Ecoulements plans supersoniques separees par un jet en forme de couche mince/.  
05 p0746 A69-16020
- Wing Theory in Supersonic Flow.  
08 p1251 A69-20523
- On the flow separation from the edges of the antisymmetrical delta wing in supersonic regime.  
19 p3241 A69-36779
- Pressure distribution on conical delta wings in supersonic-moderate hypersonic flow.  
20 p3459 A69-37593
- CARBERRY, T. F.**  
Analysis theory for the shaped-beam doubly curved reflector antenna.  
20 p3506 A69-37835
- CARBERRY, W. J.**  
Ceramic armor systems today.  
19 p3355 A69-35525
- CARBONE, R. E.**  
Statistics of instantaneous frequency and amplitude as related to the Doppler spectrum.  
12 p2032 A69-26863
- Precipitation-induced mesoscale wind perturbations in the melting layer.  
20 p3572 A69-37909
- CARBONE, R. J.**  
Characteristics of a single-frequency sealed-off CO sub 2 amplifier.  
12 p2109 A69-26640
- Vibrational energy transfer in CO sub 2 under laser conditions with and without water vapor.  
23 p4171 A69-41390
- CARBONELL, J. R.**  
A queueing model of visual sampling experimental validation.  
02 p0202 A69-11954
- CARD, D. H.**  
Exercise-temperature regulation in man during acute exposure to simulated altitude.  
22 p3891 A69-40219
- CARDEN, R. C.**  
An experiment to study electric and electromagnetic fields in the frequency range 10 Hz to 540 kHz on OGO-F.  
19 p3284 A69-36677
- CARDEN, W. H.**  
High pressure Hugoniot data obtained with a Managanin pressure transducer.  
[AIAA PAPER 69-358] 13 p2264 A69-28291
- CARDENAS, R.**  
Reflectance of cotton leaves and their structure.  
15 p2558 A69-30456
- CARDENAS, X. G.**  
A survey of the galactic plane at 85 and 150 MHz.  
07 p1216 A69-19138
- CARDINALE, S. V.**  
Ground and air resonance characteristics of a soft in-plane rigid-rotor system.  
[AIAA PAPER 69-205] 07 p1055 A69-19559
- Dynamics of a rigid-rotor controlled by a high-speed gyro as it slows/stops at high forward speed.  
[AHS PAPER 343] 17 p2899 A69-33508
- CARDONA, M.**  
Electroreflectance in Ge - Si alloys.  
02 p0295 A69-11784
- Band structure and optical constants of InSb, InAs, and GaSb - The k-p method.  
19 p3385 A69-36515
- CARDULLO, M. W.**  
Maritime satellite service.  
[AIAA PAPER 68-232] 02 p0356 A69-12383
- Mobile communications via satellite.  
23 p4114 A69-41355
- CARDUS, J. O.**  
A new determination of the influence of the moon on the values of the horizontal component at Moca / Fernando Poo / Una nueva determinacion de la influencia de la luna en los valores de la componente horizontal en Moca / Fernando Poo /.  
11 p1965 A69-25555
- CAREN, R. P.**  
Radiation transfer from a metal to a finely divided particulate medium.  
13 p2374 A69-27783
- Radiation heat transfer phenomena at cryogenic temperatures.  
17 p3074 A69-33680
- CARESSA, J. P.**  
Theoretical and experimental / shock tube / study of the phenomena accompanying the loss of equilibrium in a closed-cycle MHD generator / Etude theorique et experimentale, en tube a choc, des phenomenes accompagnant la mise hors d'equilibre dans un generateur MHD en cycle ferme/.  
10 p1737 A69-23468
- CARESSA, J.-P.**  
Electrical characteristics of a linear Faraday generator using a binary mixture of nobles gases with nonequilibrium ionization / Caracteristiques electriques d'un generateur lineaire de Faraday utilisant un melange binaire de gaz rares, avec ionisation hors d'equilibre/.  
08 p1359 A69-19880
- CAREY, L. J.**  
Space software - At the crossroads.  
04 p0564 A69-15297
- CAREY, R.**  
A modified Ke torsional pendulum for stress and strain relaxation measurements.  
01 p0079 A69-10221
- CARICATO, G.**  
Menabrea's theorem for nonisothermal transformations of a constrained anisotropic and inhomogeneous elastic body, with initial stress. I / Il teorema di Menabrea per trasformazioni non isoterme di un corpo elastico vincolato anisotropo e non omogeneo, con stress iniziale. I/.  
02 p0341 A69-12194
- Menabrea's theorem for nonisothermal transformations of a constrained anisotropic and inhomogeneous elastic body with initial stress. II / Il teorema di Menabrea per trasformazioni non isoterme di un corpo elastico vincolato, anisotropo e non omogeneo, con stress iniziale. II/.  
02 p0341 A69-12197
- CARIGNAN, G. R.**  
Measurements of electron cooling rates in the mid-latitude and auroral-zone thermosphere.  
05 p0755 A69-16261
- CARLIOLARO, G. L.**  
Dependence on sampling frequency of amplitude statistical parameters of signals.  
05 p0722 A69-16711
- Noise description of a linear n-port through noise figures.  
05 p0741 A69-16713
- CARLETON, N. P.**  
Energy transfer to and through ionospheric electrons.  
07 p1128 A69-19364
- Measurement of the abundance of CO sub 2 in the Martian atmosphere.  
09 p1607 A69-22472
- CARLEY, C. T.**  
Natural convective oscillatory flow in cylindrical annuli.  
09 p1481 A69-21902
- CARLEY, D. R.**  
Microwave integrated circuits.  
07 p1096 A69-18441
- CARLEY, J. F.**  
Processing for high performance.  
18 p3148 A69-34611
- CARLISLE, J. C.**  
Role of hematocrit, heart mass, and high-altitude exposure in acute hypoxia tolerance.  
22 p3874 A69-40214
- CARLQVIST, P.**  
Solar flares caused by high impedance regions in current filaments.  
06 p0995 A69-17445
- Current limitation and solar flares.  
18 p3188 A69-35392
- CARLS, H.**  
Radiation cooling behind a strong shock in krypton.  
18 p3171 A69-34450
- CARLSON, A. E., JR.**  
Validity of topography representation by truncated series of surface harmonics.  
13 p3244 A69-27647
- CARLSON, A. W.**  
Negative resistance in current-voltage curves of avalanche diodes.  
12 p2036 A69-25916
- CARLSON, C. E.**  
Mechanical properties of braze-bonded boric-aluminum composites.  
19 p3340 A69-35509
- CARLSON, C. W.**  
The penetration and mixing of air jets directed perpendicular to a stream.  
[ASME PAPER 68-WA/GT-8] 05 p0750 A69-16143
- CARLSON, D. E.**  
Controllable states of elastic heat conductors.  
03 p0529 A69-13957
- Inverse deformation results for elastic materials.  
13 p2360 A69-27324
- CARLSON, F. M.**  
Measure MOSFET parameters with ease.  
07 p1113 A69-19780
- CARLSON, F. P.**  
Propagation of spherical waves in locally homogeneous random media.  
12 p2029 A69-26251
- CARLSON, H. C.**  
Radar backscatter and rocket probe measurements of electron temperature above Arcibo.  
11 p1951 A69-25162
- CARLSON, H. W.**  
Sonic booms - Fundamental characteristics.  
15 p2550 A69-30369
- CARLSON, L. D.**  
Cardiovascular changes during tilt and leg negative pressure tests.  
01 p0021 A69-11334
- CARLSON, L. W.**  
Gaseous film cooling at various degrees of hot-gas acceleration and turbulence levels.  
06 p1033 A69-17557

- CARLSON, R.**  
Discussion of the paper "Tail rotor design. II - Structural dynamics" by Lynn, Balke, Bennett, and Gaffey. [AHS PAPER 342A] 17 p3059 A69-33503
- CARLSON, R. D.**  
Computer graphics and manufacturing. 07 p1089 A69-19741
- CARLSON, R. G.**  
Rotor dynamics of a single stowed rotor aircraft. [AIAA PAPER 69-207] 07 p1057 A69-19578
- CARLSON, R. L.**  
Experimental studies of the postbuckling behavior of complete spherical shells. 03 p0524 A69-13062
- CARLSON, R. M.**  
Possibilities of compound rotorcraft - Status 1968. 05 p0703 A69-16394
- CARLSON, R. W.**  
A double monochromator for the extreme ultraviolet. 24 p4351 A69-43758
- CARLSTON, P. K.**  
A note on transition fading statistics at VLF. 12 p2032 A69-26862
- CARLTON, C. H.**  
Some aspects of nonlinear mechanical behavior of a composite propellant. [AIAA PAPER 68-519] 04 p0646 A69-15510
- CARLYLE, J. S.**  
MOS technique. I - Introduction and review /Die MOS-Technik. I - Einfuehrung und Uebersicht/. 07 p1099 A69-18494  
MOS technology - Introduction and survey. II /Die MOS-Technik - Einfuehrung und Uebersicht. II/. 08 p1286 A69-20833
- CARMAN, E. H.**  
A simple airglow photometer with improved red sensitivity. 16 p2777 A69-32107  
Predawn enhancement of 6300 angstrom units airglow in conjugate regions. 24 p4308 A69-43011
- CARMAN, R. L.**  
Transient and steady state thermal self-focusing. 10 p1706 A69-24009
- CARMELI, M.**  
Group-theoretic approach to the new conserved quantities in general relativity. 14 p2486 A69-29450
- CARMI, G.**  
First-order phase transitions in quantum-Coulomb plasmas. 06 p0968 A69-17785
- CARMI, S.**  
Stability of Poiseuille flow in pipes, annuli, and channels. 07 p1121 A69-19475  
Energy stability of channel flows. 21 p3697 A69-39675
- CARMICHAEL, H.**  
The ground-level solar proton event of 7 July 1966 recorded by neutron monitors. 10 p1766 A69-23761  
The Forbush decrease associated with the proton event of 7 July 1966 as recorded by neutron monitors. 10 p1768 A69-23774  
Ground-based synoptic observations of cosmic rays. 15 p2673 A69-30012
- CARNAHAN, R. D.**  
Mechanical testing of silica phenolic composites at elevated temperatures. 09 p1530 A69-22321
- CARNEGGIE, D. M.**  
Large scale 70-mm aerial color photography. 11 p1880 A69-24265  
Applying remote sensing technology for improving range resource inventories. 12 p2098 A69-26992
- CARNEGIE, W.**  
Vibration characteristics of straight blades of asymmetrical aerofoil cross-section. 17 p3067 A69-34053  
Modal curves of pre-twisted beams of rectangular cross-section. 20 p3621 A69-37080  
A numerical technique for the solution of some non-linear systems. 22 p4040 A69-39937
- CARNEVALE, E. H.**  
Ultrasonic thermometry for nuclear reactors. [IEEE PAPER 1C-4] 07 p1134 A69-19186  
Ultrasonic testing of solids at elevated temperatures. 15 p2632 A69-31514
- CARNEVALE, M.**  
Interferometric study of phase fluctuations of a laser beam through the turbulent atmosphere. 01 p0091 A69-10845  
Phase fluctuations of laser beam propagating in turbulent atmosphere. 17 p2927 A69-33855  
Influence of thermal turbulence in a convective ascending stream on phase fluctuations of a laser beam. 24 p4329 A69-43754
- CARNEVALE, R. F.**  
Rocket sampling of a 1968 noctilucous cloud display over Fort Churchill, Canada. 15 p2602 A69-31386  
Particle collection results from recent rocket and satellite experiments. 21 p3793 A69-38343
- CARNEY, R.**  
A custom tailored airborne digital guidance and control system for a large booster. [AIAA PAPER 69-988] 22 p3978 A69-40368
- CAROLI, I.**  
Remarks on converters for microwave reception /Considerazioni sui convertitori di ricezione di oscillazione a microonda/. 08 p1285 A69-20594
- CAROLLA, R. L.**  
Effect of in vivo hyperoxia on erythrocyte fatty acid composition. 03 p0375 A69-14070  
Relationship between tocopherol status and in vivo hemolysis caused by hyperoxia. 07 p1066 A69-19422
- CARON, P. R.**  
A technique for measuring the electron density of dense, thick, steady-state plasmas. 02 p0290 A69-12349
- CARONNA, R. L.**  
Mariner Mars 1969 test support system. [AIAA PAPER 69-982] 22 p3907 A69-40362
- CAROSELLA, C. A.**  
Oxygen sticking coefficients on clean /111/ silicon surfaces. 18 p3183 A69-35107
- CAROVILLANO, R. L.**  
Physics of the Magnetosphere, Proceedings of the Conference, Boston College, Chestnut Hill, Mass., June 19-28, 1967. 07 p1207 A69-19351  
Magnetic energy relationships in the magnetosphere. 07 p1128 A69-19359  
Corotating structure in the solar wind. 22 p4003 A69-40302
- CAROW, D.**  
An approximate theoretical analysis of the static and dynamic characteristics of the herringbone grooved, gas lubricated journal bearing, and comparison with experiment. [ASME PAPER 68-LUBS-7] 13 p2265 A69-27269
- CARPAY, F. M. A.**  
Vanadium chalcogenides and the nickel-arsenide structure. 15 p2667 A69-30602
- CARPENTER, D. L.**  
Multi-experiment detection of the plasmopause from EOGO satellites and antarctic ground stations. 11 p1878 A69-25153  
A case of artificial triggering of VLF magnetospheric noise during the drift of a whistler duct across magnetic shells. 11 p1878 A69-25154  
An effect of a transmitter frequency increase on the occurrence of VLF noise triggered near L equals 3 in the magnetosphere. 11 p1878 A69-25156  
Ion depletion in the high-latitude exosphere - Simultaneous EOGO 2 observations of the light ion trough and the VLF cutoff. 18 p3187 A69-34939
- CARPENTER, F. C., JR.**  
Biotelemetry of EKG signals within a small, closed chamber. 23 p4103 A69-41766
- CARPENTER, G. C.**  
Modified Newton-Raphson methods for preliminary orbit determination. 19 p3397 A69-35613  
Orbit determination for a thrusted space vehicle. [AIAA PAPER 69-901] 21 p3806 A69-39335
- CARPENTER, J. D.**  
The impact of biosciences requirements on biosatellite attitude control. 18 p3210 A69-35094
- CARPENTER, J. E.**  
Quickie weight estimating equations turning their inherent weakness into an advantage. [SAWE PAPER 794] 18 p3222 A69-34904
- CARPENTER, J. F.**  
Aluminum coatings for aerospace fasteners. [ASM PAPER D8-5.2] 07 p1142 A69-19663
- CARPENTER, L. H.**  
Periodic orbits in the restricted three-body problem in the neighborhood of resonances of type  $k$  plus  $l/k$  /Ueber periodische Bahnen im eingeschaenkten Dreikoerperproblem und in der Naehc der Kommensurabilitaeten vom Typus  $k$  plus  $l/k$ /. 08 p1382 A69-19874
- CARPENTER, P. J.**  
Design trends in future helicopter, compounds, and composite aircraft. 05 p0700 A69-15548
- CARPENTER, R. L.**  
Polarization effects of scattered coherent light on imagery. 11 p1896 A69-24849
- CARPENTIER, M. H.**  
Application of pseudorandom codes to radar - Attempt at a synthesis /Application au radar des codes pseudo-alatoires - Tentative de synthese/. 24 p4281 A69-42741  
Radars- New Concepts. 24 p4283 A69-43168
- CARPETIS, C.**  
The optimization of MHD induction converters. 13 p2207 A69-27504
- CARR, D. L.**  
Satellite observations of the average properties of auroral particle precipitations - Latitudinal variations. 22 p3938 A69-40502
- CARR, F. L.**  
Macrofractographic techniques. 04 p0619 A69-15394
- CARR, J. B.**  
The torsional vibration of uniform thin-walled beams of open section. 22 p4040 A69-39935
- CARR, J. G.**  
The airborne digital computer in the navigation management role. 16 p2809 A69-32260
- CARR, L. W.**  
Problems associated with wind tunnel tests of high disk loading systems at low forward speeds. 18 p3119 A69-35230
- CARR, T. C.**  
Physiological recording with dry electrodes. 21 p3666 A69-39441
- CARR, T. D.**  
The magnetosphere of Jupiter. 21 p3812 A69-39517
- CARRANZA, G.**  
Kinematic study of ionized hydrogen in M 51 /Etude cinématique de l'hydrogene ionise dans M 51/. 13 p2347 A69-27720
- CARRARA, N.**  
Present developments of digital telemetry from space vehicles. 08 p1276 A69-20592
- CARRAS, A. N.**  
An analog computer simulation of a closed Brayton cycle system. [ASME PAPER 69-GT-50] 09 p1442 A69-22479
- CARRE, R.**  
Significance of external mechanograms in the interpretation of systolic murmurs when evaluating flight personnel /Interet des mecanogrammes externes dans l'interpretation des souffles systoliques lors de l'expertise du personnel navigant/. 09 p1445 A69-22726



Advantages of bloodless methods of measuring heart flow /Interet des methodes non sanglantes de mesure du debit cardiaque/.  
09 p1448 A69-22730

Morphological variations of the arterial pulse wave - Experimental and clinical correlations /Variations morphologiques de l'onde pulsatile arterielle - Correlations experimentales et cliniques/.  
21 p3661 A69-39272

Effects of inhalation of amyl nitrite on the carotidogram of a healthy subject /Action de l'inhalation de nitrite d'amyle sur le carotidogramme du sujet sain/.  
21 p3661 A69-39278

Advantage of nonsurgical methods of measuring cardiac output in aerospace medicine /Interet des methodes non sanglantes de mesure du debit cardiaque en medecine aeronautique et spatiale/.  
23 p4088 A69-41813

## CARRERI, C.

Design of the transmitting antenna of a multistation radar system for investigating the upper atmosphere and meteors /Progetto dell'antenna trasmittente di un sistema radar multistazione per lo studio dell'alta atmosfera e delle meteore/.  
19 p3278 A69-36661

## CARRIERE, P.

Nozzle adaptation problems /Problemes d'adaptation de tuyeres/.  
[ONERA-TP-600] 02 p0187 A69-11620

Application of the method of unstationary characteristics to the numerical computation of a steady compressible flow /Application de la methode des caracteristiques instationnaires au calcul numerique d'un ecoulement permanent compressible/.  
[ONERA-TP-630] 07 p1049 A69-18413

Similarity properties of the laminar or turbulent separation phenomena in a nonuniform supersonic flow /Proprietes de similitude des phenomenes de decollement laminaire ou turbulent en ecoulement supersonique non uniforme/.  
[ONERA-TP-659F] 07 p1050 A69-18417

Theoretical analysis of turbulent separation and reattachment at the trailing edge of a blade, at supersonic speeds.  
[ONERA-TP-678] 16 p2733 A69-32258

## CARRILLO, D.

Determination of flaws and fracture sites in materials using liquid crystal coatings.  
10 p1699 A69-23053

## CARRION, W.

Laser beam directed at the lunar retro-reflector array - Observations of the first returns.  
24 p4384 A69-43197

## CARROLL, B. L.

Spin-other-orbit matrix elements for f super 3 configurations.  
06 p0962 A69-17819

## CARROLL, C. C.

Organizing a special-purpose computer to realize digital filters for sampled-data systems.  
04 p0569 A69-15462

## CARROLL, J. E.

An automatic instrument for the determination of astro-azimuth.  
[AIAA PAPER 69-861] 21 p3762 A69-39389

## CARROLL, J. T.

Diazomethane and deuteriodiazomethane by the base-catalyzed reaction of hydrazine with chloroform.  
06 p0885 A69-17885

## CARROLL, K. G.

Electron microprobe analysis of impurity heterogeneities in thermally grown silicon oxide.  
10 p1743 A69-23171

## CARROLL, M. M.

Plane waves in non-simple elastic solids.  
08 p1411 A69-20141

## CARRON, G. J.

X-ray spectrographic camera.  
03 p0427 A69-13101

## CARRU, H.

Study of the variations in the exospheric temperature by means of Thomson scattering /Etude par diffusion de Thomson des variations de la temperature exospherique/.  
15 p2604 A69-31409

## CARRUTHERS, G. R.

Far-ultraviolet stellar astronomy.  
10 p1772 A69-22870

Observation of the Lyman alpha interstellar absorption line in theta Orionis.  
15 p2695 A69-30890

Magnetically focused electronographic image converters for space astronomy applications.  
17 p2972 A69-33084

Some new instrumentation techniques for far-ultraviolet studies from sounding rockets.  
20 p3543 A69-37801

On the far-ultraviolet interstellar extinction law in the Orion nebula region.  
22 p4030 A69-40770

## CARRUTHERS, J. A.

Pulse velocity in a self-locked He-Ne laser.  
09 p1514 A69-21347

Second-harmonic enhancement using a self-locked 0.63- $\mu$  He-Ne laser.  
12 p2106 A69-26321

## CARSON, R. R.

On the application of digital computer simulation as a maintainability design and prediction tool.  
10 p1668 A69-22974

## CARSON, T. R.

The calculation of stellar radiative opacity.  
07 p1222 A69-19589

A critique of the hydrogenic approximation in the calculation of stellar opacity.  
07 p1223 A69-19626

Ionization equilibrium with negative ion formation.  
11 p1928 A69-25255

## CARSON, W. G.

Plate buckling analysis using a fully compatible finite element.  
13 p2364 A69-28225

## CARSTOIU, J.

The electrodynamics and dynamics of flying bodies /L'electrodynamique et dynamique des corps volants/.  
01 p0121 A69-11134

New remarks concerning two fields of gravitation and propagation of gravitational waves /Nouvelles remarques sur les deux champs de gravitation et propagation des ondes gravifiques/.  
08 p1382 A69-19881

The two fields of gravitation and propagation of gravity waves /Les deux champs de gravitation et propagation des ondes gravifiques/.  
08 p1390 A69-20276

## CARSWELL, A. I.

Mosaic-mirror camera for multiple image, high resolution photography.  
17 p2972 A69-33089

## CARSWELL, R. F.

Axially symmetric hot big-bang cosmologies.  
23 p4222 A69-42402

## CARTER, A. F.

Correlations of turbine blade total-pressure-loss coefficients derived from achievable stage efficiency data.  
[ASME PAPER 68-WA/GT-5] 05 p0812 A69-16140

## CARTER, B.

Global structure of the Kerr family of gravitational fields.  
03 p0466 A69-13473

## CARTER, D. L.

Wave propagation cutoff in a slightly noncompensated solid-state plasma.  
12 p2133 A69-25926

## CARTER, E.

Medical problems facing air carrier pilots today and in the future.  
22 p3894 A69-41146

## CARTER, E. S.

Now is the time for aerodynamics to come to the aid of the hardware.  
23 p4061 A69-41370

## CARTER, E. S., JR.

Survey of rotary-wing handling qualities.  
05 p0701 A69-15550

## CARTER, J.

Excitation, dissipative, and emissive mechanisms in biochemicals.  
03 p0372 A69-13487

## CARTER, J. C.

Water vapor - Observations of galactic sources.  
18 p3205 A69-35435

## CARTER, J. E.

Experimental investigation of the near wake of a magnetically suspended cone at M sub infinity equals 4.3.  
[AIAA PAPER 69-186] 06 p0863 A69-18068

## CARTER, J. W.

Application of dynamic programming in selecting optimum quality assurance controls for electronic hardware.  
15 p2722 A69-31127

Mission assurance through integrated testing.  
19 p3327 A69-36014

## CARTER, R. H.

The metallographic preparation of micro-miniature devices.  
03 p0402 A69-13007

## CARTER, R. P.

Low-pressure arc discharge motion between concentric cylindrical electrodes in a transverse magnetic field.  
[AIAA PAPER 68-708] 24 p4359 A69-43644

## CARTER, V. L.

Atmospheric implications of predissociation in N sub 2.  
05 p0756 A69-16282

Absorption of oxygen at elevated temperatures /300 K to 900 K/ in the Schumann-Runge system.  
06 p0962 A69-17803

Predissociation in the Schumann-Runge band system of O sub 2 - Laboratory measurements and atmospheric effects.  
20 p3534 A69-38089

Atmospheric density above 158 kilometers inferred from magnetron and drag data from the satellite OV-15 /1968-059A/.  
24 p4310 A69-43179

## CARTER, V. L., JR.

Pathology of normobaric oxygen toxicity in primates.  
21 p3660 A69-39179

## CARTER, W. D.

Geologic analysis of a multispectrally processed Apollo space photograph.  
22 p3941 A69-40987

## CARTIANU, G.

Transmission system with cascade phase modulation by dividing the baseband spectrum into subbands.  
12 p2030 A69-26385

## CARTIER, M.

Cosmic radiation and life /Les rayonnements du cosmos et la vie/.  
01 p0013 A69-10157

Intrinsic curve of friction /Courbe intrinseque du frottement/.  
19 p3329 A69-36723

## CARTON, ED.

Bounded solutions, solutions asymptotic to zero, and conditional stability of differential systems /Solutions bornees, solutions asymptotiques a zero et stabilite conditionnelle des systemes differentiels/.  
23 p4181 A69-41722

## CARTON, R.

Study of the reliability of mass-produced silicon transistors /Etude de la fiabilite de transistors silicium produits en grande serie/.  
15 p2626 A69-30833

## CARTWRIGHT, D. C.

Angular dependence of low-energy electron-impact excitation cross section of the lowest triplet states of H sub 2.  
06 p0962 A69-17822

## CARTWRIGHT, M. L.

Almost periodic differential equations and almost periodic flows.  
07 p1174 A69-18733

## CARTWRIGHT, N. E.

Modification to the receive-path waveguide feeder of Goonhilly aerial.  
17 p2935 A69-32849

## CARUSO, A.

Absorption of light in the reflecting skin of a collisionless plasma.  
01 p0127 A69-10283

Protection of Gunn oscillators from breakdown phenomena /Sulla protezione dei dispositivi di Gunn da fenomeni di "breakdown"/.  
21 p3682 A69-38777

## CARUSO, A. J.

Production of an intense helium continuum below 230 angstrom units.  
23 p4191 A69-42149

## CARUSO, P., JR.

The Orbiting Astronomical Observatory thermal test program.  
[AIAA PAPER 69-995] 22 p3920 A69-40373

- CARVALHINHOS, H. J.**  
The creep of niobium-molybdenum alloys.  
10 p1711 A69-23375
- CARVER, J. H.**  
Solar absorption photometry and the determination of atmospheric composition.  
12 p2065 A69-26106
- CARVER, K. R.**  
Polarization stability of the helical beam antenna.  
02 p0219 A69-12345
- CARY, R. A.**  
An extra-strong maraging steel.  
22 p3971 A69-40833
- CARY, R. H. J.**  
Measurements on some radome materials with superior dielectric and temperature characteristics.  
07 p1109 A69-19514
- CASABELLA, P. A.**  
Nuclear-magnetic-resonance studies of ferroelectricity in normal and irradiated Rochelle salt.  
09 p1559 A69-22283  
Super 11 B quadrupole coupling constants in solid boron halides.  
20 p3483 A69-36935
- CASAL, F. G.**  
A method for obtaining performance boundaries of complete space propulsion systems containing nuclear-electric stages.  
[AIAA PAPER 69-249] 09 p1538 A69-21249
- CASANI, E. K.**  
Mars entry and landing capsule.  
02 p0333 A69-11746  
Planetary spacecraft/entry capsule interface design.  
[AIAA PAPER 68-1162] 03 p0521 A69-13671
- CASANOVA, C.**  
Dynamic aspects of the human electroencephalogram - Initial results of a radiotelemetric study /Aspects dynamiques de l'electroencephalogramme humain - Premiers resultats d'une etude radio-telemetrique/.  
22 p3889 A69-40158
- CASANOVAS, J.**  
Observational decay curves for solar calcium chromospheric plages.  
16 p2859 A69-32222
- CASARELLA, M. J.**  
Displacement effects on the laminar mixing of two parallel streams.  
05 p0744 A69-15714
- CASATI, C.**  
Functional changes of somato-sensory system during deep sleep.  
22 p3872 A69-40161
- CASAVARDE, M.**  
The effect on the geomagnetic field of the solar eclipse of Nov. 12, 1966 at and near the dip equator.  
02 p0241 A69-11727
- CASAZZA, S. A.**  
Thermal protection techniques for electronics of air-launched missiles.  
22 p4049 A69-39943
- CASE, C. T.**  
Transient signal propagation through an inhomogeneous plasma.  
11 p1836 A69-24990
- CASE, K. M.**  
Burgers' turbulence models.  
24 p4302 A69-43360
- CASE, L. A.**  
Changes of the Petrov type of a space-time.  
08 p1350 A69-19789
- CASE, R. S., JR.**  
Time-resolved spectroscopy of exploding wires.  
01 p0119 A69-10671
- CASEY, H. C., JR.**  
Temperature dependence of the energy gap in GaAs and GaP.  
09 p1553 A69-21330  
Radiative tunneling in GaAs abrupt asymmetrical junctions.  
09 p1544 A69-21336
- CASEY, H. W.**  
Histologic changes in rat skin after 13 Mev proton irradiation.  
14 p2407 A69-29299  
Electron microscopy of canine cerebellar Purkinje cells after rapid decompression to a near-vacuum.  
21 p3660 A69-39177
- CASEY, K. F.**  
Dipole radiation in a periodically stratified medium.  
03 p0398 A69-13802  
Transient signal propagation through an inhomogeneous plasma.  
11 p1836 A69-24990  
Normalized signal-to-noise power ratios of aperture antennas in random signal and noise fields.  
20 p3494 A69-37845  
Radiation through an inhomogeneous plasma covering a ground plane.  
20 p3495 A69-37852
- CASHION, C. M.**  
GO/NO-GO logic synthesis.  
11 p1843 A69-25078
- CASHMAN, W. F.**  
A computational approach to optimal control of stochastic saturating systems.  
15 p2582 A69-30601
- CASINI, A.**  
Some receiving systems for digital telemetry from space vehicles.  
08 p1276 A69-20591
- CASINI, G.**  
Protonic compression radar.  
11 p1834 A69-24566
- CASLEY-SMITH, J. R.**  
An electron microscopical demonstration of the permeability of cerebral and retinal capillaries to ions.  
23 p4081 A69-41433
- CASON, C.**  
Performance characteristics of a multiple-arc jet wind tunnel.  
[AIAA PAPER 68-229] 22 p3927 A69-40541
- CASPALL, F.**  
The use of radar in the discrimination and identification of agricultural land use.  
12 p2097 A69-26986
- CASPERSON, R. C.**  
Community response to atmospheric noise.  
15 p2719 A69-30374
- CASS, T. R.**  
Recent developments in MAR-M alloy 509.  
11 p1901 A69-24259
- CASSANTO, J. M.**  
Subsonic base pressure results for typical planetary entry configurations.  
19 p3238 A69-35959  
Correlation of free-flight base pressure data for M equals 4 to M equals 19.  
20 p3458 A69-37196  
Base pressure measurements on slender cones with domed afterbodies.  
[AIAA PAPER 68-698] 24 p4249 A69-43675
- CASSEL, C. E.**  
Influence of rare earths in stainless steel bare wire electrodes.  
12 p2103 A69-26623
- CASSIDY, E. C.**  
Time-resolved emission and absorption studies of exploding wire spectra.  
01 p0118 A69-10664
- CASSIDY, J. F.**  
Thermal contact resistance measurements at ambient pressures of one atmosphere to  $3 \times 10$  super minus super 12 mm Hg and comparison with theoretical predictions.  
[AIAA PAPER 69-629] 17 p3073 A69-33299
- CASSIDY, W. A.**  
Physical and chemical properties of Australasian microtektites.  
08 p1305 A69-19815
- CASSINELLI, J. P.**  
Interplanetary gas. XVI.  
18 p3186 A69-34301
- CASSOU, M.**  
Attitude control principle of the PAS satellite /Principe du controle en attitude du satellite P.A.S./.  
17 p3048 A69-33238
- CASTAGNE, J. L.**  
Development of high-strength maraging steels /Developpement d'aciers maraging a haute resistance/.  
11 p1904 A69-24643
- CASTAGNOLI, C.**  
An underground search for leptonic quarks in the cosmic radiation.  
02 p0306 A69-11547
- An interpretation of cosmic-ray data by SU sub 3 triplet particles.  
15 p2678 A69-31498
- CASTAGNOLI, G. C.**  
Trains of diurnal waves in the muonic component at 70 mwe during cosmic-ray decreases.  
14 p2511 A69-28962
- CASTELLANI, G.**  
An interesting case of failure of a planetary reduction gear. 1/Un interessante caso di avaria di un riduttore planetario. 1/.  
08 p1321 A69-20853
- CASTELLANI, V.**  
Errors due to fluctuations in the delay in measuring correlation functions /Errori dovuti alle fluttuazioni del ritardo nella misura delle funzioni di correlazione/.  
08 p1296 A69-19923  
Physical conditions in the convective envelopes of stars. I.  
11 p1961 A69-25109  
Population II star models and abundance of primeval helium.  
12 p2156 A69-26228  
Waveform transmission with permutation modulation.  
12 p2030 A69-26386  
An investigation on H-R diagrams of globular clusters.  
14 p2527 A69-29943  
On the stratification of elements in the atmospheres of globular cluster and halo B-stars.  
14 p2529 A69-29976  
On the evolution of the horizontal branch stars of metal-poor globular clusters.  
14 p2529 A69-29977  
On equilibrium models for main-sequence stars.  
16 p2859 A69-32219  
Horizontal-branch star models.  
17 p3030 A69-33071  
Determination and layout of the eye chart for a digital transmission system by means of computer simulation /Determinazione e tracciamento del diagramma ad occhio per un sistema di trasmissione numerica mediante simulazione al calcolatore/.  
21 p3678 A69-38776
- CASTELLI, A.**  
Potential constants of nitric acid.  
15 p2561 A69-30467
- CASTELLI, J. P.**  
Spectrum of the 6 March 1968 solar radio burst.  
01 p0148 A69-10054  
The spectra of selected radio events of March and July 1966.  
01 p0069 A69-11121  
The proton flare of 9 June 1968.  
20 p3587 A69-37332  
Spectral considerations of microwave solar bursts.  
24 p4372 A69-43616
- CASTELLI, V.**  
Gas bearing analysis.  
04 p0604 A69-14518  
Performance characteristics of spiral-groove and shrouded Rayleigh step profiles for high-speed noncontacting gas seals.  
[ASME PAPER 68-LUBS-38] 13 p2266 A69-27272  
On the local compressibility effect in spiral-groove bearings.  
[ASME PAPER 68-LUBS-33] 13 p2266 A69-27274
- CASTELLINI, G.**  
Some receiving systems for digital telemetry from space vehicles.  
08 p1276 A69-20591
- CASTER, R. M.**  
Nonlinear effects in telemetry transmitter-receiver RF links.  
19 p3270 A69-36239
- CASTI, J.**  
Estimating parameters of an inhomogeneous medium by probing with rays.  
18 p3172 A69-34667
- CASTI, J. L.**  
Reflection and transmission functions for finite isotropically scattering atmospheres with specular reflectors.  
15 p2597 A69-31152
- CASTINEL, C.**  
A radioaltimeter of advanced design /Un radioaltimetre de conception avancee/.  
19 p3315 A69-36699



## CASTLE, B. L.

- Effects of acute exposure to high-energy protons on primates. 03 p0374 A69-13498
- Pressure-diameter relations of capillaries and small blood vessels in frog lung. 22 p3885 A69-40974

## CASTLE, G.

- Human factors in air traffic control. 23 p4108 A69-41828

## CASTLE, J. A.

- Handbook of Solar Simulation for Thermal Vacuum Testing. 21 p3690 A69-38894

## CASTLE, R. T.

- Analytical descriptions of the nuclear weapon environment and effects. 15 p2652 A69-30381

## CASTLES, M. P.

- Experiments with a low polarization error loop array direction finder. 01 p0048 A69-11006

## CASTOR, J. G.

- The Garrett TSE36-1 propulsion engine - Design and operational considerations. [SAE PAPER 690310] 11 p1942 A69-24513

## CASTREC, C.

- Use of the Diademe satellites for the determination of the electron content /Utilisation des satellites Diademe pour la détermination des contenus électroniques/. 16 p2785 A69-32615

## CASTRO, R.

- Influence of the atmosphere and alloying elements on casehardening by gas carburization /Influence de l'atmosphère et des éléments d'alliage sur la carburation superficielle par cémentation gazeuse/. 07 0 A69-19344

## CASTRUCCIO, P. A.

- Use of remote sensors in earth-orbital space for the discovery, inventory, evaluation, development and conservation of earth's natural resources. [UN PAPER 68-10464] 01 p0065 A69-10532

## CASWELL, J. L.

- Radio observations of two H II regions. 10 p1773 A69-22957
- 178 MHz observations of galactic radio sources. 21 p3801 A69-38701

## CATALANO, F.

- Research on magnetic stars at the Catania Astrophysical Observatory. I. 16 p2858 A69-32208

## CATALANO, S.

- Photometric elements of the binary system S Equ. 16 p2858 A69-32212

## CATALDO, C. E.

- Recent experience in high pressure gaseous hydrogen equipment operated at room temperature. [ASM PAPER D8-14.1] 07 p1143 A69-19666

## CATANACH, W. M., JR.

- Fatigue crack propagation in cylindrical shells. 10 p1795 A69-23066

## CATANIA, B.

- Measurement of transmission characteristics on noisy-long distance or satellite-microwave links. 05 p0722 A69-16728

## CATCHPOLE, R. M.

- Nova T Pyxidis. 08 p1391 A69-20396
- Observations of 17 southern planetary nebulae. 08 p1392 A69-20561

## CATE, D. M.

- A parametric approach to estimating weights of surface control systems of combat and transport aircraft. [SAWE PAPER 812] 18 p3221 A69-34898

## CATHALA, J.-C.

- Methods of synchronization of a Bethenod pendulum /Modes de synchronisation d'un pendule de Bethenod/. 24 p4349 A69-42673

## CATHERINES, D. S.

- A geometrically exact finite element for thin shells of revolution. [AIAA PAPER 69-56] 06 p1029 A69-18193

## CATHEY, E. H.

- Some midlatitude sporadic-E results from the Explorer 20 satellite. 14 p2434 A69-28943

## CATLETT, G. F.

- Glaucoma in commercial pilots. 03 p0376 A69-14078
- Glaucoma in commercial pilots. 23 p4088 A69-41805

## CATO, J. E.

- Propagation in the earth's atmosphere. 11 p1837 A69-25003

## CATO, R. E., JR.

- The impact of failure data on management of a launch operations reliability program. 19 p3294 A69-36022

## CATOTTI, A. J.

- Nickel-cadmium cells for optimum overcharge capability. 10 p1639 A69-23991

## CATTANI, D.

- Relation between the viscosity of a plasma and the possible generation of a constant magnetic field in a star. 15 p2700 A69-31492

## CATTON, I.

- Nonlinear free surface effects in tank draining at low gravity. [AIAA PAPER 69-680] 17 p2953 A69-33450

## CAUBET, J.-J.

- Intrinsic curve of friction /Courbe intrinsèque du frottement/. 19 p3329 A69-36723

## CAUFFMAN, D. P.

- VLF emissions during magnetic storms and their association with 40-key electrons. 09 p1488 A69-21698
- Initial observations of VLF electric and magnetic fields with the Injun 5 satellite. 22 p3938 A69-40503

## CAUGHEY, D. M.

- Computer simulation of U.H.F.-transistor small-signal behaviour at high frequencies. 13 p2227 A69-27241

## CAUGHEY, S. J.

- Subpicosecond structure in Nd-glass laser relaxation oscillations. 06 p0938 A69-18231

## CAUGHEY, T. K.

- Whirling of a heavy string under constant axial tension - A non-linear eigenvalue problem. 13 p2359 A69-27264

## CAUGHLAN, C. N.

- The crystal and molecular structure of mu-oxo-bis /chlorobis/2, 4-pentanedionato/titanium/IV//chloroform, /TiCl/C sub 5 H sub 7 O sub 2/ sub 2/ sub 2 O.CHCl sub 3. 01 p0023 A69-10411

## CAULFIELD, H. J.

- Image degradation in undersampled holograms. 08 p1312 A69-20078

## CAULFIELD, W. H., JR.

- The second heart sound in coronary artery disease - A phonocardiographic assessment. 24 p4261 A69-42726

## CAULTON, M.

- Hybrid integrated lumped-element microwave amplifiers. 01 p0039 A69-10190
- Designing lumped elements into microwave amplifiers. 11 p1856 A69-25654

## CAUSSE, J.-P.

- Payloads /Introduction/ /Les charges utiles /Introduction//. 02 p0333 A69-11914

## CAUSSE, R.

- Experimental study of the free surface downstream of a submerged valve in magnetohydrodynamic flow /Etude expérimentale de la surface libre à l'aval d'une vanne de fond en écoulement magnétohydrodynamique/. 15 p2659 A69-30299

## CAUVILLE, R. J.

- New method of measurement of filament diameters and particularly carbon of filaments. 08 p1316 A69-20499

## CAUWENBERGH, H.

- Measurements of the thermal conductivity of gases. I, II. 05 p0845 A69-15616

## CAVALIER, G.

- Bead sampling by aspiration of molten metal /Prelevements d'échantillons en baguettes par aspiration de métal liquide/. 07 p1141 A69-19341

## CAVALIERE, A.

- Rotating neutron stars and pulsar emission. 08 p1383 A69-19895
- Collective interactions of electromagnetic waves in a plasma /Interazioni collettive di onde elettromagnetiche in un plasma/. 08 p1361 A69-20220
- Anomalous scattering and absorption of light by decay into plasma waves. 16 p2822 A69-32046

## CAVANAUGH, L. A.

- Visualization of standing acoustic waves using time-averaged optical holographic interferometry. 06 p0923 A69-17150
- Holographic measurement of compressor blade, turbine blade and airframe panel vibration distribution. [SAE PAPER 690265] 07 p1130 A69-18313
- Continuous butt welding using a carbon dioxide laser. 15 p2617 A69-30099
- The observation of three dimensional shadow-graphlike images in holography of phase objects. 24 p4317 A69-43764

## CAVICCHI, R. H.

- Comparison of flexible- and firm-foundation rotor critical-speed analyses. [ASME PAPER 69-VIBR-49] 10 p1808 A69-24184

## CAYE, R.

- Metallic phase of stone meteorites /Phase métallique des météorites pierreuses/. 19 p3415 A69-36124

## CAYLA, F.

- Satellite observations of the vertical ozone distribution in the upper stratosphere. 16 p2788 A69-32645

## CAYREL DE STROBEL, G.

- Detailed analysis of the star phi Aurigae. 08 p1403 A69-20913

## CAYWOOD, J. M.

- Origin of field-dependent collection efficiency in contact-limited photoconductors. 20 p3583 A69-37732

## CAZANJIAN, R. S.

- An introduction to laser reliability. 18 p3151 A69-34523

## CAZAUX, J. L.

- Problems of analyzing priming explosives /Les problèmes d'analyse des explosifs d'amorçage/. 10 p1750 A69-23012

## CAZEMAJOU, J.

- Simulation of the "Roseau" computer /Simulation du calculateur "Roseau"/. 20 p3502 A69-37396

## CAZIN, Y.

- Development of high-strength maraging steels /Développement d'aciers maraging à haute résistance/. 11 p1904 A69-24643

## CAZZOLA, P.

- Electron-electron neutrino bremsstrahlung. I, II. 24 p4351 A69-42794

## CEASE, R. G.

- A predetection combiner for telemetry diversity applications. 19 p3270 A69-36241

## CEBECI, T.

- Calculation of profile drag of airfoils at low Mach numbers. 01 p0006 A69-11017
- Effect of transverse curvature on skin friction and heat transfer in laminar flows past slender circular cylinders. 02 p0232 A69-12210
- Calculation of compressible adiabatic turbulent boundary layers. [AIAA PAPER 69-687] 17 p2955 A69-33470
- Laminar boundary layers on slender paraboloids. 23 p4152 A69-41904
- Solution of the incompressible turbulent boundary-layer equations with heat transfer. [ASME PAPER 69-HT-7] 24 p4304 A69-43561

- CECCARELLI, M.**  
Operation of a new type of device for the simultaneous comparison of pairs of astronomical plates.  
16 p2791 A69-32226  
The Italian cross radio telescope. III - Operation of the telescope.  
19 p3295 A69-36643
- CECCHINI, A.**  
Suitable targets for the production of a deuterium plasma cloud in a vacuum environment with a laser pulse.  
01 p0090 A69-10222
- CECCHINI, G. L.**  
Detection of *Escherichia coli* by gas chromatography.  
03 p0382 A69-13550
- CECCON, H.**  
Time dependent spectroscopy of flashlamp pumped dye lasers.  
06 p0936 A69-17901
- CECCON, H. L.**  
Optical pumps for organic dye lasers.  
23 p4174 A69-42187
- CEDERBERG, J. W.**  
Hyperfine spectrum of NaCl by molecular-beam electric resonance.  
16 p2815 A69-32794
- CEFOLO, P. J.**  
Adaptive control for Mars entry based on sensitivity analysis.  
[AIAA PAPER 68-8355] 20 p3573 A69-37193  
Vector-matrix second-order sensitivity equation with application to Mars entry.  
24 p4388 A69-43690
- CEHAKE, K.**  
Persistence of solar and geomagnetic activity. I./Die Persistenz der solaren und geomagnetischen Aktivitaet. I/.  
20 p3601 A69-37508
- CELINSKI, Z.**  
Space charge in the MHD generator channel.  
15 p2659 A69-30635
- CELNIKER, L.**  
Synthesizing aircraft design.  
14 p2392 A69-29432
- CEMBALI, F.**  
Operation of a new type of device for the simultaneous comparison of pairs of astronomical plates.  
16 p2791 A69-32226
- CENSOR, D.**  
First-order propagation in moving media.  
01 p0030 A69-10630  
Extended gradient relations with reference to EM waves in moving simple media.  
04 p0557 A69-14760  
Scattering of electromagnetic waves by a cylinder moving along its axis.  
16 p2748 A69-31579
- CENTER, R. M.**  
Application of bionics to spacecraft energy allocation.  
07 p1058 A69-18389
- CEPLECHA, Z.**  
Photographic networks for fireballs.  
19 p3415 A69-36120
- CERCIGNANI, C.**  
Influence of the accommodation coefficient on the heat transfer in a rarefied gas.  
01 p0177 A69-11405  
Lectures on kinetic theory.  
11 p1870 A69-25005  
Mathematical Methods in Kinetic Theory.  
16 p2811 A69-31721
- CERESUELA, R.**  
Aerodynamics of an aircraft propelled at Mach 7 /Aerodynamique d'un avion propulse a Mach 7/.  
[ONERA-TP-657] 07 p1052 A69-18414  
The aerodynamics of a Mach 7 powered aircraft /Aerodynamique d'un avion propulse a Mach 7/.  
21 p3644 A69-39164
- CERINI, D. J.**  
Circulation of liquids for MHD power generation.  
13 p2208 A69-27510
- CERINI, J. P.**  
New sulfide addition agents for lubricant materials.  
01 p0102 A69-10907
- CERISIER, J.-C.**  
An interpretation of whistler-excited emissions in the neighborhood of the lower hybrid frequency /Une interpretation des emissions au voisinage de la frequence hybride basse excitees par des sifflements/.  
05 p0759 A69-16606
- CERKANOWICZ, A. E.**  
Photochemical ignition of low pressure fuel-oxidizer mixtures.  
[WSCI PAPER 68-42] 06 p1034 A69-17791  
Ignition of subatmospheric gaseous fuel-oxidant mixtures by ultraviolet irradiation.  
[AIAA PAPER 69-88] 06 p0983 A69-18118
- CERMAK, J. E.**  
"Power law" profiles in thermally stratified shear flows.  
11 p1874 A69-25381
- CERNIGLIA, N. P.**  
Beam-lead Schottky-barrier diodes for low-noise integrated microwave mixers.  
02 p0222 A69-12474
- CERNOHORSKY, J.**  
Norms for quantitative vectorcardiography with special emphasis on the medical evaluation of flying personnel.  
24 p4277 A69-43390
- CERQUETTINI, C.**  
Sprayable polyurethane foam insulation - Saturn S-II booster.  
21 p3732 A69-38967  
Sprayable polyurethane foam insulation - Saturn S-II booster.  
24 p4337 A69-43453
- CERRETELLI, P.**  
Energy utilization in intermittent exercise of supramaximal intensity.  
23 p4100 A69-41443  
Energy cost of isotonic tetanic contractions of varied force and duration in mammalian skeletal muscle.  
23 p4093 A69-42065
- CERTAIN, P. R.**  
Calculation of matrix elements for one-dimensional quantum-mechanical problems.  
04 p0632 A69-14866  
On the modification of exchange perturbation theories.  
07 p1184 A69-18288  
Exchange and Coulomb energy of H sub 2 determined by various perturbation methods.  
07 p1186 A69-19446  
Summary of exchange perturbation calculations for H sub 2 at large separations.  
17 p3009 A69-34170
- CERVELLI, R. V.**  
Comparison of composite and noncomposite structural tubes.  
[AIAA PAPER 68-340] 24 p4405 A69-43653
- CERVI, J. E.**  
The impact of information transfer satellites on everyday living.  
07 p1244 A69-18678
- CESARI, G.**  
Scattering of laser light by a laboratory plasma /Diffusion de la lumiere laser par un plasma de laboratoire/.  
05 p0798 A69-15586  
Axial striograms of a noncylindrical focusing discharge /Striogrammes axiaux d'une decharge non cylindrique focalisante/.  
08 p1362 A69-20279  
90 deg laser light scattering by a dense plasma focus.  
11 p1899 A69-25324  
Study of the collective scattering of laser light at an angle of 90 deg by a cold dense plasma /Etude de la diffusion collective a 90 deg de la lumiere laser par un plasma dense et froid/.  
13 p2273 A69-28366
- CESARSKY, C. J.**  
Effect of line absorption of main-sequence model stars.  
13 p2340 A69-27578
- CESCHINI, L. J.**  
Fatigue precracking of spin-burst toughness specimens.  
11 p1995 A69-25650  
An ultrasonic crack growth monitor.  
20 p3547 A69-38312
- CESS, R. D.**  
The large path length limit for infrared gaseous radiation.  
05 p0844 A69-15579
- The effect of surface emissivity upon infrared gaseous radiation.  
06 p1033 A69-17559
- The interaction of thermal conduction and infrared gaseous radiation.  
09 p1621 A69-21442
- Radiative transport quantities for a hydrogen plasma.  
20 p3581 A69-37306
- CESSNA, L. C.**  
Flexural fatigue of glass-reinforced thermoplastics.  
08 p1337 A69-20481
- CESTER, B.**  
Photoelectric observations of CH Cygni during the explosive phases of 1967-68.  
08 p1396 A69-20650  
On the reflection effect in the eclipsing binaries.  
20 p3600 A69-37479
- CETARUK, W. K.**  
Materials for re-entry vehicle antenna windows.  
07 p1090 A69-18400
- CETAS, T. C.**  
Specific heats of Cu, GaAs, GaSb, InAs, and InSb from 1 to 30 K.  
01 p0140 A69-11252
- CETRON, M. J.**  
MACRO R and D.  
15 p2720 A69-30958
- CEYRAT, B.**  
Stage separation by detonating fuses /Le decoupage inter-etape par cordeaux detonants/.  
10 p1752 A69-23023  
Pyrotechnic circuit closer using the conductivity of a hollow charge jet /Conjoncteur pyrotechnique utilisant la conductivite du jet d'une charge creuse/.  
10 p1635 A69-23031
- CHABAH, M.**  
Influence of transverse polarization on axis deviation of radomes /Influence de la polarisation transversale sur la deviation d'axe des radomes/.  
07 p1111 A69-19524
- CHABANAS, L.**  
Study and development of a wire-type space memory /Etude et realisation d'une memoire a fils spatiale/.  
20 p3503 A69-37403
- CHABANNES, F.**  
Measurement of the time resolution of streak cameras with the aid of pulsed laser diodes /Mesure de la resolution temporelle des cameras a fente a l'aide de diodes lasers pulsees/.  
12 p2084 A69-26152
- CHACE, W. G.**  
Conference on the Exploding Wire Phenomenon, 4th, Boston, Mass., October 18-20, 1967. Proceedings.  
01 p0116 A69-10654  
An "electrical equation of state" of metals determined by an exploding wire technique.  
01 p0117 A69-10659
- CHACKO, O.**  
Global solar radiation flux measurements over India during the IQSY.  
02 p0307 A69-11819  
Surface radiation balance measurements in India during the IQSY.  
02 p0307 A69-11820
- CHADAEV, V. V.**  
Some ways of automating the technological conditions in single-pass electric-spark machining.  
23 p4168 A69-41308
- CHADDERTON, L. T.**  
Standing waves on the moon.  
20 p3604 A69-37565
- CHADDUCK, W. M.**  
Ptosis and proptosis following Valsalva maneuver.  
17 p2909 A69-33186
- CHADOV, V. I.**  
Man's thermal tolerance - A review of the literature.  
10 p1645 A69-23494
- CHADWICK, G. G.**  
A 17-1 dual band circularly polarized focused two-channel monopulse tracking system.  
23 p4120 A69-41752
- CHADWICK, H. D.**  
Two sequential nonparametric detection procedures.  
06 p0888 A69-17531  
Time synchronization in an MFSK receiver.  
08 p1274 A69-20133



- CHAEVSKII, E. V.**  
Statistical properties of energy fluxes produced by a regular source and a set of random sources. 07 p1076 A69-18510  
A statistical model of reflections of radio signals from objects of complex shape. 09 p1460 A69-22662
- CHAFARIS, G. J.**  
Display technology - Today and tomorrow. I - Light valve techniques. 06 p0928 A69-17922
- CHAFEE, N.**  
The bifurcation of one or more closed orbits from an equilibrium point of an autonomous differential system. 02 p0281 A69-12133
- CHAFFEE, R. R. J.**  
Study of the synergistic effects of heat exposure and ionizing irradiation in the hamster. 08 p1263 A69-20174
- CHAFFIN, D. B.**  
Surface electromyography frequency analysis as a diagnostic tool. 21 p3664 A69-38920
- CHAFFIN, R. J.**  
Diagnostics of an anisotropic plasma with a microwave Fabry-Perot resonator. 04 p0635 A69-14757  
The effect of neutron radiation on an IMPATT diode. 14 p2423 A69-29761
- CHAGNON, C. W.**  
Solar-cycle variation of extreme ultraviolet radiation. 20 p3592 A69-38103
- CHAHINE, M. T.**  
Determination of the temperature profile in an atmosphere from its outgoing radiance. [JPL-TR-32-1351] 06 p0922 A69-17805
- CHAHINE, N. T.**  
Performance simulation technique for the lunar module environmental control system. [AIAA PAPER 69-616] 17 p2903 A69-33307
- CHAIANOVA, E. A.**  
The scattering indicatrix of the atmospheric boundary layer. 02 p0274 A69-11443
- CHAIKA, G. E.**  
Effect of an electron-electron interaction on the current-voltage characteristic and equivalent circuit of a metal-semiconductor contact /Vlianie elektron-elektronovogo vzaimodeistviia na vol'tampernuiu kharakteristiku i ekvivalentnuiu skhemu kontakta metall-poluprovodnik/. 07 p1107 A69-19162  
Noise in a forward-biased p-n junction at low frequencies. 11 p1857 A69-25705  
Current-voltage characteristic and the equivalent circuit of a metal-semiconductor contact with allowance for a current disturbance in the distribution function /Vol'tampernaia kharakteristika i ekvivalentnaia skhema kontakta metall-poluprovodnik pri uchete tokovogo narusheniia funktsii raspredeleniia/. 19 p3391 A69-36608
- CHAIKA, I.**  
Calculation of the frequency characteristics of complex radio circuits with the aid of a digital computer /Raschet chastotnykh kharakteristik slozhnykh radioelektronnykh skhem pri pomoshchi tsifrovoi vychislitel'noi mashiny/. 09 p1472 A69-21783
- CHAIKA, M.**  
Interference of light scattered by a system of atoms /Interferentsiia sveta, rasseianogo sistemoi atomov/. 17 p3005 A69-33109  
Line width of spontaneous gas laser emission /Shirina linii spontannogo izlucheniia gazovogo lazera/. 17 p2981 A69-33116
- CHAIKA, V. E.**  
Investigation of TWT stability near the edges of the pass band of the slow-wave structure /Issledovanie ustoiichivosti LBY vblizi granits polosy propuskaniia zamedliaushchei sistemy/. 03 p0407 A69-13976  
Investigation of symmetrical slow-wave structures of the type of coupled resonator chains /Issledovanie simmetrichnykh zamedliaushchik sistem tipa tsepochet sviazannykh rezonatorov/. 22 p3916 A69-40958
- CHAIKEN, R. F.**  
One-dimensional lattice model of detonation in heterogeneous explosives. [WSCI PAPER 68-30] 07 p1240 A69-18357  
Implications of a steady-state solid propellant combustion model to a low pressure deflagration limit. [WSCI PAPER 69-5] 16 p2830 A69-32346
- CHAIKOVSKII, B. S.**  
Influence of static tension on energy dissipation in a material subjected to transverse vibrations /O vlianii staticheskogo rastiasheniia na rasseianiie energii v materiale pri poperechnykh kolebaniakh/. 17 p2991 A69-33934
- CHAIKOVSKII, V. I.**  
Determination of the power spectrum of a random process from a discrete sequence of instantaneous values /Opredelenie spektra moshchnosti sluchainogo protsessa po diskretnoi posledovatel'nosti mgnovennykh znachenii/. 13 p2239 A69-28514
- CHAIN, D.**  
Use of "slush hydrogen" in the propulsion of spacecraft /Utilisation du "slush hydrogen" pour la propulsion de vehicules spatiaux/. 17 p3017 A69-33339
- CHAJES, A.**  
Stability behavior illustrated by simple models. 18 p3211 A69-34342
- CHAKHLOV, V. L.**  
Compact betatrons for nondestructive testing applications. 18 p3136 A69-34779
- CHAKRABARTI, A.**  
Derivation of certain finite Lebedev transforms and their uses in elastostatics. 17 p3067 A69-34148
- CHAKRABARTI, R. K.**  
Collapse load of shallow conical shells. 23 p4236 A69-42496
- CHAKRABARTI, S. K.**  
Accuracy of compensation methods in photoelastic fringe-order measurements. 22 p3945 A69-40082
- CHAKRABARTY, J.**  
Bifurcation phenomenon and the rate-problem in plasticity. 21 p3840 A69-39299  
On uniqueness and stability in rigid/plastic solids. 23 p4235 A69-42460
- CHAKRABORTI, B.**  
Nonlinear deviations of the direction of a reflected wave in vacuum at a plasma boundary. 09 p1459 A69-22529
- CHAKRABORTY, B. B.**  
The formation of soot and polycyclic aromatic hydrocarbons in diffusion flames. III. 02 p0205 A69-12318  
Stability of a perfectly conducting liquid jet in the presence of a magnetic field. 03 p0474 A69-13142
- CHAKRABORTY, D.**  
Measurements of AM-PM conversion in low-noise TWT's, TDA's and parametric amplifiers. 04 p0573 A69-14336  
Some applications of differential equations in modern electrical circuit problems. 12 p2052 A69-26351
- CHAKRABORTY, H. S.**  
On the transient electrical response of a piezoelectric transducer due to shock-loaded stress. 22 p3947 A69-40863
- CHAKRAVARTI, A. K.**  
Focusing factor in a stratified medium. 12 p2029 A69-26100
- CHAKRAVARTI, A. N.**  
Dielectric-waveguide modes in laser diodes in the presence of a transverse magnetic field. 12 p2039 A69-26353  
Temperature dependence of the total stimulated light power from semiconductor junction lasers. 21 p3734 A69-38437  
Dependence of the differential external quantum efficiency and gain in GaAs laser diodes on laser reflectivity. 24 p4330 A69-43766  
On the dependence of the differential external quantum efficiency and gain in GaAs laser diodes on laser length. 24 p4330 A69-43767
- Dependence of the total stimulated light power and the gain factor in GaAs junction lasers on laser length. 24 p4330 A69-43767
- CHAKRAVARTY, S. C.**  
Lunar oscillations in the D-region absorption at Sriharikota. 22 p4035 A69-41218
- CHAKRAVORTY, J. G.**  
Plastically nonhomogeneous shells under internal pressure. 24 p4405 A69-43676
- CHALAIA, M. N.**  
Measurement of the irregular component of the satellite-signal phase lead due to ionospheric inhomogeneities by the method of coherent frequencies /Izmerenie metodom kogerentnykh chastot neregularnoi sostavliaiushchei nabega fazy signalov ISZ za shchegol' neodnorodnostei ionosfery/. 06 p0890 A69-17794
- CHALAIYA, V. G.**  
Excess conductivity effect in cadmium sulfide single crystals at room temperatures /Do efektu zalishekovoi provodnosti u monokristalakh sul'fida kadmiiu pri kimmnatnykh temperaturakh/. 08 p1374 A69-21088
- CHALEAT, R.**  
General theory of successive approximations in gear and machine studies based on the new matrix tensor method with a view toward computerization. II - Kinematic study of spatial gears with nondeformable closed contours, using the matrix tensor method /Allgemeine Theorie der sukzessiven Naerherungen beim getriebes- und maschinenstudium auf grund der neuen Matrix-Tensor-Methode, im Hinblick auf die Anwendung von Rechenautomaten. II - Kinematisches Studium von Raumgetriebe mit unverformbaren geschlossenen Konturen mittels der Matrix-Tensor-Methode/. 15 p2713 A69-31021
- CHALENKO, P. I.**  
Solution of certain problems concerning the bending of rectangular plates with free edges /Reshenie nekotorykh zadach ob izgibe priamougol'nykh plastin so svobodnymi kraiami/. 20 p3630 A69-38292
- CHALFAN, J. L.**  
Linear metal-oxide-semiconductor integrated circuits. 15 p2577 A69-30594
- CHALIL, O. V.**  
Microstructure of a light-scattering medium of large particles. 14 p2481 A69-28733  
Double light scattering near the critical point. 14 p2482 A69-28733  
Study of light scattering in single-component system near a critical point with allowance for the gravitational effect /Vivchennia svitlorozsiannia v odnokomponentnykh sistemakh poblyzu kritichnoi tochki z vrakhuvanniam gravitatsiinogo efektu/. 14 p2485 A69-28992  
Theory of multiple light scattering. 14 p2487 A69-29663
- CHALIKOV, D. V.**  
Determining the universal wind-velocity and temperature profiles in the atmospheric boundary layer. 02 p0274 A69-11444  
The use of profile observations to calculate vertical turbulent fluxes in the atmospheric boundary layer. 10 p1682 A69-23322
- CHALK, C. R.**  
Airplane flying qualities specification revision. [AIAA PAPER 68-245] 17 p2902 A69-34020
- CHALLE, A.**  
Perturbation function and analytical representation of the motion of a satellite /Fonction perturbatrice et representation analytique du mouvement d'un satellite/. 22 p4030 A69-40900
- CHALLINOR, R. A.**  
Neutral-air winds in the ionospheric F-region for an asymmetric global pressure system. 16 p2779 A69-32300
- CHALMETON, V.**  
Study of the ionization of a gas by a Q-switched laser /Etude de l'ionisation d'un gaz par un laser declenche/. 02 p0255 A69-11700
- CHALON, P.**  
An expansion for evaluating sensitivity to a random parameter. 21 p3685 A69-38722

- CHALONGE, D.**  
Spectrophotometric studies of non stable stars. I.  
13 p2351 A69-27868
- CHAM, T.-S.**  
Turbulent boundary-layer flow on a rotating disk.  
17 p2957 A69-33601
- CHAMBAREL, A.**  
Theoretical study of the free surface in magneto-hydrodynamic flow /Etude theorique de la surface libre en ecoulement magneto-hydrodynamique/.  
08 p1362 A69-20273  
Experimental study of the free surface downstream of a submerged valve in magneto-hydrodynamic flow /Etude experimentale de la surface libre a l'aval d'une vanne de fond en ecoulement magneto-hydrodynamique/.  
15 p2659 A69-30299
- CHAMBE, G.**  
The observation of solar soft X-ray bursts and their relations with microwave radio bursts /L'observation des sursauts solaires de rayonnement X doux et leur relation avec les sursauts radio-centimetriques/.  
17 p3025 A69-34055  
The emission of solar X-rays in the 0.5-3 angstrom unit wavelength range and its relation to the magnetic configuration of active centers.  
22 p4003 A69-40298
- CHAMBERLAIN, A. P.**  
Shock loads in parachuted supplies.  
07 p1053 A69-19140
- CHAMBERLAIN, D.**  
Measurement of drag from interaction of jet exhaust and airframe.  
[AIAA PAPER 68-395] 12 p2059 A69-26769
- CHAMBERLAIN, D. L., JR.**  
A study of bonding between glass and plastic in glass reinforced plastics. II.  
08 p1341 A69-20514
- CHAMBERLAIN, J.**  
Sub-millimetre wave solar observations.  
03 p0513 A69-13774  
Dimers of the water molecule in the earth's atmosphere.  
05 p0759 A69-16658  
A 377 mu m CW maser interferometer for plasma diagnostics.  
08 p1359 A69-19987  
The direct measurement of electron density in an MHD duct.  
10 p1731 A69-23436  
Transient phenomena in the 337-mu M maser.  
17 p2981 A69-33088  
Absorption and dispersion studies in the range 10-1000 cm super -1 using a modular Michelson interferometer.  
20 p3538 A69-37297
- CHAMBERLAIN, J. W.**  
Escape rate of hydrogen from a carbon dioxide atmosphere.  
08 p1386 A69-20076  
Electric acceleration of auroral particles.  
22 p3938 A69-40445
- CHAMBERLAIN, S. G.**  
On stochastic differential games - Sufficient conditions that a given strategy be a saddle point, and numerical procedure for the solution of the game.  
17 p2994 A69-32844  
Finite state stochastic games - Existence theorems and computational procedures.  
22 p3975 A69-41010
- CHAMBERS, R. H.**  
On old universes and galaxy evolution.  
14 p2527 A69-29944
- CHAMBLISS, C. R.**  
The radial velocity curve of the eclipsing binary system 9 Chamaleontis /BV 430/.  
08 p1391 A69-20395  
The eclipsing binary system AU Puppis.  
10 p1774 A69-22968
- CHAMBOULEYRON, I.**  
Effect of temperature on the radiative emission of PbSe diode lasers.  
19 p3337 A69-36533
- CHAMIS, C. C.**  
Important factors in fiber composite design.  
08 p1341 A69-20512  
Failure criteria for filamentary composites.  
09 p1611 A69-21479
- Thermoelastic properties of unidirectional filamentary composites by a semiempirical micromechanics theory.  
09 p1530 A69-22320
- Closing materials research structural design cycle.  
24 p4399 A69-42991
- CHAMPAGNE, E. B.**  
A technique for particle sizing in moving streams.  
19 p3306 A69-35733
- CHAMPETIER, J.-L.**  
Breakdown plasmods produced by lasers /Sur les boules de claquage crees par lasers/.  
03 p0480 A69-14058
- CHAMPION, K. S. W.**  
Anomalous mesospheric temperatures observed at White Sands, New Mexico.  
15 p2601 A69-31376  
Properties of the lower thermosphere - Recent progress.  
15 p2602 A69-31383  
Atmospheric density measurements by research satellite OV1-15.  
15 p2602 A69-31384  
Measurements by the low altitude density satellite OV1-16.  
15 p2602 A69-31385  
Space Research IX, COSPAR Plenary Meeting, 11th, Tokyo, Japan, May 9-21, 1968, Proceedings.  
21 p3698 A69-38334
- CHAMPION, R. L.**  
Charge transfer and dissociative charge transfer between rare-gas ions and molecular nitrogen.  
05 p0796 A69-15909
- CHAN, F. T.**  
Rotational transition of CO sub 2 molecule by collisions.  
20 p3581 A69-38121
- CHAN, K. L.**  
Storm-time variations of the electron concentration in the polar topside ionosphere.  
14 p2510 A69-28939  
Global electron density distributions from topside soundings.  
20 p3530 A69-37867  
Model studies of the kinked Z trace in topside ionograms.  
20 p3531 A69-37893
- CHAN, K. W.**  
Particle substorms observed at the geostationary orbit.  
24 p4367 A69-43173
- CHAN, P. W.**  
Laser-produced sparks in a 200-kG magnetic field.  
02 p0260 A69-12659
- CHAN, S. H.**  
Total band absorbance of non-isothermal infrared-radiating gases.  
22 p3983 A69-40101
- CHAN, S. P.**  
Topological formulation of network functions without generation of k-trees.  
06 p0903 A69-17409
- CHAN, S. T. K.**  
Mechanical property tests for cylindrically orthotropic materials.  
07 p1232 A69-18718
- CHAN, Y. M.**  
Extending the domain of the Laplacian operator with the use of delta functions.  
07 p1174 A69-19495
- CHAN, Y. W. T.**  
Rotation and mass of the galaxy NGC 6574.  
15 p2691 A69-30764
- CHAN, Y. Y.**  
Some similarity solutions of three-dimensional incompressible laminar boundary layers with suction or injection.  
10 p1678 A69-22936  
Loitsianskii's method for boundary layers with suction and injection.  
13 p2249 A69-28247
- CHANAUD, R. C.**  
Experimental study of aerodynamic sound from a rotating disk.  
09 p1539 A69-21718
- CHANDAIEV, A. K.**  
Quasi-periodic variations of the intensity of solar radio emission at the 3.3-cm wavelength /K-vaziperiodicheskie izmeneniia intensivnosti radioizlucheniia solntsa na volne 3,3 cm/.  
07 p1211 A69-18516
- Some peculiarities of motions in the region of weak magnetic fields in the undisturbed photosphere /O nekotorykh osobennostiakh dvizhenii v oblasti slabykh magnitnykh polei nevozmoshchennoi fotosfery/.  
20 p3535 A69-38300
- CHANDARSEKKHARA, B. S.**  
Magneto-hydrodynamic laminar flow between porous disks with injection at a large Reynolds number /Magnitogidrodinamicheskoe laminarnoe techenie mezhduristymi diskami s vduvom s bol'shim chislom Reinal'sa/.  
15 p2662 A69-30968
- CHANDER, J.**  
Sulfidation of a complex nickel base alloy - Inconel 713C.  
12 p2115 A69-26617
- CHANDLER, D. C.**  
Iterative guidance applied to generalized missions.  
[AIAA PAPER 67-620] 04 p0629 A69-15501
- CHANDLER, P. B.**  
Remote reconnaissance of willcox playa.  
22 p3942 A69-40988
- CHANDLER, R. N.**  
A laboratory water vapor laser.  
21 p3738 A69-39446
- CHANDLER, T. R. D.**  
The construction of a rectangular shock tube for use with pressure and vacuum.  
06 p0906 A69-16928
- CHANDLER, W. T.**  
Effect of high pressure hydrogen on metals.  
[ASM PAPER D8-14.2] 07 p1169 A69-19667  
Effects of hydrogen on 5Al-2.5Sn ELI titanium.  
[AIAA PAPER 69-585] 16 p2803 A69-32760
- CHANDRA, R. C.**  
Empirical relationship for computation of free convection from a single horizontal cylinder to fluids.  
09 p1625 A69-22693
- CHANDRA, S.**  
The influence of varying solar flux on ionospheric temperatures and densities - A theoretical study.  
16 p2849 A69-32082  
F-region ionization and heating during magnetic storms.  
16 p2775 A69-32083  
The role of atomic oxygen in the ionospheric E- and F-region behavior.  
16 p2780 A69-32314
- CHANDRAKER, K.**  
Measurement of electron energy and density in an H.F. electrodeless ring discharge.  
08 p1361 A69-20230
- CHANDRASEKHARAN, R.**  
Low noise front end amplifier for wideband receivers.  
02 p0216 A69-12028
- CHANDRASEKHARA SWAMY, N. V.**  
Friction coefficient for turbulent flow through smooth pipes.  
11 p1874 A69-25429
- CHANDRASHEKHARA, K.**  
A note on the analysis of finite solid cylinder.  
20 p3621 A69-37199
- CHANEY, W. G.**  
The future for data transmission on communications circuits.  
04 p0559 A69-15207
- CHANG, B.**  
Optical orientation of the super 3 P sub 0 ground state of Pb super 207.  
07 p1156 A69-19399  
Aerial remote sensing for the earth resources program.  
22 p3949 A69-40994
- CHANG, C.**  
Beryllium-10 in iron meteorites, their cosmic-ray exposure and terrestrial ages.  
19 p3412 A69-36104
- CHANG, C. M.**  
Gas-phase ignition of a solid fuel in a shock tube.  
18 p3183 A69-34463
- CHANG, C. S.**  
A parametric study of the complex variable method for analyzing the stresses in an infinite plate containing a rigid rectangular inclusion.  
02 p0348 A69-12796



## CHANG, D.

Cirrus cloud influence on 6.4-6.9  $\mu$  observations.  
12 p2075 A69-27003

## CHANG, D. C.

End correction of a monopole antenna with arbitrary radius.  
02 p0219 A69-12346

VLF wave propagation along a mixed path in the curved earth-ionosphere waveguide.  
12 p2032 A69-26858

## CHANG, D. T.

Features of tropospheric and stratospheric dust.  
21 p3718 A69-39773

## CHANG, E. S.

Dipole shielding factor in Hartree-Fock theory.  
02 p0281 A69-12179

Photo-ionization of lithium - A many-body calculation.  
06 p0961 A69-17134

Continuous absorption by members of the Li isoelectronic sequence.  
11 p1922 A69-25260

Rotational excitation of diatomic molecules by electron impact.  
21 p3775 A69-39665

## CHANG, F. K.

Maintaining surface accuracy of large radio telescopes by active compensation.  
23 p4149 A69-42136

## CHANG, H.

Corneal damage thresholds for CO sub 2 laser radiation.  
11 p1830 A69-24844

## CHANG, H. Y.

A mathematical model for the behavior of thrust reversers.  
[AIAA PAPER 69-3] 06 p0985 A69-18124

## CHANG, H.-C.

Absorption spectrum of electrically excited oxygen molecules. II.  
20 p3581 A69-38276

## CHANG, J.

Generation of smeared out electron beams for experiments on weak plasma turbulence.  
04 p0636 A69-15020

## CHANG, J. C.

Response of a cascade connected limiter and phase detector to PM signal.  
23 p4131 A69-42525

## CHANG, J. H.

Viscous effects on impact pressure measurements in low density flows at high Mach numbers.  
02 p0234 A69-12633

Adaptation in nonstationary environment.

Supersonic molecular beam sampling system for mass spectrometric studies of high pressure flow systems.  
[AIAA PAPER 69-94] 06 p0930 A69-18099

Spectral emissivity measurements of ablating phenolic graphite.  
20 p3565 A69-37187

## CHANG, J. J.

P-i-n isolation for monolithic integrated circuits.  
02 p0222 A69-12471

## CHANG, K. K. N.

Power generation with avalanche diodes.  
09 p1466 A69-22455

Avalanche diodes as UHF and L-band sources.  
14 p2418 A69-28890

## CHANG, K. S.

An adsorption study of O sub 2 and H sub 2 on Mo by field emission retarding potential analyser.  
08 p1268 A69-20179

## CHANG, K. T.

Elastic-plastic stress distribution in a compressed ring.  
05 p0837 A69-16063

## CHANG, L. L.

GeTe-GaAs tunnel junction - A negative- resistance Schottky-type barrier.  
06 p0980 A69-17770

## CHANG, L. L. Y.

Subsolidus stability relations in the system KTaO sub 3-KNbO sub 3.  
08 p1332 A69-20373

## CHANG, M. L.

Initial behavior of an exploding wire.  
01 p0117 A69-10656

## CHANG, M. M. T.

Scaling and resolution of scenic holographic stereograms.  
11 p1883 A69-24690

## CHANG, N. J. F.

Comparison between formulas for ionospheric radio propagation and atmospheric wave propagation.  
10 p1655 A69-23419

## CHANG, O.

Effect of mass injection on a high-current arc.  
[AIAA PAPER 69-266] 09 p1564 A69-21242

## CHANG, R.

The fracture behavior of crystalline solids - An atomistic approach.  
10 p1796 A69-23067

## CHANG, R. F.

Correlations in light from a laser at threshold.  
13 p2271 A69-27399

## CHANG, R. P. H.

Nonlinear decay instability and parametric amplification of cyclotron-harmonic plasma waves.  
12 p2135 A69-26314

## CHANG, R. W.

Hybrid digital transmission systems. I, II.  
01 p0027 A69-10248

Hybrid digital transmission systems. I - Joint optimization of analog and digital repeaters.  
09 p1457 A69-22465

## CHANG, S.

Studies on the formation and transformation of esters. LXXX.  
16 p2747 A69-31808

## CHANG, S. Y.

Performance characteristics of a 300-GHz radiometer and some atmospheric attenuation measurements.  
02 p0209 A69-12336

## CHANG, T. S.

Initial behavior of an exploding wire.  
01 p0117 A69-10656

Hydromagnetic stability analysis of jet-driven vortex flow.  
05 p0798 A69-15610

Hydromagnetic stability of dissipative flow between rotating permeable cylinders. II - Oscillatory critical modes and asymptotic results.  
11 p1926 A69-24895

Stress waves resulting from hypervelocity impact.  
[AIAA PAPER 69-355] 13 p2365 A69-28287

## CHANG, T. Y.

Absolute measurement of second order nonlinear coefficient for optical generation of millimeter wave difference frequencies in GaAs.  
06 p0928 A69-17903

Accurate rotational constants of C super 12 O sub 2 super 16 from measurement of CW beats in bulk GaAs between CO sub 2 vibrational-rotational laser lines.  
12 p2105 A69-26311

## CHANG, V. W. H.

Infinite phased dipole array.  
04 p0571 A69-14316

## CHANG, W. W.

Lumped-model analysis of microcircuit vulnerability.  
06 p0977 A69-16886

## CHANG, Y. A.

Phase investigations in the system zirconium-tungsten.  
11 p1903 A69-24578

Oxidation of molybdenum disilicide.  
20 p3567 A69-37780

## CHANIN, L. M.

Ionic species present in argon-caesium and cesium discharges.  
09 p1440 A69-21830

## CHANIN, M. L.

Temperature measurements of the upper atmosphere in the northern polar zone.  
15 p2606 A69-31448

## CHANIN, M.-L.

Aeronomy /L'aeronomie/.  
02 p0242 A69-11902

## CHANNAPRAGADA, R. S.

Mixing, ignition, and combustion analysis of air-augmented solid rockets with boron particles.  
[AIAA PAPER 67-481] 24 p4365 A69-43668

## CHANTLAND, R. L.

Pressure data storage and scanning.  
05 p0726 A69-16768

## CHANTRY, G. W.

Absorption and dispersion studies in the range 10-1000 cm super -1 using a modular Michelson interferometer.  
20 p3538 A69-37297

## CHANUSSOT, G.

Influence of the OH radical and of the stoichiometry of BaTiO sub 3 on the ferroelectric transition /Influence du radical OH et de la stoechiometrie de BaTiO sub 3 sur la transition ferroelectrique/.  
03 p0491 A69-14053

## CHANUT, F.

Ignition systems for propellant units /Systemes d'allumage de blocs de propergol/.  
10 p1752 A69-23022

## CHANZIT, L.

High range resolution by means of pulse to pulse frequency shifting.  
03 p0388 A69-13181

## CHAO, B. T.

Unsteady heat transfer in laminar boundary layers over a flat plate.  
01 p0177 A69-11401

Advanced Heat Transfer.

Selected topics on convective heat transfer.  
13 p2375 A69-28138

13 p2376 A69-28139

## CHAO, K. A.

Estimation of electronic influences on vibrational entropy in dilute-solid-solution alloys.  
16 p2798 A69-31706

## CHAPANIS, A.

The effect of the operator's handedness on some directional stereotypes in control-display relationships.  
02 p0203 A69-12212

## CHAPEK, A. V.

Diurnal periodicity of the physiological functions of the organisms of flight personnel /K voprosu o suutochnoi periodike fiziologicheskikh funktsii organizma u letnogo sostava/.  
17 p2906 A69-32935

## CHAPEL, R. E.

Poisson's ratio determined with strain rosettes.  
11 p1995 A69-25652

## CHAPELLE, W. E.

Automation in photogrammetric compilation.  
24 p4316 A69-43566

## CHAPIN, S. G.

The hybrid /hydrazine/ resistojet.  
[AIAA PAPER 69-496] 16 p2838 A69-32649

## CHAPKIS, R. L.

Surface mass injection at supersonic and hypersonic speeds as a problem in turbulent mixing. I.  
[AIAA PAPER 68-130] 16 p2770 A69-31883

Mean properties of the turbulent near wake of a slender body with and without base injection.  
16 p2733 A69-32147

## CHAPLIN, V. I.

Formation of a self-sustained discharge in a moving gas /Vozniknovenie samostoiateľnogo razriada v dvizhushchemu gaze/.  
11 p1933 A69-25545

## CHAPLIN, A. F.

Synthesis of passive dipole arrays /Sintez reshetok passivnykh vibratorov/.  
23 p4138 A69-41935

## CHAPMAN, C. P.

A digitally controlled vibration or acoustics testing system. I - Advantages and basic concepts.  
15 p2586 A69-30387

Six-channel spectrum averager for environmental acoustic testing.  
[JPL-TR-32-1442] 17 p2946 A69-33658

## CHAPMAN, C. R.

Correlation between Zurich sunspot number and prominence of Jupiter's red spot.  
17 p3045 A69-34185

## CHAPMAN, D. R.

Sr isotope patterns within the Southeast Australasian strewn-field.  
23 p4154 A69-41342

## CHAPMAN, G. A.

The photospheric network.  
04 p0664 A69-15523

## CHAPMAN, G. T.

Ballistic range tests of ablating and nonablating slender cones.  
[AIAA PAPER 69-179] 06 p1036 A69-18083

- A new method for extracting aerodynamic coefficients from free-flight data.  
[AIAA PAPER 69-134] 06 p0864 A69-18161
- CHAPMAN, J. D.**  
Inhibition of gamma-ray-induced degradation of *E. coli* B sub s-1 DNA by infection with T1, T2 and T4 bacteriophage.  
07 p1069 A69-19709
- CHAPMAN, J. H.**  
Topside sounding of the earth's ionosphere.  
14 p2438 A69-29101
- CHAPMAN, M. C.**  
Absolute electron fluxes and energies in the inner radiation zone in 1965.  
01 p0147 A69-11235  
Evaluation of the CRAND source for 10- to 50-Mev trapped protons.  
22 p4005 A69-40512
- CHAPMAN, P. H.**  
Effect of high energy X-irradiation of the head on cerebral blood flow and blood pressure in the Macaca mulatta.  
03 p0376 A69-14075
- CHAPMAN, R.**  
Instrumentation for analog differentiator at low frequencies.  
06 p0897 A69-17702
- CHAPMAN, R. D.**  
Rational approximations to Gaunt factors.  
08 p1354 A69-20153  
Oscillator strengths and wavelengths of some X-ray and extreme-ultraviolet spectrum lines of highly ionized iron.  
13 p2326 A69-27554
- CHAPMAN, S.**  
Lunar daily harmonic geomagnetic variation as indicated by spectral analysis.  
07 p1123 A69-18817  
A model midnight meridian magnetospheric field.  
13 p2252 A69-27532  
Notes on the computation of the solar and lunar daily magnetic variations of X and Y from hourly or bihourly values of H and declination.  
16 p2782 A69-32457  
Auroral science, 1600 to 1965 towards its Golden Age/ques/  
21 p3706 A69-38483
- CHAPMAN, T. I.**  
Energy-level iterative NMR method for sets of magnetically nonequivalent, chemical-shift equivalent nuclei.  
20 p3579 A69-37348
- CHAPNIK, I. M.**  
Stationary lamination in a gas discharge - Investigation of periodic solutions of the system of nonlinear equations of the plasma, using an analog computer.  
04 p0636 A69-14783
- CHAPOROVA, I. N.**  
Study of changes in the structure of WC-Co alloys during plastic deformation /Issledovanie izmenenii v strukture splavov WC-Co pri plasticheskoi deformatsii/.  
18 p3158 A69-35261
- CHAPPAZ-MARTIN, F.**  
Oscillations of a tunnel diode in the switching mode - Existence of a critical frequency separating the switching and oscillation modes /Oscillations d'une diode tunnel en regime de commutation - Existence d'une frequence critique separant les regimes de commutation et d'oscillations/.  
02 p0213 A69-11535
- CHAPPELL, C. R.**  
Penetration of particles into the atmosphere.  
21 p3709 A69-38502
- CHAPPELL, W. H.**  
New sulfide addition agents for lubricant materials.  
01 p0102 A69-10907
- CHAPPELLE, E. W.**  
ATP assay of terrestrial soils - A test of an exobiological experiment.  
20 p3473 A69-37567  
Production of adenosine triphosphate in normal cells and sporulation mutants of *Bacillus subtilis*.  
22 p3886 A69-41076
- CHAPRONT, J.**  
Literal developments in the analytical theory of the moon /Developpements litteraux dans la theorie analytique de la lune/.  
21 p3796 A69-38474
- CHAPURSKII, L. I.**  
Spectral brightness of clouds and landscape features in the visible and near infrared spectral regions /Spektral'naiia iarkost' oblakov i ob'ektov landshafta v vidimom i blizhnem infrakrasnom uchastkakh spektra/.  
06 p0953 A69-17991
- CHAPUT, J. M.**  
Combination of thermal factors from the point of view of testing /Conjugaison des facteurs thermiques du point de vue de l'essai/.  
13 p2215 A69-28594
- CHARAKHCHIAN, A. I.**  
High-latitude geomagnetic disturbances in June 1965 /Geomagnitnye vozmushcheniia v vysokikh shirotakh v iunie 1965 g./.  
17 p2964 A69-33961
- CHARAKHCHIAN, A. N.**  
Data concerning the magnetic inhomogeneities in interplanetary space based on the results of measurements of solar and galactic cosmic rays /Dannye o magnitnykh neodnorodnostiakh v mezplanetnom prostranstve po rezul'tatam izmerenii solnechnykh i galakticheskikh kosmicheskikh luchej/.  
02 p0306 A69-11658  
Measurements of cosmic rays in the stratosphere over the Arctic and Antarctica /Izmereniia kosmicheskikh luchej v stratosfere nad Arktikoi i Antarktidoi/.  
09 p1575 A69-21542  
Data on the coefficient of diffusion of solar cosmic-ray particles in interplanetary space /Dannye o koefitsiente diffuzii chastits kosmicheskikh luchej solntsa v mezplanetnom prostranstve/.  
10 p1755 A69-22812  
Galactic cosmic-ray modulation and solar activity /according to measurements in the stratosphere/ /Moduliatsiia galakticheskikh kosmicheskikh luchej i solnechnaia aktivnost' /po izmereniiam v stratosfere//.  
10 p1758 A69-22832  
Relation between solar activity and 19- to 24-day variations in the cosmic-ray intensity /19- 24-dnevnye variatsii intensivnosti kosmicheskikh luchej i solnechnaia aktivnost'/.  
10 p1759 A69-22843  
The proton flares on 7 July, 2 September 1966, and 28 January 1967.  
10 p1767 A69-23764  
Data on magnetic inhomogeneities in interplanetary space according to measurements of solar and galactic cosmic rays.  
13 p2333 A69-28689  
Cosmic-ray measurements in the stratosphere over the Arctic and Antarctica.  
16 p2851 A69-32537  
Proton flares of July 7 and September 2, 1966, and January 28, 1967 /Protonnye vspyshki 7 iul'ia, 2 sentiabria 1966 g. i 28 ianvaria 1967 g./.  
20 p3587 A69-37045
- CHARAKHCHIAN, T. N.**  
Data concerning the magnetic inhomogeneities in interplanetary space based on the results of measurements of solar and galactic cosmic rays /Dannye o magnitnykh neodnorodnostiakh v mezplanetnom prostranstve po rezul'tatam izmerenii solnechnykh i galakticheskikh kosmicheskikh luchej/.  
02 p0306 A69-11658  
Coupling coefficients for the charged cosmic-ray component in the stratosphere /Koeffitsienty svyazi dlia zariazhennoi komponenty kosmicheskikh luchej v stratosfere/.  
02 p0306 A69-11659  
Measurements of cosmic rays in the stratosphere over the Arctic and Antarctica /Izmereniia kosmicheskikh luchej v stratosfere nad Arktikoi i Antarktidoi/.  
09 p1575 A69-21542  
Data on the coefficient of diffusion of solar cosmic-ray particles in interplanetary space /Dannye o koefitsiente diffuzii chastits kosmicheskikh luchej solntsa v mezplanetnom prostranstve/.  
10 p1755 A69-22812  
Modulation of galactic cosmic rays during minimum solar activity according to satellite measurements /Moduliatsiia galakticheskikh kosmicheskikh luchej v minimume solnechnoi aktivnosti po izmereniiam na sputnikakh zemli/.  
10 p1756 A69-22819  
Galactic cosmic-ray modulation and solar activity /according to measurements in the stratosphere/ /Moduliatsiia galakticheskikh kosmicheskikh luchej i solnechnaia aktivnost' /po izmereniiam v stratosfere//.  
10 p1758 A69-22832  
The proton flares on 7 July, 2 September 1966, and 28 January 1967.  
10 p1767 A69-23764
- Study of the energy spectrum of 11-year variations in cosmic-ray intensity according to measurements in the stratosphere.  
12 p2149 A69-26682
- Data on magnetic inhomogeneities in interplanetary space according to measurements of solar and galactic cosmic rays.  
13 p2333 A69-28689  
Coupling coefficients for the charged component of cosmic rays in the stratosphere.  
13 p2334 A69-28690  
Cosmic-ray measurements in the stratosphere over the Arctic and Antarctica.  
16 p2851 A69-32537  
High-latitude geomagnetic disturbances in June 1965 /Geomagnitnye vozmushcheniia v vysokikh shirotakh v iunie 1965 g./.  
17 p2964 A69-33961  
Proton flares of July 7 and September 2, 1966, and January 28, 1967 /Protonnye vspyshki 7 iul'ia, 2 sentiabria 1966 g. i 28 ianvaria 1967 g./.  
20 p3587 A69-37045
- CHARALAMBUS, ST.**  
Tritium and argon-39 in stone and iron meteorites.  
09 p1604 A69-22398
- CHARAN, B. D.**  
Respiratory control of heart rate.  
22 p3894 A69-41202
- CHARATIS, G.**  
Atomic spectroscopy with the shock tube.  
18 p3176 A69-34446
- CHARBONNIER, R.**  
Programmable 300-Hz to 60-MHz generator-synthesizer and peripheral equipment /Générateur-synthétiseur programmable 300 Hz-60 MHz et équipements périphériques/.  
10 p1664 A69-23796
- CHARHUT, D. E.**  
Resistojet systems manned spacecraft applications.  
[AIAA PAPER 69-255] 09 p1561 A69-21220
- CHARKOV, V. D.**  
Determination of the bearing capacity of axisymmetric shells by the linear programming method /Opredelenie nesushchei sposobnosti osesimmetrichnykh obolochek metodom lineinogo programmirovaniia/.  
20 p3622 A69-37326
- CHARLEMAGNE, P.**  
Assembly language of the "Roseau" computer /Langage assembleur du calculateur "Roseau"/.  
20 p3502 A69-37397
- CHARLES, D. R.**  
Meshless shutter tube with nine images - Double deflection capability.  
12 p2083 A69-26144
- CHARLES, L.**  
Study of the structure of detonation waves in solid explosives /Etude de la structure des ondes de detonation dans les explosifs solides/.  
02 p0349 A69-11526
- CHARLES, R.**  
Design and study of a low-power nuclear reactor for space propulsion /Conception et étude d'un reacteur nucléaire de faible puissance destiné à la propulsion spatiale/.  
17 p3004 A69-33342
- CHARLIP, S.**  
Electrical characteristics of a sealed nickel-cadmium battery having a bipolar construction.  
23 p4072 A69-42283
- CHARLTON, D. A.**  
Microwave components for wide-band phased arrays.  
04 p0571 A69-14318
- CHARMAN, W. N.**  
Search for high energy gamma-rays from CP 1133.  
02 p0307 A69-11823  
A simple technique for detecting a periodicity of unknown value in the signal from an astronomical source.  
04 p0556 A69-14294
- CHARNEY, J. G.**  
A further note on large-scale motions in the tropics.  
07 p1176 A69-19045
- CHARNOCK, W.**  
The initiation of serrated yielding at elevated temperatures.  
21 p3749 A69-39710



## CHARNOW, M.

Application of Hansen's method to the X super th satellite of Jupiter.

20 p3602 A69-37529

## CHARNOW, M. L.

Reobservation of the tenth satellite of Jupiter. [AAS PAPER 68-140]

20 p3595 A69-37194

## CHARNY, V. I.

Determination of second derivatives of the parameters of motion from initial conditions.

01 p0107 A69-11305

Reduction of the integration time of equations of motion with the aid of the Runge principle /O sokrashchenii vremeni integrirvaniia uravnenii dvizheniia s pomoshch'iu printsipa Runge/.

09 p1532 A69-21763

Synthesis of optimum guidance control in solving the problem of satellite rendezvous in orbit /Sintez optimal'nogo upravleniia vyvedeniem pri reshenii zadachi vstrechi sputnikov na orbite/.

13 p2356 A69-27684

## CHARPIN, F.

Buffeting tests /Essais de tremblement/.

06 p0857 A69-17096

## CHARRAUDEAU, J.

Influence of a weak viscosity gradient on an incompressible laminar boundary layer /Influence d'un faible gradient de viscosite sur une couche limite laminaire incompressible/.

13 p2250 A69-28357

## CHARRIEAU, J.

The corneal arc, a warning sign of atheromatosis in flight crews /L'arc corneen signe evocateur d'atheromatose chez les membres du personnel navigant/.

05 p0711 A69-16631

## CHARTIER, C.

Application to a shock tube of transistorized triggers adapted to platinum-film probes /Sur l'utilisation au tube a choc de declencheurs transistorises adaptes aux sondes a film de platine/.

11 p1887 A69-25095

## CHARTIER, G.

Possibility of operating a solid-state laser with non-parallel mirrors /Possibilite de fonctionnement d'un laser solide a miroirs non paralleles/.

03 p0440 A69-13365

Synchronisation of two Q-switched solid state lasers.

07 p1147 A69-18488

## CHARTOFF, R. P.

Carbon foam - A cellular structural material for high-temperature application.

17 p2992 A69-33373

## CHARUGIN, V. M.

X-ray emission of radio galaxies and quasars /O rentgenovskom izluchении ot radiogalakтик i kvazarov/.

03 p0500 A69-13079

X-ray emission from radio galaxies and quasars.

14 p2509 A69-28761

## CHARVIER, H.

Microwave radiometer for radio meteorology /Radiometre microonde de radiometeorologie/.

06 p0924 A69-17247

## CHARWAT, A. F.

Interaction flows due to supersonic secondary jets.

11 p1944 A69-25594

## CHASANOV, M. G.

The enthalpy of solid tungsten from 2800 deg K to its melting point.

17 p2987 A69-33075

## CHASE, C. A., JR.

Diffusion of heat and mass in a porous medium with bulk flow. I, II.

15 p2552 A69-31115

## CHASE, C. E.

Velocity of sound at 1 MHz near the He super 4 critical point.

06 p0957 A69-17142

## CHASE, J. D.

Magnetic pinch effect in the thermal RF induction plasma.

09 p1544 A69-21341

## CHASE, L. M.

Evidence that the plasma sheet is the source of auroral electrons.

05 p0756 A69-16273

## CHASE, R. C.

Elastic scattering of negative pions from deuterons at 2.01, 3.77, and 5.53 GeV/c.

17 p3007 A69-32885

Pi super minus p elastic scattering at 2.51, 2.76, and 3.01 GeV/c near t approximately equal to minus 3 /GeV/c/ super 2.

24 p4352 A69-43049

## CHASE, S. C., JR.

Infrared radiometer for the 1969 Mariner mission to Mars.

17 p2972 A69-33085

Mariner 1969 - Preliminary results of the infrared radiometer experiment.

24 p4384 A69-43196

## CHASMAN, C.

Band-gap effects in the stopping of Ge super 72 atoms in germanium.

01 p0140 A69-11245

## CHASSAING, J.-P.

Treatment of Doppler measurements in semidynamical geodesy /Traitement des mesures Doppler en geodesie semi-dynamique/.

15 p2602 A69-31382

## CHASTEEN, L. H.

Controlled nozzle separation for thrust vectoring.

01 p0161 A69-10412

## CHASTELIER

Results of tests performed on primates placed in a state of weightlessness /Resultats des experiences effectuees sur des primates places en etat de nonpesanteur/.

09 p1445 A69-22724

## CHASTY, J. S.

Analysis of the strengths of aluminum repair welds.

15 p2631 A69-31509

## CHATANIER, M.

Theoretical and experimental characterization of the frequency stability of oscillators /Caracterisation theorique et experimentale de la stabilite de frequence des oscillateurs/.

22 p3900 A69-40930

## CHATELIER, G.

Psychomotor reactions among primates put into ballistic flight in rockets /Reactions psychomotrices chez des primates places en vol balistique en fusées/.

01 p0017 A69-11082

Psychomotor reactions during ballistic rocket flights /Reactions psychomotrices au cours de vols balistiques en fusées/.

06 p0874 A69-17649

## CHATER, W. T.

A logarithmic electrometer for space flight application.

12 p2092 A69-26476

## CHATO, J. C.

A method for the measurement of the thermal properties of biological materials.

06 p0879 A69-17086

Heat transfer in bioengineering.

13 p2213 A69-28150

Combined free and forced convection flows in channels.

13 p2377 A69-28152

Performance of a wick-limited heat pipe. [ASME PAPER 69-HT-20]

24 p4413 A69-43549

## CHATTERJEE, A. S.

Dispersion of soluble matter in the hydro-magnetic laminar flow between two parallel plates.

04 p0638 A69-15194

## CHATTERJEE, B. K.

Studies in extensive air showers at Ootacamund.

06 p0990 A69-17299

The Kolar gold fields extensive air shower experiment.

06 p0990 A69-17300

## CHATTERJEE, D.

Twisting of a spherical shell of non-homogeneous isotropic material.

20 p3619 A69-36911

## CHATTERJEE, J.

The phenomenon of pulsed subharmonic oscillation.

03 p0385 A69-12918

## CHATTERJEE, J. S.

Helical log-periodic array.

02 p0219 A69-12337

## CHATTERJEE, P. C.

Aeromedical evaluation of aircrew following partial gastrectomy /A case report/.

10 p1645 A69-23381

## CHATTERJEE, P. K.

An estimation of performances of unidigit and multidigit communication systems.

17 p2918 A69-33066

## CHATTERJEE, R.

Microwave resonator.

09 p1464 A69-22096

Radiation from tapered dielectric rod aerials.

09 p1464 A69-22097

Some investigations on dielectric rod aerial excited in mixed HE sub 11 and E sub 01 modes.

12 p2035 A69-25900

A two-dimensional array absorber for microwaves.

12 p2035 A69-25901

Some investigations on artificial plasma at microwave frequencies.

18 p3100 A69-34271

Tapered dielectric rod aerials.

21 p3681 A69-38444

## CHATTERJEE, S. K.

Circular cylindrical dielectric rod waveguide.

04 p0577 A69-14977

Microwave resonator.

09 p1464 A69-22096

A theoretical analysis of the source-excited electromagnetic fields.

12 p2028 A69-25898

Investigations on corrugated surface wave line.

12 p2028 A69-25899

Some investigations on dielectric rod aerial excited in mixed HE sub 11 and E sub 01 modes.

12 p2035 A69-25900

A two-dimensional array absorber for microwaves.

12 p2035 A69-25901

Some investigations on artificial plasma at microwave frequencies.

18 p3100 A69-34271

## CHATTERJEE, U. K.

A study of the gallium arsenide injection laser and an investigation of its application in a communication system.

14 p2459 A69-29349

## CHATTERJI, B. N.

A simple digital simulation of control systems.

08 p1296 A69-20110

## CHATTERJI, S.

Magnetite content of a type I carbonaceous meteorite.

02 p0328 A69-12729

## CHATURVEDI, M.

Omega transformation in zirconium alloys.

10 p1707 A69-22988

## CHAU, H. H. M.

Holographic interferometer for isopachic stress analysis.

04 p0599 A69-15013

## CHAUDHRY, H. R.

Torsional motion of a cylindrical mass of an incompressible anisotropic fluid.

02 p0229 A69-11558

Large deformations of reinforced compressible elastic materials.

13 p2359 A69-27262

## CHAUDHURI, J.

On the spectrum of ordinary second order differential operators.

17 p2996 A69-33793

## CHAUDHURI, P. R.

Thermal stress propagation in an infinite viscoelastic thin plate.

08 p1415 A69-20661

## CHAUDRON, T.

Migration and precipitation of vacancies in quenched magnesium.

02 p0267 A69-12187

## CHAUHAN, A. P.

Small- and large-amplitude free vibrations of square shallow shells.

12 p2179 A69-26211

## CHAULIA, P. B.

Stress-freezing in a transversely loaded plate supported at four corners.

22 p4045 A69-40900

## CHAUMERON, J.

Design of communication satellite transponders and multiple access techniques.

09 p1609 A69-21619

## CHAUMETTE, D.

Remarks on the use of thermocouples subjected to a flow of radiated heat /Remarques sur l'utilisation des thermocouples soumis a un flux de chaleur rayonne/.

17 p2975 A69-33596

- CHAUVIN, L. T.**  
Apollo thermal-protection system development.  
[AIAA PAPER 68-1142] 03 p0519 A69-13558
- CHAUZY, S.**  
Fluctuation of the electromagnetic field received after transhorizon propagation /Fluctuation du champ électromagnétique reçu après une propagation transhorizon/.  
20 p3494 A69-37810
- CHAVCHANIDZE, V. V.**  
Stimulated emission of active fibrous filaments /Vynuzhdennoe izluchenie aktivnykh volokonnykh nitei/.  
05 p0761 A69-15657  
The induced emission of active fibers.  
16 p2792 A69-32514
- CHAVDAROV, S. S.**  
Computation of electron concentration profiles as a method of obtaining information on E sub s.  
03 p0423 A69-13536  
Influence of radio wave absorption in the ionosphere on the variation of sporadic E-layer parameters.  
03 p0423 A69-13539  
Determination of the aeronomic parameters of the ionospheric F region /Ob opredelenii aeronomicheskikh parametrov F-oblasti ionosfery/.  
23 p4156 A69-41844
- CHAVKA, G. G.**  
Multiband frequency conversion /Mnogopolosovoe preobrazovanie chastoty/.  
13 p2235 A69-28519
- CHAWLA, B. R.**  
Reflection and transmission of normally incident waves by a semi-infinite longitudinally drifting magneto-plasma.  
01 p0134 A69-11290
- CHAZOT, G. C.**  
NECTAR - An integrated automatic data processing system.  
05 p0726 A69-16765
- CHEATHAM, M. A.**  
Some problems in the measurement of cochlear distortion.  
23 p4085 A69-41573
- CHEBAEVSKII, V. F.**  
Flow deflection at the exit from the wheel of a centrifugal pump /Otklonenie potoka na vykhode koleasa sentrobezhnogo nasosa/.  
15 p2547 A69-30571
- CHEBAN, A. G.**  
Influence of plasma screening on the energy spectrum of electrons localized at surface charges in a degenerate n-type semiconductor. I /Vliianie plazmennoi ekranirovki na energeticheskii spektr elektronov, lokalizovannykh u poverkhnostnykh zariadov v vyrozhdennom poluprovodnike n-tipa. I/.  
14 p2505 A69-29170
- CHEBERIAK, A. G.**  
Determination of stress concentration around a hole by the photo creep method /K opredeleniiu konsentratsii napriazhenii vozle otverstii metodom fotopol-zhuchestii/.  
12 p2178 A69-26000
- CHEBOTAEV, V. P.**  
Absorption saturation effects in a gas laser.  
04 p0611 A69-14550  
Selection and self-locking of modes in a He-Ne laser with nonlinear absorption.  
[IEEE PAPER G-13] 07 p1151 A69-19059  
Stabilization of reproducibility of frequencies of He-Ne lasers at 0.63  $\mu$ .  
[IEEE PAPER P-4] 07 p1153 A69-19073  
Collision effect on the saturation character of vibration-rotation transitions for 00 deg 1- 10 deg 0 band of CO sub 2.  
14 p2457 A69-28928  
Three-level gas laser.  
14 p2460 A69-29671  
Fluctuations of emission buildup in gas lasers /O fluktuatsiakh narastaniia izlucheniia v gazovykh kvantovykh generatorakh/.  
15 p2634 A69-30960  
Selection and self-synchronization of oscillation modes in a laser with nonlinear absorption /Seleksiia i samosinkhronizatsiia tipov kolebaniia v lazere s nelineinym pogloshcheniem/.  
19 p3336 A69-36350  
Use of the Zeeman effect for stabilizing the frequency of a gas laser with nonlinear absorption /Ob ispol'zovanii efekta Zeemana dlia stabilizatsii chastoty gazovogo lazera s nelineinym pogloshcheniem/.  
20 p3554 A69-37729
- CHEBOTAREV, G. A.**  
Jacobi integral and the stability of satellite systems /Integral Iakobi i ustoiichivost' sputnikovyykh sistem/.  
20 p3596 A69-37314
- CHEBOTAREV, R. P.**  
A qualitative atmospheric circulation model based on radar meteor observations /Kachestvennaia model' tsirkulatsii atmosfery po radionabludeniim meteorov/.  
23 p4214 A69-41862
- CHEBOTAREV, V. V.**  
The influence of Hall currents on plasmoid dynamics in a spatially-periodic magnetic field.  
08 p1370 A69-21017
- CHEBOTAREVA, E. I.**  
Structure of a supersonic flow of a conducting gas in a transverse magnetic field when drawing the induced EMF and investigation of the current-voltage characteristics /Struktura sverkhzvukovogo potoka provodiashchego gaza v poperechnom magnitnom pole pri s'eme indutsirovannoi EDS i issledovanie vol'tamp-ernykh kharakteristik/.  
10 p1737 A69-23469
- CHEBOTAROV, I. A. P.**  
Initial dynamics of the EKG during an electrical defibrillation of the heart /Pochatkovaya dinamika EKG pri elektrichnoi defibrilatsii sertsia/.  
19 p3257 A69-36168
- CHEBURKIN, N. V.**  
Effect of a longitudinal alternating magnetic field on lasing in ionized argon /Vozdeistvie prodol'nogo peremennogo magnitnogo polia na generatsiiu v ionizovannom argone/.  
06 p0934 A69-17467  
The effect of laser frequency drift on the operation of a three-mirror interferometer.  
11 p1895 A69-24720  
Effect of longitudinal alternating magnetic field on generated power in ionized argon.  
20 p3555 A69-37950
- CHEBYSHEV, V. V.**  
Synthesis of relief impedance antennas.  
04 p0577 A69-14786
- CHECCACCI, P. F.**  
Portable system for receiving and recording ionospheric satellite signals.  
04 p0597 A69-14748  
Holographic antennas.  
05 p0734 A69-16574  
Long-range propagation of HF signals in the equatorial zone observed by means of the San Marco 2 satellite /Propagazione a grande distanza di segnali hf nella zona equatoriale osservati a mezzo del satellite San Marco 2/.  
08 p1276 A69-20593  
Open resonators with rimmed mirrors.  
14 p2424 A69-29765  
Notes on the analysis of scintillation of satellite signals.  
16 p2751 A69-32103  
Microwave holograms.  
17 p2976 A69-33891  
Direct detection of ionospheric irregularity.  
21 p3715 A69-38562
- CHECHA, V. A.**  
Ionospheric station for space-frequency diversity reception /Ionosfernaia stantsiia dlia prostranstvenno-chastotno-raznosennogo priema/.  
20 p3510 A69-37693
- CHECHEL, V. K.**  
Experimental investigation of plasma drift instability in an external high-frequency field.  
14 p2489 A69-28740
- CHECHELITSKII, A. M.**  
Dynamics of degenerate optimal motions /Dinamika vyrozhdennykh optimal'nykh dvizhenii/.  
16 p2811 A69-31625
- CHECHETKIN, V. M.**  
The equilibrium state of matter at high temperatures and densities /Ravnovesnoe sostoiianie veshchestva pri vysokikh temperaturakh i plotnostyakh/.  
11 p1957 A69-24403  
Neutronization of matter at high densities /Neitronizatsiia veshchestva pri bol'shikh plotnostyakh/.  
11 p1957 A69-24404  
Neutrino emission by the URCA process at high temperatures /Neitronnoe izluchenie URCA- protsessom pri vysokikh temperaturakh/.  
15 p2674 A69-30542
- The equilibrium state of matter at high temperatures and densities.  
24 p4391 A69-43793  
Neutronization of matter at high densities.  
24 p4391 A69-43794
- CHECHINA, A. A.**  
Flute instability in a rarefied non-neutral plasma.  
08 p1370 A69-21013
- CHECHKIN, V. V.**  
Observation of plasma instability in a strong alternating electric field.  
09 p1552 A69-22526  
Plasma heating by a fast magnetosonic wave of large amplitude.  
14 p2493 A69-29643
- CHECHINSKA, H.**  
Optical method of stress measurement /Optyczna metoda pomiaru naprezien/.  
11 p1887 A69-25199
- CHECKA, V. A.**  
Preliminary results of an investigation of motions at various levels in the ionosphere /Predvaritel'nye rezultaty issledovaniia dvizhenii v ionosfere na razlichnykh vysotnykh urovniakh/.  
17 p2969 A69-33999
- CHECKI, EY, R. J.**  
Design and performance of radiation-cooled MPD arc thrusters.  
[AIAA PAPER 69-245] 09 p1566 A69-21259
- CHECKRAHAMATOULA**  
Study of the saturation of the oscillation level in a hydrogen maser as a function of the atom flux entering the cavity /Etude de la saturation du niveau d'oscillation du maser a hydrogene en fonction du flux d'atomes entrant dans la cavite/.  
09 p1517 A69-22093
- CHEEMA, L. S.**  
Unsteady heat transfer in laminar boundary layer over a flat plate.  
01 p0177 A69-11401
- CHEESEMAN, I. C.**  
Circulation-controlled rotor aircraft.  
19 p3248 A69-36767
- CHEEVER, D. L.**  
The feasibility of resistance welding in hard vacuum.  
12 p2103 A69-26622  
Fabrication of ultrahigh-purity aluminum strip for use in cryogenic magnets.  
19 p3318 A69-35541  
The feasibility of resistance welding in a hard vacuum.  
19 p3319 A69-35554  
Effect of experimental 2219 and 2014 aluminum weld composition variations.  
22 p3956 A69-40461
- CHEFANOV, V. M.**  
Measurement of gas streams with nonorientable five-channel adapters /Izmerenie gazovykh potokov neorientuemymi piatikanal'nymi nasadkami/.  
11 p1888 A69-25340
- CHEHIKIAN, A.**  
A real-time correlator in the extraction of a repetitive signal from a noise background - Generalization of a multichannel sampler /Le corrélateur en temps réel, dans l'extraction du signal répétitif n'oye dans le bruit - Généralisation de l'échantillonneur multicanal/.  
11 p1837 A69-25094
- CHEKALIN, E. K.**  
Structure of a supersonic flow of a conducting gas in a transverse magnetic field when drawing the induced EMF and investigation of the current-voltage characteristics /Struktura sverkhzvukovogo potoka provodiashchego gaza v poperechnom magnitnom pole pri s'eme indutsirovannoi EDS i issledovanie vol'tamp-ernykh kharakteristik/.  
10 p1737 A69-23469  
Near-electrode processes in a rarefied plasma flow in the presence of a boundary layer /Prielektrodnye protsessy v potoke razrezhnoii plazmy pri nalichii pogranichnogo sloia/.  
12 p2137 A69-26532  
Study of a dense plasma during an electric explosion of a wire in a vacuum /Izluchenie plotnoi plazmy pri elektricheskoi vzryve provolochki v vakume/.  
12 p2137 A69-26533
- CHEKALIN, S. V.**  
Experiments on the observation of neutron emission at a focus of high-power laser radiation on a lithium deuteride surface.  
[IEEE PAPER O-11] 07 p1153 A69-19072



- Generation and amplification of high-intensity light pulses in neodymium glass. 08 p1323 A69-19946
- CHEKALINSKAIA, IU. I.**  
Computation of the axial-mode frequencies and the optimal parameters of three- and four-mirror resonators for gas lasers /Raschet chastot oseyvkh mod i optimal'nye parametry trekh- i chetyrekhzernkal'nogo rezonatorov dlia gazovykh OKG/. 22 p3964 A69-40796
- CHEKALOV, V. V.**  
Methods of separating weak periodic signals from noise /Review/ /Metody vydeleniia iz шумов slabykh periodicheskikh signalov /obzor/. 04 p0597 A69-14848  
Methods of separating weak periodic signals from noise /Review/. 15 p2607 A69-30241
- CHEKHLOV, V. I.**  
A boundary value problem for a hyperbolic equation with discontinuous boundary conditions. 04 p0622 A69-14617
- CHEKHONADSKII, N. A.**  
Simulation of the regulatory function of the cardiovascular system during weightlessness /O modelirovanii funktsii regulatsii serdechno-sosudistoi sistemy v nevesomosti/. 03 p0376 A69-14193  
Reactions of the cardiovascular and respiratory systems of cosmonauts under conditions of orbital flight on the Voskhod spacecraft /Reaktsii serdechnososudistoi i dykhatel'noi sistem kosmonavtov v usloviakh orbital'nogo poleta na kosmicheskom korabe "Voskhod"/. 07 p1061 A69-18584  
Certain reactions of the cardiovascular and respiratory systems of cosmonauts during orbital flight on the Voskhod 2 spacecraft /Nekotorye reaktsii serdechnososudistoi i dykhatel'noi sistem kosmonavtov v orbital'nom polete na kosmicheskom korabe "Voskhod 2"/. 07 p1062 A69-18585
- CHEKHONIN, N. F.**  
A method for determining the fatigue life of aircraft structures /Ob odnom metode opredeleniia ustalostnoi dolgovlechnosti samoletnykh konstrukttsii/. 11 p1987 A69-25345
- CHEKHOVICH, V. S.**  
Thermal resistance of multilayer cylindrical elements in the thermionic converters. 14 p2539 A69-29218
- CHEKHOVOI, IU. N.**  
Stability on the whole of pulse-frequency modulated control systems. 05 p0740 A69-16670
- CHEKHOVSKII, E. IA.**  
Transmission of newspaper pages in the "Orbit" system /Peredacha polos gazet v sisteme "Orbit"/. 19 p3277 A69-36567
- CHEKHEROVSKI, V. IA.**  
Formation energy of heat vacancies in molybdenum and their concentration. 02 p0266 A69-12184  
Dilatometer for measurements in the temperature range 100-1000 deg C at different pressures of the gaseous medium. 03 p0432 A69-14151  
Integral hemispherical emissivity of pyrolytic zirconium carbide /Integral'naia polusfericheskaiia izluchatel'naia sposobnost' piroliticheskogo karbida tsirkoniia/. 15 p2640 A69-30985
- CHEKIRDA, I. F.**  
Coordination structure of arbitrary human motions of various complexity during flight along a Kepler parabola /Koordinationnaya struktura proizvol'nykh dvizhenii cheloveka razlichnoi slozhnosti v usloviakh poleta po parabole Keplera/. 07 p1065 A69-18979  
Time perception under conditions of brief weightlessness /O vospriatii vremeni v usloviakh kratkovremennoi nevesomosti/. 07 p1065 A69-18981  
The role of the vestibular analyzer in human space orientation during weightlessness in airplane flights. 08 p1262 A69-19840  
Importance of parabolic flights, reproducing a brief weightlessness, in the vestibular professional selection of astronauts /K voprosu o znachenii parabolicheskikh poletov s vosproizvedeniem kratkovremennoi nevesomosti v vestibuliarnom profotbore kosmonavtov/. 20 p3481 A69-37276

- Coordination structure of human voluntary movements of varying complexity under conditions of flight on free fall trajectory. 20 p3479 A69-38227  
Perception of time during short-term weightlessness. 20 p3480 A69-38229
- CHEKIRDA, N. F.**  
Modeling human movements in weightlessness and in a water environment from the viewpoint of a biomechanical approach /O modelirovanii dvizhenii cheloveka v nevesomosti i v vodnoi srede s biomekhanicheskikh pozitsii/. 17 p2915 A69-33385
- CHEKMAREVA, P. P.**  
Mechanical properties of structural alloys at temperatures down to -269 deg C /Mekhanicheskie svoistva konstrukttsionnykh splavov pri temperaturakh do -269 deg C/. 04 p0614 A69-14574  
Mechanical properties of structural alloys at temperatures down to -269 deg C. 15 p2638 A69-30275
- CHELIDZE, T. E.**  
Observation of the effect of spectral line distortion in a pulse high-frequency plasma /Nabliudenie efekta iskrivleniia spektral'nykh liniy v impul'snoi vysokochastotnoi plazme/. 14 p2497 A69-29791
- CHELIDZE, T. IA.**  
Optical investigations of a laser spark /Opticheskie issledovaniia lazernoi iskry/. 14 p2461 A69-29779
- CHELNOKOV, M. B.**  
Determination of the parameters of a plasma from the intensity of its continuous spectrum /Opredelenie parametrov plazmy po intensivnosti sploshnogo spektra/. 11 p1934 A69-25566  
Population of excited atomic states and ionization of a low-pressure nonequilibrium cesium plasma /Zaseleennost' vzbuzhdennykh sostoianii atomov i ionizatsiia v neravnovesnoi tsezievoi plazme nizkogo davleniia/. 11 p1934 A69-25567
- CHELNOKOV, R. V.**  
Influence of the shape of the elastic curve on the volume of a beam of uniform strength under combined longitudinal and transverse bending /Vliianie na ob'em vida uprugoi linii balki rnvnogo soprotivleniia pri prodol'no-poperechnom izgibe/. 23 p4225 A69-41421
- CHELPANOV, I. B.**  
Optimal selection of the scale factor in the case of a limited range of the measuring instrument /Optimal'nyi vybor mashtabnogo koeffitsienta pri ogranichennom diapazone izmeritel'nogo pribora/. 12 p2079 A69-25966
- CHELTISOV, V. F.**  
Interaction of two field oscillators in a circular laser. 11 p1899 A69-25325
- CHEMERESIUK, G. G.**  
Phenomena induced by the capture of carriers injected into illuminated cadmium selenide single crystals /Iavlennia, obuslovlennye zakhvatom nosteieli, inzhektirovannykh v osveshchennye monokristally selenida kadmiiia/. 09 p1555 A69-21506
- CHEMERIS, A. N.**  
Dynamic stability of a cylindrical shell /K voprosu o dinamicheskoi ustoiichivosti tsilindricheskoi obolochki/. 17 p3064 A69-33920  
Procedure for investigating the dynamic stability of cylindrical shells with allowance for damping /Metodika issledovaniia dinamicheskoi ustoiichivosti tsilindricheskikh obolochek s uchetoм zatukhaniia/. 17 p3065 A69-33929
- CHEMERIS, V. S.**  
Approximate method of solving the first basic problem in the axisymmetric elasticity theory /O metode priblizhennogo resheniia pervoi osnovnoi zadachi osesimmetricheskoi teorii uprugosti/. 18 p3226 A69-35375
- CHEN, C. C.**  
Range difference error due to the presence of ionospheric electrons. 23 p4128 A69-42505
- CHEN, C. F.**  
Effect of nonequilibrium dissociation on constant pressure laminar mixing. 04 p0588 A69-14733

- State space approach to mixed boundary value problems. 18 p3164 A69-34685  
Vortex shedding from circular cylinders in shear flow. 20 p3515 A69-37222
- CHEN, C. H.**  
Wideband PCM-FM bit error probability using discriminator detection. 07 p1082 A69-19104
- CHEN, C. J.**  
Temperature dependence of dissociative recombination and molecular-ion formation in He, Ne, and Ar plasmas. 08 p1356 A69-20711  
Collisional-radiative electron-ion recombination rates in rare-gas plasmas. 12 p2134 A69-25988
- CHEN, C. S.**  
Higher order resonances in a magnetoplasma. 22 p4023 A69-40511  
Higher order resonances in a plasma. 23 p4197 A69-42418
- CHEN, C. T.**  
Irreducible Jordan form realization of a rational matrix. 12 p2122 A69-26511
- CHEN, C.-F.**  
Continued fraction inversion by Routh's algorithm. 16 p2805 A69-32470
- CHEN, C.-H.**  
Computer processing of radiation sensor PCM data. 03 p0400 A69-13313  
Discriminator detection of wide-band PCM/FM. 08 p1271 A69-19864  
Computer optimization of FM/FM telemetry systems. 19 p3273 A69-36275
- CHEN, C.-J.**  
Low temperature simulation of hypersonic melting, ablation and the observed wave patterns. 06 p0907 A69-18064
- CHEN, C.-L.**  
Modification of scattering of waves by central loading. 06 p0888 A69-17512  
Theoretical and experimental studies on the long dipole antenna. 08 p1281 A69-20019
- CHEN, F. S.**  
Holographic storage in lithium niobate. 03 p0432 A69-14184
- CHEN, H. C.**  
Potential functions for a compressible and anisotropic plasma medium. 05 p0803 A69-16350  
Spectral resolution and solution of field problems in an anisotropic and compressible medium. 08 p1274 A69-20031
- CHEN, H.-L.**  
Laser-excited vibrational fluorescence of HCl and the HCl-CO sub 2 laser. 07 p1144 A69-18289
- CHEN, J. C. Y.**  
Separable expansion for off-shell two-body t matrix with Coulomb potential. 08 p1354 A69-20205
- CHEN, K. M.**  
Radiation fields of the short-backfire antenna. 02 p0219 A69-12339
- CHEN, K.-Y.**  
Temperature distributions on the surfaces of close binary stars. 24 p4387 A69-43350
- CHEN, M. M.**  
State space approach to mixed boundary value problems. 18 p3164 A69-34685
- CHEN, P. E.**  
Transverse properties of fibrous composites. 20 p3623 A69-37354
- CHEN, P. J.**  
Thermodynamic influences on the propagation and the growth of acceleration waves in elastic materials. 05 p0836 A69-15931  
On the thermodynamics of non-simple elastic materials with two temperatures. 08 p1422 A69-20847

- On the growth and decay of temperature rate waves of arbitrary form. 21 p3853 A69-39671
- CHEN, P. L.**  
Schlieren interferometry applied to convective heat transfer studies. 07 p1130 A69-18263
- CHEN, R. L. W.**  
Isoperimetric solutions related to the thermodynamics of plasmas. 12 p2138 A69-26603
- CHEN, R. T. N.**  
Computer-aided design of multivariable control systems with applications to VTOL aircraft stability augmentation. 12 p2013 A69-26068
- CHEN, R. Y.**  
On transition from supersonic to subsonic flow at low Reynolds numbers in a tube. [ASME PAPER 69-APM-23] 18 p3120 A69-34397
- CHEN, S. Y.**  
Magnetic hypersonic flow near the stagnation point at low Reynolds number. 22 p3860 A69-40540
- CHEN, T.**  
Hydromagnetic interplanetary shock waves. 04 p0660 A69-15126  
Invariant-strength propagation of a spherical shock in inhomogeneous media. 10 p1778 A69-23405
- CHEN, T. F.**  
Low-power-consumption logic devices. 05 p0704 A69-16002
- CHEN, T. L.**  
Stress concentrations in a rectangular plate with circular perforations along its two bonded edges and subjected to restrained shrinkage. 08 p1412 A69-20255  
Stress and finite-strain analysis of a circular ring under diametral compression. 14 p2531 A69-28884
- CHEN, T. S.**  
Mutually dependent heat and mass transfer in laminar duct flow. 15 p2716 A69-30004
- CHEN, W. T.**  
Axisymmetric stress field around spheroidal inclusions and cavities in a transversely isotropic material. [ASME PAPER 68-WA/APM-14] 04 p0669 A69-14400  
Stresses in some anisotropic materials due to indentation and sliding. 08 p1414 A69-20524  
Plane thermal stress at an elliptical elastic inclusion under uniform heat flow. 08 p1418 A69-21003
- CHEN, W. W. L.**  
Quasi-steady compressible flow with heat transfer in accelerating nozzles and ducts. 12 p2012 A69-26790
- CHEN, W. Y.**  
Correlation measurements in grid turbulence using digital harmonic analysis. 03 p0419 A69-13950
- CHEN, W.-K.**  
Theory and design of transistor distributed amplifiers. 01 p0041 A69-10203
- CHENEY, F. W.**  
The effect of volume history on shunt flow in excised dog lungs. 21 p3651 A69-38386
- CHENEY, J. A.**  
Thermally generated stress waves in a dispersive elastic rod. 09 p1617 A69-22010
- CHENEY, L.**  
Spacecraft oceanography - Its scientific and economic implications for the next decade. [UN PAPER 68-95878] 01 p0064 A69-10491
- CHENEY, M. C., JR.**  
The ABC helicopter. [AIAA PAPER 69-217] 07 p1055 A69-19558
- CHENG, C. S.**  
Yield stress of normal human blood as a function of endogenous fibrinogen. 22 p3874 A69-40223
- CHENG, D. H.**  
In-plane bending of curved circular tubes. [ASME PAPER 68-PVP-12] 03 p0523 A69-12999
- CHENG, D. H. S.**  
Characteristics of triangular lattice arrays. 04 p0570 A69-14308
- CHENG, D. K.**  
Wave reflections from a conducting surface with a moving uniaxial sheath. 02 p0209 A69-12334  
Optimum scannable planar arrays with an invariant sidelobe level. 04 p0570 A69-14302  
Scattering from a conducting cylinder coated with a moving uniaxial medium. 07 p1086 A69-19469  
Pattern synthesis of circular arrays with many directive elements. 08 p1282 A69-20036  
High-frequency scattering from a conducting cylinder with an inhomogeneous plasma sheath. 20 p3494 A69-37843  
Pattern synthesis of circular arrays in a moving medium. 22 p3915 A69-40706
- CHENG, D. Y.**  
A novel use of a telescope to photograph metal diaphragm openings. 20 p3538 A69-37227  
Application of a variable resistance to arrest oscillations in a pulsed capacitor discharge circuit. 22 p3917 A69-41228
- CHENG, H. K.**  
A Stokes-like region around a slightly yawed needle in the hypersonic strong-interaction regime. 04 p0542 A69-14732  
Nonsimilar structure of blast wave with expanding interface, and application to hypersonic flows. 06 p0860 A69-17636  
On the outer-edge problem of a hypersonic boundary layer. 22 p3860 A69-40896
- CHENG, H. S.**  
Performance characteristics of spiral-groove and shrouded Rayleigh step profiles for high-speed noncontacting gas seals. [ASME PAPER 68-LUBS-38] 13 p2266 A69-27272  
Configurations for gas turbine compressor end seals. [ASLE PREPRINT 68AM 4B-4] 13 p2267 A69-27366  
A numerical solution of the elastohydrodynamic film thickness in an elliptical contact. [ASME PAPER 69-LUBS-17] 18 p3120 A69-34379
- CHENG, K. C.**  
Thermal instability in plane Poiseuille flow. [ASME PAPER 69-HT-37] 24 p4411 A69-43533
- CHENG, L.**  
Precise comparison of the Josephson frequency-voltage relation at microwave and far-infrared frequencies. 20 p3583 A69-37418
- CHENG, R. T.**  
Generalized series solutions of the boundary-layer equations. 20 p3514 A69-37211
- CHENG, S. C.**  
The prediction of the thermal conductivity of two and three phase solid heterogeneous mixtures. 13 p2378 A69-28337
- CHENG, S. I.**  
Numerical solution of a uniform flow over a sphere at intermediate Reynolds numbers. 18 p3120 A69-34434
- CHENG, S.-I.**  
An analysis of the possibility of reduction of sonic boom by electro-aerodynamic devices. [AIAA PAPER 69-38] 06 p0869 A69-18150
- CHENG, S.-I.**  
Combustion instability theory. 11 p2003 A69-25597  
An advanced space propulsion concept. 11 p1944 A69-25598  
Aerospace applications of electro-aerodynamic interaction. 12 p2136 A69-26405
- CHENG, Y. F.**  
An investigation of residual stresses in tempered glass plates of aircraft windshields. [AIAA PAPER 68-323] 12 p2118 A69-26768  
On the effect of rotation of secondary principal axes in scattered light photoelasticity. 21 p3844 A69-39317  
An automatic system for scattered-light photoelasticity. 22 p3945 A69-40079
- CHENIAE, G. M.**  
Photoreactivation of manganese catalyst in photosynthetic oxygen evolution. 13 p2210 A69-28257
- CHENON, F.**  
The centralized control system of the ESRO 1 satellite /Le système de contrôle centralisé du satellite ESRO 1/. 15 p2702 A69-31083
- CHENOWETH, D. L.**  
A technique for correcting coefficient quantization errors in hybrid control systems. 18 p3111 A69-34687  
A technique for optimizing the selection of quantized coefficients in digital controllers. 24 p4292 A69-43283  
On the correction of coefficient quantization errors in hybrid control systems. 24 p4293 A69-43302
- CHEO, P. K.**  
Relaxation of CO sub 2 laser levels by collisions with foreign gases. [IEEE PAPER G-1] 05 p0774 A69-16314  
Rotational relaxation rate of CO sub 2 laser levels. 10 p1701 A69-22948  
Spontaneous self-pulsing and cavity dumping in a CO sub 2 laser with electro-optic Q-switching. 16 p2797 A69-32014  
Wavelength dependence of total and depolarized back-scattered laser light from rough metallic surfaces. 18 p3172 A69-35011
- CHEPOVETSKII, A. G.**  
Optimal geometrical relations in a coaxial linear induction MHD generator /Optimal'nye geometricheskie sootnosheniia v koaksial'nom lineinom induktsionnom MGD-generatore/. 13 p2702 A69-27507
- CHEPURNOVA, L. G.**  
An existence and uniqueness theorem /Ob odnoi teoreme sushchestvovaniia i edinstvennosti/. 19 p3360 A69-36373
- CHER, M.**  
Chemiluminescent reactions of He /2 super 3 S/ with nitrogen, oxygen, carbon monoxide, and carbon dioxide. 20 p3483 A69-36936
- CHERANOVSKII, O. R.**  
A wing with a laminar plastic profile /Krylo s laminarnym profilom iz plastika/. 19 p3324 A69-35831
- CHERDYNTSEVA, K. V.**  
A rare case of observation of genetically related electron-photon cascades with a total energy exceeding 10 super 14 ev. 13 p2331 A69-28398
- CHEREDNICHENKO, V. I.**  
The part played by sodium atoms and NO molecules in the formation of 6300 and 5577 angstrom units emissions of atomic oxygen in the comet Mrkos 1957d /Rol' atomov natriia i molekul NO v obrazovanii emissii 6300 i 5577 angstrom units atomarnogo kisloroda v komete Mrkosa 1957d/. 14 p2523 A69-29707  
Some problems in cometary spectroscopy /Nekotorye problemy spektroskopii komet/. 15 p2685 A69-30523
- CHEREMISIN, F. G.**  
Construction of models of the Boltzmann collision integral. 05 p0797 A69-16679  
Structure of a shock wave in a simple monatomic gas /Struktura udarnoi volny v prostom odnoatomnom gase/. 10 p1680 A69-23894
- CHEREMUKHIN, G. S.**  
Follow-up system for aiming optical equipment at the sun. 03 p0427 A69-12980  
Preliminary results of investigations of solar X-ray emission by means of the satellite "Kosmos-166." 07 p2120 A69-19614



## CHERENKOV, A. P.

## CHERENKOV, A. P.

Asymptotic method for calculating the reliability of technological systems /Asimptoticheskii metod rascheta nadezhnosti tekhnicheskikh sistem/.

01 p0085 A69-10210

Asymptotic method for calculating the reliability of engineering systems.

14 p2453 A69-28747

## CHERENKOV, A. S.

Influence of negative ions on the electrical conductivity of multicomponent gas mixtures /Vliianie naliichia otritsatel'nykh ionov na elektroprovodnost' mnogokomponentnykh gazovykh smesey/.

21 p3774 A69-38867

## CHEREPACHIN, M. A.

Certain reactions of man under conditions of reduced gravitation /O nekotorykh reaktsiiakh cheloveka v usloviakh ponizhennoi vesomosti/.

07 p1062 A69-18592

Maintenance of physiological functions in conditions of hypokinesia by physical exercises.

08 p1263 A69-19932

Effects of prolonged bed rest on muscle tone and proprioceptive reflexes in healthy man.

10 p1646 A69-23583

Coordination of human motions under intermittent effects of accelerations and weightlessness /Koordiniatsia dvizhenii cheloveka pri perevezhaiushchiesia vozdeistvii peregruzok i nevesomosti/.

17 p2907 A69-32938

## CHEREPANOV, G. P.

Statically indeterminate elastoplastic problems in the presence of complex shear.

05 p0843 A69-16691

Crack growth during cyclic loading /O roste treshchin pri tsiklicheskom nagruzenii/.

07 p1232 A69-18992

Quasi-brittle fracture /O kvazikhrupkom razrushenii/.

09 p1614 A69-21883

Local buckling of membranes.

16 p2875 A69-32293

Development of cracks in viscous bodies /O razvitiitreshchin v viazkikh telakh/.

18 p3215 A69-34570

The elastoplastic problem /Uprugo-plasticheskaia zadacha/.

18 p3217 A69-34594

Conditions in a crack tip /Ob uslovii v kontsetreshchiny/.

22 p4047 A69-41123

Effect of stiffening ribs on the development of a crack /O vozdeistvii reber zhestkosti na razvitiitreshchiny/.

24 p4406 A69-43709

## CHEREPANOV, P. Z.

Thermal resistance of multilayer cylindrical elements in the thermionic converters.

14 p2539 A69-29218

Theoretical study of transient thermal conditions during the start-up of a thermionic converter.

14 p2400 A69-29226

## CHEREPANOV, V. P.

Thermodynamic calculation of combustion-chamber processes in the case of excess oxidizer /Termodinamicheskii raschet protsessov v kamere sgoraniia pri izbytkie oksislitel'ia/.

04 p0684 A69-14486

## CHEREPASHCHUK, A. M.

Interpretation of the brightness curves of eclipsing systems under the condition of monotonicity of the unknown functions /Interpretatsiia kriyvykh bleska zatmennyykh sistem pri uslovii monotonnosti iskomykh funktsii/.

09 p1588 A69-21363

Interpretation of the light curves of eclipsing systems if the unknown functions are monotonic.

18 p3197 A69-34753

## CHERESHNEVA, N. V.

Experimental determination of the emissivities of high-temperature gas flows /Eksperimental'noe opredelenie izluchatel'nykh sposobnostei vysokotemperaturnykh gazovykh potokov/.

06 p0911 A69-17348

## CHERIN, W. S.

Engineering/manufacturing interfaces. [SAE PAPER 680668]

03 p0433 A69-13451

## CHERKAS, V. I.

Prolonged disturbances of the ionosphere due to the action of high-altitude thermonuclear explosions /O dlitel'nykh vozmushcheniiakh ionosfery pod vozdeistviem vysotnykh termoiadernykh vzryvov/.

19 p3304 A69-36624

Fluctuations of the polarization-fading periods of short-wave signals from artificial earth satellites and the inhomogeneous structure of the ionosphere /Fluktuatsii perioda polarizatsionnykh zamiraniy kv signalov lsz i neodnorodnaia struktura ionosfery/.

22 p3942 A69-41095

## CHERKASOV, E. M.

Pure oxygen laser.

06 p0932 A69-16923

Study of the pure oxygen gas laser /Issledovanie gazovogo kvantovogo generatora na chistom kislorode/.

06 p0933 A69-17259

Nonlinear Optics /Nelineinaia Optika/.

12 p2109 A69-26905

The role of collisions in gas lasers /Rol'stokolnovenii v gazovykh lazerakh/.

14 p2459 A69-29388

Pulsed emission mode in an argon-oxygen laser /Impul'snyi rezhim generatsii v lazere na smesi argon-kislorod/.

17 p2982 A69-33633

## CHERKASOV, I. I.

Soil-density meter-penetrator of the automatic lunar station Luna-13.

03 p0430 A69-13424

Measurement of the lunar surface density by the automatic station "Luna-13."

03 p0430 A69-13425

Study of the lunar surface by the Soviet Luna 9 and Luna 13 automatic stations /Issledovanie lunnoi poverkhnosti na sovetsskikh avtomaticheskikh stantsiiakh Luna-9 - Luna-13/.

[UN PAPER 68-95769]

06 p1000 A69-17041

Investigations of the physical and mechanical properties of the moon's soil from Luna 13.

18 p3113 A69-34239

## CHERKASOVA, K. P.

Magnetosonic waves.

10 p1727 A69-23090

## CHERKES, V. O.

Role of subcortical structures of the cerebrum in controlling the central and peripheral functions of the nervous system /Rol' pidkorkovykh struktur mozku v regulatsii tsentral'nykh i periferichnykh funktsii nervovoi sistemi/.

22 p3889 A69-41275

## CHERKEZ, A. IA.

Investigation of a supersonic flow past two separating bodies /Issledovanie sverkhzvukovogo obtekanii dvukh razdeliaushchikhsia tel/.

14 p2391 A69-29617

## CHERKUNOV, A. I.

Simulation of F sub 2 layer disturbance on electronic computers.

03 p0423 A69-13516

The formation of pseudorandom uniformly distributed numbers from noise-like signals /Formirovanie psevdosluchainykh ravnomerno raspredelennykh chisel iz shumopodobnykh signalov/.

13 p2218 A69-27248

## CHERKUNOVA, G. P.

Relationships characterizing the radiation patterns of large-scale multielement antenna systems /O zakonomenostyakh, kharakterizuiushchikh diagrammy napravlennosti mnogoelementnykh antennykh sistem bol'shikh razmerov/.

11 p1844 A69-24451

## CHERMISIDE, H. B.

An atmosphere exposure chamber for small animals.

04 p0584 A69-14678

## CHERN, D. C.

Current distribution for wire exploded in vacuo.

01 p0119 A69-10669

## CHERN, J.-M.

Expansion of a hole in a disk with kinematic hardening.

21 p3840 A69-39297

## CHERNA, N. S.

Electrical properties of pyrolusite.

05 p0809 A69-16374

## CHERNAVSKII, D. S.

Concerning the statistical theory and large-angle scattering.

13 p2302 A69-28368

## CHERNENKO, ZH. S.

The An-24 Aircraft - Construction and Exploitation /Samolet An-24 - Konstruktsiia i Eksploatatsiia/.

16 p2735 A69-32112

## CHERNETS, A. N.

Three-level andalusite paramagnetic amplifier for the 3 cm range.

04 p0577 A69-14780

Four-level andalusite paramagnetic amplifier for the 3 mm range.

04 p0577 A69-14781

Trivalent-iron-doped andalusite as crystal for microwave waves.

[IEEE PAPER C-2]

07 p1150 A69-19049

Polarization of stimulated emission of neodymium ions in a glass base.

10 p1703 A69-23618

Cadmium sulfide thin-film hypersonic transducers.

15 p2575 A69-30236

Paramagnetic amplification in the millimeter range /Paramagnitnoe usilenie v millimetrovom diapazone/.

19 p3333 A69-35881

## CHERNETSKII, V. D.

Idealized cycle of a gas-expansion machine with a built-in regenerator /Idealizirovannyi tsikl detandera so vstroennym regeneratomor/.

04 p0687 A69-15164

## CHERNEY, O. A. E.

Enhancement of superconductivity in thin aluminum films.

16 p2825 A69-31634

## CHERNIAK, J. R.

The Gauss method for solving Kepler's equation in nearly parabolic orbits.

12 p2171 A69-27154

Computer derivation of short-period lunar perturbations.

15 p2699 A69-31381

## CHERNIAEV, V. S.

Heat capacity of cubic monoxides and vanadium oxycarbide /Teploemkost' kubicheskikh monooksi i oksikarbida vanadiia/.

09 p1523 A69-21739

## CHERNIAEVA, S. A.

Study of the working capacity of a human operator during 64-hour wakefulness /Issledovanie rabotosposobnosti cheloveka- operatora pri 64-chasovom lishenii sna/.

22 p3877 A69-40280

## CHERNIAK, M. M.

Microwave absorption and scattering by precipitation /Pogloshchenie i rasseianie mikroradiovoln v osadkakh/.

06 p0954 A69-17997

## CHERNIAK, N. I.

Kinetics of the process of repeated elastoplastic deformation of a polycrystalline body /Kinetika protsessa povtornogo uprugoplasticheskogo deformirovaniia polikristallicheskogo tela/.

01 p0164 A69-10082

## CHERNIAK, V. V.

Theoretical design of horseshoe-shaped magnetic sensors located above a ferromagnetic medium /O teoreticheskomo raschete podkovooobraznykh datchikov nad ferromagnitnoi sredoi/.

12 p2094 A69-26719

## CHERNIAKOV, E. I.

Excitation of diffraction radiation in a periodic structure with losses /Vozbuzhdenie difraktsionnogo izlucheniia v periodicheskoi strukture s poteriami/.

23 p4124 A69-42031

## CHERNIAKOV, I. N.

Evaporation under low atmospheric pressure conditions.

10 p1647 A69-23591

## CHERNIAKOV, P. S.

Weak free convection in vessels in a gravitational field.

04 p0685 A69-14619

Investigation of free convection in closed axisymmetric volumes /Issledovanie svobodnoi konveksii v zamknutykh osesimmetrichnykh ob'emakh/.

21 p3848 A69-38634

## CHERNIAVSKII, A. F.

Methods of separating weak periodic signals from noise /Review/ /Metody vydeleniia iz shumov slabykh periodicheskikh signalov /obzor/.

04 p0597 A69-14848

Methods of separating weak periodic signals from noise /Review/.

15 p2607 A69-30241

**CHERNIAVSKII, E. V.**

- Invariance of precessional motions in power gyro-stabilizers /Ob invariantnosti pretseSIONnykh dvizhenii v silovykh girostabilizatorakh/.  
04 p0597 A69-14602
- Synthesis of the kinematic structure of a power gyro-stabilizer /O sinteze kinematicheskoi struktury silovogo girostabilizatora/.  
14 p2446 A69-28924

**CHERNIAVSKII, F. N.**

- Damage in polymers under critical loads during the action of laser radiation /Razrushenie v polimerakh pri predel'nykh nagruzkakh pod vozdewstviem lazernogo izlucheniia/.  
08 p1328 A69-21190
- Laser radiation-induced breakdown processes in polymers at the load limit.  
18 p3152 A69-35159

**CHERNIAVSKII, M. M.**

- Concerning the role of isobar production processes in nuclear interactions of approximately 20 Gev protons.  
13 p2303 A69-28373

**CHERNIAVSKII, O. F.**

- Calculation of a conical shell on a digital computer /Raschet konicheskoi obolochki na ETsVM/.  
11 p1981 A69-24943

**CHERNIGOVSKII, V. N.**

- Participation of the ventral posterolateral thalamus nucleus of cats in the transmission of afferent visceral signals /Uchastie ventral'nogo zadne-lateral'nogo iadra talamusa koshki v peredache afferentnykh vistseral'nykh signalov/.  
12 p2020 A69-26562

**CHERNIKOV, A. A.**

- Radar equation for precipitations and radar calibration in the measurement of multiple-target reflectivity /Upravlenie radiolokatsii osadkov i kalibrovka radiolokatora pri izmerenii otrazhaemosti mnozhestvennoi tseli/.  
16 p2806 A69-32264
- Scattering of radio waves in clouds and the radar equation of clouds /Rasseianie radiovoln v oblakakh i uravnenie radiolokatsii oblakov/.  
16 p2807 A69-32267
- Investigation of the polarization characteristics of angel echo signals /Issledovanie polarizatsionnykh kharakteristik ekho-signalov ot "iasnogo" neba/.  
16 p2779 A69-32274
- Investigation of the backscattering patterns of angel sources /Issledovanie diagramm obratnogo rasseianiia istochnikov otrazhenii ot "iasnogo" neba/.  
16 p2779 A69-32275
- Measurement of the rate of motion of angel sources /Izmereniia skorosti dvizheniia istochnikov otrazheniia ot "iasnogo" neba/.  
16 p2779 A69-32276
- Improvement of the accuracy of radar precipitation measurements /O povyshenii tochnosti radiolokatsionno izmereniia osadkov/.  
23 p4185 A69-42494

**CHERNIKOV, I. A.**

- Evolution of limited planetocentric orbits of small bodies under the influence of direct light pressure /Evolutsiia ogranichenennykh planetotsentricheskikh orbit mal'kikh tel pod vliianiem priamogo svetovogo davlения/.  
05 p0823 A69-16043
- Period-eccentricity correlation for balloon satellites /O korreliatsii "period- eksentrisitet" dlia sputnikov-ballonov/.  
19 p3427 A69-36628
- Evolution of bounded planetocentric orbits of small bodies under the influence of direct radiation pressure.  
20 p3606 A69-37952

**CHERNIKOV, S. A.**

- Damping of natural oscillations by dry friction forces in a single-axis gyro-stabilizer with free play /Dempirovanie avtokolebani silami sukhogo treniia v odnoosnom girostabilizatore s liuftom/.  
23 p4163 A69-41554

**CHERNIKOV, V. A.**

- Lowering of the optical breakdown threshold in a laser focus by superimposing a microwave field.  
03 p0441 A69-13997

**CHERNIN, A. D.**

- Radiation and matter in an open cosmological model.  
01 p0150 A69-10371
- Hypothesis of "photon whirls" and the formation of protogalaxies. II /Gipoteza fotonykh vikrei i formirovanie protogalaktik. II/.  
09 p1587 A69-21355

Characteristic cosmological length.

- The "photon eddy" hypothesis and the formation of protogalaxies. II.  
09 p1608 A69-22528  
18 p3197 A69-34745

**CHERNIN, V. M.**

- Computation of the temperature field of a thin-walled turbine blade with deflector cooling /K raschetu temperaturnogo polia tonkostennoi lopatki turbiny s deflektornym okhlazhdeniem/.  
21 p3786 A69-39718

**CHERNINA, V. S.**

- Statics of Thin-walled Shells of Revolution /Statika Tonkostennykh Obolochek Vrashcheniia/.  
10 p1800 A69-23197
- A modification of the Bubnov-Galerkin-Ritz method related to the mixed variational principle in elasticity theory /Vidoizmenenie metoda Bubnova-Galerkina-Rittsa, sviazannoe so smeshannym variatsionnym print-sipom v teorii uprugosti/.  
18 p3215 A69-34566

**CHERNOBAL, V. A.**

- Hydraulic resistance of uniformly and nonuniformly heated ducts.  
20 p3513 A69-37086

**CHERNOBROVKIN, G. A.**

- Investigation of certain properties of an annular gas laser by electronic simulation /Issledovanie nekotorykh svoistv kol'tsevo go gazovogo lazera pri pomoschi elektronno go modelirovaniia/.  
05 p0770 A69-15645
- A study of some properties of an annular gas laser by means of analog simulation.  
16 p2798 A69-32502

**CHERNOBROVKINA, N. A.**

- Dynamics of the diffused reflection process according to observations at the Irkutsk station /Dinamika protsessa rasseianiannykh otrazhenii po nabludeniiam na stantsii Irkutsk/.  
20 p3529 A69-37687

**CHERNOF, J.**

- Application of satellite navigation techniques to marine and air navigation.  
08 p1349 A69-21198
- Utilization of satellite navigation techniques in marine operations. [AIAA PAPER 68-471]  
13 p2295 A69-27247

**CHERNOLUTSKAIA, E. S.**

- Noise stability of the reception of a binary frequency-modulated signal with the aid of an ordinary frequency detector /K voprosu o pomekhoustoichivosti priema dvoichnogo chastotno-modulirovannogo signala s pomoshch'iu obychnogo chastotnogo detektora/.  
15 p2564 A69-30145

**CHERNOSKY, E. J.**

- Long and short period changes in magnetic activity at Huncayo during the solar cycle.  
23 p4162 A69-42442

**CHERNOUSKO, F. L.**

- Equilibrium problem for a fluid subjected to the action of gravitational forces and surface tension /Zadacha o ravnovesii zhidkosti, podverzhennoi deistviu sil tiazhesti i poverkhnostnogo natiazheniia/.  
03 p0417 A69-13810
- The solution of variational and boundary value problems by the method of local variations.  
04 p0622 A69-14616

- Solution of nonlinear problems of heat conduction in a medium with phase transitions /O reshenii nelineinykh zadach teploprovodnosti v srede s fazovymi perekhodami/.  
19 p3453 A69-36838

- Local-variation method for variational problems with nonadditive functionals /Metod lokal'nykh variatsii dlia variatsionnykh zadach s neadditivnymi funktsionalami/.  
20 p3513 A69-36990

- Motion of a Solid Body with Cavities Containing a Viscous Liquid /Dvizhenie tverdogo tela s polostiami, soderzhashchimi viazkuiu zhidkost'/.  
20 p3578 A69-38200

**CHERNOV, I. A.**

- Some theorems on the equivalent hop in ionospheric radio propagation.  
04 p0560 A69-15402

- Certain errors in the Appleton-Baynon equation for the skip distance /O nekotorykh pogreshnostiakh v uravnenii Eppl'tona-Beinona dlia rasstoianiia skachka/.  
13 p2218 A69-27214

**CHERNOV, N. L.**

- Elastoplastic strains in thin-walled beams under mobile loads /Uprugo-plasticheskie deformatsii tonkostennykh sterzhnei pri podvizhnykh nagruzkakh/.  
05 p0841 A69-16205

**CHERNOV, V. G.**

- Investigation of subthreshold phenomena in excited elements on an analog model /Issledovanie podporogovykh iavlenii v vozbudimyykh elementakh na analogovoi modeli/.  
23 p4109 A69-41980

**CHERNOV, V. S.**

- Realization of astaticism in linear automatic control systems with respect to harmonic effects /O realizatsii astatizma lineinykh SAU po otnosheniiu k garmonicheskim vozdewstviyam/.  
12 p2045 A69-25967
- Optical resonators with mirrors of arbitrary form /Opticheskie rezonatory s zerkalami proizvol'noi formy/.  
19 p3333 A69-35880
- Emission kinetics of a Q-switched optical resonator. II - Case of a passive Q-switch /Kinetyka izlucheniia opticheskogo rezonatora s moduliruemoi dobrotnost'iu. II - Sluchai passivnogo modulirovaniia/.  
21 p3740 A69-39550

**CHERNOVA, A. G.**

- New heat-resistant materials - Polyimides and polybenzimidazoles.  
19 p3358 A69-35901

**CHERNOVSKO, F. L.**

- Optimization of the observation process /Ob optimizatsii protsessa nabludeniiia/.  
12 p2027 A69-25882

**CHERNUKHINA, G. M.**

- Thermionic converter electrical characteristics with matrix circuit connections.  
14 p2400 A69-29225

**CHERNYI, G. G.**

- One-dimensional unsteady flows of a combustible gas mixture, taking into account the finite rates of chemical reactions /Odnomernye nestatsionarnye techeniia goruchei smesi gazov s ucheto m konechnoi skorosti khimicheskikh reaktsii/.  
06 p0909 A69-17325
- Supersonic flow past bodies with formation of detonation and combustion fronts.  
19 p3241 A69-36780
- Onset of oscillations accompanying the attenuation of detonation waves /Vozniknovenie kolebani pri oslablenii voln detonatsii/.  
22 p3929 A69-40112

**CHERNYI, V. G.**

- Effect of Nuclear Radiations on the Structure and Properties of Metals and Alloys /Vozdeistvie iadernykh izlucheniia na strukturu i svoistva metallov i splavov/.  
12 p2114 A69-26469

**CHERNYI, Z. D.**

- Study of electromagnetic methods for vibrational treatment of metals during the crystallization process /Issledovanie elektromagnitnykh metodov vibratsionnoi obrabotki metallov v protsessе kristallizatsii/.  
14 p2456 A69-29916

**CHERNYKH, D. F.**

- Transmission of holographs by a standard phototelegraphic channel with a limited number of halftones /Peredacha gologramm po standartnomu fototelegrafnomu kanalu s ogranichenным chislom polutonov/.  
11 p1889 A69-25549

**CHERNYKH, E. V.**

- Some results of an investigation of a single-component version of a liquid-metal MHD energy converter /Nekotorye rezul'taty izucheniia odnokomponentnoi skhemy zhidkometallicheskogo MGD-preobrazovaniia energii/.  
13 p2205 A69-27488

**CHERNYKH, K. F.**

- Separation of boundary conditions in linear shell theory.  
19 p3443 A69-36781

**CHERNYKH, L. I.**

- Observation of minor planets at the Crimean Astrophysical Observatory. II. /Nabludeniiia mal'kikh planet v Krymskoi astrofizicheskoi observatorii. II/.  
20 p3570 A69-37313

**CHERNYKH, N. S.**

- "Synchronous" formations in the tail of comet Ikeya-Seki /Sinkhronnye obrazovaniia v khvoste komety Ikeya-Seki/.  
04 p0652 A69-14378



# CHERNYKH, V. T.

Investigation of the tail of the comet Ikeya Seki /Issledovanie khvosta komety Ikeya-Seki/.  
14 p2524 A69-29708

## CHERNYKH, V. T.

Application of a Mach-Zehnder interferometer for obtaining holograms of transparent objects /O primeneni interferometra Tsendera- Makha dlia polucheniia gologramm prozrachnykh ob'ektov/.  
12 p2091 A69-26369

## CHERNYSHENKO, A. A.

Application of a digital computer to a study of the stressed state of asymmetrically loaded shells /Primenenie ETsVM dlia issledovaniia napriazhennogo sostoiianiia asimmetrichno nagruzhennykh obolochek/.  
06 p1026 A69-18016

## CHERNYSHENKO, I. S.

Elastic-plastic axisymmetric state of shells of revolution with variable thickness /Uprugo-plastichesko osemimetricnoe sostoiianie obolochek vrashcheniia peremennoi tolshchiny/.  
14 p2533 A69-28982

## CHERNYSHEV, G. N.

Representation of Green's function type solutions of shell equations by a small-parameter technique /Predstavlenie reshenii tipa grina uravnenii obolochek metodom malogo parametra/.  
09 p1614 A69-21886

## CHERNYSHEV, L. I.

Sintering of mixtures of powders of nickel and molybdenum.  
15 p2638 A69-30280

## CHERNYSHEV, M. K.

The modelling of irrational transfer functions.  
09 p1476 A69-22677

## CHERNYSHEV, O. V.

Analytic description of the planetary distribution of ionospheric parameters.  
06 p0921 A69-17745

Selection of the optimum length of a series approximating diurnal f sub 0 F sub 2 variations on a planetary scale.  
06 p0921 A69-17746

Analytical description of the space-time variations of f sub 0 F2 /Analiticheskoe opisaniie prostranstvenno-vremennykh variatsii f sub 0 F2/.  
09 p1486 A69-21545

Curves of the distribution of f sub 0 E sub s /O kriykh raspredeleniia f sub 0 E sub s/.  
09 p1486 A69-21547

Application of mathematical methods in predicting f sub 0 F2 /Primenenie matematicheskikh metodov dlia prognozirovaniia f sub 0 F2/.  
10 p1687 A69-23927

Analytical description of the space-time variations of f sub 0 F sub 2.  
16 p2783 A69-32540

F sub 0 E sub S distribution curves.  
16 p2784 A69-32542

## CHERNYSHEV, S. M.

Investigation of throttling effects on the efficiency of a Rankine cycle with an MHD generator.  
11 p1824 A69-24222

## CHERNYSHEV, V. B.

Circadian rhythm as response to the compulsory constant conditions.  
15 p2557 A69-31469

## CHERNYSHEV, V. I.

Design and optimization of the static characteristics for one type of pneumatic element.  
14 p2393 A69-28746

## CHERNYSHEVA, S. P.

Computation of electron concentration profiles as a method of obtaining information on E sub s.  
03 p0423 A69-13536

Possible application of correlation methods to E sub s analysis.  
03 p0423 A69-13537

Influence of radio wave absorption in the ionosphere on the variation of sporadic E-layer parameters.  
03 p0423 A69-13539

Possible interpretation of middle-latitude types of E.  
06 p0922 A69-17750

A possible method of calculating radio-wave absorption in the lower ionosphere /Vozmozhnyi metod rascheta pogloscheniia radiovoln v nizhnii ionosfere/.  
14 p2411 A69-29075

## CHERNYSHOVA, T. A.

Problems of the theory and technology of welding of heat-resistant alloys based on niobium and nickel

/Voprosy teorii i tekhnologii svarki zharoprochnykh spлавov na osnove niobiia i nikelia/.  
09 p1504 A69-22146

## CHERPAK, N. T.

Problem of the saturation of a quantum paramagnetic amplifier /KPU/ in the pulsed mode of operation /K voprosu o насыщении KPU v impul'snom rezhime/.  
08 p1325 A69-20436

A possible method of protecting quantum paramagnetic amplifiers from saturation /O vozmozhnom metode zashchity KPU ot насыщения/.  
15 p2579 A69-30956

## CHERRINGTON, B. E.

Dynamics of optical mixing in a He-Ne laser.  
05 p0776 A69-16331

Dispersion-corrected three-wavelength laser heterodyne measurement of plasma densities.  
09 p1544 A69-21331

A thermally pumped CO sub 2 laser.  
18 p3151 A69-34264

Measurement of dispersion at 6328 and 6401 angstrom units due to the neon 1 sub 5 metastable atoms in a He-Ne discharge.  
23 p4172 A69-41397

## CHERRY, B. W.

Yield of adhesive joints.  
16 p2794 A69-32573

## CHERRY, J. A.

Laminated adhesive bonded structures.  
09 p1526 A69-22318

## CHERRY, S. S.

Selection of recombination rate constants for H-F-O reactions.  
04 p0646 A69-14743

Identification of important chemical reactions in liquid propellant rocket engines. [WSC] PAPER 68-7].  
11 p1942 A69-24906

## CHERTKOV, I. A. B.

Effect of sulfides contained in fuels on their operational properties /Vliianie sul'fidov, soderzhashchikh-sia v toplivakh, na ikh ekspluatatsionnye svoistva/.  
07 p1202 A69-19456

Polyfunctional additives to jet fuels /Polifunktsional'nye prisadki k reaktivnym toplivam/.  
16 p2828 A69-31562

## CHERTKOV, N. K.

Determination of the differential equation of a plant from its time characteristic /Opredelenie differentsial'nogo uravneniia ob'ekta po ego vremennoi kharakteristike/.  
01 p0053 A69-10804

## CHERTOK, I. M.

Longitude dependence of the degree of polarization of type III solar radio bursts.  
04 p0649 A69-15242

Elliptical polarization of type-III solar radio bursts in the decameter range.  
11 p1945 A69-24244

Possibility of estimating the magnetic field strength in the solar corona on the basis of the time profile of type III radio bursts /O vozmozhnosti otsenok napriazhenosti magnitnogo polia v solnechnoi korone po vremennomu profiliiu radiovyslekov III tipa/.  
15 p2675 A69-30554

## CHERTOPRUD, V. E.

Analysis of the nature of a quasar nucleus from statistical properties of its optical variability.  
04 p0662 A69-15235

Analysis of rapid density variations in the upper atmosphere /K analizu bystrykh izmenenii v plotnosti verkhnei atmosfery/.  
12 p2069 A69-26436

The effect of variable solar activity on the rotation of the earth's upper atmosphere /O vozdeistvii peremennoi solnechnoi aktivnosti na vrashchenie verkhnei atmosfery zemli/.  
12 p2069 A69-26442

## CHERTOVSKIKH, E. A.

Changes in functions of the nervous system and of some analyzers during the combined action of hypokinesia and radial accelerations.  
02 p0197 A69-11496

## CHERVIKOVA, T. S.

A miniature telemetric device for transmitting electromyograms.  
08 p1265 A69-19836

## CHERVINSKY, A.

A study of axisymmetrical turbulent jet diffusion flames.  
13 p2379 A69-28455

Transient burning of spherical symmetric fuel droplets.  
14 p2537 A69-29016

Supercritical burning of liquid droplets in stagnant environment.  
24 p4415 A69-43600

## CHERVOV, V. G.

Model of subthreshold phenomena in excited elements /Model' podporogovykh iavlenii v vozбудimyykh elementakh/.  
23 p4110 A69-41981

## CHESHANKOV, B.

Determination of the critical buckling load /V'rkhu opredelianeto na kritichnata sila pri iz'ichvane/.  
05 p0832 A69-15681

## CHESKIS, H. P.

In situ measurements of deformation behavior of individual phases in composites by X-ray diffraction.  
06 p0939 A69-16944

## CHESLAK, F. R.

Cavities formed on liquid surfaces by impinging gaseous jets.  
11 p1869 A69-24888

## CHESNE, H.

The corneal arc, a warning sign of atheromatosis in flight crews /L'arc corneen signe evocateur d'atheromatose chez les membres du personnel navigant/.  
05 p0711 A69-16631

## CHESNOKOVA, V. D.

Polarization diversity of signals scattered in the ionosphere /O polarizatsionnom raznesenii rasseiannykh v ionosfere signalov/.  
03 p0394 A69-13378

Correlation of signals subject to angle scatter in the ionosphere.  
03 p0399 A69-14129

Polarization diversity of signals scattered in the ionosphere.  
14 p2410 A69-28829

## CHESNUTT, J. C.

Phase identification in modified Cb 132 alloys.  
13 p2282 A69-28162

## CHESSIN, N.

"B" staged epoxy-S glass prepregs.  
09 p1530 A69-22327

## CHESTER, A. N.

Diode array camera tubes and X-ray imaging.  
09 p1463 A69-21845

## CHESTER, W.

On the flow past a sphere at low Reynolds number.  
21 p3694 A69-38771

## CHESTNAIA, I. I.

Calculation of the high wind velocity profile in the lowest 100-m layer of the atmosphere according to ground data /Raschet profilia bol'shikh skorostei vetra v nizhnem 100- metrovom sloe atmosfery po nazemnym dannym/.  
20 p3571 A69-37695

Processing basic pilot balloon observations on the Ural-4 computer /Obrabotka bazisnykh sharopilotnykh nabludenii na evm "Ural-4"/.  
20 p3572 A69-37700

## CHESTNUTT, D.

Jet engine inlet noise control.  
05 p0811 A69-15622

## CHESTON, T. C.

Phased arrays for radars.  
01 p0049 A69-11390

## CHETVERIKOV, I. A.

Light and heat of a planet - Satellite actinometry. [UN PAPER 68-95763]  
06 p0916 A69-17038

Analysis of measurements by wide-sector instruments of the Cosmos 122 satellite /Analiz izmerenii shirokosekturnykh priborov sputnika "Kosmos-122"/.  
11 p1912 A69-24830

Processing actinometric measurements of the Cosmos 122 satellite /Obrabotka aktinometricheskikh izmerenii sputnika "Kosmos-122"/.  
11 p1913 A69-24831

## CHETYRKIN, N. V.

Results of a determination of the dynamics of the Venusian atmosphere from measurements of the radial velocity of the Venera 4 automatic interplanetary station /Rezul'taty opredeleniia dinamiki atmosfery Venery po dannym izmerenii radial'noi skorosti AMS "Venera-4"/.  
22 p4034 A69-41099

## CHEUNG, A. C.

Detection of NH sub 3 molecules in the interstellar medium by their microwave emission.  
03 p0518 A69-14258

- Detection of water in interstellar regions by its microwave radiation.  
08 p1383 A69-19896
- Spectra, variability, size, and polarization of H sub 2 O microwave emission sources in the Galaxy.  
09 p1587 A69-21307
- Further microwave emission lines and clouds of ammonia in our galaxy.  
09 p1597 A69-22150
- Distribution of ammonia density, velocity, and rotational excitation in the region of Sagittarius B2.  
21 p3799 A69-38647
- A pumping mechanism for anomalous microwave absorption in formaldehyde in interstellar space.  
22 p4029 A69-40768
- CHEUNG, H.**  
Dissociating gas as a working fluid for space plant.  
04 p0551 A69-15313
- CHEVALERAUD, J.**  
Results of questionnaire given to flight personnel concerning the lighting of instrument panels / Résultats d'une enquête auprès du personnel navigant concernant l'éclairage des tableaux de bord/.  
05 p0715 A69-16622
- Efficiency of visual functions as a function of the color of the instrument panel lighting / L'efficacité des fonctions visuelles en fonction de la couleur de l'éclairage des instruments de bord/.  
05 p0715 A69-16623
- The corneal arc, a warning sign of atheromatosis in flight crews / L'arc corneen signe évocateur d'athéromatose chez les membres du personnel navigant/.  
05 p0711 A69-16631
- Influence of illumination on the reading of navigation charts / Influence de l'éclairage sur la lecture des cartes de navigation/.  
24 p4271 A69-42605
- CHEVALIER, R.**  
Launcher development within a European space programme.  
03 p0520 A69-13593
- CHEVALLIER, J.**  
Photovoltaic effects in graded-band-gap structures.  
19 p3381 A69-35680
- CHEVELA, O. B.**  
Formation of plasma coatings on the surface of steels and titanium alloys / O formirovanii plazmennyykh pokrytii na poverkhnosti stali i titanovykh spavov/.  
07 p1165 A69-18931
- Formation of plasma coatings on steel and titanium-alloy surfaces.  
21 p3746 A69-39152
- CHEVRAY, R.**  
Temperature compensated linearizer for hot-wire anemometer.  
06 p0927 A69-17701
- Turbulence measurements in the wake of a thin flat plate.  
24 p4249 A69-43694
- CHEYNEY, H.**  
Comments on the paper by D. G. Rea and B. T. O'Leary, "On the composition of the Venus clouds."  
01 p0157 A69-11292
- Theoretical spectral scattering of ice clouds in the near infrared.  
18 p3126 A69-34283
- CHI, J. W. H.**  
An analytical model for the viscous region in wall turbulence.  
[AIAA PAPER 69-163] 06 p0914 A69-18139
- CHIABRISHVILI, N. G.**  
Photoluminescence method of measuring the distribution of equilibrium carrier concentration in GaAs / Fotoluminescentnyi metod izmereniia raspredeleniia konsentratsii ravnovesnykh nositelei toka v GaAs/.  
03 p0489 A69-13893
- Photoluminescence method of measuring the equilibrium carrier distribution in GaAs.  
11 p1939 A69-25694
- CHIADO PIAT, M. G.**  
Studies on the behaviour of gas molecules scattered by a solid surface - Analyses for monoenergetic and Maxwellian beams.  
19 p3377 A69-36181
- CHIANG, C.**  
Moire patterns from the surface and their application in measuring topography.  
08 p1312 A69-20103
- CHIANG, C.-H.**  
Axially symmetric supersonic turbulent jets discharged from a nozzle with underexpansion.  
07 p1049 A69-18397
- CHIANG, F.-P.**  
Moire-fringe interpolation and multiplication by fringe shifting.  
03 p0524 A69-13063
- CHIANG, IU. N.**  
Electric resistance of thin single-crystal aluminum plates.  
10 p1711 A69-23620
- CHIANG, T.**  
Dynamic behavior of the spherical squeeze-film hybrid bearing.  
[ASME PAPER 68-LUBS-37] 13 p2267 A69-27281
- Analysis of pulsating flows in infinite and finite conical nozzles.  
[ASME PAPER 69-APM-16] 18 p3214 A69-34392
- CHIANTA, M. A.**  
Thermal protection principles.  
[AGARDOGRAPH-111] 08 p1266 A69-20674
- CHIARAPPA, D. J.**  
OV1 spacecraft gravity gradient systems / Vertstat/.  
07 p1227 A69-18330
- CHIARODO, R. A.**  
A fluxgate sensor of high stability for low field magnetometry.  
[IEEE PAPER 10.2] 01 p0081 A69-10715
- CHIBA, K.**  
Ceramic rod array scanned with ferrite phase shifters.  
04 p0572 A69-14327
- CHIBA, T.**  
Ceramic rod array scanned with ferrite phase shifters.  
04 p0572 A69-14327
- CHIBISOV, A. M.**  
An approximation of the equations for two-dimensional motion of a gas at high supersonic velocities.  
07 p1120 A69-18754
- CHIBISOV, G. V.**  
Angular variations in the background radiation caused by macroscopic motions of the metagalactic medium.  
18 p3188 A69-35208
- CHICCO, M.**  
Semiconductivity of the subdomains of elliptic equations of variational type / Semiconducibilità delle sottosoluzioni di equazioni ellittiche di tipo variazionale/.  
02 p0270 A69-11548
- CHICHESTER-MILES, I.**  
Hawker Siddeley inter-city V/STOL.  
13 p2203 A69-28354
- CHICHESTER, C. O.**  
The effects of high intensity visible and ultraviolet light on the death of microorganisms.  
20 p3475 A69-37613
- CHICK, B. B.**  
Ultrasonic Methods in Solid State Physics.  
12 p2145 A69-26870
- A modified ultrasonic pulse-echo-overlap method for determining sound velocities and attenuation of solids.  
14 p2450 A69-29567
- CHICKLIS, E.**  
Ground-state modulation using optical double resonance in trivalent rare-earth-doped single crystals.  
01 p0134 A69-10013
- CHIECO, G. A.**  
The use of amplifiers with microwave amplifiers in high power radar systems with frequency agility.  
23 p4135 A69-41384
- CHIEN, K.-Y.**  
Angular-moment-averaged absorption coefficients in nongrey radiation.  
04 p0686 A69-14744
- CHIEN, R. T.**  
Annual Allerton Conference on Circuit and System Theory, 6th, University of Illinois, Monticello, Ill., October 2-4, 1968, Proceedings.  
06 p0901 A69-17394
- Coding for error control.  
09 p1461 A69-21893
- Recent developments in algebraic decoding.  
23 p4119 A69-41746
- CHIESI, F.**  
Considerations on the cooling of the liquid propellant rocket engines.  
08 p1376 A69-20588
- Measurement of the thrust of rocket engines by means of quartz transducers / Misura della spinta dei motori a razzo con trasduttori a quarzo/.  
08 p1301 A69-20589
- A method of calculation of the hybrid rocket engines.  
08 p1376 A69-20590
- CHIGIER, N. A.**  
Impinging jet flames.  
06 p1035 A69-17933
- CHIGLIAZZA, R.**  
Design and dynamic characteristics investigation of a high performances spherical bearing.  
16 p2793 A69-31728
- CHIK, K.-P.**  
Vacancy diffusion in germanium.  
02 p0295 A69-11780
- CHIKHACHEV, A. S.**  
Nonlinear interaction between intense plasma waves / O nelineinoi vzaimodeistvii intensivnykh plazmennyykh voln/.  
08 p1362 A69-20427
- Induced Compton effect for plasma and electromagnetic waves under astrophysical conditions / Indutsirovannyi Kompton-effekt na plazmennyykh i elektromagnitnykh volnakh v astrofizicheskikh usloviakh/.  
20 p3607 A69-38035
- CHIKHLADZE, O. A.**  
Holography on crystals / Golografiia na kristallakh/.  
04 p0598 A69-14855
- Crystal holography.  
15 p2608 A69-30247
- CHIKMACHEV, V. I.**  
Cartographic tying-in of photographs of the Zond-3 automatic interstellar station by the method of rectifying according to the points of orientation / Kartograficheskaia priviazka snimkov AMS "Zond 3" sposobom rektifirovaniia po orientiruushchim tochkam/.  
20 p3608 A69-38051
- CHILD, R. F.**  
An experimental investigation of an oscillating two-dimensional airfoil in reverse flow.  
18 p3087 A69-35219
- CHILDERS, M. G.**  
Test evaluation of a 2500 deg F structural component.  
12 p2103 A69-26837
- CHILDRESS, S.**  
A class of solutions of the magnetohydrodynamic dynamo problem.  
22 p3989 A69-40196
- CHILDS, B.**  
A note on Love's stress function.  
13 p2364 A69-28233
- CHILDS, D.**  
Modal simulation of unidirectional fluid dynamics /water hammer/.  
05 p0751 A69-16475
- Simulation models for flexible spinning bodies.  
19 p3280 A69-35990
- CHILDS, G. E.**  
Low temperature electrical resistivity of some engineering alloys.  
[NAS-NRC PAPER D-5] 22 p3970 A69-40633
- CHILDS, M. E.**  
An experimental study of the interaction of a conical shock wave and a turbulent boundary layer including suction effects.  
[AIAA PAPER 69-450] 16 p2773 A69-32754
- CHILIKIN, V. M.**  
Application of frequency methods to an analysis of linear homing systems / Primenenie chastotnykh metodov k analizu lineinykh sistem samonavedeniia/.  
01 p0113 A69-10805
- CHILINGARIAN, IU. S.**  
Laser with a nonreciprocal element.  
03 p0435 A69-12983
- Self-focusing of inhomogeneous laser beams and its influence on the development of stimulated scattering effects / Samofokusirovka neodnorodnykh lazernyykh puchkov i ee vliianie na razvitiie effektov vynuzhdennogo rassaiianiia/.  
08 p1326 A69-20538
- CHILTON, A. C.**  
The effects of strain rate and pressurization on the ductile-brittle transition temperature of polycrystalline sintered tungsten.  
12 p2117 A69-27138



- The effects of temperature and pressurization on the tensile and compressive properties of polycrystalline cast tungsten. 18 p3154 A69-34273
- CHILVERS, P. W. C.**  
Generalised efficiency curve for step-recovery-diode frequency multipliers. 02 p0215 A69-11947
- CHIMONAS, G.**  
Wind-driven instability in the lower E region. 20 p3534 A69-38091  
Ion separation in temperate zone sporadic E and the layer shape. 20 p3535 A69-38106
- CHIN, B.**  
Results of the UHF telemetry system R and D flight tests at White Sands Missile Range. 07 p1082 A69-19116
- CHIN, H.**  
Prediction of elastic-plastic wave profiles in aluminum 1060-0 under uniaxial strain loading. 02 p0344 A69-12289
- CHIN, J. H.**  
Radiation transport for stagnation flows including effects of lines and ablation layer. [AIAA PAPER 68-664] 23 p4059 A69-41890
- CHIN, P. N.**  
Ionospheric electron content and scintillation studies at widely-spaced low-latitude stations. 02 p0235 A69-11427
- CHINAIEV, P. I.**  
Self-Adaptive Systems - Handbook /Samonas-traivaiushchiesia Sistemy - Spravochnik/. 21 p3687 A69-39532
- CHINAL, J.**  
Special arithmetical techniques and onboard computers /Techniques arithmetiques speciales et calculateurs embarques/. 20 p3499 A69-37378
- CHINCARINI, G.**  
Observations of Comet Honda 1968c. 20 p3614 A69-38252
- CHINENOV, A. M.**  
Heat treatment of beta-titanium alloys /Termicheskaia obrabotka beta-titanovykh splavov/. 01 p0093 A69-10213  
Heat treatment of beta-titanium alloys. 15 p2637 A69-30269
- CHING, A.**  
Strength and stress-strain properties of rapidly heated laminated ablative materials. 02 p0347 A69-12512
- CHING, B. K.**  
Upper atmospheric response to transient heating. 11 p1878 A69-25151  
Atmospheric density above 158 kilometers inferred from magnetron and drag data from the satellite OV-1-15 /1968-059A/. 24 p4310 A69-43179
- CHING, J. K. S.**  
The response of the planetary boundary layer to time varying pressure gradient force. 03 p0460 A69-13337
- CHINITZ, W.**  
Rotary engines. 07 p1203 A69-18910  
Combustion of solid fuels in a high-temperature supersonic airstream. 24 p4414 A69-43569
- CHINNOCK, E. L.**  
Scattering from dielectric mirrors. 13 p2298 A69-27663
- CHINNOV, V. F.**  
Diagnoses of a low-current arc discharge plasma by means of a light probe /Diagnostika plazmy slabotochnogo dugovogo razriada pri pomoshchi svetovogo zonda/. 09 p1546 A69-21586  
Electrophysical and radiative properties of a nonequilibrium argon-potassium plasma as a possible working fluid for an MHD generator /Elektrofizicheskie i radiatsionnye svoystva neravnovesnoi argon-kalievoy plazmy-vozmozhnogo rabocheho tela MGD-generatora/. 10 p1732 A69-23441
- CHIOLA, J. P.**  
Influence of SO sub 3 super 2 super minus ions on pitting corrosion of stainless steels in sodium chloride solution /Influence des ions SO sub 3 super 2 super

minus sur la corrosion par piqures des aciers inoxydables en solution de chlorure de sodium/. 07 p1167 A69-19343

**CHIPLONKAR, M. W.**

Some comments on the accuracy of the estimated temperature distribution in the upper atmosphere from the intensity measurements of zenith sky during twilight. 09 p1487 A69-21653

A routine ionospheric study by means of an atmospheric wave form recorder. 14 p2440 A69-29351

**CHIPLONKAR, V. T.**

Radial particle distribution profile in a low temperature gas discharge plasma. 11 p1925 A69-24330

**CHIQUET, P.**

Guiana space center /Le centre spatial guyanais/. 02 p0228 A69-11920

The space center in Toulouse /Le centre spatial de Toulouse/. 16 p2765 A69-31758

**CHIRIAEV, A. G.**

Determination of the parameters of electron fluxes from ionospheric data /K opredeleniiu parametrov elektronnykh potokov s pomoshch'iu ionosfernykh dannykh/. 10 p1688 A69-23931

**CHIRKIN, A. P.**

Theoretical investigation of the gas parameters of reactive burners operating with fuel gas and compressed air /Teoreticheskoe issledovanie parametrov gaza reaktivnykh gorelok, rabotaiushchikh na goruchem gaze i szhatom vozdukh/. 04 p0684 A69-14487

**CHIRKIN, A. S.**

Unsteady phenomena and space-time analogy in nonlinear optics /Nestatsionarnye iavleniia i prostranstvenno-vremennaia analogiia v nelineinoi optike/. 02 p0259 A69-12646

Aperture limitations of the effectiveness of nonlinear optical processes /Ob aperturnykh ogranicheniiakh effektivnosti nelineinykh opticheskikh protsessov/. 03 p0439 A69-13056

Nonstationary nonlinear optical effects and ultrashort light pulse formation. [IEEE PAPER H-5] 05 p0774 A69-16316

**CHIRKOV, N. P.**

Asymmetric effects in the secular variations of cosmic rays /Asimmetrichnye efekty v vekovykh variatsiakh kosmicheskikh luche/. 23 p4206 A69-41854

**CHIRKOV, S. V.**

Influence of Fluid Contamination on the Operational Reliability of Aircraft Hydraulic Systems /Vliianie zagriaznenosti zhidkosti na nadezhnost' raboty gidrosistem letatel'nykh apparatov/. 21 p3649 A69-39530

**CHIRKOVA, R. M.**

Investigation of solar activity on the basis of calcium flocculi in 1964-1965 /Issledovanie solnechnoi aktivnosti po kal'tsiyevym flokkulam v 1964-1965 gg./. 14 p2525 A69-29722

**CHISEL, D. M.**

A fluidic proportional thruster system for sounding rocket applications. [ASME PAPER 68-WA/FE-32] 05 p0763 A69-16105

New functional approaches for redundant inert gas thruster systems. [AIAA PAPER 69-843] 21 p3786 A69-39373

**CHISHOLM, S. H.**

Evidence of transit-time effects in silicon n-nu-n space-charge-limited current /S.C.L.C./ solid-state devices. 03 p0483 A69-12852

**CHISHOLM, T.**

An analysis of thermal and space-charge spreading of electron beams from guns of the Pierce type. 12 p2036 A69-25920

**CHISTIakov, D. A.**

Effect of different distributions of raindrop sizes on radar performance. 02 p0208 A69-12259

Attenuation and scattering of electromagnetic waves by rainfalls of various natures /Oslablenie i rasseyanie elektromagnitnykh voln dozhdiami razlichnoi prirody/. 08 p1275 A69-20430

**CHISTIakov, E. C.**

Apparatus for determining the amount of dissolved gases in a liquid /Pribor dlia opredeleniia kolichestva rastvorenykh gazov v zhidkosti/. 19 p3308 A69-35822

**CHISTIakov, E. S.**

Possibility of determining a dispersed phase in pipelines by ultrasonic techniques /O vozmozhnosti opredeleniia dispersnoi fazy v truboprovodakh ul'trazvukovym sposobom/. 04 p0596 A69-14488

**CHISTIakov, Iu. D.**

Investigation of the possibility of producing heteroepitaxial films in the system Ge-GaAs by condensation of germanium on GaAs from molecular beams in vacuum /Issledovanie vozmozhnosti polucheniia geteroepitaksial'nykh sloev v sisteme Ge-GaAs pri kondensatsii germaniia na GaAs iz molekuliarnykh puchkov v vakuume/. 11 p1938 A69-25033

**CHISTIakov, P. G.**

Rocket Engines /Raketnye Dvigateli/. 01 p0143 A69-11196

**CHISTIakov, V. F.**

Distribution of the intensity of the 5303-angstrom units coronal line on the solar limb /O raspredelenii intensivnosti koronal'noi linii 5303 angstrom units po limbu solntsa/. 03 p0506 A69-13084

Intensity distribution for the 5303 angstrom units coronal line along the solar limb. 14 p2515 A69-28766

**CHISTIAKOVA, V. A.**

Study of changes in the structure of WC-Co alloys during plastic deformation /Issledovanie izmenenii v strukture splavov WC-Co pri plasticheskoi deformatsii/. 18 p3158 A69-35261

**CHITECHIAN, V. I.**

Methods of determining induced magnetic fields in linear DC MHD generators /Metody opredeleniia induitsirovannykh magnitnykh polei v lineinykh MGD-generatorakh postoiannogo toka/. 10 p1636 A69-23454

**CHITNIS, E. V.**

Isotropic background cosmic X-rays and upper limits for solar X-ray flux. 06 p0992 A69-17311

X-ray flux from Centaurus X-2 in the energy range 2-20 kev. 22 p4007 A69-40773

**CHITRE, N. K. M.**

Transmission and reflection group delay of Butterworth, Chebychev, and elliptic filters. 21 p3686 A69-39139

**CHITRE, S. M.**

Relativistic astrophysics and gravitational collapse /Review/. 06 p1002 A69-17315

On convective processes in late-type stars. 06 p1003 A69-17321

Variation of electronic charge with cosmic time. 06 p1003 A69-17323

**CHIU, H. Y.**

Thermodynamic approach to the equation of state of a magnetized Fermi gas. 11 p1961 A69-25107

**CHIU, H.-Y.**

Quantum theory of an electron gas with anomalous magnetic moments in intense magnetic fields. 08 p1353 A69-19782

Nature of radio and optical emissions from pulsars. 08 p1394 A69-20624

Radio emission from magnetic neutron stars - A possible model for pulsars. 08 p1397 A69-20729

Stellar Physics. Volume 1. 12 p2152 A69-25785

New state of ferromagnetism in degenerate electron gas and magnetic fields in collapsed bodies. 21 p3798 A69-38600

**CHIU, K. D.**

Ultimate strengths of laminated composites. 20 p3627 A69-37773

**CHIU, S. C.**

Burgers' turbulence models. 24 p4302 A69-43360

- CHIU, T. L.**  
Correlation of experiments with a two-section-model theory of the saturation drain conductance of MOS transistors.  
06 p0893 A69-17155
- CHIUDERI, C.**  
New state of ferromagnetism in degenerate electron gas and magnetic fields in collapsed bodies.  
21 p3798 A69-38600  
Solution of the Dirac equation in orthogonal electric and magnetic fields.  
23 p4190 A69-41357
- CHIUDERI, F. D.**  
Correlation between flares and bursts as a function of spot type /Correlazione brillamenti-bursts in funzione del tipo di macchie/.  
16 p2850 A69-32213
- CHIVADZE, G. O.**  
Improving the antidetonation properties of benzines with the aid of synthetic zeolite /Povyshenie antidetonatsionnykh svoystv benzinov s pomoshch'yu sinteticheskogo tselolita/.  
23 p4199 A69-42479
- CHIVODA, K.**  
Experimental studies of the harmonic radiation in a microwave gas discharge at 34 GHz frequency.  
08 p1283 A69-20177
- CHIZHEVSKAIA, S. N.**  
Liquid Semiconductors.  
10 p1744 A69-23316
- CHIZHIK, A. A.**  
Effect of various factors on the value of the creep index /Vliianie razlichnykh faktorov na velichinu pokazatelya polzuchestii/.  
15 p2639 A69-30569
- CHIZHOV, A. KH.**  
Relation between the superconductivity and microhardness properties of niobium.  
05 p0810 A69-16805
- CHIZHOV, S. V.**  
Life in the spacecraft and planetary station.  
01 p0020 A69-11075  
Investigation of the oxidative-catalytic method of mineralization of wastes in a closed ecological system.  
10 p1649 A69-23579  
Bactericidal effect of silver-coated activated carbons and ion-exchange resins /O bakteritsidnom deistvii poserebrennykh aktivirovannykh ugley i ionoobmennyykh smol/.  
13 p2216 A69-28621
- CHKHAIDZE, L. V.**  
Coordination of the Voluntary Human Movements During Space Flight /Koordiniatsiia Proizvol'nykh Dvizhenii Cheloveka v Usloviakh Kosmicheskogo Poleta /2nd Edition/.  
01 p0018 A69-11180  
Modeling human movements in weightlessness and in a water environment from the viewpoint of a biomechanical approach /O modelirovani dvizhenii cheloveka v nevesomosti i v vodnoi srede s biomekhanicheskikh pozitsii/.  
17 p2915 A69-33385
- CHKHENKELI, SH. M.**  
Regularities of the altitude distribution of radon decay products in the atmosphere and the magnitude of vertical turbulent diffusion /Zakonomernosti raspredeleniia produktov raspada radona po vysoye v atmosfere i velichina vertikal'noi turbulentnoi diffuzii/.  
20 p3533 A69-38076
- CHMIELNIAK, T.**  
Unsteady random temperature and stress fields in an infinite bar /Niestacjonalne przypadkowe pole temperatury i naprezien w nieskonczonym pręcie/.  
19 p3440 A69-36685
- CHMYREV, V. M.**  
Probable mechanism of generation of geomagnetic pulsation of the PPI type /Veroiatnyi mekhanizm generatsii geomagnitnykh pul'satsii tipa PPI/.  
20 p3521 A69-37039
- CHO, A. Y.**  
Mean adsorption lifetimes and activation energies of silver and gold on clean, oxygenated, and carburized tungsten surfaces.  
23 p4198 A69-41542
- CHO, C. H.**  
Regenerative servo amplifier for electro-hydraulic actuator.  
15 p2553 A69-31294
- CHO, S. H.**  
Melting or freezing of finite slabs.  
[ASME PAPER 68-WA/HT-37]
- CHO, Y.**  
Stabilization of a composite-cavity single-frequency laser.  
05 p0848 A69-16128  
A composite-cavity tunable laser.  
23 p4174 A69-41635
- CHO, Y.-S.**  
An off-axis circle criterion for the stability of feedback systems with a monotonic nonlinearity.  
02 p0225 A69-11969  
Stability of nonlinear time-varying feedback systems.  
04 p0583 A69-15110  
Stability analysis of nonlinear and time-varying discrete systems.  
05 p0740 A69-16600
- CHOATE, J. S.**  
Analysis of products evolved from selected thermal control coating materials during ultraviolet radiation in vacuum.  
[AIAA PAPER 69-640]  
17 p2992 A69-33289
- CHOATE, R.**  
Lunar surface mechanical properties.  
02 p0321 A69-12225
- CHOBOTOV, V.**  
Possible effects of boom flutter on the attitude dynamics of the OV1-10 satellite.  
04 p0666 A69-15520
- CHOBOTOV, V. A.**  
On the mass properties in satellite attitude control.  
[SAWE PAPER 743]  
18 p3208 A69-34885
- CHODIL, G.**  
Simultaneous observations of the optical and X-ray spectra of Sco XR-1.  
07 p1220 A69-19391
- CHODURA, R.**  
Investigation of energy dissipation in collisionless shock waves.  
17 p3013 A69-33820
- CHOHAN, V. S.**  
Charge composition and energy spectra of cosmic ray nuclei with Z equals 10-28.  
06 p0988 A69-17274
- CHOJNACKI, W.**  
Polarimetric observations of magnetic stars with a two-channel polarimeter.  
13 p2347 A69-27713
- CHOLAKOVA, N.**  
Discreteness of the distances to extragalactic objects /V'rkhу diskretizatsiia na razstoianiata do izv'n-galaktichni obekti/.  
21 p3802 A69-38843
- CHOLNOKY, T.**  
Further development of Mohr's tensor representation.  
22 p4038 A69-39903
- CHON, Y. T.**  
An analysis of the effect of integral and sigma pulse frequency modulation on white noise.  
01 p0034 A69-11221
- CHONG, N. V.**  
Coupled waves in ionic semiconductors in the presence of external electric and magnetic fields.  
06 p0978 A69-16897
- CHONI, IU. I.**  
Synthesis of an antenna system on the basis of a given radiation-pattern amplitude /K sintezu antennoi sistemy po zadannoi amplitudnoi diagramme napravlenosti/.  
13 p2235 A69-28521
- CHOO, S. C.**  
Carrier generation-recombination in the space-charge region of an asymmetrical p-n junction.  
03 p0487 A69-13641
- CHOO, Y.**  
Displacement effects on the laminar mixing of two parallel streams.  
05 p0744 A69-15714
- CHOPRA, K. L.**  
Thin Film Phenomena.  
18 p3182 A69-34929
- CHOQUET-BRUHAT, Y.**  
Asymptotic waves for a system of partial differential equations with multiple characteristics /Ondes asymptotiques pour un systeme d'equations aux derivees partielles a caracteristiques multiples/.  
02 p0271 A69-12034
- CHORIN, A. J.**  
Numerical solution of the Navier-Stokes equations.  
03 p0415 A69-13369  
On the convergence of discrete approximations to the Navier-Stokes equations.  
18 p3121 A69-34613
- CHORMONOV, M. B.**  
Influence of the decompaction of a material on the stress distribution /O vlianii razrykhleniia materiala na raspredeleniie napriazhenii/.  
11 p1972 A69-24656
- CHOU, C. K.**  
Gravitational instability with Hall effect in a plasma.  
03 p0478 A69-13803  
The Hall effect and Kelvin-Helmholtz instability in a plasma.  
03 p0478 A69-13804
- CHOU, P. C.**  
The importance of signs of shear stress and shear strain in composites.  
07 p1170 A69-18720  
The classification of partial differential equations in structural dynamics.  
11 p1991 A69-25513  
Shock Hugoniot in composite materials - A finite control-volume approach.  
[AIAA PAPER 69-359]  
13 p2366 A69-28292  
Hypervelocity impact of bumper-protected fuel tanks.  
[AIAA PAPER 69-369]  
13 p2367 A69-28301  
Finite deflections of an elastic circular plate with a central hole.  
[ASME PAPER 69-APM-20]  
18 p3214 A69-34395  
Analytical study of Hugoniot in unidirectional fiber reinforced composites.  
20 p3627 A69-37768
- CHOU, Q. B.**  
Analysis of proportional fluid amplifiers in cascade and with feedback.  
24 p4255 A69-43268
- CHOU, S.**  
Approximate laboratory simulation of spectroscopic observations of Mars.  
08 p1354 A69-20151
- CHOU, S.-C.**  
Stress-wave propagation in a class of nonhomogeneous elastic media.  
24 p4403 A69-43574
- CHOU, S.-I.**  
Finite deformation of a spinning elastic membrane.  
24 p4404 A69-43651
- CHOU, Y.-S.**  
Inviscid hypersonic flow past blunt bodies.  
04 p0542 A69-14723
- CHOUDHRY, R. K.**  
Existence of the periodic orbit in the problem of the motion of an artificial satellite.  
21 p3795 A69-38441  
Closed paths with double collision in a plane elliptic restricted problem of three bodies.  
21 p3795 A69-38443
- CHOUDHURY, A. K.**  
Numerical computation method for the evaluation of the transition matrix.  
11 p1910 A69-25660
- CHOUDHURY, D. R.**  
Numerical computation method for the evaluation of the transition matrix.  
11 p1910 A69-25660
- CHOULES, C. W.**  
Automation - The quiet revolution.  
18 p3168 A69-34805
- CHOUTEAU, J.**  
Preliminary data on a limitation of the use of an oxygen-hydrogen mixture for deep submersion to the saturation point /Premieres donnees sur une limitation de l'utilisation du melange oxygene-hydrogene pour la plongee profonde a saturation/.  
24 p4262 A69-43025
- CHOW, C. Y.**  
Performance characteristics of spiral-groove and shrouded Rayleigh step profiles for high-speed noncontacting gas seals.  
[ASME PAPER 68-LUBS-38]  
13 p2266 A69-27272  
Theoretical analysis of spiral-grooved screw seal for turbulent operation.  
[ASLE FICFS PREPRINT 32]  
15 p2619 A69-30482



## CHOW, C.-Y.

Effect of angular inertia of lubricant in MHD hydrostatic thrust bearings.

09 p1503 A69-21443

## CHOW, D. K.

On threshold decoding of cyclic codes.

06 p0903 A69-17532

## CHOW, M. C.

Recombination statistics for neutron bombarded silicon transistors.

06 p0975 A69-16871

## CHOW, P. E. K.

Electronic beam-rotation for circular arrays using matrix network.

08 p1288 A69-20964

## CHOW, P. L.

Final period of decay for a viscoelastic fluid in isotropic turbulence.

22 p3928 A69-39891

## CHOW, S. K.

An experimental study on the characteristics of vortex valves.

02 p0195 A69-12079

## CHOW, T. L.

Electron gas in intense magnetic fields.

13 p2343 A69-27624

## CHOW, T. S.

The elastic constants of fiber reinforced materials.

20 p3626 A69-37759

## CHOW, W. L.

Study of jet mixing problems by Meksyn's method.

02 p0233 A69-12530

## CHOW, Y. L.

Synthesis of array space factors.

07 p1108 A69-19466

## CHOWDHURY, A. N.

Source of helium in natural gas.

08 p1311 A69-20947

## CHOWDHURY, S. R.

Correlation of sudden frequency deviations with solar microwave bursts.

20 p3592 A69-38101

## CHOWDHURY, S. S.

The composition of an argon plasma in Saha equilibrium.

07 p1193 A69-19168

Observations on the reflected shock in a T-tube and comparison with theory.

15 p2593 A69-31161

## CHRANS, L. J.

The effect of stagnation temperature and molecular weight variation of gaseous injection into a supersonic stream.

[AIAA PAPER 69-1] 06 p1039 A69-18196

## CHREST, S. A.

Rocket sampling of a 1968 noctilucent cloud display over Fort Churchill, Canada.

15 p2602 A69-31386

Particle collection results from recent rocket and satellite experiments.

21 p3793 A69-38343

## CHRISS, D. E.

Turbulent transport properties in subsonic coaxial free mixing systems.

[AIAA PAPER 69-681] 17 p2956 A69-33495

## CHRIST, B. W.

On the distinction between alloy softening due to nitrogen and nickel in dilute lattice solution in iron.

22 p3969 A69-40164

## CHRISTEN, M.

Proton diffusion in solids - Application to fuel cells /Diffusion des protons dans les solides - Applications aux piles a combustible/.

08 p1269 A69-21053

Diffusion of protons in solids - Applications to fuel cells /Diffusion des protons dans les solides - Applications aux piles a combustible/.

16 p2740 A69-32424

## CHRISTENSEN, C. P.

Gain saturation and diffusion in CO sub 2 lasers.

19 p3338 A69-36692

## CHRISTENSEN, E. M.

Principal science results from Surveyor 5.

02 p0321 A69-12224

Lunar surface mechanical properties.

02 p0321 A69-12225

## CHRISTENSEN, H.

Elastohydrodynamic theory of spherical bodies in normal approach.

[ASME PAPER 69-LUBS-3]

18 p3213 A69-34384

Finite-element analysis of axis-symmetric rotors.

19 p3445 A69-36826

## CHRISTENSEN, H. D.

Contact stress between two-dimensional finite elastic bodies.

[ASME PAPER 69-APMW-9]

24 p4402 A69-43104

## CHRISTENSEN, M. V.

A study of bonding between glass and plastic in glass reinforced plastics. II.

08 p1341 A69-20514

## CHRISTENSEN, R. M.

Viscoelastic properties of heterogeneous media.

08 p1417 A69-20825

## CHRISTIANSEN, P. L.

Resonant interaction approach and slowly varying approach in nonlinear wave propagation.

17 p2928 A69-33870

## CHRISTIANSEN, S.

Numerical determination of stresses in a finite or infinite plate with several holes of arbitrary form.

10 p1793 A69-22882

## CHRISTIANSEN, W. H.

Measurements of flow uniformity in shock tubes operating at low initial pressure.

01 p0062 A69-11219

Fog dissipation using a CO sub 2 laser.

02 p0258 A69-12622

A study of fog clearing using a CO sub 2 laser.

[AIAA PAPER 69-670] 17 p2945 A69-33449

## CHRISTIE, L. A.

Sensitivity aspects of linear digital control systems.

17 p2944 A69-33742

## CHRISTMAN, D. R.

Dynamic properties of high-purity beryllium.

[AIAA PAPER 69-360] 13 p2283 A69-28293

## CHRISTODOULIDES, C.

Allende meteorite - Age determination by thermoluminescence.

24 p4385 A69-43219

## CHRISTOFFEL, J.

A unique vacuum facility for the testing of optical satellites.

[AIAA PAPER 69-1026] 22 p3924 A69-40396

## CHRISTOFORIDES, C.

Supersaturation of blood with O sub 2.

23 p4077 A69-41296

## CHRISTOPH, G.

Stationary solutions of the Vlasov equation with external electrical fields and BGK collision terms /Stationaere Loesungen der Vlasov-Gleichung mit ausseren elektrischen Feldern und BGK-Stosstermen/.

05 p0801 A69-15745

## CHRISTOPHER, P. F.

A Bayes approach to frequency optimization for satellite communication.

05 p0721 A69-16580

## CHU, C. K.

Computational Fluid Dynamics.

01 p0061 A69-10916

## CHU, C.-W.

On the impingement of a supersonic jet on a flat plate.

08 p1252 A69-20841

## CHU, F. K.-H.

The formation of a shock wave in a blade passage of a partial admission turbine.

[ASME PAPER 68-FE-25] 05 p0698 A69-16075

## CHU, H.

Compliant coating skin friction experiments.

[AIAA PAPER 69-165] 06 p0912 A69-18043

## CHU, H. H.

Compliant surface drag as a function of speed.

21 p3695 A69-39039

## CHU, J.-W.

The use of satellites for navigation.

[UN PAPER 68-95205] 01 p0113 A69-10514

Use of satellites for navigation.

01 p0114 A69-11011

## CHU, R. T.

Numerical simulation of the macrophysical and microphysical processes of moist convection.

19 p3362 A69-36497

## CHU, S. T.

Inclusion of time constraints and redundant access on spacecraft return probabilities by the concept of Borel set.

21 p3819 A69-39017

## CHU, T. K.

Collisional drift waves - Identification, stabilization, and enhanced plasma transport.

03 p0474 A69-13145

Drift instabilities in a uniformly rotating plasma cylinder.

11 p1924 A69-24306

## CHU, T. L.

Dielectric materials in semiconductor devices.

13 p2286 A69-28004

The etching of germanium with water vapor and hydrogen sulfide.

22 p3970 A69-40737

## CHU, W.

An experimental study of saturable absorbers for ruby lasers.

07 p1155 A69-19089

## CHU, W.-H.

Influence of a rigid top mass on the response of a pressurized cylinder containing liquid.

09 p1616 A69-21979

Dynamic stability of cylindrical propellant tanks.

11 p1989 A69-25499

## CHUAN, R. L.

Atmospheric densitometer measuring methods above 50 km.

15 p2615 A69-31284

In-situ molecular beam experiments in earth orbit.

19 p3377 A69-36182

Facility for simulation of rocket plumes in a space environment.

22 p3928 A69-40731

## CHUANG, H.

"Power law" profiles in thermally stratified shear flows.

11 p1874 A69-25381

## CHUANG, K. C.

Detection of strain by coherent optical techniques.

12 p2180 A69-26305

## CHUANG, Y. S.

Properties of metal-polymer-silicon thin film structures.

21 p3782 A69-39464

## CHUBARIAN, E. V.

Steady axisymmetric gravitational fields /Stationary aksial'no-simmetricheskie gravitatsionnye polia/.

02 p0317 A69-11956

The internal solution of steady axisymmetric gravitational fields /O vnutrennem reshenii statsionarnykh aksial'no-simmetricheskikh gravitatsionnykh polei/.

13 p2351 A69-27863

Slow rotation of relativistic polytropes /Medlennoe vrashchenie relativistskikh politrop/.

19 p3426 A69-36576

## CHUBARINA, E. V.

Charge of an LI-2 aircraft in stratus clouds /Zariazhenie samoleta LI-2 v oblakhkh sloistykh form/.

04 p0549 A69-15108

## CHUBAROV, V. A.

Thermooxidative degradation of various heat-resistant organosilicon binder resins.

17 p2992 A69-33744

## CHUBB, D. L.

Ionizing shock structure in a monatomic gas.

03 p0414 A69-13138

## CHUBB, T. A.

X-ray line and continuum spectra of solar flares from 0.5 to 8.5 angstroms.

02 p0308 A69-12297

Glimpsing the hidden X-ray universe.

10 p1760 A69-22869

X-ray pulsar in the Crab Nebula.

13 p2354 A69-28465

Measurements of solar X-ray emission from theOGO-IV spacecraft.

24 p4371 A69-43611

## CHUBERKIS, V. P.

Verification of the hypothesis of normality of the one-dimensional distribution law of a random process /Proverka gipotezy o normal'nosti odnomernogo zakona raspredeleniya statsionarnogo sluchainogo protessa/.

08 p1299 A69-21069

Checking the hypothesis of the normality of the one-dimensional distribution law of a stationary random process.  
16 p2765 A69-32484

**CHUCHKALOV, B. S.**  
Evaluation of the use of radiative information from satellites in operative synoptic work /Opyt ispol'zovaniia radiatsionnoi informatsii so sputnikov v operativnoi sinopticheskoi rabote/.  
14 p2473 A69-29729  
Influence of the temperature of the stratosphere on the ascent height of radiosondes /Vliianie temperatury stratosfery na vysotu pod'ema radiozondov/.  
14 p2473 A69-29731  
Analysis of the state of the atmosphere over the globe from a picture obtained by the Zond 5 space station at an altitude of 90,000 km /Analiz sostoiianiia atmosfery nad zemnym sharom po snimku s vysoty 90.000 km, poluchennomu kosmicheskoi stantsiei "Zond-5"/.  
23 p4184 A69-42486

**CHUCHKIN, V. G.**  
Some aspects of utilization of higher plants as nutrition source in space missions.  
15 p2560 A69-31408

**CHUCHURIUKIN, A. D.**  
Solubility of hydrogen in solid and liquid titanium /Rastvorimost' vodoroda v tverdom i zhidkom titane/.  
11 p1905 A69-24963

**CHUDAKOV, A. F.**  
Changes of electrical and magnetic properties during the formation of a modulated structure in the alloy Co-Ti /Izmenenie elektricheskikh i magnitnykh svoystv pri obrazovanii modulirovannoi struktury v splave Co-Ti/.  
11 p1904 A69-24707

**CHUDINOV, E. M.**  
Extrapolation in cosmology /Ob ekstrapoliatsii v kosmologii/.  
14 p2516 A69-28867

**CHUDINOV, M. G.**  
Interdiffusion in Ti-V, Ti-Nb, Ti-Ta, and Ti-Mo systems /Vzaimnaya diffuziia v sistemakh Ti-V, Ti-Nb, Ti-Ta, Ti-Mo/.  
21 p3745 A69-38954

**CHUDNOVSKII, G. S.**  
Role of aldosterone and hydrocortisone in the control of the sodium metabolism of the organism /Rol' al'dosterona i gidrokortizona v reguliatsii obmena natriia v organizme/.  
21 p3656 A69-38965

**CHUDOBIAK, W. J.**  
On the static collector-emitter saturation voltage of a transistor with a lightly doped collector.  
14 p2421 A69-29545

**CHUDOV, L. A.**  
Computer Methods and Programming- Numerical Methods in Gasdynamics /Vychislitel'nye Metody i Programirovanie- Chislennye Metody v Gazovoi Dinamike/.  
03 p0362 A69-13649  
Difference schemes for the solution of the Navier-Stokes equations /Review/ /Raznostnye metody resheniia uravnenii Nav'e-Stoksa /obzor/.  
03 p0415 A69-13650  
Two-dimensional flow of an incompressible fluid near the sharp leading edge of a plate at zero incidence. II /Ploskoe techenie viazkoi neszhimaemoi zhidkosti vblizi ostroi perednei kromki plastiny pri nulevom ugle ataki. II/.  
03 p0415 A69-13651  
Approximate boundary conditions for the curl in the calculation of the flow of a viscous incompressible fluid /O priblizhennykh granichnykh usloviakh dlia vikhria pri raschete techenii viazkoi neszhimaemoi zhidkosti/.  
03 p0416 A69-13652  
Difference methods for calculating boundary layer flows /Survey/ /Raznostnye metody rascheta techenii v pogranichnom sloe /obzor/.  
03 p0416 A69-13655  
Difference methods for solving the incorrect Cauchy problem for the three-dimensional Laplace equation /Raznostnye metody resheniia nekorrektnoi zadachi Koshi dlia trekhmernogo uravneniia Laplasa/.  
03 p0424 A69-13661

**CHUGARIAN, E. V.**  
Nonrelativistic theory of rotating configurations.  
12 p2159 A69-26662

**CHUGUNOV, I. U.**  
Quasi-static theory of an antenna in a magnetoactive plasma in the presence of plasma resonance /Kvazistaticheskaiia teoriia anteny v magnitnoaktivnoi plazme pri nalichii plazmennogo rezonansa/.  
07 p1099 A69-18522

Polarization of thermal radiation in anisotropic media /O polarizatsii teplovogo izlucheniia v anizotropnykh sredakh/.  
15 p2653 A69-30940

Theory of a thin metallic antenna in anisotropic media /K teorii tonkoi metallicheskoj anteny v anizotropnykh sredakh/.  
19 p3285 A69-36878

**CHUIANOV, V. A.**  
A possible stabilization of the trough-shaped plasma instability through a feedback system.  
06 p0966 A69-17544  
Current-convective instability of a weakly ionized plasma in the presence of feedbacks /Tokovo-konvektivnaia neustoiichivost' slabo ionizovannoi plazmy v prisutstvii obratnykh svyazei/.  
13 p2311 A69-28106

**CHUIKIN, E. I.**  
Intensity measurements of gamma-rays with energies from 0.3 to 3 Mev at various depths of the atmosphere /Izmerenie razlichnykh glubinakh s energiei ot 0,3 do 3 Mev na razlichnykh glubinakh atmosfery/.  
10 p1770 A69-23924

**CHUIKOV, B. A.**  
On the state of oxygen adsorbed on the surface of tungsten and molybdenum single crystals.  
12 p2026 A69-26115

**CHUIKOVA, N. A.**  
The gravitational field and the figure of the moon /Gravitatsionnoe pole i figura luny/.  
09 p1589 A69-21375  
The gravitational field and figure of the moon.  
18 p3198 A69-34763

**CHUISTOV, K. V.**  
Changes of electrical and magnetic properties during the formation of a modulated structure in the alloy Co-Ti /Izmenenie elektricheskikh i magnitnykh svoystv pri obrazovanii modulirovannoi struktury v splave Co-Ti/.  
11 p1904 A69-24707  
State of a precipitated phase during aging of a cobalt-titanium solid solution /O sostoianii fazy vydeleniia pri starenii tverdogo rastvora kobal'tit'an/.  
12 p2112 A69-26037  
Features of the decomposition of a supersaturated solid solution of niobium in cobalt - Precipitation mechanism in a matrix with a hexagonal closely packed lattice /Osobennosti raspada peresyshchennogo tverdogo rastvora niobiia v kobal'te - Mekhanizm vydeleniia v matritse s geksagonal'noi plotnoupakovannoi reshetkoi/.  
21 p3750 A69-39788

**CHUKANOVA, T. I.**  
Integration of equations for plane isentropic gas motion at supersonic velocities.  
05 p0699 A69-16674

**CHUKHALO, N. A.**  
Starting supersonic nozzles by means of cylindrical diffusers /O zapuske sverkhzvukovykh sopel s pomoshch'iu tsilindricheskikh diffuzorov/.  
03 p0365 A69-14226  
Starting supersonic nozzles with the aid of cylindrical diffusers /O zapuske sverkhzvukovykh sopel s pomoshch'iu tsilindricheskikh diffuzorov/.  
17 p2890 A69-33125

**CHUKHROVA, A. I.**  
Increasing the radiation sensitivity of the nervous system by enzyme poisons affecting the oxidation processes /O povyshenii radiochuvstvitel'nosti nervnoi sistemy fermentnymi iadami, narushaiushchimi oksislitel'nye protsessy/.  
21 p3658 A69-39053

**CHUKWUJEKWU, S. E.**  
Plastic failure under internal pressure of aluminum spherical shells with nozzle reinforced openings - Experimental results and their application to design.  
17 p3052 A69-32983

**CHUMAK, Z. N.**  
Spectrophotometric study of beta CrB.  
16 p2864 A69-32592

**CHUMAKOVA, L. D.**  
X-ray study of structural defects in cobalt /Rentgenograficheskie issledovaniia strukturnykh nesovershenstv v kobal'te/.  
12 p2113 A69-26042

**CHUMBALOVA, R. A.**  
Cosmic ray anisotropy and Forbush effects during a solar activity minimum /Anizotropiia kosmicheskikh luchej i efekty Forbusha v minimume solnechnoi aktivnosti/.  
10 p1758 A69-22835

**CHUMBURIDZE, I. SH.**  
Analysis of heuristic experiments concerning the planning and forecasting of scientific research /Analiz evristicheskikh eksperimentov po planirovaniu i prognozirovaniu nauchnykh issledovaniu/.  
15 p2720 A69-30969

**CHUN, K. S.**  
A control system concept for an axisymmetric super-sonic inlet. [AIAA PAPER 68-581]  
20 p3585 A69-37151

**CHUNAeva, O. N.**  
Generation of optical harmonics in lithium niobate /Generirovanie opticheskikh harmonik v niobate litia/.  
03 p0437 A69-13046

**CHUNG, D. H.**  
Pressure and temperature dependences of the isotropic elastic moduli of polycrystalline alumina.  
02 p0268 A69-12407  
A modified ultrasonic pulse-echo-overlap method for determining sound velocities and attenuation of solids.  
14 p2450 A69-29567  
Pressure derivatives of the elastic properties of polycrystalline quartz and rutile.  
20 p3583 A69-37502

**CHUNG, K. T.**  
Conformal change in Einstein's 'g' super lambda super upslon-unified field theory. I.  
03 p0467 A69-13756

**CHUNG, P. M.**  
Merged stagnation shock layer of nonequilibrium dissociating gas.  
02 p0189 A69-12521  
Periodic fluctuation of chemical species over a reactive surface.  
11 p1831 A69-24284  
Heat transfer in chemically reacting gases.  
13 p2377 A69-28147  
Near-surface electron temperature of weakly ionized plasma according to kinetic theory.  
22 p3989 A69-40528

**CHUNG, W.-Y.**  
The elastic stability of fibers in a composite plate.  
07 p1232 A69-18714

**CHUPAKHIN, M. S.**  
Method of laminar mass-spectral analysis of thin semiconductor films /Metod posloinogo mass-spektral'nogo analiza tonkikh poluprovodnikovyykh plenok/.  
13 p2316 A69-27293

**CHUPP, E. L.**  
Radiative mean-life measurements of some atomic-hydrogen excited states using beam-foil excitation.  
03 p0469 A69-12920  
A study of hydrogen Lyman alpha radiation using the beam-foil excitation method.  
03 p0471 A69-13167  
Onboard calibration system for gamma-ray spectrometers in space satellites. [IEEE PAPER 3A-6]  
07 p1134 A69-19193  
Upper limit for the solar neutron flux in the energy interval 20-120 Mev.  
11 p1945 A69-24421  
Cosmic ray neutron monitor for OGO-F.  
19 p3314 A69-36678

**CHUPP, R. E.**  
Evaluation of internal heat-transfer coefficients for impingement-cooled turbine airfoils. [AIAA PAPER 68-564]  
17 p3022 A69-34021

**CHUPRINA, A. F.**  
Creep and durability of VM-1 alloy.  
15 p2638 A69-30284

**CHUPROV, S. D.**  
Influence of multipath propagation on the correlation of signal fluctuations in spaced reception.  
03 p0394 A69-13519

**CHURAEV, R. V.**  
Damping power of thin-walled fiberglass-reinforced plastic structure during high-frequency vibrations in various eigenmodes /Dempfiruiushchaia sposobnost' tonkostennykh stekloplastikovyykh konstruktssii pri vysokochastotnykh kolebaniiax po razlichnym sobstvennyim formam/.  
17 p3065 A69-33938

**CHURAEV, V. A.**  
Plasma acceleration in a conical induction source /Uskorenie plazmy v induktsionnom konicheskom istochnike/.  
24 p4357 A69-43468



- CHURAKOV, V. N.**  
Conditions and criteria of similarity in the theory of plasticity /Ob usloviakh i kriteriakh podobii teorii plastichnosti/. 15 p2714 A69-31200
- CHURCH, M. J.**  
Aerospace fastener systems - A proposal for standardization. 24 p4325 A69-43439
- CHURCHILL, A. V.**  
Effect of head movement in visual-kinesthetic localization. 24 p4275 A69-43118
- CHURCHILL, R. A.**  
Wideband fiberoptic analog information link. 23 p4121 A69-41768
- CHURCHILL, R. J.**  
Swept frequency microwave measurements in simulated reentry environments. [AIAA PAPER 69-701] 17 p2920 A69-33461  
Swept frequency microwave measurements in simulated reentry environments. [AAS PAPER 69-282] 24 p4313 A69-42861
- CHURCHILL, S. W.**  
Confined jet mixing in the entrance of a tubular reactor. [AICHE PAPER 25A] 04 p0586 A69-14508  
Free convection at low Prandtl numbers in laminar boundary layers. 17 p3068 A69-33014
- CHURCHWELL, E.**  
A search at 15 GHz for compact H II regions in regions of possible star formation. 22 p4024 A69-40576
- CHURILOV, V. P.**  
A statistical model of reflections of radio signals from objects of complex shape. 09 p1460 A69-22662
- CHURKINA, G. P.**  
Numerical experiments on flow of rarefied plasma around bodies of various shapes. I. 01 p0134 A69-11307
- CHURNEY, K. L.**  
The heat of combustion of beryllium in fluorine. 21 p3853 A69-39703
- CHURSHUKOV, E. S.**  
Operational characteristics of jet fuels purified of mercaptanes /Ekspluatatsionnye svoystva reaktivnykh topliv, ochishchennykh ot merkaptanov/. 01 p0142 A69-11098  
Corrosive characteristics of jet fuels in the presence of condensing water /Korroziionnye svoystva reaktivnykh topliv v usloviakh kondensirovaniya vody/. 01 p0142 A69-11099
- CHUSHKIN, P. I.**  
Three-dimensional supersonic gas flows with nonequilibrium processes /Prostranstvennye sverkhzvukovye techeniya gaza s neravnovesnymi protsessami/. 01 p0060 A69-10724  
Method of Characteristics for Three-Dimensional Supersonic Flows /Metod Kharakteristik dlia Prostranstvennykh Sverkhzvukovykh Tachenii/. 19 p3238 A69-36170
- CHUSOV, A. G.**  
Study of the properties of maraging steels with increased cobalt and molybdenum content /Issledovanie svoystv martensitno stareiushchikh staley s povyshennym soderzhaniiem kobal'ta i molibdena/. 01 p0098 A69-10731
- CHUSOV, M. A.**  
Investigation of viscosity of gases based on the law of corresponding states. 06 p0957 A69-16918  
Derivation of Grad type hydrodynamic equations - Calculation of transport coefficients of arbitrary order /K vyvodu gidrodinamicheskikh uravnenii gredovskogo tipa - Raschet transportnykh koeffitsientov proizvol'nogo poriadka/. 09 p1481 A69-21888
- CHUTER, I. H.**  
The comparison of subjective and objective upper air forecasts for aviation. I. 08 p1345 A69-19886  
The comparison of subjective and objective upper air forecasts for aviation. II. 09 p1536 A69-22074
- CHUTOV, I. I.**  
Reflection of a pulse-driven plasma from a metallic surface. 11 p1934 A69-25710
- Interaction between a moving pulse plasma and an immobile quasi stationary discharge plasma /Vzaemodiia impul'snoi rukhomoi plazmy z nerukhomoiu plazmoi kvazistatsionarnogo rozriadu/. 14 p2490 A69-28998
- CHUVIKOVSKII, V. S.**  
Calculation of the forced oscillations of one-dimensional girder systems with allowance for nonlinear resisting forces /Raschet vynuzhennykh kolebaniy odnornernykh balochnykh sistem s uchedom nelineynykh sil soprotivlenii/. 17 p3064 A69-33917
- CHYNOWETH, A. G.**  
Charge multiplication phenomena. 04 p0641 A69-14503
- CHYTIL, B.**  
A note on scintillation indices. 16 p2777 A69-32104
- CIANCIARULO, A. N.**  
Epoxy molding compounds characterization and classification. 04 p0620 A69-14954
- CIANCITTO, A.**  
Rocket motor with a combustion chamber of variable geometry /Motore a razao con camera di combustione a geometria variabile/. 15 p2671 A69-30600
- CIANETTI, E.**  
Analytical and instrumental technique for determining traces of metals in some aeronautical products /Metodica analitico-strumentale per la determinazione delle tracce di metalli in alcuni prodotti aeronautici/. 03 p0435 A69-14101
- CIARANELLO, R. D.**  
Enzymatic synthesis of adrenaline in mammalian brain. 07 p1066 A69-19260  
Adrenal epinephrine and phenylethanolamine n-methyl transferase /PNMT/ activity in the rat bearing a transplantable pituitary tumor. 08 p1263 A69-20374  
Compensatory hypertrophy and phenylethanolamine n-methyl transferase /PNMT/ activity in the rat adrenal. 23 p4080 A69-41404
- CIAVARELLI, A. P.**  
Operational measures of aircraft carrier landing system performance. 17 p2916 A69-34012
- CICALA, P.**  
Quasi-cylindrical translation shells. 02 p0338 A69-11718
- CICCI, F.**  
Methods of reducing the response of integrally stiffened structures to random pressures. [ASME PAPER 69-VIBR-26] 10 p1806 A69-24172
- CICCONI, G.**  
Some properties of whistlers at Roburent, North Italy. 01 p0067 A69-11033
- CICERONE, R. J.**  
Theory of ion collection by a stationary electrostatic probe. 18 p3128 A69-34804
- CICHON, G.**  
Test flight with the AS-W15 /Testflug mit der AS-W15/. 10 p1633 A69-22872
- CICHOWICZ, L.**  
Certain ways of using artificial satellite observations in the field of continental and worldwide geodesy /Certaines variantes de l'exploitation des observations des satellites artificiels dans le domaine de la geodesie continentale et mondiale/. [UN PAPER 68-07445] 06 p0917 A69-17069
- CIESLIK, W. J.**  
A helium face seal application in a liquid oxygen pump. [ASLE FICFS PREPRINT 24] 15 p2621 A69-30498
- CIHAK, A.**  
Radioprotective effect of 5-azacytidine in AKR mice. 23 p4080 A69-41429
- CIHAL, V.**  
Electron-microscope study of carbide precipitation in stainless steels /Elektronemikroskopische Untersuchung der Carbidabscheidungen in korrosionsbestaendigen Staehlen/. 10 p1713 A69-23820
- CILETTI, M. D.**  
The application of the method of steepest ascent to a very high order optimization problem - The problem of developing evasion tactics for aircraft pursued by missiles. 06 p0866 A69-17400  
Composition problem for differential games. 10 p1667 A69-24059
- CINDRICH, I.**  
Data recording. 20 p3540 A69-37640
- CINI-CASTAGNOLI, G.**  
The Forbush decrease of March 1966 observed in the neutron, sea-level meson, and underground meson components. 01 p0146 A69-11129
- CIONI, G.**  
A simplified method of simulating electromagnetic showers. 22 p4007 A69-41052
- CIRAY, C.**  
On some aspects of hot-wire anemometry - Yaw and curvature. 03 p0426 A69-12845
- CITRON, S. J.**  
On the applicability of the sweep method to optimal control problems. 12 p2053 A69-26512  
Elements of Optimal Control. 18 p3109 A69-34532  
A conjugate-point condition for a class of differential games. 24 p4340 A69-42959
- CIUCIURA, A.**  
Spark-gaps for protection of radio receivers. 21 p3681 A69-38395
- CIURLA, T.**  
The influence of the filamentary structure of prominences and flares on the equivalent widths of lines. 22 p4001 A69-39994
- CIZERON, G.**  
Inhibiting influence of a two-stage thermal treatment on the extent of the swelling and porosity linked to the Kirkendall effect developing during sintering of mixtures of iron and nickel powders /Influence inhibitrice d'un traitement thermique en deux etapes sur l'importance du gonflement et de la porosite lies au phenomene Kirkendall developpe lors du frittage de melanges de poudres de fer et de nickel/. 05 p0782 A69-16616  
Influence of cumulative thermal cycling on the progressive disappearance of the martensitic transformation of 18 percent-nickel maraging steels /Influence de cyclages thermiques cumules sur la disparition progressive de la transformation martensitique des aciers "maraging" a 18 percent de nickel/. 18 p3155 A69-34650
- CLAASSEN, H. A.**  
The laminar magnetogasdynamic electrode boundary layer of a thermal non-equilibrium plasma. 13 p2310 A69-28031
- CLAASSEN, M.**  
Analogue-computer model for an avalanche-diode oscillator. 15 p2577 A69-30615
- CLAERBOUT, J. F.**  
Components as nonunique functions of total magnetic field - A note on extraterrestrial magnetic prospecting. 20 p3609 A69-38105
- CLAIRMONT, A. R., JR.**  
Infinite diameter detonation velocities of ammonium perchlorate. 11 p1940 A69-24486
- CLAMPITT, R.**  
Metastable species produced by electron excitation of N sub 2, H sub 2, N sub 2 O, and CO sub 2. 13 p2301 A69-27362  
Clustering of cold hydrogen gas on protons. 24 p4389 A69-43747
- CLANCEY, V. J.**  
Explosive evidence in an airplane accident. 02 p0193 A69-12688
- CLANCY, H. M.**  
Development of polyimide-glass fabric laminates with nonflammable characteristics in high oxygen concentration spacecraft environments. 09 p1531 A69-22366

**CLANCY, M. C.**  
Observations of high-energy X-rays from Sagittarius.  
09 p1583 A69-22764

**CLAPIE, M.**  
Calculation of the limits of in situ measurements of auroral electrons /Calcul des limites des mesures in situ d'electrons auroraux/.  
16 p2785 A69-32617

**CLAPP, S. D.**  
Rocket performance optimization for the space storable FLOX/LPG propellant system.  
[AIAA PAPER 69-506] 16 p2846 A69-32778  
Lithium-fluorine-hydrogen tripropellant investigation.  
24 p4362 A69-43128

**CLARDY, D. E.**  
Radiometric measurements of the moon at 8.6- and 3.2-millimeter wavelengths.  
02 p0327 A69-12717

**CLARE, T. A.**  
An investigation of the non-linear flight dynamics of ordnance weapons.  
[AIAA PAPER 69-135] 06 p0863 A69-18120

**CLARIA, A.**  
Turbulent detachment in an incompressible fluid on thick bodies /Decollement turbulent en fluide incompressible sur des corps epais/.  
24 p4299 A69-42674

**CLARK, A. A.**  
A note on integral equations and Wolf's theorem.  
08 p1271 A69-19865

**CLARK, A. F.**  
Low temperature thermal expansion of some metallic alloys.  
14 p2464 A69-29400  
Low temperature electrical resistivity of some engineering alloys.  
[NAS-NRC PAPER D-5] 22 p3970 A69-40633

**CLARK, A. W.**  
The design of the COMSAT thermal vacuum chamber.  
15 p2587 A69-30393

**CLARK, A., JR.**  
Solar differential rotation and oblateness.  
12 p2157 A69-26308

**CLARK, B.**  
Magnitude estimates of rotational velocity during and following prolonged increasing, constant, and zero angular acceleration.  
04 p0554 A69-15332  
Comparison of three methods to determine thresholds for perception of angular acceleration.  
05 p0708 A69-15969  
Effects of angular acceleration on man - Thresholds for the perception of rotation and the oculogyral illusion.  
23 p4101 A69-41674

**CLARK, B. A. J.**  
Effects of tinted ophthalmic media on the detection and recognition of red signal lights.  
01 p0022 A69-11341

**CLARK, B. G.**  
Pulsar search techniques.  
20 p3605 A69-37824

**CLARK, C. F.**  
Ablative characterization of seven heat shield materials - A review of the NASA-SRI Round-Robin program.  
12 p2119 A69-26813

**CLARK, D. A.**  
Preferential shifts in consumption of metabolic fuels following exposure to rocket fuel substances.  
14 p2407 A69-29303  
The absorption of monomethylhydrazine through canine skin.  
22 p3887 A69-41191

**CLARK, D. C.**  
Ionization and excitation of nitrogen by protons and hydrogen atoms in the energy range 1-25 kev.  
24 p4368 A69-43177

**CLARK, D. R.**  
The free wake analysis - A method for the prediction of helicopter rotor hovering performance.  
[AHS PAPER 321] 17 p2895 A69-33538

**CLARK, E. E.**  
The cluster of galaxies Abell 2199.  
10 p1774 A69-22965

**CLARK, E. L.**  
Aerodynamic characteristics of the hemisphere at supersonic and hypersonic Mach numbers.  
23 p4060 A69-41910

**CLARK, E. S.**  
Molecular motion in polytetrafluoroethylene at cryogenic temperatures.  
05 p0797 A69-16495

**CLARK, F. C.**  
Avoidance and escape behavior controlled by artificial gravity.  
21 p3665 A69-39174

**CLARK, G. W.**  
Search for X-rays from the large and small Magellanic clouds.  
01 p0150 A69-10370  
High energy X-ray study of M-87.  
20 p3588 A69-37488  
Balloon observations of high energy X-ray sources in the region of the galactic centre.  
23 p4206 A69-42114

**CLARK, J. A.**  
Dynamics of moving gas bubbles in injection cooling.  
[ASME PAPER 67-WA/HT-30] 02 p0351 A69-12201  
Photoelastic study of high-frequency stress waves propagating in bars and plates.  
[ASME PAPER 68-WA/APM-27] 04 p0669 A69-14397  
A study of incompressible turbulent boundary layers in channel flow.  
[ASME PAPER 68-FE-26] 05 p0747 A69-16066  
Cryogenic heat transfer.  
11 p1998 A69-24461

**CLARK, J. C.**  
Optically pumped millimeter wave maser.  
07 p1146 A69-18480

**CLARK, J. E.**  
Cross-section control of a thin wire loop by impedance loading techniques.  
11 p1837 A69-25000

**CLARK, J. J.**  
High-temperature magnetic test techniques and analyses.  
01 p0093 A69-10111  
High-temperature magnetic test techniques and analyses.  
09 p1512 A69-22375

**CLARK, J. M.**  
Aircraft navigation using Omega.  
23 p4186 A69-42539

**CLARK, J. P. C.**  
Magnetic attitude control for synchronous satellites.  
06 p1017 A69-17944

**CLARK, K. E.**  
Quasi-steady plasma acceleration.  
[AIAA PAPER 69-267] 09 p1563 A69-21234

**CLARK, L. G.**  
The use of Hamilton's modified principle to solve nonlinear control problems  
15 p2583 A69-31304  
Sensitivity of linear control systems to large parameter variations.  
21 p3685 A69-38726  
On the synthesis of suboptimal, inertia-wheel attitude control systems.  
21 p3826 A69-39642

**CLARK, M.**  
Analysis of integrated charged particle energy spectra from gridded electrostatic analyzers.  
08 p1364 A69-20521

**CLARK, M. E.**  
Precursor cerebral circulation models.  
19 p3264 A69-36867

**CLARK, M. T.**  
Optimization of the representation of sampled data signals on orthonormal bases.  
03 p0391 A69-13231  
Optimization of the representation of sampled data signals on orthonormal bases.  
06 p0901 A69-17363

**CLARK, P. A.**  
Solar differential rotation and oblateness.  
12 p2157 A69-26308

**CLARK, R. N.**  
Limit cycle oscillations in pulse-modulated systems.  
21 p3688 A69-39756

Limit cycle oscillations in pulse-modulated systems.  
24 p4295 A69-43318

**CLARK, R. R.**  
Polarization of radio pulses from pulsar CP 0328.  
08 p1397 A69-20694  
A remote sense, remote control, pressure regulator using pure fluid amplifiers.  
15 p2554 A69-31303

**CLARK, S. P., JR.**  
Inhomogeneous accumulation of the earth from the primitive solar nebula.  
24 p4385 A69-43215

**CLARK, T. A.**  
Telemetry signal-strength variations from balloon-borne equipment and a method for balloon range estimation.  
06 p0886 A69-16925  
The spectrum of the cosmic radio background between 0.4 and 6.5 MHz.  
23 p4219 A69-42375

**CLARK, W. D.**  
Spectrum of the 6 March 1968 solar radio burst.  
01 p0148 A69-10054

**CLARK, W. G., JR.**  
Fatigue precracking of spin-burst toughness specimens.  
11 p1995 A69-25650  
Fractography and fracture mechanics.  
20 p3557 A69-36957  
An ultrasonic crack growth monitor.  
20 p3547 A69-38312

**CLARK, W. H.**  
Respiratory gas exchange in exercise during helium-oxygen breathing.  
17 p2910 A69-33751  
Respiratory gas exchange in exercise during helium-oxygen breathing.  
22 p3891 A69-40221

**CLARK, W. K.**  
The fluidic vibrating string accelerometer.  
02 p0249 A69-12091

**CLARK, W. L., JR.**  
Radio wave reflections from large horizontal gradients in the topside ionosphere.  
14 p2415 A69-29521

**CLARK, W. M.**  
High altitude daytime sky radiance.  
08 p1317 A69-21071

**CLARKE, A. M.**  
Some biological effects of laser radiation.  
[AGARDOGRAPH-111] 08 p1266 A69-20676

**CLARKE, D. D.**  
Compartmentation of glutamic acid metabolism in brain slices.  
18 p3096 A69-35172

**CLARKE, D. R.**  
High-temperature annealable solar array.  
19 p3251 A69-35688

**CLARKE, J.**  
Experimental comparison of the Josephson voltage-frequency relation in different superconductors.  
02 p0299 A69-12599  
Time-constant variable over a large range.  
10 p1667 A69-24046

**CLARKE, J. F.**  
Galactic Jupiter probes.  
02 p0324 A69-12303  
On the structure of a hydrogen-oxygen diffusion flame.  
03 p0531 A69-12895  
Some unsteady motions of a diffusion flame sheet.  
03 p0532 A69-13014  
Emmons' problem according to the Oseen approximation.  
11 p1997 A69-24307  
Reaction-broadening in a hydrogen-oxygen diffusion flame.  
24 p4408 A69-42920

**CLARKE, J. M.**  
A model for uniaxial creep based on internal-stress redistribution.  
20 p3619 A69-36941  
Pulse interference effects in a phase-lock loop.  
23 p4145 A69-42230  
Radio spectrum utilization in aerospace communication systems.  
23 p4128 A69-42502



## CLARKE, K. K.

## CLARKE, K. K.

Quantized second order frequency locked loop.  
03 p0390 A69-13202

## CLARKE, N. B.

The body image of the aviator.  
23 p4112 A69-42364

## CLARKE, P. D.

Gunn-diode operation at Q band frequencies.  
02 p0297 A69-11944

## CLARKE, S. W.

Effect of acceleration on regional lung emptying.  
23 p4083 A69-41448

## CLARKSON, B. L.

Stresses in skin panels subjected to random acoustic loading.  
03 p0530 A69-14092

Methods of reducing the response of integrally stiffened structures to random pressures.  
[ASME PAPER 69-VIBR-26]

10 p1806 A69-24172

## CLARRICOATS, P. J. B.

Theoretical analysis of cylindrical hybrid modes in a corrugated horn.  
15 p2575 A69-30175

Analysis of spherical hybrid modes in a corrugated conical horn.  
15 p2575 A69-30176

On the radiation from a ferrite slab excited by a line source.  
17 p2926 A69-33852

## CLASSEN, J.

Lunar volcanism and pearly - Causes of tektite showers (Mondvulkanismus und Perlestein - Ursachen der Tektiteschauer).  
20 p3597 A69-37338

## CLAUER, A. H.

Techniques for transmission electron microscopy and etch pitting of CoO single crystals.  
12 p2112 A69-25944

Tensile and creep deformation of a fiber reinforced Mg-Li alloy.  
17 p2986 A69-33073

## CLAUSEN, O. W.

Distributed parameter space radiator dynamic analysis.  
[AIAA PAPER 69-29]

06 p1039 A69-18205

Thermal tests of an improved louver system for spacecraft thermal control.  
[AIAA PAPER 69-627]

17 p3071 A69-33269

## CLAUSEN, W. E.

A comparison of approximate methods for the solution of plate bending problems.  
[AIAA PAPER 68-296]

16 p2874 A69-32160

## CLAUSER, F. H.

No law says space must be expensive.  
15 p2719 A69-30186

## CLAUSER, J. F.

On the numerical determination of relaxation and retardation spectra for linearly viscoelastic materials.  
02 p0348 A69-12605

Upper limits to the intensity of background radiation at lambda equals 1.32, 0.559, and 0.359 mm.  
07 p1221 A69-19404

## CLAUSING, A. M.

Numerical methods in heat transfer.  
13 p2376 A69-28141

## CLAUSS, A.

The 200-W membrane cell "ABEPAC" /La pile a membrane de 200 W "ABEPAC"/.  
08 p1259 A69-21040

The 200-W "ABEPAC" membrane cell /La pile a membrane de 200 W "ABEPAC"/.  
16 p2738 A69-32411

## CLAUSS, F. J.

Engineer's Guide to High-Temperature Materials.  
20 p3559 A69-37148

## CLAUSS, G.

The vibrating camera - A photographic method for measuring velocity /Die vibrierende Kamera - Ein fotografisches Verfahren zur Geschwindigkeitsmessung/.

13 p2261 A69-27913

## CLAVELIER, B.

The structure of the sources of stationary type IV bursts and noise-storm enhancements.  
02 p0328 A69-12753

## CLAVER, G. C.

Characterization of thermosetting resin curing behavior by thermal analysis under pressure.  
09 p1500 A69-22311

## CLAVEYROLAS, R.

Experimental study of AZ5G-Zr-Cr alloy welds under 1-1/2 biaxial states of stress at low temperatures.  
01 p0088 A69-11152

## CLAY, W. G.

High speed photographic techniques in a ballistic range.  
12 p2088 A69-26182

## CLAYDEN, W. A.

Cylindrical afterbodies at M sub infinity equals 2 with hot gas ejection.  
02 p0190 A69-12533

## CLAYTON, A. B.

Manufacturing small rocket motors.  
[AIAA PAPER 69-520]

16 p2795 A69-32779

## CLAYTON, B. R.

A note on the accuracy of similar solutions of the equations for laminar boundary layers on curved surfaces.  
11 p1867 A69-24375

Laminar boundary layers over permeable curved surfaces.  
23 p4153 A69-42399

## CLAYTON, D. D.

Nucleosynthesis of the isotopes of lead.  
08 p1357 A69-20897

Gamma-ray lines from young supernova remnants.  
09 p1581 A69-22409

The origin of the elements.  
14 p2529 A69-29985

Prospects of nuclear gamma-ray astronomy.  
21 p3792 A69-39572

The nuclear theory of the origin of the elements.  
24 p4386 A69-43334

## CLAYTON, F. I.

Graphite ablation in high-pressure environments.  
[AIAA PAPER 68-1153]

04 p0686 A69-14873

## CLAYTON, R. M.

Injector response to strong, high-frequency pressure oscillations.  
21 p3786 A69-39235

## CLEARY, H. J.

Electrochemical properties of Fe and steel.  
20 p3563 A69-38002

## CLEARY, J. R.

Velocity distribution in the lower mantle.  
07 p1129 A69-19502

Free oscillations of the earth and the D layer.  
23 p4158 A69-42117

## CLEARY, J. W.

Theoretical and experimental study of supersonic steady flow around inclined bodies of revolution.  
[AIAA PAPER 69-187]

06 p0865 A69-18176

## CLEARY, W. A., JR.

United States requirements for commercial surface effect ships.  
08 p1254 A69-20199

## CLEAVER, J. W.

A second order solution for the non-equilibrium flow of a relaxing gas in a plane expansion.  
13 p2244 A69-27322

## CLEGG, P. E.

Continuous spectrum of Taurus A at 1.2 mm wavelength.  
09 p1597 A69-22156

Millimetre and submillimetre astronomy.  
13 p2343 A69-27603

## CLEMENT, G.

Liquid-phase radical oxidation /Oxydations radicalaires en phase liquide/.

06 p1032 A69-17425

## CLEMENT, R.

A cryogenic propellant tank pressurization analysis.  
01 p0163 A69-11147

## CLEMENT, W. F.

A manual control-display theory applied to instrument landings of a jet transport.  
10 p1650 A69-23877

## CLEMENS, E. D.

Optical positions of radio sources.  
11 p1958 A69-24465

## CLEMESH, B. R.

Investigation of the stratospheric aerosol by infrared and lidar techniques.  
04 p0592 A69-14654

Low-latitude ionospheric electron content measurements during half a solar cycle.  
23 p4161 A69-42435

## CLEMMONS, T. P.

Systems design for weight optimization.  
[SAWE PAPER 757]

18 p3220 A69-34881

## CLEMONS, L.

Monte Carlo calculations of a hemispherical duct neutron streaming experiment.  
18 p3171 A69-35178

## CLEMONS, L. C., JR.

COHORT-II - A Monte Carlo general purpose shielding computer code.  
14 p2417 A69-29004

## CLEMOT, M.

Evaluation of laboratory studies of life duration of thermionic converters /Bilan des etudes de duree de vie des convertisseurs thermo-ioniques en laboratoire/.

14 p2398 A69-29179

In-pile experiments of "Sirene" thermionic conversion, and examination after irradiation of the "Sirene 302" converter /Experiences de conversion thermo-ionique "Sirene" en pile et examen apres irradiation du convertisseur "Sirene 302"/.

14 p2481 A69-29198

Utilization of titanium alloys for thermionic conversion /Utilisation des alliages de titane en conversion thermo-ionique/.

14 p2462 A69-29217

## CLERC, D.

Utilization of eigenvectors for the selection of essential couplings in flutter calculations /Utilisation des vecteurs propres pour la selection des couplages essentiels dans les calculs de flottement/.

03 p0522 A69-12878

## CLERICO, M.

A study of the friction and wear of nylon against metal.  
19 p3329 A69-36495

## CLEVELAND, F. A.

Management techniques for complex systems.  
[RAES PAPER 9]

22 p4053 A69-40489

## CLEVETT, M. L., JR.

Triangulated pantograph beam applications.  
02 p0252 A69-11752

## CLIFF, R. A.

The SDP-3 - A computer for use on board small scientific spacecraft.  
03 p0400 A69-13243

The SDP-1 stored-program computer.  
04 p0569 A69-15472

The IMP-1 computer experiment.  
19 p3280 A69-36265

The SDP-3 - A computer designed for data systems of small scientific spacecraft.  
20 p3500 A69-37385

Recent improvements in the SDP-3 computer.  
23 p4133 A69-41737

## CLIFFORD, J. M.

Some aspects of personal cooling in inadequately air conditioned cockpits.  
[AGARDOGRAPH-111]

08 p1267 A69-20684

## CLIFFORD, W. H.

A hybrid computational method for partial differential equations.  
04 p0566 A69-15347

## CLIFTON, J. V.

Motion of a bubble in a rotating liquid.  
09 p1483 A69-22006

## CLIFTON, R. J.

Elastic-plastic boundaries in combined longitudinal and torsional plastic wave propagation.  
[ASME PAPER 68-WA/APM-7]

04 p0670 A69-14403

The elastic-plastic boundary in one-dimensional wave propagation.  
04 p0670 A69-14407

## CLINE, J. E.

X-ray fluorescence and electron microprobe techniques for determination of thin-film thicknesses.  
07 p1113 A69-19582

Scanning electron mirror microscopy and scanning electron microscopy of integrated circuits.  
17 p2971 A69-32891

- CLINE, T. L.**  
Relativistic electrons from solar flares.  
04 p0650 A69-15528  
On the generation of synchrotron and X-ray emission from electrons with energy below mc super 2 in solar flares.  
09 p1580 A69-22203  
Very high energy solar X-rays observed during the proton event of 7 July 1966.  
10 p1766 A69-23753  
Relativistic solar electrons detected during the 7 July 1966 proton flare event.  
10 p1767 A69-23766
- CLINGAN, J.**  
Some effects of interference of three-dimensional bodies on the wake geometry of a hovering rotor.  
[AIAA PAPER 68-9228] 07 p1051 A69-19551
- CLOBES, A. R.**  
Passive mode locking of a pulsed Nd-YAG laser.  
16 p2797 A69-32019
- CLODE, M.**  
CO sub 2 washout during hyperventilation in man.  
22 p3885 A69-40975
- CLODMAN, J.**  
The design and benefits of an automatic picture transmission /APT/ network.  
[UN PAPER 68-95450] 01 p0054 A69-10522
- CLOSE, D. H.**  
Hologram recording on photopolymer materials.  
13 p2258 A69-27199
- CLOSE, D. M.**  
ESR measurement of quadrupole coupling in N/SO sub 3/ sub 2 super 2 super minus.  
18 p3178 A69-35474
- CLOSE, V.**  
Transesterification with an anion-exchange resin.  
24 p4280 A69-43513
- CLOSE, V. A.**  
Determination of steric purity and configuration of diketopiperazines by gas-liquid chromatography, thin-layer chromatography, and nuclear magnetic resonance spectrometry.  
07 p1075 A69-19498  
Alcoholysis of the Merrifield-type peptide - Polymer bond with an anion exchange resin.  
24 p4279 A69-42713
- CLOSS, R. L.**  
Low latitude sporadic E associated with geomagnetic activity.  
16 p2779 A69-32195
- CLOUD, P. E., JR.**  
Proterozoic eucaryotes from Eastern California.  
22 p3935 A69-40052  
A new Chroococcacean alga from the Proterozoic of Queensland.  
22 p3936 A69-40059
- CLOUD, P., JR.**  
The primitive earth.  
21 p3806 A69-39290
- CLOUGH, P. N.**  
Formation of vibrationally excited N sub 2 O in the reaction of nitrogen atoms with NO sub 2.  
11 p1832 A69-24880
- CLOUGH, R. B.**  
The preparation and properties of vapor-deposited epitaxial InAs sub 1-x P sub x using arsine and phosphine.  
12 p2142 A69-25934  
Vapor-phase growth of epitaxial GaAs sub 1-x Sb sub x alloys using arsine and stibine.  
12 p2145 A69-26920
- CLOUGH, W. R.**  
Very-short-time, very-high-temperature creep rupture of type 347 stainless steel and correlation of data.  
[ASME PAPER 68-WA/MET-2] 14 p2464 A69-29439  
Neck-and-split tensile fracture of anisotropic plate steel.  
[ASME PAPER 68-WA/MET-1] 14 p2464 A69-29440
- CLOUGHERTY, E. V.**  
Diborane materials, candidates for aerospace applications.  
19 p3355 A69-35526
- CLOUTIER, G. J.**  
A history of the meteoroid hazard.  
01 p0160 A69-11412
- CLOUTIER, M.**  
Three-dimensional separation on an inclined ellipsoid /A propos du decollement tridimensionnel sur un ellipsoide incline/.  
08 p1251 A69-19876
- CLOYD, W. C.**  
Simulation of the stress environment of a rocket-borne animal centrifuge.  
13 p2213 A69-28090
- CLUA, A. L.**  
Interferometrically measured thorium lines between 2747 and 4572 angstrom units.  
23 p4191 A69-42150
- CLUBE, S. V. M.**  
The proper motions of RR Lyrae variables. I.  
15 p2700 A69-31493  
Observations of southern RR Lyrae stars.  
21 p3801 A69-38764
- CLUTTER, D. R.**  
Infrared spectroscopic study of polycrystalline NH sub 4 CN.  
24 p4280 A69-43809
- CLUTTERBUCK, F. W. J.**  
The construction of a rectangular shock tube for use with pressure and vacuum.  
06 p0906 A69-16928
- CLYMER, A. B.**  
Methods of simulating structural dynamics.  
05 p0842 A69-16471
- CMIRAL, J.**  
Elimination of the reaction to hypoxia in human beings by repeated exposure to hypoxia /L'abolition de la reaction hypoxique par des expositions repetees a l'hypoxie chez l'homme/.  
23 p4214 A69-41789
- CNUDE, G. M.**  
FM characteristics measurement of telemetry transmitters.  
14 p2411 A69-28881  
Space attenuation at telemetry frequencies.  
24 p4281 A69-42622
- COALE, C. W.**  
Axisymmetric vibrations of a cylindrical-hemispherical tank partially filled with a liquid.  
[AIAA PAPER 67-75] 09 p1482 A69-21940
- COATE, R. E.**  
Manned aerospace simulation.  
[ASME PAPER 69-DE-56] 14 p2427 A69-28844
- COATES, C. L.**  
Realization of sequential machines with threshold elements.  
18 p3105 A69-34618
- COATES, R. J.**  
Tracking and data acquisition for space exploration.  
17 p2919 A69-33371  
Why data system standards/ques/.  
23 p4133 A69-41769
- COATES, R. L.**  
Design considerations for combustion stability.  
[AIAA PAPER 68-532] 12 p2191 A69-26788  
Mixing and combustion of compressible, particle-laden ducted flows.  
[AIAA PAPER 69-460] 16 p2880 A69-32650
- COATS, D. E.**  
Analytical investigations of equilibrium and nonequilibrium compressible turbulent boundary layers.  
[AIAA PAPER 69-689] 17 p2955 A69-33481  
Finite difference solution for the laminar near-wake recompression behavior.  
[AIAA PAPER 69-713] 18 p3085 A69-34417
- COATS, J. D.**  
Correlation of free-flight base pressure data for M equals 4 to M equals 19.  
20 p3458 A69-37196
- COBB, R. O.**  
Pool boiling heat transfer from Teflon-coated stainless steel.  
[ASME PAPER 68-WA/HT-12] 05 p0847 A69-16119
- COBB, W. E.**  
A note on lightning strikes to aircraft.  
03 p0458 A69-13031
- COBBLE, M. H.**  
The temperature of a plate heated by a source of arbitrary motion and strength.  
09 p1622 A69-21906
- Finite transform solution of the vibrating beam with ends elastically restrained.  
11 p1976 A69-24794
- COBENIN, I. A.**  
Analysis of the damping accuracy of polynomial filters /K analizy tochnosti zatukhaniia polinomial'nykh fil'trov/.  
11 p1850 A69-24970
- COBURN, E. L.**  
The effect of thin surface films on the radiative properties of metal surfaces.  
[AIAA PAPER 69-623] 17 p3072 A69-33283
- COBURN, J. F.**  
Lubricant vapor pressure derived from evaporation loss.  
[ASLE PAPER 68-LC-23] 15 p2642 A69-30607
- COBURN, N.**  
Characteristic waves in relativistic nonequilibrium fluids.  
09 p1480 A69-21614
- COCCA, F. J.**  
Electron microprobe analysis of impurity heterogeneities in thermally grown silicon oxide.  
10 p1743 A69-23171
- COCHAIN, R.**  
Computer-aided design /CAD/ in the fields of electronics and logic systems /La conception assistee par ordinateur /CAO/ dans les domaines de l'electronique et des ensembles logiques/.  
08 p1278 A69-19970
- COCHE, J. C.**  
Experimental results of MHD conversion using a rare gas /Resultats d'experiences de conversion MHD a gaz rare/.  
10 p1738 A69-23475
- COCHRAN, J. F.**  
Solid State Physics, Simon Fraser University Summer School on Solid State Physics, Alta Lake, British Columbia, Canada, August 21-September 1, 1967, Lectures. Volume 1 - Electrons in Metals.  
05 p0809 A69-16552
- COCHRAN, R. A.**  
An actuator-disk model for azimuthally nonuniform MPD arcs.  
[AIAA PAPER 68-714] 24 p4359 A69-43570
- COCHRAN, R. W.**  
Effects of surface preparation on stress corrosion cracking of type 310 stainless steel in boiling 42 percent magnesium chloride.  
03 p0444 A69-13311
- COCKE, W. J.**  
Discovery of optical signals from pulsar NP 0532.  
08 p1394 A69-20622  
Optical candidate for pulsar PSR 0833-45.  
13 p2337 A69-27516  
Optical polarization measurements of pulsar NP 0532.  
21 p3798 A69-38542
- COCKETT, A.**  
EEG monitoring during the treatment of decompression illness /"bends"/.  
19 p3261 A69-36268
- COCKFIELD, R. D.**  
Space radiators optimized as structural elements.  
01 p0160 A69-10151
- COCKRELL, C. R.**  
An omnidirectional microwave antenna for use on spacecraft.  
22 p3913 A69-40697
- COCKS, A. C.**  
Sq currents in a three-dimensional ionosphere.  
12 p2074 A69-26955  
The air motions in the dynamo theory of Sq.  
16 p2782 A69-32460
- COCKS, F. H.**  
The separation of corrosion and stress effects in stress corrosion - The critical role of surface preparation.  
21 p3747 A69-39435
- CODE, A. D.**  
A computer-controlled photometric telescope.  
04 p0602 A69-15380  
Filter photometry of Saturn in the spectral region lambda lambda 2950-2450.  
09 p1602 A69-22216
- CODIER, E. O.**  
Reliability prediction - Help or hoax/ques/.  
18 p3146 A69-34514



## CODY, R. P.

RF inductively excited ion laser with aperture-magnetic confinement. 19 p3338 A69-36690

## COE, H. H.

Lubrication and wear of ball bearings in cryogenic hydrogen. 01 p0084 A69-10109

Cooling studies with high-speed ball bearings operating in cold hydrogen gas. [ASLE PAPER 68-LC-2] 07 p1141 A69-19310

## COELING, K. J.

Incipient and nucleate boiling of liquid hydrogen. [ASME PAPER 68-WA/PID-4] 05 p0848 A69-16165

## COEN, R.

Communication systems using synchronous and near synchronous satellites. 09 p1458 A69-22468

## COENNING, F.

A program-controlled automatic level measuring system for selective level and attenuation measurements in the frequency range from 200 Hz to 2 MHz /Ein programmgesteuerter Pegelmessautomat fuer selektive Pegel- und Daempfungsmessungen im Frequenzbereich von 200 Hz bis 2 MHz/. 09 p1501 A69-22577

## COESTER, J.-Y.

Study of a carbon dioxide molecular amplifier operating at high pressures /Etude d'un amplificateur moleculaire a CO sub 2 fonctionnement aux fortes pressions/. 22 p3962 A69-40474

## COEUILLET, J.

Selecting servomechanism motors /Choix des moteurs de servomecanismes/. 11 p1826 A69-25119

## COFER, H. G.

Experiment and theory of the ionization and recombination kinetics in plasmas /super 3 He/ produced through neutron irradiation. 10 p1738 A69-23488

## COFER, J. W., JR.

Statistical characteristics of the polarization power ratio for radar return with circular polarization. 23 p4131 A69-42540

## COFER, W. R., III

High temperature decomposition of ammonium perchlorate using CO sub 2 laser-mass spectrometry. [AIAA PAPER 69-143] 06 p0885 A69-18111

## COFFEE, D. L.

Ultraviolet polarimetry of planets. 15 p2616 A69-31380

Wavelength dependence of polarization. XV - Observations of Venus. 16 p2860 A69-32236

Wavelength dependence of polarization. XVI - Atmosphere of Venus. 16 p2860 A69-32237

## COFFEY, F. J.

Honeycomb panel fabrication by salt bath brazing. 19 p3320 A69-35557

## COFFEY, T. C.

The automatic frequency-domain synthesis of multiloop control systems. [AIAA PAPER 69-941] 22 p3917 A69-40324

## COFFIN, L. F., JR.

Predictive parameters and their application to high temperature, low cycle fatigue. 10 p1796 A69-23068

## COFFMAN, M. L.

New evidence for standing waves in electrically exploded iron wires. 01 p0118 A69-10661

## COGAN, D. M.

Velocity measurements in a plasma jet. 22 p3926 A69-40444

## COGGI, J. V.

Electrical/thermal integration of dynamic power and life support systems for manned spacecraft. 23 p4189 A69-42269

## COGLEY, A. C.

A substitute-kernel approximation for radiative transfer in a nongrey gas near equilibrium, with application to radiative acoustics. 15 p2717 A69-30791

## COGNARD, D.

Inertial magneto confinement of a plasma produced by the interaction of laser radiation with a solid deuterium granule /Confinement magneto inertielle d'un plasma cree par l'interaction du rayonnement laser avec un granule de deuterium solide/. 05 p0798 A69-15585

## COHEN-SOLAL, G.

Transport of photocarriers in Cd sub x Hg sub 1-x Te graded-gap structures. 06 p0979 A69-17154

## COHEN-SOLAL, G.-W.

Study of the generation of ultrasonic waves by stimulated Brillouin emission /Etude de la generation d'ultrasons par effet Brillouin stimule/. 05 p0777 A69-16610

## COHEN, E.

Effective density of phonon states for NdCl sub 3 from vibronic spectra and applications to ion-lattice interactions. 03 p0473 A69-13907

Spectroscopic determination of the magnon density of states of GdCl sub 3, a ferromagnetic rare-earth salt. 03 p0494 A69-14257

Improved deformation functions for the finite element analysis of beam systems. 15 p2710 A69-30869

## COHEN, E. B.

Optimum public policies for introducing innovations. [AAS PAPER 69-292] 24 p4417 A69-42809

## COHEN, E. L.

Exponential distributions in Markov chain models for communication channels. 01 p0027 A69-10267

## COHEN, G.

Effects of various respiratory maneuvers on the physiological response to angular acceleration. 23 p4102 A69-41679

## COHEN, G. B.

Reliability influence on life cycle costs. 12 p2101 A69-25848

## COHEN, G. H.

Changes in ECG contour during prolonged plus g sub z acceleration. 21 p3660 A69-39178

## COHEN, H.

On a nonlinear theory of elastic shells. 01 p0166 A69-10166

A direct nonlinear theory of elastic membranes. 21 p3832 A69-38465

## COHEN, H. A.

Free molecular gas flow through a moving absorbing cylindrical tube. 06 p0911 A69-17877

## COHEN, H. L.

The psi-method applied to both minima of an eclipsing binary. 08 p1408 A69-21136

## COHEN, H. S.

Human operator decision-making in manual control. 20 p3482 A69-37720

## COHEN, I. M.

Diffusion of precursor ions and electrons upstream of a strong shock wave propagating down a shock tube. 11 p1866 A69-25275

On the structure of the boundary layer separating a neutral anisotropic plasma from a magnetic field. 23 p4197 A69-42415

## COHEN, J. G.

The spectrum of alpha super 2 Canum Venaticorum, 5000-6700 angstrom units. 15 p2692 A69-30773

## COHEN, J. M.

The instability of stellar structures intermediate between white dwarfs and neutron stars. 08 p1397 A69-20770

Exact fields of charge and mass distributions in general relativity. 16 p2812 A69-32053

## COHEN, L. C.

The treatment of resonance scattering of polarized radiation in weak magnetic fields by the Monte Carlo technique. 20 p3577 A69-38157

## COHEN, L. G.

On the structure of the boundary layer separating a neutral anisotropic plasma from a magnetic field. 23 p4197 A69-42415

Experimental studies of the interaction between collisionless plasmas and electromagnetic fields. 24 p4359 A69-43646

## COHEN, L. S.

Measurements in free jet mixing/combustion flows. [AIAA PAPER 69-538] 16 p2843 A69-32705

## COHEN, M.

Splat quenching of iron-nickel-boron alloys. 10 p1707 A69-22987

## COHEN, M. D.

Exact fields of charge and mass distributions in general relativity. 16 p2812 A69-32053

## COHEN, M. H.

Interplanetary scintillations. IV - Observations near the sun. 08 p1385 A69-20069

Simple band model for amorphous semiconducting alloys. 15 p2667 A69-30199

High-resolution observations of radio sources. 21 p3812 A69-39518

## COHEN, M. I.

Application of lasers to microelectronic fabrication. 11 p1846 A69-24600

Laser interconnection of wires. 15 p2617 A69-30097

Some aspects of material processing with a laser. 21 p3742 A69-39705

## COHEN, M. K.

Approach guidance planet tracker. 03 p0463 A69-13214

## COHEN, M. L.

Superconductivity and band structure from a single pseudopotential - Zinc and cadmium. 04 p0642 A69-14965

## COHEN, M. S.

Synthesis and evaluation of curing agents. [AIAA PAPER 69-436] 16 p2747 A69-32777

## COHEN, N.

Kinetics of hydrogen halides in shock waves. IV - HBr. 20 p3484 A69-37347

## COHEN, N. D.

Developing interactive graphics systems for aerospace applications. [AIAA PAPER 69-954] 22 p3905 A69-40336

## COHEN, N. S.

Study of a fluid-controlled solid rocket motor for space application. [AIAA PAPER 69-446] 16 p2841 A69-32687

Combustion considerations in fuel-rich propellant systems. 23 p4199 A69-41894

## COHEN, R.

Stresses in shallow axisymmetric shells using a casting procedure. [SESA PAPER 1332] 11 p1995 A69-25651

Methods for evaluating the performance of small acoustic filters. 20 p3464 A69-37321

## COHEN, R. A.

Silicon dioxide thermally grown in a silicon nitride ambient. 12 p2142 A69-25935

## COHEN, S. A.

Modulation factors for amplitude modulation. 01 p0028 A69-10419

## COHEN, S. C.

Fast critical experiments in support of thermionic reactor physics. 09 p1441 A69-21835

Fast neutron spectrum for a subcritical section of a homogeneous super 235 U-polyethylene critical assembly. 18 p3170 A69-34313

## COHEN, S. H.

Development and testing of intermetallic coated titanium alloy gears. 19 p3323 A69-35582

## COHEN, S. I.

Information flow in research and development laboratories. 20 p3640 A69-38019

## COHN, J. D.

A pump system for performing indicator-dilution curves without blood loss. 23 p4101 A69-41450

- COHN, S. B.**  
Equivalent circuit of the bolometer detector.  
01 p0044 A69-10626
- COLACINO, M.**  
The infrared techniques for meteorological applications /Le tecniche dell'infrarosso nelle applicazioni meteorologiche/.  
24 p4316 A69-43507
- COLAK-ANTIC, P.**  
A multipurpose high-efficiency high-voltage flash lamp with electrolytic capacitors /Universelles Hochspannungsblitzgeraet grosser Leistung mit Elektrolyt-Kondensatoren/.  
07 p1116 A69-18259
- COLAMUSSI, A.**  
Delay elements in fluid logic circuits.  
02 p0196 A69-12085
- COLANGELO, V. J.**  
Determining the toughness of thin-walled tubes.  
13 p2269 A69-28183
- COLAO, A.**  
Determining isoclinics from fringe patterns.  
24 p4396 A69-42738
- COLAUTTI, M. P.**  
Transverse vibrations of a wedge-shaped simply supported beam /Sulle vibrazioni trasversali di una biella cuneiforme appoggiata agli estremi/.  
02 p0272 A69-12193
- COLBERT, D. L.**  
The ICRPG measurement uncertainty model.  
[AIAA PAPER 69-734] 16 p2846 A69-32781
- COLBERT, J. E.**  
FLOX/methane pump-fed engine systems.  
[AIAA PAPER 69-510] 16 p2741 A69-32720
- COLBURN, D. S.**  
Earth's bow shock - Elapsed-time observations by two closely spaced satellites.  
02 p0244 A69-12299  
The geomagnetic tail - Topology, reconnection and interaction with the moon.  
07 p1128 A69-19365  
Interplanetary sector structure in the rising portion of the sunspot cycle.  
14 p2517 A69-28957  
Interplanetary field and geomagnetic variations - A unified view.  
16 p2862 A69-32309
- COLBURN, P. J.**  
Television broadcasting by synchronous satellite.  
13 p2220 A69-27830
- COLDRICK, J. R.**  
Phase-only acoustic holography.  
13 p2259 A69-27243  
Acoustical holography and its applications.  
23 p4167 A69-42198
- COLE, A. E.**  
Longitudinal variations in the structure of the stratosphere and mesosphere.  
15 p2602 A69-31379
- COLE, A. J.**  
Local smoothing by polynomials in  $n$  dimensions.  
08 p1344 A69-20830
- COLE, A. R.**  
Comparison of two groundbased D-region experiments.  
15 p2606 A69-31537
- COLE, B. N.**  
Pre-stressing effects in hand-reinforced pressure vessels.  
20 p3621 A69-37064
- COLE, B. W.**  
Development of the shim-joint concept for composite structural members.  
[AIAA PAPER 68-341] 11 p1987 A69-25369  
Comparison of composite and noncomposite structural tubes.  
[AIAA PAPER 68-340] 24 p4405 A69-43653
- COLE, C. K.**  
Ultrasonics - A nondestructive technique for predicting the residual life of compressively fatigued filament wound composites.  
19 p3322 A69-35577
- COLE, D. G.**  
The heights of solar radio sources at 1424 MHz and 696 MHz.  
17 p3040 A69-33808
- COLE, E. M.**  
Effects of bonding techniques on the reliability of hybrid microcircuits.  
22 p3911 A69-39956
- COLE, F. B., JR.**  
Test simulation of aircraft environment.  
08 p1301 A69-20603
- COLE, G. H. A.**  
Classical fluids and the superposition approximation.  
08 p1350 A69-19868
- COLE, H. W.**  
Marconi's contribution to ATC development.  
18 p3168 A69-34806
- COLE, J. D.**  
A class of three-dimensional, optimum hypersonic wings.  
[AIAA PAPER 68-158] 09 p1430 A69-21944  
Acoustic-gravity waves from an energy source at the ground in an isothermal atmosphere.  
18 p3129 A69-34953  
The general similarity solution of the heat equation.  
20 p3630 A69-36915
- COLE, J. E.**  
Microbiology quality activities for a planetary mission.  
15 p2559 A69-31124
- COLE, J. H.**  
Synthesis of fluid logic control circuits.  
24 p4292 A69-43290
- COLE, J. M.**  
Delta-T curves for measuring magnetic tape link jitter.  
07 p1132 A69-18827
- COLE, K. D.**  
Maps of the difference in geomagnetic field at conjugate areas.  
02 p0245 A69-12737  
Electrical conductivity in the earth's bow shock.  
18 p3131 A69-35191
- COLE, L. F.**  
Correlation between high performance epoxy cast resin properties and composite performance.  
08 p1340 A69-20510
- COLE, L. J.**  
Retarded immunological recovery in sublethally X-irradiated mice by additional thymic exposure - Reversal with injected marrow cells.  
22 p3887 A69-41194
- COLE, M. M.**  
Observations of the earth's resources.  
06 p0916 A69-16855
- COLE, R. B.**  
Ammonium perchlorate decomposition by convective surface heating.  
[WSCI PAPER 69-23] 16 p2832 A69-32361  
Ammonium perchlorate linear pyrolysis by convective surface heating.  
[AIAA PAPER 69-501] 16 p2835 A69-32758
- COLE, R. J.**  
Two Interaction Problems in Fluid Mechanics.  
21 p3698 A69-39869
- COLE, R. K.**  
Operation of solar cell arrays in dilute streaming plasmas.  
[AIAA PAPER 69-262] 09 p1436 A69-21726  
Measurements of equilibration potential between a plasma "thrust" beam and a dilute "space" plasma.  
[AIAA PAPER 69-263] 09 p1568 A69-21728
- COLE, R. R.**  
Prediction of the one-dimensional equilibrium cutting gap in electrochemical machining.  
[ASME PAPER 68-WA/PROD-16] 05 p0768 A69-16193
- COLE, T. W.**  
Stability of pulsar periods.  
05 p0825 A69-16353
- COLE, W. P.**  
Reliability testing during development.  
15 p2579 A69-31036
- COLEHOUR, J. K.**  
Prevention of overt motion sickness by incremental exposure to otherwise highly stressful Coriolis accelerations.  
07 p1067 A69-19425
- COLEMAN, E.**  
Elastic scattering of negative pions from deuterons at 2.01, 3.77, and 5.53 GeV/c.  
17 p3007 A69-32885
- Pi super minus p elastic scattering at 2.51, 2.76, and 3.01 GeV/c near  $t$  approximately equal to minus 3 /GeV/c/ super 2.  
24 p4352 A69-43049
- COLEMAN, I.**  
Stellar spectroscopy, 1.2  $\mu$  to 2.6  $\mu$ .  
04 p0655 A69-14667
- COLEMAN, J. A.**  
Direct reading instrument for silicon and germanium four-probe resistivity measurements.  
04 p0599 A69-15019
- COLEMAN, P. C.**  
Soft X-ray background flux.  
24 p4368 A69-43220
- COLEMAN, P. D.**  
Relaxation phenomena in the water vapor laser.  
05 p0771 A69-15810  
Far-infrared lasing in H sub 2 S, OCS, and SO sub 2.  
10 p1706 A69-24008
- COLEMAN, P. J.**  
Search for a lunar wake at large distances from the moon - Mariner 4.  
16 p2856 A69-31986
- COLEMAN, P. J., JR.**  
Magnetospheric substorms observed at the synchronous orbit.  
01 p0075 A69-11225  
The magnetic field at the synchronous, equatorial orbit.  
07 p1123 A69-18343  
Standing Alfvén waves in the magnetosphere.  
07 p1124 A69-18835  
Further evidence on the correlation between transverse fluctuations in the interplanetary magnetic field and Kp.  
14 p2510 A69-28948  
The radial dependence of the interplanetary magnetic field - 1.0-1.5 AU.  
16 p2856 A69-31964  
Day-night variation of Alouette II secondary resonances.  
20 p3496 A69-37889  
On the north-south asymmetry in the solar wind.  
22 p4004 A69-40303  
Observations of the microstructure of the earth's bow shock.  
24 p4306 A69-42693
- COLEMAN, R. R.**  
Fluidic control and logic applications.  
22 p3870 A69-41239
- COLEMAN, T. G.**  
A sampled-data regulator for maintaining a constant alveolar CO sub 2.  
07 p1072 A69-19480
- COLEMAN, W. A.**  
Thermal-neutron flux generation by high-energy protons.  
02 p0279 A69-11837
- COLES, P. A.**  
The influence of end-tidal carbon dioxide tension on EEG changes during routine hyperventilation in different age groups.  
22 p3872 A69-40162
- COLES, R. R. A.**  
Hazardous exposure to impulse noise.  
07 p1066 A69-19171
- COLGATE, S. A.**  
Quasistellar objects and Seyfert galaxies.  
05 p0819 A69-15703  
Gamma-ray lines from young supernova remnants.  
09 p1581 A69-22409  
Early supernova luminosity.  
22 p4026 A69-40649
- COLGATE, S. O.**  
Scattering of high-velocity neutral particles. XVI - Ar- $\text{Ar}$ , Ar-He, and Ar-H sub 2.  
22 p3988 A69-41187
- COLIN, J.**  
Effects of a sharp increase of radiant temperature on the human organism /Effets sur l'organisme d'une augmentation brutale de la température radiante/.  
[AGARDOGRAPH-111] 08 p1264 A69-20670  
Coefficients of heat exchange by convection - An experimental study /Coefficients d'échange de chaleur par convection - Etude expérimentale/.  
[AGARDOGRAPH-111] 08 p1266 A69-20673  
Effects of immersion in cold water on man /Effets sur l'homme de l'immersion dans l'eau froide/.  
08 p1267 A69-20682



- Heat tolerance in the case of ventilation failure in a supersonic transport aircraft /Tolérance a la chaleur dans le cas de panne de la climatisation sur avion de transport supersonique/.  
24 p4277 A69-43382
- Influence of altitude on human heat exchange /Influence de l'altitude sur les échanges thermiques de l'homme/.  
24 p4267 A69-43384
- COLIN, J. M.**  
Radar performance improved by digital processing.  
03 p0393 A69-13291
- COLIN, L.**  
Ray tracing studies for the topside ionosphere.  
07 p1124 A69-18838
- An interpretation of OGO light ion abundance measurements.  
11 p1879 A69-25157
- Morphology of electron concentration enhancement at a height of 1000 kilometers at polar latitudes.  
14 p2510 A69-28938
- Global electron density distributions from topside soundings.  
20 p3530 A69-37867
- Model studies of the kinked Z trace in topside ionograms.  
20 p3531 A69-37893
- Temperature and ion abundance profiles deduced from simultaneous Explorer XXXI and Alouette II data.  
20 p3532 A69-37896
- COLINO, R. R.**  
Economic and other aspects of global telecommunication satellite systems.  
03 p0535 A69-13592
- COLLA, G.**  
The Italian cross radio telescope. III - Operation of the telescope.  
19 p3295 A69-36643
- COLLARD, H. R.**  
Preliminary comparison of solar wind plasma observations in the geomagnetospheric wake at 1000 and 500 earth radii.  
12 p2151 A69-26943
- COLLETT, C. R.**  
Cesium microthruster system.  
[AIAA PAPER 69-292] 09 p1569 A69-21875
- COLLIER, D. W.**  
More effective research for large corporations.  
17 p3075 A69-32964
- COLLIER, E. L.**  
Resistive wall EGD channel.  
02 p0291 A69-12506
- COLLIGAN, J. A.**  
A shift-and-add property for majority combined composite codes.  
03 p0391 A69-13229
- COLLIGNON, F.**  
Study of the reflection indicatrices of a rough surface subjected to heat radiation /Etude des indicatrices de reflexion d'une surface rugueuse soumise au rayonnement thermique/.  
21 p3847 A69-38455
- COLLIN, J.**  
Creep behavior of a Ni-Cr-Mo alloy /Udimet 500/ - Study of the stress-temperature-time correlation /Comportement au fluage d'un alliage au Ni-Cr-Mo /Udimet 500/ - Etude de la correlation contraintes-temperatures-temps/.  
05 p0781 A69-16500
- COLLIN, J.-M.**  
Electronic control and adjustment of the Olympus 593 /Commande et regulation electronique de l'Olympus 593/.  
19 p3395 A69-36706
- COLLIN, R. E.**  
Dispersion relations for a compressible isotropic turbulent plasma.  
[AFCLR-69-0289] 10 p1729 A69-23424
- COLLINET, J.-C. R.**  
FM noise suppression of an injection phase-locked oscillator.  
02 p0220 A69-12450
- Noise-reduction techniques of high-frequency oscillator-high-order multipliers and avalanche-diode-type microwave sources.  
14 p2420 A69-29458

- COLLING, D. A.**  
Investigation of a laminated shielding material for audio and microwave frequencies.  
09 p1500 A69-22310
- Ferromagnetic composite materials for microwave shielding.  
09 p1510 A69-22352
- Unidirectionally solidified cobalt-based alloys for elevated temperature magnetic application.  
19 p3341 A69-35542
- COLLINGNON, J. T.**  
Thrust vector control by secondary gas injection /Deviation de jet par injection gazeuse secondaire/.  
17 p3019 A69-33333
- COLLINGS, W. D.**  
Measurement of blood flow in the limb of man by cuvette densitometry.  
23 p4077 A69-41294
- COLLINS, C. B.**  
Calculation of the dependence of emitted light on charge density for two-electron collisional-radiative recombination in the hydrogenic approximation.  
03 p0469 A69-12923
- Collisional-radiative recombination of ions and electrons in high-pressure plasmas in which the electron temperature exceeds the gas temperature.  
08 p1356 A69-20742
- Late-time source of atomic light in the helium afterglow.  
08 p1356 A69-20743
- COLLINS, C. C.**  
Mechanical components of human eye movements.  
22 p3872 A69-40200
- COLLINS, D. J.**  
An experimental study of the near wake of a two-dimensional hypersonic blunt body with mass addition.  
[AIAA PAPER 69-67] 06 p0862 A69-18044
- The effect of stagnation temperature and molecular weight variation of gaseous injection into a supersonic stream.  
[AIAA PAPER 69-1] 06 p1039 A69-18196
- COLLINS, F. G.**  
Audiometer modification and pulse-tone technique for pure-tone threshold determination.  
06 p0882 A69-17836
- COLLINS, G. J.**  
Charge-exchange excitation and CW oscillation in the zinc-ion laser.  
21 p3735 A69-38598
- COLLINS, H. E.**  
Development of a nickel-base superalloy using statistically designed experiments.  
08 p1329 A69-20001
- Superalloy development for aircraft gas turbines.  
[ASME PAPER 69-GT-7] 09 p1527 A69-22506
- Characterization and thermal stability of nickel-base superalloys.  
10 p1714 A69-23977
- Relative long-time stability of carbide and intermetallic phases in nickel-base superalloys.  
13 p2277 A69-27405
- COLLINS, J. A.**  
The satellite - Canada's unique requirements.  
06 p1043 A69-17832
- COLLINS, J. D.**  
The eigenvalue problem for structural systems with statistical properties.  
16 p2871 A69-31878
- A hazards model for exploding solid propellant rockets.  
[AIAA PAPER 69-461] 16 p2869 A69-32749
- COLLINS, J. H.**  
Measurements of magneto-elastic constants by microwave techniques.  
02 p0299 A69-12243
- 100 MHz surface acoustoelectric amplifier exhibiting stable terminal gain with DC drift field.  
14 p2422 A69-29559
- COLLINS, L. B.**  
MITOL - Machine independent telemetry oriented language.  
22 p3905 A69-40340
- COLLINS, M.**  
Progress report on Apollo program.  
06 p1017 A69-17672
- COLLINS, P. L.**  
Identification of distributed parameter systems using finite differences.  
[ASME PAPER 68-WA/AUT-1] 05 p0738 A69-16185

- COLLINS, R. A.**  
Lunar occultations of radio sources at 81.5 MHz.  
10 p1779 A69-23606
- Further observations of pulsating radio sources.  
17 p3036 A69-33636
- COLLINS, R. B.**  
Sizing high pressure pneumatic components.  
20 p3467 A69-38186
- COLLINS, R. C.**  
Airframe maintenance - An operator's viewpoint.  
03 p0434 A69-13698
- COLLINS, R. L.**  
Tire parameters for landing-gear shimmy studies.  
[AIAA PAPER 68-311] 17 p2902 A69-34029
- COLLINS, S. A., JR.**  
Optical heterodyne detection of a randomly distorted signal beam.  
07 p1087 A69-19642
- Log-amplitude mean for laser-beam propagation in the atmosphere.  
24 p4282 A69-42970
- COLLINS, T. L.**  
Optimization of digital computer systems.  
03 p0400 A69-13233
- COLLINS, V. P.**  
Measurement of sympathetic neurohormones in the plasma of race car drivers.  
07 p1067 A69-19424
- COLLIS, R. T. H.**  
Laser radar applications.  
09 p1521 A69-22795
- Lidar observations of airfield approach conditions - An exploratory study.  
15 p2651 A69-30895
- Lidar.  
22 p3977 A69-40535
- COLLISON, P.**  
Some computations of meridional flow, angular momentum and energy in the atmosphere based on IGY data for latitude 30 deg N.  
08 p1346 A69-20312
- COLLOMOSSE, H.**  
All-weather operation for helicopters - Flight control systems for helicopters.  
09 p1435 A69-22778
- COLLOT, G.**  
Analogies and differences between computers carried on missiles and satellites /Analogies et differences entre calculateurs embarques sur lanceurs et sur satellites/.  
20 p3500 A69-37380
- COLMER, R. A.**  
New developments in the Telford image converter camera.  
12 p2082 A69-26138
- COLOGNA, P. G.**  
Selective amplifier for recording time signals on Time Recorder 2 and measurement of the time lag introduced by the Philips 8RO 501 radio receiver /Amplificatore selettivo per registrazione su Time Recorder 2 di segnali orari e misura del ritardo introdotto dalla ricevente Philips 8RO 501/.  
16 p2790 A69-32217
- COLOBETTI, G.**  
A comparative study by ESR of the radiation resistance of some sulfur and selenoamino acids.  
21 p3668 A69-38425
- COLOMBIER, L.**  
Trace elements and alloys /Oligoelements et alliages/.  
21 p3750 A69-39870
- COLOMBO, G.**  
A theory of the dynamical structure of the Saturn ring supported by recent observations.  
20 p3600 A69-37482
- COLOSIMO, D. D.**  
Wave superheater is upgraded closer to reentry conditions.  
01 p0054 A69-10917
- COLP, J. L.**  
A trailing camera technique for studying projectile penetration into earth materials.  
02 p0227 A69-11760
- Penetration of terrestrial materials by instrumented projectiles.  
02 p0228 A69-11767
- COLQUHOUN, L. R.**  
The operation of hovercraft.  
02 p0277 A69-11592

**COLQUITT, C. W.**  
Fluidics for propellant tank pressurization.  
[AIAA PAPER 68-629] 09 p1442 A69-21980

**COLSHER, R.**  
Analysis and performance of the gas-lubricated tilting pad thrust bearing.  
[ASLE PREPRINT 69AM 3C-2] 15 p2619 A69-30472

**COLTMAN, C. A., JR.**  
Measurement of endogenous carbon monoxide production to determine the effect of high plus g sub x acceleration on the destruction rate of red cells.  
17 p2908 A69-33176

**COLTMAN, R. A.**  
Putting R and D on a profit-making basis.  
14 p2541 A69-29280

**COLTON, D.**  
A contribution to the analytic theory of partial differential equations.  
07 p1173 A69-18731  
Jacobi series which converge to zero, with applications to a class of singular partial differential equations.  
07 p1174 A69-18805

**COLTRIN, R. E.**  
Supersonic wind tunnel investigation of inlet-engine compatibility.  
[AIAA PAPER 69-487] 16 p2840 A69-32676

**COLVER, C. P.**  
Saturated pool boiling burnout of ethane-ethylene mixtures.  
15 p2671 A69-31118

**COLVOCORESSES, A. P.**  
Balloon flights to test remote sensors.  
22 p3865 A69-40806

**COLWELL, G. T.**  
Low density nozzle flow.  
[ASME PAPER 68-WA/FE-9] 05 p0698 A69-16089  
Low density nozzle flow.  
[ASME PAPER 68-WA/FE-9] 14 p2390 A69-29445

**COLWELL, R. G.**  
Mechanics of near-earth satellite clusters.  
[AIAA PAPER 69-929] 21 p3809 A69-39358

**COLWELL, R. N.**  
Determining the usefulness of space photography for natural resource inventory.  
12 p2097 A69-26987  
Applications of earth orbital remote sensing to forest and range problems.  
[AAS PAPER 69-059] 24 p4307 A69-42823

**COLWILL, T.**  
Hypersonic research engine integrated propulsion control.  
[AIAA PAPER 69-546] 16 p2845 A69-32744

**COMANESCU, TR.**  
Supersonic combustion around a conical obstacle /La combustion supersonique autour d'un obstacle conique/.  
15 p2548 A69-31007

**COMAS, F.**  
Clinical studies of radiation effects in man - A preliminary report of a retrospective search for dose-relationships in the prodromal syndrome.  
03 p0374 A69-13503

**COMAS, J.**  
Ejection patterns in low-energy sputtering of GaAs and GaP crystals.  
04 p0640 A69-14452  
Oxygen sticking coefficients on clean /111/ silicon surfaces.  
18 p3183 A69-35107

**COMBA, P. G.**  
A language for three-dimensional geometry.  
05 p0724 A69-16382

**COMBES, A.**  
Parasitic calcifications of soft parts in flight personnel /Les calcifications parasitaires des parties molles et le personnel navigant/.  
09 p1446 A69-22729

**COMBES, C.**  
Methods of development of a distributed-type bipolar transistor model /Methodes d'elaboration d'un modele reparti de transistor bipolaire/.  
08 p1280 A69-19976

**COMBES, R.**  
Stable balloon systems for long-duration stratospheric flights /Systemes stables de ballons pour vols stratospheriques de longue duree/.  
15 p2551 A69-30703

**COMBES, R. C., JR.**  
Design for damage tolerance.  
[AIAA PAPER 69-212] 07 p1056 A69-19574

**COMBET, H.-A.**  
Study of the electrical conductivity and the Hall effect in thin bismuth films between 4.2 and 300 K /Etude de la conductivite electrique et de l'effet Hall dans des couches minces de bismuth entre 4,2 et 300 deg K/.  
09 p1557 A69-21692

**COMBS, L. P.**  
Secondary non destructive instability in medium size liquid fuel rocket engines.  
16 p2836 A69-32001

**COMELLA, J. M.**  
Frequency dependent pulse widths for CP 1133.  
02 p0318 A69-12093  
Crab Nebula pulsar NP 0532.  
09 p1592 A69-21462  
The period of pulsar NP 0532.  
15 p2680 A69-30232

**COMER, C. M.**  
Statistics of tropospheric radio-refractive-index soundings taken over a 3-year period in the United Kingdom.  
13 p2254 A69-28428

**COMER, D. J.**  
Optimisation of bandwidth in noniterative wideband amplifiers.  
09 p1469 A69-22606

**COMERFORD, M. F.**  
A new octahedrite from South Africa.  
03 p0507 A69-13097  
Phosphide and carbide inclusions in iron meteorites.  
19 p3417 A69-36133

**COMES, F. J.**  
Spectroscopy of the hydrogen molecule in the vicinity of its ionization limit /Die Spektroskopie des Wasserstoffmolekuls in der Nahe seiner Ionisierungsgrenze/.  
07 p1184 A69-18490  
Photoinduced shock processes involving metastable hydrogen atoms and H sub 2 in the energy range from 0.05 to 0.47 eV /Photoinduzierte Stossprozesse metastabiler Wasserstoffatome mit H sub 2 im Energiebereich von 0,05-0,47 eV/.  
16 p2813 A69-31754

**COMFORT, E.**  
Experimental investigation of two shock wave boundary layer interaction configurations.  
[AIAA PAPER 69-8] 06 p0915 A69-18172

**COMLY, J.**  
Observation of mode locking and ultrashort optical pulses induced by anisotropic molecular liquids.  
02 p0259 A69-12655  
Optical communication through random atmospheric turbulence.  
23 p4125 A69-42186

**COMO, M.**  
A basis for the linear theory of elastic stability of structures.  
17 p3054 A69-33042  
Strain hardening plasticity with Bauschinger effect.  
21 p3832 A69-38466

**COMOY, J.**  
Studies of the nutritional component of fatigue in glider pilots /Recherches sur la composante nutritionnelle de la fatigue chez les pilotes de vol a voile/.  
23 p4106 A69-41796

**COMPARIN, R. A.**  
In situ vacuum testing - A must for certain elastomeric materials.  
09 p1477 A69-22008  
An analysis of the flow-disturbance and side forces due to gaseous secondary injection into a rocket nozzle.  
[AIAA PAPER 69-443] 16 p2839 A69-32666  
Application of the line-source technique for vacuum thermal conductivity measurements.  
[AIAA PAPER 69-1013] 22 p3922 A69-40386

**COMPSTON, W.**  
Sr isotope patterns within the Southeast Australasian strewn-field.  
23 p4154 A69-41342  
Lead isotopic analysis using a double spike.  
24 p4280 A69-42733

**COMPTON, B.**  
Short-term frequency stability of the HCN maser.  
24 p4327 A69-42614

**COMPTON, R. N.**  
Collisions of monoenergetic electrons with NO sub 2 - Possible lower limits to electron affinities of O sub 2 and NO.  
13 p2301 A69-27363

**COMPTON, R. T., JR.**  
One- and two-dimensional Green's functions for electromagnetic waves in moving simple media.  
03 p0466 A69-13352

**COMPTON, W. A.**  
High temperature sensors for gas turbines.  
[ASME PAPER 69-GT-30] 09 p1501 A69-22492

**COMPTON, W. D.**  
Recombination luminescence in irradiated silicon.  
03 p0494 A69-14243

**COMSTOCK, D. F.**  
Computer program to predict heat transfer through glass.  
[AIAA PAPER 68-65] 13 p2378 A69-28215

**COMSTOCK, G. M.**  
Energy spectra and abundances of the cosmic-ray nuclei helium to iron from the OGO-I satellite experiment.  
08 p1378 A69-20067  
Propagation and source characteristics derived from the low-energy, multiply charged, cosmic-ray nuclei.  
08 p1378 A69-20068

**CONANT, R. C.**  
Channel capacity of Moore automata.  
07 p1088 A69-19707

**CONAWAY, J.**  
Microwave observations of sea state from aircraft.  
18 p3127 A69-34421

**CONEL, J. E.**  
Lunar mascons - A near-surface interpretation.  
04 p0654 A69-14630  
What the Rangers revealed about lunar geology.  
06 p1001 A69-17163  
Infrared emissivities of silicates - Experimental results and a cloudy atmosphere model of spectral emission from condensed particulate mediums.  
10 p1778 A69-23414  
Strategy for scientific exploration of the terrestrial planets.  
22 p4022 A69-40449

**CONFORTO, A. M.**  
Effects of the earth's magnetic field on cosmic rays /Gli effetti del campo magnetico terrestre sui raggi cosmici/.  
08 p1378 A69-20219

**CONFORTO, G. C.**  
Shock waves in stellar atmospheres - Their effects on ionization and radiation fronts /Onde d'urto nelle atmosfere stellari - Effetti sul fronte della ionizzazione e della radiazione/.  
16 p2858 A69-32207

**CONKLIN, E. K.**  
Simultaneous optical and radio observations of NP 0532.  
15 p2680 A69-30233  
Velocity of the earth with respect to the cosmic background radiation.  
17 p3022 A69-32864

**CONKLIN, N. J.**  
Multiplexing, analog-to-digital conversion, and data formatting.  
10 p1660 A69-23232

**CONLEY, C. C.**  
Effects of acute exposure to high-energy protons on primates.  
03 p0374 A69-13498  
On the ultimate behavior of orbits with respect to an unstable critical point. I - Oscillating, asymptotic, and capture orbits.  
07 p1215 A69-18732

**CONLEY, T. D.**  
Analysis of radar return from turbulent rocket exhaust plumes.  
[AIAA PAPER 69-71] 06 p0891 A69-18071

**CONNELL, G. M.**  
Possible effects of boom flutter on the attitude dynamics of the OV1-10 satellite.  
04 p0666 A69-15520  
The effects of boom flutter and magnetic dipoles on the attitude stability of gravity-gradient satellites.  
07 p1227 A69-18332  
Asymptotic stability of second-order linear systems with semidefinite damping.  
20 p3575 A69-37212



Degree-of-freedom requirements for hinged multi-body satellites. 21 p3820 A69-39233

Optimal configurations for hinged, two-body satellites. 24 p4393 A69-43247

**CONNELLY, E. M.**  
Vehicle control experiments with large artificial nerve network /LANNET/. 07 p1070 A69-18388

**CONNELLY, J. J.**  
Optimal estimation of rotation-coupled flexural oscillations. 24 p4394 A69-43291

**CONNER, J. P.**  
Vela-4 satellite energetic particle experiment. [IEEE PAPER 3C-2] 07 p1134 A69-19196

**CONNER, W. J.**  
Manned test of a regenerative life support system. 07 p1071 A69-19427

**CONNES, J.**  
Carbon monoxide in the Martian atmosphere. 23 p4220 A69-42379  
The infrared spectrum of Arcturus. 23 p4222 A69-42453

**CONNES, P.**  
Carbon monoxide in the Martian atmosphere. 23 p4220 A69-42379  
The infrared spectrum of Arcturus. 23 p4222 A69-42453

**CONNOLLY, D. J.**  
The effect of background pressure and magnetic field shape on MPD thruster performance. [AIAA PAPER 69-243] 09 p1564 A69-21239  
A study of the axial velocities in an ammonia MPD thruster. 16 p2835 A69-31890

**CONNOR, B. V.**  
Space magnetics - The Mariner V magnetometer experiment. [IEEE PAPER 10-1] 01 p0081 A69-10714

**CONNOR, J.**  
Geometrically nonlinear finite-element analysis. 13 p2361 A69-27441

**CONNOR, J. J.**  
Transient dynamic response of linearly viscoelastic structures and continua. 11 p1993 A69-25528

**CONNOR, J., JR.**  
Analysis of geometrically nonlinear framed structures. 23 p4232 A69-42142

**CONNOR, M. A.**  
A closed-form solution for three-dimensional re-entry trajectories. I, II. 03 p0504 A69-12858

**CONNOR, W. J.**  
The Huey Cobra in Vietnam. 06 p0867 A69-17661

**CONNORS, M. M.**  
The effect of breathing 100 percent oxygen on foveal thresholds. 02 p0203 A69-12216  
Luminance requirements for hue identification in small targets. 07 p1183 A69-19649

**CONORT, A.**  
The impossibility of deducing the conservation of momentum and energy from a variational principle in Wheeler-Feynman electrodynamics /Sur l'impossibilite de deduire la conservation de l'impulsion-energie d'un principe variationnel dans l'electrodynamique de Wheeler et Feynman/. 04 p0631 A69-15059

**CONOVER, M.**  
Lunar Module thermal-vacuum simulation utilizing conformal heater thermal control. [AIAA PAPER 69-312] 09 p1479 A69-22386

**CONRAD, D. A.**  
Role of correlations in navigation satellite error analysis. [AAS PAPER 68-145] 21 p3761 A69-39222

**CONRAD, H.**  
Effects of hydrostatic pressure on the mechanical behavior of polycrystalline beryllium. 01 p0092 A69-10059  
Grain-size refinement of ingot beryllium by straining under hydrostatic pressure. 08 p1330 A69-20013

The effect of grain size on the strength of alpha-titanium at room temperature. 13 p2280 A69-27766

Work hardening during stress relaxation in titanium at 300 deg K. 19 p3342 A69-35812

Stress relaxation and thermally activated deformation in titanium. 21 p3749 A69-39598

**CONRATH, B. J.**  
Inverse problems in radiative transfer - A review. 06 p0919 A69-17617  
On the estimation of relative humidity profiles from medium-resolution infrared spectra obtained from a satellite. 18 p3126 A69-34284

**CONROY, D. C.**  
Post-wrinkling behavior of a conical shell of revolution subjected to bending loads. 06 p1027 A69-18074 [AIAA PAPER 69-90]

**CONSORTINI, A.**  
Phase correlation measurements of a laser beam propagated through a turbulent medium. 17 p2976 A69-33857

**CONSTANS, A.**  
Theoretical study of spatial and kinetic distributions of molecules reflected by a surface /Etude theorique des distributions cinetiques et spatiales des molecules reflechies par une surface/. 01 p0122 A69-10041

**CONSTANT, A.**  
Study of the influence of additive elements on the properties of 9 percent nickel steel /Etude de l'influence d'elements d'addition sur les proprietes de l'acier a 9 percent de nickel/. 11 p1904 A69-24642

**CONSTANTINESCU, O.**  
E.S.R. spectra of some molybdenum /V/ polycrystalline complexes. 22 p3897 A69-40971

**CONSTANTINESCU, V. N.**  
On the local compressibility effect in spiral-groove bearings. [ASME PAPER 68-LUBS-33] 13 p2266 A69-27274  
Note on the influence of the heat transfer between the surfaces as a secondary effect in gas lubrication. [ASME PAPER 68-LUBS-4] 13 p2267 A69-27286  
On the influence of magnetic and electrical fields in gas lubrication. [ASME PAPER 68-LUBS-26] 13 p2267 A69-27288  
On the electromagnetic pumping effect in gas lubrication. 15 p2629 A69-31003  
A gas bearing generating unit. 15 p2629 A69-31028

**CONSTANTINIDES, A.**  
An operations research approach to system effectiveness. 18 p3145 A69-34503

**CONSTANTINIDES, A. G.**  
Digital notch filters. 15 p2575 A69-30182

**CONSTANTINIDES, E.**  
Observed redistribution of E region ionization by neutral winds. 15 p2677 A69-31395

**CONSTANTINIDES, J. F.**  
Time dependent relation of electron density profiles and wind profiles in the E region. 01 p0072 A69-11172

**CONTENSOU, P.**  
Some general properties of maneuverability domains with semilinear boundaries - Application to orbital transfers /Quelques proprietes generales des domaines de manoeuvrabilite a frontiere semi-lineaire - Application aux transferts d'orbite/. 19 p3399 A69-35668

**CONTI, D. A.**  
The growth of radome design and manufacture at the British Aircraft Corporation Works, Stevenage, England. 07 p1141 A69-19510

**CONTI, P. S.**  
The evolution of close binaries and the Am stars. 05 p0822 A69-15855  
The early A stars. III - Model-atmosphere abundance analysis of four field stars. 09 p1600 A69-22198

Spectral classification of some A stars with large m sub 1 indices. 09 p1602 A69-22215

A search for lithium and beryllium in Ib supergiants and Cepheids. 09 p1604 A69-22402

Stellar Li/Be and Li super 6/Li super 7 ratios. 10 p1785 A69-24095

Zeeman observations of metallic-line stars. 15 p2692 A69-30775

Lithium and beryllium in stars. 21 p3810 A69-39503

**CONTI, R.**  
Inviscid reacting flow near a stagnation point. 11 p1876 A69-25566

**CONTZEN, J. P.**  
Certain aspects of the utilization of advanced propulsion systems /Quelques aspects de l'utilisation des systemes de propulsion avancees/. 06 p0984 A69-17628

**CONVERSE, J. W.**  
A simple hydraulic analog of acoustic waves in baffle cells. 09 p1570 A69-22004

**CONWAY, E. C.**  
Cooling of a high-power electron tube in a space vehicle. 11 p1847 A69-24747  
Nonelectric cathode heating. 11 p1848 A69-24748

**CONWAY, H. D.**  
A parametric study of the complex variable method for analyzing the stresses in an infinite plate containing a rigid rectangular inclusion. 02 p0348 A69-12796  
Effect of fiber geometry and partial debonding on fiber-matrix bond stresses. 07 p1170 A69-18717

**CONWAY, J. B.**  
Stress-rupture Parameters- Origin, Calculation and Use. 13 p2360 A69-27372  
A proposed method for predicting the low-cycle fatigue behavior of 304 and 316 stainless steel. 17 p2987 A69-33079  
Stress-rupture parameters for the refractory metals. [ASM PAPER D8-3.4] 20 p3564 A69-38135

**CONWAY, R. G.**  
An interferometer of 425 metres baseline, consisting of two fully steerable radio telescopes. 03 p0411 A69-13468  
Interferometric measurement of polarization distributions in radio sources. 08 p1390 A69-20389  
Measurement of the spectrum of 387 radio sources at centimetre wavelengths. I. 18 p3200 A69-35132

**COOHILL, T. P.**  
Responses of cultured Chinese hamster cells to ultraviolet light of different wavelengths. 07 p1068 A69-19492  
Post-irradiation properties of cultured Chinese hamster cells exposed to ultraviolet light. 19 p3257 A69-35975

**COOK, A. H.**  
Applications of satellite geodesy. [UN PAPER 68-95793] 01 p0065 A69-10523  
The hydroxyl molecule in interstellar space. 10 p1781 A69-23671  
Gas lasers and the measurement of long period and secular changes of strain. 22 p3960 A69-40189

**COOK, C. E.**  
Rough terrain demonstration of the OV-10A. [AIAA PAPER 69-316] 09 p1434 A69-22391

**COOK, D. H.**  
ECM/ECCM system simulation program. 03 p0400 A69-13200

**COOK, E. B.**  
Predicted air entrainment by subsonic free round jets. 24 p4300 A69-43257

**COOK, E. J.**  
An X-band voltage tunable magnetron. 07 p1102 A69-18670

**COOK, G.**  
Quadratic control problem with an energy constraint - Approximate solutions. 04 p0583 A69-15111

- The application of the method of steepest ascent to a very high order optimization problem - The problem of developing evasion tactics for aircraft pursued by missiles.  
06 p0866 A69-17401
- COOK, G. E.**  
The semi-annual variation in air density at a height of 1100 km from 1964 to 1967.  
06 p0918 A69-17385  
Evaluation of odd zonal harmonics in the geopotential, of degree less than 33, from the analysis of 22 satellite orbits.  
14 p2439 A69-29118  
The semi-annual variation in the upper atmosphere during 1967 and 1968.  
15 p2601 A69-31378  
Semi-annual variation in density at a height of 90 km.  
17 p2958 A69-32863
- COOK, G. R.**  
A coaxial, three-coil probe for measuring local values of electrical conductivity and velocity in plasma streams.  
[AIAA PAPER 69-327] 13 p2313 A69-28264
- COOK, I. T.**  
Shear buckling of orthogonally stiffened, infinitely long simply-supported plates - Stiffeners having torsional and flexural rigidities.  
11 p1984 A69-25142
- COOK, J. L.**  
Fabrication of graphite fiber-reinforced graphite composites.  
[ASM PAPER W9-20.4] 21 p3730 A69-38671
- COOK, J. R.**  
Photo-inhibition of cell division and growth in Euglenoid flagellates.  
01 p0014 A69-10903  
Unbalanced respiratory growth of Euglena.  
10 p1647 A69-24186  
A continuous culture device for protozoan cells.  
15 p2555 A69-30445
- COOK, K. V.**  
Optical methods for studying ultrasonic propagation in transparent media.  
15 p2617 A69-31510
- COOK, P. P.**  
Power spectral density analysis of V/STOL aircraft structures.  
01 p0168 A69-10407
- COOK, R. D.**  
Strain resultants in certain finite elements.  
13 p2364 A69-28230  
Eigenvalue problems with a "mixed" plate element.  
16 p2874 A69-32176
- COOK, W. G.**  
Quality control of welding techniques.  
04 p0608 A69-15485
- COOKE, B. A.**  
Rocket observations of Virgo XR-1.  
15 p2701 A69-31535
- COOKE, D.**  
Stability measurement problems and techniques for operational airborne pulse Doppler radar.  
20 p3492 A69-37711
- COOKE, D. J.**  
Spectral fine structure in pulsar radiation.  
01 p0150 A69-10273  
Measurements on the period of the pulsating radio source at 1919 plus 21.  
07 p1214 A69-18665  
Evidence in support of a rotational model for the pulsar PSR 0833-45.  
09 p1592 A69-21461  
A new determination of muon directional coupling coefficients.  
09 p1583 A69-22759  
Magnetic poles and the polarization structure of pulsar radiation.  
18 p3202 A69-35215
- COOKE, J. P.**  
Comparative cardiovascular responses of baboons and dogs to near-vacuum pressures.  
06 p0875 A69-17846  
Electron microscopy of canine cerebellar Purkinje cells after rapid decompression to a near-vacuum.  
21 p3660 A69-39177
- COOKE, K. L.**  
Differential-difference equations and nonlinear initial-boundary value problems for linear hyperbolic partial differential equations.  
04 p0623 A69-14949
- COOKSON, R. E.**  
Strand size and low pressure deflagration limit in a composite propellant.  
[AIAA PAPER 69-144] 06 p0983 A69-18162
- COOL, D. R.**  
Testing semiconductors for leaks.  
16 p2758 A69-31712
- COOL, T. A.**  
Gain measurements in a fluid mixing CO sub 2 laser system.  
10 p1701 A69-22954
- COOLEY, M. D. A.**  
On the slow motion of two spheres in contact along their line of centres through a viscous fluid.  
24 p4299 A69-42747
- COOLEY, R. L.**  
Are Mil Specs obsolete/ques/  
15 p2722 A69-31120
- COOLEY, W. C.**  
Fluidic logic for a pneumatic stepping motor.  
18 p3092 A69-34310
- COOMBS, L. F. E.**  
The development of aircraft engine accessories.  
16 p2789 A69-31813
- COON, C. W.**  
Transition from the turbulent to the laminar regime for internal convective flow with large property variations.  
[ASME PAPER 69-HT-9] 24 p4304 A69-43559
- COONEY, J. J.**  
Effects of polyurethane foams on microbial growth in fuel-water systems.  
24 p4271 A69-42700
- COOP, R. D.**  
The Apollo communications network.  
18 p3100 A69-34267
- COOPER, C. J.**  
Avionics clean room.  
16 p2767 A69-32369
- COOPER, D. C.**  
Method for measuring wind turbulence.  
04 p0628 A69-15149  
Statistical analysis of position fixing in three dimensions.  
22 p3979 A69-41253
- COOPER, D. E.**  
Survey of rotary-wing handling qualities.  
05 p0701 A69-15550
- COOPER, G. A.**  
Mechanical properties of a new carbon fibre material.  
08 p1341 A69-20700
- COOPER, H. W.**  
Microwave interferometer for simple, precise ILS calibration.  
03 p0430 A69-13680
- COOPER, J.**  
Rapid scanning with the Fabry-Perot etalon.  
01 p0082 A69-10837  
Calculated profiles of He I 4471 and 4922 angstrom units and their forbidden components.  
07 p1224 A69-19713  
On strong collisions in hydrogenic line broadening.  
09 p1543 A69-22405  
Stark broadening of the Na I 5682-88 angstrom units and 4978-82 angstrom units lines.  
15 p2656 A69-31155  
Electron-impact broadening of isolated lines of neutral atoms in a plasma. I.  
16 p2823 A69-32468  
Classical path methods in line broadening. I - The classical path approximation.  
23 p4192 A69-41378  
Classical path methods in line broadening. II - Application to the Lyman series of hydrogen.  
23 p4193 A69-41379
- COOPER, J. E.**  
Investigations of the unique memory properties of 55-Nitinol alloy.  
19 p3340 A69-35523
- COOPER, J. K.**  
Telemetry in medicine and biology.  
22 p3893 A69-40787
- COOPER, L. Y.**  
Constant surface heating of a variable conductivity half-space.  
21 p3851 A69-39292
- COOPER, M. G.**  
Thermal contact conductance.  
13 p2378 A69-28338
- COOPER, O. L.**  
Pressure-altitude transducers.  
07 p1132 A69-18873
- COOPER, P. I.**  
Digital simulation of transient solar still processes.  
16 p2765 A69-31816
- COOPER, P. V.**  
X-band IMPATT microstrip power sources.  
02 p0216 A69-12146
- COOPER, R. K.**  
Comment on "Strength margins for combined random stresses."  
17 p3066 A69-34038
- COOPER, R. W.**  
Magneto-optic light modulators.  
11 p1886 A69-25057
- COOPER, T. E.**  
Analytical determination of cylindrical source temperature fields and their relation to thermal diffusivity of brain tissue.  
06 p0879 A69-17085
- COOPER, V. G.**  
Depolarized Rayleigh scattering in gases as a new probe of intermolecular forces.  
[IEEE PAPER B-11] 07 p1157 A69-19485
- COOPER, W. K.**  
Interferometer-controlled telemetry tracking system.  
19 p3271 A69-36253
- COOPER, W. R.**  
CLIP - An interactive multi-computer system for processing ionospheric data.  
[AIAA PAPER 69-952] 22 p3904 A69-40334
- COOPERMAN, R. S.**  
A flexible format adaptive telemetry encoder.  
23 p4119 A69-41748
- COOPERSMITH, M. H.**  
Excitation spectrum for a Bose gas with repulsive core and attractive well.  
17 p3008 A69-33118
- COPLEY, L. G.**  
A longitudinal crack in a cylindrical shell under internal pressure.  
18 p3212 A69-34346
- COPLEY, S. M.**  
The role of interfaces in Ni-base superalloys.  
03 p0449 A69-13878  
Work-hardening in off-stoichiometric Ni sub 3 Al.  
05 p0779 A69-15760
- COPPENS, R.**  
Properties of epitaxially grown silver and gold films and the influence of alpha irradiation.  
03 p0486 A69-13582
- COPPI, B.**  
Fluctuations in multipole confined plasmas.  
05 p0804 A69-16385  
Nonlinear interactions of positive and negative energy modes in plasmas.  
[IAEA PAPER CN-24/E-13] 07 p1196 A69-19768  
Drift instabilities in a uniformly rotating plasma cylinder.  
11 p1924 A69-24300
- COQUIN, G. A.**  
Ultrasonic dispersive delay lines - An approach to better radar systems.  
24 p4286 A69-42901
- CORALLO, R. A.**  
Determination of high gas-stream temperatures from short-exposure probe responses.  
15 p2612 A69-31268  
Determination of high gas-stream temperatures from short-exposure probe responses.  
20 p3536 A69-37005
- CORBETT, H. H.**  
The flux density of Taurus A at 4.3-mm wavelength.  
09 p1591 A69-21450  
Observations of variable radio sources at 9.55-milimeter wavelength.  
13 p2334 A69-27309  
Observations of radio sources at 4.3-mm wavelength.  
22 p4014 A69-40126



## CORBETT, R. E.

Two year flight performance of the Lockheed Type XI nickel-cadmium battery. 23 p4072 A69-42285

## CORBEY, C. D.

Self-pumped Gunn-effect parametric amplifier. 07 p1107 A69-19450

## CORBIN, J. D.

Mariner IV and OGO III - Recent measurements of picogram dust particle flux in interplanetary and cislunar space. 15 p2699 A69-31394

Lunar Explorer 35 - 1967-1968 measurements of picogram dust particle flux in selenocentric space. 15 p2699 A69-31396

## CORBLY, D. M.

The accuracy and precision of ultrasonic shear wave flaw measurements as a function of stress of the flaw. 24 p4397 A69-42756

## CORCORAN, D. W. J.

On the combination of evidence from the eye and ear. 23 p4111 A69-42168

## CORCORAN, V. J.

CW gain characteristics of the 890-GHz HCN laser line. 19 p3339 A69-36695

Frequency lock of the hydrogen cyanide laser to a microwave frequency standard. 22 p3963 A69-40567

## CORCORAN, W. H.

Some new transition probabilities of argon I in the range of 5000-6500 angstrom units and the role of a nonuniform source temperature. 01 p0125 A69-10963

## CORCUFF, Y.

Perturbations discovered in the magnetosphere by means of whistlers, as an aftermath of the proton event of July 7, 1966 /Perturbations decouvertes dans la magnetosphere, au moyen des sifflements radioelectriques, a la suite de l'evenement a proton du 7 juillet 1966/. 10 p1683 A69-23776

## CORDELLOS, A. D.

Use of Rayleigh waves for the detection of stress-corrosion cracking /SCC/ in aluminum alloys. 12 p2114 A69-26306

## CORDES, H. F.

An estimate of the melting point of ammonium perchlorate. 20 p3585 A69-37217

## CORDEY, J. G.

The ion cyclotron drift loss-cone instability in mirror magnetic wells. 02 p0288 A69-12169

## CORDIER, H.

The stress corrosion behavior of AlZnMg alloys /Das Spannungsrisikokorrosionsverhalten der AlZnMg-Legierungen/. 16 p2800 A69-31779

## CORDWELL, J. E.

The brittle fracture of /100/ axis tungsten single crystals. 15 p2637 A69-30226

## CORELLI, J. C.

Effect of 50 Mev electrons of the ultimate Fermi level in germanium. 04 p0640 A69-14444

Interaction of Li and O with radiation-produced defects in Si. 09 p1554 A69-21337

## COREY, A.

The potential of titanium castings in gas turbine engines. [ASME PAPER 69-GT-24] 09 p1513 A69-22494

## COREY, V. B.

Electrically servoed transducers for flight control. 05 p0766 A69-16750

## CORINO, E. R.

A visual investigation of the wall region in turbulent flow. 17 p2956 A69-33598

## CORK, M. J.

Mission constraints on solid-propellant motors for unmanned spacecraft. [AIAA PAPER 68-815] 21 p3819 A69-39031

## CORLISS, L. D.

A study of the quadratic performance index for a VTOL prefilter model reference attitude control system. [AIAA PAPER 69-884] 21 p3764 A69-39411

## CORMERY, G.

The aerodynamic derivation of the Concorde wing. [RAES PAPER 18] 22 p3859 A69-40497

## CORMIER, A.

Expandable airlock experiment for the orbital workshop. [IAF PAPER SD-49] 02 p0334 A69-11949

## CORN, D. L.

A comparison of the experimental biaxial strength of structural alloys with theoretical predictions. 10 p1714 A69-23974

## CORNALL, P. N.

Materials for space application. 24 p4332 A69-43207

## CORNBLEET, S.

Beam shaping for optimum illumination patterns. [UN PAPER 68-95756] 01 p0029 A69-10524

Multi-frequency operation of sandwich radomes. 01 p0034 A69-11037

Multi-frequency radomes and radomes with zero insertion phase delay. 07 p1110 A69-19522

## CORNELIS, A.

Application of Computers to the Calculation of Structures /Application des ordinateurs au calcul des structures/. 07 p1233 A69-19349

## CORNELIUS, F.

Questions concerning the theory of relativity /Fragezeichen zur Relativitaets-Theorie/. 10 p1725 A69-23317

## CORNELL, R. G.

Simultaneous estimation by partial totals for compartmental models. 01 p0106 A69-10926

Biological losses and the quarantine policy for Mars. 11 p1828 A69-25459

Release of microbial contamination from fractured solids. 11 p1828 A69-25461

Release of microbial contamination from fractured solids. 20 p3475 A69-37614

Spearman simultaneous estimation for a compartmental model. 24 p4339 A69-42765

## CORNES, G. M. M.

A polygonal finite element for plate bending problems using the assumed stress approach. 15 p2710 A69-30867

## CORNFIELD, J.

Selected risk factors in coronary disease. 24 p4262 A69-43059

## CORNIA, R. P.

Combustion bomb tests of an extinguishable fluorocarbon propellant. [WSCI PAPER 69-9] 16 p2831 A69-32349

## CORNICK, D. E.

Optimization of the parking orbit orientation for a three-dimensional capture-escape mission utilizing Davidson's method. [AIAA PAPER 69-918] 21 p3808 A69-39347

## CORNIL, M.

Measurement of the gas concentration in a boundary layer undergoing uniform injection /Mesure de la concentration des gaz dans une couche limite, soumise a une injection uniforme/. 23 p4058 A69-41695

## CORNSEWET, T. N.

Non-contact method of measuring small eye-movements and stabilizing the retinal image. 09 p1446 A69-21908

## CORRIGAN, M. J.

From A to B - The aviation industry's responsibility to passengers. 06 p1042 A69-16851

## CORRIGAN, S. J. B.

Dissociation of carbon dioxide in the positive column of a glow discharge. 14 p2488 A69-29095

## CORRINGTON, L. C.

The nuclear rocket program - Its status and plans. [AIAA PAPER 68-610] 21 p3768 A69-39219

## CORRIOL, J.

Problems of ventilation mechanics under high-pressure conditions /Problemes de mecanique ventilatoire en hyperbarie/. 13 p2215 A69-28598

Preliminary data on a limitation of the use of an oxygen-hydrogen mixture for deep submersion to the saturation point /Premieres donnees sur une limitation de l'utilisation du melange oxygene-hydrogene pour la plongee profonde a saturation/. 24 p4262 A69-43025

## CORSE, F. E.

Synthetic foam preregs - A new composite construction material. 19 p3353 A69-35512

## CORSI, S.

Surface states and pinch-off effect in CdS crystals. 03 p0488 A69-13757

Infra-red quenching, pinch-off effect, and mobility in CdS. 16 p2827 A69-32044

## CORTEN, F. L. J. H.

Performance and cost of flight functions. 22 p3863 A69-40041

## CORTI, E.

Radiation of electromagnetic waves in very general time-invariant linear media. 17 p2924 A69-33834

## CORVIN, K. K.

Dissociation of carbon dioxide in the positive column of a glow discharge. 14 p2488 A69-29095

## CORY, H.

Analysis of coupling problems for the case of proton whistlers /Analyse des problemes de couplage dans le cas des sifflements protoniques/. 13 p2254 A69-27981

A V.L.F. and particle rocket experiment at Kerguelen Islands. II. 15 p2571 A69-31424

The simple thin-film optical method in electromagnetic wave propagation. 16 p2752 A69-32392

The generalized thin-film optical method in electromagnetic wave propagation. 16 p2753 A69-32393

The generalized thin-film optical technique in radio propagation. 17 p2927 A69-33863

## CORY, J. S.

Plasma-dynamic stabilization in a coaxial-jet, gas-core reactor. 24 p4349 A69-43679

## COSMOVICI, C. B.

Simulation of cometary two-phase flow with evaporation. 10 p1674 A69-23686

## COSTA

Damping of high-rigidity structures /Amortissement des structures de raideur elevee/. 13 p2370 A69-28601

## COSTA DE BEAUREGARD, O.

The "mass defect" of a connected system in the Wheeler-Feynman theory of electromagnetic interaction - New expression for the total momentum-energy of the system /Le "defaut de masse" d'un systeme lie en theorie de l'interaction electromagnetique de Wheeler et Feynman - Nouvelle expression de l'impulsion-energie totale du systeme/. 04 p0631 A69-15058

"Mass defect" and gauge invariance in the Wheeler-Feynman theory of electromagnetic interaction /"Defaut de masse" et invariance de jauge en theorie de l'interaction electromagnetique de Wheeler et Feynman/. 11 p1915 A69-24326

The Penfield-Haus effect as an inertial effect of orbital angular momentum - Derivation of the Bohr magneton formula from the Einstein equivalence principle /L'effet Penfield-Haus comme effet inertiel de moment angulaire orbital - Deduction de la formule du magneton de Bohr du principe d'equivalence d'Einstein/. 11 p1919 A69-25098

## COSTA, F.

Regional and total body sweat composition of men fed controlled diets. 10 p1644 A69-23314

## COSTAIN, C. H.

Spectral flux densities of radio sources at 22.25 MHz. I. 16 p2860 A69-32231

- Large 22-MHz array for radio astronomy.  
20 p3507 A69-37837
- COSTANZO, A.**  
Application of an associative processor to an inter-  
ceptor radar system.  
17 p2931 A69-34071
- COSTELLO, D. J., JR.**  
A construction technique for random-error- correct-  
ing convolutional codes.  
24 p4284 A69-42723
- COSTELLO, D. P.**  
Microtubules in spermatozoa of Childia /Turbellaria,  
acoela/ revealed by negative staining.  
07 p1066 A69-19263
- COSTELLO, F. A.**  
Limits of validity of rms approximation for satellite-  
temperature variances.  
02 p0352 A69-12211  
The selection of spacecraft optical coatings for tem-  
perature control.  
[AIAA PAPER 69-979] 22 p4050 A69-40359
- COSTER, H. G. L.**  
Gravito-inertial fields and relativity.  
07 p1182 A69-19408
- COSTOGUE, E.**  
Solar electric propulsion system evaluation.  
[AIAA PAPER 69-498] 16 p2843 A69-32708
- COT, P. D.**  
Air traffic in transport systems of the future - Eu-  
rope's role in future world air transport /Der Luftver-  
kehr im Transportsystem der Zukunft - Europa im  
kuenftigen Weltluftverkehr/.  
11 p2004 A69-25216
- COTES, J. E.**  
Relationships of oxygen consumption, ventilation  
and cardiac frequency to body weight during stan-  
dardized submaximal exercise in normal subjects.  
23 p4099 A69-42169
- COTIN, F.**  
Stability of stratospheric balloons and their gondolas  
/Stabilite des ballons stratospheriques et de leur  
nacelle/.  
19 p3248 A69-36689
- COTSFTIS, M.**  
Necessary and sufficient stability conditions for  
systems of differential equations with quasi-periodic  
reducible coefficients /Conditions necessaires et suf-  
fisantes de stabilite des systemes differentiels a coeffi-  
cients quasi periodiques reducibles/.  
01 p0107 A69-11130  
On stability of motion.  
11 p1919 A69-25437
- COTTER, R. W.**  
The electrolytic bubble level to obtain model atti-  
tude accuracy during wind tunnel tests.  
10 p1672 A69-23268
- COTTERELL, B.**  
On the behavior of notched struts.  
05 p0837 A69-16064  
Fracture propagation in organic glasses.  
05 p0784 A69-16429
- COTTIN, P.**  
Transistor and diode models for the "ECAP" pro-  
gram - Some applications /Modeles de transistors et  
diodes pour programme "ECAP" - Quelques applica-  
tions/.  
08 p1280 A69-19975
- COTTRILL, S. D.**  
A computation of radar SEP and CEP.  
13 p2221 A69-27963
- COUAIROIN, M.**  
Breakdown plasmoids produced by lasers /Sur les  
boules de claquage creees par lasers/.  
03 p0480 A69-14058
- COUCOULAS, A.**  
Compliant bonding - A new technique for joining  
microelectronic components.  
02 p0254 A69-12473
- COUDERT, J.**  
Cutaneous circulation during adaptation to high al-  
titude /La circulation cutanee au cours de l'adaptation  
a l'altitude/.  
23 p4098 A69-42106
- COUDEVILLE, A.**  
Scattering of laser light by a laboratory plasma /Dif-  
fusion de la lumiere laser par un plasma de laboratoire/.  
05 p0798 A69-15586
- Axial striograms of a noncylindrical focusing  
discharge /Striogrammes axiaux d'une decharge non  
cylindrique focalisante/.  
08 p1362 A69-20279  
90 deg laser light scattering by a dense plasma focus.  
11 p1899 A69-25324  
Study of the collective scattering of laser light at an  
angle of 90 deg by a cold dense plasma /Etude de la dif-  
fusion collective a 90 deg de la lumiere laser par un  
plasma dense et froid/.  
13 p2273 A69-28366
- COUDOT, D.**  
Space applications of electrochemical generators  
/Applications spatiales des generateurs elec-  
trochimiques/.  
08 p1259 A69-21036  
Space applications of electrochemical generators  
/Applications spatiales des generateurs elec-  
trochimiques/.  
16 p2737 A69-32407
- COUFLEAU, P.**  
Preliminary study of the D-2 experiment /Etude  
preliminaire a l'experience D-2/.  
11 p1949 A69-24869
- COUFOVA, P.**  
Investigation of the temperature dependence of the  
dielectric constant of barium titanate single crystals  
doped with hydroxyl /Issledovanie temperaturnoi  
zavisimosti dielektricheskoi prinitsaemosti na  
monokristallakh titanata bariia s dobavkoi gidroksila/.  
22 p3995 A69-41157  
Defect structure of ceramic barium titanate with  
chromium oxide additions /O defektnoi strukture  
keramicheskogo titanata bariia s dobavkoi okisi  
khroma/.  
22 p3996 A69-41160
- COUGHRAN, H. J.**  
Design reviews and derating.  
22 p3953 A69-40031
- COULMAN, C. E.**  
Effect of averaging time on MTF in a turbulent at-  
mosphere.  
06 p0890 A69-17806  
A quantitative treatment of solar "seeing". I.  
14 p2453 A69-29973
- COULMAN, G. A.**  
A hybrid computational method for partial dif-  
ferential equations.  
04 p0566 A69-15347
- COULMANCE, M.**  
Dynamic aspects of the human electroencephalo-  
gram - Initial results of a radiotelemetric study /Aspects  
dynamiques de l'electroencephalogramme humain -  
Premiers resultats d'une etude radio-telemetrique/.  
22 p3889 A69-40158
- COULSON, K. L.**  
Polarimetry of Mars.  
23 p4212 A69-41615
- COULSON, L.**  
Pion capture in super 6 Li and super 7 Li, the forma-  
tion of super 4 H, a search for super 5 H.  
12 p2132 A69-26296  
Search for an excited state of the triton.  
12 p2132 A69-26297
- COULTAS, T. A.**  
Combustion stabilization with acoustic absorbers.  
03 p0532 A69-13133
- COULTER, G. L.**  
Far-infrared spectra and structure of small ring com-  
pounds - Ethylene carbonate, gamma- butyrolactone,  
and cyclopentanone/.  
02 p0206 A69-12723
- COUMES, C.**  
Stabilized single-mode ionized argon laser /Laser  
argon ionise a mode unique, stabilise/.  
07 p1145 A69-18475
- COUNSELMAN, C. C.**  
Radar measurements of Martian topography.  
16 p2860 A69-32238
- COUPRY, G.**  
Unsteady supersonic flow around a thin circular  
cylinder /Ecoulement supersonique instationnaire au-  
tour d'un cylindre circulaire mince/.  
[ONERA-TP-666] 06 p0857 A69-17098  
Pressure induced on a lifting surface by an isotropic  
atmospheric turbulence /Pression induite sur une sur-  
face portante par une turbulence atmosferique  
isotrope/.  
[ONERA-TP-681] 09 p1613 A69-21689
- Equivalence of two procedures for quick processing  
of statistical data concerning Gaussian processes  
/Equivalence de deux procedes de depouillement ra-  
pide des donnees statistiques de processus gaussiens/.  
19 p3361 A69-36646  
Use of an aircraft for measuring the statistical dis-  
tribution of turbulence /Utilisation d'un avion comme  
moyen de mesure de la distribution statistique de la tur-  
bulence/.  
[ONERA-TP-699] 20 p3541 A69-37754
- COUR-PALAI, B. G.**  
Meteoroid protection by multiwall structures.  
[AIAA PAPER 69-372] 13 p2367 A69-28304
- COURRIER, M.**  
Utilization of very short pulse lasers for instantane-  
ous measurement of deformations by the holographic  
method /Utilisation des lasers en impulsions tres  
courtes pour la mesure instantanee des deformations  
par methode holographique/.  
12 p2087 A69-26175
- COURTEL, R.**  
Friction-induced plastic deformation of single  
crystals of hcp metals - Beryllium, cobalt, and zinc  
/Deformation plastique par frottement, de quelques  
monocristaux metalliques a structure hexagonale -  
Beryllium, cobalt et zinc/.  
02 p0254 A69-12627  
The rigidity of the contact between two solid sur-  
faces and its role in causing friction in the presence of  
vibrations /Sur la rigidite de contact entre deux sur-  
faces solides, et son role dans le frottement en presence  
de vibrations/.  
12 p2102 A69-26290  
Physicochemical and surface properties and friction  
under lunar conditions /Proprietes physico-chimiques  
superficielles et frottement dans les conditions lu-  
naires/.  
18 p3113 A69-34241
- COURTIER, G. M.**  
Modulation of auroral electrons at large distances  
from the earth.  
12 p2065 A69-26108  
Modulation of auroral electrons near the equatorial  
plane.  
21 p3709 A69-38499
- COURTNEY, A. L.**  
Development of the shim-joint concept for com-  
posite structural members.  
[AIAA PAPER 68-341] 11 p1987 A69-25369
- COURTNEY, T. H.**  
Aging in Nb/Cb/-Ti-O superconductors, with appen-  
dix.  
03 p0484 A69-13118
- COUSIN, S. B.**  
Three-dimensional boundary layers on cones at small  
angles of attack.  
[ASME PAPER 68-WA/APM-24] 04 p0541 A69-14389
- COUTANCEAU, J.**  
Similarity between flows past a stationary obstacle of  
thermodynamically perfect gases in or out of a gravita-  
tional field /Sur la similitude entre des ecoulements au-  
tour d'un obstacle fixe de gaz thermodynamiquement  
parfaits, places ou non dans un champ de pesanteur/.  
09 p1429 A69-21686  
The determination of the transverse thermal re-  
sistance of an isotropic homogeneous cylinder of  
revolution with mixed boundary conditions /Sur la  
determination de la resistance thermique transversale  
d'un cylindre de revolution homogene isotrope avec  
des conditions aux limites mixtes/.  
12 p2190 A69-26292  
Natural turbulent convection on an isothermal ver-  
tical plate, transition, heat exchange and wall friction,  
velocity and temperature distribution laws /Convection  
naturelle turbulente sur une plaque verticale  
isotherme, transition, echange de chaleur et frottement  
parietal, lois de repartition de vitesse et de tempera-  
ture/.  
21 p3852 A69-39430
- COUTANCEAU, M.**  
Calculation of an irrotational hydrodynamic field  
around a sphere moving along the axis of a cylindrical  
tube containing an incompressible fluid /Sur le calcul  
du champ hydrodynamique irrotationnel' autour d'une  
sphere qui se deplace dans l'axe d'un tube cylindrique  
contenant un fluide incompressible/.  
03 p0415 A69-13362  
Expansion of the stream function of a steady  
meridional flow of a viscous fluid, at small Reynolds  
numbers /Sur un developpement de la fonction de cou-  
rant de l'ecoulement meriden permanent d'un fluide  
visqueux, interessant les petits nombres de Reynolds/.  
13 p2247 A69-27737



## COUTEAU, P.

Fundamental separations of close visual binaries  
/Distances fondamentales d'étoiles doubles serrées/.  
16 p2855 A69-31662

## COUTS, W. H., JR.

The influence of carbon upon cast Waspaloy.  
[SAE PAPER 690100] 07 p1158 A69-18307

## COUTSOURADIS, D.

Structural stability of MAR-M 509, a cobalt-base superalloy.  
05 p0781 A69-16448

Microstructure of cobalt-base high-temperature alloys.  
14 p2465 A69-29890

## COUTURE

Motors using catalytic decomposition of hydrazine  
/Les moteurs a decomposition catalytique de l'-hydrazine/.  
17 p3019 A69-33340

Turbopump engine with a thrust of 400 kn /Moteur a turbo-pompe de 400 kilonewtons de poussee/.  
17 p3019 A69-33341

## COVELL, J. W.

Increased myocardial oxygen consumption and contractile state associated with increased heart rate in dogs.  
24 p4258 A69-42634

## COVERT, E. E.

Design and calibration of a small heat transfer gage and its application.  
15 p2613 A69-31272

An aerodynamic pitch-roll coupling in spinning vehicles.  
21 p3647 A69-39038

## COVINGTON, A. E.

Solar radio emission at 10.7 cm, 1947-1968.  
19 p3401 A69-35758

## COWAN, C. L.

Concerning redshifts in the spectra of quasi-stellar objects.  
01 p0153 A69-10855

## COWAN, F. P.

Interactions above 10 Gev.  
03 p0371 A69-13477

## COWAN, K. C.

A computational method for determining the stability region of a second-order non-linear autonomous system.  
08 p1297 A69-20358

## COWAN, R. D.

Theoretical calculations of the d-, f-, and g-electron transition series.  
08 p1355 A69-20734

## COWAN, T. W.

Application of new concepts to the design of an advanced nickel-base superalloy - Udimet 710.  
[SAE PAPER 690103] 09 p1522 A69-21556

## COWAN, W. M., JR.

Indirect atmospheric measurements utilizing Rake tropospheric scatter techniques. I - The Rake tropospheric scatter technique.  
14 p2448 A69-29524

## COWARD, K. S.

An assessment of variable geometry spacecraft performance potential.  
[AIAA PAPER 68-1164] 03 p0520 A69-13562

## COWGILL, D. S.

The effect of chloride contamination on cracking in titanium.  
[SAE PAPER 680642] 03 p0444 A69-13458  
Titanium corrosion cracking morphology.  
13 p2282 A69-28165

## COWLEY, A.

A study of the bright A stars. I - A catalogue of spectral classifications.  
16 p2860 A69-32233

## COWLEY, A. M.

Shot noise in silicon Schottky barrier diodes.  
05 p0734 A69-16564

## COWLEY, A. P.

The VV Cephei stars.  
24 p4386 A69-43346

## COWLEY, C.

A study of the bright A stars. I - A catalogue of spectral classifications.  
16 p2860 A69-32233

## COWLING, P. W.

Development of a modified cascade thermoelectric heat pump.  
22 p3869 A69-40133

## COWPER, G. R.

On the accuracy of Timoshenko's beam theory.  
04 p0675 A69-14593  
The shear coefficient - Some experimental evidence.  
10 p1801 A69-23538

## COWPERTHWAIT, M.

Relationships between incomplete equations of state.  
23 p4239 A69-41569

## COWSIK, R.

Lithium, beryllium, boron and fluorine nuclei in cosmic radiation.  
06 p0988 A69-17271

Spectra of heavy and super heavy nuclei in steady state.  
06 p0988 A69-17273

Rigidity spectrum of cosmic ray helium nuclei using a magnetic spectrograph.  
06 p0989 A69-17277

Possible origin of high-energy cosmic gamma rays/ques/.  
09 p1580 A69-22295

## COX, A. D.

Existence and uniqueness of solutions to uni-axial elastic-plastic wave interactions.  
16 p2870 A69-31809

## COX, C. R.

Helicopter noise reduction and its effects on operations.  
[AHS PAPER 352] 17 p2915 A69-33525  
Rotor noise measurements in wind tunnels.  
18 p3119 A69-35225

## COX, D. C.

A data-gathering antenna array for transhorizon propagation research.  
11 p1851 A69-24987

## COX, D. M.

Electron impact excitation of hydrogen Lyman-alpha radiation.  
02 p0283 A69-12466

## COX, D. P.

Effects of self-absorption and internal dust on hydrogen-line intensities in gaseous nebulae.  
10 p1787 A69-24118  
Ionization equilibrium and radiative cooling of a low-density plasma.  
24 p4376 A69-42661

## COX, J. E.

The effect of oxygen-supply impurities on the performance of a hydrogen-oxygen fuel cell.  
04 p0551 A69-15310

## COX, J. P.

Pulsating stars.  
04 p0653 A69-14625

General relativistic instability in white dwarfs.  
06 p1010 A69-17975

Principles of stellar structure. Volume 1 - Physical principles.  
23 p4211 A69-41377

Principles of Stellar Structure. Volume 2 - Applications to Stars.  
23 p4223 A69-42475

## COX, J. R., JR.

An algorithmic approach to signal estimation useful in fetal electrocardiography.  
21 p3668 A69-39866

## COX, L. P.

Solar cell degradation experiments on LES-4 and -5.  
19 p3254 A69-35713

## COX, R. A.

Application of power spectral methods to aircraft gust clearance.  
24 p4253 A69-43111

## COX, R. H.

The application of the scanning electron microscope to the development of high-reliability semiconductor products.  
17 p2936 A69-32892

Comparison of linearized wave propagation models for arterial blood flow analysis.  
19 p3264 A69-36868

## COX, S. K.

Radiation models of midlatitude synoptic features.  
24 p4343 A69-43064

## COX, V. C.

Short-latency antidiuresis following the initiation of food ingestion.  
01 p0014 A69-10864

Hypothalamic motivational systems - Fixed or plastic neural circuits/ques/.  
09 p1444 A69-21314

A comparison of stimulus-bound drinking and drinking induced by water deprivation.  
17 p2910 A69-33754

The motivation underlying eating elicited by lateral hypothalamic stimulation.  
17 p2910 A69-33752

Ventromedial hypothalamic lesions and changes in body weight and food consumption in male and female rats.  
17 p2910 A69-33756

## COX, W. F.

Reliability vibration testing.  
22 p3954 A69-40036

## COYNE, G.

Survey of the region of Lacerta OB1.  
12 p2153 A69-25813

## COYNE, G. V.

Wavelength dependence of polarization. XVII - Be-type stars.  
16 p2863 A69-32393

## COZEWITH, A.

Cryogenic stretch forming improves strength of vessels.  
18 p3150 A69-35420

## COZZARELLI, F. A.

Creep of conical membrane shells under aerodynamic heating and loading.  
13 p2364 A69-28205

## COZZENS, D. E.

Nomogram plans circular antenna array.  
01 p0037 A69-10017

## CRABB, R. L.

Environmental assessment of thin silicon solar cells from pilot production.  
19 p3252 A69-35694

## CRABILL, N. L.

Lunar Orbiter mission design.  
[AIAA PAPER 68-47] 04 p0664 A69-15503

## CRABTREE, D. L.

Velocity and temperature profiles in the turbulent boundary layer above an evaporating liquid film.  
13 p2375 A69-27792

## CRABTREE, L. F.

Aerodynamic research for future civil aircraft.  
16 p2732 A69-32023

## CRAFER, R. C.

Time-dependent processes in CO sub 2 laser amplifiers.  
08 p1324 A69-20098

High peak power from a CO sub 2 laser system.  
11 p1899 A69-25053

Rate processes in the CO sub 2 laser.  
11 p1899 A69-25054

Gain saturation in CO sub 2 laser amplifiers.  
11 p1899 A69-25055

Rotational relaxation and gain saturation in CO sub 2 laser amplifiers.  
21 p3736 A69-38941

## CRAFORD, M. G.

Electroluminescence of diffused GaAs sub 1-x P sub x diodes with low donor concentrations.  
16 p2758 A69-31699

## CRAFT, H. D., JR.

Frequency dependent pulse widths for CP 1133.  
02 p0318 A69-12093

Intensity variations of the pulsar CP 1919.  
03 p0513 A69-13770

Crab Nebula pulsar NP 0532.  
09 p1592 A69-21462

## CRAGG, B. G.

The topography of the afferent projections in the circumstriate visual cortex of the monkey studied by the Nauta method.  
22 p3881 A69-40851

## CRAGO, W. A.

Problems associated with the use of skirts on hovercraft.  
10 p1634 A69-23629

## CRAIG, G. B.

Substructure strengthening in aluminum.  
08 p1330 A69-20011

**CRAIG, G. T.**  
Transport processes in magnetosolidmechanics-adiabatic conditions. 13 p2299 A69-28129

**CRAIG, H. L., JR.**  
Atmospheric stress corrosion testing of aluminum alloys. 01 p0100 A69-11352

**CRAIG, J. I.**  
Experimental studies of the effect of general imperfections on the elastic stability of thin shells. 14 p2533 A69-29022

**CRAIG, J. P.**  
Output polarization rotation sensitivity of a HeNe laser. 07 p1198 A69-18646

**CRAIG, R. A.**  
Cooling of the thermosphere by atomic oxygen. 12 p2064 A69-26009

**CRAIG, R. D.**  
Optimization of connector-pin assignments in electrical/electronic wiring systems. 19 p3284 A69-36030

**CRAIGIE, J. H.**  
Transoceanic traffic control and operational support using satellite systems. 18 p3170 A69-35065

**CRAIN, G. E.**  
Theoretical performance of the overmoded right-angle corner. 13 p2234 A69-28426

**CRAM, L. A.**  
Spectral response of a point-contact diode in the sub-millimetre range. 06 p0893 A69-16939

**CRAM, M. E.**  
A molecular resonance AFC system for millimeter oscillators. 01 p0044 A69-10628

**CRAMAROSSA, F.**  
A Fortran IV program for the computation of equilibrium compositions of gas mixtures at high temperatures. 08 p1278 A69-20154  
The behaviour of metal oxides injected into an argon induction plasma. 13 p2315 A69-28458

**CRAMPIN, D. J.**  
The effect of background density on the Zoellner illusion. 22 p3879 A69-40841

**CRAMPTON, D.**  
The solar motion from distant objects. 04 p0654 A69-14627  
A new determination of Oort's constant A from cepheids. 12 p2153 A69-25804

**CRANCE, J. P.**  
Studies of the nutritional component of fatigue in glider pilots /Recherches sur la composante nutritionnelle de la fatigue chez les pilotes de vol a voile/. 23 p4106 A69-41796

**CRANDALL, C. J.**  
Radar mapping in Panama. 20 p3519 A69-36928

**CRANDALL, P. B.**  
Low temperature adaptor for the Debye- Scherrer power camera. 19 p3313 A69-36493

**CRANE, H. D.**  
Non-contact method of measuring small eye- movements and stabilizing the retinal image. 09 p1446 A69-21908  
Digital Magnetic Logic. 20 p3498 A69-37144

**CRANE, R., JR.**  
An experimental twenty-inch segmented active mirror. 13 p2261 A69-27950

**CRANE, W. E.**  
Solubility of helium in liquid fluorine. 01 p0142 A69-11258  
Studies of galvanic corrosion couples in liquid fluorine. 06 p0944 A69-17854  
Technical note - The role of impurities in corrosion by fluorine oxidizers. 21 p3784 A69-39487

**CRANFORD, K. H.**  
An improved analytical drag theory for the artificial satellite problem. [AIAA PAPER 69-925] 21 p3808 A69-39352

**CRANNELL, C. J.**  
Experimental determination of the transition effect in electromagnetic cascade showers. 22 p3987 A69-41003

**CRANNELL, H.**  
Experimental determination of the transition effect in electromagnetic cascade showers. 22 p3987 A69-41003

**CRANSTON, B. H.**  
Compliant bonding - A new technique for joining microelectronic components. 02 p0254 A69-12473

**CRARY, J. H.**  
Early detection at low latitudes of a polar cap event by its effect on VLF propagation. 05 p0816 A69-16276  
Very low radio frequency observations of the solar flare and polar-cap absorption event of 7 July 1966. 10 p1657 A69-23772

**CRATCHLEY, D.**  
Mechanical behavior of a fiber reinforced metal and its effect upon engineering applications. 06 p0940 A69-16949

**CRVALHO, E. G.**  
The effect of thin surface films on the radiative properties of metal surfaces. [AIAA PAPER 69-623] 17 p3072 A69-33283

**CRAVENS, J. E.**  
Cost plus award fee contracting. 15 p2720 A69-30426

**CRAWFORD, A. B.**  
Relationship between cross-path winds and fading rates in microwave propagation beyond the horizon. 01 p0030 A69-10566

**CRAWFORD, A. M.**  
ATP assay of terrestrial soils - A test of an exobiological experiment. 20 p3473 A69-37567

**CRAWFORD, B. S.**  
Configuration design and efficient operation of redundant multi-jet systems. [AIAA PAPER 69-845] 21 p3822 A69-39375

**CRAWFORD, C. K.**  
Mass spectrometer ion source for ionization cross-section measurement. 01 p0080 A69-10605

**CRAWFORD, D. F.**  
Two-body perturbation matrix. 20 p3568 A69-37200

**CRAWFORD, D. L.**  
Four-color and H-beta photometry of open clusters. II - Coma and Ursa Major. 16 p2860 A69-32234

**CRAWFORD, F. S.**  
Search for nanosecond optical pulses from Crab pulsar NP 0532. 16 p2865 A69-32801

**CRAWFORD, F. W.**  
Nonlinear interaction of cyclotron harmonic waves. 06 p0968 A69-17766  
Parametric amplification of cyclotron harmonic waves in plasma. 07 p1189 A69-18439  
Low-frequency waves and instabilities on the positive column in a magnetic field. I - Analysis and study of axisymmetric modes. II - Study of asymmetric modes. 11 p1929 A69-25268  
Nonlinear interaction between extraordinary waves in a cold plasma. 23 p4195 A69-41538  
Nonlinear interaction between whistlers. 24 p4309 A69-43174

**CRAWFORD, J. H., JR.**  
Factors influencing the stability of radiation defects in semiconductors. 06 p0974 A69-16863

**CRAWFORD, L.**  
The turbulent mixing and combustion of hydrogen injected parallel to a supersonic air stream in an axisymmetric combustor. [AIAA PAPER 69-539] 16 p2877 A69-31844

**CRAWFORD, O. H.**  
Electron impact excitation of CN. 21 p3773 A69-38476

**CREAMER, E. L.**  
Embrittlement of type 347 stainless steel weldments by sigma phase. 18 p3150 A69-35429

**CREASY, Q. R.**  
Mission - Possible. 13 p2383 A69-28101

**CREED, D.**  
Solar simulator using a pulsed xenon arc tube. 15 p2586 A69-30385

**CREEDON, J. E.**  
Microwave-excited ionized argon laser. 04 p0609 A69-14346

**CREEDON, J. F.**  
Evaluation of multipoint interaction in the design of a thin diffraction-limited active mirror. 13 p2261 A69-27951

**CREEL, J. D.**  
Computerization of radio engineering functions. 11 p1840 A69-25313

**CREMER, G. D.**  
Beryllium - Brazing and welding. [SAE PAPER 680651] 03 p0433 A69-13454

**CREMERS, C. J.**  
Magnetohydrodynamic free convection from a horizontal plate. 11 p1930 A69-25277  
Prediction of the onset of burnout in an electric arc with a transpiration-cooled anode. [AIAA PAPER 69-696] 17 p3011 A69-33451

**CRENWELGE, O. E., JR.**  
Free vibrations of ring- and-stringer-stiffened conical shells. 17 p3051 A69-32955

**CREPPS, J. R.**  
Rapid annealing in silicon transistors. 06 p0975 A69-16870

**CRESCENTINI, A. A.**  
Effects of inelastic collisions in low- temperature, diffusion-dominated discharges. 04 p0637 A69-15047

**CRESS, H. A.**  
Determination of the approximate structural parameters of a large steerable antenna. 23 p4230 A69-42129

**CRESSWELL, G. R.**  
Fast auroral waves. 04 p0594 A69-15123  
Flickering, a 10-cps fluctuation within bright auroras. 04 p0594 A69-15129  
Flaming auroras. 05 p0758 A69-16413

**CRESWELL, R. A.**  
Shock-tube studies of thermal ionization of NO using mass spectrometric detection. 18 p3099 A69-34464

**CREUTZFELDT, O. D.**  
Telemetric EEG studies during high-performance situations /Telemetrische EEG- Untersuchungen in Leistungssituationen/. 15 p2560 A69-31232

**CREWDSON, R. C. C.**  
Shock waves in solids. 13 p2360 A69-27341

**CREWE, P. R.**  
The BHC contribution to hovercraft development. 12 p2014 A69-27140

**CREZE, M.**  
Study of certain statistical determinations based on proper motions and radial velocities /Etude sur certains determinations statistiques basees sur les mouvements propres et les vitesses radiales/. 20 p3605 A69-37829

**CRIBBENS, A. H.**  
Periodic structure in solar radio bursts and its relation to burst energy. 12 p2157 A69-26234  
Microwave polarisation measurements of four solar radio bursts. 18 p3188 A69-35213

**CRICHLAW, W. J.**  
Stable crack propagation - Fail-safe design criteria - Analytical methods and test procedures. [AIAA PAPER 69-215] 07 p1237 A69-19569



- The materials-structures interface - A systems approach to airframe structural design.  
12 p2186 A69-26833
- CRIDLAND, L.**  
A hydrostatic tension test of a brittle material.  
05 p0784 A69-16434
- CRIDLIN, M. S.**  
An in situ facility for the determination of the effects of a space environment on the solar absorptance of materials.  
[AIAA PAPER 69-1021] 22 p3923 A69-40392
- CRIFO, J.**  
Preliminary study of the D-2 experiment /Etude preliminaire a l'experience D-2/.  
11 p1949 A69-24869
- CRIFO, J.-F.**  
The magnetosphere /La magnetosphere/.  
02 p0242 A69-11904  
Description of radiation belts /stable trapping zones/ /Description des ceintures de radiations /zones de piégeage stable/.  
11 p1948 A69-24858
- CRIGHTON, D. G.**  
Real space-time Green's functions applied to plate vibration induced by turbulent flow.  
24 p4395 A69-42597
- CRILEY, R. L.**  
Grab one and jump.  
19 p3255 A69-36146
- CRILLON, R.**  
Kinematic study of ionized hydrogen in NGC 4449 /Etude cinématique de l'hydrogene ionise dans NGC 4449/.  
13 p2347 A69-27714  
Kinematic study of ionized hydrogen in M 51 /Etude cinématique de l'hydrogene ionise dans M 51/.  
13 p2347 A69-27720  
Kinematic study of ionized hydrogen in NGC 4631 /Etude cinématique de l'hydrogene ionise dans NGC 4631/.  
16 p2854 A69-31647
- CRILLY, A. F.**  
Redundant world models.  
07 p1219 A69-19283
- CRILLY, W. M.**  
The SST in international operation.  
[AIAA PAPER 68-1024] 04 p0689 A69-14794
- CRIMI, P.**  
The stability of dynamic systems with periodically varying parameters.  
11 p1990 A69-25510
- CRINON, G.**  
Study program for MOS transistor logic circuits /Programme d'étude de circuits logiques a transistors MOS/.  
08 p1280 A69-19977
- CRIPPS, V. J.**  
Effects of hyperbaric nitrogen and oxygen on auditory evoked responses in man.  
14 p2407 A69-29302
- CRIPWELL, B. G.**  
The climatic testing of helicopters.  
14 p2427 A69-29505
- CRISCIONE, J. M.**  
"Thornel" composite fuselage section fabrication.  
09 p1509 A69-22341
- CRISCUOLO, E. L.**  
The magnetic tape recording of ultrasonic test information.  
07 p1117 A69-19697  
Making reference radiographs for steel welds.  
18 p3150 A69-35425
- CRISMAN, W. C.**  
Buckling of cylindrical and conical sandwich shells with orthotropic facings.  
[AIAA PAPER 68-294] 09 p1616 A69-21942
- CRISP, M. D.**  
Distortionless propagation of light through an optical medium.  
12 p2130 A69-26313  
Radiative effects in semiclassical theory.  
21 p3769 A69-38578
- CRISP, R.**  
SIRU - A new inertial system concept for inflight reliability and maintainability.  
19 p3370 A69-35803
- CRISPIN, J. W., JR.**  
Methods of Radar Cross-Section Analysis.  
03 p0383 A69-12901
- RCS calculation of simple shapes - Monostatic.  
03 p0384 A69-12905
- RCS calculation of simple shapes - Bistatic.  
03 p0384 A69-12906
- RCS enhancement devices.  
03 p0384 A69-12909
- RCS calculation of complex shapes - Methods.  
03 p0384 A69-12910
- RCS calculation of complex shapes - Examples.  
03 p0384 A69-12911
- The interpretation of data.  
03 p0385 A69-12913
- CRIST, S. A.**  
Motion and stability of a spinning spring-mass system in orbit.  
21 p3817 A69-39759
- CRISTAL, E. G.**  
Theory and design of transmission line all-pass equalizers.  
13 p2233 A69-28065
- CRISTALDI, S.**  
Synchronous three colour stellar photometer.  
16 p2790 A69-32209
- CRISTESCU, M.**  
Investigation of a Ne-Ar thermionic generator.  
14 p2398 A69-29180
- CRISTESCU, N.**  
Dynamic plasticity under combined stress.  
02 p0344 A69-12293
- CRISWELL, D. R.**  
Pc 1 micropulsation activity and magnetospheric amplification of 0.2- to 5.0-Hz hydromagnetic waves.  
05 p0754 A69-16263
- CRIVELLI-VISCONTI, I.**  
Mechanical properties of a new carbon fibre material.  
08 p1341 A69-20700
- CROCCO, L.**  
Nonlinear oscillations in liquid rocket combustion chambers.  
19 p3449 A69-36352
- CROCHET, M.**  
Calculation of optical path variations and emergence conditions in a dynamic ionosphere /Calcul des variations de chemin optique et des conditions d'émergence dans une ionosphere dynamique/.  
01 p0068 A69-11111  
Study of a wideband directional antenna system in the decimeter range /Etude d'un système d'antennes directif, large bande, dans la gamme decamétrique/.  
03 p0402 A69-12860
- CROCKER, A.**  
Carbon-dioxide laser with high power per unit length.  
09 p1516 A69-21678
- CROCKER, E. A.**  
A millimeter-wave lunar radar.  
03 p0397 A69-13725
- CROCKER, M. C., II**  
A simulation of stationkeeping for synchronous satellites.  
[AAS PAPER 68-151] 19 p3429 A69-35950
- CROCKER, M. J.**  
The response of a supersonic transport fuselage to boundary layer and to reverberant noise.  
15 p2549 A69-30302  
Response of uniform beams to homogeneous, random pressure fields.  
[ASA PAPER SVT2] 15 p2713 A69-31143  
Structural response to sonic booms.  
21 p3647 A69-38987
- CROFT, T. A.**  
Comparison of simultaneous forward and backscatter soundings to verify a proposed focusing mechanism of HF sky waves.  
14 p2435 A69-28967
- CROFTS, J. D.**  
Some observations on the preparation and fabrication of synthetic cordierite.  
07 p1168 A69-19525
- ROLL, R. H., JR.**  
A wind tunnel data acquisition and control system.  
10 p1673 A69-23286
- CROMBIE, D. D.**  
Very low radio frequency observations of the solar flare and polar-cap absorption event of 7 July 1966.  
10 p1657 A69-23772
- CRONE, R. A.**  
Autokinesis and the perception of movement - The physiology of eccentric fixation.  
22 p3878 A69-40858
- CRONIN, D.**  
Power conditioning suitable for electric spacecraft. [AIAA PAPER 69-240] 09 p1568 A69-21735
- CRONIN, D. C.**  
Experimental research on parachute deployment load control by use of line ties.  
11 p1823 A69-25383
- CRONIN, J.**  
Satellite imagery of the earth.  
20 p3536 A69-36953
- CROOK, G. M.**  
Initial results of the Pioneer 8 VLF electric field experiment.  
01 p0035 A69-11223  
Detection of electric-field turbulence in the earth's bow shock.  
04 p0592 A69-14681  
The OGO-V plasma wave detector - Instrumentation and in-flight operation.  
19 p3315 A69-36681
- CROOM, D. L.**  
Outstanding solar radio burst at 4.2 mm.  
09 p1578 A69-22155
- CROSBIE, A. L.**  
The exact solution to a simple nongray radiative transfer problem.  
15 p2718 A69-31152
- CROSBY, A.**  
The manufacture of ceramic radomes by the flame spraying process.  
07 p1142 A69-19522
- CROSBY, D. A.**  
Residual gas analysis and leak detection by time-of-flight measurements on neutral metastable atoms and molecules.  
13 p2262 A69-28003
- CROSBY, G. A.**  
Spectroscopic studies of ruthenium /II/ complexes - Assignment of the luminescence.  
07 p1200 A69-19211  
Ligand-field transitions in tertiary phosphine and amine complexes of ruthenium /II/ and osmium /II/.  
07 p1075 A69-19483
- CROSBY, J. C.**  
Crash protection of data recorders.  
10 p1691 A69-23241
- CROSBY, J. R.**  
Fracture toughness of an Al-alloy in the biaxial stress field.  
17 p2986 A69-32986
- CROSBY, V. M.**  
A self-monitored stability augmentation system for the CX-84 V/STOL aircraft.  
[AHS PAPER 310] 17 p2901 A69-33544
- CROSE, J. G.**  
Nonlinear analysis method for circular plates.  
20 p3628 A69-37783
- CROSET, M.**  
Anodic silica - Properties and applications /La silice anodique - Propriétés et applications/.  
05 p0810 A69-16581
- CROSIGNANI, B.**  
Light scattering by particles suspended in a turbulent fluid.  
07 p1157 A69-19411  
Influence of thermal turbulence in a convective ascending stream on phase fluctuations of a laser beam.  
24 p4329 A69-43755
- CROSLEY, D. R.**  
On probing cometary magnetic fields by measuring depolarization of resonance fluorescence.  
09 p1603 A69-22233
- CROSS, B. T.**  
Ultrasonic inspection of weldments using the delay technique.  
15 p2631 A69-31501
- CROSS, E. J., JR.**  
Investigation of the leeward side of a delta wing at hypersonic speeds.  
[AIAA PAPER 68-675] 09 p1431 A69-21999
- CROSS, E. R.**  
Feedback signal design by optimum control and dynamic programming technique.  
12 p2046 A69-26061

- CROSS, J.**  
Visual and tactual interaction in judgments of the vertical.  
24 p4271 A69-42752
- CROSS, K. D.**  
Human factors evaluation of the vertical contact analog display.  
03 p0379 A69-13361
- CROSS, M.**  
Effects of increased oxygen pressure on adrenal steroid and catecholamine release.  
23 p0487 A69-41791
- CROSS, P. H.**  
A broadband waveguide window for high power microwave tubes.  
07 p1096 A69-18435
- CROSS, R. C.**  
Hydromagnetic waves in a nonuniform hydrogen plasma.  
08 p1367 A69-20794
- CROSS, W. B.**  
Investigations of the unique memory properties of 55-Nitinol alloy.  
19 p3340 A69-35523
- CROSSFIELD, A. S.**  
Eastern's STOL experience.  
19 p3248 A69-36865  
STOL demonstration program.  
[SAE PAPER 690420] 23 p4185 A69-41644
- CROSSLAND, B.**  
Developments in explosive welding.  
04 p0608 A69-15481
- CROSSLEY, A. F.**  
Inter-relation of temperature and wind on the route London-New York at 50 mb.  
15 p2651 A69-30690
- CROSSLEY, F. A.**  
Texture strengthening of heat-treated alpha- beta titanium alloys.  
21 p3729 A69-38662
- CROSSLEY, T. R.**  
Synthesis of aircraft modal control systems having real or complex eigenvalues.  
09 p1435 A69-22779
- CROSSMAN, F. W.**  
Controlled microstructures of Al-CuAl sub 2 eutectic composites and their compressive properties.  
06 p0942 A69-17227  
Tensile properties of unidirectionally solidified Al-CuAl sub 2 eutectic composites.  
10 p1708 A69-22995
- CROSSMANN, F. W.**  
Development of nitrided boron reinforced metal matrix composites.  
13 p2283 A69-28671
- CROSTHWAITE, D. L., JR.**  
The application of the scanning electron microscope to the development of high-reliability semiconductor products.  
17 p2936 A69-32892
- CROWELL, W. F.**  
An omnidirectional microwave antenna for use on spacecraft.  
22 p3913 A69-40697
- CROTHERS, J. M.**  
New devices for managing the product development process.  
[ASME PAPER 68-WA/MGT-3] 05 p0850 A69-16146
- CROTHERS, G. P., JR.**  
High pressure Hugoniot data obtained with a Manganin pressure transducer.  
[AIAA PAPER 69-358] 13 p2264 A69-28291
- CROUSEL, L.**  
Polynomial Chebyshev approximations of the ideal filter.  
08 p1299 A69-21168
- CROW, S. C.**  
Distortion of sonic bangs by atmospheric turbulence.  
21 p3646 A69-38689
- CROW, T. G.**  
Properties of neodymium laser materials.  
24 p4329 A69-43751
- CROW, T. J.**  
Effect of mild hypoxia on mental performance assessed by a test of selective attention.  
09 p1445 A69-22553
- Impairment of mental performance at a simulated altitude of 8,000 feet.  
23 p4102 A69-41680
- CROWDER, R. S.**  
Apollo entry aerodynamics.  
[AIAA PAPER 68-1008] 12 p2012 A69-26789
- CROWDER, V. D.**  
Integration of a rocket motor into the Scout vehicle.  
02 p0335 A69-12384
- CROWE, C. T.**  
A photographic and analytic study of composite propellant combustion in an acceleration field.  
[AIAA PAPER 69-173] 06 p0983 A69-18151
- CROWE, W.**  
The use of avalanche diodes in an amplifying mode to increase source output power.  
09 p1462 A69-21408
- CROWELL, C. R.**  
Richardson constant and tunneling effective mass for thermionic and thermionic-field emission in Schottky barrier diodes.  
07 p1089 A69-18247  
Normalized thermionic-field /T-F/ emission in metal-semiconductor /Schottky/ barriers.  
08 p1373 A69-20861
- CROWLEY, J. M.**  
Growth of waves on an accelerated jet.  
01 p0062 A69-11207
- CROWLEY, P.**  
A review of five years of private practice at Sydney airport.  
23 p4105 A69-41786
- CROWN, P. L.**  
Design effective failure mode and effect analysis.  
18 p3147 A69-34526
- CROWNFIELD, F. R., JR.**  
Mie total and differential backscattering cross sections at laser wavelengths for Junge aerosol models.  
04 p0609 A69-14290
- CROWTHER, J. H.**  
On the optical identification of 3C 230.  
12 p2173 A69-27171
- CROZIER, R. J. M.**  
Similarity solution for the rapid uniform expansion of a spherical cavity in a compressible elastic-plastic solid.  
03 p0528 A69-13798
- CRUIKSHANK, D. P.**  
Arizona-NASA atlas of infrared solar spectrum - A preliminary report.  
06 p1008 A69-17808  
Arizona-NASA atlas of infrared solar spectrum. II.  
06 p1008 A69-17809  
A high-resolution solar spectrometer for air-borne infrared observations.  
06 p0928 A69-17811  
Minor constituents in the atmosphere of Jupiter.  
12 p2155 A69-26205  
Arizona-NASA atlas of infrared solar spectrum. IV, V.  
21 p3800 A69-38682
- CRUM, R. J.**  
Gamma heating in thin heavy-element absorbers.  
07 p1178 A69-18825
- CRUNKLETON, J. D.**  
A priority interrupt oriented by hybrid executive.  
04 p0567 A69-15350
- CRUPI, G.**  
Principle of steady action and electromagnetic equations in space-time. II /Sul principio di azione stazionaria e sulle equazioni elettromagnetiche nello spazio-tempo. II/.  
02 p0281 A69-12196
- CRUSSARD, C.**  
High-temperature creep /Fluage de haute temperature/.  
17 p2986 A69-32911
- CRUTZEN, P.**  
Determination of parameters appearing in the oxygen-hydrogen atmosphere.  
16 p2787 A69-32636
- CRUVER, J. E.**  
ISOTEC thermoelectric generator for space power.  
23 p4189 A69-42270
- CRUZ, J.**  
Effect of chronic hypoxic hypoxia on the O sub 2-Hb dissociation curve and respiratory gas transport in man.  
21 p3650 A69-38383
- CRUZ, J. B., JR.**  
Feedback control which preserves optimality for systems with unknown parameters.  
11 p1860 A69-25441
- CRUZ, J. C.**  
Ventilatory response to a single breath of CO sub 2 in O sub 2 in normal man at sea level and high altitude.  
22 p3890 A69-40207  
Mixed venous P sub O sub 2, P sub CO sub 2, pH and cardiac output during exercise in trained subjects.  
23 p4078 A69-41316
- CRYSTAL, T. H.**  
The design and applications of digital filters with complex coefficients.  
04 p0579 A69-15460
- CSAKI, F.**  
Stability test of linear control systems with dead time.  
13 p2238 A69-27395  
Limit-cycle analysis of relay control systems.  
13 p2238 A69-27396
- CSANADY, G. T.**  
An experimental investigation of the composition of jet noise.  
17 p2957 A69-33602
- CSAVINSZKY, P.**  
Approximate analytical solutions of the Thomas-Fermi equation for positive ions.  
10 p1726 A69-23525
- CSEHALMI, N.**  
Efficient partitioning for the batch-fabricated fourth generation computer.  
04 p0567 A69-15355
- CSIKY, G. A.**  
Investigation of a hollow cathode discharge plasma.  
[AIAA PAPER 69-258] 09 p1561 A69-21221
- CSOERSZ, E.**  
On the fundamental phenomenon of magnetohydrodynamic energy conversion.  
21 p3777 A69-39165
- CUBBISON, R. W.**  
Study of a family of supersonic inlet systems.  
[AIAA PAPER 68-580] 17 p3022 A69-34018
- CUBEDDU, R.**  
Picosecond pulses, TEM sub 00 mode, mode-locked ruby laser.  
23 p4172 A69-41395
- CUBICCIOTTI, D.**  
The thermodynamic properties of gaseous niobium chlorides.  
23 p4112 A69-41339
- CUCCIA, C. L.**  
Sensitivity of microwave earth stations for analog and digital communications. I.  
07 p1077 A69-18669  
Sensitivity of microwave earth stations for analog and digital communications. II.  
09 p1453 A69-21409
- CUDABACK, D. D.**  
The occultation position of an OH emission source in W24.  
09 p1591 A69-21449  
A survey of dust clouds for OH emission.  
09 p1603 A69-22267  
Search for nanosecond optical pulses from Crab pulsar NP 0532.  
16 p2865 A69-32801
- CUDOS SAMBLANCAT, V.**  
Passengers, cargo, aircraft, airports /Pasajeros, mercancías, aviones, aeropuertos/.  
10 p1634 A69-23601
- CUELLAR, J. P.**  
A microscale deposition test for the evaluation of aircraft turbine engine lubricants.  
[ASLE PAPER 68-LC-22] 07 p1140 A69-19309  
A bearing deposition test for evaluating aircraft gas turbine engine lubricants.  
10 p1700 A69-24070
- CUEVAS, J. E.**  
Fibre content in graphite reinforced composites.  
10 p1716 A69-23695
- CUFFEL, R. F.**  
Flow and heat-transfer measurements in subsonic air flow through a contraction section.  
[JPL-TR-32-1348] 10 p1809 A69-23194  
Laminarization of a turbulent boundary layer in nozzle flow.  
[JPL-TR-32-1407] 16 p2732 A69-31894



- Transonic flowfield in a supersonic nozzle with small throat radius of curvature. 23 p0406 A69-41900
- Laminarization of a turbulent boundary layer in nozzle flow - Boundary layer and heat transfer measurements with wall cooling. [ASME PAPER 69-HT-56] 24 p4303 A69-43538
- Laminar, transition, and turbulent boundary-layer heat-transfer measurements with wall cooling in turbulent airflow through a tube. [ASME PAPER 69-HT-8] 24 p4414 A69-43560
- CUGIANI, C.**  
Studies of self-focusing antennas for telecommunication satellites. 08 p1289 A69-20970
- CUKAY, R. S.**  
Electronic instrumentation for the measurement of charged particles by an AC voltage method. 10 p1662 A69-23256
- Systems application of latching reed relays in scientific satellite instrumentation. 13 p2231 A69-28047
- CULHANE, J. L.**  
Soft X-ray observations from OSO-4. 12 p2151 A69-26936
- Thermal continuum radiation from coronal plasmas at soft X-ray wavelengths. 23 p4207 A69-42406
- CULICK, F. E. C.**  
A review of calculations for unsteady burning of a solid propellant. 02 p0305 A69-12501
- An elementary calculation of the combustion of solid propellants. 09 p1623 A69-22091
- An elementary calculation for the burning rate of composite solid propellants. [WSCI PAPER 69-7] 16 p2830 A69-32348
- Analysis of acoustic waves in a cold-flow rocket. 19 p3394 A69-35946
- T-burner data and combustion instability in solid propellant rockets. 20 p3586 A69-37224
- Remarks on extinguishment and the response function for a burning solid propellant. 23 p4201 A69-41922
- CULLEN, A. L.**  
New principle for wideband mode coupling. 09 p1467 A69-22586
- New technique for digital phase-shift control. 12 p2052 A69-26382
- CULLEN, J. F.**  
Perceptual style differences between airline pilots and engineers. 12 p2023 A69-26556
- A study of simulated airline pilot incapacitation. 24 p4277 A69-43386
- CULLEY, F. L.**  
Refractive effects of radio ranging on artificial earth satellites. 18 p3104 A69-35200
- CULLIAN, C. A.**  
Temperature history of hard space suit during GLFC operational test. 21 p3666 A69-39182
- CULLMORE, M. S. G.**  
Traction in friction-grip bolted joints. 23 p4235 A69-42461
- CULLMANN, G.**  
Information Coding and Transmission /Codage et Transmission de l'Information/. 04 p0558 A69-15066
- CULLUM, J.**  
Discrete approximations to continuous optimal control problems. 21 p3684 A69-38431
- CULOTTA, S.**  
Formulas for the thermodynamic properties of dense nitrogen. 20 p3631 A69-37214
- CULP, R.**  
Numerical study of the economical earth-Mars and earth-Venus transfers. [AAS PAPER 69-241] 24 p4380 A69-42855
- CULP, R. D.**  
Optimum transfer between hyperbolic asymptotes about a planet of finite size. [AAS PAPER 69-242] 24 p4380 A69-42856
- CULSHAW, W.**  
Double resonance in gaseous lasers. 10 p1704 A69-23808
- CULVER, C. G.**  
Nonuniform torsion of composite beams. 18 p3211 A69-34343
- CULVER, C. O.**  
Optimal estimation for nonlinear systems. [AIAA PAPER 69-852] 21 p3686 A69-39380
- CULVER, J.**  
Proton-irradiation effects in primates. 03 p0373 A69-13496
- CULVER, L. E.**  
Growth of part-through and through-thickness fatigue cracks in sheet glassy plastics. [SESA PAPER 1348] 09 p1617 A69-22013
- Deformation of thermoplastics under different types of tensile loading. 10 p1716 A69-22942
- CULVER, R. C.**  
The use of positive feedback to control spring mass systems. 02 p0248 A69-11738
- CUMMACK, C. H.**  
Non-linear loss and the night-time ionospheric F-region. 10 p1685 A69-23832
- Perturbations in a non-linear F-region at night. 21 p3715 A69-38559
- CUMME, G.**  
Frequency dependence of atmospheric noise intensity from 1 to 1000 kHz at low and medium latitudes. 05 p0758 A69-16410
- CUMME, G. A.**  
Comparison of A3-absorption measurements at L.F. and rocket measured D-region profiles. 16 p2778 A69-32188
- CUMMING, G. L.**  
Vilna meteorite - Camera, visual, seismic and analytic records. 13 p2334 A69-27189
- CUMMING, R. C.**  
Flat-top pulses with high efficiency and confined spectra. 01 p0030 A69-10631
- CUMMINGS, W. D.**  
Magnetospheric substorms observed at the synchronous orbit. 01 p0075 A69-11225
- Standing Alfvén waves in the magnetosphere. 07 p1124 A69-18835
- Effect of high electron-proton temperature ratios on the double shock wave structure in the solar wind. 07 p1205 A69-18849
- CUMO, M.**  
Notes on droplet heat transfer. 15 p2718 A69-31117
- Bubble flow up to the critical pressure. [ASME PAPER 69-HT-30] 24 p4411 A69-43529
- CUMPSTON, J. R.**  
Periodic cycles in integral pulse frequency modulation /IPFM/ systems. 05 p0737 A69-15865
- CUMPTSY, N. A.**  
The calculation of the three-dimensional turbulent boundary layer. III. 17 p2958 A69-34047
- CUNDY, S. L.**  
Studies of segregation and the initial stages of precipitation at grain boundaries in an aluminium 7 wt. percent magnesium alloy with an energy analysing electron microscope. 03 p0442 A69-12894
- CUNITZ, R. J.**  
Comparison of saccadic eye movements during fixation and reading. 22 p3880 A69-40855
- CUNNINGHAM, A. L.**  
The characteristics of the Mg-B composite system. 09 p1507 A69-22332
- Preparation and characterization of a novel form of Si sub 3 N sub 4 fiber. 19 p3354 A69-35517
- CUNNINGHAM, C. E.**  
The impact of microelectronics on maintenance and maintainability. 19 p3283 A69-36021
- CUNNINGHAM, D. C.**  
A comparison of conventional and tracking filter systems for launch vehicle stabilization. [AIAA PAPER 69-874] 21 p3823 A69-39400
- CUNNINGHAM, J. H.**  
Characterization of debris clouds behind impactor meteoroid bumper plates. [AIAA PAPER 69-380] 13 p2368 A69-28310
- CUNNINGHAM, R. E.**  
Experimental stability studies of the herringbone-grooved gas-lubricated journal bearing. [ASME PAPER 68-LUBS-25] 13 p2266 A69-27271
- CUNNINGHAM, T. H. M.**  
Theoretical and experimental studies of ducted mixing and burning of coaxial streams. [AIAA PAPER 69-85] 06 p0984 A69-18082
- CUNNINGHAM, W.**  
Stars that do not twinkle outside the earth's atmosphere. 12 p2173 A69-27172
- CUNNINGTON, G. R.**  
Calorimetric measurements of solar and broadband spectral absorbance during ultraviolet exposure testing in vacuum. 16 p2789 A69-31815
- A study of heat-transfer processes in multilayer insulations. [AIAA PAPER 69-607] 17 p3073 A69-33300
- CUNTZE, R.**  
Determination of the natural frequencies of thin oblique-angled isotropic plates /Ermittlung von Eigenfrequenzen dünner, schiefwinkliger isotroper Platten/. 19 p3438 A69-36312
- CUOMO, S.**  
Fire resistance of elastoplastic continua /Sulla resistenza al fuoco dei continui elastoplastici/. 14 p2536 A69-29598
- CUPERMAN, S.**  
A "charge bunching" approach to the gravitohydrodynamic instability. 11 p1961 A69-25105
- Numerical experimental check of Lynden-Bell statistics for a collisionless one-dimensional stellar system. 16 p2862 A69-32376
- CUPP, R. E.**  
Frequency lock of the hydrogen cyanide laser to a microwave frequency standard. 22 p3963 A69-40567
- CURKENDAL, D. W.**  
A simplified approach for determining the information content of radio tracking data. [AAS PAPER 69-112] 19 p3402 A69-35935
- CURNOW, R. C.**  
The importance of application satellites to the European economy. 13 p2382 A69-27834
- CURNUTTE, B.**  
Mean life of the 2p super 2 super 1 D level in C III. 07 p1184 A69-18643
- Beam-foil excitation of levels in S II and S III. 18 p3177 A69-35015
- CURRAN, R. E.**  
Preparation and properties of unsupported positive coefficient thin thermistor films. 22 p3997 A69-41214
- CURRAN, W.**  
Hypersonic research engine integrated propulsion control. [AIAA PAPER 69-546] 16 p2845 A69-32744
- CURRIE, D. G.**  
Some implications for physics and geophysics of laser range measurements from earth to a lunar retro-reflector. 22 p3960 A69-40190
- CURRIE, E. H.**  
Onset of the helical instability in weakly ionized discharge plasmas. 11 p1924 A69-24299
- CURRIE, J.**  
Pressure applied dielectrics. 19 p3281 A69-35548
- CURRIE, M. G.**  
State-space structure of model-reference adaptive control for a noisy system. 18 p3111 A69-34686

- CURRIE, P.**  
Longitudinal and transverse waves in finite elastic strain - Hadamard and Green materials.  
19 p3440 A69-36588
- CURRIE, R. G.**  
The geomagnetic tail - Topology, reconnection and interaction with the moon.  
07 p1128 A69-19365
- CURRIN, G. F.**  
A circuit analysis program for educational use.  
18 p3111 A69-34680  
NASAP revisited - An educational tool.  
21 p3856 A69-39662
- CURRY, D. L.**  
RCA's approach to Mil-Std 883.  
24 p4287 A69-43205
- CURRY, D. M.**  
Definition of entry corridor thermal limits for Apollo spacecraft.  
[AIAA PAPER 68-1144] 03 p0521 A69-13673  
An evaluation of ablation mechanisms for the Apollo heat shield material.  
[AIAA PAPER 69-98] 06 p1038 A69-18149
- CURRY, R. E.**  
A new algorithm for suboptimal stochastic control.  
06 p0902 A69-17402  
A separation theorem for nonlinear measurements.  
24 p4291 A69-43269
- CURRY, T. J.**  
The performance of analog correlators for several integrator functions.  
14 p2413 A69-29485
- CURRY, W. H.**  
A thin strap support for the measurement of the dynamic stability characteristics of high fineness ratio wind tunnel models.  
[AIAA PAPER 69-350] 13 p2243 A69-28284  
A comparison between transonic wind-tunnel and full-scale store separation characteristics.  
17 p2896 A69-34035
- CURTARELLI, F.**  
Sensitivity of active RC low-pass filters /Sulla sensibilità di filtri passa-basso RC attivi/.  
04 p0578 A69-15070
- CURTICE, W. R.**  
Stable negative R-F conductance and oscillation conditions in GaAs.  
07 p1197 A69-18448  
Measurement of noise quality of MIG beam noise.  
14 p2449 A69-29558
- CURTIN, D. J.**  
Low energy proton damage in silicon solar cells.  
19 p3252 A69-35701  
Irradiation studies on state-of-the-art cadmium sulfide cells.  
19 p3253 A69-35705  
Evaluation of the performance of solar arrays on Intelsat spacecraft at synchronous altitude.  
23 p4072 A69-42287
- CURTIS, D. J.**  
Temperature transducers and measurement.  
10 p1690 A69-23225
- CURTIS, G. J.**  
Non-Hookean behaviour of strong carbon fibres.  
03 p0454 A69-13937
- CURTIS, G. L.**  
Air freighters.  
22 p3863 A69-40427
- CURTIS, H. J.**  
The use of a deuteron microbeam for simulating the biological effects of heavy cosmic-ray particles.  
03 p0373 A69-13493  
The interpretation of microbeam experiments for manned space flight.  
03 p0373 A69-13494
- CURTIS, O. L., JR.**  
Annealing of 10 Mev electron damage in silicon.  
06 p0974 A69-16865
- CURTIS, R. E.**  
Relationship between composition, microstructure, and stress corrosion cracking /in salt solution/ in titanium alloys.  
20 p3557 A69-36961
- CURTIS, S. B.**  
The physical characteristics of solar flares.  
03 p0371 A69-13480
- CURTIS, T. D. W.**  
The use of a breadboard chip in conjunction with computer-aided design of integrated circuits.  
03 p0402 A69-13008
- CURTIS, T. P.**  
The high-power voltage-tunable magnetron /VTM/.  
13 p2232 A69-28056
- CURTIS, W. R.**  
Remote sensing of sea surface temperature.  
18 p3130 A69-35057
- CURTISS, C. F.**  
A resonance theory of termolecular recombination kinetics - H plus H plus M goes to H sub 2 plus M.  
01 p0122 A69-10034  
Symmetric gaseous diffusion coefficients.  
07 p1186 A69-19395  
Molecular collisions. IX - Restricted distorted-wave approximation for rotational excitation and scattering of diatomic molecules.  
10 p1726 A69-23524  
Resonance theory of termolecular recombination kinetics - H plus H plus M yields H sub 2 plus M.  
20 p3579 A69-37345
- CURTISS, H. C., JR.**  
Dynamic stability of V/STOL aircraft at low speeds.  
[AIAA PAPER 69-194] 07 p1055 A69-19566
- CURTZ, T. B.**  
RCS calculation of complex shapes - Methods.  
03 p0384 A69-12910
- CURWEN, P. W.**  
Feasibility of gas bearings for small high-performance aircraft gas turbines.  
[ASME PAPER 69-GT-60] 09 p1513 A69-22515  
Recent developments of oil-free linear-motor resonant-piston compressors.  
[ASME PAPER 69-FE-36] 20 p3466 A69-37996
- CURZON, P. L. V.**  
Stability functions for the local buckling of thin flat-walled structures with the walls in combined shear and compression.  
05 p0833 A69-15709  
Nodal lines for long plates in combined shear and compression with sinusoidal edge rotations.  
11 p1983 A69-25137  
Buckling of a long flat panel with a series of equidistant longitudinal supports in combined longitudinal compression and shear.  
11 p1984 A69-25138
- CUSACK, G. M.**  
The application of or to stop selection and sequencing for the aeromedical evacuation problem.  
[AAS PAPER 69-385] 24 p4251 A69-42804
- CUSSENOT, J.-R.**  
Study of the phase shift existing between oscillations of density and local potential in a cesium plasma /Etude du déphasage existant entre les oscillations de densité et de potentiel local dans un plasma de césium/.  
24 p4354 A69-42676
- CUTHBERT, W. W.**  
Telemetry at the Air Force Western Test Range.  
05 p0743 A69-16304
- CYRAS, A.**  
Stochastic models for the calculation of optimal elastoplastic one-dimensional systems /Stochastische Modelle zur Berechnung von optimalen elastoplastischen eindimensionalen Systemen/.  
19 p3438 A69-36313  
Application of mathematical programming methods to the calculation of optimal elastoplastic structures and their realization on electronic computers /Die Anwendung der methoden der mathematischen programmierung zur berechnung optimaler elastisch-plastischer konstruktionen und ihre verwirklichung auf elektronischen rechenmaschinen/.  
21 p3831 A69-38414
- CZARNECKI, A.**  
Possibilities of applying the conditioned method with unknowns for adjusting the satellite triangulation.  
15 p2594 A69-30030
- CZARNOTA-BOJARSKI, R. E.**  
Predeformations of shells - Solution for the spherical shell.  
02 p0336 A69-11555
- CZECH, J.**  
Interferometric studies of unsteady shock waves in a theta-pinch-driven shock tube /Interferometrische Untersuchungen von instationaeren Stosswellen in einem mit theta-Pinch betriebenen Stossrohr/.  
08 p1304 A69-20710
- CZOBOLY, E.**  
Hungarian Academy of Sciences, Conference on Dimensioning and Strength Calculations, 3rd, Budapest, Hungary, October 28- November 2, 1968, Proceedings.  
17 p3051 A69-32975
- CZYSZ, P.**  
Thermographic heat transfer measurement.  
01 p0078 A69-10152  
Quantitative heat transfer measurement using thermographic phosphors.  
12 p2099 A69-27150
- CZYK, S. J.**  
Spectrophotometric studies of gaseous nebulae. [ARL-68-0200] 02 p0327 A69-12708  
Spectrophotometric studies of gaseous nebulae. XII.  
10 p1787 A69-24117  
Some problems concerning the collisional excitation of forbidden lines in planetary nebulae.  
19 p3422 A69-36221  
Spectrophotometric studies of gaseous nebulae. XIV - The bright moderate-excitation planetary IC 5217.  
24 p4376 A69-42663

## D

- D CUNNA, M. F.**  
Transistorised multichannel pulse height analyser and recording system for balloon borne cosmic ray telescope.  
06 p0924 A69-17284
- DA ROSA, A. V.**  
Enhancement of ionizing radiation during a solar flare.  
20 p3590 A69-37558
- DABBADIE, H. C.**  
Recent progress in the field of small turbines /Recents progres dans le domaine des petites turbines/.  
17 p3020 A69-33346
- DABBY, F. W.**  
Thermal self-focusing of laser beams in lead glasses.  
05 p0771 A69-15819
- DABORA, E. K.**  
Observed structure of spray detonations.  
03 p0415 A69-13139
- DABOSI, F.**  
Effect of dispersed phases on cavitation of magnesium alloys by creep /Effet de phases dispersées sur la cavitation par fluage d'alliages de magnésium/.  
17 p2985 A69-32907
- DABROWSKI, K.**  
Short-range passenger aircraft /Krotkodystansowe samoloty pasazerskie/.  
13 p2201 A69-27294
- DABURLOS, K. E.**  
Design, fabrication, and characterization of a germanium microwave transistor.  
12 p2037 A69-25940
- DACHILLE, F.**  
Effect of pressure and temperature on the reversal transitions of stishovite.  
22 p4021 A69-40412
- DACHS, J.**  
Nightglow intensities during the sunspot minima as measured in Southwest Africa. I - Measurement methods and results /Die Helligkeiten des nachteilichen Luftleuchten waehrend des Sonnenfleckenminimums nach Messungen in Suedwestafrika. I - Messverfahren und Messergebnisse/.  
11 p1877 A69-24584  
Nightglow intensities at sunspot minimum from measurements in South West Africa. II - Discussion of results and comparison with ionospheric observations /Die Helligkeiten des nachteilichen Luftleuchten waehrend des Sonnenfleckenminimums nach Messungen in Suedwestafrika. II - Diskussion der Ergebnisse und Vergleich mit Ionosphaerenbeobachtungen/.  
12 p2066 A69-26133  
On nightglow intensity variations connected with vertical movements in the upper atmosphere.  
21 p3713 A69-38525
- DACHS, L. L.**  
Beryllium disks sop up C-5A-size brake heat loads.  
15 p2639 A69-30591  
The emerging composites.  
20 p3565 A69-37291



## DADALI, IU. A.

Precipitation intensity measurement with a multiwave radar /Izmerenie intensivnosti osadkov mnogovolnovym radiolokatorom/.  
16 p2806 A69-32265

## DADEPPO, D. A.

Buckling of deep arches at large deflections.  
20 p3622 A69-37210

## DADIEU, A.

Rocket Propellants /Raketentreibstoffe/.  
10 p1752 A69-23806  
Rocket propellants /Raketentreibstoffe/.  
13 p2324 A69-27916

## DADONE, A.

A method for evaluating the off-design performance of a radial inflow turbine and comparison with experiments.  
10 p1754 A69-23891

## DADYKIN, V. L.

Preliminary results of a search for fractionally-charged particles in the cosmic rays at sea level.  
13 p2333 A69-28425

## DADYKIN, V. P.

Some data on volatile /oxygen-containing/ compounds evolved by a number of vegetables.  
02 p0198 A69-11509  
Possibility of using sweet potatoes as the basic source of carbohydrates in the diet of man during a space flight /O vozmozhnosti ispol'zovaniia batata v kachestve osnovnogo istochnika uglevodov v pitanii cheloveka vo vremia kosmicheskogo poleta/.  
13 p2216 A69-28619

## DAEHLER, M.

Coordinated measurements of plasma density and cooperative light scattering in a theta-pinch plasma.  
11 p1924 A69-24304

## DAENDLIKEK, R.

Intensity interferometry by two-photon excitation of fluorescence.  
10 p1705 A69-23811  
Reflection properties of an active three-mirror-resonator.  
11 p1886 A69-25047  
Influence of systematic phase deviations on the output of mode-locked lasers.  
21 p3741 A69-39683  
The output intensity of a non-ideally mode-locked laser.  
21 p3741 A69-39684  
Coupled resonators - Critical dependence of the mutual interaction on their separation.  
24 p4329 A69-43756

## DAFERMOS, C. M.

Some remarks on Korn's inequality.  
05 p0844 A69-16740

## DAFNY, N.

Effects of stimulating reticular formation, hippocampus and septum on single cells in the posterior hypothalamus.  
21 p3656 A69-38979

## DAGAEV, M. M.

Some effects and problems associated with the interaction of stars with the interstellar medium /Nekotorye efekty i problemy vzaimodeistviia zvezd s mezhyzvednoi sredoi/.  
11 p1955 A69-24386  
Acceleration of the galactic motion of stars /Ob uskorenii galakticheskogo dvizheniia zvezd/.  
20 p3608 A69-38046  
The interaction of stars with the interstellar medium.  
24 p4390 A69-43776

## DAGBJARTSSON, S.

Results of studies of thermionic reactor systems /Ergebnisse von Studien ueber Thermionikreaktorsysteme/.  
02 p0279 A69-12662  
An improved out-of-core thermionic reactor for low power.  
09 p1441 A69-21836  
Results of studies on various fast and thermal thermionic reactor systems.  
14 p2480 A69-29182

## DAGGETT, D. H.

F-111D computer complex.  
[AIAA PAPER 68-37] 24 p4285 A69-43719

## DAGKESAMANSKII, R. D.

Flux densities and spectral indices for the sources in the 3C and 3CR catalogs at 86-MHz frequency.  
11 p1951 A69-24237

## DAGLISH, H. N.

Low-noise Microwave Amplifiers.  
03 p0402 A69-13017

## DAGNAC, R.

Measurement of effective charge-exchange and stripping cross sections of incident ions and atoms /masses of 1, 2, and 3/ encountering a vapor target at energies ranging from 1 to 50 keV /Mesure des sections efficaces d'échange de charge et de "stripping" pour des ions et des atomes incidents /masses 1, 2, et 3/ d'énergie comprise entre 1 et 50 keV rencontrant une cible de vapeur d'eau/.  
19 p3378 A69-36190

## DAGNINO, N.

Functional changes of somato-sensory system during deep sleep.  
22 p3872 A69-40161

## DAGOSTINO, S.

Strain hardening plasticity with Bauschinger effect.  
21 p3832 A69-38466

## DAHLEM, T.

Integration of time-dependent functions by means of glow-discharge tubes and an oscillator /Integration zeitabhaengeriger Funktionen mittels Glimm-roehrenkippschwinger/.  
02 p0251 A69-12773

## DAHLENE, D.

Liquid expulsion by direct pressurization of a spinning propellant tank.  
[AIAA PAPER 69-527] 16 p2838 A69-32651

## DAHLQUIST, C. A.

Pressure-sensitive adhesives.  
14 p2468 A69-29342

## DAHLSTROEM, E.

SAAB Viggen and its first flight test phase.  
06 p0867 A69-17662

## DAHLM, T. J.

Graphite temperature and ablation characteristics in various environments.  
[AIAA PAPER 69-148] 06 p0947 A69-18155

## DAICH, A. R.

Plastic scintillators with increased transparency /Plastmassovye stintillatory s povyshennoi prozrachnost'iu/.  
21 p3724 A69-39073

## DAIGNE, G.

Structure and movement of solar noise storms.  
02 p0315 A69-11824  
Some characteristics of type IV bursts. II - Study of the spectrum - Effect of the plasma on synchrotron emission /Sur quelques caractéristiques des sursauts de type IV. II - Etude du spectre - Effet du plasma sur l'émission synchrotron/.  
02 p0309 A69-12754

## DAILEY, C. C.

The versatility of electrically propelled spacecraft for planetary missions.  
[AIAA PAPER 69-253] 09 p1585 A69-21244

## DAILEY, C. L.

Investigation of plasma rotation in a pulsed inductive accelerator.  
[AIAA PAPER 68-86] 04 p0635 A69-14702

## DAILIDENAS, V. M.

Certain possibilities of estimating the response time of semiconductor diodes from physical parameters /Nekotorye vozmozhnosti otsenit' bystrodeistvie poluprovodnikovykh diodov po fizicheskim parametram/.  
08 p1287 A69-20889  
Transient process in diodes with an inhomogeneous base during switching /O perekhodnom protsesse v diodakh s neodnorodnoi bazoi pri perekliuchenii/.  
08 p1287 A69-20890

## DAINTREE, E. J.

Measurement of the spectrum of 387 radio sources at centimetre wavelengths. I.  
18 p3200 A69-35132

## DAINTY, D. G.

Liquid nitrogen for fuel tank explosion suppression.  
05 p0703 A69-16505

## DAIRE, M.

Details concerning the phase diagram of vanadium-nickel from 0 to 40 percent nickel /Precisions sur le diagramme d'équilibre vanadium-nickel entre 0 et 40 percent de nickel/.  
11 p1903 A69-24579

## DAITCH, J. M.

Contrast sensitivity of the human peripheral retina.  
22 p3882 A69-40870

## DAKIN, J. T.

Negative-ion-molecule reactions in N sub 2 O.  
06 p0960 A69-1710

## DAKOWSKI, M.

The possibility of extinct superheavy elements occurring in meteorites.  
20 p3601 A69-3753

## DAKSS, M. L.

A fast digitalized scan laser.  
[IEEE PAPER R-2] 05 p0775 A69-1632  
Efficiencies and bandwidths of intracavity acoustooptic devices.  
10 p1697 A69-238

## DAKUCHAEVA, O. D.

Photography in astronomy /Fotografiia v astronomii/.  
11 p1885 A69-2497

## DALARD, F.

Study of zinc oxidation in weakly alkaline solutions /Etude de l'oxydation du zinc dans les solutions faiblement basiques/.  
08 p1268 A69-2105

Study of the oxidation of zinc in weakly basic solutions /Etude de l'oxydation du zinc dans les solutions faiblement basiques/.  
16 p2740 A69-3242

## DALBERG, E.

A certain modified criterion of the instability of motion /O nekotom vidoizmenennom kriterii neustoiichivosti dvizheniia/.  
18 p3174 A69-3531

## DALE, J. R.

Secondary vortex generation in the near wake of circular cylinders.  
[AIAA PAPER 69-755] 18 p3084 A69-3441

## DALE, R. G., JR.

Quantitative schlieren measurements by the photomultiplier technique.  
19 p3306 A69-3574

## DALELIO, G. F.

Polymeric Schiff bases. XII.  
07 p1074 A69-1862  
Polymeric Schiff bases. XIII - The direct synthesis of cross-linked polymeric azomethines.  
08 p1269 A69-2105  
Polymeric Schiff bases. XV - The synthesis of cross-linked polymeric azomethines from amino aryl ketones.  
08 p1269 A69-2106  
Polymeric Schiff bases. XIV - The synthesis of cross-linked polymeric azomethines by exchange reactions.  
08 p1269 A69-2106  
Polymeric Schiff bases. XVI.  
10 p1651 A69-2330  
Polymeric Schiff bases. XVII.  
13 p2217 A69-2831  
Structural design and thermal properties of polymers.  
21 p3751 A69-3878  
The synthesis of thermally stable polymeric azomethines by polycondensation reactions.  
23 p4113 A69-4201

## DALEN, H.

Direct epoxy embedding for vertical sectioning of cells grown as a monolayer on Millipore filter.  
10 p1649 A69-23404  
Surface features of cultured mammalian cells.  
20 p3467 A69-37100  
Two types of long microextensions from cultivated liver cells.  
20 p3480 A69-38287

## DALENOORT, G. J.

Joint probability distributions of the electric microfield in hot plasmas with neglect of interactions between particles.  
12 p2139 A69-26871

## DALESSIO, F. J.

Improvement of reliability of Gunn diodes.  
09 p1470 A69-22788

## DALEY, H. L.

Emissive probes for plasma potential measurements on the SERT II spacecraft.  
[AIAA PAPER 69-272] 09 p1492 A69-21217  
Hg super plus plus Cs charge transfer with comments on ion energy neutralization.  
16 p2835 A69-31895

- DALEY, K.**  
Azotobacter vinelandii RNA polymerase. VII - Enzyme transitions during unprimed r/l-C/ synthesis.  
22 p3895 A69-40050
- DALGARNO, A.**  
The effect of oxygen cooling on ionospheric electron temperatures.  
02 p0245 A69-12739  
Infrared day and night airglow of the earth's upper atmosphere.  
13 p2252 A69-27585  
Dipole properties of molecular hydrogen.  
14 p2488 A69-29094  
Sum rules for variational wavefunctions.  
14 p2471 A69-29921  
Fine-structure transitions and shape resonances.  
15 p2655 A69-30198  
Electron cooling by vibrational excitation of O sub 2.  
16 p2774 A69-31982  
Electron impact excitation of the dayglow.  
20 p3591 A69-38061  
Photodissociation of molecular hydrogen on Venus.  
20 p3609 A69-38102  
Intercombination oscillator strengths in the helium sequence.  
20 p3577 A69-38171  
Electron impact excitation of CN.  
21 p3773 A69-38476  
Inelastic collisions at low energies.  
24 p4351 A69-42763
- DALKE, G. W.**  
Regional slopes with non-stereo radar.  
15 p2610 A69-30710
- DALLAPORTA, N.**  
Possibility of mass loss in the red-giant stage from H-R diagrams of galactic clusters.  
08 p1396 A69-20642
- DALLE, E.**  
Qualification of integrated circuits for military and space applications /Qualification de circuits integres pour applications militaires et spatiales/.  
15 p2624 A69-30820
- DALLOLIO, L.**  
A computing program derived from Chree's method.  
13 p2225 A69-27617
- DALLOLMO, U.**  
Jupiter - Opposition 1967-1968 /Giove - Opposizione 1967-68/.  
16 p2858 A69-32205
- DALLOS, P.**  
Some problems in the measurement of cochlear distortion.  
23 p4085 A69-41573
- DALLY, J. W.**  
Application of birefringent coatings to glass-fiber-reinforced plastics.  
11 p1995 A69-25647  
Recording dynamic fringe patterns with a Cranz-Schardin camera.  
20 p3541 A69-37778  
On the fidelity of high-speed photographic systems for dynamic photoelasticity.  
22 p3945 A69-40077
- DALMAN, G. C.**  
Measurements of multiplication effects on noise in silicon avalanche diodes.  
04 p0573 A69-14332
- DALRYMPLE, E.**  
Design of a large explosive containment capsule for nuclear reactor irradiation.  
04 p0629 A69-14480
- DALRYMPLE, G. V.**  
Acute somatic effects in primates of protons to 400 Mev.  
03 p0374 A69-13497
- DALTON, B. P.**  
Factors affecting the cation requirement of a halophilic NADH dehydrogenase.  
10 p1651 A69-23127
- DALTON, C.**  
Strictly sinusoidal flow around a stationary cylinder. [ASME PAPER 69-FE-13]  
21 p3643 A69-38601
- DALTON, G. R.**  
Nuclear properties of a reactor used for nuclear seeding of an MHD plasma.  
10 p1723 A69-23485
- Experiment and theory of the ionization and recombination kinetics in plasmas /super 3 He/ produced through neutron irradiation.  
10 p1738 A69-23488
- DALTON, P. L.**  
Application of dynamic programming in selecting optimum quality assurance controls for electronic hardware.  
15 p2722 A69-31127
- DALU, G.**  
The electrical conductivity of air in the presence of fog /La conducibilita elettrica dell'aria in presenza di nebbia/.  
24 p4347 A69-43509
- DALU, G. A.**  
The electrical conductivity of air in the presence of fog /La conducibilita elettrica dell'aria in presenza di nebbia/.  
24 p4347 A69-43509
- DALY, D. A.**  
Hybrid integrated lumped-element microwave amplifiers.  
01 p0039 A69-10190
- DALY, O.**  
Responses of Cladonia rangiferina to experimental stress factors.  
18 p3095 A69-34539
- DALZELL, W. H.**  
Optical constants of soot and their application to heat-flux calculations. [ASME PAPER 68-HT-13]  
13 p2374 A69-27777
- DALZIEL, R.**  
Measurement of high-energy electrons and protons /Experiments S.71A and S.71E/.  
13 p2327 A69-27754
- DAMASCHINI, R.**  
A frequency selector for a gas laser /Selecteur de frequences pour laser a gaz/.  
16 p2795 A69-31608
- DAMATO, A. N.**  
Relative roles of sympathetic and parasympathetic nervous systems in the carotid sinus reflex in dogs.  
24 p4257 A69-42629
- DAMATO, R.**  
Metal space frame radome design.  
23 p4231 A69-42139
- DAMELIO, V. J.**  
Extreme temperature performance of graphites. [AIAA PAPER 68-297]  
04 p0621 A69-15329
- DAMIANO, V.**  
Effects of hydrostatic pressure on the mechanical behavior of polycrystalline beryllium.  
01 p0092 A69-10059
- DAMIANO, V. V.**  
Deformation and fracture of beryllium bicrystals.  
06 p0942 A69-17225  
Deformation of beryllium single crystals under high pressure.  
13 p2279 A69-27760
- DAMICO, J.**  
Radioactive isotopes in Hoba West and other iron meteorites.  
22 p4021 A69-40411
- DAMICO, J. J.**  
A new method of pressure control for adhesive bonding.  
09 p1512 A69-22367
- DAMICO, T.**  
A class of digital filters with application to the processing of signals transmitted from space vehicles /Una classe di filtri numerici con applicazioni all'elaborazione di segnali trasmessi da veicoli spaziali/.  
01 p0038 A69-10071
- DAMLE, S. V.**  
Transistorised multichannel pulse height analyser and recording system for balloon borne cosmic ray telescope.  
06 p0924 A69-17284
- DAMM, R.**  
Rocket Propellants /Raketentreibstoffe/.  
10 p1752 A69-23806
- DAMMANN, H.**  
Experimental investigation of the formation and acceleration of the current layer in a Z-pinch discharge /Experimentelle Untersuchung der Entstehung und Beschleunigung der stromfuehrenden Schicht in einer Z-Pinch-Entladung/.  
09 p1552 A69-22397
- DAMOULAKIS, J. N.**  
Maximum lift-to-drag ratio airfoils at moderate supersonic speeds.  
13 p2199 A69-28214  
The restoration of constraints in holonomic and non-holonomic problems.  
19 p3361 A69-36758
- DAN, C., JR.**  
The Orbiting Astronomical Observatory thermal test program. [AIAA PAPER 69-995]  
22 p3920 A69-40373
- DANARD, M. B.**  
A simple method of including longwave radiation in a tropospheric numerical prediction model.  
07 p1175 A69-18896
- DANBY, J. M. A.**  
Motion of a satellite of a very oblate planet.  
10 p1774 A69-22969
- DANCHENKO, V.**  
Effects of electric fields on annealing of radiation damage in MOSFET's.  
05 p0733 A69-16562  
Investigation of radiation damage in MOSFETs using bias-temperature treatments.  
06 p0976 A69-16877
- DANCY, J.**  
The influence of impurities on the formation of single-crystal films.  
22 p3992 A69-39899
- DANDEKAR, B. S.**  
Equatorial measurements of the /OI/ 5577 angstrom ions emission of the dayglow with a rocket photometer.  
24 p4314 A69-43005
- DANEK, J.**  
The reliability of conventional circuits and microelectronics.  
08 p1293 A69-21112
- DANES, Z. F.**  
Convection in the interiors of planets.  
13 p2344 A69-27646
- DANESI, A.**  
Adaptive method for the experimental determination of stability derivatives /Metodo adattativo per la determinazione sperimentale delle derivate di stabilita/.  
11 p1824 A69-25671  
Design of an autopilot for the flight simulation of the stability and control characteristics of reentry vehicles /Sul progetto di un autopilota per la simulazione in volo delle caratteristiche di stabilita e controllo di veicoli di rientro nell'atmosfera/.  
18 p3208 A69-35000  
Design method for reference-model adaptive control systems /Sul metodo di progetto degli autopiloti adattativi a modello di riferimento/.  
21 p3688 A69-39857
- DANEU, V.**  
Accurate laser wavelength measurements in the infrared and far infrared using a Michelson interferometer.  
17 p3006 A69-33405
- DANEY, D. E.**  
Preparation and characterization of slush hydrogen and nitrogen gels.  
22 p3998 A69-40632
- DANG, L. M.**  
Design theory of junction-gate field-effect transistor. I - The tectron-like structure. II - The diffused gate structure.  
06 p0893 A69-17197
- DANGELO, H.**  
Optimization of slowly-varying systems by minimization of the expected value of a quadratic performance index.  
18 p3111 A69-34688
- DANGELO, N.**  
Role of the universal instability in auroral phenomena.  
07 p1125 A69-18852  
Continuous supersonic plasma wind tunnel.  
15 p2589 A69-30909  
Heating of the solar corona.  
17 p3030 A69-33060
- DANGOR, A. E.**  
Time resolved measurements of electron number density and electron temperature using laser interferometry at 337-mu m wavelength.  
03 p0432 A69-14187



- Observations on the reflected shock in a T-tube and comparison with theory. 15 p2593 A69-31161
- A phase sensitive interferometer for the measurement of electron density in transient plasmas. 22 p3946 A69-40438
- DANGVU, H.**  
Exact gravitational wave solutions of the Einstein field equations /Sur les solutions exactes d'onde gravitationnelle des equations du champ d'Einstein/. 08 p1352 A69-20755
- DANIEL, D. B.**  
Airborne Omega navigation set. 08 p1349 A69-21197
- DANIEL, I. M.**  
Ultrahigh-speed framing photography employing a multiply-pulsed ruby laser and a "smear-type" camera - Application to dynamic photoelasticity. 12 p2086 A69-26166
- Three-dimensional photoelastic analysis of a fiber-reinforced composite model. 12 p2189 A69-27162
- A multiple-pulse ruby-laser system for dynamic photomechanics - Applications to transmitted- and scattered-light photoelasticity. 22 p3944 A69-40076
- DANIEL, J. L.**  
Dynamic electron microscopy of high temperature reactions. 09 p1499 A69-22304
- DANIEL, R. R.**  
Rigidity spectrum of cosmic ray helium nuclei greater than 12 bv. 06 p0988 A69-17276
- Cosmic ray electrons in the Galaxy. 06 p0991 A69-17309
- Electrons in metagalaxy and their implications. 06 p0991 A69-17310
- Cosmic X-rays, gamma-rays, and electrons. 07 p1204 A69-18391
- On the existence of the galactic radio halo. 09 p1590 A69-21395
- Cosmic Ray Studies in Relation to Recent Developments in Astronomy and Astrophysics, Tata Institute of Fundamental Research, Colloquium, Bombay, India, November 11-16, 1968, Proceedings. 21 p3788 A69-38811
- Cosmic ray electrons. 21 p3790 A69-38823
- DANIELE, V.**  
The use of dyadic Green's functions for wave propagation in anisotropic media. 17 p2924 A69-33835
- DANIELIAN, S. A.**  
Influence of a change in the duration of discrete packets of phase-manipulated signals on the output response of a matched filter /Vliianie izmeneniia dlitel'nosti diskretov fazomanipulirovannogo signala na vykhodnoi otklik soglasovannogo filtra/. 12 p2031 A69-26487
- DANIELMEYER, H. G.**  
High-power single-frequency lasers using thin metal film mode-selection filters. 17 p2982 A69-33399
- DANIELS, F. B.**  
Lengthening of shock waveforms caused by their propagation to high altitudes. 07 p1054 A69-19463
- DANIELS, G. E.**  
Measurement of gas temperature and the radiation compensating thermocouple. 04 p0598 A69-14916
- DANIELS, R. D.**  
Orientation dependence of pitting and blistering in proton-irradiated aluminum crystals. 04 p0640 A69-14451
- DANIELS, R. G.**  
Heat transfer and integrated circuits. 06 p0894 A69-17216
- DANIELS, R. J.**  
Reducing transformer inrush transients. 06 p0894 A69-17221
- DANIELSON, D. A.**  
Buckling and initial postbuckling behavior of spherical shells under pressure. 16 p2874 A69-32162
- Dynamic buckling loads of imperfection-sensitive structures from perturbation procedures. 24 p4405 A69-43656
- DANIELSON, G. C.**  
Thermal diffusivity and other non-steady-state methods. 23 p4237 A69-41326
- DANIELSON, G. E., JR.**  
Environmental testing and calibration of the Mariner Mars 1969 television system. 22 p3920 A69-40372
- DANIELSON, R.**  
An upper limit to the angular diameter of the nucleus of NGC 4151. 09 p1602 A69-22227
- DANIK, B.**  
Integrated inertial velocity-aided and position-aided aircraft navigation. 08 p1349 A69-21196
- DANILCHENKO, K. P.**  
Effect of a jet on a circular plate near a screen /O vozdeistvii strui na krugliu plastinu vblizi ekrana/. 19 p3297 A69-35816
- DANILCHUK, L. N.**  
Investigation of stacking faults in epitaxial layers of germanium /Izuchenie defektov upakovki v epitaksial'nykh sloiakh germaniia/. 02 p0297 A69-11880
- DANILEIKO, I. U. K.**  
Optical homogeneity of ruby crystals and its relation to laser radiation divergence /Opticheskaia odnorodnost' kristallov rubina i ee svyaz' s raskhodimost'iu izlucheniia opticheskikh kvantovykh generatorov/. 01 p0139 A69-10831
- Optical homogeneity of ruby crystals and its relation to the radiation divergence of lasers. 11 p1936 A69-24698
- Surface and volume scattering, surface-damage, and optical homogeneity studies of ruby crystals and their connection with laser-emission characteristics. [IEEE PAPER U-7] 12 p2106 A69-26322
- DANILEIKO, M. V.**  
Operating characteristics of a ruby laser at 78 deg K. 05 p0777 A69-16546
- DANILEVSKII, N. P.**  
Luminescence spectra of some molecular gases excited by fast electrons in the infrared spectral region /Spektry svecheniia nekotorykh molekuliarnykh gazov v infrakrasnoi oblasti spektra, vzbuzhdennykh bystryimi elektronami/. 09 p1590 A69-21382
- Infrared emission spectra of some molecular gases excited by fast electrons. 18 p3176 A69-34770
- DANILIN, G. A.**  
Couette flow of an ionized multicomponent gas /Techenie Kuetta mnogokomponentnogo ionizovannogo gaza/. 19 p3240 A69-36403
- DANILIN, V. A.**  
Averaged field in an ionospheric waveguide channel radio communication with an artificial earth satellite /Usrednennoe pole v ionosfernom volnovodnom kanale pri radiosvyazi s ISZ/. 02 p0206 A69-11661
- Averaged field in an ionospheric waveguide channel in radio communications with a satellite. 13 p2224 A69-28692
- DANILIN, V. S.**  
Experimental investigation of a wet-steam injector /Eksperimental'noe issledovanie parovodnogo inzhektora/. 13 p2246 A69-27490
- DANILKIN, N. P.**  
Determination of the aeronomic parameters of the ionospheric F region /Ob opredelenii aeronomiceskikh parametrov F-oblasti ionosfery/. 23 p4156 A69-41844
- DANILKIN, V. G.**  
Investigation of the shape of nuclear cascade showers in lead and the energy spectrum of nuclear-active particles with the aid of a calorimeter with lead absorbers. 13 p2303 A69-28399
- DANILOV, A. D.**  
Second experiment aimed at studying the constants of ion-molecule reactions directly in the ionosphere /Vtoroi eksperiment po issledovaniu konstant ionomolekuliarnykh reaktsii neposredstvenno v ionosfere/. 08 p1311 A69-21159
- Diurnal variations of the atmospheric ion composition at altitudes of 100-200 km. 15 p2603 A69-31401
- Ion composition of the upper atmosphere at altitudes of 130-155 km during the period of meteor shower Orionides activity. 15 p2603 A69-31406
- Investigation of the elementary processes in the ionosphere by means of VV-type devices. 15 p2603 A69-31407
- DANILOV, A. N.**  
Effect of self-bias on the dynamic range of tunnel diode amplifiers. 09 p1469 A69-22633
- Synchronization of SHF tunnel-diode self-excited oscillators /Sinkhronizatsiia avtogeneratorov SVCh na tunnel'nykh diodakh/. 11 p1849 A69-24955
- Rocket Aerodynamics /Aerodinamika Rakety/. 17 p2889 A69-32829
- DANILOV, B. S.**  
Use of binary shift registers for shaping the signal spectrum in data transmission equipment /Primenenie dvoichnykh sdvigaiushchikh registrov dlia formirovaniia spektra signala v apparature peredachi dannykh/. 12 p2040 A69-26486
- DANILOV, I. I.**  
Thermal contact resistance in cylindrical elements in thermionic energy converters. 14 p2400 A69-29216
- DANILOV, I. U.**  
Application of thermionic energy conversion in the USSR. 14 p2405 A69-29279
- DANILOV, L. N.**  
Stress Analysis. Number 12 - Theoretical and Experimental Studies of the Strength of Machine Structures /Raschet na Prochnost'. Number 12 - Teoreticheskie i Eksperimental'nye Issledovaniia Prochnosti Mashinostroitel'nykh Konstruktsii/. 11 p1980 A69-24940
- Theoretical and Experimental Investigations of the Strength of Mechanical Engineering Structures /Teoreticheskie i Eksperimental'nye Issledovaniia Prochnosti Mashinostroitel'nykh Konstruktsii/. 17 p3056 A69-33190
- DANILOV, O. B.**  
Method of measuring the beats between longitudinal modes in a CW laser. 03 p0440 A69-13265
- Study of the causes of the effect of the gas temperature on He-Ne laser power output at lambda equals 6328 angstrom units /Issledovanie prichin vliianiia temperatury gaza na moshchnost' generatsii He-Ne lazera na lambda equals 6328 angstrom units/. 10 p1706 A69-24078
- The application of lasers with regulated pulses for photographing distant objects with selection in regard to the range. 12 p2089 A69-26190
- DANILOV, V. I.**  
Impulse-noise limiter with tracking threshold in receivers of noiselike signals. 05 p0719 A69-16086
- Influence of amplitude limiting in noise receivers on the accuracy of measurement in the presence of impulsive interference. 07 p1088 A69-19754
- DANILOV, V. N.**  
Paraxial approximation for a dense electron beam /O paraksial'nom priblizhenii dlia plotnogo elektronnoho puchka/. 04 p0632 A69-14981
- DANILOV, YU. L.**  
Survey of experimental work in the USSR. 14 p2404 A69-29277
- DANILOVA, T. V.**  
Monte Carlo calculations of the nuclear cascade process in the atmosphere. 13 p2331 A69-28397
- DANILOVSKAIA, V. I.**  
Application of the Castigliano variational principle to the plane thermoelasticity problem /Prilozhenie variatsionnogo nachala Kastil'iano k ploskoi zadache termouprugosti/. 08 p1419 A69-21178
- DANISHEVSKII, A. M.**  
Investigation of laser action in CO sub 2 in the case of pulsed excitation /Issledovanie lazernogo deistviia v CO sub 2 pri impul'snom vzbuzhdenii/. 01 p0090 A69-10787
- Investigation of the laser effect in CO sub 2 during pulsed excitation. 20 p3555 A69-38004

- DANKO, J. C.**  
Surface characterization studies on CVD tungsten.  
09 p1558 A69-21810
- DANKO, M. I.**  
Effect of laser radiation on the electrical conductivity of the animal liver /Vpliv viprominiuvannia optichnogo kvantovogo generatora /lazera/ na elektroprovodnist' pechinki tvarin/.  
23 p4111 A69-42344
- DANN, R. K.**  
Hydrogen embrittlement of stainless steel.  
01 p0093 A69-10062
- DANNENBERG, H.**  
Epoxide adhesives.  
14 p2468 A69-29339
- DANNENBERG, R. E.**  
Microsecond response system for measuring shock arrival by changes in stream electrical impedance in a shock tube.  
03 p0428 A69-13104  
An application of optical telemetry to shock tube measurements.  
14 p2449 A69-29561  
A novel use of a telescope to photograph metal diaphragm openings.  
20 p3538 A69-37227
- DANNENMUELLER, R. J.**  
A new cryogenic storage system for spacecraft.  
24 p4393 A69-43045
- DANNESSA, A. T.**  
Effects of natural aging on fracture characteristics of X7000-series aluminum weldments.  
01 p0086 A69-10537
- DANNOWSKI, K.**  
Considerations of equivalence and stability for a negative-impedance converter according to the bridge principle /Aequivalenz- und Stabilitätsbetrachtungen zum Negativ-Übersetzer nach dem Brückenprinzip/.  
09 p1467 A69-22559
- DANOVICH, J. F.**  
Wear protection of a pressure-loaded titanium alloy by lubricated electroless nickel coatings.  
24 p4331 A69-42786
- DANTONIO, C.**  
Impurity-dislocation interaction and repeated yielding in a commercial Al alloy.  
04 p0613 A69-14440
- DANTONIO, C. R.**  
The effect of strain rate and temperature on the flow stress of 7075 aluminum.  
03 p0443 A69-13120
- DANTONIO, R. A.**  
Pseudo-noise interferometer.  
01 p0048 A69-11003  
Air-ground, ground-air communications using pseudo-noise through a satellite.  
01 p0033 A69-11009
- DANYLUK, H. T.**  
Elastic-plastic flow through a converging conical channel.  
12 p2063 A69-27114
- DANZER, K. H.**  
Two methods for calculating multiple scattering in a turbid atmosphere /Ueber zwei Methoden zur Berechnung der Strahlungsmehrfachstreuung in der trüben Atmosphäre/.  
11 p1911 A69-24587
- DANZIGER, I. J.**  
Observational time-scales for depletion of lithium in main sequence stars.  
14 p2517 A69-29089
- DANZIGER, L.**  
Life-test sampling plans for instantaneous failure rate of a lognormal distribution.  
15 p2630 A69-31137
- DAOUD, M. B.**  
The coefficient of friction of porous media in the magnetodynamics of liquids /Sur le coefficient de frottement des milieux poreux en magnétohydrodynamique des liquides/.  
03 p0480 A69-14112  
Experimental study, in the region of validity of the Darcy law, of the flow of a viscous electrically conducting fluid through an insulating porous medium in the presence of a transverse magnetic field /Etude expérimentale, dans le domaine de validité de la loi de Darcy, de l'écoulement d'un liquide visqueux et électroconducteur à travers un milieu poreux isolant en présence d'un champ magnétique transversal/.  
05 p0805 A69-16603
- DAPKUS, P. D.**  
The laser transition and photon energy of GaAs in the lightly-doped limit.  
02 p0257 A69-12615  
Laser transition to band edge or to impurity states in GaAs-Ge.  
13 p2270 A69-27193  
Time behavior of laser modes in GaAs platelet lasers.  
16 p2796 A69-31704
- DAPPOLITO, J. A.**  
Low sensitivity filters for state estimation in the presence of large parameter uncertainties.  
22 p3918 A69-41016
- DARCHIEVA, L. A.**  
Relation between high-latitude geomagnetic disturbances and electron fluxes at the boundary of the outer radiation belt /Sviaz' vysokosirotnykh geomagnitnykh vozmushchenii s potokami elektronov na granitse vneshnego radiatsionnogo poiasa/.  
14 p2438 A69-29079
- DARCY, J. A.**  
Color picture reproduction using a high-resolution television system.  
[SMPTE PAPER 105-79]  
12 p2077 A69-25767  
Photo-dielectric tape camera systems.  
16 p2792 A69-32558
- DARCY, R. G.**  
Mobile telescope for examining vertical intensity of cosmic ray fluxes.  
09 p1493 A69-21420
- DARDANO, J. F.**  
Observing behavior of mental patients under a fixed-interval schedule of signals.  
23 p4091 A69-42014
- DARDARE, M.**  
The boosters /Les lanceurs/.  
02 p0334 A69-11919
- DARDEN, B. F. L.**  
Developing a STOLport policy for the city-center.  
[RAES PAPER 3]  
22 p3927 A69-40484
- DARDO, M.**  
Evidence for strongly interacting heavy shower particles at 70 m w.e. underground.  
02 p0310 A69-12831
- DAREK, B.**  
Zinc diffusion into gallium arsenide /Dyfuzja cynku do arsenku galu/.  
13 p2323 A69-28640
- DARENSKAIA, N. G.**  
Diurnal rhythms and ionizing radiation effects.  
15 p2557 A69-31458
- DARG, V. A.**  
Mathematical model of a life support system.  
10 p1649 A69-23580  
Study of a mathematical model of a life support system /K issledovaniu matematicheskoi modeli sistemy zhizneobespecheniia/.  
22 p3892 A69-40272
- DARGEIKO, M. M.**  
Stabilization of axisymmetric perturbations in a conducting fluid by means of a distributed automatic control system /Stabilizatsiia osesimmetricheskikh vozmushchenii provodiashchei zhidkosti pri pomoshchi raspredelennoi sistemy avtomaticheskogo regulirovaniia/.  
13 p2311 A69-28105
- DARLSTON, B. J. L.**  
Creep deformation and fatigue failure of structural materials.  
24 p4398 A69-42771
- DARLING, R. C.**  
Thermoregulatory responses to deep and superficial cooling in spinal man.  
22 p3873 A69-40209
- DARMANIAN, A. P.**  
Lowering of the optical breakdown threshold in a laser focus by superimposing a microwave field.  
03 p0441 A69-13997
- DARMS, F. J., JR.**  
Boron/epoxy support strut for non-integral cryogenic tankage.  
19 p3354 A69-35516
- DARRAS, B.**  
Smoothing by the method of least squares - Application to the eigenmodes of a structure /Lissage par les moindres carrés - Application aux formes propres d'une structure/.  
18 p3218 A69-34642
- DARROZES, J.**  
Some aspects on the approximate solution of the Boltzmann equations for a binary gas mixture /Quelques aspects sur la résolution approchée des équations de Boltzmann pour un mélange binaire de gaz/.  
[ONERA-TP-694]  
11 p1867 A69-24753
- DARSEY, D. M.**  
Resistive properties of indium and indium-gallium contacts to CdS.  
03 p0487 A69-13638
- DART, R.**  
Analysis of random signals and real-time analysis systems /Analyse des signaux aléatoires et systèmes d'analyse en temps réel/.  
13 p2264 A69-28603
- DARWELL, H. M.**  
Composite modified cast-double-base propellants - Technology and application.  
17 p3017 A69-33349
- DAS GUPTA, A.**  
Scintillations of satellite signals by ionospheric irregularities with sharp boundary.  
09 p1489 A69-21713
- DAS TALUKDER, N. K.**  
Collapse load of shallow conical shells.  
23 p4236 A69-42496
- DAS, A.**  
Helix antenna for spacecraft.  
13 p2228 A69-27632  
The supersonic wind tunnel of the Braunschweig research center of the DFVLR /Der Ueberschallwindkanal des Forschungszentrums Braunschweig der DFVLR/.  
20 p3510 A69-37422  
Spacecraft phased array configurations.  
22 p3915 A69-40705
- DAS, A. C.**  
A mechanism for VLF emissions.  
03 p0399 A69-14022
- DAS, A. K.**  
Development of a big cloud chamber for measuring the specific ionisation of muons.  
06 p0925 A69-17303  
Muon-bundles observed at sealevel.  
06 p0991 A69-17304  
Energy spectrum of muons from their knock-on electrons.  
06 p0991 A69-17305  
Thermal stresses in a hollow circular cylinder with smooth rigid insulating covers on the curved surfaces.  
12 p2180 A69-26268  
Effect of couple-stresses on a semi-infinite plate due to Gaussian distribution of load on the bounding surface.  
22 p4038 A69-39902
- DAS, B.**  
Stresses due to a nucleus of thermoelastic strain in an infinite elastic solid with two rigid circular inserts.  
16 p2872 A69-31906
- DAS, D.**  
Uniform transmission line equivalence of cascaded exponential lines.  
01 p0044 A69-10623
- DAS, G.**  
Internal void formation in powder metallurgy tungsten.  
01 p0093 A69-10061
- DAS, H. K.**  
Measurement of skin friction using a rectangular mouthed Preston tube.  
11 p1880 A69-24376  
Displacement effects on pitot tubes with rectangular mouths.  
17 p2976 A69-34049
- DAS, J.**  
An estimation of performances of unidigit and multidigit communication systems.  
17 p2918 A69-33066
- DAS, K. P.**  
Stability of gravitating fluid layer of infinite extent but finite thickness including Hall effect.  
01 p0128 A69-10342
- DAS, L.**  
An integrated computerized reliability monitoring program for aircraft systems and components.  
12 p2055 A69-25972



DAS, M. B.

Physical limitations of MOS structures.  
16 p2757 A69-31612

DAS, P. K.

A proposed method of accelerated fatigue testing  
under progressive loading.  
10 p1800 A69-23349

DAS, S. C.

Axisymmetric thermal stresses in a spheroidal shell  
of arbitrary thickness.  
05 p0836 A69-15923  
Fracture of rotating hollow shafts.  
15 p2712 A69-31017

DAS, U. N.

Combined natural and forced convection hydromagnetic  
flow in vertical channels.  
19 p3380 A69-36304

DASARATHY, B. V.

Response of gyro systems to stochastic inputs.  
01 p0079 A69-10236  
On the response of a class of non-linear systems with  
time dependent parameters.  
01 p0050 A69-10237  
Study of mechanical systems subjected to combined  
deterministic and random excitation.  
04 p0680 A69-14968  
Effect of creep on the vibrations of mechanical  
systems subjected to random excitation.  
09 p1617 A69-22095  
On the synthesis of a class of second order nonlinear  
differential equations.  
24 p4342 A69-43702

DASCALU, D.

Space-charge waves and high-frequency negative resistance  
of SCL diodes.  
12 p2038 A69-26349  
Experimental evidence of transit-time effects in silicon  
punch-through diodes.  
15 p2575 A69-30181

DASCHER, A.

An automated aircraft instrumentation system for cloud  
nucleation studies.  
01 p0080 A69-10542

DASHCHENKO, I. P.

Estimate of the efficiency of equipment methods for  
solving problems in automatic control systems with  
digital control computers /Ob otsenke effektivnosti apparatnykh sposobov resheniya zadach v avtomatizirovannykh sistemakh upravleniya s tsifrovymi vychislitel'no-upravlyaiushchimi mashinami/.  
17 p3312 A69-33120

DASHER, C. E.

Effects of MMH upon the cornea and studies on the blood-aqueous barrier to MMH.  
09 p1447 A69-22547

DASHEVSKII, M. IA.

Investigation of strongly-doped n-type indium antimonide.  
09 p1558 A69-21869

DASHKOV, A. A.

Orbital trajectories about a planet with reentry to the earth /Traektorii obleta planety s vozvrashcheniem k zemle/.  
05 p0823 A69-16042  
Trajectories of a flight around a planet with return to the earth.  
20 p3606 A69-37951

DASPET, H.

Space applications of electrochemical generators /Applications spatiales des generateurs electrochimiques/.  
08 p1259 A69-21036  
Space applications of electrochemical generators /Applications spatiales des generateurs electrochimiques/.  
16 p2737 A69-32407

DASPET, M. H.

Degradation of solar generators in space and the influence on their design /Degradation des generateurs solaires spatiaux et influence sur leur conception/.  
11 p1825 A69-24870

DAST, L.

Initiation of priming explosives by electrons and photons /Initiation des explosifs d'amorceur par electrons et par photons/.  
10 p1751 A69-23017

DASZKIEWICZ, M.

A microholographic system enabling to obtain holograms with no pseudoscopic real image.  
21 p3726 A69-39702

DAT, J.

Similarity of fluid amplifiers - Theoretical study of the flow in the feed nozzle - Influence of the boundary layer /Similitude des amplificateurs fluides - Etude theorique de l'ecoulement dans la buse d'alimentation - Influence de la couche limite/.  
07 p1059 A69-19320

DAT, R.

Fluidic logic elements employing suction controls /Elements logiques a fluides utilisant des commandes par aspiration/.  
16 p2736 A69-31835Techniques used in aeroelasticity for the representation of an aircraft in flight /Les techniques utilisees en aeroelasticite pour la representation de l'avion en vol/. [ONERA-TP-697]  
20 p3626 A69-37755

DATE, J. H.

Propagation in the earth's atmosphere.  
11 p1837 A69-25003

DATHE, G.

Microwave frequency doubling in ruby.  
17 p3015 A69-33024

DATHE, H. M.

Research planning as an aid to development decisions /Die Planungsforschung als Hilfsmittel fuer Entwicklungsentscheidungen/.  
04 p0689 A69-14807

DATKOWSKI, W.

WED-type vibration exciters /Wzbudniki drgan typu WED/.  
16 p2790 A69-32077

DATNOW, B.

Single-channel pressure telemetry unit.  
11 p1831 A69-25642  
A multichannel implantable telemetry system.  
15 p2559 A69-31044  
Single-channel pressure telemetry unit.  
23 p4100 A69-41295

DATSENKO, L. I.

A study of structural defects in CdSe single crystals using X-ray topograms.  
02 p0298 A69-12048  
The effect of dislocations on the intensity jumps at the interferential transmission of X-rays near the K-edge of absorption in Ge.  
03 p0490 A69-13944

DATSIEV, M. I.

Desorption of O super plus and H super plus ions from a graphite surface under slow electron irradiation /Desorbtsiia ionov O super plus i H super plus s poverkhnosti grafita pri obluhenii medlennymi elektronami/.  
22 p3972 A69-39957

DATTA, B. K.

Stationary electromagnetic fields in General relativity.  
01 p0115 A69-10020

DATTA, G.

Interrupted wave synchronization of pulsed oscillators.  
03 p0404 A69-13301

DATTA, M. R.

Optimum control of a fourth order digital control system.  
03 p0408 A69-12916

DATTA, N.

Flow and heat transfer between two infinite coaxial rotating discs under an axial magnetic field.  
10 p1728 A69-23234

DATTA, S. K.

Three-dimensional and shell-theory analysis of elastic waves in a hollow sphere. I. [ASME PAPER 69-APMW-7]  
24 p4402 A69-43105Three-dimensional and shell-theory analysis of elastic waves in a hollow sphere. II. [ASME PAPER 69-APMW-8]  
24 p4402 A69-43106

DATTA, S. R.

Energy expenditure in work predicted from heart rate and pulmonary ventilation.  
22 p3891 A69-40220

DATTAGURU, B.

Stress concentration and load diffusion in rectangular panels with constant stress flanges.  
18 p3219 A69-34785

DATWYLER, W. F.

Introduction to digital elements and circuits.  
10 p1638 A69-23553

DAU, K.

Two probes for the measurement of the complete velocity vector in subsonic flow.  
05 p0764 A69-16398

DAU, W. D.

Cosmic rays latitude survey at solar minimum.  
19 p3396 A69-36411

DAUBERT, D. L.

Power systems for the Apollo Applications Program.  
23 p4069 A69-42244

DAUGHARTY, T. M.

Interrelationship of physical factors affecting sodium reabsorption in the dog.  
13 p2210 A69-28482

DAUGHERTY, J. D.

On the solution of Langmuir's spherical space-charge equation.  
07 p1115 A69-18864

DAUGHNEY, C. C.

Measurement of light scattered from density fluctuations within a collisionless shock.  
24 p4360 A69-43748

DAUKNIS, V. I.

Thermal stability of refractory ceramic materials in a high-temperature gas flow /Termostoikost' ognepornykh keramicheskikh materialov v vysokotemperaturnom gazovom potoke/.  
13 p2285 A69-27472

DAUKSYS, R. J.

Graphite fibers - Their properties and resin matrix technology. [ASM PAPER W9-16.1]  
21 p3728 A69-38655

DAUME, E. IA.

Limiting parameters of ultra-short pulses emitted by a laser with resonance modulation of losses /Predel'nye parametry sverkhkorotkikh impul'sov, izluchaemykh OKG pri rezonansnoi moduliatsii poter'/.  
02 p0258 A69-12641

DAUPHIN, J.

A short survey of European work on lubrication in vacuum. [IME PAPER 10]  
07 p1138 A69-18564

DAURIA, G.

Statistical properties of the field diffracted by an aperture with partially coherent illumination.  
11 p1836 A69-24978A survey of problems found in propagation of waves in random media.  
17 p2926 A69-33853The double aperture problem with partially coherent illumination.  
17 p2929 A69-33877

DAURY, G.

Theoretical study of spatial and kinetic distributions of molecules reflected by a surface /Etude theorique des distributions cinetiques et spatiales des molecules reflechies par une surface/.  
01 p0122 A69-10041

DAUTCOURT, G.

Variations in the cosmic microwave background produced by nonthermal gravitational radiation.  
08 p1398 A69-20773Small-scale variations in the cosmic microwave background.  
23 p4222 A69-42401

DAUTEUIL, R. J.

Computer data processing for ablation measurement.  
10 p1660 A69-23290Computer optimization of FM/FM telemetry systems.  
19 p3273 A69-36275

DAUTOVA, L. I.

Effect of cutting speed on surface layers of titanium alloy.  
18 p3148 A69-34548

DAUVILLIER, A.

The magnetohydrodynamic mechanism of solar activity /Sur le mecanisme magnetohydrodynamique de l'activite solaire/.  
01 p0156 A69-11136

- Solar activity, polar migrations, and glacial periods /Activite solaire, migrations polaires et periodes glaciaires/. 11 p1877 A69-24409
- DAVE, J. V.**  
The effect of stratospheric dust on the color of the twilight sky. 02 p0243 A69-12014  
Scattering of electromagnetic radiation by a large, absorbing sphere. 14 p2412 A69-29283
- DAVEAU, J. E.**  
Suggested improvements for maintainability demonstrations. 18 p3117 A69-34530
- DAVENPORT, C. R.**  
Propulsion system design for maintainability in the Lockheed 1011. [SAE PAPER 690390] 23 p4201 A69-41665
- DAVENPORT, D. E.**  
Designing electro-explosive devices for space. 10 p1752 A69-23022
- DAVENPORT, F. J.**  
The design and performance prediction of propeller/rotors for VTOL applications. [AHS PAPER 325] 17 p2894 A69-33534  
Dynamic stall of airfoil sections for high-speed rotors. [AHS PAPER 206] 20 p3463 A69-37806
- DAVENPORT, M. E.**  
Velocity profiles and eddy diffusivities for fully developed, turbulent, low Reynolds number pipe flow. [ASME PAPER 68-WA/FE-34] 05 p0749 A69-16107
- DAVEY, A.**  
Instabilities of a buoyancy-driven system. 11 p1876 A69-25559
- DAVEY, B. J.**  
The characteristics and problems associated with V/S.T.O.L. operations. [ICAS PAPER 68-05] 11 p1822 A69-24463
- DAVEY, J. E.**  
Structural and optical evaluation of vacuum-deposited GaP films. 09 p1554 A69-21332
- DAVID, C. D., JR.**  
Effects of radiation pressure on a laser-produced plasma. 07 p1190 A69-18902
- DAVID, E.**  
Investigation of shock processes by means of a laser interferometer /Untersuchung von Stossvorgaengen mittels eines Laser-Interferometers/. 02 p0282 A69-12607  
"Demultiplied" neuronal discharge periodicities correlated with stimulus frequency in colliculus inferior and geniculatum mediale /Reizfrequenzkorrelierte "untersetzte" neuronale entladungsperiodizitaet im colliculus inferior und im corpus geniculatum mediale/. 23 p4096 A69-42089  
Sound-correlated DC changes on the intact skull of human subjects /Akustischen Reizen zugeordnete Gleichspannungsaenderungen am intakten Schaedel des Menschen/. 23 p4098 A69-42101
- DAVID, I.**  
Occurrence of turbulence in the flow between two parallel walls with a given periodic roughness /Asupra aparitiei turbulentei la miscarea intre doi pereti paraleli cu rugozitate periodica data/. 05 p0747 A69-16034
- DAVID, J. P.**  
Development of solar thermionic converters - Tests in simulated radiation /Realisation de convertisseurs thermoioniques solaires - Essais en rayonnement simule/. 07 p1058 A69-18951  
Solar-pumped laser /Laser a pompage solaire/. 07 p1150 A69-18953  
Action of radiation on the functioning of thermionic converters - Conversion of solar radiation /Action du rayonnement sur le fonctionnement de convertisseurs thermoioniques-conversion du rayonnement solaire/. 14 p2404 A69-29261
- DAVID, K. H.**  
The photovoltaic effect in the Cu-Cd-S system. 19 p3382 A69-35682  
Photoconductivity study of annealing of radiation defects in lithium-doped silicon. 19 p3382 A69-35696
- DAVID, P.**  
Small-signal field-effect transistor model at saturation /Modele du transistor a effet de champ en petits signaux, a la saturation/. 04 p0579 A69-15226  
Propagation of Waves. 19 p3275 A69-36382
- DAVIDENKO, D. F.**  
Output power pulsations in lasers /O pul'satsiakh moshchnosti izlucheniia v lazerakh/. 20 p3554 A69-37726
- DAVIDENKO, V. A.**  
Measurement of the primary specific ionization in noble gases /Izmerenie pervichnoi udel'noi ionizatsii v blagorodnykh gazakh/. 10 p1726 A69-23128
- DAVIDENKO, V. IU.**  
Experimental study in the simulation of various types of neurons /Eksperimental'noe issledovanie po modelirovaniu neuronov razlichnykh tipov/. 20 p3471 A69-37256
- DAVIDGE, R. W.**  
Mechanical properties of ceramic materials. 11 p1907 A69-25238
- DAVIDOVA, T. A.**  
Dense plasma flute instability in the presence of an electric field. 11 p1934 A69-25707
- DAVIDS, N.**  
The damped transient behaviour of finite beams and plates. 15 p2710 A69-30868
- DAVIDSON, B. J.**  
Pulsed J band /12.4-18 GHz/ Gunn-effect oscillators. 09 p1468 A69-22594
- DAVIDSON, B. KH.**  
Optimal landing of a space vehicle on the surface of the moon /Optimal'naia posadka kosmicheskogo aparata na poverkhnost' luny/. 19 p3431 A69-36616  
Optimal liftoff of a space vehicle from the surface of the moon /Optimal'noe vyvedenie kosmicheskogo aparata s poverkhnosti luny/. 19 p3431 A69-36617
- DAVIDSON, C. N.**  
The nuclear environment against which equipment must be hardened. 15 p2651 A69-30380
- DAVIDSON, D. L.**  
Elastic constants of molybdenum-rich rhenium alloys in the temperature range -190 deg C to plus 100 deg C. 04 p0613 A69-14455
- DAVIDSON, F.**  
Sixth order correlations of laser beam fluctuations near threshold. 07 p1144 A69-18252
- DAVIDSON, G.**  
The airport and the aircraft in relation to loading problems. 17 p2948 A69-34208  
Luminous efficiency of electron induced emission in nitrogen. 21 p3774 A69-38521
- DAVIDSON, H. F.**  
MACRO R and D. 15 p2720 A69-30958
- DAVIDSON, I. M.**  
Some notes on aircraft propulsion by wake regeneration. 05 p0811 A69-15555
- DAVIDSON, J. G.**  
Color and appearance properties of paint films. 04 p0620 A69-14886
- DAVIDSON, J. N.**  
A study of plasma stability in sheared magnetic fields. 02 p0289 A69-12173
- DAVIDSON, K.**  
Galactic HII and the dispersion measures of the pulsars. 08 p1397 A69-20696  
Dispersion measures of pulsars. 23 p4220 A69-42381
- DAVIDSON, R.**  
Parametric amplification in plasmas with negative energy waves. 20 p3582 A69-38244
- DAVIDSON, R. C.**  
Macroscopic quasilinear theory of the garden-hose instability. 01 p0133 A69-11217  
Diffusion of electron plasma oscillations in a large-amplitude ion-wave background. 03 p0483 A69-14256  
Resonant four-wave interaction of electron-plasma oscillations. 06 p0963 A69-17143  
On the kinetic equation for resonant three-wave coupling. 08 p1360 A69-19989  
General weak turbulence theory of resonant four-wave processes. 11 p1921 A69-24294  
Los Angeles International Airport development planning. [AIAA PAPER 69-806] 19 p3288 A69-35590
- DAVIDSON, R. P.**  
Swept frequency microwave measurements in simulated reentry environments. [AIAA PAPER 69-701] 17 p2920 A69-33461  
Swept frequency microwave measurements in simulated reentry environments. [AAS PAPER 69-282] 24 p4313 A69-42861
- DAVIDSON, R. W. C.**  
Nonlinear oscillations in a cold plasma. 02 p0288 A69-12171
- DAVIDSON, T. E.**  
The effects of cold reduction by hydrostatic fluid extrusion on the mechanical properties of 18 percent nickel maraging steels. 13 p2278 A69-27414  
A comparison of results of axial-tension, rotating-beam and pressurized-cylinder fatigue tests. 15 p2709 A69-30676
- DAVIDSON, V. E.**  
Starting supersonic nozzles by means of cylindrical diffusers /O zapuske sverkhzvukovykh sopel s pomoshch'iu tsilindricheskikh diffuzorov/. 03 p0365 A69-14226  
Starting supersonic nozzles with the aid of cylindrical diffusers /O zapuske sverkhzvukovykh sopel s pomoshch'iu tsilindricheskikh diffuzorov/. 17 p2890 A69-33125
- DAVIDSON, W.**  
Study of a complete sample of cosmic radio sources. 07 p1206 A69-19270
- DAVIE, A. J. T.**  
Local smoothing by polynomials in n dimensions. 08 p1344 A69-20830
- DAVIES, A. C.**  
Digital-filter frequency response. 15 p2567 A69-30612  
Probability-density functions of digitally filtered m sequences. 15 p2568 A69-30617
- DAVIES, A. M.**  
Nonlinear behaviour, including jump resonance, of hydraulic servomechanisms. 20 p3464 A69-36999
- DAVIES, C. M.**  
The boundary layer between a cold plasma and a confined magnetic field when the plasma is not normally incident on the boundary. 02 p0235 A69-11424  
The structure of the magnetopause. 12 p2139 A69-26944
- DAVIES, D. A.**  
Meteorology and outer space technology. 12 p2126 A69-26126
- DAVIES, D. E.**  
Ionization and attachment in oxygen at low pressures. 08 p1354 A69-20099
- DAVIES, D. E. N.**  
Self-focussing aerial arrays for airborne communications. 08 p1289 A69-20971  
Measurements on aircraft echoes using wideband pulse-compression radar. 21 p3672 A69-38755
- DAVIES, D. J.**  
Some numerical experiments using a two-level general circulation model. 08 p1346 A69-20314



- DAVIES, D. R.  
Some numerical experiments using a two-level general circulation model. 08 p1346 A69-20314  
The induction and repair of radiation damage in *Chlamydomonas*. 23 p4090 A69-41964
- DAVIES, G. E.  
A fluidic method of inlet guide vane control for jet engines. 02 p0305 A69-12090
- DAVIES, J. G.  
Changing periodicities in the pulsars. 05 p0825 A69-16352
- DAVIES, K.  
Comparison between formulas for ionospheric radio propagation and atmospheric wave propagation. 10 p1655 A69-23419  
Ionospheric Radio Waves. 16 p2749 A69-31715
- DAVIES, L.  
Viscous effects on shock tube flows. 11 p1870 A69-25010  
On the equilibrium piston technique in gun tunnels. 11 p1862 A69-25013  
Flight through the air at very high speeds. 17 p2895 A69-33576  
Influence of reflected shock and boundary-layer interaction on shock-tube flows. 18 p3116 A69-34448
- DAVIES, L. G.  
The characteristics of the Mg-B composite system. 09 p1507 A69-22332  
Continuous casting as a composite fabrication process. 19 p3318 A69-35511  
Preparation and characterization of a novel form of Si sub 3 N sub 4 fiber. 19 p3354 A69-35517
- DAVIES, M. B.  
Operation of a lithium niobate electrooptic Q switch at 1.06  $\mu$ m. 01 p0089 A69-10184  
Laser power and energy measurement by photoelectric techniques. 22 p3961 A69-40239
- DAVIES, M. E.  
Mariner 6 television pictures - First report. 21 p3803 A69-38981  
Mariner 7 television pictures - First report. 21 p3806 A69-39330  
Mariner 6 and 7 television pictures - Preliminary analysis. 24 p4384 A69-43195
- DAVIES, O. J.  
New principle for wideband mode coupling. 09 p1467 A69-22586
- DAVIES, R. D.  
A radio method for determining the astronomical unit. 07 p1222 A69-19590  
Neutral hydrogen asymmetry in the galaxy M101 as evidence for tidal effects. 08 p1394 A69-20625  
Magnetic structure of extragalactic radio sources. Magnitnaia struktura vnegalakticheskikh radioistokhnikov/. 12 p2165 A69-27034  
Indications of nonuniformities in the velocity distribution and the density of neutral hydrogen in M 31 and M 33 /Priznaki neravnomernosti v raspredelenii skorostei i plotnosti neutral'nogo vodoroda v M 31 i M 33/. 12 p2166 A69-27038  
Extragalactic radio sources in the infrared. 13 p2342 A69-27597  
The Jodrell Bank radio frequency digital autocorrelation spectrometer. 17 p2970 A69-32856  
Distance of pulsars and the interstellar electron gas. 20 p3597 A69-37409
- DAVIES, R. G.  
On the temperature dependence of the flow stress of nickel-base alloys. 21 p3744 A69-38738
- DAVIES, R. M.  
Nonlinear behaviour, including jump resonance, of hydraulic servomechanisms. 20 p3464 A69-36999
- DAVIES, S. R.  
Application of generalised strain-measure to simple deformation problems in the field of plasticity. 21 p3844 A69-39321
- DAVIES, T. R.  
A study of the interaction between a primary aerofoil and a jet flapped secondary aerofoil. 19 p3242 A69-36820
- DAVIES, T. W.  
Coherent light scattering measurements on single and clad optical glass fibres. 11 p1918 A69-25044
- DAVIES, W.  
The application of stability and control test techniques to the X-22A aircraft. 14 p2392 A69-29699
- DAVIES, W. E. R.  
Simultaneous measurement of temperature and density by an electron beam luminescence technique. 20 p3543 A69-37799
- DAVIES, W. O.  
Determination of thermodynamic properties with optical cross-correlation methods. [AIAA PAPER 67-149] 16 p2789 A69-31868
- DAVIES, W. P.  
Vertical navigation requirements for S.S.T. 02 p0277 A69-11590
- DAVIES, W. R.  
Heat transfer and transition to turbulence in the shock-induced boundary layer on a semi-infinite flat plate. 11 p1869 A69-24890
- DAVIN, D. E.  
Optical and radio telescopes on the lunar surface using LASSO. 18 p3136 A69-34813
- DAVIS, B. W.  
Launch vehicles for future automated space missions. [AIAA PAPER 68-447] 09 p1610 A69-21983
- DAVIS, D. D., JR.  
A pyrotechnic-activated calorimeter for flight research at lunar return velocity. 10 p1669 A69-23026
- DAVIS, D. K.  
Laser beam joining of critical components for high reliability. 11 p1896 A69-24741
- DAVIS, D. N.  
Is there NbO in S-type stars/ques/. 19 p3403 A69-35964
- DAVIS, D. T.  
Analysis of a laser Doppler velocimeter. 01 p0090 A69-10298
- DAVIS, G. L.  
Thermal protection system optimization. [AIAA PAPER 69-27] 06 p1039 A69-18211
- DAVIS, H. O.  
Ablative materials for controlled high regression rates in tactical rocket motors. [AIAA PAPER 69-423] 16 p2804 A69-32710  
Low cost ablative materials for solid rocket nozzles. 19 p3357 A69-35537
- DAVIS, H. T.  
Application of the Prigogine-Nicolis-Misguich theory of transport. 04 p0589 A69-14863  
Power spectrum of the impedance pneumograph - A data reduction system producing an analytical parameter of potential clinical usefulness. 12 p2024 A69-26558
- DAVIS, J. A.  
Field dependence and target identification. 06 p0880 A69-17211
- DAVIS, J. C.  
Wing-tail interaction flutter of moderately spaced tandem airfoils. [AIAA PAPER 69-57] 06 p1028 A69-18105
- DAVIS, J. G., JR.  
Fabrication of uniaxial filament-reinforced epoxy tubes for structural applications. 09 p1508 A69-22339  
Application of advanced materials to truss structures. 19 p3340 A69-35504
- DAVIS, J. H.  
The reinforcement of thermoplastic matrices with fibres. 02 p0269 A69-11794
- Growth of thallium whiskers. 04 p0641 A69-14455
- DAVIS, J. J.  
An advanced contact ion microthruster system. [AIAA PAPER 68-552] 21 p3785 A69-39215
- DAVIS, J. P.  
Uninsulated in-core thermionic diode concept. 14 p2398 A69-29118  
Stability and control considerations for thermionic reactors. 14 p2481 A69-29118
- DAVIS, J. R.  
Multi-junction solar cells. 19 p3251 A69-35615
- DAVIS, K. G.  
Comments on "slip band continuity across grain boundaries in aluminum." 01 p0095 A69-10600
- DAVIS, L.  
The anisotropy of the solar wind. 16 p2849 A69-32095
- DAVIS, L. C.  
Electron and phonon tunneling spectroscopy in metal-germanium contacts. 06 p0982 A69-18233
- DAVIS, L. E.  
Resonance-frequency behaviour of a cavity with an evanescent section. 22 p3900 A69-40922
- DAVIS, L. R.  
Resonant vibration of the magnetosphere observed from Explorer 26. 14 p2434 A69-28945
- DAVIS, L. W.  
Effects of transverse-mode selection on the wavefront of a ruby laser. 02 p0257 A69-12400  
Characterization of metal matrix composites. [ASME PAPER 69-GT-23] 09 p1527 A69-22495  
Comparison of boron-epoxy and boron-aluminum composites. 19 p3340 A69-35500
- DAVIS, L., JR.  
Large-amplitude Alfvén waves in the interplanetary medium - Mariner 5. 14 p2510 A69-28945  
The radial dependence of the interplanetary magnetic field - 1.0-1.5 AU. 16 p2856 A69-31966  
Search for a lunar wake at large distances from the moon - Mariner 4. 16 p2856 A69-31966  
Long-wavelength turbulence and the heating of the solar wind. 18 p3186 A69-34295
- DAVIS, M. E.  
An investigation of the decoupling effects in a magnetic forming beryllium coil assembly. 11 p1888 A69-25310  
GaAs-GaP heterojunctions. 21 p3779 A69-38475
- DAVIS, M. J.  
Enhancement of ionizing radiation during a solar flare. 20 p3590 A69-37555
- DAVIS, P.  
Novel flame-resistant chlorine-containing polyesters. 08 p1340 A69-20500
- DAVIS, P. W.  
Interaction of high-powered focused laser beam with exploding wire. 01 p0090 A69-10666
- DAVIS, R. A.  
Outage and replacement implications for operational satellite systems. 02 p0333 A69-11800
- DAVIS, R. C.  
Presampling filtering. 07 p1083 A69-19125
- DAVIS, R. E.  
The two-dimensional flow of a stratified fluid over an obstacle. 11 p1869 A69-24895
- DAVIS, R. J.  
Ringwoodite, natural /Mg, Fe/ sub 2 SiO sub 4 spinel in the Tenham meteorite. 09 p1597 A69-22115

- DAVIS, R. M.**  
Design, simulation and flight performance of the Radio Astronomy Explorer-A satellite.  
07 p1226 A69-18328
- DAVIS, S. H.**  
On the principle of exchange of stabilities.  
16 p2812 A69-31811
- DAVIS, T. N.**  
Flickering, a 10-cps fluctuation within bright auroras.  
04 p0594 A69-15129  
Conjugacy of visual auroras during magnetically quiet periods.  
05 p0753 A69-16247  
Television observation of auroras.  
21 p3706 A69-38484
- DAVIS, W. D.**  
Measurements of the Stark broadening of H gamma.  
22 p3985 A69-40664
- DAVIS, W. E., JR.**  
Retarded immunological recovery in sublethally X-irradiated mice by additional thymic exposure - Reversal with injected marrow cells.  
22 p3887 A69-41194
- DAVIS, W. R.**  
A variational formulation of standard general relativity which includes the full Bianchi identities in consequence of an extended general invariance property.  
05 p0791 A69-15632  
A high-performance monolithic IF amplifier incorporating electronic gain control.  
07 p1104 A69-18885
- DAVIS, W. S.**  
ATS-III resistojet thruster system performance.  
[AIAA PAPER 68-553] 21 p3786 A69-39754
- DAVISON, E. J.**  
A computational method for determining the stability region of a second-order non-linear autonomous system.  
08 p1297 A69-20358
- DAVISON, P. J. N.**  
The X-ray spectrum of Sco XR-1 to 100 kev.  
09 p1584 A69-22766
- DAVISSON, J. W.**  
Electrically induced fracture of materials.  
17 p2989 A69-33558
- DAVIT, J.**  
Mechanism for laser surface damage of glasses.  
06 p0935 A69-17771
- DAVLETSHIN, E. Z.**  
Use of linearly gliding and linearly rotating strengthening moduli in the solution of certain engineering problems in plasticity theory /Primenenie lineino-skol'zhashchego i lineino-vrashchayushchegosia modulei uprochneniia pri reshenii nekotorykh tekhnologicheskikh zadach teorii plastichnosti/.  
11 p1986 A69-25342
- DAVOINE, F.**  
Description of an experimental device for studying laser-material interactions - Application to degassing surfaces placed under ultrahigh vacuum /Description d'un dispositif experimental destine a l'etude de l'interaction laser-matiere - Application au degazage des surfaces placees sous ultra-vide/.  
20 p3553 A69-37406
- DAVOUST, C.**  
Synoptic observations of the F2 layer in the magnetically conjugate regions of Kerguelen and Archangel /Les observations synoptiques de la couche F2 dans les regions magnetiquement conjuguees de Kerguelen et Arkangelsk/.  
16 p2784 A69-32612
- DAVUST, K.**  
Synoptic observations of the F sub 2 -layer of the ionosphere in the magnetically conjugate regions Kerguelen-Archangel'sk province.  
06 p0919 A69-17723
- DAVY, R. C.**  
Applications of Microelectronics to Aerospace Equipment.  
[AGARDGRAPH-114] 08 p1291 A69-20981
- DAVYDOV, B. B.**  
Investigation of near-electrode plasma formations in a high-current pulsed discharge with separated flames at atmospheric pressure. II /Issledovanie prieklektroodnykh plazmoobrazovaniil sil'notochnogo impul'snogo razriada s razdelennymi fakelami pri atmosfernom davlenii. II/.  
11 p1927 A69-25219
- DAVYDOV, B. I.**  
Medicinal therapy and flight safety /Lekarstvennaia terapiia i bezopasnost' poletov/.  
01 p0014 A69-10583  
Establishment of permissible irradiation doses during spaceflight planning.  
07 p1069 A69-19618  
Outlines of Space Radiobiology /Ocherki Kosmicheskoi Radiobiologii/.  
11 p1827 A69-24263  
Drug therapy and flight safety.  
15 p2555 A69-30753  
The effect of overstrain on the sensitivity of animal organisms to cystamine /Vliianie peregruzok na chuvstvitel'nost' organizma zhivotnykh k tsistaminu/.  
17 p2909 A69-33386
- DAVYDOV, I. U. M.**  
Simultaneous passage of useful and noise signals through differential frequency discriminators. II /Sovmestnoe prokhozhdienie signala i shuma cherez differentsial'nye chastotnye diskriminatory. II/.  
04 p0556 A69-14462  
Simultaneous transmission of a signal and noise through differential frequency discriminators. II.  
14 p2410 A69-28833
- DAVYDOV, P. S.**  
Estimate of the effectiveness of certain false-alarm stabilization circuits in the presence of unsteady Gaussian noise /Otsenka effektivnosti nekotorykh skhem stabilizatsii lozhnoi trevogi pri nestatsionarnom gaussovom shume/.  
15 p2567 A69-30342
- DAVYDOV, V. D.**  
Photometric and spectral observations of planets in the range from 8 to 14 mu /Fotometricheskie i spektral'nye nabludeniia planet v diapazone 8-14 mk/.  
11 p1956 A69-24395  
New explanations for the Mayeda flare on Mars. I /Novye ob'iasneniia maedovskoi vspyshki na Marse. I/.  
20 p3608 A69-38049  
Photometric and spectroscopic observations of planets in the 8-14 mu range.  
24 p4390 A69-43785
- DAVYDOV, V. G.**  
C-curves of the decomposition of a supersaturated solid solution in duraluminum-type alloys /S-krivye raspada peresyschennogo tverdogo rastvora v splavakh tipa duraliumin/.  
01 p0094 A69-10396
- DAVYDOV, V. M.**  
Measurement of the characteristics of millimeter-wavelength diodes with nonlinear capacitance /Voprosy izmereniia kharakteristik diodov diapazona millimetrovnykh voln s nelineinoi emkost'iu/.  
12 p2043 A69-26885  
Electromagnetic field of a horizontal low-frequency electric dipole in the presence of an anisotropic plane /Elektromagnitnoe pole nizkочастотного горизонтального электрического диполя в присутствии анизотропной плоскости/.  
20 p3521 A69-37047
- DAVYDOVA, I. N.**  
Computation of laser radiation backscattered along oblique paths.  
10 p1659 A69-24220  
Holography of intensities /Ologografii intensivnosti/.  
17 p2973 A69-33113  
Resolving power and field of view of a holographic device designed for recording images through an inhomogeneous atmosphere /O razreshaiushchei sposobnosti i pole zreniia olograficheskogo ustroistva, prednaznachennogo dlia registratsii izobrazheniia skvoz' neodnorodnuu atmosferu/.  
20 p3540 A69-37728
- DAVYDOVA, T. A.**  
Cyclotron instability of a plasma in a magnetic trap with a "cold" plasma admixture /Tsiklotronnaia neustoiichivost' plazmy v magnitnoi lovushke s primes'iu "kholodnoi" plazmy/.  
02 p0292 A69-12554  
Cyclotron instability in a magnetic trap with cold plasma.  
15 p2658 A69-30251
- DAVYDOVSKII, V. I. A.**  
Acceleration of cosmic particles by electromagnetic waves with a variable rate of propagation /Ob uskorenii kosmicheskikh chastits elektromagnitnymi volnami s peremennoi skorost'iu rasprostraneniia/.  
10 p1756 A69-22816
- DAWE, D. J.**  
Application of the discrete element method to the buckling analysis of rectangular plates under arbitrary membrane loading.  
17 p3066 A69-34048
- DAWE, J. A.**  
The atmosphere of eta Aquilae.  
08 p1386 A69-20089  
The position of 1 Carinae in the H-R diagram.  
14 p2522 A69-29590
- DAWIRS, H. N.**  
Equivalent circuit of a series gap in the center conductor of a coaxial transmission line.  
14 p2424 A69-29766
- DAWKINS, A. P.**  
Rain repellent system presentation.  
06 p0877 A69-16954
- DAWSON, B.**  
Coupled bending-bending vibrations of pre-twisted cantilever blading treated by the Rayleigh-Ritz energy method.  
03 p0529 A69-13989  
Vibration characteristics of straight blades of asymmetrical aerofoil cross-section.  
17 p3067 A69-34053  
Modal curves of pre-twisted beams of rectangular cross-section.  
20 p3621 A69-37080
- DAWSON, D. F.**  
Computer-aided circuit analysis by the topological approach.  
01 p0037 A69-11349
- DAWSON, G.**  
Communication satellite transponders.  
08 p1279 A69-19905
- DAWSON, J.**  
Optical absorption and expansion of laser-produced plasmas.  
16 p2818 A69-31679
- DAWSON, J. M.**  
Geodesic acoustic waves in hydromagnetic systems.  
03 p0475 A69-13147  
Collisional absorption and emission of longitudinal waves in a one-dimensional plasma.  
15 p2661 A69-30921
- DAWSON, L. G.**  
Propulsion in perspective.  
17 p3018 A69-33218  
The building block approach to advanced engines.  
[RAES PAPER 14] 22 p3999 A69-40493
- DAWSON, S. E.**  
Multi-channel pressure telemetry system for base pressure measurements on small models.  
19 p3305 A69-35727
- DAWSON, W. R.**  
An eye protective panel for flash-blindness protection using triplet state photochromism.  
21 p3668 A69-39783
- DAY, B. P.**  
A review of electric propulsion research in the United Kingdom.  
[AIAA PAPER 69-299] 09 p1564 A69-21241
- DAY, E. C.**  
Simulating the operation of an aerospace computer system.  
22 p3907 A69-40353
- DAY, G. F.**  
High CW power K-band Gunn oscillators.  
12 p2036 A69-25907
- DAY, G. W.**  
Detection of fast infrared laser pulses with thin film thermocouples.  
05 p0773 A69-16284  
Investigation of a Q-switched pulsed discharge CO sub 2 laser.  
22 p3963 A69-40566
- DAY, J. W. B.**  
A troposcatter propagation experiment at 15.7 GHz over a 500 km path.  
01 p0043 A69-10560
- DAY, M. S.**  
Cooperation through the exchange of scientific and technical information.  
[UN PAPER 68-95317] 06 p1043 A69-17068  
Rationale of the NASA biomedical applications program.  
16 p2882 A69-32430



## DAY, R. A.

DAY, R. A.

Shock-tube measurements of Van der Waals broadened silicon lines. 18 p3116 A69-34449

DAY, S. E.

Solid-state power supplies for turbine control and instrumentation. 03 p0368 A69-13432

DAY, W. A.

On the symmetry of the conductivity tensor and other restrictions in the nonlinear theory of heat conduction. 13 p2377 A69-28193

On the conversion of heat into mechanical work. 20 p3575 A69-37074

DAY, W. R., JR.

Small-signal gain calculations for electrostatically focused klystrons. 18 p3109 A69-35294

DAYARATNAM, P.

Feasibility of full stress design. 16 p2872 A69-31915

DAYE, R. L.

An experiment in the use of satellite data in a numerical cloud prediction program. 01 p0110 A69-10691

DAYKIN, R. P.

Closed die development for heavy forgings. 04 p0604 A69-14523

DE ALMEIDA AZEVEDO, J. C.

Theory of waves on inhomogeneous warm plasmas. 08 p1365 A69-20744

DE ANGELIS, A.

Suitable targets for the production of a deuterium plasma cloud in a vacuum environment with a laser pulse. 01 p0090 A69-10222

Use of the image orthicon tube for detecting low intensity pulsed light signals. 08 p1317 A69-21085

DE ANGELIS, R. J.

Elastic springback and residual stresses in sheet metal formed by bending. 08 p1319 A69-20005

DE BARBEYRAC, J.

Air traffic control procedures in a parallel track system. 02 p0277 A69-11591

DE BARR, A. E.

Electrochemical Machining. 06 p0932 A69-17857

DE BEER, J. F.

A theoretical analysis of extensive air showers. III - Muon showers at large zenith angles. 15 p2678 A69-31483

DE BOCK, A.

On the shear viscosity of liquid oxygen. 05 p0846 A69-15916

DE BOER, H.

Structure and hardening of an austenitic alloy - Fe-30 percent Ni-5 percent Nb/Structure et durcissement d'un alliage austénitique - Fe-30 percent Ni-5 percent Nb/. 01 p0095 A69-10603

DE BOER, P. C. T.

Measurement of ionization relaxation times in shock tubes. 18 p3116 A69-34451

DE BOER, R.

The physically nonlinear theory of rotationally symmetrical loaded shells of revolution /Zur physikalisch-nichtlinearen Theorie der dreh-symmetrisch belasteten Rotationsschalen/. 13 p2362 A69-27921

DE BOISE, R. H.

C.W. anomalous-mode operation in silicon planar IMPATT diodes. 17 p2934 A69-32846

DE BROCK, S. C.

Agema navigation system flight performance prediction. [AIAA PAPER 69-453] 16 p2841 A69-32683

DE BROGLIE, L.

Discussions of the formula  $Q$  equals  $Q$  sub zero square root of 1 minus beta square and definition of pressure in relativistic thermodynamics /Sur les discussions relatives a la formule  $Q$  equals  $Q$  sub zero square

root of 1 minus beta square et la definition de la pression en thermodynamique relativiste/. 02 p0352 A69-12253

Electromagnetic Waves and Photons /Ondes Electromagnetiques et Photons/. 08 p1351 A69-20117

DE CALLATAY, V.

Atlas of the Planets /Atlas des Planetes/. 03 p0513 A69-13778

DE CAMBRAY, C.

Inertial navigation /Navigation par inertie/. 19 p3371 A69-36703

DE CHAZAL, L. E. M.

Correlation of interfacial free energy in binary and ternary systems. 09 p1448 A69-21909

DE CLAVIERE, G.

Design and development of the SEPR HM 4 40 kn-thrust liquid oxygen and hydrogen rocket motor /Conception et mise au point du moteur-fusee SEPR HM 4 de 40 kn de poussée, a oxygene et hydrogene liquides/. 04 p0647 A69-15064

The SEPR rocket engine - HM4 with liquid oxygen and hydrogen - Design and operation /Le moteur-fusee S.E.P.R. - HM4 a oxygene et hydrogene liquides - Conception et fonctionnement/. 17 p3020 A69-33345

DE CREMOUX, B.

Bistable operation of a CW GaAs injection laser. 01 p0090 A69-10565

DE CRESCENTE, M. A.

The wetting of silicon carbide surfaces. 08 p1341 A69-20515

DE DOMBAL, F. T.

Medicine or physiology in space/ques/ 03 p0369 A69-12859

Weight loss during manned space missions. 23 p4100 A69-41303

DE DONATO, O.

Iterative solution of the incremental problem for elastic-plastic structures with associated flow laws. 06 p1024 A69-17510

Extension to continua of some minimum theorems in elastoplastic theory. 07 p1235 A69-19442

DE DYCKER, E.

Gridding technique for satellite pictures. 24 p4314 A69-42992

DE FEITER, L. D.

A measurement of auroral electrons in the 1-10 Mev range. 09 p1576 A69-21663

On the development and activity of the active region associated with the proton flare event of July 1966 - Summary of observations and conclusions. 10 p1766 A69-23760

DE FELCOURT, B.

Control and recording of takeoff and landing parameters /Contrôle et enregistrement des parametres de decollage et d'atterrissage/. 08 p1347 A69-20780

DE FELICE, F.

Equatorial geodesic motion in the gravitational field of a rotating source. 01 p0157 A69-11289

DE FORGE, A. S.

Effect of secondary injection on the characteristics of a supersonic parallel diffuser. 03 p0365 A69-13991

DE FRIES, P. J.

Possibilities for participation by United States and European industry in communication satellite programs. 03 p0535 A69-13591

DE GEE, A. W. J.

Influence of the atmosphere on the endurance of some solid lubricants compared at constant layer thickness. [IME PAPER 3] 07 p1138 A69-18563

DE GIORGIO, M. T.

Notes on the analysis of scintillation of satellite signals. 16 p2751 A69-32103

DE GLINIASTY, W.

Synthesis of results of hypersonic flight tests of bodies of revolution /Synthese des resultats d'essais en vol hypersonique/. 10 p1632 A69-23842

DE GRAAFF, W.

Comments on the ageing effect of gas-filled proportional counters. 20 p3538 A69-371

X-ray heliography by means of a Fresnel-Soret zoneplate camera. 20 p3544 A69-371

DE GROOT, M.

On the spectrum and nature of P Cygni. 24 p4391 A69-438

DE GRUCHY, D. C.

Rocket-assisted projectiles promise increased artillery range, payload. 15 p2702 A69-301

DE GRUYL, J. A.

Noise considerations in broad-band traveling-wave masers. 02 p0257 A69-1262

DE HEER, F. J.

Emission cross sections of the first negative band system of N sub 2 by electron impact. 05 p0795 A69-1566

DE IORIO, A.

Plastic instability in shells of revolution subjected to internal pressure. 02 p0338 A69-1170

DE IRIBARNE, A. P.

Nondisturbing tracer technique for quantitative measurements in turbulent flow. 09 p1495 A69-215

DE J. LEE, G.

Propagation of blood flow pulse in the normal human pulmonary arterial system. 24 p4259 A69-4266

DE JAGER, C.

New techniques in X-ray astronomy. 05 p0762 A69-1581

Hard solar X-ray bursts. 05 p0814 A69-1581

Acceleration processes in solar flares. 06 p0995 A69-1744

Solar X-ray bursts. 08 p1379 A69-2058

Solar flares - Properties and problems. 24 p4370 A69-4366

DE JAGER, G.

The Jodrell Bank radio frequency digital autocorrelation spectrometer. 17 p2970 A69-3288

DE JONG, K.-H.

The next step in space flight - The space station /Das naechste Schritt in der Raumfahrt - Die Raumstation/. 05 p0829 A69-1593

Aircraft engines of the future /Flugzeugtriebwerke der Zukunft/. 11 p1942 A69-2523

DE JONG, M.

Cutting of thin carbon films with a CO sub 2 laser. II - Experiments on cylindrical bodies. 15 p2635 A69-310

DE JONG, T.

The interpretation of the diffuse galactic radiation. 10 p1782 A69-2366

DE LA COTARDIERE, PH.

Quasars /Les quasars/. 08 p1390 A69-203

DE LA GARZA, A., JR.

Tracking and telemetry. 19 p3275 A69-363

DE LA PENHA, G.

A note on Love's stress function. 13 p2364 A69-282

DE LA PORTE DES VAUX, B.

A V.L.F. particle rocket experiment at Kerguelen Islands. I. 15 p2605 A69-3147

A VLF and particle rocket experiment at Kerguelen Islands. III. 15 p2605 A69-3147

DE LAGARDE, J.

Navigational equipment in the supersonic Concorde in 1970. 14 p2480 A69-298

DE LANG, H.

Role of linear phase anisotropy in a Zeeman laser. 16 p2798 A69-3266

- DE LEIRIS, H.**  
Microfractographic aspects associated with creep /Aspects microfractographiques associes au fluage/.  
17 p2986 A69-32910
- DE LEUW, C. E.**  
Esthetics of urban transportation facilities.  
15 p2550 A69-30409
- DE LISLE, C.**  
The monkey as a biological payload /Pointe biologique singe/.  
09 p1447 A69-22722
- DE LIVOIS, G.**  
Review of general concepts concerning servosystems and control. II - Control /Rappel des notions generales sur les asservissements et la regulation. II - Regulation/.  
04 p0550 A69-15180
- DE LOOR, G. P.**  
Possibilities and uses of radar and thermal infrared systems.  
15 p2612 A69-31162
- DE LOTTO, I.**  
Signal to noise ratio in peak amplitude measurements.  
05 p0722 A69-16730  
Problem of plane sections of Coons' surfaces /Sul problema delle sezioni piane di superfici di Coons/.  
08 p1278 A69-19921
- DE LUCA, L.**  
Considerations on velocity losses due to gravity /Considerazioni sulle perdite di velocita per gravita/.  
08 p1409 A69-20587
- DE MARI, A.**  
An accurate numerical one-dimensional solution of the p-n junction under arbitrary transient conditions.  
03 p0487 A69-13639
- DE MENDONCA, F.**  
Equatorial atmosphere measurements obtained with the sounding rocket grenade experiment.  
23 p4159 A69-42423  
Low-latitude ionospheric electron content measurements during half a solar cycle.  
23 p4161 A69-42435
- DE MESTRE, N. J.**  
Non-linear weak shock diffraction.  
03 p0412 A69-12848
- DE MEVERGNIES, E. N.**  
Design and characteristics of an actinium fueled thermionic generator.  
14 p2399 A69-29192
- DE MONTLIVAUT, J. L.**  
Optical correlation for fast acquisition of pseudo random ranging codes.  
03 p0389 A69-13186
- DE MYTTENAERE, P.**  
Note on the nuclear propulsion of space vehicles /Note sur la propulsion nucleaire des vehicules spatiaux/.  
05 p0791 A69-15598  
Design and study of a low-power nuclear reactor for space propulsion /Conception et etude d'un reacteur nucleaire de faible puissance destine a la propulsion spatiale/.  
17 p3004 A69-33342
- DE PAZZIS, O.**  
Shot noise in antennas.  
07 p1079 A69-18920
- DE PENA, R. G.**  
Freezing of water droplets in equilibrium with different gases.  
12 p2126 A69-26018
- DE PESSEROEY, W.**  
On the shear viscosity of liquid oxygen.  
05 p0846 A69-15916
- DE ROCCO, A. G.**  
Intermolecular forces in globular molecules. VII.  
01 p0124 A69-10687
- DE ROQUEFORT, T. A.**  
Laminar separation with heat transfer at Mach 8 /Decollement laminaire avec transfert thermique a M equals 8/.  
09 p1433 A69-22609  
Measurement of the convection coefficient in a laminar separation zone in supersonic flow /Mesure du coefficient de convection dans une zone decollee laminaire en regime supersonique/.  
12 p2011 A69-26289
- Calculation of supersonic laminar separation by an integral method /Calcul du decollement laminaire supersonique par une methode integrale/.  
16 p2731 A69-31834
- DE S. COUTINHO, J.**  
Systems engineering - Minimizing product defects.  
15 p2719 A69-30085
- DE SANTIS, P.**  
Scaling laws for R.F. discharge experiments in ionized environments.  
02 p0283 A69-12241  
Resonance absorption of microwave longitudinal phonons in transversally magnetised /100/Y.I.G. rods.  
15 p2565 A69-30184  
Microwave elastic propagation in ferrimagnetic materials /Propagazione elastica a microonde in materiali ferrimagnetici/.  
21 p3780 A69-38774
- DE SCHRYVER, C.**  
Coronary circulation response to hyperoxia after vagotomy and combined alpha and beta adrenergic receptors blockade in the anesthetized intact dog.  
23 p4096 A69-42088
- DE SERRES, F. J.**  
Mutation-induction and nuclear inactivation in Neurospora crassa using radiations with different rates of energy loss.  
03 p0373 A69-13490  
Effects of radiation during space flight on microorganisms and plants on the Biosatellite II and Gemini XI missions.  
20 p3476 A69-37617
- DE SILVA, C. N.**  
On a nonlinear theory of elastic shells.  
01 p0166 A69-10166  
A direct nonlinear theory of elastic membranes.  
21 p3832 A69-38465
- DE SIMONE, J. C.**  
Results of tests on a supersonic magnetoaerodynamic conversion rig /Resultats d'essais sur banc de conversion magnetoaerodynamique supersonique/.  
13 p2311 A69-28034
- DE SMET, A.**  
Method for measuring the thermal conductivity of refractory materials at high temperatures /Methode de mesure de la conductibilite thermique des refractaires a haute temperature/.  
21 p3742 A69-38422
- DE SOCIO, L. M.**  
Bounded expansions of supersonic flows. [ASME PAPER 69-HT-14]  
24 p4247 A69-43555
- DE SOETE, G.**  
Oxidation and self-ignition in the gaseous phase /Oxydations et auto-inflammations en phase gazeuse/.  
06 p1031 A69-17416  
Deflagration in the turbulent regime /La deflagration en regime turbulent/.  
06 p1032 A69-17420  
Detonations /Les detonations/.  
06 p1032 A69-17424
- DE SOUSA, J. T. P.**  
Alternatives for instructional broadcast satellites.  
13 p2381 A69-27373
- DE SOUZA, A. A.**  
Acoustical transparencies for optical imaging and ultrasonic diffraction.  
10 p1695 A69-23546
- DE SOUZA, R. M.**  
A note on lower ionosphere equivalent height diurnal variation.  
05 p0752 A69-15666
- DE STEESE, J. G.**  
Oxygen effects in tantalum thermionic emitters.  
09 p1437 A69-21812
- DE STROBEL, G. C.**  
Discovery of a new spectroscopic binary - 16 Piscium.  
07 p1214 A69-18662
- DE TROYER, A.**  
Production and shaping of Th 228 for radiothermal propulsion /Production et mise en forme de Th 228 en vue de la propulsion radiothermique/.  
05 p0791 A69-15597  
Design and characteristics of an actinium fueled thermionic generator.  
14 p2399 A69-29192
- DE VAHL DAVIS, G.**  
Laminar natural convection in an enclosed rectangular cavity.  
06 p1033 A69-17556
- DE VAUCOLEURS, G.**  
Motion of the sun with respect to the galaxies and the kinematics of the local supercluster.  
03 p0513 A69-13769  
On the opposition effect of Mars.  
07 p1214 A69-18616  
A new analysis of the Hubble counts of galaxies. I - The galactic absorption function.  
10 p1779 A69-23609  
Observation of unsteady phenomena in galaxies /Nabludenie nestatsionarnykh iavlenii v galaktikakh/.  
12 p2169 A69-27061  
Solar motion with respect to the high-velocity HI clouds and to the local group.  
22 p4035 A69-41209
- DE VEUBKE, B. F.**  
Advanced Problems and Methods for Space Flight Optimization, Proceedings of the Colloquium on Optimization in Space Flight Mechanics, University of Liege, Liege, Belgium, June 19-22, 1967.  
19 p3398 A69-35662  
The second variation test with algebraic and differential constraints.  
19 p3400 A69-35672  
The theoretical design laws of warping-free multicellular box beams.  
19 p3443 A69-36786
- DE VITO, L.**  
Concerning the hypotheses of an existence theorem for the Volterra elliptic integrodifferential equation /Sulle ipotesi di un teorema d'esistenza per l'equazione integro-differenziale di tipo ellittico di Volterra/.  
12 p2121 A69-26468
- DE VRIES, A. E.**  
Ionization cross sections of alkalis on diatomic halogens in the ev-region.  
19 p3378 A69-36187
- DE VRIES, C. J.**  
Analog studies of the human systemic arterial tree.  
17 p2908 A69-33007
- DE VRIES, R. F.**  
Stability of the screw pinch.  
16 p2821 A69-32037
- DE WEESE PUCKETT, J.**  
Tracking eye movements with and without saccadic correction.  
22 p3881 A69-40856
- DE WIESS, F. A.**  
A high-resolution solar spectrometer for air-borne infrared observations.  
06 p0928 A69-17811
- DE WITT, H.**  
Hydrodynamic study on fully submerged foils of hydrofoil ships in a seaway up to 140kt at constant Froude number.  
11 p1871 A69-25122
- DE WOLF, D. A.**  
Wave propagation and multiple scattering in a random continuum.  
15 p2564 A69-30150
- DE WYS, J. N.**  
Magnet experiment - Electromagnetic properties of the lunar surface.  
02 p0321 A69-12226
- DE ATKINSON, R.**  
Light delays near a relativistic star.  
13 p2350 A69-27825
- DE, Y.**  
Torsion of a composite non-homogeneous circular cylinder.  
12 p2180 A69-26274
- DEACON, H. J., JR.**  
Radiation heating characteristics of Venus entry.  
02 p0351 A69-11751  
Radiofrequency signal transmission during Mars orbital entry.  
09 p1455 A69-22002
- DEACON, W.**  
A survey of the current state of the art in gas turbine combustion chamber design. [IME PAPER 3]  
12 p2146 A69-25789
- DEAKIN, C. G.**  
A simple guide to the general assessment of MTBF.  
21 p3684 A69-39700
- DEAL, P. L.**  
Flight investigation of the wing-rotor lift-sharing characteristics of a hingeless rotor compound helicopter.  
14 p2393 A69-29702



## DEAL, W. J., JR.

Double perturbation theory applied to frequency-dependent polarizabilities. I. 03 p0472 A69-13314

Double perturbation theory applied to frequency-dependent polarizabilities. II. 03 p0472 A69-13315

## DEAN, D. L.

Analysis of ribbed plates. 11 p1983 A69-25019

## DEAN, F. G.

Thermoplastic adhesives and reinforced plastic laminates for structural usage. 09 p1530 A69-22365

## DEAN, K. J.

Design for a full multiplier. 01 p0048 A69-11138

## DEAN, R. C., JR.

Straight channel diffuser performance at high inlet Mach numbers. [ASME PAPER 68-WA/FE-19] 05 p0698 A69-16095

## DEAN, R. D.

Effect of vibration on the operation of decimal input devices. 17 p2916 A69-34010

## DEAN, R. H.

Transient double injection in germanium. 02 p0301 A69-12651

## DEANE, F. R.

Prevention of overt motion sickness by incremental exposure to otherwise highly stressful Coriolis accelerations. 07 p1067 A69-19425

## DEANGELIS, H. M.

Radiation annealing and modification of the 35 deg and 65 deg K defects in germanium at low temperature. 06 p0980 A69-17757

## DEARDEN, E. W.

Long range backscatter from F-region irregularities. 18 p3125 A69-34252

Propagation ducts due to horizontal gradients leading to echoes from magnetic field-aligned F-region irregularities. 22 p3941 A69-40913

## DEARNLEY, R.

Crustal tectonic evidence for earth expansion. 22 p3936 A69-40182

## DEAVER, W. H.

Control of the stannate bath in treating magnesium-steel couples. 14 p2466 A69-29933

## DEBARBAT, S.

Nearly diurnal nutation and periodic terms of the local coordinates /Nutation presque diurne et termes periodiques des coordonnees locales/. 09 p1596 A69-22059

Discussion of the observations of Uranus carried out in 1964 using the Danjon astrolabes of Algiers and Quito /Discussion des observations d'Uranus effectuees en 1964 aux astrolabes A. Danjon d'Alger et de Quito/. 16 p2853 A69-31620

Observations of Uranus using the A. Danjon astrolabe of the Sao Paulo Observatory /Observations d'Uranus effectuees a l'astrolabe A. Danjon de l'observatoire de Sao Paulo/. 22 p4031 A69-40912

## DEBEHOEGNE, H.

Remarks regarding recent Belgian observations of the asteroid Icarus /Considerations sur des observations belges recentes de l'asteroide Icarus/. 05 p0819 A69-15698

Solution of the Kepler hyperbolic sine equation by the method of false position - Application to the calculation of the residues of the Uccle observations for a hyperbolic orbit of the Arend-Roland comet, following the elements calculated by Hasegawa /Resolution de l'equation de Kepler en sinus hyperbolique par la methode de fausse position - Application au calcul des residus des observations d'Uccle pour une orbite hyperbolique de la comete Arend-Roland, d'apres les elements calcules par Hasegawa/. 06 p0997 A69-16821

Reduction of astronomical positions on photographic plates /Reduction des positions astronomiques sur les cliches photographiques/. 10 p1784 A69-24034

The possible noncoincidence of the dynamic and photometric centers of cometary nuclei /Sur la non-

coincidence possible des centres dynamique et photometrique des noyaux cometaires/. 10 p1784 A69-24035

New method of determining differential corrections for solar eclipses by application of the method of least squares - Calculation of phases and local elements of eclipses by an electronic computer /Nouvelle methode de determination des corrections differentielles pour les eclipses de soleil par application de la methode des moindres carres - Calcul des phases et elements locaux des eclipses par ordinateur electronique/. 13 p2336 A69-27447

Solution of the analytic equivalent of Banachiewicz's graph used in the determination of parabolic orbits on the basis of n observations /n greater than or equal to 3/, by means of an electronic computer - Extension of the method of variation of geocentric distances /"second variation"/ - Method of variation of instants of observation /Resolution de l'equivalent analytique du graphique de Banachiewicz utilise dans la determination d'orbites paraboliques a partir de n observation /n greater than or equal to 3/, au moyen de l'ordinateur electronique - Extension de la methode de variation des distances geocentriques /"variation seconde"/ - Methode de variation des instants d'observation/. 13 p2336 A69-27448

Observation of the asteroid Icarus at the Royal Observatory of Belgium /Observation de l'asteroide Icare a l'Observatoire Royal de Belgique/. 14 p2521 A69-29584

Calculation of a provisional elliptic orbit for the asteroid Floriac, discovered in September-December 1967 /Calcul d'une orbite elliptique provisoire pour l'asteroide Floriac decouvert en septembre-decembre 1967/. 14 p2521 A69-29585

## DEBETTENCOURT, J. T.

High speed digital transmission tests at 35 GHz. 03 p0389 A69-13192

Subsurface radio propagation experiments. 03 p0395 A69-13622

Design of millimeter wave communication systems. 03 p0405 A69-13723

## DEBIJADJI, R.

Effect of hypoxic hypoxia on the catecholamine content and some cytochemical changes in the hypothalamus of the cat. 14 p2407 A69-29297

The effect of supersonic flying on the urinary catecholamine excretion in pilots. 24 p4265 A69-43370

## DEBILLY, J.

Wide-field astronomical camera for the study of extended light sources - Design technique /Camera astronomique a grand champ pour l'etude de sources lumineuses etendues - Technique de realisation/. 12 p2080 A69-26127

## DEBNATH, L.

Some operational properties of Hermite transform. 15 p2645 A69-30863

## DEBRA, D. B.

A comparison of satellite drag measurement techniques. 16 p2788 A69-31722

## DEBRAY, P.

Communications between satellite and balloons for the Eole mission. 07 p1084 A69-19134

## DEBROCK, S. C.

Spacecraft capillary propellant retention and control for long-life missions. [AIAA PAPER 68-465] 04 p0646 A69-15505

## DEBS, A. S.

On the optimal angular velocity control of asymmetrical space vehicles. 12 p2054 A69-26516

## DECARLI, P. S.

Enstatite - Disorder produced by a megabar shock event. 21 p3792 A69-38321

## DECARLO, V. J.

Vacuum-ultraviolet photochemistry. IX - Primary and chain processes in the photolysis of hydrogen peroxide. 10 p1652 A69-23527

## DECECCO, A.

Laser-induced Teflon char. 24 p4336 A69-43266

## DECKER, J. A., JR.

False signal rejection in optical-infrared collision warning systems. 12 p2129 A69-26772

## DECKER, M. T.

Radiometric observations of thunderstorm cells. 12 p2127 A69-27002

## DECKER, R. F.

Coherency strains in gamma hardened nickel alloys. 20 p3558 A69-36963

## DECKERS, J. M.

Nozzle beam technique for mapping low density gas flows. 07 p1136 A69-19467

A heated supersonic beam study of the helium-argon intermolecular potential. 19 p3377 A69-36183

## DECKKER, B. E. L.

Temperature distribution in low pressure magnesium vapour-oxygen diffusion flames. [WSCI PAPER 68-20] 07 p1241 A69-18367

## DECOMPS, B.

Polarization of the fluorescent light of Ne atoms interacting with a laser beam - Measurement of several relaxation times. [IEEE PAPER T-9] 07 p1155 A69-19084

## DECOTIIS, C. J.

Fluidic two axis pulse time modulated position sensor. 02 p0249 A69-12087

## DECROLY, J. C.

The determination of transfer orbits /La determination des orbites de transfert/. 07 p1211 A69-18503

## DEDENKO, I. I.

Human tolerance to local infrared irradiation. 10 p1647 A69-23589

## DEDENKO, L. G.

Contribution to the problem of determining the primary particle energy from extensive air shower data. 13 p2332 A69-28411

## DEDOES, D. H.

The application of the method of steepest ascent to a very high order optimization problem - The problem of developing evasion tactics for aircraft pursued by missiles. 06 p0866 A69-17401

## DEDRICK, J. H.

Fracture toughness behavior of AlZnMgCu alloys /Das Bruchverhalten von AlZnMgCu-Legierungen/. 16 p2800 A69-31780

Fracture behavior of aluminum alloys. 17 p2989 A69-33555

## DEDRICK, K. G.

Corneal damage thresholds for CO sub 2 laser radiation. 11 p1830 A69-24844

## DEDUKH, L. M.

Possibility of direct investigation of the influence of dislocations on the processes of magnetization of yttrium iron garnet crystals. 09 p1559 A69-22532

## DEE, C. W.

Fluid bearings, with special reference to silicon nitride. 06 p0931 A69-17529

## DEECKE, L.

Distribution of readiness potential, pre-motion positivity, and motor potential of the human cerebral cortex preceding voluntary finger movements. 22 p3875 A69-40261

## DEEKSHATULU, B. L.

Method of variation of parameters for overdamped non-linear systems. 08 p1297 A69-20356

Game theoretic approach to minimum-effort control of second-order system. 10 p1667 A69-24040

Singular optimal control in the presence of uncertainty - A game theoretic approach. 10 p1667 A69-24041

Respiratory control of heart rate. 22 p3894 A69-41202

## DEELY, J. J.

Partial prior information and shorter confidence intervals. 19 p3360 A69-36038

## DEEPAK NANDA, K.

Non-equilibrium flow past an oscillating airfoil in a wind tunnel. 23 p4061 A69-42349

## DEERENBERG, A. J. M.

Long-term time variations of the cosmic-ray electron flux above 500 Mev.

16 p2851 A69-32566

## DEERKOSKI, L. F.

A performance evaluation of a two-element large aperture antenna array.

19 p3272 A69-36254

## DEESE, J. H.

A systematic approach for the analytical analysis and prediction of the yield from liquid propellant explosions.

04 p0646 A69-14477

## DEEV, V. M.

Construction of harmonic and biharmonic functions in the solution of a three-dimensional problem in elasticity theory /Postroenie harmonicheskikh i bigarmonicheskikh funktsii pri reshenii prostranstvennoi zadachi teorii pruzhnosti transversal'noizotropnogo sredovishcha z tsilindrichnoi anizotropiei/.

11 p1976 A69-24777

Solution of the three-dimensional problem of the theory of elasticity for a transversely isotropic medium with cylindrical anisotropy /Do rozv'iazku trivimirnoi zadachi teorii pruzhnosti transversal'noizotropnogo sredovishcha z tsilindrichnoi anizotropiei/.

11 p1983 A69-25091

## DEEVA, N. T.

Investigation of iron-nickel and iron-nickel-cobalt ferrites /Issledovanie zhelezo-nikelevykh i zhelezo-nikel'-kobal'tobvykh ferritov/.

13 p2319 A69-27992

## DEFABAUGH, G. L.

Neural limitations of visual excitability - After-effects of subliminal stimulation.

22 p3881 A69-40860

## DEFAYOLLE

Psychological study of small groups of subjects isolated on a high mountain /Etude psychologique de petits groupes de sujets isolés en haute montagne/.

21 p3661 A69-39267

## DEFRAUOLD, PH.

Theoretical limits to use an adsorption system as cesium reserve in thermionic converter.

09 p1441 A69-21839

Tests of a nuclear-type converter equipped with a cesium adsorption tank /Essais d'un convertisseur du type nucléaire muni d'un réservoir de césium a adsorption/.

14 p2397 A69-29174

Study of refractory surfaces in the presence of cesium vapors by means of an emission microscope /Etude au microscope a emission de surfaces refractaires en presence de vapeur de césium/.

14 p2507 A69-29276

## DEFRISE, P.

Zonal temperature and spectral characteristics of the stratospheric circulation in January and February 1958 /Temperature zonale et caracteristiques spectrales de la circulation dans la stratosphere en janvier-fevrier 1958/.

02 p0246 A69-12759

## DEGAONKAR, S. S.

Metre and decametre solar radio bursts recorded during July 6-11, 1968.

03 p0518 A69-14259

## DEGEN, V.

Vibrational populations of O sub 2 /A super 3 sigma sub u plus/ and synthetic spectra of the Herzberg bands in the night airglow.

24 p4310 A69-43186

## DEGENFORD, J. E.

A quasi-optic technique for measuring dielectric loss tangents.

12 p2080 A69-26057

## DEGENS, E. T.

Molecular development of organic matrices capable of mineralization /Molekulare Entwicklung mineralisationsfaehiger organischer Matrizen/.

04 p0555 A69-14888

## DEGNER, V. R.

Demonstration of a self-contained organic Rankine silent engine. [SAE PAPER 690062]

07 p1058 A69-18309

## DEGROOT, L. E.

Extended capability from existing nav aids.

07 p1177 A69-19210

Navigation record - Rockwell Polar Flight.

09 p1538 A69-21406

## DEGTIARENKO, A. G.

Equations of motion of a point on a machined surface during electrochemical milling.

23 p4168 A69-41310

## DEGTIARENKO, N. N.

Angular distribution of a material vaporized by a laser beam /Uglovoye raspredelenie neshchestva, isparennogo luchom OKG/.

21 p3737 A69-38992

## DEGTIAREV, L. M.

Calculation of ionization instability in a low-temperature magnetized plasma /Raschet ionizatsionnoi neustoiichivosti v nizkoterperaturnoi zamagnichennoi plazme/.

10 p1741 A69-23962

## DEGTIAREV, V. A.

Vestibular-vegetative reactions under the action of angular and Coriolis accelerations under conditions of weightlessness /O vestibulo-vegetativnykh reaktsiakh pri vozdeistvii uglovyykh i korolisovykh uskorenii v usloviakh nevesomosti/.

07 p1062 A69-18587

## DEHNEN, H.

Astrophysical consequences of Dirac's hypothesis of a variable gravitational number.

09 p1603 A69-22270

## DEHORITY, G. L.

An elementary calculation for the burning rate of composite solid propellants [WSCIP PAPER 69-7]

16 p2830 A69-32348

Analysis of acoustic waves in a cold-flow rocket.

19 p3394 A69-35946

## DEIBERT, M. C.

Voltage oscillations of the H sub 2-CO system.

22 p3896 A69-40738

## DEICH, A. N.

Determination of photographic magnitudes of galactic nuclei /Opredelenie fotograficheskikh velichin iader galaktik/.

12 p2165 A69-27029

## DEICH, M. E.

Experimental investigation of an injector model as a vaporizer for MHD systems /Eksperimental'noe issledovanie modeli inzhektora kak razgonnogo ustroistva dlia MGD-ustanovok/.

06 p0871 A69-17918

Method of designing a simple injector /Metodika rascheta proteishego inzhektora/.

06 p0872 A69-17920

Experimental investigation of a wet-steam injector /Eksperimental'noe issledovanie parovodnogo inzhektora/.

13 p2246 A69-27490

Gasdynamics of Two-Phase Media /Gazodinamika Dvukhfaznykh Sred/.

17 p2948 A69-32951

## DEIGEN, M. F.

Angular dependences of EPR line widths of Cr super 3 super plus in ZnWO sub 4 /Uglovye zavisimosti shirin linii EPR Cr super 3 super plus v ZnWO sub 4/.

10 p1743 A69-23131

## DEIGHTON, G. A.

Rotogravure printing of flexible printed circuits.

09 p1511 A69-22357

## DEIRMENDJIAN, D.

Introductory comments on Venus's lower atmosphere.

02 p0319 A69-12103

Electromagnetic Scattering on Spherical Polydispersions.

12 p2030 A69-26467

## DEIS, D. W.

High field properties of pure niobium nitride thin films.

17 p3016 A69-33790

Applications of superconductivity.

19 p3382 A69-35807

## DEISSLER, R. G.

Direction of maximum turbulent vorticity in a shear flow.

11 p1874 A69-25282

## DEITZ, P. H.

Probability analysis of ocular damage due to laser radiation through the atmosphere.

11 p1830 A69-24843

Saturation of scintillation magnitude in near-earth optical propagation.

15 p2570 A69-31030

Coherent light propagation through a turbulent atmosphere - Measurements of the optical filter function.

24 p4344 A69-43114

## DEIWERT, G. S.

Analytical prediction of the incompressible turbulent boundary layer with arbitrary pressure distribution. [AIAA PAPER 69-397]

15 p2591 A69-30478

## DEIXLER, A.

Establishing reliability of electronic components by failure rates and drift behaviour.

15 p2626 A69-30835

## DEJONGE, J.

Recording of star spectra with a fiber optic electrostatic image intensifier.

[WERL-68-1C2-TAEC-P1]

04 p0603 A69-15444

## DEJONGHE, P.

Production and shaping of Th 228 for radiothermal propulsion /Production et mise en forme de Th 228 en vue de la propulsion radiothermique/.

05 p0791 A69-15597

Design and characteristics of an actinium fueled thermionic generator.

14 p2399 A69-29192

## DEKER, H.

The application of photogrammetry in satellite geodesy /satellite photogrammetry/ /Die Anwendung der Photogrammetrie in der Satellitengeodäsie /Satellitenphotogrammetrie/.

16 p2790 A69-32202

## DEKHTIAR, I. IA.

Changes of electrical and magnetic properties during the formation of a modulated structure in the alloy Co-Ti /Izmenenie elektricheskikh i magnitnykh svoystv pri obrazovanii modulirovannoi struktury v splave Co-Ti/.

11 p1904 A69-24707

## DEKKER, M.

Present and future airline telecommunications requirements.

23 p4114 A69-41356

## DEKLEVA, N.

Early brain atrophies.

23 p4089 A69-41816

## DEKSNIS, A. P.

Peculiarities of the recrystallization process of the In sub 3 Te sub 4 phase in thin In-Te films consisting of a mixture of In sub 2 Te sub 3 and In sub 3 Te sub 4 phases /Osobennosti protsessa rekristallizatsii fazy In sub 3 Te sub 4 v tonkikh sloiakh In-Te, sostoiashchikh iz smesi faz In sub 2 Te sub 3 i In sub 3 Te sub 4/.

24 p4361 A69-42993

Investigation of the process of formation of the In sub 3 Te sub 4 phase in a polyphase layer of the In-Te system /Issledovanie protsessa obrazovaniia fazy In sub 3 Te sub 4 v polifaznom sloe sistemy In-Te/.

24 p4361 A69-42994

Results of a microanalytical and X-ray investigation of macroblock thin films of the In sub 3 Te sub 4 phase /Rezultaty mikroanaliticheskogo i rentgenograficheskogo issledovaniia tonkikh krupnoblochnykh plenok fazy In sub 3 Te sub 4/.

24 p4361 A69-42995

## DEL CANO, C. P.

CITS - An automatic system self-test tool.

11 p1866 A69-25083

## DEL CASAL, E. P.

The effects of multidimensional flow through porous matrices in mass transfer cooling.

[AIAA PAPER 69-149]

06 p1038 A69-18179

## DEL DUCA, B. S.

The use of a heat shrinkable sleeve in a lubricant-free connector for glass vacuum systems.

08 p1320 A69-20529

## DEL NOTARIO, P. P.

Flame propagation on plastic fuels in an oxidizing atmosphere /Propagacion de llamas sobre combustibles plasticos en atmosfera oxidante/.

17 p3074 A69-33662

## DEL VALLE, E. G.

Nonequilibrium flow and the kinetics of chemical reactions in the char zone.

24 p4409 A69-43512

## DELAHAYE, J. F.

Estimation and control of reliability of electronic components manufactured in quantity /Estimation et controle de la fiabilite des composants electroniques fabriques en grande serie/.

15 p2627 A69-30837



## DELAHAYE, R. P.

Parasitic calcifications of soft parts in flight personnel /Les calcifications parasitaires des parties molles et le personnel navigant/.

09 p1446 A69-22729

Dynamic roentgenology of the cervical spine - General interest of the method in aeronautical medicine /La radiographie dynamique du rachis cervical - Interet general de la methode en medecine aeronautique/.

23 p4087 A69-41797

Results of a dynamic X-ray study of the cervical spine in military pilots of jet aircraft /Resultats de l'exploration radiodynamique du rachis cervical des pilotes militaires d'avions a reaction/.

23 p4087 A69-41798

Human resistance to accelerations of high intensity and short duration - Mechanical and circulatory effects /Resistance du corps humain aux accelerations elevees de courte duree - Effets mecaniques et hemodynamiques/.

24 p4266 A69-43380

## DELAHAYE, R.-P.

The role of radiology in medical investigations after ejection of military jet pilots /La part de la radiologie dans l'enquete medicale apres ejection des pilotes militaires d'avions a reaction/.

24 p4266 A69-43379

## DELAMOTTE, E.

Transformation strain in stressed cobalt-nickel single crystals.

13 p2279 A69-27761

## DELANEY, J. A.

Spacecraft phased array configurations.

22 p3915 A69-40705

Comparison between a data relay satellite system and a ground-based mission support network in terms of mission support capability, support effectiveness and system and mission spacecraft requirements.

23 p4120 A69-41756

## DELANEY, R. G.

Effect of isolation on blood pressure, behavior and response to epinephrine in the rat.

14 p2407 A69-29296

## DELAITRE, M.

Comparative functional study of fundamental components /Etude fonctionnelle comparative des organes fondamentaux/.

04 p0550 A69-15181

The ONERA low-g accelerometer.

[ONERA-TP-449] 05 p0766 A69-16749

Comparative functional study of the principal components of a servo loop /Etude fonctionnelle comparative des organes fondamentaux d'une chaine d'asservissement/.

16 p2741 A69-32431

## DELBAUVE, J. R.

A phase-locked UHF telemetry transponder for missile scoring applications.

23 p4137 A69-41779

## DELBUILLE, L.

High resolution spectra of the sun.

13 p2341 A69-27588

Project to map the sky in the infrared from an E.S.R.O. satellite.

13 p2260 A69-27606

## DELCARO, L.

Direct and indirect measurements of differential parameters of transistors /Mesure directe e indirecte di parametri differenziali dei transistori/.

14 p2420 A69-29397

## DELCROIX, A.

Transport coefficients in the chromosphere and coronal gas. I - Viscosity.

09 p1602 A69-22217

Transport coefficients in the chromosphere and coronal gas. II.

15 p2694 A69-30788

## DELCROIX, J. L.

Plasma Physics. Volume 2 - Weakly Ionized Gases.

06 p0963 A69-17165

## DELCROIX, J.-L.

Study of the postdischarge of a laser-produced plasma /Etude de la post-decharge d'un plasma produit par laser/.

01 p0128 A69-10394

## DELDALLE, A.

Remarks concerning superheterodyne millimeter and submillimeter wave detection /Remarques concernant la detection superheterodyne en ondes millimetriques et submillimetriques/.

15 p2570 A69-31093

## DELEA, C.

Agreement in endpoints from circadian rhythmometry on healthy human beings living on different continents.

23 p4083 A69-41457

## DELEEUW, J. H.

Simultaneous measurement of temperature and density by an electron beam luminescence technique.

20 p3543 A69-37799

## DELERY, J.

Influence of a sharp pressure variation on a turbulent boundary layer and application to hypersonic air intakes /Action d'une variation brusque de pression sur une couche limite turbulente et application aux prises d'air hypersoniques/.

17 p2895 A69-33587

## DELFOUR, A.

Properties of an equivalent circuit for microwave point diodes /Proprietes du schema equivalent d'une diode a pointe en micro-ondes/.

05 p0735 A69-16605

## DELGROSSO, E. J.

Mechanical properties of braze-bonded borsic-aluminum composites.

19 p3340 A69-35509

Development and testing of intermetallic coated titanium alloy gears.

19 p3323 A69-35582

## DELIGNE, P.

Transistorized receiver for satellite telecommunications /Recepteur transistorise pour telecommunications par satellites/.

05 p0734 A69-16594

## DELIONBACK, L. M.

Project management - An incentive contracting decision model.

02 p0356 A69-12476

## DELISEE, F.

Use of titanium for supersonic aircraft /L'utilisation du titane pour les avions supersoniques/.

02 p0192 A69-11891

## DELISI, C.

Theory of a helix-to-coil transition in a triple-stranded macromolecule.

24 p4353 A69-43812

## DELIVORIAS, P.

Development of p-channel enhancement - MOS triodes.

07 p1100 A69-18622

## DELLI PONTI, C.

Photoelectric observations of Nova Delphini 1967.

20 p3599 A69-37475

## DELLI SANTI, F. S.

Statistical analysis of solar radio emission at 327 MHz /Analisi statistica della radioemissione solare a 327 MHz/.

20 p3588 A69-37478

## DELLINGER, T. C.

Computation of nonequilibrium merged stagnation shock layers by successive accelerated replacement. [AIAA PAPER 69-655]

17 p2892 A69-33469

## DELLMANN, H. D.

Sleep, hibernation and hypothermia in the yellow-bellied marmot /M. flaviventris/.

10 p1643 A69-23122

## DELLOUE, J.

Experimental study of ionospheric perturbations caused by a strong explosion on the ground /Etude experimentale de la perturbation engendree dans l'ionosphere par une forte explosion au sol/.

09 p1488 A69-21694

## DELLWIG, L. F.

The potential of radar in geological exploration.

12 p2099 A69-27009

Geoscience application of radar.

20 p3491 A69-37651

Radar in geological exploration.

20 p3491 A69-37652

## DELMAIRE, M.

Significance of simultaneous double recording of mouth pressure and heart rate in the Flack test /Interet d'une double inscription simultanee de la pression buccale et du rythme cardiaque dans le test de Flack/.

05 p0710 A69-16626

## DELMARE, C.

Inertial magneto confinement of a plasma produced by the interaction of laser radiation with a solid deuterium granule /Confinement magneto inertiell d'un plasma cree par l'interaction du rayonnement laser avec un granule de deuterium solide/.

05 p0798 A69-15585

## DELMONTE, J.

Pressure applied dielectrics.

19 p3281 A69-35548

Reversion resistant urethanes.

19 p3357 A69-35566

## DELONE, N. L.

Stimulation of growth in certain biological objects subjected to vertical vibrations /Stimulatsia rosta u nekotorykh biologicheskikh ob'ektov pod vozdeistviem vertikal'noi vibratsii/.

01 p0014 A69-10584

The effect of space flight on *Cosmos-110* on the microspores of *Tradescantia paludosa*.

01 p0018 A69-11317

Results of biological experiments conducted under flight conditions on the Vostok spacecraft with the participation of cosmonauts A. G. Nikolaev, P. R. Popovich, and V. F. Bykovskii /Rezultaty biologicheskikh eksperimentov, provedennykh v usloviyakh poleta na korabliakh "Vostok" s uchastiem kosmonavtov A. G. Nikolaeva, P. R. Popovicha i V. F. Bykovskogo/.

07 p1063 A69-18597

Growth stimulation of certain biological specimens subjected to vertical vibrations.

15 p2555 A69-30754

## DELONG, D. F., JR.

Detection and parameter estimation in an amplitude-comparison monopulse radar.

09 p1452 A69-21312

The design of clutter-resistant radar waveforms with limited dynamic range.

17 p2921 A69-33625

## DELONG, V. R.

Satellite airborne communications.

20 p3497 A69-38314

## DELONG, W. T.

Eliminating hydrogen cracking.

01 p0088 A69-11398

## DELORME, J. F.

Calorimetric study of the energy dissipated from a solid subjected to fatigue cycles.

04 p0618 A69-15205

## DELOUR, J.-P.

Granularity of a scattering surface illuminated by coherent light - Observation in the focal plane /Granularite d'une plaque diffusante eclairee en lumiere coherente - Observation dans le plan focal/.

21 p3741 A69-39575

## DELOZIER, T. R.

Fluidic valve for warm gas flow control.

[AIAA PAPER 69-118] 06 p0872 A69-18147

## DELPECH, J. F.

Measurement and study of the parameters characterizing the plasma of a helium-neon laser /Mesure et etude des parametres caracterisant le plasma d'un laser a helium-neon/.

17 p2982 A69-33390

## DELPECH, J.-F.

Study of the intergalactic continuum and the cosmogonic hypotheses /L'etude du fond continu intergalactique et les hypotheses cosmogoniques/.

05 p0827 A69-16593

## DELSEMME, A. H.

Cometary nuclei.

22 p4013 A69-40097

## DELTOUR, G.

Considerations relative to the calculation of radiation doses in view of the quantification of biological effects in the case of supersonic transport /Considerations relatives aux calculs des doses de radiations en vue de la quantification des effets biologiques dans le cas du transport supersonique/.

11 p1830 A69-24865

Necessity of using the direct correlations between the damages caused and the trajectories in the study of the biological effects of heavy ions in cosmic radiation /Necessite d'utiliser les correlations directes entre les dommages causes et les trajectoires dans l'etude des effets biologiques des ions lourds du rayonnement cosmique/.

23 p4089 A69-41831

## DELTOUR, R.

Coupled motion of vortices in superposed superconducting films.

01 p0135 A69-10014

## DELUCA, R.

Work-hardening in quenched, fully hardened, and overaged Mg-Mn alloy single crystals.

05 p0778 A69-15757

- DELUISI, J. J.**  
A study of the effect of haze upon Umkehr measurements.  
08 p1308 A69-20316
- DELVILLE, J. C.**  
Transistor and diode models for the "ECAP" program - Some applications /Modeles de transistors et diodes pour programme "ECAP" - Quelques applications/.  
08 p1280 A69-19975
- DEMAN, P.**  
Design of communication satellite transponders and multiple access techniques.  
09 p1609 A69-21619
- DEMANGE**  
Cerebral circulation under longitudinal acceleration /Circulation cerebrale sous acceleration longitudinale/.  
05 p0710 A69-16625
- DEMANGE, J.**  
Advantages of bloodless methods of measuring heart flow /Interet des methodes non sanglantes de mesure du debit cardiaque/.  
09 p1448 A69-22730  
Advantage of nonsurgical methods of measuring cardiac output in aerospace medicine /Interet des methodes non sanglantes de mesure du debit cardiaque en medecine aeronautique et spatiale/.  
23 p4088 A69-41813  
Human resistance to accelerations of high intensity and short duration - Mechanical and circulatory effects /Resistance du corps humain aux accelerations elevees de courte duree - Effets mecaniques et hemodynamiques/.  
24 p4266 A69-43380
- DEMANGE, J. M. R.**  
Effects of prolonged positive accelerations /plus 3 G sub z/ on the variations of human cardiac output /Effets des accelerations positives prolongees /plus 3 G sub z/ sur les variations du debit cardiaque humain/.  
24 p4267 A69-43385
- DEMANGE, PH.**  
Ion-exchange fuel cells as a source of energy on board balloons for exploration of the upper atmosphere /Les piles a combustible a membrane echangeuse d'ions comme source d'energie a bord des ballons d'exploration de la haute atmosphere/.  
08 p1260 A69-21042  
Ion-exchange membrane fuel cells as a power source for balloons exploring the upper atmosphere /Les piles a combustible a membrane echangeuse d'ions comme source d'energie a bord des ballons d'exploration de la haute atmosphere/.  
16 p2738 A69-32413
- DEMARIA, A. J.**  
Picosecond laser pulses.  
07 p1148 A69-18856
- DEMARQUE, P.**  
Some current problems in the theory of late-type stars.  
01 p0158 A69-11325  
Some uncertainties in Population II stellar models near the main sequence.  
09 p1601 A69-22214  
On the chemical composition and age of NGC 188.  
10 p1789 A69-24127  
On the interpretation of the color-magnitude diagrams of M67 and NGC 188.  
10 p1789 A69-24128
- DEMARS, G.**  
Optical degradation of high-power ionized argon gas lasers. [IEEE PAPER L-4]  
05 p0775 A69-16322
- DEMARS, G. A.**  
Mode interactions between the 4881- and 5147-angstrom units lines in Ar super plus lasers.  
10 p1705 A69-24003
- DEMBLING, P. B.**  
International liability for damages caused by the launching of objects into outer space.  
20 p3638 A69-37127
- DEMBLING, P. G.**  
International liability for damages caused by the launching of objects into outer space - Theory and applications. [UN PAPER 68-95337]  
01 p0180 A69-10525
- DEBNOVETSKII, O. F.**  
Discharges in the cortex of cats induced by strychnine under the action of stimuli of increasing intensity /Strikhnnini rozriadi kori mozku kishki' viklikani stimulami narostaiuchoi intensivnosti/.  
22 p3888 A69-41270
- DEMCHENKO, V. V.**  
Effect of an electromagnetic field induced by external currents on the density distribution of a plasma /Pro vpliv elektromagnitnogo polia, stvorivanogo zovnishnimi strumami, na rozpodil gustini plazmi/.  
11 p1927 A69-24910  
Propagation of large-amplitude TE waves along a plasma sheet /Rasprostranenie TE voln bol'shoi amplitudy voln' sloia plazmy/.  
15 p2569 A69-30939  
Contribution to the nonlinear theory of high-frequency hybrid resonances in an inhomogeneous plasma /Do nelineinoi teorii visokochastotnikh gibrnichkh rezonansiv u neodnorodnoi plazmi/.  
21 p3672 A69-38588
- DEME, S.**  
Radiation damage of junction and MOS transistors /Reteg-es MOS tranzistorok sugarkarosada/.  
13 p2227 A69-27514
- DEMEL, P.**  
Optimization of dynamic systems with the aid of sensitivity functions /Optimalizace dynamickykh sostav pomoci citlivostnich funkci/.  
02 p0224 A69-11594
- DEMENIK, I. V.**  
Resistance of a xenon plasma in a large flash lamp.  
03 p0478 A69-13846
- DEMENKO, A. A.**  
Absolute photometry and the determination of the tail type of the comet Ikeya Seki 1965f /Absoluitnaia fotometriia i opredelenie tipa khvosta komety Ikeya-Seki 1965f/.  
14 p2524 A69-29709
- DEMENKO, I. M.**  
Lunar profile from observations of the annular eclipse of May 20, 1966 /Profil' luny po nabludeniiam kol'tseobraznogo zatmenia 20 maia 1966 g./.  
15 p2686 A69-30531  
Determination of lunar coordinate corrections from the observation of the annular solar eclipse of May 20, 1966 /Opredelenie popravok koordinat luny po nabludeniiu kol'tseobraznogo solnechnogo zatmenia 20 maia 1966 g./.  
15 p2686 A69-30532
- DEMENTEV, A. A.**  
Nanosecond pulse generators for semiconductor laser excitation /Generatory nanosekundnykh impul'sov dlia vzbuzhdenia poluprovodnikov K.O.K.G./.  
18 p3153 A69-35257
- DEMENTEV, I. U. A.**  
An approximate method for solving a three-dimensional Dirichlet problem /Ob odnom priblizhennom sposobe reshenia prostranstvennoi zadachi Dirikhle/.  
05 p0787 A69-16457
- DEMENTEV, V. A.**  
Microwave diodes on a gallium arsenide base /SVCh-Diody na osnove arsenida gallia/.  
05 p0730 A69-16222
- DEMENTHON, J.-B.**  
Equipment for satellite tracking and telemetry /Les equipements de localisation et de telemesure de satellites/.  
02 p0228 A69-11922
- DEMENII, O. I.**  
Structure of fast magnetohydrodynamic shock waves /O strukture bystrykh magnitogidrodinamicheskikh udarnykh voln/.  
01 p0130 A69-10774
- DEMENTII, S. V.**  
Structure of fast magnetohydrodynamic shock waves /O strukture bystrykh magnitogidrodinamicheskikh udarnykh voln/.  
01 p0130 A69-10774
- DEMEO, E. A.**  
Nonreciprocal polycrystalline antiferromagnetic devices for millimeter and submillimeter wavelengths. [IEEE PAPER 17.11]  
01 p0045 A69-10720
- DEMERS, S.**  
Integrated magnitudes and colors of the four brightest globular clusters in Fornax.  
18 p3201 A69-35205
- DEMETRIADES, A.**  
Turbulent front structure of an axisymmetric compressible wake.  
03 p0419 A69-13949  
Turbulent mean-flow measurements in a two-dimensional supersonic wake.  
11 p1817 A69-24281  
Mean and intermittent flow of a self-preserving plasma jet.  
16 p2770 A69-31889
- Observations in the transition zone of a turbulent plasma jet. [AIAA PAPER 68-685]  
24 p4360 A69-43697
- DEMETRIADES, S. T.**  
Compressible turbulent magnetohydrodynamic boundary layers.  
08 p1366 A69-20786
- DEMETRY, J. P.**  
Achieving filter effectiveness and insuring reliability.  
23 p4142 A69-42233
- DEMETRY, J. S.**  
Adaptive tracking of maneuvering targets.  
11 p1861 A69-25455
- DEMIANCHUK, V. S.**  
Preparedness of two-channel systems with submultiple redundancy /O gotovnosti dvukhkanal'nykh sistem s drobnnoi kratnost'iu rezervirovaniia/.  
23 p4136 A69-41559
- DEMIANOV, I. U. A.**  
A method of constructing a solution to a Prandtl type equation in the vicinity of points where the analyticity of the boundary conditions is disrupted /Ob odnom sposobe postroeniia reshenia uravnenii tipa Prandtlia v okrestnosti tochiek narusheniia analitichnosti granichnykh uslovii/.  
23 p4151 A69-41525
- DEMIANOV, V. V.**  
Vacuum triode in a wideband radio-frequency amplifier /Vakuumnyi triod v shirokopolosnom usilitеле radiochastoty/.  
11 p1849 A69-24958
- DEMIANOVA, L. A.**  
GaAs oscillators with p-n junctions /GaAs-Generatory p-n-Perekhodami/.  
15 p2666 A69-30065
- DEMIANOVSKII, A. P.**  
Theory of inertial systems without gyroscopic sensors.  
16 p2791 A69-32283
- DEMIANUSHKO, I. V.**  
Plasticity theories for nonisothermal loading /Teorii plastichnosti pri neizotermicheskom nagruzenii/.  
07 p1237 A69-19681
- DEMICHELIS, C.**  
Laser-produced sparks in a 200-kG magnetic field.  
02 p0260 A69-12659  
A mode-locked laser as a light source for schlieren photography. [IEEE PAPER H-1]  
05 p0774 A69-16315  
Preliminary evidence for self-focusing in gas breakdown produced by picosecond laser pulses.  
13 p2270 A69-27196  
Laser induced gas breakdown - A bibliographical review.  
17 p2980 A69-33026  
Schlieren photography using a mode-locked laser as the light source.  
21 p3736 A69-38795
- DEMIDENKO, A. A.**  
Contribution to the theory of acoustoelectric waves in crystals with a high dielectric constant /K teorii akusto-elektricheskikh voln kristallakh s bol'shoi dielektricheskoi pronitsaemost'iu/.  
13 p2317 A69-27878
- DEMIDENKO, A. F.**  
Heat capacity and quasi-chain dynamics of diamond-like structures.  
03 p0490 A69-13943
- DEMIDENKO, I. I.**  
A study of transverse plasma injection into a toroidal magnetic field.  
03 p0478 A69-13837  
Characteristics of a plasma trapped by a transverse magnetic field. II.  
06 p0963 A69-16907  
Longitudinal polarization of plasma stream in a transverse magnetic field.  
08 p1370 A69-21018  
Plasma flow in a transverse inhomogeneous magnetic field /Plazmennyi potok v neodnorodnom poperechnom magnitnom pole/.  
12 p2137 A69-26528  
Tangential injection of a plasma into a magnetic field of toroidal configuration /Kasatel'naia inzhetsiia plazmy v magnitnoe pole toroidal'noi konfiguratsii/.  
13 p2311 A69-28108  
Study of the mechanism of capture of a moving plasma by a transverse magnetic field /Issledovanie mekhanizma zakhvata dvizhushchiesia plazmy poperechnym magnitnym polem/.  
24 p4357 A69-43469



- Investigation of certain characteristics of a plasma captured by a transverse magnetic field /Issledovanie nekotorykh kharakteristik plazmy, zakhvachennoi poperechnym magnitnym polem/.  
24 p4357 A69-43470
- Longitudinal polarization of a plasma flux in a transverse magnetic field /Prodol'naya polarizatsiya plazmennogo potoka v poperechnom magnitnom pole/.  
24 p4358 A69-43471
- DEMIDENKO, V. P.**  
Application of self-adaptive systems in directional gyroscopes /K voprosu primeneniia sistem samonastroyki v giroskopakh napravleniia/.  
11 p1881 A69-24559
- DEMIDENKO, Z. A.**  
Theory of laser radiation on indirect band-band transitions in semiconductors of different types /Teoriia lazernogo izlucheniia na nepriamykh zonal'nykh perekhodakh v poluprovodnikakh razlichnogo tipa/.  
19 p3332 A69-35873
- DEMIDOV, A. S.**  
Automatic processing of electrocardiograms recorded during space flight /Avtomaticheskaya obrabotka elektrokardiogrammy, registriruemoi vo vremia kosmicheskogo poleta/.  
05 p0715 A69-16524
- Automatic processing of electrocardiograms recorded during cosmic flight.  
18 p3098 A69-34743
- Stiffness of heat exchanger tube plates /O zhestkosti trubnykh dosok teploobmennyykh apparatov/.  
24 p4400 A69-43087
- DEMIDOV, M. I.**  
Investigation of gas protection of optical quartz from heating by a dense plasma /Issledovanie gazovoi zashchity opticheskogo kvartsa ot nagreva plotnoi plazmoi/.  
11 p1926 A69-24616
- Reversible opacity of an optical quartz occurring during contact with a dense plasma /Obratimaia neprozrachnost' opticheskogo kvartsa, vznikayushchaya pri kontakte s plotnoi plazmoi/.  
14 p2490 A69-29159
- DEMIDOVA, A. N.**  
Lunar limb image and inhomogeneous layers in the troposphere /Izobrazhenie kraia luny i sloi neodnorodnosti v troposfere/.  
01 p0156 A69-11182
- DEMIKHOVSKII, V. I. A.**  
Quantum dimensional effects in thin semiconductor and semimetal films /Kvantovye razmernye efekty v poluprovodnikovyykh i polumetallicheskikh plenkach/.  
01 p1336 A69-10186
- DEMIN, V. G.**  
Motion of an Artificial Satellite in a Noncentral Gravitational Field /Dvizhenie Iskustvennogo Sputnika v Netsentral'nom Pole Tiagoteniia/.  
04 p0659 A69-15027
- DEMIN, V. S.**  
Experimental investigation of the influence of the wall on the readings of a thermoanemometer /Eksperimental'noe issledovanie vliianiia stenki na pokazaniia termoanemometra/.  
19 p3308 A69-35857
- DEMIN, V. V.**  
Absorption coefficient in the spin-rotational lines of atmospheric oxygen in the geomagnetic field /Koeffitsient pogloscheniia v spin-vrashchatel'nykh liniakh kisloroda v atmosfere v geomagnitnom pole/.  
15 p2597 A69-30941
- DEMINA, N. I.**  
Determination of the allowance for the arbitrary yield point for sheet materials working under biaxial tensile load.  
10 p1801 A69-23849
- DEMING, J. L.**  
Profiles of laser-created cavities on metal surfaces.  
20 p3552 A69-36917
- DEMIRKHANOV, R. A.**  
Drift instability of a collisionless plasma in the high-frequency field of an E wave /Dreifovaya neustoiichivost' besstolknovitel'noi plazmy v vysokochastotnom pole E-volny/.  
09 p1546 A69-21564
- DEM'YANOV, V. F.**  
Algorithms for some minimax problems.  
10 p1721 A69-23863
- DEMKINA, L. B.**  
Magnetic field decay in the group 21034 during the proton flare period of July 1966.  
10 p1766 A69-23759
- DEMMA, F. J.**  
A large volume TEM sub 00 mode technique for 10.6-mu lasers.  
04 p0609 A69-14287
- DEMNY, J.**  
Preparation and investigation of tungsten surfaces with preferred orientations.  
14 p2506 A69-29267
- DEMORE, W. B.**  
Formation of carbon trioxide in the photolysis of ozone in liquid carbon dioxide.  
23 p4112 A69-41338
- DEMOS, G. T.**  
Anticipatory stress and flight stress in F-102 pilots.  
12 p2023 A69-26552
- DEMOULIN, M.-H.**  
On the nature of the optical flux from extragalactic systems.  
02 p0326 A69-12706
- The peculiar galaxy NGC 4194.  
13 p2339 A69-27571
- Rotation and mass of the galaxy NGC 6574.  
15 p2691 A69-30764
- Observations of galaxies with large amounts of dust. I - The Galaxy NGC 7625.  
20 p3610 A69-38142
- Observations of galaxies with large amounts of dust. II - Rotation and mass of NGC 3593.  
20 p3610 A69-38143
- Observations of galaxies with large amounts of dust. III - Velocity field in NGC 3077.  
20 p3610 A69-38144
- IC 3258 - A small extragalactic object with a blueshift.  
23 p4219 A69-42374
- A very high-velocity gas cloud near the nucleus of NGC 4939.  
24 p4375 A69-42609
- DEMOULIN, MH.**  
Certain results of optical studies of galaxies /Nekotorye rezul'taty opticheskikh issledovaniy galaktik/.  
12 p2170 A69-27063
- DEMPSEY, D. J.**  
Calibration of instrumentation radars to obtain accurate real-time tracking data. [AIAA PAPER 68-872]  
21 p3675 A69-39398
- DEMPSTER, J. B.**  
Flight test evaluation of an advanced stability augmentation system for B-52 aircraft. [AIAA PAPER 68-1068]  
20 p3461 A69-37157
- DEMSEY, S.**  
Comparison of system estimation methods.  
15 p2722 A69-31135
- DEMUTSKII, V. P.**  
Theory of magnetoplasticity.  
05 p0844 A69-16804
- Contribution to the thermodynamics of deformable media /Do termodinamiki deformovannykh sere dovishch/.  
08 p1419 A69-21074
- Stresses and waves in a magnetoplastic medium /Napriazheniia i volny v magnetoplasticheskoi srede/.  
09 p1551 A69-22033
- Conditions for breakup of an oblique shock wave.  
09 p1483 A69-22665
- Investigation of an oscillating electron-ion discharge in a longitudinal magnetic field /Issledovanie kolebatel'nogo elektronno-ionnogo razriada v prodol'nom magnitnom pole/.  
13 p2311 A69-28109
- Matrix form of magnetohydrodynamic equations /Matrichnaya forma magnetogidrodinamicheskikh uravnenii/.  
14 p2500 A69-29902
- DEN BOGGENDE, A. J. F.**  
Comments on the ageing effect of gas-filled proportional counters.  
20 p3538 A69-37302
- DEN HARTOG, H. J.**  
Local mass transfer with chemical reaction. I, II.  
02 p0232 A69-12234
- DEN, G. N.**  
Comparison of experimental data for flow in a centrifugal compressor impeller wheel with results calculated by the methods of lattice theory /Soglasovanie rezul'tatov rascheta potoka v tsentroběžnom kompressornom kolese metodami teorii reshetok s eksperimental'nymi dannymi/.  
23 p4058 A69-41727
- DENARO, J. M.**  
In-flight crimes, the Tokyo Convention, and federal judicial jurisdiction.  
22 p4053 A69-40777
- DENAVIT, J.**  
Nonlinear and collisional effects on Landau damping.  
01 p0133 A69-11222
- DENBIGH, P. N.**  
Determination of the optimum modulation technique for single voice channel operation under very severe noise conditions. [UN PAPER 68-95851]  
01 p0029 A69-10522
- Techniques and errors of balloon location by location orbit meteorological satellites.  
21 p3760 A69-38606
- DENBNOVETSKAIA, E. N.**  
Temperature coefficient of resistivity of certain high melting-point compounds and their solid solutions /Termicheskii koeffitsient elektrosoprotivleniia nekotorykh tugoplavkikh soedinenii i ikh tverdykh rastvorov/.  
09 p1523 A69-21777
- Thermal coefficient of the electrical resistance of some refractory compounds and their solid solutions.  
20 p3585 A69-38222
- DENBY, D.**  
A method for reducing movement in holography emulsions.  
06 p0923 A69-16937
- DENDA, S.**  
Electron beam exposure system for integrated circuits.  
15 p2579 A69-31000
- DENEMARKOVA, M.**  
The TESLA TKG 101 ruby laser /Rubinovy laser TESLA TKG 101/.  
08 p1327 A69-20889
- DENENSTEIN, A.**  
Precise comparison of the Josephson frequency-voltage relation at microwave and far-infrared frequencies.  
20 p3583 A69-37414
- DENEY, C. L.**  
Flux of hydrogen, helium, and electrons at Fort Churchill in 1967.  
05 p0756 A69-16277
- Differential energy spectrum of protons, helium nuclei, and electrons.  
07 p1204 A69-18832
- Balloon measurement of proton and alpha particle fluxes from Palestine, Texas.  
14 p2511 A69-28966
- DENHAM, W. F.**  
Modeling and adjoints for continuous systems.  
15 p2645 A69-31277
- Note on sequential estimation of second partial derivatives.  
24 p4340 A69-42955
- DENIEUIL, F.**  
Star identification system /Système d'identification stellaire/.  
08 p1347 A69-20656
- DENIS, G.**  
Analysis of breathable liquid oxygen - Determination of its impurities /Analyse de l'oxygene liquide respirable - Dosage de ses impuretes/.  
21 p3666 A69-39278
- DENISENKO, E. T.**  
Study of the compaction kinetics during hot pressing of metal powders /Issledovanie kinetiki uplotneniia pri goriazhem pressovanii metallicheskikh poroshkov/.  
04 p0618 A69-15388
- DENISIUK, IU. N.**  
A corollary of the reciprocity theorem in holography /Ob odnom sledstviu teoremy vzaimnosti v golografii/.  
04 p0602 A69-15377
- Obtaining high-quality holograms of three-dimensional diffuse objects with the aid of single-mode rub lasers /Poluchenie vysokokachestvennykh gologram trekhmernykh diffuznykh ob'ektov s pomoshch'iu monomodovykh rubinovykh lazerev/.  
07 p1132 A69-18800
- On one consequence of the reciprocity theorem in holography.  
16 p2790 A69-32122
- Holography of intensities /O golografii intensivnosti/.  
17 p2973 A69-33111

- Holographic recording of the temporal coherence pattern of a wave train from a pulsed radiation source /O golograficheskoi registratsii kartiny vremennoi kogerentnosti tsuga voln impul'snogo istochnika izlucheniia/.  
17 p2973 A69-33114
- Resolving power and field of view of a holographic device designed for recording images through an inhomogeneous atmosphere /O razreshaiushchei sposobnosti i pole zreniia golograficheskogo ustroistva, prednaznachennogo dlia registratsii izobrazheniia skvoz' neodnorodnuiu atmosferu/.  
20 p3540 A69-37728
- Checking the coherence of laser radiation used in holography.  
21 p3734 A69-38398
- Production of high-quality holograms of three-dimensional diffuse objects with the use of single-mode ruby lasers.  
21 p3724 A69-38946
- Transformation properties of a hologram /O transformatsionnykh svoystvakh gologrammy/.  
24 p4315 A69-43166
- DENISON, D. M.**  
A method for the estimation of the cardiac output during space flight.  
[UN PAPER 68-95746] 01 p0151 A69-10527
- DENISON, R. D.**  
Manned aerospace simulation.  
[ASME PAPER 69-DE-56] 14 p2427 A69-28844
- DENISOV, E. V.**  
Cross section for inelastic interaction of 100 to 1000 GeV nuclear-active particles with iron and lead nuclei.  
13 p2330 A69-28384
- DENISOV, F. P.**  
Nuclear Interactions in Spacecraft Shielding /Iadernye Vzaimodeistviia v Zashchite Kosmicheskikh Korabli/.  
14 p2481 A69-29817
- DENISOV, P. S.**  
Designing three-dimensional cam gears /K voprosu proektirovaniia prostranstvennykh kulachkovykh mekhanizmov/.  
23 p4168 A69-41413
- DENISOV, V. N.**  
Indirect method of determining the airflow rate through the inner contour and the gas temperature in front of the turbine of a ducted-fan engine /Kosvennyi metod opredeleniia rashoda vozdukhha cherez vnutrennii kontur i temperatury gaza pered turbinoi dvukhkонтурного dvigatel'ia/.  
18 p3086 A69-34986
- DENISOVA, A. D.**  
The effect of heat treatment on the lifetime of current carriers in GaAs.  
05 p0809 A69-16551
- DENKER, S. P.**  
Characteristic ranges for LSA oscillation.  
05 p0810 A69-16568
- A theoretical appraisal of the quenched multiple domain mode in GaAs microwave diodes.  
08 p1282 A69-20107
- DENKS, V. P.**  
Photosimulation of the electron-hole and exciton mechanisms of NaI-Tl and KI-Tl single-crystal scintillations /Fotomodelirovanie elektronno-dyrochnogo i eksitonnoogo mekhanizmov tsintillitsii v kristallakh NaI-Tl i KI-Tl/.  
12 p2144 A69-26722
- Selective photon modeling of both the electron/hole-induced and the exciton-induced scintillation mechanisms in NaI-Tl and KI-Tl crystals.  
21 p3781 A69-39135
- DENLINGER, E. J.**  
Radiation from microstrip resonators.  
16 p2760 A69-31946
- DENMAN, H. H.**  
Ultraspherical potential approximation in nonlinear symmetric free oscillations.  
01 p0107 A69-11418
- DENNAR, E. A.**  
An evaluation of the differential approximation for spherically symmetric radiative transfer.  
[ASME PAPER 68-HT-21] 13 p2373 A69-27774
- DENNIS, A. J.**  
Analysis of a ring-strut structure on an elastic foundation.  
12 p2184 A69-26812
- DENNIS, C. P.**  
A computer approach to analyze aeroelastic stability.  
10 p1634 A69-23274
- DENNIS, J. E., JR.**  
On Newton-like iteration functions - General convergence theorems and a specific algorithm.  
01 p0106 A69-10988
- DENNIS, N. T. M.**  
Vacuum System Design.  
07 p1180 A69-18549
- DENNIS, T. L.**  
World Airports: The Way Ahead, Institution of Civil Engineers, Conference, London, England, September 23-25, 1969, Proceedings.  
22 p3925 A69-40424
- DENNISON, P. A.**  
Observations of fine structure in the interplanetary medium.  
09 p1594 A69-21658
- Preliminary observations of the effects of a corotating stream on interplanetary scintillation.  
09 p1582 A69-22751
- DENNY, H. W.**  
Lossy transmission line filters.  
03 p0406 A69-13906
- Some RF characteristics of bonding systems.  
12 p2040 A69-26472
- Active preselection filter techniques for adjacent channel interference suppression at UHF.  
23 p4141 A69-42220
- DENOEU, J.-P.**  
Significance of simultaneous double recording of mouth pressure and heart rate in the Flack test /Interet d'une double inscription simultanee de la pression buccale et du rythme cardiaque dans le test de Flack/.  
05 p0710 A69-16626
- DENO, S.**  
Effect of the superimposed stress of higher frequency on the fatigue strength of an aluminum alloy.  
06 p0941 A69-17121
- A method of estimation of program fatigue life.  
21 p3846 A69-39810
- DENOTH, F.**  
Recovery time and dependence of the pulse length on a resistive load in the tunnel diode univibrator /Sul tempo di ricupero e sulla dipendenza della durata dell'impulso da un carico resistivo nell'univibratore a diodi tunnel/.  
04 p0578 A69-15069
- DENOUE, M.**  
Statistical linearization of nonlinear memory-type elements /Linearisation statistique des organes non-lineaires a memoire/.  
03 p0409 A69-13005
- DENSON, C. I.**  
Plasma noise sources of improved accuracy.  
02 p0210 A69-12439
- DENT, J. C.**  
Correction for temperature loading and high gas pressure effects for the constant-temperature hot-wire anemometer.  
06 p0930 A69-18218
- DENTON, F.**  
Intra-cavity laser diffraction gratings.  
01 p0092 A69-10897
- DENTON, R. A.**  
Electron beam evaporation of refractory materials.  
[ASM PAPER D8-22.2] 20 p3551 A69-38131
- DENZEL, P.**  
Simple representation of the possibilities of distance measurement by means of a distance relay composed of intermediate current transformers and rectifier bridges /Einfache Darstellung der Moeglichkeiten der Distanzmessung mit einem aus Zwischenwandlern und Gleichrichterbruecken aufgebauten Distanzmessglied/.  
05 p0765 A69-16746
- DENZLER, J.**  
Photogrammetric contouring from aerial colour photographs.  
22 p3944 A69-40045
- DEO, N.**  
Self-dual graphs and digraphs.  
06 p0947 A69-17410
- A digital computer for antenna pointing.  
07 p1089 A69-19745
- DEODHAR, G. B.**  
Spin doublets in X-ray satellite spectra.  
15 p2675 A69-30700
- DEPEW, C. A.**  
Forced laminar flow convection in a horizontal tube with variable viscosity and free convection effects.  
[ASME PAPER 68-WA/HT-20] 05 p0847 A69-16123
- Forced laminar flow convection in a horizontal tube with variable viscosity and free-convection effects.  
[ASME PAPER 68-WA/HT-20] 17 p3068 A69-32902
- DEPLANTE, H.**  
The variable-geometry Dassault Mirage G aircraft /L'avion a geometrie variable Dassault Mirage G/.  
07 p1053 A69-19230
- DEPREZ, G.**  
Application of Computers to the Calculation of Structures /Application des ordinateurs au calcul des structures/.  
07 p1233 A69-19349
- DEPRIT-BARTHOLOME, A.**  
The matricants of the Keplerian motions /the two-dimensional case/.  
03 p0513 A69-13779
- DEPRIT, A.**  
The matricants of the Keplerian motions /the two-dimensional case/.  
03 p0513 A69-13779
- A manifold of periodic orbits.  
04 p0653 A69-14611
- The phase space around L sub 4 in the case of an internal resonance of 1/3 /L'espace de phase autour de L sub 4 pour la resonance interne 1/3/.  
13 p2346 A69-27711
- Periodic Trojan orbits for the resonance 1/12.  
13 p2350 A69-27824
- Canonical transformations depending on a small parameter.  
19 p3397 A69-35608
- Periodic orbits emanating from L sub 4 at the 1/4 internal resonance /Sur les orbites periodiques issues de L sub 4 a la resonance interne 1/4/.  
22 p4031 A69-40909
- DER HOVANESIAN, J.**  
Application of photoelasticity to frozen two-dimensional models with extensions to three-dimensional analysis.  
15 p2611 A69-31110
- Cumulative damage analysis of random stresses.  
17 p3053 A69-32988
- An experimental study of a cumulative fatigue damage indicator.  
17 p3053 A69-32989
- DER, J. J.**  
Theoretical study of the separation of subcritical and supercritical turbulent boundary layers by the method of integral equations.  
[AIAA PAPER 69-34] 06 p0912 A69-18077
- DER, J., JR.**  
A study of general three-dimensional boundary layer problems by an exact numerical method.  
[AIAA PAPER 69-138] 06 p0911 A69-18041
- DERBENEVA, N. N.**  
Characteristics of biological effects of cosmic radiation, model investigations.  
20 p3478 A69-37628
- DERBILOV, V. I.**  
On the development of a low voltage arc in a thermionic diode with extended electrodes.  
14 p2402 A69-29244
- DEREBCHINSKII, A. I.**  
Calibration of a dE/dx-counter by cosmic ray muons /Kalibrovka dE/dx-schetchika muonami kosmicheskogo izlucheniia/.  
21 p3724 A69-39075
- DEREBERIA, N. A.**  
The temperature dependence of resistance of sintered ZrO sub 2 with an admixture of Cu sub 2 O.  
16 p2827 A69-32482
- DERESIEWICZ, H.**  
A note on Hertz's theory of impact.  
02 p0349 A69-12829
- DEREVIANCHENKO, V. T.**  
Investigation of the stressed state of turbocompressor disks /Issledovanie napriazhennogo sostoiianiia diskov turbokompresora/.  
19 p3436 A69-35850
- DEREVIANKO, N. F.**  
A frequency method for measuring the velocity of a fluid flow /O chastotnom metode izmereniia skorosti tekheniia zhidkosti/.  
04 p0598 A69-14995



- Survey of turbulent gas flows by an optical method.  
06 p0926 A69-17540
- DERFLER, H.**  
Higher-order Landau modes.  
11 p1929 A69-25265
- DERGACHEV, P. B.**  
Gyroscopic stabilization of a rotating body /K voprosu giroskopicheskoi stabilizatsii vrashchaisushchegosia tela/.  
13 p2259 A69-27428
- DERGACHEV, V. A.**  
Generation of various neutrino groups in the internal regions of the sun /O generatsii razlichnykh grupp neitrino vo vnutrennykh oblastiakh solntsa/.  
10 p1757 A69-22827
- DERGARABEDIAN, P.**  
On the structure of mature severe storms.  
[AIAA PAPER 69-671] 17 p2997 A69-33499  
Comparison of six designs of low cost launch vehicles.  
21 p3827 A69-39694
- DERGUNOV, V. P.**  
Application of tabulated singular kernels to problems associated with flexible shells made of hereditary materials /Primenenie tabulirovannykh singularnykh iader v zadachakh o gibkikh obolochkakh iz nasledstvennykh materialov/.  
08 p1413 A69-20335
- DERGUZOV, V. I.**  
Continuous dependence of the maximum index of exponential growth of the solution of a linear Hamiltonian equation with periodic operator coefficients.  
07 p1231 A69-18501
- DERIAGIN, V. N.**  
Generator of sinusoidally modulated current pulses for supplying semiconductor lasers.  
15 p2633 A69-30235
- DERIDDER, A. J.**  
Deformation processing of superalloy gas turbine components.  
[SAE PAPER 69-0101] 09 p1503 A69-21557
- DERIUGIN, I. A.**  
Optical insulator of infrared laser radiation /Opticheskii izoliator infrakrasnogo izlucheniia lazera/.  
17 p2981 A69-33117  
A noninteracting element for a quantum paramagnetic amplifier /Nevzaimnyi element dlia kvantovogo paramagnitnogo usilitelia/.  
19 p3334 A69-35883  
Modulation of laser emission by a frequency of 36.6 GHz /Modulatsiia izlucheniia OKG chastotoi 36.6 Ggts/.  
19 p3334 A69-35884  
Information capacity of a quantum system with a limited maximum number of particles /Informatsionnaia emkost' kvantovoi sistemy pri ogranichenom maksimal'nom chisle chastits/.  
19 p3334 A69-35885
- DERIUGIN, L. N.**  
Sensitivity of the memory matrix in laser-beam perforated recordings /Chuvstvitel'nost' matrits pamiatii pri perforatsionnoi zapisii lazernym luchom/.  
19 p3335 A69-36198
- DERIZEMLIA, A. N.**  
Some characteristics of reaction diffusion during vapor phase saturation of refractory metals with beryllium /O nekotorykh osobennostiakh reaktsionnoi diffuzii pri nasyshchenii tugoplavkikh metallov beriliiem iz parovoi fazy/.  
20 p3549 A69-37364
- DERKACH, P. KH.**  
Unsteady flow past a deformable surface /two-dimensional problem/ /Nestatsionarnoe obtekanie deformiruemoi poverkhnosti /ploskaia zadacha/.  
24 p4243 A69-42586
- DERKACH, V. P.**  
Electroluminescent Devices /Elektroluminescentnye Ustroistva/.  
11 p1850 A69-24976
- DERKACHEVA, L. D.**  
Stimulated emission of dyes in the 720 to 920-nm region /Stimulirovannoe izluchenie krastitelei v oblasti 720-920 nm/.  
04 p0612 A69-15373  
Stimulated luminescence of dyes in the 720-920 nm region.  
16 p2797 A69-32120  
Mode locking in lasers employing polymethine dye solutions /Sinkhronizatsiia mod v lazerakh na rastvorakh polimetinovykh krastitelei/.  
21 p3740 A69-39545
- DERMAN, C.**  
On getting close to but not beyond a boundary.  
24 p4341 A69-43235
- DERMOTT, S. F.**  
On the origin of commensurabilities in the solar system. I - The tidal hypothesis.  
07 p1223 A69-19638  
On the origin of commensurabilities in the solar system. II - The orbital period relation.  
07 p1224 A69-19639  
On the origin of commensurabilities in the solar system. III - The resonant structure of the solar system.  
10 p1771 A69-22852
- DEROSHIA, C. W.**  
Mechanisms of action of light on circadian rhythms in the monkey.  
15 p2556 A69-31336
- DEROSIER, D. J.**  
Is Venus prolate/ques/  
10 p1784 A69-23958
- DERR, J. S.**  
Free bodily vibrations of the terrestrial planets.  
17 p3031 A69-33097
- DETOUZOS, M. L.**  
On-line simulation of block-diagram systems.  
16 p2755 A69-31709
- DERUNTZ, J. A., JR.**  
The static strength of syntactic foams.  
[ASME PAPER 69-APMW-24] 24 p4336 A69-43095
- DESAI, P. V.**  
Parametric considerations in the design of a fluidic direct impact modulator.  
[ASME PAPER 69-FLCS-38] 20 p3465 A69-37983
- DESAI, R. R.**  
The effect of filament winding process variables on the performance of carbon or fiberglass reinforced NOL rings.  
08 p1338 A69-20489
- DESAI, S. V.**  
Some new transition probabilities of argon I in the range of 5000-6500 angstrom units and the role of a nonuniform source temperature.  
01 p0125 A69-10963
- DESAI, U. D.**  
Effects of electric fields on annealing of radiation damage in MOSFET's.  
05 p0733 A69-16562  
2-20 kev spectrum of X-rays from the Crab Nebula and the diffuse background near galactic anticenter.  
15 p2675 A69-30759  
Pulsed X-ray emission of NP 0532 in March 1968.  
20 p3590 A69-37574
- DESAINTFUSCIEN, M.**  
Design of a double focalization in a hydrogen maser.  
12 p2105 A69-26050  
Efficiency of a single-hyperfine-state selector for hydrogen masers.  
18 p3153 A69-35306
- DESAUTY, J.**  
Assurance of the reliability of space equipment /Assurance de la fiabilite d'un equipement spatial/.  
15 p2624 A69-30817
- DESCAMPS, J.**  
Electron microprobe study of diffusion layers on refractory alloys - Tantalum /Etude au microanalyseur a sonde electronique de couches obtenues par diffusion dans quelques alliages refractaires - Cas du tantale/.  
[ONERA-TP-665] 06 p0941 A69-17097
- DESCHAMPS, J.**  
Automatic recording with a Fabry-Perot interferometer.  
03 p0428 A69-13111
- DESCORNET, G.**  
Molecular interactions in the ammonia maser /Interactions moleculaires dans la maser a ammoniac/.  
07 p1145 A69-18478
- DESER, S.**  
Gravitation without self-interaction.  
03 p0466 A69-13388
- DESERNO, U.**  
Efficient frequency doubling with a high repetition rate YAG - Nd-giant pulse laser.  
07 p1144 A69-18469
- DESEQUELLES, J.**  
Measurement of the transition probabilities of some N I ultraviolet multiplets /Mesure des probabilites de transition de quelques multiplets ultraviolets de N I/.  
18 p3178 A69-35413
- Relative intensities and exponential decay of a doublet in N V.  
21 p3774 A69-38760
- DESHAYES, G.**  
Propagation of detonations in hydrogen-oxygen mixtures in a supersonic flow /Propagation des detonations dans les melanges hydrogene-oxygene en ecoulement supersonique/.  
08 p1420 A69-19882
- DESHAZER, L. G.**  
Spectral control of laser oscillators by secondary light sources.  
[IEEE PAPER P-3] 05 p0775 A69-16324  
Spectroscopic determination of local-field parameters.  
21 p3779 A69-38531
- DESPANDE, S. D.**  
Electromagnetic radiation from solar flares.  
05 p0813 A69-15603
- DESPANDE, S. M.**  
The Boltzmann collision integrals for a combination of Maxwellians.  
14 p2431 A69-29578  
Minimum error solutions of the Boltzmann equation for shock structure.  
14 p2431 A69-29579
- DESIENO, R. P.**  
Kerr-cell time-resolved spectra of an exploding wire.  
01 p0118 A69-10665
- DESIKAN, V.**  
Global solar radiation flux measurements over India during the IQSY.  
02 p0307 A69-11819
- DESILVA, A. W.**  
Collisionless shock waves and turbulent heating in high voltage theta pinches.  
17 p3013 A69-33825
- DESILVA, B. M. E.**  
Minimum weight design of disks using a frequency constraint.  
[ASME PAPER 69-VIBR-1] 10 p1700 A69-24159
- DESILVA, C. N.**  
A dynamical theory of elastic directed curves.  
13 p2360 A69-27321  
On the contact problem of thin elastic shells.  
19 p3438 A69-36305
- DESIRANT, M.**  
Assessment of U.S.-European cooperation in the space field.  
03 p0535 A69-13590
- DESMARES, P.**  
Rapid sampling of acoustic holograms by laser-scanning techniques.  
13 p2265 A69-28662
- DESMAZES, A.**  
The M45H medium-power jet of the next decade /Le M 45 H reacteur de moyenne puissance de la prochaine decennie/.  
24 p4363 A69-42566
- DESOER, C. A.**  
Lp-stability /1 less than p less than infinity/ of nonlinear time-varying feedback systems.  
06 p0903 A69-17411  
An extension to the circle criterion.  
06 p0905 A69-17949  
A note concerning observable but not controllable modes, and stability.  
22 p3917 A69-40135  
L super p-stability /p greater than or equal to 1 and less than or equal to infinity/ of nonlinear time-varying feedback systems.  
23 p4146 A69-42473
- DESPAIN, A. M.**  
Studies of earth airglow.  
02 p0247 A69-12810
- DESPAUTZ, J. F.**  
Nonlinear differential equations and the terrestrial brachistochrone.  
20 p3575 A69-37205
- DESPLAT, J. L.**  
Study of cesium adsorption on tungsten single crystals /Etude de l'adsorption du cesium sur des monocristaux de tungstene/.  
14 p2506 A69-29271  
Study of refractory surfaces in the presence of cesium vapors by means of an emission microscope /Etude au microscope a emission de surfaces refractaires en presence de vapeur de cesium/.  
14 p2507 A69-29276

- DESPOIT, J. A.**  
Glow discharge electron beam welding.  
04 p0608 A69-15480
- DESPRES, S.**  
Hemorrhages of the dental pulp of the rat following acute hypoxia /Hémorragies de la pulpe dentaire du rat consécutives à des hypoxies aiguës/.  
21 p3661 A69-39276
- DESSAU, P. P.**  
Composite materials development for cryogenic bearing retainers.  
[ASME PAPER 68-WA/LUB-10]  
05 p0768 A69-16133
- DESSLER, A. J.**  
Ionizing plasma flux in the Martian upper atmosphere.  
02 p0320 A69-12117  
A source for field-aligned currents at auroral latitudes.  
05 p0755 A69-16266  
Solar wind interactions and the magnetosphere.  
07 p1207 A69-19353  
General applicability of solar-wind and solar-breeze theories.  
15 p2676 A69-30858  
Field-aligned currents in the magnetosphere.  
21 p3792 A69-39567
- DESSUS, B.**  
Single-mode high-power helium-neon laser /Laser monomode de puissance à helium-neon/.  
22 p3962 A69-40473
- DESTESE, J. G.**  
A miniature atomic battery based on thermionic conversion.  
14 p2399 A69-29193
- DESTIVELLE, S.**  
Environmental tests of space vehicles /Les essais d'environnement des véhicules spatiaux/.  
02 p0228 A69-11918
- DESTUYNDER, R.**  
Influence of the aeroelastic interaction between two wing configurations - Initial experimental results /Influence de l'interaction aéroélastique entre deux plans - Premiers résultats expérimentaux/.  
17 p3061 A69-33595
- DETALLE, B.**  
Heat shielding of a rocket motor chamber for isopropyl nitrate - Its qualities of endurance and safety during repeated firing /Ludion motor/ /Les protections thermiques d'une chambre de moteur fusée a nip - Leurs qualités d'endurance et de sécurité pour des tirs répétés/moteur du Ludion/.  
17 p3019 A69-33343
- DETMENDY, D.**  
Estimating parameters of an inhomogeneous medium by probing with rays.  
18 p3172 A69-34667
- DETEMPLE, T. A.**  
Some considerations in the design of a high power, pulsed N sub 2 laser.  
01 p0091 A69-10842
- DETENBECK, R. W.**  
Correlations in light from a laser at threshold.  
13 p2271 A69-27399
- DETLEFSEN, J.**  
Electronically variable phase shifters and attenuators in strip line technology /Elektronisch steuerbare Phasenschieber und Dämpfungsglieder in Streifenleitungstechnik/.  
16 p2763 A69-32582
- DETORE, J. A.**  
The stopped-rotor variant of the propotor VTOL aircraft.  
[AIAA PAPER 69-220]  
10 p1635 A69-24087
- DETTMAN, J. W.**  
Initial-boundary value problems related through the Stieltjes transform.  
08 p1342 A69-20352
- DETTMAR, P.**  
Impulse responses of the nervus opticus to excitation of the retina with acetylcholine /Impulsantworten des Nervus Opticus auf Reizung der Netzhaut mit Acetylcholin/.  
23 p4084 A69-41465
- DETTMERING, W.**  
Methods of thrust increase and their evaluation /Methoden der Schuberoehung und ihre Bewertung/.  
23 p4199 A69-41578
- DETURK, A.**  
Exploratory tests on fiber-reinforced plates with circular holes under tension.  
24 p4404 A69-43602
- DETWEILER, H. K.**  
R-F defocusing in high-power traveling-wave amplifiers.  
07 p1094 A69-18424
- DETWEILER, M. B.**  
Analysis of N sub 2 H sub 4-RFNA reaction product.  
24 p4365 A69-43669
- DETWILER, D. P.**  
Apparatus for the precision measurement of internal friction.  
03 p0428 A69-13108
- DEUBNER, F.-L.**  
The vectormagnetograph of the Fraunhofer Institut.  
14 p2453 A69-29972
- DEUPREE, R.**  
Statistical correlations of position between X-ray sources and optical objects.  
12 p2171 A69-27155
- DEUSER, L. M.**  
Minimum mean square error approximation of unknown probability distribution functions.  
06 p0947 A69-17361
- DEUTSCH, A. J.**  
High-dispersion classification of K2-M6 giants of high and low velocity.  
13 p2338 A69-27556  
The spectrum of alpha super 2 Canum Venaticorum, 5000-6700 angstrom units.  
15 p2692 A69-30773
- DEUTSCH, F.**  
Triggering of a pressurized spark gap by a laser beam.  
04 p0612 A69-15204
- DEUTSCH, H.**  
Impedance and equivalent circuit diagram of the positive low-pressure column at small discharge current values /Impedanz und Ersatzschaltbild der positiven Niederdrucksaeule bei kleinen Entladungsstromstaerken/.  
05 p0800 A69-15742
- DEUTSCH, R.**  
System Analysis Techniques.  
08 p1298 A69-20461
- DEUTSCH, R. V.**  
Investigation of the propagation of Alfvén waves and magnetoacoustic waves in a system with helical symmetry /Studiul propagarii undelor Alfvén si a undelor magnetoacustice in sisteme cu simetrie elicoidal/.  
01 p0130 A69-10742  
The propagation of the Alfvén waves in non-homogeneous systems in the relativistic magnetohydrodynamics.  
02 p0290 A69-12254  
Propagation of Alfvén waves in non-homogeneous plasma in the presence of the homogeneous gravitational field.  
05 p0805 A69-16706
- DEUTSCH, T. F.**  
Frequency- and time-dependent gain characteristics of laser- and flashlamp-pumped dye solution lasers.  
02 p0257 A69-12616  
Iodine infrared laser.  
07 p1154 A69-19082  
Life and parameter studies on sealed CO sub 2 lasers.  
07 p1155 A69-19091  
CW operation of high-pressure flowing CO sub 2 lasers.  
23 p4173 A69-41496
- DEUTSCHER, M. P.**  
Enzymatic synthesis of deoxyribonucleic acid. XXVIII.  
22 p3898 A69-41072  
Enzymatic synthesis of deoxyribonucleic acid. XXIX.  
22 p3898 A69-41073
- DEV VERMA, S.**  
Summary of experimental verification of the flux and energy spectrum of secondary electrons at high altitudes in the atmosphere.  
09 p1490 A69-21914
- DEVANATHAN, C.**  
Study of transport properties of plasma using semiclassical quantum potential.  
05 p0799 A69-15735
- Effect of inelastic collisions on transport properties and shock structure in high temperature gases.  
19 p3448 A69-36149
- DEVANATHAN, T.**  
Ferredoxin from two thermophilic Clostridia.  
22 p3897 A69-41068
- DEVANE, M. E.**  
Multifunction single-package antenna system for spin-stabilized near-synchronous satellite.  
22 p3913 A69-40694  
VHF antenna systems for spin-stabilized satellites.  
22 p3913 A69-40695
- DEVANEY, A. J.**  
Laser display systems. I - Scanners.  
04 p0600 A69-15028  
Laser display systems. II.  
09 p1492 A69-21394
- DEVAUD, M.**  
Strioscopic methods for measuring mass volume in hypersonic wakes in a hot-shot tunnel /Methodes strioscopiques de mesure des masses volumiques dans les sillages hypersoniques en tunnel de tir/.  
19 p3293 A69-35740
- DFVAUX, P.**  
Recent developments of ultrahigh-speed cinematographic materials in France /Recents développements des matériels de cinématographie ultra-rapide en France/.  
12 p2090 A69-26197
- DEVELIS, J. B.**  
Scattering of partially coherent radiation.  
16 p2797 A69-32050
- DEVENISH, A. F.**  
Meeting the air freight challenge.  
22 p4053 A69-40483
- DEVENISH, D. M.**  
Flexible skirts.  
13 p2203 A69-28179
- DEVENYI, A.**  
Piezoresistance in amorphous germanium.  
19 p3391 A69-36559
- DEVERALL, L. I.**  
A criterion for thermal ignition of cellulosic materials.  
11 p1940 A69-24474  
A model of solid-propellant ignition in a neutral environment.  
13 p2324 A69-28218
- DEVEREUX, A. J.**  
Hovercraft Design and Construction.  
12 p2013 A69-26633
- DEVEREUX, W. P.**  
Sight reduction tables for orbital plane determination.  
07 p1177 A69-19206
- DEVIANIN, E. A.**  
Theory of inertial systems without gyroscopic sensors.  
16 p2791 A69-32283
- DEVIENTNE, F. M.**  
Formation and study of the properties of high energy molecular jets obtained from triatomic ions of hydrogen, deuterium, and nitrogen /Formation et étude des propriétés des jets moléculaires de haute énergie obtenus à partir d'ions triatomiques d'hydrogene, de deuterium et d'azote/.  
05 p0797 A69-16339  
Shock ionization by impact against a gas target of triatomic hydrogen molecules /Ionisation par chocs sur une cible gazeuse des molécules triatomiques d'hydrogene/.  
19 p3378 A69-36188
- DEVIEUX, C.**  
Signal-to-noise ratio requirements of filtered biphasic channels.  
13 p2221 A69-27959
- DEVILLERS, J.-F.**  
Detachment distance of the shock wave in front of spheres and cylinders placed in a hypersonic flow /Distance de détachement de l'onde de choc devant des sphères et des cylindres placés dans un écoulement hypersonique/.  
22 p3931 A69-40710
- DEVILLERS, P.**  
Effect of mass injection on a high-current arc.  
[AIAA PAPER 69-266]  
09 p1564 A69-21242



## DEVIME, R.

Experimental work on inhomogeneous flows  
/Travaux experimentaux sur la veine inhomogene/.  
13 p2310 A69-28032

## DEVIN, B.

All-metal nuclear thermionic module /Module ther-  
moionique nucleaire tout-metal/.  
14 p2398 A69-29181

In-pile experiments of "Sirene" thermionic conver-  
sion, and examination after irradiation of the "Sirene  
302" converter /Experiences de conversion ther-  
moionique "Sirene" en pile et examen apres irradiation  
du convertisseur "Sirene 302"/.  
14 p2481 A69-29198

French thermionic program and accomplishments.  
23 p4069 A69-42247

## DEVINE, A. T.

Adherend mechanical properties limit adhesive bond  
strengths.  
09 p1530 A69-22317

## DEVINE, C. J.

Chebyshev polynomial expansion of Bose- Einstein  
functions of orders 1 to 10.  
24 p4341 A69-43231

## DEVINE, M. J.

New sulfide addition agents for lubricant materials.  
01 p0102 A69-10907

## DEVISHEV, M. I.

Cross section for pionization in interactions of 100  
GeV cosmic ray neutrons and pions with carbon and  
lead nuclei.  
13 p2330 A69-28382

## DEVOGE, B.

Testing the reliability of the "Concorde" propulsion  
system in the ejection system /La recherche de la fi-  
abilite du propulseur de "Concorde" dans le systeme  
d'ejection/.  
16 p2837 A69-32072

## DEVOGE, M. B.

Some examples of investigation of the reliability of  
mechanical parts of aircraft turbines /Quelques exam-  
ples de recherche d'une bonne fiabilite de pieces  
mecaniques de turbomachines d'aviation/.  
17 p3020 A69-33347

## DEVORE, R. V.

Interaction of intense RF fields with heated air.  
04 p0634 A69-14453

## DEVOS, E.

Fundamental problems relative to low- temperature  
fuel cells using carbon fuels /Problemes fondamentaux  
relatifs aux piles a basse temperature utilisant des com-  
bustibles carbones/.  
08 p1259 A69-21037

Basic problems of low temperature cells using car-  
bon-containing fuels /Problemes fondamentaux relatifs  
aux piles a basse temperature utilisant des combustibles  
carbones/.  
16 p2738 A69-32408

## DEVOTO, R. S.

Transport coefficients of partially ionized hydrogen.  
04 p0637 A69-15051

Transport coefficients of partially ionized krypton  
and xenon.  
09 p1548 A69-21935

Thermal conductivity of shock-heated argon.  
18 p3228 A69-34459

## DEVRIES, K. L.

An EPR investigation of newly formed fracture sur-  
faces.  
03 p0434 A69-13871

## DEVRIES, R. P.

Importance of a relationship between dendrite for-  
mation and solidification in highly alloyed materials.  
01 p0098 A69-10899

## DEVRIESE, J.

The Concorde propulsion group /Le groupe propul-  
seur du Concorde/.  
12 p2147 A69-26357

## DEWEY, B. R.

Residual strain distribution in layered rings.  
20 p3628 A69-37774

## DEWEY, C. F., JR.

Plasma ionization enhancement by laser line radia-  
tion.  
[AIAA PAPER 69-47] 06 p0972 A69-18186

A new technique for joining porous refractory  
metals.  
20 p3548 A69-37216

## DEWEY, J. M.

Density measurements in a valve driven shock tube.  
10 p1673 A69-23342  
Calibration of shock tubes for studying aerodynamic  
loading.  
18 p3085 A69-34469

## DEWEY, M. A. P.

Boron autoradiography with the electron  
microscope.  
20 p3567 A69-38263

## DEWITT, R. L.

Pressurant gas requirements for the pressurized  
discharge of liquid hydrogen from propellant tanks.  
[AIAA PAPER 69-526] 16 p2845 A69-32737

## DEWITT, T. E.

Forming of large parts by diffusion bonding.  
[ASM PAPER C7-2.3] 04 p0604 A69-14525

## DEWITT, W. D.

Outgassing of multifoil insulation materials in sealed  
vacuum systems.  
13 p2299 A69-28016

## DEXTER, J. F.

Silicone plastics for electrical insulation.  
13 p2286 A69-27990

## DEY, D.

Advance indication as a human-engineering aid in  
manual attitude stabilization of VTOL aircraft in  
hovering flight /Die Voranzeige als  
anthropotechnisches Hilfsmittel zur manuellen  
Lagestabilisierung von VTOL- Flugzeugen im  
Schwebeflug/.  
03 p0366 A69-13645

Prediction displays - A simple way of modeling.  
19 p3313 A69-36414

## DEY, S. K.

A comparative study of the flow field about an oscil-  
lating flat plate with the numerical solution of the Navi-  
er-Stokes equations.  
[AIAA PAPER 69-226] 07 p1121 A69-19565

## DEYST, J. J.

A survey of structural flexibility effects on spacecraft  
control systems.  
[AIAA PAPER 69-116] 06 p1019 A69-18187

## DEYST, J. J., JR.

Optimum spacecraft guidance with measurement un-  
certainty.  
06 p0955 A69-17576

A derivation of the optimum continuous linear esti-  
mator for systems with correlated measurement noise.  
[AIAA PAPER 69-73] 06 p0905 A69-18121

Conditions for asymptotic stability of the discrete  
minimum-variance linear estimator.  
11 p1860 A69-25449

## DEZIDEREV, S. G.

Calculation of the temperature of turbine blades with  
effusion cooling /K raschetu temperatury turbinykh  
lopatok pri effuzionnom okhlazhdenii/.  
21 p3850 A69-38860

## DEZUBAY, E. A.

Power-weight optimization of Rankine-type cycle.  
19 p3254 A69-35957

## DHALIWAL, R. S.

Dynamic response of anisotropic elastic shells.  
23 p4235 A69-42481

## DHAR SINGH, M.

Development of a circularly polarized L and S band  
antenna with omnidirectional pattern.  
03 p0404 A69-13471

## DHARCOURT, A.

Reliability of passive components subjected to the  
action of ionizing radiation /Fiabilite des composants  
passifs soumis a l'action des radiations ionisantes/.  
15 p2627 A69-30838

## DHILLON, H. S.

Diffraction of partially coherent light by an aberr-  
ation-free annular aperture.  
14 p2460 A69-29640

## DHIR, S. K.

Stresses around two equal reinforced circular  
openings in a thin plate.  
02 p0349 A69-12799

## DHONT, S.

Influence of the anomalous skin effect on the emis-  
sivity factors of metals /Influence de l'effet anormal de  
peau sur les indicatrices d'emission des metaux/.  
23 p4177 A69-42212

## DI BENEDETTO, F.

Minimum height of the ionization of monochromatic  
radiations in the earth's atmosphere /Altezza minima  
per la ionizzazione di radiazioni monocromatiche nell'  
atmosfera terrestre/.  
13 p2256 A69-28653

## DI CASTRO, C.

Density-matrix methods and time dependence of  
order parameter in superconductors.  
22 p3994 A69-41053

## DI CERBO, M.

Analytical and instrumental technique for determin-  
ing traces of metals in some aeronautical produc-  
ts /Metodica analitico- strumentale per la determinazione  
delle tracce di metalli in alcuni prodotti aeronautici/.  
03 p0435 A69-14101

## DI CHIRICO, G.

Analysis of three-dimensional strains by means of  
moire-holographic interferometry /Analisi di defor-  
mazioni tridimensionali mediante interferometria  
moire-olografica/.  
18 p3139 A69-35280

## DI FEDERICO, I.

Heat transfer in heat-generating fluid with flat  
velocity profile and arbitrary fluid inlet and circum-  
ferential wall temperature distributions.  
03 p0530 A69-12862

## DI FRANCIA, G. T.

Phase correlation measurements of a laser beam  
propagated through a turbulent medium.  
17 p2976 A69-33857

## DI MILO, A. J.

Hydroxylamine complexes of some inorganic salts.  
17 p2917 A69-33657

Polymer network and microstructure effects on  
propellant properties.  
[AICHE PAPER 37A] 17 p3017 A69-33668

## DI NARDO, U.

Synthesis of a line filter matched to bipolar video  
pulse trains with variable envelope frequency /Sintesi  
di un filtro a linee adattato a treni di impulsi video  
bipolari a frequenza di inviluppo variabile/.  
04 p0558 A69-15071

Analysis of a coherent MTI followed by a video in-  
tegrator /Analisi di un MTI coerente seguito da un in-  
tegratore video/.  
16 p2753 A69-32438

## DI PORTO, P.

Light scattering by particles suspended in a turbulent  
fluid.  
07 p1157 A69-19417

Influence of thermal turbulence in a convective  
ascending stream on phase fluctuations of a laser beam.  
24 p4329 A69-43754

## DI PRAMPERO, P. E.

Energy utilization in intermittent exercise of  
supramaximal intensity.  
23 p4100 A69-41442

Energy cost of isotonic tetanic contractions of varied  
force and duration in mammalian skeletal muscle.  
23 p4093 A69-42065

## DI PRIMA, R. C.

A completeness theorem for non-selfadjoint eigen-  
value problems in hydrodynamic stability.  
21 p3754 A69-38426

## DI SAN MARTINO, R. C. M.

Attitude dynamics and stability conditions of a non-  
rigid spinning satellite.  
23 p4224 A69-42396

## DI SILVIO, G.

Self-controlled vibration of cylinder in fluid stream.  
13 p2360 A69-27437

## DI SORRENTINO, A. P.

Influence of flight and commercial piloting on the  
morbidity of civil aviation personnel /Influenza del volo  
e del pilotaggio di linea sulla morbosita del personale  
dell'aviazione civile/.  
18 p3098 A69-35303

## DI TARANTO, R. A.

The free vibratory bending of damped laminated  
plates.  
[ASME PAPER 69-VIBR-68] 10 p1805 A69-24158

## DI TOMMASO, S.

General semiempirical method for determining the  
performance curves of supersonic air-to-air ejectors  
/Un metodo generale semiempirico per determinare le  
curve di funzionamento di ciettori supersonici aria-  
aria/.  
21 p3644 A69-38654

## DI TORO, M. J.

Communication in time-frequency spread media using adaptive equalization.

01 p0029 A69-10554

## DI VALENTIN, M. A.

Shock-tube studies of thermal ionization of NO using mass spectrometric detection.

18 p3099 A69-34464

## DIACHEK, I. M.

Investigation of the wear resistance of briquetted lubricants on a molybdenum disulfide base /Issledovanie iznosostoičnosti briketirovannykh smazok na osnove disul'fid molibdena/.

21 p3733 A69-39805

## DIACHENKO, A. A.

Application of holograms to the analysis of wave packets in quasi-optical transmission lines /O primeneni gologram dlia analiza volnovykh puchkov v kvaziopticheskikh liniakh peredachi/.

05 p0718 A69-15650

Application of holograms to the analysis of waveguide beams in quasi-optical transmission lines.

16 p2754 A69-32507

## DIACHENKO, S. M.

Electron beam defocusing in a TWT operating in the dynamic mode /Rasfokusirovka elektronnoho puchka v LBV v dinamicheskom rezhime/.

03 p0406 A69-13974

Experimental investigation of high-frequency defocusing of the beam in a TWT /Eksperimental'noe issledovanie vysokochastotnoi rasfokusirovki puchka v LBV/.

03 p0407 A69-13975

## DIACHENKO, V. F.

Rotation and pulsation of a gravitating gas cloud /Vrashchenie i pul'satsii gravitiruiushchego oblaka gaza/.

02 p0317 A69-11955

## DIACHENKO, V. V.

Electron confinement region in electron cyclotron resonance in a magnetic mirror.

03 p0478 A69-13849

## DIACHINA, A. P.

A problem in the theory of nonlocal deformation of solid bodies /Ob odnoi zadache nelokal'noi teorii deformatsii tverdykh tel/.

23 p4226 A69-41703

## DIACHKOV, V. I.

Optimum design of satellite communications systems with frequency division multiple access /Ob optimal'-nom proektirovanii sistem sputnikovoi svyazi s chastotnym mnogostantsionnym dostupom/.

14 p2412 A69-29426

Oxidation of metals at high temperatures in the unsteady /transitional/ range. II - Experimental results of titanium oxidation /Oksienie metallov pri vysokikh temperaturakh v nestatsionarnoi /perekhodnoi/ oblasti. II - Eksperimental'nye dannye po oksieniiu titana/.

18 p3157 A69-35252

Transmission of newspaper pages in the "Orbit" system /Peredacha polos gazet v sisteme "Orbita"/.

19 p3277 A69-36567

## DIACONU, M.

Contributions to the problem of eccentric compression, taking into account a hypothesis which considers traction forces and a hypothesis which neglects them /Contributions au probleme de la compression excentrique, envisageant l'hypothese qui considere les efforts de traction et l'hypothese qui les en neglige/.

02 p0341 A69-12258

## DIADICHEV, K. M.

Pressure losses in a pipeline with a venturi tube /Poteri davleniia v truboprovode s truboi venturi/.

15 p2612 A69-33180

## DIAKONOV, E. G.

A problem of the theory of meshed shells and its difference analog /Ob odnoi zadache teorii setchatykh obolochek i ee raznostnom analoge/.

14 p2536 A69-29473

## DIAKONOV, I. U.

Calculation of two-dimensional flows of an equilibrium and perfect gas by the method of networks /Raschet dvumernykh tekhnii ravnovesnogo i sovershennogo gaza metodom setok/.

03 p0363 A69-13658

Supersonic three-dimensional flow past blunt bodies.

19 p3242 A69-36783

## DIAKONOV, V. P.

Current-voltage characteristic of a transistor in the avalanche regime.

02 p0218 A69-12266

## DIAKONOVA, M. I.

Chemical composition of seven chondrites of different types /Khimicheskii sostav semi khondritov raznykh tipov/.

01 p0026 A69-11381

## DIAKOV, A. A.

A shifted-pulse generator /Generator sdvinytykh impul'sov/.

17 p2938 A69-33899

A 100-channel information storage /100- Kanal'nyi nakopitel' informatsii/.

17 p2939 A69-33900

## DIAKOV, B. B.

Failure models and reliability analysis of thermionic converter component parts.

14 p2400 A69-29227

## DIAKOV, T.

Influence of gamma-radiation on certain parameters of transistors and diodes /Vliianie na gama-l'chenieto v'rkuh niakoi parametri na tranzistori i diodi/.

05 p0728 A69-15695

## DIAKOV, V. A.

Introduction to Quantum Electronics /Vvedenie v Kvantovuiu Elektroniku/.

20 p3556 A69-38210

## DIAKOVA, M. A.

Phase transformations in titanium alloys under nonequilibrium conditions /Fazovye prevrashcheniia v splavakh titana v neravnovesnykh usloviakh/.

07 p1162 A69-18774

## DIAKOVSKII, O. V.

Selection of structural dimensions for thermocouples in the measurement of unsteady temperatures in gases /Vybór konstruktivnykh razmerov termopar pri izmerenii nestatsionarnykh temperatur v gazakh/.

19 p3311 A69-36197

## DIAMANT, E. M.

Certain results of the observation of stellar scintillation spectra with the AZT-7 telescope at Goloseevo /Nekotorye rezul'taty nabliudeniia spektrov mertsaniai zvezd na teleskope AZT-7 v Goloseve/.

15 p2647 A69-30165

## DIAMANT, L. M.

Nanosecond image converter framing camera types.

12 p2083 A69-26141

## DIAMANT, L. S.

Space rendezvous.

21 p3824 A69-39474

## DIAMANT, P.

Two-photon counting statistics for laser and chaotic radiation.

10 p1704 A69-23658

## DIAMOND, B. L.

A generalized approach to the analysis of infinite planar array antennas.

04 p0571 A69-14311

## DIAMOND, S. D.

An organic Rankine cycle for manned space applications.

23 p4188 A69-42264

## DIANOV-KLOKOV, V. I.

Molecular parameters of the 0.7620  $\mu$  absorption band of O sub 2 and calculations of the transmission function on their basis /O molekuliarnykh parametrah polosy pogloscheniia O sub 2 0,7620 mkm i raschete po nim funktsii propuskaniia/.

03 p0458 A69-13272

Molecular parameters of the O sub 2 absorption band at 0.7620  $\mu$  and their use in calculating the transmission function.

14 p2487 A69-28780

## DIANOV, E. M.

Measurement of the luminescence quantum yield in neodymium glass /Izmerenie kvantovogo vykhoda liuminesentsii v neodimovom stekle/.

10 p1702 A69-23211

## DIATEL, N. P.

Investigation of solar activity on the basis of calcium flocculi in 1964-1965 /Issledovanie solnechnoi aktivnosti po kal'tsievym flokkulam v 1964-1965 gg./.

14 p2525 A69-29722

## DIATLOV, I. N.

Shape of the fuel jet in air stream/mechanical atomization /Forma toplivnogo fakela pri vozdukhonomekhanicheskom raspylivanii/.

11 p2002 A69-25336

## DIAZ, J. B.

Discussion and extension of a theorem of Tricomi concerning functions which assume all intermediate values.

09 p1533 A69-22797

## DIAZ, M.

Physical identification of bipolar transistors in a static regime - Development of an associated CAD program /Identification physique des transistors bipolaires en regime statique - Elaboration d'un programme de CAO associe/.

08 p1280 A69-19972

## DIAZ, R.

Exploratory tests on fiber-reinforced plates with circular holes under tension.

24 p4404 A69-43602

## DIBAI, E. A.

Observation of the H sub alpha emission line in the nucleus of the Virgo A radio galaxy /Nabliudeniia emissionnoi linii H sub alpha v iadre radiogalaktyki Deva A/.

09 p1588 A69-21360

Redshifts of some radio galaxies and quasistellar radio sources.

11 p1951 A69-24236

Physical conditions in Seyfert's galaxy NGC 4151 /Fizicheskie uslovia v galaktike Seiferta NGC 4151/.

12 p2164 A69-27021

Spectrophotometry of the nuclei of Seyfert galaxies /Spektrofotometriia iader seifertovskikh galaktik/.

12 p2164 A69-27022

UBV photometry of Seyfert galaxies /UBV-fotometriia galaktik Seiferta/.

15 p2686 A69-30537

Observations of the emission line H sub alpha in the nucleus of the radiogalaxy Virgo A.

18 p3197 A69-34750

Observations of the supernovae Chuadze and Wild /Nabliudeniia sverkhnyvykh Chuadze i Wild/.

20 p3607 A69-38038

## DICARLO, J. A.

Stage-1 interstitials in electron-irradiated tungsten.

13 p2284 A69-28682

## DICK, R. K.

A liquid-helium cryopump.

01 p0088 A69-11155

## DICKE, L. M.

Economics of commercial space stations.

06 p1007 A69-17599

## DICKE, R. H.

Origin of the globular star clusters.

09 p1599 A69-22192

The age of the Galaxy from the decay of uranium.

09 p1605 A69-22414

Some implications for physics and geophysics of laser range measurements from earth to a lunar retro-reflector.

22 p3960 A69-40190

Remarks on gravitation and cosmology.

23 p4219 A69-42329

General relativity - Survey and experimental tests.

23 p4192 A69-42330

## DICKEL, H. R.

The Cygnus X region, V - Catalogue and distances of optically visible H II regions.

09 p1596 A69-22053

## DICKEL, J. R.

Lack of phase variation of Venus.

05 p0818 A69-15601

MHz contour maps of the supernova remnants HB 9, Simeis 147, and IC 443.

09 p1604 A69-22408

Radio observations of the supernova remnant HB 21.

22 p4014 A69-40129

## DICKENS, R. J.

A galactic cluster in the direction of the Large Magellanic Cloud.

17 p3034 A69-33411

## DICKERSON, J. A.

A digitally controlled formant generator for a terminal analog speech synthesizer.

11 p1852 A69-25292

## DICKERSON, S. L.

Wall attachment at high Knudsen numbers - Experimental results. [ASME PAPER 69-FLCS-37]

21 p3692 A69-38602

Mechanics of near-earth satellite clusters. [AIAA PAPER 69-929]

21 p3809 A69-39358

## DICKERSON, W. D.

Secondary mission optimization. [AAS PAPER 68-138]

21 p3819 A69-39210

## DICKEY, J. R.

Advanced methods for predicting elastomer/ fluids interactions. [ASLE PAPER 68-LC-21]

07 p1171 A69-19306



DICKEY, R. R.

- Effects of pyrolysis-gas chemical reactions on surface recession of charring ablators.  
[AIAA PAPER 68-302] 09 p1622 A69-21982
- The development of polybenzimidazole composites as ablative heat shields. 23 p4179 A69-41715

DICKIE, E. J.

- Progress in air traffic control and its relationship to airport and aircraft development. 17 p3004 A69-34204

DICKINSON, A. S.

- Calculation of matrix elements for one-dimensional quantum-mechanical problems. 04 p0632 A69-14866

DICKINSON, B.

- Aircraft Stability and Control for Pilots and Engineers. 11 p1821 A69-24370

DICKINSON, C. J.

- A digital computer model of the effects of gravitational stress upon the heart and venous system. 24 p4271 A69-42783

DICKINSON, D. F.

- Time variations in galactic OH emission sources. 14 p2517 A69-29085
- Conditions for microwave radiation from excited OH a-doublet states. 18 p3185 A69-34292

DICKINSON, R. E.

- Planetary Rossby waves propagating vertically through weak westerly wind wave guides. 03 p0460 A69-13335
- Theory of planetary wave-zonal flow interaction. 07 p1126 A69-19037
- Vertical propagation of planetary Rossby waves through an atmosphere with Newtonian cooling. 08 p1344 A69-19812
- Propagators of atmospheric motions. I - Excitation by point impulses. 22 p3938 A69-40446

DICKINSON, S. M.

- The flexural vibration of rectangular orthotropic plates. 13 p2363 A69-28128
- Clough-Tocher triangular plate-bending element in vibration. 13 p2365 A69-28246

DICKMANN, E. D.

- Optimization of trajectories by iterative application of the maximum principle /min-H. method/ /Optimierung von Flugbahnen durch iterative Anwendung des Maximumprinzips /min-H-Methode/. [DVL-852] 04 p0548 A69-14827

DICKSON, C. R.

- Eddy velocities in the planetary boundary layer as obtained from tetron flights at Idaho Falls. 04 p0626 A69-14912

DICKSON, J.

- The centrifuge as a therapeutic device. 24 p4265 A69-43372

DICKSON, P.

- At long last, ERTS is on the way. 14 p2453 A69-29952

DICKSON, P. F.

- Adsorption kinetics in a ternary system containing hydrogen. [NAS-NRC PAPER H-4] 22 p3981 A69-40629

DICKSON, R. E.

- Optimum rendezvous intercept, and injection. 23 p4224 A69-41921

DICRISTINA, V.

- Nosetip cooling by discrete fluid injection. [AIAA PAPER 68-141] 03 p0532 A69-13559
- Three-dimensional laminar boundary layer transition on a sharp 8 deg cone at Mach no. 10. [AIAA PAPER 69-12] 06 p0863 A69-18112

DIDENKO, D. A.

- Influence of grain boundaries, crystal purity, and strain rate on discontinuous slip in aluminum at low temperatures /O vliianii granits zern, chistoty kristallov i skorosti deformirovaniia na preryvistoe skol'zhenie v aluminium pri nizkikh temperaturakh/. 21 p3750 A69-39789

DIDIER, A.

- Frequency of urinary lithiasis among aircrews /Lithiase urinaire et personnel navigant/. 24 p4267 A69-43388

- Effects of hyperventilation on flight personnel /L'hypermventilation dans le personnel navigant/. 24 p4269 A69-43410

DIDKOVSII, R.

- Experimental investigation of the metabolic relationships between hypoxia and hypoglycemia /Etude experimentale des relations metaboliques entre l'hypoxie et l'hypoglycemie/. 09 p1445 A69-22727

DIDOT, D.

- Difficulties and findings of a medical inquiry after an aircraft accident /Difficultes et enseignements d'une enquete medicale apres accident aerien/. 05 p0715 A69-16628

DIDUK, G. A.

- Method for constructing the boundaries of a region in the control-parameter space /Metod postroeniia granits oblasti v prostranstve parametrov upravleniia/. 13 p2225 A69-27967

DIDYK, R. P.

- Approximate calculation of the axisymmetric motions of the wall of a tube during deformation by an explosion /Priblizhennyi raschet osesimmetrichnykh dvizhenii stenki truby pri deformatsii vzryvom/. 02 p0254 A69-12675

DIEBOLD, J.

- Bad decisions on computer use. 05 p0850 A69-16299

DIEDE, A. H.

- Early detection at low latitudes of a polar cap event by its effect on VLF propagation. 05 p0816 A69-16276

DIEDERIKS-VERSCHOOR, I. H. PH.

- Some observations on registration of spacecraft. 20 p3637 A69-37117

DIEKMAN, J.

- Determination of the structures of the ions produced in the single and double McLafferty rearrangements by ion cyclotron resonance spectroscopy. 19 p3265 A69-36288

DIELS, J. C.

- Gain measurements at 10.6 mu in pulse-generated CO sub 2 plasmas at high pressures. 23 p4174 A69-42196

DIEM, M.

- Physics of the formation of precipitation /Physik der Niederschlagsbildung/. 24 p4343 A69-43037

DIEMEL, W. E.

- A morphological study of the solar granulation. 17 p3029 A69-33045

DIEMINGER, W.

- Summary on low-energy particle events in the ionosphere associated with the July 1966 proton flare event. 10 p1768 A69-23786

DIENES, A.

- Theory of nonlinear effects in a gas laser amplifier. I, II. 01 p0088 A69-10010

- Polarization-dependent gain saturation and nonlinearity-induced anisotropy in the 3.39-mu He-Ne laser amplifier. 14 p2457 A69-28931

- Cross saturation of 10.6-mu signals in SF sub 6. 14 p2460 A69-29602

DIENST, J. F.

- An oversize cavity for exciting the LSA mode in n-GaAs. 02 p0297 A69-11940

DIESINGER, W. H.

- Calculation of the aerodynamic properties of arbitrary slender supersonic wings /Zur Berechnung der aerodynamischen Eigenschaften beliebiger, duenner Ueberschallfluegel/. 15 p2548 A69-31170

DIESPEROV, V. N.

- On the three-dimensional sonic flow of an ideal gas past a body. 04 p0591 A69-15535

- Bodies of revolution in a sonic flow of an ideal gas /O telakh vrashcheniia v zvukovom potoke ideal'nogo gaza/. 10 p1632 A69-23364

- A second approximation in the theory of asymptotic damping of disturbances in supersonic flow of a viscous heat-conducting gas. 11 p1817 A69-24627

DIETER, M. P.

- Glucose metabolism in rat lymphatic tissues - Effects of acute and chronic exercise. 23 p4080 A69-41400

DIETER, N. H.

- High-velocity interstellar gas. 19 p3402 A69-35900

DIETERICH, E. J.

- The post attack command and control system - Airborne data automation /PACCS-ADA/, 481A. 17 p2977 A69-34110

DIETERICH, P. D.

- Primary flow meter. 04 p0600 A69-15000

DIETERLE, G.

- An electronically tunable parametric receiver amplifier as a low-noise high-frequency prestage for a radio receiver in the frequency range from 1250 to 1350 MHz /Ein elektronisch durchstimmbarer parametrischer Empfangsverstaerker als rauscharmes Hochfrequenzvorstufe fuer Radarempfaenger im Frequenzbereich 1250 bis 1350 MHz/. 18 p3104 A69-35455

DIETLIN

- Psychological study of small groups of subjects isolated on a high mountain /Etude psychologique de petits groupes de sujets isolés en haute montagne/. 21 p3661 A69-39260

DIETRICH, L.

- Load carrying capacity of bars weakened by a series of V notches and subjected to axially symmetric tensile loading /Nosnosc granicna rozciaganych osiowosymetrycznych pretow oslabionych szeregami karbow katowych/. 04 p0680 A69-15160

DIETRICH, M. W.

- Contact conformity effects on spinning torque and friction. [ASME PAPER 68-LUB-10] 15 p2628 A69-30900

DIETZ, A. G. H.

- Composite Engineering Laminates. 21 p3752 A69-38930

DIETZ, G. R.

- Radiation-processed wood-plastic materials. 04 p0605 A69-14580

DIETZ, H.

- Berlin weather map - Turbulence in the cloudless region near thunderstorms /Berliner Wetterkarte - Turbulenz im wolkenfreien Raum in der Naeh von Gewittern/. 15 p2649 A69-31210

DIETZ, K. J.

- Comparison of the propagation characteristics of nonstationary shock waves in two different types of shock tubes /Vergleich der Ausbreitungseigenschaften von nichtstationaeren Stosswellen in zwei verschiedenen Stossrohrtypen/. 18 p3119 A69-34260

DIETZ, R. D.

- Statistical equilibrium and ergodic Markov chains. 09 p1542 A69-22210

DIETZE, G.

- A partly automatic instrument for measuring skylight polarization in the daytime and at twilight /Ein teilautomatisches Geraet zum Messen der Himmelslichtpolarisation bei Tage und in der Daemmerung/. 12 p2078 A69-25892

- Zones of the visibility of a noctilucous cloud. 19 p3362 A69-36410

DIEWORTH, C.

- East-west asymmetry and charge sign ratio of primary cosmic-ray electrons at 8.3 Gv rigidity cut-off. 15 p2678 A69-31497

DIFRANCO, D. A.

- Higher-order control system dynamics and longitudinal handling qualities. [AIAA PAPER 69-768] 19 p3245 A69-35655

DIGENIS, C. J.

- The reduction of coupling between antennas on an aerospace vehicle. 05 p0729 A69-15977

DIGIOVANNI, A. J.

- Function of the Bird respirator at high altitude. 14 p2406 A69-29290

DIGIOVANNI, G.

- Exploratory tests on fiber-reinforced plates with circular holes under tension. 24 p4404 A69-43602

- DIGIUSTO, N.**  
Maintenance practices for rigid pavement.  
01 p0057 A69-11277
- DIGNAZIO, L. A.**  
Exploding bridgewire ordnance systems for a Mars space probe.  
17 p2905 A69-34108
- DIGO, R.**  
Psychopathology of airline stewardesses.  
07 p1067 A69-19434
- DIGO, R. J.**  
Psychotherapy and chemotherapy in aviation medicine /Psychotherapies et chimiotherapies en medecine aeronautique/.  
24 p4266 A69-43378
- DIJKSTRA, J. H.**  
X-ray heliography by means of a Fresnel-Soret type zoneplate camera.  
20 p3544 A69-37803
- DIKE, L. L.**  
The Lockheed hybrid system - A giant step.  
04 p0567 A69-15349
- DIKII, A. G.**  
Plasma motion in crossed inhomogeneous electric and magnetic fields /Dvizhenie plazmy v skreshchennykh neodnorodnykh elektricheskoy i magnitnoy poliax/.  
24 p4358 A69-43475
- DIKII, L. A.**  
A variational principle in the theory of adaptation of meteorological fields /Ob odnom variatsionnom printsepe v teorii adaptatsii meteorologicheskikh polii/.  
12 p2125 A69-25954  
Theory of the Fluctuations of the Earth's Atmosphere /Teoriia Kolebanii Zemnoi Atmosfery/.  
21 p3717 A69-39528
- DIKUSHIN, G. A.**  
Some ways of automating the technological conditions in single-pass electric-spark machining.  
23 p4168 A69-41308
- DILL, H. G.**  
A new insulated gate tetrode with high drain breakdown potential and low Miller feedback capacitance.  
05 p0733 A69-16556  
MOS field effect transistors formed by gate masked ion implantation.  
05 p0734 A69-16563  
Radiation effects in modified oxide insulators in MOS structures.  
06 p0976 A69-16876
- DILLARD, G. M.**  
A distribution-free sequential probability-ratio test for multiple-resolution-element radars.  
05 p0717 A69-15609
- DILLARD, P. A.**  
40 watts/pound spacecraft solar arrays.  
23 p4073 A69-42290
- DILLE, J. R.**  
Circadian rhythms and the effects of long-distance flights.  
03 p0378 A69-14260  
Drug and toxic hazards in general aviation.  
07 p1068 A69-19435  
Inflight spontaneous pneumothorax /a case report/.  
17 p2909 A69-33183  
Medical certification of civil pilots following head trauma.  
23 p4086 A69-41687
- DILLENSCHNEIDER, P. G.**  
The use of ground based flight simulators in aircraft design.  
[RAES PAPER 10] 22 p3927 A69-40490
- DILLER, D. E.**  
Refractive index of gaseous and liquid hydrogen.  
02 p0281 A69-12180  
Thermal conductivity measurements on fluid hydrogen at 17 to 200 K and pressures to 10 MN/m<sup>2</sup>.  
[NAS-NRC PAPER D-1] 22 p3998 A69-40631
- DILLEY, J. F.**  
An analysis of reentry flight measurements of shock layer microwave radiation.  
[AIAA PAPER 69-183] 06 p0865 A69-18201
- DILLON, M. A.**  
Excitation by electron impact of vibrational transitions in water and carbon dioxide at kinetic energies between 30 and 60 eV.  
06 p0960 A69-17108
- DILLON, O. W., JR.**  
Plastic deformation waves and heat generated near the yield point of annealed aluminum.  
02 p0342 A69-12280  
Thermodynamics of elastic-plastic materials as a theory with internal state variables.  
23 p4226 A69-41537
- DILLON, T. R.**  
A cesium electron-bombardment microthruster system.  
[AIAA PAPER 69-293] 09 p1561 A69-21223
- DILTS, H. S.**  
Exothermic bimetallic ignition system.  
[AIAA PAPER 69-425] 16 p2832 A69-32653
- DILWORTH, A. F.**  
Development of a process for grinding 5 micron ammonium perchlorate.  
[AIAA PAPER 69-519] 16 p2793 A69-31850
- DIMANSSTEIN, F. A.**  
Propagation of an electromagnetic wave in a space with a gravitational wave metric.  
14 p2487 A69-29669
- DIMANTHA, P. C.**  
On the domain of asymptotic stability of nonlinear nonconservative systems.  
16 p2873 A69-32059
- DIMENTBERG, F. M.**  
Contribution to the theory of finite displacements of a solid body /K teorii konechnykh peremeshchenii tverdogo tela/.  
18 p3172 A69-34589
- DIMENTBERG, M. F.**  
Resonance properties of a one-degree-of-freedom system with randomly varying resonance frequency.  
16 p2813 A69-32285  
Statistical estimate of the probability of a resonance mode in a vibrational system interacting with an excitation source of limited power /Statisticheskaya otsenka ustoychivosti rezonansnogo rezhima kolebatel'noi sistemy, vzaimodeistviushchei s istochnikom vozbuzhdeniya ogranichennoi moshchnosti/.  
18 p3171 A69-34554
- DIMITRENKO, D. A.**  
Peculiarity in the radio-emission spectrum of the Crab Nebula in the decimeter wavelength range /Ob osobennosti v spektre radioizlucheniya krabovidnoi tumannosti v deitsimetrovom diapazone voln/.  
10 p1784 A69-23941
- DIMITRIU, A.**  
The H alpha plage associated with the proton flare of July 1966.  
10 p1762 A69-23728
- DIMITROV, C.**  
Interaction between point defects and magnesium atoms in aluminum irradiated by neutrons at 78 K - Influence of concentration /Interaction entre defauts ponctuels et atomes de magnesium dans l'aluminium irradie aux neutrons a 78 deg K - Influence de la concentration/.  
05 p0781 A69-16613
- DIMITROV, O.**  
Interaction between point defects and magnesium atoms in aluminum irradiated by neutrons at 78 K - Influence of concentration /Interaction entre defauts ponctuels et atomes de magnesium dans l'aluminium irradie aux neutrons a 78 deg K - Influence de la concentration/.  
05 p0781 A69-16613
- DIMITROV, V. D.**  
Probability algorithms for the calculation of argument groups in the problem of random event prediction /Imovirnisni algoritmi metodu grupovogo vrakhuvannya argumentiv u Zadachi peredbachennia vipadkovikh podii/.  
19 p3287 A69-36664
- DIMOCK, D.**  
Plasma diagnostics with ionized barium and tunable dye lasers.  
22 p3962 A69-40532
- DIMOFTE, F.**  
On the influence of magnetic and electrical fields in gas lubrication.  
[ASME PAPER 68-LUBS-26] 13 p2267 A69-27288
- DIMOFTE, FL.**  
On the electromagnetic pumping effect in gas lubrication.  
15 p2629 A69-31003
- DIMOV, G. I.**  
Production of high-intensity hydrogen-ion beams.  
03 p0412 A69-13842
- A hydrogen jet ejected from a supersonic nozzle into a vacuum /Vodorodnaia struia v vakuume iz sverkhzvukovogo sopla/.  
19 p3240 A69-36601
- DINABURG, E. I.**  
Burning and stabilization of a hydrogen flame in an axisymmetric flow /Gorenie i stabilizatsiia plameni vodoroda v osesimmetrichnom potoke/.  
02 p0355 A69-12673
- DINESCU, A.**  
Determination of a space direction utilizing laser and optical observations of artificial satellites /Determinatie d'une direction spatiale utilisant des observations optiques et laser des satellites artificiels/.  
15 p2699 A69-31377
- DINESKU, A.**  
Preliminary determination of the spatial direction Nikolaev-Helwan /Predvaritel'noe opredelenie prostanstvennogo napravleniya Nikolaev-Khelvan/.  
12 p2068 A69-26427  
Determination of an anomalistic satellite period from passages through the same declination parallel /Opredelenie anomalisticheskogo perioda sputnika iz prokhozhenii na tu zhe paralel' skloneniia/.  
12 p2158 A69-26441
- DINGWALL, A. G. F.**  
High-yield processing for fixed-interconnect large-scale integrated arrays.  
02 p0254 A69-12467
- DINI, D.**  
Design and dynamic characteristics investigation of a high performances spherical bearing.  
16 p2793 A69-31728  
Mathematical model of the attitude dynamics of a nonrigid gyroscopic satellite /Modele mathematicque de la dynamique d'attitude d'un satellite gyroscopique non rigide/.  
17 p3048 A69-33239
- DINSDALE, W. O.**  
Significance of weld defects.  
[SBAC PAPER 17] 20 p3550 A69-37450
- DINTENFASS, L.**  
Blood rheology in pathogenesis of the coronary heart diseases.  
24 p4261 A69-42725
- DIONNE, G. F.**  
Determination of magnetic anisotropy and porosity from the approach to saturation of polycrystalline ferrites.  
16 p2825 A69-31700
- DIPPEL, K. H.**  
Results of refraction measurements perpendicular to the axis in a theta-pinch plasma /Ergebnisse aus Refraktionsmessungen senkrecht zur Achse eines Theta-Pinch-Plasmas/.  
09 p1544 A69-21302
- DIPRIMA, R. C.**  
Higher order approximations in the asymptotic solution of the Reynolds equation for slider bearings at high bearing numbers.  
[ASME PAPER 68-LUBS-18] 13 p2266 A69-27270
- DIRAC, P. A. M.**  
The quantization of the gravitational field.  
23 p4192 A69-42332
- DIRINGER, P.**  
Determination of supersonic flows associated with a given pressure law by the method of characteristics /Determinatie par la methode des caracteristiques d'ecoulements supersoniques associes a une loi de pression donnee/.  
[ONERA-TP-721] 18 p3121 A69-34636
- DIRLING, R. B., JR.**  
An approximate solution for the flow of a fluid through a porous solid.  
09 p1430 A69-21973
- DIROCHKA, A. I.**  
Coherent recombinational radiation of some semiconductors at high levels of excitation.  
19 p3387 A69-36539
- DISHMAN, B. H.**  
Air bearing table mechanization and verification of a spacecraft wide angle attitude control system.  
[AIAA PAPER 69-856] 21 p3823 A69-39384
- DISMAN, R. I.**  
Next generation miniature microwave tuners.  
07 p1102 A69-18672
- DISNEY, M. J.**  
Discovery of optical signals from pulsar NP 0532.  
08 p1394 A69-20622



- Optical candidate for pulsar PSR 0833-45.  
13 p2337 A69-27516
- Optical polarization measurements of pulsar NP 0532.  
21 p3798 A69-38542
- DISPES-MARCO, M. J.**  
Orbital transfers /Changement d'orbites/.  
06 p1007 A69-17578
- DISTEFANO, E.**  
Electrical processes in a flowing plasma with cold electrodes.  
10 p1737 A69-23466
- DISTEFANO, G. P.**  
Stability of numerical integration techniques.  
02 p0273 A69-12478  
Causes of instabilities in numerical integration techniques.  
10 p1721 A69-24042
- DITELLA, N.**  
Near-field repeatable stimulation of infrared earth horizon sensors in variable environments and test levels. [AIAA PAPER 69-322]  
09 p1478 A69-22376
- DITTMER, D. S.**  
Metabolism.  
04 p0553 A69-14908
- DITTMER, G.**  
Design of two-terminal RLC bridge networks with two reactances and three resistances/synthesis of RLC bridge circuits/ /Realisierung von RLC-Bruecken-Zweipolen mit zwei Reaktanzen und drei Widerstaenden /Synthese von RLC-Bruecken//.  
09 p1464 A69-22291
- DITTO, F. H.**  
Partial derivatives used in trajectory estimation.  
19 p3398 A69-35616
- DIUBIUK, A. F.**  
On the influence function for a problem occurring in determining the wind from the pressure field.  
09 p1536 A69-21867
- DIUBKO, G. F.**  
Simulation of the statics of hearing and vision adaptation /Modelirovanie statiki adaptatsii slukha i zreniia/.  
23 p4109 A69-41979  
Simulation of the dynamics of vision and hearing adaptation /Modelirovanie dinamiki adaptatsii zreniia i slukha/.  
23 p4110 A69-41984
- DIUBKO, S. F.**  
Hydrogen as a buffer gas in a submillimeter water-vapor laser /Vodorod v kachestve bufernogo gaza submillimetrovogo lazera na parakh vody/.  
04 p0612 A69-15175  
Hydrogen as a buffer gas in a submillimeter water-vapor laser.  
18 p3152 A69-34717  
Submillimeter CW laser operating with water vapor and HCN vapor /Submillimetrovy laser nepreryvnogo deistviia, rabotaiushchii na parakh H sub 2 O i HCN/.  
22 p3959 A69-39958
- DIUKALOV, A. N.**  
Scientific results of a flight of the lantar 1 automatic ionospheric laboratory /Nauchnye rezul'taty poleta avtomaticheskoi ionosfernoi laboratorii "Lantar-1"/.  
05 p0830 A69-16056  
Scientific results of the flight of the automatic ionospheric laboratory "Yantarr-1".  
20 p3618 A69-37966
- DIUZHEV, G. A.**  
Comparison of the probe and optical methods of measuring the parameters of low-temperature cesium plasma.  
03 p0478 A69-13836  
Low-voltage arc in thermionic converters - Comparison between theory and experiment.  
06 p0963 A69-16910  
Theoretical and experimental investigation of low-voltage arc in thermionic converter.  
14 p2404 A69-29254  
The probe and spectral investigations of dense plasma thermionic converters.  
14 p2404 A69-29256
- DIVAKOV, O. G.**  
Optimal control of the boundary layer /Ob optimal'nom upravlenii pogranichnym sloem/.  
21 p3849 A69-38846
- DIVAN, L.**  
Spectrophotometric studies of non stable stars. I.  
13 p2351 A69-27868
- Remarks on interstellar absorption in the direction of the IC 1805 cluster /Remarques sur l'absorption interstellaire dans la direction de l'amas IC 1805/.  
21 p3814 A69-39576
- Notes on the scale of absolute magnitudes of O stars /Remarques sur l'echelle de magnitudes absolues des etoiles O/.  
23 p4213 A69-41699
- DIVARI, N. B.**  
Atmospheric Optics, Akademiia Nauk SSSR, Conference on Atmospheric Optics, Pulkovo, USSR, November-December 1965 and December 1966, Transactions /Atmosferaia Optika, Akademiia Nauk SSSR, Soveshchanie po Atmosfernoi Optike, Pulkovo, USSR, November-December 1965 and December 1966, Trudy/.  
01 p0073 A69-11181  
Isophotes of zodiacal light and its terrestrial component.  
03 p0512 A69-13693  
Polarization of certain components of night-sky radiation scattered by the troposphere.  
04 p0595 A69-15247  
Solar radiation pressure on interplanetary dust particles /O davlennii solnechnogo izlucheniia na chastitsy mezplanetnoi pyli/.  
11 p1956 A69-24397  
Solar radiation pressure on particles of interplanetary dust.  
24 p4390 A69-43787
- DIVIN, I. A. N.**  
Medicinal therapy and flight safety /Lekarstvennaia terapiia i bezopasnost' poletov/.  
01 p0014 A69-10583  
Drug therapy and flight safety.  
15 p2555 A69-30753
- DIVINSKAIA, B. SH.**  
Complex application of radar and satellite observations in the analysis of meso- and macroscale systems of clouds /Kompleksnoe ispol'zovanie radiolokatsionnykh i sputnikovykh nabludenii pri analize mezo- i makromasshtabnykh oblachnykh sistem/.  
13 p2294 A69-27853
- DIXNEUF, B.**  
A transistorized L-band oscillator tuned by an yttrium garnet /Oscillateur a transistor bande L accorde par un grenat d'yttrium/.  
16 p2761 A69-32450
- DIXON-LEWIS, G.**  
Flame structure and flame reaction kinetics. II - Transport phenomena in multicomponent systems.  
01 p0175 A69-10144  
Flame structure and flame reaction kinetics. III - Measurement of temperature profiles in flames at atmospheric pressure.  
07 p1242 A69-19489
- DIXON, A.**  
ISO-braze system for refractory materials.  
04 p0607 A69-15218
- DIXON, C. J.**  
Lift augmentation by lateral blowing over a lifting surface. [AIAA PAPER 69-193]  
07 p1051 A69-19554
- DIXON, F. P.**  
Manned expeditions to Mars and Venus.  
02 p0324 A69-12304
- DIXON, H. M.**  
Performance certification theory versus operational reality.  
14 p2392 A69-29698
- DIXON, J. C.**  
An electrically insulated heat pipe for depressed collectors.  
11 p1847 A69-24746  
Heat pipe design for electron tube cooling. [ASME PAPER 69-HT-25]  
24 p4412 A69-43543
- DIXON, J. M.**  
Experimental tests with orthogonal transmission.  
03 p0395 A69-13597
- DIXON, J. R.**  
Stress distribution and buckling in thin sheets with central slits.  
10 p1796 A69-23069  
Stress distribution in a tension specimen notched on one edge.  
19 p3447 A69-36859
- DIXON, P.**  
Quantitative heat transfer measurement using thermographic phosphors.  
12 p2099 A69-27150
- DIXON, R. J.**  
Turbulent base flow on an axisymmetric body with a single exhaust jet. [AIAA PAPER 69-650]  
17 p2956 A69-33485
- DIXON, R. S.**  
A high-sensitivity 1415-MHz survey between declinations of 0 deg and 20 deg north.  
18 p3195 A69-34428
- DIXON, S. C.**  
Flutter boundary for simply supported unstiffened cylinders.  
23 p4228 A69-41914
- DIXON, W. P.**  
Thermographic heat transfer measurement.  
01 p0078 A69-10152  
Calibration apparatus for surface thermocouples.  
19 p3292 A69-35725
- DIZHUR, D. P.**  
Computer calculations of the efficiency of the Gunn generator.  
01 p0042 A69-10319  
Computer model of the Gunn diode.  
07 p1097 A69-18449
- DJERASSI, C.**  
Mass spectrometry in structural and stereochemical problems. CLXI - Elucidation of the course of the characteristic ring D fragmentation of steroids.  
07 p1069 A69-19497  
Mass spectrometry in structural and stereochemical problems. CLXVI.  
09 p1448 A69-22551  
A study of the fragmentation processes of some n-acyl-2-indolinols upon electron impact.  
15 p2561 A69-30407  
Determination of the structures of the ions produced in the single and double McLafferty rearrangements by ion cyclotron resonance spectroscopy.  
19 p3265 A69-36288  
Applications of artificial intelligence for chemical inference. I - The number of possible organic compounds - Acyclic structures containing C, H, O, and N.  
23 p4114 A69-42214
- DJEU, N.**  
Laser parameters for the 10.8-mu N sub 2 O molecular laser. [IEEE PAPER G-10]  
07 p1151 A69-19057
- DJODJO, B. A.**  
Transfer matrices for beams loaded axially and laid on an elastic foundation.  
23 p4234 A69-42400
- DJOJODIHARDJO, R. H.**  
A numerical method for the calculation of nonlinear unsteady lifting potential flow problems. [AIAA PAPER 69-23]  
06 p0862 A69-18040
- DJORDJEVIC, V.**  
Generalization of the equation for the problem of the temperature boundary layer /Universalisierung der Gleichung vom Temperaturgrenzschichtproblem/.  
10 p1808 A69-22915
- DJORDJEVICH, V. D.**  
Taylor's hydrodynamical model of a funnel diffuser /O taylorovom khidrodinamichkom modelu vikhornog rasprashivacha/.  
21 p3692 A69-38611
- DJURICIC, M. V.**  
Acidic components of Green River shale identified by a gas chromatography-mass spectrometry-computer system.  
21 p3669 A69-38983
- DLUGACH, D. I. A.**  
Method for an approximate determination of constant gaps in electrochemical machining.  
08 p1321 A69-20726
- DLUGACH, M. I.**  
Calculation of cylindrical stringer-supported shells under longitudinal load /Raschet stringernykh tsilindricheskikh obolochek, nagruzhennykh prodol'nymi silami/.  
01 p0164 A69-10083
- DLUSSKAIA, I. G.**  
Biochemical indicators of the reaction of pilots to complex conditions of flight /Biokhimicheskie pokazатели reaktsii letchikov na slozhnye usloviia poleta/.  
05 p0710 A69-16525  
Biochemical indices of the response of fliers to complex conditions of flight.  
18 p3096 A69-34744

## DMITRAKH, N. D.

Limiting equilibrium of a three-dimensional brittle body with an internal plane crack of elliptical planform /O predel'nom ravnovesii trekhmernogo khrupkogo tela s vnutrennei ploskoi treshchinoi, imeiushchei v plane formu ovala/.

18 p3226 A69-35379

## DMITRENKO, A. G.

Radiation of a "vertical" dipole positioned on the boundary of a flat semiinfinite impedance system /Izluchenie "vertikal'nogo" dipolia, raspolozhennogo na granitse ploskoi polubeskonechnoi impendansnoi sistemy/.

13 p2236 A69-28546

## DMITRENKO, I. M.

Spectral properties of weakly coupled superconductors /Spektral'ni vlastivosti slabov'iazanikh nadprovodnikov/.

14 p2504 A69-28994

## DMITRENKO, V. E.

Hydrogen-oxygen fuel cells with hydrophobic type electrodes and an alkaline electrolyte /Piles a combustible hydrogen-oxygen a electrodes d'un type hydrophobe a electrolyte alcalin/.

08 p1261 A69-21055

Hydrogen-oxygen fuel batteries based on hydrophobic type electrodes with an alkaline electrolyte /Toplivnye vodorodno-kislorodnye baterei na osnove elektrodov gidrofobnogo tipa s shchelochnym elektrolitom/.

16 p2740 A69-32426

## DMITRENKO, V. V.

Study of cosmic-ray electrons and gamma quanta at altitudes up to 27.5 km /Issledovanie ekekttronov i gamma-kvantov kosmicheskikh lucei na vysotakh do 27.5 km/.

10 p1758 A69-22830

Variations in the electron and gamma quanta intensities in the atmosphere /Ob izmeneniiax intensivnosti elektronov i gamma-kvantov v atmosfere/.

20 p3587 A69-37046

A device for recording electrons with energies from 0.1 to 1.5 Gev in cosmic radiation /Pribor dlia registratsii elektronov s energiei 0,1 to 1,5 Gev v kosmicheskom izluchении/.

21 p3724 A69-39074

## DMITREVSKY, S.

Approximate cutoff frequency of dielectric ridge waveguide, with application to traveling-wave masers.

05 p0777 A69-16579

## DMITRIENKO, A. N.

Detection characteristics of a coherent pulse packet with a random initial phase on a background of Gaussian noise of unknown intensity /Kharakteristiki obnaruzheniia kogherentnoi pachki impul'sov so sluchainoi nachal'noi fazoi na fone gausssovoi pomekhi s neizvestnoi intensivnost'iu/.

06 p0887 A69-17463

Detection characteristics of a coherent pulse train with a random initial phase against a background of a Gaussian noise of an unknown intensity.

20 p3496 A69-37946

## DMITRIEV, A.

Zond 5 circumnavigates the moon.

06 p1003 A69-17389

## DMITRIEV, B. A.

Determination of coupling coefficients from the azimuthal effect of cosmic rays /Opredelenie koefitsientov svyazi po azimutal'nomu efektu kosmicheskikh lucei/.

10 p1770 A69-23925

## DMITRIEV, B. M.

Measurement of the total heats of high-temperature polymer gasification /Izmerenie summarnykh teplov vysokotemperaturnoi gazifikatsii polimerov/.

17 p3069 A69-33133

## DMITRIEV, K. I.

Investigation of a liquid-metal jet MHD generator /Issledovanie zhidkometallichesko struinoego MGD-generatora/.

13 p2208 A69-27511

## DMITRIEV, L. I.

Effect of the rate of cooling from the homogenization temperature on the heat resistance of forgings of Khn77TiUR alloy /Vliianie skorosti okhlazhdeniia ot temperatury gomogenizatsii na zharoprochnost' pokovok iz splava Khn77TiUR/.

02 p0266 A69-12125

## DMITRIEV, S. P.

Filtration of signals given by differential equations with variable coefficients /Fil'tratsiia signalov, zadani-

nykh differentsial'nymi uravneniiami s peremennymi koefitsientami/.

13 p2218 A69-27251

## DMITRIEV, V. D.

Spectral emittance of molybdenum, tantalum, niobium, and zirconium in the infrared region of the spectrum.

05 p0846 A69-15903

Trends in the thermal emission of tungsten.

18 p3156 A69-34715

## DMITRIEV, V. G.

Theory of parametric light generators /K teorii parametricheskikh generatorov sveta/.

03 p0437 A69-13044

Frequency mixing in nonlinear electrooptical crystals /Smeshenie chastot v nelineinykh elektroopticheskikh kristallakh/.

03 p0438 A69-13047

Observation of the optical rectification effect in lithium metaniobate crystals /O nabliudenii efekta opticheskogo vypryamleniia v kristallakh metaniobata litii/.

14 p2458 A69-29168

## DMITRIEV, V. I.

Impedance of an inhomogeneous earth /Impedansy neodnorodnoi zemli/.

23 p4157 A69-41867

## DMITRIEV, V. P.

Synchronization in systems transmitting discrete information /Sinkhronizatsiia v sistemakh peredachi diskretnoi informatsii/.

18 p3104 A69-35264

## DMITRIEVA-ARRAGO, L. R.

An approximate method for determining the boundaries of clouds /O priblizhennom sposobe opredeleniia granits oblachnosti/.

20 p3569 A69-36986

## DMITRIEVA, A. I.

Breakdown localization in p-n junctions.

04 p0577 A69-14782

## DMITRIEVA, I. B.

The cathode materials of the thermoemission converters research /TEC/.

14 p2505 A69-29265

## DMITRIEVA, I. K.

Temperature distributions in a layer with internal sources of heat and in a turbulent fluid flow cooling the layer /Raspredelenie temperatur v sloe s vnutrennimi istochnikami tepla i okhlazhdaushchem ego turbulentnom potoke zhidkosti/.

15 p2718 A69-31169

## DMITRIEVA, L. K.

Distribution of atomic oxygen in the polar mesosphere at night.

12 p2070 A69-26690

## DMITRIEVA, L. V.

Conveyer growing of carrots by the aeroponic method /Konveiernoe vyrashchivanie morkovi sposobom aeroponiki/.

17 p2912 A69-32943

## DMITRIEVA, N. E.

Electrical properties of In sub 1-x Ga sub x As solid solutions /x equals 0.2-0.25/.

07 p1199 A69-18689

## DMITRUK, M. L.

Distribution of minority carriers in the space-charge layer of semiconductors.

07 p1198 A69-18506

## DMITRUK, M. V.

Continuous stimulated emission of an LaF sub 3 -Nd super 3 super plus laser at room temperature.

08 p1323 A69-19945

Continuous-wave lasers based on composite crystals of the yttriofluorite type /Opticheskie kvantovye generatory nepreryvnogo deistviia na osnove smeshannykh kristallov tipa ittrofluorita/.

13 p2273 A69-28316

Spectroscopic investigation of stimulated emission from lasers based on CeF sub 3 -Nd super 3 super plus crystals.

14 p2460 A69-29645

## DMITRUK, N. L.

Field effect in compensated p-type gallium arsenide.

07 p1199 A69-18686

## DNEPROVSKAIA, T. S.

Tunnel effects in diffused p-n junctions in gallium antimonide. I - Electrical properties /Tunnel'nye efekty v diffuzionnykh p-n-perekhodakh v antimonide galliia. I - Elektricheskie svoistva/.

21 p3780 A69-39043

## DNEPROVSKII, V. S.

Nonlinear absorption of ruby laser radiation in CdS, ZnS, and SiC /Nelineinoe pogloschenie izlucheniia rubinovogo lazera v CdS, ZnS i SiC/.

03 p0436 A69-13038

Neodymium laser with regulated pulse duration.

14 p2460 A69-29670

## DNESTROVSKII, IU. M.

Dense plasma flute instability in the presence of an electric field.

11 p1934 A69-25707

## DNESTROVSKII, IU. N.

Spatial distribution of plasma density from phase measurements.

03 p0480 A69-14138

Flute instability in an axially symmetric plasma with finite ion larmor radius.

06 p0966 A69-17520

Flute instability in a rarefied non-neutral plasma.

08 p1370 A69-21013

Determination of the spatial distribution of plasma density from the phase shift as measured by microwave multichannel probes /Opredelenie proststranstvennogo raspredeleniia plotnosti plazmy po fazovomu sdvigu pri mnogokanal'nom mikrovolnovom zondirovanii/.

14 p2497 A69-29792

## DOAN, A. S., JR.

The formation of phosphides in iron meteorites.

19 p3417 A69-36132

## DOBACZEWSKA, W.

Coupling of two geodetic systems with the aid of satellite observations /Soedinenie dvukh geodezicheskikh sistem pri pomoshchi nabliudenii iskustvennykh sputnikov zemli/.

12 p2068 A69-26426

## DOBATKIN, V. I.

Some problems associated with the improvement of the production technology and increasing the quality of titanium alloy blanks /Nekotorye voprosy sovershenstvovaniia tekhnologii proizvodstva i povysheniia kachestva polufabrikatov iz titanovykh splavov/.

07 p1161 A69-18765

## DOBBINS, D. L.

Number density determination in the atmosphere of O sub 2, H sub 2 O, and CO sub 2 gas constituents by use of a high intensity laser beam.

16 p2781 A69-32387

## DOBBINS, R. A.

A comparison of two methods of measuring particle size of Al sub 2 O sub 3 produced by a small rocket motor. [AIAA PAPER 69-146]

06 p0984 A69-18117

## DOBBS, H. S.

A high-speed photographic investigation of the controlled fracture of conducting solids and the interruption of electric current.

12 p2113 A69-26195

## DOBI, N. S.

Changing airworthiness requirements for air taxi operators and their effect on manufacturers. [SAE PAPER 690320]

15 p2549 A69-30090

## DOBIE, W. J.

Testing tires for resistance to impact, shock, and cuts.

09 p1480 A69-22735

## DOBLER, C. V.

Zeeman splitting used to increase energy from a Q-switched iodine laser.

05 p0773 A69-16288

## DOBODEICH, I. A.

Acoustic conductivity of a pipeline with control units in an engine supply system /Akusticheskaiia provodimost' truboprovoda s agregatami regulirovaniia v sisteme pitaniia dvigatelei/.

11 p1942 A69-25335

Experimental determination of the discharge coefficient of the elements of a pneumohydraulic system and of the opening time of the valve units /K voprosu ob eksperimental'nom opredelenii koefitsienta rashkoda uzlov pnevmogidrosistem i vremeni otkrytiia klapannykh ustroistv/.

18 p3094 A69-34981

## DOBRESKU-PURICE, L.

Wave propagation in connected space-time in the case of a linear second-order partial differential equation of hyperbolic type /Propagarea undelor in spatiu timp conexat in cazul unei ecuatii cu derivate partiale de ordinul II de tip hiperbolic/.

11 p1908 A69-24356



## DOBRICHEV, V.

Spectrometric study of kappa Cassiopeia. II /Spek-trofotometricheskoe izsledovanie na kappa Kasiopeia. II/.  
21 p3803 A69-38844

## DOBROKHOTOVA, M. L.

New heat-resistant materials - Polyimides and polybenzimidazoles.  
19 p3358 A69-35901

## DOBROKHOVA, V. V.

Space Flight Mechanics- Trajectories, Motion about a Center of Mass, Optimization, Control Systems /Mekhanika Kosmicheskogo Poleta- Traektorii, Dvizhenie okolo Tsentra Mass, Optimizatsiia, Sistemy Upravleniia/.  
21 p3828 A69-39816

Analytical theory of control of spherical motions of a spacecraft about its center of mass /Analiticheskaiia teoriia upravleniia sfericheskimi dvizheniiami kosmicheskogo letatel'nogo apparata vokrug sobstvennogo tsentra mass/.  
21 p3829 A69-39829

## DOBROKHOVA, N. N.

General resistance in 62-day periods of hypokinesia with exposure to acceleration.  
02 p0198 A69-11513

## DOBROTIN, B.

Mariner limit cycles and self-disturbance torques. [AIAA PAPER 69-844]  
21 p3822 A69-39374

## DOBROTIN, B. M.

SEAN - A strapdown electrostatic gyro aerospace navigator.  
19 p3369 A69-35802

## DOBROTIN, N. A.

Strong interactions at energies greater than 10 super 11 ev.  
03 p0498 A69-12939

## DOBROTT, D. R.

Determination of stellarator equilibria using guiding-center equations.  
09 p1552 A69-22044

## DOBROTT, R. D.

The application of the scanning electron microscope to the development of high-reliability semiconductor products.  
17 p2936 A69-32892

## DOBROV, W. I.

Electron loss processes in air afterglows.  
22 p4006 A69-40527

## DOBROVOLSKII, A. G.

Slip casting of a ZrC-W composition /Shlikernoe lit'e kompozitsii ZrC-W/.  
10 p1716 A69-24056

Grinding and classification of micropowders of high-melting-point compounds /Izmel'chenie i klassifikatsiia mikroporoshkov tugoplavkikh soedinenii/.  
12 p2113 A69-26256

## DOBROVOLSKII, M. V.

Liquid-Fuel Rocket Engines - Design Principles /Zhidkotochnye Raketye Dvigateli - Osnovy Proektirovaniia/.  
12 p2148 A69-27078

## DOBROVOLSKII, V. N.

Investigation of the impedance of high resistivity gallium arsenide samples with a nonlinear current-voltage characteristic /Issledovanie impedansa obraztsov vysokomnogo arsenida galliia s nelineinnoi vol'tampernoi kharakteristikoi/.  
13 p2317 A69-27881

Impedance of high-resistivity gallium arsenide samples with nonlinear current-voltage characteristics.  
21 p3782 A69-39143

## DOBRYNIN, B. M.

Nonequilibrium heating of electrons during the motion of a shock wave across a magnetic field /Neravnovesnyi nagrev elektronov pri dvizhenii udarnoi volny cherez magnitnoe pole/.  
10 p1737 A69-23470

## DOBRYSHMAN, E. M.

Certain features of the pressure and wind fields in the equatorial zone /O nekotorykh osobennostiakh poei davlennia i vetra v priekvatorial'noi oblasti/.  
14 p2478 A69-29833

On a numerical scheme of wind field prediction.  
19 p3364 A69-36506

## DOBZANSKI, M.

Quasi-phonon model of acoustic scattering on a real obstacle.  
05 p0797 A69-16649

## DOBZELECKI, A. J.

Non-linear longitudinal dynamics of an orbital lifting vehicle. [AAS PAPER 69-244]  
24 p4392 A69-42857

## DOBSON, E. B.

Simultaneous radar reflectivity measurements and refractive index spectra in the clear atmosphere.  
01 p0032 A69-10969

## DOCHERTY, J.

Nuclear radiation in the environment - Beta and gamma-ray dose rates and air ionisation from 1951 to 1968.  
22 p4007 A69-40915

## DOD, L. R.

Backfire antennas for telemetry and tracking applications.  
19 p3271 A69-36251

## DODD, R.

On board test instrumentation.  
11 p1866 A69-25080

## DODD, R. A.

Nature of slip line and substructure formation during creep in stoichiometric NiAl at temperatures between 475 deg and 775 deg C.  
19 p3343 A69-35923

## DODD, R. T.

Recrystallized chondrules in the Sharps /H-3/ chondrite.  
01 p0156 A69-10977

Metamorphism of the ordinary chondrites - A review.  
08 p1391 A69-20516

## DODD, W. W.

Search for an optical remnant of the Cassiopeia A supernova.  
24 p4389 A69-43746

## DODDS, J. I.

Reusable space transportation systems- 1970/ 1980 - An evolutionary view.  
21 p3827 A69-39693

## DODEL, G.

Experimental determination of the current density distribution in a simulated MHD generator with allowance for relaxation effects.  
10 p1734 A69-23453

## DODEMENT, G.

Radiology and thermography in reliability /La radiologie et la thermographie en fiabilite/.  
15 p2610 A69-30850

## DODERO, M. A.

The Forbush decrease of March 1966 observed in the neutron, sea-level meson, and underground meson components.  
01 p0146 A69-11129

Trains of diurnal waves in the muonic component at 70 mwe during cosmic-ray decreases.  
14 p2511 A69-28962

## DODGE, C.

HF direction finding during multimode propagation conditions.  
21 p3677 A69-39456

## DODGE, F. T.

Viscous flow-induced vibrations of a flat plate suspended in a narrow channel.  
11 p1991 A69-25515

Simulated low-gravity sloshing in spherical, ellipsoidal and cylindrical tanks. [AIAA PAPER 69-1004]  
22 p3921 A69-40378

## DODGE, H. S.

Physics of failure in spacecraft application.  
19 p3430 A69-36009

## DODGE, N. B.

Investigation of harmonic ion cyclotron wave propagation and damping in a plasma.  
21 p3777 A69-39455

## DODIN, M. G.

A special feature of the welding of polycarbonate films.  
06 p0930 A69-17094

## DODINGTON, S. H.

Recent developments of the Tacan navigation system.  
17 p3003 A69-34101

Radio navigation.  
18 p3169 A69-34848

## DODON, G.

Influence of global anomalies on S sub q variations.  
06 p0920 A69-17734

## DODONOV, L. D.

The effective electrical conductivity of a two-phase liquid-metal flow /Effektivnaia elektroprovodnost' dvukhfaznogo zhidkometallicheskogo potoka/.  
13 p2306 A69-27488

## DODRICO, S.

21-cm observations at low latitudes in the direction of the galactic centre.  
08 p1392 A69-20561

A note on the systemic velocity of M 31.  
21 p3797 A69-38484

Observations of M82 in the optical infrared.  
21 p3799 A69-38661

## DODTCHENKO, V. V.

Method of calculating the gasdynamic and electrical parameters of the two-dimensional flow of a low-temperature plasma in a coaxial type magnetogasdynamicheskii kanal /Metod rascheta gazodinamicheskikh i elektricheskikh parametrov dvumernogo techeniia nizkoterperaturnoi plazmy v magnitogazodinamicheskom kanale koaksial'nogo tipa/.  
13 p2305 A69-27386

## DODSON, C. L.

Diazomethane and deuteriodiazomethane by the base-catalyzed reaction of hydrazine with chloroform.  
06 p0885 A69-17885

## DODSON, H. W.

Increasing optical evidence for mass motions in solar flares, 1937-1967.  
06 p0993 A69-17428

The solar particle event of July 16-19, 1966 and its possible association with a flare on the invisible solar hemisphere.  
09 p1579 A69-22181

The behavior of the active region prior to the proton flare 7 July 1966, based on lambda-sweep records.  
10 p1765 A69-23746

Later development of the center of activity of the proton flare, 7 July 1966 - Optical observations.  
10 p1766 A69-23758

The history and morphology of solar activity, 1964-1965.  
15 p2679 A69-30006

## DOEHREN, H. H. V.

The Varta fuel cell system.  
08 p1261 A69-21047

The Varta fuel cell system.  
16 p2739 A69-32418

## DOEOES, B. R.

The influence of the large-scale heat sources on the dynamics of the ultra-long waves.  
09 p1491 A69-22164

## DOERFER, I.

Communication satellites.  
22 p4052 A69-40276

## DOERFLER, G.

Considerations on the sampling of extraterrestrial material. [UN PAPER 68-95381]  
01 p0150 A69-10480

Investigations on a quantitative mineralogical characterization of meteorites by modal analysis.  
19 p3416 A69-36128

## DOERING, J. P.

Vibrational excitation in ion-molecule collisions - H super plus, H sub 2 super plus, He super plus, N super plus, Ne super plus, and electrons on N sub 2.  
08 p1356 A69-20739

An experimental survey of the low energy electron scattering spectrum of nitrogen.  
22 p3935 A69-39970

## DOERING, R. D.

A model for predicting risk in proposed research and development tasks.  
04 p0689 A69-14980

## DOERRE, E. A.

Metal-to-ceramic seals for thermionic converters.  
14 p2454 A69-29211

## DOESSCHATE, W., JR.

Some limitations of the power output capability of VHF transistors.  
07 p1101 A69-18653

## DOFFIN, J.

Application to a shock tube of transistorized triggers adapted to platinum-film probes /Sur l'utilisation au tube a choc de declencheurs transistorises adaptes aux sondes a film de platine/.  
11 p1887 A69-25095

- DOFFING, C. G.**  
Fail-operational landing commands using Kalman filtering.  
17 p3003 A69-34106
- DOGANIS, R. S.**  
Airport location - The factors involved.  
22 p3926 A69-40431
- DOGLIOTTI, R.**  
Determination and layout of the eye chart for a digital transmission system by means of computer simulation /Determinazione e tracciamento del diagramma ad occhio per un sistema di trasmissione numerica mediante simulazione al calcolatore/.  
21 p3678 A69-38776
- DOHERTY, L. H.**  
Observations of four H II regions at a wavelength of 2.8 centimeters.  
09 p1598 A69-22186  
Flux densities of radio sources at a wavelength of 2.8 cm.  
22 p4014 A69-40127
- DOHERTY, M. C.**  
Applying fluidic operational amplifiers.  
15 p2554 A69-31300
- DOHNANYI, J. S.**  
Collisional model of asteroids and their debris.  
14 p2526 A69-29879
- DOHNER, C. V.**  
Theoretical evaluation of the simulation of radiative heating of planetary entry vehicles.  
[AIAA PAPER 69-634] 17 p2891 A69-33281  
Re-entry safety of isotopic systems.  
[AIAA PAPER 68-1166] 22 p3979 A69-40551
- DOHNER, C. Y.**  
Reentry safety of isotopic systems.  
[AIAA PAPER 68-1166] 03 p0465 A69-13561
- DOI, H.**  
Mechanism of plastic deformation and dislocation damping of cemented carbides.  
21 p3744 A69-38736  
A TDMA/PCM experiment on applications technology satellites.  
23 p4129 A69-42510
- DOI, M.**  
The Wiener-Hermite expansion with time-dependent ideal random function.  
15 p2644 A69-30201
- DOICH, R. V.**  
Influence of a gravitational field of arbitrary structure on Alfvén waves propagating in an inhomogeneous medium /Vliianie gravitatsionnogo polia liuboi struktury na al'fvenovskie volny rasprostraniiaushchiesia v neodnorodnoi srede/.  
23 p4223 A69-42478
- DOIG, A.**  
The proof of the pudding.  
05 p0742 A69-15883
- DOKAINISH, M. A.**  
Experimental investigation of gas turbine blade vibration - A review.  
[ASME PAPER 69-VIBR-59] 10 p1805 A69-24155
- DOKSHEVICH, A. I.**  
Integrable cases in the problem of the motion of a heavy solid body about a fixed point /Integriremnye sluchai zadachi o dvizhenii tiazhelogo tverdogo tela vokrug nepodvizhnoi točki/.  
05 p0794 A69-16206  
Variational equations corresponding to the rotation of a heavy solid body with a fixed point about the horizontal axis /Ob uravneniakh v variatsiakh, sootvetstvuiushchikh vrashcheniiu tiazhelogo tverdogo tela, imeiushchego nepodvizhnuu točku, vokrug gorizontal'noi osi/.  
11 p1917 A69-24778
- DOKTOROV, A. L.**  
Influence of Doppler distortions of a wideband signal on the accuracy of estimates of its parameters /O vlianii dopplerovskikh iskazhenii shirokopolosnogo signala na tochnost' otsenki ego parametrov/.  
09 p1454 A69-21725  
Influence of the nonoptimality of a receiver filter on the accuracy of radio-signal parameter estimates /O vlianii neoptimal'nosti fil'tra priemnika na tochnost' otsenki parametrov radioisignalov/.  
11 p1835 A69-24960  
Effect of Doppler distortions of a broadband signal on the accuracy of estimating its parameters.  
20 p3488 A69-37461
- DOKUCHAEV, L. V.**  
Dynamics of a rapidly rotating spacecraft with elastic booms /Dinamika bystrovrashchaiushchegosia kosmicheskogo apparata s uprugimi shtangami/.  
18 p3207 A69-34582  
Constructing regions of stable rotation of a spacecraft with elastic booms /Postroenie oblastei ustoiichivogo vrashcheniia kosmicheskogo apparata s uprugimi shtangami/.  
22 p4037 A69-41091
- DOKUCHAEV, V. P.**  
Generation of ionospheric perturbations by alternating currents at polar latitudes /Generatsiia ionosfernykh vozмущеchenii peremennymi tokami poliarnykh shirot/.  
23 p4155 A69-41842
- DOKUCHAEVA, O. D.**  
The study of the forbidden lines in the planetary-nebula spectra.  
19 p3423 A69-36223
- DOLADUGINA, V. S.**  
Evaporographic converter for examination of striations in materials used in the infrared.  
08 p1314 A69-20384
- DOLAN, P.**  
Cosmological consequences of an excess charge /Consequences cosmologiques d'un excès de charge/.  
18 p3206 A69-35469
- DOLAPTSCHIEW, BL.**  
Application of elementary equations of the Tzenoff type /Nielson equations/ to anholonomic dynamics /Verwendung der einfachsten Gleichungen Tzenoffschen Typs /Nielsenschen Gleichungen/ in der nichtholonomem Dynamik/.  
13 p2288 A69-27924
- DOLBNIA, V. T.**  
Application of the linear graph method to the analysis of electromagnetic processes in autonomous inverters /Primenenie metoda lineinykh grafov dlia analiza elektromagnitnykh protsessov v avtonomnykh invertorakh/.  
24 p4255 A69-42571
- DOLGACHEV, V. P.**  
Comparison of the theory of motion of remote satellites with observations /Sravnenie teorii dvizheniia dalekikh ISZ s nabludeniiami/.  
10 p1779 A69-23614
- DOLGIKH, V. IA.**  
Initial thermostructural stresses in two-dimensional media.  
17 p3058 A69-33316
- DOLGIN, V. P.**  
A basis for designing frequency-pulse integral-estimate systems using integrating chemotron tetrodes /Os-novy rascheta chastotno-impul'snykh ustroistv integral'noi otsenki na khimotronnykh integrirovushchikh tetradakh/.  
13 p2227 A69-27522
- DOLGINOV, A. Z.**  
The rotation and orientation of cosmic dust grains.  
03 p0511 A69-13420  
Dependence of the diffusion coefficient of cosmic rays on the spectrum of interplanetary magnetic field inhomogeneities and on the distance from the sun /Zavisimost' koeffitsienta diffuzii kosmicheskikh luchei ot rasstoianii do solntsa/.  
10 p1757 A69-22822
- DOLGINOV, SH. SH.**  
Results of Soviet investigations of charged particles and magnetic fields in space /Rezul'taty sovetskikh issledovanií zariazhennykh chastits i magnitnykh polei v kosmicheskomp prostranstve/.  
[UN PAPER 68-95768] 06 p0986 A69-17031  
Magnetic field investigation with interplanetary station "Venera-4".  
10 p1791 A69-24199  
Studies of the magnetic fields of the earth and planets /Issledovaniia magnitnykh polei zemli i planet/.  
13 p2336 A69-27352
- DOLGINOVA, IU. N.**  
Magnetic field decay in the group 21034 during the proton flare period of July 1966.  
10 p1766 A69-23759
- DOLGINTSEVA, G. IA.**  
Filtration of signals given by differential equations with variable coefficients /Fil'tratsiia signalov, zadannykh differentsial'nyimi uravneniiami s peremennymi koeffitsientami/.  
13 p2218 A69-27251
- DOLGOPOLOV, V. V.**  
Effect of an electromagnetic field induced by external currents on the density distribution of a plasma /Pro vplyv elektromagnitnogo polia, stvorivuvanogo zovnish-nimi strumami, na rozpodil gustini plazmi/.  
11 p1927 A69-24910  
Propagation of large-amplitude TE waves along a plasma sheet /Rasprostranenie TE voln bol'shoi amplitudy vdol' sloia plazmy/.  
15 p2569 A69-30939
- DOLGOSHEIN, B. A.**  
Measurement of the primary specific ionization in noble gases /Izmerenie pervichnoi udel'noi ionizatsii v blagorodnykh gazakh/.  
10 p1726 A69-23128  
Electron-ion recombination in the wake of an ionizing particle and the scintillation mechanism of noble gases /Elektron-ionnaia rekombinatsiia na slede ionizuiushchei chastitsy i mekhanizm tsintilliatсии blagorodnykh gazov/.  
15 p2655 A69-30961
- DOLGOV-SAVELEV, G. G.**  
Application of Michelson interferometers with large interference fields to the investigation of plasma physics /O primenении interferometrov Maikel'sona s bol'shimi poliarni interferentsii v issledovaniakh po fizike plazmy/.  
14 p2496 A69-29776  
Fabry-Perot interferometer for studying the spatial distribution of the electron concentration in a plasma /Interferometr Fabri-Pero dlia issledovaniia prostranstvennogo raspredeleniia konsentratsii elektronov v plazme/.  
14 p2451 A69-29777  
Development of a collisionless shock wave program /Razvitiie programmy po udarnym volnam bez stolknovenii/.  
17 p3012 A69-33818
- DOLGOV, A. S.**  
Dynamic effects during the condensation of films on substrates /Dinamicheskie efekty pri kondensatsii plenok na podlozhkakh/.  
21 p3775 A69-39557
- DOLGOV, IU. S.**  
Kinetics of diffusion brazing of titanium.  
22 p3958 A69-41203
- DOLGOVA, I. I.**  
Emission of sound by a boundary layer /K voprosu ob izluchении zvuka pogranichnym sloem/.  
13 p2246 A69-27538  
Sound radiation from a boundary layer.  
20 p3518 A69-38204
- DOLIA, G. P.**  
Neutron activation analysis determination of oxygen in beryllium.  
20 p3544 A69-37811
- DOLIATOVSKII, V. A.**  
A multilayer network with lateral couplings for distinguishing features in the recognition of visual patterns /Mnogosloinaia set' s lateral'nyimi svyaziimi dlia vydeleniia priznakov i opoznaniia zritel'nykh obrazov/.  
19 p3260 A69-35898
- DOLININ, N. A.**  
Certain suboptimal schemes for detecting fluctuating Poisson signals /O nekotorykh suboptimal'nykh skhemakh dlia obnaruzheniia fluktuiruiushchikh puasonovskikh signalov/.  
13 p2223 A69-28552
- DOLININ, V. N.**  
Integral-operator method for studying stress concentrations at a circular hole in the case of large strains and a physical nonlinearity /Integral'no-operatormii metod doslidzhennia konsentratsii napruzheniia pobliзу krugovogo otvora pri velikikh deformatsiiaakh ta fizichnii nelineinosti/.  
09 p1613 A69-21629
- DOLININA, N. N.**  
Integral-operator method for studying stress concentrations at a circular hole in the case of large strains and a physical nonlinearity /Integral'no-operatormii metod doslidzhennia konsentratsii napruzheniia pobliзу krugovogo otvora pri velikikh deformatsiiaakh ta fizichnii nelineinosti/.  
09 p1613 A69-21629
- DOLINSKAIA, R. A.**  
Bibliography for heat and mass transfer /Bibliografiia po teplo- i massoobmenu/.  
14 p2540 A69-29900  
Bibliography of heat and mass transfer /Bibliografiia po teplo- i massoobmenu/.  
16 p2878 A69-31960



## DOLITSKII, A. V.

Causes of the motion of the geographical poles and the nature of worldwide geophysical fields /Prichiny dvizheniya geograficheskikh poliusov i priroda mirovykh geofizicheskikh polei/.  
22 p3942 A69-41120

## DOLITSKII, A. V.

A survey of impulsive trajectories.  
16 p2857 A69-32146

How to open the heliocentric launch window for earth-Mars orbiter missions.  
[AAS PAPER 68-095] 21 p3804 A69-39201

## DOLLARD, J. F.

Common nuclear module for planetary exploration.  
[AIAA PAPER 68-590] 09 p1539 A69-21984

## DOLLE, W. C.

Shielded enclosure measurements can be accurate.  
21 p3683 A69-39439

## DOLLFUS, A.

Synthesis on the ultra-violet survey of clouds in Venus' atmosphere.  
02 p0320 A69-12111

Atlas of the Planets /Atlas des Planetes/.  
03 p0513 A69-13778

Optical determination of the diameter of the planet Venus /Determinatio optique du diametre de la planete Venus/.  
05 p0818 A69-15621

Optical properties and thickness of the Saturn rings observed edgewise in 1966 /Proprietes optiques et epaisseur des anneaux de Saturne observes par la tranche en 1966/.  
07 p1219 A69-19335

The planet Mars - The nature of its surface, and the properties of its atmosphere according to the polarization of its light. I - Observations /La planete Mars - La nature de sa surface et les proprietes de son atmosphere, d'apres la polarisation de sa lumiere. I - Observations/.  
16 p2854 A69-31655

The planet Mars - The nature of its surface and the properties of its atmosphere according to the polarization of its light. II - The nature of the soil of the planet Mars /La planete Mars - La nature de sa surface et les proprietes de son atmosphere, d'apres la polarisation de sa lumiere. II - La nature du sol de la planete Mars/.  
16 p2855 A69-31660

The physical properties of the lunar surface /Les proprietes physiques de la surface de la lune/.  
16 p2856 A69-32069

Optical properties and the thickness of Saturn's rings observed on the ring plane in 1966 /Proprietes optiques et epaisseur des anneaux de Saturne observes par la tranche en 1966/.  
20 p3605 A69-37821

## DOLLINS, C.

Precipitation of nitrogen on dislocation in niobium.  
15 p2639 A69-30585

## DOLLY, J. S.

A phase sensitive interferometer for the measurement of electron density in transient plasmas.  
22 p3946 A69-40438

## DOLOCAN, V.

On the p-n junctions at variable signals.  
03 p0491 A69-14051

## DOLOKAN, V.

Majority carrier lifetime in p-type GaAs /Vremia zhizni osnovnykh nositelei v GaAs p-tipa/.  
15 p2666 A69-30056

## DOLOWY, J. F., JR.

Fabrication-testing-design of Al-B composite materials.  
09 p1510 A69-22351

Fabrication and processing mechanisms active in Al-B composites.  
[AIME PAPER S69-6] 20 p3564 A69-38197

Thermal/mechanical strengthening of 6061 Al-B composites.  
24 p4334 A69-43449

## DOLUKHANOV, M. P.

Noise in the centimeter wave range produced by the thermal radiation of the troposphere and by precipitation.  
12 p2032 A69-26704

## DOLZHANSKII, F. V.

Calculation of atmospheric zonal circulation /O raschete zonal'noi tsirkulatsii atmosfery/.  
23 p4183 A69-41522

## DOLZHENKOV, A. A.

Theory of switching scanning antennas.  
05 p0729 A69-16082

## DOLZHIKOV, V. V.

Calculation of smooth multiwave waveguide junctions. I, II /K raschetu plynnykh mnogovolnovnykh volnovodnykh perekhodov. I, II/.  
23 p4125 A69-42046

## DOMALAIN, M.

Image intensifier tubes and slit-type electronic cameras with high-sensitivity multiple integral images - Applications /Tubes intensificateurs d'images et cameras electroniques et fentes et a images integrales multiples a haute sensibilite - Applications/.  
12 p2083 A69-26143

## DOMB, U.

Effect of linearization of the three-body problem near L sub 2.  
19 p3402 A69-35961

## DOMBKOVSKAIA, E. P.

Relation between cloud masses observable from a satellite and the zones of precipitation /Sviaz' mezhdu oblachnymi massivami, vidimymi so sputnika, i zonami vypadaushchikh iz nikh osadkov/.  
19 p3366 A69-36671

Correlation between the thermal radio emission intensity of the earth-atmosphere system and the moisture content of clouds /Korrelatsionnaia zavisimost' mezhdu intensivnost'iu teplovogo radioizlucheniia sistemy zemlia-atmosfera i vodozapasom oblakov/.  
23 p4184 A69-42488

## DOMBROVSKAIA, E. V.

Heat resistance of ZhS6-K alloy subjected to multicomponent diffusion saturation /Zharostoikost' splava ZhS6-K posle mnogokomponentnogo difuzionnogo nasyscheniia/.  
19 p3345 A69-36159

## DOMBROVSKII, G. A.

On linearized theory of a profile in subsonic flow.  
19 p3241 A69-36782

## DOMEIJ, B.

Lattice location of dopant elements implanted into Ge.  
07 p1199 A69-18903

## DOMENICO, A. J.

Recent advances in microstrip circulators.  
13 p2230 A69-27679

## DOMMANGET, J.

Observation of the asteroid Icarus at the Royal Observatory of Belgium /Observation de l'asteroide Icare a l'Observatoire Royal de Belgique/.  
14 p2521 A69-29584

Study of the characteristics of an invisible body perturbing the motion of a star /Etude des caracteristiques d'un corps invisible perturbant le mouvement d'une etoile/.  
17 p3034 A69-33407

## DOMMASCHK, W.

Excitation of oscillations between the ion cyclotron and electron plasma frequency in an ion-beam generated plasma.  
17 p3014 A69-33830

## DOMOKOS, A.

Reliability and safety of flight.  
08 p1322 A69-21106

## DONACHIE, M.

The potential of titanium castings in gas turbine engines.  
[ASME PAPER 69-GT-24] 09 p1513 A69-22494

## DONACHIE, M. J.

Materials for advanced airbreathing aircraft engines.  
[ASM PAPER D8-25.2] 20 p3586 A69-38133

## DONACHIE, M. J., JR.

Jet engine materials for the 1970's.  
09 p1523 A69-22061

Relationship of properties to microstructure in cobalt-base superalloys.  
14 p2465 A69-29891

## DONAGHY, R. E.

Apollo extravehicular communication telemetry subsystem.  
23 p4121 A69-41767

## DONAHUE, T. E., JR.

The definitive arrangements for INTELSAT.  
20 p3637 A69-37121

## DONAHUE, T. M.

The problem of using Mariner IV ionospheric densities to deduce a model of the Martian atmospheric structure.  
02 p0320 A69-12114

Collision processes relevant to aeronomy.  
07 p1130 A69-19654

Deuterium in the upper atmospheres of Venus and earth.  
[SRCC-91] 09 p1594 A69-21696

A hydrogen bulge over the springtime pole.  
18 p3129 A69-34956

## DONALDSON, C. D.

A computer study of an analytical model of boundary-layer transition.  
[AIAA PAPER 68-38] 09 p1482 A69-21948

## DONALDSON, E. E.

Interference predictions - Philosophies, objectives, and future directions.  
23 p4126 A69-42221

## DONALDSON, J. R.

The lunar crater Dawes.  
11 p1952 A69-24264

## DONALDSON, R. J., JR.

Plan shear indicator for real-time Doppler radar identification of hazardous storm winds.  
18 p3139 A69-35427

## DONATI, S.

The statistical behavior of the scintillation detector - Theories and experiments.  
22 p3947 A69-40670

## DONATONI, A.

Passive attitude stabilization of an interplanetary probe.  
17 p3047 A69-33225

## DONCHENKO, V. A.

"Spotted" structure of the scattered background during the propagation of laser radiation /O "piatnistoi" strukture rasseiannogo fona pri rasprostraneni lazernogo izlucheniia/.  
13 p2273 A69-28550

## DONCHEV, T.

Behavior of the solution of a second-order elliptic equation /O povedenii resheniia ellipticheskogo uravneniia vtorogo poriadka/.  
06 p0947 A69-17393

Pulse investigation on thermionic converters.  
14 p2403 A69-29252

## DONCHIN, E.

Discriminant analysis in average evoked response studies - The study of single trial data.  
22 p3890 A69-40163

## DONDI, M. G.

Energy dependence of the elastic total collision cross section of identical molecules - super 4 He.  
19 p3378 A69-36186

## DONEA, J.

Limiting state of a square plate subjected to shear and reinforced by a vertical stiffener /Etat limite d'une plaque carree, cisaillee, renforcee par un raidisseur vertical/.  
24 p4399 A69-42967

## DONEGA, H. M.

Flame emission analysis for sodium in silicon oxide films and on silicon surfaces.  
[ECS PAPER 306] 08 p1314 A69-20367

## DONELY, P.

The pilot's choice - Off the end or off the side of the runway.  
[SAE PAPER 690375] 23 p4062 A69-41652

## DONER, D. R.

Structural behavior of laminated graphite filament composites.  
08 p1337 A69-20483

## DONETS, I. G.

Development of techniques for the production of nickel reinforced with mullite whiskers.  
05 p0782 A69-16794

## DONG, S. B.

Free vibration of laminated orthotropic cylindrical shells.  
06 p1020 A69-17145

## DONHAM, R. E.

Ground and air resonance characteristics of a soft in-plane rigid-rotor system.  
[AIAA PAPER 69-205] 07 p1055 A69-19559

Dynamics of a rigid-rotor controlled by a high-speed gyro as it slows/stops at high forward speed.  
[AHS PAPER 343] 17 p2899 A69-33508

## DONIAT, D.

Fundamental problems relative to low-temperature fuel cells using carbon fuels /Problemes fondamentaux relatifs aux piles a basse temperature utilisant des combustibles carbones/.  
08 p1259 A69-21037

- Study of electrochemical oxidation of hydrocarbons on platinum /Etude de l'oxydation electrochimique des hydrocarbures sur le platine/.  
08 p1268 A69-21052
- Basic problems of low temperature cells using carbon-containing fuels /Problemes fondamentaux relatifs aux piles a basse temperature utilisant des combustibles carbonés/.  
16 p2738 A69-32408
- Study of electrochemical oxidation of hydrocarbons on platinum /Etude de l'oxydation electrochimique des hydrocarbures sur le platine/.  
16 p2740 A69-32423
- DONII, V. N.**  
Evaluation of the exponent in the mass distribution law of meteoric bodies for the Leonids in 1967 /Otsenka pokazatelya stepeni v zakone raspredeleniia meteornykh tel po massam dlia potoka Leonid 1967 g./.  
18 p3203 A69-35334
- DONIN, V. I.**  
Single-mode generation and Lamb dip in an argon ion gas laser /Odnomodovyi rezhim i lembov proval v gazovom lazere na ionakh argona/.  
10 p1706 A69-24080
- DONKER, D. N. J.**  
Lambda waves in EEG of normal adults and their relation to complexity of visual imagery.  
24 p4268 A69-43401
- DONLEY, J. L.**  
Photoelectron flux in the topside ionosphere measured by retarding potential analyzers.  
11 p1950 A69-25144  
The thermal ion and electron trap experiments on the Explorer XXXI satellite.  
20 p3544 A69-37878  
Comparison of results of Explorer XXXI direct measurement probes.  
20 p3531 A69-37882
- DONLEY, N. J.**  
On luminance additivity and related topics.  
22 p3880 A69-40849
- DONN, B.**  
Extinction by interstellar grains, Mie particles and polycyclic aromatic molecules.  
10 p1781 A69-23679  
Ionization and ray formation in comets.  
13 p2349 A69-27817
- DONN, W. L.**  
Infrasound at long range from Saturn V, 1967.  
03 p0509 A69-13358  
Milankovitch radiation variations - A quantitative evaluation.  
03 p0426 A69-14232
- DONNADIEU, A.**  
Experimental study of the light absorption of indium and gallium thin films /Etude experimentale de l'absorption lumineuse de couches minces d'indium et de gallium/.  
10 p1747 A69-23792
- DONNELLY, D. P.**  
Detection of metastable atoms and molecules with continuous channel electron multipliers.  
22 p3917 A69-41235
- DONNELLY, F.**  
Design evolution of mechanically despun antennas from ATS to Intelsat.  
03 p0403 A69-13239
- DONNELLY, F. E., JR.**  
The design of the mechanically despun antenna for the Intelsat-III communications satellite.  
22 p3913 A69-40691
- DONNELLY, R. F.**  
The X-ray and extreme ultraviolet radiation of the 7 July 1966 proton flare as deduced from sudden ionospheric disturbance data.  
10 p1766 A69-23756  
Contribution of X-ray and EUV bursts of solar flares to sudden frequency deviations.  
11 p1950 A69-25160
- DONNELLY, R. J.**  
Hydromagnetic duct flow - Theory and experiment.  
01 p0132 A69-11209
- DONOHUE, J.**  
Dynamics of pulsed-microwave breakdown in a nonuniform field.  
07 p1107 A69-19448  
Electron recombination and diffusion in CO at elevated temperature.  
22 p3984 A69-40478
- Radiation patterns of a slot antenna in the presence of a breakdown sheath.  
23 p4116 A69-41595
- DONOHUE, J. H.**  
Thermoelastic instability of open section booms.  
07 p1231 A69-18331
- DONOLATO, C.**  
Influence of hydrogen content on the relaxation spectrum of alpha titanium.  
01 p0096 A69-10614
- DONOVAN, B. V.**  
Electron-temperature, density and gas- temperature measurements in an argon afterglow.  
15 p2658 A69-30173
- DONOVAN, L. F.**  
A numerical solution of unsteady flow in a two-dimensional square cavity.  
[AICHE PAPER 25C]  
04 p0587 A69-14510
- DONSKOI, A. V.**  
Electrochemical dimensioning of turbine blades.  
04 p0605 A69-14560
- DONSKOI, I. A.**  
Ionization manometer transducers for measuring pressures from 10 super minus 10 to 10 super minus 1 torr /Ionizatsionnye manometricheskie preobrazovateli dlia izmereniia davlenii 10 super minus 10 to 10 super minus 1 torr/.  
21 p3724 A69-39077
- DONSKOI, K. V.**  
Nonequilibrium heating of electrons during the motion of a shock wave across a magnetic field /Neravnovesnyi nagrev elektronov pri dvizhenii udarnoi volny cherez magnitnoe pole/.  
10 p1737 A69-23470
- DONTSOVA, V. V.**  
Measurement of the radiation divergence of gas lasers operating in the TEM sub nm modes /Izmerenie rashodimosti izlucheniia gazovykh lazerov pri generatsii na modakh TEM sub nm/.  
07 p1148 A69-18804  
Measurement of the divergence of the radiation of gas lasers operating in TEM sub nm modes.  
21 p3736 A69-38949
- DOOHER, J.**  
Spectral density sum rules, current algebra, and zero-mass extrapolations.  
17 p3008 A69-33004
- DOOLEN, G.**  
Maximum number of binary collisions for three relativistic point particles.  
08 p1353 A69-19788
- DOOLITTLE, P. H.**  
Dissociative photoionization of O sub 2.  
06 p0960 A69-17110
- DORAN, H. E.**  
The half-plane with an edge crack in plane elastostatics.  
11 p1987 A69-25438
- DORAN, R. J.**  
Needed - A fresh view of military avionics.  
18 p3109 A69-35140
- DORAND, R.**  
Utilization of the exhaust gases of various turbine engines for powering jet-driven rotors with controlled circulation /Utilisation des gaz d'echappement de diverses turbomachines pour l'entrainement en rotation de voilures tournantes thermopropulsees comportant la circulation controlee/.  
17 p3020 A69-33344
- DORBAND, A. E.**  
An automatic multichannel instrument for monitoring electrical transients on aircraft.  
17 p2947 A69-34135
- DORE, B. D.**  
The viscous damping of internal waves on the rotating earth.  
02 p0247 A69-12775  
A contribution to the theory of viscous damping of stratified wave flows.  
23 p4153 A69-42408
- DORE, F. J.**  
Aircraft design and development experience related to reusable launch vehicles.  
21 p3826 A69-39689
- DOREMUS, J. P.**  
A spherically symmetrical water-bag model /Modele de l'outre en symetrie spherique/.  
16 p2866 A69-32813
- DORENBOS, T.**  
Frequency analysis of heart murmurs.  
24 p4279 A69-43800
- DORFMAN, E.**  
Poly /2,4-perfluoroalkylene-6- perfluoroalkyl-triazine/ s - New high temperature elastomers.  
19 p3264 A69-35535
- DORFMAN, J. R.**  
Theory of transport coefficients for moderately dense gases.  
14 p2540 A69-29469
- DORFMAN, L. A.**  
Flow of a viscous fluid between a fixed disk and a blown rotating disk.  
07 p1119 A69-18743
- DORFMAN, S. D.**  
Attitude control problems in earth-oriented spacecraft - An illustrative example.  
06 p1015 A69-17586
- DORIA, M. L.**  
Some general results for non-reacting binary mixtures of fluids.  
12 p2191 A69-26927
- DORIAN, C.**  
Mobile communications via satellite.  
23 p4114 A69-41355
- DORIER**  
Electronic counterrotating antenna of high directivity /Antenne contre-rotative electronique a grande directivite/.  
04 p0578 A69-15065
- DORIGO, M. V.**  
A simple grating spectrometer for the far infrared /Ein einfacher Gitterspektrometer fuer das ferne Infrarot/.  
21 p3726 A69-39682
- DORKEL, J.**  
Study of aging of microwave varactors and improvement of their reliability by selection /Etude du vieillissement de varactors hyperfrequences et de l'amelioration de leur fiabilite par selection/.  
15 p2627 A69-30839
- DORLEANS, J.**  
Assistance rendered by the computer to the engineer responsible for the reliability of a system /Aide apportee par l'ordinateur a l'ingenieur responsable de la fiabilite d'un systeme/.  
04 p0608 A69-15224  
The computer as an aid to the system reliability engineer.  
15 p2572 A69-31042  
Accuracy of calculations of reliability predictions /Precision des calculs previsionnels de fiabilite/.  
17 p2937 A69-33389
- DORLING, E. B.**  
Rocket studies of sporadic-E ionisation.  
16 p2780 A69-32310
- DORMAN, G.**  
Interaction of a relativistic electron beam with an inhomogeneous plasma.  
04 p0637 A69-15046
- DORMAN, I. V.**  
Cosmic rays and solar-wind dynamics. I /Kosmicheskie luchy i dinamika solnechnogo vetra. I/.  
02 p0306 A69-11657  
Cosmic rays and solar-wind dynamics. II /Kosmicheskie luchy i dinamika solnechnogo vetra. II/.  
09 p1575 A69-21524  
Properties of the boundary between the solar wind and the interstellar medium according to cosmic-ray data /Svoistva granitsy mezhdu solnechnym vetrom i mezhsvezdnoi sredoi po dannym o kosmicheskikh luchakh/.  
10 p1757 A69-22825  
Effect of solar activity on the electromagnetic conditions in interplanetary space according to data concerning the modulation effects in cosmic rays /Vozdeistvie solnechnoi aktivnosti na elektromagnitnye uslovia v mezplanetnom prostranstve po dannym o modulatsionnykh effektakh kosmicheskikh luche/.  
10 p1759 A69-22841  
Cosmic rays and the dynamics of the solar wind. I.  
13 p2333 A69-28688  
Cosmic rays and the dynamics of the solar wind. II.  
16 p2851 A69-32519
- DORMAN, L. I.**  
Cosmic rays and solar-wind dynamics. I /Kosmicheskie luchy i dinamika solnechnogo vetra. I/.  
02 p0306 A69-11657



Cosmic rays and the solar wind /Kosmicheskie luchy i solnechnyi veter/.  
03 p0500 A69-13355

Determination of the cosmic-ray modulation spectrum in interplanetary space.  
03 p0501 A69-13527

Solar-diurnal Cosmic-Ray Variations from Maximum to Minimum Solar Activity /Solnechno-sutochnye variatsii kosmicheskikh luchei ot maksimuma do minimuma solnechnoi aktivnosti/.  
07 p1209 A69-19500

Cosmic rays and solar-wind dynamics. II /Kosmicheskie luchy i dinamika solnechnogo vetra. II/.  
09 p1575 A69-21524

Investigation of cosmic-ray variations as a means of studying the interplanetary medium /Issledovanie variatsii kosmicheskikh luchei kak metod izucheniia mezplanetnoi sredy/.  
10 p1755 A69-22811

Problems associated with the origin of cosmic rays in the light of measurements of the energy spectrum and stellar-diurnal variations /Voprosy proiskhozhdeniia kosmicheskikh luchei v svyazi s izmereniami energeticheskogo spektra i zvezdno-sutochnykh variatsii/.  
10 p1757 A69-22823

Spectrum of magnetic inhomogeneities in interplanetary space and cosmic-ray variations /Spektr magnitnykh neodnorodnostei v mezplanetnom prostranstve i variatsii kosmicheskikh luchei/.  
10 p1757 A69-22824

Properties of the boundary between the solar wind and the interstellar medium according to cosmic-ray data /Svoistva granitsy mezhdu solnechnym vetrom i mezzhzvezdnoi sredoi po dannym o kosmicheskikh luchakh/.  
10 p1757 A69-22825

Spectrographic method of analyzing the variations in cosmic-ray intensity /Spektrograficheskii metod analiza variatsii intensivnosti kosmicheskikh luchei/.  
10 p1759 A69-22836

Effect of solar activity on the electromagnetic conditions in interplanetary space according to data concerning the modulation effects in cosmic rays /Vozdeistvie solnechnoi aktivnosti na elektromagnitnye uslovia v mezplanetnom prostranstve po dannym o modulatsionnykh efektakh kosmicheskikh luchei/.  
10 p1759 A69-22841

Cosmic-ray modulation by a solar wind whose characteristics depend on the angle between the wind and the helioequatorial plane /O modulatsii kosmicheskikh luchei solnechnym vetrom, kharakteristik kotorogo zavisiat ot ugla s ploskost'iu gelioekvatora/.  
10 p1759 A69-22842

Processing of cosmic ray variation data with the aid of electronic computers /Obrabotka dannykh po variatsiiam kosmicheskikh luchei pri pomoshchi elektronnykh vychislitel'nykh mashin/.  
13 p2327 A69-27609

Cosmic rays and the dynamics of the solar wind. I.  
13 p2333 A69-28688

Dependence of cosmic-ray increases on the structure of the interplanetary magnetic field before Forbush effects /Zavisimost' vzrastaniia kosmicheskikh luchei perez Forbush-effektami ot struktury mezplanetnogo magnitnogo polia/.  
14 p2512 A69-29044

Cosmic ray variations - Theory.  
15 p2673 A69-30015

Cosmic rays and the dynamics of the solar wind. II.  
16 p2851 A69-32519

Possibility of reconciling measurements on proton satellites with data for the diurnal stellar variation and with various models of the origin of cosmic rays /O vozmozhnosti soglasovaniia izmerenii na sputnikakh "proton" s dannymi o zvezdno-sutochnoi variatsii i s razlichnymi modelami proiskhozhdeniia kosmicheskikh luchei/.  
19 p3396 A69-36621

Distortion of the outer anisotropic flux of galactic cosmic rays in the solar system /Ob iskazhenii vneshnego anizotropnogo potoka galakticheskikh kosmicheskikh luchei v solnechnoi sisteme/.  
23 p4205 A69-41837

Acceleration of cosmic rays by corpuscular fluxes and the characteristics of the solar wind /Uskorenie kosmicheskikh luchei korpuskuliarnymi potokami i kharakteristiki solnechnogo vetra/.  
23 p4205 A69-41838

DORMAN, L. J.

Solar Cosmic Rays /Solnechnye Kosmicheskie Luchy/.  
14 p2514 A69-29816

DORN, J. E.

Interstitial impurity effects on the mechanical properties of molybdenum single crystals.  
01 p0095 A69-10609

DORNEY, D. C.

Design, construction and testing of NASA's liquid-oxygen and liquid-hydrogen barges.  
01 p0056 A69-11150

DORNIER, S.

Review of post-war research and development at Dornier.  
22 p3862 A69-39931

DORNSEIF, E. R.

Modern traveling-wave tubes for space application.  
13 p2232 A69-28055

DOROFEEV, M. T.

Calibration of a dE/dx-counter by cosmic ray muons /Kalibrovka dE/dx-schetchika miuonami kosmicheskogo izlucheniia/.  
21 p3724 A69-39075

DOROFEEV, V. I.

Mass-spectrometer investigation of ions formed by interaction between laser radiation and matter.  
06 p0932 A69-16921

DOROFEEVA, N. S.

Investigation of the shape and drift of focusing ionospheric discontinuities /Issledovanie formy fokusiruiushchikh neodnorodnostei ionosfery i ikh dreifa/.  
14 p2436 A69-29054

DOROSHENKO, A. N.

Observation of the effect of spectral line distortion in a pulse high-frequency plasma /Nabludenie efekta iskrivleniia spektral'nykh liniy v impul'snoi vysokochastotnoi plazme/.  
14 p2497 A69-29791

DOROSHENKO, V. E.

Effect of sound on a turbulent flame /O vozdeistvii zvuka na turbulentnoe plamia/.  
17 p3069 A69-33141

DOROSHENKO, V. T.

Study of several emission nebulae in the H-alpha line by means of the Fabry-Perot etalon /Issledovanie neskol'kikh emissionnykh туманностей v linii H alpha s pomoshch'iu etalona Fabry-Perot/.  
20 p3607 A69-38039

DOROSHKEVICH, A. G.

Neutrinos in anisotropic cosmological solutions.  
01 p0123 A69-10348

Anisotropy of the early stages of cosmological expansion and relic emission /Anizotropiia rannikh stadii kosmologicheskogo rasshireniia i reliktovnogo izlucheniia/.  
09 p1593 A69-21568

Thermal conditions of the intergalactic gas /IGG/ /Teplovii rezhim mezgalakticheskogo gaza /MGG//.  
11 p1954 A69-24381

Thermal conditions in the intergalactic gas.  
24 p4389 A69-43771

DORRER, G. A.

An electrical simulation technique for plants with distributed parameters /Ob odnom sposome elektricheskogo modelirovaniia ob'ektov s raspredelennymi parametrami/.  
09 p1471 A69-21436

The problem of optimum gathering of information in systems for controlling distributed technological processes in the presence of random effects /Zadacha optimal'nogo sbora informatsii v sistemakh upravleniia raspredelennymi tekhnologicheskimi protsessami pri sluchainykh vozdeistviakh/.  
09 p1471 A69-21437

DORROUGH, D. C.

A methodical approach to analyzing and synthesizing a self-repairing computer.  
12 p2034 A69-25941

DORSCHNER, J.

An eruptive variable star in Hercules /Ueber einen eruptiven Veraenderlichen in Hercules/.  
08 p1382 A69-19871

DORSCHU, K. E.

Process considerations play important role.  
08 p1320 A69-20410

DORSEY, R. S.

Simulation method applied to reliability analysis of turbojet engine components operating in airline service.  
19 p3394 A69-36042

DOSANJH, D. S.

An experimental investigation of the formation and flow characteristics of an impulsively generated vortex street.  
[ASME PAPER 68-FE-32] 05 p0748 A69-16079

Underexpanded jet noise reduction using radial flow impingement.  
[AIAA PAPER 68-81] 13 p2248 A69-28212

Mach disc and Riemann wave in underexpanded jet flows.  
[AIAA PAPER 69-665] 17 p2954 A69-33460

Interaction of an advancing shock front with a concentrated heat /entropy/ source.  
18 p3228 A69-34468

Shock structure in transversely impinging jet flows.  
[ASME PAPER 69-FLCS-41] 20 p3515 A69-37975

DOSE, V.

Polarization of Lyman alpha radiation in hydrogen-rare-gas collisions.  
08 p1355 A69-20207

DOTCHIN, L. W.

Radiative mean-life measurements of some atomic-hydrogen excited states using beam-foil excitation.  
03 p0469 A69-12920

A study of hydrogen Lyman alpha radiation using the beam-foil excitation method.  
03 p0471 A69-13167

NOTE, T.

A method of determining the potential of a plasma from an RF probe.  
07 p1130 A69-18300

DOUAT, M.

Test methods in the rocket-propulsion field.  
16 p2765 A69-31751

DOUCET, F.

Aid rendered by CAD in choosing components with a view to circuit optimization /Aide apportee par le CAO pour le choix des composants en vue de l'optimisation des circuits/.  
15 p2628 A69-30849

DOUCET, H.

Simultaneous measurements of ion-acoustic-wave potential and plasma density perturbation to yield gamma sub e.  
03 p0475 A69-13148

DOUCET, M. T.

Computer simulation of an onboard navigation computer /Simulation sur ordinateur d'un calculateur de navigation embarque/.  
20 p3502 A69-37398

DOUGAL, A. A.

Stop- and pass-bands for harmonic ion cyclotron waves.  
06 p0970 A69-17953

Interaction of optical-maser beams with ionized gases.  
13 p2273 A69-28464

Laser induced breakdown in high pressure gases.  
21 p3738 A69-39445

Two-wavelength, single-exposure holographic interferometry.  
21 p3725 A69-39448

Investigation of harmonic ion cyclotron wave propagation and damping in a plasma.  
21 p3777 A69-39455

DOUGALL, R. S.

Local heat transfer downstream of abrupt circular channel expansion.  
[ASME PAPER 69-HT-35] 24 p4411 A69-43532

DOUGHERTY, J. D.

Epidemiology of aerial application accidents.  
09 p1447 A69-22554

Variation in the annual general aviation accident rate as it relates to flight training.  
19 p3262 A69-36448

Prediction of the annual general aviation accident rate from annual variation in flight training.  
23 p4062 A69-41793

DOUGHERTY, J. E., JR.

FAA crashworthiness program for large and small airplanes.  
[SAE PAPER 690321] 11 p2004 A69-24509

DOUGHMAN, E. L.

Mean and intermittent flow of a self-preserving plasma jet.  
16 p2770 A69-31889

Observations in the transition zone of a turbulent plasma jet.  
[AIAA PAPER 68-685] 24 p4360 A69-43697

- DOUGHTY, P. S.**  
Recent fall of the Bovedy meteorite, Northern Ireland.  
18 p3200 A69-34993
- DOUGHTY, R. O.**  
A 4-200 ev neutral molecular beam.  
19 p3376 A69-36176
- DOUGLAS, B. C.**  
Resonant perturbations of existing satellites.  
03 p0521 A69-13777  
Perturbations of existing resonant satellites.  
22 p4035 A69-39968
- DOUGLAS, L. L.**  
The helicopter comes of age - Review of present and future roles of rotary wing aircraft.  
05 p0700 A69-15547
- DOUGLAS, N. J.**  
A study of environmental effects upon particulate radiation-induced absorption bands in spacecraft thermal control coating pigments.  
[AIAA PAPER 69-642] 17 p2991 A69-33273
- DOUGLAS, W. J.**  
Bending stiffness of an inflated cylindrical cantilever beam.  
23 p4227 A69-41881
- DOUGLASS, D. L.**  
The effect of oxidation on the mechanical behavior of nickel at 600 deg C.  
08 p1333 A69-20556  
Spinodal decomposition in Al/Zn alloys. I - Mechanical properties.  
09 p1522 A69-21501  
Spinodal decomposition in Al/Zn alloys. II - X-ray diffraction studies.  
09 p1522 A69-21502  
Spinodal decomposition in Al/Zn alloys. III - Metallography and electron microscopy.  
09 p1522 A69-21503
- DOURY, A.**  
Synthetic treatment of the general problem of the trajectories of air masses in the free atmosphere /Traitement synthetique du probleme general des trajectoires de masses d'air en atmosphere libre/.  
16 p2805 A69-31611
- DOUTE, J.**  
Use of pyrotechnical devices on a ballistic rocket /Emploi de dispositifs pyrotechniques sur un engin balistique/.  
10 p1752 A69-23024
- DOVE, D. B.**  
Direct recording electron diffraction for thin film materials studies.  
09 p1499 A69-22303
- DOVE, J. E.**  
Shock-tube studies of thermal ionization of NO using mass spectrometric detection.  
18 p3099 A69-34464  
Computer studies of reaction profiles in gas detonations.  
19 p3451 A69-36366
- DOVERSPIKE, L. D.**  
Charge transfer and dissociative charge transfer between rare-gas ions and molecular nitrogen.  
05 p0796 A69-15909
- DOVGER, L. S.**  
Transparency characteristics of phototropic switches and their influence on laser parameters /Kharakteristiki prosvetleniia fototropnykh zatvorov i ikh vliianie na parametry lazera/.  
04 p0610 A69-14385  
Characteristics of the optical transmission of phototropic shutters and their effect on laser parameters.  
14 p2456 A69-28758
- DOW, J. D.**  
Resonance energy transfer in condensed media from a many-particle viewpoint.  
01 p0121 A69-11257
- DOWDEN, R. L.**  
A Jupiter model of pulsars.  
09 p1608 A69-22761
- DOWDY, W. L.**  
Major factors influencing the development of a nuclear flight stage.  
[AIAA PAPER 68-591] 21 p3769 A69-39752
- DOWELL, A. R.**  
Changes in acid-base balance induced by 100 percent gradient headward acceleration.  
09 p1444 A69-22540
- Effect of lower body negative pressure upon pulmonary ventilation and perfusion as measured using xenon-133.  
17 p2909 A69-33180  
Ventilation, lung volumes, and gas exchange during lower body negative pressure.  
22 p3891 A69-40222
- DOWELL, E. H.**  
Generalized aerodynamic forces on a flexible cylindrical shell undergoing transient motion.  
01 p0005 A69-10229  
Influence of in-plane edge support flexibility on the nonlinear flutter of loaded plates.  
11 p1992 A69-25523  
Nonlinear flutter of curved plates.  
13 p2364 A69-28207  
Transmission of noise from a turbulent boundary layer through a flexible plate into a closed cavity.  
17 p3006 A69-33409  
Non-linear theory of unstable plane Poiseuille flow.  
24 p4298 A69-42600
- DOWELL, G. W., III**  
A digital integrated circuit radiosonde system.  
17 p2937 A69-33675
- DOWLEY, M. W.**  
Studies of high-power CW and quasi-CW parametric UV generation by ADP and KDP in an argon-ion laser cavity.  
[IEEE PAPER B-1] 05 p0773 A69-16308
- DOWNEY, J. A.**  
Thermoregulatory responses to deep and superficial cooling in spinal man.  
22 p3873 A69-40209
- DOWNEY, M.**  
Outline of a preliminary programme for the selection of European components for space use.  
15 p2624 A69-30823
- DOWNEY, T.**  
Magnetic suspension and guidance for high speed rockets by superconducting magnets.  
17 p2946 A69-33789
- DOWNING, M.**  
Deployment latchup dynamics of an erectable truss antenna.  
[AAS PAPER 69-336] 24 p4398 A69-42827
- DOWNS, G. S.**  
Observed decrease in the periods of pulsar PSR 0833-45.  
12 p2154 A69-25878  
Average pulsar energies at centimetre wavelengths.  
18 p3196 A69-34644
- DOWNS, W. R.**  
Detection and minimization of chemically induced ignition hazards of glycol fluids.  
19 p3359 A69-36028
- DOYLE, B. C.**  
Ditching and evacuation.  
08 p1254 A69-20453  
Aeromedical investigations of civil aircraft accidents.  
12 p2021 A69-25840
- DOYLE, B. W.**  
Nonlinear and collisional effects on Landau damping.  
01 p0133 A69-11215
- DOYLE, E. A., JR.**  
Failure analysis - Its role in screening decisions.  
18 p3108 A69-34499
- DOYLE, E. F.**  
Organic Rankine cycle with reciprocating engine.  
23 p4067 A69-42237
- DOYLE, G. R., JR.**  
Mathematical model for the ascent and descent of a high-altitude tethered balloon.  
[AIAA PAPER 68-942] 24 p4254 A69-43722
- DOYLE, J. M.**  
A general solution for strain-gradient elasticity theory.  
20 p3621 A69-37073
- DOYLE, M. D. C.**  
Aerodynamic losses in partial admission turbines.  
15 p2547 A69-30290
- DOYLE, M. J.**  
Effect of polymer structure on chemical resistance of reinforced plastics.  
08 p1338 A69-20490
- DOYLE, S. E.**  
The International Telecommunications Satellite consortium and established principles governing activities in space - An analysis of consistency.  
20 p3638 A69-37122
- DOYLE, W. M.**  
Experimental studies of a weakly anisotropic gas laser.  
07 p1145 A69-18473  
Frequency discrimination characteristics of an elliptically polarized dual-polarization gas laser.  
[IEEE PAPER P-5] 07 p1153 A69-19074
- DOYON, L. R.**  
Solving for the MTTR of complex systems.  
18 p3144 A69-34494
- DOZMOROV, I. M.**  
Momentum energy tensor and gravitational radiation /Tensor energii impul'sa i gravitatsionnoe izluchenie/.  
01 p0116 A69-10435  
Gravitational waves in the general theory of relativity. I - Invariant formulation of the theory of gravitational radiation /Gravitatsionnye volny v obshchei teorii otosloitel'nosti. I - Invariantnaia formulirovka teorii gravitatsionnogo izlucheniia/.  
02 p0332 A69-12835  
Gravitational waves in the general theory of relativity. II - Kundt's plane-front gravitational waves /Gravitatsionnye volny v obshchei teorii otosloitel'nosti. II - Ploskofrontovye gravitatsionnye volny Kundta/.  
02 p0332 A69-12836
- DRABOVICH, K. N.**  
Nonstationary nonlinear optical effects and ultrashort light pulse formation.  
[IEEE PAPER H-5] 05 p0774 A69-16316
- DRABOWITZ, S.**  
Increase in the resolving power of an antenna by decomposition of the received field in orthogonal distributions /Augmentation du pouvoir separateur d'une antenne par decomposition du champ recu en distributions orthogonales/.  
08 p1288 A69-20961  
Contribution to the technique of counterrotating antennas /Contribution a la technique des antennes counterrotatives/.  
08 p1289 A69-20968  
Increase of the resolving power of an antenna - Multiple channels and statistical decision /Augmentation du pouvoir separateur d'une antenne - Voies multiples et decision statistique/.  
10 p1664 A69-23797
- DRACHINSKII, A. S.**  
Structural changes and mechanical properties of molybdenum on annealing.  
02 p0268 A69-12191
- DRAGAN, C.**  
General theory of successive approximations in gear and machine studies based on the new matrix tensor method with a view toward computerization. II - Kinematic study of spatial gears with nondeformable closed contours, using the matrix tensor method /Allgemeine Theorie der sukzessiven Naeherungen beim getriebe- und maschinenstudium auf grund der neuen Matrix-Tensor-Methode, im Hinblick auf die Anwendung von Rechenautomaten. II - Kinematisches Studium der Raumgetriebe mit unverformbaren geschlossenen Konturen mittels der Matrix-Tensor-Methode/.  
15 p2713 A69-31020
- DRAGANOV, B. KH.**  
Study, by similarity methods, of the effect of the flow cross section of the inlet system on the process of filling an internal combustion engine /Issledovanie metodami teorii podobii vliianiia prokhodnogo sечения vpusknoi sistemy na protsess napolneniia dvigatel'ia vnutrennego sgoraniia/.  
19 p3393 A69-35824
- DRAGO, F. G.**  
Radio observation of the solar eclipse of May 20, 1966.  
17 p3030 A69-33057
- DRAGONE, C.**  
Analysis of thermal and shot noise in pumped resistive diodes.  
03 p0406 A69-13828
- DRAGOS, L.**  
Flow of viscous, electrically conducting fluids in the presence of a flat plate at nonzero incidence /L'ecoulement des fluides visqueux, electroconducteurs, en presence d'une plaque plane a incidence non nulle/.  
01 p0126 A69-10163  
The Hall effect in fluid flows in the presence of thin profiles /L'effet Hall dans l'ecoulement des fluides en presence des profils minces/.  
01 p0132 A69-11133



- The problem of thin foils in magnetoaerodynamics /Sur le probleme des profils minces en magnetoaerodynamique/. 13 p2200 A69-28360
- Magnetohydrodynamics /Magnetodinamica fluidelor/. 23 p4195 A69-41363
- DRAGUZIA, M. D.**
- Use of a two-gas artificial atmosphere in manned spacecraft /O primeneni dvehgazovoi iskusstvennoi atmosfery v obitaemykh kosmicheskikh korabliakh/. 17 p2912 A69-32940
- DRAHOS, D.**
- Some theoretical contributions concerning the Doppler geodetical measurements. 15 p2601 A69-31375
- DRAIN, L. E.**
- A study of the spatial structure of turbulent flow by intensity-fluctuation spectroscopy. 09 p1493 A69-21491
- DRITSUN, I. A.**
- Asymptotic approximation to the solution of a non-linear heat conduction problem /Asimptoticheskoe priblizhenie k resheniiu nelineinogo zadachi teploprovodnosti/. 21 p3848 A69-38642
- DRITSUN, I. O.**
- Application of a power series technique to the solution of a problem for a parabolic equation /Zastosovanie metoda stepenivkh riadov do rozv'iazannia odnoi zadachi rivianni paraboličnogo tipu/. 09 p1532 A69-21628
- DRAKE, G. W. F.**
- Intercombination oscillator strengths in the helium sequence. 20 p3577 A69-38171
- Singlet-triplet mixing in the helium sequence. 22 p3986 A69-40783
- DRAKE, H. M.**
- Mission analysis of general aviation in the 1970's. [AIAA PAPER 69-818] 19 p3453 A69-35624
- DRAKE, R.**
- Electron beam radiation curing of liquid mercaptan terminated butadiene-acrylonitrile copolymers. 09 p1512 A69-22368
- DRAKE, R. L.**
- A first approximation for flow through a porous tube. [ASME PAPER 69-FE-44] 20 p3517 A69-38000
- DRAKE, R. M., JR.**
- Sensible heat transfer in the Gemini and Apollo space suits. 06 p0880 A69-17089
- DRAKIN, I. I.**
- Approximate determination of the relative weight of fuel required for flight along a prescribed trajectory /Priblizhennoe opredelenie otnositel'nogo vesa topliva, potrebnogo dlia poleta po zadannoi traektorii/. 03 p0519 A69-12964
- DRANE, C. J., JR.**
- Useful approximations for the directivity and beam-width of large scanning Dolph-Chebyshev arrays. 04 p0570 A69-14303
- DRANGEID, K. E.**
- Analog method for calculating the characteristics of field-effect transistors /Ein Analogverfahren zur Berechnung der Eigenschaften von Feldeffekttransistoren/. 02 p0215 A69-11781
- DRAKISHNIKOV, I. A.**
- Statistical characteristics of signals from infrared scanning equipment /Statisticheskie kharakteristiki signalov skaniruiushchei infrakrasnoi apparatury/. 06 p0929 A69-17980
- DRAKOVA, ZH. I.**
- A study of the structure of the boundaries of grains in tungsten ion with field-emission microscope. 08 p1329 A69-19943
- DRAKSFIELD, P.**
- Flow and filtration characteristics of wire cloth. [ASME PAPER 68-WA/FE-39] 05 p0750 A69-16111
- DRAKATZ, S. W.**
- Calculation of photoionization cross sections of Ba I. 18 p3177 A69-35238
- DRAPER, C. S.**
- Traffic control. 05 p0789 A69-15560
- DRAPER, J. S.**
- Analysis of radar return from turbulent rocket exhaust plumes. [AIAA PAPER 69-71] 06 p0891 A69-18071
- Rarefaction in underexpanded flows. 23 p4152 A69-41920
- DRAPIER, J. M.**
- Structural stability of MAR-M 509, a cobalt-base superalloy. 05 p0781 A69-16448
- Microstructure of cobalt-base high-temperature alloys. 14 p2465 A69-29890
- DRAVSKIKH, A. F.**
- Instability of the galactic nucleus /O nestabil'nosti iadra galaktiki/. 12 p2171 A69-27068
- Attempt at observing, at the 5-cm wavelength, the lines of high-charge ions formed by dielectronic recombination in the solar corona /O popytke nabludenii linii vysokozaryadnykh ionov na volne 5 cm, obrazuiushchikhia vsledstvie dielektronnoi rekombinatsii v solnechnoi korone/. 15 p2689 A69-30568
- DRAVSKIKH, Z. V.**
- Instability of the galactic nucleus /O nestabil'nosti iadra galaktiki/. 12 p2171 A69-27068
- Attempt at observing, at the 5-cm wavelength, the lines of high-charge ions formed by dielectronic recombination in the solar corona /O popytke nabludenii linii vysokozaryadnykh ionov na volne 5 cm, obrazuiushchikhia vsledstvie dielektronnoi rekombinatsii v solnechnoi korone/. 15 p2689 A69-30568
- DRAWIN, H. W.**
- Mass spectrometry of plasmas. 08 p1316 A69-20475
- Collision and transport cross-sections. 08 p1364 A69-20476
- Evaluation of electrical conductivity, heat conductivity and viscosity of plasmas. 08 p1364 A69-20477
- Stark-broadening of hydrogen Balmer lines in the presence of strong magnetic fields in plasmas. 09 p1542 A69-22248
- Collisional-radiative ionization and recombination coefficients for quasi-stationary homogeneous hydrogen and hydrogenic ion plasmas. 22 p3988 A69-41153
- Influence of atom-atom collisions on the collisional-radiative ionization and recombination coefficients of hydrogen plasmas. 22 p3988 A69-41154
- DRAWIN, H.-W.**
- Simple determination of electron densities in plasmas submitted to magnetic fields. 15 p2657 A69-30027
- DRAYTON, G. H.**
- Titanium combines strength, weight-saving. 22 p3956 A69-40824
- DRAZIN, P. G.**
- Non-linear internal gravity waves in a slightly stratified atmosphere. 14 p2441 A69-29574
- DRECHSEL, D.**
- A 3-m spherical test-volume space-simulation facility for ESTEC. 13 p2241 A69-28080
- Space simulation facility for testing space vehicles with diameters up to 3 m. I - Planning and design of the facility /Weltraum-Simulationsanlage zum Prüfen von Raumflugkörpern mit Durchmessern bis zu 3 m. I - Planung und Entwurf der Anlage/. 21 p3689 A69-38420
- Space simulation facility for testing space vehicles with diameters up to 3 m. II - Construction of the facility and putting it into operation /Weltraum-Simulationsanlage zum Prüfen von Raumflugkörpern mit Durchmessern bis zu 3 m. II - Aufbau und Inbetriebnahme der Anlage/. 22 p3919 A69-39959
- DRECHSLER, M.**
- Study of metals by means of the field ion microscope /Etude des metaux avec le microscope ionique de champ/. 06 p0943 A69-17376
- Measurement of the surface energy anisotropy of pure tungsten with a field ion microscope /Eine Messung der Anisotropie der Oberflächenenergie von reinem Wolfram mit dem Feldionenmikroskop/. 08 p1330 A69-20139
- DREES, J. M.**
- Aeroelastic rotor phenomena and nonsteady rotor aerodynamics. 05 p0695 A69-15544
- Design of airfoils for rotors. 18 p3087 A69-35224
- DREGICH, I.**
- Electrical properties of thin PbTe semiconductor films /Elektricheskie svoystva tonkikh poluprovodnikovykh plenek PbTe/. 21 p3782 A69-39244
- DREISBACH, L.**
- Effects of physical and psychic stress on phosphatidyl glycerol and related phospholipids in humans and animals. 23 p4088 A69-41818
- DREITSER, G. A.**
- Investigation of heat exchange intensification in a packed tube bundle in longitudinal air flow /Issledovanie intensifikatsii teploobmena v prodol'nom omyvaemom vozdukhom tesnom puchke trub/. 01 p0173 A69-10092
- DREMIN, A. N.**
- Certain problems of the polarization of dielectrics in shock waves /Nekotorye voprosy polarizatsii dielektrikov v udarnykh volnakh/. 04 p0589 A69-14988
- Explosive magnetohydrodynamic generator with a superconducting magnetic system /Vzryvnoi magnetogidrodinamicheskii generator so sverkhprovodiaschei magnitnoi sistemoi/. 14 p2393 A69-28911
- Parameters of Mach reflection in Plexiglas cylinders /Parametry makhovskogo otrazheniia v plekstil'skikh tsilindrakh/. 19 p3302 A69-36845
- DREMIN, M. M.**
- Recording and energy analysis of low-energy H sub 1 super plus, H sub 2 super plus, He super plus ions with surface-barrier silicon counters /Registratsiia i energogeticheskii analiz ionov H sub 1 super plus, H sub 2 super plus, He super plus nizkikh energii s pomoshch'iu poverkhnostno-bar'ernykh kremnievykh schetchikov/. 14 p2452 A69-29811
- DREMIN, N. M.**
- Concerning the role of isobar production processes in nuclear interactions of approximately 20 Gev protons. 13 p2303 A69-28373
- DRESCHER, A.**
- Analysis of compression of short cylinders of Coulomb material. 08 p1410 A69-19890
- DRESCHHOFF, G.**
- Formation of organic compounds in solid bodies by solar and cosmic proton bombardment. 19 p3414 A69-36114
- DRESHER, W. H.**
- The age of fibers. 20 p3567 A69-37748
- Thermochemistry of the hot corrosion of superalloys. 23 p4178 A69-42444
- DRESHFIELD, R. L.**
- Development of a nickel-base superalloy using statistically designed experiments. 08 p1329 A69-20001
- DRESSER, K. J.**
- Evaluation of lithium peroxide for oxygen supply and carbon dioxide control. [AIAA PAPER 69-620] 17 p2914 A69-33303
- DRESSLER, K.**
- The lowest valence and Rydberg states in the dipole-allowed absorption spectrum of nitrogen - A survey of their interactions. 09 p1542 A69-21916
- On the photodissociation of interstellar H sub 2 and CH molecules. 10 p1781 A69-23672
- DREVAL, V. A.**
- Effect of geometry on the characteristics of two-dimensionally periodic resonator slow-wave structures /Vliianie geometrii na kharakteristiki rezonatornykh dvumerno-periodicheskikh zamedliaushchikh sistem/. 23 p4140 A69-42048
- DREVER, R. W. P.**
- Search for high energy gamma-rays from CP 1133. 02 p0307 A69-11823
- DREW, L. C.**
- A proposed low cost proximity warning device for aircraft. 17 p2917 A69-34102

**DREWRY, J. E.**  
Studies of hydrogen-air supersonic combustion at low densities. [WSCI PAPER 68-29] 07 p1240 A69-18358  
Supersonic combustion studies at low density conditions. [AIAA PAPER 69-458] 16 p2880 A69-32743

**DREYER, K.**  
High-pressure rocket engines /Hochdruck- Raketen- triebwerke/. 17 p3021 A69-33361

**DRIAGIN, IU. A.**  
Detector radiometers for the millimeter and submil- limetrovogo i detektornye radiometry mil- limetrovogo i submillimetrovogo diapazonov voln/. 19 p3285 A69-36877

**DRIAKHLUSHIN, V. F.**  
Penetration of a longitudinal electric field into a semibounded plasma. 12 p2138 A69-26711

**DRIATSKII, V. M.**  
Ionospheric effects of the solar proton flare of July 7, 1966 /Ionosfernye effekty solnechnoi protonnoi vspyski 7. vii 1966 g./. 10 p1770 A69-23907  
Maps of auroral absorption from riometric observa- tion data /Karty avroral'nogo pogloshcheniia po dan- nym riometricheskikh nabludenii/. 17 p2967 A69-33990  
Motion of auroral absorption along the auroral zone /Dvizhenie avroral'nogo pogloshcheniia vdol' zony poliarnykh siianii/. 20 p3520 A69-37034

**DRING, R. P.**  
A theoretical investigation of disturbance amplifica- tion in external laminar natural convection. 03 p0533 A69-13951  
Hot-wire anemometer calibration for measurements at very low velocity. 17 p2971 A69-32901  
Hot-wire anemometer calibration for measurements at very low velocity. [ASME PAPER 69-HT-A] 24 p4316 A69-43527

**DRISCOLL, D. A.**  
EEG electrode sensitivity - An application of reciprocity. 10 p1648 A69-23186

**DRISCOLL, J. N.**  
Primary processes in the photolysis of SO sub 2 at 1849 angstrom units. 01 p0024 A69-10619

**DRISCOLL, J. S.**  
A high energy density lithium/ dichloroisocyanuric acid battery system. [ECS PAPER 15] 05 p0706 A69-16231

**DRISCOLL, L. C.**  
Concept of an interactive system as an experimenter. [AIAA PAPER 69-953] 22 p3904 A69-40335

**DRISCOLL, R.**  
A small satellite concept for lower-atmosphere mea- surements. 09 p1610 A69-22009

**DRITOV, L. A.**  
Contact phenomena in plasmas /Kontaktnye iavleniia v plazme/. 03 p0404 A69-13547

**DRITS, M. E.**  
Light Alloys and Methods of Treating Them /Legkie splavy i metody ikh obrabotki/. 11 p1901 A69-24268  
Effect of decomposition of the solid solution on recrystallization of magnesium alloys /O vlianii raspada tverdogo rastvora na rekristallizatsiiu mag- niefykh splavov/. 11 p1902 A69-24272  
A new field of application of light alloys /Novaia oblast' primeneniia legkikh splavov/. 20 p3564 A69-38290

**DROBIAZKO, L. A.**  
Some peculiarities of I-V curves of the thermionic converters in cesium vapor at the pressure 10- super 2 - 5 torr. 14 p2402 A69-29241

**DROBIAZKO, S. V.**  
Some peculiarities of I-V curves of the thermionic converters in cesium vapor at the pressure 10- super 2 - 5 torr. 14 p2402 A69-29241

**DROBIAZKO, V. P.**  
Solid solutions in InAs-CdS and InAs- CdSe systems /Tverdye rastvory v sistemakh InAs-CdS i InAs-CdSe/. 02 p0297 A69-11882  
Reflection spectra of solid solutions of indium arse- nide with compounds of the A super II and B super VI type. 07 p1198 A69-18511  
Certain properties of solid solutions of the GaAs- ZnGa sub 2 Se sub 4 system /Nekotorye svoistva tver- dykh rastvorov sistemy GaAs-ZnGa sub 2 Se sub 4/. 15 p2670 A69-31050  
Solid solutions in the InAs-CdS and systems. 18 p3182 A69-35042

**DROBOTA, V.**  
Limits of validity of the formulas expressing the critical buckling load for oscillating continuous beams /Limitele de valabilitate ale formulelor ce dau sarcina critica de flambaj la grinzile continue pendulare/. 11 p1969 A69-24349  
The lateral buckling of oscillating beams, taking into account torsional stresses /Le flambage lateral des poutres oscillantes en tenant compte aussi des sollicita- tions de torsion/. 15 p2712 A69-31015

**DROBOVA, L. V.**  
Thermal conditions of the upper blanket of the moon and its integral radio emission during an eclipse /Teplovoi rezhim verkhnego pokrova luny i ee in- tegral'noe radioizluchenie vo vremia zatmenii/. 03 p0506 A69-13088  
Thermal conditions of the lunar topsoil and the in- tegrated radio emission of the eclipsed moon. 14 p2515 A69-28770

**DROBYSHEVICH, V. I.**  
Determination of albedo variations from satellites, taking the instrument characteristics into account /Opredelenie variatsii al'bido so sputnikov s uchetoм kharakteristik apparatury/. 10 p1689 A69-23969  
Determining albedo variation from satellite data using the instrument characteristics. 21 p3717 A69-39655

**DROBYSHEVSKII, E. M.**  
Magnetic field generation by convective zones of hot stars /Generatsiia magnitnogo polia konvektivnymi zonami goriachikh zvezd/. 13 p2350 A69-27862

**DROBZHEV, V. I.**  
Vertical ionization drift and the recombination coeff- icient in the ionospheric F region /Vertikal'nyi dreif ionizatsii i koefitsient rekombinatsii v F-oblasti ionos- fery/. 12 p2070 A69-26688  
Investigation of the horizontal, vertical, and total vector of drift velocity of small-scale ionization in- homogeneities in the ionosphere. 12 p2070 A69-26688  
Method of determining the parameters of ionospher- ic ionization inhomogeneities /Metodika opredeleniia parametrov neodnorodnosti ionizatsii ionosfery/. 14 p2444 A69-29872  
Study of the inhomogeneous structure of the iono- sphere by a method of frequency-space diversity recep- tion /equipment, preliminary results/ /Issledovanie neodnorodnoi struktury ionosfery metodom chastotno- prostanstvenno- raznennogo priema /apparatura. predvaritel'nye rezul'taty/. 14 p2453 A69-29876  
Determination of the vertical drift velocity compo- nent and the recombination coefficient in the iono- spheric F region /Opredeleniie vertikal'noi sostavliaushchei skorosti dreifa i koefitsienta rekombinatsii F-oblasti ionosfery/. 20 p3521 A69-37049  
Verification of initial assumptions and of the criteria of applicability of correlation analysis /Proverka isk- hodnykh dopushchenii i kriteriev primenimosti korre- liatsionnogo analiza/. 20 p3503 A69-37688

**DROGIN, E. M.**  
Delay-line bandwidth reduction techniques. 03 p0392 A69-13251

**DRONIOU, J.**  
Our experience with asthma in military air crews /Notre experience de l'asthme dans le personnel navi- gant des forces armees/. 05 p0710 A69-16624

**DRONNIK, L. M.**  
Empirical approximation of the hydraulic drag coef- ficient in a traveling magnetic field /Ob empiricheskoi

apksimatsii koefitsienta gidravlicheskogo soprotivleniia v begushchem magnitnom pole/. 07 p1192 A69-19017  
Investigation of a liquid-metal induction MHD generator /Issledovanie zhidkometallicheskogo MGD- generatora induktsionnogo tipa/. 13 p2208 A69-27513  
Basic relationships of an asynchronous MHD genera- tor in an autonomous mode of operation /Osnovnye sootnosheniia asinkhronnogo MGD- generatora v av- tonomnom rezhime raboty/. 14 p2405 A69-29457

**DROPPELMAN, J. D.**  
A lunar-surface electric-field detector. 03 p0429 A69-13221

**DROUET, J.**  
Possible biological and physiopathological effects of the UHF electromagnetic radiation of radar antennas /Effets biologiques et physio-pathologiques eventuels des rayonnements electromagnetiques U.H.F. des "aeriens-radars"/. 24 p4273 A69-42996

**DROUET, M. G.**  
Study of moving striations in plasmas. IV - Electron- energy transfer and the determination of the electron thermal relaxation length. 01 p0127 A69-10341  
Study of moving striations in plasmas. III - The fast type "r" and the determination of the ionization frequency dependence on the electron mean energy. 03 p0477 A69-13801  
Experimental evidence for a similarity relation in ionization waves. 10 p1740 A69-23721  
Study of moving striations in plasmas. V - A study of the saturation process in large amplitude moving striations. 10 p1741 A69-23859

**DROUILLARD, T. F.**  
IIT Research Institute, Symposium on Nondestructive Testing of Welds, 2nd, Illinois Institute of Technology, Chicago, Ill., January 30-February 1, 1967, Proceedings. 07 p1139 A69-18794

**DROVOZIUK, N. S.**  
Numerical solution of a system of nonlinear integral equations with variable upper bounds and of the Gour- sat problem for a nonlinear hyperbolic partial dif- ferential equation /O chislennom reshenii sistemy nelineinykh integral'nykh uravnenii s peremennymi verkhnimi predelami i zadachi gursa dlia nelineinogo uravneniia s chastnymi proizvodnymi giper- bolicheskogo tipa/. 20 p3569 A69-38293

**DROWNS, R. E.**  
Cost-effective selection for a national space launch vehicle stable. 01 p0162 A69-11096  
Automation of launch vehicle adaptive costs in sup- port of long-range space planning. [AAS PAPER 69-164] 24 p4392 A69-42815

**DROZ, P. V.**  
Relativistic analytic mechanics /Sur la mecanique analytique relativiste/. 07 p1182 A69-19331

**DROZD, N. P.**  
Stability of the plastic and fatigue properties of steel 1Kh18N9T under longtime static loads in vacuum and in liquid lithium. 03 p0450 A69-13912

**DROZD, T.**  
Algorithms for calculating the trajectory parameters of an axisymmetrical body during ballistic and vertical flight with allowance for air drag proportional to the square of velocity /Algoritmy obliczaniia parametrov toru ciela osiowosymetrycznego w locie balistycznym i pionowym z uwzglednieniem oporu powietrza proporc-jonalnego do kwadratu predkosci/. 17 p2889 A69-32950

**DROZDETSKII, G. A.**  
Method for calculating the trajectory of a radio beam in the atmosphere as a geodesic line of Finsler space /Metod rascheta traektorii radiolucha v atmosfere kak geodezicheskoi linii prostranstva Finslera/. 01 p0031 A69-10879  
A method for computing the trajectory of a radio beam in the atmosphere by treating it as a geodesic line in the Finsler space. 12 p2031 A69-26642

**DROZDOV, B. G.**  
Beryllium - A new structural metal /Berillii - Novyi konstruktсионnyi metall/. 11 p1904 A69-24897



## DROZDOV, S. A.

Investigation of the operation of a thin-film heat gauge with insulation for transient processes /K voprosu issledovaniia raboty plenochnoho termopriemnika s izolatsiei v kratkovremennykh protsessakh/.

11 p2002 A69-25231

## DROZDOVA, N. V.

Supersonic flow past staggered cones /Sverkhzvukovoe otekanie stupchatykh konusov/.

03 p0363 A69-13659

## DROZHBIN, I. U. A.

Investigation of ultrashort light pulses employing time-base image converter tube.

12 p2083 A69-26139

## DROZHIN, V. A.

Insulating materials of thermoemission converters.

14 p2467 A69-29214

## DROZHSHINOV, I. U. N.

Stabilization of a solution to the heat-conduction equation /O stabilizatsii resheniia uravneniia teploprovodnosti/.

13 p2375 A69-27795

Stabilization of the solutions to the generalized Cauchy problem for an ultraparabolic equation /Stabilizatsiia reshenii obobshchennoi zadachi Koshi dlia ul'traparabolicheskogo uravneniia/.

18 p3165 A69-35312

## DRUCKER, D. C.

Macroscopic fundamentals in brittle fracture.

13 p2275 A69-27228

On stability of viscoplastic systems with thermo-mechanical coupling.

20 p3625 A69-37591

## DRUETTA, M.

Measurement of the lifetimes of excited states in CO sub 2 and N sub 2 O super plus molecules from accelerated molecular ion beams /Mesure des durees de vie d'etats excites dans les molecules CO sub 2 et N sub 2 O super plus a partir de faisceaux d'ions moleculaires accelerees/.

22 p3985 A69-40715

## DRUILHET, A.

An original method of measuring atmospheric diffusion, using a radioactive gas emitted from a point source /Une methode originale de mesure de la diffusion atmospherique utilisant un gaz radioactif emis depuis un point source/.

01 p0144 A69-10043

## DRUKAREV, G. F.

Theoretical aspects of atomic collisions - Electron collisions.

07 p1187 A69-19660

## DRUMMOND, A. J.

The absolute calibration of thermal radiation detectors.

04 p0602 A69-15429

The calibration of multichannel radiometers for application in spacecraft and space simulation programs.

06 p0926 A69-17620

The Eppley-JPL solar constant measurement program.

09 p1576 A69-21647

## DRUMMOND, J. D.

Color-TV wheel takes a spin in space.

18 p3101 A69-34810

## DRUMMOND, J. E.

Resistance of the magnetosphere.

09 p1489 A69-21710

## DRUMMOND, W.

The use of high quality castings in European aerospace projects.

20 p3551 A69-38029

## DRUYVESTYEN, W. F.

Experiments on Alfvén-wave resonances in liquid sodium.

01 p0131 A69-10820

## DRUZHAEV, I. U. A.

Duk-15TLAM device for the automatic ultrasonic inspection of tube welds.

18 p3137 A69-35111

## DRUZHININ, A. I. A.

Utilization of unsteady thermal processes in a transistor for obtaining time delays /Ob ispol'zovanii nestatsionarnykh teplovykh protsessov v tranzistore dlia polucheniia vremennoi zaderzhki/.

12 p2043 A69-26883

## DRUZHININ, I. I.

Deformation of high melting point metals and alloys in vacuum at high temperatures /Deformatsiia tu-

goplavkikh metallov i splavov v vakuume pri vysokikh temperaturakh/.

18 p3155 A69-34651

## DRUZHININ, I. U. P.

Diurnal rhythms and ionizing radiation effects.

15 p2557 A69-31458

## DRUZHININ, S. A.

Displacement in a turbulent boundary layer on a previous surface during supercritical injection /Otnesenie v turbulentnom pogranichnom sloe na pronitsaemoi poverkhnosti pri sverkhkriticheskom vduve/.

13 p2245 A69-27385

## DRUZHININA, I. P.

Regularities of the change in properties of binary vanadium alloys /Zakonomernosti izmeneniia svoistv dvoynykh vanadievnykh splavov/.

08 p1333 A69-20439

## DRYDO, I. M.

Investigation of oscillation breakdown of varactor diodes /Issledovanie generatsionnogo probiia varaktornykh diodov/.

15 p2574 A69-30127

## DSA, E. R.

Stagnation flow against a rotating magnetized disc.

15 p2659 A69-30674

## DSIDA, J. A.

A study of rocket exhaust plumes at high altitudes.

[AIAA PAPER 69-575] 16 p2869 A69-32746

## DU FEU, A. N.

Evolution of the modern altimeter.

08 p1313 A69-20123

Evolution of the modern altimeter.

15 p2610 A69-30859

## DU PLESSIS, M. P.

Pressure signal generator for fluidic research.

[ASME PAPER 69-FLCS-40] 21 p3649 A69-38603

## DU PLESSIX, J.

Nickel-cadmium and silver-cadmium storage batteries for space applications /Batteries d'accumulateurs nickel-cadmium et argent-cadmium pour applications spatiales/.

08 p1261 A69-21051

## DU PONTAVICE, E.

Aerial navigation and international law. I /Navigation aerienne et droit international. I/.

05 p0849 A69-15681

Air navigation and international law. II /Navigation aerienne et droit international. II/.

09 p1626 A69-22092

## DUBATOVKO, E. T.

The use of the YuS-38M chronograph for testing high-speed, curtain-type shutters.

12 p2093 A69-26598

## DUBATOVKO, O. E.

Some problems concerning auroral absorption.

03 p0423 A69-13520

## DUBE, S. K.

On unsteady hydromagnetic flow of an electrically conducting incompressible fluid in contact with a harmonically oscillating plate.

04 p0638 A69-15093

## DUBECK, L.

Steady-state flux jumping in superconducting niobium titanium tubes in superimposed AC and DC magnetic fields.

17 p3016 A69-33787

## DUBENTSOV, V. R.

Results of a comparison of mean latitudinal values of the temperature and the geopotential of isobaric surfaces in the Northern and Southern Hemispheres /Rezultaty sopostavleniia srednikh shirotnykh znachenii temperatury i geopotentsiala izobaricheskikh poverkhnosti v severnom i juzhnom polushariiakh/.

14 p2473 A69-29724

Certain features of air circulation in the stratosphere and mesosphere /Nekotorye cherty tsirkulatsii vozdukh v stratosfere i mezofsfere/.

14 p2478 A69-29834

## DUBEY, R. N.

Instability in an elastic-plastic cylindrical shell under axial compression.

13 p2363 A69-28124

## DUBININ, G. N.

Application of the salt CrCl sub 2 for chromium gas deposition on steel in an argon atmosphere /Primenenie soli CrCl sub 2 pri gazovom khromirovanii stali v atmosfere argona/.

04 p0605 A69-14577

## DUBININ, V. P.

Creep and durability of VM-1 alloy.

15 p2638 A69-30284

## DUBINSKII, I. U.

Changes in the amplitude and phase of the solar diurnal variation /Izmeneniia amplitudy i fazy solnechno-sutochnoi variatsii/.

10 p1759 A69-22837

## DUBINSKII, I. U. A.

Quasi-linear elliptic-parabolic equations /Kvazilineinye elliptiko-parabolicheskie uravneniia/.

05 p0787 A69-16424

Quasilinear elliptic and parabolic equations of arbitrary order.

10 p1717 A69-22801

## DUBINSKIKH, I. U. V.

Insulating materials of thermoemission converters.

14 p2467 A69-29214

## DUBKO, A. N.

Construction of a design scheme for a shaft casing containing a pin joint /Postroenie raschetnoi skhemy valoprovoda, soderzhashchego shtiftovoe soedineniie/.

19 p3324 A69-35832

## DUBNER, V. M.

Unsteady problem of the heat conduction of a two-layer cylinder /Nestatsionarniia zadacha teploprovodnosti dvukhsloinogo tsilindra/.

19 p3448 A69-35981

Distribution of eigenvalues of random cyclic matrices /Raspredelenie sobstvennykh znachenii sluchainykh tsiklicheskikh matrits/.

20 p3567 A69-36988

## DUBODAT, M.

The corneal arc, a warning sign of atheromatosis in flight crews /L'arc corneen signe evocateur d'atheromatose chez les membres du personnel navigant/.

05 p0711 A69-16631

## DUBOIS, A.

Chemical corrosion of zirconia-based ceramics considered for use in MHD generators /Corrosion chimique de ceramiques a base de zirconie etude en vue de leur application aux generateurs MHD/.

13 p2284 A69-27469

## DUBOIS, D. F.

Superradiance and recombination radiation from cadmium telluride.

19 p3389 A69-36550

## DUBOIS, J. E.

Principles of the DARC topological system.

12 p2026 A69-26361

## DUBOIS, M.

The 200-kn dynamometric calibration bench of the Modane-Arvieux Test Center /Le banc d'etalonnage dynamometrique de 200 kn du Centre d'Essais de Modane-Arvieux/.

07 p1116 A69-19217

## DUBOSHIN, G. N.

Current problems of celestial mechanics /Sovremennye problemy nebesnoi mekhaniki/.

03 p0517 A69-14223

## DUBOST, G.

Frequency-independent antennas /Antennes independantes de la frequence/.

08 p1295 A69-21149

## DUBOV, E.

On the lithium abundance in sunspots and the undisturbed solar atmosphere.

05 p0821 A69-15850

## DUBOVIK, A. S.

Photographic recording of high-speed processes.

08 p1317 A69-21033

Continuously operating mirror scanning system in high-speed photographic cameras.

12 p2085 A69-26154

High-speed SFR camera for use in the visual and ultraviolet spectral ranges - For dissection, stereoscopic and spectral photography.

12 p2085 A69-26155

High-speed SP-III spectrophotochronograph.

12 p2085 A69-26161

Fundamentals of the theory of mirror image scanning /Osnovy teorii zerkal'noi razvertki izobrazheniia/.

12 p2091 A69-26368

## DUBOVIK, M. V.

Pulsed laser emission of nitrogen atoms in a N sub 2-He mixture /Impul'snoe lazernoe izluchenie atomov azota v smesi N sub 2-He/.

06 p0933 A69-17258

**DUBOVIK, V. I.**  
Binary laminar separation layer on a vertical surface in the simultaneous presence of free and forced convection /Binarnyi laminarnyi pogranichnyi sloi na vertikāl'noi poverkhnosti pri sovместnoi svobodnoi i vynuzhdennoi konveksii/.  
19 p3453 A69-36844

**DUBOVIK, V. P.**  
Time estimate in a quick-response problem /Otsinki chasu v odnii zadachi shvidkosti/.  
21 p3769 A69-38568

**DUBOVITSKAIA, N. V.**  
Mechanism of secondary recrystallization in a molybdenum foil /Mekhanizm vtorichnoi rekristallizatsii v molibdenovoi fol'ge/.  
18 p3157 A69-35253

**DUBOVITSKII, F. I.**  
Explosive magnetohydrodynamic generator with a superconducting magnetic system /Vzryvnoi magnitogidrodinamicheskii generator so sverkhprovodiashchei magnitnoi sistemoi/.  
14 p2393 A69-28911

**DUBOVOI, L. V.**  
High-frequency stabilization of a plasma cylinder carrying current in a longitudinal magnetic field.  
04 p0635 A69-14549  
Effect of the longitudinal dimensions of a plasma column on the excitation criterion of Kadomtsev-Nedospasov convective-current instability /Vliianie prodol'nykh razmerov plazmennogo stolba na kriterii vzbuzhdeniia tokovo-konvektivnoi neustoiichivosti Kadomtseva-Nedospasova/.  
13 p2314 A69-28441

**DUBOVSKII, S. V.**  
Final relationship in variational problems of rocket dynamics /O konechnom sootnoshenii v variatsionnykh zadachakh raketodinamiki/.  
21 p3829 A69-39825  
Optimal sliding regimes for controlling dynamic systems /O skol'zhashchikh optimal'nykh rezhimakh upravleniia dinamicheskimi sistemami/.  
21 p3768 A69-39826

**DUBRO, E. B.**  
Calculation of the probability distributions of signal amplitudes, concentrated noise, and the relation between them under conditions of Rayleigh and logarithmic fading /Raschet raspredelenii veroiatnostei amplitud signalov, srosredotochennykh pomekh i ikh ot-nosheniia v usloviakh releevskikh i logarit-micheskikh normal'nykh zamiraniui/.  
11 p1833 A69-24440

**DUBROFF, W.**  
F.I.M. imaging of solute atoms in dilute binary alloys.  
01 p0092 A69-10055

**DUBROV, G. L.**  
Cermet material for radial sealing of high-tempera-ture turbines /Metallokeramicheskii material dlja radi-al'nogo uplotneniia vysokotemperaturnykh turbin/.  
13 p2275 A69-27344

**DUBROV, V. A.**  
Bainitic transformation in the system Ti-O.  
04 p0613 A69-14559

**DUBROVSKAIA, E. K.**  
Nighttime variation of ionization in the F region of the ionosphere at mid-latitudes /Nochnoe izmenenie ionizatsii F-oblasti ionosfery na perekhodnykh shirotakh/.  
12 p2064 A69-26007  
Certain regularities in the occurrence of the F zero layer over Ashkhabad /O nekotorykh zakonome-rnostiakh pojavleniia sloia F zero nad Ashkhabadam/.  
20 p3527 A69-37671

**DUBROVSKII, V. G.**  
Experiment in applying D sub st variations to deep electromagnetic soundings /Opyt ispol'zovaniia D sub st-variantiui dlja glubinnykh elektromagnitnykh zondirovaniui/.  
02 p0240 A69-11700  
Experience in the use of D sub st variations for deep electromagnetic soundings.  
13 p2258 A69-28731

**DUBRUILLÉ, J.**  
Considerations concerning the treatment of partial loss of teeth in the fighter pilot /Considerations sur le traitement de l'edentation partielle chez le pilote de chasse/.  
21 p3661 A69-39277

**DUBS, C. W.**  
Heating of the ionosphere and attenuation of the equatorial hydromagnetic waves.  
23 p4161 A69-42437

**DUBUISSON, J. C.**  
Long life reliability problems and solutions for valves under spatial environments.  
[AAS PAPER 69-238] 24 p4319 A69-42854

**DUCATI, A. C.**  
Electron beam from a magnetoplasmadynamic arc.  
20 p3582 A69-38236

**DUCHESNE, J.**  
Meteorites and extraterrestrial life.  
11 p1953 A69-24342

**DUCK, K. I.**  
MEPSIS - Minimal electric propulsion systems for interplanetary spacecraft.  
[AIAA PAPER 69-499] 16 p2844 A69-32714

**DUCKER, A. J.**  
The effect of hypoxia on brain gamma-aminobutyric acid levels.  
04 p0552 A69-14482

**DUCKWORTH, W. H.**  
Considerations in testing brittle materials.  
24 p4333 A69-43342

**DUCOTE, D.**  
A new family of illuminants for night and special color aerial photography.  
22 p3950 A69-41000

**DUCROS, R.**  
Mechanism of decomposition of low-pressure ethylene on a high-temperature tungsten ribbon surface /Mecanisme de la decomposition de l'ethylene a basse pression a la surface de rubans de tungstene a haute temperature/.  
19 p3265 A69-36729  
Mechanism of decomposition of low-pressure ethylene on a high-temperature rhenium ribbon surface /Mecanisme de la decomposition de l'ethylene a basse pression a la surface de rubans de rhenium a haute tem-perature/.  
19 p3266 A69-36730  
Influence of oxygen on the decomposition of low-pressure ethylene at the surface of high-temperature tungsten and rhenium /Influence de l'oxygene sur la decomposition de l'ethylene a basse pression a la surface du tungstene et du rhenium a haute temperature/.  
19 p3266 A69-36732

**DUCUING, J.**  
Noncollinear interactions in parametric luminescence.  
[IEEE PAPER K-8] 07 p1152 A69-19067

**DUDAREVITCH, M. D.**  
Water reclamation by membrane vapor diffusion.  
03 p0379 A69-12992

**DUDCHENKO, A. A.**  
Nonlinear axisymmetric oscillations of a cylindrical shell wound out of elastic fibers /Nelineinye osesimetricnyye kolebaniia tsilindricheskoi obolochki, namotannoi iz uprugikh nitei/.  
18 p3222 A69-34975

**DUDEK, M.**  
Camera lenses and techniques for aerial color photography.  
22 p3950 A69-40999

**DUDDERAR, T. D.**  
Applications of holography to fracture mechanics.  
15 p2609 A69-30681

**DUDECK, J.**  
Dependence of dv/dt and dp/dt of ventricular pressure of the heart on physical systolic results /Die Abhaengigkeit von dv/dt und dp/dt des Ventrikeldruckes des Herzens von physikalischen Resultaten der Systole/.  
23 p4095 A69-42076

**DUDIN, L. A.**  
Generalization of experimental data concerning the limits of flame stabilization by means of jets /Obobshchenie eksperimental'nykh dannykh po predelam stabilizatsii plameni na striakh/.  
03 p0531 A69-12956  
Flame stabilization at various flow temperatures /Stabilizatsiia plameni pri razlichnykh temperaturakh potok/.  
21 p3850 A69-38859

**DUDKIN, V. E.**  
Measurement of the proton and neutron spectra on board satellites of the Cosmos series /Izmerenie spek-trov protonov i neutronov na sputnikakh serii "Kosmos"/.  
05 p0814 A69-16051  
Nuclear Interactions in Spacecraft Shielding /Iadernye Vzaimodeistviia v Zashchite Kosmicheskikh Korablei/.  
14 p2481 A69-29817

Measurement of the proton and neutron spectra in the "Cosmos" series satellites.  
20 p3591 A69-37961

**DUDKINA, L. P.**  
Effect of aluminum and iron on the hot hardness of the compound TiNi /Vliianie aluminiia i zheleza na goriachuiu tverdst' soedineniia TiNi/.  
18 p3157 A69-35249

**DUDLEY, D. G.**  
Random phase errors in end-fed linear antenna arrays.  
04 p0578 A69-15211

**DUDLEY, G. M., III**  
Measurement of endogenous carbon monoxide production to determine the effect of high plus g sub x acceleration on the destruction rate of red cells.  
17 p2908 A69-33176

**DUDNIK, B. S.**  
A radar wind patrol /Vetrovoi radiolokatsionnyi patrol/.  
17 p2939 A69-33901  
Transmitting and antenna systems of a meteor station with a high effective sensitivity /Peredaishchee i antennoe ustroistva meteornoii stantsii vysokoi effektiv-noi chuvstvitel'nosti/.  
17 p2939 A69-33902

**DUDNIK, E. F.**  
Low-frequency dispersion of BaTiO sub 3 single crystals in strong electric fields /Nizkochastotnaia dispersiia monokristallov BaTiO sub 3 v sil'nykh elek-tricheskikh poliax/.  
01 p0139 A69-10889  
Polarization reversal of BaTiO sub 3 single crystals in sinusoidal fields.  
06 p0981 A69-17893  
Low-frequency dispersion of BaTiO sub 3 single crystals in a strong electric field.  
18 p3182 A69-34720

**DUDOLADOV, A. G.**  
Angular distribution of a material vaporized by a laser beam /Uglovoe raspredelenie neshchestva, isparennogo luchom OKG/.  
21 p3737 A69-38992

**DUDZINSKI, T. J.**  
Venturi meter with separable diffuser.  
[ASME PAPER 68-WA/FM-2] 05 p0763 A69-16135  
Venturi meter with separable diffuser.  
[ASME PAPER 68-WA/FM-2] 14 p2447 A69-29447  
Multiple-function probe for airflow research.  
16 p2766 A69-31917  
Flow-direction measurement with fixed-position probes in subsonic flow over a range of Reynolds num-bers  
17 p2973 A69-33107

**DUECHS, D. F.**  
Collisionless shock waves and turbulent heating in high voltage theta pinches.  
17 p3013 A69-33825

**DUETSCH, H. U.**  
The photochemistry of stratospheric ozone.  
02 p0245 A69-12694  
1.1/2 years of routine observations of vertical ozone distribution near Zuerich, Switzerland.  
16 p2787 A69-32635

**DUFF, G. F. D.**  
Positive elementary solutions and completely monotonic functions.  
22 p3976 A69-41035

**DUFF, W. G.**  
EMC figure of merit for receivers.  
23 p4142 A69-42232

**DUFFEE, R. A.**  
Vertical research rockets.  
01 p0162 A69-10936  
Artificial earth satellites.  
01 p0162 A69-10937  
Chemical composition of the upper atmosphere and interplanetary space.  
01 p0025 A69-10940  
Physiological methods and results.  
01 p0015 A69-10947  
Biological experimentation - Methods and results.  
01 p0016 A69-10948  
Satellite meteorology.  
01 p0111 A69-10950

**DUFFEY, T. A.**  
Experimental-theoretical correlations of impulsively loaded clamped circular plates.  
15 p2709 A69-30675



**DUFFIELD, A. M.**
**DUFFIELD, A. M.**

 Mass spectra of quinoline and isoquinoline N-oxides.  
07 p1075 A69-19496

 Mass spectrometry in structural and stereochemical problems. CLXVI.  
09 p1448 A69-22551

 A study of the fragmentation processes of some n-acyl-2-indolinols upon electron impact.  
15 p2561 A69-30407

 Applications of artificial intelligence for chemical inference. I - The number of possible organic compounds - Acyclic structures containing C, H, O, and N.  
23 p4114 A69-42214

**DUFFIN, R. J.**

 The influence of Poisson's ratio on the vibrational spectrum.  
15 p2713 A69-31097

 Algorithms for classical stability problems.  
21 p3755 A69-38925

**DUFFUS, H. J.**

 Doppler observations of associated ionospheric and magnetic fluctuations.  
20 p3535 A69-38194

**DUFFY, A. R.**

 Fracture design practices for pressure piping.  
17 p3060 A69-33562

**DUFFY, D.**

 Lewis acidity of alanes - Interactions of trimethylalane with amines, ethers, and phosphines.  
07 p1074 A69-18630

**DUFFY, E. R.**

 Development of fabrication methods for aluminum-boron composite aircraft structures.  
[AIME PAPER S69-1] 21 p3732 A69-39471

**DUFFY, M. T.**

 Preparation, optical and dielectric properties of vapor-deposited niobium oxide thin films.  
[ECS PAPER 17] 08 p1372 A69-20365

**DUFFY, V.**

 Temperature control of a missile mounted S-band transmitter package by use of a fusible material.  
22 p3909 A69-39945

**DUFORT, E. C.**

 A design procedure for matching volumetrically scanned waveguide arrays.  
04 p0571 A69-14312

**DUFOUT, S. W.**

 An interpretation of OGO light ion abundance measurements.  
11 p1879 A69-25157

 Temperature and ion abundance profiles deduced from simultaneous Explorer XXXI and Alouette II data.  
20 p3532 A69-37896

**DUFRESNE, D.**

 Electrical characteristics of a linear Faraday generator using a binary mixture of noble gases with nonequilibrium ionization /Caracteristiques electriques d'un generateur lineaire de Faraday utilisant un melange binaire de gaz rares, avec ionisation hors d'equilibre/.  
08 p1359 A69-19880

**DUFRESNE, M.**

 Study of the structure of detonation waves in solid explosives /Etude de la structure des ondes de detonation dans les explosifs solides/.  
02 p0349 A69-11526

**DUGAN, J. F., JR.**

 Future technology trends in airbreathing propulsion.  
[AIAA PAPER 69-774] 19 p3244 A69-35648

**DUGAN, J. P.**

 Viscous drag of bodies moving near a free surface.  
11 p1866 A69-24278

**DUGAN, J. V., JR.**

 On the nature of ion-molecule collisions.  
05 p0797 A69-16428

 Computer-made movies and plotting descriptions of ion-molecule collisions with polar targets.  
24 p4352 A69-43124

**DUGAR, A. B.**

 C.I.T. sensors - A design evolution.  
[ASME PAPER 69-GT-18] 09 p1571 A69-22499

**DUGDALE, R. A.**

 Glow discharge electron beam welding.  
04 p0608 A69-15480

**DUGGAL, S. P.**

 Solar diurnal anisotropy of cosmic rays.  
21 p3788 A69-38547

**DUGGAR, B. C.**

 The design of physical activity programs for industry.  
21 p3663 A69-38919

**DUGGER, G. L.**

 External burning in supersonic streams.  
11 p1941 A69-24261

 Ramjets and air-augmented rockets.  
11 p1943 A69-25586

**DUGGER, P. H.**

 A laser photographic system for aeroballistic range photography.  
19 p3306 A69-35732

**DUGIN, V. V.**

 Optimal detection of signals having an unknown arrival time on a background of normal noise with a time-varying intensity /Optimal'noe obnaruzhenie signalov s neizvestnym momentom prikhoda na fone normal'nogo shum'a s izmeniaiushcheisia vo vremeni intensivnost'iu/.  
15 p2563 A69-30133

**DUGOFF, L.**

 NASA Technology Utilization Program.  
18 p3236 A69-35105

**DUGUAY, M. A.**

 Correlation effects in the display of picosecond pulses by two-photon techniques.  
02 p0259 A69-12654

 Optical sampling of subnanosecond light pulses.  
02 p0259 A69-12656

 Compression of pulses from a mode-locked He-Ne laser.  
09 p1516 A69-21745

**DUGUET, M.**

 The aerodynamics of the Concorde /L'aerodynamique de Concorde/.  
12 p2012 A69-26358

**DUH, C. Y.**

 Temperature dependence of hot electron drift velocity in silicon at high electric field.  
01 p0135 A69-10120

**DUHAMEL, P.**

 A description of the transition boundary layer on a flat plate /Une description de la couche limite de transition sur plaque plane/.  
07 p1121 A69-19329

**DUHON, J. M.**

 Tail rotor design. I - Aerodynamics.  
[AHS PAPER 300] 17 p2895 A69-33549

**DUKE, C. B.**

 Electron and phonon tunneling spectroscopy in metal-germanium contacts.  
06 p0982 A69-18234

 Electronic structure of clean metallic interfaces.  
13 p2321 A69-28008

 Tunneling measurement of electron-plasmon interaction in degenerate semiconductors.  
19 p3382 A69-36049

**DUKE, M. B.**

 Surveyor alpha-scattering data - Consistency with lunar origin of eucrites and howardites.  
20 p3597 A69-37341

**DUKEK, W. G.**

 Milestones in aviation fuels.  
[AIAA PAPER 69-779] 19 p3392 A69-35643

**DUKES, T. A.**

 An integrated display concept for helicopters and VTOL aircraft.  
[AHS PAPER 314] 17 p3001 A69-33541

**DUKES, W. H.**

 Design of attachments and connections with brittle materials.  
17 p3061 A69-33569

**DUKHOVLINOV, S. D.**

 Some results of an investigation of a single-component version of a liquid-metal MHD energy converter /Nekotorye rezul'taty izucheniia odnokomponentnoi skhemy zhidkometallicheskogo MGD-preobrazovaniia energii/.  
13 p2205 A69-27488

**DUKHOVNII, M. A.**

 Piecewise-linear approximation of input signals /Proskukovo-liniinu aproksimatsiiu vkhidnikh signaliv/.  
14 p2426 A69-29143

**DUKOR, S. G.**

 The photoelectron multiplier FEU-77 for recording light pulses from optical quantum generators /lasers/ in the 700-nm range.  
03 p0440 A69-13264

**DUKOWICZ, J. K.**

 Theory and calibration of small continuum electron static probes in an ionized flow.  
19 p3304 A69-35777

**DULEY, W. W.**

 CO sub 2 laser-induced electron emission from metals.  
05 p0771 A69-15861

 Spectra of impurities in interstellar grains.  
10 p1781 A69-23661

 Hydrogen atoms in interstellar grains.  
13 p2337 A69-27541

**DULGEROFF, C. R.**

 Cesium microthruster system.  
[AIAA PAPER 69-292] 09 p1569 A69-21861

**DULING, B.**

 Gravity as a biological determinant.  
06 p0872 A69-17031

 Methods of simulating weightlessness.  
06 p0879 A69-17031

**DULK, G. A.**

 Europa and the decametric radiation from Jupiter.  
05 p0813 A69-15601

 Faraday effect on Jupiter's radio bursts.  
20 p3594 A69-38161

**DULLBERG, E.**

 Metallurgical and production developments in cryogenic quenching.  
[SAE PAPER 690343] 11 p1890 A69-24491

**DULLER, N. M.**

 Critical examination of direct muon production.  
07 p1209 A69-19401

**DULNEV, R. A.**

 Determination of the amplitude of elastic-plastic deformations /strains/ in thermal-fatigue tests.  
10 p1801 A69-23841

**DULOV, V. G.**

 Nonuniform supersonic gas flow past axisymmetric bodies /Obtekanie osesimmetrichnykh tel neravnomenym sverkhzvukovym potokom gaza/.  
19 p3238 A69-35851

**DUMA, A. S.**

 Lunar profile from observations of the annular eclipse of May 20, 1966 /Profil' luny po nabludeniiu kol'tseobraznogo zatmenia 20 maia 1966 g./.  
15 p2686 A69-30531

 Determination of lunar coordinate corrections from the observation of the annular solar eclipse of May 20, 1966 /Opredelenie popravok koordinat luny po nabludeniiu kol'tseobraznogo solnechnogo zatmenia 20 maia 1966 g./.  
15 p2686 A69-30531

**DUMA, D. P.**

 Lunar profile from observations of the annular eclipse of May 20, 1966 /Profil' luny po nabludeniiu kol'tseobraznogo zatmenia 20 maia 1966 g./.  
15 p2686 A69-30531

 Determination of lunar coordinate corrections from the observation of the annular solar eclipse of May 20, 1966 /Opredelenie popravok koordinat luny po nabludeniiu kol'tseobraznogo solnechnogo zatmenia 20 maia 1966 g./.  
15 p2686 A69-30531

 Determination of the orientation elements of the FK3 and FK4 catalogs from meridian observations during 1963 and 1964 /Opredelenie elementov orientatsii katalogov FK3 i FK4 po meridiannym nabludeniiam 1963-1964 gg./.  
17 p3027 A69-32871

**DUMARTIN, S.**

 Demonstration of a polarization of the light from the stimulated Brillouin effect in compressed gaseous nitrogen /Mise en evidence d'une depolarization de lumiere emise par effet Brillouin stimule dans l'azote gazeux comprime/.  
09 p1516 A69-21691

**DUMAS, C.**

 A new charge amplifier for a piezoelectric transducer /Un nouvel amplificateur de charge pour capteur piezo-electrique/.  
20 p3508 A69-37911

**DUMAS, P.**

 In-pile experiments of "Sirene" thermionic conversion, and examination after irradiation of the "Sirene 302" converter /Experiences de conversion thermionique "Sirene" en pile et examen apres irradiation du convertisseur "Sirene 302"/.  
14 p2481 A69-29141

**DUMBROVA, N. E.**  
Morphological changes in the ganglia of the solar plexus under the action of total X-irradiation /Morfologichni zmini v gangliakh soniachnogo spletnia pri zastosuvanni zagal'nogo rentgenivs'kogo oprominnia/. 12 p2019 A69-26347

**DUMITRESCU, A.**  
Eclipsing binaries observed photometrically at the Astronomical Observatory of Bucharest in the year 1968 /Citeva binare cu eclipsa observate fotoelectric la observatorul astronomic din Bucuresti in anul 1968/. 15 p2696 A69-31224

**DUMITRESCU, L.**  
Reservoir conditions of a reflected-shock wind tunnel /Sur les conditions de reservoir d'une soufflerie a choc reflechi/. 13 p2243 A69-28359

**DUMITRESCU, L. Z.**  
The interaction of weak shock waves and two-dimensional obstacles. 05 p0746 A69-16018

**DUMKE, W. P.**  
The injection laser. 05 p0772 A69-16228

**DUMMER, R. S.**  
Theoretical and practical implication of the bidirectional reflectance of spacecraft surfaces. [AIAA PAPER 68-26] 13 p2222 A69-28216  
Gas-surface energy transfer experiment for OGO-F. 19 p3255 A69-36680

**DUMOND, R. C.**  
Compound rotary-wing aircraft research. [AIAA PAPER 69-218] 07 p1056 A69-19568

**DUMONT, F. P.**  
Gas adsorption on tungsten single crystals /Adsorption de gaz sur des monocristaux de tungstene/. 14 p2506 A69-29272

**DUMONT, M.**  
Polarization of the fluorescent light of Ne atoms interacting with a laser beam - Measurement of several relaxation times. [IEEE PAPER T-9] 07 p1155 A69-19084

**DUMONT, S.**  
On the interpretation of the center-limb observations of Ca II emission cores. 16 p2854 A69-31653  
Calculation of the polarization rate of continuous radiation /Calcul du taux de polarisation du rayonnement continu/. 19 p3427 A69-36728

**DUMOVA, A. A.**  
Determination of a plasma electron distribution function from the bremsstrahlung spectrum /Opredelenie funktsii raspredelenia elektronov plazmy po spektru tormoznogo izlucheniia/. 08 p1365 A69-20547

**DUNAEV, IU. A.**  
Optical quantum generator application for high-speed photography and holography in ballistic investigations. 12 p2088 A69-26177  
The interaction of a shock wave in a body in the presense of ionization relaxation. 19 p3450 A69-36361  
Shadow images of bodies obtained at hypersonic speeds by means of a single-pulse laser /Poluchenie tenevykh izobrazhenii tel pri giperzvukovykh skorostiakh s pomoshch'iu monoimpul'snogo opticheskogo kvantovogo generatora/. 22 p3963 A69-40601

**DUNAVANT, J. C.**  
Downstream cooling effectiveness of massive upstream transpiration from a slender cone. 24 p4248 A69-43588

**DUNBAR, W. G.**  
Corona and breakdown voltage in helium-oxygen atmospheres. 05 p0730 A69-16241  
Corona testing of supersonic airplane high temperature wire. 05 p0731 A69-16245

**DUNCAN, A. G.**  
A multipurpose phase equilibrium apparatus to study mixtures of cryogenic fluids - Applications to argon methane. [NAS-NRC PAPER H-3] 22 p3947 A69-40630

**DUNCAN, C. H.**  
Solar irradiance measurements from a research aircraft. 23 p4216 A69-42191

**DUNCAN, J. R., JR.**  
The astrodynamist's role vis-a-vis the systems engineer. [AIAA PAPER 69-124] 06 p1011 A69-18090

**DUNCAN, M. E.**  
The effect of a circumferential stiffener on the stress in a pressurized cylindrical shell with a longitudinal crack. 18 p3212 A69-34347

**DUNCAN, R. A.**  
F-region seasonal and magnetic-storm behaviour. 05 p0757 A69-16404  
Neutral winds and universal-time control of the polar F-region. 18 p3125 A69-34255

**DUNCAN, R. C.**  
Display requirements for advanced manned spacecraft. 08 p1312 A69-19968  
Guidance and control for atmospheric entry. 11 p1914 A69-25724  
Satellite navigation aids. 18 p3169 A69-34855

**DUNCOMBE, R. L.**  
Mass of Pluto. 02 p0315 A69-11808  
Orbit of Neptune and the mass of Pluto. 04 p0663 A69-15385

**DUNDURS, J.**  
Representation of stress concentration factors for a composite in plane strain. 07 p1170 A69-18716

**DUNEGAN, H.**  
Acoustic emission - A new nondestructive testing tool. 19 p3314 A69-36634

**DUNEGAN, H. L.**  
Acoustic emission - Stress wave detection as a tool for nondestructive testing and material evaluation. 20 p3512 A69-38270

**DUNFORD, E.**  
The lunar variations in the F2-region of the ionosphere at low latitudes. 16 p2776 A69-32090

**DUNGEY, J. W.**  
Waves and particles in the magnetosphere. 07 p1208 A69-19356  
Bounce resonant interaction between pulsations and trapped particles. 12 p2073 A69-26946  
Electromagnetic noise in the current sheet in the geomagnetic tail. [AFCLR-69-0395] 16 p2781 A69-32317  
Damping of waves in the current sheet in the geomagnetic tail by radiation. [AFCLR-69-0396] 16 p2781 A69-32318

**DUNHAM, D. W.**  
Photographic observations of Neptune and bd - 17 deg 4388 near the time of the occultation in April 1968. 23 p4221 A69-42388

**DUNHAM, J.**  
Aerodynamic and thermal considerations in designing axial flow turbine blades. [IME PAPER 2] 12 p2146 A69-25788

**DUNIN, N. A.**  
Buckling of the compressor blades of a gas turbine engine during hydraulic pellet jet working and the possibilities of eliminating it /Koroblenie lopatok kompressora GTD pri gidrodobestruinoi obrabotke i vozmozhnosti ego ustraneniia/. 21 p3731 A69-38879

**DUNIPACE, D. W.**  
A new, sensitive, rapid materials contamination screening system. 24 p4297 A69-42931

**DUNKELMAN, L.**  
Airglow and star photographs in the daytime from a rocket. 17 p3037 A69-33664

**DUNLAP, J. L.**  
Minor planets. III - Lightcurves of a Trojan asteroid. 22 p4013 A69-40124

**DUNLAP, R.**  
Nucleation and growth of oxide particles in metal vapour flames. 21 p3783 A69-38799

**DUNLAY, J. B.**  
Converter SD-4 design and summary of test results. 11 p1827 A69-25398

**SNAP-13 generator development program.** 14 p2481 A69-29191

**Converter SD-4 design and summary of test results.** 14 p2399 A69-29196

**Multi-foil thermal insulation using oxide particle layer separation.** 14 p2539 A69-29213

**DUNN, C.**  
Feed systems and nozzles for Phoebus reactor experiments. [AIAA PAPER 67-478] 21 p3769 A69-39751

**DUNN, D. A.**  
Experiment in stochastic heating. 08 p1368 A69-20805

**DUNN, J. C.**  
An explicit closed-loop controller for gravity turn landing maneuvers. 02 p0335 A69 12531

**DUNN, J. H.**  
Radar target amplitude, angle, and Doppler scintillation from analysis of the echo signal propagating in space. 02 p0211 A69-12447

**DUNN, M. G.**  
Experimental study of high-enthalpy shock- tunnel flow. II - Nozzle-flow characteristics. 24 p4247 A69-43575  
Measurement of electron temperature and number density in shock-tunnel flows. I - Development of free-molecular Langmuir probes. 24 p4317 A69-43648  
Experimental study of high-enthalpy shock- tunnel flow. I - Shock-tube flow and nozzle starting time. 24 p4305 A69-43664

**DUNN, M. H.**  
Time-resolved spectra of high-current pulsed argon lasers. [IEEE PAPER L-12] 07 p1152 A69-19068

**DUNN, R. G.**  
Studies of hydrogen-air supersonic combustion at low densities. [WSCJ PAPER 68-29] 07 p1240 A69-18358  
A test facility for sustained supersonic combustion at low densities. [AIAA PAPER 69-340] 13 p2243 A69-28276  
Supersonic combustion studies at low density conditions. [AIAA PAPER 69-458] 16 p2880 A69-32743

**DUNN, S. S.**  
Minimum power spacecraft attitude control laws for small constant disturbance torques. 11 p1966 A69-25446

**DUNN, V. E.**  
Recent advances in microstrip circulators. 13 p2230 A69-27679

**DUNN, W. I.**  
Generalized critical-state model of type II superconductors. 02 p0298 A69-12030

**DUNN, W. J.**  
Elimination of character smear on labelled plan displays. 09 p1495 A69-21675

**DUNN, W. R., JR.**  
Topological formulation of network functions without generation of k-trees. 06 p0903 A69-17409

**DUNN, W. W.**  
The solubility of carbon in cobalt and nickel. 01 p0092 A69-10060

**DUNNAM, M. P.**  
Airbreathing propulsion - Opportunities unlimited. 18 p3185 A69-35139

**DUNNE, J. A.**  
Strategy for scientific exploration of the terrestrial planets. 22 p4027 A69-40449

**DUNNE, J. B.**  
Modern rate gyro techniques. 15 p2608 A69-30410

**DUNNETT, R. M.**  
Theoretical limitations to the Hall acceleration mechanism in the polytron machine. 06 p0965 A69-17514  
Single-particle motion in multiple-cusp magnetic fields. 14 p2499 A69-29852



## DUNNING, E. L.

Refrigeration of space flight cryogenic gas storage systems.

15 p2587 A69-30395

## DUNNING, J. W., JR.

Motion measurement by laser Doppler techniques.

09 p1492 A69-21398

Application of the laser Doppler flowmeter to fluid flow measurements.

12 p2093 A69-26546

## DUNNINGER, D. R.

The condition for uniqueness of the Dirichlet problem for hyperbolic equations in cylindrical domains.

12 p2124 A69-26932

## DUNSBY, J. A.

Effect of atmospheric humidity on aircraft structural alloy fatigue life.

09 p1521 A69-21390

## DUNST, M.

Experimental and Theoretical Research on Atmospheric Circulations, the Jetstream, and Cyclonic Disturbances /Experimentelle und theoretische Untersuchungen ueber die atmosphärischen Zirkulationen, den jet stream und die zyklonalen Störungen/.

17 p2999 A69-33757

Model experiments regarding lateral mixing in the shear fields of the jet stream /Modellexperimente ueber die seitliche Vermischung in den scherungsfeldern des jet stream/.

17 p3000 A69-33759

## DUNTSOVA, ZH. S.

Calculation of the motion of a shock wave and flow parameters in a shock tube with a noninstantaneously opening diaphragm /Raschet dvizheniya udarnoi volny i parametrov potoka pri nemgovennom otkrytii diafragmy v udarnoi tube/.

14 p2432 A69-29623

## DUNWOODY, J.

High-frequency sound waves in ideal gases with internal dissipation.

05 p0792 A69-15723

## DUPAS, A.

Soviet space in 1969 /L'espace sovietique en 1969/.

06 p1002 A69-17265

## DUPE, J.

A new method for the quick analysis of transient phenomena. [ONERA-TP-684]

19 p3293 A69-35747

## DUPONT, C.

Structural stability of MAR-M 509, a cobalt-base superalloy.

05 p0781 A69-16448

Creep behavior of a Ni-Cr-Mo alloy /Udimet 500/ - Study of the stress-temperature-time correlation /Comportement au fluage d'un alliage au Ni-Cr-Mo /Udimet 500/ - Etude de la correlation contraintes-temperatures-temps/.

05 p0781 A69-16500

## DUPONT, T.

A factorization procedure for the solution of elliptic difference equations.

10 p1719 A69-23520

## DUPREE, A. K.

Calculations of ionization equilibria for oxygen, neon, silicon, and iron.

09 p1543 A69-22404

## DUPREE, T. H.

Nonlinear theory of low-frequency instabilities.

08 p1367 A69-20801

Weak turbulence theory of velocity space diffusion and the nonlinear Landau damping of waves.

08 p1368 A69-20803

Non-linear plasma physics.

23 p4197 A69-42312

## DUPUIS, G.

Elastic stability of one-dimensional structures /Stabilité élastique des structures unidimensionnelles/.

08 p1418 A69-20846

## DUPUIS, M.

Apparatus for automatic measurement of the amplitude and phase displacement of short- and ultra-short-wave signals /Dispositif de mesure automatique de l'amplitude et du déphasage de signaux en ondes courtes et ultra-courtes/.

15 p2570 A69-31088

## DUPUY, J.

The influence of the multiplicity of secondary particles, created in very-high-energy nuclear interactions, on the muon component of extensive air showers /L'in-

fluence de la multiplicité des particules secondaires créées dans les interactions nucléaires de très haute énergie, sur la composante muonique des grandes gerbes de l'air/.

07 p1207 A69-19325

## DURAND, J.

Cutaneous circulation during adaptation to high altitude /La circulation cutanée au cours de l'adaptation à l'altitude/.

23 p4098 A69-42106

## DURAND, J. P.

Evaluation of laboratory studies of life duration of thermionic converters /Bilan des études de durée de vie des convertisseurs thermo-ioniques en laboratoire/.

14 p2398 A69-29179

All-metal nuclear thermionic module /Module thermionique nucléaire tout-métal/.

14 p2398 A69-29181

Utilization of titanium alloys for thermionic conversion /Utilisation des alliages de titane en conversion thermo-ionique/.

14 p2462 A69-29217

## DURAND, M.

Numerical solution and experimental evaluation of elastoplastic problems for multiply connected shells of revolution.

06 p1025 A69-17614

## DURANT, M.

Image intensifier tubes and slit-type electronic cameras with high-sensitivity multiple integral images - Applications /Tubes intensificateurs d'images et caméras électroniques et fentes et à images intégrales multiples à haute sensibilité - Applications/.

12 p2083 A69-26143

## DURANTE, B.

High power density fuel cell.

23 p4076 A69-42309

## DURANTON, P.

Printed circuits by the RCS process /Les circuits imprimés par le procédé R.C.S./.

02 p0216 A69-12051

## DURASOVA, M. S.

Quasi-periodic variations of the intensity of solar radio emission at the 3.3-cm wavelength /Kvaziperiodicheskie izmeneniia intensivnosti radioizlucheniia solntsa na volne 3,3 cm/.

07 p1211 A69-18516

## DURBIN, E. J.

Aerodynamic instrumentation for improving helicopter take-off and landing piloting performance.

05 p0767 A69-16776

A vector airspeed measuring system /VAMS/ for helicopters and other V/STOL aircraft. [AHS PAPER 350]

17 p2974 A69-33527

## DURBIN, F.

The Linvill model - Its application to the description of irradiated semiconductors /Modele de Linvill - Son application à la description des semiconducteurs irradiés/.

08 p1280 A69-19974

## DURCHOLZ, R. L.

Cryostat and strain measurement for tensile tests to 1.5 K. [NAS-NRC PAPER J-3]

22 p3947 A69-40627

## DURELLI, A. J.

Stress concentrations around elliptical perforations in shrunk plates with bonded boundaries.

02 p0345 A69-12391

Moire-fringe interpolation and multiplication by fringe shifting.

03 p0524 A69-13063

Photoelastic study of high-frequency stress waves propagating in bars and plates. [ASME PAPER 68-WA/APM-27]

04 p0669 A69-14397

Stress concentrations in a rectangular plate with circular perforations along its two bonded edges and subjected to restrained shrinkage.

08 p1412 A69-20255

Natural stress.

13 p2359 A69-27259

Stress and finite-strain analysis of a circular ring under diametral compression.

14 p2531 A69-28884

Stresses in a perforated ribbed cylindrical shell subjected to internal pressure.

16 p2876 A69-32784

Stress distribution in a stator vane under bending.

22 p4042 A69-40310

## DURGAPRASAD, N.

Composition of the 2nd September 1966 solar particle event.

06 p0989 A69-17222

Composition of cosmic rays measured in Gemini X.

21 p3787 A69-38300

## DURHAM, F. P.

The nuclear rocket program at Los Alamos. [AIAA PAPER 69-556]

16 p2811 A69-32710

## DURIG, J. R.

Infrared and Raman investigation of condensed phases of methylamine and its deuterium derivatives.

01 p0023 A69-10000

Far-infrared spectra and structure of small ring compounds - Ethylene carbonate, gamma-butyrolactone and cyclopentanone/.

02 p0206 A69-12777

Infrared and Raman spectra of substituted hydrazines. I - Methylhydrazine.

10 p1752 A69-23555

Vibrational spectra and structure of small-ring compounds. XII.

14 p2410 A69-29999

## DURIS, C. S.

An exchange method for solving Haar or non-Haar overdetermined linear equations in the sense of Chebyshev.

01 p0105 A69-10700

## DURLING, B. J.

A method for computing the response of a general axisymmetric shell with an attached asymmetric structure.

11 p1993 A69-25555

## DURNEY, B.

Decrease in the period of pulsar PSR 0833-45.

18 p3196 A69-34600

## DURNEY, B. R.

Model atmosphere calculation of the solar oblateness.

08 p1383 A69-19800

Pulsation periods of rotating white dwarfs.

17 p3037 A69-33600

## DURNOVA, G. N.

Histological investigation of the internal organs of mice exposed for 20 days to an atmosphere with a high oxygen content /Gistologicheskoe issledovanie vnutrennykh organov myshei, nakhodivshikhsia v dnei v atmosfere s povyshennym soderzhaniiem kisloroda/.

05 p0709 A69-16500

Immunological and histochemical characteristics of the reactivity of mice placed in a medium with a high oxygen content /Immunologicheskai i gistohimicheskai kharakteristika reaktivnosti myshei, nakhodivshikhsia v srede s povyshennym soderzhaniiem kisloroda/.

07 p1065 A69-18900

Phagocytic activity and certain characteristics of carbohydrate metabolism in neutrophils of mice exposed to an atmosphere with increased oxygen content /Fagotsitarnai aktivnost' i nekotorye pokazateli uglevodnogo obmena neitrofilov u liudei, nakhodivshikhsia v atmosfere s povyshennym soderzhaniiem kisloroda/.

17 p2907 A69-32900

Histological examination of the internal organs of mice after twenty days in a hyperoxic atmosphere.

18 p3096 A69-34700

Immunological and histological study on the reactivity of mice exposed to a hyperoxic atmosphere.

20 p3479 A69-38200

## DUROUCHOUX, P.

Diffuse X radiation - Observation and origin /Rayonnement X diffus - Observation et origine/.

05 p0817 A69-16700

## DUROUCHOUX, PH.

Observation of celestial X-ray sources /Observation de sources X célestes/.

05 p0817 A69-16700

Observation of five sources of cosmic X-rays in the 15-150 Kev energy range.

07 p1210 A69-19700

## DURRAN, D. A.

Pressure gage for high noise environment.

15 p2611 A69-31000

## DURRANI, S. A.

Allende meteorite - Age determination by thermoluminescence.

24 p4385 A69-43200

**DURRANI, S. H.**

Communications system for the proposed orbiting data relay network.  
[AIAA PAPER 68-432] 09 p1455 A69-21989

**DURRANT, A. J. F.**

Characteristics of organic dye lasers as tunable frequency sources for nanosecond absorption spectroscopy.  
[IEEE PAPER A-3] 07 p1150 A69-19047

**DURRANT, T.**

The control of atmospheric pollution from gas turbine engines.  
[SAE PAPER 680347] 07 p1204 A69-19729

The control of atmospheric pollution from gas turbine engines.  
12 p2147 A69-26236

The reduction of smoke from gas turbine engines.  
17 p3020 A69-33350

The reduction of smoke from gas turbine engines.  
19 p3395 A69-36770

**DURRER, D.**

Refractory period of the dog's ventricular myocardium following sudden changes in frequency.  
24 p4257 A69-42628

**DURVASULA, S.**

Natural frequencies and modes of skew membranes.  
06 p1021 A69-17146

Free vibration of simply supported parallelogramic plates.  
11 p1987 A69-25379

On a perturbation solution of an algebraic eigenvalue problem concerning the vibration of a skew membrane.  
15 p2703 A69-30211

Natural frequencies and modes of clamped skew plates.  
20 p3621 A69-37201

Natural frequencies of vibration of isotropic flat plates. I.  
23 p4233 A69-42348

**DURYEA, G. R.**

The application of the accelerometer force balance in short-duration testing.  
[AIAA PAPER 69-351] 13 p2264 A69-28285

Accelerometer force balance techniques.  
19 p3292 A69-35737

**DUSEK, F.**

A new method of material evaluation from the standpoint of its susceptibility to brittle failure. II /Nový způsob hodnocení materiálu z hlediska náchylnosti ke krehkému porušení. II/.  
16 p2795 A69-32796

**DUSHIN, L. A.**

Microwave emission from a plasma in an inhomogeneous magnetic field. I - Emission at harmonics of the electron cyclotron frequency.  
08 p1370 A69-21019

Microwave emission of a plasma from an electrodeless inductive discharge at low pressures /Mikrovolnovoe izluchenie plazmy bezelektrodnogo induktsionnogo razriada pri nizkikh davleniakh/.  
09 p1549 A69-22017

Nonthermal microwave emission from a PIG discharge plasma /Neteplovoe mikrovolnovoe izluchenie iz plazmy otrazhatel'nogo razriada/.  
09 p1549 A69-22018

Alfven oscillations in an inhomogeneous plasma from a pulsed discharge with oscillating electrodes /Al'fvenovskie kolebaniia neodnorodnoi plazmy v impul'snom razriade s ostillsiruiushchimi elektronami/.  
09 p1550 A69-22020

Raman scattering of microwaves at plasma drift oscillations /Kombinatsionnoe rasseianie mikrovoln na dreifovykh kolebaniakh plazmy/.  
09 p1550 A69-22021

Determination of electron concentration from the change in the amplitude of a microwave signal reflected from an anisotropic plasma /Opredelenie kontsentratsii elektronov po izmeneniiu amplitudy otrazhennogo mikrovolnovogo signala ot anizotropnoi plazmy/.  
09 p1550 A69-22027

Classification and principles of construction of fast-response microwave interferometers /Printsipy postroeniia i klassifikatsiia bystrodeistviushchikh mikrovolnovykh interferometrov/.  
09 p1496 A69-22028

Analysis of the errors in certain microwave interferometer circuits /Analiz pogreshnostei nekotorykh skhem mikrovolnovykh interferometrov/.  
09 p1496 A69-22029

Simplified microwave interferometer for studying a pulse discharge plasma /Uproshchennyi mikrovolnovyi interferometr dlia issledovaniia plazmy impul'snykh razriadov/.  
09 p1496 A69-22030

Effect of refraction on the accuracy of plasma density determination by microwave interferometry /Vliianie refraktsii na tochnost' opredeleniia plotnosti plazmy pri mikrovolnovoi interferometrii/.  
09 p1496 A69-22031

Study of a Plasma with the Aid of Lasers /Issledovanie Plazmy s Pomoshch'iu Lazerov/.  
12 p2139 A69-27075

Determination of the local values of plasma parameters from the energy absorption of a refracted microwave beam /Opredelenie lokal'nykh znachenii parametrov plazmy po pogloshcheniiu energii refragiruushchego mikrovolnovogo lucha/.  
13 p2312 A69-28112

Plasma multifrequency interferometry /Mnogochastotnaia interferometriia plazmy/.  
14 p2497 A69-29795

A microwave interferometer with digital-logic elements /Mikrovolnovyi interferometr so schetnologicheskimi elementami/.  
14 p2452 A69-29802

**DUSHKOV, B. A.**

Study of the effects of various work and rest schedules on subjects under conditions of relative isolation /Izuchenie vliianiia razlichnykh rezhimov truda i otdykha na ispytatelei, nakhodiaschikhsia v usloviakh otositel'noi izolatsii/.  
03 p0381 A69-14201

Change in the functional state of the human organism during tests in chambers /Izmenenie funktsional'nogo sostoiianiia organizma cheloveka pri ispytaniakh v kamerakh/.  
03 p0377 A69-14202

Changes in physiological functions during prolonged confinement in a closed restricted space.  
08 p1262 A69-19838

Effect of a "fractional" regime of daily activity on the human organism under conditions of relative isolation /Vliianie na organizm cheloveka "drobnogo" rezhima sutochnoi deiatel'nosti v usloviakh otositel'noi izolatsii/.  
17 p2906 A69-32936

Study of the working capacity of a human operator during 64-hour wakefulness /Issledovanie rabotosposobnosti cheloveka-operatora pri 64-chasovom lishenii sna/.  
22 p3877 A69-40280

**DUSPIVA, F.**

Molecular biological aspects of developmental physiology /Molekularbiologicheskie Aspekty der Entwicklungsgysiologie/.  
21 p3652 A69-38787

**DUST, D. C.**

Manned aerospace simulation.  
[ASME PAPER 69-DE-56] 14 p2427 A69-28844

**DUSTERBERRY, J. C.**

The simulator to match the transports to come.  
24 p4297 A69-43044

**DUSTO, A.**

An influence coefficient method for the prediction of longitudinal stability derivatives of rigid and elastic airplanes.  
[AIAA PAPER 69-131] 06 p0868 A69-18134

**DUSTOV, I. K.**

The influence of supersonic plasma jets on polymer films /Deistvie sverkhzvukovykh plazmennyykh strui na polimernye plenki/.  
21 p3752 A69-39081

Investigation of the mechanism of breakdown of certain polymers due to the action of a radiative plasma flux /Issledovanie mekhanizma razrusheniia nekotorykh polimerov pod deistviem luchistogo potoka plazmy/.  
22 p3974 A69-41031

**DUSZEK, M.**

Plastic analysis of shallow spherical shells at moderately large deflections.  
11 p1980 A69-24823

**DUTCHAK, I. A. I.**

Production of epitaxial films of tin chalcogenides.  
02 p0298 A69-12049

**DUTERQUE, J.**

Analysis of the infrared spectrum of diborene hydrazine /Analyse du spectre infrarouge de l'hydrazine diborene/.  
12 p2027 A69-26917

**DUTHIE, J. G.**

Gamma ray astronomy.  
03 p0497 A69-12931

Search for cosmic gamma radiation in the southern sky.  
08 p1377 A69-19787

Optical studies of pulsar NP 0532.  
10 p1774 A69-23182

**DUTSCH, H. U.**

Critical comparison of the determination of vertical ozone distribution by the Umkehr method and by the electrochemical sonde.  
16 p2786 A69-32630

Simultaneous Umkehr observations with two instruments.  
16 p2786 A69-32631

**DUTT, M.**

Temperature fields in the jets of transpiration and water-cooled argon arcs.  
15 p2657 A69-30155

**DUTTA, S. K.**

Fine-grained ceramics - The role of pressure calcining.  
12 p2119 A69-26832

**DUTTON, E. J.**

Radiometric observations of thunderstorm cells.  
12 p2127 A69-27002

**DUTTON, G. W.**

An interferometric displacement transducer.  
15 p2614 A69-31280

**DUTTON, J.**

The motion of oxygen ions in oxygen.  
05 p0795 A69-15662

**DUTTON, J. A.**

Approximate equations of motion for gases and liquids.  
12 p2061 A69-26013

**DUTTON, R.**

A survey of compression creep testing of metals.  
12 p2175 A69-25836

**DUTTON, R. W.**

Oriented Te thin films.  
08 p1373 A69-20891

**DUTUIT, Y.**

Attempt at interpretation of Faraday effect measurements in a hydrogen plasma during guided propagation in the 3-cm band /Essai d'interpretation des mesures d'effet Faraday d'un plasma d'hydrogene, en propagation guidee dans la bande des 3 cm/.  
17 p2919 A69-33394

**DUTZMANN, R. J.**

An integrated sensor controller for missile directional control.  
[AIAA PAPER 69-837] 21 p3761 A69-39368

**DUVAL, R.**

Influence of allotropy of molybdenum disilicide MoSi sub 2 on the siliciding of molybdenum and its alloys /Consequences de l'allotropie du disiliciure MoSi sub 2 pour la siliciuration du molybdene et de ses alliages/.  
[ONERA-TP-642] 08 p1335 A69-19967

**DUVAL, R. A.**

25 kwe reactor-thermoelectric power system for manned orbiting space stations.  
23 p4187 A69-42256

**DUVALL, D. S.**

Studies of postweld heat-treatment cracking in nickel-base alloys.  
08 p1318 A69-19964

**DUVALL, G. E.**

Finite amplitude longitudinal waves in lattices.  
06 p1022 A69-17367

**DUVALL, R. N.**

Spectrophotometric studies of gaseous nebulae. XII.  
10 p1787 A69-24117

**DUVOISIN, P. F.**

Indirect atmospheric measurements utilizing Rake tropospheric scatter techniques. II - Radiometeorological interpretation of Rake channel-sounding observations.  
14 p2448 A69-29525

**DUVOV, A. S.**

Physics of the Atmospheric Boundary Layer /Fizika pogranichnogo sloia atmosfery/.  
20 p3571 A69-37694

**DUXBURY, T. C.**

Investigation of planetary navigation using spacecraft-based measurements.  
19 p3368 A69-35791



- A spacecraft-based navigation instrument for outer planet missions.  
[AIAA PAPER 69-902] 21 p3761 A69-39348
- DUYSINX, R.**  
Observation of polar auroral spectra in the far ultraviolet /Enregistrement de spectres d'aurores polaires dans l'ultraviolet lointain/.  
08 p1311 A69-21026  
Spectroscopic study of the auroras of November 19, 1966, and February 4, 1967, in the visible and the near-ultraviolet range /Etude spectroscopique dans le domaine visible et ultra-violet proche des aurores du 19 novembre 1966 et 4 février 1967/.  
17 p2961 A69-33416
- DUYTSCHAEVER, D.**  
Compensation of time delay and smoothing errors in hybrid computation loops.  
15 p2572 A69-30618
- DVINSKIKH, N. I.**  
Decomposition of the diurnal variation of  $f$  sub zero F into natural uncorrelated components /O razlozhenii sutochnogo khoda  $f$  sub zero F2 na estestvennye nekorrelirovannye sostavliayushchie/.  
20 p3521 A69-37051
- DVORAK, F. A.**  
Effect of uniform injection on heat transfer in the constant property turbulent boundary layer.  
[ASME PAPER 68-WA/HT-24] 05 p0847 A69-16126  
Calculation of turbulent boundary layers on rough surfaces in pressure gradient.  
24 p4304 A69-43580
- DVORAK, J.**  
Motion of cracks in brittle fracture.  
10 p1796 A69-23070  
Elimination of the reaction to hypoxia in human beings by repeated exposure to hypoxia /L'abolition de la reaction hypoxique par des expositions repetees a l'hypoxie chez l'homme/.  
23 p4214 A69-41789
- DVORAK, K.**  
Calculation of fatigue life in nonstationary cyclic loading above the endurance limit and its application to shortened fatigue tests /Vypocet zivotnosti pri nestacionarnim cyklickem zatezovanii nad mezi unavy a jeho aplikace na zkracene unavove zkousky/.  
07 p1231 A69-18403
- DVORIANKIN, D. K.**  
Electrokinetic converter of biomechanical parameters /Elektrokineticheskii preobrazovatel' biomekhanicheskikh parametrov/.  
14 p2409 A69-29471
- DVORIANKIN, V. F.**  
Thermal EMF of cadmium arsenide /Termoeds v arsenide kadmia/.  
22 p3993 A69-40607
- DVORASHIN, A. S.**  
Solar corpuscular radiation according to measurement data obtained with satellites and automatic interplanetary stations /Korpuskularnoe izluchenie solntsa po dannym izmerenii na sputnikakh i avtomaticheskikh mezplanetnykh stantsiakh/.  
15 p2684 A69-30516  
Four-streamer model of the solar corona at near-minimum activity /Chetyrekhluchevaia model' solnechnoi korony vblizi minimuma aktivnosti/.  
15 p2674 A69-30517
- DWIVEDI, R. P.**  
On the curvature of magnetic lines behind a hydromagnetic shock in pseudo-stationary flows.  
04 p0638 A69-15092
- DWORETSKY, M. M.**  
Dynamical stability in pre-main-sequence stars.  
07 p1220 A69-19388  
Identification of Pt II in the spectra of some peculiar A stars.  
15 p2695 A69-30891
- DWORETSKY, S.**  
Electron bombardment ion source for low energy beams.  
03 p0428 A69-13106
- DWORNIK, E. J.**  
Pecoraite, Ni sub 6 Si sub 4 O sub 10 /OH/ sub 8, nickel analog of clinchysotile, formed in the Wolf Creek meteorite.  
18 p3199 A69-34824
- DWORNIK, S. E.**  
Principal science results from Surveyor 5.  
02 p0321 A69-12224
- DWYER, H. A.**  
Calculation of unsteady leading-edge boundary layers.  
02 p0233 A69-12543  
Hele-Shaw and porous medium flow for space fuel systems.  
[AIAA PAPER 69-678] 17 p3021 A69-33444
- DYAL, P.**  
Magnetometer experiment.  
[AAS PAPER 68-206] 02 p0312 A69-11481
- DYBAN, E. P.**  
Calculation of air film cooling for a rotating disk /K raschetu plenochного воздушного okhlazhdeniia vrashchayushchegosia diska/.  
06 p1034 A69-17814  
Effect of initial nonuniformity of the temperature profile of the main stream on the efficiency of thermal shielding of a surface by air injection through a slit or porous collar /Vliianie nachal'noi neravnomernosti profil'ia temperatury osnovnogo potoka na effektivnost' teplovoi zashchity poverkhnosti dvumov vozdukh cherez shchel' ili poristy poiasok/.  
11 p2002 A69-25338  
Investigation of the air cooling systems of the turbine rotors of AI-20 engines /Issledovanie sistem vozdushnogo okhlazhdeniia rotorov turbin dvigatelei AI-20/.  
24 p4364 A69-43081
- DYBOWSKI, W.**  
Physiological and psychotechnical criteria for the arrangement of dials and clocks in the pilot's cockpit.  
23 p4108 A69-41827
- DYCE, R. B.**  
Venus - Lower atmosphere not measured.  
01 p0157 A69-11197
- DYCK, H. M.**  
Photometric polarimetry of late-type stars.  
01 p0158 A69-11326  
Chromospheres and polarization in late-type stars.  
13 p2340 A69-27579
- DYCUS, R. D.**  
A note on meteorites and the moon.  
04 p0655 A69-14663  
The epsilon Leonid meteor shower and satellite detected micrometeoroid showers.  
14 p2522 A69-29588  
Rainfall and the meteoroid influx to earth.  
20 p3609 A69-38062  
A meteoroid stream model for evaluation of the threat hazard to interplanetary flight.  
24 p4385 A69-43258  
The meteorite flux at the surface of Mars.  
24 p4387 A69-43351
- DYE, R. C. F.**  
Vibration amplitudes of compressor blades resulting from scatter in blade natural frequencies.  
[ASME PAPER 68-WA/GT-3] 05 p0837 A69-16139
- DYER, C. H.**  
The magnetic tape recording of ultrasonic test information.  
07 p1117 A69-19697
- DYER, D. F.**  
Quasi-steady compressible flow with heat transfer in accelerating nozzles and ducts.  
12 p2012 A69-26790
- DYER, J.**  
Generalized multistep methods in satellite orbit computation.  
01 p0153 A69-10808  
Generalized multistep methods for second-order equations and applications to orbit computation.  
[AIAA PAPER 69-948] 22 p4021 A69-40331
- DYER, J. P.**  
Comparison of preflight and postflight error analyses of Lunar Orbiter missions.  
[AAS PAPER 68-108] 21 p3805 A69-39220
- DYER, P.**  
On optimal control problems with discontinuities.  
01 p0049 A69-10003  
Optimization of control systems with discontinuities and terminal constraints.  
22 p3918 A69-41009  
Optimization of control systems with discontinuities and terminal constraints.  
24 p4294 A69-43306
- DYER, R.**  
Organic-inorganic systems and life.  
14 p2408 A69-29632
- DYKE, W. P.**  
3 nanosecond exposures with X-rays, electrons and light.  
12 p2086 A69-26161  
Nanosecond photography with super radiant light, rays or electrons.  
19 p3305 A69-35737
- DYKHNE, A. M.**  
Ionization instability in a bounded region /Ionizatsionnaia neustoiichivost' v ogranichennoi oblasti/.  
10 p1735 A69-23461
- DYKMAN, I. M.**  
Effect of electric field and energy dispersion law on plasma oscillations in semiconductors.  
04 p0642 A69-14555  
Propagation of electromagnetic waves in a plate-like semiconductor at nonstandard dispersion law of carrier energy.  
22 p3994 A69-40751
- DYLEWSKI, T. J.**  
Criteria for selecting curves for fitting to data.  
[AIAA PAPER 69-950] 22 p3975 A69-40331
- DYLEWSKI, W.**  
Application of Lagrange equations for flutter analysis of a guided rocket in supersonic flight /Zastosowanie rownan Lagrange'a do badania flatteru sterowanej rakiety w locie naddzwiekowym/.  
17 p3045 A69-32944
- DYM, C. L.**  
Perturbation solutions for the buckling problems of axially compressed thin cylindrical shells of infinite or finite length.  
[ASME PAPER 68-WA/APM-22] 04 p0669 A69-14399  
Dynamics of anisotropic elastic solids.  
04 p0675 A69-14599  
On the dynamics of a shell in a testing machine.  
13 p2359 A69-27269  
On the time-dependent heat conduction and thermoelastic problems.  
14 p2535 A69-29369
- DYMENT, A.**  
An unusual phenomenon of propagation of a train of gravity waves in a cylindrical channel /Sur un phenomene exceptionnel de propagation d'un train d'ondes de pesanteur dans un canal cylindrique/.  
01 p0059 A69-10381  
Indeformable gravity waves in a second-order approximation in a cylindrical channel /Sur les ondes de pesanteur indeformables a l'approximation d'ordre 2 dans un canal cylindrique/.  
01 p0060 A69-10399  
Permanent gravity waves in a second-order approximation in the case of plane flow of two immiscible liquids on a horizontal bottom /Sur les ondes de pesanteur permanentes a l'approximation d'ordre 2 dans un ecoulement plan sur fond horizontal de deux liquides non miscibles/.  
04 p0590 A69-15053
- DYMENT, J. C.**  
Optimum stripe width for continuous operation of GaAs junction lasers.  
16 p2796 A69-31699  
Time delays and Q switching in junction lasers. Computer calculations and comparison with experiments.  
22 p3962 A69-40566  
Spiking in light pulses from GaAs Q-switched junction lasers.  
22 p3963 A69-40566
- DYMENT, R.**  
Laboratory for air cushion vehicle.  
15 p2589 A69-30866
- DYMIKOV, V. P.**  
Some features of a numerical solution of the equations for humidity transport in the atmosphere /O nekotorykh osobennostiakh chislennogo resheniia uravnenii perenosia vlazhnosti v atmosfere/.  
21 p3759 A69-39111
- DYMOV, B. K.**  
Integral hemispherical emissivity of pyrolytic zirconium carbide /Integral'naia polusfericheskaiia izluchatel'naia sposobnost' piroliticheskogo karbida tsirkonia/.  
15 p2640 A69-30981
- DYMOVICH, V. I.**  
Mass-spectrometer investigation of ions formed by interaction between laser radiation and matter.  
06 p0932 A69-16922

DYMSHITS, IU. I.

Thermionic emission and expansion of a plasma formed by focused single-pulse laser radiation on a solid target.  
03 p0441 A69-14141

DYNER, H. B.

Simulation of total equilibrium shock-layer radiation for three typical entry body shapes.  
[AIAA PAPER 67-324] 24 p4249 A69-43665

DYSHLEVIY, P. S.

Space and Time in Modern Physics, All-Union Symposium on the Philosophical Problems of Einstein's Theory of Gravitation and Relativistic Cosmology, 2nd, Kiev Ukrainian SSR, June 1-4, 1966, Transactions /Prostranstvo i Vremia v Sovremennoi Fizike, Vsesoiuznyi Simpozium po Filosofskim Probleмам Teorii Tiagoteniia Einsteina i Relativistskoi Kosmologii, 2nd, Kiev, Ukrainian SSR, June 1-4, 1966, Materialy/.  
14 p2482 A69-28856

Philosophical substance and meaning of the general theory of relativity and Einstein's methods /Filosofskoe soderzhanie i znachenie obshechei teorii otноситel'nosti i metodov Einsteina/.  
14 p2483 A69-28859

Under what conditions does the hypothesis of a macroscopic nature of space and time have sense/ques/ /Pri kakikh usloviakh gipoteza o makroskopichesko prirode prostranstva i vremeni imeet smysl/ques/.  
14 p2484 A69-28864

DYSON, F. J.

Numerological considerations relevant to quasi-stellar objects.  
02 p0325 A69-12590

The efficiency of energy release in gravitational collapse.  
16 p2853 A69-31594

DYSON, J. E.

The high-level populations of hydrogen in gaseous nebulae.  
09 p1604 A69-22406

DYSON, P. L.

Conflicting electron temperature measurements in the upper F region.  
05 p0756 A69-16283

Ionospheric and magnetic observations at 1000 kilometers during the geomagnetic storm and aurora of May 25-26, 1967.  
18 p3129 A69-34954

DZAKOWIC, G. S.

Heat pipes function isothermally and adaptably.  
21 p3852 A69-39475

Experimental study of vapor velocity limit in a sodium heat pipe.  
[ASME PAPER 69-HT-21] 24 p4412 A69-43547

DZEDIN, T.

A comparative study of some cardiovascular effects of sotalol /MJ 1999/ and propranolol.  
23 p4080 A69-41403

DZERDZEEVSKII, B. L.

Meteorological Investigations- General Circulation of the Atmosphere /Meteorologicheskii Issledovaniia-Obshchaia Tsirkuliatsiia Atmosfery/.  
14 p2475 A69-29818

Secular fluctuations of the general atmospheric circulation and of the climate, and the main regularities of the planetary circulation /Mnogoletnie fluktuatsii obshechei tsirkuliatsii atmosfery i klimata i glavneishie zakonomernosti planetarnoi tsirkuliatsii/.  
14 p2478 A69-29836

DZHABAR-ZADE, R. M.

An algorithm for a numerical solution of the balance equation /Ob odnom algoritme chislennogo resheniia uravneniia balansa/.  
14 p2470 A69-29401

DZHAKSIMOV, E.

Certain effects in semiconductors due to the action of intense light on current carriers /Nekotorye efekty v poluprovodnikakh, vyyvnannye deistviem intensivnogo sveta na nositeli toka/.  
01 p0139 A69-10895

Calculation of the effect of "entrainment" on the acoustothermal effect in semiconductors /Raschet vliianiia efekta "uvlecheniia" na akustotermicheskii effekt v poluprovodnikakh/.  
10 p1746 A69-23573

DZHAKUPOV, K. B.

Numerical calculation of stationary problems of a viscous incompressible fluid /O chislennom raschete statsionarnykh zadach viazkoi neshzimaemoi zhidkosti/.  
11 p1875 A69-25480

Two numerical methods of solving the steady-state Navier-Stokes equations for a viscous compressible fluid /O dvukh chislennykh metodakh resheniia statsionarnykh uravnenii nav'e-stoksa viazkoi szhimaemoi zhidkosti/.  
19 p3297 A69-35852

DZHAUGASHTIN, K. E.

Numerical solution to the problem of the development of a laminar jet in a channel /Chislennoe reshenie zadachi o razvitiu laminarnoi strui v kanale/.  
07 p1120 A69-18997

Propagation of an axisymmetric turbulent jet of an electrically conducting fluid in a longitudinal magnetic field /Rasprostranenie osesimmetrichnoi turbulentnoi strui elektroprovodiashchei zhidkosti v prodol'nom magnitnom pole/.  
07 p1192 A69-19019

Distribution of the pulsation energy in an axisymmetric turbulent jet of conducting fluid expanding in a longitudinal magnetic field /Raspreделение pul'satsionnoi energii v osesimmetrichnoi turbulentnoi strue elektroprovodiashchei zhidkosti, rasprostraniiaushchei v prodol'nom magnitnom pole/.  
07 p1192 A69-19021

Some results of a further theoretical study of MHD flows /Nekotorye rezul'taty dal'neishego teoreticheskogo issledovaniia MGD-techenii/.  
10 p1734 A69-23455

Mercury flow with a hydraulic shock in a channel situated in a transverse magnetic field /Tehenie rtuti s gidravlicheskim pryzhkom v lotke v poperechnom magnitnom pole/.  
13 p2307 A69-27499

Pulsating flow of a conducting fluid in a plane channel /Pul'siruiushchee techenie provodiashchei zhidkosti v ploskom kanale/.  
14 p2501 A69-29909

DZHAVRISHVILI, A. K.

Delayed coincidences in air showers.  
13 p2331 A69-28402

DZHEMILEV, G. G.

Influence of zonal drift on the formation of a morning ionization anomaly in the F region /O vliiani zonal'nogo dreifa na obrazovanie predpoludnennoi anomalii ionizatsii v F-oblasti/.  
14 p2442 A69-29732

DZHIBUTI, M. V.

The initial stage in the ageing of Fe-Ni alloys containing Ti additions.  
10 p1712 A69-23720

DZHIOEVA, S. G.

Electrical reflection in n-type GaAs /Elektrootrazhenie v GaAs n-tipa/.  
15 p2666 A69-30060

Features of electrical reflection in GaAs with low free-carrier concentration /Osobennosti elektrootrazheniia v GaAs s maloi kontsentratsiei svobodnykh nositelei/.  
15 p2666 A69-30061

DZHISHKARIANI, A. V.

The method of least squares and the Bubnov-Galerkin method /O metodakh naimen'shikh kvadratov i Bubnova-Galerkina/.  
01 p0105 A69-10728

DZHORDZHIA, N. V.

Ions at altitudes of 1000 to 1200 km according to measurements on the Cosmos 5 satellite /Iony na vysotakh 1000-1200 km po izmereniiam na sputnike "Kosmos-5"/.  
02 p0306 A69-11656

DZHORDZHIO, N. V.

Ions at heights of 1000-1200 km, according to Cosmos 5 measurements.  
13 p2333 A69-28687

Concentrations of molecular ions on the basis of measurements performed on board the Cosmos 5 satellite /Kontsentratsii molekuliarnykh ionov po izmereniiam na sputnike "Kosmos-5"/.  
20 p3519 A69-37021

DZHORDZHIO, V. A.

Jet streams as indicators of general atmospheric circulation /Struiinye techeniia kak indikatory obshechei tsirkuliatsii atmosfery/.  
14 p2477 A69-29831

DZHRBASHIAN, M. M.

A generalized Riemann-Liouville operator and some of its applications /Obobshchennyi operator Rimana-Liuvillia i nekotorye ego primeneniia/.  
04 p0622 A69-14512

DZHUN, I. V.

Pearson's distribution of type VII in the errors of observations of latitude variations /Raspreделение Pirsona

VII tipa v oshibkakh nabludeniia nad kolebaniiami shiroi/.  
17 p2959 A69-32879

DZHURAEV, T. D.

A system of equations in boundary layer theory for a steady incompressible fluid flow /O sisteme uravnenii teorii pogranichnogo sloia dlia statsionarnogo techeniia neshzimaemoi zhidkosti/.  
05 p0751 A69-16454

System of boundary layer equations for a plane steady gas flow /O sisteme uravnenii pogranichnogo sloia dlia ploskogo statsionarnogo techeniia gaza/.  
10 p1679 A69-23569

DZHUSUPOV, K.

Simple wave in a conducting medium in a steady gravitational field /Prostaia volna v provodiashchei srede v statsionarnom pole tiazhesti/.  
05 p0802 A69-15789

Simple wave in a conductive medium in a stationary gravitational field.  
18 p3181 A69-35040

DZHUZUMKULOV, T.

A general solution of the equations of magnetohydrodynamics for one-dimensional non-stationary and plane stationary motions.  
10 p1727 A69-23096

DZIADYK, V. K.

Investigations concerning the theory of approximations of analytic functions, conducted at the Institute of Mathematics of the Academy of Sciences of the Ukrainian SSR /Issledovaniia po teorii priblizhenii analiticheskikh funktsii, provodimy v Institut Matematiki AN USSR/.  
12 p2120 A69-26198

DZIECIELAK, R.

Some applications of the reciprocal theorem for displacements to singular solutions in the theory of consolidation.  
05 p0835 A69-15869

DZIEBOWSKI, C. V.

Suggested zodiacal light measurements from space probes.  
16 p2857 A69-32092

DZIEWONSKI, A.

Preliminary report on recent improvements in the analysis of surface waves.  
02 p0243 A69-12006

Recent improvements in the analysis of surface wave observations.  
16 p2784 A69-32576

Recent improvements in the analysis of surface wave observations.  
16 p2784 A69-32577

A technique for the analysis of transient seismic signals.  
22 p3934 A69-39872

Progress report on recent improvements in the analysis of surface wave observations.  
23 p4157 A69-42018

DZIEWULSKA-LOSIOWA, A.

Ozone changes related to the macrosynoptic situations in the middle stratosphere.  
08 p1308 A69-20261

DZIUBENKO, M. I.

Laser for photolocation of the moon.  
14 p2460 A69-29660

DZIUBENKO, N. I.

Variation in the mean length of polar aurora rays during the night /Tiksi bay/ /Izmenenie srednei dliny luchi poliarnykh sianii v techenie nochi /B. Tiksi/.  
14 p2437 A69-29077

Structure of polar auroras /Struktura poliarnykh sianii/.  
14 p2442 A69-29719

DZIUBENKO, T. D.

Determination of the position of a jetstream axis from weather satellite cloud data /Opredelenie polozheniia osi struiunogo techeniia po dannym ob oblachnosti s meteorologicheskogo sputnik/.  
19 p3366 A69-36669

DZNELADZE, ZH. I.

Some properties of tungsten and tungsten-base alloys.  
05 p0782 A69-16797

DZYGADLO, Z.

Instability limits of parametric self-excited vibrations of elastic and aeroelastic systems with travelling waves.  
02 p0337 A69-11561



Vibration of a rectangular plate forced by a harmonically varying or nonstationary pressure in three-dimensional supersonic flow.

03 p0528 A69-13928

Asymptotic theory of the pressure on a cylindrical shell performing unsteady oscillation in external or internal supersonic flow.

09 p1618 A69-22256

Asymptotic theory of the pressure on a cylindrical shell performing unsteady oscillation in external or internal supersonic flow.

18 p3089 A69-35461

Forced parametrically-excited vibration of a plate of finite length in plane supersonic flow. I - Theory.

24 p4407 A69-43733

## E

### EAGLE, E. L.

Nomogram for estimating body fat, specific gravity and lean body weight from height and weight.

07 p1067 A69-19428

### EAGLE, K. H.

Fault Tree and reliability analysis comparison.

18 p3142 A69-34479

### EAGLES, D. M.

Effective masses in Zr-doped superconducting ceramic SrTiO sub 3.

13 p2316 A69-27400

Theory of transitions from large to nearly- small polarons, with application to Zr-doped superconducting SrTiO sub 3.

20 p3583 A69-37280

### EAGLES, P. M.

Composite series in the Orr-Sommerfeld problem for symmetric channel flow.

17 p2958 A69-34151

### EAKER, N.

Data reduction system for the Modular Auroral Probe.

23 p4133 A69-41764

### EARL, H. E.

Scattering from dielectric mirrors.

13 p2298 A69-27663

### EARL, J. A.

Are cosmic electrons anisotropic/ques/

20 p3593 A69-38145

### EARL, T. D.

The potential of an air cushion landing gear in civil air transport.

02 p0193 A69-12690

### EARLEY, L. E.

Relationship between intrarenal hydrostatic pressure and hemodynamically induced changes in sodium excretion.

07 p1063 A69-18629

Interrelationship of physical factors affecting sodium reabsorption in the dog.

13 p2210 A69-28482

### EARNSHAW, R. D. S.

Changes in the total electron content and slab thickness of the ionosphere during a magnetic storm in June 1965.

05 p0759 A69-16420

### EARP, C. W.

Basis for a mathematical theory of direction-defining radio beacons.

17 p2918 A69-33028

### EASON, G.

On the indentation of an inhomogeneous plastic solid.

11 p1986 A69-25244

### EASSON, R. M.

Surface structure and A.C. losses in superconductive niobium.

02 p0298 A69-12031

### EAST, R. A.

Steady expansion of shock-heated gases for recombination studies.

18 p3228 A69-34466

A miniature total temperature probe for boundary layer measurements in short running time hypersonic facilities.

19 p3293 A69-35751

### EASTBURN, M. W.

What significance - Statistics.

22 p4054 A69-41128

### EASTERLING, M. F.

A high-rate telemetry system for the Mariner 1969 mission.

07 p1083 A69-19125

### EASTMAN, F. H., III

High resolution television images from space.

07 p1131 A69-18552

### EASTMAN, G. Y.

The heat pipe - A progress report.

23 p4074 A69-42296

### EASTMAN, J. M.

A fluidic compressor bleed control.

[ASME PAPER 69-GT-19] 09 p1571 A69-22498

A fluidic compressor bleed control for jet engines.

10 p1753 A69-23559

### EASTMAN, L. F.

High power hybrid mode oscillations in GaAs.

07 p1196 A69-18444

Pulse power from LSA devices at centimeter through millimeter wavelengths.

07 p1097 A69-18445

### EASTON, C. R.

Nonlinear free surface effects in tank draining at low gravity.

[AIAA PAPER 69-680] 17 p2953 A69-33450

### EASTON, K. W.

Glow discharge electron beam welding.

04 p0608 A69-15480

### EASTWOOD, C.

The scope of quality control in welding.

[SBAC PAPER 15] 20 p3550 A69-37452

### EASTWOOD, E.

The electronic ground environment.

06 p0886 A69-16860

Radar, birds and aircraft.

11 p1837 A69-25247

### EATHER, R. H.

Latitudinal distribution of auroral and airglow emissions - The "soft" auroral zone.

05 p0754 A69-16258

Spectrophotometry of faint light sources with a tilting-filter photometer.

11 p1884 A69-24834

The absence of the hydrogen emission /H beta/ in the westward traveling surge.

18 p3130 A69-35189

Latitudinal distribution of auroral and airglow emissions.

21 p3709 A69-38501

Characteristics of polar cap auroras.

22 p3940 A69-40522

Short-period auroral pulsations in lambda 6300 O I.

24 p4309 A69-43171

### EATON, D. C.

NERVA - Contributing today and tomorrow.

18 p3170 A69-35075

### EBBERT, L.

Relationship between tocopherol status and in vivo hemolysis caused by hyperoxia.

07 p1066 A69-19422

### EBEL, H. F.

Is there life on Mars/ques/ The origin and propagation of life in the cosmos /Gibt es Leben auf dem Mars/ques/ Ueber Entstehung und Verbreitung des Lebens im Kosmos/.

05 p0707 A69-15966

### EBELING, W.

On the equation of state of fully ionized quantum plasmas.

01 p0128 A69-10346

Derivation of the free energy of low-density quantum plasmas from exact scattering phases /Ableitung der freien Energie von Quantenplasmen kleiner Dichte aus den exakten Streuphasen/.

05 p0799 A69-15629

### EBELING, W. C.

A new approach to visual simulation.

[AIAA PAPER 68-255] 11 p1866 A69-25376

### EBERHARDT, P.

Ages of silicate inclusions in iron meteorites.

08 p1405 A69-20927

Rare-gas measurements in separate mineral phases of the Otis and Elenovka chondrites.

19 p3418 A69-36137

### EBERIUS, H.

Determination of rate constants of chemical reactions from flames /Zur Ermittlung von Geschwindigkeitskonstanten chemischer Reaktionen aus Flammen/.

22 p3895 A69-40318

### EBERLY, J. H.

Trajectory and mass shift of a classical electron in radiation pulse.

08 p1377 A69-1977

### EBERSOLE, J. S.

Modification of the cortical click-evoked response during eye movement in cats.

17 p2911 A69-341

### EBERT, D. H.

Development of collision avoidance systems.

13 p2295 A69-273

### EBERT, H.

Digital processing of radar information in air traffic control.

13 p2295 A69-273

### EBERT, L. J.

The stress-strain behavior of concentric composite cylinders.

01 p0171 A69-1122

### EBERT, S.

Sighting in the C-5.

18 p3104 A69-3544

### EBIHARA, K.

Some excitation temperature measurements of induction-coupled argon plasmas.

06 p0964 A69-1711

### EBIHARA, W. T.

In-process metallurgy of wrought cobalt-base alloys.

14 p2456 A69-298

### EBRAHIMI, I.

Turbulence in isothermal free jets /Turbulenz in isothermen Freistrahlen/.

06 p0909 A69-1711

Turbulence in Isothermal Free Jets and Free Jet Flames /Turbulenz in isothermen Freistrahlen und Freistrahlfammen/.

17 p3068 A69-3299

### EBY, L. T.

Thermosetting adhesives.

14 p2468 A69-293

### EBY, R. J.

Some aspects of thermal modeling theory and analysis as applied to spacecraft temperature control.

[SAE PAPER 690199] 07 p1239 A69-183

### ECCLES, D.

An explanation of the magnetic declination effect in the ionospheric F2-layer.

18 p3126 A69-342

A review of topside sounder studies of the equatorial ionosphere.

20 p3530 A69-378

### ECCLES, E. S.

New philosophies in automatic power unit controls.

24 p4253 A69-4311

### ECHENIQUE, R.

T-wave inversion of the ECG of healthy individuals with vagotonia.

09 p1445 A69-225

### ECHIGO, R.

Composite heat transfer with thermal radiation in a non-gray medium.

03 p0533 A69-138

### ECHIZENYA, Y.

Stratification of F region during solar minimum and its variation comparing with solar maximum's.

17 p2959 A69-330

### ECKARD, A. D.

Synthesis of linear aliphatic polyesters.

19 p3265 A69-363

### ECKARD, R.

Strain gauge transducers and applications.

10 p1690 A69-232

### ECKARDT, R. C.

Compensating for pump-induced distortion in glass laser rods.

04 p0609 A69-142

### ECKBRETH, A. C.

Current pattern and gas flow stabilization in pulsed plasma accelerators.

[AIAA PAPER 69-112] 06 p0971 A69-181

### ECKDAHL, C.

Properties of the rotating spoke in an unstable pulsed MPD arc.

[AIAA PAPER 69-234] 09 p1561 A69-212

### ECKER, H. A.

Statistical characteristics of the polarization power ratio for radar return with circular polarization.

23 p4131 A69-425

ECKERT, B.  
Turbocompressors /Turboverdichter/.  
19 p3395 A69-36749

ECKERT, E. R. G.  
Plasma heat transfer.  
[ASME PAPER 68-HT-38] 01 p0175 A69-10314  
Film cooling with normal injection into a supersonic  
flow.  
03 p0413 A69-12994  
Heat transfer - A review of current literature.  
04 p0684 A69-14354  
Reverse transition turbulent-laminar for flow  
through a tube with fluid injection.  
04 p0586 A69-14409  
Heat transfer bibliography.  
06 p1033 A69-17558  
Heat transfer bibliography.  
13 p2379 A69-28341  
Laminarization of turbulent flow in a circular porous  
tube with uniform mass injection through the tube wall.  
[ASME PAPER 69-HT-57] 24 p4303 A69-43537

ECKERT, P.  
Diuresis during total immersion in a thermally  
neutral bath /Die Diurese bei Immersion in ein ther-  
moindifferentes Vollbad/.  
23 p4094 A69-42075

ECKERT, R. D.  
The economics of airport use, congestion, and safety.  
15 p2723 A69-31241

ECKERT, R. E.  
Effect of film processing on cryogenic properties of  
poly/ethylene terephthalate/.  
05 p0785 A69-16490

ECKHARDT, W. O.  
LM cathode electron bombardment thrusters.  
[AIAA PAPER 69-302] 09 p1569 A69-21876

ECKHAUSE, M.  
Energy and width measurements of the pionic 2p-1s  
transition in super 23 Na.  
01 p0122 A69-10035

ECKLUND, W. L.  
Auroral absorption occurrence patterns as a function  
of magnetic activity.  
16 p2848 A69-31968

ECKMAN, P. K.  
Technology and Social Progress- Synergism or Con-  
flict/ques/, American Astronautical Society, Goddard  
Memorial Symposium, 6th, Washington, D.C., March  
12, 13, 1968, Proceedings.  
17 p3076 A69-34039  
The 1973 Mariner Mercury mission.  
[AAS PAPER 69-288] 24 p4381 A69-42862

ECKSTEIN, M. C.  
Asymptotic solutions for orbital resonances due to  
the general geopotential.  
16 p2863 A69-32401

ECKSTUT, G.  
Functional integration theory for incompressible  
fluid turbulence. II.  
12 p2062 A69-26602

ECKTON, W. H., JR.  
Design, fabrication, and characterization of a ger-  
manium microwave transistor.  
12 p2037 A69-25940

ECONOMIDES, S. C.  
Cellular array implementation and utilization of  
arithmetic functions for aerospace computer systems.  
[AIAA PAPER 69-964] 22 p3906 A69-40345

ECONOMOS, C.  
A transformation theory for the compressible turbu-  
lent boundary layer with mass transfer.  
[AIAA PAPER 69-161] 06 p0912 A69-18045

ECONOMOU, E. N.  
Surface plasmons in thin films.  
22 p3992 A69-40419

ECONOMY, J.  
Single crystal flake reinforced composites.  
05 p0785 A69-16581  
Aerospace applications for "Kynol" fibers.  
24 p4337 A69-43424

ECONOMY, R.  
Explicit forms of the rotational equations of motion  
for digital simulation.  
10 p1661 A69-23855

EDDY, J. A.  
New far infrared observations of atmospheric  
molecular lines.  
04 p0628 A69-15146

Infrared scattering observations in the upper at-  
mosphere.  
18 p3126 A69-34281

EDDY, W. C., JR.  
Radioactive gas penetrants for nondestructive test  
inspections.  
19 p3322 A69-35575

EDELBAUM, T. N.  
Minimum impulse guidance.  
[AIAA PAPER 69-74] 06 p0956 A69-18183  
Optimal guidance from hyperbolic to circular orbits.  
19 p3367 A69-35663  
The fifth and sixth integrals for optimum rocket  
trajectories in a central field.  
[AIAA PAPER 69-904] 21 p3806 A69-39336

EDELEN, D. G. B.  
A morphological classification of E and SO galaxies  
in terms of equilibrium isopleths.  
08 p1395 A69-20636  
Protoelastic bodies with large deformation.  
22 p4042 A69-40452

EDELMAN, D. A.  
A predictive scale of aircraft emergencies.  
06 p0880 A69-17208

EDELMAN, G. M.  
Electron microscopy of a hemagglutinin from Limu-  
lus polyphemus.  
16 p2742 A69-31864

EDELMAN, N. H.  
Peripheral chemoreflexes in the regulation of  
breathing of high altitude natives.  
12 p2019 A69-26131

EDELMAN, R.  
Studies of hydrogen-air supersonic combustion at  
low densities.  
[WSCI PAPER 68-29] 07 p1240 A69-18358  
Some observations on heterogeneous mixing inside  
channels.  
19 p3300 A69-36785

EDELMAN, R. B.  
A solution of the inviscid-viscid equations with appli-  
cations to bounded and unbounded multicomponent  
reacting flows.  
[AIAA PAPER 69-83] 06 p1037 A69-18109  
A quasi-global chemical kinetic model for the finite  
rate combustion of hydrocarbon fuels with application  
to turbulent burning and mixing in hypersonic engines  
and nozzles.  
[AIAA PAPER 69-86] 06 p1037 A69-18119  
Analytical investigation of the effects of vitiated air  
contamination on combustion and hypersonic air-  
breathing engine ground tests.  
[AIAA PAPER 69-338] 13 p2325 A69-28274  
The effect of vitiated air contamination on ground  
testing.  
[AIAA PAPER 69-456] 19 p3448 A69-36333

EDELMAN, S.  
Piezoelectric shakers for wide-frequency calibration  
of vibration pickups.  
17 p2975 A69-33665

EDELMANN, J.  
Study of precipitation processes in an iron-nickel-  
chromium-beryllium alloy by means of transmission  
electron microscopy /Untersuchungen der  
Ausscheidungsreaktionen an einer Eisen-Nickel-  
Chrom-Beryllium-Legierung mittels elektronen-  
mikroskopischer Durchstrahlung/.  
08 p1333 A69-20447

EDELMANN, R.  
Minimum power spacecraft attitude control laws for  
small constant disturbance torques.  
11 p1966 A69-25446

EDELSON, D.  
Transient effects of nuclear radiation on the dielec-  
tric properties of refractory low-loss ceramics at  
microwave frequencies.  
20 p3584 A69-38065

EDELSTEIN, M.  
Rotogravure printing of flexible printed circuits.  
09 p1511 A69-22357

EDELSTEIN, W. S.  
A note on non-uniqueness in linear elasticity theory.  
05 p0844 A69-16739  
The cylinder problem in thermoviscoelasticity.  
12 p2181 A69-26396

EDEN, H. F.  
Effect of a radial barrier on the convective flow in a  
rotating fluid annulus.  
02 p0275 A69-12013

EDENBOROUGH, N. B.  
High-temperature eddy current crack detection.  
04 p0607 A69-14972

EDENHOFER, P.  
Eigenvalue representation of electromagnetic modes  
in a double-anisotropic, compressible plasma.  
17 p2926 A69-33851  
Electromagnetic waves in a compressible plasma  
with a homogeneous drift velocity and magnetic field  
/Elektromagnetische Wellen in einem kompressiblen  
Plasma mit homogenem Geschwindigkeits- und Mag-  
netfeld/.  
18 p3179 A69-34261

EDGAR, R. F.  
The Fresnel diffraction images of periodic structures.  
19 p3372 A69-35906

EDGE, R. G.  
Lubricant evaluation and systems design for aircraft  
gas turbine engines.  
[SAE PAPER 690424] 23 p4200 A69-41648

EDGEcombe, D. S.  
Problems in planning for the introduction of primary  
electric propulsion.  
[AIAA PAPER 69-247] 09 p1565 A69-21251

EDGEcombe, K.  
Computer simulation as an aid to the design of a  
digital Doppler processor.  
12 p2035 A69-27096

EDGERTON, A. T.  
Engineering applications of microwave radiometry.  
12 p2099 A69-27008

EDINGTON, J. W.  
Effect of strain rate on the dislocation substructure  
in deformed niobium single crystals.  
02 p0268 A69-12287  
The mechanical properties, dislocation sub-  
structure and density in niobium single crystals deformed at  
high strain rates.  
24 p4332 A69-43030

EDLICH, R. F.  
Gastric blood flow and its distribution during  
restraint.  
17 p2908 A69-33170

EDMONDS, F. N., JR.  
The infrared spectrum of Arcturus.  
23 p4222 A69-42453

EDMONDS, H. D.  
External resonator turn-on time-delay effects with  
GaAs injection lasers at room temperature.  
21 p3734 A69-38408

EDMONDSON, H.  
The relationship between flame pressure and burning  
velocity.  
21 p3849 A69-38806

EDMUNDS, L. H., JR.  
Effect of inhaled CO sub 2 on hemorrhagic con-  
solidation due to unilateral pulmonary arterial ligation.  
23 p4082 A69-41441

EDNERAL, A. F.  
Structural changes during the martensitic ageing of a  
Fe-Ni-Ti alloy.  
05 p0783 A69-16813

EDNERAL, N. V.  
Structure and mechanical properties of materials  
after hydroexplosive forming.  
09 p1503 A69-21851

EDON, C.  
Hydrogen and basic-electrolyte low-temperature  
batteries at the CGE Research Center /Les piles froides  
a hydrogene et a electrolyte basique au Centre de  
Recherches de la C.G.E./.  
08 p1258 A69-21027  
Cold hydrogen and basic electrolyte cells at the  
research center of the CGE /Les piles froides a  
hydrogene et a electrolyte basique au Centre de  
Recherches de la C.G.E./.  
08 p1259 A69-21039  
Hydrogen and basic electrolyte cold cells at the CGE  
research center /Les piles froides a hydrogene et a  
electrolyte basique au centre de recherches de la C.G.E./.  
16 p2738 A69-32410

EDRIDGE, A. L.  
Pulsed J band /12.4-18 GHz/ Gunn-effect oscillators.  
09 p1468 A69-22594

EDSON, H.  
An experiment in the use of satellite data in a numer-  
ical cloud prediction program.  
01 p0110 A69-10691



## EDWARDS, A. A.

A large, selectively pumped, thermal vacuum test facility.  
15 p2587 A69-30392

## EDWARDS, B. F.

An effect of weightlessness following exposure to vibration.  
15 p2557 A69-31368

## EDWARDS, D. F.

Effects of strong collisions and lower-state broadening on the H sub gamma profile.  
20 p3579 A69-37305

## EDWARDS, D. H.

The structure of transverse waves in detonations.  
19 p3451 A69-36367

## EDWARDS, D. J.

Infinite diameter detonation velocities of ammonium perchlorate.  
11 p1940 A69-24486

## EDWARDS, D. K.

Radiative transfer characteristics of materials.  
13 p2373 A69-27768  
Suppression of cellular convection by lateral walls.  
13 p2374 A69-27782

## EDWARDS, F. G.

Measurement of pilot describing functions from flight test data with an example from Gemini X.  
02 p0202 A69-11950

## EDWARDS, H. J.

Search for heavy mass particles in the sea level cosmic radiation.  
16 p2846 A69-31600

## EDWARDS, J. G.

A high power diffraction limited optically swept slab laser.  
11 p1897 A69-25036

An optically swept slab laser.  
14 p2457 A69-28930

## EDWARDS, K. R.

Precursor plasma formation for blunt reentry vehicles.  
[AIAA PAPER 69-718] 17 p2893 A69-33487

## EDWARDS, L. H.

Organosilicon compounds. IV - Synthesis of organosilicon substituted Bunte salts and mercaptoethylamines.  
13 p2210 A69-28486

Organosilicon compounds. V.  
15 p2561 A69-30414

## EDWARDS, M. S.

Engine health monitoring on the C-141.  
[AIAA PAPER 69-775] 19 p3244 A69-35646

## EDWARDS, P. J.

Solar absorption photometry and the determination of atmospheric composition.  
12 p2065 A69-26106

Ionospheric effect caused by celestial X-rays.  
17 p3024 A69-33378

## EDWARDS, R.

Application of the laser Doppler flowmeter to fluid flow measurements.  
12 p2093 A69-26546

## EDWARDS, R. V.

Flow measurements with Doppler shifted laser light.  
15 p2616 A69-31291

## EDWARDS, R. W.

Microbiological sampling of surfaces.  
05 p0715 A69-15982

## EDWARDS, W.

Probabilistic information processing systems - Design and evaluation.  
01 p0037 A69-10954

## EFANOV, V. A.

A method of observing solar radio emission bursts with the aid of pencil-beam antennas /Metod nabludeniiya vspleskov radioizlucheniya solntsa osionapravlenymi antennami/.  
04 p0651 A69-14377

Radio emission of Venus and Jupiter at 2.25 and 8 mm wavelengths /Radioizluchenie Venery i Iupitera na volnakh 2.25 i 8 mm/.  
11 p1956 A69-24396

Investigation of the Crab Nebula at wavelengths of 2.16 and 8.2 mm /Issledovaniya krabovidnoi tumanosti na volnakh 2.16 i 8.2 mm/.  
19 p3428 A69-36875

Observation of solar radio emission by the 22-m radio telescope at the Crimean Astrophysical Observatory at 2.25 mm and 8.15 mm wavelengths.  
22 p4020 A69-40295

Radio emission of Venus and Jupiter at 2.25 and 8 mm.  
24 p4390 A69-43786

## EFANOVA, I. P.

Interaction of oppositely moving waves in an annular solid-state laser /Vzaimodeistvie vstrochnykh voln v kol'tsevom lazere na tverdom tele/.  
02 p0259 A69-12648

## EFFENDIEV, CH. A.

Application of television systems in observations of solar granulation /O primenenii televizionnykh sistem dlia nabludenii solnechnoi granulatsii/.  
24 p4389 A69-43711

## EFFENBERGER, E.

Carbidothemic production of metals of groups IVa, Va, and VIa, and their alloys /Ueber die karbidothermische Herstellung von Metallen der IVa-, Va- und VIa-Gruppe und deren Legierungen/.  
09 p1514 A69-22731

The carbidothemic production of high-melting metal alloys, with special reference to titanium alloys /Ueber die karbidothermische Herstellung von hochschmelzenden Legierungen, insbesondere Titanlegierungen/.  
16 p2800 A69-31777

## EFFERSON, K. R.

Heat transfer from cylindrical surfaces to liquid helium. I.  
17 p3074 A69-33780

## EFIMENKO, G. I.

Application of a laser to the investigation of wall turbulence /Ispol'zovanie opticheskogo kvantovogo generatora dlia issledovaniya pristemoi turbulentnosti/.  
09 p1515 A69-21434

## EFIMENKO, L. N.

Low-temperature breakdown by oxidation of high melting point compounds /Nizkotemperaturnoe oksislitel'noe razrushenie tugoplavkikh soedinenii/.  
20 p3561 A69-37375

Effect of alloying additives of aluminum on the corrosion resistance of tungsten disilicide /Vliianie legiruiushchikh dobavok aluminia na korroziionnuiu stoikost' disilitsida vol'frama/.  
20 p3561 A69-37376

## EFIMOV, V. F.

Laser based on Raman scattering in liquid nitrogen.  
09 p1520 A69-22533

## EFIMOV, A. I.

Scattering of meter radio waves by the lunar surface.  
07 p1087 A69-19615

High-temperature internal friction in nickel-titanium alloys /Vysokotemperaturnoe vnutrennee trenie v splavakh nikel'-titan/.  
18 p3158 A69-35443

## EFIMOV, A. N.

Selection of the optimum time for transmission of telemetry data by an error correcting system /Vybor optimal'nogo vremeni peredachi telemekhnicheskoi informatsii sistemoi, ispravliaiushchei oshibki/.  
14 p2412 A69-29428

## EFIMOV, B. P.

Allowance for the effects of multiple reflection from dielectric walls in the microwave probing of plasmas /Uchet effektivov mnogokratnogo otrazheniia ot dielektricheskikh stenok pri SVCh-zondirovanii plazmy/.  
14 p2498 A69-29806

## EFIMOV, G. M.

Receiver for the automatic conversion of meteorological radar signals /Priemnoe ustroistvo dlia avtomaticheskogo preobrazovaniia radiolokatsionnykh meteorologicheskikh signalov/.  
16 p2791 A69-32280

## EFIMOV, I. U. E.

Energy spectrum of slow atmospheric neutrons /Energeticheskiy spektr medlennykh atmosferykh neutronov/.  
10 p1758 A69-22831

## EFIMOV, I. U. V.

Transition temperature of V sub 3 Ga to the superconducting state.  
03 p0483 A69-13023

Physical Metallurgy of Superconducting Materials /Metallovedenie sverkhprovodiashchikh materialov/.  
16 p2802 A69-32051

## EFIMOV, J. V.

Vanadium and its alloys /Vanadin und seine Legierungen/.  
22 p3968 A69-39887

## EFIMOV, N. N.

Concerning the relation between primary particle energy and number of electrons in extensive air showers.  
13 p2331 A69-28390

## EFIMOVA, B. A.

Methods of Investigating Semiconductors as Applied to the Lead Chalcogenides PbTe, PbSe, and PbS /Metody issledovaniia poluprovodnikov v primenenii u khal'kogenidam svintsia PbTe, PbSe i PbS/.  
12 p2145 A69-26855

## EFIMOVA, M. V.

Deformation conditions and quenching temperature for bars of alloy VT14 /Rezhimy deformirovaniia i temperatūra zakalki prutkov splava VT14/.  
19 p3328 A69-36155

## EFIMOVA, S. K.

A case of stability of the permanent rotations of a heavy solid body with a liquid filler /Odn sluchai ustoiichivosti permanentnykh vrashchenii tiazhelogo tverdogo tela s zhidkim napolneniem/.  
21 p3773 A69-39833

## EFIMOVA, T. V.

Influence of radio wave absorption in the interstellar medium on the distribution of cosmic radio emissions over the firmament /Vliianie pogloscheniia radiovoln v mezhzvezdnoi srede na raspredelenie kosmicheskogo radioizlucheniia po nebosvodu/.  
15 p2687 A69-30542

## EFREMOV, E. A.

Stability of heated three-layer plates with a lightweight filler in a supersonic gas flow /Ustoiichivost' nagretykh trekhslonnykh plastin s legkim zapolnitel'm v sverkhzvukovom potoke gaza/.  
24 p4395 A69-42590

## EFREMOV, I. I.

Calculation of a supercavitation flow past thin foils near a dividing boundary /Raschet superkavitatsionnogo obtekaniia tonkikh profilii vblizi granitsy razdelia/.  
22 p3933 A69-41022

Oscillations of a slender profile in a subsonic flow near a solid boundary /K zadache o kolebaniakh tonkogo profilia v dozvukovom potoke vblizi tverdogo granitsy/.  
23 p4058 A69-41712

## EFRON, E.

Image processing by digital systems.  
01 p0077 A69-10022

## EFRON, L.

The radius of Venus as determined by planetary radar and Mariner 5 radio tracking data.  
03 p0508 A69-13348

Electromagnetic velocity-transducer studies of plastic waves in aluminum bars.  
15 p2709 A69-30677

## EGAN, J.

Air Transport Total In-Flight Simulator-707. [SAWE PAPER 747] 18 p3118 A69-34882

## EGAN, W. G.

Interpretation and application of photometric polarimetric observations of planetary surfaces.  
03 p0421 A69-13392

Aircraft polarimetric and photometric observations.  
12 p2096 A69-26988

Coherence-polarization phenomena in remote sensing.  
14 p2448 A69-29533

Determination of the complex index of refraction of rocks and minerals.  
17 p2973 A69-33092

Polarimetric and photometric simulation of the Martian surface.  
20 p3614 A69-38253

## EGANIAN, I. L.

Study of atomic ordering effects in ternary solid solutions based on Ni sub 3 Fe, and alloyed with the group VI elements chromium, molybdenum, and tungsten /Issledovanie effektivov atomnogo uporiadocheniia v troinykh tverdykh rastvorakh na osnove Ni sub 3 Fe i legirovannykh elementami VI gruppy - Khromom, molibdenom, vol'framom/.  
11 p1904 A69-24705

## EGELAND, A.

The position and height of auroral absorption deduced from VLF phase measurements.  
05 p0758 A69-16412

Simultaneous ground and satellite measurements of the enhanced electromagnetic band emission between 500 and 1000 Hz.  
21 p3708 A69-38490

**EGELSTAFF, P. A.**  
A study of the spatial structure of turbulent flow by intensity-fluctuation spectroscopy.  
09 p1493 A69-21491

**EGGARTER, T. P.**  
Green's function for the steady state of a periodically excited circuit.  
12 p2036 A69-25918

**EGGEN, O. J.**  
On the optical identification of the X-ray source Cen XR-2 as WX Cen.  
01 p0145 A69-10857  
The old galactic cluster NGC 3680.  
08 p1384 A69-20054  
Motions of the bright F-type stars.  
08 p1386 A69-20074  
The distance of the Hyades and the mass-luminosity relation.  
13 p2339 A69-27565  
Faint Cepheids in Cygnus and Monoceros.  
15 p2692 A69-30772  
Subluminous stars. III - Luminosity calibration for subluminous stars and the space density of the blue subluminous stars south of declination -45 deg.  
20 p3612 A69-38160  
Stars with motions of more than 100 km/sec perpendicular to the galactic plane.  
24 p4386 A69-43348

**EGGER, A.**  
Directional coupler with lumped circuit elements /Richtkoppler aus konzentrierten Schaltelementen/.  
16 p2763 A69-32581  
Central data system concepts for spacecraft data management.  
24 p4284 A69-42621

**EGGER, J.**  
Baroclinic instability as a function of the wind profile of the basic current /Barokline Instabilität in Abhängigkeit vom Windprofil der Grundströmung/.  
11 p1911 A69-24586

**EGIAZAROV, B. G.**  
The gamma spectrometer on "Luna-10" for the study of the lunar rocks.  
01 p0084 A69-11314

**EGIBEKOV, P. E.**  
One of the possible mechanisms of the division of a comet nucleus /Odin iz vozmozhnykh mekhanizmov deleniia iadra komety/.  
04 p0659 A69-14997

**EGIDI, A.**  
Measurement of the solar wind direction with the IMP 1 satellite.  
16 p2847 A69-31962

**EGIDI, C.**  
Modulation envelopes - Tables of profiles and harmonic components /Inviluppi di modulazione - Tavole dei profili e delle componenti armoniche/.  
21 p3673 A69-38778

**EGIZ, I. V.**  
Strengthening of nickel solid solutions during deformation /Uprochnenie tverdykh rastvorov nikelia pri deformatsii/.  
18 p3157 A69-35246

**EGLE, D. M.**  
A theoretical analysis of the free vibration of discretely stiffened cylindrical shells with arbitrary end conditions.  
11 p1992 A69-25521  
Free vibrations of multilayer anisotropic cylindrical shells.  
20 p3627 A69-37767

**EGLÉN, J. A.**  
Skirt design for small hovercraft.  
13 p2202 A69-27545

**EGOLAEV, V. F.**  
X-ray study of structural defects in cobalt /Rentgenograficheskie issledovaniia strukturnykh nesovershenstv v kobalte/.  
12 p2113 A69-26042

**EGOROV, A. D.**  
Automatic processing of electrocardiograms recorded during space flight /Avtomaticheskaiia obrabotka elektrokardiogrammy, registriruemoi vo vremia kosmicheskogo poleta/.  
05 p0715 A69-16524  
Theoretical aspects of the selection of the physiological parameter complex for medical control during space flights /Teoreticheskie aspekty vybora kompleksa fiziologicheskikh parametrov dlia meditsinskogo kontrolya v kosmicheskikh poletakh/.  
07 p1071 A69-18978  
Quantitative evaluation of the activity of animal cardiovascular systems during prolonged orbital flight.  
08 p1261 A69-19828  
Automatic processing of electrocardiograms recorded during cosmic flight.  
18 p3098 A69-34743  
Theoretical approach to the selection of physiological parameters for the medical monitoring of space flights.  
20 p3483 A69-38226

**EGOROV, A. G.**  
Study of the influence of prolonged heating in vacuum and thermal cycling on the properties of SAP sheets /Issledovanie vlianiia dlitel'nykh nagrevov v vakuumе i teplosmen na svoystva listovykh polufabrikatov SAPa/.  
02 p0266 A69-12126

**EGOROV, A. M.**  
Propagation of high-intensity electromagnetic waves in plasma waveguides /Rasprostraneniye elektromagnitnykh voln bol'shoi intensivnosti v plazmennyykh volnovodakh/.  
03 p0482 A69-14228

**EGOROV, B. B.**  
Some results of the biomedical experiment on the biosatellite "Kosmos-110."  
08 p1261 A69-19827  
Quantitative evaluation of the activity of animal cardiovascular systems during prolonged orbital flight.  
08 p1261 A69-19828  
Changes in the calcium metabolism of rats under conditions of hypokinesia /Izmeneniye kal'tsievogo obmena u krysa v usloviyakh gipokinezii/.  
13 p2212 A69-28618

**EGOROV, G. A.**  
Investigation of the stability of integral manifolds /K issledovaniyu ustoyichivosti integral'nykh mnogoobrazii/.  
21 p3770 A69-38850

**EGOROV, I. A.**  
Influence of "artificial Mars" conditions on some enzymes /Vlianiye usloviy "iskusstvennogo Marsa" na nekotorye fermenty/.  
07 p1065 A69-18974  
Effect of a simulated Martian environment on certain enzymes.  
20 p3479 A69-38222

**EGOROV, I. A.**  
An automatic data processing system for ionospheric investigations /Sistema avtomaticheskoi obrabotki dannykh pri issledovanii ionosfery/.  
13 p2225 A69-27610

**EGOROV, I. P.**  
Measurement of natural line width of the emission of a gas laser with coupled modes.  
09 p1516 A69-21670

**EGOROV, K. P.**  
Experimental study of the probability of loss of a pulse during the transmission of binary information in the optical wavelength range /Eksperimental'nye issledovaniia veroiatnosti propuska impul'sa pri peredache dvoichnoi informatsii v opticheskom diapazone voln/.  
11 p1834 A69-24611

**EGOROV, L. A.**  
Crystallization of InAs sub 1-x P sub x solid solutions from the gas phase /Kristallizatsiia tverdykh rastvorov InAs sub 1-x P sub x iz gazovoi fazy/.  
12 p2144 A69-26587

**EGOROV, N. G.**  
Selection of the optimal structure of fiberglass products. I /K vyboru optimal'noi struktury steklovolonitov. I/.  
08 p1335 A69-20332  
The choice of an optimal structure of fiberglass-reinforced materials. II /K vyboru optimal'noi struktury steklovolonitov. II/.  
18 p3162 A69-35356

**EGOROV, O. K.**  
Experimental study of the ablation of meteorites.  
15 p2697 A69-31252

**EGOROV, P. I.**  
Influence of high-altitude mountain acclimatization on the tolerance of the organism to environmental effects /Vlianiye vysokogoroi na akklimatizatsii na ustoyichivost' organizma k vozdeystviyu faktorov vneshnei sredy/.  
13 p2212 A69-28623

**EGOROV, S. T.**  
Specific features of the method of microwave radiometric sounding of the atmosphere from on board aircraft /Osobennosti metoda sverkhvysokochastotnogo radiometricheskogo zondirovaniia atmosfery s letatel'nykh apparatov/.  
06 p0954 A69-18001

**EGOROV, V. A.**  
Influence of the spread of initial data on reentry trajectories from the moon to the earth /O vlianii razbrosa nachal'nykh dannykh na traektorii vozvrashcheniya ot luny k zemle/.  
09 p1594 A69-21756  
Use of a two-gas artificial atmosphere in manned spacecraft /O primenenii dvukhgazovoi iskustvennoi atmosfery v obitaemykh kosmicheskikh korabliakh/.  
17 p2912 A69-32940

**EGOROVA, N. N.**  
Stabilization of the concentration of mineral nutrients in the medium during prolonged Chlorella cultivation with recovery of the medium.  
10 p1646 A69-23578

**EGOROVA, V. F.**  
Peakless regime and mode width of a continuous laser.  
06 p0934 A69-17681

**EGORSHINA, T. V.**  
The nature of the excess phase in ferritic-austenitic stainless steels with titanium.  
04 p0615 A69-14641

**EGSTROM, G. H.**  
Heart rate and respiratory response correlations in surface and underwater work.  
14 p2406 A69-29293

**EGUCHI, H.**  
The developments of the study on whistlers and atmospherics in Japan for the last 40 years.  
15 p2595 A69-30418

**EGYED, L.**  
The slow expansion hypothesis.  
22 p4018 A69-40179

**EHLBERGER, A. G.**  
Design criteria for linearly polarized waveguide arrays.  
04 p0571 A69-14313

**EHLERS, F. E.**  
Pressure oscillations produced in a wind tunnel by hinged plates in the walls of the test section.  
02 p0229 A69-12537  
Linearized magnetogasdynamic channel and jet flow.  
17 p3010 A69-33016  
Air forces on a missile from the motion of the silo near a bomb blast.  
21 p3691 A69-39765

**EHLERS, H. K. F.**  
Pressure measurements and gas-flow analysis in chambers A and B during thermal vacuum tests of spacecraft 2TV-1 and LTA-8. [AIAA PAPER 69-1033]  
22 p3924 A69-40401

**EHLERS, J.**  
The locally isotropic solutions of the Liouville and Poisson equations.  
09 p1605 A69-22412

**EHMANN, W. D.**  
The distribution of gold and iridium in meteoritic and terrestrial materials.  
08 p1404 A69-20918  
Abundances of some volatile elements in meteorites.  
08 p1404 A69-20919

**EHMERT, A.**  
A new optical ozone radiosonde /Eine neue optische Ozonradiosonde/.  
02 p0251 A69-12761  
Auroral-zone X-ray measurements obtained by simultaneous balloon flights in Northern Scandinavia in 1967.  
05 p0813 A69-15822  
Measurements of auroral-zone X-rays with balloon borne instruments at Kiruna/Sweden in 1968.  
21 p3791 A69-39252

**EHR, R. L.**  
Displays and maneuvers for collision avoidance systems.  
17 p3002 A69-34096

**EHRARD, A.**  
Meteorological forecasting /Prevision meteorologique/.  
18 p3166 A69-34694



- EHRENSPECK, H. W.**  
"Backfire" antennas / "Backfire-Antennen".  
16 p2763 A69-32586
- EHRENSTEIN, G. W.**  
Damping properties of glass-fiber-reinforced plastics / Daempfungseigenschaften glasfaserverstaerkter Kunststoffe/.  
03 p0454 A69-13824
- EHRET, J.**  
A tension-torsion-compression testing machine / Une machine d'essais en traction-torsion-compression/.  
[ONERA-TP-596] 17 p2945 A69-33065
- EHRFELD, W.**  
Investigation of rarefied gas flows by means of miniature pressure probes / Zur Untersuchung von Stromungen verduennter Gase mit Miniatur-Drucksonden/.  
14 p2430 A69-29289
- EHRHARDT, H.**  
Ionization of helium - Angular correlation of the scattered and ejected electrons.  
06 p0962 A69-17191
- EHRICH, F. F.**  
Acoustic resonance and multiple pure tone noise in turbomachinery inlets.  
[ASME PAPER 69-GT-2] 09 p1572 A69-22509  
The dynamic stability of rotor/stator radial rubs in rotating machinery.  
[ASME PAPER 69-VIBR-56] 10 p1804 A69-24146
- EHRIKKE, K. A.**  
Propulsion systems - Comparison and evaluation for space missions.  
11 p1965 A69-25600  
Atmospheric braking entry and associated technologies.  
11 p1968 A69-25722
- EHRLICH, E.**  
The general utility and character of prospective navigation services satellite systems.  
[UN PAPER 68-95363] 01 p0113 A69-10479
- EHRLICH, R.**  
Resistance to experimental bacterial pneumonia and influenza infection in space cabin environment.  
07 p1067 A69-19432  
Resistance to infection in space-cabin environment.  
23 p4108 A69-41832
- EHRMAN, L.**  
The design and applications of digital filters with complex coefficients.  
04 p0579 A69-15460
- EHRMANN, C. H.**  
Computer analysis of tracks in nuclear emulsion utilizing digitized video scan.  
[IEEE PAPER 2A-7] 07 p1133 A69-19185  
A gamma ray telescope utilizing large area wire spark chambers.  
[IEEE PAPER 3A-5] 07 p1134 A69-19192
- EIBER, R. J.**  
Fracture design practices for pressure piping.  
17 p3060 A69-33562
- EICHACKER, L. W.**  
Noise reduction in wideband atmospheric receiving systems.  
23 p4128 A69-42504
- EICHELBRENNER, E. A.**  
Three-dimensional boundary layers.  
05 p0743 A69-15556  
Three-dimensional separation on an inclined ellipsoid / A propos du decollement tridimensionnel sur un ellipsoide incline/.  
08 p1251 A69-19876
- EICHEN, J.**  
Material testing / Werkstoffpruefung/.  
09 p1513 A69-22565
- EICHENBAUM, F. D.**  
A new method for computing the dynamic response of aircraft to three-dimensional turbulence.  
11 p1823 A69-25503
- EICHHORN, H.**  
A study of the positions and proper motions of 83 stars in the region of Sco X-1.  
12 p2152 A69-25798
- EICHHORN, J.**  
Dependence of tilt-table and acceleration tolerance on body build and physical fitness / Die Abhaengigkeit der Orthostase- und Beschleunigungstoleranz von Koerperbau und Leistungsfaeigkeit/.  
[DVL-834] 09 p1444 A69-21304
- EICHHORN, R.**  
Description of a controllable sonic flow orifice.  
10 p1693 A69-23343
- EICHLER, H.**  
Nonlinear optical effects in lasers / Nichtlineare Optische Effekte in Lasern/.  
08 p1327 A69-20768
- EICHLER, J.**  
Designing by simulator.  
20 p3498 A69-37292
- EICHLER, P.**  
Utilization of transistor-transistor logic switching circuits in high-speed digital frequency dividers with variable division ratios for modern frequency processing systems / Einsatz von Transistor-Transistor-Logik-Schaltkreisen in schnellen digitalen Frequenz-Teilern mit variablen Teilerfaktoren fuer moderne Frequenzaufbereitungssysteme/.  
05 p0729 A69-15963
- EICKHOFF, H.**  
Static pressure and turbulence in rotationally symmetric free jets and free jet flames / Statischer Druck und Turbulenz in drehsymmetrischen Freistrahlen und Freistrahlfammen/.  
15 p2719 A69-31190
- EIDELMAN, S. D.**  
Differentiability of fundamental solutions to elliptic equations / O differentsiruemosti fundamental'nykh reshenii ellipticheskikh uravnenii/.  
01 p0106 A69-10955  
Certain properties of positive solutions to evolutionary hypoelliptic equations / O nekotorykh svoistvakh polozhitel'nykh reshenii evoliutsionnykh gipoellipticheskikh uravnenii/.  
11 p1908 A69-24534  
Some properties of positive solutions of evolutionary hypoelliptic equations.  
21 p3756 A69-39151
- EIDMAN, B. I. A.**  
Theory of a thin cylindrical antenna in an isotropic plasma / K teorii tonkoi tsilindricheskoi anteny v izotropnoi plazme/.  
11 p1853 A69-25551
- EIDMAN, V. I. A.**  
Impedance of a thin cylindrical antenna in an isotropic plasma / Ob impedanse tonkoi tsilindricheskoi anteny v izotropnoi plazme/.  
08 p1285 A69-20428
- EIDUK, O. N.**  
Study of changes in the structure of WC-Co alloys during plastic deformation / Issledovanie izmenenii v strukture splavov WC-Co pri plasticheskoi deformatsii/.  
18 p3158 A69-35261
- EIFE, R.**  
Respiratory changes resulting from breathing through a mask / Veraenderungen des Atemtyps bei Maskenatmung/.  
17 p2916 A69-33774
- EIFLER, W.**  
Calculation of turbulent velocity distribution and wall friction in concentric annular clearances / Berechnung der turbulenten Geschwindigkeitsverteilung und der Wandreibung in konzentrischen Ringspalten/.  
17 p2956 A69-33575  
Turbulent velocity distribution and wall friction in flow channels of various cross sections / Ueber die turbulente Geschwindigkeitsverteilung und Wandreibung in Stromungskanaelen verschiedener Querschnitte/.  
20 p3515 A69-37925
- EIGENSON, A. M.**  
The phase density of white dwarfs in the color-luminosity diagram.  
12 p2159 A69-26665
- EIKENBERG, A. F.**  
On the design of a large aperture radar for target imaging.  
04 p0562 A69-15476
- EIKENBERRY, R. S.**  
Nonlinear aerodynamic characteristics of re-entry configurations with aerodynamic and mass asymmetries.  
[AIAA PAPER 69-867] 21 p3823 A69-39393
- EINASTO, I. A. I.**  
Andromeda galaxy M 31. I - Preliminary model / Galaktika Andromedy M 31. I - Predvaritel'naia model'/.  
19 p3426 A69-36579
- EINASTO, J.**  
On galactic descriptive functions.  
12 p2160 A69-26852
- EINAUDI, F.**  
A review of the nonlinear theory of plasma oscillations.  
14 p2501 A69-2993
- EINFELD, K.**  
Present status of development of thermionic diodes and thermionic reactors in the Federal Republic of Germany.  
23 p4188 A69-4222
- EISCHEN, J.**  
A fast low-level commutator / Commutateur rapide bas niveau/.  
11 p1884 A69-247
- EISEN, C. L.**  
External-fuel thermionic reactors.  
14 p2480 A69-291
- EISEN, H. A.**  
The dynamic response of solids exposed to a pulsed electron-beam.  
05 p0771 A69-158
- EISENBERG, P. H.**  
Physics of control of electronic devices.  
18 p3143 A69-3448
- EISENCRAFT, M.**  
On thermal and excess currents in GaSb tunnel diodes.  
05 p0734 A69-1657
- EISENFELD, J.**  
Normal mode expansion and stability of Couette flow.  
01 p0059 A69-1022  
A completeness theorem for an integro-differential operator.  
14 p2470 A69-2890
- EISENSTADT, R.**  
Generation of crack propagation data on notched rotating beam specimens by means of an interrupted stressing technique.  
[ASME PAPER 68-WA/MET-3] 05 p0838 A69-1614  
A comparison of results of axial-tension, rotating beam and pressurized-cylinder fatigue tests.  
15 p2709 A69-3067
- EISFELD, F.**  
Holographic technique for measuring thin fluid films / Holographisches Verfahren zur Vermessung duenner Fluessigkeitsfilme/.  
08 p1317 A69-2087  
Investigation of flowing fluid films by means of interference holography / Untersuchungen an fließenden Fluessigkeitsfilmen mit Hilfe der Interferenzholographie/.  
12 p2088 A69-2617
- EISHEN, D. E.**  
Special purpose automatic test set development techniques.  
11 p1851 A69-2500
- EISLER, T. J.**  
Convergent solutions of the inviscid solar wind equations.  
14 p2515 A69-2990  
Asymptotic solutions of the viscous solar wind equations.  
14 p2515 A69-2990
- EISLEY, J. G.**  
Motion and stability of a spinning spring-mass system in orbit.  
21 p3817 A69-3970
- EISMONT, O. A.**  
The effect of an induced magnetic field on the magnetohydrodynamic flow of a compressible gas / Vliianiye induitsirovannogo magnitnogo polia pri magnetogidrodinamicheskom techenii szhimaemogo gaza/.  
14 p2500 A69-2990
- EISNER, P. N.**  
Ionization and attachment in O sub 2 and airlike sub 2 - O sub 2 mixtures irradiated by 1.5-Mev electrons.  
13 p2302 A69-2745
- EISON, R. L.**  
UHF conversion at the Kwajalein Missile Range.  
07 p1077 A69-1882
- EISSNER, W.**  
Resonances in cross sections for excitation of forbidden lines in O super 2 super plus.  
11 p1921 A69-2441
- EITEL, H.**  
Experimental work on inductive magnetoplasma dynamic converters.  
10 p1638 A69-2345

**EJIKE, U. B. C. O.**

The stress intensity factors for a Griffith crack whose surfaces are loaded asymmetrically.  
13 p2369 A69-28352

**EJIRI, M.**

A modified plasma resonance observed by a rocket-borne gyro-plasma probe.  
10 p1726 A69-22807

Rocket observations of the winter ionosphere by plasma probes.  
15 p2606 A69-31446

Dynamic visco-elastic properties of the lens.  
22 p3883 A69-40875

**EKBLOM, B.**

Effect of physical training in adolescent boys.  
23 p4077 A69-41312

**EKEDAH, Y.**

A study of colour excesses in Kapteyn's selected area 4.  
08 p1388 A69-20241

**EKELAND, I.**

Certain problems of optimal control /Sur certains problemes de controle optimal/.  
19 p3287 A69-36724

**EKELAND, K.**

Communication systems using synchronous and near synchronous satellites.  
09 p1458 A69-22468

**EKERS, R. D.**

Further observations of pulsating radio sources at 13 cm.  
02 p0328 A69-12726

A measurement of the galactic magnetic field using the pulsating radio source PSR 0833-45.  
13 p2335 A69-27311

Interferometric observations of the brightness distribution of southern radio sources.  
15 p2696 A69-31166

Detection of the pulsed radio source CP 1919 at 13 cm wavelength.  
17 p3036 A69-33637

Radio sources and elliptical galaxies.  
22 p4025 A69-40639

**EKIERT, T.**

Capacitive dynamometer /Silomierz pojemnosciowy/.  
11 p1887 A69-25207

**EKINGS, J. D.**

When does quality become reliability/ques/  
12 p2102 A69-25971

**EKLUND, F.**

Wavelength dependence of microwave propagation far beyond the radio horizon.  
03 p0395 A69-13626

**EKLUND, P. R.**

Analysis of the elastic contact of a hollow ball with a flat plate.  
[ASME PAPER 69-LUBS-5]  
18 p3212 A69-34383

**EKLUND, T.**

Hydrodynamic effects in the flame spreading, ignitability and steady burning of liquid fuels.  
11 p1999 A69-24484

**EKONG, T. E.**

Dynamics of continuous multimass rotor systems.  
[ASME PAPER 69-VIBR-51]  
10 p1804 A69-24153

**EL GORESY, A.**

Phase relations in the system Cr-Fe-S.  
19 p3359 A69-36123

**EL MOHANDIS, M. G. S.**

Magnetohydrodynamic disturbances in the earth's core. IV.  
23 p4158 A69-42176

**EL-ASSAR, R. J.**

Incompressible turbulent wake of a flat plate.  
23 p4060 A69-41912

**EL-KAREH, A. B.**

Electron Beam and Laser Beam Technology.  
11 p1846 A69-24596

**EL-KHALAFAWY, T. A.**

Collective interactions in a fast tetatron discharge.  
09 p1552 A69-22046

High-speed shock-wave investigation in rarefied gas.  
14 p2433 A69-29846

**EL-SHIRBINI, A. A.**

A study of missile control by rudders during the propulsion period with special reference to lateral wind effect.  
01 p0163 A69-11297

Determination of the optimal length of rocket combustion chambers.  
08 p1376 A69-20606

A treatise on the behaviour of injected propellants inside a rocket combustion chamber.  
11 p1941 A69-24329

**EL-SUM, H. M. A.**

Acoustical Holography. Volume 1 - Proceedings of the First International Symposium, Huntington Beach, Calif., December 14, 15, 1967.  
10 p1694 A69-23540

The scope of the symposium.  
10 p1694 A69-23541

Acoustic holography.  
11 p1883 A69-24687

Acoustical holograms using phase information only.  
23 p4166 A69-42180

**ELAGIN, V. I.**

Effect of natural aging of an alloy of the Al-Zn-Mg system on subsequent artificial aging at different temperatures /Vlianie estestvennogo stareniia splava sistemy Al-Zn-Mg na posleduiushchee iskusstvennoe starenie pri razlichnykh temperaturakh/.  
11 p1905 A69-24921

**ELAGINA, L. A.**

Section pressing from titanium alloys /Pressovanie profilei iz titanovykh splavov/.  
07 p1164 A69-18788

**ELBAUM, C.**

Ultrasonic Methods in Solid State Physics.  
12 p2145 A69-26870

**ELBAZ, C.**

Calculation of Radiation Doses in Space, Centre d'Etudes et de Recherches en Technologie Spatiale, European Symposium, Toulouse, France, February 21-23, 1968, Reports /Calcul des Doses de Radiations dans l'Espace, Centre d'Etudes et de Recherches en Technologie Spatiale, Journees Europeennes, Toulouse, France, February 21-23, 1968, Comptes Rendus/.  
11 p1947 A69-24854

**ELCO, R. A.**

Interaction of the solar wind with planetary atmospheres.  
24 p4368 A69-43178

**ELCRAT, A. R.**

A local existence theorem for quasi-linear partial differential equations.  
17 p2994 A69-32843

**ELDER, J. W.**

The temporal development of a model of high Rayleigh number convection.  
11 p1874 A69-25351

**ELDRIDGE, J. S.**

Meteorite fall at Pueblito de Allende, Chihuahua, Mexico - Preliminary information.  
08 p1396 A69-20686

**ELEFTERION, A.**

Fluctuation of the electromagnetic field received after transhorizon propagation /Fluctuation du champ electromagnetique recu apres une propagation transhorizon/.  
20 p3494 A69-37810

**ELEKOE, V. B.**

Mechanism of the action of solar activity on the cycle of oscillation of atmospheric circulation.  
12 p2070 A69-26692

**ELENA, A.**

Some properties of whistlers at Roburent, North Italy.  
01 p0067 A69-11033

**ELENA, M.-P.**

Turbulent boundary layer velocity distributions in a uniform or accelerated compressible flow /Distributions de vitesses des couches limites turbulentes en ecoulement compressible, uniforme ou accelere/.  
[ONERA-TP-693]  
11 p1867 A69-24752

**ELEONSKII, V. M.**

On the upper boundary of the velocity of propagation of simple waves for the non-linear wave equation.  
04 p0630 A69-14553

**ELESHIN, I. U. N.**

Use of a two-gas artificial atmosphere in manned spacecraft /O primeneni dvukhgazovoi iskusstvennoi atmosfery v obitaemykh kosmicheskikh korabliakh/.  
17 p2912 A69-32940

**ELESIN, V. F.**

Electrothermal domains in semiconductors /Elektrotermovye domeny v poluprovodnikakh/.  
06 p0981 A69-17880

Electrothermal domains in semiconductors.  
14 p2503 A69-28789

Angular distribution of a material vaporized by a laser beam /Uglovoe raspredelenie neshchestva, isparennogo luchom OKG/.  
21 p3737 A69-38992

**ELFNER, L. F.**

Auditory temporal masking and the perception of order.  
11 p1830 A69-24795

**ELFORD, W. G.**

Buckland Park aerial array.  
24 p4286 A69-42607

**ELGAROEY, O. E.**

Time-splitting of solar radio bursts.  
11 p1946 A69-24590

**ELIASBERG, P. E.**

Evolution of almost-circular artificial earth satellite orbits under the influence of zonal harmonics.  
01 p0157 A69-11304

Determination of the flight trajectory of a spacecraft in the absence of information concerning the distribution law of the measurement errors /Opredelenie traektorii poleta kosmicheskogo apparata pri otсутstvii svedenii o zakone raspredelenia oshibok izmerenii/.  
09 p1595 A69-21757

The using of AES orbits evolution data for refinement of some geophysical parameters.  
15 p2604 A69-31417

**ELIASSEN, E.**

On the observed large-scale atmospheric wave motions.  
15 p2647 A69-30216

**ELIASSEN, B.**

Discovery of an intense OH emission source.  
09 p1591 A69-21448

Positions and Stokes parameters of seven OH-emission sources.  
10 p1787 A69-24114

**ELINSKII, M. P.**

Use of a two-gas artificial atmosphere in manned spacecraft /O primeneni dvukhgazovoi iskusstvennoi atmosfery v obitaemykh kosmicheskikh korabliakh/.  
17 p2912 A69-32940

**ELISEEV, A. A.**

Transmission of random noise and signals through a multistage multiplier.  
04 p0557 A69-14777

Determination of the concentration of molecules in an excited state from absolute intensities /Opredelenie kontsentratsii molekul v vzbuzhdennom sostoianii po absolutnym intensivnostiam/.  
15 p2654 A69-30080

**ELISEEV, A. S.**

Man-operator under conditions of acceleration.  
08 p1265 A69-19936

**ELISEEV, B. V.**

Retardation of a free nonsubmerged jet in a perpendicular magnetic field /Tormozhenie svobodnoi nezatoplennoi strui v perpendikuliarnom magnitnom pole/.  
14 p2501 A69-29910

**ELISEEV, P. G.**

GaP sub x As sub 1 sub -x -based injection lasers.  
02 p0255 A69-11879

Laboratory clamp-type diode holders for injection lasers and electroluminescent diodes.  
03 p0435 A69-12985

Reduction of the oscillation threshold of an uncooled injection laser by uniaxial compression.  
03 p0441 A69-13848

Radiative recombination in p-n junctions in indium phosphide.  
03 p0492 A69-14166

Observation of the memory effect in injection lasers /Nabliudenie effekta pamati v inzhetsionnykh lazerakh/.  
07 p1147 A69-18542

Influence of a frequency filter on the emission spectrum of semiconductor lasers /Vlianie chastotnogo filtra na spektr izlucheniia poluprovodnikovyykh generatov/.  
15 p2635 A69-30967

About the threshold phenomena in the injection lasers.  
19 p3337 A69-36527

Memory effect in injection lasers.  
21 p3735 A69-38694



## ELISEEV, S. M.

Many-particle interactions in the high and superhigh energy region /new types of elementary particle interactions/.

13 p2303 A69-28369

## ELISEEVA, I. B.

Obtaining titanium aluminum alloys by aluminothermal reduction of TiCl sub 4 /Poluchenie titano-aluminiyevykh spлавov /ligatur/ aluminotermicheskim vosstanovleniem TiCl sub 4/.

07 p1159 A69-18536

## ELISEEVA, N. M.

Efficient GaP diode sources of red radiation.

06 p0979 A69-16999

## ELISEEVNIN, V. A.

Fluctuations of waves of different frequencies propagating in an isotropic turbulent medium /Fluktuatsii voln razlichnoi chastyot, rasprostraniayushchikhsia v izotropnoi turbulentnoi srede/.

23 p4117 A69-41728

## ELISTRATOV, V. A.

Multiphoton excitation of luminescence and photoconductivity in KCl-Eu single crystals by ruby and neodymium lasers /Mnogofotonnoe vozбужdenie luminesentsii i fotoprovodimosti monokristallov KCl-Eu rubinovym i neodimovym lazerami/.

19 p3335 A69-36165

## ELIUTIN, O. P.

The anomalies of the properties of titanium alloys with beta stabilizing elements.

03 p0443 A69-13029

Fabrication of a bimetallic sheet of titanium-28 percent vanadium alloy plated with niobium by means of the hot-rolling method /Poluchenie bimetallicheskoj lenty splava titana s 28 percent vanadiia, plakirovannoi niobiem metodom gorichetj prokati/.

18 p3155 A69-34652

## ELIUTIN, V. P.

High-Temperature Materials /Vysokotemperaturnye Materialy/.

03 p0445 A69-13567

Investigation of interaction processes between carbon and oxides of high-melting-point metals /Issledovanie protsessov vzaimodeistviia oksidov tугoplavkikh metallov s uglerodom/.

03 p0445 A69-13568

Interaction between metal oxides and carbon during spatial separation of the reagents /Vzaimodeistvie oksidov metallov s uglerodom pri prostranstvennom razdelenii reagentov/.

03 p0445 A69-13569

Relations between some semiconductor and chemical properties of metal oxides /Sviaz' mezhdu nekotorymi poluprovodnikovymi i khimicheskimi svoistvami oksidov metallov/.

03 p0445 A69-13570

Interaction of liquid titanium and zirconium with graphite /Vzaimodeistvie zhidkikh titana i tsirkonia s grafitom/.

03 p0446 A69-13572

Study of the electrical resistivity of titanium carbide, titanium monoxide, and titanium-oxygen-carbon alloys /Issledovanie elektrosoprotivleniya karbida titana, monooksiida titana i spлавov titan-kislorod-uglerod/.

03 p0446 A69-13575

Temperature dependence of internal friction in molybdenum wire in the moderate and high temperature range /Temperaturnaia zavisimost' vnutrennego treniia molibdenovoi provoloki v oblasti umerennykh i vysokikh temperatur/.

03 p0446 A69-13576

Theory of coating deposition on high-temperature materials /K teorii naneseniia pokrytii na vysokotemperaturnye materialy/.

20 p3560 A69-37358

## ELIUTINA, L. A.

Corrosion-resistant titanium alloy with 32 percent Mo /Korroziionostoikiy splav titana s 32 percent Mo/.

07 p1163 A69-18781

## ELIZARENKO, A. S.

Computation of the directional characteristic of electropneumatic system.

14 p2420 A69-29332

## ELIZAREV, I. U. N.

Predawn effect in the f sub 0 F2 variations caused by sunrise at a magnetically conjugate point /Predrassvetnyi effekt v variatsiiakh f sub 0 F2 obuslovlennyi vosk-hodom solntsa v magnitno-sopriazhennoi toчке/.

02 p0238 A69-11681

Predawn effect in f sub 0 F sub 2 variations caused by sunrise at a magnetically-conjugate point.

13 p2257 A69-28712

## ELIZAREVA, V. N.

Influence of electrode vapor on the electron density in a low-current arc discharge plasma in air /O vliianii parov elektrodov na kontsentratsiiu elektronov v plazme nizkotochnogo dugovogo razriada v vozdukhel/.

01 p0128 A69-10433

## ELIZONDO, R.

Reflex responses of human sweat glands to different rates of skin cooling.

23 p4082 A69-41446

## ELKIN, I. A.

Stability of thin cylindrical shells /K voprosu ustoiichivosti tonkikh tsilindricheskikh obolochek/.

05 p0840 A69-16199

## ELKINA, I. A.

Study of the causes of the effect of the gas temperature on He-Ne laser power output at lambda equals 6328 angstrom units /Issledovanie prichin vliianiia temperatury gaza na moshechnost' generatsii He-Ne lazera na lambda equals 6328 angstrom units/.

10 p1706 A69-24078

## ELKINS, T. J.

Observations of travelling ionospheric disturbances using stationary satellites.

10 p1685 A69-23831

Measurement and interpretation of power spectrums of ionospheric scintillation at a sub-auroral location.

20 p3534 A69-38093

## ELLDER, J.

New OH radio emission sources in Cygnus.

11 p1964 A69-25403

## ELLEMAN, D. D.

Kinetic analysis of the ion-molecule reactions in nitrogen-hydrogen mixtures using ion cyclotron resonance.

12 p2131 A69-25985

Analysis of the ion-molecule reactions in gaseous H sub 2, D sub 2, and HD by ion cyclotron resonance techniques.

20 p3578 A69-36934

## ELLEN, C. H.

A comparison of membrane and panel flutter.

13 p2365 A69-28236

## ELLENBURG, J. Y.

Laminar-sublayer effects in solvent cleaning.

08 p1318 A69-19807

## ELLERBY, R. A.

Medical evaluation of missile fuel handlers.

09 p1447 A69-22556

## ELLERT, G. V.

Liquid lasers /Opticheskie kvantovye generatory na zhidkostiakh/.

11 p1893 A69-24353

Energy exchange between active centers in glass /Ob obmene energiei mezhdu aktivnymi tsentrami v stekle/.

15 p2632 A69-30053

Features of energy transfer and dissipation in lumino-phors based on phosphate glasses activated by neodymium /Osobennosti perenosia i dissipatsii energii v lumino-forakh na osnovie fosfatnykh stekol, aktivirovannykh neodimom/.

20 p3552 A69-37017

## ELLING, W.

Special approximation formulas of the Appleton-Hartree equations for the interpretation of the absorption of a medium-wave amplification in the nighttime E-region of the ionosphere /Spezielle Naecherungsformeln der Appleton-Hartree-Gleichungen zur Interpretation der Absorption einer Mittelwellenausbreitung im naechtlichen E-Gebiet der Ionosphae/.

07 p1122 A69-18295

## ELLINWOOD, J. W.

Axisymmetric hypersonic flow with strong viscous interaction.

05 p0744 A69-15720

## ELLIOT, H.

Underground cosmic-ray measurements.

15 p2673 A69-30013

A possible mechanism for solar flares.

24 p4374 A69-43623

## ELLIOTT, D.

Structural variations in iron meteorites.

09 p1597 A69-22154

## ELLIOTT, D. D.

Atmospheric density above 158 kilometers inferred from magnetron and drag data from the satellite OV1-15 /1968-059A/.

24 p4310 A69-43179

## ELLIOTT, D. F.

Applications of a simplified multidimensional stochastic approximation algorithm.

24 p4291 A69-4323

## ELLIOTT, D. G.

Performance capabilities of liquid-metal MHD induction generators.

13 p2207 A69-274

## ELLIOTT, D. N.

Lamellar tearing in multi-pass fillet joints.

24 p4320 A69-422

## ELLIOTT, G. A.

Hypersonic lifting body optimization.

02 p0189 A69-12

Hypersonic lifting body optimization. [AIAA PAPER 68-1157]

03 p0362 A69-135

## ELLIOTT, G. R.

Integration of a digital computer with a vertical balancing system on a real-time basis. [SAWE PAPER 738]

18 p3220 A69-348

## ELLIOTT, H. A.

Earth sensor for attitude control of deep-space probes.

15 p2609 A69-305

## ELLIOTT, H. W.

Clinical toxicologic studies on Freon R F 1301.

18 p3098 A69-350

## ELLIOTT, I.

Power spectra of H alpha Doppler shifts.

07 p1217 A69-192

## ELLIOTT, J. P.

Free-molecule flow past a cone.

04 p0541 A69-147

## ELLIS, C. W.

Recommendations for future aerodynamic research.

23 p4057 A69-413

## ELLIS, D. V.

Search for gamma radiation from Centaurus A.

09 p1580 A69-222

## ELLIS, G. F. R.

A class of homogeneous cosmological models.

11 p1919 A69-252

## ELLIS, G. H.

Nuclear properties of a reactor used for nuclear seeding of an MHD plasma.

10 p1723 A69-234

## ELLIS, G. R. A.

Fine structure in the spectra of solar radio bursts.

17 p3024 A69-336

## ELLIS, J. P.

Decompression stress in simulated orbital flight.

01 p0022 A69-113

## ELLIS, R. A.

A step toward automation of nozzle design. [AIAA PAPER 69-975]

22 p3999 A69-403

## ELLIS, S.

Identity between the growth hormone degrading activity of the pituitary gland and plasmin.

06 p0873 A69-171

New observations on the substrate specificity of cathepsin C /dipeptidyl aminopeptidase I/ including degradation of beta-corticotropin and other peptide hormones.

20 p3473 A69-375

## ELLIS, W. H.

Experiment and theory of the ionization and recombination kinetics in plasmas /super 3 He/ produced through neutron irradiation.

10 p1738 A69-234

## ELLIS, W. R.

Ion density and current distributions in a propagating current sheet, determined by microwave reflectivity technique.

16 p2816 A69-316

## ELLISON, D. E.

Stability derivative estimation at subsonic speeds.

05 p0700 A69-155

## ELLISON, E. G.

A review of the interaction of creep and fatigue.

20 p3620 A69-370

## ELLISON, T. A.

ATLAS - A standard compiler input language for commercial airlines.

11 p1842 A69-250

## ELLS, J. W.

Estimate of sub-surface Martian temperatures.

17 p3034 A69-334

- ELLSAESSER, H. W.**  
A climatology of epsilon-/atmospheric dissipation.  
18 p3166 A69-34825  
Wind variability as a function of time.  
18 p3167 A69-34829
- ELLYETT, C. D.**  
Radio noise of auroral origin.  
14 p2411 A69-29108
- ELLYIN, F.**  
Effect of skew penetration on stress concentration.  
04 p0674 A69-14589  
Elastic-plastic behavior of intersecting shells.  
09 p1615 A69-21922
- ELMORE, R. E.**  
Ion sensor yields spacecraft attitude.  
01 p0079 A69-10293
- ELMS, R. V., JR.**  
Radioisotope thermal energy sources for space station life support systems.  
23 p4189 A69-42268
- ELNAN, O.**  
Nonlinear vibration of a pendulum in a viscous stream.  
21 p3773 A69-39679
- ELPATEVSKII, A. N.**  
Nonlinear strains in shells of revolution made of elastic fibers under the action of internal pressure /Nelineinye deformatsii obolochek vrashcheniia iz uprugikh nitei pri deistvii vnutrennego davleniia/.  
17 p3057 A69-33195  
Nonlinear axisymmetric oscillations of a cylindrical shell wound out of elastic fibers /Nelineinye osemimetricnyye kolebaniia tsilindricheskoi obolochki, namotannoi iz uprugikh nitei/.  
18 p3222 A69-34975
- ELPHICK, M.**  
Light-emitting diodes.  
20 p3505 A69-37702
- ELROD, B. D.**  
Solar array performance as a function of orbital parameters and spacecraft attitude.  
13 p2203 A69-27419
- ELROD, H. G., JR.**  
Theory for finite-width high-speed self-acting gas-lubricated slider /and partial-arc/ bearings. [ASME PAPER 68-LUBS-15]  
13 p2265 A69-27268  
Analysis of pulsating flows in infinite and finite conical nozzles.  
[ASME PAPER 69-APM-16]  
18 p3214 A69-34392
- ELSASSER, W. M.**  
Convection and stress propagation in the upper mantle.  
22 p3937 A69-40184
- ELSE, C. V.**  
An improved solid state amplifier for the Dobson ozone spectrophotometer.  
16 p2792 A69-32641
- ELSLEY, G. H.**  
Hovercraft Design and Construction.  
12 p2013 A69-26633
- ELSMORE, B.**  
Accurate positions of CP 0950 and CP 1133.  
17 p3036 A69-33639
- ELSNER, J.**  
Influence of the initial turbulence of flow on the evolution of wakes behind cascade blades.  
09 p1431 A69-22235  
Design of a DISA thermoanemometer and its application in studies of flow /Budowa termooanemometru f-my DISA i jego zastosowanie w badaniach przeplywow/.  
24 p4311 A69-42558
- ELTERMAN, L.**  
Features of tropospheric and stratospheric dust.  
21 p3718 A69-39773
- ELUKHIN, N. K.**  
Heat release during the boiling of a downward flowing liquid oxygen film /Teplootdacha pri kipenii zhidkogo kisloroda, stekaiushchego plenki/.  
04 p0687 A69-15161
- ELUMEEV, V. I.**  
Optimization and systematization of solutions to antenna synthesis problems.  
02 p0217 A69-12260  
Optimal solutions to problems in antenna synthesis theory /Optimal'nye resheniia zadach teorii sinteza antenn/.  
21 p3682 A69-39124
- Optimum antenna synthesis for limited deviations of the source distribution function from the prescribed function /Optimal'nyi sintez antenn pri ogranichenii ot-klonenii funktsii raspredeleniia istochnikov ot zadanoi/.  
22 p3916 A69-40952
- ELVIUS, A.**  
Photoelectric observations of polarization and color, carried out in three spectral regions of the galaxy M 82 /Fotoelektricheskie nabludeniiia polarizatsii i tsveta v galaktike M 82, proizvedennye v trekh uchastkakh spektra/.  
12 p2169 A69-27057  
Antimatter and the formation of galaxies /Antimateria i formirovanie galaktik/.  
12 p2170 A69-27064  
Antimatter, quasi-stellar objects, and the evolution of galaxies.  
15 p2690 A69-30670
- ELWELL, J.**  
A computer model for the evaluation of helicopter fire control systems.  
[AHS PAPER 316]  
17 p2933 A69-33540
- ELWELL, R. C.**  
Design of pivoted-pad journal bearings.  
[ASME PAPER 68-LUBS-27]  
13 p2266 A69-27275
- ELZY, E.**  
Engineering calculations of momentum, heat and mass transfer through laminar boundaries.  
16 p2879 A69-32203
- EMANUEL, G.**  
Radiative transport in an optically thick planar medium.  
01 p0178 A69-11411  
Kinetics of complex molecules in aerodynamic flows.  
20 p3514 A69-37226
- EMELIANENKO, S. N.**  
Altitude asymmetry of an instantaneous auroral zone /Vysoznaia asimmetriia mgnovЕННОй zony siiani/.  
20 p3522 A69-37056
- EMELIANENKO, V. V.**  
Forced oscillations of a laminar orthotropic cylindrical shell /Vynuzhdennye kolebaniia sloisto-ortotropnoi tsilindricheskoi obolochki/.  
15 p2715 A69-31202
- EMELIANOV, A. I.**  
Measuring the electrical conductivity of high-resistance epitaxial semiconducting films by the three-probe method.  
04 p0597 A69-14538
- EMELIANOV, IU. A.**  
Energy dependence of some characteristics of electron-photon cascades in lead.  
13 p2304 A69-28418
- EMELIANOV, M. D.**  
Outlines of Space Physiology /Ocherki po Kosmicheskoi Fiziologii/.  
01 p0014 A69-10743  
Some results of physiological investigations in the slow rotation room.  
02 p0197 A69-11498  
Oculomotor activity of cosmonauts during orbital flights /Glazodvigatel'naia aktivnost' u kosmonavtov vo vremia orbital'nykh poletov/.  
07 p1063 A69-18594  
Peculiarities of vestibular reactions in rats under conditions of artificial hyperthermia /Osobennosti protekaniia vestibuliarnykh reaktsii u kryis v usloviakh iskustvennoi gipotermii/.  
17 p2906 A69-32934  
Physiology of the Vestibular analyzer /Fiziologiya vestibuliarnogo analizatora/.  
20 p3467 A69-37240  
Some current problems in studies of the analyzer functions of astronauts during flight /Nekotorye aktual'nye voprosy issledovaniia analizatornoi funktsii u kosmonavtov v polete/.  
20 p3469 A69-37241  
Methods of studying the vestibular function on a spacecraft /K voprosu o metodakh izucheniia vestibuliarnoi funktsii v kosmicheskom korabe/.  
20 p3473 A69-37275
- EMELIANOV, V. A.**  
Quantitative investigations of shock-wave processes behind a shock wave by means of shadow methods /Kolichestvennye issledovaniia udarno-volnovykh protsessov za udarno volnoi pri pomoshchi tenevykh metodov/.  
13 p2245 A69-27384
- EMELIANOV, V. P.**  
Theory of self-channeling of light in a nonlinear isotropic medium /K teorii samokanalizatsii sveta v nelineinoy izotropnoi srede/.  
17 p3007 A69-33975
- EMELIANOVA, L. N.**  
New heat-resistant materials - Polyimides and polybenzimidazoles.  
19 p3358 A69-35901
- EMELIANOVA, T. A.**  
Study of the diffusion mobility of nickel in the beta-phase of titanium and its alloys /Issledovanie diffuzionnoi podvizhnosti nikelia v beta-faze titana i ego splavov/.  
11 p1902 A69-24274
- EMENDOERFER, D.**  
Results of studies of thermionic reactor systems /Ergebnisse von Studien ueber Thermionikreaktorsysteme/.  
02 p0279 A69-12662  
Results of studies on various fast and thermal thermionic reactor systems.  
14 p2480 A69-29182
- EMERO, D. H.**  
Structural efficiency of diffusion bonded titanium honeycomb sandwich.  
12 p2115 A69-26828  
Metallurgical and structural aspects of diffusion bonded titanium honeycomb sandwich.  
24 p4324 A69-43434
- EMERSON, B.**  
Orbits of two O-type spectroscopic binaries HD 93403 and 135240.  
11 p1963 A69-25257
- EMERSON, D.**  
Forbidden lines of Fe II in the photospheric spectrum.  
03 p0515 A69-14036
- EMERSON, J.**  
Chemiluminescent emission in gaseous reactions at low concentrations.  
01 p0024 A69-10618
- EMERSON, W. E.**  
Poly /2,4-perfluoroalkylene-6- perfluoroalkyl-triazine/ s - New high temperature elastomers.  
19 p3264 A69-35535
- EMERY, A. F.**  
An experimental study of the separated flow of very thick incompressible turbulent boundary layers.  
[ASME PAPER 68-WA/FE-36]  
05 p0750 A69-16109  
Free convection through vertical plane layers - Moderate and high Prandtl number fluids.  
[ASME PAPER 68-WA/HT-4]  
05 p0846 A69-16115  
Stress intensity factors for edge cracks in rectangular plates with arbitrary loadings.  
[ASME PAPER 68-WA/MET-18]  
05 p0839 A69-16156  
A Green's function for the stress intensity factors of edge cracks and its application to thermal stresses.  
[ASME PAPER 68-WA/MET-19]  
05 p0839 A69-16157  
Thermal radiation effects on the laminar free convection boundary layer of an absorbing gas.  
[ASME PAPER 68-HT-43]  
13 p2573 A69-27772  
Recompression step heat transfer coefficients for supersonic open cavity flow.  
13 p2375 A69-27786  
Use of heavy gases in explosive-driven shock tubes.  
[AIAA PAPER 68-730]  
24 p4297 A69-43577
- EMERY, F. E.**  
Recent experimental work on silicon microstrip microwave transmission lines.  
01 p0041 A69-10201
- EMERY, R. J.**  
Observation of atmospheric absorption using submillimetre maser sources.  
20 p3553 A69-37296
- EMETS, IU. P.**  
Solution of the problem of current distribution in a magnetohydrodynamic channel with permeable electrodes at tensor character of conductivity of the flowing medium.  
11 p1934 A69-25727  
The electric field in an MHD duct with permeable electrodes when the Hall effect is present in the flow of the moving medium /Elektricheskoe pole v MGD-kanale s pronsitaemymi elektrodami pri nalichii efekta Kholla v potoke dvizhushcheisya sredy/.  
13 p2310 A69-28030



## EMFINGER, J. E.

Fly-by-wire redundant actuator.  
22 p3870 A69-41242

## EMILIANI, P. L.

A class of digital filters with application to the processing of signals transmitted from space vehicles /Una classe di filtri numerici con applicazioni all'elaborazione di segnali trasmessi da veicoli spaziali/.  
01 p0038 A69-10071

## EMIN, O. N.

General method of determining the optimum parameters of turbines with a small volumetric flow rate /Obshchii metod opredeleniya optimal'nykh parametrov turbin s malym ob'emnym rashkodom/.  
18 p3184 A69-34983

## EMME, E. M.

Aeronautics, rocketry, and astronautics.  
18 p3233 A69-34552

## EMMONS, S. P.

Optimization of diode structures for monolithic integrated microwave circuits.  
01 p0040 A69-10195

## EMMONS, W. F.

Composite materials development for cryogenic bearing retainers.  
[ASME PAPER 68-WA/LUB-10]  
05 p0768 A69-16133

## EMMONY, D. C.

Strong shock wave generation by the interaction of a giant laser pulse with a solid target.  
21 p3736 A69-38942

## EMMOTT, N. W.

Computers and navigation systems.  
17 p3003 A69-34100

## EMOND, A.

Observations on electrostatic probe behavior in collision-dominated ionized turbulent gas flows in ballistic ranges.  
19 p3291 A69-35716

## EMRICH, H.

Topographic distribution of optically evoked potentials in the cortex of man at differing excitations /Topographische Verteilung optisch evozierter Potentiale ueber die Hirnrinde des Menschen bei unterschiedlichen Reizen/.  
22 p3884 A69-40885

## ENA, A. I.

Diffraction of electromagnetic waves by a five-element symmetrical array /Difraktsiia elektromagnitnykh voln na piatilementnoi simmetrichnoi reshetke/.  
23 p4123 A69-42029

## ENALSKII, V. A.

The properties of an iterational process.  
18 p3164 A69-34701

## ENCK, F. D.

Mechanical effects in type II superconductors.  
02 p0294 A69-11776

## ENCRENANZ, P.

Mean free paths of cosmic rays through a far infrared radiation field.  
16 p2852 A69-32819

## ENDER, A.

Two types of potential distribution in collisionless mode of thermionic converter operation in the presence of a transverse magnetic field.  
14 p2401 A69-29235

## ENDERBY, J. E.

The electrical properties of liquid semiconductors.  
20 p3584 A69-38024

## ENDICOTT, J. E.

Comparison of speech materials recorded in room air at ground level and in a helium-oxygen mixture at a simulated altitude of 18,000 feet.  
12 p2019 A69-26548

## ENDIKOV, G. I.

Effective velocity of vertical displacements of the lower ionosphere at sunset and sunrise.  
06 p0922 A69-17752

Measurement of the field strength of ionosphere-reflected radio waves in the range from 150 to 1500 khz at small distances from the emitter /Ob izmerenii napriazhenosti polia otrazhennykh ot ionosfery radiovoln diapazona 150 to 1500 KGTs na nebol'shikh rasstoiniakh ot peredatchika/.  
23 p4123 A69-41861

## ENDLICH, R. M.

Direct computation of geostrophic winds from observed winds using the balance equation.  
04 p0626 A69-14913

Analyzing and forecasting clear-air turbulence probabilities over the United States.  
22 p3976 A69-39927

## ENDLICHER, W.

Design of a satellite terminal for contingency deployment.  
[AIAA PAPER 68-439]  
04 p0579 A69-15367

## ENDO, K.

Erosion of bearing alloys in oil film.  
01 p0094 A69-10313

Fatigue properties of fiberglass reinforced plastics - Effects of stress direction and mean stress.  
06 p0945 A69-17124

Behaviour of corrosion potential and current and life of corrosion fatigue.  
19 p3342 A69-35775

Crack propagation of corrosion fatigue under service loads.  
21 p3750 A69-39814

## ENDO, M.

Flexural vibrations of a ring of rectangular cross section.  
24 p4404 A69-43629

## ENDO, T.

Cyclic stress-strain and fatigue behavior of representative aircraft metals.  
10 p1714 A69-23981

Determination of the cyclic stress-strain curve.  
10 p1715 A69-23982

## ENDRES, H.

Digital telemetry equipment in space craft.  
03 p0393 A69-13290

## ENDRUD, G. H.

A differential thermistor gauge for macroscopic velocity measurements in rarefied gases.  
04 p0601 A69-15117

## ENE, H. I.

The Hartmann problem for the motion of an electroconductive fluid in a homogeneous porous medium /Sur le probleme de Hartman pour le mouvement d'un fluide electroconducteur dans un milieu poreux homogene/.  
11 p1925 A69-24324

## ENEBO, L.

Investigation of some methods for increasing the digestibility in vitro of microalgae.  
21 p3667 A69-39701

## ENEY, J. A.

Flight evaluation of power approach short period dynamics in the variable-stability NF-8D.  
[AIAA PAPER 69-896]  
21 p3648 A69-39420

## ENFIEJIAN, E. A.

Color picture reproduction using a high-resolution television system.  
[SMPTE PAPER 105-79]  
12 p2077 A69-25767

## ENGBERG, J.

Conversion formulae for noise parameters.  
09 p1455 A69-21897

## ENGEL, C. D.

Transverse waves in detonations. II - structure and spacing in H sub 2-O sub 2, C sub 2 H sub 4-O sub 2, and CH sub 4-O sub 2 systems.  
13 p2378 A69-28217

Radiation absorption effects on heating loads encountered during hyperbolic entry.  
21 p3644 A69-39040

## ENGEL, J. M.

The electrostatic storage display tube.  
07 p1101 A69-18655

## ENGEL, R.

Mass concentrations in the lunar interior /Massenkonzentrationen im mondinneren/.  
20 p3606 A69-37933

## ENGEL, S. L.

A fibre optical angular displacement transducer.  
06 p0923 A69-16929

## ENGEL, T.

Adsorption of CO on tungsten - Field emission from single planes.  
14 p2409 A69-29093

## ENGELBART, D. C.

A research center for augmenting human intellect.  
04 p0566 A69-15342

## ENGBRECHT, R. S.

Solid-state bulk phenomena and their application to integrated electronics.  
02 p0216 A69-12144

## ENGELER, W. E.

Refractory metal silicon device technology.  
06 p0930 A69-17153

## ENGELHARDT, A. G.

Retracting pedestal apparatus that presents a single solid target to a focused Q-switched laser beam.  
03 p0439 A69-13109

Microwave diagnostics of laser produced aluminum plasmas.  
11 p1930 A69-25228

## ENGELL, H.-J.

Physicochemical Methods of Corrosion Testing, Europaesische Foederation Korrosion, Corrosion Conference, Frankfurt-am-Main, West Germany, April 22-24, 1968, Reports /Physikalisch-Chemische Methoden der Korrosionspruefung, Europaesische Foederation Korrosion, Korrosionstagung, Frankfurt-am-Main, West Germany, April 22-24, 1968, Berichte/.  
10 p1712 A69-23818

## ENGELMANN, F.

Alternative description of the nonlinear interaction of a plasma with a weak electron beam.  
10 p1729 A69-23407

Micro-field fluctuations in stable nonequilibrium plasmas.  
14 p2490 A69-29103

Anomalous scattering and absorption of light by decay into plasma waves.  
16 p2822 A69-32046

## ENGELMANN, R.

Simplified model for the domain dynamics in Gunn-effect semiconductors covered with dielectric sheets.  
03 p0491 A69-13988

The behavior of Gunn oscillators as a function of the load conditions /Das Verhalten von Gunn-Oszillatoren als Funktion der Lastbedingungen/.  
11 p1853 A69-25609

## ENGELN, C.

Solution of the vibration equation in the neighborhood of ellipses /Ueber die Loesungen der Schwingungsgleichung im Aeusseren von Ellipsen/.  
08 p1416 A69-20714

## ENGELSON, M.

Interpreting pulsed RF spectra.  
09 p1460 A69-22791

## ENGEN, G. F.

A method of calibrating coaxial noise sources in terms of a waveguide standard.  
02 p0210 A69-12436

A low-temperature microwave noise standard.  
02 p0211 A69-12446

A method of determining the mismatch correction in microwave power measurements.  
12 p2038 A69-26055

## ENGIBARIAN, N. B.

Polychromatic scattering in a one-dimensional medium.  
16 p2813 A69-32589

## ENGIN, A. E.

Vibrations of fluid-filled spherical shells.  
17 p3051 A69-32956

## ENGLAND, R.

Error estimates for Runge-Kutta type solutions to systems of ordinary differential equations.  
15 p2644 A69-30672

## ENGLAND, W. G.

Thermal radiation effects on the laminar free convection boundary layer of an absorbing gas.  
[ASME PAPER 68-HT-43]  
13 p2373 A69-27772

## ENGLE, F. V.

Performance aspects of folding propotor V/STOL aircraft.  
[AHS PAPER 302]  
17 p2901 A69-33547

## ENGLE, R. B.

Acoustic emission - Stress wave detection as a tool for nondestructive testing and material evaluation.  
20 p3512 A69-38270

## ENGLE, W. W., JR.

High-energy /less than 400-Mev/ neutron transport using the method of discrete ordinates.  
14 p2481 A69-29592

## ENGLEHART, W. C.

Performance characteristics of a "damped" mass expulsion attitude control system.  
[AIAA PAPER 67-535]  
09 p1610 A69-21986

## ENGLEMAN, R., JR.

Collision broadening of transient absorption spectra.  
09 p1543 A69-22252

- ENGLIN, B. A.**  
Corrosive characteristics of jet fuels in the presence of condensing water /Korroziionnye svoystva reaktivnykh topliv v usloviakh kondensirovaniya vody/.  
01 p0142 A69-11099
- ENGLISH, A. T.**  
Metal processing and fracture.  
17 p2988 A69-33552
- ENGLISH, W. D.**  
Studies of galvanic corrosion couples in liquid fluorine.  
06 p0944 A69-17854  
Apparatus for impact testing of fluorinating agents.  
06 p0907 A69-17876  
Technical note - The role of impurities in corrosion by fluorine oxidizers.  
21 p3784 A69-39487
- ENGLISH, W. K.**  
A research center for augmenting human intellect.  
04 p0566 A69-15342
- ENGLUND, P. T.**  
Enzymatic synthesis of deoxyribonucleic acid. XXVI.  
22 p3898 A69-41070  
Enzymatic synthesis of deoxyribonucleic acid. XXVII.  
22 p3898 A69-41071  
Enzymatic synthesis of deoxyribonucleic acid. XXX.  
22 p3898 A69-41074  
Enzymatic synthesis of deoxyribonucleic acid. XXXI.  
22 p3898 A69-41075
- ENGQUIST, R. D.**  
Parameters affecting electron beam welding.  
04 p0605 A69-14529  
Effects of lasers on fracture of materials.  
17 p2989 A69-33557
- ENGSTROM, W. L.**  
Crack-opening displacements and normal strains in centrally notched plates.  
12 p2189 A69-27163
- ENGVER, N.**  
Investigations of a Milky Way field in Circinus /SA 195/.  
08 p1389 A69-20246
- ENGVOLD, O.**  
A spectroscopic study of the H alpha profile of moustaches.  
06 p0994 A69-17435  
The abundance of beryllium in the solar atmosphere.  
06 p1010 A69-17971  
On the position of sunspots in the core of H alpha relative to the continuum.  
22 p4019 A69-40291
- ENIKEEVA, T. H.**  
The Cauchy problem for a class of nonlinear second-order differential equations in Hilbert space.  
10 p1721 A69-23885
- ENIKEEVA, T. K. H.**  
Cauchy problem for a class of second-order nonlinear differential equations in a Hilbert space /O zadache Koshi dlia odnogo klassa nelineinykh differentsial'nykh uravnenii vtorogo poriadka v gil'bertovom prostranstve/.  
05 p0786 A69-16061
- ENKE, C. G.**  
Digital Electronics for Scientists.  
18 p3112 A69-34915
- ENKENHUS, K. R.**  
Evaluation of dense gas phenomena in a free-piston hypersonic wind tunnel. [AIAA PAPER 69-169]  
06 p0907 A69-18188  
Piston driven facilities - Application of dense real gas effects.  
11 p1862 A69-25011  
Intermittent facilities.  
11 p1863 A69-25016  
Hypersonic testing in the V.K.I. Longshot free-piston tunnel. [AIAA PAPER 69-333]  
13 p2249 A69-28269  
Formulas for the thermodynamic properties of dense nitrogen.  
20 p3631 A69-37214
- ENKER, M. B.**  
Increasing the stability of scintillation spectrometers for X radiation /Povyshenie stabil'nosti stintillatsionnykh spektrometrov rentgenovskogo izlucheniia/.  
21 p3727 A69-39856
- ENLOE, L. H.**  
Hologram heterodyne scanners.  
03 p0431 A69-13827  
Television transmission of holograms with reduced resolution requirements on the camera tube.  
17 p2974 A69-33401
- ENLOW, R. A.**  
Four GERT views of planning R and D projects.  
04 p0689 A69-15100
- ENLOW, R. L.**  
Aerodynamic lift and moment fluctuations of a sphere.  
14 p2390 A69-29573
- ENNOS, A. E.**  
Visual observation of surface vibration nodal patterns.  
12 p2099 A69-27176  
Holographic techniques in engineering metrology.  
22 p3945 A69-40235
- ENOME, S.**  
The slowly varying component of the radio emission during the period of the July 1966 proton flare.  
10 p1783 A69-23734  
High-resolution observations of solar radio bursts with multi-element compound interferometers at 3.75 and 9.4 GHz.  
11 p1946 A69-24428  
A high-resolution quick-scan interferometer for solar studies at 3.75 GHz.  
18 p3118 A69-34968  
A statistical study of solar bursts at microwave frequencies.  
18 p3187 A69-34969
- ENOTO, T.**  
Input admittance of the Fabry-Perot resonator with infinitely long conic-section cylindrical reflectors.  
05 p0731 A69-16295
- ENTENMAN, C.**  
Intermediary metabolism in hypothermic rat livers.  
10 p1642 A69-23119
- ENTIN, R. I.**  
Dislocation mobility in niobium and molybdenum studied by measuring the amplitude dependence of the internal friction.  
04 p0614 A69-14635
- ENTOV, V. M.**  
Concerning Prandtl's brittle fracture model /K modeli khрупкого razrusheniia Prandtlia/.  
07 p1237 A69-19682
- ENTREKIN, H. D.**  
Evaluation of the Atlantic City mesonet for short range prediction of aviation terminal weather.  
24 p4342 A69-42892
- ENTZIAN, G.**  
An investigation of solar X-ray and radio emissions and their relationship to ionospheric phenomena.  
24 p4372 A69-43615
- ENZER, S.**  
Technological and operational considerations affecting development of reusable space transportation systems.  
03 p0519 A69-13395
- ENZMANN, R. D.**  
Use of Space Systems for Planetary Geology and Geophysics.  
03 p0509 A69-13390
- EOLL, C. K.**  
A finite formulation of quantum electrodynamics.  
07 p1181 A69-18957
- EPHERRE, M.**  
Speculations on the light element abundances in stars.  
16 p2866 A69-32816
- EPIFANOVA, V. I.**  
Idealized cycle of a gas-expansion machine with a built-in regenerator /Idealizirovannyi tsikl detandera so vstroennym regeneratorem/.  
04 p0687 A69-15164
- EPPELRY, A. D.**  
Sleep, hibernation and hypothermia in the yellow-bellied marmot /M. flaviventris/.  
10 p1643 A69-23122
- EPPERS, W. C., JR.**  
High power CO-N sub 2 -He laser.  
08 p1324 A69-20163  
Q switching of the carbon monoxide laser.  
21 p3742 A69-39742
- EPPELSON, J. P.**  
Application of lasers to microelectronic fabrication.  
11 p1846 A69-24600
- EPPLER, W. G., JR.**  
Relating remote sensor signals to ground-truth information.  
14 p2416 A69-29534
- EPREMIAN, E.**  
Look for more efficient materials.  
09 p1524 A69-22069
- EPSHTEIN, A.**  
Design model of a jet in a crosswind /O raschetnoi modeli strui v snosiashchem potoke/.  
18 p3124 A69-35149
- EPSHTEIN, G. N.**  
Peculiarities in the flow mechanism of a magnesium alloy with hydro-explosive loading.  
04 p0615 A69-14639  
Structure and mechanical properties of materials after hydroexplosive forming.  
09 p1503 A69-21851
- EPSTEIN, E. S.**  
The role of initial uncertainties in prediction.  
15 p2649 A69-30894
- EPSTEIN, G.**  
Recursive fast Fourier transforms.  
04 p0565 A69-15337
- EPSTEIN, H.**  
The effect of airflow on the behavior of foam as a dynamic element in shock and vibrations. [ASME PAPER 69-VIBR-46]  
10 p1803 A69-24144
- EPSTEIN, J.**  
Stepped-scanned ring array.  
14 p2419 A69-28894
- EPSTEIN, L. C.**  
An all-reflecting Schmidt telescope for space astronomy.  
11 p1887 A69-25101
- EPSTEIN, M.**  
Condensation-enhanced vaporization rates in non-isothermal systems.  
03 p0532 A69-13122  
Fundamental approach to high-frequency breakdown of gases.  
08 p1357 A69-20810  
Reliability with allowable downtime.  
19 p3326 A69-36002  
Application of an improved model of the wall boundary condition to molecular beam scattering from a solid surface.  
19 p3377 A69-36179
- EPSTEIN, M. A.**  
PCM television via satellite relay.  
23 p4130 A69-42520
- EPSTEIN, M. R.**  
The effects of polarization rotation and phase delay with frequency on ionospherically propagated signals.  
02 p0208 A69-12331  
Polarization of ionospherically propagated HF radio waves with applications to radio communication.  
07 p1078 A69-18916
- EPSTEIN, R.**  
Protection of pilots against lasers.  
07 p1072 A69-19436
- EPSTEIN, S. T.**  
Variational upper and lower bounds on the dynamic polarizability at imaginary frequencies.  
01 p0122 A69-10284  
Sum rules for variational wavefunctions.  
14 p2471 A69-29921
- ERASLAN, A. H.**  
Energy dissipation in MHD duct flow.  
04 p0635 A69-14724  
Temperature distributions in MHD channels with Hall effect.  
04 p0635 A69-14746  
The solution of temperature development in the entrance region of an MHD channel by the B. G. Galerkin method. [ASME PAPER 68-WA/HT-10]  
05 p0803 A69-16118  
Heat transfer in magnetohydrodynamic channel flow.  
11 p1923 A69-24290



## ERASLAN, N. F.

Heat transfer in magnetohydrodynamic channel flow. 11 p1923 A69-24290

## ERB, R. B.

Apollo thermal-protection system development. [AIAA PAPER 68-1142] 03 p0519 A69-13558

## ERB, W.

Expansion behavior in exploding wires /Ueber das Expansionsverhalten explodierender Draehete/. 11 p1926 A69-24472

## ERBE, L. H.

Nonoscillatory solutions of second order nonlinear differential equations. 12 p2120 A69-26033

## ERBEIA, A.

Study of atomic collisions in a helium-neon laser containing a small quantity of a foreign gas /argon, krypton, or xenon/ /Etude des collisions atomiques dans un laser helium-neon contenant une petite quantite d'un gaz etranger /argon, krypton ou xenon/. 08 p1325 A69-20278

Spatial coherence of a laser beam /Coherence spatiale d'un faisceau laser/. 22 p3960 A69-40018

## ERCIJANI, L. A.

Optical monitoring of quasi stellar objects at the Observatory of Asiago. 05 p0826 A69-16387

## ERDMANN-JESNITZER, F.

Contribution to explosive forming of aluminum powder /Beitrag zur Explosivformung von Aluminiumpulver/. 16 p2793 A69-31790

## ERDMANN, J. C.

Response of thermally softened defect structures in alloys to an applied stress. 07 p1165 A69-18906

## ERDOGAN, F.

Fatigue crack propagation in cylindrical shells. 10 p1795 A69-23066

Crack-propagation theories. 11 p1975 A69-24672

Cylindrical and spherical shells with cracks. 22 p4046 A69-41041

## ERDOS, J.

Numerical solution of several steady wake flows of the mixed supersonic/subsonic type by a time-dependent method, and comparison with experimental data. [AIAA PAPER 69-649] 17 p2892 A69-33468

## EREMENKO, I. U. A.

Study of four-momentum transfers in high-energy interactions of cosmic ray particles. 13 p2330 A69-28375

Energy characteristics of the interaction of cosmic-ray particles with carbon nuclei. 13 p2330 A69-28379

## EREMENKO, V. V.

Electric resistance of thin single-crystal aluminum plates. 10 p1711 A69-23620

## EREMIN, A. V.

Efficiency of man under conditions of reduced gravitation /K voprosu o rabotosposobnosti cheloveka v usloviakh ponizhennoi vesomosti/. 07 p1063 A69-18596

Modeling human movements in weightlessness and in a water environment from the viewpoint of a biomechanical approach /O modelirovani dvizhenii cheloveka v nevesomosti i v vodnoi srede s biomechanicheskikh pozitsii/. 17 p2915 A69-33385

## EREMIN, N. I.

Magneto-metallographic investigation of martensite transformation in stainless steels in connection with embrittlement during cold deformation. 18 p3138 A69-35117

## ERHARDT, H. R.

Application of electronically phased antennas for spin stabilized satellites. 08 p1289 A69-20969

## ERHARDT, K.

Behavior of 2024 aluminum in low cycle fatigue at low strain rates as a function of temperature. 10 p1709 A69-23071

## ERICKSEN, R. H.

The characteristics of spontaneous martensite in thin foils of Ti-Cr alloys. 10 p1708 A69-22994

The martensite transformation in Ti-Cr binary alloys. 13 p2276 A69-27369

## ERICKSON, D.

Hele-Shaw and porous medium flow for space fuel systems. [AIAA PAPER 69-678] 17 p3021 A69-33444

## ERICKSON, J. C., JR.

A continuous vortex sheet representation of deformed wakes of hovering propellers. 18 p3087 A69-35217

Higher harmonic pitch control. 18 p3089 A69-35233

## ERICKSON, J. E.

Mass influx and penetration rate of meteor streams. 06 p1000 A69-17007

Analysis of the meteoroid flux measured by Explorer 16 and Lunar Orbiter. 13 p2349 A69-27820

## ERICKSON, L. E.

Self-Q-switching of ruby lasers at 77 deg K. 05 p0776 A69-16332

## ERICKSON, P. W.

Silane treatment of glass fabric from nonaqueous solvents. 08 p1341 A69-20513

## ERICKSON, R. C.

Fluid and thermodynamic modeling of a nuclear rocket vehicle. [SAE PAPER 690201] 07 p1178 A69-18306

## ERICKSON, W. C.

Progress in radio and radar astronomy. 19 p3425 A69-36430

## ERICKSON, W. D.

Some aspects of interplanetary earth-entry simulation. 15 p2681 A69-30376

## ERICSSON, L. E.

Unsteady aerodynamics of an ablating flared body of revolution including effect of entropy gradient. 02 p0189 A69-12524

Universal scaling laws for hypersonic nose bluntness effects. [AIAA PAPER 68-1158] 03 p0362 A69-13566

Dynamic stability problems associated with flare stabilizers and flap controls. [AIAA PAPER 69-182] 06 p1017 A69-18053

Effect of boundary layer transition on vehicle dynamics. [AIAA PAPER 69-106] 06 p1037 A69-18087

Effect of nose bluntness on hypersonic unsteady aerodynamics. [AIAA PAPER 68-889] 12 p2012 A69-26794

Nonexistence of axisymmetric separated flow. 23 p4060 A69-41905

## ERIKSSON, L.

Lattice location of dopant elements implanted into Ge. 07 p1199 A69-18903

## ERINGEN, A. C.

Theory of micropolar elasticity. 11 p1975 A69-24674

Reflection of plane waves from the flat boundary of a micropolar elastic half-space. 15 p2714 A69-31147

Mechanics of micropolar continua. 20 p3624 A69-37582

## ERKES, J. W.

Radio observations of the supernova remnant HB 21. 22 p4014 A69-40129

## ERKMAN, J. O.

Infinite diameter detonation velocities of ammonium perchlorate. 11 p1940 A69-24486

## ERLANK, A. J.

The composition of stony meteorites. I - Analytical techniques. 11 p1953 A69-24358

Fractionation of some abundant lithophile element ratios in chondrites. 19 p3409 A69-36087

## ERLICKI, M. S.

Nonlinearity of Hall voltage. 09 p1548 A69-21683

## ERLMEIER, R.

Hypergolic filling materials for solid fuels consisting of hybrid propellant combinations /Hypergole Fuellstoffe fuer Festbrennstoffe lithergoler Treibstoffkombinationen/. 10 p1753 A69-24023

Fuels for flight speeds up to Mach 3.5 /Kraftstoff fuer Fluggeschwindigkeiten bis Mach 3,5/. 11 p1941 A69-25422

## ERLYKIN, A. D.

New data on high-energy muons and nuclear-interacting particles obtained with the Tyan'-Shan installation for study of extensive air showers. 13 p2331 A69-28395

The penetrating component of the cosmic rays at mountain altitudes and the hypothesis of a passive baryon state. 13 p2331 A69-28400

Test of the hypothesis of the existence of a passive baryon state by means of the calorimeter telescope technique. 13 p2331 A69-28400

On the magnitude of the lead-copper transition effect. 13 p2304 A69-28411

## ERMA, V. A.

Exact solution for the scattering of electromagnetic waves from bodies of arbitrary shape. III - Obstacles with arbitrary electromagnetic properties. 17 p2918 A69-33002

## ERMAKOV, B. A.

Generation of microsecond pulses in a ruby laser. 03 p0441 A69-14142

Transparency characteristics of phototropic switches and their influence on laser parameters /Kharakteristiki prosvetlenia fototropnykh zatvorov i ikh vlianie na parametry lazera/. 04 p0610 A69-14389

Characteristics of the optical transmission of phototropic shutters and their effect on laser parameters. 14 p2456 A69-28758

## ERMAKOV, F. A.

Energy of eddy-current plasmoids /K energii tokov vikhrevykh gustkov/. 23 p4214 A69-41834

## ERMAKOV, V. A.

Single-pulse ruby lasers with opto-mechanical shutters. 12 p2107 A69-26588

Heat removal from a laser rod by means of a metallic conductor. 12 p2108 A69-26592

## ERMAKOVA, M. P.

The zirconium corner in the zirconium-vanadium-nickel phase diagram /Tsirkoniyevoi ugol diagrammy sostoiiaia tsirkonii-vanadii-nikel/. 02 p0262 A69-11847

## ERMATOV, S. E.

Structural changes in a molybdenum single crystal under the action of laser radiation /Strukturnye izmeneniia monokristalla molibdena pod deistviem lazernogo oblucheniia/. 21 p3750 A69-39842

## ERMILIN, V. A.

Calculation of wave processes in pipelines in the process of filling with a fluid /K raschetu volnovykh protsessov v truboprovodakh pri zapolnenii ikh zhidkost'iu/. 24 p4300 A69-43075

## ERMILOV, I. U. A.

Calculation of satellite rendezvous impulses in a central Newtonian gravitational field /O raschete impul'sov dlia sblizheniia sputnikov v tsentral'nom n'iutonovskom pole tiagoteniia/. 05 p0789 A69-16046

Calculation of impulses required for convergence of orbiting vehicles in a central Newtonian gravity field. 20 p3574 A69-37955

## ERMISCH, R.

Study of the effect of residual gas on fatigue behavior of pure iron subjected to alternating bending load in ultrahigh vacuum /Untersuchungen ueber den Gaseinfluss auf das Ermuedungsverhalten von Reineisen bei Biegewechselbelastung im Ultrahochvakuum/. 04 p0616 A69-14846

## ERMOLAEV, V. M.

Investigation of the dependences of combustion processes in a turbulent flow of a homogeneous mixture /Issledovanie zavisimosti protsessov goreniia v turbulentnom potoke odnorodnoi smesi/. 17 p3069 A69-33140

## ERMOLAEVA, G. K.

Wall jet of a conducting fluid in a transverse magnetic field /Pristenochnaia struia provodiashchei zhidkosti v poperechnom magnitnom pole/. 07 p1192 A69-19020

Boundary-layer jet of a conducting fluid in a slip-stream /Pristenochnaia struia provodiashchei zhidkosti v sputnom potoke/.  
14 p2501 A69-29917

**ERMOLENKO, S. D.**  
Nonlinear theory of small aspect ratio wings.  
21 p3644 A69-39084

**ERMOLOV, I. N.**  
Sensitivity of the shadow method of flaw detection.  
10 p1675 A69-24075

**ERMOLOVA, M. I.**  
Investigation of phase and structural transformations in two-phase industrial titanium alloys /Issledovanie fazovykh i strukturnykh prevrashchenii v dvukhfaznykh promyshlennykh titanovykh splavakh/.  
07 p1162 A69-18776

**ERMOLOVICH, IU. B.**  
Strain potential constants and mechanism of hole scattering in indium antimonide /Konstanty deformatsionnogo potentsiala i mekhanizm rasseianiia dyrok v antimonide indii/.  
16 p2824 A69-31575

**ERMOSHINA, K. P.**  
Derivation of isophotes for extended celestial objects by the photographic equidensitometry method.  
11 p1952 A69-24255

**ERNEST, J.**  
Tunable Raman up-converter as a coherent generator. [IEEE PAPER B-2]  
05 p0774 A69-16309  
Passive transverse mode locking in a confocal Nd super 3 super plus glass laser.  
12 p2107 A69-26327

**ERNST, D. M.**  
Performance comparison of four cylindrical diodes with various types of tungsten emitters.  
09 p1439 A69-21821  
Heat pipe studies at Thermo Electron Corporation.  
09 p1440 A69-21833  
Heat pipe development for thermionic applications.  
23 p4074 A69-42297

**ERNST, G.**  
Thrust modulation in hybrid propellant engines and its applications /La modulation de la pousse des moteurs a lithergol et ses applications/.  
17 p3019 A69-33337

**ERNST, H.**  
Ventilation-perfusion relationships during high-altitude adaptation.  
22 p3875 A69-40227

**ERNST, M. H.**  
Theory of transport coefficients for moderately dense gases.  
14 p2540 A69-29469

**ERNSTING, J.**  
Decompression sickness in aviation.  
24 p4269 A69-43412

**ERNULL, R. E.**  
Utilization of ground-based guidance systems to supplement onboard guidance of space vehicles.  
06 p0955 A69-17580

**ERNVEIN-PECQUENARD, J.**  
Atomic clock with sequential optical pumping /Horloge atomique a pompage optique sequentiel/.  
12 p2090 A69-26291

**EROFEEV, A. I.**  
Influence of the type of roughness on the interaction between a gas flow and solid surface /O vlianii vida sherokhovatosti na vzaimodeistvie potoka gaza s poverkhnost'iu tverdogo tela/.  
06 p0910 A69-17342

**EROFEEV, N. M.**  
Short-period variations in the altitudes of ionospheric reflections /Korotkoperiodicheskie izmeneniia vysot ionosfernykh otrazhenii/.  
20 p3521 A69-37054

**EROFEEVA, I. N.**  
Characteristics of the interaction of pions and nucleons with nuclei.  
13 p2331 A69-28389  
Reasons for the production of asymmetric showers in interactions of high-energy strong-interacting particles with nuclei.  
13 p2303 A69-28391

**EROKHIN, A. A.**  
Effect of surface impurities in titanium on the formation of pores in welds.  
06 p0945 A69-17894

Problems of the theory and technology of welding of heat-resistant alloys based on niobium and nickel /Voprosy teorii i tekhnologii svarki zharoпрочnykh splavov na osnove niobiia i nikelia/.  
09 p1504 A69-22146

**EROKHIN, G. S.**  
Influence of molybdenum disulfide on the electrochemical corrosion of metals /Vliianie disulfida molibdena na elektrokhimicheskuu korroziiu metallov/.  
21 p3733 A69-39804

**EROKHIN, IU. G.**  
Measurement of the parameters of the ionosphere by the method of "incoherent" scattering of radio waves /K izmereniiam parametrov ionosfery metodom "nekoherentnogo" rasseianiia radiovoln/.  
01 p0065 A69-10575  
Ionospheric measurements by the method of incoherent radio wave scattering /K ionosfernym izmereniiam metodom nekoherentnogo rasseianiia radiovoln/.  
10 p1686 A69-23910  
Measurements of the parameters of the ionosphere by the "incoherent" radiowave scattering method.  
15 p2597 A69-30745  
Effect of the American "Starfish" explosion on the state of the ionosphere according to observations in Central Kazakhstan /Vliianie amerikanskogo vzryva "Starfish" na sostoiianie ionosfery po nabludeniiam v sentral'nom Kazakhstane/.  
22 p3942 A69-41097

**EROKHIN, N. S.**  
Nonlinear theory of the damping of electromagnetic waves in a plasma /K nelineinnoi teorii zatukhaniia elektromagnitnykh voln v plazme/.  
04 p0558 A69-14982  
Second harmonic generation by an electromagnetic wave incident on an inhomogeneous plasma /Generatsiia vtoroi harmoniki pri padenii elektromagnitnoi volny na neodnorodnuiu plazmu/.  
10 p1653 A69-23133

**EROSHENKO, E. G.**  
Topology of the high-latitude nighttime magnetosphere.  
03 p0422 A69-13505  
Asymmetry of ring current during different phases of a geomagnetic storm.  
07 p1129 A69-19611  
Magnetic field investigation with interplanetary station "Venera-4".  
10 p1791 A69-24199

**EROSHENKO, V. M.**  
Analysis of ablation of solids in supersonic flow.  
18 p3231 A69-35121

**EROSHEVICH, E. S.**  
Photographic photometry of the tail of comet Ikeya-Seki /Fotograficheskaiia fotometriia khvosta komety Ikeya-Seki/.  
15 p2685 A69-30527

**EROZOLIMSKII, B. G.**  
Recording of low-energy protons on a scintillation counter /Registratsiia protonov mal'kikh energii stintil'liatsionnym schetnikom/.  
18 p3138 A69-35255

**ERSHIN, SH. A.**  
Calculation of a homogeneous turbulent gas flame.  
08 p1420 A69-19998  
Investigation of a turbulent compressible gas jet /Issledovanie turbulentnykh strui szhimaemogo gaza/.  
21 p3645 A69-39847

**ERSHKOVICH, A. I.**  
The transport of charged particles in the earth's magnetosphere.  
01 p0147 A69-11320

**ERSHOV, A. G.**  
Generation of optical harmonics in lithium niobate /Generirovanie opticheskikh harmonik v niobate litii/.  
03 p0437 A69-13046

**ERSHOV, B. V.**  
Measurement of the luminescence quantum yield in neodymium glass /Izmerenie kvantovogo vykhoda liuminesentsii v neodimovom stekle/.  
10 p1702 A69-23211

**ERSHOV, I. V.**  
Quantitative investigations of shock-wave processes behind a shock wave by means of shadow methods /Kolichestvennye issledovaniia udarno-volnovykh protsessov za udarnoi volnoi pri pomoshchi tenevykh metodov/.  
13 p2245 A69-27384

Calculation of the motion of a shock wave and flow parameters in a shock tube with a noninstantaneously opening diaphragm /Raschet dvizheniia udarnoi volny i parametrov potoka pri nemgovennom otkrytii diafragmy v udarnoi trube/.  
14 p2432 A69-29623

Experimental study of the nonequilibrium processes behind a shock wave in air and nitrogen by the shadow method /Eksperimental'noe issledovanie neravnovesnykh protsessov za udarnoi volnoi v vozdukhie i azote tenevym metodom/.  
21 p3695 A69-38961

**ERSHOV, N. S.**  
Retention of flow similarity in the calibration of nozzles used for investigating working processes in pumps.  
16 p2772 A69-32145  
Experimental investigation of the effect of the thermodynamic properties of a liquid on cavitation phenomena.  
21 p3696 A69-39101  
Calculation of the flow parameters for a real gas /air/ /Raschet parametrov pri techenii real'nogo gaza /vozdukha/.  
24 p4244 A69-43088

**ERSHOV, V. N.**  
Variation of the circumferential inhomogeneity of a flow passing through the impeller blades of an axial-flow compressor /Izmenenie okruzhnoi neravnomernosti potoka pri prokhozhenii cherez reshetku rabocheho kola osevo kompressora/.  
03 p0361 A69-12954

**ERSHOVA, I. O.**  
Some properties of tungsten and tungsten-base alloys.  
05 p0782 A69-16797

**ERSHOVA, V. T.**  
Cold-shortness threshold of tungsten-molybdenum alloys.  
05 p0783 A69-16809

**ERTANOV, I. D.**  
Changes in the enzymatic activity of cellular and sub-cellular structures in response to accelerations.  
10 p1645 A69-23496

**ERTEL, H.**  
The relation between friction and wind in the Gauss-Argand diagram /Die Beziehung zwischen Reibung und Wind im Gauss-Argand-Diagramm/.  
16 p2808 A69-32455

**ERU, I. I.**  
Three-level andalusite paramagnetic amplifier for the 3 cm range.  
04 p0577 A69-14780  
Four-level andalusite paramagnetic amplifier for the 3 mm range.  
04 p0577 A69-14781  
Trivalent-iron-doped andalusite as crystal for microwave waves. [IEEE PAPER C-2]  
07 p1150 A69-19049  
Paramagnetic amplification in the millimeter range /Paramagnitnoe usilenie v millimetrovom diapazone/.  
19 p3333 A69-35881

**ERUKHIMOV, L. M.**  
Frequency correlation of radio-wave fluctuations behind n random screens /O chastotnoi korreliatsii fluktuatsii radiovoln za n khaoticheskimi ekranami/.  
07 p1076 A69-18525  
Investigation of the small-scale portion of the spectrum of ionospheric inhomogeneities by the radio astronomical method at frequencies of 13-54 MHz.  
12 p2070 A69-26687  
Possibility of investigating the inhomogeneities of interstellar plasma by the method of discrete-source scintillation /O vozmozhnosti issledovaniia neodnorodnosti mezhzvezdnoi plazmy metodom mertsiatii diskretnykh istochnikov/.  
19 p3428 A69-36882

**ERUKHIMOV, M. SH.**  
Acoustic plasma waves in thin films /Akusticheskie plazmennye volny v tonkikh plenkakh/.  
02 p0300 A69-12649  
Effect of inelastic scattering on the transverse quantum thermogalvanomagnetic phenomena in thin semiconductor films /Vliianie neuprugogo rasseianiia na poperechnye kvantovye termogalvanomagnitnye iavleniia v tonkikh poluprovodnikovykh plenkakh/.  
13 p2318 A69-27890

**ERUKHIMOVICH, IU. A.**  
Scattering of a spherical wave at a truncated paraboloid of revolution /Rasseianie sfericheskoi volny na ushechnom paraboloide vrashcheniia/.  
11 p1846 A69-24614



## ERYKALOVA, O. K.

Use of a two-gas artificial atmosphere in manned spacecraft /O primeneni dvukh gazovoi iskustvennoi atmosfery v obitaemykh kosmicheskikh korabliakh/.  
17 p2912 A69-32940

## ERZHANOV, ZH. S.

Solution of a doubly periodic problem of elastic theory /K resheniiu dvoiakoperiodicheskoi zadachi teorii uprugosti/.  
11 p1972 A69-24652

## ESADZE, IU. S.

Calculation of plates by a method analogous to the method of forces of structural mechanics /Ispol'zovanie metoda analogichnogo metoda sil stroitel'noi mekhaniki dlia rascheta plit/.  
10 p1792 A69-22849

## ESAKI, L.

GeTe-GaAs tunnel junction - A negative-resistance Schottky-type barrier.  
06 p0980 A69-17770

Application of a k-p band model to GeTe and SnTe.  
19 p3385 A69-36516

## ESCHARD, G.

A shutter tube for ultrahigh-speed photography /Tube obturateur pour photographie ultra-rapide/.  
12 p2083 A69-26145

## ESCHER, P.

Numerical investigations and calculations for simple rendezvous maneuvers in the case of an elliptical target orbit /Numerische Untersuchungen und Vorausberechnungen fuer einfache Rendezvous-Manoeuvres bei elliptischer Zielbahn/.  
09 p1538 A69-21649

## ESCHWEILER, J. C.

Liquid rocket engine feed system dynamics by the method of characteristics.  
03 p0495 A69-12991

## ESCOBAL, P. R.

Motion of a vehicle in the transition region of the three-body problem.  
03 p0505 A69-13001

Ground coverage of spin stabilized satellites.  
03 p0522 A69-14244

Methods of Astrodynamics.  
04 p0652 A69-14458

## ESCOUSSE, A.

Flight and adrenosympathetic reaction.  
23 p4099 A69-42363

## ESELEVICH, V. G.

Development of a collisionless shock wave program /Razvitiye programmy po udarnym volnam bez stolk-novenii/.  
17 p3012 A69-33818

## ESKINA, N. A.

Possibility of tuning two-mirror antennas in the near zone /O vozmozhnosti nastroiki dvukh zerkal'nykh anten v blizhnei zone/.  
06 p0895 A69-17462

Possibility of adjustment of double-reflector antennas in the near zone.  
20 p3508 A69-37945

## ESHEL, A.

Foil bearings.  
15 p2618 A69-30327

## ESHELBY, J. D.

Dislocations and the theory of fracture.  
13 p2358 A69-27222

## ESHLEMAN, R. L.

On the critical speeds of a continuous rotor. [ASME PAPER 69-VIBR-52]  
10 p1804 A69-24152

Dynamics of continuous multimass rotor systems. [ASME PAPER 69-VIBR-51]  
10 p1804 A69-24153

## ESHLEMAN, V. R.

Venus - Lower atmosphere not measured.  
01 p0157 A69-11197

Bistatic radar astronomy. [AAS PAPER 68-182]  
02 p0311 A69-11467

The atmospheres of Mars and Venus.  
08 p1408 A69-21160

## ESHLERMAN, V. R.

The occulting disk of the sun at radio wavelengths.  
09 p1607 A69-22432

## ESIN, V. I.

Calculation of wave processes in pipelines in the process of filling with a fluid /K raschetu volnovykh

protsesov v truboprovodakh pri zapolnenii ikh zhidkost'yu/.  
24 p4300 A69-43075

## ESIN, V. O.

Influence of the conditions of growth in the method of zone melting without a crucible on the orientation, purity and perfection of tantalum single crystals.  
16 p2803 A69-32490

## ESIPOV, V. F.

Spectrophotometry of relics of supernovae IC 443 and NGC 6888 /Spektrofotometriia ostatkov vspyshkek sverkhnovykh IC 443 i NGC 6888/.  
09 p1587 A69-21357

Observation of the H sub alpha emission line in the nucleus of the Virgo A radio galaxy /Nabliudeniia emissionnoi linii H sub alpha v iadre radiogalaktiki Deva A/.  
09 p1588 A69-21360

Redshifts of some radio galaxies and quasistellar radio sources.  
11 p1951 A69-24236

The 10,830-angstrom units He I line in the beta-Lyr shell /Linii He I 10,830 angstrom units v obolochke beta Lyr/.  
11 p1955 A69-24391

Spectrophotometry of the supernova remnants IC 443 and NGC 6888.  
18 p3197 A69-34747

Observations of the emission line H sub alpha in the nucleus of the radiogalaxy Virgo A.  
18 p3197 A69-34750

Observations of the supernovae Chuadze and Wild /Nabliudeniia sverkhnovykh Chuadze i Vilda/.  
20 p3607 A69-38038

The 10,830 angstrom units He I line in the envelope of beta Lyrae.  
24 p4390 A69-43781

## ESIPOV, V. M.

Method for constructing the boundaries of a region in the control-parameter space /Metod postroeniia granits oblasti v prostranstve parametrov upravleniia/.  
13 p2225 A69-27967

## ESKER, D. W.

Design and performance of radiation-cooled MPD arc thrusters. [AIAA PAPER 69-245]  
09 p1566 A69-21259

## ESKIN, L. D.

Solution of the Cauchy problem of the heat conduction equation /O reshenii zadachi Koshi dlia uravneniia teploprovodnosti/.  
13 p2380 A69-28685

Solutions to the differential equation  $y'' - sp/x/y$  equals 0 which are bounded on the semiaxis and the Cauchy problem for the heat conduction equation /Ob ograniichennykh na poluosi resheniiakh differentsial'nogo uravneniia  $y'' - sp/x/y$  equals 0 i zadache Koshi dlia uravneniia teploprovodnosti/.  
18 p3231 A69-35310

## ESKIN, V. I.

Local parametric synthesis of optimal control in complex systems.  
09 p1475 A69-22666

## ESKOV, A. G.

Investigation of turbulent processes within a shock wavefront in a plasma /Issledovanie kharaktera turbulentnykh protsesov vo fronte udarnoi volny v plazme/.  
18 p3180 A69-35017

## ESNAUD, S.

Ceramic-metal seals /Scellements ceramique-metal/.  
14 p2455 A69-29212

## ESOLA, C. H.

Electroforming of aluminum composite structures by codeposition of high strength, high modulus fibers.  
19 p3318 A69-35510

## ESPARZA, A. R.

Renal pathology of acute methylhydrazine intoxication in dogs.  
06 p0883 A69-17847

## ESPINOSA, A. F.

Seismic waves generated by sonic booms - A geoaoustical problem.  
01 p0077 A69-11281

## ESPOSITO, R.

Asymptotic performance of adaptive receivers and application to signals of unknown frequency.  
05 p0722 A69-16727

## ESPY, R. H.

Three new PH stainlesses offer weldability, performance.  
08 p1320 A69-20409

## ESSEN, L.

Evaluation of some aspects of relativity.  
03 p0467 A69-13599

Improvement to the National Physical Laboratory atomic clock.  
21 p3720 A69-38544

## ESSENWANGER, O.

New concepts for vertical structure in rocket climatology /Neue Konzepte fuer die Vertikalstruktur in der Raketenklimatologie/.  
17 p3000 A69-33790

Power spectrum, structure function, vertical wind shear, and turbulence in troposphere and stratosphere.  
20 p3570 A69-37501

## ESSER, S.

Studies on the influence of fast transportation on the circadian excretion pattern of the kidney in humans.  
09 p1444 A69-22545

## ESSLINGER, M. E.

On the postbuckling equilibrium and stability of thin-walled circular cylinders under axial compression.  
11 p1979 A69-24816

## ESSLINGER, P.

Metallurgical factors governing the development of high-temperature materials.  
10 p1712 A69-23630

## ESTERMANN, I.

The low-temperature specific heat of graphite.  
02 p0269 A69-11782

## ESTEROWITZ, L.

Ground-state modulation using optical double resonance in trivalent rare-earth-doped single crystals.  
01 p0134 A69-10013

## ESTES, H. P.

Cracked solder joint mechanism in discrete component assemblies.  
07 p1140 A69-19102

## ESTEVE, D.

Effects of ionizing radiation on MOS devices.  
08 p1373 A69-20864

Study of the influence of surface properties on the reliability of planar bipolar transistors /Etude de l'influence des proprietes de surface sur la fiabilite des transistors bipolaires planars/.  
15 p2625 A69-30826

## ESTEVE, D. J.

M.I.S. capacitance in heavy inversion.  
15 p2565 A69-30179

## ESTLE, T. L.

Paraelectric-resonance spectroscopy.  
06 p0982 A69-18235

## ESTOK, G. K.

Differential thermal analysis of some biological specimens, proteins, and starches.  
15 p2555 A69-31000

Differential thermal analysis of some biological specimens, proteins, and starches.  
16 p2747 A69-31807

## ESTOL, C. J.

The Interamerican network of meteorological investigations with rockets /EXAMETNET/ /La red interamericana de investigaciones meteorologicas con cohetes /EXAMETNET/. [UN PAPER 68-9503]  
06 p0950 A69-17062

## ESTOQUE, M. A.

Vertical mixing due to penetrative convection.  
03 p0460 A69-13340

## ESTRADE, S.

Juridical standards applicable to the legal and commercial exploitation of communications satellites /Normas juridicas aplicables a la explotacion legal y comercial de satelites de comunicaciones/.  
20 p3638 A69-37123

## ESTRIN, T.

Computerized display of spatio-temporal EEG patterns.  
21 p3668 A69-39864

## ESTROPOV, V. V.

Efficient GaP diode sources of red radiation.  
06 p0979 A69-16999

## ESWARAN, C.

Further correlations between time domain and frequency domain parameters for linear control systems.  
02 p0225 A69-12026

## ETAIX, J.-F.

Study of luminous radiation emitted during an azimuthal constriction in argon /Etude du rayonnement

- lumineux emis lors d'une striction azimutale dans l'argon/.  
08 p1362 A69-20280
- ETCHETO, J.**  
A V.L.F. particle rocket experiment at Kerguelen Islands. I.  
15 p2605 A69-31423  
A VLF and particle rocket experiment at Kerguelen Islands. III.  
15 p2605 A69-31425
- ETHERIDGE, D. A.**  
The spectrum of a meteor from the 1966 Leonid shower.  
04 p0655 A69-14664
- ETHERIDGE, F. G.**  
Attitude-control-rocket exhaust plume effects. [AIAA PAPER 69-574]  
16 p2870 A69-32774
- ETHERINGTON, R. J.**  
Bounce resonant interaction between pulsations and trapped particles.  
12 p2073 A69-26946
- ETIEVANT, C.**  
Density measurements by means of the propagation of electron plasma waves in the presence of a strong magnetic field /Mesures de densites par propagation d'ondes plasma electroniques en presence d'un champ magnetique fort/.  
07 p1194 A69-19323
- ETIM, E.**  
An interpretation of cosmic-ray data by SU sub 3 triplet particles.  
15 p2678 A69-31498
- ETINGOF, M. I.**  
Design and performance of short-base strain gauges.  
20 p3544 A69-37817
- ETKIN, B.**  
Dynamics of flight vehicles.  
02 p0193 A69-11985
- ETKIN, V. S.**  
Investigation of tunnel diode amplifier operation in the presence of noise.  
09 p1469 A69-22630  
Development, in the USSR, of the theory and technology of parametric amplifying systems with lumped reactive nonlinear elements /Razvitie v SSSR teorii i tekhniki parametricheskikh usilitel'nykh sistem s sosredotochennymi reaktivnymi nelineinymi elementami/.  
11 p1844 A69-24448  
Influence of reactive-parameter scatter on the frequency characteristics of regenerative amplifiers /O vliyanii razbrosa reaktivnykh parametrov na chastotnye kharakteristiki regenerativnykh usilitel'ei/.  
13 p2235 A69-28515  
Investigation of oscillation breakdown of varactor diodes /Issledovanie generatsionnogo probiia varakornykh diodov/.  
15 p2574 A69-30127
- ETTENBERG, M.**  
Measurement of the probability density function of a microwave noise generator.  
02 p0221 A69-12459
- ETZOLD, K.-F.**  
Acoustic paramagnetic resonance in arsenic-doped germanium.  
02 p0296 A69-11835
- ETZRODT, A.**  
Establishing reliability of electronic components by failure rates and drift behaviour.  
15 p2626 A69-30835
- EUBANK, H. P.**  
Single-particle confinement studies in a radio-frequency-supplemented magnetic mirror.  
11 p1924 A69-24306
- EUBANKS, R. A.**  
On the critical speeds of a continuous rotor. [ASME PAPER 69-VIBR-52]  
10 p1804 A69-24152
- EUGSTER, O.**  
Isotopic analyses of barium in meteorites and in terrestrial samples.  
19 p3425 A69-36422
- EULER, E. A.**  
Optimal low-thrust rendezvous control.  
20 p3617 A69-37192  
Optimal station-keeping at collinear points. [AIAA PAPER 69-906]  
21 p3807 A69-39338
- EULER, J.**  
The Varta fuel cell system.  
08 p1261 A69-21047
- The Varta fuel cell system.  
16 p2739 A69-32418
- EUSTIS, R. H.**  
Discharge characteristics in a seeded plasma flow.  
10 p1733 A69-23449
- EUTENEUER, G.-A.**  
Single-stage and multistage Carnot-type shock diffusers in the case of swirl flows /Ein- und mehrstufige Carnot-Stossdiffusoren bei drallbehafteter Stromung/.  
02 p0230 A69-11616  
Unsteady incident flow in a rotating pot, taking the bottom effect into account /Die instationaere Anlaufstromung in einem rotierenden Topf unter Beruecksichtigung des Bodeneinflusses/.  
03 p0414 A69-13019  
Ground effect in the case of accelerating and decelerating flow of viscous fluids in rotating cylinders /Der Bodeneinfluss bei Anlauf- und bei Bremsströmungen zaeher Flussigkeiten in rotierenden Zylindergefaessen/.  
10 p1677 A69-22896
- EUVARD, D.**  
Asymptotic study of the flow at a large distance from an obstacle moving at the speed of sound. III - Three-dimensional flow in front of the shock waves /Etude asymptotique de l'ecoulement a grande distance d'un obstacle se deplacant a la vitesse du son. III - Ecoulement tridimensionnel, en amont des ondes de choc/.  
01 p0005 A69-10159
- EVAN-IWANOWSKI, R. M.**  
Nonstationary vibrations of mechanical systems.  
11 p1975 A69-24739
- EVANS, D. C.**  
Airglow and star photographs in the daytime from a rocket.  
17 p3037 A69-33664
- EVANS, D. J. I.**  
Controlling the properties of nickel powders produced by the hydrogen reduction of nickel ammine sulphate solutions.  
08 p1334 A69-21057
- EVANS, D. L.**  
An experimental measurement of the ultraviolet absorption coefficient of shock heated air.  
22 p4049 A69-40098
- EVANS, D. S.**  
Stars of higher multiplicity.  
07 p1219 A69-19295  
An area search for subdwarfs.  
08 p1392 A69-20560  
Observations of 17 southern planetary nebulae.  
08 p1392 A69-20561  
A rediscussion of p Velorum.  
11 p1963 A69-25263  
Fine structure in the energy spectrum of low energy auroral electrons.  
21 p3707 A69-38490  
Observations of southern RR Lyrae stars.  
21 p3801 A69-38764
- EVANS, E. A.**  
Experimental simulation of two-phase venting to a space environment.  
15 p2701 A69-30396  
Analytical study of two-phase impingement for orbital cryogenic venting. [AIAA PAPER 69-571]  
16 p2869 A69-32753
- EVANS, E. J.**  
Radiation hardness of ovonic devices.  
06 p0978 A69-16891
- EVANS, F. A.**  
Experimental strapdown redundant sensor inertial navigation system. [AIAA PAPER 69-851]  
21 p3762 A69-39379
- EVANS, H. M.**  
Absorption and dispersion studies in the range 10-1000 cm super -1 using a modular Michelson interferometer.  
20 p3538 A69-37297
- EVANS, J. E.**  
Coordinated measurements of particles, luminosity, and electron concentrations.  
21 p3707 A69-38491  
Satellite measurements of auroral ultraviolet and 3914-angstrom unit radiation.  
22 p3939 A69-40507  
Consequences of very small planetary magnetic moments.  
24 p4385 A69-43224
- EVANS, J. H.**  
The heat of solution and diffusivity of nitrogen in molybdenum.  
02 p0267 A69-12188
- EVANS, J. M.**  
Electron of electrolytes for electrochemical machining.  
13 p2268 A69-27521
- EVANS, J. V.**  
Scattering properties of Venus at 3.8 cm.  
13 p2349 A69-27818  
Theory and practice of ionosphere study by Thomson scatter radar.  
14 p2415 A69-29522  
Radar studies of planetary surfaces.  
21 p3811 A69-39509
- EVANS, K.**  
Rocket observations of Virgo XR-1.  
15 p2701 A69-31535
- EVANS, K. R.**  
The embrittlement and fracture of Ti-8 pct Al alloys.  
19 p3344 A69-35927
- EVANS, L. B.**  
Vibrational relaxation of oxygen by methane.  
09 p1542 A69-21721
- EVANS, L. C.**  
Access of solar protons into the polar cap - A persistent north-south asymmetry.  
24 p4368 A69-43183
- EVANS, L. R.**  
Lens aberration effects in optical-frequency breakdown of gases.  
15 p2634 A69-30878
- EVANS, M.**  
Basic studies of the mechanism of shock initiation in granular explosives.  
10 p1751 A69-23016
- EVANS, M. E.**  
An investigation of the strength of the geomagnetic field in the early Precambrian.  
08 p1309 A69-20580
- EVANS, M. R.**  
Vortex wakes behind high-lift wings. [AIAA PAPER 69-740]  
18 p3083 A69-34405
- EVANS, M. W.**  
Shock front reaction and initiation of detonation in low density ammonium perchlorate.  
21 p3784 A69-39590
- EVANS, N. T.**  
Statistical analysis of antenna pattern loss effects.  
08 p1270 A69-19858
- EVANS, R. A.**  
The analysis of accelerated temperature-tests.  
18 p3117 A69-34509  
A generalized limit theorem for reliability.  
20 p3547 A69-37068
- EVANS, R. D.**  
Absorption of ultraviolet radiation in the reflected region of a shock tube.  
18 p3230 A69-35073  
An experimental measurement of the ultraviolet absorption coefficient of shock heated air.  
22 p4049 A69-40098
- EVANS, R. J.**  
Reduction of radiation sensitivity in MOS structures by aluminum doping of silicon dioxide.  
20 p3584 A69-38070
- EVANS, R. M.**  
The influence of boundary layers on spectroscopic temperature measurements in MHD channels.  
10 p1731 A69-23434
- EVANS, S.**  
The formation of chlorine pentafluoride in an electrochemical cell. I - From chlorine trifluoride.  
13 p2217 A69-28134
- EVANS, T. L.**  
The frequency of Cepheid binaries.  
07 p1223 A69-19627
- EVANS, W. D.**  
16-40 angstrom units coronal X-ray emission during the 12 November 1966 eclipse.  
04 p0650 A69-15531
- EVANS, W. F. J.**  
Balloon observations of the temporal variation of the infrared atmospheric oxygen bands in the airglow.  
16 p2776 A69-32091



## EVANS, W. H.

Electric fields and conductivity in thunderclouds.  
08 p1345 A69-19813

## EVANS, W. J.

A large-signal analysis of IMPATT diodes.  
05 p0733 A69-16555

Work-hardening and recovery during transient and steady-state creep.  
06 p0943 A69-17236

## EVDOKIMOV, I. P.

Biological action of ruby laser emission /O biologicheskomo deistvii izlucheniia rubinovogo lazera/.  
21 p3665 A69-39060

## EVDOKIMOV, S. E.

A method of solving partial differential equations on an incompressible fluid /O gorizonta'nom udare sfery, zatoplennoi v neszchimaemoi zhidkosti/.  
24 p4298 A69-42585

## EVDOKIMOV, V. F.

A method of solving partial differential equations on an analog computer /Ob odnom metode resheniia differentsial'nykh uravnenii v chastnykh proizvodnykh s primeneniem AVM/.  
12 p2123 A69-26717

## EVELEIGH, V. W.

Adaptive control of a reflective satellite communication system.  
06 p0887 A69-17356

## EVENS, D. A.

Control concepts for a high bypass aircraft turbofan engine.  
[SAE PAPER 690403] 23 p4201 A69-41659

## EVENSEN, H. M.

Ablative materials for controlled high regression rates in tactical rocket motors.  
[AIAA PAPER 69-423] 16 p2804 A69-32710

## EVENTOV, V. G.

A control problem for the motion of nonlinear systems under the effect of random disturbances /Zadacha ob upravlenii dvizheniem nelineinykh sistem, nakhodiaschikhsia pod vozdeistviem sluchainykh vozmushchenii/.  
01 p0052 A69-10800

## EVERHART, E.

Change in total energy of comets passing through the solar system.  
10 p1774 A69-22970

Close encounters of comets and planets.  
18 p3195 A69-34433

## EVERITT, W. N.

On the spectrum of ordinary second order differential operators.  
17 p2996 A69-33793

## EVERSE, J.

Significance of substrate inhibition of dehydrogenases.  
01 p0015 A69-10931

Lactate dehydrogenase of lobster /homarus Americanus/ tail muscle. I.  
22 p3897 A69-41069

## EVGRAFOV, V. V.

Calculation of the flow of an ionized gas in a magnetohydrodynamic channel of rectangular cross section /K voprosu o raschete tekheniia ionizirovannogo gaza v magnitogidrodinamicheskom kanale priamougol'nogo secheniia/.  
14 p2500 A69-29904

## EVIATAR, A.

Origin of drift-periodic echoes in outer-zone electron flux.  
05 p0815 A69-16259

Bounce-resonant scattering of auroral-zone electrons.  
05 p0754 A69-16260

Diffusion of equatorial particles in the outer radiation zone.  
14 p2510 A69-28937

## EVLANOV, N. G.

Dependence of the structure and properties of titanium alloy blanks on the deformation degree and temperature /Zavisimost' struktury i svoistv zagotovok iz titanovykh spлавov ot temperatury i stepeni deformatsii/.  
02 p0266 A69-12124

Geometrical and thermomechanical parameters of deformation of certain titanium alloys /Geometricheskie i termomekhanicheskie parametry deformirovaniia nekotorykh titanovykh spлавov/.  
03 p0452 A69-14123

## EVLASHIN, L. S.

Complex investigation of the polar ionosphere /Kompleksnoe issledovanie poliarnoi ionosfery/.  
17 p2963 A69-33950

## EVLETH, E. M.

Ionic and biradical mechanisms in thermal and photo cis-trans isomerizations.  
13 p2216 A69-27618

## EVRARD-KESTELOOT, G.

Solar activity in 1967 /Active solaire en 1967/.  
02 p0313 A69-11533

## EVSEEV, E. G.

A difference method for solving multidimensional differential equations of higher orders /Ob odnom raznostnom metode resheniia mnogomernykh differentsial'nykh uravnenii vysshikh poriadkov/.  
20 p3568 A69-38074

## EVSEEV, V. I.

Higher spatial harmonics in closed delay structures with a multistep interaction space /Vysshie prostranstvennye garmoniki v zamknutykh zamedliaushchikh strukturakh s mnogostupenchatym prostranstvom vzaimodeistviia/.  
13 p2236 A69-28576

## EVSUKOV, N. N.

Certain regularities of the distribution of the color index over the lunar surface /Nekotorye zakonomernosti v raspredelenii pokazatelya tsвета po lunnoi poverkhnosti/.  
03 p0506 A69-13089

Distribution of color index over the lunar surface.  
14 p2516 A69-28771

## EVSTIUKHIN, A. I.

Mechanical properties of molybdenum after hydroextrusion.  
16 p2803 A69-32491

Mechanical properties of hydro-extruded molybdenum after annealing.  
18 p3156 A69-34719

Anomalous grain growth and the deformation of single crystals during annealing of hydraulically extruded molybdenum /Anomal'nyi rost zeren i obrazovanie monokristallov pri ozhigie gidroekstrudirovannogo molibdena/.  
21 p3745 A69-38953

## EVSTRATOVA, S. P.

Experimental estimation of the accuracy of certain types of accelerated fatigue tests.  
07 p1233 A69-19315

## EVTEEV, B. F.

Investigation of the static electrification of aircraft /Issledovanie staticheskoi elektrizatsii samoletov/.  
04 p0549 A69-15107

## EVTIANOV, S. I.

Determination of the effective bandwidth of automatic phase control by the asymptotic method /Opredelenie polosy zakhvata fazovoi avtopodstroiki asimtoticheskimi metodami/.  
01 p0030 A69-10590

Determination of the pull-in range of a phase-lock AFC system by an asymptotic method.  
10 p1653 A69-23105

## EVTUHOV, V.

Motion picture holography.  
10 p1697 A69-24002

A continuously pumped repetitively Q-switched ruby laser and applications to frequency-conversion experiments.  
17 p2980 A69-33027

## EVTUSHENKO, A. V.

Spectral characteristics of pressure pulsations near the wall during boundary-layer separation behind a bulge on a smooth wall /O spektral'nykh kharakteristikakh pristenochnykh pul'satsii davleniia pri otryve pogranichnogo sloia za vystupom na gladkoi stenke/.  
13 p2246 A69-27535

Spectral characteristics of the wall pressure fluctuations associated with boundary layer separation behind a projection on a smooth wall.  
20 p3518 A69-38202

## EVTUSHENKO, O. V.

Diffusion welding and soldering of metallic wire with graphite and graphitized viscose /Diffuzionnaia svarka i paika metallicheskoj provoloki s grafitom i grafitizirovannoi viskozoi/.  
21 p3728 A69-38617

## EVTUSHENKO, T. P.

Optical investigations of a laser spark /Opticheskie issledovaniia lazernoi iskry/.  
14 p2461 A69-29779

## EVTUSHOK, T. M.

Diffusion welding and soldering of metallic wire with graphite and graphitized viscose /Diffuzionnaia svarka i paika metallicheskoj provoloki s grafitom i grafitizirovannoi viskozoi/.  
21 p3728 A69-38617

Study of the interaction of graphite and pyrographite with the disilicides of titanium niobium and tungsten /Issledovanie vzaimodeistviia grafita i pirografita s disilidami titana, niobia, molibdena i vol'frama/.  
22 p3970 A69-40638

## EVZOVICH, N. P.

Predawn effect in the f sub 0 F2 variations caused by sunrise at a magnetically conjugate point /Predrassvetnyi efekt v variatsiakh f sub 0 F2 obuslovlennyyi voskhodom solntsa v magnitno-sopriazhennoi toчке/.  
02 p0238 A69-11681

Predawn effect in f sub 0 F sub 2 variations caused by sunrise at a magnetically-conjugate point.  
13 p2257 A69-28712

## EWALD, A. W.

Some recent experimental studies of the gray-tin band structure.  
02 p0295 A69-11783

## EWALD, B.

V/STOL wind tunnel testing /V/STOL - Windkanal-Messtechnik/.  
11 p1866 A69-25431

## EWALD, H. N.

Low-frequency waves and instabilities on the positive column in a magnetic field. I - Analysis and study of axisymmetric modes. II - Study of asymmetric modes.  
11 p1929 A69-25268

## EWALD, R.

Thermal and hydrodynamical study of a whirling layer of liquid hydrogen under high heat flux.  
05 p0849 A69-16818

## EWART, D. G.

The angular motion of the Europa vehicle during first stage cut-off.  
03 p0519 A69-12856

Development of the Europa I first stage attitude control system to the Europa II requirements.  
16 p2866 A69-31726

## EWEN, H. I.

Microwave radiometric capabilities and techniques.  
12 p2033 A69-26976

## EWER, S. E.

Comparative cost and capacity estimates of airports and airports 1975-1985.  
[AIAA PAPER 69-208] 07 p1245 A69-19564

## EWING, C. L.

Evaluation of head protection in aircraft.  
17 p2913 A69-33169

## EWING, C. T.

Nondestructive testing for void content in glass-filament-wound composites.  
17 p2979 A69-33656

## EWING, D. J., JR.

Reciprocal variational techniques and the solution of optimization problems.  
03 p0457 A69-13766

## EWING, M.

Probability of growth /pG/ of viable microorganisms in Martian environments.  
01 p0018 A69-11091

The Apollo passive seismic experiment.  
20 p3539 A69-37516

## EWING, R. D.

Crack propagation in plates and shells subjected to bending and direct loading.  
10 p1795 A69-23061

## EWINS, D. J.

The effects of detuning upon the forced vibrations of bladed disks.  
15 p2704 A69-30304

## EXLEY, J. T.

Flow separation and reattachment in confined jet mixing.  
[ASME PAPER 69-FE-29] 20 p3517 A69-37994

## EXTON, R. J.

Doublet suppression in the principal series of cesium.  
08 p1356 A69-20736

## EYFRIG, R.

Influence of magnetic declination on the altitude of the top of the F2 ionospheric layer /L'influence de la declinaison magnetique sur la hauteur du sommet de la couche ionospherique F2/.  
21 p3717 A69-39577

- EYMAN, D. P.**  
Lewis acidity of alanes - Interactions of trimethylalane with amines, ethers, and phosphines.  
07 p1074 A69-18630  
Donor abilities of sulfoxides, sulfonamides, and thionylamides.  
07 p1074 A69-18631
- EYMAN, J. R.**  
Approach navigation and entry corridors for manned planetary atmosphere braking.  
[AAS PAPER 68-122] 19 p3402 A69-35937
- EYRAUD, C.**  
Direct electrochemical conversion of the energy of a radioactive element /Conversion electrochimique directe de l'energie d'un radioelement/.  
08 p1269 A69-21054  
Direct electrochemical conversion of the energy of a radioelement /Conversion electrochimique directe de l'energie d'un radioelement/.  
16 p2740 A69-32425
- EYRE, B. L.**  
The heat of solution and diffusivity of nitrogen in molybdenum.  
02 p0267 A69-12188
- EZRIN, M.**  
Characterization of thermosetting resin curing behavior by thermal analysis under pressure.  
09 p1500 A69-22311
- F**
- FABBRICOTTI, M.**  
The photovoltaic effect in the Cu-Cd-S system.  
19 p3382 A69-35682
- FABELINSKII, I. L.**  
Stimulated scattering and broadening of an intense pulse of laser emission in gases /Vynuzhdennoe rasseyaniye i ushireniye spektra moshchnogo impul'sa lazernogo izlucheniya v gazakh/.  
09 p1516 A69-21562
- FABIAN, H.**  
Azur, the first German research satellite - An unusual systems management problem /Der erste deutsche Forschungssatellitazur - Eine ungewöhnliche Systemführungsaufgabe/.  
17 p3050 A69-33700
- FABIAN, P.**  
A new optical ozone radiosonde /Eine neue optische Ozonradiosonde/.  
02 p0251 A69-12761  
Investigation of the air movements in the lower stratosphere by means of ozone measurements /Untersuchung von Lufttransporten in der unteren Stratosphäre mit Hilfe von Ozonmessungen/.  
02 p0246 A69-12762  
Ozone in the atmosphere of Venus.  
08 p1382 A69-19887
- FABIAN, W.**  
Experimental oscillator strengths for the Schumann-Runge band system in oxygen.  
02 p0284 A69-12832
- FABRE, A.**  
Our experience with asthma in military air crews /Notre experience de l'asthme dans le personnel navigant des forces armees/.  
05 p0710 A69-16624
- FABRE, D.**  
Some experiments on the scattering of ultraviolet radiation by rough surfaces. I /Quelques experiences de diffusion du rayonnement ultraviolet par des surfaces rugueuses. I/.  
21 p3770 A69-38796
- FABRE, J.**  
Fluidic logic elements employing suction controls /Elements logiques a fluides utilisant des commandes par aspiration/.  
16 p2736 A69-31835
- FABRE, P.**  
Study of the seaworthiness of a helicopter - Sea tests and comparison with model tests - Improvement of the seaworthiness of an amphibious helicopter /Etude des qualites marines d'un helicoptere - Essais a la mer et comparaison avec les essais sur maquette - Amelioration des qualites marines d'un helicoptere amphibie/.  
08 p1255 A69-20653
- FABRI, J.**  
Various mixing regimes of two flows with different stagnation enthalpies /Divers regimes de melange de deux flux d'enthalpies d'arret differentes/.  
13 p2251 A69-28499
- FABRIKANT, N. IA.**  
Velocity distribution in a turbulent stream near a solid surface.  
16 p2772 A69-32128  
Gas flows having a momentum potential /Tepocheniya gaza, imeiushchie potentsial kolichestva dvizheniya/.  
24 p4244 A69-43071
- FABRIS, G.**  
Possibility of mass loss in the red-giant stage from H-R diagrams of galactic clusters.  
08 p1396 A69-20642
- FACCHINELLI, C.**  
Photoelectric observations of the binary AH Vir /Osservazioni fotoelettriche della binaria AH Vir/.  
16 p2858 A69-32215
- FACKERELL, E. D.**  
Relativistic star clusters.  
21 p3814 A69-39570
- FACON, P.**  
The curved wall amplifier - Operation characteristics and applications.  
02 p0196 A69-12083
- FADA, C. V.**  
The frequency response of volume-terminated pneumatic lines with circular and rectangular cross sections.  
24 p4301 A69-43288
- FADEEV, S. I.**  
Self-similar solution of the Navier-Stokes equations for a completely ionized plasma - Problem of a plane piston /Avtomodel'noe reshenie uravnenii nav'e-Stoksa dlia polnost'iu ionizovannoi vodorodnoi plazmy - Zadacha o ploskom porshne/.  
22 p3991 A69-41021
- FADEEV, V. M.**  
On the "magnetostatic" oscillations in interpenetrating plasmas and selfconstricted current layers.  
10 p1727 A69-23092
- FADEEV, V. V.**  
Theory of parametric light generators /K teorii parametricheskikh generatorov sveta/.  
03 p0437 A69-13044  
Generation of optical harmonics in lithium niobate /Generirovaniye opticheskikh garmonik v niobate litii/.  
03 p0437 A69-13046  
Dielectric mirrors for parametric light generators /Dielektricheskie zerkala dlia parametricheskikh generatorov sveta/.  
03 p0438 A69-13049  
Ultraviolet lasers using organic-scintillator molecules.  
13 p2271 A69-27657
- FADER, W. J.**  
Hydrodynamic model of a spherical plasma produced by Q-spoiled laser irradiation of a solid particle.  
01 p0132 A69-11210  
Expansion of a resistive spherical plasma in a magnetic field.  
01 p0132 A69-11211
- FAELTHAMMAR, C.-G.**  
Charged particle diffusion by violation of the third adiabatic invariant.  
07 p1209 A69-19375  
Transport and acceleration of radiation-belt particles.  
11 p1948 A69-24855  
Radial motion resulting from pitch-angle scattering of trapped electrons in the distorted geomagnetic field.  
20 p3593 A69-38104  
Fundamental electromagnetic processes in the outer magnetosphere.  
21 p3707 A69-38485  
Field aligned currents and auroral precipitation.  
21 p3710 A69-38506
- FAESSLER, K.**  
Effect of nonlinear excitation on magnetoacoustic resonance in a cold plasma.  
09 p1548 A69-21668
- FAETH, G. M.**  
Flame zone development of monopropellant droplets.  
02 p0352 A69-12310  
On the prediction of pure monopropellant droplet life histories.  
[AIAA PAPER 69-563] 16 p2834 A69-32722
- FAFARMAN, A.**  
Beam transmission in electron guns having a single-apertured control grid.  
05 p0734 A69-16566
- FAFURIN, A. V.**  
Turbulent boundary layer in the inlet section of a tube under conditions of nonisothermicity and injection /Turbulentnyi pogranichnyi sloi v nachal'nom uchastke trubyy v usloviakh neizotermichnosti i vduva/.  
15 p2592 A69-30986  
Turbulent boundary layer at the inlet section of a tube in the case of blowing with various gases /Turbulentnyi pogranichnyi sloi v nachal'nom uchastke trubyy pri vduve razlichnykh gazov/.  
24 p4300 A69-43079
- FAGAN, C. H.**  
Elastomeric bearing application to helicopter tail rotor designs.  
01 p0085 A69-10406
- FAGAN, T. L.**  
Monte Carlo simulation of system reliability.  
01 p0036 A69-10707  
A computerized cost model for space systems.  
19 p3454 A69-36007  
The role of system safety in software.  
[AIAA PAPER 69-962] 22 p3905 A69-40343
- FAGER, J. A.**  
Large-aperture expandable truss microwave antenna.  
22 p3913 A69-40696
- FAGIN, S.**  
Stochastic servomechanism design via optimal filter theory.  
18 p3110 A69-34673
- FAGIOLI, O.**  
Protonic compression radar.  
11 p1834 A69-24566
- FAGOT, H.**  
Analysis of the viscous wake of an ablating sphere with the aid of an image converter camera.  
19 p3306 A69-35739
- FAHEY, J. J.**  
Pecoraite, Ni sub 6 Si sub 4 O sub 10 /OH/ sub 8, nickel analog of clinchrosytile, formed in the Wolf Creek meteorite.  
18 p3199 A69-34824
- FAHIMIAN, E. J.**  
Scattering of radiation by particle layers.  
[AIAA PAPER 68-30] 02 p0282 A69-12503
- FAHLMAN, G. G.**  
On the angular momenta of stars, planets and asteroids.  
09 p1608 A69-22716  
Pulsar theory of Chiu, Canuto and Fasio-Canuto.  
16 p2865 A69-32802
- FAHMY, B.**  
The propagation of Alfvén waves in a viscous fluid of finite electrical conductivity. II.  
07 p1195 A69-19451
- FAHR, H. J.**  
Possible contributions of fast neutral particles to the formation of the F2 layer.  
04 p0592 A69-15009  
On the influence of neutral interstellar matter on the upper atmosphere.  
05 p0828 A69-16653  
Neutral corpuscular energy flux by charge-transfer collisions in the vicinity of the sun.  
05 p0817 A69-16654  
Impact ionization by neutral interplanetary particles.  
15 p2699 A69-31390  
Solar wind tail and the anisotropic production of fast hydrogen atoms.  
22 p4008 A69-41208
- FAHRNER, T.**  
Launch and mission influences on space propulsion system design.  
12 p2148 A69-26834
- FAIFER, S. I.**  
Sintered beryllium-base compositions. I.  
10 p1711 A69-23334
- FAIN, V. M.**  
Quantum Electronics. Volume 1 - Basic theory.  
17 p2982 A69-33686  
Quantum Electronics. Volume 2 - Maser amplifiers and oscillators.  
17 p2982 A69-33687
- FAINBERG, E. B.**  
Some peculiarities of magnetotelluric curves with allowance for the sphericity of the earth /Nekotoryye osobennosti kriykh mts s ucheto m sferichnosti zemli/.  
02 p0240 A69-11699



- B-206

- ev pri sverkhzvukovom obtekanii pri bol'shikh uglakh ataki/.  
02 p0191 A69-12585
- FAM, S. S.**  
Ultrasonic thermometry for nuclear reactors.  
[IEEE PAPER 1C-4] 07 p1134 A69-19186
- FAN, C.**  
Monte Carlo calculation of free molecule flow over concave spherical surfaces.  
24 p4248 A69-43592
- FAN, C. Y.**  
Energy spectra and abundances of the cosmic-ray nuclei helium to iron from the OGO-I satellite experiment.  
08 p1378 A69-20067
- FAN, H. Y.**  
Effects of optical phonons on the optical properties of semiconductors.  
19 p3385 A69-36517
- FANALE, F.**  
Strategy for scientific exploration of the terrestrial planets.  
22 p4022 A69-40449
- FANCHENKO, S. D.**  
Generalized quantum yield of multistage electrooptical converters /Obobshchennyyi kvantovyyi vykhod mnogokaskadnykh elektronno-opticheskikh preobrazovatelei/.  
14 p2496 A69-29788
- FANDRICH, R. T., JR.**  
Shock pulse time history generator.  
15 p2585 A69-30360
- FANG, P. H.**  
Impurity effects on annealing of radiation defects in silicon.  
10 p1747 A69-24006  
Gamma irradiation of lithium silicon solar cells.  
19 p3251 A69-35694
- FANG, T. C.**  
A uniform closed solution of the variational equations for optimal trajectories during coast.  
19 p3399 A69-35671
- FANGER, P. O.**  
Predicted and measured heat losses and thermal comfort conditions for human beings.  
06 p0880 A69-17087
- FANGUIN, R.**  
Propagation of an electromagnetic wave in a waveguide containing a birefringent medium, and detailed study of the case of a waveguide of rectangular cross section /Propagation d'une onde electromagnetique dans un guide contenant un milieu birefringent et etude detaillee du cas d'un guide de section rectangulaire/.  
11 p1853 A69-25350
- FANK, F. B.**  
High CW power K-band Gunn oscillators.  
12 p2036 A69-25907
- FANKHAUSER, F.**  
The linear models of the perception of brightness /Die linearen Modelle des Helligkeitsehens/.  
22 p3881 A69-40862
- FANNELOP, T. K.**  
Three-dimensional boundary-layer flow about an ablating slender cone.  
[ASME PAPER 69-FE-23] 20 p3460 A69-37992
- FANNIBO, A. K.**  
Spectrum of an aluminum plasma excited by laser radiation /Spektr aluminievoy plazmy, vzbuzhdaemoi lazernym izlucheniem/.  
12 p2134 A69-26027
- FANNING, W. R.**  
Design of the Haystack antenna and radome.  
23 p4149 A69-42131
- FANO, U.**  
Ionization of the inner shells of atoms.  
07 p1187 A69-19659
- FANSELAU, G.**  
The variations of the geomagnetic field in middle and high latitudes during the proton flare event of July 1966.  
10 p1683 A69-23780  
Physical aspects of pc 3 and pc 4.  
12 p2063 A69-25782  
Harmonic analysis of Sq /Zur harmonischen Analyse des Sq/.  
16 p2781 A69-32452
- FANSLER, K. S.**  
Correlated X-ray and optical streak photographs of exploding wires.  
01 p0119 A69-10670
- FANTE, R. L.**  
Bounds on the electric field outside a radiating system.  
08 p1273 A69-20026  
A variational formulation specifying the breakdown criteria for plasmas subjected to spatially nonuniform electric fields.  
10 p1739 A69-23650  
Complete electric field of the infinite slot antenna.  
11 p1851 A69-24994  
Quality factor of general ideal antennas.  
20 p3506 A69-37836  
The near field of the loop antenna.  
21 p3683 A69-39281
- FANTI, C.**  
The radio spectra of a homogeneous sample of 4C radiosources.  
21 p3797 A69-38480
- FANTI, R.**  
Composite technology in perspective.  
08 p1341 A69-20601  
The Italian cross radio telescope. III - Operation of the telescope.  
19 p3295 A69-36643  
The radio spectra of a homogeneous sample of 4C radiosources.  
21 p3797 A69-38480
- FANTO, P.**  
Some peculiar tropospheric and ground effects on solar noise radio measurements at 7 GHz.  
07 p1215 A69-18819
- FANUCCI, J. B.**  
Rotor downwash in ground effect in the presence of a step.  
[AIAA PAPER 69-225] 08 p1253 A69-21032  
Characteristics of a finite-length MHD traveling-wave cylindrical accelerator or generator.  
[AIAA PAPER 67-714] 16 p2736 A69-32152
- FARADAY, B. J.**  
Defect clusters in electron-irradiated silicon.  
06 p0974 A69-16866
- FARAGGIANA, R.**  
Spectroscopic evidence for mass loss from CH Cygni.  
08 p1396 A69-20651  
A study of 48 Librae in the period 1950-1962.  
17 p3038 A69-33722  
Forbidden emissions in the spectrum of CH Cygni and VV Cephei.  
19 p3423 A69-36228
- FARAPONOVA, G. P.**  
Determining the radiative heat flux in the lower layers of the atmosphere.  
10 p1682 A69-23327  
Scientific program and scientific equipment complex of the Cosmos 149 artificial earth satellite /Nauchnaia programma i kompleks nauchnoi apparatury ISZ "Kosmos-149"/.  
14 p2447 A69-29403  
Method and certain results of measurements of the earth's short- and long-wave emission fluxes on the Cosmos 149 satellite /Metod i nekotorye rezul'taty izmerenii potokov korotkovolnovogo i dlinnovolnovogo izlucheniia zemli na ISZ "Kosmos-149"/.  
15 p2597 A69-30652
- FARBER, E. A.**  
A systematic approach for the analytical analysis and prediction of the yield from liquid propellant explosions.  
04 p0646 A69-14477  
Studies and analyses of the mixing phenomena of liquid propellants leading to a yield-time function relationship.  
04 p0646 A69-14478
- FARBER, M.**  
Electro-propulsion with colloids.  
03 p0495 A69-13396
- FARBSHTEIN, I. I.**  
Negative magnetoresistance of tellurium at low temperatures.  
06 p0978 A69-16986
- FAREEDUDDIN, K.**  
Increased tolerance of orthostatic stress in patients with heart disease.  
19 p3258 A69-36374
- FARELLO, G. E.**  
Notes on droplet heat transfer.  
15 p2718 A69-31117  
Bubble flow up to the critical pressure.  
[ASME PAPER 69-HT-30] 24 p4411 A69-43529
- FARGES, J.**  
Crystals and molecules in molecular jets - An electron diffraction study /Cristaux et molecules dans les jets moleculaires - Etude par diffraction electronique/.  
02 p0284 A69-12629
- FARHI, L. E.**  
Ventilation-perfusion relationships during high-altitude adaptation.  
22 p3875 A69-40227  
A digital computer program for constructing ventilation-perfusion lines.  
22 p3875 A69-40230  
Alveolar to mixed venous P sub CO sub 2 difference under conditions of no gas exchange.  
22 p3885 A69-40976  
Mixed venous P sub O sub 2, P sub CO sub 2, pH and cardiac output during exercise in trained subjects.  
23 p4078 A69-41316
- FARIES, D. W.**  
Tunable far-infrared radiation generated from the difference frequency between two ruby lasers.  
16 p2798 A69-32603
- FARLEY, D. T.**  
Incoherent scatter power measurements, a comparison of various techniques.  
07 p1085 A69-19222  
Faraday rotation measurements using incoherent scatter.  
07 p1085 A69-19223
- FARLEY, J. F.**  
Piloting aspects of poor weather jet V/STOL.  
01 p0010 A69-10868
- FARLEY, T. A.**  
Absolute electron fluxes and energies in the inner radiation zone in 1965.  
01 p0147 A69-11235  
Radial diffusion of electrons at low L values.  
05 p0816 A69-16279  
Radial diffusion of starfish electrons.  
18 p3187 A69-34945  
Evaluation of the CRAND source for 10- to 50-Mev trapped protons.  
22 p4005 A69-40512
- FARLOW, S. J.**  
An existence theorem for periodic solutions of a parabolic boundary value problem of the second kind.  
04 p0624 A69-15004
- FARMER, A. J. D.**  
Experimental oscillator strengths for the Schumann-Runge band system in oxygen.  
02 p0284 A69-12832
- FARMER, O. A.**  
TAF - A steady state, frequency response, and time response simulation program.  
04 p0565 A69-15341
- FARMER, W. M.**  
Holographic techniques for the study of dynamic particle fields.  
21 p3726 A69-39776
- FARNSWORTH, D.**  
Test parameters, material characterization, and the white thermal control coating stability problem.  
[AIAA PAPER 69-641] 17 p2993 A69-33762
- FARNSWORTH, H. E.**  
Interactions of N sub 2 O, NO and CO sub 2 with /100/ nickel using combined LEED and mass spectrometer measurements.  
08 p1268 A69-20138
- FARQUHAR, J.**  
Transient pumping performance of a two speed, hydraulic turbine driven inducer system.  
[AIAA PAPER 69-551] 18 p3140 A69-34415
- FARQUHAR, R. W.**  
Future missions for libration-point satellites.  
15 p2680 A69-30188
- FARR, J. P.**  
Nodal precipitation and cellular solidification substructure in commercial purity nickel.  
08 p1332 A69-20289
- FARRAGHER, A. L.**  
Charge transfer of N sub 2 super plus, O sub 2 super plus, and NO super plus to sodium atoms at thermal energies.  
07 p1185 A69-19303



**FARREDDUDDIN, K.**

Impaired orthostatic tolerance after bed rest in patients with myocardial infarction.  
10 p1648 A69-24189

**FARREL, E. C.**

The transient performance of a hydraulic turbine-driven inducer - Computer predictions and test verifications.  
[AIAA PAPER 69-552] 16 p2741 A69-32747

**FARRELL, H. H.**

Chlorine-35 nuclear quadrupole resonance spectra of several chlorodiazines.  
01 p0123 A69-10290

**FARRELL, J.**

On the analysis of structural design.  
08 p1413 A69-20351

**FARRELL, J. C.**

Tension-and-compression radial support system for the primary mirror.  
12 p2057 A69-26413

Canadian 150-inch telescope.  
12 p2058 A69-26418

**FARRELL, J. L.**

Dynamics of a libration-damped discretized cruciform structure.  
11 p1989 A69-25502

Continuous and discrete RAE structural models.  
[AAS PAPER 68-126] 21 p3819 A69-39211

Optimal estimation of rotation-coupled flexural oscillations.  
24 p4394 A69-43291

**FARRELL, K.**

The growth of grain boundary gas bubbles in chemically vapor deposited tungsten.  
01 p0097 A69-10646

**FARRELL, R.**

A SiC backward diode.  
09 p1470 A69-22787

**FARRELL, R. J.**

Effect of vibration on the operation of decimal input devices.  
17 p2916 A69-34010

**FARRER, D. N.**

Illumination intensity and behavioral circadian rhythms.  
24 p4260 A69-42702

**FARRIS, G. F.**

Some antecedents and consequences of scientific performance.  
15 p2721 A69-31069

**FARUQUI, M. N.**

An estimation of performances of unidigit and multidigit communication systems.  
17 p2918 A69-33066

**FASCILOLO, J. C.**

Antidiuretic hormone and human eccrine sweating.  
23 p4077 A69-41311

**FASHANO, M.**

Use of a data relay satellite system with ATS.  
03 p0391 A69-13241

**FASSELL, W. M.**

The effects of high intensity electrical currents on advanced materials.  
08 p1338 A69-20486

Advances in fiber reinforced carbon and graphite.  
19 p3354 A69-35519

**FASSIO-CANUTO, L.**

Quantum theory of an electron gas with anomalous magnetic moments in intense magnetic fields.  
08 p1353 A69-19782

Nature of radio and optical emissions from pulsars.  
08 p1394 A69-20624

Thermodynamic approach to the equation of state of a magnetized Fermi gas.  
11 p1961 A69-25107

One-boson-exchange contributions to high-energy proton antiproton elastic scattering in a nonlocal field theory.  
21 p3775 A69-39467

**FASSIO, F.**

Incompressible laminar boundary layer with normal suction or blowing /Strato limite laminare incompressibile con aspirazione o soffiatura normale/.  
06 p0911 A69-17781

**FASSO, G.**

First results of rain erosion tests in the S3 intermittent wind tunnel of the O.N.E.R.A. Modane Test Center.  
07 p1117 A69-19534

**FASTIE, W. G.**

Rocket measurement of ultraviolet spectra of Venus and Jupiter between 1200 and 1800 angstrom units.  
[JHU-TR-15] 10 p1788 A69-24121

Mariner 6 - Ultraviolet spectrum of Mars upper atmosphere.  
22 p4023 A69-40568

**FATKULLIN, M. N.**

Planetary distribution of drifts in the F sub 2 region of the ionosphere, excited by neutral gas motions.  
03 p0422 A69-13513

Some characteristics of the equatorial anomaly in the F sub 2 region of the ionosphere at local noon during the IGY and IQSY.  
03 p0422 A69-13515

Effects observed in the F sub 2 -layer of the ionosphere following an SSC magnetic storm.  
03 p0423 A69-13531

Height distribution of lunar tides in the ionosphere near the magnetic equator.  
05 p0756 A69-16401

Estimates of the loss coefficients and of the rates of ion-molecule reactions in the nighttime F-region of the ionosphere from n sub s e /h, t/ profiles at Moscow.  
06 p0919 A69-17724

Concentration of hydrogen at 300-600 km above the earth surface deduced from ionospheric data.  
07 p1129 A69-19612

Estimates of the vertical transport rate of charged particles in the outer portion of the F2 region of the ionosphere /Otsenki skorosti vertikal'nogo perenosazariashennykh chastits vo vnesheinei chasti oblasti F2 ionosfery/.  
09 p1485 A69-21529

Rocket-probe investigations of ionospheric currents at mid-latitudes and low latitudes /Raketnyye issledovaniia ionosferynykh tokov na srednikh i niznikhkh shirotakh/.  
10 p1686 A69-23909

Plasma motions in the F-region of the ionosphere accompanying the motions of the neutral gas.  
12 p2070 A69-26684

Estimates of the vertical transport velocity of charged particles in the topside ionosphere.  
16 p2783 A69-32524

Latitude distribution of temperature in the nighttime F2 region of the ionosphere under calm and disturbed conditions, as calculated from the Alouette 1 satellite data /Shirotnoe raspredelenie temperatury nochnoi oblasti F2 ionosfery v spokoinykh i vozmushchennykh usloviakh, rasschitannoi po dannym sputnika "Alouette-1"/.  
19 p3304 A69-36623

Electric fields in the lower ionosphere above the magnetic equator /Elektricheskie polia v nizheinei ionosfere nad magnitnym ekvatorom/.  
20 p3521 A69-37053

Distribution of the electron concentration in the outer portion of the F2 region under quiet and perturbed conditions /K raspredeleniiu elektronnoi kontsentratsii vo vnesheinei chasti oblasti F2 v spokoinykh i vozmushchennykh usloviakh/.  
23 p4156 A69-41856

Temperature dependence of photoionization rates in the upper atmosphere /K temperaturnoi zavisimosti skorosti fotoionizatsii v verkhnei atmosfere/.  
23 p4157 A69-41857

**FATRAS, M.**

Comparative study of the effects of three hypnosis-inducing agents on reaction and response times /Etude comparative de trois hypnogenes sur les temps de reaction et de reponse/.  
21 p3661 A69-39274

**FATTAH, A. A.**

The propagation of Alfvén waves in a viscous fluid of finite electrical conductivity. II.  
07 p1195 A69-19451

**FATTAKH, KH. A. A.**

Amplification of microwave oscillations in bulk GaAs /Usilenie SVCh-kolebani v ob'eme GaAs/.  
21 p3781 A69-39127

**FATTORINI, H. O.**

Some differential equations for vector distributions /Sur quelques equations differentielles pour les distributions vectorielles/.  
13 p2288 A69-27734

Ordinary differential equations in linear topological space. II.  
19 p3360 A69-36599

**FAUCHAIS, P.**

Determination of thermodynamical characteristics of gas-mixture plasmas /Determination des caracteristiques thermodynamiques des plasmas de melange de gaz/.  
10 p1810 A69-23717

Thermodynamic properties of nitrogen gas and hydrogen plasmas and their mixtures /Proprietes thermodynamiques des plasmas d'azote, d'hydrogene et de leur melange/.  
21 p3847 A69-38471

Thermal, electrical, and thermoelectronic properties of various refractory oxide materials /Proprietes thermiques, electriques et thermoelectroniques de divers materiaux d'oxydes refractaires/.  
13 p2316 A69-23161

Effect of non-homogeneity on the transverse vibrational frequency of uniform beams.  
08 p1413 A69-20413

Optical measurements on laser-produced plasmas. Study of the expansion of a lithium hydride microplasma in a vacuum /Etude de l'expansion dans le vide d'un microplasma d'hydrure de lithium/.  
02 p0286 A69-11776

Calculation of Radiation Doses in Space /Calcul des Doses de Rayonnement dans l'Espace, Centre d'Etudes et de Recherches en Technologie Spatiale, Journées Européennes, Toulouse, France, February 21-23, 1968, Reports /Calcul des Doses de Rayonnement dans l'Espace, Centre d'Etudes et de Recherches en Technologie Spatiale, Journées Européennes, Toulouse, France, February 21-23, 1968, Comptes Rendus/.  
11 p1947 A69-24817

The stability of Schwarzschild spheres to radial perturbations.  
07 p1221 A69-19511

Frequency-modulation sensitivity of Gunn oscillators.  
15 p2577 A69-30615

Pulsation periods of rotating white dwarfs.  
17 p3037 A69-33617

Polynomial representations of mirror-cusp fields.  
06 p0966 A69-17506

The effect of finite ion mass on the stability of space-charge-neutralized electron beam.  
09 p1545 A69-21345

Phase identification in modified Cb 132 alloys.  
13 p2282 A69-28113

Study of the structure of detonation waves in so explosives /Etude de la structure des ondes de detonation dans les explosifs solides/.  
02 p0349 A69-11502

Experimental study of AZ5G-Zr-Cr alloy welds under 1-1/2 biaxial states of stress at low temperature.  
01 p0088 A69-11101

Flash spectroscopy by Q-switched laser excitation Application to the study of naphthalene /Spectroscopie par éclair à excitation par laser déclenchée - Application à l'étude du naphtalène/.  
02 p0254 A69-11502

Application of Kalman filtering to the resetting of inertial navigation system /Application du filtrage de Kalman au recalage d'un navigateur par inertie/.  
19 p3286 A69-36619

Critical two-phase flow.  
13 p2376 A69-28113

Pecoraite, Ni sub 6 Si sub 4 O sub 10 /OH/ sub nickel analog of clinochrysotile, formed in the W Creek meteorite.  
18 p3199 A69-34818

The lowest temperatures of the earth's atmosphere /Die niedrigsten Temperaturen in der Erdatmosphäre/.  
13 p2255 A69-28613

Vertical profiles of pressure, temperature, and density variations resulting from pressure variations in

upper troposphere /Vertikalprofile von Druck-Temperatur- und Dichteänderungen bei Drauckaenderungen in der oberen Troposphaere/.  
19 p3365 A69-36580

**FAVALE, E.**  
Functional changes of somato-sensory system during deep sleep.  
22 p3872 A69-40161

**FAVE, J.**  
Accessible domain of a re-entry glider - Gradient method /Domaine accessible a un planeur orbital - Methode du gradient/.  
[ICAS PAPER 68-41]  
11 p1966 A69-24750  
Overestimation of the optimum as a convergence criterion for the gradient method /Critere de convergence par surestimation de l'optimum pour la methode du gradient/.  
[ONERA-TP-628]  
16 p2805 A69-32332  
A new procedure for accelerating the convergence of the steepest ascent method when applied to reentry trajectories of an orbital glider /Un nouveau procede d'acceleration de la methode du gradient, applique aux trajectoires de rentree d'un planeur orbital/.  
19 p3398 A69-35666

**FAVERO, M. S.**  
Factors influencing the detection and enumeration of microbial contaminants on space hardware.  
05 p0714 A69-15954  
Microbiological sampling of surfaces.  
05 p0715 A69-15982

**FAVOR, R. J.**  
The Elevated-Temperature Properties of Selected Superalloys.  
08 p1328 A69-19913

**FAVORITE, F. G.**  
Life Sciences and Space Research VI, COSPAR, Plenary Meeting, 10th, Open Meeting of Working Group V, London, England, July 27, 28, 1967, Proceedings.  
01 p0016 A69-11073  
Life Sciences and Space Research VII COSPAR, Plenary meeting, 11th, Open Meeting of Working Group V and Symposium on Biological Effects of Radiation in Space, Tokyo, Japan, May 14-16, 1968 and May 10, 1968, Proceedings.  
20 p3474 A69-37612

**FAVORSKII, A. P.**  
Calculation of ionization instability in a low-temperature magnetized plasma /Raschet ionizatsionnoi neustoiichivosti v nizkotermpurnoi zamagnichennoi plazme/.  
10 p1741 A69-23962

**FAVORSKII, O. N.**  
Optimization of the parameters of closed gas cycles of power plants with heat removal by radiation /Ob optimizatsii parametrov zomknutykh gazovykh tsiklov energeticheskikh ustanovok s otvodom tepla izlucheniem/.  
20 p3464 A69-37603

**FAVRE, A.**  
Statistical equations of turbulent gases.  
19 p3300 A69-36784

**FAVRE, A. E.**  
Heavy press forgings of light metals.  
[ASM PAPER C7-5.1]  
04 p0604 A69-14521

**FAWCETT, J. E. S.**  
International Law and the Uses of Outer Space.  
02 p0356 A69-12676

**FAX, R. G.**  
Dielectrophoretic liquid expulsion.  
24 p4300 A69-43237

**FAY, J.**  
Electronic instrumentation for the measurement of charged particles by an AC voltage method.  
10 p1662 A69-23256

**FAY, J. A.**  
An actuator-disk model for azimuthally nonuniform MPD arcs.  
[AIAA PAPER 68-714]  
24 p4359 A69-43570

**FAY, S.**  
Leveling of analytic platforms.  
08 p1347 A69-19862

**FAYET, A.**  
Dynamic study of the shape of the fracture front in the thickness of a toughened glass plate /Etude dynamique de la forme du front de fracture dans l'epaisseur d'une plaque de verre trempé/.  
12 p2118 A69-26194

**FAZIO, A. E.**  
Compensation effects on transformers, relays, and other piece parts in an encapsulated structure - Lunar module signal conditioner.  
22 p3910 A69-39953

**FAZIO, G. G.**  
A search for discrete sources of cosmic gamma rays of energies near  $2 \times 10$  super 12 ev.  
02 p0308 A69-12597  
Upper limits to gamma ray fluxes from three pulsating radio sources.  
03 p0513 A69-13772  
Solar gamma rays and their correlation with space and ground-based observations.  
05 p0814 A69-15863

**FAZYLOV, A.**  
Investigation of the characteristics of a CdTe laser with electronic excitation /Issledovanie kharakteristik kvantovogo generatora na CdTe pri elektronnom vzbuzhdenii/.  
13 p2272 A69-27896

**FEAREY, J. P.**  
The deep space network - An instrument for radio navigation for the Mariner mission to Mars - 1969.  
16 p2749 A69-31725

**FEARN, D. G.**  
Observations of precursor effects in an electromagnetic shock tube.  
02 p0229 A69-11936  
A review of electric propulsion research in the United Kingdom.  
[AIAA PAPER 69-299]  
09 p1564 A69-21241  
An investigation of the electrical breakdown of a plasma-electrode system.  
12 p2134 A69-26098

**FEARNEHOUGH, G. D.**  
Fracture mechanics considerations in the Charpy impact test.  
05 p0780 A69-16431

**FEAST, M. W.**  
The kinematics of planetary nebulae in the Magellanic Clouds.  
12 p2155 A69-25891  
Infrared excess of RY Sgr.  
23 p4220 A69-42377

**FECHTIG, H.**  
Concentration of cosmic dust near the earth /Die Konzentration des kosmischen Staubes in Erdaehe/.  
06 p0999 A69-16971

**FECYCH, W.**  
Experiences with beryllium swelling and replacement in the Plum Brook Reactor.  
03 p0465 A69-13131

**FEDCHENKO, K. K.**  
Cosmic-ray anisotropy and the sectorial structure of the interplanetary magnetic field /Anizotropiia kosmicheskikh luchei i sektornaia struktura mezplanetnogo magnitnogo polia/.  
10 p1758 A69-22834

**FEDER, A. M.**  
A new family of illuminants for night and special color aerial photography.  
22 p3950 A69-41000

**FEDERER, J. I.**  
Formation and characterization of an Al5- type structure in chemically vapor deposited tungsten-rhenium alloys.  
01 p0098 A69-10649

**FEDIAEV, IU. I.**  
Effect of dislocations on the electric properties of indium antimonide.  
14 p2507 A69-29646

**FEDIAEV, V. K.**  
Experimental investigation of the current harmonics in a triode-klystron /tristron/ /Eksperimental'noe issledovanie garmonik toka v triodklistrone /tristrone/.  
13 p2234 A69-28510

**FEDINSKI, A. V.**  
A technique for measuring the water vapour and atomic oxygen content in the upper atmosphere.  
20 p3543 A69-37798

**FEDIO, P.**  
Visual information and evoked responses from the left and right hemispheres.  
21 p3656 A69-38976

**FEDOR, L. S.**  
Observations of microstructure and vertical motion in sporadic E.  
01 p0071 A69-11164

The interpretation of ionospheric radio drift measurements. II - Kinesonde observations of microstructure and vertical motion in sporadic E.  
18 p3125 A69-34250

**FEDORCHENKO, A. M.**  
Amplification of electromagnetic waves in a solid-state plasma /Do pitannia pro pidsilennia elektromagnitnikh khvil' u plazmi tverdogo tila/.  
08 p1374 A69-21078  
Conversion of a longitudinal plasma wave into an electromagnetic wave at a plasma-dielectric boundary.  
11 p1934 A69-25708  
Incoherent reflection of electromagnetic waves from a plasma /Nekogerentnoe otrazhenie elektromagnitnykh voln ot plazmy/.  
12 p2031 A69-26530  
Interaction of a rotating electron beam with asymmetric waves in a magnetized plasma waveguide /Vzaimodeistvie vrashchaiushchegosia elektronnogo puchka s nesimmetrichnymi volnami zamagnichennogo plazmennogo volnovoda/.  
13 p2312 A69-28118  
Dispersion characteristics of a magnetized plasma waveguide /Dispersionnye kharakteristiki zamagnichennogo plazmennogo volnovoda/.  
13 p2315 A69-28571  
Criterion of absolute and convective instability of parametrically interacting waves /Kriterii absolutnoi i konvektivnoi neustoiichivosti dlia parametricheskikh vzaimodeistviushchikh voln/.  
21 p3677 A69-39555

**FEDORCHENKO, G. P.**  
Computation of the accuracy of part centering during assembly /Raschet tochnosti tsentrirovaniia detalei pri sborke/.  
21 p3733 A69-39719

**FEDORCHENKO, I. M.**  
Properties of electrolytic and reduced titanium powders and sinterability of porous compacts from such powders.  
05 p0782 A69-16795  
Cermet material for radial sealing of high-temperature turbines /Metallokeramicheskii material dlia radial'nogo uplotneniia vysokotemperaturnykh turbin/.  
13 p2275 A69-23744

**FEDORCHENKO, V. D.**  
Plasma oscillation intensities at combination frequencies /Ob intensivnosti kolebaniia plazmy na kombinatsionnykh chastotakh/.  
09 p1550 A69-22024

**FEDORENKO, L. U.**  
The use of a laser beam for investigating the instrumental profile of a double-pass solar spectrograph.  
11 p1893 A69-24431

**FEDORENKO, N. V.**  
Investigation, by the coincidence method, of the elementary processes involved in charged-state variations during an interaction between protons and inert gas atoms /Issledovanie metodom sovpadenii elementarnykh protsessov izmeneniia zariadovykh sostoianii pri vzaimodeistvii protonov s atomami inertykh gazov/.  
12 p2133 A69-26543

**FEDORENKO, R. P.**  
Cauchy problem for Bellman's dynamic programming equation /K zadache Koshi dlia uravneniia dinamicheskogo programmirovaniia Bellmana/.  
14 p2426 A69-29478

**FEDORIUK, M. V.**  
On the stability in C of the Cauchy problem for difference and partial differential equations.  
18 p3165 A69-35049  
Asymptotic methods in the theory of ordinary linear differential equations /Asimptoticheskie metody v teorii obyknovennykh lineinykh differentsial'nykh uravnenii/.  
22 p3976 A69-41124

**FEDORKOV, N. N.**  
Friction in vacuum.  
03 p0434 A69-13915

**FEDOROV, A. A.**  
Complex application of radar and satellite observations in the analysis of meso- and macroscale systems of clouds /Kompleksnoe ispol'zovanie radiolokatsionnykh i sputnikovykh nabludenií pri analize mezo- i makromasshtabnykh oblachnykh sistem/.  
13 p2294 A69-27853  
Meteorological nature and characteristics of an anomalous radio echo /Meteorologicheskaia priroda i kharakteristiki anomal'nogo radioekho/.  
16 p2808 A69-32277



## FEDOROV, B. M.

Changes in the corticosteroid and catecholamine metabolism during a sharp limitation of the motor activity of the organism /Izmeneniia kortikosteroidnogo i katekolaminovogo obmena pri rezkom ogranichenii dvigatel'noi aktivnosti organizma/.  
12 p2021 A69-26973

## FEDOROV, F. I.

A first-order equation for the gravitational field.  
03 p0466 A69-13422

## FEDOROV, G. B.

Thermodynamic properties of zirconium-niobium alloys.  
07 p1165 A69-18940

## FEDOROV, I. V.

Body weight and protein synthesis in animals during hypokinesia.  
08 p1262 A69-19928

## FEDOROV, L. P.

The graph-analytical method of I. V. Ostoslavskii and A. A. Lebedev /K grafo-analiticheskomu metodu I. V. Ostoslavskogo i A. A. Lebedeva/.  
11 p1823 A69-25343

## FEDOROV, M. I.

Interrelationship between the temperature of a cooled surface and the frequency of the self-oscillations of pressure during heat transfer to a turbulent fluid flow /O vzaimosviasi temperatury okhlazhdaemoi poverkhnosti i chastoty avtokolebaniy davleniya pri teploobmene s turbulentnym potokom zhidkosti/.  
01 p0173 A69-10094

## FEDOROV, T. F.

Phase equilibria in the systems vanadium- chromium-carbon, niobium-chromium-carbon, and tantalum-chromium-carbon.  
09 p1523 A69-21872

Investigation of the ternary system zirconium- rhodium-carbon /Issledovanie troinnoi sistema tsirkonii-reniiuglerod/.  
10 p1715 A69-24055

## FEDOROV, V. B.

Resistance of a xenon plasma in a large flash lamp.  
03 p0478 A69-13846

Measurement of the luminescence quantum yield in neodymium glass /Izmerenie kvantovogo vykhoda liuminesentsii v neodimovom stekle/.  
10 p1702 A69-23211

Laser spark in the "slow combustion" regime.  
23 p4172 A69-41492

## FEDOROV, V. I.

Nonlinear cyclotron resonance in a plane wave propagating along a magnetic field.  
06 p0963 A69-16905

Heat conductivity of gallium telluride /Teploprovodnost' tellurida galliia/.  
16 p2824 A69-31572

## FEDOROV, V. K.

Influence of the training of nervous processes on the brain weight and cholinesterase activity /Vliianie trenirovki nervnykh protsessov na ves mozga i aktivnost' kholinesterazy/.  
21 p3662 A69-39627

## FEDOROV, V. M.

Nanosecond image converter framing camera types.  
12 p2083 A69-26141

Superfast optical methods for high-speed plasma processes.  
12 p2089 A69-26186

Application of Michelson interferometers with large interference fields to the investigation of plasma physics /O primeneniі interferometrov Maikel'sona s bol'shimi poliami interferentsii v issledovaniakh po fizike plazmy/.  
14 p2496 A69-29776

## FEDOROV, V. T.

Observations of the polarization of cosmic radio emission near the galactic anticenter at wavelengths of 70, 60, and 40 cm /Nabludeniia polarizatsii kosmicheskogo radioizlucheniia vblizi antitsentra galaktiki na volnakh 70, 60 i 40 cm/.  
03 p0501 A69-13704

## FEDOROVA, E. O.

Measurements of the Fourier spectra of two-dimensional functions /Izmerenie spektrov Fur'e dvumernykh funktsii/.  
10 p1725 A69-23301

## FEDOROVA, G. M.

Noise generator employing avalanche transit-time diodes /Generator shuma na lavinno-proletnom diode/.  
07 p1107 A69-19156

## FEDOROVA, L. D.

The adaptive effect of hydrocortisone during hypoxia /K adaptivnomu efektu gidrokortizona pri gipoksii/.  
13 p2210 A69-27800

## FEDOROVA, L. V.

Relation between the attenuation coefficient of laser emission and the water content of artificial fogs /Sviaz' koeffitsienta oslavlennia intensivnosti lazernogo izlucheniia s vodnost'iu iskusstvennykh tumanov/.  
21 p3738 A69-39118

## FEDOROVA, M. K.

Sensitivity of leak detection at low pressures and concentrations of probe gases.  
24 p4296 A69-42656

## FEDOROVA, N. I.

Ions at altitudes of 1000 to 1200 km according to measurements on the Cosmos 5 satellite /Iony na vysotakh 1000-1200 km po izmereniam na sputnike "Kosmos-5"/.  
02 p0306 A69-11656

Ions at heights of 1000-1200 km, according to Cosmos 5 measurements.  
13 p2333 A69-28687

Concentrations of molecular ions on the basis of measurements performed on board the Cosmos 5 satellite /Kontsentratsii molekuliarnykh ionov po izmereniam na sputnike "Kosmos-5"/.  
20 p3519 A69-37021

## FEDOROVICH, R. D.

Investigation of luminescence and electron emission centers in dispersed gold films /Doslidzhennia tsentriv svitinnia ta elektronnoi emisii u dispergovaniikh zolotikh plivkakh/.  
14 p2504 A69-28992

## FEDORUK, I. U. M.

Generator of a train of bright light flashes for hydrodynamic and gas dynamic investigations.  
11 p1879 A69-24235

## FEDORUS, G. A.

Photoelements based on films of cadmium selenide with p-n heterotransitions.  
07 p1198 A69-18512

Photocells with p-n heterojunctions based on compressed sintered cadmium selenide /Fotoelementy z p-n geteroperekhodami na osnovi spresovanogo spechenogo selenidu kadmiiu/.  
08 p1374 A69-21084

Parameters of slow recombination centers of heat-treated CdSe single crystals.  
09 p1560 A69-22664

## FEDOSEEV, K. P.

Semiconductor laser with an external resonator /Poluprovodnikovyi kvantovyi generator s vneshnim rezonatorom/.  
08 p1326 A69-20543

## FEDOSEEV, L. I.

Detector radiometers for the millimeter and submillimeter wavelengths /Detektornye radiometriy millimetrovogo i submillimetrovogo diapazonov voln/.  
19 p3285 A69-36877

## FEDOSEEVA, N. V.

Combustion of a system of liquid-fuel droplets /Gorenie sistemy kapel' zhidkogo topliva/.  
15 p2719 A69-31174

## FEDOSENKO, I. U. K.

Spectra of electrical signals at the output of ferroprobe sensors when inspecting spherical defects.  
10 p1675 A69-24072

## FEDOSOV, E. A.

General problems in guidance theory /Obshchie voprosy teorii navedeniia/.  
21 p3687 A69-39643

## FEDOSOV, I. U. A.

Stability of a closed toroidal shell of circular cross section /Ustoichivost' zamknutoi toroidal'noi obolochki krugovogo poperechnogo sечeniia/.  
17 p3055 A69-33130

## FEDOTOV, B. N.

Method of calculating the aerodynamic characteristics of wings of complex planar form with subsonic leading and trailing edges /Metod rascheta aerodinamicheskikh kharakteristik kryl'ev slozhnoi formy v plane s dozovukovymi perednimi i zadnimi kromkami/.  
14 p2391 A69-29624

## FEDOTOV, I. A.

Semiconductor Devices and their Use. Number 20 /Poluprovodnikovye Pribory i ikh Primenenie. Number 20/.  
12 p2042 A69-26877

## FEDOTOV, M. A.

Investigation of the physicochemical properties of zirconium nitride in the homogeneity range /Izuchenie fiziko-mekhanicheskikh svoystv nitrida tsirkoniia v oblasti gomogenosti/.  
20 p3558 A69-37000

## FEDOTOV, S. G.

Decomposition of titanium-vanadium martensite during heating /Raspad titano-vanadievogo martensita pri nagreve/.  
07 p1163 A69-18777

Interdiffusion in Ti-V, Ti-Nb, Ti-Ta, and Ti-Mo systems /Vzaimnaia diffuziia v sistemakh Ti-V, Ti-Nb, Ti-Ta, Ti-Mo/.  
21 p3745 A69-38919

Disintegration of titanium-vanadium martensite during continuous heating.  
21 p3746 A69-39160

## FEDUNIAK, R. B.

Distribution of blackbody cavity radiation in a moving frame of reference.  
08 p1380 A69-19780

## FEGAN, D. J.

UHF radio pulses from the zenith associated with extensive air showers.  
21 p3792 A69-39611

## FEGLEY, K. A.

Orthogonalization techniques of a direction cosine matrix.  
23 p4134 A69-42544

## FEHLNER, T. P.

A mass spectrometric investigation of the low-pressure pyrolysis of borane carbonyl - The bond dissociation energy of diborane.  
14 p2410 A69-29280

## FEHMI, L. G.

Electrophysiological correlates of visual perceptual masking in monkeys.  
22 p3876 A69-40260

## FEHR, T. D.

Predictive logic control of an on-off system with one simple sensor. [ASME PAPER 68-WA/AUT-14]  
05 p0830 A69-16130

## FEHR, U.

Infrasound at long range from Saturn V, 1967.  
03 p0509 A69-13350

Energy propagation in the lower ionosphere and atmosphere produced by artificial disturbances. I.  
07 p1078 A69-18844

Ultralow frequency waves generated by the Saturn F engine.  
24 p4365 A69-43411

## FEHRENBACH, C.

European Southern Observatory 60-inch telescope.  
12 p2058 A69-26414

## FEHRENBACH, CH.

Behavior of narrow absorption lines of calcium in Nova Delphini 1967 /Comportement des raies d'absorption fines du calcium dans la nova delphini 1967/.  
13 p2346 A69-27700

## FEHRS, D. L.

Measurements of the work function and desorption energy of cesium and potassium on 100/tungsten.  
09 p1558 A69-21800

## FEHSENFELD, F. C.

Some aspects of the metal ion chemistry of the earth's atmosphere.  
01 p0071 A69-11160

Origin of water cluster ions in the D region.  
14 p2434 A69-28940

## FEIBELMAN, P. J.

Simple microscopic theory of surface plasmons.  
06 p0967 A69-17711

## FEIDELMAN, L. A.

An aircraft squadron performance effectiveness model.  
03 p0367 A69-13911

## FEIDT, R.

Thermistor thermometer with low energy dissipation intended for measurement in a flowing fluid - Principle of assembly /Thermometre a theristance a faible dissipation d'energie destine a la mesure dans un fluide en ecoulement - Principe du montage/.  
15 p2608 A69-30290

## FEIFFER, J. S.

Nuclear radiation damage vs. thermal decomposition of 1,3-diamino-2,4,6-trinitrobenzene and 2,2',4,4',6,6'-hexanitrostilbene.  
02 p0304 A69-12500

## FEIGELSON, E. M.

Certain optical properties of the Venusian atmosphere and the state of radiative equilibrium /Nekotorye opticheskie svoystva atmosfery Veneri i rezhim luchistogo ravnovesiia/.

13 p2345 A69-27691

Certain radiation problems associated with the problem of general circulation /Nekotorye radiatsionnye zadachi, svyazannye s problemoi obshchei tsirkulatsii/.

14 p2477 A69-29826

Calculation of the long-wave influx in the case of low vertical resolution /Raschet dlinnovolnovogo pritoka pri malom razreshenii po vertikalii/.

21 p3758 A69-39112

## FEIGELSON, R. S.

Nonlinear optical properties of Ba sub 2 NaNb sub 5 O sub 15 in the tetragonal phase.

09 p1515 A69-21354

## FEIGEN, L.

A method for detecting and measuring frequency of surface vibrations using a helium-neon laser.

09 p1515 A69-21430

## FEIGENBAUM, E. A.

Mechanization of inductive inference in organic chemistry.

07 p1075 A69-19484

Applications of artificial intelligence for chemical inference. I - The number of possible organic compounds - Acyclic structures containing C, H, O, and N.

23 p4114 A69-42214

## FEIGIN, F. Z.

Mechanism of generation and the development of pearls during cyclotron instability of the outer proton zone /Mekhanizm generatsii i razvitiye zhemchuzhin pri tsiklotronnoi neustoiichivosti vneshnei protonnoi zony/.

23 p4206 A69-41850

## FEIGIN, M. I.

Dynamic systems with impulsive interactions in the theory of nonlinear oscillations.

16 p2875 A69-32295

## FEIGL, D. M.

Polymeric Schiff bases. XIII - The direct synthesis of cross-linked polymeric azomethines.

08 p1269 A69-21059

Polymeric Schiff bases. XIV - The synthesis of cross-linked polymeric azomethines by exchange reactions.

08 p1269 A69-21061

Polymeric Schiff bases. XVII.

13 p2217 A69-28317

## FEIKEMA, H.

Identification of nonlinear systems.

08 p1297 A69-20302

## FEIL, O. G.

The magnetic test facilities at ESTEC.

20 p3512 A69-38279

## FEIN, M. E.

A thermally pumped CO sub 2 laser.

18 p3151 A69-34264

## FEIN, R. S.

Boundary Lubrication- An Appraisal of World Literature.

11 p1891 A69-24925

## FEINBERG, E. L.

Theoretical aspects of high energy strong interactions.

03 p0469 A69-12940

## FEINBERG, M. R.

Sufficient conditions for stability of fluid motions constitutively described by the infinitesimal theory of viscoelasticity.

17 p2949 A69-33015

## FEINBERG, P.

Use of computers and programmable telemetry systems on scientific satellites.

23 p4132 A69-41735

## FEINSTEIN, A.

The OB stars in Carina-Centaurus.

18 p3200 A69-35133

## FEISSEL, M.

Spectrographic measurements of motions in the Venusian atmosphere /Mesure spectrographique de mouvements dans l'atmosphere de Venus/.

10 p1778 A69-23409

## FEIST, W. M.

Cold electron emitters.

11 p1846 A69-24597

## FEISTMAN, M.

Cost effectiveness via weighted factor analysis.

18 p3232 A69-34504

## FEIT, L.

PCM television via satellite relay.

23 p4130 A69-42520

## FEIX, G.

Noise of the atmosphere at millimeter wavelengths.

01 p0028 A69-10420

Influence of the troposphere on radio astronomical measurements in the mm wave range /Einfluss der Troposphäre auf radioastronomische Messungen im mm-Wellenbereich/.

13 p2223 A69-28607

A contribution to the model of the slowly varying component of the sun derived from observations at 8.6 mm.

22 p4027 A69-40660

Focus broadening by astigmatism of large microwave parabolic antennas.

23 p4140 A69-42188

## FEIX, M. R.

Numerical experiments on one-dimensional stellar models /Experiences numeriques sur les modeles stellaires unidimensionnels/.

02 p0323 A69-12274

Diffusion of fast electrons in stochastic magnetic fields.

08 p1368 A69-20807

A spherically symmetrical water-bag model /Modele de l'outre en symetrie spherique/.

16 p2866 A69-32813

## FEJER, A. A.

Measurements of the decay of swirl in turbulent flow.

16 p2772 A69-32170

Separation and flow reversal in swirling flows in circular ducts.

24 p4301 A69-43355

## FEJER, J. A.

Periodicities in the amplitude of ionospheric plasma resonances.

07 p1125 A69-18847

The growth and decay of resonant plasma oscillations excited by a small pulsed dipole.

16 p2817 A69-31641

Progress in magnetospheric radio.

19 p3303 A69-36429

Noise spectrum received by an antenna in a plasma.

21 p3683 A69-39284

A guiding centre Vlasov equation and its application to Alfvén waves.

23 p4197 A69-42416

## FEKLISTOV, V. N.

Measurement of gas streams with nonorientable five-channel adapters /Izmerenie gazovykh potokov neorientiruemyimi piatikanal'nymi nasadkami/.

11 p1888 A69-25340

## FEKLISTOVA, T.

Probability of certain forbidden coronal lines in the vacuum ultraviolet region /Veroiatnosti nekotorykh zapreshchennykh koronal'nykh liniy v oblasti vakuumnogo ul'trafiioleta/.

12 p2157 A69-26334

Probabilities of some forbidden coronal lines in the vacuum ultraviolet range /Veroiatnosti nekotorykh zapreshchennykh koronal'nykh liniy v oblasti vakuumnogo ul'trafiioleta/.

14 p2519 A69-29355

## FELD, IA. N.

Application of nonresonant Green's functions to the derivation of the integral equations for problems associated with diffraction at open screens /Primenenie nerezonansnykh funktsii Grina k postroeniiu integral'nykh uravnenii zadach difraktsii na nezamknutykh ekranakh/.

22 p3901 A69-40949

## FELD, M. S.

Strong mode coupling induced in a gas laser by an intracavity saturable absorbing medium.

08 p1324 A69-20166

Laser-induced line-narrowing effects in coupled Doppler-broadened transitions.

09 p1519 A69-22282

## FELDMAN, A.

Design application of high-modulus filament-wound composites to aerospace propellant and pressurization tanks.

19 p3354 A69-35513

## FELDMAN, J.

The gyroscope in torque-to-balance strapdown application. [AIAA PAPER 69-848]

21 p3762 A69-39378

## FELDMAN, K. T., JR.

Applications of the heat pipe.

06 p1030 A69-17189

Experiments with a two-fluid heat pipe.

23 p4240 A69-42306

## FELDMAN, N. E.

Syllabus on low-noise microwave devices.

20 p3504 A69-36913

## FELDMAN, P. A.

Low-energy cosmic rays from pulsar flares/ques/

18 p3187 A69-34995

## FELDMAN, P. D.

Rocket observations of bright celestial infrared sources in Ursa Major.

09 p1603 A69-22230

Limb darkening on the earth's night side at wavelengths of 1-3 mu and 3-7.5 mu.

17 p2960 A69-33167

Far infrared nightglow emission from atomic oxygen.

22 p3940 A69-40521

## FELDMAN, S.

Effects of stimulating reticular formation, hippocampus and septum on single cells in the posterior hypothalamus.

21 p3656 A69-38979

## FELDMANN, G.

Comparative noise measurements in klystron oscillators /Vergleichende Rauschmessungen an Oszillator-klystrons/.

07 p1096 A69-18438

## FELDMANN, H.

A simple strategy for a class of linear iterative methods and acceleration of nonlinear convergence /Eine einfache Strategie fuer eine Klasse linearer Iterationsverfahren und nichtlineare Konvergenzbeschleunigung/.

10 p1718 A69-22878

## FELDMANN, J.

A wave-node converter with a feed for the excitation of an omnidirectional antenna /Ein Wellentypwandler mit Einspeisung zur Erregung einer Rundstrahlantenne/.

11 p1854 A69-25616

## FELDMANN, J. W.

Numerical treatment of mixed boundary value problems in two-dimensional elastostatics.

15 p2706 A69-30432

## FELDSHTEIN, IA. I.

Cross-sectional dimensions of the magnetospheric tail at various intensities of polar magnetic disturbances /Razmery poperechnogo secheniia shleifa magnetosfery pri razlichnoi intensivnosti poliarnykh magnitnykh vozmushchenii/.

05 p0753 A69-16050

Asymmetry of ring current during different phases of a geomagnetic storm.

07 p1129 A69-19611

Influence of the ring current on the location of the auroral oval /Vliianie kol'tsevoogo toka na polozhenie ovala siiani/.

09 p1485 A69-21532

Reference level for field readings in the calculation of S sub q variations /Ob urovne otscheta polia pri vychislenii S sub q -variatsii/.

09 p1575 A69-21551

The form of the equivalent current system of polar geomagnetic disturbances /O forme ekvivalentnoi tokovoi sistemy poliarnykh geomagnitnykh vozmushchenii/.

10 p1688 A69-23937

The auroral oval and the ring current in the earth's magnetosphere.

10 p1689 A69-24203

Ring current in the magnetosphere and low-latitude magnetic bays /Kol'tsevoi tok v magnitosfere i nizkoshirotnye magnitnye bukhty/.

13 p2253 A69-27699

Boundary of the captured electrons with E greater than or equal to 280 kev and the position of current electrojets in the ionosphere /Granitsa zakhvachennykh elektronov s E greater than or equal to 280 keV i polozhenie takovykh elektrostrui v ionosfere/.

13 p2327 A69-27700

Influence of the ring current on the position of the auroral oval.

16 p2783 A69-32527

Reference field level in the computation of S sub q variations.

16 p2851 A69-32546

Polar Auroras /Poliarnye Siiani/.

17 p2962 A69-33949

Polar auroral belt during magnetic disturbances /Polosa poliarnykh siiani pri magnitnykh vozmushcheniakh/.

17 p2963 A69-33951



Polar auroras at the minimum and maximum of the solar activity cycle /Poliarnye siianiia v minimume i maksimume tsikla solnechnoi aktivnosti/.

17 p2963 A69-33955

Quiet solar-diurnal variations of the geomagnetic field during the IGY. IV - High-latitude variations /Spokoinye solnechno-sutochnye variatsii geomagnitnogo polia v period MGG. IV - Variatsii v vysokikh shirotakh/.

17 p2964 A69-33960

Magnetic activity at high latitudes in the Northern Hemisphere during the solar cycle maximum and minimum /Magnitnaia aktivnost' v vysokikh shirotakh severnogo polushariia v period maksimuma i minimuma solnechnogo tsikla/.

17 p2965 A69-33966

Pi2 pulsations, polar aurora ovals, and the plasma density in the magnetosphere /Pul'satsii Pi2, oval poliarnykh siiani i plotnost' plazmy v magnitosfere/.

19 p3303 A69-36205

Dimensions of cross section of magnetotail at different intensities of polar magnetic disturbances.

20 p3532 A69-37959

## FELDSTEIN, Y. I.

Polar auroras, polar substorms, and their relationships with the dynamics of the magnetosphere.

12 p2072 A69-26741

The auroral orientation curves for the IQSY.

24 p4308 A69-43009

## FELGATE, D. G.

Buckland Park aerial array.

24 p4286 A69-42607

## FELGINA, S. B.

Effect of decomposition of the solid solution on recrystallization of magnesium alloys /O vliianii raspada tverdogo rastvora na rekristallizatsii magniemykh splavov/.

11 p1902 A69-24272

## FELIX, H.

Onboard computer project on the Roseau satellite /Projet de calculateur embarque sur le satellite Roseau/.

20 p3501 A69-37389

## FELIX, M. R.

Real-time trajectory determination for the Apollo missions.

[AIAA PAPER 69-938]

22 p4020 A69-40321

## FELLE, K.

Automatic contour plotting in the production of orthophotos /Automatische Erzeugung von Hoehenschichtlinien bei der Herstellung von Orthophotos/.

22 p3951 A69-41248

## FELLER, A.

Computer programming - A design aid.

10 p1659 A69-23141

## FELLER, D. D.

In vivo utilization of acetate-1-C super 14 in centrifuged rats.

07 p1067 A69-19429

Conversion of acetate-2-super 14 C to super 14 CO sub 2 and super 14 C-fatty acids in the partially hepatectomized rat /33627/.

19 p3257 A69-35976

Effects of hyperoxia and hypoxia on mitosis in the normal and regenerating rat liver.

24 p4269 A69-43565

## FELLER, M.

Configuration management.

20 p3640 A69-38021

## FELLERHOFF, R. D.

Parachute system to recover spinning shell subjected to 20,000 g's. [AIAA PAPER 68-937]

12 p2014 A69-26805

## FELLGATE, P.

Towards efficient astronomy.

20 p3539 A69-37525

## FELLGETT, P. B.

Large flux-collectors for infrared astronomy.

13 p2239 A69-27605

## FELLI, M.

A search at 15 GHz for compact H II regions in regions of possible star formation.

22 p4024 A69-40576

## FELLINGER, M.

Elastic scattering of negative pions from deuterons at 2.01, 3.77, and 5.53 GeV/c.

17 p3007 A69-32885

Pi super minus p elastic scattering at 2.51, 2.76, and 3.01 GeV/c near t approximately equal to minus 3 /GeV/c/super 2.

24 p4352 A69-43049

## FELLS, I.

An investigation into heat transfer from unseeded propane-air flames augmented with D.C. electrical power.

06 p1035 A69-17934

Experimental and theoretical studies of gaseous suspensions of thermionic emitting particles for use as MHD working fluids.

10 p1738 A69-23491

## FELS, M. F.

Positronium formation in positron-helium scattering.

24 p4353 A69-43815

## FELSEN, L. B.

Ray optics - A novel approach to scattering by discontinuities in a waveguide.

14 p2423 A69-29753

Propagation in inhomogeneous and dispersive media.

17 p2924 A69-33838

Progress in radio waves and transmission of information. I - Radio waves.

19 p3276 A69-36431

Transients in dispersive media. I - Theory.

20 p3494 A69-37841

Transients in dispersive media. II - Excitation of space waves and surface waves in a bounded cold magnetoplasma.

20 p3494 A69-37842

## FELSING, G. W.

Coanda flow over a circular cylinder with injection normal to the surface.

16 p2772 A69-32148

## FELSKE, D.

Measurements of the vertical and latitudinal distribution of ionospheric inhomogeneities with the aid of Explorer 22 /S 66/ signals /Messungen der Hoehe- und Breitenverteilung von Inhomogenitaeten in der Ionosphaere mit Hilfe der Signale von Explorer 22 /S 66/.

01 p0064 A69-10446

Determination of the total number of electrons in the ionosphere from the Faraday effect with the aid of signals from the ATS-3 satellite /Opredelenie obshchego chisla elektronov ionosfery po efektu Faradeia s pomoshch'iu signalov sputnikn ATS-3/.

02 p0237 A69-11660

Determination of the total number of electrons in the ionosphere from the Faraday effect by means of signals from the ATS-3 satellite.

13 p2256 A69-28691

## FELSTEAD, E. B.

Additional optical data processing techniques for surface roughness studies.

12 p2079 A69-25910

## FELTEN, E. J.

The interaction of the alloy niobium-25titanium with air, oxygen and nitrogen. I - The unusual oxidation behavior of Nb-25Ti at 1000 deg C.

08 p1331 A69-20193

The interaction of the alloy niobium-25titanium with air, oxygen and nitrogen. II - The reaction of Nb-25Ti in air and oxygen between 650 deg and 1000 deg C.

08 p1331 A69-20194

The interaction of the alloy niobium-25titanium with air, oxygen and nitrogen. III - The products of the Nb-Ti-N reaction at 1000 deg C.

08 p1331 A69-20195

## FELTEN, J. E.

Cosmological implications of the diffuse X-ray background.

09 p1578 A69-22152

## FELTHAM, P.

A stochastic model of creep.

03 p0529 A69-13942

## FELTNER, C. E.

Selecting materials to resist low cycle fatigue.

[ASME PAPER 69-DE-59]

14 p2461 A69-28852

## FELTON, L. P.

Optimized components in truss synthesis.

02 p0347 A69-12536

Optimum structural design.

[SAE PAPER 680752]

03 p0525 A69-13437

## FELTYN, J. A.

Charge motion in MOS-structures with a pyrolytic SiO sub 2 film on germanium /Dvizhenie zaryadov v

MOS-strukturakh s piroliticheskoi plenkoi SiO sub 2 na germanii/.

07 p1200 A69-19010

## FENAIN, M.

Transferring boundary values to a fictitious contour in the numerical solution of partial differential equations /A propos du report des donnees aux limites sur une frontiere fictive dans la resolution numerique des equations aux derivees partielles/.

[ONERA-TP-646]

03 p0454 A69-12874

## FENAUGHTY, R. R.

Airload, blade response, and hub force measurements on the NH-3A compound helicopter. [AIAA PAPER 68-980]

24 p4250 A69-43711

## FENBY, R. G.

Electronic beam-rotation for circular arrays using matrix network.

08 p1288 A69-20964

## FENDELL, F.

Near-equilibrium decomposition burning of monopropellant droplets in a stagnant atmosphere.

12 p2190 A69-25948

On the structure of mature severe storms.

[AIAA PAPER 69-671]

17 p2997 A69-33499

## FENDER, D. H.

The interplay of drifts and flicks in binocular fixation.

22 p3883 A69-40876

## FENDLEY, J. R., JR.

Continuous UV lasers.

[IEEE PAPER L-1]

05 p0775 A69-16321

## FENG, C.

Anisotropy in plastic flow of a Ti-8Al-1Mo-1V alloy.

17 p2987 A69-33078

## FENG, C. C.

Free vibration analysis by the modal substitution method.

02 p0338 A69-11747

The application of flowgraphs to elastomechanical systems. [AAS PAPER 69-151]

24 p4339 A69-42816

## FENICHEL, H.

Low temperature specific heat of praseodymium magnesium nitrate.

12 p2026 A69-25784

## FENN, J. B.

Viscous effects on impact pressure measurements in low density flows at high Mach numbers.

02 p0234 A69-12633

Strand size and low pressure deflagration limit in a composite propellant. [AIAA PAPER 69-144]

06 p0983 A69-18162

Molecular beam experiments in the lunar environment.

18 p3113 A69-34240

## FENNELL, R.

A boundary value problem for a system of nonlinear functional differential equations.

14 p2470 A69-28906

## FENNEMA, J. W. R.

A comparison between the parametric treatments of ion-atom collision for low and high impact velocities.

05 p0797 A69-16697

## FENNER, G. E.

Influence of hot electrons on the optical absorption in Fe-doped CdTe.

19 p3389 A69-36551

## FENNING, L. M.

Stress-induced ocular-motor failures in pilots and astronauts /Stressinduzierte Augenmuskelerregung bei Piloten und Raumfahrern/.

03 p0370 A69-13470

Stress-induced transitory oculomotor imbalance and its significance in aerospace flight.

23 p4087 A69-41804

Oculobulbar vergence changes induced by M-1 Val-salva maneuvers.

24 p4266 A69-43373

## FENSTER, P.

An optical technique for measurement of gas flow profiles utilizing a ring laser.

04 p0596 A69-14281

## FENTON, A. G.

Correlation between the cosmic-ray solar daily variation underground and geomagnetic activity.

09 p1583 A69-22755

A new determination of muon directional coupling coefficients.

09 p1583 A69-22759

**FENTRESS, G. H.**  
An attenuation and phase shift divider circuit.  
04 p0573 A69-14337

**FENVES, S. J.**  
Design using symbolic topological equations.  
17 p2933 A69-33709  
Problem-oriented languages.  
18 p3106 A69-34658

**FEODOSEV, V. I.**  
Axisymmetric elastic properties of a spherical shell /Osesimmetrichnaia elastika sfericheskoi obolochki/.  
18 p3224 A69-35318

**FERBER, R. R.**  
The shielding of electromagnetic pulses by use of magnetic materials.  
23 p4141 A69-42222

**FERDINAND, A. P.**  
High speed photographic techniques in a ballistic range.  
12 p2088 A69-26182

**FERDMAN, N. A.**  
Carrier dragging in a solid under the influence of laser emission.  
13 p2271 A69-27661

**FERENCZ, CS.**  
The satellite radio observation station of the Budapest Technical University - Reception of APT pictures /Sputnikovaia radionabludatel'naia stantsiia Tekhnicheskogo Universiteta v Budapeshte - Priem APT- Kartin/.  
12 p2059 A69-26449  
Wave propagation in inhomogeneous, anisotropic, time-varying medium.  
13 p2219 A69-27397  
Some theoretical contributions concerning the Doppler geodetical measurements.  
15 p2601 A69-31375

**FERENCZ, I.**  
Some theoretical contributions concerning the Doppler geodetical measurements.  
15 p2601 A69-31375

**FERGUSON, E. E.**  
Some aspects of the metal ion chemistry of the earth's atmosphere.  
01 p0071 A69-11168  
Origin of water cluster ions in the D region.  
14 p2434 A69-28940  
A simple receiving and display system for Alouette 1 ionograms.  
20 p3507 A69-37861

**FERGUSON, J. L.**  
Electrically driven blast waves.  
16 p2768 A69-31664

**FERGUSON, T. B.**  
Centrifugal compressors for gas turbines.  
[IME PAPER 1]  
12 p2146 A69-25790

**FERNANDEZ-MORAN, H.**  
Electron microscopy of DNA conformations in spinach chloroplasts.  
20 p3479 A69-38001

**FERNANDEZ-SINTES, J.**  
A foldable tubular connection and its application to an expandable lattice column.  
06 p1024 A69-17608

**FERNANDEZ, F. L.**  
Effect of finite plate length on supersonic turbulent boundary layer with large distributed surface injection.  
[AIAA PAPER 69-162]  
06 p0864 A69-18138  
Experiments in supersonic turbulent flow with large distributed surface injection.  
[AIAA PAPER 68-129]  
24 p4304 A69-43581

**FERNANDO, C. E.**  
Observation of faults in convertor bridges.  
15 p2575 A69-30180

**FERNANDO, P. C. B.**  
Nighttime equatorial Pi 2 micropulsations.  
07 p1125 A69-18841

**FERNHOLZ, H.-H.**  
Experimental investigation of an incompressible turbulent boundary layer with near-zero wall friction at a circular cylinder situated longitudinally in a flow /Experimentelle Untersuchung einer inkompressiblen turbulenten Grenzschicht mit Wandreibung nahe Null an einem laengsangestromten Kreiszyylinder/.  
03 p0416 A69-13664

**FERNIE, J. D.**  
Classical Cepheids and galactic structure.  
10 p1773 A69-22962

A new determination of Oort's constant A from cepheids.  
12 p2153 A69-25804  
UBV observations of P Cygni.  
12 p2172 A69-27159

**FERRARA, A.**  
LM flight simulation in the space environment.  
[AIAA PAPER 69-991]  
22 p3920 A69-40369

**FERRARA, J. D.**  
Solar electric propulsion system evaluation.  
[AIAA PAPER 69-498]  
16 p2843 A69-32708

**FERRARA, R.**  
Study of the scattering of a laser beam in artificially produced fog /Studio dello scattering di un fascio laser in nebbia prodotta artificialmente/.  
24 p4328 A69-43503  
Visibility and polar conductivity in fog /Visibilita e conducibilita polare in nebbia/.  
24 p4347 A69-43506

**FERRARESE, J.**  
New concepts in in-flight monitoring.  
22 p3894 A69-41150

**FERRARI, C.**  
Transonic Aerodynamics.  
04 p0541 A69-14580

**FERRARI, E. J.**  
Suppression of interference in a congested spectrum.  
23 p4128 A69-42503

**FERRARI, G.**  
Notes on droplet heat transfer.  
15 p2718 A69-31117  
Bubble flow up to the critical pressure.  
[ASME PAPER 69-HT-30]  
24 p4411 A69-43529

**FERRARI, V. J., JR.**  
Psychophysiological factors in USAF aircraft mishaps involving ground egress.  
06 p0878 A69-16959  
USAF ejection experience in the combat environment - 1 January 1967-30 June 1968.  
06 p0878 A69-16960  
Psychophysiological factors in USAF aircraft mishaps involving ground egress.  
15 p2558 A69-30462

**FERRARIO, A.**  
An argon-ion laser with a mercury pool cathode.  
12 p2107 A69-26326  
Interaction mechanisms of laser transitions in argon and krypton ion laser.  
13 p2270 A69-27204

**FERRARO, A. J.**  
Winter D-region electron concentration and collision frequency features obtained with high-power interaction measurements.  
09 p1489 A69-21702  
Comparison of two groundbased D-region experiments.  
15 p2606 A69-31537  
Changes in electron density and collision frequency at University Park, Pennsylvania during the stratospheric warming of 1967/68.  
21 p3714 A69-38556

**FERRARO, V. C. A.**  
The solar-terrestrial environment - An historical survey.  
12 p2161 A69-26941

**FERRAZ-MELLO, S.**  
The construction of absolutely plane orbits /Sur la construction d'orbites absolues planes/.  
08 p1390 A69-20275  
The construction of absolute orbits - The space problem /Sur la construction d'orbites absolues - Le probleme spatial/.  
15 p2690 A69-30622

**FERRAZ, J. E. G.**  
Alternatives for instructional broadcast satellites.  
13 p2381 A69-27373

**FERRELL, K. R.**  
The development of an improved method of conducting height-velocity testing on rotary wing aircraft.  
[AHS PAPER 353]  
17 p2900 A69-33524

**FERRELL, W. R.**  
Human operator decision-making in manual control.  
20 p3482 A69-37720

**FERRER, M. A.**  
The juridical problem of a lunar station /La problematica juridica de una estacion lunar/.  
20 p3637 A69-37119

**FERRERA, J.**  
Electric propulsion system performance evaluation.  
[AIAA PAPER 69-236]  
09 p1560 A69-21213

**FERRERO, G.**  
Influence of the radiative effect on the stability and oscillations of a magnetic gaseous mass /Influenza dell'effetto radiativo sulla stabilita e sulle oscillazioni di una massa gassosa magnetica/.  
14 p2522 A69-29596

**FERRI, A.**  
Supersonic combustion technology.  
11 p2003 A69-25596  
Some observations on heterogeneous mixing inside channels.  
19 p3300 A69-36785  
Effects of lengthwise lift distribution on sonic boom of SST configurations.  
24 p4253 A69-43661

**FERRIER, B. E., JR.**  
Operational flight program validation plan for missiles.  
19 p3279 A69-35955

**FERRIER, W. G.**  
The zone plate and its role in holography.  
22 p3947 A69-40864

**FERRIN, I. R.**  
Brightness variations of the comet Alcock 1963 b and its correlation with solar phenomena.  
08 p1394 A69-20620

**FERRIS, H. W.**  
Development of the OH-6A drive system for RVN load spectrums.  
[AHS PAPER 374]  
17 p2900 A69-33514

**FERRIS, J. E.**  
Experimental study of a spherical array of circularly polarized elements.  
04 p0573 A69-14331

**FERRY, D. K.**  
Orientation studies of the microwave emission from InSb.  
07 p1198 A69-18647  
Propagation in the earth's atmosphere.  
11 p1837 A69-25003

**FERRY, V.**  
Birds and aviation /Les oiseaux et l'aviation/.  
18 p3090 A69-34695

**FERTMAN, E. V.**  
Influence of molybdenum disulfide on the electrochemical corrosion of metals /Vliianie disulfida molibdena na elektrokhimicheskuiu korroziiu metallov/.  
21 p3733 A69-39804

**FERZIGER, J. H.**  
Non-grey radiative heat transfer between parallel plates.  
06 p1033 A69-17554

**FESCHOTTE, P.**  
On the origin of lunar relief.  
15 p2698 A69-31373

**FESENKO, B. I.**  
Observational selection and statistics of visual binary systems. II - Statistics.  
12 p2159 A69-26666

**FESENKO, E. G.**  
Classification of barium titanate modifiers /Klassifikatsiia modifikatorov titanata bariia/.  
22 p3996 A69-41161

**FESENKO, V. V.**  
Study of the vaporization and thermodynamic properties of silicon nitride /Issledovanie ispareniiia i termodinamicheskikh svoistv nitrida kremniia/.  
12 p2118 A69-26261  
Study of the rate of vaporization of titanium, zirconium, hafnium, niobium, and tantalum carbides at high temperatures /Issledovanie skorosti ispareniiia karbidov titana, tsirkoniia, gafniia, niobiia i tantalata pri vysokikh temperaturakh/.  
15 p2640 A69-30983  
Thermodynamic characteristics of high-melting-point carbides in the homogeneity region /O termodinamicheskikh kharakteristikakh tugoplavkikh karbidov v oblasti gomogenosti/.  
21 p3742 A69-38614

**FESENKOV, V. G.**  
Advances in meteoritics /Uspekhi meteoritiki/.  
01 p0159 A69-11367  
Tunguska fall and associated problems /Tunguskoe padenie i sviazannye s nim problemy/.  
01 p0159 A69-11378



- Optical sounding of cosmic dust in the upper atmosphere.  
04 p0594 A69-15246
- Basic advances in meteoritics /Osnovnye uspekhi meteoritiki/.  
09 p1593 A69-21581
- Certain timely problems of atmospheric optics /O nekotorykh aktual'nykh zadachakh atmosfornoj optiki/.  
12 p2055 A69-25815
- FESQ, H. W.**  
The composition of the stony meteorites. IV - Some analytical data on Orgueil, Nogoya, Orans and Ngawi.  
24 p4382 A69-42927
- FESSENDEN, R. D.**  
Computer aided weight/sizing program for entry spacecraft.  
[SAWE PAPER 797] 18 p3208 A69-34903
- FESSLER, H.**  
Stresses at end-milled keyways in plain shafts subjected to tension, bending, and torsion.  
19 p3445 A69-36827
- A material for accelerated creep testing with models.  
21 p3844 A69-39320
- FESSLER, T. E.**  
Decay of super 136 La and super 134 La.  
01 p0122 A69-10100
- FESTA, G. G.**  
Neutrino-pair bremsstrahlung from a degenerate electron gas.  
18 p3176 A69-35004
- FESTED, E. A.**  
Distributions of cycles-to-failure in simple fatigue and the associated reliabilities.  
19 p3437 A69-36032
- FESTER, D. A.**  
Liquid fluorine no-vent loading studies.  
[AIAA PAPER 69-579] 16 p2767 A69-32715
- Main tank injection for packaged liquid missiles.  
[AIAA PAPER 68-627] 19 p3429 A69-35947
- FESTINGER, J.-C.**  
Measurement of wall pressures and heat fluxes in a hypersonic flow at low Reynolds numbers /Mesures de pressions parietales et de flux thermiques dans un ecoulement hypersonique aux faibles nombres de Reynolds/.  
16 p2731 A69-31605
- FETISOV, B. A.**  
Observation of plasma instability in a strong alternating electric field.  
09 p1552 A69-22526
- FETISOV, E. P.**  
Transformation of a surface wave into a space wave during scattering at random surface roughnesses /O transformatsii poverkhnostnoi volny v prostranstvennui pri rasseianii na sluchainykh nerovnostiakh poverkhnosti/.  
10 p1658 A69-23952
- Electrodynamic description of a high-frequency flame discharge /Elektrodinamicheskoe opisaniye vysokochastotnogo fakel'nogo razriada/.  
12 p2140 A69-27125
- Applicability of an electrodynamic model to a high-frequency flame discharge stabilized by axial injection /O primenimosti elektrodinamicheskoi modeli k vysokochastotnomu fakel'nomu razriadu, stabilizirovannomu osevm prodivom/.  
12 p2140 A69-27126
- Certain problems of the generation of dense plasma jets in a flowing high-frequency flame discharge /Nekotorye voprosy generatsii plotnykh plazmennyykh strui v protochnom vysokochastotnom fakel'nom razriade/.  
12 p2140 A69-27127
- A shielded high-frequency flame discharge /Ekranirovannyi vysokochastotnyi fakel'nyi razriad/.  
12 p2140 A69-27128
- Certain problems of matching high-frequency oscillators to a load in the form of a flame discharge /Nekotorye voprosy soglasovaniya vysokochastotnykh generatorov s nagruzkoi v vide fakel'nogo razriada/.  
12 p2140 A69-27129
- Current-convective instability in an inhomogeneous solid-state plasma /Tokovo-konvektivnaya neustoiichivost' v neodnorodnoi tverdotel'noi plazme/.  
15 p2665 A69-30042
- FETT, F.**  
Experimental investigation of the control behavior of a jet engine during air bleed /Experimentelle Untersuchung des Regelverhaltens eines Strahltriebwerks bei Luftentnahme/.  
13 p2325 A69-27444

The dynamic behavior of jet engines, especially during perturbations /Das dynamische Verhalten von Strahltriebwerken insbesondere bei Stoerungen/.  
15 p2671 A69-30931

Methods of thrust increase and their evaluation /Methoden der Schuberoehung und ihre Bewertung/.  
23 p4199 A69-41578

**FETTING, F.**

The stabilization of turbulent ammonia-air flames on flameholders.  
21 p3849 A69-38808

**FEUERSTEIN, G.**

Kinetic study of fast gas reactions with shock waves /Kinetische Untersuchung schneller Gasreaktionen mit Stosswellen/.  
08 p1304 A69-20707

**FEUERSTEIN, S.**

Low-energy electron-diffraction studies of the interaction of oxygen with a molybdenum /100/ surface.  
16 p2748 A69-32795

Stress-induced desorption from aluminum, magnesium, and molybdenum.  
23 p4176 A69-41541

**FEUGIER, A.**

Chemiluminescence and chemionization in flames /Chimiluminescence et chimionisation dans les flammes/.  
06 p1032 A69-17423

Thermal radiation of potassium in gases used in magnetohydrodynamics /Rayonnement thermique du potassium dans les gaz utilises en magnetohydrodynamique/.  
13 p2308 A69-28022

**FEUSSNER, K.**

Inertial motions, equipotential surfaces, and Coriolis forces on the earth's ellipsoid /Ueber Traegheitsbewegungen, Aequipotentiaelflaechen und Corioliskraefte auf dem Erdellipsoid/.  
24 p4346 A69-43156

**FEWTRELL, H. E.**

Reliability, the management of imperfection.  
18 p3146 A69-34513

**FEZER, F.**

Application of aerial photographs in geomorphology /Die verwendung des Luftbildes in der Geomorphologie/.  
20 p3539 A69-37512

**FIACCO, A. V.**

Nonlinear Programming- Sequential Unconstrained Minimization Techniques.  
04 p0563 A69-14421

**FIALKO, E. I.**

Evaluation of the exponent in the mass distribution law of meteoric bodies for the Leonids in 1967 /Otsenka pokazatelya stepeni v zakone raspredeleniya meteornykh tel po massam dlia potoka Leonid 1967 g./.  
18 p3203 A69-35334

Meteor radio electronics /Meteornaia radioelektronika/.  
19 p3277 A69-36591

**FIALKOV, I. I. A.**

Liquid Binary Systems /Dvoynye zhidkie sistemy/.  
21 p3670 A69-39529

**FICARRA, A.**

Radioemission from planetary nebulae observed with the pencil beam of the "Northern Cross" radiotelescope.  
01 p0157 A69-11291

The Italian cross radio telescope. III - Operation of the telescope.  
19 p3295 A69-36643

**FICHERA, E.**

Determination of an instrument azimuth /Sulla determinazione dell'azimut strumentale/.  
16 p2791 A69-32227

**FICHTEL, C. E.**

Energetic solar particles.  
03 p0498 A69-12934

Cosmic-ray propagation.  
05 p0816 A69-16361

Composition of the 2nd September 1966 solar particle event.  
06 p0989 A69-17280

A gamma ray telescope utilizing large area wire spark chambers.  
[IEEE PAPER 3A-5] 07 p1134 A69-19192

Composition of cosmic rays measured in Gemini XI.  
21 p3787 A69-38350

**FICHTL, G. H.**

Characteristics of turbulence observed at the NASA 150-m meteorological tower.  
01 p0110 A69-10695

Approximate equations of motion for gases and liquids.  
12 p2061 A69-26019

Detailed wind and temperature profiles.  
17 p2999 A69-33739

**FIDELLE, T. P., JR.**

A semi-discrete approximate solution of the inverse problem of transient heat conduction.  
[ASME PAPER 68-WA/HT-26] 05 p0848 A69-16121

**FIEBELMANN, P.**

A heat pipe thermionic reactor concept.  
14 p2480 A69-29187

**FIEBIG, M.**

Calculation of the incident current in tubes with variable cross sections /Berechnung der Anlaufstromung in Rohren veraenderlichen Querschnitts/.  
10 p1677 A69-22897

**FIEDLER, H. E.**

Jets and wakes in tailored pressure gradient.  
08 p1252 A69-20782

Some measurements in the immediate near wake of blunt bodies.  
[AIAA PAPER 69-746] 18 p3084 A69-34409

**FIELD, D. R.**

A model to describe long-term performance characteristics of pressure contacted lead-telluride thermoelectric generators.  
23 p4188 A69-42262

**FIELD, E. C.**

Propagation of ELF waves under normal and naturally disturbed conditions.  
18 p3101 A69-34949

**FIELD, G. B.**

Cosmic-ray heating of the interstellar gas.  
10 p1770 A69-24095

Interstellar clouds.  
16 p2853 A69-31599

Intensity of the soft X-ray background flux.  
21 p3788 A69-38541

**FIELD, J. E.**

A high-speed photographic investigation of the controlled fracture of conducting solids and the interruption of electric current.  
12 p2113 A69-26195

Diagnosis of service failures.  
24 p4398 A69-42772

**FIELD, M.**

Surface integrity - Its effect on product quality.  
18 p3149 A69-35129

**FIELD, R. A.**

Time-intensity data in solar cosmic-ray events - Biological data relevant to their effects in man.  
03 p0374 A69-13500

**FIELD, T. T.**

A new technique for revealing plastic deformation in nickel-base superalloys.  
21 p3744 A69-38741

**FIELDER, G.**

Size-frequency distributions of particles and lunar surface materials.  
02 p0325 A69-12567

Explosion craters on the earth and moon.  
04 p0656 A69-14670

**FIELDER, L. J.**

Structural materials for the SST.  
24 p4324 A69-43436

**FIELDING, S. J.**

A phase sensitive interferometer for the measurement of electron density in transient plasmas.  
22 p3946 A69-40438

**FIELDS, D. P.**

Launch-period selection for the 1972 Venus launch opportunity.  
[AAS PAPER 68-135] 21 p3805 A69-39208

**FIESCHI, R.**

Positron annihilation in semiconductors.  
03 p0485 A69-13295

**FIEVET, F.**

Statistical linearization of nonlinear memory-type elements /Linearisation statistique des organes non-lineaires a memoire/.  
03 p0409 A69-13005

- FIFE, P. C.**  
Existence of convective solutions of the generalized Benard problem which are analytic in their norm.  
14 p2540 A69-29679
- FIFE, W. P.**  
Comparative cardiovascular responses of baboons and dogs to near-vacuum pressures.  
06 p0875 A69-17846
- FIGARO, B. A.**  
A space triangulation method by means of satellite astrometry /Kosmicheskaya triangulatsiya metodom astrometrii sputnikov zemli/.  
11 p1956 A69-24400
- FIGUERAS, R. I.**  
Influence of dynamic unbalance on spin stabilized rockets.  
[SAVE PAPER 741]  
18 p3208 A69-34886
- FILALKOW, E.**  
The transmission of electromagnetic waves through the ionosphere at micropulsation frequencies.  
17 p2927 A69-33864
- FIKE, C. T.**  
Computer Evaluation of Mathematical Functions.  
05 p0723 A69-15955
- FIKE, R. M.**  
Measurements of the pressure and thermal environment in an Aerobee 150 sounding rocket.  
09 p1610 A69-22005
- FIL, I. D.**  
The question of using light converters for optical pumping.  
05 p0777 A69-16373
- FILATOV, A. N.**  
The averaging method in nonlinear mechanics /O metode usredneniya v nelineinoi mekhanike/.  
20 p3576 A69-37440
- FILATOV, E. I.**  
Additional aerodynamic forces and moments acting on a body of revolution rotating about the symmetry axis in free-molecular flow /Dopolnitel'nye aerodinamicheskie sily i momenty, deistvuyushchie na telo vrashcheniya, zakruchennoe otositol'no osi simetrii v svobodnomlekuliarnom potoke/.  
24 p4243 A69-42583  
The problem of selecting a wing configuration for hypersonic velocities /K zadache o vybere formy kryla dlia giperzvukovykh skorostei/.  
24 p4247 A69-43497
- FILATOV, M. IA.**  
Fatigue resistance during complex stress-variation cycles /Review/.  
04 p0673 A69-14535
- FILATOV, O. N.**  
Dependence of the forbidden bandwidth of indium antimonide films on their thickness /Zavisimost' shiriny zapreshchennoi zony plenok antimonida india ot tolschiny/.  
15 p2666 A69-30044  
Structure of the absorption edge of indium antimonide thin films /Struktura kraia polosy pogloshcheniya tonkikh plenok antimonida india/.  
21 p3783 A69-39560
- FILATOV, P. P.**  
Single-mode regime in a gas ring laser /Odomodovyi rezhim v gazovom kol'tsevom lazere/.  
17 p2982 A69-33632
- FILATOVA, L. A.**  
Study of the high-temperature oxidation of the Sikhote-Alin iron meteorite /Issledovanie vysokotemperaturnogo oksleniya sikhote-alinskogo zheleznoogo meteorita/.  
01 p0025 A69-11373
- FILCHAGIN, N. M.**  
Accuracy of sighting and identifying points during measurements of their coordinates from aerial photographs /K voprosu o tochnosti vizirovaniya i otkazhestveniya tochek pri izmerenii ikh koordinat po aerosnimkam/.  
21 p3719 A69-38404
- FILCHAKOV, P. F.**  
Application of a power series technique to the solution of a problem for a parabolic equation /Zastosuvaniya metody stepennykh riadov do rozv'iazanniya odnei zadachi rivianniya parabolichnogo tipu/.  
09 p1532 A69-21628  
Solution of nonlinear and linear ordinary differential equations and systems of such equations with the aid of power series /Reshenie nelineinykh i lineinykh obyknennykh differentsial'nykh uravnenii i ikh sistem pri pomoshchi stepennykh riadov/.  
12 p2120 A69-26199
- A method of solving a system of algebraic and transcendental equations /Pro odin metod rozv'iazanniya sistem algebraichnikh chi transsendentnykh ravnaniy/.  
12 p2123 A69-26608
- FILENKO, I. I.**  
Obtaining holograms with an incoherent light source.  
09 p1495 A69-21671
- FILIMONOV, G. F.**  
Influence of the lamination effect on the performance of a traveling wave tube /Vliianie effekta rassloeniya na rabotu LBT/.  
05 p0727 A69-15642  
Effect of stratification on TWT operation.  
16 p2762 A69-32499
- FILIMONOV, S. S.**  
Combined heat transfer calculations.  
23 p4237 A69-41328
- FILIMONOV, V. I.**  
Study of combustion instability in liquid-fuel rocket engines /K issledovaniyu neustoiichivosti goreniya v zhidkostnykh raketnykh dvigatelakh/.  
01 p0142 A69-10090
- FILIMONOVA, E. A.**  
Interaction between an ion beam and a plasma target in the presence of charge exchange /Vzaimodeistvie ionnogo potoka s plazmoi misheni pri pereziaradke/.  
03 p0481 A69-14200
- FILIN, V. A.**  
Influence of inlet conditions on heat transfer in a short curvilinear channel /Vliianie uslovii vkhoda na teploobmen v korotkom krivolineinom kanale/.  
21 p3850 A69-38866
- FILINA, L. I.**  
Mechanical properties of diffused chromized layers.  
03 p0450 A69-13913
- FILINOV, V. S.**  
Investigation of phase transitions by the Monte Carlo method /Issledovanie fazovykh perekhodov s pomoshch' shch'iu metoda Monte-Karlo/.  
15 p2655 A69-30981
- FILIPESCU, N.**  
Fluorescence spectra of homogeneous and mixed europium complexes.  
01 p0024 A69-10893
- FILIFEV, V. S.**  
Classification of barium titanate modifiers /Klassifikatsiya modifikatorov titanata baria/.  
22 p3996 A69-41161
- FILIPOWSKY, R. F.**  
Concepts of integrated adaptive data transmission systems.  
23 p4121 A69-41760
- FILIPPCHENKO, A. S.**  
Thermal EMF in p-type indium antimonide /Termoeds v antimonide india p-tipa/.  
06 p0981 A69-17881  
Thermoelectric power of p-type indium antimonide.  
14 p2503 A69-28790
- FILIPPENKO, L. G.**  
Heating of a medium by an explosion in the presence of allotropic modifications and of thermochemical reactions in the medium.  
03 p0534 A69-14159
- FILIPPOV, A. P.**  
Dynamics and Strength of Machines /Dinamika i Prochnost' Mashin/.  
06 p1026 A69 18013  
Numerical Methods in the Applied Theory of Elasticity /Chislennyye metody v prikladnoi teorii uprugosti/.  
18 p3211 A69-34331
- FILIPPOV, E. I.**  
Angular and energy distribution of gamma quanta during a Compton effect at relativistic electrons /Uglovoye i energeticheskoe raspredeleniya gamma-kvantov pri Kompton-efekte na relativistskikh elektronakh/.  
10 p1701 A69-23132
- FILIPPOV, G. A.**  
Gasdynamics of Two-Phase Media /Gazodinamika Dvukhfaznykh Sred/.  
17 p2948 A69-32951
- FILIPPOV, I. G.**  
Numerical solution for a nonstationary problem of the motion of a rigid obstacle in a compressible fluid /Chislennoe reshenie odnoi nestatsionarnoi zadachi o dvizhenii zhestkoi pregrady v szhimamoi zhidkosti/.  
14 p2430 A69-29480
- FILIPPOV, I. U. F.**  
Diurnal variations of the natural frequencies of the earth - ionosphere resonator in relation to the eccentricity of the geomagnetic field.  
03 p0422 A69-13512  
Effect of the geomagnetic field on the spectrum of microwave noise in the earth-ionosphere resonator /Vplyv geomagnitnogo polia na spektr nadvysokochastotnykh shumiv u rezonatori zemlia-ionosfera/.  
17 p2918 A69-33034
- FILIPPOV, I. U. K.**  
Certain results of the observation of stellar scintillation spectra with the AZT-7 telescope at Golosevo /Nekotorye rezul'taty nabludeniya spektrov mertsaniya zvezd na teleskope AZT-7 v Golosevo/.  
15 p2647 A69-30165
- FILIPPOV, I. U. T.**  
Excitation of the earth-ionosphere waveguide by lightning discharges and the influence of geomagnetic field on the ELF noise spectrum.  
17 p2928 A69-33865
- FILIPPOV, V. L.**  
Arrangement for studying atmospheric spectral transparency in the infrared spectral region /Ustanovka dlia issledovaniya spektral'noi prozrachnosti atmosfery v ik oblasti spektra/.  
05 p0759 A69-16639  
System for studying the spectral transparency of the atmosphere in the infrared spectral region.  
14 p2433 A69-28795  
Nomograms for calculating the spectral transparency of the atmosphere in the range from 2.8 to 5.6  $\mu$  /Nomogrammy dlia rascheta spektral'noi prozrachnosti atmosfery v oblasti 2,8-5,6 mkn/.  
21 p3759 A69-39117
- FILLIUS, R. W.**  
Penetration of solar protons to four earth radii in the equatorial plane.  
01 p0146 A69-11122
- FILLMORE, F. L.**  
Hydrogen check valve design and development program.  
[AIAA PAPER 69-578]  
16 p2845 A69-32738
- FILLMORE, G. L.**  
Information rates for photocount detection systems.  
20 p3485 A69-36923
- FILONENKO, A. K.**  
Problem of flame propagation with allowance for hydrodynamics and the temperature dependence of the transport coefficients /Zadacha o rasprostraneni plameni s ucheto gidrodinamiki i temperaturnoi zavisimosti koeffitsientov perenosu/.  
17 p3069 A69-33136
- FILONENKO, K. G.**  
Microwave phenomena in a long, slender gas discharge.  
14 p2489 A69-28739
- FIMMELL, R. O.**  
Central data system concepts for spacecraft data management.  
24 p4284 A69-42621
- FIMPEL, H. P.**  
Measurement of standard visibility using scattered-light recorder during the 1965 Atlantic expedition aboard the "Meteor" /Messungen der Normsichtweite mit einem Streulichtschreiber waehrend der Atlantischen Expedition 1965 "Meteor"/.  
04 p0628 A69-15158
- FINATEV, I. U. P.**  
Mach number distribution along the axes of undeexpanded supersonic jets /O raspredelenii chisla Makha po osi sverkhzvukovykh nedorasshirenykh strui/.  
07 p1050 A69-18922
- FINCHER, C. L.**  
Self-Q-switched Nd super 3 super plus -YAG and ruby lasers.  
17 p2979 A69-32916
- FINDLATER, J.**  
Interhemispheric transport of air in the lower troposphere over the western Indian Ocean.  
18 p3166 A69-34420
- FINDLAY, F. D.**  
Relative band intensities in the atmospheric and infrared atmospheric systems of molecular oxygen.  
10 p1681 A69-23163
- FINDLAY, J. A.**  
Design of pivoted-pad journal bearings.  
[ASME PAPER 68-LUBS-27]  
13 p2266 A69-27275



- Thermal structure of an Alouette 2 topside profile as deduced from rocket measurements.  
14 p2510 A69-28942
- Measurements of leakage in mechanical face seals.  
[ASLE FICFS PREPRINT 19]  
15 p2621 A69-30497
- Electron measurements bearing on the energy and particle balance of the upper F region.  
16 p2848 A69-31975
- Ionospheric and magnetic observations at 1000 kilometers during the geomagnetic storm and aurora of May 25-26, 1967.  
18 p3129 A69-34954
- Cylindrical electrostatic probes employed on Alouette II and Explorer XXXI satellites.  
20 p3544 A69-37876
- Comparison of cylindrical electrostatic probe measurements on Alouette II and Explorer XXXI satellites.  
20 p3544 A69-37877
- Comparison of results of Explorer XXXI direct measurement probes.  
20 p3531 A69-37882
- FINDLAY, J. M.**  
A spatial integration effect in visual acuity.  
22 p3879 A69-40840
- FINDLAY, J. W.**  
Planetary exploration strategy.  
02 p0324 A69-12305
- Filled and unfilled aperture telescopes.  
10 p1674 A69-23866
- Scientific space research - The next 10 years.  
18 p3193 A69-34360
- FINDLEY, W. N.**  
Nonlinear combined stress creep experiments on rigid polyurethane foam with application to multiple integral and modified superposition theory.  
04 p0680 A69-15155
- Behavior of nonlinear viscoelastic material under simultaneous stress relaxation in tension and creep in torsion.  
[ASME PAPER 68-WA/APM-8]  
05 p0839 A69-16186
- Behavior of nonlinear viscoelastic material under simultaneous stress relaxation in tension and creep in torsion.  
[ASME PAPER 68-WA/APM-8]  
13 p2362 A69-28121
- FINE, S.**  
A method for detecting and measuring frequency of surface vibrations using a helium-neon laser.  
09 p1515 A69-21430
- FINGER, F. G.**  
The diurnal temperature range of the middle stratosphere.  
03 p0461 A69-13344
- Atmospheric circulation and variability at proposed SST flight levels.  
24 p4251 A69-42711
- FINK, H. J.**  
Magnetic suspension and guidance for high speed rockets by superconducting magnets.  
17 p2946 A69-33789
- FINK, R.**  
Handbook of Solar Simulation for Thermal Vacuum Testing.  
21 p3690 A69-38894
- FINK, U.**  
Charge deflection experiments in beam foil spectroscopy.  
04 p0595 A69-14279
- FINK, W. H.**  
SCF determination of the ground and excited states of NO sub 2.  
06 p0960 A69-17109
- FINKEL, M. W.**  
Portable reflectometer.  
[AIAA PAPER 69-599]  
17 p2973 A69-33264
- FINKEL, V. A.**  
Temperature dependence of the lattice constants of yttrium at 77-300 deg K.  
02 p0298 A69-12047
- FINKELSHTEIN, E. IA.**  
A method for detecting the diffusion current of a p-n junction and application of it to an investigation of the reverse-biased current-voltage characteristics of germanium diodes /Metod vydeleniia diffuzionnogo toka p-n perekhoda i ego primeneniia dlia issledovaniia obratnykh vol'tampernykh kharakteristik germaniyevykh diodov/.  
07 p1105 A69-19007
- The effect of the rate of surface recombination on the diffusion current of certain mesa diodes /Vliianie skorosti poverkhnostnoi rekombinatsii na diffuzionnyi tok nekotorykh meza-diodov/.  
07 p1105 A69-19008
- FINKELSHTEIN, G. B.**  
Kinetics and mechanism of breakdown in graphite materials under intensive wear /Kinetika i mekhanizm razrusheniia grafitovykh materialov pri intensivnom iznashivanii/.  
14 p2467 A69-28912
- FINKELSTEIN, D.**  
Structure of ball lightning.  
22 p3940 A69-40536
- FINKENZELLER, P.**  
"Demultiplied" neuronal discharge periodicities correlated with stimulus frequency in colliculus inferior and geniculatum mediale /Reizfrequenzkorrelierte "untersetzte" neuronale entladungsperiodizitaet im colliculus inferior und im corpus geniculatum mediale/.  
23 p4096 A69-42089
- Sound-correlated DC changes on the intact skull of human subjects /Akustischen Reizen zugeordnete Gleichspannungsanderungen am intakten Schaedel des Menschen/.  
23 p4098 A69-42101
- FINKIN, E. F.**  
Abrasive wear.  
13 p2265 A69-27233
- A theory for the effects of film thickness and normal load in the friction of thin films.  
22 p3955 A69-40407
- FINKLAIRE, S.**  
Concorde and thermal fatigue.  
13 p2241 A69-28102
- FINKLEMAN, D.**  
A note on boundary conditions for use with the differential approximation to radiative transfer.  
20 p3633 A69-37524
- Numerical studies in semigray radiative transfer.  
24 p4415 A69-43673
- FINLAYSON, B. A.**  
Convective instability by active stress.  
14 p2540 A69-29634
- FINLAYSON, J. B.**  
Developments in volcanic gas research in Hawaii.  
02 p0236 A69-11466
- FINN, D. L.**  
Asymptotic sampling errors in closed-loop hybrid systems.  
12 p2053 A69-26508
- FINN, G. D.**  
Studies in spectral line formation. I, II.  
01 p0124 A69-10962
- Studies in spectral line formation. III - Non-linear multi-level atom problems.  
12 p2133 A69-26967
- FINN, H. M.**  
Adaptive detection mode with threshold control as a function of spatially sampled clutter-level estimates.  
01 p0026 A69-10178
- FINN, K. M.**  
A new look at microwave silicon technology.  
09 p1462 A69-21410
- FINNEGAN, T. F.**  
Precise comparison of the Josephson frequency-voltage relation at microwave and far-infrared frequencies.  
20 p3583 A69-37418
- FINSON, M.**  
The axisymmetric, hypersonic near wake with base injection.  
[AIAA PAPER 69-66]  
06 p0914 A69-18115
- FINSTON, M.**  
Experimental investigation of the near wake of a magnetically suspended cone at M sub infinity equals 4.3.  
[AIAA PAPER 69-186]  
06 p0863 A69-18068
- FINTON, J. M.**  
Reliability assessment of operational weapon systems.  
22 p3953 A69-40028
- FINZI, A.**  
Possible conversion of rotational energy of the neutron star in the Crab Nebula into energy of relativistic electrons.  
09 p1591 A69-21454
- FIOCCO, G.**  
Optical radar observations of mesospheric aerosols in Norway during the summer 1966.  
14 p2444 A69-29877
- Study of the scattering of a laser beam in artificially produced fog /Studio dello scattering di un fascio laser in nebbia prodotta artificialmente/.  
24 p4328 A69-43503
- FIORÉ, M. V.**  
Control/display location coding.  
07 p1070 A69-18907
- FIORÉ, N. F.**  
Dislocation damping due to extended dislocations.  
08 p1334 A69-20571
- FIORENTINO, R. J.**  
Manufacture of tubular products by hydrostatic extrusion.  
[SAE PAPER 690319]  
15 p2617 A69-30093
- FORICA, V.**  
Hyperventilation-induced hemolysis in the dog.  
22 p3887 A69-41192
- FIORINO, T. D.**  
Shoulder pressures for slender cone-afterbody combinations in hypersonic flow.  
04 p0542 A69-14735
- FIQUET, J.**  
A new method for the quick analysis of transient phenomena.  
[ONERA-TP-684]  
19 p3293 A69-35747
- FIRAGO, B. A.**  
Geometrical synchronization of astrometric satellite observations - A simple method of processing quasi-synchronous observations when precise times are not available /Geometricheskoe sinkhronizirovanie astrometricheskikh nabludenii iskusstvennykh sputnikov zemli - Ob odnom prostom metode obrabotki kvazisinkhronnykh nabludenii, ne obespechennykh momentami tochnogo vremeni/.  
12 p2158 A69-26432
- Space triangulation by means of satellite astrometry.  
24 p4391 A69-43790
- FIREMAN, E. L.**  
Freshly fallen meteorites from Portugal and Mexico.  
12 p2160 A69-26935
- Radioactive isotopes in Hoba West and other iron meteorites.  
22 p4021 A69-40411
- FIRKOWICZ, S.**  
Certain statistical problems of the reliability of automatic control elements /Niektore zagadnienia statystyczne niezawodnosci elementow automatyki/.  
16 p2764 A69-32199
- FIRKOWSKI, R.**  
Lateral distribution of the muon component in the central region of extensive air showers.  
15 p2677 A69-31481
- FIRSOFF, V. A.**  
On the internal structure of the moon.  
12 p2160 A69-26896
- On the surface temperature of Mars.  
17 p3034 A69-33412
- Rivers of the moon.  
19 p3419 A69-36145
- FIRSOV, IU. A.**  
Hall effect in polaron semiconductors /Ob effekte Kholla v poliaronnykh poluprovodnikakh/.  
03 p0484 A69-13281
- Hall effect in polaron semiconductors.  
14 p2508 A69-29654
- FIRSOV, O. B.**  
A qualitative streamer theory /Kachestvennaia teoriia strimera/.  
11 p1935 A69-25759
- FIRSTOV, S. A.**  
Influence of alloying elements on the dislocation structure of chromium /Vlianie legiruiushchikh elementov na dislokatsionnuu strukturu khroma/.  
18 p3160 A69-35452
- FIRTH, K.**  
Laser power and energy measurement by photoelectric techniques.  
22 p3961 A69-40239
- FISANOV, V. V.**  
Diffraction of cylindrical waves at a half-plane in an anisotropic plasma /Difraktsiia tsilindricheskikh voln na poluploskosti v anizotropnoi plazme/.  
02 p0293 A69-12842

**FISCHBACH, F. F.**

Microwave refraction as a technique for satellite meteorology e Some problems.  
21 p3671 A69-38376

**FISCHEL, E.**

Toward a platform system for European launch vehicles /Zum Plattformsystem der europaischen Traeger-rakete/.  
04 p0629 A69-14809

**FISCHER, B. A.**

Responses of hamsters to He-O sub 2 at low and high temperatures - Induction of hypothermia.  
10 p1646 A69-23564

**FISCHER, C.**

VFW H3 Sprinter - Development of a new autogyro. II /VFW h3 "Sprinter" - Entwicklung eines neuen Flugschraubers. II/.  
16 p2735 A69-32056

VFW-H3 "Sprinter" - A semi-compound with pneumatic motor drive.  
[AHS PAPER 303] 17 p2901 A69-33546

**FISCHER, CHR.**

Production of high grade forgings in titanium and titanium alloys - Their properties and machinability /Herstellung hochwertiger Schmiedestuecke aus Titan und Titanlegierungen, deren Eigenschaften und Spanbarkeit/.  
16 p2801 A69-31785

**FISCHER, E.**

Mechanical effects in type II superconductors.  
02 p0294 A69-11776

Investigation of the behavior of bounded and free arc discharges under the action of transverse magnetic fields and gas flows /Zur Untersuchung des Verhaltens eingeschlossener und freibrennender Bogenentladungen unter dem Einfluss transversaler Magnetfelder und Gasstroemungen/.  
08 p1366 A69-20767

**FISCHER, F. J.**

Stress diffusion from axially loaded stiffeners into cylindrical shells.  
03 p0530 A69-14065

**FISCHER, G.**

Contribution to the problem of barotropic instability /Ein Beitrag zum Problem der barotropen Instabilitaet/.  
02 p0276 A69-12758

Impurity-dislocation interaction and repeated yielding in a commercial Al alloy.  
04 p0613 A69-14440

Dynamic stability behavior of axially impacting circular cylinder shells /Das dynamische Stabilitaetsverhalten der axial gestossenen Kreiszylinderschale/.  
[DVL-853] 04 p0677 A69-14836

A 3-m spherical test-volume space-simulation facility for ESTEC.  
13 p2241 A69-28080

Experimental and Theoretical Research on Atmospheric Circulations, the Jetstream, and Cyclonic Disturbances /Experimentelle und theoretische Untersuchungen ueber die atmosphaeischen Zirkulationen, den jet stream und die zyklonalen Stoerungen/.  
17 p2999 A69-33757

Model calculations for the displacement of vortices in rotating fluids /Modellrechnungen zur Verlagerung von Wirbeln in rotierenden Fluessigkeiten/.  
17 p3000 A69-33761

**FISCHER, G. J.**

The effect of strain rate and temperature on the flow stress of 7075 aluminum.  
03 p0443 A69-13120

**FISCHER, H.**

The integrated shrouded propeller /Die integrierte Mantelschraube/.  
05 p0702 A69-16379

New aspects for the choice of contact materials for silicon solar cells.  
19 p3250 A69-35687

**FISCHER, K. H.**

Comparative evaluation of avionic installations /Die Vergleichsbewertung von Avionikanlagen/.  
11 p1887 A69-25212

**FISCHER, L. G.**

A navigation satellite system for use with army tactical aircraft.  
08 p1349 A69-21193

**FISCHER, S.**

Position of the source of the cosmic ray diurnal anisotropy relative to the ecliptic plane.  
18 p3189 A69-35441

**FISCHER, W.**

The buckling load of thin elastic rods clamped at one end as a nonconservative, two-parameter eigenvalue problem /Die knicklast des einseitig eingespannten stabes als zweiparametriges, nichtkonservatives eigenwertproblem/.  
21 p3845 A69-39678

**FISCHER, W. A.**

Results of earth resources surveys of the earth and plans for future satellites.  
[AAS PAPER 69-058] 24 p4307 A69-42824

**FISCHHOFF, E.**

Technological aspects of a test stand for MHD /Aspects technologiques et constructifs d'un banc d'essai pour MHD/.  
10 p1673 A69-23474

**FISCHLER, J. E.**

Supercritical flow effects on some unsteady aerodynamic coefficients used for flutter analysis.  
01 p0007 A69-11020

**FISCHLER, S.**

GaSb-ZnTe heterojunction.  
02 p0299 A69-12408

**FISENKO, V. M.**

DC amplifier with a controllable and reversible transfer constant /Usilitel' postoiannogo toka s upravliaemym i reversiruemym koeffitsientom peredachi/.  
13 p2235 A69-28511

**FISH, A.**

The non-isothermal oxidation of neopentane.  
11 p1940 A69-24477

The controlling role of cool flames in two-stage ignition.  
11 p1998 A69-24479

**FISH, C. V.**

An "electrical equation of state" of metals determined by an exploding wire technique.  
01 p0117 A69-10659

**FISH, M. L.**

A basis for designing frequency-pulse integral-estimate systems using integrating chemotron tetrodes /Os-novy rascheta chastotno-impul'snykh ustroystv integral'noi otsenki na khimotronnykh integriuiushchikh tetrodakh/.  
13 p2227 A69-27522

**FISH, R.**

Development of polyurethane for controlling fuel fires in aircraft structures.  
15 p2561 A69-30311

**FISH, W. R.**

Advanced fuels and oxidizers.  
16 p2828 A69-31747

**FISHBURN, J.**

Strain survey of an adhesive-bonded box beam.  
21 p3844 A69-39325

**FISHER, A. B.**

Effect of carbon monoxide on function and structure of the lung.  
22 p3874 A69-40224

**FISHER, A. W.**

Isolation techniques for fabricating integrated circuits. I - Laminate substrates.  
07 p1100 A69-18617

Diffusion characteristics and applications of doped silicon dioxide layers deposited from silane, /SiH sub 4/.  
07 p1198 A69-18619

Diffusion characteristics of doped silicon dioxide layers deposited from premixed hydrides.  
07 p1198 A69-18620

**FISHER, C. F., JR.**

On gas ingestion and fluid inertia effects in viscoseals.  
[ASLE FICFS PREPRINT 31] 15 p2621 A69-30496

**FISHER, D. E.**

Excess argon in deep-sea rocks.  
02 p0244 A69-12568

Chlorine as an indicator of terrestrial contamination in iron meteorites.  
08 p1405 A69-20923

Aluminum abundances in stony meteorites.  
11 p1952 A69-24334

Silicon in iron meteorites and the earth's core.  
16 p2865 A69-32807

Uranium content of some stone meteorites and their Pu-Xe decay interval.  
17 p3044 A69-34167

**FISHER, D. M.**

Note on inclination of fatigue cracks in plane strain fracture toughness test specimens.  
12 p2177 A69-25958

**FISHER, E. B.**

Design and testing of ablation models with controlled pressure gradients.  
12 p2059 A69-26816

**FISHER, G. D.**

Determination of the flow field of an ideal axisymmetric impinging jet.  
[AICHE PAPER 31F] 08 p1302 A69-19847

**FISHER, H. D.**

Data handling equipment for British satellites.  
05 p0726 A69-16769

**FISHER, P. A.**

Developments in magnesium alloys /Neue Entwicklungen auf dem Gebiet der Magnesiumlegierungen/.  
16 p2801 A69-31787

**FISHER, R. A.**

The thermal conductivity of silicon dioxide glass from 0.5 to 4.2 K.  
09 p1493 A69-21426

**FISHER, R. E.**

A 1200-megabit per second microwave-carrier gray-code analog-to-digital converter.  
01 p0044 A69-10627

Digital-reflection-type microwave phase shifters.  
15 p2580 A69-31076

**FISHER, R. K.**

Resonance cones in the field pattern of a short antenna in an anisotropic plasma.  
15 p2659 A69-30876

**FISHER, R. R.**

Variations in the active region, McMath No. 8362 prior to the proton flare of 7 July 1966.  
10 p1765 A69-23747

**FISHER, R. S.**

Identification of bodies in accidents involving extreme disintegration.  
12 p2021 A69-25839

**FISHER, R. V.**

Bed forms in base-surge deposits - Lunar implications.  
23 p4216 A69-42203

**FISHER, S. S.**

Properties of low-density freejets measured using molecular-beam techniques.  
20 p3514 A69-37206

**FISHER, W. T.**

The ejection of instruments from sounding rocket payloads.  
10 p1635 A69-23032

**FISHKOVA, L. M.**

Intensity distribution in the continuous spectrum of the night airglow in the region from 5500 to 6700 angstroms /O raspredelenii intensivnosti v splotnom spektre svecheniia nochnogo neba v oblasti lambda 5500-6700 angstroms/.  
20 p3522 A69-37057

**FISHMAN, A. P.**

Interstitial pressure of the lung.  
24 p4257 A69-42627

**FISHMAN, G. J.**

Search for gamma radiation from Centaurus A.  
09 p1580 A69-22269

Gamma-ray lines from young supernova remnants.  
09 p1581 A69-22409

Observation of pulsed hard X-radiation from NP 0532 from 1967 data.  
18 p3186 A69-34316

**FISHMAN, I. M.**

Investigation of laser action in CO sub 2 in the case of pulsed excitation /Issledovanie lazernogo deistviia v CO sub 2 pri impul'snom vozvuzhdenii/.  
01 p0090 A69-10787

Generation of the second harmonic in ternary semiconductor compounds /Generatsiia vtoroi garmoniki v troinykh poluprovodnikovykh soedineniakh/.  
03 p0489 A69-13894

Generation of a second harmonic in ternary semiconducting compounds.  
11 p1939 A69-25695

Investigation of the laser effect in CO sub 2 during pulsed excitation.  
20 p3555 A69-38004



## FISK, L. A.

- Anisotropies of solar cosmic rays.  
18 p3189 A69-35400
- Solar modulation of galactic cosmic rays. I.  
24 p4367 A69-43169

## FISK, S. J.

- Efficiency peaking in red-light-emitting gallium-phosphide diodes.  
15 p2575 A69-30174

## FISKE, D. I.

- A computerized mass spectrometer system.  
[AIAA PAPER 69-1016] 22 p3922 A69-40388

## FISTUL, V. I.

- Investigation of some properties of iron-doped gallium arsenide.  
04 p0643 A69-15263
- Heavily doped semiconductors.  
10 p1746 A69-23522
- Possibility of constructing a high-speed switch from a gallium arsenide crystal doped with iron /O vozmozhnosti sozdaniia bystrodeistviushchego perekliuchatelia iz kristalla arsenida galliia legirovanogo zhelezom/.  
13 p2319 A69-27898

## FISZDON, W.

- Some aeroelastic problems of sailplane design trends.  
15 p2551 A69-30899
- A hypothesis concerning the non-stationary temperature-jump conditions at the gas-solid interface.  
17 p2949 A69-33023
- On the persistence of transition in the near-wake.  
19 p3242 A69-36809

## FITAIRE, M.

- Automatic recording with a Fabry-Perot interferometer.  
03 p0428 A69-13111
- Acoustic wave generation by temperature modulation of a plasma.  
12 p2134 A69-26096

## FITCH, E. C., JR.

- Synthesis of fluid logic control circuits.  
24 p4292 A69-43290

## FITCH, J.

- Integral representations for Jacobi polynomials and some applications.  
14 p2470 A69-28905

## FITCH, J. R.

- The buckling and post-buckling behavior of spherical caps under axisymmetric load.  
12 p2187 A69-26842

## FITCH, L. T.

- A high-sensitivity 1415-MHz survey between declinations of 0 deg and 20 deg north.  
18 p3195 A69-34428

## FITE, W. L.

- Charge transfer of N sub 2 super plus, O sub 2 super plus, and NO super plus to sodium atoms at thermal energies.  
07 p1185 A69-19303
- Sticking coefficients for atmospheric gases incident on metallic substrates.  
23 p4151 A69-41544

## FITREMANN, M.

- Turbulent generation of the galactic field /Generation turbulente du champ galactique/.  
10 p1783 A69-23793

## FITSNER, L. N.

- An optimal system for searching for a minimum /Optimal'naiia sistema poiska minimuma/.  
10 p1666 A69-23816

## FITTS, R. E.

- Boundedness in nonlinear systems.  
09 p1533 A69-22449

## FITZGERALD, B. P.

- Development of the automatic laser tracker.  
[SMPT PREPRINT 101-91] 07 p1116 A69-18949

## FITZGERALD, M. P.

- A recalibration of the absolute magnitudes of stars consistent with the photometric distance moduli of clusters.  
08 p1408 A69-21139
- The distribution of interstellar reddening material.  
10 p1773 A69-22961

## FITZGERALD, R. T.

- Why data system standards/ques/.  
23 p4133 A69-41769

## FITZGIBBON, G. M.

- Coronary angiography for evaluating certain cardiac problems of aircrew.  
19 p3263 A69-36461

## FITZGIBBONS, E. T.

- Properties of metal-polymer-silicon thin film structures.  
21 p3782 A69-39464

## FITZHUGH, H. A.

- Numerical studies of the laminar boundary layer for Mach numbers up to 15.  
13 p2248 A69-28173

## FITZMAURICE, M. W.

- Wavelength dependence of laser-beam scintillation.  
07 p1157 A69-19641
- Measurement of log-amplitude variance.  
14 p2486 A69-29642

## FITZNER, K.

- Tangential-stress distribution and heat transfer in a circular cylinder with an attached wall jet /Schubspannungsverteilung und Waermeuebergang an einem Kreiszyylinder mit anliegendem Wandstrahl/.  
05 p0746 A69-16022

## FITZPATRICK, G. O.

- Cesium sorption in materials for thermionic converters.  
14 p2463 A69-29220

## FITZPATRICK, J. M.

- Strain-hardening characteristics of four new steels and a titanium alloy.  
04 p0618 A69-15156
- Texture strengthening of heat-treated alpha- beta titanium alloys.  
21 p3729 A69-38662

## FITZSIMMONS, T. E.

- The spring supported hydrostatic seal.  
[ASME PAPER 68-WA/LUB-9] 05 p0768 A69-16132

## FITZSIMMONS, V. G.

- Dry-film lubricants from molybdenum disulfide bonded with microfibrinous boehmite.  
[ASLE PAPER 68-LC-14] 15 p2642 A69-30606

## FITZSIMONS, J. M.

- The aircraft manufacturer's product liability.  
01 p0180 A69-11392

## FIURS, G. P.

- Plasma diffusion in a toroidal stellarator /Diffuziia plazmy v toroidal'nom stellaratore/.  
07 p1191 A69-18985

## FIX, G.

- Higher-order Rayleigh-Ritz approximations.  
09 p1534 A69-22798

## FJAELLBRANT, T. T.

- Non-minimum-phase microwave filters.  
13 p2228 A69-27668

## FJELDBO, G.

- Venus - Lower atmosphere not measured.  
01 p0157 A69-11197
- The atmosphere of Mars - Radio occultation measurements and interpretations.  
02 p0320 A69-12116

- Structure of the atmosphere of Venus derived from Mariner V S-band measurements.  
21 p3794 A69-38380

## FLACH, A.

- Solar-pumped laser /Laser a pompage solaire/.  
07 p1150 A69-18953

## FLADDA, G.

- Lattice location of dopant elements implanted into Ge.  
07 p1199 A69-18903

## FLAGE, D.

- Mechanical failure technology - A coordinated Government program.  
18 p3144 A69-34492

## FLAHERTY, J. M.

- Microcircuit phased-array electronic countermeasures system.  
24 p4287 A69-43110

## FLAHERTY, R. E.

- Impact characteristics in fused silica.  
[AIAA PAPER 69-367] 13 p2366 A69-28299

## FLANAGAN, T. M.

- Carrier scattering from defects in neutron-bombarded semiconductors.  
06 p0974 A69-16864

## FLANDERS, J. H.

- Traffic control.  
05 p0789 A69-15560

## FLANDRO, G. A.

- Resonant combustion in rockets.  
02 p0305 A69-12494
- The mechanics and applications of the planetary swingby technique for optimization of interplanetary trajectories.  
02 p0331 A69-12818

## FLANNERY, M. R.

- Theoretical and experimental three-body ionic recombination coefficients.  
04 p0632 A69-14671
- Three-body ionic recombination at moderate and high gas densities.  
09 p1542 A69-21624
- H-H interaction potentials.  
11 p1921 A69-24416
- Simple analytic expression for general two-center Coulomb integrals.  
14 p2471 A69-29926
- Impact-parameter treatment of hydrogen-hydrogen excitation collisions. I - Two-state approximation.  
22 p3987 A69-41006
- Impact-parameter treatment of hydrogen-hydrogen excitation collisions. II - Four-state approximation.  
22 p3987 A69-41007

## FLATLEY, D.

- MOS field-effect transistor drivers for laminated-ferrite memories.  
01 p0039 A69-10172

## FLAVIN, J. N.

- Some bounds for quantities associated with two-dimensional anisotropic media.  
08 p1418 A69-20848

## FLAX, L.

- Spin wave approximation for anisotropic Heisenberg antiferromagnet.  
12 p2144 A69-26500
- Theory of phase transitions in solid hydrogen.  
24 p4350 A69-43119

## FLECK, J. A., JR.

- Evolution of a Q-switched laser pulse from noise.  
07 p1149 A69-18897

## FLECK, J. N.

- What we can expect in the 1970's.  
09 p1524 A69-22067
- Beryllium-reinforced aluminum.  
19 p3340 A69-35508

## FLECK, W. G.

- A mechanical model of fatigue crack propagation.  
10 p1796 A69-23072

## FLECKNER, H.

- Areas of expectation for automatic scanning of flying objects /Erwartungsgebiete fuer die automatische Flugobjekt-Beobachtung/.  
01 p0035 A69-11296

## FLEIG, A. J., JR.

- A passive method for scanning the celestial sphere.  
[AIAA PAPER 68-854] 21 p3767 A69-39764

## FLEISCHER, R. L.

- The utilization of nuclear particle tracks in solids to study the distribution of certain elements in nature and in the cosmic radiation.  
08 p1401 A69-20899

- Observation of trans-iron nuclei in the primary cosmic radiation.  
21 p3787 A69-38327

- Ages of Darwin glass, Macedon glass, and Far Eastern tektites.  
23 p4210 A69-41344

## FLEISCHMANN, H. H.

- Charge production in collisions between hydrogen atoms, and He, Ne, Ar, and H sub 2 in the energy range from 50-1000 ev.  
13 p2302 A69-27459

- Stripping and ionization in low-energy collisions of H on O sub 2 and N sub 2.  
16 p2814 A69-31773

## FLEISHMAN, N. P.

- Large elastic deflections of a rectangular plate in plane bending by edge moments.  
06 p1021 A69-17177

- Some generalized boundary-value problems for panels and thin plates /Nekotorye obobshchennye kraevye zadachi dlia plastin i tonkikh plit/.  
11 p1974 A69-24664

- Stability of an annular plate with rigid supporting ribs /Ustoichivost' kol'tsevoi plastiny s opornymi rebrami zhestkosti/.  
14 p2533 A69-28983
- Generalized boundary value problems of nonlinearly elastic plates with a reinforced edge /Uzagal'neni granichni zadachi dlia nelineino pruzhnikh plastin z pidkriplenim kraem/.  
21 p3833 A69-38574
- FLEKSER, L. A.**  
A method, readily adaptable to a computer, for deriving the equations of electronic circuits with linear and nonlinear elements /Ob odnom sposobe sostavleniia uravnenii elektronnykh skhem s lineinymi i nelineinymi elementami, udobnom dlia realizatsii na ETsVM/.  
09 p1472 A69-21779
- FLEMING, D. P.**  
Experimental stability studies of the herringbone-grooved gas-lubricated journal bearing.  
[ASME PAPER 68-LUBS-25]  
13 p2266 A69-27271
- FLEMING, I. A.**  
Concerning determinations of the drift velocity and lateral diffusion of positive ions in hydrogen.  
20 p3580 A69-38026
- FLEMING, P.**  
Azimuth angle distribution of the secondary particles of cosmic-ray jets.  
17 p3024 A69-33763
- FLEMING, R. A.**  
Truth and falsity of verbal statements as conditioned stimuli in classical and differential eyelid conditioning.  
07 p1064 A69-18632  
Arithmetic correctness as the discriminandum in classical and differential eyelid conditioning.  
07 p1064 A69-18637
- FLEMINGS, M. C.**  
Directional solidification and composite structures.  
03 p0449 A69-13877  
Influence of ingot structure and processing on mechanical properties and fracture of a high strength wrought aluminum alloy.  
23 p4176 A69-41506
- FLEMMING, J. C.**  
Re-entry vehicle launch restrictions considering damage to optical instruments by solar radiation.  
04 p0666 A69-15511
- FLEMMING, J. P.**  
A low energy scanned electron beam potential probe.  
04 p0601 A69-15115
- FLEMMING, M.**  
Temperature problems in the structure of jet-lift VTOL aircraft /Temperaturprobleme an der Struktur von VTOL-Strahltransportern/.  
04 p0548 A69-14841  
Noise problems of VTOL with particular reference to the Dornier DO 31.  
22 p3862 A69-39932
- FLESSAS, A. P.**  
Relationship of paper speed to precision of pulse wave measurements - A multiple observer study of left ventricular ejection time.  
19 p3258 A69-36449
- FLETCHER, D. D.**  
Surface heat transfer immediately downstream of flush, non-tangential injection holes and slots.  
[AIAA PAPER 69-523]  
16 p2843 A69-32703
- FLETCHER, E. A.**  
Fluorocarbon combustion studies. IV.  
21 p3852 A69-39594
- FLETCHER, J.**  
Investigation of the plasma produced by a normal ionizing shock wave using polychromator techniques.  
14 p2494 A69-29767  
Effects of various respiratory maneuvers on the physiological response to angular acceleration.  
23 p4102 A69-41679
- FLETCHER, K.**  
Thin-film spherical bolometer for measurement of hazardous field intensities from 400 MHz to 40 GHz.  
24 p4311 A69-42572  
Helical detector and alarm system for 2450 MHz and applications.  
24 p4312 A69-42573
- FLETCHER, L. S.**  
Thermal contact resistance of selected low-conductance interstitial materials.  
[AIAA PAPER 68-31]  
23 p4239 A69-41889
- FLETCHER, P.**  
Wafer-chip assembly for large-scale integration.  
02 p0222 A69-12472
- FLETCHER, R. F.**  
Characteristics of liquid propellant explosions.  
04 p0645 A69-14474
- FLETCHER, W.**  
A space communications "fall-out" industrial telemetry/ques/.  
08 p1271 A69-19906
- FLETT, A. M.**  
Atmospheric noise at 33.5 GHz.  
05 p0721 A69-16661
- FLEXMAN, R. E.**  
Advanced training concepts in simulation.  
22 p3928 A69-41137
- FLIGEL, D. S.**  
Properties of the ionosphere at low frequencies.  
12 p2070 A69-26689
- FLIGEL, M. D.**  
A method of processing riometric data /O metodike obrabotki riometricheskikh dannyykh/.  
14 p2436 A69-29056  
Vertical distribution of cosmic radio emission absorption /Vysotnoe raspredelenie pogloshcheniia kosmicheskogo radioizlucheniia/.  
20 p3590 A69-37676  
Determination of integral electron concentration /Ob opredelenii integral'noi elektronnoi konsentratsii/.  
23 p4157 A69-41858
- FLIGOR, P. D.**  
Multi spectral image analysis.  
17 p2977 A69-34064
- FLINT, E. F.**  
Operation flight test results of an infrared air turbulence detector.  
[AIAA PAPER 69-799]  
19 p3367 A69-35631
- FLINT, G. W.**  
Properties of neodymium laser materials.  
24 p4329 A69-43751
- FLINT, R. B., JR.**  
Investigation of quasi-periodic VLF emissions and their relation to geomagnetic micropulsations.  
01 p0063 A69-10274
- FLINTOFF, J. L.**  
Ansty noise and compressor test centre.  
13 p2240 A69-27616
- FLITMAN, L. M.**  
Mechanics of brittle failure /Mekhanika khрупkogo razrusheniia/.  
21 p3839 A69-39194
- FLOCH, A. LE.**  
Nonlinear effects in the output intensity of a He-Ne laser placed in a magnetic field /Effets non lineaires dans l'intensite de sortie d'un laser He-Ne place dans un champ magnetique/.  
20 p3553 A69-37433
- FLOCK, W. L.**  
Multisensor detection of ionospheric phenomena.  
14 p2448 A69-29526
- FLOHN, H.**  
Relation between the equator-to-pole temperature gradient and the planetary air pressure belts /Zusammenhang zwischen dem Temperaturgefalle Aequator-Pol und den planetarischen Luftdruckguerteln/.  
24 p4345 A69-43149
- FLOOD, D. J.**  
Molecular vibration spectra from field emission energy distributions.  
12 p2132 A69-26097  
Magnetothermal oscillations in pressure-annealed pyrolytic graphite.  
14 p2504 A69-29005
- FLOREA, S.**  
Some problems concerning the dynamics of fluidic amplifier interconnections /Unele probleme privind dinamica interconexiunii amplificatoarelor fluidice/.  
11 p1824 A69-24350
- FLORENSKII, K. P.**  
Study of the lunar surface by the Soviet Luna 9 and Luna 13 automatic stations /Issledovanie lunnoi poverkhnosti na sovetskikh avtomaticheskikh stantsiiakh Luna-9 - Luna-13/.  
[UN PAPER 68-95769]  
06 p1000 A69-17041  
Structure of the lunar surface layers from new data /O stroenii poverkhnostnykh sloev luny po novym dannym/.  
07 p1212 A69-18547  
Finely dispersed cosmic material from lower Permian salts /Melkodispersnoe kosmicheskoe veshchestvo iz nizhnepersmskikh solei/.  
12 p2154 A69-25821
- FLORENSKII, P. V.**  
Geological-morphological mapping of the moon and the peculiarities of the lunar surface structure /Geologo-morfologicheskoe kartirovanie luny i osobennosti stroeniia lunnoi poverkhnosti/.  
03 p0505 A69-12898  
Statistical classification of lunar and Martian annular structures according to their diameters /Statisticheskaiia klassifikatsiia kol'tsevykh struktur luny i Marsa po diametram/.  
04 p0658 A69-14959  
Statistical classification of ring structures on the moon and Mars and their diameters.  
18 p3197 A69-34722
- FLORENT, P.**  
A new nondirectional probe permitting the measurement of mean velocities in turbulent flows /Sur une nouvelle sonde non directionnelle permettant la mesure des vitesses moyennes dans les ecoulements turbulents/.  
04 p0600 A69-15056
- FLORES, B.**  
Balancing criteria and their relationship to current American practice.  
[ASME PAPER 69-VIBR-60]  
10 p1804 A69-24149
- FLORES, L. M.**  
Spin-other-orbit matrix elements for f super 3 configurations.  
06 p0962 A69-17819
- FLORET, F.**  
Development of solar thermionic converters - Tests in simulated radiation /Realisation de convertisseurs thermoioniques solaires - Essais en rayonnement simule/.  
07 p1058 A69-18951  
Action of radiation on the functioning of thermionic converters - Conversion of solar radiation /Action du rayonnement sur le fonctionnement de convertisseurs thermoioniques-conversion du rayonnement solaire/.  
14 p2404 A69-29261
- FLORIANI, D.**  
Viscous MGD channel flow in boundary layer approximation with heat conduction.  
06 p0966 A69-17523  
General algorithm for the investigation of plasma instabilities.  
14 p2499 A69-29850
- FLORIDA, C. D.**  
The development of a series of ionospheric satellites.  
20 p3618 A69-37856
- FLORIDA, R.**  
Rapid recording microspectrophotometer.  
03 p0428 A69-13109
- FLORINSKII, I. U. B.**  
Attachment for testing materials for delayed rupture.  
04 p0674 A69-14541
- FLORIO, F.**  
Near-field repeatable stimulation of infrared earth horizon sensors in variable environments and test levels.  
[AIAA PAPER 69-322]  
09 p1478 A69-22376
- FLORIO, F. A.**  
Thermo/structural analysis of a large flexible paraboloid antenna.  
[AIAA PAPER 68-333]  
02 p0345 A69-12372
- FLORKOSKI, S. P.**  
Glass reinforced polyimide laminate - A new high performance material.  
09 p1530 A69-22363
- FLOROV, I. F.**  
Determination of aircraft and engine parameters which ensure a maximum theoretical range for a given cruising speed /Opredelenie parametrov samoleta i dvigatelia, obezpechivaiushchikh maksimal'nuui teoreticheskuii dal'nost pri zadannoii kreiskerskoi skorosti poleta/.  
03 p0366 A69-12950



## FLOTHOW, J.

Application of the displacement method in the strength calculation of the VAK 191 /Die Anwendung der Verschiebungsmethode bei der Festigkeit-sberechnung der VAK 191/.

20 p3462 A69-37515

## FLOUX, F.

Experimental study of the ionization of deuterium under the action of a short-pulse laser /Etude experimentale de l'ionisation du deuterium sous l'action d'un laser a impulsion courte/.

02 p0255 A69-11545

Plasma production with the aid of steep-front laser pulses /Creation de plasma a l'aide d'impulsions laser a front de montee rapide/.

05 p0770 A69-15584

X rays from a laser created deuterium plasma.

06 p0964 A69-17479

Gas breakdown with nanosecond pulses.

07 p1155 A69-19085

## FLOWER, D. R.

Computer models of the planetary nebulae NGC 7662 and IC 418.

06 p1009 A69-17963

Forbidden line radiation from gaseous nebulae - Introductory report.

19 p3422 A69-36220

## FLOWER, R. A.

Laser instruments for measurements.

06 p0933 A69-17167

## FLOWER, S.

Pan American World Airways testing of, and evaluation of, inertial navigation systems.

06 p0955 A69-17663

## FLOYD, F. W.

Limit on the angular size of Cyg XR-1.

17 p3026 A69-32860

## FLOYD, S. R.

Thermal effects on the integrity of aluminum to silicon contacts in silicon integrated circuits.

17 p2936 A69-32893

Current status of scanning electron microscopy in semiconductor device reliability physics.

19 p3382 A69-35788

## FLOYD, W. B.

Minimum bandwidth of M signals with specified code or correlation matrix.

09 p1452 A69-21313

## FLUEGGE-LOTZ, I.

Minimum-fuel attitude control of a spacecraft by an extended method of steepest-descent.

03 p0522 A69-14100

A numerical solution for the laminar wake behind a finite flat plate.

04 p0541 A69-14387

## FLUEGGE, W.

Stresses in a cylindrical shell supported by a core of a different material.

05 p0835 A69-15871

## FLUX, M.

Inflight spontaneous pneumothorax /a case report/.

17 p2909 A69-33183

## FLYNN, J. H.

Vaporization of organic plasticizers.

04 p0620 A69-14956

## FLYNN, P. D.

Strain gage instrumentation for a light gas gun.

19 p3306 A69-35736

## FLYNN, R.

Epoxy molding compounds characterization and classification.

04 p0620 A69-14954

## FLYTZANIS, C.

Study of second-order susceptibilities of III-V and II-VI compounds, using the Phillips model /Etude des susceptibilites du second ordre des composés III-V et II-VI en utilisant le modele de Phillips/.

01 p0138 A69-10365

## FOCAS, J.

Optical properties and thickness of the Saturn rings observed edgewise in 1966 /Proprietes optiques et epaisseur des anneaux de Saturne observes par la tranche en 1966/.

07 p1219 A69-19335

The planet Mars - The nature of its surface, and the properties of its atmosphere according to the polarization of its light. I - Observations /La planete Mars - La nature de sa surface et les proprietes de son at-

mosphere, d'apres la polarisation de sa lumiere. I - Observations/.

16 p2854 A69-31655

The planet Mars - The nature of its surface and the properties of its atmosphere according to the polarization of its light. II - The nature of the soil of the planet mars /La planete Mars - La nature de sa surface et les proprietes de son atmosphere, d'apres la polarisation de sa lumiere. II - La nature du sol de la planete Mars/.

16 p2855 A69-31660

## FOCAS, J. H.

Optical properties and the thickness of Saturn's rings observed on the ring plane in 1966 /Proprietes optiques et epaisseur des anneaux de Saturne observes par la tranche en 1966/.

20 p3605 A69-37821

## FOCH, J.

Light scattering by dilute monatomic gases using the Burnett equations.

03 p0466 A69-13135

## FOEEX, M.

High temperature study of the systems formed by zirconia with samarium and gadolinium sesquioxides /Etude a haute temperature des systemes formes par la zircone avec les sesquioxides de samarium et de gadolinium/.

01 p0101 A69-10044

## FOERSCHING, H.-W.

Problems of ground vibration testing of flight vehicles /Zur Problematik des Standschwingungsversuchs an Flugkoerpern/.

04 p0585 A69-14833

Natural vibrations in axisymmetrically loaded orthotropic circular conical shells /Eigenschwingungen der axialsymmetrisch belasteten, orthotropen Kreiskegelschale/.

11 p1969 A69-24327

## FOERSTER, R.

Damping properties of glass-fiber-reinforced plastics /Daempfungseigenschaften glasfaserverstaerkter Kunststoffe/.

03 p0454 A69-13824

## FOERSTER, W.

Singular membrane stress and displacement states of a spherical shell /Singulare Membran-Spannungs- und Verschiebungszustände der Kugelschale/.

21 p3831 A69-38416

## FOFANOV, O. N.

Machine for in vacuo testing of samples at high temperatures /Mashina dlia ispytaniia obraztsov v vakuume pri vysokoi temperature/.

18 p3117 A69-34604

## FOFANOV, V. I.

Problem of reproduction of food protein by autotrophic organisms in extraterrestrial conditions.

01 p0021 A69-11079

Effect of diet containing unicellular algae on the composition of enteric microflora in animals.

02 p0197 A69-11490

Biological value of Chlorella proteins.

02 p0198 A69-11510

Changes in the intestinal microflora of rats caused by protein-free diets /Izmeneniia kishechnoi mikroflory pri bezbelkovom pitanii krysy/.

05 p0709 A69-16516

Influence of diets containing unicellular algae on the recovery of metabolic processes in protein-deficient white rats /Vlianie ratsiona s odnokletchnymi vodorosliami na vosstanovlenie obmennyykh protsessov u belykh krysy posle belkovogo golodaniia/.

07 p1065 A69-18977

Effect of the alcohol-soluble fraction of a biomass of protocoeci seaweeds on the organism of white rats /Vlianie spirtorastvorimoi fraktsii biomassy protokokovykh vodoroslei na organizm belykh krysy/.

17 p2906 A69-32930

Changes in the intestinal microflora of protein-starved rats.

18 p3096 A69-34735

Effect of diets containing unicellular algae on the recovery of metabolism in protein-deficient white rats.

20 p3479 A69-38225

## FOGARTY, L. E.

Computer mechanization of six-degree of freedom flight equations.

02 p0212 A69-11998

Trajectory optimization by a direct descent process.

06 p1006 A69-17570

## FOGDALL, L. B.

Electron energy dependence for in-vacuum degradation and recovery in thermal control surfaces.

17 p3005 A69-33306

## FOGEL, I. A. M.

Luminescence spectra of some molecular gases excited by fast electrons in the infrared spectral region /Spektry svecheniia nekotorykh molekuliarnykh gazov v infrakrasnoi oblasti spektra, vzbuzhdennykh bystryimi elektronami/.

09 p1590 A69-21318

Luminescence spectra of nitrogen, oxygen, and argon excited by fast electrons in the infrared region of the spectrum, and comparison of them with polarized spectra /Spektry svecheniia azota, kisloroda i vozdukh, vzbuzhdennykh bystryimi elektronami, v infrakrasnoi oblasti spektra i sravneniie ikh so spektrami poliarnykh siiani/.

10 p1687 A69-23131

Infrared emission spectra of some molecular gases excited by fast electrons.

18 p3176 A69-34777

Influence of oxygen pressure on the tungsten oxidation process /Vlianie davleniia kisloroda na protsess oksisleniia vol'frama/.

21 p3746 A69-39070

## FOGELZANG, A. E.

Combustion of certain organic perchlorates /Goreniie nekotorykh organicheskikh perkloratov/.

15 p2716 A69-30101

## FOGLI, G. L.

Atmospheric incoming long-wave radiation at high altitude.

13 p2256 A69-28644

## FOKEEV, V. P.

Mach reflection of shock waves in real gases.

19 p3450 A69-36361

## FOKHT, A. S.

Mathematical simulation of closed ecosystems.

01 p0021 A69-11131

## FOKIN, A. G.

Calculation of effective elastic moduli of composite materials taking into account multiparticle interaction /Vychislenie effektivnykh uprugikh modulei kompozitsionnykh materialov s uchetom mnogochastichnykh vzaimodeistvii/.

13 p2360 A69-27388

Correlation functions of an elastic field of quasi-isotropic solid bodies.

14 p2531 A69-28801

Effect of reinforcement on stress relaxation and creep in hereditary elastic materials /Vlianie armirovaniia na relaksatsiiu napriazhenii i polzheschnyye uprugoo-nasledstvennykh materialov/.

22 p4045 A69-40747

## FOKIN, O. V.

Physical realizability of nonlinear invariant systems.

08 p1296 A69-20277

Conditions of invariance in steady and unsteady systems /Umovi invariantnosti u statsionarnykh i nestatsionarnykh sistemakh/.

23 p4145 A69-42377

## FOKKER, A. D.

On the development and activity of the active region associated with the proton flare event of July 1966. Summary of observations and conclusions.

10 p1766 A69-23777

Spectral characteristics of medium-sized solar radio events.

22 p4020 A69-40324

## FOLCK, J. L.

Operating characteristics of a multi-megawatt arc heater used with the AFFDL 50 megawatt facility.

15 p2586 A69-30377

## FOLEY, H. M.

Pressure-induced microwave absorption of nonpolar gases.

06 p0962 A69-17811

## FOLEY, M. F.

Pulmonary function during zero-gravity maneuvers.

17 p2909 A69-33183

Pulmonary function during zero-gravity maneuvers.

23 p4089 A69-41821

The effects of mild acute physical stress on delivery and neonatal mortality in rats.

24 p4266 A69-43338

## FOLEY, T. K.

Experimental SST terminal for L-band satellite communications/surveillance ATC system.

17 p2932 A69-34111

## FOLIN, K. G.

A method of reducing the number of ruby-laser lasing modes /Ob odnom metode sokrashcheniia chisla generiruemyykh mod rubinovogo OKG/.

03 p0439 A69-13051

- An electrooptically Q-switched ruby laser with a saturable absorber in the cavity /OKG na rubine s elektropitcheskim modulatorom dobrotnosti i nasyshchaisushchimsia poglotitelem v rezonatore/.  
07 p1147 A69-18531
- Effect of the inhomogeneity of the radiation field in the active rod on the dynamics of a ruby laser /Vliianie neodnorodnosti polia izlucheniia v aktivnom sterzhne na dinamiku OKG na rubine/.  
11 p1901 A69-25756
- Investigation of the time-dependent characteristics of a Q-switched ruby laser driven by an external signal.  
15 p2634 A69-30727
- Generation kinetics, radiation spectrum, and directivity of a ruby laser with a spatially homogeneous inverted population.  
15 p2634 A69-30729
- Experimental study of the spectral, angular, and temporal characteristics of the emission of a traveling-wave ruby laser /Eksperimental'noe issledovanie spektral'nykh, uglovnykh i vremennykh kharakteristik izlucheniia OKG begushchei volny na rubine/.  
21 p3741 A69-39554
- FOLINO, F. A.**  
Design of the Haystack antenna and radome.  
23 p4149 A69-42131
- FOLINSBEE, R. E.**  
Vilna meteorite - Camera, visual, seismic and analytic records.  
13 p2334 A69-27189
- FOLK, H.**  
Methods of estimating occupational attrition.  
07 p1245 A69-19728
- FOLKESSON, D. E.**  
The digital computer system in the Swedish aircraft Saab 37 "Viggen".  
[AIAA PAPER 69-985] 22 p3908 A69-40365
- FOLKESTAD, K.**  
Results of rocket measurements in the lower auroral ionosphere.  
16 p2778 A69-32187
- FOLLE, M. I.**  
A plane hypersonic gas jet /Plaskaia giperzvukovaia struia gaza/.  
24 p4246 A69-43484
- FOLOMEEV, A. V.**  
A laser with a resonator mirror transmittance which is variable over the cross section /OKG s peremennym po secheniiu propuskaniem zerkal rezonatora/.  
15 p2634 A69-30962  
A ruby laser generating a single mode /Rubinovi laser, generiruiushchii odnu modu/.  
20 p3553 A69-37607
- FOLQUES, J.**  
Sea-level observations of the 7 July 1966 solar proton event.  
10 p1767 A69-23765
- FOLSE, R. F.**  
High-amplitude torsional oscillations of a disk in a viscous fluid.  
08 p1417 A69-20781
- FOLSOME, C. E.**  
Prebiological membranes - Synthesis and properties.  
11 p1828 A69-25462
- FOLTYN, J.**  
Explosive acrylic polymers /Explosive Acrylpolymere/.  
08 p1376 A69-21152
- FOMENKO, A. F.**  
Effect of the parameters of an electrodeless plasmatron on the mode of operation of a high-frequency oscillator /Vliianie parametrov bezelektrodnogo plazmatrona na rezhim raboty vysokochastotnogo generatora/.  
12 p2140 A69-27123  
Measurement of the parameters of the plasma of a helical pulse discharge by probe methods /Izmerenie parametrov plazmy impul'snogo vikhrevogo razriada zondovymi metodami/.  
12 p2140 A69-27124
- FOMENKO, B. A.**  
Transient flow regimes in magnetohydrodynamics.  
10 p1727 A69-23097
- FOMENKO, O. N.**  
Quasi-invariant optimal automatic control systems /Kvaziinvariantnye optimal'nye sistemy avtomaticheskogo upravleniia/.  
12 p2045 A69-25964
- FOMENKO, V. S.**  
Emissivity of high melting point compounds /Koeffitsient izlucheniia tugoplavkikh soedinenii/.  
18 p3158 A69-35260
- FOMICHEV, M. S.**  
Dynamic pressure pulsations, temperature and concentration profiles in the zone of discrete eddies in the wake of a plate in infinite gas flow.  
18 p3124 A69-35120
- FOMICHEV, N. N.**  
KDP-crystal electro-optical device for deflecting a laser beam.  
03 p0435 A69-12984
- FOMICHEV, V. V.**  
Longitude dependence of the degree of polarization of type III solar radio bursts.  
04 p0649 A69-15242  
Elliptical polarization of type-III solar radio bursts in the decimeter range.  
11 p1945 A69-24244  
Possibility of estimating the magnetic field strength in the solar corona on the basis of the time profile of type III radio bursts /O vozmozhnosti otsenok napriazennosti magnitnogo polia v solnechnoi korone po vremennomu profilu radiovyspeklov III tipa/.  
15 p2675 A69-30554
- FOMIN, A. F.**  
Threshold properties and optimum parameters of signals in radar measurements.  
04 p0560 A69-15403
- FOMIN, A. V.**  
Reliability of Semiconductor Radio Devices of Flight Vehicles /Nadezhnost' poluprovodnikovyykh radioustroystv letatel'nykh apparatov/.  
18 p3108 A69-34350
- FOMIN, I. P.**  
Determination of the local values of plasma parameters from the energy absorption of a refracted microwave beam /Opredelenie lokal'nykh znachenii parametrov plazmy po pogloshcheniiu energii refragiruushchego mikrovolnovogo lucha/.  
13 p2312 A69-28112  
Plasma multifrequency interferometry /Mnogochastotnaia interferometriia plazmy/.  
14 p2497 A69-29795
- FOMIN, M. F.**  
Possibility of using an artificial atmosphere with a variable gas composition in air-tight cabins /O vozmozhnosti ispol'zovaniia v germicheskikh kabinakh iskusstvennoi atmosfery s nestatsionarnym gazovym sostavom/.  
22 p3892 A69-40284
- FOMIN, N. N.**  
Influence of the nonlinear capacitance of a tunnel diode on the characteristics of a self-excited oscillator /O vlianii nelineinnoi emkosti tunnel'nogo dioda na kharakteristiki avtogeneratora/.  
12 p2043 A69-26889
- FOMIN, P. I.**  
Coordinate transformations that eliminate singularities on the gravitational radius in the Schwarzschild metric.  
08 p1351 A69-19952
- FOMIN, V. I.**  
Hypersonic gas flow round a blunt body, allowing for radiation.  
02 p0188 A69-11651
- FOMIN, V. N.**  
Dynamic instability domains of parametrically excited systems with an infinite number of degrees of freedom.  
07 p1231 A69-18502  
Calculation of radiating gas flows in a shock layer /Raschet techenii izluchaushchego gaza v udarnom sloe/.  
14 p2390 A69-29477  
Heating due to hypersonic gas flow past blunt bodies, taking radiative transport into account /Obtekanie i nagrev zatuplennykh tel giperzvukovym potokom gaza s vchetom perenosa izlucheniia/.  
20 p3457 A69-36981  
Hypersonic gas flow past blunt bodies with allowance for selective energy emission and absorption /Obtekanie zatuplennykh tel giperzvukovym potokom gaza s uchedom selektivnogo izlucheniia i pogloshcheniia energii/.  
20 p3457 A69-36993
- FOMIN, V. S.**  
Human sensorimotor reactions during rotation in an apparatus with a small radius /Sensomotornye reaktsii
- cheloveka pri vozdeistvii vrashchenii na ustanovke s malym radiusom/.  
20 p3471 A69-37258
- FOMINA-KOSOLAPOVA, V. P.**  
The role of the adaptation function of sympathetic innervation in motion sickness prophylaxis /O roli adaptatsionnoi funktsii simpaticheskoi innervatsii pri profilaktike ukachivaniia/.  
20 p3472 A69-37265
- FOMINA, T. S.**  
Statistical description of the microstructure of fiberglass-reinforced plastics /K statisticheskomu opisaniiu mikrostrukturny steokoplastikov/.  
18 p3163 A69-35363
- FONAREV, A. S.**  
On asymptotic solutions of unsteady expansion of gas into vacuum.  
05 p0751 A69-16676
- FONASH, S. J.**  
Fermi-surface structure and field ionization.  
17 p3015 A69-32821
- FONCHY, R.**  
Microwave selective filter using a resonant cavity with a single coupling component /Filtre selectif en microondes utilisant une cavite resonnante a un seul organe de couplage/.  
01 p0042 A69-10384
- FONDANESCHE**  
Use of primates in space research /Utilisation des primates dans les recherches spatiales/.  
09 p1445 A69-22723
- FONDER, G.**  
Application of Computers to the Calculation of Structures /Application des ordinateurs au calcul des structures/.  
07 p1233 A69-19349
- FONER, S.**  
High-field studies of band ferromagnetism in Fe and Ni by Moessbauer and magnetic moment measurements.  
19 p3383 A69-36050
- FONTAINE, A. B.**  
Indirect atmospheric measurements utilizing Rake tropospheric scatter techniques. II - Radiometeorological interpretation of Rake channel-sounding observations.  
14 p2448 A69-29525
- FONTAINE, B.**  
Application of the ion laser to flow diagnostics in shock tubes /Application du laser ionique aux diagnostics d'écoulements en tube a choc/.  
08 p1323 A69-19879
- FONTAINE, R. J.**  
Secondary non destructive instability in medium size liquid fuel rocket engines.  
16 p2836 A69-32001
- FONTAN, J.**  
An original method of measuring atmospheric diffusion, using a radioactive gas emitted from a point source /Une methode originale de mesure de la diffusion atmospherique utilisant un gaz radioactif emis depuis un point source/.  
01 p0144 A69-10043
- FONTANA, J. R.**  
Mixed-polarization modes of Michelson-type optical resonators.  
05 p0776 A69-16330  
Synthesis of travelling-wave microwave and optical resonators.  
07 p1145 A69-18477
- FONTANEL, A.**  
New method of measurement of filament diameters and particularly carbon of filaments.  
08 p1316 A69-20499
- FONTELL, A.**  
Lattice location of dopant elements implanted into Ge.  
07 p1199 A69-18903
- FONTELLE, P.**  
Effect of prolonged iterative accelerations and decelerations on the vestibular apparatus /Effet des accelerations et decelerations iteratives prolongees sur l'appareil vestibulaire/.  
13 p2211 A69-28592
- FONTHEIM, E. G.**  
Ionospheric electron temperature calculations including protonospheric and conjugate effects.  
22 p3939 A69-40506



## FONYAD, A.

Stability of an anisotropic viscoelastic liquid film /Stabilität eines anisotropen viskoelastischen Flüssigkeitsfilmes/.  
22 p3929 A69-39893

## FOO, E.-N.

Raman scattering by coupled plasmon-cyclotron-harmonic modes in semiconducting plasmas.  
16 p2824 A69-32604

## FOOTE, W. J.

A low-temperature microwave noise standard.  
02 p0211 A69-12446

## FOPIANO, P. J.

Phase transformations and strengthening mechanisms in the alloy Ti-6Al-4V.  
20 p3556 A69-36954

## FORATTINI, F.

The receiving device of a multistation radar system for the study of meteors and the upper atmosphere /L'apparato ricevente del sistema radar multistazione per lo studio delle meteore e dell'alta atmosfera/.  
07 p1077 A69-18674

Design of the transmitting antenna of a multistation radar system for investigating the upper atmosphere and meteors /Progetto dell'antenna trasmittente di un sistema radar multistazione per lo studio dell'alta atmosfera e delle meteore/.  
19 p3278 A69-36661

Interferometric determination of the altitude of the reflection zone of meteor trails /Determinazione interferometrica della quota della zona riflettente delle tracce meteoriche/.  
24 p4311 A69-43508

## FORBES, F.

Expandable airlock experiment for the orbital workshop. [IAF PAPER SD-49]  
02 p0334 A69-11949

## FORBES, F. F.

The infrared polarization of the moon.  
04 p0656 A69-14669

Stellar photometric data for various photocathode materials.  
17 p2973 A69-33092

Large aperture aluminum alloy telescope mirrors.  
20 p3546 A69-38193

Stellar photometric data for six different photocathode materials and the silicon detector.  
21 p3800 A69-38680

The infrared spectrum, diameter, and polarization of the galactic nucleus.  
22 p4029 A69-40767

A 40-cm welded-segment lightweight aluminum alloy telescope mirror.  
23 p4164 A69-41624

## FORBES, S. G.

Electric and ion propulsion.  
11 p1944 A69-25592

## FORBUSH, B.

Reaction between primary and secondary electron acceptors of photosystem II of photosynthesis.  
01 p0024 A69-10928

## FORBUSH, J. M.

Level and density control.  
22 p3870 A69-41241

## FORBUSH, S. E.

Variation with a period of two solar cycles in the cosmic-ray diurnal anisotropy and the superposed variations correlated with magnetic activity.  
18 p3186 A69-34934

## FORD, D. A.

Invariant subspaces and the controllability and observability of linear dynamical systems.  
05 p0740 A69-16597

## FORD, E.

The use of compressed air in aircraft manufacture.  
02 p0253 A69-12069

## FORD, F. E.

Auxiliary electrode charge control.  
10 p1640 A69-23993

## FORD, J. A.

The effect of fiber orientation and morphology on the tensile behavior of Al sub 3 Ni whisker reinforced aluminum.  
06 p0939 A69-16943

## FORD, N. P.

The Black Arrow X3 spacecraft structure.  
13 p2357 A69-28478

## FORD, R. W.

The cat local electroretinogram to incremental stimuli.  
22 p3878 A69-40835

## FORD, S. D.

Glow discharge electron beam welding.  
04 p0608 A69-15480

## FORD, T. E.

Furnace for large scale titanium production.  
02 p0229 A69-12068

Correlation Protected Instrument Landing System.  
22 p3978 A69-39963

Apollo 11 instrumentation and control techniques.  
24 p4295 A69-42550

## FORD, W. F.

Inelastic scattering calculations with Wood-Saxon Hartree-Fock wave functions.  
14 p2504 A69-29006

Core polarization effects in inelastic scattering.  
14 p2487 A69-29007

A large-angle approximation for high-energy scattering.  
14 p2487 A69-29008

E2 transition rates for super 20 Ne.  
18 p3177 A69-35166

Inelastic scattering calculations with projected Hartree-Fock wave functions.  
22 p3988 A69-41045

## FORD, W. K., JR.

Observations of M82 in the optical infrared.  
21 p3799 A69-38649

## FORDYCE, S. W.

Communications for the Apollo Applications Program.  
07 p1083 A69-19124

## FOREHAND, J. E.

Parawing precision aerial delivery system. [AIAA PAPER 68-958]  
24 p4254 A69-43723

## FOREMAN, K. M.

Interpretation and application of photometric-polarimetric observations of planetary surfaces.  
03 p0421 A69-13394

Terrestrial and Martian aerosols. [AIAA PAPER 69-52]  
06 p1011 A69-18199

A search-theory basis for planetary exploration lander strategy.  
09 p1595 A69-21994

## FORESTIER, B.

Application of the ion laser to flow diagnostics in shock tubes /Application du laser ionique aux diagnostics d'écoulements en tube à chocs/.  
08 p1323 A69-19879

## FORESTIERI, A. F.

Observations on CdS solar cell stability.  
03 p0367 A69-13074

## FORGA, R.

Theory of a lunar satellite /Theorie d'un satellite lunaire/.  
16 p2855 A69-31656

## FORK, R. L.

Frequency stabilization of a gas laser.  
08 p1327 A69-21090

Anisotropy effects in a Zeeman laser.  
16 p2798 A69-32607

## FORMALSKII, A. M.

Determination of the controllability region for linear steady systems /Opredelenie oblasti upravliaemosti dia lineinykh statsionarnykh sistem/.  
13 p2239 A69-28437

## FORMANEK, J.

Negative absolute temperatures in statistical physics /Zaporne absolutni teploty ve statistické fyzice/.  
18 p3231 A69-35403

## FORMANIAK, J.

Measurement equipment developed at the Institute of Aviation /Aparatura pomiarowa opracowana w instytutcie lotnictwa/.  
16 p2790 A69-32076

Methods of measurements of dynamic mechanical quantities /Metody pomiarow dynamicznych wielkosci mechanicznych/.  
22 p3943 A69-39926

## FORMELLER, F. J.

Physiological approach to the test and evaluation of aviation survival equipment.  
06 p0877 A69-16953

## FORMISANO, V.

Interplanetary plasma electrons - A preliminary report of Pioneer 6 data.  
05 p0816 A69-16275

Small amplitude waves in high beta plasmas.  
08 p1359 A69-19986

## FORNEY, G. D., JR.

A high speed sequential decoder for satellite communications.  
23 p4131 A69-42523

## FORNWALD, F.

Propagation of Alfvén waves in non-homogeneous plasma in the presence of the homogeneous gravitational field.  
05 p0805 A69-16706

## FORNWALT, D. E.

Metallographic characterization of phases associated with aluminide coated Udimet 700.  
13 p2282 A69-28163

## FORRAY, M. J.

Variational Calculus in Science and Engineering.  
04 p0623 A69-14847

## FORREST, D. A.

A precision azimuth reference system for gyrocompass evaluation. [AIAA PAPER 69-859]  
21 p3725 A69-39387

## FORREST, D. J.

Upper limit for the solar neutron flux in the energy interval 20-120 Mev.  
11 p1945 A69-24421

## FORREST, D. L.

The compact Co-60 kernel for space power.  
23 p4187 A69-42257

## FORRESTER, A. T.

Electron bombardment thruster technology. [AIAA PAPER 69-301]  
09 p1568 A69-21730

## FORREY, D. G.

A use of extreme-value statistics.  
24 p4318 A69-42642

## FORSBERG, K.

Axisymmetric and beam-type vibrations of thin cylindrical shells. [AIAA PAPER 69-447]  
09 p1616 A69-21938

Exact solution for natural frequencies of ring stiffened cylinders.  
12 p2184 A69-26810

Dynamic behavior of a cylinder with a cutout. [AIAA PAPER 68-318]  
16 p2874 A69-32158

Engineering applications of computer graphics.  
18 p3106 A69-34659

## FORSBERG, R.

Rapid recording microspectrophotometer.  
03 p0428 A69-13109

## FORSJUND, R. P.

Dispersed flow film boiling. [ASME PAPER 68-HT-44]  
02 p0351 A69-12203

## FORSTER, K.

Motion of a vehicle in the transition region of the three-body problem.  
03 p0505 A69-13001

## FORSTMANN, F.

Electromagnetic waves in metallic electron plasmas /Ueber elektromagnetische Wellen in metallischen Elektronenplasmen/.  
02 p0286 A69-11788

## FORSYTH, P. A.

The rate of occurrence of VHF radio-aurora over an eleven-year period.  
07 p1124 A69-18824

## FORSYTHE, F. E.

A wind tunnel data acquisition and control system.  
10 p1673 A69-23286

## FORTAK, H.

The energetics of the planetary boundary layer /Zur Energetik der planetarischen Grenzschicht/.  
24 p4309 A69-43148

## FORTE, S.

Microelectronics in the United Kingdom. [AGARDOGRAPH-114]  
08 p1292 A69-20992

## FORTIER, A.

Transfer problems in turbulent flows.  
05 p0743 A69-15558

The influence of the relaxation time on the discharge coefficient of a sonic nozzle /Sur l'influence du temps de relaxation sur le coefficient de debit d'une tuyere sonique/.  
19 p3241 A69-36721

- FORTIER, Y. O.**  
The value of satellite techniques in the evaluation of natural resources of large areas.  
[UN PAPER 68-95529] 06 p0917 A69-17067
- FORTINI, T.**  
Ejections of matter from the main component of fast growing sunspot-groups.  
06 p0995 A69-17441  
Forecasts of solar activity /Sulle previsioni dell'attività solare/.  
10 p1777 A69-23312  
Birth and development of the calcium plage associated with the proton flare of July 1966.  
10 p1763 A69-23729  
Forecasts of solar activity /Sulle previsioni dell'attività solare/.  
13 p2333 A69-28657
- FORTMANN, T.**  
On the design of linear systems with piecewise- constant feedback gains.  
02 p0224 A69-11964
- FORTUNE, O.**  
Studies of hydrogen-air supersonic combustion at low densities.  
[WSCI PAPER 68-29] 07 p1240 A69-18358
- FORTUNE, O. F.**  
A quasi-global chemical kinetic model for the finite rate combustion of hydrocarbon fuels with application to turbulent burning and mixing in hypersonic engines and nozzles.  
[AIAA PAPER 69-86] 06 p1037 A69-18119
- FORTUS, M. I.**  
Statistical description of general atmospheric circulation /O statisticheskoy opisaniy obshchei tsirkulatsii atmosfery/.  
14 p2476 A69-29822
- FORTUS, V. M.**  
"Capture" of parametrically coupled waves by pulses and beams of pumping radiation /O "pleneni" parametricheski svyazannykh voln impul'sami i puchkami izlucheniya nakachki/.  
10 p1705 A69-23956
- FORTY, A. J.**  
The metal physics of stress corrosion.  
19 p3349 A69-36886
- FORWARD, R. L.**  
Bibliography of interstellar travel and communication.  
03 p0510 A69-13397
- FORYS, L. J.**  
The epsilon-capacity of classes of unknown channels.  
15 p2570 A69-31142  
A note concerning observable but not controllable modes, and stability.  
22 p3917 A69-40135
- FOSDICK, G. E.**  
The impact of information transfer satellites on everyday living.  
07 p1244 A69-18678
- FOSDICK, R. L.**  
A note on non-uniqueness in linear elasticity theory.  
05 p0844 A69-16739  
On general measures of deformation.  
08 p1416 A69-20690
- FOSHA, A. A., JR.**  
Boron fiber-composite-reinforced fuselage stringers for the SST.  
[AIAA PAPER 69-763] 19 p3329 A69-36298
- FOSHEE, L. L.**  
Satellite imagery of the earth.  
20 p3536 A69-36930
- FOSNIGHT, V. V.**  
A cesium electron-bombardment microthruster system.  
[AIAA PAPER 69-293] 09 p1561 A69-21223  
Thrust vectoring of ion engines.  
[AIAA PAPER 68-543] 09 p1570 A69-21985
- FOSSARD, A.**  
Construction of a minimal representation in state variables /Construction d'une représentation minimale en variables d'états/.  
12 p2047 A69-26070
- FOSSARD, A. J.**  
The influence of structure and representation on the determination of limit cycles of non linear multivariable systems.  
12 p2048 A69-26078
- FOSSI, B. M.**  
X-ray fluxes from the Solrad 9 satellite /1968-17A/ from March 1968 to December 1968.  
20 p3588 A69-37473
- FOSTER, A. D.**  
FSX-414 - An alloy for gas turbines.  
18 p3158 A69-35421
- FOSTER, C. R.**  
Construction practice for hot-mix bituminous pavements.  
01 p0057 A69-11276
- FOSTER, D. H.**  
The response of the human visual system to moving spatially-periodic patterns.  
22 p3880 A69-40850
- FOSTER, D. J.**  
An approximate theoretical analysis of the static and dynamic characteristics of the herringbone grooved, gas lubricated journal bearing, and comparison with experiment.  
[ASME PAPER 68-LUBS-7] 13 p2265 A69-27269
- FOSTER, H. E.**  
An all-air air-cargo system.  
24 p4419 A69-43047
- FOSTER, J. A.**  
Integrating the airport into the community plan.  
16 p2882 A69-32331
- FOSTER, J. D.**  
Index of refraction and expansion thermal coefficients of Nd-YAG.  
04 p0609 A69-14293  
Kilowatt CO sub 2 gas-transport laser.  
23 p4173 A69-41497
- FOSTER, J. M.**  
Studies on the energy metabolism of human leukocytes. II.  
15 p2555 A69-30413
- FOSTER, K.**  
Generalised efficiency curve for step- recovery-diode frequency multipliers.  
02 p0215 A69-11947  
A brief survey of fluidics in the U.K. and some comments on problems encountered in developing fluidic circuits.  
[AGARDOGRAPH-118] 08 p1257 A69-20952
- FOSTER, L. M.**  
Anomalous electrical properties of solution- grown, p-type GaP.  
09 p1557 A69-21750
- FOSTER, P.**  
Urinary excretion of catecholamines and 17- hydroxycorticosteroids following plus G sub x impact in humans.  
06 p0875 A69-17839
- FOSTER, P. R.**  
Atmospheric noise at 33.5 GHz.  
05 p0721 A69-16661
- FOSTER, R.**  
An intermittent traversing gear for small wind tunnels.  
01 p0054 A69-10219
- FOSTER, R. M.**  
Application of Godunov's method to blunt-body calculations.  
16 p2732 A69-31886  
Supersonic flow past a finite cone with large surface mass injection.  
23 p4059 A69-41884
- FOSTH, D. C.**  
Predictive logic control of an on-off system with one simple sensor.  
[ASME PAPER 68-WA/AUT-14] 05 p0830 A69-16134
- FOTEDAR, H. L.**  
Factors affecting the mechanical behavior of lithium fluoride single crystals.  
01 p0138 A69-10602
- FOTIEO, G.**  
Vibration characteristics of a hypersonic missile interceptor.  
09 p1614 A69-21890
- FOUCHE, F.**  
A method of studying the convection across a fluid film /Méthode d'étude de la convection à travers une lame fluide/.  
01 p0176 A69-11135
- FOUCHE, K. F.**  
A comparison of trace element distribution in the metal phase of chondrites and in iron meteorites.  
08 p1404 A69-20921
- FOUDRIAT, E. C.**  
Displays and maneuvers for collision avoidance systems.  
17 p3002 A69-34096
- FOUESNANT**  
Turbopump engine with a thrust of 400 kn /Moteur a turbo-pompe de 400 kilonewtons de pousse/.  
17 p3019 A69-33341
- FOUKAL, P.**  
The temperature and internal kinematics of M8.  
19 p3424 A69-36334
- FOULK, P. W.**  
Adaptive-logic trees for use in multilevel- circuit design.  
09 p1475 A69-22583
- FOULKE, H.**  
Effect of thermal flutter on gravity gradient stabilized spacecraft.  
07 p1226 A69-18325  
Effects of high accuracy gravity gradient stabilization  
07 p1226 A69-18326
- FOUNTAIN, A.**  
Society of American Value Engineers, National Conference, San Diego, Calif., April 21-23, 1969, Proceedings.  
13 p2382 A69-28092
- FOUNTAIN, W. D.**  
Properties of neodymium laser materials.  
24 p4329 A69-43751
- FOURCADE, C. R.**  
Variable stars in IC 4499-V.  
20 p3598 A69-37462
- FOURGEAUD, J.-C.**  
Caravelle strikes on the Toulouse-Blagnac halting barrier /Les engagements de la Caravelle dans la barrière d'arrêt de Toulouse-Blagnac/.  
10 p1674 A69-23706
- FOURNET, G.**  
Solid State Electronics.  
18 p3182 A69-34653
- FOURNEY, M. E.**  
Aerosol size and velocity determination via holography.  
09 p1492 A69-21418
- FOURNEY, W. L.**  
Normal modes and natural frequencies of combined structures.  
04 p0678 A69-14870  
Stability of a finitely deformed thin cylindrical shell.  
08 p1413 A69-20414
- FOURNIER, G.**  
Determination, by passive means, of the fundamental parameters of a plasma flow induced in an annular duct by an MF electromagnetic field /Determination, avec des moyens passifs, des paramètres fondamentaux de l'écoulement d'un plasma induit dans un canal annulaire par un champ électromagnétique de moyenne fréquence/.  
[ONERA-TP-649] 03 p0473 A69-12877  
Determination, by analog simulation, of the cylinder wake potential, for the case of hypersonic motion in a collisionless plasma /Determination, par des moyens analogiques, du potentiel du sillage d'un cylindre, en mouvement hypersonique dans un plasma sans collisions/.  
11 p1926 A69-24756
- FOURNIER, M.**  
Performance of electrically small array receiving systems in the presence of noise.  
03 p0398 A69-13904
- FOWKE, J. G.**  
Lightweight, high-thermal-capacity force models for use in arc tunnels.  
12 p2059 A69-26796
- FOWLE, A. A.**  
Computer program to predict heat transfer through glass.  
[AIAA PAPER 68-65] 13 p2378 A69-28215
- FOWLE, E. N.**  
Radar calibration test satellite.  
20 p3617 A69-37714
- FOWLER, F.**  
Rate and predictability in rate-tracking tasks.  
11 p1829 A69-24737



- FOWLER, H. S.**  
Tests on the bird impact resistance of polyurethane foam. 17 p2901 A69-33648  
Research on the internal aerodynamics of the centrifugal compressor. [RAES PAPER 19] 22 p3859 A69-40498
- FOWLER, M. E.**  
A new numerical method for simulation. 05 p0725 A69-16477
- FOWLER, P.**  
Welding of very thin foil. 17 p2977 A69-32854
- FOWLER, P. H.**  
Interactions at very high energies. 03 p0498 A69-12941  
Analytic justification of the WSEIAC formula. 12 p2102 A69-26570
- FOWLER, V. J.**  
An experimental laser color TV projection display system. 07 p1137 A69-19740
- FOWLER, W. A.**  
The empirical foundations of nucleosynthesis. 08 p1357 A69-20893  
Nucleosynthesis. 21 p3801 A69-38813  
Solar neutrinos. 21 p3790 A69-38827  
Prospects of nuclear gamma-ray astronomy. 21 p3792 A69-39572
- FOWLER, W. B.**  
Effects of energetic particles on photomultipliers in earth orbits up to 1500 km. 06 p0923 A69-16932
- FOWLER, W. T.**  
Recurrent nature of Lagrange multipliers for optimal low-thrust earth-Jupiter transfers. 23 p4215 A69-41896  
The computation of optimal Apollo-type reentry trajectories. 24 p4386 A69-43281
- FOWLES, G. R.**  
Isotope shifts in the 4416-angstrom units cadmium laser. 10 p1705 A69-23812
- FOWLIS, W. W.**  
Characteristics of amplitude vacillation in a rotating, differentially heated fluid determined by a multi-probe technique. 07 p1126 A69-19040
- FOX, A.**  
The constitutive equation of a complete nonlinear viscoelastic material. 05 p0835 A69-15868  
Economical reliability program design. 18 p3232 A69-34496  
Reliability of epoxy transistors. 18 p3145 A69-34498
- FOX, C. W.**  
Effects of minor elements on the weldability of "Hastelloy" alloy X. 22 p3967 A69-39881
- FOX, F. K.**  
SNAP-21 10-watt thermoelectric power system. 23 p4069 A69-42248
- FOX, H.**  
A review of problems in the nonreacting turbulent far wake. 13 p2200 A69-28500
- FOX, K.**  
Infrared absorption spectrum of CH sub 4 at 9050 cm super - super I. 01 p0023 A69-10289  
Spherical pendulum and motion in a dipole field. 03 p0473 A69-14109  
Studies of methane absorption in the Jovian atmosphere. I. 22 p4028 A69-40663
- FOX, M. K.**  
Trajectory analysis aspects of low-thrust and ballistic rendezvous missions to Halley's Comet. [AIAA PAPER 69-933] 21 p3809 A69-39360
- FOX, N.**  
On the derivation of the constitutive equations of ideal plasticity. 21 p3840 A69-39287
- FOX, R.**  
Do faster-than-light group velocities imply violation of causality/ques/. 21 p3769 A69-38543
- FOX, R. C.**  
Comparative study of protective coatings for gas turbine engine components operating in marine environments. 01 p0099 A69-11057
- FOX, R. H. W.**  
Ground testing of satellites. 08 p1409 A69-19962
- FOX, R. L.**  
Rates of change of eigenvalues and eigenvectors. 02 p0347 A69-12532  
Form of inelastic transport cross sections. 08 p1357 A69-20814  
Structural optimization in the dynamics response regime - A computational approach. 11 p1989 A69-25495
- FOX, S.**  
In the beginning... life assembled itself. 21 p3651 A69-38577
- FOX, S. W.**  
The thermal synthesis of neutral and basic proteinoids. 07 p1074 A69-18633  
The binding of basic proteinoids with organic or thermally synthesized polynucleotides. 07 p1074 A69-18635  
A new view of the "synthesis of life." 10 p1641 A69-23035  
Self-assembly of the protocell from a self-ordered polymer. 12 p2017 A69-25764  
Spontaneous generation, the origin of life, and self assembly. 12 p2018 A69-25776  
Self-ordered polymers and propagative cell-like systems. 12 p2018 A69-25781  
The condensation of the adenylates of the amino acids common to protein. 22 p3895 A69-40048  
Abiotic polymerization and self-organization. 22 p3896 A69-40781  
Selective formation of particles by binding of pyrimidine polyribonucleotides or purine polyribonucleotides with lysine-rich or arginine-rich proteinoids. 23 p4113 A69-41509
- FOXELL, C. A. P.**  
Low-noise Microwave Amplifiers. 03 p0402 A69-13017  
Microwave semiconductor devices. 07 p1096 A69-18440
- FOXWORTH, T. G.**  
Another look at accelerate-stop criteria. [AIAA PAPER 69-772] 19 p3244 A69-35650
- FOYT, A. G.**  
GaAs Schottky barrier avalanche photodiodes. 13 p2226 A69-27195
- FRACASSINI, M.**  
Zodiacal light - Cometary contribution and solar activity. 05 p0826 A69-16391  
The relation between apparent magnitude and diameter in stars of galactic clusters. II. 16 p2858 A69-32210  
Determination of non eclipsed area of Algol by means of the Balmer discontinuity. 16 p2858 A69-32216
- FRADENBURGH, E. A.**  
Research and development of advanced rotorcraft concepts. [AIAA PAPER 69-199] 07 p1055 A69-19555  
Development of the TRAC variable diameter rotor concept. [AIAA PAPER 69-221] 07 p1056 A69-19572
- FRADKIN, D. B.**  
Experiments using a 25 kw hollow cathode lithium vapor MPD arc jet. [AIAA PAPER 69-241] 09 p1561 A69-21222
- FRADKIN, E. E.**  
Single-mode regime in a gas ring laser /Od-nomodovoyi rezhim v gazovom kol'tsevom lazere/. 17 p2982 A69-33632
- Possibility of parasitic emission in a regenerative traveling wave amplifier /O vozmozhnosti voz-noveniia parazitnoi generatsii v regenerativnom usilitele begushchei volny/. 20 p3506 A69-377
- FRADKIN, J.**  
Cryogenic applications in electronics. 10 p1665 A69-240
- FRADKIN, M. I.**  
Use of helium at a supercritical pressure for cooling superconducting systems under spaceflight conditions. 04 p0585 A69-153  
Heavy nuclei in primary cosmic rays /Tiazhelye yad-rya v pervichnom kosmicheskom izlucheni/. 10 p1756 A69-222
- FRADLIN, B. N.**  
Origin of the fundamental concepts of nonholonomic mechanics /Review/ /Genezis pervoosnovnykh ponyatiy negolonomnoi mekhaniki /obzor/. 12 p2129 A69-255
- FRAENKEL, L. E.**  
On the method of matched asymptotic expansion. 07 p1180 A69-188  
On the method of matched asymptotic expansion. II. 07 p1180 A69-188  
On the method of matched asymptotic expansion. III. 07 p1180 A69-188
- FRAENZ, I.**  
Nondestructive thickness measurement of thin films on microstructures. 03 p0430 A69-136
- FRAIDENRAICH, N.**  
Electrical processes in a flowing plasma with cold electrodes. 10 p1737 A69-234
- FRAIKOR, F. J.**  
Precipitation in quenched and aged beryllium ingot sheet. 08 p1330 A69-200
- FRAIN, J. P.**  
Tiny 3-valve manifold controls F-111 inflation bags. 20 p3467 A69-381
- FRASHTUT, R. G.**  
Beryllium - A new structural metal /Berillii - Novy konstruktivnyy metall/. 11 p1904 A69-248
- FRANCE, W. D., JR.**  
Interpretation of passive current maxima during polarization of stainless steels. 06 p0944 A69-178
- FRANCESCHETTI, G.**  
Radiation of electromagnetic waves in very general time-invariant linear media. 17 p2924 A69-338
- FRANCEY, J. L. A.**  
Helicon waves in non-resistive cylindrical and spherical plasmas. 03 p0479 A69-139
- FRANCEY, R. J.**  
Observations of Cen XR-2, Sco XR-1, and terrestrial X-rays. 04 p0649 A69-154
- FRANCIS, A. A.**  
Spectrum of the 6 March 1968 solar radio burst. 01 p0148 A69-100
- FRANCIS, E. C.**  
Some aspects of nonlinear mechanical behavior of composite propellant. [AIAA PAPER 68-519] 04 p0646 A69-155
- FRANCIS, R. J.**  
Studies on auroral hydrogen emission using an image intensifier. 10 p1684 A69-238
- FRANCIS, W. E.**  
Penetration of auroral electrons into the atmosphere. 07 p1128 A69-193
- FRANCISCO, H. D.**  
A system of computer programs to calculate aerodynamic characteristics for missiles, reentry vehicles and spacecraft at angles of attack. 18 p3107 A69-350
- FRANCK, G.**  
A quantitative interpretation of electron groups in electron-beam-generated He low-pressure plasma using the Boltzmann collision equation /Eine quantitative Deutung der Elektronengruppen im elektronen-

- 'strahlerzeugten He-Niederdruckplasma mit Hilfe der Boltzmannschen Stossleichung/.  
05 p0805 A69-16705
- FRANCKE, K. P.**  
Investigations of the precipitation behavior and the mechanical properties of the alloy Inconel 625 /Untersuchungen ueber das ausscheidungsverhalten und die mechanischen eigenschaften der legierung Inconel 625/.  
22 p3971 A69-40802
- FRANCOIS, C.**  
Asymptotic study of Navier-Stokes equations for the laminar motions of an incompressible viscous fluid /Etude asymptotique des equations de Navier-Stokes pour les mouvements laminaires d'un fluide visqueux incompressible/.  
[ONERA-TP-651] 01 p0059 A69-10383  
Experimental verification of the Prandtl-Batchelor theory /Verification experimentale de la theorie de Prandtl-Batchelor/.  
11 p1868 A69-24755  
Coupling conditions for two regions described by distinct approximations in laminar flow /Conditions de raccord entre deux domaines decrits par des approximations distinctes en ecoulement laminaire/.  
[ONERA-TP-738] 19 p3299 A69-36649  
Numerical integration of the Navier-Stokes equations in a square region /Integration numerique des equations de Navier-Stokes dans un domaine carre/.  
22 p3932 A69-40928
- FRANCOIS, D.**  
Model of crack initiation in a grain joint /Modele de naissance des fissures dans un joint de grain/.  
10 p1708 A69-22996
- FRANCOMBE, M. H.**  
Dielectric properties of reactively sputtered films of aluminum nitride.  
13 p2322 A69-28013
- FRANCOZ, P.**  
Clinical case - Epilepsy acquired by a fighter pilot /Cas clinique - Epilepsie acquise chez un pilote de chasse/.  
09 p1446 A69-22728
- FRANDSEN, A. M. A.**  
OGO search coil magnetometer experiments.  
19 p3284 A69-36675
- FRANEK, A.**  
Problem of stability of hypereutectic AlSi alloys /Zur Frage der Stabilitaet der ueberutektischen AlSi-Legierungen/.  
22 p3968 A69-40063
- FRANK-KAMENETSKII, D. A.**  
Cutoff of cyclotron harmonics and plasma instability /Otsechna tsiklotronnykh garmonik i neustoiichivost' plazmy/.  
10 p1728 A69-23130
- FRANK, J.**  
On the correlation between wide-band arrays and array simulators.  
02 p0219 A69-12343
- FRANK, L. A.**  
Recent observations of low-energy charged particles in the earth's magnetosphere.  
07 p1208 A69-19358  
Degradation of continuous-channel electron multipliers in a laboratory operating environment.  
14 p2449 A69-29565
- FRANK, L. S.**  
Difference methods in the solution of an incorrect Cauchy problem simulating an ideal gas flow in a nozzle /Raznostnye metody resheniia nekorrektnoi zadachi Koshi, modeliruiushchei technice ideal'nogo gaza v so-ple/.  
01 p0006 A69-10379  
Difference methods for solving the incorrect Cauchy problem for the three-dimensional Laplace equation /Raznostnye metody resheniia nekorrektnoi zadachi Koshi dlia trekhmernogo uravneniia Laplasa/.  
03 p0424 A69-13661  
Difference methods for solving the improper Cauchy problem simulating flow of a perfect gas through a nozzle.  
12 p2012 A69-26671
- FRANK, R.**  
Experimental study of the interaction between waves and electrons in a plasma characterized by a "bump-in-tail" distribution function.  
06 p0966 A69-17521  
Hemorrhages of the dental pulp of the rat following acute hypoxia /Hemorrhages de la pulpe dentaire du rat consecutives a des hypoxies aiguës/.  
21 p3661 A69-39276
- FRANK, R. E.**  
Buoyant Venus station for the '70s.  
02 p0333 A69-11745
- FRANK, R. G.**  
Recent advances in columbium alloys.  
07 p1164 A69-18791
- FRANKE, E. B.**  
An adaptive airborne VHF/UHF transmitter system.  
07 p1106 A69-19114
- FRANKE, H.**  
Determination of temperature and electron density in a plasma beam using a low-dispersion spectrograph /Bestimmung von Temperatur und Elektronendichte mit einem Spektrographen geringer Dispersion in einem Plasmastrahl/.  
05 p0803 A69-15997
- FRANKE, M. E.**  
Effect of vortices induced by corona discharge on free-convection heat transfer from a vertical plate. [ASME PAPER WA/HT-9] 05 p0846 A69-16117  
The frequency response of volume-terminated pneumatic lines with circular and rectangular cross sections.  
24 p4301 A69-43288
- FRANKEL, J. M.**  
Brushless DC torque motors.  
01 p0012 A69-10154
- FRANKEL, R. B.**  
High-field studies of band ferromagnetism in Fe and Ni by Moessbauer and magnetic moment measurements.  
19 p3383 A69-36050
- FRANKENA, H. J.**  
Scattering of electromagnetic waves by angled bends in rectangular waveguides.  
17 p2930 A69-33887
- FRANKENA, J. F.**  
A uniform asymptotic expansion of the solution of a linear elliptic singular perturbation problem.  
05 p0786 A69-15928
- FRANKENBERGER, E.**  
Nighttime relative humidity variations /Ueber abendliche Aenderungen der relativen Feuchte/.  
24 p4346 A69-43158
- FRANKENTHAL, S.**  
Bimodal diffusion in the earth's magnetosphere. II - On the electron belts.  
08 p1307 A69-20184  
Acceleration of trapped electrons and protons through bimodal diffusion in the earth's radiation belts.  
09 p1576 A69-21708  
Bimodal diffusion in the earth's magnetosphere. IV - On the space and time dependence of trapped particle energy spectra.  
16 p2852 A69-32619
- FRANKLAND, H. G.**  
The LM - Packaging the radar assembly.  
10 p1663 A69-23537
- FRANKLIN, A. R.**  
Light beam deflection using holographic scanning techniques.  
11 p1885 A69-24847
- FRANKLIN, C. A.**  
The design of swept-frequency topside sounders.  
20 p3507 A69-37859  
A data acquisition and processing system for mass producing topside ionograms.  
20 p3503 A69-37860
- FRANKLIN, D. L.**  
Cardiovascular performance of Alaska sled dogs during exercise.  
24 p4256 A69-42624
- FRANKLIN, F.**  
A theory of the dynamical structure of the Saturn ring supported by recent observations.  
20 p3600 A69-37482
- FRANKLIN, G. F.**  
Limit cycle oscillations in pulse-modulated systems.  
21 p3688 A69-39756  
Limit cycle oscillations in pulse-modulated systems.  
24 p4295 A69-43318
- FRANKLIN, J. I.**  
Ion-molecule reactions in a 50-MHz discharge.  
01 p0129 A69-10682
- FRANKLIN, J. N.**  
Numerical analysis of an elliptic-parabolic partial differential equation.  
10 p1719 A69-23516
- FRANKLIN, P.**  
Ultrasonics, microwaves join forces.  
03 p0394 A69-13353  
Army tests helicopter radar.  
04 p0559 A69-15197
- FRANKLIN, R. B.**  
The second heart sound in coronary artery disease - A phonocardiographic assessment.  
24 p4261 A69-42726
- FRANKLIN, R. K.**  
Evaluation of NOMAD buoy telemetry system.  
03 p0391 A69-13223
- FRANKLIN, R. N.**  
Dispersion of electron plasma waves.  
01 p0126 A69-10277
- FRANKLIN, W.**  
Phonon theory of solid-state diffusion including anharmonic effects.  
17 p3015 A69-32822
- FRANKS, H. J., JR.**  
STADAN PCM data handling systems.  
19 p3270 A69-36242
- FRANKS, R. K.**  
Beryllium as an acceptor in silicon.  
09 p1556 A69-21652  
Beryllium as an acceptor in silicon.  
10 p1747 A69-23989
- FRANKS, R. W.**  
Telemetric control of urban transportation and law enforcement.  
19 p3272 A69-36256
- FRANKS, W. J.**  
Axially symmetric bodies having a minimum pressure variation with Mach number.  
04 p0542 A69-14738
- FRANTISAK, F.**  
Nondisturbing tracer technique for quantitative measurements in turbulent flow.  
09 p1495 A69-21911
- FRANTSEVICH, I. M.**  
Characteristic temperature, Young's modulus, and mean square atomic displacement in the lattices of titanium, zirconium, and chromium nitrides /Kharakteristichna temperatura, modul'lunga ta seredne kvadratiche zmischennia atomiv u grattsii nitridiv titanu, tsirkoniu ta khromu/.  
06 p0938 A69-16830  
The characteristic temperature, the Young modulus, and the RMS displacement of the atoms in the lattices of titanium, vanadium, chromium, iron, cobalt, and zirconium borides /Kharakteristichna temperatura, modul'lunga i seredne kvadratiche zmischennia atomiv u grattsii boridiv titanu, vanadiu, khromu, zaliza, kobal'tu i tsirkoniu/.  
12 p2115 A69-26615
- FRANTSEVICH, I. N.**  
Nature of the strength of tungsten-nickel-iron alloys. I - Precipitation-hardening characteristics of W-Ni-Fe alloys.  
05 p0782 A69-16798  
Nature of the strength of tungsten-nickel-iron alloys. II - Rupture mechanism of W-Ni-Fe alloys.  
10 p1711 A69-23333  
Study of the failure characteristics of reinforced nickel by the method of high-temperature metallography. I /Issledovanie osobennosti razrusheniia armirovannogo nikelia metodom vysokotemperaturnoi metallografii. I/.  
21 p3743 A69-38616
- FRANZ, U.**  
The large-scale cloud distribution in extratropical low-pressure regions /Die grossraeumige Wolkenverteilung in ausserer tropischen Tiefdruckgebieten/.  
15 p2650 A69-31212
- FRANZEN, O.**  
Evoked response correlates of psychophysical magnitude estimates for tactile stimulation in man.  
22 p3876 A69-40262
- FRANZGROTE, E. J.**  
Chemical composition of the lunar surface in Mare Tranquillitatis.  
20 p3601 A69-37517
- FRASCA, W. H.**  
Operation flight test results of an infrared air turbulence detector. [AIAA PAPER 69-799] 19 p3367 A69-35631
- FRASER-SMITH, A. C.**  
A possible full-moon enhancement of hydromagnetic emission activity.  
16 p2774 A69-31979



- FRASER, D. B.**  
Holographic storage in lithium niobate.  
03 p0432 A69-14184
- FRASER, T. M.**  
Leisure and recreation in long duration space missions.  
06 p0880 A69-17209
- FRASIER, J. T.**  
Streak interferometric measurements of transient displacements.  
01 p0078 A69-10117  
The transient response of targets subjected to hypervelocity impacts.  
07 p1234 A69-19380
- FRAUTSCH, S. C.**  
Lepton non-conservation and solar neutrinos.  
23 p4194 A69-41596
- FRAWLEY, P. T.**  
The post attack command and control system - Airborne data automation /PACCS-ADA/, 481A.  
17 p2977 A69-34116
- FRAYNE, P. G.**  
Repetitive Q-modulated HCN gas maser.  
09 p1516 A69-21626
- FRAZER, A. H.**  
High-temperature plastics.  
18 p3161 A69-34279
- FRAZIER, J. W.**  
Diffusion bonded titanium honeycomb sandwich.  
19 p3320 A69-35558
- FRAZIER, N. A.**  
Magnetic fields.  
01 p0066 A69-10943
- FRAZIER, T. W.**  
Control of human vigilance by concurrent schedules.  
23 p4081 A69-41438
- FRECHE, J. C.**  
Ultrasonic detection and measurement of fatigue cracks in notched specimens.  
01 p0078 A69-10113  
Ultrasonic detection and measurement of fatigue cracks in notched specimens.  
14 p2445 A69-28882  
NASA programs for development of high-temperature alloys for advanced engines.  
[ICAS PAPER 68-26] 24 p4335 A69-43718
- FRECHETTE, F. J.**  
Aerospace applications for "Kynol" fibers.  
24 p4337 A69-43424
- FRECSKA, S. A.**  
Characteristics of the Agfa-Gevaert type 10E70 holographic film.  
01 p0082 A69-10851
- FREDEN, S. C.**  
Inner-belt Van Allen radiation.  
12 p2152 A69-27144
- FREDERICK, C. L.**  
Far-infrared observation of the galactic-center region at 100 microns.  
09 p1603 A69-22264  
A far infrared sky survey.  
13 p2342 A69-27599
- FREDERICKS, G. W.**  
Reconfiguration and control of avionic multiprocessor systems.  
17 p2977 A69-34072
- FREDRIKSEN, T. M.**  
A monolithic high-power series voltage regulator.  
07 p1103 A69-18881
- FREDGA, K.**  
Rocket spectroheliograph for the Mg II line at 2802.7 angstrom units.  
11 p1884 A69-24838
- FREDRICKS, R. J.**  
Range-Doppler imaging with motion through resolution cells.  
08 p1270 A69-19861  
Multicolor holography.  
11 p1882 A69-24679
- FREDRICKS, R. W.**  
Magnetoacoustic wave propagating across a magnetic field in a warm collisionless plasma.  
03 p0479 A69-14020  
Detection of electric-field turbulence in the earth's bow shock.  
04 p0592 A69-14681
- Electrostatic heating of solar wind ions beyond 0.1 AU.  
16 p2848 A69-31971
- The fine structure of the earth's collisionless shock wave.  
[AIAA PAPER 69-676] 17 p2961 A69-33452  
The OGO-V plasma wave detector - Instrumentation and in-flight operation.  
19 p3315 A69-36683  
Observations of the microstructure of the earth's bow shock.  
24 p4306 A69-42693
- FREDRICKSON, F. W.**  
Heavy press extrusions of light metals.  
04 p0604 A69-14526
- FREDRICKSON, G. O.**  
Orbital experimentation for advancing cryogenic technology.  
[AIAA PAPER 67-454] 12 p2174 A69-26782
- FREDRIKSSON, B. J.**  
The LL-group chondrites.  
08 p1406 A69-20931
- FREDRIKSSON, K.**  
The LL-group chondrites.  
08 p1406 A69-20931  
The Sharps chondrite - New evidence on the origin of chondrules and chondrites.  
19 p3408 A69-36086  
The Siena meteorite /Der meteorit von Siena/.  
20 p3602 A69-37534
- FREE, W. R.**  
Preliminary interpretation of near-field effects on measurement accuracy in shielded enclosures.  
23 p4141 A69-42226
- FREED, C.**  
Gain saturation and diffusion in CO sub 2 lasers.  
19 p3338 A69-36692  
Direct observation of the Lorentzian line shape as limited by quantum phase noise in a laser above threshold.  
21 p3734 A69-38326
- FREED, K. F.**  
Radiative decay of polyatomic molecules.  
14 p2488 A69-29924
- FREEDMAN, M.**  
Logarithmic variation criteria for the stability of systems with time-varying gains.  
03 p0409 A69-13073
- FREEDMAN, M. I.**  
L sub 2-stability of time-varying systems - Construction of multipliers with prescribed phase characteristics.  
05 p0740 A69-16598
- FREEMAN, A. J.**  
High-field studies of band ferromagnetism in Fe and Ni by Moessbauer and magnetic moment measurements.  
19 p3383 A69-36050
- FREEMAN, E.**  
The measurement of three-dimensional antenna patterns.  
17 p2942 A69-34086
- FREEMAN, E. A.**  
Design of optimal multivariable linear control systems.  
11 p1861 A69-25663
- FREEMAN, G. W.**  
The ORBIS-CAL satellite.  
07 p1226 A69-18323
- FREEMAN, J. H.**  
Resins and reinforced plastic laminates for continuous use at 650 deg F. III.  
07 p1171 A69-19545
- FREEMAN, J. W.**  
A source for field-aligned currents at auroral latitudes.  
05 p0755 A69-16266
- FREEMAN, J. W., JR.**  
Particle dynamics at the synchronous orbit.  
07 p1209 A69-19371  
Magnetospheric wind.  
09 p1574 A69-21309
- FREEMAN, K. C.**  
On the optical identification of the X-ray source Cen XR-2 as WX Cen.  
01 p0145 A69-10857  
Crab and Vela pulsars.  
13 p2354 A69-28470
- The occultation of BD -17 deg 4388 by Neptune. I  
17 p3041 A69-33828
- The occultation of BD -17 deg 4388 by Neptune. II  
17 p3041 A69-33828
- FREEMAN, N. G.**  
Titan IIIC digital flight controls.  
[AIAA PAPER 69-878] 21 p3824 A69-39424
- FREEMAN, N. J.**  
Torsion of a finite elastic cylindrical rod partially bonded to an elastic half space.  
07 p1236 A69-19424
- FREEMAN, R. A.**  
Variable-energy blast waves.  
04 p0590 A69-15152
- FREEMAN, R. B.**  
Metallographic study of fatigued uniaxial bonded epoxy composites.  
24 p4337 A69-43424
- FREEMAN, W. R., JR.**  
A dynamic hot-corrosion rig testing procedure.  
23 p4150 A69-42424
- FREENY, S. L.**  
Hybrid digital transmission systems. I, II.  
01 p0027 A69-10217  
Hybrid digital transmission systems. I - Joint compression of analog and digital repeaters.  
09 p1457 A69-22424
- FREES, G.**  
Study of effects of sodium corrosion on metals of subgroups IV and V /Untersuchung von Korrosionsprodukten durch Natrium an Metallen der vierten und funften Nebengruppe/.  
10 p1713 A69-23813
- FRESE, E.**  
Production of adenosine triphosphate in normal cells and sporulation mutants of bacillus subtilis.  
22 p3886 A69-41010
- FREGGENS, R. A.**  
Experimental determination of wick properties for heat pipe applications.  
23 p4074 A69-42226
- FREHSE, J.**  
Second-order nonlinear elliptic difference equations and associated variational problems /Ueber nichtlineare elliptische Differenzgleichungen zweiter Ordnung und zugehoerige Variationsprobleme/.  
10 p1718 A69-22813
- FREIBERG, L. A.**  
Charge motion in MOS-structures with a pyrolytic SiO sub 2 film on germanium /Dvizhenie zariadov MOS-strukturakh s piroliticheskoi plenki SiO sub 2 na germanii/.  
07 p1200 A69-19010
- FREIBERG, R. J.**  
Properties of low order transverse modes in argon ion lasers.  
03 p0440 A69-13540  
Properties of low order transverse modes in argon ion lasers.  
11 p1896 A69-24840
- FREIDBERG, J. P.**  
Two-dimensional equilibrium for high-beta mirror devices including particle loss.  
03 p0475 A69-13151  
Nonlinear development of the two-stream instability.  
08 p1367 A69-20808  
Collisionless tearing mode instabilities in a high-beta theta pinch.  
16 p2819 A69-31616
- FREIDIN, A. S.**  
Determination of the strength of glued joints during cyclic loading.  
04 p0605 A69-14540
- FREIDMAN, G. I.**  
Influence of a finite beam width on the characteristics of excited parametrically coupled oscillations in optical-range resonators /O vlianii konechnykh shirin puchka na kharakteristiki vozvuzhdaiushchikhsia parametricheskikh svyazannykh kolebaniy v rezonatorakh opticheskogo diapazona/.  
03 p0437 A69-13040
- FREIDMAN, G. J.**  
"Capture" of parametrically coupled waves by pulses and beams of pumping radiation /O "pleneni" parametricheskikh svyazannykh voln impul'snymi puchkami izlucheniia nakachki/.  
10 p1705 A69-23910
- FREIER, P. S.**  
Very heavy nuclei in the primary cosmic radiation.  
05 p0816 A69-16316

- Very heavy nuclei in the primary cosmic radiation.  
II. 05 p0816 A69-16366
- FRIESLEBEN, H. C.**  
Satellites and space flight navigation /Satelliten und Raumfahrtnavigation/. 13 p2296 A69-27918
- FREIK, D. M.**  
Production of epitaxial films of tin chalcogenides. 02 p0298 A69-12049
- FREILIKHER, V. D.**  
Spectrum of a signal scattered by an oscillating interface /Spektr signala, rasseinnogo koleblushcheisia poverkhnosti u razdela/. 08 p1275 A69-20432
- FRIMANIS, I. A. F.**  
A new type of organic semiconductors /O novom tipe organicheskikh poluprovodnikov/. 13 p2317 A69-27799
- FRISINGER, J.**  
Extraction and acceleration mechanism in RF- ion thrusters. [AIAA PAPER 69-284] 09 p1564 A69-21237  
Design variables of HF ion engines for space tests /Auslegungsgroessen von HF- Ionentriebwerken fuer Raumtests/. 22 p3998 A69-39904  
Design parameters of HF engines in space tests /Auslegungsgroessen von HF-triebwerken bei raumtests/. [DGLR-69-022] 23 p4203 A69-41933
- FREIZON, A. A.**  
Thickness variations of the E-F interlayer region /Variatsii tolshchi mezhslonovoi oblasti E-F/. 02 p0239 A69-11682  
Calculations of N/h/ profiles of the ionosphere accounting for the interlayer and underlying ionization /Raschety N/h/-profilei ionosfery s uchetom mezhslonovoi i nizhelezhachshei ionizatsii/. 02 p0239 A69-11687  
Variations in the thickness of the intermediate E-F region. 13 p2257 A69-28713  
Computations of ionospheric N/h/ profiles with allowance for interlayer and underlying ionization. 13 p2258 A69-28718
- FREIZON, I. A.**  
Geometric parameters and temperature of the F1 layer during the IGY and IQSY /Geometricheskije parametry i temperatura sloia F1 v MGG i MGSS/. 09 p1486 A69-21544  
Geometric parameters and temperature of the F sub 1-layer during the IGY and IQSY. 16 p2783 A69-32539
- FREMOUW, E. J.**  
Thomson scatter measurements of magnetic field effects on the Landau damping and excitation of plasma waves. 16 p2818 A69-31678
- FREMY, J.**  
Contributions to cadmium sulfide-copper sulfide solar cell studies. 19 p3250 A69-35685
- FRENCH, A. G., JR.**  
Rotary actuators help train jet pilots. 20 p3511 A69-38182
- FRENCH, D. N.**  
X-ray stress analysis of WC-Co cermets. I - Procedures. 16 p2802 A69-32339  
X-ray stress analysis of WC-Co cermets. II - Temperature stresses. 16 p2802 A69-32340  
The microstructure and microproperties of WC-Co alloys. 20 p3564 A69-38246  
Experimental methods of X-ray stress analysis. 24 p4331 A69-42736
- FRENCH, F. W.**  
Solar flare radiation protection requirements for passive and active shields. [AIAA PAPER 69-15] 06 p0884 A69-18079
- FRENCH, I. P.**  
Microwave and far-infrared absorption as a diagnostic for the wake of hypersonic projectiles. 01 p0006 A69-10961  
Calibration and use of electrostatic probes for hypersonic wake diagnostics. 19 p3291 A69-35717
- FRENCH, J. B.**  
Planetary atmospheric simulation using molecular beams. [AIAA PAPER 69-1031] 22 p3926 A69-40437
- FRENCH, J. M.**  
Frequency stabilization and noise suppression in the argon FM laser. [IEEE PAPER P-7] 05 p0775 A69-16325
- FRENCH, K. E.**  
Initial phase of parachute inflation. [AIAA PAPER 68-927] 20 p3461 A69-37165
- FRENCH, M. J.**  
Motion measurement by laser Doppler techniques. 09 p1492 A69-21398
- FRENCHKO, I. U. S.**  
Temperature stresses in an elastic plane with a temperature-insulated arc-shaped crack /Temperaturnye napriazhenia v uprugoi ploskosti s termoizolirovannoi dugoobraznoi treshchinoi/. 01 p0164 A69-10078
- FRENK, H.**  
Optical sensors for space flights /Optische Sensoren fuer die Raumfahrt/. 12 p2078 A69-25871
- FRENKEL, L.**  
Methods for the measurement of frequency and stability of laser generators in the infrared. 07 p1146 A69-18482  
Frequency measurements in the far infrared - Limitations imposed by the noise spectrum in harmonic mixing. 17 p3006 A69-33674
- FREON, A.**  
Sea-level observations of the 7 July 1966 solar proton event. 10 p1767 A69-23765
- FRESIN, B. S.**  
Application of hypotheses of summing fatigue damage to the accelerated evaluation of fatigue endurance. 04 p0673 A69-14536
- FRETIGNY, G.**  
Constant heading air navigation /Navigation aerienne a cap constant/. 15 p2651 A69-30294
- FRETZ, L. H.**  
High-power operation of pulsed water-vapor laser and precision wavelength measurement of the strongest component. 19 p3337 A69-36416
- FREUDENTHAL, A. M.**  
Statistical approach to brittle fracture. 11 p1975 A69-24673  
The Ronay effect in media showing creep. 20 p3625 A69-37596  
Second order effects in the theory of plasticity. 23 p4234 A69-42409
- FREUND, E.**  
Decoupling and determination of the inverse for time-varying multivariable systems /Die Entkopplung und die Bestimmung der inversen bei zeitvariablen Mehrgroessen-Systemen/. 09 p1472 A69-21680
- FREUND, J.**  
Investigation of the liquid-metal multi-stage injection process. 13 p2372 A69-27483
- FREUND, P. G. O.**  
Finite-range gravitation. 22 p4027 A69-40656
- FREUND, T.**  
Electron injection into zinc oxide. 10 p1651 A69-22940
- FREUNDLICH, M. M.**  
Exobiology - The Search for Extraterrestrial Life, American Astronautical Society and American Association for the Advancement of Science, Symposium, New York, N.Y., December 30, 1967, Proceedings. 17 p2907 A69-32967
- FREWER, G. C.**  
KSC - Spaceport for the moon. I - The challenge and the means. 16 p2767 A69-32429  
KSC - Spaceport for the moon. II - Building a gargantuan assembly line. KSC - Spaceport for the moon. II - Building a gargantuan assembly line. 19 p3288 A69-35500  
KSC - Spaceport for the moon. III. 21 p3690 A69-38754
- KSC - Spaceport for the moon. IV. 24 p4297 A69-43036
- FREY, F. A.**  
Relative and absolute terrestrial abundances of the rare earths. 08 p1310 A69-20942
- FREY, F. W.**  
Chemical vapor deposition of beryllium metal. 01 p0097 A69-10644
- FREY, H.**  
Theoretical calculations of additive effects in hydrogen-oxygen ignition. [WSC PAPER 68-52] 07 p1239 A69-18316
- FREY, J. R.**  
Density effects on fluidic feedback oscillators. [ASME PAPER 69-FLCS-39] 20 p3465 A69-37984
- FREYMUTH, P.**  
Nonlinear control theory for constant- temperature hot-wire anemometers. 09 p1493 A69-21421  
Spectra of turbulence in wakes behind circular cylinders. 21 p3693 A69-38705
- FRIAU, W. S.**  
Rats - Their comings and goings. 19 p3257 A69-36243
- FRIBERG, E. G.**  
Pressure correlation for blunted slender cones. 24 p4249 A69-43681
- FRIC, V.**  
Contribution to the evaluation of the frequency stability of a microwave source in a radar transmitter with fixed target suppression /Prispevek k vyhodnoteniu kmitoctovej stability mikrovlneho zdroja vo vysielaci radiolokatoru s potlacanim pevných cieľov/. 20 p3485 A69-36943
- FRICKE, F. R.**  
Pressure fluctuations in a separated flow region. 04 p0544 A69-14868
- FRICKE, J. E.**  
Noise as a Public Health Hazard, American Speech and Hearing Association, Conference, Washington, D.C., June 13, 14, 1968, Proceedings. 14 p2541 A69-29149
- FRICKE, K.**  
Stability of rotating stars. II - The influence of toroidal and poloidal magnetic fields. 13 p2346 A69-27707  
Instability of steady rotation in stars /Instabilitaet stationaerer Rotation in Sternen/. 13 p2354 A69-28566  
Instability of Nonrevolving Rotating Stars /Instabilitaet zirkulationsfreier Rotation in Sternen/. 17 p3029 A69-32997  
Secular stability of differential rotation and the solar oblateness. 18 p3202 A69-35214
- FRICKE, M.**  
Physicotechnical principles of a system for monitoring takeoffs of large aircraft /Physikalisch-technische Grundlagen fuer ein System zur Ueberwachung des Startvorganges bei Grossflugzeugen/. 12 p2128 A69-26119
- FRICKE, W.**  
Analytical and experimental studies of the sound field in a propeller duct. 04 p0544 A69-14867
- FRIDLINDER, I. N.**  
New light alloys of aluminum with lithium and magnesium. 03 p0443 A69-13026  
Effect of powdering temperature on the structure and properties of pressed semifinished products of sintered aluminum alloys with iron and chromium additions /Vliianie temperatury raspilyeniia na strukturu i svoistva pressovannykh polufabrikatov iz spechennykh aluminievyykh splavov s dobavkami zheleza i khroma/. 03 p0452 A69-14119  
Regularities of property changes during aging of aluminum alloys /Zakonomenosti izmeneniia svoistv pri stareniia aluminievyykh splavov/. 11 p1901 A69-24269
- FRIDMAN, A. M.**  
Stability of bodies of revolution relative to radial disturbances /Ob ustoychivosti tel vrashcheniia ot nositel'no radial'nykh vozmushchenii/. 02 p0317 A69-11978



- The Poincare recurrence theorem and the problem of gravitational collapse /Teorema vozvrashcheniya Puankare i problema gravitatsionnogo kollapsa/.  
09 p1593 A69-21567
- The stability of solids of revolution with respect to radial perturbations.  
15 p2680 A69-30260
- Theory of the formation and stability of ejections from the nuclei of radio galaxies and quasars /K teorii obrazovaniya i ustoychivosti vybrosov iz iader radiogalakтик i kvazarov/.  
20 p3606 A69-38032
- Theory of the gravitational stability of a rotating cylinder /Teoriya gravitatsionnoi ustoychivosti vrashchayushchegosya tsilindra/.  
22 p4032 A69-41017
- FRIDMAN, IA. B.**
- Determination of the allowance for the arbitrary yield point for sheet materials working under biaxial tensile load.  
10 p1801 A69-23849
- Conditions in a crack tip /Ob uslovii v kontse treshchiny/.  
22 p4047 A69-41123
- FRIDMAN, S. A.**
- Obtaining a visible image of radio emission in the millimeter band.  
04 p0560 A69-15272
- Use of luminophors in the visualization of CO sub 2 laser radiation /Primeneniye luminoforov dlia vizualizatsii izlucheniya lazerov na CO sub 2/.  
18 p3153 A69-35259
- FRIDMAN, V. M.**
- A modification of the Bubnov-Galerkin-Ritz method related to the mixed variational principle in elasticity theory /Vidoizmeneniye metoda Bubnova-Galerkina-Rittsa, svyazannoye so smeshannym variatsionnym printsiptom v teorii uprugosti/.  
18 p3215 A69-34566
- FRIDRIKHOV, S. A.**
- Optimum gas mixture in the He-Ne laser and the field distribution in the resonator.  
03 p0441 A69-13847
- Performance of a He-Ne laser excited by microwave pulses /O rabote He-Ne-lazera v rezime vozbuzhdeniya impul'sami sverkhvysokoi chastoty/.  
04 p0610 A69-14423
- Optimal ratio between the mixture components in an annular He-Ne laser /Ob optimal'nom sootnoshenii komponentov smesi v kol'tsevom He-Ne lazere/.  
04 p0612 A69-15176
- Zeeman effect in a multimode He-Ne laser operating at 0.63 and 3.39  $\mu$ m simultaneously.  
06 p0932 A69-16912
- Dependence of He-Ne laser output power on the spark-gap cross section geometry /Zavisimost' moshnosti izlucheniya He-Ne lazera ot geometrii secheniya razriadnogo promezhnutka/.  
07 p1147 A69-18541
- Frequency characteristics of a helium-neon laser in a transverse magnetic field /Chastotnye kharakteristiki geli-neonovogo lazera v poperechnom magnitnom pole/.  
11 p1894 A69-24622
- Energy characteristics of a helium-neon laser in a transverse magnetic field /Energeticheskie kharakteristiki geli-neonovogo lazera v poperechnom magnitnom pole/.  
12 p2104 A69-26023
- Effect of the operating conditions of a hot cathode on the output power of a He-Ne laser.  
12 p2109 A69-26716
- The gas ring laser /Kol'tsevoi gazovyi lazer/.  
13 p2272 A69-28175
- Optimum composition ratio in a He-Ne ring laser.  
18 p3152 A69-34718
- Effect of plasma-tube cross section on the power output of He-Ne laser.  
21 p3735 A69-38693
- Relationship between the radiation power of a laser and the electron concentration in a He-Ne plasma /O svyazi moshnosti izlucheniya lazera s kontsentratsiei elektronov v He-Ne plazme/.  
22 p3964 A69-40794
- FRIE, W.**
- Theoretical investigation of the flow in a smooth pipe /Theoretische Untersuchungen zur Stroemung im glatten Rohr/.  
02 p0230 A69-11870
- Flow in a short asymmetric tube /Zur Stroemung im asymmetrischen kurzen Rohr/.  
03 p0419 A69-13969
- FRIEBERTSHAUSER, P. E.**
- Electrical properties of titanium, zirconium, and hafnium films from 300 K to 1.3 K.  
13 p2321 A69-28010
- FRIED, B. D.**
- Current decay in a streaming plasma due to weak turbulence.  
08 p1368 A69-20808
- Low-beta plasma penetration across a magnetic field.  
15 p2661 A69-30923
- Transverse plasma-wave echoes.  
16 p2823 A69-32467
- FRIED, D. L.**
- Observation of very weak optical strength of atmospheric turbulence.  
02 p0275 A69-11930
- FRIED, E.**
- Thermal conduction contribution to heat transfer at contacts.  
23 p4237 A69-41327
- FRIED, I.**
- The changes in the /two-dimensional/ stress distribution round a rectangular hole with rounded corners, caused by a varying internal pressure and temperature.  
06 p1025 A69-17611
- More on gradient iterative methods in finite-element analysis.  
13 p2365 A69-28249
- Gradient methods for finite-element eigenproblems.  
16 p2871 A69-31898
- Finite-element analysis of time-dependent phenomena.  
20 p3575 A69-37204
- Some aspects of the natural coordinate system in the finite-element method.  
23 p4182 A69-41901
- FRIED, W. R.**
- Avionics Navigation Systems.  
18 p3168 A69-34843
- Doppler navigation.  
18 p3169 A69-34849
- FRIEDEL, J.**
- Creep mechanisms at low temperatures /Sur les mecanismes de fluage aux basses temperatures/.  
17 p2985 A69-32909
- FRIEDEMANN, CHR.**
- An eruptive variable star in Hercules /Ueber einen eruptiven Veraenderlichen in Hercules/.  
08 p1382 A69-19871
- Evolution of silicon carbide particles in the atmospheres of carbon stars.  
10 p1781 A69-23678
- FRIEDENREICH, G.**
- Improving avionic equipment reliability via test and failure analysis.  
19 p3282 A69-35784
- FRIEDERICY, J. A.**
- Finite element formulation for solving complicated boundary value problems in structural analysis.  
03 p0526 A69-13736
- FRIEDLAENDER, F. M.**
- Space-storable propulsion systems comparison. [AIAA PAPER 68-614]  
09 p1570 A69-21981
- FRIEDLAND, B.**
- Quasi-optimum control for minimum-time rendezvous in a central force field.  
24 p4349 A69-43313
- FRIEDLAND, H.**
- Final control elements for the direct digital control of test stands.  
10 p1671 A69-23259
- FRIEDLAND, S.**
- Free-edge buckling of heterogeneous cylindrical shells in axial compression.  
10 p1802 A69-23889
- Stability of heterogeneous orthotropic cylindrical shells in axial compression.  
14 p2533 A69-29024
- FRIEDLANDER, A. L.**
- Guidance analysis of the multiple outer-planet /grand-tour/ mission. [AAS PAPER 68-109]  
21 p3761 A69-39205
- Missions to the comets. [AAS PAPER 69-320]  
24 p4381 A69-42866
- FRIEDLANDER, M. W.**
- Observation of trans-iron nuclei in the primary cosmic radiation.  
21 p3787 A69-38327
- FRIEDMAN, A.**
- Singular perturbations for the Cauchy problem and for boundary value problems.  
10 p1720 A69-23635
- FRIEDMAN, G. J.**
- Constraint theory. I - Fundamentals.  
11 p1858 A69-24936
- FRIEDMAN, H.**
- X-ray line and continuum spectra of solar flares from 0.5 to 8.5 angstroms.  
02 p0308 A69-12297
- Cosmic X-rays.  
03 p0501 A69-13767
- Absence of pulsar characteristics in several X-ray sources.  
07 p1218 A69-19254
- Glimpsing the hidden X-ray universe.  
10 p1760 A69-22869
- Absolute judgment of more than 32 categories /5 bits/ with a unidimensional visual stimulus.  
10 p1641 A69-23039
- Magnitude of experimental effect and a table for its rapid estimation.  
10 p1669 A69-23040
- The slowly varying component of solar X-ray emission in the period 1-15 July 1966.  
10 p1763 A69-23736
- X-ray emission events preceding the proton flare of 7 July 1966.  
10 p1764 A69-23745
- X-ray emission from the proton flare of 7 July 1966.  
10 p1766 A69-23755
- Solar flares.  
11 p1946 A69-24516
- On X-ray line emission from Scorpius XR-1.  
13 p2325 A69-27313
- X-ray pulsar in the Crab Nebula.  
13 p2354 A69-28465
- Energetic solar radiations.  
15 p2673 A69-30007
- X-ray spectra of several discrete cosmic sources.  
20 p3593 A69-38152
- X-ray observations of solar flares /Invited review paper/.  
24 p4371 A69-43608
- Measurements of solar X-ray emission from the OGO-IV spacecraft.  
24 p4371 A69-43611
- FRIEDMAN, J.**
- Space storable propellant performance demonstration. [AIAA PAPER 69-505]  
16 p2845 A69-32762
- FRIEDMAN, J. D.**
- Infrared sensing of active geologic processes.  
12 p2076 A69-27011
- Satellite observation of effusive volcanism.  
21 p3721 A69-38631
- FRIEDMAN, J. J.**
- Some effects of acute and chronic microwave irradiation of mice.  
08 p1266 A69-20678
- FRIEDMAN, M.**
- Plasma turbulence in solar flares as an explanation of some observed phenomena.  
20 p3589 A69-37549
- On a possible proton origin for Type V continuum radiation from a solar flare /Research note/.  
22 p4003 A69-40301
- Possible mechanism for the acceleration of ions in some astrophysical phenomena.  
22 p3987 A69-41002
- The cardiac lymphatics in experimental chronic congestive heart failure.  
23 p4078 A69-41364
- FRIEDMAN, M. H.**
- A general thermal explosion criterion - Application to initiation by imbedded wires. [WSCI PAPER 68-23]  
07 p1240 A69-18359
- FRIEDMAN, R.**
- Expansion of simulated storable propellants in a supersonic nozzle. [AIAA PAPER 68-635]  
20 p3631 A69-37188
- FRIEDMANN, M.**
- Laminar flow in a pipe at low and moderate Reynolds numbers.  
05 p0743 A69-15578
- FRIEDRICH, E.**
- A new interpretation of metal fatigue /Die neuere Deutung der Metallermuedung/.  
05 p0781 A69-16542

- FRIEDRICH, H.**  
The flight characteristics of a high-lift STOL transport aircraft /Ueber die Flugeigenschaften eines STOL-Transportflugzeugs mit Hochauftriebs erzeugung/.  
20 p3462 A69-37513  
The problem of the roll control requirements for V/STOL transport aircraft in the low-speed range /Zur Frage der Rollsteuerbarkeitsforderungen fuer V/STOL-Transportflugzeuge im Langsamflugbereich/.  
20 p3574 A69-37514
- FRIEDRICH, O. M., JR.**  
Interaction of optical-maser beams with ionized gases.  
13 p2273 A69-28464  
Laser induced breakdown in high pressure gases.  
21 p3738 A69-39445  
Two-wavelength, single-exposure holographic interferometry.  
21 p3725 A69-39448  
Investigation of harmonic ion cyclotron wave propagation and damping in a plasma.  
21 p3777 A69-39455
- FRIEHE, C. A.**  
Deviations from the cosine law for yawed cylindrical anemometer sensors.  
[ASME PAPER 68-WA/APM-16]  
04 p0596 A69-14391
- FRIEMAN, E. A.**  
MHD instabilities.  
24 p4355 A69-42683
- FRIEND, R. C.**  
Analysis of intercept control techniques with computer generated movies.  
06 p0906 A69-17397
- FRIESEM, A. A.**  
Multicolor holography.  
11 p1882 A69-24679  
Detection of micro fractures by holographic interferometry.  
24 p4317 A69-43763
- FRIHAGEN, J.**  
Spaced receiver measurements of the height of ionospheric irregularities over Europe.  
01 p0064 A69-10428  
Satellite scintillation at high latitudes and its possible relation to precipitation of soft particles.  
05 p0757 A69-16406  
A feature of the polar F-region.  
18 p3126 A69-34257
- FRIICHTENICHT, J. F.**  
Evaporation of high-velocity particles in free-molecule flow.  
16 p2769 A69-31870
- FRIK, M. A.**  
Attitude stability of satellites subjected to gravity gradient and aerodynamic torques.  
[AIAA PAPER 69-832]  
21 p3821 A69-39363
- FRIILING, L. A.**  
Cosmic-ray neutron flux measurements above the atmosphere.  
01 p0146 A69-11223
- FRIMMER, M.**  
Polarographic measurement of critical oxygen pressures at heart muscle sarcosomes /Polarographische Messung kritischer Sauerstoffdrucke bei Herzmuskelsarkosomen/.  
23 p4080 A69-41427
- FRIMOUT, D.**  
Measurement of solar UV radiation by stratospheric balloon /Mesure du rayonnement ultraviolet solaire par ballon stratospherique/.  
11 p1945 A69-24410
- FRINTS, P. J. A.**  
Nitrosoazomethine derivatives - Oxidation of amidoximes.  
10 p1651 A69-23305
- FRISCH, B.**  
The 747 - Can we cope with its success/ques/.  
16 p2734 A69-31631
- FRISCH, D. H.**  
Autometric gyro for satellite relativity experiments.  
23 p4162 A69-41543
- FRISCH, H. P.**  
Thermoelastic instability of open section booms.  
07 p1231 A69-18331  
Thermally induced vibrations of long thin-walled cylinders of open section.  
11 p1994 A69-25534
- FRISCH, K. C.**  
Novel flame-resistant chlorine-containing polyester resins.  
08 p1340 A69-20505
- FRISCH, U.**  
Turbulent generation of the galactic field /Generation turbulente du champ galactique/.  
10 p1783 A69-23793
- FRISCHMUTH, D. S.**  
A model for the description and evaluation of technical problem solving.  
20 p3640 A69-38020
- FRISIUS, J.**  
Spectral parameters of the VLF radio noise observed as functions of the azimuth.  
01 p0033 A69-10971
- FRITSBERG, V. IA.**  
Heat capacity of /Ba,Sr/TiO sub 3 solid solutions in the ferroelectric phase transition region /Teploemkost' tverdyykh rastvorov /Ba,Sr/TiO sub 3 v oblasti segnetoelektricheskogo fazovogo perekhoda/.  
22 p3996 A69-41162
- FRITSCH, C. A.**  
A quadratic conduction gas lens.  
24 p4350 A69-43332
- FRITZ, G.**  
Absence of pulsar characteristics in several X-ray sources.  
07 p1218 A69-19254  
On X-ray line emission from Scorpius XR-1.  
13 p2325 A69-27313  
X-ray pulsar in the Crab Nebula.  
13 p2354 A69-28465  
X-ray spectra of several discrete cosmic sources.  
20 p3593 A69-38152
- FRITZ, T. A.**  
High-latitude outer-zone boundary region for greater than or equal to 40-kev electrons during geomagnetically quiet periods.  
03 p0502 A69-14004  
Initial observations of geomagnetically trapped protons and alpha particles with OGO 4.  
24 p4368 A69-43184
- FRITZEN, J. S.**  
The effect of chloride contamination on cracking in titanium.  
[SAE PAPER 680642]  
03 p0444 A69-13458
- FRITZLER, D.**  
Ultrasonic holography via the ultrasonic camera.  
10 p1696 A69-23550  
Some problems associated with optical image formation from acoustic holograms.  
23 p4166 A69-42181  
Reduction of bandwidth required for high resolution hologram transmission.  
24 p4317 A69-43761
- FRITZSCHE, C. R.**  
Production, development and research in integrated circuits in Germany.  
[AGARDOGRAPH-114]  
08 p1292 A69-20994
- FRITZSCHE, H.**  
Radiation hardness of ovonic devices.  
06 p0978 A69-16891  
Simple band model for amorphous semiconducting alloys.  
15 p2667 A69-30199
- FRIZEN, S. A.**  
Effect of plastic deformation and ageing on the structure of the alloy AMg11.  
05 p0783 A69-16814
- FROELICH, G.**  
Barotrauma during hyperbaric oxygenation /Barotrauma bei hyperbarer Oxygenation/.  
17 p2911 A69-33776  
Effects of various types of noise interference in hearing-test rooms on the reliability of quick-check audiometry /Der Einfluss unterschiedlichen Stoerschalls in den Hoerpruefraeumen auf die Zuverlaessigkeit der Quick-Check-Audiometrie/.  
21 p3725 A69-39286
- FROELICH, H.**  
Designing permanent magnets for attitude control of satellites with special consideration of environmental influences /Auslegung von Dauermagnetstaeben fuer die Lagerregelung von Satelliten mit besonderer Beruecksichtigung der Umwelteinfluesse/.  
16 p2868 A69-31936
- FROEHLI, C.**  
Holographic recordings in spatially incoherent light /Enregistrement d'hologrammes en lumiere spatialement incoherente/.  
12 p2090 A69-26293  
Study of weak displacements of opaque objects and of the optical distortion in solid-state lasers by holographic interferometry /Etude des faibles déplacements d'objets opaques et de la distorsion optique dans les lasers a solide par interferometrie holographique/.  
19 p3308 A69-35909
- FROELICH, F.**  
Investigations of reversal phenomena of the main geomagnetic field /Untersuchungen zu Umkehrerscheinungen des geomagnetischen Hauptfeldes/.  
16 p2782 A69-32462
- FROHLICH, S. J.**  
ISO-braze system for refractory materials.  
04 p0607 A69-15218
- FROHN, A.**  
Three-dimensional supersonic flow around shells of finite span /Dreidimensionale Ueberschallstroemung um Fluegel endlicher Spannweite/.  
11 p1820 A69-25425  
Measurement of ionization relaxation times in shock tubes.  
18 p3116 A69-34451
- FROLOV, A. A.**  
Determination of the influence of blowing various gases into the boundary layer on friction and heat- and mass-transfer when the external-flow velocity varies according to a power law /Opredelenie vlianiia dvuda razlichnykh gazov v pogranichnyy sloi na trenie, teplo- i massoobmen pri stepennom izmenenii skorosti vneshnego potoka/.  
02 p0234 A69-12581
- FROLOV, A. D.**  
Study of the electrical conductivity of the plasma in coaxial-type MHD generator models /Issledovanie elektroprovodnosti plazmy v modeliakh MGD-generatorov koaksial'nogo tipa/.  
10 p1735 A69-23463
- FROLOV, A. M.**  
A procedure for investigating ferrites in alternating fields /O metodike ispytaniia ferritov v peremennykh poliakh/.  
13 p2320 A69-27996
- FROLOV, A. V.**  
Effect of dislocations of lifetime of minority carriers in silicon.  
06 p0980 A69-17551
- FROLOV, IU. V.**  
Combustion and ignition of finely dispersed aluminum particles /O goreanii i vosplamnenii chastits melkodispersnogo aluminiuma/.  
08 p1375 A69-20341
- FROLOV, K. V.**  
Vibrations and Stability of Devices, Machines, and Control-System Elements /Kolebaniia i Ustoichivost' Priborov, Mashin i Elementov Sistem Upravleniia/.  
14 p2536 A69-29741  
Problem of vibration damping in devices and machines in a nonlinear formulation /K zadache vibroamortizatsii priborov i mashin v nelineinoi postanovke/.  
14 p2537 A69-29746
- FROLOV, O. S.**  
Role of the surface relief in the field effect in germanium and silicon.  
07 p1199 A69-18682  
Nature of recombination centers on a real germanium surface /Pro prirodu rekombinatsiinskikh tsentrov na real'noi poverkhnii germaniiu/.  
12 p2142 A69-25978
- FROLOV, S. A.**  
Synthesis of low-sensitivity electric circuits /Sintez malochuvstvitel'nykh elektricheskikh tspeiv/.  
09 p1472 A69-21780  
Analysis of the damping accuracy of polynomial filters /K analizu tochnosti zatukhaniia polinomial'nykh fil'trov/.  
11 p1850 A69-24970
- FROLOV, S. D.**  
Measurement of the temperature of moving droplets /Izmerenie temperatury dvizhushchikhsia kapel'/.  
04 p0688 A69-15423
- FROLOV, S. P.**  
Testing Aircraft Electrical Equipment /Ispytaniia aviatsionnogo elektrooborudovaniia/.  
20 p3464 A69-37237



## FROLOV, V. P.

Solution of some stress concentration problems by the contour smoothing method /O reshenii nekotorykh problem kontsentratsii napriazhenii s pomoshch'yu metoda sglazhivaniia kontura/.

11 p1973 A69-24661

## FROLOVA, L. S.

Cumulative error in inertial navigation systems /O nakoplenii oshibok v sistemakh inertsial'noi navigatsii/.

22 p3978 A69-40252

## FROLOVA, V. G.

Measurement of the lifetime of a system of 00 deg v vibrational levels of CO sub 2 molecules /Izmerenie vremen zhizni sistemy kolebatel'nykh urovnei 00 deg v molekul CO sub 2/.

13 p2273 A69-28579

Measurement of the 00 super 0 1 level population of CO sub 2 molecules /Izmerenie naselennosti urovnia 00 super 0 1 molekul CO sub 2/.

13 p2274 A69-28580

Study of a CO sub 2 pulsed laser /Issledovanie lazera na CO sub 2 v impul'snom rezhime/.

14 p2458 A69-29162

## FROMBERG, C.

Three airborne microelectronic equipments under development in the U.K. [AGARDOGRAPH-114]

08 p1292 A69-20991

## FROME, E. L.

Power spectrum of the impedance pneumograph - A data reduction system producing an analytical parameter of potential clinical usefulness.

12 p2024 A69-26558

## FROMENT, G.

Optical ozonsonde for simultaneous measurements /Sonde optique d'ozone a mesures simultanees/.

16 p2792 A69-32637

## FROMENTIN, J.

Method of strain analysis on an insulating specimen in the presence of a thermal gradient by means of a strain gauge /Methode d'analyse des deformees sur specimen isolant en presence d'un gradient thermique, au moyen de jauge d'extensometrie/.

13 p2264 A69-28599

## FROMM, E.

Solubility of nitrogen in tungsten at high temperatures /Zur Hochtemperaturloslichkeit von Stickstoff in Wolfram/.

07 p1168 A69-19602

## FROMM, J. E.

A method for reducing dispersion in convective diffidence schemes.

04 p0591 A69-15282

## FROMZEL, V. A.

The width of the emission spectrum of solid-state lasers /Shirina spektra generatsii tverdotel'nykh lazerv/.

14 p2459 A69-29389

A laser with a resonator mirror transmittance which is variable over the cross section /OKG s peremennym po secheniiu propuskaniem zerkal rezonatora/.

15 p2634 A69-30962

Angular divergence and transverse modes of a neodymium glass laser with a spherical cavity /Uglovoe raskhozhdienie i poperechnye tipy kolebanii lazera na neodimovom stekle so sfericheskimi rezonatorom/.

20 p3554 A69-37725

## FRONEK, D. K.

A free gyro erection system using any angular momentum, and for any initial starting angle.

16 p2792 A69-32553

## FRONING, H. D., JR.

Some preliminary propulsion system considerations and requirements for interstellar space flight.

06 p0984 A69-17631

## FROST, B. J.

Post-inhibitory rebound of the b-wave of the pigeon ERG.

23 p4084 A69-41463

## FROST, J.

An inexpensive technique for color electroluminescent display.

24 p4286 A69-42900

## FROST, L. S.

A new spectroscopic method of high pressure arc diagnostics.

12 p2094 A69-26968

## FROST, L. W.

Resins and reinforced plastic laminates for continuous use at 650 deg F. III.

07 p1171 A69-19545

## FROST, N. E.

Designing to prevent fatigue failures in service.

24 p4397 A69-42770

## FROST, P.

Mathematical modeling of stochastic processes.

04 p0623 A69-14694

## FROST, P. A.

New canonical forms of general multivariable linear systems with application to estimation and control.

12 p2048 A69-26075

## FROST, W. O.

Errors resulting from channel filters and adjacent channel crosstalk in DSB/SC telemetry systems.

07 p1083 A69-19130

Considerations in the use of AGC in AM/FM telemetry systems.

09 p1454 A69-21799

## FROULA, N. H.

Dynamic properties of high-purity beryllium. [AIAA PAPER 69-360]

13 p2283 A69-28293

## FROVA, A.

Electrooptical and magneto-optical effects in solids /Effetti elettro-ottici e magneto-ottici nei solidi/.

08 p1371 A69-20217

## FRUENGEL, F.

The videograph, a measuring device for atmospheric turbidity and visibility /Der Videograph, ein Messgeraet fuer atmosphaerische Truebung und Sichtweiten/.

08 p1314 A69-20376

## FRUGE, F.

Stability measurement problems and techniques for operational airborne pulse Doppler radar.

20 p3492 A69-37711

## FRUTIGER, W. A.

An X-band voltage tunable magnetron.

07 p1102 A69-18670

## FRUTKIN, A. W.

NASA programs and opportunities for international cooperation in space. [UN PAPER 68-95367]

01 p0179 A69-10516

## FRY, D. L.

Certain histological and chemical responses of the vascular interface to acutely induced mechanical stress in the aorta of the dog.

24 p4257 A69-42625

## FRY, G. E.

Personality characteristics of jet pilots as measured by the Edwards Personal Preference Schedule.

14 p2408 A69-29294

## FRYBA, L.

The inverse problem in stochastic processes.

10 p1793 A69-22876

## FRYE, G. M.

Evidence for a point source of high energy cosmic gamma rays.

24 p4365 A69-42606

## FRYE, G. M., JR.

Flux and energy spectrum of cosmic-ray electrons at 42 deg north geomagnetic latitude in October 1967.

05 p0815 A69-16250

Upper limits for high-energy neutrons from two importance 1 solar flares.

18 p3187 A69-34959

## FRYER, B. C.

The radioisotope energized Stirling engine for spacecraft auxiliary electric power in the 250 to 500 W/e/ power range.

23 p4190 A69-42281

## FRYER, R.

Crater statistics near the Flamsteed P ring.

21 p3800 A69-38675

## FRYER, R. J.

The moon from Apollo 8.

14 p2527 A69-29889

The 1969 missions to Mars.

18 p3198 A69-34795

## FRYER, T. B.

Single-channel pressure telemetry unit.

11 p1831 A69-25642

A multichannel implantable telemetry system.

15 p2559 A69-31044

Single-channel pressure telemetry unit.

23 p4100 A69-41295

## FRYKLUND, J.

Use of a time-sharing computer in nuclear chemistry.

05 p0725 A69-16584

## FRYSINGER, G. R.

Practical hydrocarbon fuel cell.

01 p0013 A69-10969

Fast transient response fuel cell - Battery hybrid power source. [SAE PAPER 690205]

24 p4255 A69-42888

## FU, H. S.

Lumped model analysis of the low frequency generation noise in gold-doped silicon junction-gate field-effect transistors.

22 p3911 A69-40000

## FU, K. S.

On feature selection in pattern recognition.

06 p0892 A69-17311

Stochastic approximation algorithms for system identification, estimation, and decomposition of multistage structures.

11 p1842 A69-24939

Learning control systems - Review and outlook.

18 p3112 A69-35099

## FU, K.-S.

A nonparametric partitioning procedure for pattern classification.

24 p4285 A69-43066

## FUCCELLA, L. M.

Beta-blockade and emotional tachycardia. Radiotelemetric investigations in ski jumpers.

23 p4078 A69-41311

## FUCCI, S.

Avionics and ECM system integration on military aircraft. [AIAA PAPER 69-822]

19 p3243 A69-35599

## FUCHS, E.

Adaptation of electrical autostimulation in the hypothalamus and of the instrumental confirmatory reaction to varying conditions of release /Anpassung der elektrischen Autostimulation im Hypothalamus und der instrumentellen Bekraeftigungsreaktion an sich aendernde Ausloesbedingungen/.

23 p4091 A69-42051

## FUCHS, L. H.

X-ray crystallographic evidence for the meteoritic occurrence of nepheline.

04 p0659 A69-15014

The phosphate mineralogy of meteorites.

19 p3416 A69-36128

## FUCHS, M.

Procedure for the launching of the "Europa 1" carrier rocket in Woomera according to prelaunch wind load calculations /Verfahren zur Startfreigabe der Europa-1-Tragerrakete in Woomera aufgrund von Windbelastungsvorausberechnungen/.

01 p0160 A69-10033

Launch clearance procedure on the basis of wind load precalculations for the Europa 1 vehicle in Woomera.

20 p3619 A69-38288

## FUCHS, M. E. A.

Oxygen supply and carbon dioxide absorption in long-term life-support systems.

20 p3477 A69-37623

Basic studies on Hirudo medicinalis for a space experiment. I.

24 p4268 A69-43402

## FUECHSEL, P. G.

On the motion and stability of a dual spin satellite with nutation damping. [AIAA PAPER 69-857]

21 p3823 A69-39385

## FUEHRER, H. R.

Dynamic properties of metal powder-epoxy resin composites.

07 p1159 A69-18721

## FUELL, F. J.

Flight control system for Jaguar.

01 p0012 A69-10634

## FUESTOESS, L.

Calculations on the application of electron scattering to the determination of pressure.

07 p1181 A69-19211

## FUGOL, I. IA.

Low-frequency intensity oscillations of helium plasma radiation at low temperatures.

01 p0128 A69-10344

## FUHRMANN, K.

Rocket-borne liquid helium cooled telescope.

11 p1885 A69-24851

Near infrared night sky background.

13 p2342 A69-27600

- FUHS, A. E.**  
Radiative recombination ramjet.  
06 p0984 A69-17630  
Measurement of electrical conductivity in the wake neck.  
21 p3724 A69-39030
- FUJKSCHOT, P. H.**  
DYDRA-data logger for dynamic measurements.  
19 p3293 A69-35746
- FUJII, A.**  
A study of a parametric amplifier as a tracking filter.  
13 p2225 A69-27183
- FUJII, Y.**  
Low-loss laser beam transmission through lenses at the Brewster angle.  
07 p1148 A69-18863  
Laser photodetectors.  
09 p1518 A69-22126
- FUJII, Z.**  
The charge ratio of high-energy cosmic-ray muons at large zenith angles.  
17 p3023 A69-33321
- FUJIMOTO, K. T.**  
Fabrication of a dispenser for an eight satellite payload.  
09 p1512 A69-22369
- FUJIMOTO, M.**  
A gas flowing through a spiral arm model /Gaz, tekushchii cherez model' spiral'nogo rukava/.  
12 p2170 A69-27065  
Correlation between the densities of X-ray sources and interstellar gas.  
17 p3030 A69-33069  
Magnetohydrodynamical models of a helical magnetic field in spiral arms.  
24 p4388 A69-43640
- FUJIOKA, H.**  
Interaction of plane electromagnetic waves with a moving compressible plasma fluid.  
08 p1360 A69-20097  
Interaction of a plane electromagnetic wave with a moving conductive dielectric medium.  
18 p3105 A69-35486
- FUJIOKA, J. K.**  
A high-efficiency electronically scanned K-band phased array for spaceborne radiometric applications.  
04 p0572 A69-14328
- FUJIOKA, T.**  
Phase-locking phenomena of multitransverse, longitudinal modes in He-Ne lasers.  
[IEEE PAPER Q-1] 07 p1153 A69-19076  
New aspects of two transverse modes locking with multiple longitudinal modes in a He-Ne laser.  
12 p2104 A69-25923  
Three-dimensional effects of potential minimum on electron beam noise.  
15 p2568 A69-30794
- FUJISAWA, K.**  
Transmission line analogs and kinetic power theorems for space charge waves in semiconductors.  
10 p1748 A69-24052  
Wave amplification due to the coupling between space charge waves in semiconductors and a forward circuit wave.  
10 p1748 A69-24053
- FUJISAWA, N.**  
Toroidal theta pinch collapse by the snowplow model.  
11 p1924 A69-24303
- FUJISHIRO, S.**  
On the mechanism of stress-corrosion cracking of a titanium-6 percent aluminum-4 percent vanadium alloy in anhydrous methanol.  
11 p1903 A69-24576
- FUJITA, H.**  
On the uniqueness and non-uniqueness of solutions of initial value problems for some quasi-linear parabolic equations.  
10 p1722 A69-24069
- FUJITA, J.**  
Thermalization of the kinetic energy of a plasma flow by a magnetic mirror field in BSG-I experiments.  
02 p0289 A69-12176
- FUJITA, T.**  
Aerial measurement of radiation temperatures over Mt. Fuji and Tokyo areas and their application to the determination of ground- and water-surface temperatures.  
01 p0110 A69-10693
- Present status of cloud velocity computations from the ATS I and ATS III satellites.  
21 p3757 A69-38370
- Relationship between observed winds and cloud velocities determined from pictures obtained by the ESSA III, ESSA V and ATS I satellites.  
21 p3758 A69-38371
- FUJITA, T. T.**  
Formation and structure of equatorial anticyclones caused by large-scale cross-equatorial flows determined by ATS-I photographs.  
24 p4342 A69-42895
- FUJIWARA, E. J.**  
Novel flame-resistant chlorine-containing polyester resins.  
08 p1340 A69-20505
- FUJIWARA, M.**  
Probe noise in quiescent plasmas.  
06 p0967 A69-17715
- FUJIWARA, Y.**  
Fine structure of hybrid combustion.  
16 p2879 A69-32013  
Mechanism of plastic deformation and dislocation damping of cemented carbides.  
21 p3744 A69-38736
- FUKAO, T.**  
Bidirectional AC-DC power converter.  
13 p2209 A69-28178
- FUKATSU, A.**  
High-power transmitting tubes for satellite communication earth stations.  
05 p0728 A69-15668
- FUKATSU, Y.**  
Frequency conversion with gain through sideband locking of an IMPATT diode oscillation.  
12 p2036 A69-25909
- FUKS, I. G.**  
Influence of molybdenum disulfide on the electrochemical corrosion of metals /Vliianie disulfida molibdena na elektrokhimicheskuiu korroziiu metallov/.  
21 p3733 A69-39804
- FUKS, I. M.**  
Spectrum of a signal scattered by an oscillating interface /Spektr signala, rasseiannogo koleblushcheisia poverkhnosti'iu razdela/.  
08 p1275 A69-20432  
Refraction and scattering in the solar corona during eclipsed observations of cosmic sources /Refraktsiia i rasseianie v solnechnoi korone pri zatmennykh nabliudeniakh kosmicheskikh istochnikov/.  
15 p2688 A69-30555  
Shadowing of a statistically uneven surface /O zateneniakh statisticheski nerovnoi poverkhnosti/.  
15 p2569 A69-30948
- FUKS, M. IA.**  
Internal macrostresses in metallic vacuum condensates /Vnutrennie makronapriazheniia v metallicheskih vakuumnykh kondensatakh/.  
12 p2143 A69-26457
- FUKUCHI, S. M.**  
Broadband double balanced mixer/modulators. I.  
10 p1665 A69-23876  
Broadband double balanced mixer/modulators. II.  
15 p2580 A69-31077
- FUKUDA, T.**  
Ultralow-noise preamplifiers in satellite communication earth terminal installations - Traveling-wave maser and cooled parametric amplifier.  
05 p0728 A69-15670
- FUKUHARA, T.**  
Elastic curves of stepped-beams having different values of flexural rigidity on each half length of span.  
15 p2705 A69-30417
- FUKUI, K.**  
Cosmic-ray heavy-nucleus enders at various atmospheric depths.  
17 p3025 A69-34219
- FUKUNAGA, K.**  
Calculation of Bayes' recognition error for two multivariate Gaussian distributions.  
15 p2572 A69-31113
- FUKUNISHI, H.**  
Ionospheric effect on geomagnetic micropulsations at low latitudes.  
14 p2441 A69-29380
- FUKUSAKO, S.**  
The effects of buoyancy on the velocity and temperature distributions in a vertical wake of a heated body.  
19 p3296 A69-35761
- A contribution to the spreading of an axisymmetric wake with streamwise pressure gradient.  
19 p3296 A69-35762
- FUKUSHIMA, N.**  
Worldwide geomagnetic change preceding the onset of auroral electrojet.  
10 p1681 A69-22804  
Three-dimensional electric current and toroidal magnetic field in the ionosphere.  
10 p1681 A69-22805
- FUKUSHIMA, Y.**  
Search for quarks.  
15 p2674 A69-30308
- FUKUWATARI, A.**  
A study of combustion in simple combustion chamber.  
18 p3230 A69-34837
- FULACHIER, L.**  
Measurements of heat flux densities and Reynolds potentials in a turbulent boundary layer with wall suction /Mesures de densites de flux de chaleur et de tensions de Reynolds dans une couche limite turbulente avec aspiration a la paroi/.  
19 p3452 A69-36722
- FULDE, B.**  
P-n junctions formed during growth of gallium phosphide crystals /Zlaczna p-n powstajace w czasie wzrostu krystalow fosforu galu/.  
13 p3233 A69-28642
- FULLER, A. T.**  
Analysis of nonlinear stochastic systems by means of the Fokker-Planck equation.  
12 p2124 A69-27141
- FULLER, B. D.**  
Discussion of paper by J. L. Blank and W. R. Sill, 'Response of the moon to the time-varying interplanetary magnetic field.'  
24 p4384 A69-43190
- FULLER, C. E.**  
Application of laser Doppler velocity instrumentation to the measurement of jet turbulence.  
[SAE PAPER 690266] 09 p1494 A69-21555
- FULLER, D. D.**  
A review of the state-of-the-art for the design of self-acting gas-lubricated bearings.  
[ASME PAPER 68-LUBS-10] 13 p2265 A69-27267
- FULLER, D. W. E.**  
Short-term frequency stability of the HCN maser.  
24 p4327 A69-42614
- FULLER, J. A.**  
The point-matching solution of uniform nonsymmetric waveguides.  
14 p2423 A69-29758
- FULLER, J. E.**  
Heavy lift VTOL - Effect of weight and size on productivity.  
[SAE PAPER 782] 18 p3091 A69-34905
- FULLER, L. E.**  
Fluorocarbon combustion studies. IV.  
21 p3852 A69-39594
- FULLER, P. J. A.**  
Dynamic stress-strain release paths for aluminium and magnesium measured to 200 kb.  
08 p1330 A69-20102
- FULLER, R. J.**  
Applications of electron beam welding.  
[SBAC PAPER 14] 20 p3550 A69-37451
- FULLER, W. D.**  
Generation of crack propagation data on notched rotating beam specimens by means of an interrupted stressing technique.  
[ASME PAPER 68-WA/MET-3] 05 p0838 A69-16148
- FULMER, H. R.**  
Radome boresight measurement systems.  
07 p1109 A69-19517
- FULP, R. O.**  
Continuous characters of compact semigroups.  
24 p4340 A69-42891
- FULRATH, R. M.**  
Mechanical properties of brittle matrix composites.  
12 p2115 A69-26830
- FULTON, F.**  
Lessons from the B-70 to be applied to SST safety.  
22 p3868 A69-41143



## FULTON, R. E.

Axisymmetric static and dynamic buckling of spherical caps due to centrally distributed pressures.  
[AIAA PAPER 69-89] 06 p1028 A69-18133

## FUNAKAWA, K.

Atmospheric propagation of laser waves.  
09 p1518 A69-22129

## FUNCK, R.

Study of a continuously polarized pn junction /Etude d'une jonction pn polarisee en continu/.  
08 p1280 A69-19973

## FUNDERBURKE, I. B.

Value control-cost control program for C-5.  
13 p2383 A69-28095

## FUNG, A. K.

Radar determination of the surface properties of a randomly rough surface.  
05 p0721 A69-16572

Scattering and depolarization of electromagnetic waves by a horizontally weakly inhomogeneous medium.  
18 p3101 A69-34788

## FUNG, P. C. W.

Interaction of a system of highly relativistic rotating electrons and a cold magnetoactive plasma.  
03 p0476 A69-13383

Interaction of a highly relativistic helical electron stream and a cold magnetoactive plasma.  
07 p1191 A69-18958

Origin of solar type IV meter-wave storms.  
07 p1205 A69-18959

Synchrotron radiation from single electrons gyrating in a magnetoactive plasma.  
10 p1741 A69-23858

Amplification of synchrotron radiation in a stream-plasma system.  
11 p1931 A69-25361

## FUNG, Y. C.

A First Course in Continuum Mechanics.  
17 p3005 A69-33323

Theory of sheet flow in lung alveoli.  
22 p3874 A69-40216

Peristaltic waves in circular cylindrical tubes.  
[ASME PAPER 69-APMW-3] 24 p4275 A69-43108

## FUNG, Y.-C.

Studies on the blood flow in the lung.  
19 p3263 A69-36656

## FUNK, C. W.

Composite materials development for cryogenic bearing retainers.  
[ASME PAPER 68-WA/LUB-10] 05 p0768 A69-16133

## FUNK, F.

Calculated energy deposits from the decay of tritium and other radioisotopes incorporated into bacteria.  
07 p1068 A69-19490

The mechanism of inactivation of T4 bacteriophage by tritium decay.  
07 p1068 A69-19491

## FUNK, H.

The thermal release of rare gases from separated minerals of the Mocs meteorite.  
19 p3419 A69-36141

Cosmic rays latitude survey at solar minimum.  
19 p3396 A69-36411

## FUNK, J.

Application of nuclear solid-core rockets to interplanetary orbital launch by multiorbit injection.  
[AIAA PAPER 69-335] 16 p2810 A69-32660

## FUNK, J. E.

Quadratic control problem with an energy constraint - Approximate solutions.  
04 p0583 A69-15111

Sensible heat transfer in the Gemini and Apollo space suits.  
06 p0880 A69-17089

## FUNK, J. N.

Safety assurance program for the B-747.  
22 p3867 A69-41135

## FUNKHOUSER, G. E.

Effects of body thermal state on manual performance.  
03 p0381 A69-14074

## FUNKHOUSER, J. G.

Excess argon in deep-sea rocks.  
02 p0244 A69-12568

## FURGURSON, R. G.

High temperature sensors for gas turbines.  
[ASME PAPER 69-GT-30] 09 p1501 A69-22492

## FURI, M.

Boundedness theorem for a class of second-order differential equations /Un criterio di limitatezza per una classe di equazioni differenziali di secondo ordine/.  
02 p0271 A69-11549

## FURLETOV, V. I.

Effect of sound on a turbulent flame /O vozdeistvii zvuka na turbulentnoe plamya/.  
17 p3069 A69-33141

## FURMAN, A. V.

On an approximate method of solution of nonlinear heat-conduction problems..  
04 p0688 A69-15409

## FURMAN, I. A.

Determining the mean number of false targets in the scanning sector.  
14 p2410 A69-28836

Determination of the a posteriori probability of a target position in space on the basis of radar observation data /Opredelenie aposteriornoj veroiatnosti polozheniia tseli v prostranstve po dannym radiolokatsionnogo nabludeniia/.  
15 p2566 A69-30334

Determination of target trajectories on the basis of radar observation data with allowance for the association between neighboring readings /Nakhozhenie traektorii tselei po dannym radiolokatsionnogo nabludeniia pri uchete svyazi mezhdu sosednimi otschetami/.  
15 p2566 A69-30335

## FURNIVALL, W. H.

High altitude/cold weather operation of Hamilton Standard propellers.  
[SAE PAPER 690323] 11 p1822 A69-24515

## FURRER, F.

Deblurring of motion-blurred photographs using extended-range holographic Fourier-transform division.  
22 p3944 A69-40020

## FURST, A.

An atmosphere exposure chamber for small animals.  
04 p0584 A69-14678

## FURTH, B.

Mass spectrometry in structural and stereochemical problems. CLXVI.  
09 p1448 A69-22551

## FURTH, H. P.

Plasma diffusion in a toroidal stellarator.  
09 p1552 A69-22294

The tearing mode.  
24 p4355 A69-42684

## FURUKAWA, J.

Theoretical analysis of externally pressurized porous journal gas bearings. I.  
01 p0085 A69-10312

## FURUKAWA, M.

The abundances of arsenic, tin and antimony in chondritic meteorites.  
13 p2344 A69-27630

## FURUKAWA, S.

Precision microwave admittance measurements of active elements.  
12 p2038 A69-26054

## FURUKAWA, T.

An estimation of the heat flux and the water vapour flux by the bulk aerodynamic method.  
07 p1176 A69-18965

## FURUMOTO, A. S.

Seismic refraction study of the internal structure of a volcanic cinder cone.  
02 p0236 A69-11465

## FURUMOTO, H.

Time dependent spectroscopy of flashlamp pumped dye lasers.  
06 p0936 A69-17901

## FURUMOTO, H. W.

Optical pumps for organic dye lasers.  
23 p4174 A69-42187

## FURUSE, T.

A study on the oxygenation velocity factor of the red blood cell by use of the rapid flow method combined with a Pt-electrode as the oxygenation detector.  
20 p3480 A69-38283

## FURUTA, T.

Experimental investigation of ablative materials.  
21 p3753 A69-39800

## FURUTSU, K.

Energy-momentum tensor of electromagnetic field in moving dispersive media and instability - Relativistic formulation.  
10 p1653 A69-23193

## FURUYA, H.

The EEG of pilots. II.  
06 p0875 A69-18021

Characteristics of pilots on personality tests. I.  
06 p0876 A69-18033

## FURUYA, M.

Transient changes in oxygen consumption, CO sub 2 elimination and R.Q. during and after acutely induced hypoxia to rabbits.  
06 p0876 A69-18026

## FUSE, K.

Analyses of pyrimidine and purine bases by a combination of paper chromatography and time-of-flight mass spectrometry.  
11 p1832 A69-24738

Aluminum-26 in meteorites. VI - Achondrites.  
17 p3034 A69-33584

## FUSS, D.

Clouds-in-clouds, clouds-in-cells physics for many-body plasma simulation.  
12 p2138 A69-26625

## FUTAKI, H.

Effects of various doping elements on the transition temperature of vanadium oxide semiconductors.  
23 p4198 A69-41564

## FUTRAL, S. M.

Instrumentation used to define performance of small size, low power gas turbines.  
[ASME PAPER 69-GT-104] 09 p1501 A69-22522

## FUTRELL, J. H.

Ion-molecule reactions.  
01 p0124 A69-10859

Improvement of spectral baseline stability for a time-of-flight mass spectrometer operated at elevated pressures.  
10 p1693 A69-23345

## FYALL, A. A.

The rain erosion problem.  
21 p3646 A69-38393

Single impact studies of rain erosion.  
23 p4227 A69-41872

## FYFE, I. M.

Plane-strain plastic wave propagation in a dynamically loaded hollow cylinder.  
02 p0344 A69-12292

## G

## GAAL, P. S.

Quartz pedestal dilatometer.  
15 p2607 A69-30153

## GABASOV, R.

Contribution to the theory of controllability of dynamic systems /K teorii upravliaemosti dinamicheskikh sistem/.  
01 p0051 A69-10698

## GABBARD, O. G.

High-speed digital logic for satellite communications.  
12 p2040 A69-26465

MAT-1 - A 700-channel time-division multiple-access system with demand-assignment features.  
23 p4129 A69-42511

## GABDULKHAEV, B. G.

Some problems in the theory of approximate methods. I /Nekotorye voprosy teorii priblizhennykh metodov. I/.  
02 p0272 A69-12163

## GABEL, R. M.

Feasibility demonstration of a small fluid-cooled turbine at 2300F.  
[SAE PAPER 690034] 07 p1203 A69-18311

## GABELMAN, I. J.

Improvements in CNI - Will they help create a new air system/ques/  
07 p1085 A69-19178

## GABIDULLIN, R. M.

New light alloys of aluminum with lithium and magnesium.  
03 p0443 A69-13026

- GABLER, W.**  
Analog determination of polynomial zeros by means of an always convergent method /Analoge Polynom-nullstellenbestimmung nach einer immer konvergenten Methode/.  
05 p0723 A69-15933
- GABOR, D.**  
Associative holographic memories.  
10 p1697 A69-23868  
Information processing with coherent light.  
21 p3722 A69-38797
- GABOVICH, M. D.**  
Plasma heating in a two-stage theta pinch.  
05 p0804 A69-16549  
Certain characteristics of a plasma flow from a discharge in a magnetic field of up to 100 koe /Pro deiaki osoblivosti vitkannia plazmi z rozradiu, iaki znakhodit'sia u magnitnomu poli do 100 ke/.  
08 p1370 A69-21075  
Plasma flow from a Penning discharge with an incandescent cathode into a vacuum free of a magnetic field /Istechenie plazmy iz razriada Penninga s nakalennym katodom v vakuumnui oblast', svobodnuu ot magnitnogo polia/.  
11 p1933 A69-25543
- GABRIEL, A. H.**  
Long wavelength satellites to the He-like ion resonance lines in the laboratory and in the sun.  
09 p1598 A69-22158
- GABRIEL, M.**  
On the temperature gradient in a semi-convective region.  
09 p1596 A69-22057
- GABRIEL, W. J.**  
Maintenance recording systems for a fleet of aircraft /an overview/.  
10 p1671 A69-23261
- GABROVSKI, IU.**  
Autocorrelation of solar activity /Avtokorrelatsiia solnechnoi aktivnosti/.  
02 p0314 A69-11677
- GABROVSKI, IV.**  
Autocorrelation of solar activity.  
13 p2355 A69-28708
- GABSDIL, W.**  
A balloon telescope for measuring nightglow /Ein Ballon-Teleskop zur Messung der Nachthimmelshelligkeit/.  
06 p0999 A69-16972
- GABUNIA, L. L.**  
Inelastic interaction cross section of  $7 \times 10$  super 10 to 10 super 12 eV nuclear-interacting particles in carbon and iron.  
13 p2330 A69-28383
- GACHECHILADZE, R. G.**  
The problem of positive disturbances in the F2 layer /K voprosu o polozhitel'nykh vozmushcheniakh v sloe F2/.  
20 p3527 A69-37674
- GADD, J. D.**  
Oxidation resistant coating for columbium alloys.  
21 p3730 A69-38672
- GADDIS, D.**  
Effect of surface finish and hardness on the wear-life of an inorganic solid lubricant film. [ASLE PREPRINT 68AM 7C-3]  
07 p1139 A69-18623
- GADDIS, J. L.**  
A model for large eddy contributions in incompressible turbulent boundary layers.  
17 p2951 A69-33255
- GADDY, O. L.**  
Detection of fast infrared laser pulses with thin film thermocouples.  
05 p0773 A69-16284  
Time behavior of exciton formation and laser emission in Cd/SeS/ platelets.  
10 p1703 A69-23512  
Investigation of a Q-switched pulsed discharge CO sub 2 laser.  
22 p3963 A69-40566
- GADSDEN, M.**  
5577 angstrom units nightglow and atmospheric movements.  
16 p2778 A69-32185
- GADWAY, J. R.**  
C5 aircraft flight test PCM multiplexer/encoder.  
10 p1693 A69-23275
- GADZHIALIEV, M. M.**  
Quantum thermomagnetic effects in n-type InSb and n-type InAs.  
06 p0979 A69-16992
- GADZHOKOV, V.**  
Autocorrelation of solar activity /Avtokorrelatsiia solnechnoi aktivnosti/.  
02 p0314 A69-11677  
Autocorrelation of solar activity.  
13 p2355 A69-28708
- GAEV, I. S.**  
Saturation of molybdenum with boron by means of thermal diffusion /Termodifuzionnoe nasyschenie molibdena borom/.  
19 p3328 A69-36160
- GAEVSKAIA, M. S.**  
Influence of high oxygen concentrations on animal organisms /Vliianie povysennykh kontsentratsii kisloroda na organizm zhivotnykh/.  
05 p0709 A69-16512  
The effect of high oxygen concentrations on the animal organism.  
08 p1262 A69-19831  
Effects of high oxygen concentrations on animals.  
18 p3095 A69-34731
- GAEVSKII, V. L.**  
Light and heat of a planet - Satellite actinometry. [UN PAPER 68-95763]  
06 p0916 A69-17038  
Satellite Meteorology /Sputnikovaia Meteorologiya/.  
06 p0951 A69-17976  
Actinometric instruments on board Soviet meteorological satellites /Aktinometricheskaia apparatura sovetskikh meteorologicheskikh sputnikov zemli/.  
06 p0929 A69-17977  
Experiments in comparing the results of ground, aircraft, and spacecraft measurements /Opyt sravneniia rezul'tatov nazemnykh, samoletnykh i sputnikovykh izmerenii/.  
06 p0951 A69-17982
- GAFFEY, T. M.**  
The stopped-rotor variant of the propotor VTOL aircraft. [AIAA PAPER 69-220]  
10 p1635 A69-24087  
Tail rotor design. II - Structural dynamics. [AHS PAPER 342]  
17 p3059 A69-33504  
The effect of positive pitch-flap coupling /Negative delta sub 3/ on rotor blade motion stability and flapping.  
20 p3463 A69-37808
- GAFFIN, W. O.**  
Development of the high bypass turbopan.  
05 p0811 A69-15552
- GAFFNEY, J.**  
Failure analysis techniques used in a reliability analysis laboratory.  
15 p2722 A69-31133  
Integrated circuit failure mechanisms and their detection through failure analysis - 1969 survey.  
19 p3282 A69-35786
- GAFFNEY, J. E., JR.**  
Pseudo-noise interferometer.  
01 p0048 A69-11003  
Time-difference position-determination system for aerospace and terrestrial applications.  
08 p1348 A69-21066  
Time-difference position-determination system for aerospace and terrestrial applications.  
22 p3977 A69-39874
- GAFTULINA, D. S.**  
Some properties of tellurium-doped silicon.  
04 p0644 A69-15267
- GAFURI, R. A.**  
Fluctuations of atmospheric thermal radiation.  
09 p1490 A69-21868
- GAGANOV, P. G.**  
Determination of the optimum content of redundant elements for complex technological systems /Opredelenie optimal'nogo ob'ema zapasnykh elementov dlia slozhnykh tekhnicheskikh sistem/.  
14 p2426 A69-29422
- GAGARIN, IU. A.**  
Professional activity of a cosmonaut. [UN PAPER 68-95716]  
06 p0879 A69-17036
- GAGGE, A. P.**  
Proposed standard system of symbols for thermal physiology.  
23 p4078 A69-41317
- GAGGIOLI, R. A.**  
A new systematic formalism for similarity analysis.  
16 p2773 A69-32379
- GAGLIANO, F. P.**  
The metallographic preparation of micro-miniature devices.  
03 p0402 A69-13007  
Lasers in industry.  
09 p1521 A69-22783
- GAGLIARDI, R. M.**  
Radiation models using discrete radiator ensembles.  
01 p0030 A69-10556  
M-ary Poisson detection and optical communications.  
19 p3276 A69-36486
- GAGNE, R. E.**  
Techniques for the design of linear digital simulations.  
06 p0906 A69-17491
- GAGNON, R. A.**  
Metal-oxide-semiconductor circuits of higher orders of complementarity.  
07 p1104 A69-18887
- GAHN, R. F.**  
Vacuum distillation technique for recovery of alkali-metal reaction products.  
01 p0083 A69-10927  
Determination of oxygen in lithium by the vacuum distillation method.  
22 p3897 A69-40932
- GAI, I. A.**  
Influence of bismuth oxide on the formation and properties of garnet ferrites /Vliianie oksii vismuta na obrazovanie i svoistva ferritov-granatov/.  
13 p2320 A69-27998
- GAI, S. L.**  
Effect of suction on the upstream influence in shock-wave-boundary layer interactions.  
13 p2244 A69-27326
- GAIBULLAEV, F.**  
Certain features of electrical conductivity of the rare earth metals lanthanum, cerium, praseodymium, and neodymium, in the solid and liquid states /Nekotorye osobennosti elektroprovodnosti legkikh redkozemel'nykh metallov lantana, tseria, prazeodima i neodima v tverdom i zhidkom sostoiianiiakh/.  
21 p3781 A69-39070
- GAIDAI, V. A.**  
Effect of the acoustic interaction of electroacoustic transducers on the directional properties of multibeam receiving antennas /K voprosu o vliianii akusticheskogo vzaimodeistviia elektroakusticheskikh preobrazovatelei na napravlennye svoistva priemnykh mnogoluchevykh antenn/.  
13 p2227 A69-27536
- GAIDAMACHENKO, G. S.**  
Machine for high-temperature tensile testing in vacuum.  
07 p1117 A69-19319
- GAIDARENKO, A. L.**  
Spherulite boundaries and some specific features of interspherulite breakdown /Granitsy sferolitov i nekotorye osobennosti mezhsferolitnogo razrusheniia/.  
22 p3973 A69-40740
- GAIDUK, A. R.**  
Determination of the spectral density of the response of a linear discrete filter with multiple input and output periods to a random signal /Opredelenie spektral'noi plotnosti reaktsii lineinogo diskretnogo fil'tra s kratnymi periodami vkhoda i vykhoda na sluchainyi signal/.  
04 p0584 A69-15419
- GAIDUKOV, V. F.**  
Automatic charging device for storage capacitors /Avtomaticheskoe zariadnoe ustroistvo emkostnykh nakopitelei/.  
04 p0580 A69-14493  
Study of the self-induction of a conical electrode-type plasma accelerator /Issledovanie samoindukttsii konicheskogo elektrodnoho uskoritelia plazmy/.  
19 p3379 A69-35821
- GAIGEROV, S. S.**  
Certain features of atmospheric circulation over the Southern Hemisphere /Nekotorye osobennosti atmosfernoii tsirkulatsii nad iuzhnyim polushariem/.  
14 p2477 A69-29832  
The comparison of the Soviet Meteorological rocket data with the CIRA-1965 model.  
15 p2650 A69-31421



## GAILIT, T. A.

## GAILIT, T. A.

Measurements of the phase fluctuations of a signal reflected from the ionosphere in the case of oblique incidence /Izmereniia fluktuatsii fazy otrazhennogo ot ionosfery signala pri naklonnom padenii/.  
10 p1657 A69-23913

## GAILITIS, A.

Experimental discovery of the electromotive force along the external magnetic field induced by a flow of liquid metal /alpha-effect/.  
04 p0635 A69-14547

## GAILLARD-CUSIN, F.

The nature of the explosive process of the combustion of hydrogen at high pressures /Sur la nature du processus explosif de la combustion de l'hydrogene a hautes pressions/.  
05 p0849 A69-16615

## GAILLET, A.

Fluidic logic elements employing suction controls /Elements logiques a fluides utilisant des commandes par aspiration/.  
16 p2736 A69-31835

## GAILY, T. D.

Optical absorption coefficient of molecular oxygen near 1215 angstroms.  
15 p2656 A69-31031

## GAINER, C. A.

All-weather landing flight director and fault warning display simulator studies.  
01 p0010 A69-10455

## GAINER, T. G.

Status of research on parawing lifting decelerators. [AIAA PAPER 68-967]  
24 p4254 A69-43715

## GAINOTTI, A.

Positron annihilation in semiconductors.  
03 p0485 A69-13295

## GAITSKELL, J. N.

Submillimetre solar radiation at sea level.  
13 p2327 A69-27590

## GAIVAS, I. V.

Temperature stresses due to disturbance of uniform heat flow in the vicinity of macro-inclusions.  
06 p1021 A69-17184

## GAIVORONSKAIA, T. V.

Program for calculating probability density /Programma vychisleniia plotnosti veroiatnosti/.  
02 p0239 A69-11692  
Program for computing probability density.  
13 p2258 A69-28723

## GAJENDAR, N.

Bending of a partially clamped rectangular plate.  
04 p0681 A69-15289

## GAKHRAMANOV, K. I.

Necking of plates under biaxial tension /Obrazovanie sheiki v plastinkakh pri dvukhosnom rastizhenii/.  
22 p4039 A69-39913

## GAL-OR, B.

Theory of coupled heat and mass transfer with zero-order reactions in two-phase systems.  
14 p2537 A69-29012  
Space dynamics and the foundations of classical and relativistic thermodynamics.  
14 p2538 A69-29019

## GALAEV, A. A.

Atomic structure of the surface of semiconductor crystals as exemplified by A and B polar faces in the InSb crystal /Atomnaia struktura poverkhnosti poluprovodnikovkh kristallov na primere poliarnykh granei A i B kristalla InSb/.  
10 p1747 A69-23965

## GALAKA, P. I.

Effect of vibration and elevated temperature on the strength of fiberglass-reinforced plastic /Vliianie vibratsii i povyshennoi temperatury na prochnost' stekloplastika/.  
15 p2643 A69-31203

## GALAKTIONOV, B. V.

Electron confinement region in electron cyclotron resonance in a magnetic mirror.  
03 p0478 A69-13849

## GALAKTIONOV, I. I.

Measurement of CO sub 2 temperature and concentration behind a shock wave from the infrared bands /Izmerenie temperatury i kontsentratsii CO sub 2 za udarnoi volnoi po infrakrasnym polosam/.  
11 p1873 A69-25226

## GALAKTIONOV, S. V.

Influence of the lamination effect on the performance of a traveling wave tube /Vliianie effekta rassloeniia na rabotu LBV/.  
05 p0727 A69-15642  
Effect of stratification on TWT operation.  
16 p2762 A69-32499

## GALAKTIONOV, V. G.

Influence of high oxygen concentrations on animal organisms /Vliianie povyshennykh kontsentratsii kisloroda na organizm zhivotnykh/.  
05 p0709 A69-16512  
Effects of high oxygen concentrations on animals.  
18 p3095 A69-34731

## GALAKTIONOVA, I. A.

Conductivity and carrier density distributions in silicon doped by ion bombardment.  
04 p0643 A69-15254

## GALAKTIONOVA, N. M.

Peakless regime and mode width of a continuous laser.  
06 p0934 A69-17681

## GALAMBOS, R.

Modification of the cortical click-evoked response during eye movement in cats.  
17 p2911 A69-34171

## GALAND, C.

The inevitable appearance of protocells on the primitive earth.  
23 p4085 A69-41479

## GALANT, D. C.

High accuracy gamma function values for some rational arguments.  
03 p0455 A69-13375

## GALASHEV, E.

Aeroelasticity of a supersonic aircraft /Aerouprugost' sverkhzvukovogo samoleta/.  
22 p3862 A69-40003

## GALASSO, F.

Tensile strength of boron filament coated with silicon carbide and of uncoated boron filament at elevated temperatures.  
02 p0270 A69-12731

## GALAVANOV, V. V.

Electrical properties of diffused p-n junctions in indium phosphide.  
02 p0294 A69-11628

Electrical properties of n-CdSnAs sub 2 over a broad range of temperatures and impurity concentrations.  
05 p0809 A69-16375

Magnetoresistance and Hall effect in compensated indium phosphide.  
06 p0978 A69-16987

Electrical properties of plastically deformed p-type indium antimonide.  
07 p1199 A69-18687

Formation of radiation defects in indium antimonide at subthreshold radiation energies /Obrazovanie radiatsionnykh defektov v antimonide indii pri doporogovykh energiyakh izlucheniia/.  
13 p2318 A69-27885

Effect of deep-level compensation on the electrical properties of p-type InSb /Vliianie kompensatsii glubokogo urovnia na elektricheskie svoystva p-InSb/.  
13 p2318 A69-27895

Certain properties of long indium antimonide diodes with a negative resistance section /Nekotorye svoystva dlinnykh diodov iz antimonida indii s uchastkom otritsatel'nogo soprotivleniia/.  
15 p2581 A69-31149

Formation of radiation defects in indium antimonide at subthreshold radiation energy.  
21 p3782 A69-39144

## GALBAN, P.

Inquiry on the sleep habits of a group of radar operators working in alternating crews /Enquete sur les habitudes de sommeil d'un groupe d'operateurs radaristes travaillant en equipes alternantes/.  
21 p3666 A69-39269

## GALCHENKO, G. L.

Heats of formation of the barenes /carboranes/ B sub 10 H sub 12 C sub 2 /cryst./ - Determination of the heat of combustion of ortho-barene /Teploty obrazovaniia barenov /karboranov/ B sub 10 H sub 12 C sub 2 /krist./ - Opredelenie teploty sgoraniia orto-barena/.  
21 p3670 A69-39625

## GALCHINETSII, L. P.

Thermal conductivity of semiconducting alloys with stoichiometric vacancies /Teploprovodnist' napiv-

providnikovikh splaviv iz stekhiometrichnimi vakantsiyami/.  
12 p2142 A69-25975

## GALDIKENE, O.

Bright nickel plating /Blestiashee nikelirovanie/.  
22 p3959 A69-41264

## GALE, B. C.

Scattering of laser light in radiation-driven breakdown waves in gases.  
11 p1915 A69-24420  
Experimental and theoretical studies of the time and space development of plasma parameters in a laser induced spark in helium.  
14 p2492 A69-29636

## GALE, G. M.

Characteristics of organic dye lasers as tunable frequency sources for nanosecond absorption spectroscopy. [IEEE PAPER A-3]  
07 p1150 A69-19047

## GALE, W.

Venus - An isothermal lower atmosphere/ques/.  
16 p2852 A69-31553

## GALEEV, A. A.

Plasma diffusion in a toroidal stellarator /Diffuziia plazmy v toroidal'nom stellaratore/.  
07 p1191 A69-18985  
Plasma diffusion in a toroidal stellarator.  
09 p1552 A69-22294  
Nonlinear Plasma Theory.  
18 p3180 A69-34930

## GALEJS, J.

ELF and VLF fields of a horizontal electric dipole.  
08 p1273 A69-20023  
On antenna impedances in a cold plasma with a perpendicular static magnetic field.  
08 p1281 A69-20029  
Phase variability of Omega navigational transmissions.  
09 p1538 A69-22595

Insulated cylindrical antenna immersed in a compressible plasma.  
10 p1663 A69-23423

VLF modes below an idealized anisotropic ionosphere.  
18 p3101 A69-34797

Near fields and antipodal fields in the terrestrial earth-ionosphere waveguide.  
19 p3283 A69-35931

Antennas in Inhomogeneous Media.  
19 p3268 A69-36150

## GALEOTTI, P.

Radial velocities of Omicron Andromedae from 1961 to 1966.  
22 p4028 A69-40755

## GALIAMICHEV, I. U. P.

Composite RC converter filters and delay lines /Sostavnye konvertornye RC-fil'try i linii zaderzhki/.  
07 p1113 A69-19677  
Synthesis of low-sensitivity electric circuits /Sintez malochuvstvitel'nykh elektricheskikh tsepei/.  
09 p1472 A69-21780

## GALIEV, SH. V.

Cylindrical shell with a filler in the case of natural oscillations of a gas enclosed in the shell /Tsilindricheskaia obolochka s zapolnitelem pri avtokolebaniyakh gaza, zakliuchennogo v obolochku/.  
24 p4300 A69-43073

## GALIMBERTI, R.

Problem of plane sections of Coons' surfaces /Sul problema delle sezioni piane di superfici di Coons/.  
08 p1278 A69-19921

## GALIMOV, D. G.

Study of the effect of gamma irradiation on photochromatic glass by the EPR method /Izuchenie metodom EPR deystviia gamma-oblucheniia na fotokhromnye stekla/.  
23 p4180 A69-42471

## GALIN, L. A.

Conditions in a crack tip /Ob uslovii v kontse treshchiny/.  
22 p4047 A69-41123

## GALIN, M. B.

Behavior of planetary scale waves in atmospheric models /O povedenii voln planetarnogo masshtaba v atmosferykh modeliakh/.  
03 p0459 A69-13274  
On the behavior of planetary-scale waves in atmospheric models.  
14 p2472 A69-28782

- GALINDO, V.**  
The analysis of circular waveguide phased arrays.  
03 p0406 A69-13829  
On the asymptotic decay of coupling for infinite phased arrays.  
04 p0571 A69-14314  
A note on the radiation characteristics and forced surface wave phenomena in triangular-grid circular waveguide phased arrays.  
08 p1282 A69-20038
- GALINOV, D. G.**  
Investigation of the effect of ionizing radiation on glass activated by transition metals /Issledovanie deistviia ioniziruiushchei radiatsii na stekla, aktivirovannye perekhodnyimi metallami/.  
23 p4180 A69-42470
- GALINSKI, R.**  
Means of aerial evacuation at the disposal of a Paris hospital /Les moyens d'evacuations aeriens a la disposition d'un service hospitalier parisien/.  
23 p4105 A69-41785
- GALITSKII, V. V.**  
Equivalent circuits for an approximate calculation of the transient characteristics in uniform and nonuniform distributed RC structures /Ekvivalentnyye skhemy dlia priblizhennogo rascheta perekhodnykh kharakteristik v odnorodnykh i neodnorodnykh raspredelennykh RC-strukturakh/.  
01 p0046 A69-10779
- GALIUN, I. I.**  
Turbulence intensity in the core of a submerged jet and behind grids /Intensivnost' turbulentnosti v iadze zatoplennoi strui i za reshetkami/.  
16 p2771 A69-31959
- GALIUN, N. S.**  
A variational problem of one-dimensional nonequilibrium gasdynamics.  
07 p1119 A69-18737
- GALKIN, A. A.**  
Concerning certain features of the stationary Josephson effect.  
09 p1556 A69-21669  
Cyclotron resonance of minority carriers in indium antimonide /Tsiklotronnyi rezonans neosnovnykh nostelei v antimonide indii/.  
15 p2667 A69-30068
- GALKIN, A. I.**  
Accuracy of ionospheric parameter recording by vertical sounding /O tochnosti registratsii ionosfernykh parametrov pri vertikal'nom zondirovanii/.  
17 p2969 A69-34002  
Short-period variations in the altitudes of ionospheric reflections /Korotkoperiodicheskie izmeneniia vysot ionosfernykh otrazhenii/.  
20 p3521 A69-37054  
Determination of the amount of information obtained by vertical sounding /Ob opredelenii kolichestva informatsii, poluchaemoi pri vertikal'nom zondirovanii/.  
20 p3492 A69-37692
- GALKIN, R. M.**  
Separation of spatial and temporal variations of the magnetic field by observations at drifting stations /O razdelenii prostranstvennykh i vremennykh variatsii magnitnogo polia po nabludeniiam na dreifuishchikh stantsiakh/.  
09 p1487 A69-21553  
Separation of the space and time variations of the magnetic field, according to observations on drifting stations.  
16 p2784 A69-32548
- GALKIN, V. IA.**  
Direct methods of solving problems of optimal control.  
18 p3164 A69-34706
- GALKIN, V. S.**  
Nature of the flow and aerodynamic characteristics of bodies of very simple form in a viscous hypersonic gas flow.  
05 p0699 A69-16673  
Aerodynamic characteristics of a plate at an angle of attack in a viscous hypersonic flow /Aerodinamicheskie kharakteristiki plastyiny pod uglom ataki v viazkom giperzvukovom potoke/.  
11 p1820 A69-25471  
Homogeneous rarefied gas flows at small Knudsen numbers /Ob odnorodnykh techeniakh razrezhennogo gaza pri mal'kikh knudsenakh/.  
14 p2432 A69-29611  
On equations of nonequilibrium flow of polyatomic gases in the Eucken approximation.  
19 p3300 A69-36787
- GALKINA, T. B.**  
Stabilization of the concentration of mineral nutrients in the medium during prolonged Chlorella cultivation with recovery of the medium.  
10 p1646 A69-23578
- GALL, R.**  
Directions of approach of cosmic rays for high latitude stations.  
18 p3187 A69-34940  
The daily variation of trajectory-derived high-latitude cutoff rigidities in a model magnetosphere.  
22 p4005 A69-40513
- GALLACHER, G.**  
The influence of plenum chamber obstructions on the performance of a hovercraft lift fan.  
13 p2202 A69-27546
- GALLAGER, R. G.**  
A bound on the probability that a Gaussian process exceeds a given function.  
09 p1452 A69-21319
- GALLAGHER, C. C.**  
Color centers and ruby laser output energy degradation.  
02 p0256 A69-12358  
Color centers and ruby-laser output-energy degradation.  
16 p2795 A69-31697
- GALLAGHER, E. F.**  
Expanded application of Navy Navigation Satellite system in Marine and Air Navigation.  
14 p2479 A69-29856
- GALLAGHER, G. A.**  
Performance and versatility of a 20-kw xenon lamp solar simulator at Lincoln Laboratory.  
15 p2586 A69-30384
- GALLAGHER, J. E.**  
Realistic low visibility landing criteria for VSTOL aircraft.  
22 p3979 A69-40675
- GALLAGHER, J. J.**  
CW gain characteristics of the 890-GHz HCN laser line.  
19 p3339 A69-36695  
Frequency lock of the hydrogen cyanide laser to a microwave frequency standard.  
22 p3963 A69-40567
- GALLAGHER, J. T.**  
Capabilities of in-flight thrust reversing.  
[AIAA PAPER 68-880] 17 p2902 A69-34031
- GALLAGHER, M. S.**  
Spectral analysis of hematoxylin in tissue sections.  
01 p0015 A69-10924
- GALLANT, R. M.**  
Indirect atmospheric measurements utilizing Rake tropospheric scatter techniques. I - The Rake tropospheric scatter technique.  
14 p2448 A69-29524
- GALLANT, R. P.**  
Predictive design for spacecraft propulsion.  
[SAWE PAPER 775] 18 p3184 A69-34873
- GALLARD, M.**  
Superradiant and laser spectroscopy in the second positive system of N sub 2.  
04 p0609 A69-14285  
On the interaction between the first and second positive laser systems in N sub 2.  
11 p1893 A69-24346
- GALLE, R. R.**  
Some results of physiological investigations in the slow rotation room  
02 p0197 A69-11498  
Application of dosed coriolis accelerations in vestibulometry /Primenenie dozirovannykh uskorenii Koriolisa v vestibulometrii/.  
05 p0710 A69-16521  
Use of dosed Coriolis accelerations in vestibulometry.  
18 p3096 A69-34740  
Influence of prolonged rotation and Coriolis acceleration on the human vestibular function /Vliianie dlitel'nykh vraschenii i uskorenii koriolisa na vestibuliarnuiu funktsiiu cheloveka/.  
20 p3472 A69-37260
- GALLET, P.**  
Contribution to the study of emission factors of metals /Contribution a l'etude des indicatrices d'emission des metaux/.  
07 p1242 A69-18952
- GALLIK, G.**  
Rapid recording microspectrophotometer.  
03 p0428 A69-13109
- GALLING, G.**  
Interaction of DNA with ribosomes in cell-free protein synthesizing systems of Chlorella pyrenoidosa.  
23 p4080 A69-41430
- GALLO, W. F.**  
A study of the nonsimilar nature of the laminar boundary layer in a region of adverse pressure gradient.  
[AIAA PAPER 69-35] 06 p0913 A69-18094
- GALLOF, S.**  
Numerical solution and utilization of Green's functions.  
15 p2710 A69-30870
- GALLON, M.**  
Hydraulic tank for visualization of flows around a fixed point /Cuve hydraulique pour la visualisation des ecoulements au point fixe/.  
[ONERA-TP-708] 17 p2956 A69-33588
- GALLOUIN, F.**  
Use of primates in space research /Utilisation des primates dans les recherches spatiales/.  
09 p1445 A69-22723
- GALLOWAY, E.**  
Introductory report.  
20 p3635 A69-37103
- GALLOWAY, T. L.**  
Mission analysis of general aviation in the 1970's.  
[AIAA PAPER 69-818] 19 p3453 A69-33624
- GALLREIN, D.**  
Assignment procedure in an automatic multiradar tracking system /Das Zuordnungsverfahren im automatischen Multi-Radar-Beobachtungssystem/.  
22 p3902 A69-41250
- GALMARD, P.**  
Determination of impurities in titanium and some of its alloys by spark source mass spectroscopy /Dosage des impuretes dans le titane et certains alliages de titane par spectrographie de masse a etincelles/.  
[ONERA-TP-723] 18 p3155 A69-34638
- GALMICHE, P.**  
Preparation of refractory alloys in powders, fibers, and sintered billets by a thermochemical method /Elaboration d'alliages refractaires en poudres, en fibres et en billetes frites par voie thermochimique/.  
[ONERA-TP-636] 02 p0251 A69-11625
- GALOS, M.**  
On the load-carrying capacity of multilayer pressure vessels.  
09 p1618 A69-22257
- GALOWIN, L. S.**  
Heat pipe channel flow distributions.  
[ASME PAPER 69-HT-22] 24 p4412 A69-43546
- GALPER, A. M.**  
Study of cosmic-ray electrons and gamma quanta at altitudes up to 27.5 km /Issledovanie elektronov i gamma-kvantov kosmicheskikh lucheii na vysoatakh do 27,5 km/.  
10 p1758 A69-22830  
Variations in the electron and gamma quanta intensities in the atmosphere /Ob izmeneniiakh intensivnosti elektronov i gamma-kvantov v atmosfere/.  
20 p3587 A69-37046  
A device for recording electrons with energies from 0.1 to 1.5 Gev in cosmic radiation /Pribor dlia registratsii elektronov s energiei 0,1 to 1,5 Gev v kosmicheskom izluchenii/.  
21 p3724 A69-39074
- GALPERIN, E. A.**  
Synthesis of linear controllers in a stationary linear system.  
14 p2425 A69-28821
- GALPERIN, IU. I.**  
Radiation effects of the American high-altitude thermonuclear explosion, "Star Fish," measured by the "Cosmos-6" satellite.  
20 p3532 A69-37960  
Radioactivity of the Cosmos 6 satellite and the probable points of radioactive debris collection at altitudes from 300 to 350 km /Radioaktivnost' iz "Cosmos-6" i predpolagaemye mesta nabora radioaktivnykh oskolokov na vysoite 300-350 km/.  
23 p4205 A69-41836
- GALPERIN, M. V.**  
Frequency characteristics of direct current amplifiers with signal modulation by rectangular pulses /Chastotnye svoystva usiliteli postoiannogo toka s modulatsiei signala priamougol'nymi impul'sami/.  
01 p0053 A69-10802



## GALPERN, A. D.

Transformation properties of a hologram /O transformatsionnykh svoystvakh gologrammy/.  
24 p4315 A69-43166

## GALPERN, I. U. S.

Anisotropic photoelectric effects /Anizotropnye fotoelektricheskie efekty/.  
10 p1701 A69-23138

## GALPIN, R. J.

Stored program demodulation techniques.  
23 p4133 A69-41749

## GALT, J. A.

Intensity variations in pulsars.  
06 p1009 A69-17964

## GALTSEV, A. P.

Statistical characteristics of atmospheric transparency caused by water vapor /Statisticheskie kharakteristiki prozrachnosti atmosfery, obuslovennoi vodianym parom/.  
21 p3759 A69-39113

## GALUBINSKA, K.

Human behavior in a stress situation similar to the conditions of a long-duration space flight /speleological expedition/ /Zachowanie sie czlowieka w sytuacji stresowej podobnej do warunkow dlugotrwalogo lotu kosmicznego /wyprawa speleologiczna/.  
01 p0020 A69-10757

## GALUSHKO, E. G.

Spectral determination of oxygen in titanium with preliminary extraction /Spektral'noe opredelenie kisloroda v titane s predvaritel'noi ekstraktsiei/.  
14 p2446 A69-29158

## GALVAO, F. L.

A note on low drag bodies.  
06 p0857 A69-17000

## GALY, P.

Automatic drawing of printed circuits with the aid of a computer /Trace automatique des circuits imprimes a l'aide d'un ordinateur/.  
08 p1296 A69-19979

## GAMAN, V. I.

Dynamic current-voltage characteristics of thin-film diodes on a chalcogenide-glass base /Dinamicheskie vol'tampiernye kharakteristiki tonkoplennoknykh diodov na osnove khal'kogenidnykh stekol/.  
02 p0223 A69-12834

Influence of anisotropic pressure on the parameters of silicon diodes /Vliianie anizotropnogo davleniia na parametry kremniyevykh diodov/.  
02 p0223 A69-12839

## GAMAZOV, A. A.

Photosensitivity spectra of GaP sub x As sub 1-x - GaAs n-n heterojunctions.  
02 p0294 A69-11630

## GAMBARDELLA, G.

The cepstrum as a model for pitch-perception.  
11 p1834 A69-24571

## GAMBER, R. T.

Lander-to-orbiter communication link geometry characteristics for highly elliptical orbits.  
[AAS PAPER 68-110] 21 p3805 A69-39223

## GAMBLE, R. P.

On the distinction between alloy softening due to nitrogen and nickel in dilute lattice solution in iron.  
22 p3969 A69-40164

## GAMBLE, S. G.

The value of satellite techniques in the evaluation of natural resources of large areas.  
[JUN PAPER 68-95529] 06 p0917 A69-17067

## GAMIANINA, A. I.

Determination of the orientation elements of the FK3 and FK4 catalogs from meridian observations during 1963 and 1964 /Opredelenie elementov orientatsii katalogov FK3 i FK4 po meridiannym nabludeniiam 1963-1964 gg./.  
17 p3027 A69-32871

## GAMKHITASHVILI, L. V.

Relations between radioactivity distributions in the atmosphere at different altitudes /O svyaziakh raspredeleniia radioaktivnosti na razlichnykh vysotakh atmosfery/.  
11 p1945 A69-24320

## GAMMEL, G.

Design and characteristics of an actinium fueled thermionic generator.  
14 p2399 A69-29192

## GAMYKIN, N. S.

The Hydraulic Servo Drive /Gidravlicheskie Slediaschivii Privo/.  
18 p3093 A69-34356

## GANAPATHY, R.

On the existence of plutonium-244 in the early solar system.  
08 p1401 A69-20900

Ages of calcium-rich achondrites. II - Howardites, nakhlites, and the Angras dos Reis angrite.  
20 p3602 A69-37535

## GANAPATHY, S.

Transient response evaluation from the state transition matrix.  
12 p2120 A69-25913

## GANAPOLSKII, E. M.

Cadmium sulfide thin-film hypersonic transducers.  
15 p2575 A69-30236

## GANDHI, J. M.

Effect of a magnetic field and coriolis forces on Rayleigh-Taylor's instability.  
20 p3577 A69-38195

## GANDHI, K. V.

Constant speed servo system for surveillance radar.  
08 p1274 A69-20108

## GANDHI, O. P.

Some instabilities of electromagnetic wave propagation through drifting semiconductor magnetoplasmas.  
22 p3902 A69-41223

## GANDILLOT, F.

Two-way pyrotechnic valve for high-pressure gas /Vanne double a fonctionnement pyrotechnique pour gaz haute pression/.  
10 p1635 A69-23033

## GANDIN, L. S.

Automatic monitoring of current meteorological information /Ob avtomaticheskomo kontrole tekushchei meteorologicheskoi informatsii/.  
13 p2292 A69-27839

Processing of Operational Meteorological Information with the Aid of Computers /Obrabotka operativnoi meteorologicheskoi informatsii s pomoshch'iu elektronnykh vychislitel'nykh mashin/.  
18 p3105 A69-34332

## GANDOLFO, D. A.

Steady-state flux jumping in superconducting niobium titanium tubes in superimposed AC and DC magnetic fields.  
17 p3016 A69-33787

## GANE, N.

Surface layer fracture of brittle materials by giant laser pulses.  
11 p1899 A69-25402

## GANEFELD, R. V.

Anisotropic instability of an MHD plasma.  
11 p1922 A69-24227

Excessive noise in semiconductors /K voprosu ob izbytochnom shume v poluprovodnikakh/.  
13 p2317 A69-27876

Electric-field fluctuations in weakly ionized plasma flows /O fluktuatsiiakh elektricheskogo polia v potokakh slabionizovannoi plazmy/.  
13 p2310 A69-28029

Excess noise in semiconductors.  
21 p3782 A69-39142

## GANESH, K. S.

Excitation temperatures of the Wolf-Rayet stars.  
12 p2160 A69-26904

## GANAGADHAR, R. B.

Drift-field photovoltaic cell performance with bulk and surface recombinations.  
06 p0870 A69-17473

## GANGULEE, A.

Effects of cold work on silver-rich silver-magnesium solid solution alloys.  
24 p4332 A69-43029

## GANGULI, J.

Analysis of interfacial pressure in a laminated structure and its damping characteristics.  
10 p1800 A69-23350

## GANGULI, U.

Analysis of interfacial pressure in a laminated structure and its damping characteristics.  
10 p1800 A69-23350

## GANICHEV, A. I.

Two problems concerning the natural oscillations of elastic systems containing a liquid /Dve zadachi o sobstvennykh kolebaniyakh uprugikh sistem s zhidkim napolneniem/.  
11 p1870 A69-24951

## GANIEV, R. F.

Mechanical model imitating the oscillatory motion of a solid body in a Newtonian central force field /K otnoi mekhanicheskoi modeli, imitiruiushchei kolebatel'noe dvizhenie tverdogo tela v n'utonovskhesentral'nom pole sil/.  
11 p1919 A69-25171

Certain problems of the stability of a nonlinearly oscillating solid body /Nekotorye zadachi ustoiichivosti pri nelineinykh kolebaniyakh tverdogo tela/.  
14 p2536 A69-29777

Problem of vibration damping in devices and machines in a nonlinear formulation /K zadache vibromortizatsii priborov i mashin v nelineinoy postanovke/.  
14 p2537 A69-29777

Integrable cases of the equations of motion of a solid body located in a potential field of elastic forces /Integriruemye sluchai uravnenii dvizheniia tverdogo tela nakhodiashchegosia v potentsial'nom pole uprugikh sil/.  
15 p2653 A69-31199

Investigation of the oscillations of nonlinear systems /Issledovanie kolebani nelineynykh sistem/.  
22 p3980 A69-40100

## GANINA, V. IA.

Effect of a local stress load on the differentiation of immunocompetent cells /Vliianie mestnogo stress-vozddeistviia na differentsirovku immunokompetentnykh kletok/.  
22 p3877 A69-40277

## GANIO, A.

Calculation of phase errors in the frequency components of a /VLF/ pulse using measured noise amplitude distributions.  
03 p0396 A69-13622

## GANIUCHENKO, V. M.

Zone structure of yttrium garnet ferrite crystals grown by the Czochralski method from an inductively crucible /O zonal'noi strukture kristallov itrievogo ferrito-granata, vyrashchennykh metodom Khokhral'skogo iz induktora-tiglia/.  
13 p2321 A69-28001

## GANLEY, J. T.

The developing tangential velocity profile for axial flow in an annulus with a rotating inner cylinder.  
01 p0058 A69-10145

## GANN, A.

The optimization of MHD induction converters.  
13 p2207 A69-27504

## GANNETT, J.

Human engineering of the SST - Man's role in advanced aircraft operations.  
09 p1447 A69-22546

Human engineering of SST - Man's role in advanced aircraft operations.  
23 p4107 A69-41820

## GANNETT, J. R.

Flight management concepts.  
08 p1266 A69-20450

## GANNITSKII, A. I.

Centrifugal effects during plasma rotation in a plane homopolar device /Tsentrifuzhnye efekty pri vrashchenii plazmy v ploskom gomopolarnike/.  
13 p2315 A69-28556

## GANNON, J. J.

Optimization of electroluminescent efficiencies for vapor-grown GaAs sub 1-x P sub x diodes.  
[ECS PAPER 103] 08 p1284 A69-20366

## GANOPOLSKII, V. A.

Scientific program and scientific equipment complex of the Cosmos 149 artificial earth satellite /Nauchnaia programma i kompleks nauchnoi apparatury ISZ "Kosmos-149"/.  
14 p2447 A69-29403

## GANS, F.

Utilization of infrared detectors /Sur l'utilisation des detecteurs d'infrarouge/.  
19 p3308 A69-35905

## GANSAUPE, P.

Double diffused high-speed germanium transistors.  
05 p0809 A69-16557

## GANSLER, J. S.

A state of the art airborne electronic converter.  
14 p2405 A69-29687

## GANTOIS, M.

Structure of the omega-phase of titanium-rich titanium-iron alloys quenched in water at 20 deg C and tempered /Structure de la phase omega des alliages titane-

- fer riches en titane trempes dan l'eau a 20 deg C et revenus/.  
03 p0451 A69-13999
- Crystal lattice - and orientation relating to the matrix - of the precipitate responsible for hardening, by isothermal exposure for less than 100 hr at 700 deg C, of a nickel-chromium-niobium alloy previously quenched in water at 20 deg C /Maille cristalline et relations d'orientation avec la matrice du precipite responsable du durcissement, par maintien isotherme de moins de 100 h a 700 deg C, d'un alliage nickel-chrome-niobium prealablement trempé dans l'eau a 20 deg C/.  
08 p1334 A69-20852
- GANTSEVICH, S. V.**  
Interaction of sound with conduction electrons in many-valley semiconductors. I.  
07 p1199 A69-18680  
Interaction of sound with conduction electrons in many-valley semiconductors. II.  
07 p1199 A69-18681  
Current fluctuations in a semiconductor in a strong electric field /Fluktuatsii toka v poluprovodnike v sil'nom elektricheskoy pole/.  
16 p2824 A69-31569
- GAONKAR, G. H.**  
Flapping response of lifting rotor blades to atmospheric turbulence.  
[AIAA PAPER 69-206] 07 p1057 A69-19577  
Average elastic properties and stress fields for composite continua.  
12 p2186 A69-26824  
Uniaxial loading in an elastic continuum with a doubly periodic array of material discontinuities.  
13 p2363 A69-28133
- GAPCYNISKI, J. P.**  
Results on the mass and the gravitational field of the moon as determined from dynamics of lunar satellites.  
15 p2699 A69-31405
- GAPONTSEV, V. P.**  
Features of energy transfer and dissipation in lumino-phors based on phosphate glasses activated by neodymium /Osobennosti perenosia i dissipatsii energii v lumino-forakh na osnovie fosfatnykh stekol, aktivirovannykh neodimom/.  
20 p3552 A69-37017
- GAPOSCHKIN, E. M.**  
Measurable effect of general relativity in satellite orbits.  
08 p1383 A69-19901  
Improved values for the tesseral harmonics of the geopotential and station coordinates.  
15 p2601 A69-31372  
Computer derivation of short-period lunar perturbations.  
15 p2699 A69-31381
- GAPRINDASHVILI, KH. I.**  
Stimulated emission of active fibrous filaments /Vynuzhdennoe izluchenie aktivnykh volokonnykh nitei/.  
05 p0761 A69-15657  
The induced emission of active fibers.  
16 p2792 A69-32514
- GARABEDIAN, P. R.**  
Global structure of solutions of the inverse detached shock problem.  
19 p3301 A69-36788
- GARADZHA, M. P.**  
Ultraviolet Radiation of the Sun and Sky /UI-trafioletovaya radiatsiia solntsa i neba/.  
07 p1221 A69-19506
- GARAU, A.**  
Contribution to the study of emission factors of metals /Contribution a l'etude des indicatrices d'emission des metaux/.  
07 p1242 A69-18952
- GARAVAGLIA, M.**  
Superradiant and laser spectroscopy in the second positive system of N sub 2.  
04 p0609 A69-14285  
On the interaction between the first and second positive laser systems in N sub 2.  
11 p1893 A69-24346
- GARAZDO-LESNYKH, G. A.**  
Cometary observations in 1964-1965 /Nabludenie komety v 1964-1965 gg./.  
14 p2525 A69-29716  
Brightness variations and photometric parameters of comet Kilston 1966 b /Izmenenie bleska i fotometricheskie parametry komety 1966 b Kilstona/.  
15 p2685 A69-30529
- GARBA, J. A.**  
Aeroshell structural development for Martian entry.  
[AIAA PAPER 68-1159] 03 p0521 A69-13667  
Test facility for simulation of system- environment interaction during Martian entry.  
15 p2587 A69-30390
- GARBACZ, R. J.**  
Scattering and absorption by short, thin metallic filaments.  
03 p0395 A69-13623
- GARBER, R. I.**  
A study of the structure of the boundaries of grains in tungsten ion with field-emission microscope.  
08 p1329 A69-19943
- GARBER, T. B.**  
A semi-passive, three-axis stabilization technique for dumbbell-type satellites.  
07 p1226 A69-18324
- GARBER, V.**  
Optimum rendezvous intercept, and injection.  
23 p4224 A69-41921
- GARBEROGLIO, J. E.**  
Hypervelocity shock tunnel investigations of wake fluid and plasma properties.  
[AIAA PAPER 69-330] 13 p2242 A69-28266
- GARBUNY, M.**  
Analysis of the spectrum of a laser beam modulated by a periodic electrooptic Doppler shift.  
01 p0091 A69-10843
- GARBUZOV, A. R.**  
Error analysis in the calculation of a tangent on a digital differential analyzer /Analiz pogreshnosti vychisleniia tangensa na tsifrovom differentsial'nom analizatore/.  
13 p2225 A69-27968
- GARBUZOV, D. Z.**  
Energy spectrum of silicon-doped gallium arsenide /Energeticheskii spektr arsenida galliia, legirovannogo kremniem/.  
01 p0139 A69-10833  
Photoluminescence of n-type epitaxial gallium arsenide films /Fotoluminesentsiia epitaksial'nykh sloev arsenida galliia n-tipa/.  
03 p0488 A69-13887  
The energy spectrum of gallium arsenide doped with silicon.  
11 p1936 A69-24700  
Photoluminescence of epitaxial n-type gallium arsenide films.  
11 p1939 A69-25688  
Radiative recombination in gallium arsenide p-n structures with a germanium-doped p region /Izluchatel'naia rekombinatsiia v arsenidgallievykh p-n-strukturakh s p-oblast'iu, legirovannoi germaniim/.  
21 p3780 A69-39044  
Diagonal tunneling and radiation polarization in Al sub x Ga sub 1-x As-GaAs heterojunctions and in p-n junctions in GaAs /Diagonal'noe tunnelirovanie i polarizatsiia izlucheniia v geteroperekhodakh Al sub x Ga sub 1-x As-GaAs i p-n-perekhodakh v GaAs/.  
24 p4362 A69-43737
- GARCIA SARDINERO, E. J.**  
Technological characteristics of metallic materials for bearings /Caracteristicas tecnologicas de los materiales metalicos para cojinetes/.  
11 p1903 A69-24517
- GARCIA, C. J.**  
Brightness variations of the white light corona during the years 1964-67.  
18 p3205 A69-35394
- GARCIA, D. S.**  
Launch and mission influences on space propulsion system design.  
12 p2148 A69-26834
- GARCIA, J. D.**  
Ionization of positive ions.  
14 p2489 A69-29996  
Ejected electron distributions.  
17 p3009 A69-34189  
Observations of Lamb shifts in H using spatially periodic potentials.  
18 p3179 A69-35488
- GARCIA, J. G.**  
Cloud height contouring from Apollo 6 photography.  
20 p3369 A69-36926
- GARCIA, R.**  
Jet condenser development for an organic Rankine-cycle power conversion system.  
23 p4068 A69-42238
- GARCIA, W. M.**  
Titanium advances in jet engine design/ manufacturing technology.  
[ASM PAPER D8-26.4] 07 p1143 A69-19673  
Titanium's role in superjet engines.  
09 p1570 A69-22062
- GARCZYNSKA, I.**  
On the nature of a perturbing agent generating radio bursts in the solar atmosphere.  
22 p4009 A69-39984  
A statistical investigation of sunspots and chromospheric flares.  
22 p4001 A69-39996
- GARDENHIRE, L. W.**  
Application of nonlinear encoding to picture transmission.  
23 p4119 A69-41747  
Eighth annual report of the telemetering standards coordination committee.  
23 p4241 A69-41782
- GARDIAS, E.**  
Statistical characteristics of DZG5 semiconductor diodes /Wlasciwosci statystyczne diod polprzewodnikowych DZG5/.  
12 p2035 A69-25832
- GARDINER, J. G.**  
High-frequency mixers using square-law diodes.  
03 p0404 A69-13580  
The relationship between cross-modulation and intermodulation distortions in the double-balanced modulator.  
04 p0573 A69-14341  
Single-balanced modulators using square-law resistors /S.C.L. diodes/.  
16 p2758 A69-31756
- GARDINER, R. A.**  
Guidance and control considerations for advanced manned space missions.  
19 p3369 A69-35801
- GARDIOL, F. E.**  
Higher-order modes in dielectrically loaded rectangular waveguides.  
06 p0888 A69-17486  
Wave propagation in a rectangular waveguide loaded with an H-plane dielectric slab.  
13 p2222 A69-28075
- GARDNER, E.**  
Up-conversion of 10.6 mu radiation to the visible and second harmonic generation in HgS.  
01 p0089 A69-10180
- GARDNER, F.**  
Environmental simulation.  
19 p3295 A69-36326
- GARDNER, F. F.**  
5 GHz continuum radiation from Southern Hemisphere galactic HII regions.  
07 p1206 A69-19271  
A supernova remnant in Centaurus.  
09 p1598 A69-22184  
Jovian linear polarization at 6-cm wavelength.  
13 p2343 A69-27623  
The linear polarization of radio sources between 11 and 20 cm wavelength. I - Observations.  
14 p2526 A69-29770  
The linear polarization of radio sources between 11 and 20 cm wavelength. II - Polarization and related properties of extragalactic sources.  
14 p2526 A69-29771
- GARDNER, H.**  
New approach to logistics management.  
[AAS PAPER 69-204] 24 p4417 A69-42812
- GARDNER, H. E.**  
The equilibrium between aluminum and nitrogen in liquid 18 pct Cr-8 pct Ni stainless steel.  
06 p0942 A69-17228
- GARDNER, J. A.**  
Determination of self-broadening coefficients of CO, using CO sub 2 laser radiation at 10.6 mu.  
01 p0091 A69-10844  
Dynamic gas effects on the breakdown potential for helium, nitrogen, and argon.  
24 p4359 A69-43693
- GARDNER, J. F.**  
Efficiency of sterilants in terrestrial and extraterrestrial environments.  
05 p0712 A69-15937



## GARDNER, R. A.

Magneto-fluid-mechanic pipe flow in a transverse magnetic field with and without heat transfer.  
[AIAA PAPER 69-723] 17 p3012 A69-33497

## GARDNER, R. P.

Design studies of a gamma-ray scatter atmospheric density gauge by a multivariable search method.  
09 p1495 A69-21842

## GARDNER, T. W.

The Missile Fleet Status Tool.  
11 p1865 A69-25073

## GARDNER, W. B.

Dynamic simulation - A tool for engine component design.  
[SAE PAPER 690386] 23 p4200 A69-41655

## GARDOS, M. N.

Adhesive shear strength of ice to bonded solid lubricants.  
19 p3323 A69-35581

## GAREY, A. L.

Computerized shake facility for testing the Saturn V moon rocket.  
10 p1672 A69-23285

## GARF, M. E.

Influence of short-term overloads on the buildup of defects in the case of programmed loading /Vliianie kratkovremennykh peregruzok na nakoplenie povrezhdenii pri programmnom nagruzhении/.  
11 p1985 A69-25180

## GARFASHIAN, V. M.

Pulse ruby lasers with mercury pumping sources /Impul'snye opticheskiye generatory na rubine s ritnymi istochnikami nakachki/.  
19 p3336 A69-36347

## GARFINKEL, M.

Refractory metal silicon device technology.  
06 p0930 A69-17152

## GARFINKLE, M.

Superplasticity in tungsten-rhenium alloys.  
10 p1707 A69-22990

## GARG, S. K.

Numerical solutions for spherical elastic-plastic wave propagation.  
02 p0348 A69-12610

## GARIBASHVILI, D. I.

Inelastic interaction cross section of  $7 \times 10$  super 10 to 10 super 12 ev nuclear-interacting particles in carbon and iron.  
13 p2330 A69-28383

## GARIBASHVILI, K. A.

Holography on crystals /Golografiia na kristallakh/.  
04 p0598 A69-14855  
Crystal holography.  
15 p2608 A69-30247

## GARIFOV, R. KH.

Results of experimental investigations of a turbine stage with theta equals 3 /Rezultaty eksperimental'nogo issledovaniia turbinnoi stupeni s theta equals 3/.  
21 p3785 A69-38865

## GARINTHER, G. R.

Hazardous exposure to impulse noise.  
07 p1066 A69-19171

## GARIPAY, R. R.

Lunar surface temperatures and thermal characteristics - Surveyor 5 science results.  
02 p0321 A69-12227

## GARIPOV, R. M.

Effect of distributed suction on the structure of a turbulent boundary layer /O vlianii raspredelennoogo otososa na strukturu turbulentnogo pogrannichnogo sloia/.  
22 p3933 A69-41029

## GARKUSHA, I. D.

Temperature field of a disk of constant thickness for inhomogeneous boundary conditions /Temperaturnoe pole diska postoiannoii tolshchiny pri neodnorodnykh granichnykh usloviiah/.  
04 p0685 A69-14498

## GARLICK, G. F. J.

Absorption and infra-red emission of nickel and cobalt doped alkali halides.  
03 p0490 A69-13941

## GARLINGTON, J. C.

Rapid decompression and recompression in the stapectomized cat.  
14 p2406 A69-29292

## GARMIRE, E.

Observation of mode locking and ultrashort optical pulses induced by anisotropic molecular liquids.  
02 p0259 A69-12655

## GARMIRE, G.

A study of visual and infrared observations of SCO XR-1.  
09 p1604 A69-22401

## GARNER, E.

Investigation of high pressure burning characteristics of composite solid propellants.  
[AIAA PAPER 69-438] 16 p2834 A69-32704

## GARNER, W. B.

Application of retrodirective antenna systems to spacecraft.  
16 p2762 A69-32557

## GARNETT, S. H.

Isotopic exchange between oxygen and carbon monoxide in shock waves.  
24 p4353 A69-43807

## GARNIER, M.

Experimental study of ionospheric perturbations caused by a strong explosion on the ground /Etude experimentale de la perturbation engendree dans l'ionosphere par une forte explosion au sol/.  
09 p1488 A69-21694

## GARNOV, V. V.

High-speed SFR camera for use in the visual and ultraviolet spectral ranges - For dissection, stereoscopic and spectral photography.  
12 p2085 A69-26155

## GARRARD, W. L.

On the synthesis of suboptimal, inertia-wheel attitude control systems.  
21 p3826 A69-39642

## GARRETT, C. J. R.

On the interaction between internal gravity waves and a shear flow.  
05 p0788 A69-15721

## GARRETT, J.

Application of an associative processor to an interceptor radar system.  
17 p2931 A69-34071

## GARRETT, P. H.

Vertical-path guidance computer.  
17 p3003 A69-34104

## GARRETT, T.

Mechanical design and dynamics of the Alouette spacecraft.  
20 p3618 A69-37858

## GARRICK, I. E.

Aerodynamic Flutter.  
13 p2358 A69-27234

## GARRIGOS, R.

Experimental study of the light absorption of indium and gallium thin films /Etude experimentale de l'absorption lumineuse de couches minces d'indium et de gallium/.  
10 p1747 A69-23792

## GARRIOTT, O. K.

Enhancement of ionizing radiation during a solar flare.  
20 p3590 A69-37558

## GARRIOTT, R.

Large-aperture expandable truss microwave antenna.  
22 p3913 A69-40696

## GARRISON, R. F.

MK spectral types for bright southern OB stars.  
20 p3612 A69-38161

## GARRISON, R. L.

Bremsstrahlung and recombination radiation of neutral and ionized nitrogen.  
16 p2823 A69-32466

## GARRO, I.

Possible enhancement of photosynthesis by laser irradiation.  
24 p4270 A69-42580

## GARRY, F. W.

Jet propulsion.  
19 p3395 A69-36322

## GARSCADDEN, A.

"Burning" in the electron energy distribution by laser action in the CO sub 2-N sub 2-He discharge.  
16 p2796 A69-31772

Dispersion and stability of moving striations.  
24 p4356 A69-43363

## GARSIA, A.

On some extremal positive definite functions.  
17 p2993 A69-32831

## GARSIDE, B. K.

Mode spectra in ring and normal lasers.  
07 p1155 A69-19087

## Mode pulling in ring lasers.

12 p2106 A69-26322

## GARST, D. M.

5-year forecast for contamination control.  
08 p1265 A69-19800

## GARSTANG, R. H.

Atomic transition probabilities.  
03 p0471 A69-13169

## GARTMANN, H.

Psychiatric and psychological approach.  
24 p4278 A69-43395

## GARTSHORE, I. S.

The turbulent wall jet in an arbitrary pressure gradient.  
11 p1873 A69-25139

## GARTSKE, K.

Behavior of the diurnal cosmic ray variation before a Forbush effect /O povedenii sutochnoi variatsii kosmicheskikh luchei pered Forbush-effektom/.  
10 p1769 A69-23904

## GARVER, R. V.

360 deg varactor linear phase modulator.  
16 p2756 A69-31577

## GARVIN, D.

Evaluation of rate data.  
[WSCI PAPER 68-47] 07 p1073 A69-18320

## GARWACKI, W.

P-n junctions as artificial diffusion barriers for native defects.  
05 p0808 A69-16286

## GARY, S. P.

Particle acceleration by electrostatic waves with spatially varying phase velocities.  
03 p0479 A69-14028

Numerical studies of turbulent heating.  
08 p1368 A69-20806

## GARZ, T.

Experimental oscillator strengths for Fe I lines /Experimentelle Oszillatorenstärken von Fe I-Linien/.  
20 p3581 A69-37822

Revised solar iron abundance and its influence on the solar photospheric model /Revision der solaren Eisenhaefigkeit und ihre Bedeutung fuer das Modell der Sonnenphotosphaere/.  
21 p3796 A69-38475

Abundances of iron and some other elements in the sun and in meteorites.  
24 p4385 A69-43223

## GARZA, L. R.

Simulated low-gravity sloshing in spherical, ellipsoidal and cylindrical tanks.  
[AIAA PAPER 69-1004] 22 p3921 A69-40378

## GARZAROLLI, F.

Investigations of the precipitation behavior and the mechanical properties of the alloy Inconel 625 /Untersuchungen ueber das ausscheidungsverhalten und die mechanischen eigenschaften der legierung Inconel 625/.  
22 p3971 A69-40802

## GASANOVA, N. A.

Interband transitions in A super III B super VI multiple-layer-structure semiconductors /O mezhzonnykh perekhodakh v sloistvykh poluprovodnikakh A super III B super VI/.  
13 p2317 A69-27883

## GASCHI, J.

Method for the fabrication of intrinsically reliable components /Methode pour la fabrication de composants intrinsequement fiables/.  
15 p2627 A69-30842

## GASHIMZADE, F. M.

Thermal EMF of cadmium arsenide /Termoeds v arsenide kadmii/.  
22 p3993 A69-40607

## GASHKO, A. L.

Investigation of stresses in a frame of variable rigidity reinforcing a cylindrical shell /Issledovanie napriazhenii v shpangoute peremennoi zhestkosti, podkrepiaushchem tsilindricheskuui obolochku/.  
17 p3055 A69-33131

Application of the method of straight lines to the solution of problems in photoelasticity /Prilozhenie metoda priamykh k resheniiu zadach fotouprugosti/.  
23 p4228 A69-41987

## GASILEVICH, E. S.

Dissociation of CO sub 2 in a CO sub 2 laser gas discharge plasma /Dissotsiatsiia CO sub 2 v plazme gazovogo razriada OKG na CO sub 2/.  
12 p2107 A69-26540

- GAISOR, B.**  
Experimental realization of a perfect piezo-semiconductor resonator /a phaser/.  
03 p0431 A69-13930
- GASIUKOV, P. S.**  
Annual global atmospheric pressure wave /Godovaia volna atmosfernogo davleniia na zemnom share/.  
23 p4185 A69-42493
- GASKELL, D. J.**  
An engineering approach to hazard rate distribution functions.  
20 p3548 A69-37158
- GASKILL, J. D.**  
Atmospheric degradation of holographic images.  
12 p2090 A69-26250  
Use of multiple reference sources to increase the effective field of view in lensless Fourier-transform holography.  
17 p2971 A69-32920
- GASKILL, P. B.**  
Uncommon cause for grounding a pilot.  
12 p2024 A69-26559
- GASPAROTTO, M.**  
Subsonic constant-area MHD generator experiments with the CNEN blow-down loop facility.  
10 p1637 A69-23481  
Performance of the CNEN MHD blow-down loop facility.  
10 p1674 A69-23482
- GASPER, F. T.**  
A low cost inertial measurement unit for business aircraft.  
[SAE PAPER 690337]  
15 p2606 A69-30092
- GASPER, K. A.**  
A miniature atomic battery based on thermionic conversion.  
14 p2399 A69-29193
- GASPERETTI, R. L.**  
Aircraft generator weight reduced by more effective cooling.  
15 p2552 A69-30326
- GASSMANN, G. J.**  
North-south cross-sections of the equatorial electrojet in the Pacific and the effect of a solar eclipse.  
16 p2777 A69-32182  
Effect of the earth's albedo on the ionospheric D layer.  
18 p3127 A69-34800
- GASSNER, E.**  
Fatigue Design Procedures, International Committee on Aeronautical Fatigue, Symposium, 4th, Munich, West Germany, June 16-18, 1965, Proceedings.  
15 p2705 A69-30355
- GASSNER, G. E.**  
Radiation and annealing characteristics of neutron bombarded silicon transistors.  
06 p0975 A69-16872
- GASSNER, V.**  
On the synthesis of reactance-bridge two-terminal networks with six reactances /Zur Synthese von Reaktanz-Bruecken-Zweipolen mit sechs Reaktanzen/.  
08 p1295 A69-21166
- GAST, P. W.**  
Lead isotope compositions and uranium decay series disequilibrium in recent volcanic rocks.  
04 p0593 A69-15011  
The exploration of the moon.  
23 p4216 A69-42200
- GATAULLIN, I. G.**  
Determination of the coupled moments of inertia of a fluid in moving cavities on the basis of a numerical computer solution to the resolving integral equation /Opredelenie prisoedinennykh momentov inertsii zhidkosti v podvizhnykh polostiakh na osnovе chislennogo resheniia na ET s VM razreshaiushchego integral'nogo uravneniia/.  
11 p1868 A69-24774
- GATELIUK, E. D.**  
A possibility of signal matching in a radio interferometer with autonomous receivers /Ob odnoi vozmozhnosti sovmeshcheniia signalov radiointerferometra s avtonomnymi priemnikami/.  
03 p0431 A69-13706  
Peculiarity in the radio-emission spectrum of the Crab Nebula in the decimeter wavelength range /Ob osobennosti v spektre radioizlucheniia krabovidnoi tumannosti v detsimetrovom diapazone voln/.  
10 p1784 A69-23941
- GATES, D. F.**  
An analytic and experimental study of the heat transfer and erosion in the NOL hypervelocity launcher.  
[AIAA PAPER 69-336]  
13 p2242 A69-28272
- GATES, D. J.**  
Helicon waves in non-resistive cylindrical and spherical plasmas.  
03 p0479 A69-13961
- GATES, G. K.**  
Packaged hydraulics makes Piper landing gear automatic.  
20 p3467 A69-38183
- GATES, J. W. C.**  
Holography with scatter plates.  
01 p0079 A69-10217  
Holographic phase recording by interference between reconstructed wavefronts from separate holograms.  
01 p0083 A69-10984  
Holography of diffusely reflecting objects using a double focus lens.  
11 p1880 A69-24467  
Repetitive Q-switched laser light sources for interferometry and holography.  
12 p2087 A69-26170  
Holographic recording of rapid transient events and the problems of evaluation of the reconstructions.  
12 p2087 A69-26171
- GATES, R. G.**  
Evaluating potential fatigue performance of composites /Cu/W and Cu/Mo/ from microstructural behavior.  
06 p0940 A69-16951
- GATES, W. J.**  
X-ray and extreme ultraviolet /1-400 angstrom units/ spectroscopy of the sun, from OSO-III.  
09 p1578 A69-22169
- GATEWOOD, G.**  
A study of the positions and proper motions of 83 stars in the region of Sco X-1.  
12 p2152 A69-25798
- GATIGNOL, R.**  
An H theorem for a moderately dense gas with a discrete velocity distribution /Theoreme H pour un gaz moderement dense a repartition discrete de vitesses/.  
10 p1725 A69-23790  
The Chapman-Enskog method applied to a gas model with a discrete velocity distribution /Methode de Chapman-Enskog appliquee a un modele de gaz a repartition discrete de vitesses/.  
11 p1921 A69-24325
- GATKIN, N. G.**  
Calculation of the signal-to-noise ratio at the output of a typical radio section /O vychislenii otosheniia signal/pomekha na vykhode tipovogo radiotekhnicheskogo zvena/.  
13 p2222 A69-28506  
Noise stability of a "preselector-detector-noncommutated low-pass filter-threshold device" network during the detection of a finite-duration noise signal /Pomekhoustoichivost' trakta "preselektor-detektor-nekommutiruemyi fil'tr nizhnikh chastot-porogovogo ustroistvo" pri obrabuzhenii shumovogo signala konechnoi dlitel'nosti/.  
15 p2563 A69-30142
- GATLAND, I. R.**  
Measurement of transport properties of ions in gases - Results for K super plus ions in N sub 2.  
13 p2306 A69-27457
- GATLAND, K. W.**  
Rocketry in the Soviet Union.  
01 p0162 A69-11066
- GATLEY, W. S.**  
Methods for evaluating the performance of small acoustic filters.  
20 p3464 A69-37321
- GATLIN, J. A.**  
Satellite attitude control using a torqued, 2-axis-gimbaled boom as the actuator.  
[AIAA PAPER 68-857]  
24 p4348 A69-43245
- GATOS, H. C.**  
Preparation of vitreous materials in the form of well-defined hollow cylinders.  
12 p2101 A69-25936  
Fast neutron damage and the current carrying capacity of niobium nitride.  
17 p3008 A69-33765  
Resistance of tantalum in the intermediate /superconducting-normal/ state.  
17 p3016 A69-33791
- Microdistribution of dopants in semiconductor single crystals - InSb.  
19 p3389 A69-36547
- GATTERER, L. E.**  
Worldwide clock synchronization using a synchronous satellite.  
12 p2080 A69-26053
- GATTI, A.**  
Preparation and properties of boron carbide continuous filaments.  
[ECS PAPER 210]  
05 p0783 A69-16236
- GATTI, E.**  
Signal to noise ratio in peak amplitude measurements.  
05 p0722 A69-16730  
The statistical behavior of the scintillation detector - Theories and experiments.  
22 p3947 A69-40670
- GATTINGER, R. L.**  
Observation of the O sub 2 /super 1 delta sub g-super 3 sigma sub g super minus/ 0, 1 band in the day airglow.  
08 p1306 A69-20096
- GATUSHKIN, A. A.**  
Two-layer filters for fine purification of liquid /D-vukhsloinye fil'try dlia tonkoi ochistki zhidkosti/.  
22 p3869 A69-40637
- GATZA, P. E.**  
Epichlorohydrin-ethylene oxide rubber in seals.  
19 p3356 A69-35534
- GAUDART, L.**  
Influence of an electric field on the photoelectric effect of thin gold films /Action d'un champ electrique sur l'effet photoelectrique des couches minces d'or/.  
02 p0300 A69-12631
- GAUDEAU, C.**  
Satellite transmission of electrophysiological data for real-time analysis /Transmission de donnees electrophysiologiques par satellite pour analyse en temps reel/.  
16 p2746 A69-32070
- GAUDIN, J. L.**  
Retinal lacerations and detachment in jet pilots /Dechirures retiniennes et decollement chez les pilotes de reacteur/.  
05 p0710 A69-16630  
The corneal arc, a warning sign of atheromatosis in flight crews /L'arc corneen signe evocateur d'atheromatose chez les membres du personnel navigant/.  
05 p0711 A69-16631
- GAUDIO, R., JR.**  
Effect of cool-dehumidified inspired air on the physiologic responses to a hot, humid environment.  
09 p1446 A69-22543  
Vortex tube as a thermal protective device.  
09 p1447 A69-22550
- GAUER, O. H.**  
Diuresis during total immersion in a thermally neutral bath /Die Diuresis bei Immersion in ein thermoidifferentes Vollbad/.  
23 p4094 A69-42075  
Change of human plasma volume during immersion in a thermally neutral water bath /Aenderung des Plasmavolumens des Menschen bei Immersion in ein thermoidifferentes Wasserbad/.  
23 p4096 A69-42087
- GAUGLER, R. E.**  
Expansion of simulated storable propellants in a supersonic nozzle.  
[AIAA PAPER 68-635]  
20 p3631 A69-37188
- GAUGLER, R. W.**  
Influence of gas environment on catabolic activities and on reoxidation of reduced nicotinamide adenine dinucleotide phosphate in Chlamydia.  
16 p2747 A69-31865
- GAUJARD, P.**  
Contribution to the study of the selection of solar images /Contribution a l'etude de la selection des images solaires/.  
23 p4213 A69-41697
- GAULT**  
Motors using catalytic decomposition of hydrazine /Les moteurs a decomposition catalytique de l'-hydrazine/.  
17 p3019 A69-33340
- GAULT, D. E.**  
Principal science results from Surveyor 5.  
02 p0321 A69-12224



## GAULT, J. D.

Atmospheric turbulence considerations for future aircraft designed to operate at low altitudes.  
[AIAA PAPER 68-216] 01 p0011 A69-11023

## GAULT, W. A.

Twilight observations of upper atmospheric sodium, potassium, and lithium.  
[AFCLR-69-0097] 06 p0918 A69-17494

## GAUME, J. G.

Life support systems technologies for sealed environments.  
17 p2915 A69-33682

Factors influencing the time of safe unconsciousness /TSU/ for commercial jet passengers following cabin decompression.  
24 p4278 A69-43398

## GAUMOND, B. J.

Experimental SST terminal for L-band satellite communications/surveillance ATC system.  
17 p2932 A69-34118

## GAUNTLETT, D. J.

Objective analysis in the stratosphere and upper troposphere.  
06 p0950 A69-17787

## GAUNTNER, D. J.

Characteristics of composite carbon resistors used for measuring accelerator terminal voltages.  
06 p0907 A69-17705

## GAUR, V. P.

On the possible existence of SH in solar atmosphere.  
06 p1002 A69-17317

Molecules in the solar photosphere.  
14 p2528 A69-29963

The dependence of facula-photosphere contrast in molecular lines on dissociation energy.  
18 p3204 A69-35391

## GAUSHUS, E. V.

Investigation of the natural oscillations of space vehicles. I /Issledovanie avtokolebanii kosmicheskikh apparatov. I/.  
01 p0161 A69-10205

Investigation of the self-oscillations of space vehicles. II /Issledovanie avtokolebanii kosmicheskikh apparatov. II/.  
03 p0519 A69-13068

Investigating self-oscillations of space vehicles. I.  
14 p2530 A69-28741

Investigation of auto-oscillations of cosmic devices. II.  
14 p2530 A69-28750

Dynamics of a relay-type spacecraft orientation control system /Dinamika releinoi sistemy upravleniya orientatsiei kosmicheskogo apparata/.  
19 p3370 A69-36619

Investigation of the complex natural vibrations of space vehicles /Issledovanie slozhnykh avtokolebanii kosmicheskikh apparatov/.  
21 p3826 A69-39637

## GAUSMAN, H. W.

Reflectance of cotton leaves and their structure.  
15 p2558 A69-30456

## GAUSTAD, J. E.

Interstellar dust and diamonds.  
05 p0828 A69-16662

Circumstellar infrared emission from two peculiar objects - R Aquarii and R Coronae Borealis.  
09 p1603 A69-22263

The spectrum of NML Cygnus from 7.5 to 14 microns.  
10 p1785 A69-24101

A possible identification of interstellar silicate absorption in the infrared spectrum of 119 Tauri.  
10 p1786 A69-24104

## GAUSTER, W. F.

Performance of stabilized superconducting cables under controlled heat transfer conditions.  
[IEEE PAPER 13.5] 01 p0176 A69-10718

Steady state stability of composite superconductors.  
10 p1746 A69-23634

Steady-state performance of multistrand superconducting compound conductors.  
17 p3016 A69-33786

## GAUT, N. E.

Symmetrical formulation of the zonal kinetic energy equation.  
15 p2595 A69-30219

## GAUTHERIN, G.

Study of energy spectra of charged particles emitted by a duoplasmatron-type discharge /Etude des spectres

d'energie des particules chargees emises par une charge de type duoplasmatron/.  
14 p2501 A69-29955

## GAUTHIER, P. R.

Manned test operations related to the Apollo lunar module in the simulated space environment.  
15 p2558 A69-30394

## GAUTHIER, R.

Description of an experimental device for studying laser-material interactions - Application to degassing surfaces placed under ultrahigh vacuum /Description d'un dispositif experimental destine a l'etude de l'interaction laser-matiere - Application au degazage des surfaces placees sous ultra-vide/.  
20 p3553 A69-37406

## GAUTIER, Y.

Selection criteria for the design of a computer carried on board a satellite and for its programming language as a function of special requirements /Criteres de choix de l'architecture d'un calculateur embarque sur satellite et de son langage de programmation en fonction des besoins particuliers/.  
20 p3499 A69-37379

## GAUVRIT, M.

The influence of structure and representation on the determination of limit cycles of non linear multivariable systems.  
12 p2048 A69-26078

Rolling and longitudinal stabilization of a satellite stabilized by a flywheel /Pointage en roulis et en tangage d'un satellite stabilise par roue d'inertie/.  
17 p3048 A69-33240

## GAUVRIT, M. H.

Construction of a minimal representation in state variables /Construction d'une representation minimale en variables d'etats/.  
12 p2047 A69-26070

Controllability of stationary linear multivariable systems using a frequency-domain criterion.  
12 p2054 A69-26519

## GAVALER, J. R.

Preparation and superconducting properties of thin films of transition metal interstitial compounds.  
13 p2321 A69-28009

High field properties of pure niobium nitride thin films.  
17 p3016 A69-33790

## GAVARINI, C.

Failure calculation and nonlinear programming /Calcolo a rottura e programmazione non lineare/.  
14 p2418 A69-29597

## GAVELIA, S. P.

Calculation of the stressed state of a shallow spherical shell weakened by holes, with the aid of small computers /Raschet napriazhennogo sostoiannia oslablennoi otverstiiami plogoi sfericheskoi obolochki pri pomoshchi malyykh ETSVM/.  
06 p1027 A69-18020

Retaining the solvability of boundary value problems in shallow shell theory when they are reduced to integral equations /O sokhraneni razreshimosti granichnykh zadach teorii plogikh obolochek pri privedenii ikh k integral'nym uravneniiam/.  
18 p3224 A69-35309

A method of digital-computer calculation of the stress concentrations at holes in shallow shells /Ob odnom sposobe rascheta na ETSVM kontsentratsii napriazhenii u otverstii v plogikh obolochkakh/.  
19 p3436 A69-35847

## GAVGANEN, L. V.

Nanosecond image converter framing camera types.  
12 p2083 A69-26141

## GAVIN, T. R.

Quality assurance monitoring of the microbiological aspects of the JPL Sterilization Assembly Development Laboratory.  
15 p2559 A69-31123

## GAVRIKOV, V. K.

Forced scattering at surface waves /Vynuzhdennoe rasseianie na poverkhnostnykh volnakh/.  
21 p3770 A69-38963

## GAVRILA, M.

Study of an optimal rendezvous maneuver using minimum fuel in the approach stage in the case of elliptic and hyperbolic orbits /nonlinear theory/ /Studiul manevrei optime de intilnire cu minimum de combustibil in faza de apropiere pe orbite eliptice si hiperbolice /teoria neliniara/.  
15 p2701 A69-31548

Rigorous solution for the rendezvous problem with minimum fuel for a circular orbit /O solutie riguroasa in

problema intilnirii cu minimum de combustibil l orbite circulare/.  
16 p2852 A69-3152

## GAVRILENKO, G. D.

Stability of orthotropic cylindrical shells taking into account the momentariness of subcritical stresses /Ustoichivost' ortotropnykh tsilindricheskikh obolochek s uchetom momentnosti dokriticheskikh sostoianii/.  
14 p2532 A69-2852

## GAVRILENKO, N. V.

Capacitance of a germanium tunnel diode as a function of bias voltage and signal magnitude /Zavisimost' emkosti germanievyykh tunnel'nykh diodov ot napriazheniia smeshcheniia i velichiny signala/.  
02 p0214 A69-1152

The dependence of the capacitance of germanium tunnel diodes on the bias voltage and signal magnitude.  
11 p1847 A69-2477

## GAVRILIUK, M. I.

Cold-shortness threshold of tungsten-molybdenum alloys.  
05 p0783 A69-1688

The threshold of cold brittleness for high-melting metals /Porog khladnolomkosti tugoplavkikh metallov/.  
10 p1715 A69-2400

## GAVRILOV, A. N.

Clearing and blocking control over frequently over-adjusted automatic equipment in precision machine tool and device-construction /Ochishchaisushchii blokiriuiushchii kontrol' na chastoperalnazhivavom avtomaticheskomo oborudovanii v tochnom mashinostroenii/.  
06 p0931 A69-17695

## GAVRILOV, B. E.

Ion-optical system of a plasma source.  
15 p2658 A69-3022

## GAVRILOV, D. A.

Kinetics of the process of repeated elastoplast deformation of a polycrystalline body /Kinetika protsessa povtornogo uprugoplasticheskogo deformirovaniia polikristallicheskogo tela/.  
01 p0164 A69-10039

## GAVRILOV, G. A.

Transmission of holographs by a standard phototelegraphic channel with a limited number of half-tones /Peredacha gologramm po standartnomu fototelegrafnomu kanalu s ogranichenym chislom polutonov/.  
11 p1889 A69-2553

## GAVRILOV, I. V.

The geometric figure and dimensions of the moon.  
02 p0314 A69-1164

Hypsometric levels of the lunar surface.  
03 p0512 A69-1368

Some hypsometric properties of the figure of the moon.  
04 p0662 A69-1524

## GAVRILOV, V. E.

Temperature distribution in a xenon pulse discharge plasma over the cross section of a quartz tube /Raspredelenie temperatury plazmy impul'snogo razriada v ksenone po secheniiu kvartsevoi trubki/.  
10 p1742 A69-24088

## GAVRILOVA, A. V.

The initial stage in the ageing of Fe-Ni alloys containing Ti additions.  
10 p1712 A69-23722

## GAVRILOVA, L. A.

Radio Engineering. Number 1 /Radiotekhnika. Number 1/.  
17 p2938 A69-33895

Aircraft Construction and Air-Fleet Equipment /Samoletostroenie i Tekhnika Vozdushnogo Flota/.  
19 p3246 A69-35818

Dynamics and Strength of Machines /Dinamika i Prochnost' Mashin/.  
19 p3435 A69-35848

## GAVRILOVA, L. N.

Application of dosed coriolis accelerations in vestibulometry /Primenenie dozirovannykh uskorenii Koriolisa v vestibulometrii/.  
05 p0710 A69-16522

Use of dosed Coriolis accelerations in vestibulometry.  
18 p3096 A69-34740

## GAVRILOVA, N. D.

The effective electrical conductivity of a two-phase liquid-metal flow /Effektivnaia elektroprovodnost' dvukhfaznogo zhidkometallicheskogo potoka/.  
13 p2306 A69-27480

**GAVERLOVSKAIA, E. N.**  
Investigation of the current layer expansion in a direction opposite to that of the electrodynamic force /Issledovanie rasprostraneniia sloia toka protiv elektrodinamicheskoi sily/.  
12 p2141 A69-27130

**GAVRUSHKO, A. A.**  
Diffusion of selenium in indium antimonide.  
15 p2669 A69-30714

**GAVRUSHKO, V. V.**  
Thermal EMF in p-type indium antimonide /Termoeds v antimonide indiiia p-tipa/.  
06 p0981 A69-17881  
Selenium diffusion in indium antimonide /Diffuziia selena v antimonide indiiia/.  
09 p1554 A69-21469  
Thermoelectric power of p-type indium antimonide.  
14 p2503 A69-28790

**GAVSHIN, B. S.**  
A possibility for reducing the noise factor of a parametric electron-beam amplifier /Ob odnoi vozmozhnosti umen'sheniia koeffitsienta shuma elektronno-luchevogo parametricheskogo usilitelia/.  
05 p0728 A69-15654  
Feasibility of decreasing the noise figure of an electron-beam parametric amplifier.  
16 p2762 A69-32511

**GAVZE, A. L.**  
The phase diagram of the Ti-Ta-Cr system /Diagramma sostoiianiiia sistemy Ti-Ta-Cr/.  
22 p3969 A69-40075

**GAWARECKI, S. J.**  
Satellite imagery of the earth.  
20 p3536 A69-36930

**GAWIN, J.**  
Lateral distribution of the muon component in the central region of extensive air showers.  
15 p2677 A69-31481

**GAWLOWICZ, D. J.**  
A programmable digital compensator for single loop high performance digital servomechanisms.  
21 p3688 A69-39704

**GAY, J.**  
Balloon observations of the far-infrared spectrum and brightness temperature of the sun.  
04 p0652 A69-14419  
Atmospheric transmission and solar spectroscopy in the submillimeter wavelength range /Transmission atmosferique et spectroscopie solaire en ondes submillimetriques/.  
21 p3796 A69-38472

**GAY, P.**  
Subsonic constant-area MHD generator experiments with the CNEN blow-down loop facility.  
10 p1637 A69-23481  
Performance of the CNEN MHD blow-down loop facility.  
10 p1674 A69-23482

**GAYER, G. F.**  
A new radio telescope for the Owens Valley observatory.  
02 p0229 A69-11974

**GAYET, R.**  
Influence of dielectronic recombination on the radio recombination lines of carbon.  
13 p2346 A69-27703

**GAYLES, J. N.**  
Rayleigh scattering from circularly birefringent media.  
04 p0609 A69-14291

**GAYLORD, A. M.**  
High temperature sensors for gas turbines.  
[ASME PAPER 69-GT-30] 09 p1501 A69-22492

**GAYLORD, T. K.**  
Gunn effect bibliography.  
05 p0810 A69-16565

**GAYTE, B.**  
Evaluation of laboratory studies of life duration of thermionic converters /Bilan des etudes de duree de vie des convertisseurs thermo-ioniques en laboratoire/.  
14 p2398 A69-29179

**GAZARIAN, IU. L.**  
One-dimensional problem of wave propagation in a medium with random inhomogeneities /Ob odnomenoi zadache o rasprostraneniui volny v srede so sluchainymi neodnorodnostiami/.  
21 p3673 A69-38993

**GAZENKO, O. G.**  
Some effects developing during hypokinesia.  
02 p0198 A69-11502

Possibilities of protective adaptation and adaptation limits under conditions of maximum accelerations and weightlessness /Vozmozhnosti zashchitnykh prispособleniiu organizma i granitsy adaptatsii v usloviakh maksimal'nykh peregruzok i sostoiianii nevesomosti/.  
03 p0376 A69-14192

Space exploration and biological sciences /Kosmicheskie issledovaniia i biologicheskie nauki/.  
[UN PAPER 68-95715] 06 p0873 A69-17035

Physiological reactions of animals during flights on the third, fourth, and fifth spacecraft satellites /Fiziologicheskie reaktsii zhivotnykh pri poletakh na tret'em, chetvertom i piatom kosmicheskikh korabliakh-sputnikakh/.  
07 p1061 A69-18578

Reactions of the cardiovascular system of man and animals under conditions of weightlessness /Rektsiia serdechno-sosudistoi sistemy cheloveka i zhivotnykh v usloviakh nevesomosti/.  
07 p1061 A69-18583

Approaches to the optimization of an artificial atmosphere when P sub O sub 2 in the gaseous medium decreases irreversibly /O putiakh optimizatsii iskustvennoi atmosfery pri neobratiomoi snizhenii P sub O sub 2 v gazovoi srede/.  
10 p1650 A69-23898

Space biology and medicine /Kosmicheskaia biologiia i meditsina/.  
13 p2209 A69-27356

Biomedical investigations performed in the USSR during 1968 and the beginning of 1969 according to a program of space study and mastery /Mediko-biologicheskie issledovaniia, provedennye v SSSR v techenie 1968 g. i nachala 1969 g. po programme issledovaniia i osvoeniia kosmicheskogo prostranstva/.  
15 p2557 A69-31344

**GAZIEV, G. A.**  
Dynamics of the elimination of certain products of metabolism in humans kept in isolation.  
10 p1646 A69-23508

**GAZLEY, C., JR.**  
Re-entry and Planetary Entry Physics and Technology. I - Dynamics, Physics, Radiation, Heat Transfer and Ablation.  
11 p1967 A69-25573

**GAZZA, G. E.**  
Fine-grained ceramics - The role of pressure calcining.  
12 p2119 A69-26832

**GDALOVICH, G. L.**  
Characteristics of the neutral and ionized components of the atmosphere at heights of 100- 500 km, measured during the flights of geophysical rockets.  
03 p0422 A69-13508

**GEARHART, W. S.**  
The quasi-steady design of a compressor or pump stage for minimum fluctuating lift.  
[ASME PAPER 68-WA/FE-12] 05 p0698 A69-16092  
The quasi-steady design of a compressor or pump stage for minimum fluctuating lift.  
[ASME PAPER 68-WA/FE-12] 19 p3240 A69-36419

**GEARY, A. R.**  
Phase identification in modified Cb 132 alloys.  
13 p2282 A69-28162

**GEHALLE, T. H.**  
Magnetic and semiconducting properties of SmB sub 6.  
07 p1200 A69-19403

**GEBBEN, V. D.**  
A multipurpose ventricular actuating system.  
24 p4273 A69-42983

**GEBBIE, H. A.**  
Sub-millimetre wave solar observations.  
03 p0513 A69-13774  
Dimers of the water molecule in the earth's atmosphere.  
05 p0759 A69-16658  
A 377 mu m CW maser interferometer for plasma diagnostics.  
08 p1359 A69-19987  
The direct measurement of electron density in an MHD duct.  
10 p1731 A69-23436  
Submillimetre astronomy - Results and prospects.  
13 p2343 A69-27604  
Submillimetre absorption by isotopic and vibrationally excited forms of water vapour.  
15 p2568 A69-30699  
Transient phenomena in the 337-mu M maser.  
17 p2981 A69-33088

Millimetre wavelength spectroscopic observations of the water dimer in the vapour phase.  
18 p3177 A69-35240

A study of submillimetre atmospheric absorption using the HCN maser.  
18 p3152 A69-35241

Absorption and dispersion studies in the range 10-1000 cm super -1 using a modular Michelson interferometer.  
20 p3538 A69-37297

**GEBEL, C.**  
Study of the hydrodynamic boundary layer - Effect of the injection of secondary fluids into the boundary layer on the resistance to the forward motion of obstacles /Etude de la couche limite hydrodynamique - Effet de l'injection de fluides secondaires dans la couche limite sur la resistance a l'avancement d'obstacles/.  
16 p2768 A69-31604

**GEBHARDT, F. G.**  
Effects of wind on thermal defocusing of CO sub 2 laser radiation.  
10 p1701 A69-22949  
Variable attenuator for CO sub 2 laser radiation.  
23 p4172 A69-41396  
Log-amplitude mean for laser-beam propagation in the atmosphere.  
24 p4282 A69-42970

**GEBHARDT, J. J.**  
Preparation and properties of boron carbide continuous filaments.  
[ECS PAPER 210] 05 p0783 A69-16236

**GEBHART, B.**  
A theoretical investigation of disturbance amplification in external laminar natural convection.  
03 p0533 A69-13951  
The stability of the laminar natural convection boundary layer.  
05 p0744 A69-15719  
An experimental investigation of disturbance amplification in external laminar natural convection flow.  
14 p2430 A69-29575  
Hot-wire anemometer calibration for measurements at very low velocity.  
17 p2971 A69-32901  
External natural convection flows.  
20 p3633 A69-37718  
Hot-wire anemometer calibration for measurements at very low velocity.  
[ASME PAPER 69-HT-A] 24 p4316 A69-43527  
Natural convection flow, instability, and transition.  
[ASME PAPER 69-HT-29] 24 p4411 A69-43531

**GEBHART, H.**  
An ozone model for the stratosphere /Ein Ozonmodell fuer die Stratosphaere/.  
24 p4309 A69-43147

**GEBHART, R.**  
Photochemical, advective and turbulent effects on the meridional distribution of ozone.  
07 p1122 A69-18253  
Chemical, atmospheric and solar effects on the meridional distribution of ozone.  
16 p2785 A69-32624  
Radiation and turbulence in the free atmosphere - A simple model of the vertical heat exchange flux /Strahlung und Turbulenz in der freien Atmosphaere - Ein einfaches Modell fuer den vertikalen Austauschwaermestrom/.  
22 p3936 A69-40137

**GECKLE, W. A., JR.**  
An ultra-linear voltage controlled oscillator with crystal oscillator stability.  
01 p0042 A69-10418

**GEDDES, L. A.**  
A simple mathematical derivation of the Stewart-Hamilton formula for the determination of cardiac output.  
24 p4271 A69-42784

**GEDEN, D.**  
Measurements of AM-PM conversion in low-noise TWT's, TDA's and parametric amplifiers.  
04 p0573 A69-14336

**GEDEVANISHVILI, L. D.**  
Investigation of the spectrum of ionization bursts produced by the penetrating component of extensive air showers.  
13 p2332 A69-28403

**GEE-CLOUGH, D.**  
An improved self-damped pneumatic isolator.  
08 p1301 A69-20398

**GEE, T. H.**  
Fundamentals of holographic velocimetry.  
19 p3305 A69-35729



- Processing holographic velocimetry data.  
19 p3305 A69-35730
- GEERAETS, W. J.**  
Some biological effects of laser radiation.  
[AGARDOGRAPH-111] 08 p1266 A69-20676
- GEERS, T. L.**  
Excitation of an elastic cylindrical shell by a transient acoustic wave.  
[ASME PAPER 69-APMW-17] 24 p4401 A69-43100
- GEERTS, J.**  
Numerical integration of plane orbital transfers with multiple powered arcs.  
19 p3400 A69-35673
- GEERY, E. L.**  
Penetration of a high-velocity gas stream by a water jet.  
[AIAA PAPER 68-604] 04 p0591 A69-15516  
Water injection for rapid cooling of a flow of rocket exhaust gases.  
[AIAA PAPER 69-514] 19 p3372 A69-36301
- GEFFROY, B.**  
Substitution of the crystallographic facets with slip zones in a fatigue fracture by a heavy precipitation of titanium carbide /Substitution, dans une cassure de fatigue, de facettes cristallographiques aux plages a stries, a la faveur d'une precipitation dense de carbure de titane/.  
03 p0447 A69-13605
- GEGEL, H. L.**  
On the mechanism of stress-corrosion cracking of a titanium-6 percent aluminum-4 percent vanadium alloy in anhydrous methanol.  
11 p1903 A69-24576  
Correlation of Ti-6Al-4V fractographs with mechanical behavior in methanol-acid, methanol, and air environments.  
16 p2799 A69-31718  
Thermally activated deformation in alpha titanium.  
[ASM PAPER W9-4.2] 21 p3729 A69-38659
- GEHIN, J.**  
The soviet Tu-144 civil supersonic transport /L'avion de transport civil supersonique sovietique Tu-144/.  
10 p1634 A69-23838
- GEHMLICH, D. K.**  
Electromagnetic accelerometer.  
17 p2971 A69-32897
- GEHRE, O.**  
Experiments on the Fresnel dragging of 3 cm microwaves by a low-pressure discharge.  
12 p2133 A69-25766
- GEHRELS, T.**  
Minor planets. I - The rotation of Vesta.  
04 p0657 A69-14677  
Wavelength dependence of polarization. XIII - Interstellar extinction and polarization correlations.  
12 p2153 A69-25809  
Wavelength dependence of polarization. XIV - Atmosphere of Jupiter.  
13 p2348 A69-27805  
Ultraviolet polarimetry of planets.  
15 p2616 A69-31380  
Wavelength dependence of polarization. XV - Observations of Venus.  
16 p2860 A69-32236  
Optical polarization measurements of pulsar NP 0532.  
21 p3798 A69-38542  
Minor planets. III - Lightcurves of a Trojan asteroid.  
22 p4013 A69-40124
- GEHRING, K. A.**  
Tunable far-infrared radiation generated from the difference frequency between two ruby lasers.  
16 p2798 A69-32603
- GEHRKE, C. W.**  
Gas-liquid chromatography of protein amino acids - Separation factors.  
13 p2217 A69-28258  
Quantitative gas-liquid chromatography of sulfur containing amino acids.  
13 p2217 A69-28259  
Gas-liquid chromatographic analysis of nucleic acid components.  
13 p2217 A69-28260  
Quantitative determination of N-acetylneuraminic acid by gas-liquid chromatography.  
13 p2217 A69-28315
- GEICHENKO, V. V.**  
Theory of ordering of multicomponent alloys with allowance for interaction in any number of coordination spheres /Teoriia uporiadocheniia mnogokomponentnykh splavov s uchetom vzaimodeistviia v liubom chisle koordinatsionnykh sfer/.  
11 p1937 A69-24703
- GEIER, S.**  
Psychotherapeutic treatment of depressions and neuroses in aviation medicine.  
23 p4086 A69-41690
- GEIGER, F.**  
High temperature lithium heat pipes.  
14 p2462 A69-29203
- GEIGER, P. J.**  
Sterile soil from Antarctica - Organic analysis.  
16 p2746 A69-31552
- GEIGER, R. E.**  
Slender-cone, zero angle of attack drag in continuum and noncontinuum flow.  
[AIAA PAPER 69-711] 17 p2891 A69-33445
- GEILER, W.**  
The influence of noise on the heart rate and the O sub 2 consumption under medium-to-hard physical loads /Zum Einfluss von Laerm auf die Herzfrequenz und den O sub 2-Verbrauch bei mittelschwerer physischer Belastung/.  
21 p3654 A69-38908
- GEILIKMAN, B. T.**  
Electron mechanism of superconductivity in semiconductors and semimetals.  
03 p0492 A69-14176  
Electromagnetic properties of superconductors with overlapping bands.  
05 p0810 A69-16802
- GEISLER, J. E.**  
The sea-breeze forerunner.  
07 p1126 A69-19038
- GEISS, J.**  
Rare-gas measurements in separate mineral phases of the Otis and Elenovka chondrites.  
19 p3418 A69-36137  
Vanadium isotopic composition in meteoritic and terrestrial matter.  
20 p3601 A69-37501
- GEIST, A. M.**  
Component-total task relationships - Simple and sequential practice effects.  
02 p0203 A69-12214
- GEISTER, D. E.**  
A high pressure AC arc heater system.  
[AIAA PAPER 69-348] 13 p2243 A69-28283
- GEIVADOV, L. N.**  
Application of the variational principle to an admittance matrix of electromagnetically coupled cavities and a method of compound equivalent circuits.  
05 p0736 A69-16785
- GEJYO, T.**  
X-ray microtopographs of alpha alumina whiskers.  
16 p2802 A69-32341
- GEKKER, E. R.**  
Energy-frequency characteristics of vibrating machines /Energochastotnye kharakteristiki vibriruyemykh mashin/.  
17 p3065 A69-33922
- GEKKER, I. R.**  
Passive electric microwave probe with a balancing capacitance and its application in studying the penetration of a strong electromagnetic wave into a plasma /Passivnyi elektricheskii SVCh-zond s simmetrizuiushchimi protivovosim i ego primeneniye pri issledovanii proniknoveniia moshchnoi elektromagnitnoi volny v plazmu/.  
14 p2498 A69-29807  
Anomalous absorption of a powerful electromagnetic wave in a collisionless plasma.  
18 p3101 A69-34621
- GELATO, G.**  
The Italian cross radio telescope. III - Operation of the telescope.  
19 p3295 A69-36643
- GELB, A.**  
Effect of deflections of the vertical on the performance of a terrestrial inertial navigation system.  
[AIAA PAPER 68-847] 24 p4348 A69-43240
- GELBERGER, A. M.**  
Study of the structure-formation processes of sitals by means of electron microscopy /Issledovanie protsessov formirovaniia struktury sitalov metodom elektronnoi mikroskopii/.  
11 p1907 A69-25032
- GELD, P. V.**  
Texture of cold-rolled alloyed titanium /Tekstura kholodnoi prokatki legirovannogo titana/.  
04 p0617 A69-15030  
Coefficients of thermal expansion of chromium disilicide and its solid solutions with TiSi sub 2 and VSi sub 2 /Koeffitsienty termicheskogo rasshireniia disilida khroma i ego tverdykh rastvorov s TiSi sub 2 i VSi sub 2/.  
04 p0619 A69-15030  
Stability of the mean density of valence electrons in titanium and vanadium monoxides /O postoiannosti srednei plotnosti valentnykh elektronov v monooksidakh titana i vanadiia/.  
09 p1523 A69-21177  
Heat capacity of cubic monoxides and vanadium carbide /Teplotemkost' kubicheskikh monooksidov i tsikarbida vanadiia/.  
09 p1523 A69-21177  
Thermal diffusivity and thermal conductivity of palladium at high temperatures /Temperaturoprovodnost' i teploprovodnost' palladiia pri vysokikh temperaturakh/.  
15 p2636 A69-30040  
Thermal diffusivity and conductivity of titanium at high temperatures.  
18 p3156 A69-34676  
Coefficients of thermal expansion of chromium disilicide and its solid solutions with TiSi sub 2 and VSi sub 2.  
18 p3156 A69-35023  
Diffusion of carbon in alloys of niobium with titanium, zirconium, tungsten, and molybdenum /Diffuziia ugleroda v splavakh niobii s titanom, tsirkoniem, volframom i molibdenom/.  
18 p3157 A69-35229
- GELDART, L. P.**  
Earth currents and magnetic field variations in the period range 10-200 s.  
10 p1682 A69-23559
- GELDMACHER, E.**  
Constructive development of large parabolic antenna installations /Konstruktive Entwicklung grosser Parabol-Antennenanlagen/.  
09 p1476 A69-21659
- GELETII, N. F.**  
X-ray investigation of finely dispersed titanium in various states /Rentgenovskoe issledovanie mekhanicheskoi raznosostoiannosti titana v razlichnom sostoianii/.  
21 p3745 A69-38959
- GELFAND, B. E.**  
Causes of the occurrence of a spherical detonation in a closed volume /O prichinakh vozniknoveniia sfericheskoi detonatsii v zamknutom ob'eme/.  
10 p1810 A69-23899
- GELFAND, I. M.**  
The theory of electron plasma non-linear oscillations.  
18 p3180 A69-34700  
Interaction in biological systems /Vzaimodeistvie biologicheskikh sistemakh/.  
21 p3662 A69-39700
- GELFGAT, I. U. M.**  
Stabilization of a plane-parallel flow in a transverse magnetic field /experimental results/ /Stabilizatsiia plosko-parallelnogo techeniia v poperechnom magnetnom pole /eksperimental'nye rezul'taty/.  
01 p0130 A69-10777  
The application of Pitot and Prandtl tubes in magnetohydrodynamic experiments.  
10 p1727 A69-23100  
Turbulent Hartmann flow /Turbulentnoe gartmanovo techenie/.  
14 p2500 A69-29900  
Turbulent Hartmann flow between rough walls /Turbulentnoe gartmanovo techenie mezhdu sherokhovatyimi stenkami/.  
22 p3989 A69-40259
- GELFREIKH, G. B.**  
Optical modeling of radiation patterns of antennas with variable-profile reflectors.  
05 p0736 A69-16788  
Reflector radio telescope with a resolution of 15 arc seconds /Reflektornyi radioteleskop s razreshaiushchimi sposobnost'iu 15 sekund dugi/.  
15 p2679 A69-30100  
Study of the slowly varying component of solar radio emission /Issledovanie medlenno meniaiushchiesya komponenty radioizlucheniia solntsa/.  
15 p2674 A69-30500  
Results of observations of the total solar eclipse of May 30, 1965, with the aid of a small-base radio interferometer.  
15 p2674 A69-30500

- ferometer at the 4.0-cm wavelength /Rezultaty nabliudeniia polnogo solnechnogo zatmenia 30 maia 1965 g. s pomoshch'iu radiointerferometra s maloi bazo na volne 4.0 cm/.  
20 p3616 A69-38304
- GELIG, A. KH.**  
Absolute stability of nonlinear sampled-data systems with pulse-width and pulse-time modulation.  
09 p1476 A69-22672  
Stability of pulsed systems with frequency modulation /Ustoichivost' impul'snykh sistem s chastotnoi moduliatsiei/.  
14 p2425 A69-28909
- GELL, M.**  
The effect of temperature on fatigue fracture in a directionally-solidified nickel-base superalloy.  
10 p1709 A69-23073  
The elevated temperature fatigue of a nickel-base superalloy, MAR-M200, in conventionally-cast and directionally-solidified forms.  
19 p3342 A69-35919  
A new technique for revealing plastic deformation in nickel-base superalloys.  
21 p3744 A69-38741
- GELLATLY, R. A.**  
Structural optimization - A dream or a reality/ques/[SAWE PAPER 814]  
18 p3221 A69-34896  
Missile and space structures.  
19 p3438 A69-36324
- GELLER, L. A.**  
Relation between the irregular pulsations of the geomagnetic field and the pulsations of polar aurorae and ULF radiation /O sviazi ireguliarnykh pul'satsii geomagnitnogo polia s pul'satsiami poliarnykh silanii i UNCh-izlucheniem/.  
09 p1485 A69-21536  
Relationship between irregular geomagnetic field pulsations and the pulsations of auroras and of VLF emission.  
16 p2783 A69-32531
- GELLER, M.**  
Some considerations in the design of a high power, pulsed N sub 2 laser.  
01 p0091 A69-10842  
LCAO-MO-SCF calculations using Gaussian basis functions. II - BeH sub 2.  
05 p0811 A69-15910  
A table of integrals of the error functions.  
12 p2121 A69-26395  
A table of integrals of the exponential integral.  
24 p4341 A69-43324
- GELLER, R. E.**  
Oxygen safety - Submarine to aircraft.  
[AIAA PAPER 67-965]  
01 p0013 A69-11025
- GELLER, S.**  
Alternative explanation of the garnet occurrence in a meteorite.  
08 p1382 A69-19819
- GELLMAN, L.**  
Memory reduction through higher level language hardware.  
[AIAA PAPER 69-963]  
22 p3905 A69-40344
- GELMAN, A. A.**  
Section pressing from titanium alloys /Pressovanie profilov iz titanovykh splavov/.  
07 p1164 A69-18788
- GELMAN, M. E.**  
Temperature and height variability in the middle and upper stratosphere during 1964-1966 as determined from constant pressure charts.  
13 p2290 A69-27637  
Proposed indices characterizing stratospheric circulation and temperature fields.  
22 p3977 A69-39929
- GELNOVATCH, V. G.**  
Computer aided design of wide-band integrated microwave transistor amplifiers on high dielectric substrates.  
01 p0040 A69-10194
- GELON, W. S.**  
Sub-optimum guidance laws for rendezvous with continuous thrust.  
[AIAA PAPER 69-76]  
06 p0956 A69-18081
- GELPI, E.**  
Gas-chromatographic mass-spectrometric studies on the isoprenoids and other isomeric alkanes in meteorites.  
19 p3414 A69-36113  
Isoprenoids and other hydrocarbons in terrestrial graphite.  
22 p3934 A69-39890
- GELTSE, I. G.**  
Bactericidal effect of silver-coated activated carbons and ion-exchange resins /O bakteritsidnom deistvii poserebrennykh aktivirovannykh uglei i ionoobmennykh smol/.  
13 p2216 A69-28621
- GINOV, V. N.**  
The secondary curves as a method to determine fatigue life under nonstationary loading.  
17 p3052 A69-32976
- GENAEVA, L. I.**  
Determination of uranium in iron meteorites by recording fission fragment tracks /Opredelenie urana v zheleznykh meteoritakh metodom registratsii trekov oskolkov deleniia/.  
01 p0026 A69-11377
- GENCEY, R.**  
Improvement in the resistance to severe environments of shock-ignition pyrotechnic devices /Amelioration a la tenue aux environnements severes des artifices pyrotechniques par allumage par choc/.  
10 p1749 A69-23007
- GENDELEV, S. SH.**  
Possibility of direct investigation of the influence of dislocations on the processes of magnetization of yttrium iron garnet crystals.  
09 p1559 A69-22532
- GENDIKSON, V.**  
Mixing processes in an axisymmetric jet in a transverse flow /Protessy peremeshivaniia v osesimmetrichnoi stree v poperechnom potoke/.  
10 p1679 A69-23568
- GENDRIN, R.**  
A V.L.F. particle rocket experiment at Kerguelen Islands. I.  
15 p2605 A69-31423  
A V.L.F. and particle rocket experiment at Kerguelen Islands. II.  
15 p2571 A69-31424  
A VLF and particle rocket experiment at Kerguelen Islands. III.  
15 p2605 A69-31425
- GENERALOV, N. A.**  
"Transparency" effect in plasma subjected to the action of laser pulses /Effekt "prosvetleniia" plazmy pod deistviem lazernykh impul'sov/.  
13 p2314 A69-28442  
Plasma and laser emission /Plazma i lazernoe izluchenie/.  
16 p2797 A69-32382
- GENEVEY, P.**  
Inertial magneto confinement of a plasma produced by the interaction of laser radiation with a solid deuterium granule /Confinement magneto inertiel d'un plasma cree par l'interaction du rayonnement laser avec un granule de deuterium solide/.  
05 p0798 A69-15585
- GENIN, A. M.**  
Use of a two-gas artificial atmosphere in manned spacecraft /O primenenii dvukhgazovoi iskusstvennoi atmosfery v obitaemykh kosmicheskikh korabliakh/.  
17 p2912 A69-32940  
Possibility of using an artificial atmosphere with a variable gas composition in air-tight cabins /O vozmozhnosti ispol'zovaniia v germicheskikh kabinakh iskusstvennoi atmosfery s nestatsionarnym gazovym sostavom/.  
22 p3892 A69-40284
- GENIN, J.**  
On the Timoshenko buckling load of thin walled cylindrical shells.  
05 p0831 A69-15581
- GENIN, Y.**  
The determination of transfer orbits /La determination des orbites de transfert/.  
07 p1211 A69-18503  
Polynomial approximations in perturbational navigation and guidance schemes.  
19 p3368 A69-35664  
The theory of optimal control and the calculus of variations /Theorie du controle optimal et calcul des variations/.  
21 p3795 A69-38400
- GENKIN, A. L.**  
Unsteady jet flow of a viscous fluid /O nestatsionarnom struinom dvizhenii viskoznoi zhidkosti/.  
14 p2432 A69-29608
- GENKIN, I. L.**  
Gravitational instability in rotating systems /O gravitatsionnoi neustoiichivosti vo vraschchaushchikh-sia sistemakh/.  
09 p1589 A69-21372
- GENKIN, R. O.**  
Polarization of the radiation of glass activated by neodymium /Poliarizatsiia izlucheniia stekla, aktivirovannogo neodimom/.  
17 p2984 A69-33974
- GENOVESE, J.**  
An experimental study of the boundary layers on low temperature subliming ablators.  
[AIAA PAPER 69-152]  
06 p0929 A69-18098
- GENSUROWSKY, W.**  
Applications of economic analysis to problems of data collection by remote sensing techniques.  
12 p2193 A69-26988
- GENT, H.**  
On the optical identification of 3C 230.  
12 p2173 A69-27171
- GENTHE, W. K.**  
The magnetic resonance flowmeter.  
15 p2616 A69-31290
- GENTLEMAN, W. M.**  
The Bell laboratories numerical mathematics program library project.  
01 p0036 A69-10709
- GENTNER, W.**  
New fission track ages of tektites and related glasses.  
23 p4210 A69-41345
- GENTRY, J. R.**  
Lifting body flight test.  
06 p1017 A69-17671
- GENTRY, R. A.**  
Numerical simulation of flare-generated disturbances in the solar wind.  
16 p2848 A69-31970
- GENTY, B.**  
Electroerosion and electron microscopy /Electroerosion et microscopie electronique/.  
03 p0427 A69-12880
- GEOKHLANIAN, T. KH.**  
Relation between the processes in the troposphere and the upper stratosphere in the cold half-year /O sviazi mezhdu protsessami v troposfere i verkhnei stratosfere v khodnoe polugodie/.  
18 p3166 A69-34817
- GEORGE, A.**  
A 377 mu m CW maser interferometer for plasma diagnostics.  
08 p1359 A69-19987  
The direct measurement of electron density in an MHD duct.  
10 p1731 A69-23436
- GEORGE, A. R.**  
Reduction of sonic boom by azimuthal redistribution of overpressure.  
[AIAA PAPER 68-159]  
09 p1434 A69-21948  
Lower bounds for sonic booms in the midfield.  
24 p4254 A69-43662
- GEORGE, D. W.**  
Shock development in an electrothermal shock tube.  
14 p2427 A69-29768
- GEORGE, F. D.**  
The effect of fiber orientation and morphology on the tensile behavior of Al sub 3 Ni whisker reinforced aluminum.  
06 p0939 A69-16943
- GEORGE, L.**  
Flight Mechanics- Aircraft and Missile Performance /La Mecanique du Vol- Performances des Avions et des Engins/ 2nd Edition/.  
17 p2898 A69-33319
- GEORGE, N.**  
Scaling and resolution of scenic holographic stereograms.  
11 p1883 A69-24690
- GEORGE, T. S.**  
Nonlinear frequency modulation by noise.  
22 p3900 A69-40923
- GEORGE, T. V.**  
Retracting pedestal apparatus that presents a single solid target to a focused Q-switched laser beam.  
03 p0439 A69-13105  
Microwave diagnostics of laser produced aluminum plasmas.  
11 p1930 A69-25287



GEORGE, Y. H.

Choking of a subsonic gas flow by thermal radiation.  
15 p2717 A69-30908

GEORGES, T. M.

HF radar signatures of traveling ionospheric irregularities, 3D ray-tracing simulation.  
21 p3717 A69-39280

GEORGESCU, A.

Linear stability criteria for the plane parallel flow of a non-Newtonian fluid /Criterii de stabilitate liniara a miscarii plan paralele a unui fluid newtonian/.  
22 p3933 A69-41108

GEORGIAN, E. J.

The use of spandersondes for atmospheric soundings.  
10 p1692 A69-23257

GEORGIAN, J. C.

The Matic Computer for the solution of mechanical vibrations problems.  
[ASME PAPER 69-VIBR-12]  
10 p1806 A69-24167

GEORGIEV, A. I.

Investigation of stacking faults in epitaxial layers of germanium /Izuchenie defektov upakovki v epitaksial'nykh sloiakh germanii/.  
02 p0297 A69-11880

GEORGIEV, G. I.

Radio lines of interstellar NO molecules /O radioliniakh mezhzvezdnykh molekul NO/.  
09 p1590 A69-21377  
Radio lines of the interstellar NO molecule.  
18 p3198 A69-34765

GEORGIEVA, I. A.

Kinetic features of the martensitic transformation during thermomechanical treatment of nickel steels.  
02 p0267 A69-12190  
Isothermal and athermal martensite transformations in an Fe-NiMo alloy /Izotermicheskie i atermicheskie martensitnoe prevrashchenie v splave Fe-Ni-Mo/.  
19 p3344 A69-35983

GEORGIEVSKII, A. V.

A "min B" magnetic trap /Magnitnaia lovushka s "min B"/.  
04 p0634 A69-14299

GEORGIEVSKII, I. U.

Absorption band near lambda equals 0.43 mu in solar spectra and in the scattered radiation spectra of the sky /O polose pogloscheniya okolo lambda equals 0.43 mkm v spektrakh solntsa i spektrakh rasseiannoi radiatsii neba/.  
14 p2441 A69-29407

GEORGIEVSKII, V. S.

The effect of hypokinesis on the human blood circulation.  
10 p1646 A69-23584

GEORGII, H. W.

Concentration of CO sub 2 in the upper troposphere and lower stratosphere.  
11 p1879 A69-25254

GEORGIU, A.

Special relativity and thermodynamics.  
24 p4349 A69-42748

GEORGY, H. E.

Servoelements and control methods for V/STOL aircraft /Bedienelemente und Steuerungsmethoden fuer V/STOL-Flugzeuge/.  
04 p0547 A69-14815

GERA, J.

Branched trajectory optimization by the projected gradient technique.  
[AIAA PAPER 69-917]  
21 p3808 A69-39346

GERANIN, V. A.

Calculation of the signal-to-noise ratio at the output of a typical radio section /O vychislenii otnosheniia signal/pomekha na vykhode tipovogo radiotekhnicheskogo zvena/.  
13 p2222 A69-28506

Noise stability of a "preselector-detector-noncommutated low-pass filter-threshold device" network during the detection of a finite-duration noise signal /Pomekhoustoichivost' trakta "preselektor-detektor-nekommutiruemyi fil'tr nizhmikh chastot-porogovoe ustroystvo" pri obnaruzhenii shumovogo signala konechnoi dilitel'nosti/.  
15 p2563 A69-30142

GERARD, E.

Observations of Saturn, Uranus and Neptune at 11.13 cm.  
17 p3039 A69-33731

GERARD, G.

Structural guidelines for materials development - Some vehicle performance and design generalizations.  
[AIAA PAPER 68-331]  
01 p0011 A69-11021  
Bending general instability of shallow-stiffened cylinders.  
06 p1022 A69-17369

GERARD, J. C.

Considerations about the high atmosphere during an aurora /Considerations sur la haute atmosphere pendant une aurore polaire/.  
17 p2961 A69-33417

GERARD, J.-C.

The occurrence of the N ii 4176 angstrom units emission line in connection with type-B auroras.  
24 p4309 A69-43012

GERARD, V. B.

A frequency controlled laser for long path interferometry.  
20 p3553 A69-37303

GERARDIN, L.

Computer-aided projects - Brilliant prospects associated with numerous difficulties /Projets assistes par calculateurs - De brillantes perspectives associees a de nombreuses difficultes/.  
08 p1278 A69-19971

GERARDO, J. B.

Spectral temperatures of nonuniform plasmas.  
09 p1552 A69-22251  
Formation of molecular helium during the early afterglow.  
16 p2782 A69-32465

GERASHCHENKO, E. I.

Analysis of nonlinear control systems by the method of successive approximations /Analiz nelineinykh sistem upravleniia metodom posledovatel'nykh priblizhenii/.  
13 p2237 A69-27252  
Analysis of nonlinear discrete systems by the motion separation method. I /Analiz nelineinykh diskretnykh sistem metodom razdeleniia dvizhenii. I/.  
16 p2763 A69-31628  
Analysis of nonlinear discrete systems by the method of division of motions. II /Analiz nelineinykh diskretnykh sistem metodom razdeleniia dvizhenii. II/.  
23 p4144 A69-41956

GERASIM, A.

Cosmological implications of the possible non-existence of a second-order clustering of the galaxies.  
22 p4024 A69-40579

GERASIMOV, G. A.

A gas laser using atmospheric air /Gazovyi lazer na atmosfernom vozdukh/.  
11 p1895 A69-24625

A laser based on CO sub 2 formed chemically in an electrical discharge /Opticheskii kvantovyi generator na khimicheskii obrazovannom v elektricheskoi razriade CO sub 2/.  
13 p2274 A69-28585

GERASIMOV, G. I.

Triple splitting of radio waves in the E-region at middle latitudes.  
12 p2031 A69-26686

GERASIMOV, I. F.

Machine for in vacuo testing of samples at high temperatures /Mashina dlia ispytaniia obraztsov v vakuume pri vysokoi temperature/.  
18 p3117 A69-34604

GERASIMOV, V. G.

Towards the theory of controlling laminated products using superposed detectors.  
24 p4296 A69-42653

GERASIMOVA, G. K.

Analysis of early disturbances in ion migration in irradiated erythrocytes /K analizu rannikh narushenii transporta ionov v obluchennykh eritrotsitakh/.  
10 p1647 A69-23966

GERASIMOVA, G. N.

Triple splitting of radio waves in the E-region at middle latitudes.  
12 p2031 A69-26686

GERASIMOVA, L. P.

Effect of the rate of deformation on the structure of aluminum alloys /Vliianie skorosti deformirovaniia na strukturu aluminievyykh spavov/.  
21 p3746 A69-38958

GERASIMOVA, N. M.

A model for the interaction of high-energy nucleons with nuclei with formation of two-humped jets.  
13 p2303 A69-28371

GERASIMOVA, T. B.

Morphological changes in the internal organs of rats during early and later periods following fast neutron irradiation /Morfologicheskie izmeneniia vnutrennykh organov krysa v rannie i otdalennye sroki posle oblucheniia bystryimi neutronami/.  
21 p3659 A69-39063

GERASKINA, L. K.

Nonequilibrium laminar boundary layer of dissociating air at axisymmetric bodies /Neravnovesnyi laminarnyi pogranchnyy sloi dissotsiiruiushchego vozdukh na osesimmetrichnykh telakh/.  
19 p3239 A69-36395

GERASSIMENKO, M.

Balloon observations of high energy X-ray sources in the region of the galactic centre.  
23 p4206 A69-42114

GERATHEWOHL, S. J.

Human engineering of the SST - Man's role in advanced aircraft operations.  
09 p1447 A69-22546  
Time-zone effects.  
16 p2745 A69-32444  
Human engineering of SST - Man's role in advanced aircraft operations.  
23 p4107 A69-41820

GERBER, E. A.

Solid-state laser with vibrating reflector.  
22 p3962 A69-40562

GERBER, W. D.

Frequency discrimination characteristics of an elliptically polarized dual-polarization gas laser.  
[IEEE PAPER P-5]  
07 p1153 A69-19074

GERBERICH, W. W.

Preliminary toughness results on TRIP steel.  
08 p1330 A69-20012  
Interactions between crack growth and strain-induced transformation.  
10 p1709 A69-23074  
Structural modes of fracture.  
13 p2274 A69-27226  
Monitoring crack growth of hydrogen embrittlement and stress corrosion cracking by acoustic emission.  
19 p3350 A69-36893

GERBERMANN, A. H.

Detailed plant and soil thermal regime in agronomy.  
12 p2075 A69-26998

GERBIER, G.

High-energy-density electrochemical generators using nonaqueous media /Generateurs electrodynamiques a haute densite d'energie utilisant des milieux non aqueux/.  
08 p1261 A69-21056  
High-energy-density electrochemical generators using nonaqueous media /Generateurs electrodynamiques a haute densite d'energie utilisant des milieux non aqueux/.  
16 p2740 A69-32427

GERBULOVA, I. P.

Diurnal development of the F1 layer /Sutochnoe razvitiie sloia F1/.  
20 p3527 A69-37670

GERDEL, R. W.

Note on the use of liquefied propane for fog dispersa at the Medford-Jackson Airport, Oregon.  
04 p0585 A69-14918

GERDIN, G. A.

Nature of the rotational discontinuity.  
11 p1923 A69-24293

GERETH, R.

Modern germanium structural elements for microelectronics /Moderne Germanium-Bauelemente fuer die Mikroelektronik/.  
02 p0214 A69-11597  
New aspects for the choice of contact materials for silicon solar cells.  
19 p3250 A69-35687

GERGEI, T.

Determination of the optimum performance of Markov extremal systems.  
11 p1861 A69-25712

GERGEL, V. A.

Superfluidity of excitons in semiconductors.  
03 p0486 A69-13415

GERHARD, J. P.

Retinal lacerations and detachment in jet pilots /Dechirures retiniennes et decollement chez les pilotes de reacteur/.  
05 p0710 A69-16630

- GERHARZ, R.**  
Photometric brightness asymmetry during a lunar eclipse.  
20 p3601 A69-37510
- GERICKE, M.**  
Remarks on mesometeorological problems in the Central European region with specific consideration of the possibility of applying numerical techniques to mesometeorological research /Betrachtungen zu mesometeorologischen Problemen im mitteleuropäischen Raum, insbesondere zu Möglichkeiten der Anwendung numerischer Methoden im mesometeorologischen Bereich/.  
20 p3570 A69-37427
- GERISCH, W.**  
Numerical Laplace transform in heat conduction theory /Zur numerischen Laplace-Transformation in der Wärmeleitungstheorie/.  
21 p3851 A69-39011
- GERJUOY, E.**  
Theoretical aspects of atomic collisions - Classical, variational, and Faddeev methods.  
07 p1187 A69-19661
- GERKE, P. P.**  
Checking the coherence of laser radiation used in holography.  
21 p3734 A69-38398
- GERKING, L.**  
A Method for the Solution of the Navier-Stokes Equations with Integral Relations and its Application to the Flow Around a Flat Plate of Finite Length /Ein Verfahren zur Lösung der Navier-Stokesschen Gleichungen mit Integralbedingungen und seine Anwendung auf die Strömung um eine endlich lange Ebene Platte/.  
17 p2949 A69-32993
- GERKS, I. H.**  
Propagation in a superrefractive troposphere with a trapping surface layer.  
16 p2752 A69-32388
- GERLACH, A. C.**  
Advances in geographic and thematic mapping applications of remote sensor data.  
12 p2192 A69-26984
- GERLACH, C. R.**  
Flow-induced vibrations of metal bellows.  
[ASME PAPER 69-VIBR-5]  
10 p1805 A69-24163  
Dynamic models for viscous fluid transmission lines.  
24 p4301 A69-43289
- GERLACH, H. A.**  
Investigation of impediments in the respiratory equipment of high-performance aircraft /Untersuchungen ueber die Widerstaende in Atemanlagen von Hochleistungsflugzeugen/.  
17 p2916 A69-33773
- GERLAKH, N. I.**  
Effect of finite conductivity on stationary self-contracting plasma flows.  
06 p0966 A69-17548  
Two-dimensional steady flow of highly conducting plasma in a coaxial system.  
07 p1190 A69-18757
- GERLOFF, M.**  
To simulate re-entry at super-orbital velocity - A closed-system toroidal EGDF.  
04 p0585 A69-15323
- GERMAN, J. P.**  
The properties of the radiation below 1 GHz from gap-type electrical discharges on electric power distribution lines.  
23 p4126 A69-42218
- GERMAN, V. O.**  
Blowing of neutral gases as a means of protecting the electrodes of MHD devices /Primenenie vduva neutral'nykh gazov dlia zashchity elektrodov MGD-ustroystv/.  
11 p1826 A69-25232
- GERMANIUK, V. N.**  
Investigation of an MHD-generator model with an argon-potassium plasma /Issledovanie modeli MGD-generatora na argono-kalievoy plazme/.  
06 p0871 A69-17909  
Experimental study of an MHD generator model with a nonequilibrium plasma /Eksperimental'noe issledovanie modeli MGD-generatora s neravnovesnoi plazmoi/.  
10 p1637 A69-23480
- GERMEIER, I. U. B.**  
On guaranteed evaluations of the reliability of a system with incomplete information about the reliability of the elements.  
02 p0251 A69-11652
- GERMOND, P. J.**  
C-5 flight test telemetry data processing system.  
10 p1660 A69-23269
- GERMONPREZ, R. L.**  
Polymeric Schiff bases. XV - The synthesis of cross-linked polymeric azomethines from amino aryl ketones.  
08 p1269 A69-21060  
Polymeric Schiff bases. XIV - The synthesis of cross-linked polymeric azomethines by exchange reactions.  
08 p1269 A69-21061  
Polymeric Schiff bases. XVI.  
10 p1651 A69-23308
- GEROLA, H.**  
On the spectrum of a gaseous nebula of pure hydrogen. I.  
14 p2529 A69-29975
- GEROLD, V.**  
Strain hardening mechanisms in AlZn and AlAg alloys /Verfestigungsmechanismen in AlZn- und AlAg-Legierungen/.  
16 p2800 A69-31776
- GERONIMUS, I. A. L.**  
Certain analytically solvable problems of optimal control theory /Nekotorye analiticheski razreshimye zadachi teorii optimal'nogo upravleniya/.  
23 p4145 A69-41958
- GEROPP, D.**  
Comment on a system of infinitely many integral conditions in boundary layer theory /Bemerkung zum System der unendlich vielen Integralbedingungen der Grenzschichttheorie/.  
02 p0231 A69-12059
- GEROV, G. KH.**  
Stability of periodic oscillations of quasi-linear nonautonomous systems with delay /Ustoichivost' periodicheskikh kolebaniy kvazilineinykh neavtonomnykh sistem s zapazdyvaniem/.  
02 p0280 A69-11705
- GERPHEIDE, J.**  
Mars entry and landing capsule.  
02 p0333 A69-11746
- GERRITSEN, H. J.**  
Elimination of speckle noise in holograms with redundancy.  
01 p0082 A69-10850
- GERRITZEN, F.**  
Studies on the influence of fast transportation on the circadian excretion pattern of the kidney in humans.  
09 p1444 A69-22545  
Methods for the study of the behaviour of human circadian rhythms in kidney function before, during and after global flights.  
24 p4266 A69-43374
- GERRMANN, K.**  
Temperature dependence of intrinsic absorption in weakly doped p-InSb /Temperaturnaya zavisimost' so sobstvennogo pogloshcheniya v slabo legirovannom p-InSb/.  
01 p0136 A69-10255  
Temperature dependence of fundamental absorption in lightly doped p-type InSb.  
09 p1559 A69-22648
- GERRY, E. T.**  
Deactivation of vibrationally excited carbon dioxide /nu sub 3/ by collisions with carbon dioxide or with nitrogen.  
20 p3578 A69-36937
- GESCHA, A.**  
Investigations of the precipitation behavior and the mechanical properties of the alloy Inconel 625 /Untersuchungen ueber das ausscheidungsverhalten und die mechanischen eigenschaften der legierung Inconel 625/.  
22 p3971 A69-40802
- GESHSBERG, R. E.**  
Photometric and colorimetric characteristics of eruptive stars. IV.  
12 p2159 A69-26667
- GESHEN, B. J.**  
Rotary transformer utilization in a spin stabilized spacecraft power system.  
17 p3050 A69-34111
- GERSHENGORN, G. I.**  
A dynamic model of the F region of the ionosphere including temperature variations /Dinamicheskaya model' oblasti F ionosfery, vkluchayushchaya temperaturnye izmeneniya/.  
23 p4156 A69-41843
- GESHENZON, E. M.**  
Electron scattering on neutral acceptors in semiconductors /Rasseianie elektronov na neutral'nykh akseptorakh v poluprovodnikakh/.  
03 p0484 A69-13280  
Electrical conductivity of n-type InSb at 0.3-20 deg K.  
06 p0978 A69-16990  
Electron scattering by neutral acceptors in semiconductors.  
14 p2508 A69-29653
- GERSHINOWITZ, H.**  
National differences in styles of research management.  
17 p3075 A69-32965
- GERSHKOKHEN, S. L.**  
New heat-resistant materials - Polyimides and polybenzimidazoles.  
19 p3358 A69-35901
- GERSHMAN, B. N.**  
Diffusion of strong inhomogeneities in a weakly ionized magnetoactive plasma /O diffuzii sil'nykh neodnorodnostey v slabooionizirovannoi magnitoaktivnoi plazme/.  
08 p1362 A69-20426  
Some problems in the theory of traveling ionospheric disturbances /Nekotorye voprosy teorii peremeshchayushchikhsia ionosfernykh vozmushcheniy/.  
17 p2966 A69-33980  
Certain specific features in the redistribution of charged particles in the ionosphere in the presence of wind shifts /O nekotorykh osobennostiakh pereraspredeleniya zaryazhennykh chastits v ionosfere pri nalichii vetrovykh sdvigov/.  
23 p4155 A69-41840
- GESHT, E. N.**  
Generalization of the Liapunov's first theorem of stability to certain classes of differential equations in a Banach space /Obobshchenie 1-oi teoremy Liapunova ob ustoychivosti dlia nekotorykh klassov differentsial'nykh uravneniy v banakhovom prostranstve/.  
19 p3360 A69-35860
- GESHT, E. P.**  
A laser anemometer /Lazernyi anemometr/.  
13 p2260 A69-27857
- GESHSHTEN, M. S.**  
Dynamic and static problems in the theory of deformable membranes of the cardiovascular system /Dinamicheskie i staticheskie zadachi teorii deformiruemyykh obolochek krovenosnoi sistemy/.  
12 p2018 A69-25989
- GERSHUNI, G. Z.**  
On the convective instability of a thermal boundary layer.  
07 p1241 A69-18696
- GERSHWIN, S. B.**  
On the higher derivatives of Bellman's equation.  
24 p4341 A69-43234
- GERSON, N. C.**  
Polar cap sporadic E.  
12 p2069 A69-26464
- GERSPACHER, M.**  
Details concerning the phase diagram of vanadium-nickel from 0 to 40 percent nickel /Precisions sur le diagramme d'equilibre vanadium-nickel entre 0 et 40 percent de nickel/.  
11 p1903 A69-24579
- GERST, C. W.**  
Stripline microwave integrated circuits.  
15 p2579 A69-31075
- GERSTEIN, M.**  
Theoretical calculations of additive effects in hydrogen-oxygen ignition. [WSCI PAPER 68-52]  
07 p1239 A69-18316
- GERSTEN, J.**  
Pressure-induced microwave absorption of nonpolar gases.  
06 p0962 A69-17816
- GERSTEN, R. H.**  
A polynomial force model for determining near-equatorial, near-synchronous orbits. [AAS PAPER 68-141]  
21 p3806 A69-39234
- GERSTNER, R. W.**  
Stresses in a composite cantilever.  
01 p0172 A69-11266  
Representation of stress concentration factors for a composite in plane strain.  
07 p1170 A69-18716



## GERTSENSHTEIN, M. E.

Stabilizing filter circuits in the microwave range for solid-state devices /Fil'trovy stabiliziruiushchie tsepi SVCh diapazona dlia tverdotel'nykh priborov/.

11 p1849 A69-24961

Regenerative amplifier operating in a duct which is mismatched outside of the passband /Regenerativnyi usilitel', rabotaiushchii v trakte, rassoglasovannom vne polusy propuskaniia/.

15 p2573 A69-30118

Mismatch error in measuring small losses in circulators and reciprocal quadrupoles /O pogreshnosti rassoglasovaniia pri izmerenii malykh poter' v tsirkulyatorakh i vzaimnykh chetyrekhpoliusnikakh/.

22 p3875 A69-40259

## GERTSENSHTEIN, S. I. A.

Effect of a single roughness element on turbulence onset.

07 p1119 A69-18751

Stability of the unsteady rectilinear plane-parallel flow of an ideal fluid /Ob ustoiichivosti nestatsionarnogo priamolineinogo ploskoparallelnogo potoka ideal'noi zhidkosti/.

14 p2431 A69-29606

## GERTSUSKII, D. F.

Changes in the radiation effect on plants under the influence of space flight factors /K voprosu ob izmenenii radiatsionnogo effekta u rastenii pod vlianiem faktorov kosmicheskogo poleta/.

05 p0708 A69-16510

Radiosensitivity of potatoes to gamma-ray and proton irradiation applied to whole tubers and to isolated eyes before planting /Radiochuvstvitel'nost' kartofelia k gamma- lucham i protonam pri prepodosochnom obлучenii tselykh klubnei i izolirovannykh glazkov/.

05 p0709 A69-16511

Combined effect of Cosmos 110 space flight factors on plants /Kombinirovannoe deistvie faktorov kosmicheskogo poleta sputnika zemli "Kosmos-110" na rasteniia/.

07 p1064 A69-18972

Change in the nature of the radioprotective effect of propyl gallate during proton and gamma irradiation of potatoes.

08 p1262 A69-19927

Changes in content of dry material, sugars, and ascorbic acid in plants after action of cosmic flight factors on the seeds of these plants.

10 p1645 A69-23495

On the problem of changes in effect of radiation on plants subjected to cosmic flight factors.

18 p3095 A69-34729

Radiosensitivity of potatoes to gamma and proton irradiation applied to whole tubers and isolated eyes before planting.

18 p3095 A69-34730

Combined effect of spaceflight factors on plants in the Kosmos-110 satellite.

20 p3479 A69-38220

## GERVAIS, R. L.

Critical engineering problems of space stations.

06 p1007 A69-17601

Integration of large power systems into manned space stations.

13 p2209 A69-27939

## GESCHWIND, G.

Oxidation protection of refractory metals by inorganic compounds.

09 p1526 A69-22322

The oxidation of LiF-coated refractory metals.

19 p3341 A69-35573

## GESSEN, L. V.

Advances of the USSR in the Study of Outer Space-First Space Decade 1957-1967 /Uspekhi SSSR v issledovanii Kosmicheskogo Prostranstva- Pervoe Kosmicheskoe Desiatiletie 1957-1967/.

13 p2335 A69-27346

## GESSINGER, G. H.

Estimate of the temperature rise of micron-sized silver particles in the electron microscope due to electron-beam heating.

04 p0640 A69-14449

## GETHING, P. J. D.

Measurement of elevation angles of H.F. waves.

08 p1275 A69-20293

The calculation of electron density profiles from oblique ionograms.

10 p1684 A69-23826

## GETLER, M.

Is this any way to plan an airway/ques/

15 p2720 A69-30588

## GETLING, A. V.

A possible mechanism for producing sunspot magnetic fields.

04 p0662 A69-15243

Magnetic fields in the convective cells of the supergranulation zone /Magnitnye polia v konvektivnykh iacheikakh zony supergranulatsii/.

09 p1588 A69-21366

## GETMANETS, V. F.

Temperature field of a plate placed in a solidifying gas /O temperaturnom pole plastyiny, pomeshchennoi v otverdevshii gaz/.

16 p2878 A69-31957

## GETMANSKAIA, G. D.

Effect of titanium on the mechanical properties of N18K8M5T maraging steel /Vlianie titana na mekhanicheskie svoistva martensito- stareiushchei stali N18K8OM50T/.

15 p2639 A69-30630

## GETMANTSEV, G. G.

Radio radiation intensity at 1.68 MHz as measured by "Kosmos-142."

01 p0158 A69-11322

Frequency spectrum of distributed cosmic radio emission in the range from 6.3 to 40 MHz /O chastotnom spektre raspredelennogo kosmicheskogo radioizlucheniia v diapazone 6.3-40 MGTs/.

03 p0500 A69-13080

Relation between sporadic radio emission, recorded by Elektron satellites, and geomagnetic activity /O sviazi sporadicheskogo radioizlucheniia, zaregistrirovannogo na sputnikakh "Elektron," s geomagnitnoi aktivnost'iu/.

05 p0824 A69-16059

Type 3 solar bursts recorded by the Elektron 4 artificial earth satellite /Solnechnye vspleski III, tipa, zaregistrirovannye na ISZ "Elektron-4"/.

05 p0824 A69-16060

Variations in the mean radio emission level at frequencies of 1.1 and 2.3 MHz according to measurements on the Elektron 4 artificial earth satellite /Variatsii srednego urovnia radioizlucheniia na chastotakh 1,1 i 2,3 MGTs po izmereniam na ISZ Elektron-4/.

09 p1578 A69-21776

Frequency spectrum of the distributed cosmic radio emission in the range from 6.3 to 40 MHz.

14 p2509 A69-28762

Extra-atmospheric radio-astronomical studies /Vneatmosfernye radioastronomicheskie issledovaniia/.

15 p2682 A69-30504

Multiple "Compton" energy losses of fast electrons and their possible effects in various space objects /Mnogokratnye "komptonovskie" poteri energii bystrykh elektronov i ikh vozmozhnaia rol v razlichnykh kosmicheskikh ob'ektakh/.

15 p2676 A69-30953

Relation between geomagnetic activity and the sporadic radio emission recorded by the Elektron satellites.

20 p3606 A69-37969

Type-III solar bursts recorded by the Elektron-4 satellite.

20 p3591 A69-37970

## GETSELEV, I. V.

Results of measurements of fast charged particles by the Cosmos 137 satellite /Rezultaty izmerenii bystrykh zariashennykh chastits na sputnike "Kosmos-137"/.

13 p2327 A69-27693

## GETSINGER, W. J.

Computer-design of diode-using microwave components, and a computer-dimensioned, X-band parametric amplifier.

10 p1661 A69-23874

## GETSOV, L. B.

Methods of making high-temperature tests of refractory metals in a vacuum.

10 p1714 A69-23848

Investigation into high-temperature creep in cyclic tension and compression.

17 p3054 A69-33044

Short-period relaxation of stresses in heat-resistant alloys /Kratkovremennaiia relaksatsiia napriazhenii v zharoprotivnykh splavakh/.

22 p3969 A69-40071

## GETZINGER, R. W.

Recombination in the hydrogen-oxygen reaction - A shock tube study with nitrogen and water vapour as third bodies.

21 p3669 A69-38801

## GEVARTER, W. B.

Basic relations for control of flexible vehicles. [AIAA PAPER 69-115]

06 p1018 A69-18088

Analytical evaluation of launch strategy using pass-out countdown hold data.

19 p3430 A69-36033

## GEVORKIAN, G. A.

Stress concentration near a circular hole during the bending of plates taking into account moment stresses /Kontsentratsiia napriazhenii voze krugovogo otverstia pri izgibe plit s uchetom momentnykh napriazhenii/.

12 p2178 A69-25904

## GEVORKIAN, S. KH.

Stress singularities near corner points at the interfaces and cross section contour of a twisted rod composed of three different materials /Osobennoe napriazhenie okolo uglovnykh tochek linii razdela i kontura poperechnogo secheniia skruchiavaemogo sterzheniia, sostavlenno iz trekh razlichnykh materialov/.

15 p2707 A69-30579

## GEZA, M.

Digital linearization of frequency signals with a high degree of accuracy /Frekvencia jelek nagyPontossagig digitalis linearizalasa/.

22 p3915 A69-40939

## GHAFFARI, A.

Multiple midcourse maneuvers in interplanetary guidance.

13 p2354 A69-28504

## GHANDHI, S. K.

The properties of nickel in silicon.

24 p4360 A69-42759

## GHARE, P. M.

Optimal resource allocation for maximum reliability.

18 p3148 A69-35081

## GHATA, J.

Agreement in endpoints from circadian rhythmometry on healthy human beings living on different continents.

23 p4083 A69-41457

## GHENDRIH, P.

Automatic drawing of printed circuits with the aid of a computer /Trace automatique des circuits imprimes a l'aide d'un ordinateur/.

08 p1296 A69-19979

## GHEORGHE, V.

Dispersion relations in a plasma penetrated by beams /Relatii de dispersie in plasma strabatuta de fascicule/.

11 p1925 A69-24366

## GHEORGHITA, ST. I.

Introduction to the Hydrodynamics of Porous Bodies /Introducere in hidrodinamica corpurilor poroase/.

23 p4150 A69-41501

## GHEORGHU, A.

Melting of particles injected into a plasma jet.

17 p3009 A69-32825

## GHEORGHU, O. C.

A cavity resonator for the study of the electric susceptibility of an ionized gas.

08 p1313 A69-20214

## GHERMANOVA, K.

Transient processes with double injection in CdS single crystals.

21 p3780 A69-38833

## GHEZ, F.

Application of Kalman filtering to the resetting of an inertial navigation system /Application du filtrage de Kalman au recalage d'un navigateur par inertie/.

19 p3286 A69-36645

## GHEZZI, C.

Positron annihilation in semiconductors.

03 p0485 A69-13295

## GHEZZI, U.

Calculation of the transmission coefficients in the combustion zone /Sul calcolo dei coefficienti di trasmissione nella zona di combustione/.

08 p1421 A69-20585

Considerations on velocity losses due to gravity /Considerazioni sulle perdite di velocita per gravita/.

08 p1409 A69-20587

A method of calculation of the hybrid rocket engines.

08 p1376 A69-20590

## GHIA, K. N.

Analysis of entrainment and flow augmentation for Coanda-type nozzles.

05 p0746 A69-16021

## GHIDONI, J. J.

Microvillar bleb formation in primate hepatocytes irradiated with 32-Mev protons.

10 p1641 A69-23045

- Connection between a mitochondrion and endoplasmic reticulum in liver.  
23 p4083 A69-41455
- GHIGLIAZZA, R.**  
Optimum geometrical design of multipad externally pressurized journal bearings.  
07 p1141 A69-19439  
A simplified analytical approach and analog simulation results for the attitude perturbed dynamics of a spinning satellite.  
20 p3618 A69-37912  
Attitude dynamics and stability conditions of a non-rigid spinning satellite.  
23 p4224 A69-42396
- GHIRLANDA, J.**  
Comparative action of various annealings of a 2n 2907 p-n-p transistor subjected to 10 super 7 rads of cobalt 60 gamma rays /Action comparee de divers recuits d'un transistor pnp 2n 2907 soumis a 10 super 7 rads de rayons gamma du cobalt 60/.  
15 p2625 A69-30827  
Incidence of unitary sorting on the reliability of planar transistors subjected to irradiation recovery cycles /Incidence d'un tri unitaire sur la fiabilite de transistors planars soumis a des cycles irradiation-restauration/.  
15 p2626 A69-30834
- GHISTA, D. N.**  
A dislocation model pertaining to the strength of elastically inhomogeneous materials.  
08 p1333 A69-20557  
An analytic elastic-viscoelastic model for the shape and the forces in the left ventricle.  
12 p2022 A69-26235
- GHOBARAH, A. A.**  
Overall and local buckling of channel columns.  
13 p2361 A69-27440
- GHORAI, S. C.**  
Leading-edge vortices and shock-detachment flow over delta wings.  
17 p2896 A69-34025
- GHORMLEY, J. A.**  
Pulse radiolysis of NO - Production of NO sub 2 and N sub 2 O sub 3 and the production and relaxation of vibrationally excited NO.  
14 p2410 A69-29928
- GHOSE, R. N.**  
Redirective and retrodirective antenna arrays.  
23 p4136 A69-41580
- GHOSH, A.**  
Analysis of interfacial pressure in a laminated structure and its damping characteristics.  
10 p1800 A69-23350
- GHOSH, B.**  
Analysis of capillary and orifice compensated externally pressurized simple pad rectangular thrust bearings.  
12 p2102 A69-26239
- GHOSH, R.**  
Discussions on the gravitation of a cylindrically symmetric magnetic field.  
01 p0120 A69-10816  
Achievement of synchronous orbit using electric propulsion. [AIAA PAPER 69-275]  
09 p1586 A69-21265
- GHOSH, S. K.**  
Analysis of interfacial pressure in a laminated structure and its damping characteristics.  
10 p1800 A69-23350
- GHOSH, T. P.**  
Idealized slider bearings with Maxwell liquid as lubricant.  
02 p0253 A69-12413
- GIACCONI, R.**  
Results from detailed studies of X-ray sources.  
05 p0813 A69-15845  
Grazing-incidence telescopes for X-ray astronomy.  
09 p1501 A69-22688  
X-ray spectral data from GX3 plus 1.  
20 p3594 A69-38172  
Observation of an X-ray flare - Spatial distribution and physical parameters.  
24 p4366 A69-42688
- GIACOFICI, T. A.**  
Finite element formulation for solving complicated boundary value problems in structural analysis.  
03 p0526 A69-13736
- GIAMPALMO, G.**  
Preliminary investigation for a study of panel flutter in supersonic blow-down wind tunnels /Una indagine preliminare per lo studio del "flutter" dei pannelli nelle gallerie supersoniche intermittenti/.  
21 p3847 A69-39859
- GIANNONE, P.**  
Molecular ratios as indicators of elemental abundance ratios.  
06 p1003 A69-17320  
Initial stages in the development of low-mass close binary systems /Fasi iniziali dell'evoluzione di sistemi binari stretti poco massicci/.  
10 p1777 A69-23310  
Evolutionary stages of visual binary components.  
11 p1962 A69-25111  
Population II star models and abundance of primaevial helium.  
12 p2156 A69-26228  
An investigation on H-R diagrams of globular clusters.  
14 p2527 A69-29943  
On equilibrium models for main-sequence stars.  
16 p2859 A69-32219  
Horizontal-branch star models.  
17 p3030 A69-33071
- GIANNUZZI, M. A.**  
Initial stages in the development of low-mass close binary systems /Fasi iniziali dell'evoluzione di sistemi binari stretti poco massicci/.  
10 p1777 A69-23310  
Considerations of the angular momenta of close binary systems /Considerations sur les moments angulaires des systemes binaires serres/.  
10 p1777 A69-23313  
Evolutionary stages of visual binary components.  
11 p1962 A69-25111
- GIAQUINTA, A. R.**  
Slow non-Newtonian flow in a zone of separation.  
04 p0587 A69-14594
- GIARRATANO, P. J.**  
Flow and heat transfer characteristics of subtriple-point cryogenics in heated tubes.  
01 p0176 A69-11146
- GJARRETTO, H.**  
The effects of stereoscopy on the recognition of patterns in visual noise.  
06 p0880 A69-17214
- GIARSINTOV, E. V.**  
Fatigue and corrosion fatigue properties of aluminum alloys 01420.  
03 p0443 A69-13027
- GIAUQUE, W. F.**  
The thermal conductivity of silicon dioxide glass from 0.5 to 4.2 K.  
09 p1493 A69-21426
- GIAVOTTO, V.**  
Mechanics of anisotropic and heterogeneous panels /Sulla meccanica dei pannelli anisotropi ed eterogenei/.  
15 p2711 A69-30904  
Mechanics of panels for aerospace structures /Sulla meccanica di pannelli di strutture aerospaziali/.  
15 p2712 A69-30974  
Influence of the dynamic characteristics of the constraints on the panel flutter /Influenza delle caratteristiche dinamiche dei vincoli sul flutter di un pannello/.  
15 p2712 A69-31001
- GIBALA, R.**  
The strength and alloy softening of bcc metals.  
22 p3970 A69-40166
- GIBAN, J.**  
Prospective considerations concerning bio-acoustics in relation to bird-scaring techniques.  
17 p2914 A69-33364
- GIBBINGS, J. C.**  
Aerodynamic features of the flap-balanced swivel-airfoil.  
03 p0364 A69-13908  
The throat profile for contracting ducts containing incompressible, irrotational flows.  
10 p1680 A69-23893  
Jet-pump actuation of variable-density subsonic wind tunnels.  
11 p1892 A69-25371  
The criterion for tolerable roughness in a laminar boundary layer.  
12 p2063 A69-26774
- GIBBON, N. C.**  
Outgassing of multifoil insulation materials in sealed vacuum systems.  
13 p2299 A69-28016
- GIBBONS, G.**  
Temperature and current distribution in an avalanching p-n junction.  
03 p0487 A69-13637  
High-efficiency microwave oscillations from Si avalanche diodes.  
04 p0580 A69-15491
- GIBBONS, H. L.**  
Circadian rhythms and the effects of long-distance flights.  
03 p0378 A69-14260  
Color signals and general aviation.  
17 p2914 A69-33185
- GIBBONS, J. H.**  
Neutron capture cross-sections and the s-process.  
08 p1357 A69-20896
- GIBBONS, M.**  
Longitudinal oscillations of a plasma having a Fermi distribution of electrons.  
08 p1359 A69-19985
- GIBBS, B. W.**  
Antenna pattern distortion by an isotropic plasma slab.  
02 p0218 A69-12335  
Propagation of strong-field electromagnetic waves through plasmas near the electron cyclotron frequency.  
10 p1728 A69-23167  
Plasma density measurement by electromagnetic wave propagation at small angles to magnetic field.  
11 p1930 A69-25286
- GIBBS, E. H.**  
Rotor downwash in ground effect in the presence of a step. [AIAA PAPER 69-225]  
08 p1253 A69-21032
- GIBBS, H. M.**  
Optical orientation of the super 3 P sub 0 ground state of Pb super 207.  
07 p1156 A69-19399
- GIBBS, S. E.**  
Fundamental microwave oscillations in epitaxial GaAs by control of space-charge growth.  
02 p0297 A69-11941
- GIBSON-WILDE, B. C.**  
Relation between the equatorial anomaly and trans-equatorial VHF radio propagation.  
23 p4127 A69-42431
- GIBSON, A.**  
Binary collision losses in stellarators.  
08 p1364 A69-20520
- GIBSON, A. F.**  
Time-dependent processes in CO sub 2 laser amplifiers.  
08 p1324 A69-20098  
High peak power from a CO sub 2 laser system.  
11 p1899 A69-25053  
Rate processes in the CO sub 2 laser.  
11 p1899 A69-25054  
Gain saturation in CO sub 2 laser amplifiers.  
11 p1899 A69-25055  
Rotational relaxation and gain saturation in CO sub 2 laser amplifiers.  
21 p3736 A69-38941
- GIBSON, A. J.**  
Atmospheric sodium measured by a tuned laser radar.  
09 p1484 A69-21464  
A flashlamp-pumped dye laser for resonance scattering studies of the upper atmosphere.  
22 p3962 A69-40440
- GIBSON, C. H.**  
Fine structure of scalar fields mixed by turbulence. I - Zero-gradient points and minimal gradient surfaces. II - Spectral theory.  
03 p0414 A69-13134
- GIBSON, D. K.**  
Angular dependence of collision-induced excitation of H sub 2 plus ions.  
05 p0798 A69-16698
- GIBSON, D. M.**  
The preparation of laboratory plasmas by use of normal ionizing shocks. [AIAA PAPER 69-693]  
17 p2945 A69-33447
- GIBSON, E. K.**  
Nitrogen abundances in chondritic meteorites.  
05 p0825 A69-16301



## GIBSON, J. A.

Temperature distributions and thermal stresses in bimetallic I-beam structures. 06 p1024 A69-17610

## GIBSON, J. A. B.

Radiation dose and ionization from radioactive fallout. 01 p0145 A69-10982

Nuclear radiation in the environment - Beta and gamma-ray dose rates and air ionisation from 1951 to 1968. 22 p4007 A69-40915

## GIBSON, J. H.

Optimized flight crew training - A step toward safer operations. [AIAA PAPER 69-771] 19 p3245 A69-35653

## GIBSON, J. R.

Ultrahigh vacuum electron microscope. 04 p0599 A69-15016

## GIBSON, R. C.

Quantitative metallography of microduplex structures after superplastic deformation. 13 p2278 A69-27411

## GIBSON, R. D.

Tearing mode instability in the Bessel function model. 05 p0799 A69-15615

The Braginskii dynamo. 22 p3989 A69-40192

The Herzenberg dynamo. 22 p3989 A69-40193

The Bullard-Gellman dynamo. 22 p4018 A69-40194

## GIDALEVICH, E. IA.

The nature of interplanetary gas /K voprosu o prirode mezplanetnogo gaza/. 09 p1577 A69-21769

Magnetohydrodynamics of interstellar gas-dust medium. 16 p2823 A69-32590

## GIDASPOW, D.

Diffusion of heat and mass in a porous medium with bulk flow. I, II. 15 p2552 A69-31115

Purge dynamics of fuel cells. 23 p4075 A69-42300

## GIDDINGS, H. B.

Apparatus with electronic crowbar for chemical investigations of exploding wire phenomena. 01 p0081 A69-10680

## GIDDIS, A. R.

VHF mechanically despun antenna for spin-stabilized synchronous satellites. 01 p0161 A69-10350

Comparative evaluation of mechanically and electronically despun antennas for spacecraft. 06 p0897 A69-17590

## GIEDT, R. R.

Kinetics of hydrogen halides in shock waves. IV - HBr. 20 p3484 A69-37347

Stimulated emission behind overdriven detonation waves in F sub 2 O-H sub 2 mixtures. 22 p4052 A69-41188

Mirror mount for a shock tube laser cavity. 22 p3951 A69-41233

## GIEDT, W. H.

Determination of high gas-stream temperatures from short-exposure probe responses. 15 p2612 A69-31268

Determination of high gas-stream temperatures from short-exposure probe responses. 20 p3536 A69-37005

## GIENCKE, E.

Calculation of skew surface structures /Ueber die Berechnung schiefwinkliger Flaechentragerwerke/. 04 p0677 A69-14839

## GIERASCH, P. J.

A mechanism for Jupiter's equatorial acceleration. 03 p0508 A69-13347

A study of the diurnal thermal wave in a non-grey atmosphere. 07 p1126 A69-19036

## GIESE, R. H.

Suggested zodiacal light measurements from space probes. 16 p2857 A69-32092

## GIESECKE, A. A.

The effect on the geomagnetic field of the solar eclipse of Nov. 12, 1966 at and near the dip equator. 02 p0241 A69-11727

## GIESEKE, R. K.

Frequencies and mode shapes of a 100-foot space erectable parabolic antenna. 11 p1994 A69-25532

## GIESEKUS, H.

Rheology - Its structure and its position among the natural sciences. 20 p3561 A69-37599

## GIESING, J. P.

Vorticity and Kutta condition for unsteady multi-energy flows. [ASME PAPER 69-APMW-19] 24 p4245 A69-43099

## GIESKE, H. A.

Calculated electron and ion Stark broadening of the allowed and forbidden  $2P-nL/n$  greater than or equal to 5, L equals 1, 2, ..., n - 1/ triplet and singlet transitions in neutral helium. 22 p3985 A69-40665

## GIESSEN, B. C.

New A sub 3 B sub 5 phases of the titanium group metals with rhodium. 19 p3343 A69-35920

## GIFFIN, C. E.

Planetary atmospheres - Compositional and other changes associated with the presence of life. 18 p3193 A69-34361

## GIFFORD, F. E.

Fission fragment generated plasmas for thermionic diodes - An assessment. 09 p1440 A69-21829

## GIFFORD, R. P.

A new concept in domestic satellite communications. 23 p4117 A69-41669

## GIFFORD, W. E.

Small cryogenic regenerator performance. [ASME PAPER 68-WA/PID-2] 05 p0706 A69-16163

Small cryogenic regenerator performance. [ASME PAPER 68-WA/PID-2] 13 p2203 A69-27421

## GIGER, H.

The linear models of the perception of brightness /Die linearen Modelle des Helligkeitsehens/. 22 p3881 A69-40862

## GIGL, P. D.

Effect of pressure and temperature on the reversal transitions of stishovite. 22 p4021 A69-40412

## GIGUERE, A. J.

Design application of high-modulus filament-wound composites to aerospace propellant and pressurization tanks. 19 p3354 A69-35513

## GIL, F. C. \*

Nonlinear instability in MHD boundary layers /In-estabilidad no lineal en capas limites MHD/. 10 p1734 A69-23452

## GILARDINI, A.

Scaling laws for R.F. discharge experiments in ionized environments. 02 p0283 A69-12241

## GILBERG, L. A.

Electrical rocket engines /Elektricheskie raketnye dvigateli/. 20 p3586 A69-37236

## GILBERT, B.

A new wide-band amplifier technique. 07 p1103 A69-18878

A precise four-quadrant multiplier with sub-nanosecond response. 07 p1103 A69-18879

## GILBERT, C.

Considerations from cosmology and galactic structure which suggest a secular change in G. 22 p4017 A69-40173

## GILBERT, D. S.

Monocular estimates of distance and direction with stabilized and non-stabilized retinal images. 22 p3878 A69-40838

## GILBERT, E. G.

A computer program for the synthesis of decoupled multivariable feedback systems. 24 p4294 A69-43307

## GILBERT, E. R.

Thermal expansivities, thermal conductivities, and densities of vanadium, titanium, chromium and some vanadium-base alloys. 22 p3971 A69-40973

## GILBERT, G. A.

Area navigation - A major capability improvement for air traffic control. 08 p1349 A69-21195

## GILBERT, H. D.

On the stochastic fuel-regulator problem. 24 p4292 A69-43284

## GILBERT, J. R.

A mass spectrometric study of the ethylene oxide-oxygen flame. 11 p1831 A69-24478

## GILBERT, P. C.

Satellite television distribution - Service from geostationary satellites to community antennas in multiple-coverage areas. 22 p3902 A69-41252

## GILBERT, S. M.

Optimum signals for high-resolution radio transmission systems. 23 p4132 A69-42545

## GILBERT, W. W.

I've successfully ejected over water - What's next/ques/ 06 p0878 A69-16958

I've successfully ejected over water - What's next/ques/ 15 p2551 A69-30866

## GILBO, E. P.

Optimal selection of the scale factor in the case of a limited range of the measuring instrument /Optimal'nyi vybor mashtabnogo koefitsienta pri ogranichenom diapazone izmeritel'nogo pribora/. 12 p2079 A69-25966

## GILBY, S. W.

Equilibrium vapor compositions and activities of components for Fe-Cr-Ni alloys at 1600 deg C. 23 p4175 A69-41503

## GILCHRIST, A.

An analytical and experimental investigation of the trajectories of particles entrained by the gas flow in nozzles. 11 p1818 A69-25355

Control forces in rocket nozzles produced by a secondary gas stream inclined at various angles to the nozzle axis. 20 p3457 A69-37065

## GILCHRIST, J.

Infrared analysis of water in tektites and other glasses. 10 p1778 A69-23413

## GILCHRIST, J. D.

Manual optimal guidance techniques. 02 p0279 A69-12365

## GILDENBURG, V. B.

Nonlinear interaction of a plane electromagnetic wave with an inhomogeneous plasma layer /Nelineinoe vzaimodeistvie ploskoi elektromagnitnoi volny s neodnorodnym plazmennym sloem/. 17 p2922 A69-33693

## GILES, J. W., JR.

Construction of a plane-grating X-ray hologram with the electron microprobe. 17 p2977 A69-34160

Image reconstruction from a Fraunhofer X-ray hologram with visible light. 24 p4314 A69-42973

## GILET, R.

The effect of restoration processes makes it possible to distinguish intense irradiations and less intense irradiations among Chlorellae /L'effet des processus de restauration permet de distinguer irradiations aigues et irradiations subaigues chez les chlorelles/. 22 p3878 A69-40792

## GILGUR, D. S.

Roentgenographic and metallographic investigations of chromium-silicon diffusion layers on titanium /Rentgenograficheskie i metallograficheskie issledovaniia khromosilitsirovannykh diffuzionnykh sloev na titane/. 04 p0614 A69-14578

X-ray and metallographic analysis of chromosilicide coatings on titanium. 15 p2638 A69-30279

## GILIAZOV, M. SH.

Generalization of experimental data concerning the limits of flame stabilization by means of jets /Obobshchenie eksperimental'nykh dannyykh po predelam stabilizatsii plameni na struiakh/.  
03 p0531 A69-12956

## GILINSKII, S. M.

Calculation of the combustion of hydrogen in air behind a separated shock wave during supersonic motion of a sphere /Raschet goreniia vodoroda v vozdukhie za otoshedshei udarnoi volnoi pri sverkhzvukovom dvizhenii sfery/.  
24 p4408 A69-43488

## GILKINSON, J. L.

Ionic species present in argon-cesium and cesium discharges.  
09 p1440 A69-21830

## GILL, A. E.

Similarity theory and geostrophic adjustment.  
02 p0276 A69-12699  
The Reynolds number similarity argument.  
04 p0589 A69-14895  
Instabilities of a buoyancy-driven system.  
11 p1876 A69-25559

## GILL, B. S.

A theoretical study of pulsating combustion.  
09 p1625 A69-22694  
Theoretical evaluation of the normal velocity of flame propagation.  
09 p1625 A69-22695

## GILL, D.

Precision thermometer for the region 10-40 K.  
06 p0927 A69-17703

## GILL, F. L.

Recent developments in structural airframe fasteners.  
24 p4325 A69-43437

## GILL, P. A. T.

A material for accelerated creep testing with models.  
21 p3844 A69-39320

## GILL, P. S.

An improved experimental arrangement to study geomagnetic effect of extensive air showers.  
03 p0430 A69-13303

## GILL, S. P.

Shock tube with implosive jet driver.  
18 p3116 A69-34460

## GILL, W. D.

Photovoltaic effect at copper sulfide-cadmium sulfide heterojunctions.  
19 p3382 A69-35684

## GILL, W. J.

Sensitivity of microwave earth stations for analog and digital communications. I.  
07 p1077 A69-18669  
Sensitivity of microwave earth stations for analog and digital communications. II.  
09 p1453 A69-21409

## GILLAND, J. R.

Primary electron detector experiment for OGO-E. [IEEE PAPER 3C-4]  
07 p1135 A69-19198

## GILLE, J. C.

Cooling of the thermosphere by atomic oxygen.  
12 p2064 A69-26009

## GILLE, J.-C.

On the hysteresis of on-off elements.  
12 p2053 A69-26506

## GILLEN, K. T.

Reactive scattering of K by HBr, DBr in crossed molecular beams - Angular and velocity distributions of KBr in laboratory and C.M. systems.  
18 p3178 A69-35476

## GILLES, M. A.

Free-carrier and exciton recombination radiation in GaAs.  
01 p0140 A69-11253

## GILLES, P.

Automatic checkout of telemetry chains.  
16 p2750 A69-31727

## GILLES, P. W.

Dissociation energy of TiO/g/ and the high-temperature vaporization and thermodynamics of the titanium oxides. V.  
08 p1268 A69-21012

## GILLES, S. E.

A substitute-kernel approximation for radiative transfer in a nongrey gas near equilibrium, with application to radiative acoustics.  
15 p2717 A69-30791

## GILLES, W. P.

Radiation effects on NERVA instrumentation.  
06 p0956 A69-16882  
Instrumentation for nuclear rocket engines. [IEEE PAPER 2D-5]  
07 p1134 A69-19189

## GILLESPIE, C. R.

Uniformity of response from large area plastic scintillation detectors.  
03 p0428 A69-13107  
Experimental determination of the transition effect in electromagnetic cascade showers.  
22 p3987 A69-41003

## GILLET, F. C.

Stellar spectra from 2.8 to 14 microns.  
02 p0327 A69-12713  
Detection of the 12.8-micron Ne super plus emission line from the planetary nebula IC 418.  
09 p1591 A69-21452  
Circumstellar infrared emission from two peculiar objects - R Aquarii and R Coronae Borealis.  
09 p1603 A69-22263  
The spectrum of NML Cygnus from 7.5 to 14 microns.  
10 p1785 A69-24101  
A possible identification of interstellar silicate absorption in the infrared spectrum of I19 Tauri.  
10 p1786 A69-24104  
Spectral distribution of infrared radiation from the Trapezium region of the Orion Nebula.  
10 p1786 A69-24106  
The 2.8-14-micron spectrum of Jupiter.  
22 p4028 A69-40662

## GILLETTE, O. L.

Development of high temperature capacitance strain gauges.  
15 p2614 A69-31278  
Development of high-temperature capacitance strain gauges.  
20 p3537 A69-37006

## GILLEY, G. E.

Binary boundary layers on sharp cones in low-density supersonic and hypersonic flow. [AIAA PAPER 68-66]  
16 p2732 A69-31887

## GILLICH, W. J.

Constitutive relationships from impact studies.  
02 p0344 A69-12288

## GILLIGAN, J. E.

The role of gaseous adsorption in thermal coatings degradation. [AIAA PAPER 69-1025]  
22 p3923 A69-40395

## GILLIS, C. L.

Deployable aerodynamic decelerators for space missions. [AIAA PAPER 68-1081]  
22 p4036 A69-40542

## GILLIS, J.

Laminar flow in a pipe at low and moderate Reynolds numbers.  
05 p0743 A69-15578  
Asymptotic approach to Hartmann-Poiseuille flows.  
12 p2138 A69-26626

## GILLIS, J. R.

An experiment to determine the effects of solid and liquid rocket engine combustion on the viability of microorganisms.  
05 p0714 A69-15949

## GILLIS, M. F.

Detection of gas emboli associated with decompression using the Doppler flowmeter.  
21 p3663 A69-38915

## GILLY

Damping of high-rigidity structures /Amortissement des structures de raideur elevee/.  
13 p2370 A69-28601

## GILLY, J.

Introduction to the study of the equivalence /from the point of view of risks of rupture/ of sinusoidal and random tests /Introduction a l'etude de l'equivalence /au point de vue des risques de rupture/ des essais aleatoires et sinusoidaux/.  
13 p2370 A69-28602

Random vibrations. I - Development of theories of random vibrations - Introduction to the study of random functions /Vibrations aleatoires. I - Evolution des

theories des vibrations aleatoires - Introduction a l'etude des fonctions aleatoires/.  
17 p3054 A69-33063

## GILMAN, J. J.

Dynamical behavior of dislocations.  
02 p0343 A69-12285

## GILMAN, P. A.

Influence of an axial magnetic field on the steady linear Ekman boundary layer.  
03 p0474 A69-13141  
A Rossby-wave dynamo for the sun. I.  
22 p4019 A69-40294

## GILMAN, R. C.

On the composition of circumstellar grains.  
10 p1786 A69-24103

## GILMANOV, A. A.

Boundary conditions of the regular thermal regime.  
11 p2003 A69-25702

## GILMARTIN, T. J.

Laser beam broadening in atmospheric propagation.  
12 p2111 A69-27166

## GILMER, J. R.

Commercial Utilization of Space, American Astronautical Society, Annual Meeting, 13th, Dallas, Tex., May 1-3, 1967, Proceedings.  
17 p3041 A69-34043

## GILMORE, F. R.

A review of atomic and molecular excitation mechanisms in nonequilibrium gases up to 20000 deg K.  
08 p1354 A69-20146

## GILMORE, J. P.

A non-orthogonal multi-sensor strapdown inertial reference unit.  
03 p0429 A69-13211  
SIRU - A new inertial system concept for inflight reliability and maintainability.  
19 p3370 A69-35803

The gyroscope in torque-to-balance strapdown application. [AIAA PAPER 69-848]  
21 p3762 A69-39378  
Real-time strapdown-attitude-package evaluations. [AIAA PAPER 69-849]  
21 p3765 A69-39424

## GILMORE, J. S.

The transferability of aerospace management technology.  
02 p0355 A69-11754

## GILOI, W.

Construction of multistep integration formulas for simulation purposes.  
09 p1460 A69-21417

## GILPIN, C. B.

Corrosion studies on forged beryllium.  
21 p3749 A69-39493

## GILPIN, R. R.

Experimental and theoretical studies of electrothermal waves.  
24 p4359 A69-43645

## GILRUTH, R. R.

Why space stations/ques/  
01 p0163 A69-11395  
Manned space missions - Gateway to our future in space.  
11 p1965 A69-25644

Manned space stations.  
19 p3431 A69-36464

## GILSON, J. G.

The thermal content of quantum states.  
09 p1541 A69-22394

## GILSON, R. D.

The C-5 - Challenge of an Air Force heavy logistics transport. [AIAA PAPER 69-758]  
19 p3248 A69-36295

## GILSON, V. A.

Gas additives for stable pulsed argon ion lasers.  
10 p1702 A69-23341  
Argon laser FM detection.  
17 p2981 A69-33091

## GILSTER, H. L.

Let's stop using labor as a free good.  
13 p2382 A69-28041

## GILTROW, J. P.

The effect of particle shape on the abrasiveness of lamellar solids.  
22 p3966 A69-39877

## GILVARRY, J. J.

Nature of the lunar mascons.  
08 p1397 A69-20697



- Mensuration and isostasy of lunar mascons and maria.  
20 p3604 A69-37564
- Equations of state at high pressure from the Thomas-Fermi atom model.  
22 p3984 A69-40186
- GILWEE, W. J.**  
Development of polyurethane for controlling fuel fires in aircraft structures.  
15 p2561 A69-30311
- GIMELLI, E.**  
Design and dynamic characteristics investigation of a high performances spherical bearing.  
16 p2793 A69-31728
- GIMELSHEIN, F. I. A.**  
The problem of optimum gathering of information in systems for controlling distributed technological processes in the presence of random effects /Zadacha optimal'nogo sbora informatsii v sistemakh upravleniya raspredelennymi tekhnologicheskimi protsessami pri sluchainykh vozdustviakh/.  
09 p1471 A69-21437
- GIMMESTAD, D.**  
The spadoryc - A method of determining damping.  
01 p0087 A69-11029
- GINAT, M.**  
The Nancay radio telescope.  
23 p4149 A69-42124
- GINDILIS, L. M.**  
Solar radiation pressure on interplanetary dust particles /O davlenii solnechnogo izlucheniia na chastitsy mezplanetnoi pyli/.  
11 p1956 A69-24397
- Solar radiation pressure on particles of interplanetary dust.  
24 p4390 A69-43787
- GINDIN, I. A.**  
Electron microscopic study of the nature of low-temperature strengthening and of its effect on high-temperature creep of nickel /Elektronomikroskopicheskoe issledovanie prirody nizkoteraturnogo uprochneniia i ego vliianiia na vysokotemperaturnuiu polzuchest' nikelia/.  
18 p3157 A69-35254
- GINELL, W. S.**  
Infrared absorption in neutron-irradiated GaAs.  
23 p4198 A69-41540
- GINEVSKII, A. S.**  
Theory of Turbulent Jets and Wakes- Integral Methods of Calculation /Teoriia turbulentnykh strui i sledov- Integral'nye metody rascheta/.  
20 p3518 A69-38211
- GING, J. L.**  
A stimulated reflection experiment to demonstrate correlation between photons from independent laser beams.  
18 p3153 A69-35292
- GINI, E. CH.**  
Procedure for calculating a plane melt flow in the production of bimetallic castings /Metodika rascheta ploskogo potoka rasplava pri izgotovlenii bimetalicheskikh otливоk/.  
18 p3149 A69-35289
- GINSBURG, I. W.**  
Interference filter.  
19 p3373 A69-36053
- GINSBURG, A. S.**  
Certain optical properties of the Venusian atmosphere and the state of radiative equilibrium /Nekotorye opticheskie svoystva atmosfery Venery i rezhim luchistogo ravnovesiia/.  
13 p2345 A69-27691
- GINSBURG, E. V.**  
Radiobiological evidence on the importance of local protection of the astronaut.  
08 p1263 A69-19939
- GINSBURG, T.**  
The Ghost project /Das Ghost-Projekt/.  
03 p0520 A69-13621
- GINSBURG, TH.**  
Statistical analysis of the three-year test series of ozone soundings at Boulder, Colorado.  
16 p2786 A69-32632
- GINTSBURG, M. A.**  
Nonlinear waves with a magnetic field in cosmic plasma.  
04 p0662 A69-15244
- GINZBURG, E. I.**  
Time buildup of inhomogeneities in a weakly ionized plasma /the ionosphere/ /Vremennoe stanovlenie neodnorodnostei v slabooionizirovannoi plazme /ionosphere/.  
20 p3525 A69-37658
- GINZBURG, I. N.**  
Stability of noncircular shells with curvilinear generatrices under axial compression /Ob ustoiichivosti obolochek nekruogovogo poperechnogo sечения s krivolineinymi obrazuiushchimi pri osevom szhatii/.  
21 p3834 A69-38715
- GINZBURG, I. P.**  
Solution of turbulent boundary layer problems with longitudinal pressure gradients.  
07 p1122 A69-19735
- Turbulent MHD flow in a transverse magnetic field.  
07 p1195 A69-19736
- Possible approximate methods for solving problems of the turbulent boundary layer during the flow of gas mixtures.  
20 p3513 A69-37090
- Turbulent boundary layer in the presence of a pressure gradient with injection.  
20 p3513 A69-37091
- Turbulent boundary layer in a transverse magnetic field.  
20 p3513 A69-37092
- GINZBURG, I. A. L.**  
Mechanism of the influence of inlet conditions on the resistance of diffusers /O mekhanizme vliianiia uslovii vkhoda na soprotivlenie diffuzorov/.  
14 p2391 A69-29899
- GINZBURG, V. L.**  
Magnetic models of pulsars.  
01 p0149 A69-10269
- On the origin of cosmic rays.  
03 p0497 A69-12929
- Synchrotron radiation and its reabsorption.  
06 p0962 A69-17245
- The astrophysics of cosmic rays.  
07 p1205 A69-18909
- X-ray emission from radio galaxies /O rentgenovskom izlucheni radiogalakтик/.  
12 p2166 A69-27037
- Coherent mechanism of radio emission in quasars and supernova remnants /O koherentnom mekhanizme radioizlucheniia v kvazarakh i ostatkakh sverkhnovykh zvezd/.  
12 p2168 A69-27050
- Magnetic models of pulsars and rotating neutron stars.  
12 p2172 A69-27168
- Developments in the theory of the synchrotron radiation and its reabsorption.  
15 p2674 A69-30421
- Superfluidity and superconductivity in astrophysics.  
16 p2853 A69-31595
- Superfluidity and superconductivity in the universe /Sverkhtekuchest' i sverkhprovodimost' vo vselennoi/.  
16 p2856 A69-31950
- Developments in the theory of synchrotron radiation and its reabsorption.  
21 p3772 A69-39513
- Coherent mechanisms of radio emission and magnetic models of pulsars.  
22 p4030 A69-40905
- GIOBANU, C.**  
Determination of the resisting forces produced by the transverse vibration of a disk rotating in a viscous fluid /Determination des forces résistantes, produites par la vibration transversale d'un disque qui tourne dans un fluide visqueux/.  
02 p0232 A69-12257
- GION, E. J.**  
Modified expansion tube.  
[AIAA PAPER 68-371]  
09 p1477 A69-21960
- Impurity concentration in the expansion tube.  
[AIAA PAPER 68-371]  
09 p1477 A69-21961
- GIORDMAINE, J. A.**  
Correlation effects in the display of picosecond pulses by two-photon techniques.  
02 p0259 A69-12654
- Nonlinear optics.  
05 p0770 A69-15704
- GIORGADZE, N. P.**  
Energy losses of a charged particle in a slightly nonlinear plasma /Poteri energii zariazhennoi chastitse v slabonelineinoi plazme/.  
07 p1189 A69-18528
- GIORGI, A. L.**  
High pressure synthesis and superconducting properties of yttrium sesquicarbide.  
07 p1201 A69-19600
- GIORGI, M.**  
A statistical investigation on polar auroras.  
02 p0247 A69-12772
- The infrared techniques for meteorological applications /Le tecniche dell'infrarosso nelle applicazioni meteorologiche/.  
24 p4316 A69-43507
- GIOVANELL, R. G.**  
Fine structure of the flare of 1968 June 9.  
17 p3024 A69-33802
- GIRALT, M. G.**  
Reliability of components and electronic systems in a space environment /Fiabilité des composants et systèmes électroniques en ambiance spatiale/.  
11 p1848 A69-24867
- GIRARD, A.**  
Experimental profiles of the infrared horizon of the earth - Tacite 2 experiment /Profils expérimentaux de l'horizon infrarouge de la terre - Experience Tacite 2/.  
[ONERA-TF-709]  
15 p2601 A69-31370
- GIRARD, A. L.**  
Evolutionary multiple access communications for tactical fighters.  
17 p2931 A69-34117
- GIRARD, J.**  
Physics of reliability /Physique de la fiabilité/.  
15 p2624 A69-30822
- GIRARD, J.-L.**  
Transistor and diode models for the "ECAP" program - Some applications /Modeles de transistors et diodes pour programme "ECAP" - Quelques applications/.  
08 p1280 A69-19975
- GIRARDEAU, R.**  
Mean life of the 2p super 2 super 1 D level in C III.  
07 p1184 A69-18643
- Mean life of the 2p super 2 super 1 D level in N IV.  
17 p3009 A69-34187
- GIRARD, A.**  
Preliminary results of mass spectrometric measurements of the diurnal variation of the composition of the neutral and ionized atmosphere between 100 and 400 km /Resultats préliminaires de mesure par spectrométrie de masse de la variation diurne de la composition de l'atmosphère neutre et ionisée entre 100 et 400 km d'altitude/.  
15 p2601 A69-31371
- The FU-180 Franco-Soviet program of upper atmosphere measurements /La campagne franco-soviétique de mesures de la haute atmosphère FU-180/.  
18 p3210 A69-35282
- GIRAUD, R.**  
Metallic phase of stone meteorites /Phase métallique des météorites pierreuses/.  
19 p3415 A69-36124
- GIRAUDIER, L.**  
A method for the simultaneous and independent measurement of thermal and electrical parameters /Méthode de mesures simultanées et indépendantes de paramètres thermiques et électriques/.  
05 p0764 A69-16338
- Method for simultaneous and independent measurements of thermal and electrical parameters /Méthode de mesures simultanées et indépendantes de paramètres thermiques et électriques/.  
12 p2091 A69-26363
- GIRAULT, J.**  
Method for the measurement of signal-to-noise ratio in a PCM bit synchronizer.  
19 p3271 A69-36248
- GIRES, F.**  
Some nonlinear interaction effects involving light and matter /Sur quelques effets d'interaction non linéaire entre la lumière et la matière/.  
16 p2798 A69-32449
- GIRJA, H. M.**  
Investigations on corrugated surface wave line.  
12 p2028 A69-25899
- GIRINA, M. V.**  
Infrared polarizing microscope.  
12 p2093 A69-26595
- GIRLICH, H.-J.**  
Construction of error bounds for boundary methods /Zur Konstruktion von Fehlerschranken bei Randmethoden/.  
21 p3755 A69-39008

**GIRS, A. A.**  
Epochal changes in the forms of atmospheric circulation in the Northern Hemisphere and the associated changes of the characteristics of the atmosphere and hydrosphere /Epokhal'nye preobrazovaniia form atmosferno tsirkulatsii v severnom polusharii i svyazany s nimi izmeneniia kharakteristik atmosfery i gidrosfery/.  
14 p2478 A69-29837

**GIRSHOV, V. L.**  
Change in the mechanical properties and in the dislocation structure of deformed molybdenum alloys during annealing /Izmenenie mekhanicheskikh svoystv i dislokatsionnoi struktury deformirovannykh molibdenovykh splavov pri otzhige/.  
14 p2463 A69-29312

**GISINA, F. A.**  
Spectral characteristics of turbulence in a thermally stratified atmosphere /Spektral'nye kharakteristiki turbulentnosti v termicheski-stratifikirovannoi atmosfere/.  
14 p2472 A69-29402

**GISOLFI, C.**  
Relations between physical training, acclimatization, and heat tolerance.  
22 p3890 A69-40199

**GITELSON, I. I.**  
Experimental biological life support system. I - Continuous cultivation of algae as a link of a closed ecosystem.  
01 p0020 A69-11077  
Experimental biological life support system. II - Gas exchange between man and microalgae culture in a 30-day experiment.  
01 p0021 A69-11078

**GITGARTS, M. I.**  
Recovery in alloys of the nimonic type /Vozvrat v splavakh tipa "Nimonic"/.  
07 p1159 A69-18533  
Kinetics of fine structural changes during aging of the EI437B alloy /Kinetika tonkikh strukturnykh izmenenii pri starenii splava EI437B/.  
14 p2463 A69-29310

**GITTINS, J. F.**  
A broad-band parametric amplifier.  
01 p0041 A69-10243

**GIU, D. X.**  
Night vision requirements for combat pilots in South Vietnam.  
23 p4107 A69-41807  
F-5 cockpit fogging in South Vietnam.  
24 p4277 A69-43376

**GIUGLIANOTTI, A.**  
Establishing flight worthiness of mishandled electronic equipment.  
15 p2576 A69-30362

**GIULI, R. T.**  
Principles of stellar structure. Volume 1 - Physical principles.  
23 p4211 A69-41377  
Principles of Stellar Structure. Volume 2 - Applications to Stars.  
23 p4223 A69-42475

**GIULIANI, J. F.**  
Phase-matched optical harmonic generation in liquid media employing anomalous dispersion. [IEEE PAPER V-9]  
07 p1155 A69-19086

**GIULIANO, C. R.**  
Reversible photodissociative laser system.  
19 p3337 A69-36444

**GIUNTA, J.**  
Tristable fluid amplifiers.  
24 p4255 A69-43298

**GIUSTA, L.**  
European co-operation in the aviation industry and its future development - Instance of its application to the Anglo-French helicopter programme.  
19 p3456 A69-36849

**GIUSTI, E.**  
Regularity of the weak solutions of a class of quasilinear elliptic systems /Sulla regolarita delle soluzioni deboli di una classe di sistemi ellittici quasilineari/.  
05 p0786 A69-15927

**GIVERTS, M. E.**  
On the motion of a pulsating system in a gravitational field.  
01 p0158 A69-11318

**GIVISHVILI, G. V.**  
A method of processing riometric data /O metodike obrabotki riometricheskikh dannykh/.  
14 p2436 A69-29056

**GJESSING, D. T.**  
A hot wire anemometer for the measurement of the three orthogonal components of wind velocity, and also directly the wind direction, employing no moving parts.  
06 p0923 A69-16926  
Spectral measurements and atmospheric stability.  
17 p2960 A69-33157  
An investigation of the tropospheric fine scale properties using radio, radar and direct methods.  
22 p3941 A69-40914

**GKHOSH, K. M.**  
A model of turbulence which is symmetrical around a fixed axis.  
10 p1678 A69-23326

**GLABERSON, W. I.**  
Hydromagnetic duct flow - Theory and experiment.  
01 p0132 A69-11209

**GLADKII, B. I.**  
Short-wavelength radiation of a GaAs diode laser.  
03 p0441 A69-14165

**GLADKII, V. F.**  
Dynamics of Flight Vehicle Design /Dinamika konstruktii letatel'nogo apparata/.  
21 p3825 A69-39533

**GLADUN, A. D.**  
Multiquantum photoemissive effect /Vneshnii mnogokvantovyi fotoeffekt/.  
22 p3964 A69-40690

**GLADWELL, G. M. L.**  
Prediction of the unstable regions of a reciprocal system governed by a set of linear equations with periodic coefficients.  
08 p1413 A69-20401

**GLAESER, W. A.**  
Wear and friction of nonmetallic materials.  
13 p2284 A69-27232

**GLAGOLEV, A. I.**  
Gas jet injection into a supersonic flow from orifices in the lateral surface of a body /Istechenie gazovykh strui v sverkhzvukovoi potok iz otverstii v bokovoi poverkhnosti tela/.  
01 p0005 A69-10357

**GLAGOLEV, V. M.**  
Measurement of plasma electron temperature from the bremsstrahlung spectrum in the X-ray region /Izmerenie temperatury elektronov plazmy po spektru tormoznogo izlucheniia v rentgenovskoi oblasti/.  
14 p2496 A69-29783

**GLAGOLEVA, N. N.**  
Liquid Semiconductors.  
10 p1744 A69-23316

**GLAGOLEVSKII, IU. V.**  
Analysis of the hydrogen lines of the peculiar stars alpha super 2 CVn and gamma Lyr.  
16 p2864 A69-32594

**GLAHN, H. R.**  
Experiments in the use of statistics as related to a dynamical prediction model.  
08 p1345 A69-20298

**GLAISTER, D. H.**  
Effect of acceleration on regional lung emptying.  
23 p4083 A69-41448  
The effect of positive acceleration upon cardiac output and regional blood flow in the dog.  
23 p4089 A69-41823

**GLANCE, B.**  
Microwave and millimeter wave hybrid integrated circuits for radio systems.  
21 p3684 A69-39563

**GLANDER, H. H.**  
HI-REL space program parts control.  
16 p2793 A69-31714

**GLANDORF, D. R.**  
Lagrange multipliers and the state transition matrix for coasting arcs.  
09 p1595 A69-21969

**GLANFIELD, J. R.**  
Fan beam observations of bright galaxies at 408 MHz.  
08 p1386 A69-20087

**GLANCEAUD, F.**  
Microstructures at various latitudes and the spectral composition of the magnetic perturbations of February 1965 and March 1966 /Microstructures a diverses latitudes et composition spectrale des perturbations magnetiques de fevrier 1965 et mars 1966/.  
01 p0069 A69-11126  
Conditions under which the concept of ground travel of certain pulsations of the terrestrial magnetic field can be defined /Conditions suivant lesquelles peut etre definie la notion d'un parcours au sol pour certaines pulsations du champ magnetique terrestre/.  
07 p1127 A69-19338

**GLANSODORFF, P.**  
On the general theory of stability of thermodynamic equilibrium.  
19 p3452 A69-36789

**GLANZMANN, H.**  
Motion simulator facility for spacecraft attitude control evaluation. [AIAA PAPER 69-1029]  
22 p3924 A69-40398

**GLAS, D.**  
Spectrum of the low-voltage discharge in a caesium-filled diode.  
14 p2491 A69-29260

**GLASER, A. H.**  
Apollo landmark sighting - An application of computer simulation to a problem in applied meteorology.  
01 p0110 A69-10692

**GLASER, J. I.**  
Attenuation and guidance of modes on hollow dielectric waveguides.  
16 p2757 A69-31587

**GLASER, P. E.**  
Power from the sun - Its future.  
02 p0323 A69-12296  
Satellite solar power station.  
16 p2867 A69-31817

**GLASER, R. M.**  
Telemetered heart rate response to selected competitive swimming events.  
23 p4100 A69-41444

**GLASHOW, S. L.**  
Something new in cosmic rays.  
01 p0144 A69-10444

**GLASKO, V. B.**  
The solution of the thermal sounding problem for the atmosphere using the regularization method.  
02 p0274 A69-11448  
Application of regularization methods in inverse problems of atmospheric optics.  
06 p0919 A69-17616  
Feasibility of a regularization method in solving the problems of atmospheric thermal sounding /O vozmozhnostiakh metoda reguliarizatsii pri reshenii zadachi termicheskogo zondirovaniia atmosfery/.  
09 p1491 A69-22707  
Possibilities of the regularization method in solving the problem of atmospheric thermal sounding.  
16 p2782 A69-32487  
Determination of the brightness distribution over the source /O vosstanovlenii raspredeleniia radioarkosti po istochniku/.  
20 p3606 A69-38033

**GLASS, A.**  
1968 World Glider Championships. I - The most interesting open-class designs /Szybowcowe mistrzostwa swiata 1968. I - Najciekawsze konstrukcje klasy otwartej/.  
05 p0702 A69-16027

**GLASS, A. J.**  
Interferometric observation of absorption induced index change associated with thermal blooming.  
07 p1149 A69-18899  
Pulse shapes and spatial modes in Raman lasers.  
12 p2108 A69-26634

**GLASS, A. M.**  
Ferroelectric Sr sub 1-x Ba sub x Nb sub 2 O sub 6 as a fast and sensitive detector of infrared radiation.  
02 p0300 A69-12623

**GLASS, B.**  
Physical and chemical properties of Australasian microtektites.  
08 p1305 A69-19815

**GLASS, B. P.**  
Silicate spherules from Tunguska impact area - Electron microprobe analysis.  
14 p2516 A69-28869  
Chemical composition of Ivory Coast microtektites.  
23 p4211 A69-41351

**GLASS, I. I.**  
An experimental study of spherical combustion waves in a hemispherical chamber.  
06 p1034 A69-17927



## GLASS, I. S.

Observations of X-rays from Taurus X-1 and Cygnus X-1.  
20 p3593 A69-38153

## GLASS, N. W.

Conjugacy of visual auroras during magnetically quiet periods.  
05 p0753 A69-16247

## GLASSER, G. J.

Planned replacement - Some theory and its application.  
20 p3551 A69-38267

## GLASSMAN, A. J.

Advanced concepts to increase turbine blade loading.  
[ASME PAPER 68-WA/GT-11]  
05 p0812 A69-16136

## GLASSMAN, I.

Hydrodynamic effects in the flame spreading, ignitability and steady burning of liquid fuels.  
11 p1999 A69-24484

## GLATT, L.

On an integral method for backward boundary layers.  
05 p0752 A69-16737

## GLAWE, G. E.

Multiple-function probe for airflow research.  
16 p2766 A69-31917

## GLAZA, G. K.

Heavy press extrusions of light metals.  
04 p0604 A69-14526

## GLAZKOV, A. G.

Spacecraft control during reentry into the atmosphere /Upravlenie kosmicheskim apparatom pri vkhode v atmosferu/.  
13 p2355 A69-27681

## GLAZKOV, N. N.

Theory and calculation of a transistorized single-sideband detector /Teoriia i raschet detektora od-nopolosnykh signalov na tranzistore/.  
05 p0730 A69-16220

## GLAZKOV, V. N.

Reliability function with gradual failures.  
10 p1662 A69-23318

## GLAZKOVA, A. P.

Measurement of the radiation from flames on a microcalorimeter /Izmerenie izlucheniia plamen mikrokalorimetrami/.  
02 p0355 A69-12671

Effect of catalytic additives on the burning of ammonium perchlorate and certain of its mixtures.  
08 p1375 A69-19997

Effect of aluminum on the combustion of ammonium perchlorate and polyformaldehyde /Vliianie aluminium na gorenie perkhlorata ammoniia s poliformal'-degidom/.  
08 p1375 A69-20338

The cause of anomalies during the combustion of ammonium perchlorate and nitrate /K voprosu o prichine anomalii pri goreanii perkhlorata i nitrata ammoniia/.  
08 p1375 A69-20340

Effect of the initial temperature on the combustion of ammonium perchlorate /Vliianie nachal'noi temperatury na gorenie perkhlorata ammoniia/.  
14 p2508 A69-28914

## GLAZNEV, V. N.

Evaluation of the efficiency of methods used in investigating the frequency response of a thermoanemometer /Ob otsenke effektivnosti priiniatykh metodov izucheniia chastotnoi kharakteristiki termoanemometra/.  
19 p3308 A69-35856

## GLAZOV, O. A.

Axissymmetric magnetohydrodynamic flow in a turbulence chamber at large Hartmann numbers /Aksial'-nosimmetrichnoe magnitogidrodinamicheskoe techenie v vikhrevoi kamere pri bol'shikh chislakh Gartmana/.  
01 p0130 A69-10772

## GLAZOV, V. M.

Liquid Semiconductors.  
10 p1744 A69-23316

## GLAZOVA, T. N.

Qualitative and quantitative distribution of bone marrow in adult dogs.  
08 p1262 A69-19835

## GLAZUNOV, A. T.

Measurement of the amplification coefficients in 00 deg 1 - 10 deg 0 and 00 deg 1 - 02 deg 0 transitions of

CO sub 2 /Izmerenie koefitsientov usileniia na perekhodakh 00 deg 1 - 10 deg 0 i 00 deg 1 - 02 deg 0 CO sub 2/.  
04 p0611 A69-14426

Possibility of a thermodynamic approach to the calculation of a molecular laser /O vozmozhnosti termodinamicheskogo podkhoda k raschetu molekuliarnogo lazera/.  
06 p0934 A69-17465

A thermodynamic approach to the analysis of a molecular laser.  
20 p3555 A69-37948

## GLAZUNOV, S. G.

Heat treatment of beta-titanium alloys /Termicheskai obrabotka beta-titanovykh splavov/.  
01 p0093 A69-10213

Modern titanium alloys /Sovremennye titanovye splavy/.  
07 p1161 A69-18763

Heat treatment of beta-titanium alloys.  
15 p2637 A69-30269

## GLEBOCKI, R.

Differences in radial velocities as an indicator of turbulence.  
17 p3044 A69-34177

## GLEDHILL, C. S.

On "synthesis of particular unit real functions of reflection coefficient."  
13 p2221 A69-28074

## GLEEN, W. H., JR.

Picosecond laser pulses.  
07 p1148 A69-18856

## GLEESON, L. J.

Cosmic rays modulation.  
03 p0504 A69-14236

The Compton-getting effect.  
05 p0817 A69-16651

The equations describing the cosmic-ray gas in the interplanetary region.  
06 p0992 A69-17379

Solar modulation of galactic cosmic rays.  
09 p1580 A69-22202

Emerging theories of the solar modulation of cosmic rays.  
09 p1581 A69-22744

## GLEESON, T. A.

A modern physical basis for meteorological prediction.  
08 p1345 A69-20300

## GLEISSBERG, W.

65 years of the butterfly diagram of sunspots /65 Jahre Schmetterlingsdiagramm der Sonnenflecken/.  
19 p3426 A69-36583

## GLEIZER, A. I.

Experimental investigations of laminated critical rate dampers /Eksperimental'noe issledovanie plastinchatykh dempferov kriticheskikh skorostei/.  
17 p3066 A69-33945

## GLEMBOTSKII, I. A. L.

Effect of space flight factors on the frequency of recessive lethal sex-related mutations in *Drosophila melanogaster* /Vliianie faktorov kosmicheskogo poleta na chastoty vozniknoveniia stepennnykh s polom retsessivnykh letal'nykh mutatsii u drosophila melanogaster/.  
07 p1063 A69-18598

## GLENN, G.

New forging techniques for beryllium.  
09 p1504 A69-22073

## GLENN, J. L.

Motion-picture and television methods to aid the engineer in systems analysis and evaluation.  
[SMPT PAPER 104-17]  
04 p0596 A69-14359

## GLENN, L. A.

Stationary radial source flow of liquid particles into vacuum.  
13 p2248 A69-28210

Recondensation from a particle-vapor source flow into vacuum.  
16 p2769 A69-31869

## GLENN, S. W.

Search for gamma radiation from Centaurus A.  
09 p1580 A69-22269

## GLENN, W. H.

Second-harmonic generation by picosecond optical pulses.  
19 p3278 A69-36693

## GLENNY, R. J. E.

Advanced materials for gas turbines.  
[IME PAPER 8]  
12 p1247 A69-25791

## GLESSNER, C.

Crimping techniques make nuts fit tight.  
22 p3957 A69-40822

## GLICK, H. S.

Microwave study of the elastic scattering of electrons from argon atoms.  
[AIAA PAPER 68-138]  
04 p0632 A69-14702

A miniature transducer for measuring low transient pressures.  
22 p3950 A69-41272

Epoxy casting of large contoured nozzles.  
24 p4318 A69-42647

## GLICKMAN, M.

Simulation of the effects of load on hydraulic servomotors.  
12 p2016 A69-26266

## GLICKSMAN, L. R.

An approximate method for multidimensional problems of radiative energy transfer in an absorbing and emitting media.  
[ASME PAPER 69-HT-E]  
24 p4410 A69-43524

## GLIKMAN, L. G.

Integrating the Hamilton-Jacobi equation for a certain class of Hamiltonians.  
11 p1910 A69-25747

## GLINCHUK, K. D.

Recombination radiation of GaAs alloy-type diodes /Rekombinatsiia viprominiuvannia splavnykh GaAs-sodiiv/.  
05 p0729 A69-16210

The effect of heat treatment on the lifetime of current carriers in GaAs.  
05 p0809 A69-16551

The electroluminescence of alloyed Si and GaAs diodes.  
06 p0893 A69-16898

Electroluminescence of p-GaAs diodes /Elektroluminitsentsiia diodov iz p-GaAs/.  
13 p2230 A69-27887

Recombination radiation of alloyed GaAs diodes.  
20 p3506 A69-37783

Electroluminescence of p-type GaAs diodes.  
21 p3682 A69-39145

## GLINCHUK, M. D.

Angular dependences of EPR line widths of Cr super 3 super plus in ZnWO sub 4 /Uglovyie zavisimosti shirin linii EPR Cr super 3 super plus v ZnWO sub 4/.  
10 p1743 A69-23131

## GLINER, E. B.

Removable singularities and the causality principle in general relativity theory.  
08 p1351 A69-19948

Field equations of the general theory of relativity /O polevykh uravneniiakh obshchei teorii otnositel'nosti/.  
09 p1593 A69-21572

## GLOECKLER, G.

Physical basis of the transport and composition of cosmic rays in the Galaxy.  
18 p3185 A69-34276

## GLOERSEN, P.

Observation of fast neutrals projected from a coaxial gun.  
16 p2819 A69-31690

## GLOGE, D.

The capacity of multiple beam waveguides and optical delay lines.  
04 p0579 A69-15446

Investigation of low power laser signals with picosecond resolution.  
09 p1516 A69-21742

Scattering from dielectric mirrors.  
13 p2298 A69-27663

Experimental simulation of a multiple beam optical waveguide.  
17 p2974 A69-33400

## GLORIA, H. R.

A survey of the photodegradation of organic polymers exposed to ultraviolet radiation.  
01 p0102 A69-10861

## GLOSSMANN, H.

Polarographic measurement of critical oxygen pressures at heart muscle sarcosomes /Polarografische Messung kritischer Sauerstoffdrucke bei Herzmuskelsarkosomen/.  
23 p4080 A69-41427

## GLOTIN, P.

Drift of MOS transistors under radiation /Derives de transistors MOS sous radiations/.  
11 p1848 A69-24873

- GLOVER, I. L. F.**  
Progress in nondestructive testing in aero engine manufacture.  
15 p2632 A69-31516
- GLOVER, K. M.**  
Radar investigations of atmospheric structure and CAT in the 3 to 20-km region.  
17 p2999 A69-33740  
Simultaneous radar, aircraft and meteorological investigations of clear air turbulence.  
24 p4342 A69-42894
- GLOYNA, F. L.**  
Response of complex structures to turbulent boundary layers.  
[AIAA PAPER 69-20] 06 p0914 A69-18132
- GLUCK, D. F.**  
Propellant position control by capillary barriers during spacecraft rotational maneuvers.  
[AIAA PAPER 69-529] 16 p2868 A69-32713
- GLUCK, R.**  
Inline hybrid computer for simulation of passively stabilized satellites.  
[AIAA PAPER 68-853] 21 p3680 A69-39758
- GLUKHIKH, V. A.**  
Experimental investigation of liquid-metal MHD generators /Eksperimental'nye issledovaniia zhidkometallicheskiikh MGD- generatorov/.  
13 p2208 A69-27512
- GLUKHIN, V. A.**  
Experimental investigation of a single-wave MHD machine /Eksperimental'noe issledovanie odnopol'novoi MGD-mashiny/.  
07 p1058 A69-19026
- GLUKHOV, A. N.**  
Polarization selection of radar signals /K voprosu o polarizatsionnoi selektsii radiolokatsionnykh signalov/.  
11 p1833 A69-24442
- GLUKHOV, V. G.**  
Wind velocity profiles in the presence of ice and frost phenomena /O profilakh skorosti vetra pri golodno-zimoroveykh iavleniiakh/.  
13 p2293 A69-27846
- GLUKHOVA, N. P.**  
The effect of the "age" of solutions on the catalytic activity of complex cobalt /III/ compounds.  
17 p2988 A69-33433
- GLUKHOVSKII, A. B.**  
Statistical modeling of meteorological fields /O statisticheskom modelirovanii meteorologicheskikh polei/.  
23 p4183 A69-41523
- GLUSHAKOV, A. N.**  
Temperature drop over the cross section of a wall in the case of transpiration cooling /Temperaturnyi perepad v sechenii stenki pri okhlazhdenii vypotevaniem/.  
11 p2002 A69-25334
- GLUSHCHENKO, V. G.**  
Investigation of the influence of the Reynolds number and gas and air temperatures on turbine-blade edge cooling efficiency /Issledovanie vliianiia chisla Reynolda, temperatur gaza i vozdukh na effektivnost' okhlazhdeniia turbinnykh lopatok/.  
24 p4364 A69-43082
- GLUSHKOV, E. A.**  
Nature of inhomogeneities revealed by anodic etching of n-GaAs single crystals /Priroda neodnorodnosti, vyivliaemykh anodnym travleniem v monokristallakh n-GaAs/.  
20 p3582 A69-37013
- GLUSHKOV, I. S.**  
Current distribution in an E x H-discharge with split electrodes in a plasma with nonequilibrium conductivity /Raspredelenie toka v E x H-razriade s sektiionirovannyimi elektrodami pri neravnovesnoi provodimosti plazmy/.  
15 p2663 A69-30980
- GLUSHKOV, I. I.**  
The Pleiades and interstellar matter /Pleiady i mezvvezdnaia materiia/.  
21 p3817 A69-39727  
Spectrophotometric investigation of the IC 349 nebula /Spektrofotometricheskie issledovaniia tumanosti IC 349/.  
21 p3817 A69-39728
- GLUSHKOV, V. M.**  
Analysis of Electric Circuits and Electromagnetic Systems /Analiz Elektricheskikh Tspeei i Elektromagnitnykh Sistem/.  
01 p0046 A69-10744
- GLUSHKOVSKII, M. E.**  
Multichannel amplitude analyzer for space research.  
01 p0084 A69-11315
- GLUSHNEVA, I. N.**  
New determination of the dependence of the albedo of Venus on the wavelength in the ultraviolet region of the spectrum /Novoe opredelenie zavisimosti al'beto Venery ot dliny volny v ul'trafioletovoi oblasti spektra/.  
11 p1957 A69-24406  
A new determination of the wavelength dependence of Venus' albedo in the ultraviolet region.  
24 p4391 A69-43796
- GLUSKIN, R. S.**  
Fluidic control and logic applications.  
22 p3870 A69-41239
- GLUZMAN, P. L.**  
A probability method for calculating the accuracy of inductive converters operating in the steady-state regime /O veroiatnostnom metode rascheta tochnosti induktsionnykh preobrazovatelei, rabotaiushchikh v ustanovivshemsia rezhime/.  
13 p2259 A69-27424
- GLYNN, T.**  
Beam steering of a phased array by conjugate element phase shifting.  
02 p0219 A69-12340
- GMELIN, E.**  
The dependence of the specific heat of beryllium at low temperatures on impurities in the sample /Zur Abhaengigkeit der spezifischen Waerme von Beryllium bei tiefen Temperaturen von den Verunreinigungen der Probe/.  
09 p1527 A69-22399
- GMIRIA-NOVI, V. A.**  
Topography of potentials induced in the auditory region of the cerebral cortex of dog by acoustic click stimulation /Topografiia viklikanikh potentsialiv slukhovoi dilianki kori golovnoy mozku sobaki pri podraznenni zvukovim shchigiem/.  
22 p3888 A69-41269
- GNAPP, J.**  
The effects of military environments on the strength of filament wound glass reinforced epoxy composites.  
19 p3321 A69-35567
- GNATENKO, I. U. P.**  
Effect of impurities on the optical properties of CdTe. I - Group III and VI impurities /Vliianie primesei na opticheskie svoistva CdTe. I - Primesi III i VI grupp/.  
24 p3462 A69-43735
- GNATOVSII, A. V.**  
Holographic method of transforming coherent light fields /Golograficheskii metod preobrazovaniia kogerentnykh svetovykh polei/.  
22 p3950 A69-41115
- GNATOVSII, O. V.**  
Holographic reconstruction of the spatial distribution of a laser light field /Golografichne vidnovlennia prostoroovogo rozpodilu svetilovogo polia OKG/.  
11 p1885 A69-24919
- GNEDENKO, B. V.**  
Cold standby with restoration.  
09 p1513 A69-22676
- GNEVYSHEV, M. N.**  
Relation between changes in pearl type oscillations /Pc1/ and solar activity during an 11-year cycle /O sviazi 11-letnikh tsiklicheskiikh izmenenii kolebanii tipa zhemchuzhin /Pc1/ s solnechnoi aktivnost'iu/.  
02 p0239 A69-11696  
Distribution of the intensity of the 5303-angstrom units coronal line on the solar limb /O raspredelenii intensivnosti koronal'noi linii 5303 angstrom units po limbu solntsa/.  
03 p0506 A69-13084  
Coronal data for the period of the proton flare event of July 1966.  
10 p1763 A69-23732  
Relationship between 11-year cyclic variations in pulsations of the pearl type /Pc1/ and solar activity.  
13 p2258 A69-28727  
Intensity distribution for the 5303 angstrom units coronal line along the solar limb.  
14 p2515 A69-28766
- GNOEVAIA, N. K.**  
Human tolerance to local infrared irradiation.  
10 p1647 A69-23589
- GNOS, A. V.**  
A study of the nonsimilar nature of the laminar boundary layer in a region of adverse pressure gradient.  
[AIAA PAPER 69-35] 06 p0913 A69-18094
- GNUCHEV, V. S.**  
Influence of the geometry of plastic deformation on the mechanical properties of niobium single crystals /Vliianie geometrii plasticheskoi deformatsii na mekhanicheskie svoistva monokristallov niobia/.  
18 p3160 A69-35454
- GNUNI, V. TS.**  
Stability of the moment state of a cylindrical shell /Ob ustoiichivosti momentnogo sostoiianiia tsilindricheskoi obolochki/.  
21 p3835 A69-38724
- GNUTZMANN, U.**  
The time dependent solution of the masterequation for a laser system.  
14 p2486 A69-29633  
Quantum mechanical calculation of multi-time-correlation functions and its application to the laser theory.  
22 p3965 A69-41152
- GOATHAM, J. I.**  
Design considerations for large fan blades.  
[SAE PAPER 690387] 23 p4200 A69-41656
- GOBAT, A. R.**  
High-bias-voltage operation of GaAs transferred-electron oscillators.  
03 p0402 A69-12854
- GOBELTZ, J.**  
Study of the seaworthiness of a helicopter - Sea tests and comparison with model tests - Improvement of the seaworthiness of an amphibious helicopter /Etude des qualites marines d'un helicoptere - Essais a la mer et comparaison avec les essais sur maquette - Amelioration des qualites marines d'un helicoptere amphibie/.  
08 p1255 A69-20653
- GOBEN, C. A.**  
Recombination statistics for neutron bombarded silicon transistors.  
06 p0975 A69-16871  
Radiation and annealing characteristics of neutron bombarded silicon transistors.  
06 p0975 A69-16872
- GOBERDHAN, C. K.**  
Study of failure modes in fiber glass reinforced plastics by electron microscopy.  
09 p1529 A69-22305
- GOBETZ, F. W.**  
A survey of impulsive trajectories.  
16 p2857 A69-32146  
How to open the heliocentric launch window for earth-Mars orbiter missions.  
[AAS PAPER 68-095] 21 p3804 A69-39201
- GOBIN, P.**  
Calorimetric study of the energy dissipated from a solid subjected to fatigue cycles.  
04 p0618 A69-15205  
A theoretical and experimental analysis of high-strain-rate tensile tests using Malvern's theory.  
23 p4236 A69-42529
- GOBLE, M. E.**  
Surveyor - Hard trails to soft landings.  
19 p3430 A69-36016
- GODAL, T.**  
Flame propagation into the crack of solid propellant grain.  
[AIAA PAPER 69-561] 16 p2833 A69-32680  
Experimental investigation of ablative materials.  
21 p3753 A69-39800
- GODARD, B.**  
Noncollinear interactions in parametric luminescence.  
[IEEE PAPER K-8] 07 p1152 A69-19067
- GODART, J.**  
Study of the postdischarge of a laser-produced plasma /Etude de la post-decharge d'un plasma produit par laser/.  
01 p0128 A69-10394
- GODBEY, A. L., JR.**  
Bethanechol chloride in the treatment of motion sickness - Negative results.  
12 p2024 A69-26561
- GODBY, E. A.**  
Aeromagnetic profiles across the Reykjanes ridge southwest of Iceland.  
04 p0592 A69-14660
- GODEL, A. M.**  
Balloon-borne instrumentation for X-ray measurements.  
05 p0762 A69-15824



## GODEV, N.

Influence of friction and orography on the wind distribution in the planetary boundary layer - Stationary nonlinear problem.

02 p0240 A69-11708

On the determination of the top of the planetary boundary layer.

21 p3715 A69-38566

Introduction - The effect of friction and orography in the numerical forecasting of the baric field.

21 p3758 A69-38837

## GODFREY, D. J.

A consideration of the possible use of refractory ceramic materials for advanced combustion chamber design.

09 p1531 A69-22624

The fabrication and properties of silicon nitride ceramics and their relevance to aerospace applications.

24 p4336 A69-43211

## GODFROID, H.

Distribution of television by satellite with special reference to the size of the earth-station arials.

10 p1654 A69-23389

## GODIN, P.

Attitude restoration of a rocket probe tip by a stellar sensor /Reconstitution d'attitude d'une pointe de fusée-sonde par senseur stellaire/.

[ONERA-TP-731] 17 p3001 A69-33220

Active stabilization of a stratospheric balloon gondola /Stabilisation active d'une nacelle pour ballons stratosphériques/.

17 p2898 A69-33242

## GODOLI, G.

Considerations on the reliability of monthly averages of solar indices /Considerazioni sull'attendibilità delle medie mensili di indici solari/.

04 p0657 A69-14700

On the activity of solar prominences.

05 p0816 A69-16390

Stellar activity of the solar type.

06 p0996 A69-17447

The west-limb activity on 9, 10, 11 July 1966 as observed in the H alpha line.

10 p1764 A69-23741

## GODSHALL, F. A.

Satellite mapping of the Pacific tropical cloudiness.

17 p2996 A69-33001

## GODWIN, R. C.

Electric propulsion for ELDO vehicles.

03 p0496 A69-13994

## GODZHOVA, R.

Disturbances in the E sub s layer at mid-latitudes /Smushchenia v sloia E sub s pri sredni geografski shirini/.

01 p0066 A69-10600

## GOEBEL, J. A.

Phase equilibria in the nickel-aluminum-yttrium system at 1000 deg C.

02 p0265 A69-12004

Phase equilibria in the nickel-aluminum-scandium system at 1000 deg C.

05 p0779 A69-15833

## GOEBEL, K.

Tritium and argon-39 in stone and iron meteorites.

09 p1604 A69-22398

## GOEDEKE, A. D.

Meteorological and geographical aspects of aerial photography of the Southern Hemisphere conducted on the Rockwell around-the-world polar-flight expedition.

09 p1534 A69-21405

The 7 July 1966 solar cosmic-ray event.

10 p1768 A69-23771

## GOEHLE, B.

Flash radiography using exploding wire technique.

12 p2092 A69-26480

## GOEHRING, R.

Determination of the instrument profile of a grating spectrograph with the aid of a laser /Bestimmung des Apparateprofils eines Gitterspektrographen mit Hilfe eines Lasers/.

07 p1131 A69-18405

On the pseudo-pi-component in sunspot spectra.

22 p4019 A69-40289

## GOEL, P. S.

Production rates of nuclides in thick targets and stone meteorites.

06 p0989 A69-17283

Production of Na super 22 and H super 3, in a thick silicate target and its application to meteorites.

19 p3425 A69-36423

## GOEL, T. C.

Total and spectral emittance of cobalt.

05 p0716 A69-16447

## GOELL, J. E.

A circular-harmonic computer analysis of rectangular dielectric waveguides.

24 p4288 A69-43330

## GOELLNITZ, H.

Release windows for the ejection of a body along a highly eccentric orbit.

03 p0505 A69-13003

## GOERNER, E. E.

Lox prevalue to prevent Pogo effect on Saturn 5.

04 p0666 A69-15298

## GOERSS, R. H.

Digital computers in space engineering.

16 p2756 A69-32555

## GOERTLER, H.

Branching solutions of the Benard problem.

19 p3301 A69-36791

## GOESCHEL, W.

Stabilization concepts for astronomical satellites.

06 p1015 A69-17588

## GOESELE, K.

Interference capability of noise of different frequency bandwidths /Die Stoerfaehigkeit von Geraeuschen verschiedener Frequenzbandbreite/.

08 p1276 A69-20857

## GOETHALS, R.

Hypersonic research at the CEAT in Poitiers /Recherches hypersoniques au C.E.A.T. de Poitiers/.

16 p2766 A69-32071

## GOETZ, A. F. H.

Differences between proposed Apollo sites. I - Synthesis.

21 p3815 A69-39585

Differences between proposed Apollo sites. III - Far infrared emissivity evidence.

21 p3815 A69-39587

## GOETZ, L. P.

Fundamentals of pulse Doppler radar.

10 p1659 A69-24084

## GOETZBERGER, A.

Low-temperature hysteresis effects in metal-oxide-silicon capacitors caused by surface-state trapping.

10 p1744 A69-23179

## GOFF, R. W.

Radio occultation measurements of planetary atmospheres and ionospheres from an orbiting pair. [AIAA PAPER 69-53]

06 p1011 A69-18104

## GOFMAN, G. B.

Determination of the necessary reduction of the peak of the ATR switch in the automatic frequency control system of a radar station /Opredelenie neobkhodimogo oslableniya pika razriadnika v sisteme avtopodstroiki chastoty radiolokatsionnoi stantsii/.

01 p0047 A69-10784

Determination of the required attenuation of the ATR switch spike in a radar AFC system.

10 p1661 A69-23113

## GOFORTH, T. T.

Seismic effects of sonic booms - Empirical results.

14 p2393 A69-29880

## GOGASOV, V. V.

Study of electrohydrodynamic flows at large electric Reynolds numbers /Issledovanie elektrotrodrodinamicheskikh techenii pri bol'shikh elektricheskikh chislakh Reinal'dsa/.

13 p2305 A69-27379

## GOGATISHVILI, I. A. M.

Changes in the frequency of occurrence of geomagnetic field pulsations at different levels of geomagnetic and solar activity /Ob izmenenii chastoty poavlenii pul'satsii geomagnitnogo polia s urovnem geomagnitnoi i solnechnoi aktivnosti/.

10 p1689 A69-23939

## GOGEL, W. C.

Depth distortions in binocular fields.

21 p3653 A69-38900

## GOGGIN, W. R.

Compacting and pressureless sintering of beryllium powders.

14 p2465 A69-29681

## GOGINA, L. B.

A case of variation of the transfer function of an invariant servo drive /Sluchai izmenenii peredatochno-funktsii invariantnogo slediashego privoda/.

04 p0584 A69-15419

## GOGISH, L. V.

A study of short supersonic nozzles.

07 p1050 A69-18755

Interaction between a turbulent wake and the external flow /Vzaimodeistvie turbulentnogo sleda s vneshnim potokom/.

19 p3299 A69-36390

## GOGLIN, V. P.

Determination of the economic efficiency of construction technological solution /K opredeleniiu ekonomicheskoi effektivnosti konstruktivno-tekhnologicheskikh reshenii/.

11 p2005 A69-25340

## GOGOLIN, V. P.

Determination of the maximum permissible weights of design outlays for a variable-geometry wing /K opredeleniiu predel'no dopustimogo vesa skhemnykh izderzhok pri proektirovanii kryla izmeniaemoi geometrii/.

24 p4253 A69-43092

## GOGOSASHVILI, N. Z.

Photometry of chromospheric flares at near minimum solar activity /Fotometriia khromosfernykh vspyshkek okolo minimuma solnechnoi aktivnosti/.

01 p0149 A69-10127

## GOGOSHEV, M.

Solar chromospheric flares and the temperature of the upper atmosphere /Solnechnye khromosfernye vspyshki i temperatura verkhnei atmosfery/.

12 p2149 A69-26447

## GOGOSOV, V. V.

Investigation into unidimensional stationary flows in electrohydrodynamics.

12 p2135 A69-26398

Electrohydrodynamic equations and transfer coefficients in a strong electric field.

12 p2135 A69-26399

Equations of electrohydrodynamics and transfer coefficients in a strong electric field /Uraveniia elektrotrodrodinamiki i koefitsienty perenosu v sil'nom elektricheskom pole/.

14 p2492 A69-29610

One-dimensional flows in electrohydrodynamics /Odnomernye techenia v elektrotrodrodinamike/.

18 p3181 A69-35315

## GOGOTSI, G. A.

Device for programming the heat-resistance tension on brittle materials.

10 p1696 A69-23845

Investigations of the thermal stability of heat-resistant materials in a gas flow /Issledovanie termostoikosti ognepurnykh materialov v gazovom potoke/.

20 p3565 A69-36979

Methods of high-temperature mechanical tests of inorganic heat-resistant coatings /Metody vysokotemperaturnykh mekhanicheskikh ispytaniy neorganicheskikh zharostoikikh pokrytii/.

20 p3538 A69-37360

## GOGUA, R. A.

Unsteady generalized Ohm's law for a weakly ionized gas /O nestatsionarnom obobshchennom zakone omadlia slabo ionizirovannogo gaza/.

11 p1925 A69-24319

## GOGUE, J. M.

Preparation and use of a test of integrated logic circuits /Preparation et exploitation d'un essai de circuits integres logiques/.

15 p2626 A69-30832

## GOIKHMAN, V. KH.

Characteristics and possible spectroscopic applications of a high-frequency discharge at atmospheric pressure /Kharakteristiki i vozmozhnye spektroskopicheskie primeneniia vysokochastotnogo razriada pri atmosferom davlenii/.

03 p0482 A69-14217

## GOKHALE, G. S.

Splash albedo measurements over Hyderabad /Iambda equals 8 deg N. geo. mag./.

06 p0989 A69-17278

Proposed experiments to measure the spectra and time variation of X-ray sources.

06 p0992 A69-17312

Estimate of re-entrant albedo flux over Hyderabad from the observed directional asymmetries.

22 p4005 A69-40519

- GOKHALE, M. H.**  
Effects of viscosity and electrical conductivity on the stability of a liquid model of hard-core pinch.  
11 p1923 A69-24292
- GOKHBERG, M. B.**  
Directional hydromagnetic emission and currents along geomagnetic lines of force.  
06 p0921 A69-17743
- GOLAN, D.**  
Hypersonic flow past an oscillating slender cone.  
14 p2389 A69-29020
- GOLAND, A. N.**  
Stage-I interstitials in electron-irradiated tungsten.  
13 p2284 A69-28682
- GOLAND, L. G.**  
Influence of transverse acceleration on the secretory activity of the canine gastrointestinal tract.  
10 p1645 A69-23498
- GOLANT, V. E.**  
Microwave Methods of Investigating Plasma /Sverkhvysokochastotnye Metody Issledovaniia Plazmy/.  
12 p2139 A69-27073
- GOLARZ DE BOURNE, M. N.**  
Muscle and the weightlessness state.  
06 p0873 A69-17018
- GOLARZ, M. N.**  
Histological and histochemical observations on the capsule of the muscle spindle in normal and denervated muscle.  
15 p2554 A69-30406
- GOLD, A. J.**  
Influence of season and heat on energy expenditure during rest and exercise.  
22 p3890 A69-40211
- GOLD, B.**  
Digital Processing of Signals.  
20 p3487 A69-37146
- GOLD, H.**  
Nosepit cooling by discrete fluid injection.  
[AIAA PAPER 68-1141] 03 p0532 A69-13559
- GOLD, P. I.**  
Selection of recombination rate constants for H-F-O reactions.  
04 p0646 A69-14743  
Chemical species and chemical reactions of importance in nonequilibrium rocket engine performance calculations.  
11 p1940 A69-24905  
Identification of important chemical reactions in liquid propellant rocket engines.  
[WSCI PAPER 68-7] 11 p1942 A69-24906
- GOLD, R.**  
Cosmic ray neutrons and carbon-14 production.  
22 p4003 A69-40095
- GOLD, T.**  
Rotating neutron stars and the nature of pulsars.  
05 p0825 A69-16351  
General consequences of the magnetic field dissipation theory of flares.  
06 p0996 A69-17446  
Pulsars and the mass spectrum of cosmic rays.  
20 p3588 A69-37487  
Apollo 11 observations of a remarkable glazing phenomenon on the lunar surface.  
23 p4216 A69-42202  
The nature of pulsars - Survey of present views.  
23 p4218 A69-42326
- GOLDAEV, I. P.**  
Thermodynamic calculation of combustion-chamber processes in the case of excess oxidizer /Termodinamicheskii raschet protsessov v kamere sgoraniia pri izbytkie oksislitelia/.  
04 p0684 A69-14486
- GOLDBAUM, L. R.**  
Alcohol question in aircraft accident investigation.  
01 p0022 A69-11345
- GOLDBERG, A.**  
Morphology of martensite formation in a 300-grade maraging steel.  
13 p2278 A69-27410
- GOLDBERG, F. N.**  
Use of time-sharing computer to support several large test facilities.  
17 p2932 A69-33106
- GOLDBERG, I. U. A.**  
Magnetic field influence on the low-frequency oscillations of Gunn diodes.  
02 p0222 A69-12684
- GOLDBERG, L.**  
The infrared emission of NGC 7027.  
01 p0148 A69-10051  
The results and interpretation of some of the Harvard OSO-IV observations.  
[AAS PAPER 68-219] 02 p0313 A69-11485  
Ultraviolet astronomy.  
15 p2689 A69-30597  
Annual Review of Astronomy and Astrophysics. Volume 7.  
21 p3810 A69-39501
- GOLDBERG, M. E.**  
Fluorescence studies of substrate and subunit interactions of the beta sub 2 protein of Escherichia coli tryptophan synthetase.  
04 p0553 A69-15304
- GOLDBERG, R. A.**  
A review of the theories concerning the equatorial F2 region ionosphere.  
20 p3531 A69-37888
- GOLDBLATT, N.**  
Stimulated Brillouin scattering.  
23 p4167 A69-42183
- GOLDBLUM, K. B.**  
Oxygen Index - Key to precise flammability ratings.  
04 p0621 A69-14957  
Oxygen index - Key to precise flammability ratings.  
08 p1335 A69-20114
- GOLDBURG, A.**  
On the nonlinear propagation of shock waves through nonuniform incoming flows.  
[AIAA PAPER 69-39] 06 p0913 A69-18103  
An analysis of the possibility of reduction of sonic boom by electro-aerodynamic devices.  
[AIAA PAPER 69-38] 06 p0869 A69-18150  
Clear Air Turbulence and its Detection, Boeing Company, Symposium, Seattle, Wash., August 14-16, 1968, Proceedings.  
17 p2998 A69-33732
- GOLDEN, D. E.**  
Improvement of energy resolution in Hughes-McMillen 127 deg electrostatic energy selector.  
14 p2450 A69-29572
- GOLDEN, J. O.**  
Melting of a finite paraffin slab as applied to phase-change thermal control.  
12 p2190 A69-26785
- GOLDEN, K. E.**  
Diffraction by rocket exhausts.  
02 p0209 A69-12352
- GOLDEN, R. M.**  
Digital filter synthesis by sampled-data transformation.  
04 p0584 A69-15461  
A holding technique to reduce number of bits in digital transfer functions.  
04 p0584 A69-15464
- GOLDEN, T. S.**  
A note on the effects of the ionosphere on satellite orbital corrections in near-real time.  
23 p4132 A69-42549
- GOLDENBAUM, G. C.**  
Collisionless shock waves and turbulent heating in high voltage theta pinches.  
17 p3013 A69-33825
- GOLDENBERG, S. A.**  
Experimental investigation of the influence of the combustion-product composition on the conductivity in the presence of a potassium additive /Eksperimental'noe issledovanie vlianiia sostava produktov sgoraniia na provodimost' pri naichii dobavki kalii/.  
06 p0870 A69-17908
- GOLDENVEIZER, A. L.**  
Problems in the rigorous deduction of the theory of thin elastic shells.  
11 p1977 A69-24804  
Methods for justifying and refining the theory of shells - Survey of recent results.  
14 p2531 A69-28807  
On two-dimensional equations of the general linear theory of thin elastic shells.  
19 p3443 A69-36790
- GOLDFARB, E. M.**  
Flat-top pulses with high efficiency and confined spectra.  
01 p0030 A69-10631
- GOLDFARB, V. M.**  
Possibility of using a plasma jet for radiation amplification /O vozmozhnosti ispol'zovaniia plazmennoi strui dlia usilenia izlucheniia/.  
02 p0292 A69-12557  
Characteristics and possible spectroscopic applications of a high-frequency discharge at atmospheric pressure /Kharakteristiki i vozmozhnye spektroskopicheskie primeneniia vysokochastotnogo razriada pri atmosfernom davlenii/.  
03 p0482 A69-14217  
Use of a plasma jet to amplify radiation.  
15 p2658 A69-30254
- GOLDGERG-ROGOZINSKAIA, N. M.**  
The Fraunhofer spectrum of the sun. I /Fraunferov spektr solntsa. I/.  
20 p3615 A69-38297
- GOLDIE, H.**  
S-band thyatron waveguide switch as a pretriggered megawatt duplexer.  
01 p0048 A69-11035  
Pulsed illuminator with rapid recovery.  
04 p0599 A69-15021  
Effects of noise contributed by T.R. devices on low-noise receivers.  
09 p1469 A69-22605  
A 26- to 40-GHz fast-acting plasma waveguide switch.  
12 p2036 A69-25938  
An AC-primed quartz-chlorine stage for X-band receiver protectors.  
15 p2573 A69-30035
- GOLDIN, D.**  
Power conditioning suitable for electric spacecraft.  
[AIAA PAPER 69-240] 09 p1568 A69-21732
- GOLDIN, D. S.**  
Electron bombardment thruster technology.  
[AIAA PAPER 69-301] 09 p1568 A69-21730
- GOLDIN, I. U. A.**  
Frequency mixing in nonlinear electrooptical crystals /Smeshenie chastot v nelineinykh elektroopticheskikh kristallakh/.  
03 p0438 A69-13047
- GOLDINA, N. D.**  
Single-mode generation and Lamb dip in an argon ion gas laser /Odnomodovyi rezhim i lembov proval v gazovom lazere na ionakh argona/.  
10 p1706 A69-24080  
Study of the characteristics of absorbing metallic films in the field of a standing wave at optical frequencies /Izuchenie kharakteristik pogloschatsushchikh metallicheskh plenok v pole stoiachei volny opticheskikh chastot/.  
12 p2104 A69-26024
- GOLDING, L. S.**  
A predictor for synchronization in a TDMA synchronous satellite communications system.  
07 p1076 A69-18553
- GOLDMAN, A.**  
A comparison between statistical model and line by line calculation with application to the 9.6-mu ozone and the 2.7-mu water vapor bands.  
[AFCLR-68-0505] 01 p0124 A69-10919  
Spectral emissivity of NO in the infrared.  
17 p3009 A69-34156
- GOLDMAN, E.**  
Equations for gas mixtures. II.  
11 p1921 A69-24398  
The structure of shock-waves in gas mixtures.  
11 p1874 A69-25356
- GOLDMAN, I. B.**  
Corrosive wear by atmospheric oxygen and moisture.  
[ASLE PAPER 68-LC-10] 15 p2622 A69-30608  
Turbulent Schmidt numbers.  
21 p3852 A69-39432
- GOLDMAN, L.**  
Protection of pilots against lasers.  
07 p1072 A69-19436
- GOLDMAN, L. M.**  
Suppression of del B drift in curved theta pinch.  
11 p1925 A69-24313
- GOLDMAN, M.**  
Parametric excitation of drift waves in a resistive plasma.  
18 p3179 A69-34440



## GOLDMAN, M. A.

Pulsed illuminator with rapid recovery.  
04 p0599 A69-15021

## GOLDMAN, R.

Diffusion of electron plasma oscillations in a large-amplitude ion-wave background.  
03 p0483 A69-14256

Parametric excitation and higher-order mode coupling effects in plasmas.  
15 p2661 A69-30919

Parametric amplification in plasmas with negative energy waves.  
20 p3582 A69-38244

Parametric excitation in a plasma slab.  
20 p3582 A69-38245

## GOLDMAN, R. L.

Vibration analysis by dynamic partitioning.  
20 p3621 A69-37195

## GOLDMAN, T. J.

Performance of an electrodeless conductivity probe in anisotropic plasma.  
03 p0483 A69-14252

## GOLDMANN, K.

Oxygen effects in a type-316 stainless-steel, Nb-1 percent Zr, liquid potassium system.  
12 p2112 A69-25943

## GOLDREICH, P.

A theoretical upper bound to the solar oblateness.  
09 p1600 A69-22201

Io, a Jovian unipolar inductor.  
13 p2337 A69-27552

Some remarks on polar wandering.  
20 p3535 A69-38192

Pulsar electrodynamics.  
22 p4027 A69-40657

## GOLDRING, I. P.

Mechanical properties of the lung in experimental pulmonary emphysema.  
23 p4082 A69-41442

## GOLDSBOROUGH, J. P.

Near-infrared operating characteristics of the Mercury ion laser.  
23 p4171 A69-41393

## GOLDSCHMIED, F. R.

On the frequency response of viscous compressible fluids as a function of the Stokes number.  
24 p4301 A69-43287

## GOLDSHINE, G. D.

All-electric nonlinear actuator steers advanced tactical missiles.  
23 p4225 A69-42458

## GOLDSSTEIN, I. A. E.

Titanium in structural steel /Titan v konstruktsionnoi stali/.  
15 p2640 A69-30633

## GOLDSSTEIN, M. E.

Contact phenomena in plasmas /Kontaknyie iavleniia v plazme/.  
03 p0404 A69-13547

## GOLDSHTIK, M. A.

Principle of maximum stability of averaged turbulent flows /Printsip maksimal'noi ustoiichivosti osrednennykh turbulentnykh techenii/.  
02 p0232 A69-12354

Stability of a laminar flow in the presence of a field of mass forces /Ustoiichivost' laminarnogo potoka v prisutstvii polia massovykh sil/.  
02 p0233 A69-12573

Motion of a particle in a turbulence chamber /O dvizhenii chastytsy v vikhrevoi kamere/.  
07 p1181 A69-19000

Calculation of the wall turbulence constant /Vychislenie konstanty pristennoi turbulentnosti/.  
15 p2590 A69-30048

A maximum stability principle for mean turbulent flows.  
15 p2590 A69-30263

## GOLDSHVEND, B. L.

A year-long medical-technological experiment in a ground-based life-support system facility /Godovoi mediko-tekhnikeskii eksperiment v nazemnom komplekse sistem zhizneobespecheniia/.  
13 p2216 A69-28612

## GOLDSMID, H. J.

Problems in Solid State Physics.  
11 p1935 A69-24524

## GOLDSMITH, D. W.

Cosmic-ray heating of the interstellar gas.  
10 p1770 A69-24095

## GOLDSMITH, L. S.

Regulation of human factors.  
06 p1041 A69-16844

## GOLDSMITH, W.

Optical and mechanical properties of birefringent polymers.  
15 p2642 A69-30678

Longitudinal impact on a hollow cone.  
[ASME PAPER 69-APMW-15]  
24 p4401 A69-43101

## GOLDSTEIN, B.

An east-west asymmetry in the solar wind velocity.  
11 p1950 A69-25148

Theory of a helix-to-coil transition in a triple-stranded macromolecule.  
24 p4353 A69-43812

## GOLDSTEIN, D. R.

The influence of reaction kinetics between BBr sub 3 and O sub 2 on the uniformity of base diffusion.  
24 p4360 A69-42760

## GOLDSTEIN, H. E.

Ablative thermal protection at low heating rates.  
19 p3357 A69-35536

## GOLDSTEIN, H. W.

Mass spectrometric thermal analysis of polymers.  
09 p1448 A69-22314

## GOLDSTEIN, J. I.

The classification of iron meteorites.  
19 p3416 A69-36129

The formation of phosphides in iron meteorites.  
19 p3417 A69-36132

## GOLDSTEIN, J. R.

Hemolysis in mice exposed to varying levels of hyperoxia.  
06 p0874 A69-17837

Relationship between tocopherol status and in vivo hemolysis caused by hyperoxia.  
07 p1066 A69-19422

A joint pseudo-splitting/peroxide mechanism for oxygen reduction at fuel cell cathodes.  
16 p2748 A69-32809

## GOLDSTEIN, M.

Beryllium-reinforced aluminum.  
19 p3340 A69-35508

## GOLDSTEIN, M. E.

Effective slip coefficients for coupled conduction-radiation problems.  
13 p2374 A69-27784

## GOLDSTEIN, R. J.

Film cooling with normal injection into a supersonic flow.  
03 p0413 A69-12994

Heat transfer - A review of current literature.  
04 p0684 A69-14354

Heat transfer bibliography.  
06 p1033 A69-17558

Heat transfer bibliography.  
13 p2379 A69-28341

Stability of a horizontal fluid layer with zero shear boundaries.  
20 p3518 A69-38234

## GOLDSTEIN, R. M.

Radar observations of Icarus.  
02 p0323 A69-12300

The radius of Venus as determined by planetary radar and Mariner 5 radio tracking data.  
03 p0508 A69-13348

Radar time-of-flight measurements to Venus.  
04 p0663 A69-15384

## GOLDSTEIN, S.

Numerical experimental check of Lynden-Bell statistics for a collisionless one-dimensional stellar system.  
16 p2862 A69-32376

Applications of singular perturbations and boundary-layer theory to simple ordinary differential equations.  
20 p3515 A69-37583

## GOLDSTEIN, S. E.

Model design techniques and test methods for precision underwater simulation.  
[AIAA PAPER 69-1005]  
22 p3921 A69-40379

## GOLDSTEIN, S. J., JR.

Frequency dependence of polarization of pulsar CP 0328.  
08 p1382 A69-19817

## GOLDSTEIN, S. R.

A differential pulse-length modulated pneumatic servo utilizing floating flapper disk switching valves.  
[AGARDOGRAPH-118]  
08 p1257 A69-20948

## GOLDSTONE, B. J.

Digital signal processing.  
05 p0718 A69-15718

## GOLDSWORTHY, F. A.

On the motion established by a constant energy explosion followed by an expanding piston.  
22 p3931 A69-40818

## GOLDWASSER, S. R.

Role of pressure in spontaneous ignition.  
24 p4415 A69-43645

## GOLDWIRE, H. C., JR.

Analysis of the slowing-down rate of NP 0532.  
18 p3191 A69-34333

## GOLEC, L.

Influence of sudden decompression on the organism /Wplyw naglej dekompresji na ustroj/.  
01 p0020 A69-10757

Effect of low temperature on the organism in high-altitude flights and astronautics /Wplyw niskiej temperatury na organizm w lotach wysokosciowych kosmonautyce/.  
10 p1648 A69-23292

## GOLENETSKII, S. V.

Micrometeorite investigations on the Cosmos 133 satellite /mikrometeornye issledovaniia na sputnike Kosmos-135"/.  
01 p0152 A69-10574

Micrometeoroid investigations on the satellite Kosmos-135".  
15 p2691 A69-30744

## GOLENEVICH, V. A.

Study of the failure characteristics of reinforced nickel by the method of high-temperature metallography. I /Issledovanie osobennostei razrusheniia armirovannogo nikelia metodom vysokotemperaturnoi metallografii. I/.  
21 p3743 A69-38611

## GOLENHOFEN, K.

The effect of dynamic and static stretching on the spontaneous frequency of isolated pacemaker tissue of the heart /Der Effekt dynamischer und statischer Dehnung auf die Spontanfrequenz des isolierten Herzschriftmachers/.  
23 p4096 A69-42097

Mechanical coupling effects between respiration and heart rhythm /Mechanische Koppelungswirkungen der Atmung auf den Herzschlag/.  
23 p4097 A69-42098

## GOLES, G. G.

Cosmic abundances.  
22 p4032 A69-40988

## GOLIK, O. Z.

Study of light scattering in single-component system near a critical point with allowance for the gravitation effect /Vivchennia svitlorozsiannia v odnokomponentnikh sistemakh poblizu kritichnoi tochki z vrakhuvanniam gravitatsiinogo efektu/.  
14 p2485 A69-28993

## GOLIK, P. P.

Electron gun with a plasma cathode /Elektronnaiushka s plazmennym katodom/.  
04 p0598 A69-14857

## GOLIK, V. R.

Thermal expansion coefficients of a niobium-zirconium-titanium alloy and plexiglass at temperature ranging from 10 to 300 K /Koefitsienty termichnogo rozshirennia splavu niobii-tsiurkonii-titan i orgskla v intervali temperatur 10-300 deg K/.  
11 p1905 A69-24917

## GOLIKOV, V. N.

A random-walk theory for an effective secondary radiation center /K teorii bluzhdaniia effektivnogo tsentra vtorichnogo izlucheniia/.  
05 p0718 A69-15653

On the theory of straying of the effective center of secondary emission.  
16 p2754 A69-32516

## GOLINNAIA, G. L.

Excess conductivity effect in cadmium sulfide single crystals at room temperatures /Do efektu zalishkovoi provodnosti u monokristalakh sl'udu kadmiiu pri kimmnatnikh temperaturakh/.  
08 p1374 A69-21088

GOLITSYN, G. S.

Estimates of the lower boundary and thickness of the cloud layer on Venus /Otsenki nizhnei granitsy i tolshchiny oblachnogo sloia na Venere/.  
01 p0152 A69-10580

Vertical propagation of sound waves in an atmosphere with height-variable viscosity.  
02 p0274 A69-11440

Estimates of certain characteristics of general circulation in the atmospheres of terrestrial planets /Otsenki nekotorykh kharakteristik obshchei tsirkulatsii v atmosfere planet zemnoi gruppy/.  
05 p0828 A69-16635

Dynamics of the descent of automatic stations into planetary atmospheres as a means of checking measurement data /Dinamika spuska avtomaticheskikh stantsii v atmosfere planet kak sredstvo kontrolya dannykh izmerenii/.  
09 p1609 A69-21775

A general solution of the equations of magnetohydrodynamics for one-dimensional non-stationary and plane stationary motions.  
10 p1727 A69-23096

Estimates of some characteristics of the general circulation in the atmospheres of the terrestrial planets.  
14 p2516 A69-28791

Problems of general circulation in planetary atmospheres /Problemy obshchei tsirkulatsii v atmosfere planet/.  
14 p2526 A69-29841

Estimates of the lower boundary and thickness of the cloud layer on Venus.  
15 p2691 A69-30750

Relating the measured data from automatic space stations smoothly descending in planetary atmospheres to the center of mass /O prizvazke k tsentru mass dannykh izmerenii avtomaticheskikh stantsii, plynno opuskaiushchikhsia v atmosfere planet/.  
19 p3432 A69-36633

GOLLADAY, D.

Processing techniques for boron filament wound composite structures.  
14 p2455 A69-29413

GOLLAN, A.

Direct contact heat transfer with change of phase - Co-current flow of immiscible films with surface evaporation.  
09 p1622 A69-21904

GOLLER, H.

Unsteady rotating flow in a cylinder with a free surface. [ASME PAPER 68-FE-13]  
05 p0747 A69-16065

GOLLEY, M. G.

Buckland Park aerial array.  
24 p4286 A69-42607

GOLLNICK, A. F., JR.

Design and calibration of a small heat transfer gage and its application.  
15 p2613 A69-31272

GOLLNICK, P. D.

Effect of exercise on hepatic cholesterol of rats fed diets high in saturated or unsaturated fats.  
21 p3653 A69-38903

GOLNEV, V. IA.

Observations of the polarized radio emission from Jupiter at a wavelength of 6.6 cm with the aid of the large Pulkovo telescope /Nabliudeniia polarizovannogo radioizlucheniia Iupitera na volne 6,6 cm s pomoshchiu bol'shogo pulkovskogo radioteleskopa/.  
03 p0512 A69-13703

GOLOBORODKO, V. T.

Device for the measurement of plasma velocity by the Doppler effect with photoelectric recording /Ustanovka dlia izmereniia skorosti plazmy po Dopplereffektu s fotoelektricheskoi registratsiei/.  
12 p2079 A69-26021

Use of a scanning Fabry-Perot interferometer with a piezoceramic element for ultralow modulation frequency /Ispol'zovanie skaniruiushchego interferometra Fabri-Pero s p'ezokeramikoii na infranizkoii chastote moduliatsii/.  
15 p2611 A69-31107

GOLOMAZOVA, Z. A.

Reliability of Semiconductor Radio Devices of Flight Vehicles /Nadezhnost' poluprovodnikovyykh radiostranstv letatel'nykh apparatov/.  
18 p3108 A69-34350

GOLOMB, D.

Clusters in isentropically expanding nitric oxide and their effect on the chemiluminous NO-O reaction.  
04 p0555 A69-14864

GOLONKA, B.

French sounding rockets /Les fusees-sondes francaises/.  
02 p0333 A69-11916

French solid-propellant sounding rockets /Les fusees-sondes francaises a propergol solide/.  
03 p0518 A69-12851

GOLOS, S.

Electrical modeling of the heat-conduction equation in orthogonal curvilinear coordinate systems /Modelovanie elektricheskogo rovnaniia provedeniia tepla v ukladakh vzpolnykh ortogonalnykh krzyvoliniykh/.  
09 p1477 A69-22241

GOLOSKER, N. V.

Study of the influence of prolonged heating in vacuum and thermal cycling on the properties of SAP sheets /Issledovanie vlianiia dlitel'nykh nagrevov v vakume i teplosmen na svoystva listovykh polufabrikatov SAPa/.  
02 p0266 A69-12126

GOLOSMAN, B. S.

Bandwidth requirement of single-channel monopulse limiter.  
16 p2761 A69-32471

GOLOSOV, L. V.

Measurement of the axial rigidity of gyromotor flanges /Izmerenie osevoi zhestkosti flantsev giromotorov/.  
09 p1513 A69-22704

GOLOUBKOV, V. V.

Results of a determination of orientation from on-board measurement data.  
17 p3001 A69-33221

GOLOV, G. A.

Acceleration tolerance of a man under low barometric pressure /Perenosimost' chelovekom uskorenii pri ponizhenno barometricheskom davlenii/.  
07 p1065 A69-18982

Human tolerance to acceleration at low barometric pressures.  
20 p3480 A69-38230

GOLOV, G. G.

Unsteady heat conduction of a thin rod with a mobile end face and boundary conditions of the third kind on the lateral surface /Nestatsionarnaia teploprovodnost' tonkogo sterzhnia s podvizhnoi torsovoi granitse i granichnymi usloviyami tret'ego roda na bokovoi poverkhnosti/.  
11 p2002 A69-25229

GOLOVACHEV, IU. P.

Calculation of a plane jet flow of radiating gas /Raschet ploskogo struinogo techeniia izluchaiushchego gaza/.  
14 p2432 A69-29612

GOLOVANEVSKII, E. I.

Wollaston-prism device for discrete deflection of a laser beam /Ustroistvo diskretnogo otkloneniia lazernogo lucha na prizmkh Vollastona/.  
14 p2459 A69-29391

GOLOVANOVA, M. N.

A method of manufacturing aspherical surfaces which deviate only slightly from the sphere.  
12 p2102 A69-26597

GOLOVCHAN, V. T.

Plane oscillations of an eccentric cylinder /Ploskie kolebaniia eksentricheskogo tsilindra/.  
18 p3226 A69-35380

Diffraction of elastic waves at an infinite array of circular cylinders /Difraktsiia uprugikh voln na beskonechnom riade krugovykh tsilindrov/.  
19 p3437 A69-36144

Investigation of infinite systems of algebraic equations in periodic problems for a spherical shell /Ob issledovanii beskonechnykh sistem algebraicheskikh uravnenii periodicheskikh zadach dlia sfericheskoi obolochki/.  
23 p4227 A69-41706

GOLOVCHINER, IA. M.

Phase shape deformation and austenite stabilization in Fe-Ni and Fe-Ni-Ti alloys /O fazovom naklepe i ustoichivosti austenita v splavakh Fe-Ni i Fe-Ni-Ti/.  
18 p3159 A69-35448

GOLOVEI, M. P.

Investigation of the second optical harmonic generated in divergent laser beams /Issledovanie vtoroi opticheskoi garmoniki, generirovannoi v raskhodiashchikhsia puchkakh lazera/.  
24 p4328 A69-43161

GOLOVIN, A. M.

Energy transfer from a radiating sphere to a medium with molecular heat conduction /Perenos energii ot izluchaiushchei sfery v srede s molekuliarnoi teploprovodnost'iu/.  
05 p0845 A69-15782

Dissolution of an ellipsoidal bubble in a low-viscosity fluid /Rastvorenie ellipsoidal'nogo puzryia v zhidkosti maloi viazkosti/.  
07 p1120 A69-18990

Energy transfer from a radiating sphere into a medium with molecular heat conduction.  
18 p3230 A69-35034

Unsteady energy transport from a radiating sphere in a medium with molecular thermal conductivity /Nestatsionarnyi perenos energii ot izluchaiushchei sfery v srede s molekuliarnoi teploprovodnost'iu/.  
18 p3231 A69-35325

GOLOVIN, I. N.

Cross section measurements needed for controlled fusion research, MHD generators, and other plasma studies.  
07 p1195 A69-19652

GOLOVIN, M. I.

Computerized processing of the calibration of pneumatic devices.  
21 p3724 A69-39100

GOLOVIN, V. M.

Unsteady temperature field in the plane skin of an aerodynamic body in the case of variable thermophysical characteristics of the material /Nestatsionarnoie temperaturnoe pole v ploskoi obshivke letatel'nykh apparatov v sluchae peremennykh teplofizicheskikh svoystv materiala/.  
18 p3092 A69-34982

GOLOVIN, V. N.

Some aspects of utilization of higher plants as nutrition source in space missions.  
15 p2560 A69-31408

GOLOVISTIKOV, A. N.

Destruction of a group of alkali halide crystals by laser radiation and an estimation of their optical strength /Razrusheniie riada shchelochnogaloidnykh kristallov izlucheniem OKG i otsenka ikh opticheskoi prochnosti/.  
08 p1328 A69-21188

Decomposition of several alkali-halide crystals by laser radiation and evaluation of their optical stability.  
18 p3152 A69-35157

GOLOVIZNIN, G. I.

Measurement of the light pressure and pulse energy of laser radiation /Izmerenie svetovogo davleniia i energii impul'sa lazernogo izlucheniia/.  
22 p3961 A69-40246

GOLOVKOV, V. K.

Measurements of the phase dependence of the 0.8-cm radio emission of Mercury, and some properties of its surface layer.  
02 p0314 A69-11640

GOLOVSHCHIKOVA, G. I.

Investigation of the dielectric polarization of BaTiO sub 3 and Ba sub x Sr sub 1-x TiO sub 3 in pulsed fields in the paraelectric phase /Issledovanie dielektricheskoi polarizatsii BaTiO sub 3 i Ba sub x Sr sub 1-x TiO sub 3 v impul'snykh poliakh v paraelektricheskoi faze/.  
22 p3996 A69-41165

GOLSON, J. C.

Narrow-band and UVB photometry of GX3 plus 1 and two Wolf-Rayet stars.  
02 p0325 A69-12596

Narrow-band photometry of five combination-variable stars and the X-ray source CYG X-2.  
09 p1591 A69-21451

GOLTS, E. IA.

Plasma jet cutoff by a transverse magnetic field /Otsechka plazmennoi strui poperechnym magnitnym polem/.  
02 p0292 A69-12558

Cutoff of a plasma jet by a transverse magnetic field.  
15 p2658 A69-30255

GOLTSMAN, B. M.

Influence of inhomogeneities on the thermoelectric properties of 80 mol. and Bi sub 2 Te sub 3 plus 20 mol. and Bi sub 2 Se sub 3 alloy.  
04 p0644 A69-15265

Thermoelectric properties of p-Bi sub 0.5 Sb sub 1.5 Te sub 3 and p-Bi sub 0.5 Sb sub 1.5 /TeSe/ sub 3 solid solutions /Termoelektricheskie svoystva tverdykh rastvorov p-Bi sub 0.5 Sb sub 1.5 Te sub 3 i p-Bi sub 0.5 Sb sub 1.5 /TeSe/ sub 3/.  
15 p2668 A69-30629



## GOLTISOV, I. I.

Classification of barium titanate modifiers /Klasifikatsiia modifikatorov titanata bariia/.  
22 p3996 A69-41161

## GOLUB, A. A.

Josephson effect in highly contaminated superconductors /Effekt Dzhozefsona v sil'no zagriaznennykh sverkhprovodnikakh/.  
03 p0484 A69-13284

The Josephson effect in a very dirty superconductor.  
14 p2508 A69-29656

## GOLUBA, R. W.

Generation of large amplitude periodic shock-fronted pressure waves in a resonant tube.  
06 p0906 A69-17149

## GOLUBCHIK, R. M.

Wear and Antifriction Properties of Materials /Iznos i Antifriktsionnye Svoistva Materialov/.  
13 p2268 A69-28050

## GOLUBENKOVA, L. I.

Reaction of epoxy and polyester resins with glass fibre.  
19 p3358 A69-35902

## GOLUBEV, A. N.

Selection of the emission wavelengths in an optical range-finder/refractometer system /K vyboru dlin voln izlucheniia v sisteme svetodal' nomer-refraktometr/.  
13 p2260 A69-27826

## GOLUBEV, G. P.

Investigation of the characteristics of a CdTe laser with electronic excitation /Issledovanie kharakteristik kvantovogo generatora na CdTe pri elektronnom vzbuzhdenii/.  
13 p2272 A69-27896

## GOLUBEV, I. U. F.

Determination of spacecraft conditions during reentry into the atmosphere /Opredelenie uslovii vkhoda kosmicheskogo apparata pri spuske v atmosfere/.  
06 p1014 A69-17581

Motion control during reentry into the atmosphere /Upravlenie dvizheniem pri vkhode v atmosfere/.  
13 p2355 A69-27682

Motion control during entry into the atmosphere /Upravlenie dvizheniem pri vkhode v atmosfere/.  
21 p3767 A69-39649

## GOLUBEV, I. U. M.

Optimum gas mixture in the He-Ne laser and the field distribution in the resonator.  
03 p0441 A69-13847

Optimal ratio between the mixture components in an annular He-Ne laser /Ob optimal'nom sootnoshenii komponent smesi v kol'tsevom He-Ne lazere/.  
04 p0612 A69-15176

Optimum composition ratio in a He-Ne ring laser.  
18 p3152 A69-34718

## GOLUBEV, L. V.

The problem of the structure of the conduction band in GaSb /K voprosu o strukture zony provodimosti GaSb/.  
13 p2319 A69-27899

Certain properties of sulfur-doped gallium antimonide /Nekotorye svoistva antimonida galliia, legirovannogo seroi/.  
21 p3781 A69-39048

## GOLUBEV, S. A.

Increase of CO sub 2 laser power under the influence of a beam of fast protons.  
08 p1323 A69-19802

## GOLUBEV, V. A.

Investigation of an argon arc at high pressure /Issledovanie dugi v argone pri vysokom davlenii/.  
02 p0291 A69-12482

High-temperature turbulent jets.  
07 p1118 A69-18393

## GOLUBEV, V. G.

Hill stability in the unrestricted three-body problem.  
04 p0652 A69-14543

## GOLUBEV, V. S.

Study of an energy discharge sustained by a Lorentz force /Issledovanie elektricheskogo razriada, podderzhivaemogo siloi Lorentsa/.  
06 p0969 A69-17910

## GOLUBEVA, V. V.

Calculation of the interaction between a supersonic jet and a counterflow of an ideal compressible fluid /Raschet vzaimodeistviia sverkhzvukovoi gazovoi strui i vstrechnogo potoka ideal'noi szhimaemoi zhidkosti/.  
05 p0751 A69-16501

## GOLUBINSKII, A. I.

Hypersonic flow past delta wings of a certain class with attached shock wave, situated under an angle of attack /Obtekanie giperzvukovym potokom treugol'nykh kryl'ev opredelennogo klassa, ustanovlennykh pod uglom ataki s prisoedinennym skachkom uplotneniia/.  
02 p0191 A69-12577

Impulse of forces and moments experienced by a slender wing in unsteady flow /Ob impul'se sil i momentov, soobshchaemykh tonkomu krylu pri nestatsionarnom obtekanii/.  
06 p0858 A69-17338

## GOLUBITSKII, B. M.

Spectral transmission functions in the H sub 2 O and CO sub 2 bands.  
02 p0236 A69-11451

Measurement and calculation of spectral transmission in the N sub 2 O bands in the near-infrared region.  
02 p0236 A69-11452

Arrangement for studying atmospheric spectral transparency in the infrared spectral region /Ustanovka dlia issledovaniia spektral'noi prozrachnosti atmosfery v ik oblasti spektra/.  
05 p0759 A69-16639

System for studying the spectral transparency of the atmosphere in the infrared spectral region.  
14 p2433 A69-28795

## GOLUBOV, V. V.

Determination of the orientation of artificial earth satellites in a given measurement system /Opredelenie orientatsii iskusstvennykh sputnikov zemli po zadannoi sisteme izmerenii/.  
22 p4037 A69-41089

Results of a determination of the orientation of the Proton 2 satellite and description of its motion with respect to its center of mass /Rezultaty opredeleniia orientatsii spтника "Proton-2" i opisaniie ego dvizheniia otноситel'no tsentra mass/.  
22 p4037 A69-41090

## GOLUBOVA, L. G.

Optimal thrust control for the plane motion of a point with a variable mass /Optimal'ne keruvannia tiagoui pri ploskomu rusi tochki zmnoiinoi masi/.  
23 p4192 A69-42340

## GOLUBOVSKI, I. U. B.

Investigation of the positive column of a neon discharge at medium gas pressures. I, II /Untersuchung der positiven Saule der Neonentladung bei mittleren Gasdrucken. I, II/.  
10 p1740 A69-23723

## GOLUBOVSKII, I. U. M.

Selection of photodetectors for autocollimators employing beam splitters.  
14 p2447 A69-29326

## GOMAN, O. G.

Supersonic flows past bodies at small angles of attack /Obtekanie sverkhzvukovym potokom tel pod malymi uglami ataki/.  
24 p4243 A69-42581

## GOMBERG, L.

A cost-effective look at spacecraft component testing.  
18 p3118 A69-35082

## GOMER, R.

Adsorption of CO on tungsten - Field emission from single planes.  
14 p2409 A69-29093

## GOMERSALL, E. W.

An advanced cryogenic core concept for a flexible and economical delivery system. [AIAA PAPER 68-812]  
21 p3827 A69-39753

## GOMES, J. J.

Pulse risetimes in proportional counters.  
09 p1493 A69-21419

## GOMIS, J. P.

Storage batteries for satellite electrical power supply /Batteries d'accumulateurs pour alimentation des satellites en energie electrique/.  
16 p2735 A69-31729

## GOMOZOV, L. I.

Four-specimen vacuum device for tensile creep tests at temperatures of up to 1200 deg C.  
07 p1116 A69-19318

Four-specimen device for bending creep tests at temperatures of up to 900 deg C.  
10 p1696 A69-23851

## GOMPERTZ, G.

The interpretation of the wing of the solar line H alpha.  
08 p1390 A69-20394

## GOMZIN, V. N.

Correlation coefficient of Doppler signals in a two-channel system /Koeffitsient korreliatsii signalov Dopplera v dvukhkanal'noi sisteme/.  
01 p0032 A69-10848

Transmission of random noise and signals through multistage multipliers.  
04 p0557 A69-14779

Correlation coefficient of Doppler signals in a two-channel system.  
12 p2031 A69-26649

## GONCHARENKO, A. M.

Waveguide properties of an anisotropic p-n junction layer /Volnovodnye svoistva anizotropnogo p-perekhodnogo sloia/.  
17 p2983 A69-33979

## GONCHARENKO, G. I.

Thermal EMF of cadmium arsenide /Termoeds v arsenide kadmii/.  
22 p3993 A69-40669

## GONCHARENKO, L. F.

Thermal stability of a DC plasmatron arc /Termal'naia ustoiichivost' dugi plazmatrona postoiannogo toka/.  
15 p2663 A69-30999

## GONCHARENKO, V. M.

Influence of energy dissipation on the random vibrations of elastic elements /O vliianii rassaiianiia energii na sluchainye kolebaniia uprugikh elementov/.  
17 p3064 A69-33922

## GONCHAROV, E. G.

The InAs-InP phase diagram.  
03 p0483 A69-13022

## GONCHAROV, I. G.

Features of the emission of a p-n junction GaAs laser with a nonlinear passive element in the resonator /Osobennosti izlucheniia lazera na p-n-perekhodu GaAs s nelineinym passivnym elementom v rezonatore/.  
09 p1515 A69-21477

Observation of absorption by nonequilibrium carriers in a GaAs diode in the emission mode /Nabluzhdenie pogloscheniia neravnovesnymi nositeliami dlia GaAs v rezhime generatsii/.  
13 p2272 A69-27899

Characteristic features of the radiation of a p-n junction GaAs laser with a nonlinear passive element in the resonator.  
15 p2633 A69-30719

## GONCHAROV, I. U. P.

Application of the linear graph method to the analysis of electromagnetic processes in autonomous inverters /Primenenie metoda lineinykh grafov dlia analiza elektromagnitnykh protsessov v avtonomnykh invertorakh/.  
24 p4255 A69-42571

## GONCHAROV, L. P.

Ion composition and coefficients of ionospheric reactions at altitudes from 140 to 200 km in the equatorial ionosphere /Ionnyi sostav i koeffitsienty ionosfernykh reaktsii na vysotakh 140-200 km ekvatorial'noi ionosferi/.  
10 p1688 A69-23924

## GONCHAROVA, E. E.

Electron density distribution in the polar region /Raspredelenie elektronnoi plotnosti v pripolusnoi oblasti/.  
20 p3526 A69-37664

## GONCHAROVA, G. I.

Radiative cooling of a dense hydrogen plasma /Radiatsionnoe okhlazhdenie plotnoi vodorodnoi plazmy/.  
11 p1927 A69-25218

## GONCHARSKII, A. V.

Interpretation of the brightness curves of eclipsing systems under the condition of monotonicity of the unknown functions /Interpretatsiia krivykh bleksa zatmennykh sistem pri uslovii monotonnosti iskomnykh funktsii/.  
09 p1588 A69-21363

Interpretation of the light curves of eclipsing systems if the unknown functions are monotonic.  
18 p3197 A69-34753

Determination of the brightness distribution over the source /O vosstanovlenii raspredeleniia radioiarkosti po istochniku/.  
20 p3606 A69-38033

## GONCHUKOV, S. A.

Influence of collisions on certain characteristics of a He-Ne laser /Vliianie soudarenii na nekotorye kharakteristiki He-Ne-lazera/.  
04 p0610 A69-14383

- Line shape and the through width of the gain curve of an He-Ne laser at the wavelength of 0.63  $\mu$  /Forma linii i shirina provala v krivoi usilenia He-Ne lazera na dline volny 0.63  $\mu$  k/.  
13 p2272 A69-28115
- Effect of collisions on certain characteristics of the He-Ne laser.  
14 p2456 A69-28756
- GONCZI, G.**  
A Fourier spectrum analysis of long samples of solar line oscillations.  
22 p4019 A69-40286
- GONDI, P.**  
Bilateral microscopy of dislocations and dislocation diodes in germanium.  
03 p0488 A69-13761
- GONIKMAN, V. I.**  
Hypothalamic neurosecretion and the state of adrenal glands in rats under high-altitude conditions /Gipotalamicheskaia neurosekreksiia i sostoianie nad-pochechnikov kryv v usloviakh vysokogor'ia/.  
13 p2211 A69-28615
- GONOR, A. L.**  
Investigation of the pressure distribution on certain star-shaped bodies at M approximately equals to 4.  
07 p1050 A69-18703
- GONSER, B. W.**  
Modern Materials- Advances in Development and Applications. Volume 6.  
04 p0619 A69-14581
- GONTIER, G.**  
Mechanics of Deformable Media- Principles and General Theorems /Mecanique des Milieux Deformables- Principes et Theoremes Generaux/.  
16 p2813 A69-32789
- GONTIER, Y.**  
Effective multiphoton ionization cross section calculated using a perturbed Green's function /Section efficace d'ionisation multiphotonique calculee en utilisant une fonction de Green perturbee/.  
02 p0283 A69-11539
- GONTKEVICH, V. S.**  
Natural oscillations of a liquid in a spherical vessel /Sobstvennye kolebaniia zhidkosti v sfericheskom sosude/.  
06 p0910 A69-17333
- GONYOU, G. W.**  
Dynamic CRT spot measurement techniques.  
21 p3719 A69-38329
- GONZALEZ, C.**  
Functional compatibility analysis of aircraft-engine fuel systems. [SAE PAPER 690308]  
11 p1825 A69-24503
- GONZALEZ, G.**  
T-wave inversion of the ECG of healthy individuals with vagotonia.  
09 p1445 A69-22557
- GONZALEZ, H. M.**  
Conformal coating for glass encased components.  
19 p3281 A69-35547
- GONZALEZ, R. C.**  
Some results in minimum-entropy feature extraction.  
11 p1909 A69-25291
- GONZE-DELYS, C.**  
Solar activity in 1967 /Activite solaire en 1967/.  
02 p0313 A69-11533
- GOOBERMAN, G. L.**  
Ultrasonics- Theory and Application.  
20 p3545 A69-37903
- GOOCH, P. C.**  
Chromosome analyses of Gemini astronauts.  
17 p2908 A69-33173  
The Gemini XI S-4 spaceflight-radiation interaction experiment - The human blood experiment.  
23 p4085 A69-41600
- GOOD, C. D.**  
Waste utilization for propulsion on manned space missions. [SAE PAPER 680717]  
03 p0495 A69-13442
- GOOD, M. L.**  
Proposed test for the radiation mechanism of pulsars.  
06 p1012 A69-18226
- GOOD, R. E.**  
Clusters in isentropically expanding nitric oxide and their effect on the chemiluminous NO-O reaction.  
04 p0555 A69-14864
- GOOD, T. M.**  
Establishing flight worthiness of mishandled electronic equipment.  
15 p2576 A69-30362
- GOODALL, I. W.**  
Plastic behaviour of thin cylindrical pressure vessels with circular cutouts and radial branches.  
20 p3629 A69-38027
- GOODE, M. W.**  
Flight test evaluation of a small one-man lunar flying device. [AIAA PAPER 68-240]  
02 p0229 A69-12379
- GOODELL, W. V.**  
A plastic virtual infinity lens system for large aperture cathode ray tube displays.  
05 p0760 A69-15592
- GOODERUM, P. B.**  
Measurement of mean drop sizes for sprays from superheated waterjets.  
09 p1483 A69-21995
- GOODIER, J. N.**  
Mathematical theory of equilibrium cracks.  
11 p1974 A69-24668
- GOODISON, C. E.**  
Satellites in the service of meteorology.  
08 p1409 A69-19960
- GOODKIN, J.**  
Stable zinc electrodes.  
10 p1640 A69-23995
- GOODMAN, A. B.**  
Fissioning in planarians - Control by the brain.  
14 p2406 A69-28871  
Insensible water loss from human skin as a function of ambient vapor concentration.  
23 p4077 A69-41293
- GOODMAN, B.**  
Displacement correlations and frequency spectra for mass-disordered lattices. II.  
03 p0493 A69-14241  
Frequency spectra in disordered alloys - An interpolation formula.  
20 p3583 A69-37279
- GOODMAN, B. C.**  
Probabilistic information processing systems - Design and evaluation.  
01 p0037 A69-10954
- GOODMAN, C. D.**  
Moessbauer investigation of shocked and unshocked iron meteorites and fayalite.  
03 p0517 A69-14231
- GOODMAN, D. J.**  
The application of delta modulation to analog- to-PCM encoding.  
09 p1455 A69-21844
- GOODMAN, H. R.**  
Area navigation equipment role. [AIAA PAPER 69-798]  
19 p3367 A69-35632
- GOODMAN, J. R.**  
Layered beam systems with interlayer slip.  
01 p0169 A69-10638
- GOODMAN, J. W.**  
Digital image formation from detected holographic data.  
10 p1695 A69-23547  
Systems applications of holography.  
11 p1883 A69-24688  
Use of multiple reference sources to increase the effective field of view in lensless Fourier-transform holography.  
17 p2971 A69-32920  
Experiments in long-distance holographic imagery.  
23 p4167 A69-42184
- GOODMAN, R. A.**  
Organization and manpower utilization in research and development.  
08 p1423 A69-21155
- GOODMAN, R. M., JR.**  
Geodesic lenses for radar antennas.  
03 p0402 A69-13184
- GOODWIN, D. W.**  
Doped-crystal and gas lasers.  
08 p1323 A69-19869  
Motion of a bubble in a rotating liquid.  
09 p1483 A69-22006
- GOODWIN, F. E.**  
Optical heterodyne communications experiments at 10.6  $\mu$ . [IEEE PAPER J-5]  
05 p0720 A69-16319
- GOODWIN, G. M.**  
Effects of minor additions on weldability of Incoloy 800.  
22 p3967 A69-39884
- GOODWIN, P. M.**  
Plastics applications in the Naval Air Systems Command.  
21 p3751 A69-38532
- GOODWIN, R. D.**  
Specific heats of oxygen at coexistence.  
10 p1808 A69-23187  
Specific heats C sub v of fluid oxygen from the triple point to 300 K at pressures to 350 atmospheres.  
10 p1808 A69-23188  
Thermodynamic properties of fluid oxygen at temperatures to 250 K and pressures to 350 atmospheres on isochores at 1.3 to 3.0 times critical density.  
10 p1808 A69-23189  
Nonanalytic vapor pressure equation with data for nitrogen and oxygen. [NAS-NRC PAPER H-1]  
22 p4051 A69-40628
- GOODY, R.**  
The atmospheres of Mars and Venus - A summary review.  
02 p0318 A69-12102  
Motions of planetary atmospheres.  
21 p3811 A69-39511  
The general circulation of the Martian atmosphere.  
21 p3814 A69-39569
- GOODY, R. M.**  
Quantitative spectroscopy of Venus in the region 8,000-11,000 angstrom units.  
02 p0319 A69-12107  
Measurement of the abundance of CO sub 2 in the Martian atmosphere.  
09 p1607 A69-22427  
Motions in the atmosphere of Jupiter.  
15 p2694 A69-30856  
Venus - The next phase of planetary exploration.  
23 p4216 A69-42201
- GOODYEAR, C. C.**  
Electron detachment from negative oxygen ions at beam energies in the range 3 to 100 ev.  
09 p1542 A69-21625
- GOOGINS, G. C.**  
Design, development, and testing of a series of air-launched sounding rockets.  
21 p3820 A69-39218
- GOOLD, R. D.**  
Novel fire retardant polyesters based on bromine.  
08 p1340 A69-20504
- GOORVITCH, D.**  
Interferometrically measured thorium lines between 2747 and 4572 angstrom units.  
23 p4191 A69-42150
- GOPAL RAO, M. S. V.**  
The hysteresis variation in F2-layer parameters.  
21 p3715 A69-38560
- GOPALAKRISHNAN, A.**  
Mixing, ignition, and combustion analysis of air-augmented solid rockets with boron particles. [AIAA PAPER 67-481]  
24 p4365 A69-43668
- GOPALAKRISHNAN, N. V.**  
Studies in extensive air showers at Ootacamund.  
06 p0990 A69-17299
- GOPALAN, K.**  
Rubidium-strontium age of hypersthene /L/ chondrites.  
02 p0317 A69-12020  
Rubidium-strontium age of amphoterite /LL/ chondrites.  
21 p3814 A69-39583
- GOPASIUK, S. I.**  
Certain specific features of the velocity field in a developed active region /O nekotorykh osobennostiakh polia skorosti v razvitoi aktivnoi oblasti/.  
04 p0651 A69-14370
- GOPIN, A. J.**  
An engineering technique to optimize a constant thickness fin with arbitrarily distributed heat sources. [SAE PAPER 690198]  
07 p1239 A69-18302
- GOPPEL, J. M.**  
New concepts in processing.  
18 p3148 A69-34612
- GORA, T.**  
Theory of electronic states and transport in graded mixed semiconductors.  
10 p1745 A69-23360



## GORANCHEV, B.

## GORANCHEV, B.

Pulse investigation on thermionic converters.  
14 p2403 A69-29252

## GORAZDOVSKII, T. I. A.

Using the harmonics of a transducer signal in the measurement of mechanical stresses in steel by the eddy-current method.  
24 p4296 A69-42654

## GORBACHEV, A. A.

Impulse-noise limiter with tracking threshold in receivers of noise-like signals.  
05 p0719 A69-16086

Influence of amplitude limiting in noise receivers on the accuracy of measurement in the presence of impulsive interference.  
07 p1088 A69-19754

## GORACHEVA, A. N.

Thermoelectric properties of unalloyed bismuth telluride and solid solutions of the Bi sub 2 Te sub 3 -Bi sub 2 Se sub 3 system.  
15 p2670 A69-31248

## GORBAN, A. P.

Measurement of the composite field effect in semiconductors /Izmerenie kombinirovannogo effekta polia v poluprovodnikakh/.  
10 p1698 A69-24210

## GORBAN, G. M.

Comparative toxicological characteristics of some regenerable absorbers of carbon dioxide.  
10 p1646 A69-23502

## GORBATKOV, S. A.

Two-dimensional flow of an anisotropically conducting incompressible fluid in axisymmetric channels with a longitudinal-transverse magnetic field /Dvumernoe techenie anizotropno provodiaschei neszhimaemoi zhidkosti v osesimmetrichnykh kanalakh s prodol'no-poperechnym magnitnym polem/.  
07 p1192 A69-19015

## GORBATSKII, V. G.

Some problems concerning gas flows in close binary systems of dwarf stars.  
08 p1396 A69-20648

The radiation of a gas heated by a strong shock wave and its role in the luminescence of star shells in close binary systems /Izluchenie gaza, nagretogo sil'noi udarnoi volnoi, i ego rol' v sveschenii zvezdnykh obolochek v tesnykh dvoynykh sistemakh/.  
13 p2350 A69-27860

## GORBIN, V. V.

Transfer function of a distributed detector.  
05 p0736 A69-16787

## GORBIS, Z. R.

Study of the heat transfer of a rotating sphere under conditions of natural convection by the Schlieren method /Issledovanie teploobmena vrashchaiushchei sfera v usloviakh estestvennoi konveksii s primeneniem Shlieren-metoda/.  
01 p0174 A69-10095

Some regularities of the pulsating motion of a solid particle in turbulent flow /Nekotorye zakonomernosti pul'satsionnogo dvizhenia tverdoi chastitsy v turbulentnom potoke/.  
11 p1876 A69-25489

## GORBODEI, A. T.

Cold-shortness threshold of tungsten-molybdenum alloys.  
05 p0783 A69-16809

## GORBONOSOV, A. E.

Temperature dependence of the Josephson current in anisotropic superconductors.  
05 p0810 A69-16803

## GORBOV, F. D.

Study of human sleep under conditions of prolonged rotation /Issledovaniia sna cheloveka v usloviakh dlitel'nogo vrashchenia/.  
20 p3472 A69-37261

## GORBUNOV, A. I.

Enhancement of the resolving power of pulsed ultrasonic flaw detectors.  
18 p3137 A69-35112

## GORBUNOV, E. P.

Spatial distribution of plasma density from phase measurements.  
03 p0480 A69-14138

Determination of the spatial distribution of plasma density from the phase shift as measured by microwave multichannel probes /Opredelenie prostanstvennogo raspredeleniia plotnosti plazmy po fazovomu svygu pri mnogokanal'nom mikrovolnovom zondirovani/.  
14 p2497 A69-29792

## GORBUNOV, L. M.

The motion of a plasma in the field of a strong electromagnetic wave.  
03 p0477 A69-13413

Perturbation of a medium by the field of a strong electromagnetic wave /Vozmushchenie sredy polem sil'noi elektromagnitnoi volny/.  
09 p1453 A69-21570

Instability of a magnetized plasma in a strong high-frequency field /O neustoiichivosti zamagnichennoi plazmy v sil'nom vysokochastotnom pole/.  
12 p2136 A69-26526

## GORBUNOV, N. S.

Protective coatings on graphite.  
09 p1528 A69-21850

Chromizing of steels by vacuum diffusion /Vakuum-diffuzionnoe khromirovanie stali/.  
19 p3329 A69-36572

Vapor phase coating of particles /Obrazovanie pokrytii na chastitsakh iz parogazovoi fazy/.  
20 p3548 A69-37363

Physicochemical conditions of niobium carbide deposition on graphite /Fiziko-khimicheskie uslovia osazhdeniia na grafite karbida niobia/.  
20 p3566 A69-37367

Investigation of the process of niobium carbide formation on graphite particles /Issledovanie protessa obrazovaniia karbida niobia na grafitovykh chastitsakh/.  
20 p3566 A69-37369

Formation of carbide coatings on graphite in molten media /K voprosu obrazovaniia karbidnykh pokrytii na grafite v rasplavlennykh sredakh/.  
20 p3566 A69-37372

## GORBUNOV, V. I.

Influence of the magnetic fields of associated magnetic masses on the precision of moment sensor operation /O vliianii magnitnykh polei prisoedinennykh magnitnykh mass na tochnost' raboty momentnogo datchika/.  
09 p1497 A69-22102

## GORBUNOV, V. V.

Burning ability and inflammability of mixtures of powdered highly calorific metals with organic compounds of the C sub x H sub y O sub z series /Sposobnost' k goreniui i vosplameniaemost' smesi poroshkov vysokokalorichnykh metallov s organicheskimi veshchestvami formuly C sub x H sub y O sub z/.  
02 p0355 A69-12669

## GORBUSHINA, G. N.

Maps of auroral absorption from riometric observation data /Karty avroral'nogo pogloshcheniia po dannym riometricheskikh nabludenii/.  
17 p2967 A69-33990

Cyclic variations of auroral absorption and its relation to magnetic activity /Tsiklicheskie variatsii avroral'nogo pogloshcheniia i ego svyaz' s magnitnoi aktivnost'iu/.  
17 p2968 A69-33991

## GORCHAKOV, E. V.

Particle fluxes in the outer geomagnetic field.  
12 p2150 A69-26744

Results of measurements of fast charged particles by the Cosmos 137 satellite /Rezultaty izmerenii bystrykh zariazhennykh chastits na sputnike "Kosmos-137"/.  
13 p2327 A69-27693

## GORCHAKOVA, E. N.

Phase composition of heat-resistant ferritic and austenitic steels with intermetallic hardening /Fazovyi sostav zharoпрочnykh ferritnykh i austenitnykh stali s intermetallidnym uпрочneniem/.  
13 p2283 A69-28487

## GORCHAKOVA, I. A.

Application of statistical regularization to the determination of the vertical temperature profile of the atmosphere /Primenenie statisticheskoi regularizatsii k opredeleniiu vertikal'nogo profil'a temperatury atmosfery/.  
18 p3167 A69-35339

On application of the statistical method for determination of atmospheric temperature profiles from satellites.  
19 p3303 A69-36409

## GORDEEV, A. V.

Plasma instability in a strongly inhomogeneous magnetic field /Neustoiichivost' plazmy v sil'no neodnorodnom magnitnom pole/.  
09 p1546 A69-21571

## GORDEEV, G. V.

Plasma oscillations in electric and magnetic fields.  
03 p0480 A69-14134

Low-frequency oscillations of an electron-hole plasma in electric and magnetic fields /Nizkochastotnye kolebaniia elektronno-dyrochnoi plazmy v elektcheskom i magnitnom poliakh/.  
13 p2323 A69-28581

## GORDEEV, V. G.

Two-rotor gyroorbit theory /Teoriia dvukhrotornoi giroorbity/.  
21 p3765 A69-39636

## GORDEEVA, I. F.

Time-dependence of orbital elements in long-period oscillations in the three-body boundary-value problem.  
10 p1791 A69-24196

## GORDEEVA, T. A.

Influence of the test conditions on the state of the surface layer of nozzle guide vanes /Vliianie uslovii ispytaniia na sostoianie poverkhnostnogo sloia lopatok soplovoogo apparata/.  
20 p3561 A69-37370

## GORDEZHIANI, D. G.

A difference method for solving multidimensional differential equations of higher orders /Ob odnom raznostnom metode resheniia mnogomernykh differentsial'nykh uravnenii vysshikh poriadkov/.  
20 p3568 A69-38074

## GORDIAKOVA, G. N.

Thermoelectric properties of unalloyed bismuth telluride and solid solutions of the Bi sub 2 Te sub 3 -Bi sub 2 Se sub 3 system.  
15 p2670 A69-31248

## GORDIENKO, B. A.

Buckling of rods under an impact load /Vpuchivanie sterzhnei pri udarnom nagruzenii/.  
18 p3217 A69-34580

## GORDIENKO, L. K.

Study of the role of surface layers and conditions of strain aging during multiple thermomechanical treatment, on the basis of internal friction relaxation maxima /Issledovanie roli poverkhnostnykh sloev i uslovii deformatsionnogo starenia pri mnogokratnoi mekhaniko-termicheskoi obrabotke po relaksatsionnym maksimumam vnutrennego treniia/.  
17 p2991 A69-33939

Application of the internal friction method for determining the stability of strengthening effect during thermomechanical treatment of heat-resistant alloys /Ispol'zovanie metoda vnutrennego treniia dlia opredeleniia ustoiichivosti effekta uprochneniia pri mekhaniko-termicheskoi obrabotke zharoпрочnykh splavov/.  
17 p2991 A69-33940

## GORDIENKO, V. P.

High-frequency stabilization of a plasma cylinder carrying current in a longitudinal magnetic field.  
04 p0635 A69-14549

Investigation of the fiber distribution in oriented fiberglass-reinforced plastics /Issledovanie raspredeleniia volokon v orientirovannykh stekloplastikakh/.  
18 p3162 A69-35355

## GORDIETS, B. F.

Relaxation processes and stimulation of radiation in a dense plasma /O relaksatsionnykh protsessakh i usilenii izlucheniia v plotnoi plazme/.  
01 p0131 A69-10789

Obtaining an inverse population of vibrational levels in polyatomic molecules /O poluchenii invernoi zaselennosti na kolebatel'nykh urovniakh mnogatomnykh molekul/.  
02 p0259 A69-12647

Some applications of the relaxation theory of a highly ionized hydrogen plasma /Nekotorye prilozheniia teorii relaksatsii vysokoionizovannoi vodorodnoi plazmy/.  
07 p1191 A69-18996

Relaxation processes and amplification of radiation in a dense plasma.  
20 p3582 A69-38006

## GORDIETZ, B. F.

Population inversion of the vibrational levels in CO sub 2 lasers. [IEEE PAPER G-15]  
07 p1151 A69-19061

## GORDIN, K. A.

Kinetics of the deformation and breakup of a liquid droplet in a gas flow /K kinetike deformatsii i drobleniia zhidkoi kapli v gazovom potoke/.  
11 p1875 A69-25466

## GORDON, A. H.

A numerical experiment to predict a mean meridional pressure profile ab initio by Lagrangian integration.  
04 p0627 A69-15086

**GORDON, A. R.**

Experimental study of the effect of the similarity factor on the radiating power /emissivity/ of metals.  
05 p0845 A69-15894

Modified nonstationary method of determining the absorptivity of materials /Modifitsirovannyi nestatsionarnyi metod opredeleniia pogloschchatel'noi sposobnosti materialov/.  
09 p1528 A69-22720

Method of determining the integral hemispheric radiative capacity of materials in the temperature range from -100 to 1000 deg C.  
18 p3156 A69-34698

**GORDON, C. G.**

Spoiler-generated flow noise. II.  
07 p1183 A69-19462

**GORDON, C. P.**

Estimates of pulsar distances from neutral hydrogen absorption.  
12 p2156 A69-26224

Properties of interstellar clouds and the intercloud medium.  
17 p3038 A69-33726

**GORDON, D. G.**

Graphical systems communication - An associative memory approach.  
04 p0566 A69-15343

**GORDON, D. I.**

A fluxgate sensor of high stability for low field magnetometry.  
[IEEE PAPER 10.2] 01 p0081 A69-10715

**GORDON, F. B.**

Production of interferon in mice - Effect of altered gaseous environments.  
24 p4262 A69-42888

**GORDON, G. D.**

Differential equations and integration with BTSS.  
10 p1659 A69-23142

**GORDON, I. M.**

Radar studies of the sun and the mechanism of reflected-signal formation in the corona /Radiolokatsionnye issledovaniia solntsa i mekhanizm formirovaniia otrazhennogo signala v korone/.  
03 p0505 A69-13082

Interpretation of radio echoes from the sun.  
10 p1776 A69-23219

Radar observations of the sun and a mechanism for producing the reflected signal in the corona.  
14 p2515 A69-28764

Radar explorations of the sun and physical processes of the solar corona.  
18 p3201 A69-35207

**GORDON, J. I.**

Model for a clear atmosphere.  
07 p1130 A69-19643

**GORDON, J. W.**

Transient switching of fluidic bistable wall attachment amplifiers.  
17 p2904 A69-34068

**GORDON, K. J.**

The distribution of neutral hydrogen and the kinematic properties of NGC 6946.  
09 p1598 A69-22187

Estimates of pulsar distances from neutral hydrogen absorption.  
12 p2156 A69-26224

Properties of interstellar clouds and the intercloud medium.  
17 p3038 A69-33726

Search for a neutral-atomic-hydrogen link between M31 and M33.  
22 p4024 A69-40578

**GORDON, M. A.**

A map of M -42 and M -43 at a wavelength of 1.94 cm.  
17 p3035 A69-33609

**GORDON, P.**

Hypervelocity impact of bumper-protected fuel tanks.  
[AIAA PAPER 69-369] 13 p2367 A69-28301

**GORDON, P. L.**

Continuous infrared parametric amplification in a saturable absorber.  
14 p2459 A69-29601

**GORDON, R.**

Agreement in endpoints from circadian rhythmometry on healthy human beings living on different continents.  
23 p4083 A69-41457

**GORDON, R. B.**

Structure of the parent taenite of the Gibeon meteorite.  
17 p3034 A69-33586

**GORDON, S.**

Calculation of complex chemical equilibria.  
01 p0023 A69-10588

Composite modified cast-double-base propellants - Technology and application.  
17 p3017 A69-33349

**GORDON, T. J.**

National programs and the progress of technological societies.  
03 p0536 A69-14245

Economics of commercial space stations.  
06 p1007 A69-17599

Critical engineering problems of space stations.  
06 p1007 A69-17601

A report on the Orbital Astronomy Support Facility /OASF/ study.  
18 p3206 A69-34369

**GORDON, V. G.**

High-melting-point oxide and carbide materials for electrode walls of MHD generators /Tugoplavkie okisnye i karbidnye materialy v elektrodnykh stenkakh MGD-generatorov/.  
13 p2284 A69-27471

**GORE, L. A.**

A multi-mission interplanetary probe using 3-kw solar electric propulsion.  
06 p0984 A69-17593

**GOREHAM, A. R.**

The prevention of fretting fatigue in aluminium alloys.  
09 p1526 A69-22148

**GORELENOK, A. T.**

Photoluminescence method of measuring the distribution of equilibrium carrier concentration in GaAs /Fotoluminescentnyi metod izmereniia raspredeleniia konsentratsii ravновесnykh nositelei toka v GaAs/.  
03 p0489 A69-13893

Power epitaxial GaAs tunnel diodes /Moshchnye epitaksial'nye tunnel'nye diody iz GaAs/.  
03 p0489 A69-13895

Photoluminescence of epitaxial n-type GaAs prepared from p-type GaAs.  
03 p0492 A69-14167

Photoluminescence method of measuring the equilibrium carrier distribution in GaAs.  
11 p1939 A69-25694

High-power epitaxial GaAs tunnel diodes.  
11 p1939 A69-25696

**GORELIK, A. G.**

Radar characteristics of "angel" echoes /Radiolokatsionnye kharakteristiki otrazhenii ot "iasnogo neba"/.  
09 p1491 A69-22706

Radar investigation of the structure of turbulent flow in subfrontal clouds and precipitation in the atmospheric boundary layer /Izuchenie struktury turbulentnogo potoka radiolokatsionnym metodom v prizemnom sloe v podrontal'nykh oblakakh i osadkakh/.  
16 p2807 A69-32272

A new method of measuring the rate of dissipation of turbulence in clouds and precipitations with the aid of a conventional radar station /O novom sposobe izmerenii skorosti dissipatsii turbulentnosti v oblakakh i osadkakh pri pomoshchi obychnoi radiolokatsionnoi stantsii/.  
16 p2807 A69-32273

Measurement of the rate of motion of angel sources /Izmereniia skorosti dvizheniia istochnikov otrazheniia ot "iasnogo" neba/.  
16 p2779 A69-32276

Radar characteristics of angels.  
16 p2753 A69-32486

Determination of the velocity of vertical air motions in rain with the aid of a Doppler radar /Opredelenie skorosti vertikal'nykh dvizhenii vozdukh v dozhdiax s pomoshch'iu dopplerovskogo radiolokatora/.  
18 p3104 A69-35342

**GORELIK, S. S.**

Atomic structure of the surface of semiconductor crystals as exemplified by A and B polar faces in the InSb crystal /Atomnaia struktura poverkhnosti poluprovodnikovyykh kristallov na primere poliarnykh granei A i B kristalla InSb/.  
10 p1747 A69-23965

Aging of some ferrites with a spinel structure /O starenii nekotorykh ferritov so strukturoi spineli/.  
13 p2320 A69-27997

**GORELL, R. L.**

The effect of the atmosphere on photographic images over a long range oblique path.  
01 p0107 A69-10223

**GORELOV, D. N.**

Oscillations of airfoil arrays in a nonuniform incompressible fluid flow /O kolebaniakh profilей reshetki v neravnonomernom potoke neszhimaemoi zhidkosti/.  
24 p4245 A69-43479

**GORELOV, I. N.**

Insulating materials of thermoemission converters.  
14 p2467 A69-29214

**GORELOV, S. L.**

Mathematical experiment for the calculation of transport coefficients.  
03 p0415 A69-13419

Solution of linear problems in rarefied-gas dynamics by the Monte Carlo method /Reshenie lineinykh zadach dinamiki razrezhennogo gaza metodom Monte-Karlo/.  
06 p0910 A69-17345

Solutions to the problem of the temperature jump /the flow in a Knudsen layer/ and to the linear problem of heat transfer between two parallel plates in a rarefied gas /Reshenie zadachi o skachke temperatury /techenie v sloe Knudsen/ i lineinoi zadachi o peredache tepla mezhdru dvumia parallel'nyimi plastinami v razrezhennom gaze/.  
24 p4246 A69-43490

**GORELOV, V. A.**

Measurement of the electrical conductivity of the air behind incident and reflected shock waves by the electrode method /Izmerenie elektroprovodnosti vozdukh za padaiushchei i otrazhennoi udarnoi volnoi elektrodnyim metodom/.  
11 p1888 A69-25220

**GORELOVA, M. A.**

Measurement of the electrical conductivity of the air behind incident and reflected shock waves by the electrode method /Izmerenie elektroprovodnosti vozdukh za padaiushchei i otrazhennoi udarnoi volnoi elektrodnyim metodom/.  
11 p1888 A69-25220

**GORENSTEIN, P.**

The location of the X-ray source in Vela.  
02 p0308 A69-12594

The spectrum of diffuse cosmic X-rays, 1-13 kev.  
13 p2326 A69-27570

X-ray spectral data from GX3 plus 1.  
20 p3594 A69-38172

**GORETZKI, H.**

Microreflection measurements on pressure-sintered samples of the titanium-TiN-TiC and zirconium-ZrN-ZrC systems /Mikroreflexionsmessungen und druckgesinterten Proben der Systeme Titan-TiN-TiC und Zirkonium-ZrN-ZrC/.  
20 p3559 A69-37330

**GORGILADZE, G. I.**

Electrophysiological study of the interaction between the vestibular and visual afferent systems /Elektrofiziologicheskoe issledovanie vzaimodeistvia vestibuliarnoi i zritel'noi afferentnykh sistem/.  
20 p3469 A69-37244

Microelectrode study of neuron reactions in the vestibular nuclei of cats during polarization and caloric stimulation of the labyrinth. /Mikroelektroodnoe issledovanie reaktsii neuronov vestibuliarnykh iader u koskhi pri polarizatsii i kaloricheskome razdrashenii labirintov/.  
20 p3471 A69-37255

**GORHAM, J. A.**

Design and development of the fail operative automatic landing system for the Lockheed L-1011.  
[SAE PAPER 690407] 23 p4185 A69-41657

**GORHAM, J. E.**

Long term trends in airlines economics.  
[SAE PAPER 690414] 23 p4241 A69-41641

**GORIAACHEV, V. L.**

The effect of the construction of the working channel on the flow parameters of a plasma obtained in a shock tube.  
03 p0481 A69-14160

Ambipolar diffusion in the boundary layer formed behind a shock front.  
12 p2139 A69-26713

Interaction between a moving plasma and a transverse magnetic field /O vzaimodeistvii dvizhushcheisya plazmy s poperechnym magnitnym polem/.  
14 p2501 A69-29919



# GORIAGA, A. N.

## GORIAGA, A. N.

Investigation of exchange interactions in lithium ferrite aluminates /Issledovanie obmennykh vzaimodeistvii v ferritakh- aluminatakh litii/.  
13 p2320 A69-27995

## GORIAGINOV, A. S.

Asymptotic electromagnetic wave reflection from an impedance cylinder of arbitrary shape.  
02 p0217 A69-12262

## GORIDOV, S. I.

Properties of indium arsenide film Hall transducers in strong constant magnetic fields at liquid helium temperatures.  
10 p1696 A69-23717

## GORINA, T. I.

Determination of the optimal motion regime of a point of variable mass during its approach to a target /Nakhozhdenie optimal'nogo rezhima dvizheniia tochki peremennoi massy pri sblizhenii ee s tsel'iu/.  
21 p3818 A69-39819

## GORINOV, N.

On the connection between the F region and the E sub s layer.  
13 p2254 A69-28330

## GORIUNOV, L. V.

Calculation of a radial hydrostatic bearing /K raschetu radial'nogo gidrostaticheskogo podshipnika/.  
11 p1892 A69-25341  
Certain design features of radial hydrostatic bearings used in high-speed machines /Nekotorye osobennosti rascheta radial'nykh gidrostaticheskikh podshipnikov bystrokhodnykh mashin/.  
24 p4321 A69-43091

## GORIUNOV, N. N.

Breakdown localization in p-n junctions.  
04 p0577 A69-14782

## GORIUNOV, S. A.

Softening mechanism of heat-resisting alloys during cyclic heating /Mekhanizm razuprochneniia zharoprochnykh splavov pri tsiklicheskikh nagrevakh/.  
21 p3746 A69-38957

## GORIUNOV, V. I.

Theory of synchronization of a quasi-harmonic oscillator with a nonlinearity in the form of a cubic parabola /K teorii sinkhronizatsii kvazigarmonicheskogo ostiliatora s nelineinost'iu vida kubicheskoi paraboly/.  
04 p0578 A69-15136

## GORIUANOVA, N. A.

Generation of the second harmonic in ternary semiconductor compounds /Generatsiia vtoroi garmooniki v troinykh poluprovodnikovykh soedineniiakh/.  
03 p0489 A69-13894

Phenomena in solid solutions.  
04 p0641 A69-14505

Role of vacancies and substitutional impurities in the formation of the 1.7-ev luminescence band of gallium phosphide.  
04 p0643 A69-15258

Existence of a diamond-like semiconductor in a glassy state /O suschestvovanii almazopodobnogo poluprovodnika v stekloobraznom sostoianii/.  
10 p1747 A69-23963

Generation of a second harmonic in ternary semiconducting compounds.  
11 p1939 A69-25695

Electron and lattice heat conductivity of n-Cd sub 3 As sub 2 at low temperatures /Elektronnaia i reshetochnaia teploprovodnost' n-Cd sub 3 As sub 2 pri nizkikh temperaturakh/.  
16 p2824 A69-31568

## GORIUANOVA, N. O.

Electrical properties of n-CdSnAs sub 2 over a broad range of temperatures and impurity concentrations.  
05 p0809 A69-16375

## GORIUANOVA, T. I.

Changes in precise motions of persons with various degrees of physical preparedness under the effects of hypokinesia /Izmenenie tochnykh dvizhenii u lits razlichnoi fizicheskoi podgotovlennosti pod vlianiem gipokinezii/.  
17 p2906 A69-32937

## GORIUSHKIN, V. A.

Initial stresses in glass-fiber reinforced plastic rings produced by winding /Nachal'nye napriazheniia v kol'tsakh iz stekloplastika, izgotovlennykh namotkoi/.  
22 p4045 A69-40749

## GORKOV, V. A.

Some data on the detonatability of ammonium perchlorate.  
11 p1940 A69-24553

## GORKUN, I. I.

Electrical conductivity in the surface layers of semiconductors with a many-valley energy spectrum of the current carriers /Elektroprovodnost' pri poverkhnnykh shariiv napivprovodnikh z bagatodolinnim energetichnim spektrom nosiv strumu/.  
11 p1937 A69-24915

## GORLIN, S. M.

Effect of the initial flow turbulence on the aerodynamic drag of poorly streamlined bodies with sharp edges /Vliianie nachal'noi turbulentnosti potoka na aerodinamicheskoe soprotivlenie plokhio obtekaemykh tel s ostrymi kromkami/.  
14 p2391 A69-29625

## GORLOV, V. B.

Stiffness of heat exchanger tube plates /O zhestkosti trubnykh dosok teploobmennyykh apparatov/.  
24 p4400 A69-43087

## GORMAN, D.

Stochastic optimal control of continuous time systems with unknown gain.  
11 p1860 A69-25442

## GORMAN, D. N.

Thermal design, analysis, and testing of a full-size planetary lander model. [AIAA PAPER 69-612]  
17 p3049 A69-33296

## GORMAN, J. A.

Mobility of dislocations in aluminum at 74 deg and 83 deg K.  
10 p1713 A69-23840

## GORMAN, J. T.

Use of Huygen sources for glide path site analysis.  
17 p3003 A69-34107

## GORMLEY, J. F.

Nonsymmetric modes of complete spherical shells.  
17 p3061 A69-33706

## GORN, L. S.

Radiation measurements in space.  
20 p3591 A69-38018

## GORNOSTAEV, N. V.

Receiver for the automatic conversion of meteorological radar signals /Priemnoe ustroistvo dlia avtomaticheskogo preobrazovaniia radiolokatsionnykh meteorologicheskikh signalov/.  
16 p2791 A69-32280

A method of diminishing the dead zone of a meteorological radar /Ob odnom metode umen'sheniia mertvoi zony meteorologicheskogo radiolokatora/.  
16 p2791 A69-32281

## GOROBETS, N. N.

Statistics of the field of a phasing section /Statistika polia faziruushchei sektsii/.  
23 p4125 A69-42041

## GORODETSKII, A. A.

Biological action of ruby laser emission /O biologicheskome deistvii izlucheniia rubinovogo lazera/.  
21 p3665 A69-39060

## GORODETSKII, A. E.

Kinetics of new-phase formation under ion bombardment.  
06 p0978 A69-16985

## GORODETSKII, A. K.

Scientific program and scientific equipment complex of the Cosmos 149 artificial earth satellite /Nauchnaia programma i kompleks nauchnoi apparatury ISZ "Kosmos-149"/.  
14 p2447 A69-29403

Procedure and certain results of the determination of the temperature of the underlying surface from the Cosmos 149 satellite /Metodika i nekotorye rezul'taty opredeleniia temperatury podliashchshei poverkhnosti so sputnikia "Kosmos-149"/.  
15 p2596 A69-30651

## GORODETSKII, O. A.

Unsteady processes in a stage of a centrifugal compressor with a vaneless diffuser /Nestatsionarnye protsessy v stupeni tsentroběžnogo kompressora s bezlopatochnym diffuzorom/.  
15 p2547 A69-30073

## GORODETSKII, S. M.

A possible mechanism for the formation of complex radiation defects in silicon caused by electron bombardment.  
10 p1747 A69-23713

## GORODETSKII, S. S.

Mechanical properties of refractory materials based on boron and silicon nitrides.  
15 p2643 A69-31244

## GORODETSKII, V. I.

Optimum parametric laws of space vehicle descent control /Optimal'ne parametricheskie zakony upravleniia snizheniem kosmicheskogo apparata/.  
21 p3766 A69-39668

## GORODINSKII, S. M.

Heat stress dynamics and limits of heat tolerance in man.  
08 p1263 A69-19940

Dynamics of the elimination of certain products of metabolism in humans kept in isolation.  
10 p1646 A69-23508

## GORODKOV, S. S.

Nuclear Interactions in Spacecraft Shielding /Iadernye Vzaimodeistviia v Zashchite Kosmicheskikh Korablei/.  
14 p2481 A69-29817

## GORODNICHII, O. P.

Longitudinal magnetoresistance of n-type InSb.  
04 p0643 A69-15262

Magnetoresistance and Hall effect of n-InSb single crystals having a high dislocation density.  
14 p2503 A69-28734

## GOROG, I.

On the expansion anisotropy of laser produced plasmas.  
05 p0804 A69-16460

Single-frequency argon laser.  
21 p3738 A69-39140

## GOROKHOV, L. I.

Statistical characteristics of continuous short-wave radio signals at frequencies above the MUF.  
03 p0394 A69-13522

## GOROKHOV, N. A.

Experimental investigation of microwave radiation of a quasi-steady-state plasma /Eksperimental'noe issledovanie mikrovolnovnogo izlucheniia kvazistatsionarnoi plazmy/.  
03 p0473 A69-12897

Facility for studying electromagnetic radiation at millimeter and submillimeter wavelengths /Apparatura dlia issledovaniia elektromagnitnogo izlucheniia v milimetrovom i submillimetrovom diapazonakh dlin voln/.  
14 p2451 A69-29786

## GOROKHOV, V. A.

Calculation of thyristor pulse generators with a storage capacitor discharge /K raschetu impul'snykh generatorov na tiristorakh s razriadom nakopitel'nogo kondensatora/.  
11 p1846 A69-24615

Beryllium - A new structural metal /Berillii - Novyi konstruktsionnyi metall/.  
11 p1904 A69-24897

Fast-acting composite transistor /Bystrodeistvuiushchii sostavnoi tranzistor/.  
13 p2235 A69-28517

## GOROSHCHENIA, A. B.

Phase distribution of the current in an anisotropically conducting helical cone and its application in the analysis of frequency independent antennas.  
03 p0408 A69-14133

## GOROVE, S.

Interpreting Article II of the Outer Space Treaty.  
20 p3635 A69-37107

Interpreting salient provisions of the agreement on the rescue of astronauts, the return of astronauts, and the return of objects launched into outer space.  
20 p3636 A69-37113

## GOROVITS, V. S.

Calculation of the field in the coil area of x plane linear induction MHD machines with allowance for the finiteness of the magnetic permeability of iron /Raschet polia v obmotchnoi zone ploskolineinykh induktsionnykh MGD-mashin s uchedom konechnosti magnitnoi pronitsaemosti zheleza/.  
07 p1059 A69-19028

Calculation of fields in plane-parallel induction MHD machines with allowance for the finiteness of the winding zone thickness and the magnetic permeability of iron /Raschet polia v ploskolineinykh induktsionnykh MGD- mashinakh s uchedom konechnosti tolshchiny obmotchnoi zony i magnitnoi pronitsaemosti zheleza/.  
14 p2405 A69-29914

## GOROVOI, B. I.

The An-24 Aircraft- Construction and Exploitation /Samolet An-24- Konstruktsiia i Eksploatatsiia/.  
16 p2735 A69-32112

- GORR, G. V.**  
Conditions constraining the parameters in a particular solution to the problem of the motion of a body containing a liquid /Ob usloviakh, stesniaushchikh parametry v odnom chastnom reshenii zadachi o dvizhenii tela s zhidkim zapolneniem/.  
11 p1868 A69-24775  
Concerning Kowalewski's solution to the equations of motion of a body having a fixed point /O reshenii N. Kovalевского uravnenii dvizheniia tela, imeiushchego nepodvizhnuu točku/.  
11 p1917 A69-24776
- GORSHKOV, A. G.**  
Action of an acoustic pressure wave on a shallow spherical shell /Deistvie akusticheskoi volny davleniia na pologuui sfericheskuiu obolochku/.  
02 p0339 A69-11977  
Displacement of a rigid cylinder under the influence of an acoustic pressure wave /Peremeshchenie zhestkogo tsilindra pod deistviem akusticheskoi volny davleniia/.  
04 p0667 A69-14261  
Action of an acoustic pressure wave on a hollow spherical shell.  
15 p2704 A69-30262
- GORSHKOV, A. I.**  
Edge cleanliness control in argon shielded arc welding of titanium alloy components.  
06 p0932 A69-17898  
Sensitivity of the vestibular analyzer and sensory reactions of man during short-term weightlessness /Chuvstvitel'nost' vestibuliarnogo analizatora i sensornye reaktsii cheloveka pri kratkovremennoi nevesomosti/.  
07 p1062 A69-18586  
Vestibular reactions of cosmonauts during the flight on the Voskhod spacecraft /Vestibuliarnye reaktsii kosmonavtov pri Plete na korabe "Voskhod"/.  
07 p1062 A69-18588  
Certain reactions of man under conditions of reduced gravitation /O nekotorykh reaktsiiakh cheloveka v usloviakh ponizhennoi vesomosti/.  
07 p1062 A69-18592  
Functioning of the otolithic apparatus during weightlessness in aircraft flights.  
08 p1263 A69-19934  
Aspects of pore formation in the welding of titanium.  
11 p1892 A69-25669  
Specific features of the functional state of the otolith apparatus under conditions of altered gravity /Osobennosti funktsional'nogo sostoiianiia otolitovogo apparata v usloviakh izmenennoi vesomosti/.  
20 p3471 A69-37253
- GORSHKOV, A. S.**  
Observation of nonlinear boundary effects at radio frequencies.  
07 p1088 A69-19755
- GORSHKOV, A. V.**  
A special feature of the welding of polycarbonate films.  
06 p0930 A69-17094
- GORSHKOV, I. U. A.**  
Unsteady problem of the heat conduction of a two-layer cylinder /Nestatsionarnaia zadacha teploprovodnosti dvukhsloinogo tsilindra/.  
19 p3448 A69-35981
- GORSHKOV, V. A.**  
Plasma production in a discharge compressed against a wall by a magnetic field /Poluchenie plazmy v razriade, prizhatom k stenke magnitnym polem/.  
09 p1547 A69-21594  
Spectroscopic studies of the plasma of a high-power H-compressed discharge /Spektroskopicheskie issledovaniia plazmy moshchnogo H-prizhatogo razriada/.  
11 p1927 A69-25217
- GORSHKOV, V. G.**  
Poisson distribution of bremsstrahlung at high energies /Puassonovskoe raspredelenie tormoznogo izlucheniia pri bol'shikh energiakh/.  
11 p1922 A69-25758
- GORSHKOVA, L. D.**  
Plasma production in a discharge compressed against a wall by a magnetic field /Poluchenie plazmy v razriade, prizhatom k stenke magnitnym polem/.  
09 p1547 A69-21594  
Spectroscopic studies of the plasma of a high-power H-compressed discharge /Spektroskopicheskie issledovaniia plazmy moshchnogo H-prizhatogo razriada/.  
11 p1927 A69-25217
- GORSHKOVA, L. V.**  
Phase equilibria in the systems vanadium-chromium-carbon, niobium-chromium-carbon, and tantalum-chromium-carbon.  
09 p1523 A69-21872  
Investigation of the ternary system zirconium-rhenium-carbon /Issledovanie troinoi sistemy tsirkonii-reniiuglerod/.  
10 p1715 A69-24055
- GORSHKOVA, V. E.**  
Some results of the determination of the effective electron collision number in the lower ionosphere from radio wave absorption /Nekotorye rezul'taty opredeleniia effektivnogo chisla soudarenii elektronov v nizhnii ionosfere po pogloshcheniiu radiovoln/.  
20 p3528 A69-37679
- GORSKAIA, N. M.**  
Mach number distribution along the axes of underexpanded supersonic jets /O raspredelenii chisla Macha po osi sverkhzvukovykh nedorashshennykh strui/.  
07 p1050 A69-18922
- GORSKII, B. V.**  
The basic equations of the plane problem of the theory of asymmetric elasticity /Ob osnovnykh uravneniiakh ploskoi zadachi teorii nesimmetrichnoi uprugosti/.  
04 p0667 A69-14267
- GORSKII, V. B.**  
Asymptotic investigation of transonic flows /Asimptoticheskoe issledovanie tranzvukovykh techenii/.  
06 p0910 A69-17336
- GORSTEIN, M.**  
Approach guidance planet tracker.  
03 p0463 A69-13214
- GORTON, C. W.**  
Rain erosion of ceramic radome materials at high Mach numbers.  
07 p1171 A69-19532
- GORTON, R. E.**  
Temperature measurement for aircraft-turbine engine development.  
14 p2509 A69-28886
- GORYNIA, A. A.**  
Determination of the parameters of lunar rotation by a method which is independent of the moon's profile /Opredelenie parametrov vrashcheniia luny metodom, ne zavisiaschim ot ee profil'a/.  
17 p3027 A69-32874
- GORYSHNIK, L. L.**  
Correlation theory of radio-wave scattering in the polar ionosphere /Korrelatsionnaia teoriia rasseianiia radiovoln v poliarnoi ionosfere/.  
14 p2436 A69-29055
- GORZYNSKI, C. S., JR.**  
Effects of intentional impurities on the thermal stability of nitronium perchlorate.  
02 p0304 A69-11899
- GOSACHINSKII, I. V.**  
The region of diminished 21-cm line intensity near the radio source W 49  
04 p0662 A69-15253
- GOSHDZHANOV, M.**  
Diurnal and seasonal variations in the intensity of phase-difference fluctuations or radio waves propagating in the atmospheric ground layer /Sutochnye i sezonnye variatsii intensivnosti fluktuatsii raznosti faz radiovoln, rasprostraniiaushchikhsia v prizemnom sloe atmosfery/.  
20 p3485 A69-36971
- GOSMAN, A. D.**  
Heat and Mass Transfer in Recirculating Flows.  
21 p3691 A69-38333
- GOSMAND, R.**  
The onboard remote-control system of the ESRO I and ESRO 2 satellites /Le systeme de telecommande embarque des satellites ESRO I et ESRO II/.  
15 p2702 A69-31086
- GOSNELL, R.**  
Synthesis of fluorinated polyurethanes.  
05 p0717 A69-16498
- GOSSE, W. M.**  
A radio source near the X-ray source GX3 plus 1/.  
02 p0308 A69-12595  
A new type of wideband 1665 MHz OH emission.  
08 p1397 A69-20772  
OH emission at 1720 MHz in the direction of non-thermal galactic sources.  
10 p1776 A69-23220
- GOSSARD, E. E.**  
The effect of bandwidth on the interpretation of the cross spectra of wave recordings from spatially separated sites.  
05 p0756 A69-16272
- GOSSE, J.**  
A description of the transition boundary layer on a flat plate /Une description de la couche limite de transition sur plaque plane/.  
07 p1121 A69-19329
- GOSSEL, D.**  
The controllable gyrotator - An element in the synthesis of nonlinear systems /Der steuerbare Gyrotator - Ein Element zur Synthese nichtlinearer Systeme/.  
05 p0735 A69-16620
- GOSSENBERGER, H. F.**  
Optimization of electroluminescent efficiencies for vapor-grown GaAs sub 1-x P sub x diodes. [ECS PAPER 103]  
08 p1284 A69-20366
- GOSSETT, T. D.**  
A study of the quadratic performance index for a VTOL prefilter model reference attitude control system. [AIAA PAPER 69-884]  
21 p3764 A69-39411
- GOSSEZ, J. P.**  
Optimization of certain problems with nonlinear limits /Optimisation pour certains problemes aux limites non lineaires/.  
20 p3568 A69-37324
- GOSSEZ, J.-P.**  
Existence of optimal controls for some nonlinear processes.  
10 p1667 A69-24057
- GOSTELOW, J. P.**  
Recent developments in the aerodynamic design of axial flow compressors.  
12 p2147 A69-25792
- GOSTEV, V. I.**  
Trigger demodulator with improved characteristics /Kliuchevoi demodulator s uluchshennymi kharakteristikami/.  
14 p2419 A69-28907
- GOSTINTSEV, I. U. A.**  
Stability of a revolving ideal fluid flow in a tube /Ob ustoiichivosti techeniia po trube ideal'noi vrashchaiushcheisia zhidkosti/.  
06 p0910 A69-17332  
Onset of turbulence in a boundary layer on a thermally decomposing surface /Vozniknovenie turbulentnosti v pogranichnom sloe na termicheski razlagaiushcheisia poverkhnosti/.  
16 p2878 A69-31951  
Flow characteristics of a nozzle ejecting a swirling gas flow /Raskhodnye kharakteristiki sopla pri istechenii vintovogo potoka gaza/.  
24 p4247 A69-43499
- GOSTOF, R.**  
Radioprotective effect of 5-azacytidine in AKR mice.  
23 p4080 A69-41429
- GOTLIB, V. I. A.**  
Some effects developing during hypokinesia.  
02 p0198 A69-11502
- GOTLIB, V. M.**  
Results of a determination of the dynamics of the Venusian atmosphere from measurements of the radial velocity of the Venera 4 automatic interplanetary station /Rezul'taty opredeleniia dinamiki atmosfery Venery po dannym izmerenii radial'noi skorosti AMS "Venera-4"/.  
22 p4034 A69-41099
- GOTO, M.**  
The Toshiba blow-down MHD test facility, and experiments on non-equilibrium ionization.  
10 p1673 A69-23477
- GOTO, N.**  
A circular array of linear antenna elements.  
13 p2225 A69-27184  
Super-gain effect and elements in endfire array.  
13 p2226 A69-27186
- GOTO, T.**  
Properties of inductively excited Ar super plus ion lasers in high-current regions.  
06 p0935 A69-17767
- GOTOH, K.**  
Hydromagnetic stability of free flows at large Reynolds numbers. I - Free boundary layer between two uniform streams.  
02 p0287 A69-11832



- Helium refrigerator - Installation type and airborne type.  
05 p0704 A69-15671
- Hydromagnetic stability of free flows at large Reynolds numbers. II - Two-dimensional jet.  
22 p3931 A69-40687
- GOTOW, K.**  
Single-proton emission following positive pion absorption in carbon.  
02 p0282 A69-11460
- Elastic scattering of 600 Mev protons from He super 3.  
03 p0472 A69-13464
- Polarization in proton- super 4 He scattering at 540 Mev.  
04 p0632 A69-14966
- GOTT, E.**  
Linear regression of interlevel wind velocities.  
11 p1911 A69-24694
- GOTT, P. V. D.**  
An evaluation of integrated circuit screening techniques.  
15 p2580 A69-31130
- GOTTFRIED, A. H.**  
On the utility and measurement of voltage probability density of wideband microwave noise.  
02 p0211 A69-12460
- GOTTFRIED, R. E.**  
Integrated circuit ultra high speed A-D converter.  
17 p2943 A69-34125
- GOTTI, G. L.**  
Feasibility study of a nuclear stage for space missions /Studio di fattibilita di uno stadio nucleare per missioni spaziali/.  
08 p1409 A69-20158
- GOTTLIEB, B.**  
Composition changes in the lower thermosphere.  
21 p3704 A69-38366
- GOTTLIEB, D. M.**  
Local interstellar reddening.  
22 p4026 A69-40648
- GOTTLIEB, M.**  
Analysis of the spectrum of a laser beam modulated by a periodic electrooptic Doppler shift.  
01 p0091 A69-10843
- GOTTLIEB, M. B.**  
Toroidal plasma confinement for fusion.  
07 p1190 A69-18929
- GOTTLIEB, S. F.**  
Effect of xenon, krypton, nitrogen and nitrous oxide on oxygen consumption of rat liver slices.  
03 p0375 A69-14069
- GOTTRON, R. N.**  
Fluorics 1969 - The state of the art.  
17 p2904 A69-34067
- GOU, P. F.**  
Second order effects in the theory of plasticity.  
23 p4234 A69-42409
- GOUARS, M.**  
Analysis of the efficiency of a group of radar operators adapted to night work in a series of unaccustomed psychomotor tasks accomplished at night /Analyse du rendement d'un groupe d'operateurs radar adaptes au travail nocturne dans une serie de taches psychomotrices inhabituelles effectuees de nuit/.  
21 p3666 A69-39268
- Inquiry on the sleep habits of a group of radar operators working in alternating crews /Enquete sur les habitudes de sommeil d'un groupe d'operateurs radaristes travaillant en equipes alternantes/.  
21 p3666 A69-39269
- GOUBAU, G.**  
Diffractional crosstalk in beam waveguides for multibeam transmission.  
07 p1100 A69-18648
- GOUDAS, C. L.**  
Lunar "mascons."  
04 p0661 A69-15145
- The department of defense Selenodetic Control System and the force function of the moon.  
14 p2527 A69-29942
- GOUGH, D. O.**  
The anelastic approximation for thermal convection.  
17 p2960 A69-33155
- GOUGH, P. L.**  
Solar absorption photometry and the determination of atmospheric composition.  
12 p2065 A69-26106

- GOUILLOU, R.**  
New three-probe impedance meter and its computer /Nouvel impendemetre a trois sondes et son calculateur/.  
[ONERA-TP-605] 05 p0764 A69-16590
- GOUIN, P.**  
Equatorial counter-electrojet and inverse Sq current layers /Contre-electrojet equatorial et nappes de courants Sq inverses/.  
08 p1306 A69-19884
- GOULARD, R.**  
Radiating gas flows under conditions of reentry into planetary atmospheres /Techeniia izluchaiushchego gaza v usloviakh vkhoda v atmosfery planet/.  
20 p3513 A69-36982
- Structure of shock waves with nonequilibrium radiation and ionization.  
22 p4006 A69-40526
- GOULD, J. D.**  
Vision and lasers - Human factors of laser displays.  
05 p0760 A69-15591
- GOULD, R. D.**  
Unstable burning of solid propellants - Some experiments using T-burners.  
02 p0302 A69-11521
- Combustion instability studies with plastic propellant.  
[AIAA PAPER 69-478] 16 p2834 A69-32734
- GOULD, R. J.**  
Emission and absorption of radio waves in the galactic disk.  
17 p3034 A69-33608
- GOULD, R. W.**  
Resonance cones in the field pattern of a short antenna in an anisotropic plasma.  
15 p2659 A69-30876
- Slow-wave structures utilizing superconducting thin-film transmission lines.  
17 p2938 A69-33785
- Microwave scattering and noise emission from afterglow plasmas in a magnetic field.  
18 p3127 A69-34436
- GOURASH, F.**  
Modularization of high-power inverters and converters.  
23 p4073 A69-42292
- GOURDINE, M. C.**  
Resistive wall EGD channel.  
02 p0291 A69-12506
- Engineering aspects of electrogasdynamics.  
05 p0804 A69-16586
- GOURIET, G. G.**  
Method of measuring time delay.  
23 p4165 A69-41700
- GOURISHANKAR, V.**  
Estimation of the settling time of a class of time-varying feedback control systems.  
06 p0902 A69-17399
- GOURLAY, A. R.**  
High accuracy A.D.I. methods for parabolic equations with variable coefficients.  
01 p0106 A69-10987
- The equivalence of certain alternating direction and locally one-dimensional difference methods.  
21 p3754 A69-38745
- GOUTMANN, M. M.**  
Transmission of information in networks of erasure channels.  
10 p1657 A69-23865
- GOUX, C.**  
Intergranular creep of oriented aluminum bicrystals /Fluage intergranulaire de bicristaux orientes d'aluminium/.  
17 p2985 A69-32906
- GOVAERTS, R.**  
On the accuracy obtained when using variational techniques for asymmetrically loaded waveguides.  
13 p2233 A69-28072
- GOVERDOVSKII, V. F.**  
Automatic processing of infrared information transmitted by meteorological satellites. /Avtomaticheskaya obrabotka infrakrasnoi informatsii, postupaishchei ot meteorologicheskikh sputnikov/.  
06 p0929 A69-17981
- GOVERS, T. R.**  
Nozzle beam technique for mapping low density gas flows.  
07 p1136 A69-19467

- A heated supersonic beam study of the helium-argon intermolecular potential.  
19 p3377 A69-36183
- GOVINDARAJULU, T.**  
Time dependent hydromagnetic flow between two slowly rotating discs.  
23 p4153 A69-42410
- GOVORUN, R. D.**  
Incorporation of super 32 P in proteins of blood serum, liver, and brain of rats irradiated with high-energy protons.  
02 p0198 A69-11507
- Disturbance of the cell division process in the bone marrow of rats irradiated by 50-Mev protons /Narusenie protsessov kletochного deleniia v kostnomozgu krysa, obлучennykh protonami 50 Mev/.  
07 p1064 A69-18973
- Disorders of cell division in the bone marrow of rats irradiated with 50-Mev protons.  
20 p3479 A69-38221
- GOWDEY, C. W.**  
Platelets as an etiological factor in experimental decompression sickness.  
21 p3655 A69-38918
- GOWELL, R. W.**  
Irregular pulsations of the morning sky brightness.  
09 p1594 A69-21666
- GOWEN, F. E.**  
The Ames combined heating facility.  
[AIAA PAPER 69-342] 13 p2243 A69-28278
- GOWER, A. C.**  
Intensity variations in pulsars.  
06 p1009 A69-17964
- GOWER, J. F. R.**  
The flux density of Jupiter at 81.5 Mc/s.  
05 p0827 A69-16506
- GOWLAND, L.**  
Clustering of cold hydrogen gas on protons.  
24 p4389 A69-43747
- GOYER, G. G.**  
Laser techniques for observing the upper atmosphere.  
01 p0090 A69-10540
- GOZAK, V. P.**  
Cutoff of cyclotron harmonics and plasma instability /Otschekha tsiklotronnykh garmonik i neustoiichivost' plazmy/.  
10 p1728 A69-23130
- GRAAP, V.**  
Radiation cooling behind a strong shock in krypton.  
18 p3171 A69-34450
- GRABEC, I.**  
Correlation of light fluctuations in the positive column of an argon discharge.  
16 p2822 A69-32039
- GRABER, B. C.**  
Experimental observation of transition of the hyper-sonic boundary layer.  
[AIAA PAPER 68-39] 09 p1482 A69-21943
- GRABITZ, G.**  
An approximation technique for calculating the free jet flows of reacting gases /Ueber eine Naeherungsmethode fuer die Berechnung von Freistrahstroemungen reagierender Gase/.  
10 p1631 A69-22898
- GRABOWSKI, A.**  
Temperature and power limitations of transistors /Ograniczenia temperaturowe i mocowe tranzystorow/.  
16 p2760 A69-32047
- GRABOWSKI, B.**  
Spectral analysis of 12/DD/ Lacertae.  
12 p2156 A69-26219
- GRABOWSKI, J. T.**  
Development of a 64-output MOS transistor selection tree.  
01 p0039 A69-10173
- GRABOWSKY, W. R.**  
Pressure gage for high noise environment.  
15 p2611 A69-31029
- GRACE, I. J.**  
Solid state batteries.  
[AICHE PAPER 22D] 08 p1256 A69-19848
- GRACE, K., JR.**  
Approximate system availability models.  
18 p3144 A69-34493

- GRACE, M. I.**  
High-efficiency microwave oscillations from Si avalanche diodes. 04 p0580 A69-15491  
Parametrically generated high-efficiency low-frequency oscillations in avalanche diodes. 13 p2227 A69-27239
- GRACHEV, N. S.**  
Apparatus for study of the boiling of potassium in tubes. 03 p0534 A69-14150
- GRACHEV, V. M.**  
Efficient GaP diode sources of red radiation. 06 p0979 A69-16999
- GRACHEVA, M. E.**  
Averaging effect of a receiving aperture on light intensity fluctuations /Usredniaushchee deistvie priemnoi apertury na fluktuatsii intensivnosti sveta/. 10 p1658 A69-23950
- GRACIA POGGIO, J. A.**  
Aluminum alloys in the development of modern technology /Las aleaciones de aluminio en el desarrollo de la tecnologia moderna/. 11 p1903 A69-24518
- GRACON, T. J.**  
Remarks on the application of dynamic programming to function generation. 03 p0401 A69-13765
- GRAD, H.**  
Stability of straight multipoles with shear. 09 p1546 A69-21576
- GRADASSI, R. T.**  
Portable system for receiving and recording ionospheric satellite signals. 04 p0597 A69-14748
- GRADER, R. J.**  
X-ray airglow in the daytime sky. 02 p0307 A69-12022  
The soft X-ray spectrum of SCO XR-1. 02 p0309 A69-12711  
A search for soft X-rays from the Galaxy. 07 p1204 A69-18599
- GRADINAROV, P. G.**  
Avalanche-transit effects in p-n junctions. 03 p0492 A69-14164
- GRADON, K.**  
Combustion development on the Rolls-Royce Spey engine. 09 p1573 A69-22613
- GRADSZTAJN, E.**  
Nucleosynthesis of lithium, beryllium, and boron, and the formation of the solar system /Sur la nucleosynthese du lithium, du beryllium et du bore et la formation du systeme solaire/. 08 p1401 A69-20901  
Isotopic composition of lithium in some meteorites and the role of neutrons in the nucleosynthesis of the light elements in the solar system. 19 p3408 A69-36084
- GRADY, H. F.**  
Engines of the future. 09 p1567 A69-21387
- GRADY, L. J.**  
Ionizing radiation-initiated degradation of deoxyribonucleic acid in bacteria - A possible role for defective prophage. 07 p1068 A69-19494
- GRAEBEL, W. P.**  
On the slow motion of bodies in stratified and rotating fluids. 08 p1253 A69-20997
- GRAEFE, A.**  
Stochastic servomechanism design via optimal filter theory. 18 p3110 A69-34673
- GRAEFE, P. W. U.**  
Ocean wave profile and spectra measurement using an airborne magnetometer. 12 p2075 A69-26998
- GRAEFF, P.**  
On the problem of closure conditions in particular for Vlasov turbulence. 17 p2958 A69-34228  
A class of exact solutions for the Vlasov turbulence. 17 p2958 A69-34229  
An exact turbulence theory for the Burgers equation. 21 p3697 A69-39673
- GRAESSLEY, W.**  
A relation between positive phase shift and elastic modulus enhancement of smooth muscle. 23 p4083 A69-41459
- GRAF, C. R.**  
Backscatter, long delay echoes and round-the-world signals. 23 p4116 A69-41602
- GRAF, E. R.**  
VLF phase anomalies produced by the solar flares of July 8 to 11, 1968. 05 p0719 A69-15980  
Increased capacitance for VLF umbrella antennas using multiple-wire rib construction. 08 p1282 A69-20041  
A computer-aided measurement of SNR employing a time interval counter. 11 p1839 A69-25299  
The zeroth-order approximation to the current distribution on the elements of circular arrays of tangential dipoles. 11 p1853 A69-25318
- GRAF, R.**  
Orientation relationships between phases of a pseudobinary eutectic alloy of cobalt and tantalum carbide, obtained by means of unidirectional solidification /Relations d'orientation entre phases dans un alliage eutectique pseudo-binaire cobalt-carbure de tantale, obtenu par solidification unidirectionnelle/. [ONERA-TP-714] 17 p2988 A69-33395
- GRAFE, A.**  
The variations of the geomagnetic field in middle and high latitudes during the proton flare event of July 1966. 10 p1683 A69-23780  
On the dynamics of the DP-current system. 18 p3130 A69-35188
- GRAFF, C. B.**  
Power systems for the Apollo Applications Program. 23 p4069 A69-42244
- GRAFF, D. R.**  
Lunar control from Ranger photos. 01 p0147 A69-10022
- GRAFF, P.**  
Method of determination of the velocity and group index in an anisotropic medium /Methode de determination de la vitesse et de l'indice de groupe dans un milieu anisotrope/. 01 p0131 A69-11117
- GRAFFI, D.**  
Uniqueness theorem in the dynamics of viscoelastic bodies /Sul teorema di unicit  nella dinamica dei corpi viscoelastici/. 08 p1415 A69-20658
- GRAFFI, S.**  
Two-dimensional theory of the uniform-base transistor at any injection level. 11 p1845 A69-24569
- GRAFINGER, W.**  
Theory and development of integrated tunnel diode amplifiers /Theorie und Entwicklung von integrierten Tunneliodenverst rkern/. 11 p1834 A69-25611
- GRAFTON, R. B.**  
A periodicity theorem for autonomous functional differential equations. 19 p3361 A69-36600
- GRAHAM, B. B.**  
Effect of a shear layer on plane waves of sound in a fluid. 17 p3005 A69-32954
- GRAHAM, D.**  
A manual control-display theory applied to instrument landings of a jet transport. 10 p1650 A69-23877  
Mass dependence of self-diffusion in iron. 19 p3346 A69-36440  
Tracer diffusion studies on metals using a microtome. 19 p3313 A69-36490
- GRAHAM, D. J.**  
Draining of a liquid from a transversely moving cylindrical tank. [AIAA PAPER 69-679] 17 p2953 A69-33440  
Stability of a horizontal fluid layer with zero shear boundaries. 20 p3518 A69-38234
- GRAHAM, E. A.**  
On the theory of magnetoionic propagation in the earth's magnetosphere. [ONERA-TP-593] 02 p0236 A69-11617  
On the application of semiconductor phase-shifting for inertialess electronic antenna scanning at microwave to millimeter wave frequencies - Insertion loss limitations. [ONERA-TP-712] 23 p4143 A69-42519  
Space vehicle multibeam antenna system design. [ONERA-TP-713] 23 p4143 A69-42527
- GRAHAM, E. W.**  
Effect of a shear layer on plane waves of sound in a fluid. 17 p3005 A69-32954
- GRAHAM, G. L.**  
A simplified empirical method for rotor component fatigue design. [AHS PAPER 372] 17 p3059 A69-33516
- GRAHAM, H. L.**  
Air cargo, aircraft, terminals and marketing in the 1970s. 13 p2381 A69-27336
- GRAHAM, J. A.**  
Fatigue Design Handbook- A Guide for Product Design and Development Engineers. 01 p0170 A69-10918
- GRAHAM, J. C.**  
A survey of the potential of beamed microwave power for balloons. 22 p3870 A69-40809
- GRAHAM, J. D.**  
Fiscal forecasting for space systems. [AAS PAPER 69-166A] 24 p4417 A69-42814
- GRAHAM, J. M. R.**  
The effect of end-plates on the two-dimensionality of a vortex wake. 23 p4234 A69-42397
- GRAHAM, P. A.**  
Improvement of ejector-diffuser performance by reduction of backflow. 11 p1819 A69-25382
- GRAHAM, P. H.**  
Analysis of dilatational failure of heterogeneous materials by reaction rate theory. 15 p2710 A69-30813
- GRAHAM, P. J.**  
Stability of passive time-variable circuits. 05 p0739 A69-16348
- GRAHAM, R.**  
The future for joining metals by techniques recently developed. 04 p0608 A69-15483  
Dielectric radome designs for two frequency operation. 07 p1110 A69-19523  
Materials and structures for future civil aircraft. 16 p2872 A69-32024
- GRAHAM, R. W.**  
The effect of acceleration on heat transfer in a turbulent boundary layer. 09 p1480 A69-21480  
Heat transfer and thermal boundary layer in a conical nozzle. [AIAA PAPER 69-474] 16 p2881 A69-32780
- GRAHAM, T. L.**  
Poly /2,4-perfluoroalkylene-6-perfluoroalkyl-triazine/s - New high temperature elastomers. 19 p3264 A69-35535
- GRAHAME, W. E.**  
Aerodynamic effects of lift-jet and lift-fan inlets in transition flight. [AIAA PAPER 68-637] 12 p2014 A69-26767
- GRAHL, B. H.**  
Investigation of the structure of the interstellar neutral hydrogen in mean galactic latitudes /Untersuchungen zur Struktur des interstellaren neutralen Wasserstoffs in mittleren galaktischen Breiten/. 17 p3039 A69-33766
- GRAIA, A. L.**  
Dependence of the second-harmonic conversion factor on the space-time distribution of the radiation of a powerful laser /Zavisimost' koeffitsienta transformatsii vo vtoruiu harmoniku ot prostranstvenno-vremennogo raspredeleniia izlucheniia moshchnogo lazera/. 12 p2104 A69-26022



## GRAIFF, F.

Energy in steady-state universes in general relativity /Sull'energia negli universi stazionari della relativita generale/.

05 p0792 A69-15683

## GRAKH, I. I.

Investigation of the photoelastic method for anisotropic bodies /Issledovanie metoda fotouprugosti anizotropnykh tel/.

05 p0837 A69-16038

## GRAMMELTVEDT, A.

A survey of finite-difference schemes for the primitive equations for a barotropic fluid.

17 p2997 A69-33691

## GRAMMER, J. R.

Calorimetric measurements of solar and broadband spectral absorptance during ultraviolet exposure testing in vacuum.

16 p2789 A69-31815

## GRAMS, G.

Optical radar observations of mesospheric aerosols in Norway during the summer 1966.

14 p2444 A69-29877

## GRANA, D. C.

Microbiological studies on a water management subsystem for manned space flight. [SAE PAPER 680718]

03 p0379 A69-13441

## GRANBERG, I. G.

Numerical verification of criteria of zonal current stability with respect to small perturbations /Chislenaiia proverka kriteriev ustoiichivosti zonal'nykh techenii otноситel'no mal'kh vozmushchenii/.

12 p2125 A69-25950

## GRANDE, E.

Development of engineering practices in jet and compressor noise. [AIAA PAPER 68-550]

17 p3022 A69-34019

## GRANDPIERRE, R.

Psychomotor reactions among primates put into ballistic flight in rockets /Reactions psychomotrices chez des primates places en vol balistique en fusées/.

01 p0017 A69-11082

Research on psychomotor behavior under space-flight conditions /Recherches sur le comportement psychomoteur dans les conditions de vols spatiaux/.

02 p0199 A69-11827

Psychomotor reactions during ballistic rocket flights /Reactions psychomotrices au cours de vols balistiques en fusées/.

06 p0874 A69-17649

Space biology tests in March 1967 /Les experiences de biologie spatiale de Mars 1967/.

09 p1445 A69-22721

Psychomotor reactions of monkeys in flights along a ballistic curve.

10 p1646 A69-23575

## GRANDY, W. T., JR.

Theory of photons in a fully ionized gas. I - Photon momentum distribution.

08 p1357 A69-20747

Theory of photons in a fully ionized gas. II - Planck's law and the dielectric constant.

08 p1357 A69-20748

The quantum nature of the fully-ionized gas.

14 p2502 A69-29992

## GRANGE, J. M.

Influence of successive voltage stresses on the reliability of solid-electrolyte tantalum condensers /Influence des mises sous tension successives sur la fiabilite des condensateurs au tantale a electrolyte solide/.

15 p2626 A69-30836

The computer as an aid to the system reliability engineer.

15 p2572 A69-31042

Accuracy of calculations of reliability predictions /Precision des calculs previsionnels de fiabilite/.

17 p2937 A69-33389

## GRANGE, J.-M.

Assistance rendered by the computer to the engineer responsible for the reliability of a system /Aide apportee par l'ordinateur a l'ingenieur responsable de la fiabilite d'un systeme/.

04 p0608 A69-15224

## GRANGER, R. A.

Speed of a surge in a bathtub vortex.

05 p0744 A69-15718

## GRANIGG, A. B.

Continuously operating mirror scanning system in high-speed photographic cameras.

12 p2085 A69-26154

## GRANIK, O. T.

A self-similar solution of Navier-Stokes equations /Pro odin avtomodel'nii rosv'iazok ravnian' Nav'e-Stoksa/.

06 p0908 A69-16825

## GRANOFF, B.

Asymptotic theory of electromagnetic wave propagation in an inhomogeneous anisotropic plasma.

17 p2925 A69-33840

## GRANT, C. T.

Electrodynamics of vector mesons.

21 p3775 A69-39468

## GRANT, D. A.

Truth and falsity of verbal statements as conditioned stimuli in classical and differential eyelid conditioning.

07 p1064 A69-18632

Cue selection in paired-associate and concept-learning paradigms.

07 p1064 A69-18636

Arithmetic correctness as the discriminandum in classical and differential eyelid conditioning.

07 p1064 A69-18637

## GRANT, D. G.

Ruby as a macroscopic fluorescing and laser material.

07 p1201 A69-19646

## GRANT, E. H.

Standing wave methods for measuring permittivities at meter and decimeter wavelengths.

04 p0599 A69-15015

Fundamental physical concepts underlying absorption of microwave energy by biological material.

24 p4270 A69-42574

## GRANT, H. J.

Behavior of 2024 aluminum in low cycle fatigue at low strain rates as a function of temperature.

10 p1709 A69-23071

## GRANT, I. P.

Solution of radiative transfer problems in planetary atmospheres.

07 p1213 A69-18610

Solution of radiative transfer problems using the invariant S sub n method.

07 p1183 A69-19623

## GRANT, N. J.

New A sub 3 B sub 5 phases of the titanium group metals with rhodium.

19 p3343 A69-35920

## GRANT, R. M.

Theory of holographic interferometry.

15 p2611 A69-31146

Holographic nondestructive testing /HNDT/ of aircraft materials.

19 p3322 A69-35576

## GRANT, R. T.

Sigma - Its occurrence, effect, and control in nickel-base superalloys.

06 p0942 A69-17223

## GRANT, W. B.

Phase stabilization of widely separated oscillators.

08 p1273 A69-20022

## GRANTHAM, D. D.

Mid-latitude humidity to 32 km.

03 p0461 A69-13345

Effect of range on apparent height and frequency of high-altitude radar precipitation echoes.

18 p3101 A69-34826

## GRANZOW, M.

Mechanically despun antenna.

17 p2978 A69-33431

## GRARD, R.

Interpretation of VLF electromagnetic field measurements in the magnetosphere /Interpretation de mesures de champ electromagnetique t.b.f. dans la magnetosphere/.

08 p1306 A69-20180

## GRARD, R. J. L.

The impedance of a probe in a warm plasma.

16 p2824 A69-32611

Coupling between two electric aeriels in a warm plasma.

17 p2925 A69-33846

## GRAS, W. J.

X-ray analysis of retinal photoreceptors.

22 p3871 A69-40057

## GRASDALEN, G. L.

Absolute gf-values for Fe I and Fe II lines.

18 p3175 A69-34304

## GRASIUK, A. Z.

Laser based on Raman scattering in liquid nitrogen.

09 p1520 A69-22533

Stimulated combination scattering of neodymium laser radiation in liquid nitrogen /Vynuzhdennoe kombinatsionnoe rasseianie izlucheniia neodimovogo lazera v zhidkom azote/.

11 p1900 A69-25751

Interactions between semiconductors and intense light fluxes /Vzaimodeistvie poluprovodnikov s intensivnymi svetovymi potokami/.

21 p3737 A69-39042

## GRASL, L. M.

Small signal high frequency conductivity of GaAs.

10 p1747 A69-23694

## GRASSO, G.

Improvement factor for limited coherent MTI.

04 p0556 A69-14338

Diagrams for designing a moving-window radar extractor in the presence of fluctuating targets /Diagrammi per la progettazione di un estrattore radar a finestra mobile in presenza di bersagli fluttuanti/.

04 p0558 A69-15073

Clutter residues of a coherent MTI radar receiver.

13 p2220 A69-27941

## GRATTON, F.

On shear instability in cold plasmas with external magnetic field.

02 p0289 A69-12177

## GRATTON, J.

On shear instability in cold plasmas with external magnetic field.

02 p0289 A69-12177

## GRATTON, L.

On some problems concerning the irregular eruptive variables.

06 p0996 A69-17448

## GRATTON, R.

Suitable targets for the production of a deuterium plasma cloud in a vacuum environment with a laser pulse.

01 p0090 A69-10222

## GRAU, G.

Optical resonators and propagation laws for laser beams /Optische Resonatoren und Ausbreitungsgesetze fuer Laserstrahlen/.

06 p0937 A69-18005

Noise and coherence in the optical spectral region /Rauschen und Kohärenz im optischen Spektralbereich/.

06 p0937 A69-18011

Applications /Anwendungen/.

06 p0938 A69-18012

New method of measurement of filament diameters and particularly carbon of filaments.

08 p1316 A69-20499

## GRAU, J.

A high-speed ten-bit analog-to-digital converter employing MSI elements /Ein schneller 10-Bit-Analog-Digital-Umsetzer mit MSI-Elementen/.

11 p1845 A69-24520

## GRAUL, E. H.

RBE values for fast neutrons in connection with estimates of the radiation burden in space.

20 p3478 A69-37629

## GRAULING, C. H., JR.

Microwave interferometer for simple, precise ILS calibration.

03 p0430 A69-13680

## GRAULING, C. R.

Laser display systems. I - Scanners.

04 p0600 A69-15028

Laser display systems. II.

09 p1492 A69-21394

## GRAUNAS, R. P.

The design of the mechanically despun antenna for the Intelsat-III communications satellite.

22 p3913 A69-40691

## GRAVES, E. C.

Spring-restrained, momentum-wheel orientation and stabilization system for exoatmospheric vehicles.

21 p3819 A69-39214

## GRAVES, M. E.

Aircraft reports of cirriform clouds on certain high latitude routes and California to Honolulu.

03 p0458 A69-13032

Microwave refraction as a technique for satellite meteorology - Some problems.

21 p3671 A69-38376

- GRAVIER, J. P.**  
Numerical study of the economical earth-Mars and earth-Venus transfers.  
[AAS PAPER 69-241] 24 p4380 A69-42855
- GRAWE, H.**  
A stochastic model of electron cyclotron heating.  
09 p1551 A69-22038
- GRAY, B. F.**  
On the Lotka-Frank-Kamenetskii isothermal theory of cool flames.  
11 p1970 A69-24476  
On the critical conditions in a spherical reacting mass.  
11 p1998 A69-24480
- GRAY, C. R.**  
An horizon definition experiment.  
[AIAA PAPER 69-869] 21 p3763 A69-39395
- GRAY, D. F.**  
Development of metal-matrix composite blading for gas-turbine engines.  
[AIAA PAPER 68-1037] 20 p3586 A69-37153
- GRAY, D. L.**  
Application of quadratic optimization to helicopter flight control.  
24 p4253 A69-43279
- GRAY, E. Z.**  
Manned expeditions to Mars and Venus.  
02 p0324 A69-12304
- GRAY, G. A.**  
Study of ion-molecule reactions and reaction mechanisms in acetonitrile by ion cyclotron resonance.  
19 p3265 A69-36290
- GRAY, H. R.**  
Hot salt stress corrosion of a titanium alloy - Generation of hydrogen and its embrittling effect.  
21 p3747 A69-39434
- GRAY, J. S.**  
Signal conditioning, bit synchronization and group synchronization for high bit rate PCM.  
19 p3271 A69-36247
- GRAY, L. D.**  
Comparison of procedures used to analyze spectroscopic observations - The 7820-angstrom units carbon dioxide band in the spectrum of Venus.  
13 p2344 A69-27649  
High-dispersion spectroscopic studies of Venus. II - The water vapor variations.  
13 p2345 A69-27650  
Relative intensity calculations for carbon dioxide. IV - Calculations of the partition function for isotopes of CO sub 2.  
15 p2656 A69-31154  
High dispersion spectroscopic observations of Venus. IV - The weak carbon dioxide band at 7883 angstrom units.  
16 p2852 A69-31563  
High dispersion spectroscopic observations of Venus. III - The carbon dioxide band at 7820 angstroms.  
20 p3614 A69-38254
- GRAY, M.**  
Stability measurement problems and techniques for operational airborne pulse Doppler radar.  
20 p3492 A69-37711
- GRAY, P.**  
Gondola azimuth stabilization using a simple lunar tracker.  
20 p3538 A69-37300
- GRAY, P. E.**  
Design of digital systems - The parse- implement approach.  
21 p3680 A69-39663
- GRAY, P. V.**  
Freeze-out characteristics of the MOS varactor.  
05 p0806 A69-15809  
Refractory metal silicon device technology.  
06 p0930 A69-17152
- GRAY, R. B.**  
Determination of the design parameters for optimum heavily loaded ducted fans.  
[AIAA PAPER 69-222] 08 p1253 A69-21030
- GRAY, S. W.**  
An effect of weightlessness following exposure to vibration.  
15 p2557 A69-31368
- GRAY, S., III**  
Acute and prolonged effects of G suit inflation on cardiovascular dynamics.  
06 p0883 A69-17843
- GRAY, V. H.**  
The rotating heat pipe - A wickless, hollow shaft for transferring high heat fluxes.  
[ASME PAPER 69-HT-19] 24 p4413 A69-43550
- GRAY, W. W.**  
X-band IMPATT microstrip power sources.  
02 p0216 A69-12146
- GRAYBIEL, A.**  
Evaluation of sixteen anti-motion sickness drugs under controlled laboratory conditions.  
03 p0381 A69-14079  
Prevention of overt motion sickness by incremental exposure to otherwise highly stressful Coriolis accelerations.  
07 p1067 A69-19425  
Structural elements in the concept of motion sickness.  
12 p2019 A69-26547  
Rapid vestibular adaptation in a rotating environment by means of controlled head movements.  
17 p2908 A69-33178  
Motion sickness precipitated in the weightless phase of parabolic flight by Coriolis accelerations.  
21 p3659 A69-39168  
Motion sickness susceptibility under weightless and hypergravity conditions generated by parabolic flight.  
21 p3660 A69-39176
- GRAYZEL, A. I.**  
Design parameters for overdriven varactor frequency doublers using punch-through or bimode varactors.  
20 p3505 A69-37299  
A fundamental multiplexer theorem.  
21 p3681 A69-38530
- GRAZIANI, P.**  
Protonic compression radar.  
11 p1834 A69-24566
- GRDINA, IU. V.**  
Wear resistance of diffusion-saturated titanium alloys /Iznosostoikost' titanovykh spлавov pri diffuzionnom nasyschenii/.  
19 p3344 A69-36153
- GREATHOUSE, W. K.**  
Blending propulsion with airframe.  
03 p0364 A69-13676
- GREBE, H.**  
Construction of multistep integration formulas for simulation purposes.  
09 p1460 A69-21417
- GREBEN, I. I.**  
Centralized control with variable-step interrogation of the control points. II /Tsentralizovaniy kontrol' iz zminnim krokom opitu kontrol'ovaniykh punktiv. II/.  
08 p1298 A69-20422
- GREBENE, A. B.**  
Effective axis of symmetry for generalized FET structures.  
04 p0574 A69-14344  
An integrated FM multiplex receiver/generator.  
19 p3273 A69-36274
- GREBENKIN, G. G.**  
Propagation of cracks near an arbitrary curvilinear hole.  
04 p0674 A69-14562  
Development of cracks near holes in compressed bodies /Razvitiye treshchin vozle otverstii v szhatykh telakh/.  
18 p3218 A69-34603
- GREBENKINA, V. G.**  
Temperature coefficient of resistivity of certain high-melting-point compounds and their solid solutions /Termicheskie koefitsienty elektrosoprotivleniya nekotorykh tugoplavkikh soedinenii i ikh tverdykh rastvorov/.  
09 p1523 A69-21740  
Temperature coefficient of the electrical resistance of titanium, zirconium, and niobium carbides /Temperaturnyy koefitsient elektrosoprotivleniya karbidov titana, tsirkoniya i niobiya/.  
15 p2641 A69-31047  
Thermal coefficient of the electrical resistance of some refractory compounds and their solid solutions.  
20 p3585 A69-38216
- GREBER, I.**  
Linearized analysis of flow of incompressible laminar jet contained between side walls.  
14 p2429 A69-29023  
Similarity analysis of compressible laminar wall jet with arbitrary wall temperature.  
[ASME PAPER 69-FLCS-30] 20 p3516 A69-37979
- GREBESHKOVA, I. D.**  
Methods of protecting steel against hydrogen "corrosion."  
04 p0613 A69-14432
- GREBINSKII, A. S.**  
The 1.6-cm radio emission of solar sources associated with sunspots and flocculi.  
04 p0649 A69-15241
- GRECHIKHIN, L. I.**  
Limits of applicability of spectroscopic methods in determination of the concentration of charged particles in a low-temperature plasma and their errors.  
05 p0762 A69-15899  
Spectroscopic study of the properties of a supersonic plasma stream.  
07 p1190 A69-18695  
Spectroscopic methods of determining charged particle concentrations under the conditions prevailing in a pulsed plasma generator /Spektroskopicheskie metody opredeleniya kontsentratsii zaryazhennykh chastits v usloviakh impul'snogo plazmennogo generatorta/.  
15 p2663 A69-30991
- GRECO, R. V.**  
Resistojet biowaste utilization - Evaluation and system selection.  
[AIAA PAPER 68-121] 04 p0554 A69-15506  
Resistojet systems manned spacecraft applications.  
[AIAA PAPER 69-255] 09 p1561 A69-21220  
Resistojet control for advanced space stations.  
11 p1965 A69-24531
- GREEB, M. E.**  
Sun oriented atmospheric optics measurements using the high altitude balloon.  
15 p2615 A69-31288
- GREEBE, C. A. A. J.**  
Experiments on Alfvén-wave resonances in liquid sodium.  
01 p0131 A69-10820
- GREEN, A.**  
The influence of impurities on the formation of single-crystal films.  
22 p3992 A69-39899
- GREEN, A. E.**  
A note on simple dipolar stresses.  
06 p1022 A69-17239  
The Cosserat surface.  
10 p1798 A69-23147  
Shells in the light of generalized continua.  
11 p1978 A69-24805
- GREEN, A. E. S.**  
The relation between ionization yields, cross sections and loss functions.  
05 p0795 A69-15660  
Semi-empirical cross sections and the airglow and aurora.  
21 p3713 A69-38527
- GREEN, A. T.**  
Stress wave emission - An important new tool for the technical community.  
18 p3223 A69-35080
- GREEN, B.**  
Optical absorption and expansion of laser-produced plasmas.  
16 p2818 A69-31679
- GREEN, C.**  
Data handling during ESRO satellite testing and launching.  
05 p0727 A69-16771
- GREEN, D.**  
Study of inhomogeneities in GaAs using a scanning electron microscope.  
09 p1557 A69-21746
- GREEN, D. G.**  
Sinusoidal flicker characteristics of the color-sensitive mechanisms of the eye.  
22 p3880 A69-40851  
Contrast sensitivity of the human peripheral retina.  
22 p3882 A69-40870
- GREEN, D. H.**  
Adaptive-logic trees for use in multilevel-circuit design.  
09 p1475 A69-22583
- GREEN, D. W.**  
The diffuse X-radiation spectrum below 4 keV.  
10 p1770 A69-24094  
A spectral measurement of the cosmic X-ray background down to 2 keV.  
21 p3787 A69-38351



## GREEN, H. L., JR.

Effect of neglected gravity coefficients on computed satellite orbits and geodetic parameters.  
22 p4023 A69-40556

## GREEN, H. M.

Stress corrosion behavior of titanium alloy 6-2-4-2 as related to engine operation.  
01 p0099 A69-11056

## GREEN, H. P.

Safety determinations in nuclear power licensing /a critical view/.  
10 p1723 A69-23398

## GREEN, H. S.

An exact solution of Boltzmann's equation for a rigid sphere gas.  
04 p0633 A69-15434  
New kinetic equation for plasmas.  
08 p1369 A69-20816

## GREEN, I. M.

Initial results of the Pioneer 8 VLF electric field experiment.  
01 p0035 A69-11224  
Earth's bow shock - Elapsed-time observations by two closely spaced satellites.  
02 p0244 A69-12299  
Detection of electric-field turbulence in the earth's bow shock.  
04 p0592 A69-14681  
A simple high accuracy logarithmic count rate circuit suitable for spacecraft use.  
[IEEE PAPER 3A-3] 07 p1134 A69-19191  
The OGO-V plasma wave detector - Instrumentation and in-flight operation.  
19 p3315 A69-36683

## GREEN, J. A. S.

On the propagation of stress-corrosion cracks in a magnesium-aluminum alloy.  
10 p1710 A69-23086

## GREEN, J. E.

Interactions between shock waves and turbulent boundary layers.  
11 p1871 A69-25018

## GREEN, L. C.

Quasars six years later.  
12 p2161 A69-26937

## GREEN, M.

Project review - Scout launch vehicle.  
06 p1016 A69-17597

## GREEN, M. J.

Rolls-Royce thrust reversers - Compatibility and reliability.  
[SAE PAPER 690410] 23 p4200 A69-41638

## GREEN, P. S.

Methods of acoustic visualization.  
20 p3512 A69-38269

## GREEN, R. G.

A simple receiving and display system for Alouette 1 ionograms.  
20 p3507 A69-37861

## GREEN, R. R.

Large-scale evolution of the lunar surface.  
14 p2528 A69-29947

## GREEN, S. J.

Prediction of elastic-plastic wave profiles in aluminum 1060-0 under uniaxial strain loading.  
02 p0344 A69-12289  
High-velocity deformation properties of polyurethane foams.  
11 p1907 A69-25648

## GREEN, W. D., JR.

The impact of Apollo application on space station engineering.  
[AAS PAPER 69-491] 24 p4392 A69-42838

## GREEN, W. V.

Effect of cracks on creep rate. II.  
20 p3620 A69-36965

## GREENAWAY, D. L.

Optical Properties and Band Structure of Semiconductors.  
13 p2323 A69-28200

## GREENBAUM, G. A.

Post-wrinkling behavior of a conical shell of revolution subjected to bending loads.  
[AIAA PAPER 69-90] 06 p1027 A69-18074

## GREENBERG, D. W.

A radio observational test for low-energy cosmic rays in the Galaxy.  
09 p1580 A69-22273

## GREENBERG, J. M.

Interstellar polarization and galactic magnetic field strengths.  
10 p1781 A69-23673  
Extinction in the far ultraviolet.  
10 p1781 A69-23674  
Models of the zodiacal light.  
15 p2698 A69-31366

## GREENBERG, R.

The axisymmetric, hypersonic near wake with base injection.  
[AIAA PAPER 69-66] 06 p0914 A69-18115

## GREENBERG, R. A.

Structure of the laminar ablating air-Teflon boundary layer.  
[AIAA PAPER 69-99] 06 p1037 A69-18086

## GREENBERG, S. A.

A study of environmental effects upon particulate radiation-induced absorption bands in spacecraft thermal control coating pigments.  
[AIAA PAPER 69-642] 17 p2991 A69-33273

## GREENE, A. N.

Photographic control system for Project Apollo launches.  
[SMPTE PAPER 104-20] 04 p0596 A69-14360

## GREENE, B. E.

Generalized variational principles in the finite-element method.  
[AIAA PAPER 68-290] 23 p4227 A69-41882  
Astra - Boeing's advanced structural analyzer.  
23 p4232 A69-42144

## GREENE, B. N.

Low cycle fatigue of Ti-6Al-4V alloy.  
[ASM PAPER D8-24.4] 07 p1169 A69-19669

## GREENE, C. K.

A microstrip nonreciprocal tunable YIG filter.  
01 p0041 A69-10202

## GREENE, D. C.

Use of acoustical holography for the imaging of sources of radiated acoustic energy.  
20 p3576 A69-37323

## GREENE, J. M.

Variational principle for stationary magnetohydrodynamic equilibria.  
15 p2660 A69-30910  
Determination of subdominant solutions using a partial Wronskian.  
15 p2646 A69-31519

## GREENE, J. R.

Temperature analysis of nonlinear DC circuits.  
18 p3108 A69-34525

## GREENE, N. D.

Interpretation of passive current maxima during polarization of stainless steels.  
06 p0944 A69-17853  
Electrochemical properties of Fe and steel.  
20 p3563 A69-38002

## GREENE, N. D., JR.

The variable corrosion resistance of 18Cr-8Ni stainless steels - Behavior of commercial alloys.  
20 p3562 A69-37750

## GREENE, R. B.

Graphite ablation in high-pressure environments.  
[AIAA PAPER 68-1153] 04 p0686 A69-14873

## GREENE, R. F., JR.

Generalized approach to the thermal analysis of orbiting spacecraft.  
[SAE PAPER 690202] 07 p1239 A69-18305

## GREENE, T. F.

The carbon, nitrogen, and oxygen abundances in four K giants.  
22 p4026 A69-40653

## GREENFIELD, H. H.

Radioisotope thermal energy sources for space station life support systems.  
23 p4189 A69-42268

## GREENHOW, R. C.

Optical orientation of the super 3 P sub 0 ground state of Pb super 207.  
07 p1156 A69-19399

## GREENING, W. J.

Systems approach is a must.  
22 p3956 A69-40822

## GREENLEAF, C. J.

Exercise-temperature regulation in man during acute exposure to simulated altitude.  
22 p3891 A69-40219

## GREENLEAF, J. E.

Effects of progressive hypohydration on maximum isometric muscular strength.  
05 p0708 A69-15988  
Orthostatic intolerance after artificial heat acclimatization in physically fit subjects.  
16 p2746 A69-32814  
Exercise-temperature regulation in man during acute exposure to simulated altitude.  
22 p3891 A69-40219

## GREENLEE, M. L.

Resistance of titanium-base alloys to atmospheric corrosion.  
01 p0100 A69-11319

## GREENLEE, P. C.

Systems analysis applications to the C-5.  
[SAE PAPER 680729] 03 p0379 A69-13447

## GREENLEE, W. M.

Rate of convergence in singular perturbations.  
19 p3360 A69-35899

## GREENMAN, L. R.

Packaging requirements for optimized malfunction isolation by systematic substitution.  
14 p2420 A69-29494

## GREENSHIELDS, D. H.

Apollo thermal-protection system development.  
[AIAA PAPER 68-1142] 03 p0519 A69-13558

## GREENSITE, A. L.

Synthesis of closed-loop time optimal control systems via threshold logic networks.  
[AIAA PAPER 69-77] 06 p0905 A69-18092  
EVA stabilization shoes.  
[AAS PAPER 69-472] 24 p4272 A69-42846  
Problems of abort from manned spacecraft.  
[AAS PAPER 69-469] 24 p4272 A69-42848

## GREENSLADE, J. T.

The development of a non-conductive ignition composition for RFI protection of spacecraft electro-explosive devices.  
10 p1751 A69-23018

## GREENSPAN, A. M.

Automatic test equipment and its application to testing problems presented by today's complex communication equipment.  
03 p0410 A69-13189

## GREENSPAN, D.

Approximate solution of initial-boundary wave equation problems by boundary-value techniques.  
02 p0271 A69-11733  
Lectures on the Numerical Solution of Linear, Singular, and Nonlinear Differential Equations.  
02 p0272 A69-12157  
Numerical studies of prototype cavity flow problems.  
08 p1305 A69-20831

Approximate solution of initial value problems for ordinary differential equations by boundary value techniques.  
09 p1532 A69-21610

## GREENSPAN, H. P.

On the inviscid theory of rotating fluids.  
18 p3121 A69-34550

## GREENSPAN, J.

Beryllium.  
04 p0614 A69-14586

## GREENSTADT, E. W.

Earth's bow shock - Elapsed-time observations by two closely spaced satellites.  
02 p0244 A69-12299

## GREENSTEIN, G.

Primordial helium production in "magnetic" cosmologies.  
22 p4035 A69-41210

## GREENSTEIN, G. S.

Spin down effects in neutron stars.  
16 p2865 A69-32803

## GREENSTEIN, H.

Theory of a single-mode gas laser.  
03 p0440 A69-13296  
Some properties of a Zeeman laser with anisotropic mirrors.  
13 p2271 A69-27398

## GREENSTEIN, J. L.

Abundances in two horizontal-branch A stars.  
08 p1385 A69-20061  
Spectrophotometry of a B-type star in the globular cluster M13.  
09 p1599 A69-22193  
Red and black degenerate stars.  
15 p2681 A69-30423

- The spectrum of alpha super 2 Canum Venaticorum, 5000-6700 angstrom units. 15 p2692 A69-30773
- A spectroscopic flare of Wolf 359. 16 p2852 A69-32817
- Postflight guidance accuracy analysis of Atlas/Centaur/Surveyor flights. [AIAA PAPER 68-842] 24 p4348 A69-43239
- GREENSTEIN, L. J.**  
Influence of lower cutoff frequency on the measured variance of  $1/f$  noise. 10 p1656 A69-23661
- GREENWALD, A. J.**  
Abdominal gas volume at altitude and at ground level. 23 p4076 A69-41291
- GREENWOOD, A. H. C.**  
The management of large European international programmes. 06 p1043 A69-17831
- GREENWOOD, D. T.**  
Relativistic rocket flight with constant acceleration. 09 p1609 A69-21959  
Minimum-fuel thrust-limited transfer trajectories between coplanar elliptic orbits. [AIAA PAPER 69-914] 21 p3808 A69-39344
- GREENWOOD, J. A.**  
Radar altimetry from a spacecraft and its potential applications to geodesy. 15 p2609 A69-30460  
Oceanographic applications of radar altimetry from a spacecraft. 15 p2609 A69-30461
- GREENWOOD, L. R.**  
In situ vacuum testing - A must for certain elastomeric materials. 09 p1477 A69-22008  
Application of the line-source technique for vacuum thermal conductivity measurements. [AIAA PAPER 69-1013] 22 p3922 A69-40386
- GREENWOOD, R. H.**  
Water injection for rapid cooling of a flow of rocket exhaust gases. [AIAA PAPER 69-514] 19 p3372 A69-36301
- GREER, C. L.**  
Determination of orbits of planetary artificial satellites and planetary gravitational fields. 24 p4388 A69-43650
- GREER, H.**  
Pulsed performance of a steam reaction jet. 21 p3785 A69-39021
- GREER, R.**  
Telegraph time-division-multiplex equipment for satellite-communication systems. 17 p2920 A69-33420
- GREGG, D. W.**  
Zeeman splitting used to increase energy from a Q-switched iodine laser. 05 p0773 A69-16288
- GREGOR, H. P.**  
A highly reliable multi-channel microwave amplifier. 09 p1466 A69-22446
- GREGOREK, G. M.**  
Some shock/wind tunnel observations of interference effects in hypersonic wakes. 15 p2588 A69-30475
- GREGORI, G. P.**  
A statistical investigation on polar auroras. 02 p0247 A69-12772  
Origins of polar auroras in the diurnal hemisphere /Sull'origine delle aurore polari dell'emisfero diurno/. 13 p2256 A69-28654  
The history of the aurora. 13 p2256 A69-28655  
The calculation of the magnetic zenith /Il calcolo dello zenith magnetico/. 24 p4311 A69-43505
- GREGORKIEWICZ, W.**  
Experimental realization of a perfect piezo-semiconductor resonator /a phaser/. 03 p0431 A69-13930
- GREGORY, A. G.**  
Solar absorption photometry and the determination of atmospheric composition. 12 p2065 A69-26106
- GREGORY, B. C.**  
The effects of end holes and the glass tube on average electron number density measurements in a TM sub 010 cavity. 01 p0131 A69-10812
- Free-fall decay of a mercury vapor plasma in the early afterglow. 08 p1358 A69-19811
- GREGORY, G. L.**  
Experimental evaluation of the rate-of-rise method for measuring outgassing rates of three gases between 10 super minus super 6 and 10 super minus super 3 torr. 16 p2791 A69-32326
- GREGORY, J. B.**  
Seasonal variations of electron densities below 100 km at mid-latitudes. I. 14 p2438 A69-29109  
Seasonal variations of electron densities below 100 km at mid-latitudes. II. 14 p2439 A69-29110
- GREGORY, P. C.**  
Radio emission from auroral electrons. 07 p1127 A69-19257  
Guidance, navigation and control. 19 p3370 A69-36316  
The Ariel III cosmic radio noise experiment. 21 p3806 A69-39258
- GREGORY, R. D.**  
Stress concentration around a loaded bolt in an axially loaded bar. 04 p0681 A69-15195
- GREGORY, R. L.**  
Lunar psychology. 13 p2210 A69-27905
- GREGORY, T. L.**  
Surface characterization studies on CVD tungsten. 09 p1558 A69-21810
- GREGORY, W. H.**  
Tu-154 design advances Soviet transport technology. 18 p3092 A69-34933
- GREGUSS, P., JR.**  
Acoustical filtering with holographically matched spatial filters. 10 p1696 A69-23551
- GREIBACH, S.**  
Checking automata and one-way stack languages. 16 p2755 A69-32078
- GREIF, R.**  
Heat transfer in turbulent pipe flow with optically thin radiation. [ASME PAPER 68-WA/HT-17] 05 p0847 A69-16121  
Nongray radiative transport in a cylindrical medium. [ASME PAPER 69-HT-38] 24 p4411 A69-43534  
Stress-wave propagation in a class of nonhomogeneous elastic media. 24 p4403 A69-43574
- GREIFINGER, C.**  
Theory of hydromagnetic propagation in the ionospheric waveguide. 03 p0399 A69-14023  
Acoustic-gravity waves from an energy source at the ground in an isothermal atmosphere. 18 p3129 A69-34953
- GREIFINGER, P. S.**  
Theory of hydromagnetic propagation in the ionospheric waveguide. 03 p0399 A69-14023
- GREIG, J. R.**  
Rapid scanning with the Fabry-Perot etalon. 01 p0082 A69-10837  
Precursor vacuum ultraviolet radiation in a T-type shock tube. 20 p3511 A69-38239  
Measurements of the Stark broadening of H gamma. 22 p3985 A69-40664
- GREILING, P. T.**  
Large-signal analysis of avalanche-diode oscillators. 07 p1098 A69-18458
- GREIM, I. A.**  
Trajectory of the motion of a point image in a rotating angular mirror /Traektorii dvizheniya izobrazheniya tochki vo vrashchayushchiesya uglovom zerkale/. 11 p1881 A69-24562
- GREINER, H. F.**  
Design and test of an unloading gas barrier face seal. [ASLE FICFS PREPRINT 26] 15 p2621 A69-30495
- GREINER, W.**  
An electronically tunable parametric receiver amplifier as a low-noise high-frequency prestage for a radar receiver in the frequency range from 1250 to 1350 MHz /Ein elektronisch durchstimmbarer parametrischer Empfangsverstärker als rauscharme Hochfrequenzvorstufe fuer Radarempfänger im Frequenzbereich 1250 bis 1350 MHz/. 18 p3104 A69-35457
- GREISEN, E. W.**  
High-resolution interferometry of Venus at 3.12-cm wavelength. 18 p3191 A69-34302
- GREKOV, A. P.**  
Amide catalysis in monosubstitution reactions between hydrazine and esters /Amidnii kataliz v reaktsiakh monozamishchenikh gidrazinu z skladnimi efirami/. 14 p2409 A69-29033
- GREKOV, N. A.**  
Elastic properties of a titanium beta-alloy /IVT1/ /Uprugie svoystva beta-splava titana /IVT1/. 22 p3969 A69-40072
- GRENANDER, U.**  
A tactical study of evasive maneuvers. 03 p0457 A69-13898  
Foundations of pattern analysis. 14 p2470 A69-29360
- GRENIER, P.**  
Composite materials reinforced by fibers - The case of alumina whiskers /Les materiaux composites renforces par des fibres - Cas des trichites d'alumine/. 07 p1167 A69-19290
- GRENISHIN, S. G.**  
High-speed SP-III spectrophotochronograph. 12 p2085 A69-26161  
Measurement of the emissivity of nitrogen, oxygen, and air in the vacuum ultraviolet region of the spectrum. 21 p3774 A69-38944
- GRENS, E. A., II**  
An electrochemical mass transport-kinetic model for stress corrosion cracking of titanium. [ECS PAPER 147] 08 p1332 A69-20359
- GRENSEMANN, M. G.**  
ESRO-I project management and organisation. 13 p2382 A69-27750
- GRESHILOV, E. M.**  
Spectral characteristics of pressure pulsations near the wall during boundary-layer separation behind a bulge on a smooth wall /O spektral'nykh kharakteristikakh pristenochnykh pul'satsii daveniya pri otryye pogrannichnogo sloia za vystupom na gladkoi stenke/. 13 p2246 A69-27535  
The spectrum and the correlation of near-wall pressure pulsations for flow over a rough wall /O spektre i korrelatsii pristenochnykh pul'satsii daveniya pri obtekanii sherokhovatosti stenki/. 13 p2246 A69-27537  
Spectral characteristics of the wall pressure fluctuations associated with boundary layer separation behind a projection on a smooth wall. 20 p3518 A69-38202  
Spectrum and correlation of wall pressure fluctuations in flow past a rough wall. 20 p3518 A69-38203
- GRESHISHCHEV, B. A.**  
Calculation of the shrinkage cavity volume in castings of a wide-range alloy /K voprosu o raschete velichiny ob'ema usadochnykh pustot v otlivkakh iz shirokointerval'nogo splava/. 20 p3548 A69-37329  
Deduction of conditions for simulating the shrinking process in a melt with a broad melting interval /Vyvod uslovii modelirovaniia protseasa usadki shirokointerval'nogo splava/. 21 p3733 A69-39720
- GRETHER, W. F.**  
Effects of color of instrument lighting on absolute and acuity thresholds with exposure to a simulated instrument panel. 03 p0380 A69-14073
- GRETLER, W.**  
Analytical treatment of highly unsteady shock waves in characteristic coordinates /Analytische Behandlung starker instationärer Stosswellen in charakteristischen Koordinaten/. 10 p1677 A69-22899  
Extension of the inverse method for the calculation of plane subsonic flows to the case of flow past cambered profiles at angle of attack /Erweiterung der inversen Methode zur Ermittlung ebener Unterschallströmungen auf den Fall der Umströmung angestellter und gewölbter Profile/. 19 p3240 A69-36473



## GRETSKII, IU. IA.

Diffusion processes in the welding of metals /Review/  
/Diffuzionnye protsessy pri svarke metallov /obzor//.  
11 p1890 A69-24799

## GREVENDONK, W.

On the shear viscosity of liquid oxygen.  
05 p0846 A69-15916

## GRESSESSE, N.

Forbidden sulphur I lines in the solar spectrum.  
07 p1217 A69-19237

Solar abundances of some representative elements from the standpoint of nucleosynthesis /Abondances solaires de quelques elements representatifs au point de vue de la nucleosynthese//.  
08 p1402 A69-20906

Abundances of heavy elements in the sun.  
11 p1958 A69-24424

Forbidden lines of Fe II in the solar photospheric spectrum.  
16 p2854 A69-31652

Abundances of the rare earths in the sun.  
20 p3602 A69-37539

## GREWAL, K. S.

The effect of testing system stiffness on fracture behavior of sheet specimens.  
10 p1796 A69-23075

## GREWAL, M. S.

Ion-ion velocity space instability.  
03 p0475 A69-13154

## GREWING, M.

On the nature of the optical flux from extragalactic systems.  
02 p0326 A69-12706

Curve of growth analysis of the absorption line spectrum of 3 C 191.  
03 p0514 A69-13962

Mean energy distribution of quasi-stellar objects in the optical range /Mittlere Energieverteilung quasi-stellarer Objekte im optischen Bereich//.  
06 p0999 A69-16975

Distance estimates for pulsars.  
08 p1397 A69-20698

## GREY, J.

Cooled probes for gas measurements at very high temperatures.  
01 p0078 A69-10150

## GREYBER, H. D.

On the observation of stars, galaxies and quasars from a space observatory.  
18 p3194 A69-34370

## GREZIN, A. K.

A fluorite - Samarium laser.  
14 p2458 A69-29328

## GRIAZEVA, N. L.

Selenium distribution during oriented crystallization of gallium antimonide /O raspredelenii selenia pri napravlennoi kristallizatsii antimonida galliia//.  
23 p4198 A69-41725

## GRIAZNOV, A. P.

Operational characteristics of jet fuels purified of mercaptanes /Ekspluatatsionnye svoystva reaktivnykh topliv, ochishchennykh ot merkaptanov//.  
01 p0142 A69-11098

## GRIAZNOV, IU. M.

Synchronization of ruby laser and neodymium-glass laser single pulses by means of a bleachable liquid switch /O sinkhronizatsii monoimpul'sov izlucheniia rubinovogo i neodimovogo lazerov s pomoshch'iu prosvetliaushchegosia zhidkostnogo zatvora//.  
07 p1147 A69-18530

Stable passive Q-switch for a neodymium laser /Stabil'nyi passivnyi zatvor dlia neodimovogo lazera//.  
17 p2983 A69-33969

## GRIAZNOVA, T. A.

Magnetic retuning of a gyromonotron in the prestarting and starting modes /Magnitnaia perestroika giromonotona v dostartovykh i startovykh rezhimakh//.  
03 p0407 A69-13979

## GRIBANOVSKAIA, L. V.

The effect of the generalized coefficient of energy absorption on the mode of vibration of a full-size specimen on a vibration test bench /O vliianii obobshchennogo koefitsienta pogloscheniia energii na formu kolebaniia naturnogo obraztza na vibratsionnom stende//.  
17 p3062 A69-33718

## GRIBBIN, J. R.

Pulsation periods of rotating white dwarfs.  
17 p3037 A69-33641

## GRIBKOV, V. A.

High temperature effects of intense laser emission focused on a solid target.  
09 p1520 A69-22656

Measurement of the time variation of the temperature of the plasma of a laser flare by means of its X-radiation.  
18 p3154 A69-35496

## GRIBKOV, V. N.

Modulus of elasticity of some refractory compounds.  
09 p1529 A69-21871

## GRIBKOVSKII, V. P.

Dependence of the threshold current on losses in an interband transition model without a selection rule /O zavisimosti porogovogo toka ot poter' v modeli mezhzonnnykh perekhodov bez pravila otbora//.  
06 p0933 A69-17257

Determination of the amplification coefficient, luminescence power, and spacing between Fermi quasi-levels in injection lasers /Opredelenie koefitsienta usileniia, moshchnosti luminestsentsii i rasstoianiia mezhdu kvaziurovniami Fermi v inzhektionsnykh lazerakh//.  
22 p3965 A69-40801

## GRIBNIKOV, Z. S.

Electron-hole scattering in semiconductors at high injection levels /Elektronno-dyrochnoe rasseianie v poluprovodnikakh pri vysokikh urovniakh inzhetsitsii//.  
01 p0137 A69-10257

Dimensional n-type negative resistance in semiconductors /Rozmirmii vid'emnii opir n-tipu u napivprovidnikakh//.  
08 p1374 A69-21081

Electron-hole scattering in semiconductors at high injection levels.  
09 p1559 A69-22650

Photoconductivity of a many-valley semiconductor /Fotoprovodnist' bagatodolinnogo napivprovidnika//.  
11 p1937 A69-24913

## GRIBOV, E. B.

Calculation of the amplitude of the third-order combination component of a small-signal transistor amplifier /Raschet amplitudy kombinatsionnoi sostavliaiushchei tret'ego poriadka v tranzistornom usilitele pri malom signale//.  
13 p2226 A69-27218

## GRIDNEV, N. P.

Investigation of the group properties of the magnetohydrodynamic equations and their invariant solutions /Issledovanie gruppovykh svoystv uravnenii magnitnoi gidrodinamiki i ikh invariantnye resheniia//.  
07 p1191 A69-18994

## GRIDNEV, V. N.

Investigations of the problem of chromium /Issledovaniia po probleme khroma//.  
09 p1526 A69-22147

High-temperature internal friction in nickel-titanium alloys /Vysokotemperaturnoe vnutrennee trenie v splavakh nikel'-titan//.  
18 p3158 A69-35443

## GRIDNEVA, I. I.

Influence of deviations from the mutual perpendicularity of the gimbal axes on the kinematics of a four-gimbal Cardan mounting /Vliianie otklonenii ot vzaimnoi perpendikuliarnosti osi kolets na kinematiku chetyrekhkolezhnogo kardanova podvesa giroskopa//.  
09 p1502 A69-22705

## GRIDNEVA, I. V.

Study of dislocation mobility in indium antimonide /Issledovanie podvizhnosti dislokatsii v antimonide indii//.  
12 p2143 A69-26453

## GRIDNEVA, S. M.

Quadrupole transitions in the diagnostics of the plasma of alkaline metals.  
02 p0286 A69-11584

## GRIEBE, R. W.

Choking and shock phenomena in a single-component two-phase flow including vibrational effects. [ASME PAPER 69-HT-61]  
24 p4303 A69-43535

## GRIEGER, F.

Evaluation of multisensory signal-processing in cortical and brain stem regions of the albino rat /Evaluation multisensorischer Signalverarbeitungsprozesse in kortikalen und Stammhirn-Bereichen der Albino-Ratte//.  
23 p4092 A69-42055

## GRIEM, H. R.

Calculated electron and ion Stark broadening of the allowed and forbidden 2 super 3 P-4 super 3 P, super 3 D, super 3 F transitions in neutral helium.  
09 p1601 A69-22209

Spontaneous single-photon decay of 2 super 3 S sub 1 in helium-like ions.  
15 p2695 A69-30893

Collisionless shock waves and turbulent heating in high voltage theta pinches.  
17 p3013 A69-33822

Calculated electron and ion Stark broadening of the allowed and forbidden 2P-nL /n greater than or equal to 5, L equals 1, 2, ..., n-1/ triplet and singlet transitions in neutral helium.  
22 p3985 A69-40665

## GRIEMSMANN, J. W. E.

Transient electromagnetic guided wave propagation in moving media.  
04 p0557 A69-14751

Fundamental properties of electrical insulation materials.  
13 p2230 A69-27988

## GRIENEISEN, P. H.

Evidence for sinusoidal phase modulation in small self-trapped filaments.  
03 p0442 A69-14189

## GRIEP, D. J.

Pulsed performance of a steam reaction jet.  
21 p3785 A69-39021

## GRIEPENTROG, H.

Secondary flows in a cascade of compressor blades: with high deflection and low aspect ratio /Ecoulements secondaires dans les grilles d'aubes de compresseurs a forte deflexion et faible allongement//.  
17 p2896 A69-33606

## GRIER, D. R.

On a general method of parameter estimation. [AIAA PAPER 69-947]  
22 p3975 A69-40330

## GRIESER, C.-J.

Simplified calculation of the shock force of a parachute /Vereinfachte Berechnung der Streckstosskraft von Fallschirmen//.  
15 p2551 A69-31172

## GRIESHABER, C. K.

Blood volume changes in altitude exposed rats returned to ambient pressure.  
01 p0015 A69-10922

## GRIFFEL, D. H.

Induced fields in the moon.  
14 p2518 A69-2912

The anisotropy of the solar wind.  
16 p2849 A69-32097

## GRIFFEL, W.

Plate Formulas.  
05 p0833 A69-15726

## GRIFFIN, C. R., JR.

Correlation of scattering cross sections of disturbed index of refraction and acceleration increment of a conventional aircraft due to clear-air turbulence.  
10 p1656 A69-23651

## GRIFFIN, D. C.

Theoretical calculations of the d-, f-, and g-electron transition series.  
08 p1355 A69-20734

## GRIFFIN, J.

The application of or to stop selection and sequencing for the aeromedical evacuation problem. [AAS PAPER 69-385]  
24 p4251 A69-42804

## GRIFFIN, J. R.

Application of two-dimensional photoelasticity to the study of acceleration stresses under quasi-static conditions.  
14 p2532 A69-28885

The general transfer matrix for networks with open-circuited or short-circuited stubs.  
21 p3687 A69-39660

## GRIFFIN, R.

Forbidden Ca II in Arcturus.  
08 p1392 A69-20558

Rubidium in Arcturus.  
14 p2522 A69-29589

The atmosphere of alpha Serpentis. I - Preliminary curve-of-growth analysis.  
18 p3200 A69-35130

A first observation of Arcturus with a double-pass spectrometer.  
21 p3721 A69-38697

Differential curve-of-growth analyses of four late-type giant stars.  
21 p3800 A69-38700

## GRIFFIN, R. E.

Sensitivity analysis of fixed point linear smoothing algorithms.  
01 p0050 A69-10238

- Large and small scale sensitivity analysis of optimum estimation algorithms. 02 p0224 A69-11961
- Error bounds for optimum smoothing algorithms. 09 p1533 A69-22436
- Error bounds in optimum smoothing. 14 p2416 A69-29549
- GRIFFIN, R. F.**
- Some effects of the instrumental profile in stellar spectrophotometry, with particular reference to the Arcturus Atlas. 21 p3721 A69-38696
- The instrumental profile of the Liege Solar Atlas. 21 p3722 A69-38698
- The instrumental profile of the Utrecht Solar Atlas. 21 p3722 A69-38699
- GRIFFIN, R. N.**
- Studies related to satellite thermal control - Measurements of earth-reflected sunlight and stability of thermal-control coatings. 09 p1579 A69-22174
- Optical surface degradation from combined ultraviolet radiation and outgassed materials. 13 p2299 A69-28015
- Phase-change coatings combine active and passive thermal control. 14 p2530 A69-29434
- GRIFFIN, R. N., JR.**
- Description of Ames Research Center earth albedo experiment on OSO-III spacecraft. 15 p2614 A69-31279
- GRIFFIN, W. S.**
- Fluidic logic for a pneumatic stepping motor. 18 p3092 A69-34310
- A fluid-jet amplifier with flat saturation characteristics. [ASME PAPER 69-FLCS-21] 20 p3466 A69-37985
- GRIFFOEN, J.**
- The Paca-70 camera, a development for a unique approach to panoramic photography. 09 p1499 A69-22246
- GRIFFITH, B. J.**
- Simulation of the Apollo command module aerodynamics at high altitudes. 12 p2012 A69-26800
- Correlation of mass injection drag data for slender cones at hypersonic speeds. 13 p2199 A69-28224
- GRIFFITH, C. D.**
- A self-monitored stability augmentation system for the CX-84 V/STOL aircraft. [AHS PAPER 310] 17 p2901 A69-33545
- GRIFFITH, J. G.**
- Environmental control for radiation testing of lunar rock samples. 20 p3512 A69-38271
- GRIFFITH, J. M.**
- Optimisation of bandwidth in noniterative wideband amplifiers. 09 p1469 A69-22606
- GRIFFITH, J. S.**
- Handbook of Solar Simulation for Thermal Vacuum Testing. 21 p3690 A69-38894
- Some tests for increase in friction of mechanisms of the Mariner Mars 1969 spacecraft in the JPL Molsink space simulation chamber. [AIAA PAPER 69-996] 22 p3920 A69-40374
- GRIFFITH, P.**
- Deterioration in heat transfer to fluids at supercritical pressure and high heat fluxes. [ASME PAPER 68-HT-39] 13 p2373 A69-27771
- GRIFFITH, R.**
- Measurement of emission and absorption coefficients of the Balmer line H alpha. 16 p2822 A69-32040
- GRIFFITH, W. C.**
- Radiation gas dynamics in the shock tube. 18 p3116 A69-34447
- GRIFFITHS, J. D.**
- Transmitter filter improves voice communications. 20 p3505 A69-37293
- GRIFFITHS, J. F.**
- Studies of stabilized low temperature ignition. 1 - Cyclohexane. 02 p0304 A69-12314
- GRIFFITHS, L. B.**
- Preparation and properties of cast beryllium-aluminum alloys. 19 p3340 A69-35524
- GRIFFITHS, P. R.**
- High-temperature equilibria from plasma sources. I - Carbon-hydrogen-oxygen systems. 21 p3670 A69-39737
- High-temperature equilibria from plasma sources. II - Hydrocarbon systems. 21 p3670 A69-39738
- GRIFFITHS, R. T.**
- Differential boundary-layer separation effects in the flow over a rotating cylinder. 17 p2958 A69-34213
- GRIFFITHS, V. S.**
- Helical detector and alarm system for 2450 MHz and applications. 24 p4312 A69-42573
- GRIFFITHS, W. K.**
- Barometric coefficients of multiplicities in neutron monitors. 03 p0425 A69-14025
- GRIGALASHVILI, N. S.**
- Delayed coincidences in air showers. 13 p3331 A69-28402
- GRIGGS, M.**
- Emissivities of natural surfaces in the 8- to 14-micron spectral region. 04 p0592 A69-14653
- Aircraft measurements of albedo and absorption of stratus clouds, and surface albedos. 04 p0627 A69-14914
- Measured and calculated earth-atmosphere radiance in the 8-14-mu window as a function of altitude. 08 p1311 A69-21094
- Aircraft measurements and calculations of the total downward flux of solar radiation as a function of altitude. 17 p3023 A69-33158
- GRIGOLIUK, E. I.**
- Action of an acoustic pressure wave on a shallow spherical shell /Deistvie akusticheskoi volny davleniia na pologuii sfericheskuiu obolochku/. 02 p0339 A69-11977
- Displacement of a rigid cylinder under the influence of an acoustic pressure wave /Peremeshchenie zhestkogo tsilindra pod deistviem akusticheskoi volny davleniia/. 04 p0667 A69-14261
- Flutter of three-layer cylindrical shells. 05 p0843 A69-16683
- General theory of three-layer structures and its applications /Obshchaya teoriya trekhslonnykh konstrukttsii i ee prilozheniia/. 06 p1025 A69-17615
- Local stability of elastic shells of revolution /Lokal'naia ustoiichivost' uprugikh obolochek vrashcheniia/. 07 p1237 A69-19686
- On the creep buckling of shells. 08 p1411 A69-20143
- Action of an acoustic pressure wave on a hollow spherical shell. 15 p2704 A69-30262
- Local stability of viscoelastic shells of revolution /Lokal'naia ustoiichivost' viazko-uprugikh obolochek vrashcheniia/. 18 p3216 A69-34573
- Machine for in vacuo testing of samples at high temperatures /Mashina dlia ispytaniia obratzov v vakuume pri vysokoi temperature/. 18 p3117 A69-34604
- On the transfer of loads from reinforcing ribs to a cylindrical shell. 19 p3443 A69-36792
- GRIGOREKO, IA. M.**
- Axissymmetric deformation of shells of revolution of moderate thickness /K osesimmetrichnoi deformatsii obolochek vrashcheniia srednei tolshchiny/. 23 p4226 A69-41705
- GRIGORENKO, E. I.**
- Study of the inhomogeneous structure of the ionospheric E layer /Issledovanie neodnorodnoi struktury sloia E ionosfery/. 17 p2962 A69-33896
- GRIGORENKO, IA. M.**
- Digital computer solution of problems associated with an asymmetric stressed state of systems composed of shells of revolution /Reshenie na ETsVM zadach o
- nesimmetrichnom napriazhenom sostoianii sistem iz obolochek vrashcheniia/. 05 p0840 A69-16201
- Asymptotic behavior of the higher harmonics during asymmetric deformation of conical shells of variable thickness /Asimptotichne povodzhennia visshikh garmonik pri nesimmetrichnii deformatsii konichnikh obolonok zminnoi tovshchiny/. 11 p1983 A69-25090
- Deformation of shells with opposite edges hinged and rigidly clamped /Deformatsiia obolochek s sharniro opertym i zhestko zashchemlennym protivopolozhnymi kraiami/. 11 p1985 A69-25174
- GRIGORENKO, L. P.**
- Kinetics and mechanism of breakdown in graphite materials under intensive wear /Kinetika i mekhanizm razrusheniia grafitovykh materialov pri intensivnom iznashivani/. 14 p2467 A69-28912
- GRIGORENKO, V. G.**
- Classification and principles of construction of fast-response microwave interferometers /Printsipy postroeniia i klassifikatsiia bystrodeistviushchikh mikrovolnovykh interferometrov/. 09 p1496 A69-22028
- Analysis of the errors in certain microwave interferometer circuits /Analiz pogreshnostei nekotorykh skhem mikrovolnovykh interferometrov/. 09 p1496 A69-22029
- Effect of refraction on the accuracy of plasma density determination by microwave interferometry /Vlianie refraktsii na tochnost' opredeleniia plotnosti plazmy pri mikrovolnovoi interferometrii/. 09 p1496 A69-22031
- A microwave interferometer with digital-logic elements /Mikrovolnovyi interferometr so schetnologicheskimi elementami/. 14 p2452 A69-29802
- GRIGOREV, A. I.**
- Effect of transverse accelerations on certain kidney functions. 02 p0198 A69-11514
- Solid Rocket Propellants /Tverdye raketnye topliva/. 20 p3585 A69-37441
- GRIGOREV, A. M.**
- Sensitivity of the roots of the characteristic equation of a linear system /Chuvstvitel'nost' kornei kharakteristicheskogo uravneniia lineinoi sistemy/. 10 p1666 A69-23610
- Ionization manometer transducers for measuring pressures from 10 super minus 10 to 10 super minus 1 torr /Ionizatsionnye manometricheskie preobrazovateli dlia izmereniia davlenii 10 super minus 10 to 10 super minus 1 torr/. 21 p3724 A69-39077
- GRIGOREV, A. N.**
- Ionization of gases by fast N super plus and N super 2 super plus ions /Ionizatsiia gazov bystryimi ionami N super plus i N super 2 super plus/. 13 p2304 A69-28440
- GRIGOREV, A. T.**
- The zirconium corner of the phase diagram of the zirconium-aluminum-molybdenum system /Tsirkonievyy ugol diagrammy sostoianii sistemy tsirkonii-aliuminiimolibdena/. 02 p0261 A69-11840
- The zirconium corner in the phase diagram of the zirconium-beryllium-niobium system /Tsirkonievyy ugol diagrammy sostoianii sistemy tsirkonii-berillii-niobii/. 02 p0262 A69-11843
- Corrosion resistance of alloys in the zirconium-beryllium-niobium system /Korroziionnaya stoikost' splavov sistemy tsirkonii-berillii-niobii/. 02 p0262 A69-11844
- Mechanical properties of low-alloy alloys in the zirconium-beryllium-niobium system /Mekhanicheskie svoystva malolegirovannykh splavov sistemy tsirkonii-berillii-niobii/. 02 p0262 A69-11845
- The phase diagram of the zirconium-vanadium-niobium system /Diagramma sostoianii sistemy tsirkonii-vanadii-niobii/. 02 p0263 A69-11848
- Mechanical properties of zirconium-vanadium-niobium alloys /Mekhanicheskie svoystva splavov tsirkonii-vanadii-niobii/. 02 p0263 A69-11849
- Zirconium corner of the phase diagram of the zirconium-molybdenum-tantalum system /Tsirkonievyy ugol diagrammy sostoianii sistemy tsirkonii-molibden-tantal/. 02 p0264 A69-11858



The zirconium corner in the zirconium-nickel-niobium phase diagram /Tsirkonievyy ugol diagrammy sostoiانيا tsirkonii-nikel'-niobii/.  
02 p0264 A69-11860

Phase diagram and oxidizability of Nb-mo-Cr alloys /Diagramma sostoiانيا i okisliamost' splavov Nb-Mo-Cr/.  
18 p3157 A69-35248

## GRIGOREV, D. P.

Crystallization of pyroxene in meteoritic chondrules /Kristallizatsiia piroksena v meteoritnykh khondrakhl/.  
22 p4033 A69-41065

## GRIGOREV, G. I.

Diffusion of strong inhomogeneities in a weakly ionized magnetoactive plasma /O diffuzii sil'nykh neodnorodnostei v slaboiionizirovannoi magnitoaktivnoi plazme/.  
08 p1362 A69-20426

Some problems in the theory of traveling ionospheric disturbances /Nekotorye voprosy teorii peremeschaiushchikhsia ionosfernykh vozmushchenii/.  
17 p2966 A69-33980

Generation of ionospheric perturbations by alternating currents at polar latitudes /Generatsiia ionosfernykh vozmushchenii peremennymi tokami poliarnykh shirot/.  
23 p4155 A69-41842

## GRIGOREV, G. V.

Diffusion of beryllium in zirconium and titanium /Diffuziia berillia v tsirkonii i titane/.  
18 p3157 A69-35251

## GRIGOREV, I. U. G.

Experimental verification of the permissible radiation doses for extended space missions ("chronic experiments" with dogs) /K eksperimental'nomu obosnovaniyu dopustimnykh doz radiatsii pri dlitel'nykh kosmicheskikh poletakh /provedenie khronicheskogo eksperimenta na sobakakh/.  
05 p0708 A69-16508

Radiation danger during prolonged space flights and radiobiological investigations.  
08 p1261 A69-19826

Radiobiological evidence on the importance of local protection of the astronaut.  
08 p1263 A69-19939

Quantitative laws of the postirradiation recovery of yeast cells after exposure to heavy high-energy C super 12 ions /Kolichestvennye zakonomernosti postradiatsionnogo vosstanovleniia drozhdzhevykh kletok pri deistvii vysokoenergetichnykh tiazhelykh ionov C sub 12/.  
14 p2406 A69-28915

Diurnal rhythms and ionizing radiation effects.  
15 p2557 A69-31458

Experimental verification of permissible radiation doses during prolonged space flights - A "chronic experiment" on dogs.  
18 p3095 A69-34727

## GRIGOREV, I. U. V.

Theory of parametric light generators /K teorii parametricheskikh generatorov sveta/.  
03 p0437 A69-13044

## GRIGOREV, M. M.

Properties of bronzes made of granulated chromium bronze /Svoistva polufabrikatov iz granulirovannoi khromistoi bronzy/.  
02 p0266 A69-12127

## GRIGOREV, S. M.

One of the reasons for the asymmetry of the lunar relief /Odn iz prichin asimetrii rel'efa luny/.  
18 p3206 A69-35439

## GRIGOREV, V. I.

Effect of filtering of the pump light on the frequency of the 0-0 transition of Rb87.  
04 p0611 A69-14779

Investigation of the frequency shift in the S sub 1/2, F equals 2, m sub F equals 0 S sub 1/2, F equals 1, m sub F equals 0 transition of Rb super 87 atoms during pulsed optical pumping /Issledovanie sdviga chastoty perekhoda S sub 1/2, F equals 2, m sub F equals 0 S sub 1/2, F equals 1, m sub F equals 0 atomov Rb super 87 pri impul'snoi opticheskoi nakachke/.  
19 p3336 A69-36345

## GRIGOREV, V. M.

Magnetic knots near a sunspot.  
07 p1217 A69-19244

Some results of the active regions magnetic field researches.  
22 p4010 A69-39991

## GRIGOREV, V. P.

Interchangeability of Structural Elements in Aircraft Construction /Vzaimozameniaemost' agregatov v samoletostroeni/.  
20 p3462 A69-37443

## GRIGOREVA, L. I.

Observation of plasma instability in a strong alternating electric field.  
09 p1552 A69-22526

Plasma heating by a fast magnetosonic wave of large amplitude.  
14 p2493 A69-29643

## GRIGOREVSKII, V. M.

Periods of rotation of the satellites 1965-11-4  
12 p2069 A69-26440

The drag of a cylindrical satellite rotating in the earth's magnetic field /O tormozhenii tsilindricheskogo sputnika, vrashchaiushchegosia v magnitnom pole zemli/.  
12 p2174 A69-26443

Damping of satellite rotation by the earth's magnetic field /O tormozhenii vrashcheniia sputnika magnitnym polem zemli/.  
14 p2530 A69-29065

## GRIGORIAN, N. A.

Ferroelectric and magnetic properties of /1 - x/BiMnO sub 3 - xPbTiO sub 3 solid solutions /Segnetoelektricheskie i magnitnye svoistva tverdykh rastvorov /1 - x/BiMnO sub 3 - xPbTiO sub 3/.  
22 p3996 A69-41163

## GRIGORIAN, S. S.

Parametric resonance in communicating vessels under variable vertical accelerations /Parametricheskii rezonans v soobshchaiushchikhsia sosudakh pri vertikal'nykh peremennykh peregruzkakh/.  
14 p2432 A69-29628

## GRIGORIAN, N. M.

Stability of equilibrium of a cylindrical shell under the action of a suddenly applied loading.  
06 p1021 A69-17181

## GRIGORIAN, V. G.

Low-voltage cesium arc in thermionic converter with extended cathode surface.  
14 p2403 A69-29250

## GRIGORIAN, V. V.

Method of measuring the population of the metastable level of laser active materials /Metod izmereniia naslennosti metastabil'nogo urovnia aktivnogo materiala OKG/.  
06 p0934 A69-17457

Measurement of the cross section of induced emission of a material in a laser operating in a quasi-steady mode /Izmerenie secheniia induitsirovannogo izlucheniia veshchestva pri kvazistatsionarnom rezhime raboty OKG/.  
07 p1156 A69-19161

A method of measuring the population of the metastable level of the active material in a laser.  
20 p3555 A69-37940

## GRIGORIEV, I. U. G.

Characteristics of biological effects of cosmic radiation, model investigations.  
20 p3478 A69-37628

## GRIGOROV, N. L.

The study of the high energy cosmic ray particles with the "Proton" satellites.  
03 p0499 A69-12944

Large-area proportional counter for the study of cosmic rays.  
03 p0427 A69-12979

Low-energy proton flux in the neighborhood of the moon on December 13, 1966 /Potok protonov mal'nykh energii v okrestnosti Luny 13 dekabria 1966 g./.  
09 p1577 A69-21773

Study of cosmic-ray electrons and gamma quanta at altitudes up to 27.5 km /Issledovanie elektronov i gamma-kvantov kosmicheskikh luchi na vysotakh do 27.5 km/.  
10 p1758 A69-22830

Interaction free path in iron of nuclear-active particles with energies above 5.3 x 10 super 11 ev.  
13 p2303 A69-28385

Absorption in an ionization calorimeter of the energy flux of the nuclear component.  
13 p2330 A69-28386

Measurements with a large ionization calorimeter of the energies of nuclear-active particles in extensive air showers.  
13 p2331 A69-28387

Investigation of nuclear interactions of high-energy particles by the controlled nuclear emulsion method.  
13 p2331 A69-28388

Variations in the electron and gamma quanta intensities in the atmosphere /Ob izmeneniakh intensivnosti elektronov i gamma-kvantov v atmosfere/.  
20 p3587 A69-37044

A device for recording electrons with energies from 0.1 to 1.5 Gev in cosmic radiation /Pribor dlia registratsii elektronov s energiei 0,1 to 1,5 Gev v kosmicheskoi izluchanii/.  
21 p3724 A69-39077

Energy spectrum of neutrons in the 10 super 11 to 1 super 12 ev energy range at sea level /K voprosu o energeticheskoi spektre neitronov v oblasti energii 10 super 11-10 super 12 ev na urovne moria/.  
23 p4205 A69-41707

## GRIGOROVICH, V. K.

Electron theory of heat-resistant alloys based on high-melting-point metals with a bcc lattice /K elektronnoi teorii zharoprotivnykh splavov na osnove tiazhol'nykh metallov s otsk-reshetkoi/.  
09 p1525 A69-22133

Aging of niobium alloys alloyed with oxygen /Starenie niobievnykh splavov, legirovannykh kislorodom/.  
15 p2640 A69-30633

## GRIGOROVICI, R.

Piezoresistance in amorphous germanium.  
19 p3391 A69-36555

## GRIGSON, C. W. B.

Studies of thin polycrystalline films by electron beams.  
11 p1936 A69-24601

## GRIKIT, I. A.

Spectral determination of oxygen in titanium with preliminary extraction /Spektral'noe opredeleniie kisloroda v titane s predvaritel'noi ekstraktsiei/.  
14 p2446 A69-29158

## GRILIKHES, V. A.

Analysis of radiant transfer processes in cylindrical cavity-type receivers of solar installations /Analiz protsessov luchistogo obmena v tsilindricheskikh polostnykh priemnikakh geliostanovok/.  
16 p2741 A69-32799

## GRILITSKII, D. V.

The stress of an anisotropic plate with a soldered isotropic nucleus in the presence of notches at the seams /Napriazhennoe sostoiانيا anizotropnoi plastinki s vspaiannym izotropnym iadrom pri nalichii razrezov na spae/.  
18 p3218 A69-34602

## GRILITSKOI, D. V.

The second basic problem of anisotropic plates with a circular isotropic inclusion /Vtoraia osnovnaia zadacha dlia anizotropnoi plastinki s krugovym izotropnym vklucheniem/.  
04 p0667 A69-14264

## GRIM, D.

Cost data for economical orbital transportation system design. [AIAA PAPER 69-439]  
16 p2882 A69-32654

## GRIM, R. R.

An evaluation of the different types of digital integrated circuits as sources of electromagnetic interference.  
23 p4141 A69-42219

## GRIMARD, M.

Three-week exposure of rodents to a neon enriched atmosphere.  
01 p0019 A69-11342

## GRIMES, C. C.

Experimental evidence for the correlation-produced magnetoplasma mode in potassium.  
10 p1728 A69-23168

## GRIMES, H. H.

Vacancy relaxations in b.c.c. crystals.  
05 p0809 A69-16529

## GRIMM, U.

Initiation of detonation by incident shock waves in hydrogen-oxygen-argon mixtures.  
02 p0304 A69-12313

## GRIMMER, R. C.

Asymptotically almost periodic solutions of differential equations.  
15 p2645 A69-31096

## GRIMMER, R. L.

A computerized data acquisition system for real time fault isolation.  
11 p1843 A69-25082

## GRIMOV, I. U. G.

Improving the convergence and increasing the accuracy of stochastic approximation in determining the numerical parameters of a system.  
09 p1461 A69-21857

**GRIMSHAW, E. R.**  
Gravity gradient booms - Their origin and evolution.  
07 p1226 A69-18327

**GRIMZE, L. B.**  
Experimental application of a universal program of the Leningrad State University Computer Center for calculating axisymmetrically deformed shells of revolution /Opýt ekspluatatsii universal'noi programy VTS LGU dlia rascheta obolochek vrashcheniia pri osesimmetrichnoi deformatsii/.  
06 p1026 A69-18019

**GRIN, I. U. I.**  
A gas laser using atmospheric air /Gazovyi lazer na atmosfernom vozdukh/.  
11 p1895 A69-24625  
A laser based on CO sub 2 formed chemically in an electrical discharge /Opticheskii kvantovyi generator na khimicheski obrazovannom v elektricheskom razriade CO sub 2/.  
13 p2274 A69-28585

**GRINBLIUM, T. M.**  
Theory of double injection in semiconductor p-i-n structures with nonideal contacts /K teorii dvoimoi inzhetsii v poluprovodnikovyykh p-i-n strukturakh s neideal'nymi kontaktami/.  
13 p2323 A69-28524

**GRINCHENKO, V. T.**  
Exact solution to the problem of the stress distribution near a circular hole in an elastic layer /Tochnoe reshenie zadachi o raspredelenii napriazhenii okolo krugovogo otverstii v uprugom sloe/.  
04 p0667 A69-14266  
Ionization manometer transducers for measuring pressures from 10 super minus 10 to 10 super minus 1 torr /Ionizatsionnye manometricheskie preobrazovateli dlia izmereniia davlenii 10 super minus 10 to 10 super minus 1 tor/.  
21 p3724 A69-39077

**GRINDELAND, R. E.**  
Identity between the growth hormone degrading activity of the pituitary gland and plasmin.  
06 p0873 A69-17105

**GRINGAUZ, K. I.**  
Characteristics of the neutral and ionized components of the atmosphere at heights of 100- 500 km, measured during the flights of geophysical rockets.  
03 p0422 A69-13508  
Results of Soviet investigations of charged particles and magnetic fields in space /Rezultaty sovetskikh issledovaniy zariazhennykh chastits i magnitnykh polei v kosmicheskom prostranstve/.  
[UN PAPER 68-95768] 06 p0986 A69-17031  
Plasma measurements in the vicinity of Venus by the space vehicle "Venus-4."  
07 p1222 A69-19613  
Change in solar wind ion flux with rise in solar activity level - Data from the "Venera-2" and "Venera-4" space probes.  
10 p1771 A69-24201  
Low-energy plasma in the earth's magnetosphere.  
12 p2150 A69-26747  
Plasma in interplanetary space /Plazma v mezplanetnom prostranstve/.  
13 p2336 A69-27354

**GRINGORTEN, I. I.**  
Estimates of duration of a continuous variate by Markov process.  
08 p1346 A69-20731

**GRINIUK, V. D.**  
Spherulite boundaries and some specific features of interspherulite breakdown /Granitsy sferulitov i nekotorye osobennosti mezhsferulitnogo razrusheniia/.  
22 p3973 A69-40740

**GRINNOCH, E.**  
Stochastic servomechanism design via optimal filter theory.  
18 p3110 A69-34673

**GRIPSHOVER, P. J.**  
Friction welding of aerospace materials.  
09 p1508 A69-22335  
Fabrication of complicated powder-metallurgical shapes by hydrostatic pressing.  
09 p1511 A69-22353

**GRISAFFE, S. J.**  
Protective coatings for chromium alloys.  
12 p2114 A69-26495

**GRISHAEV, G. S.**  
A generator of pulses modulated by high-frequency oscillation for semiconductor laser excitation /Generator impul'sov, zapolnennykh vysokochastotnym kolehaniem, dlia vozbuzhdeniia poluprovodnikovyykh O.K.G./.  
18 p3153 A69-35256

Nanosecond pulse generators for semiconductor laser excitation /Generatory nanosekundnykh impul'sov dlia vozbuzhdeniia poluprovodnikovyykh O.K.G./.  
18 p3153 A69-35257

**GRISHANINA, L. A.**  
Body weight and protein synthesis in animals during hypokinesia.  
08 p1262 A69-19928

**GRISHCHAK, L. E.**  
Influence of temperature on the mechanical properties of fiberglass-reinforced textolites /Vliianie temperatury na mekhanicheskie svoystva steklotekstilov/.  
23 p4179 A69-41993

**GRISHCHAK, V. Z.**  
Investigation of the carrying capacity of reinforced cylindrical shells under complex loading with allowance for discrete positioning of the ribs /Issledovanie nesushchei sposobnosti podkreplennykh tsilindricheskikh obolochek pri kombinirovannom nagruzenii s ucheto diskretnogo raspolozheniia sh-pangoutov/.  
23 p4229 A69-41990

**GRISHCHENKO, I. U. I.**  
Investigation of the law of reflection of molecular beams.  
20 p3580 A69-37814

**GRISHCHUK, L. P.**  
Anisotropy of the early stages of cosmological expansion and relict emission /Anizotropiia rannikh stadii kosmologicheskogo rasshireniia i relikovogo izlucheniia/.  
09 p1593 A69-21568

**GRISHECKINA, S. P.**  
Coherent emission from injection plasma in InSb without magnetic field.  
19 p3387 A69-36532

**GRISHIN, A. M.**  
Ignition of a reacting gas by a heated surface with allowance for concentrated diffusion /Zazhiganie reagiruiushchego gaza nagretoi poverkhnosti s uchetom konsentratsionnoi diffuzii/.  
16 p2878 A69-31955

**GRISHIN, A. V.**  
Method of calculating the gasdynamic and electrical parameters of the two-dimensional flow of a low-temperature plasma in a coaxial type magnetogasdynamical channel /Metod rascheta gazodinamicheskikh i elektricheskikh parametrov dvumernogo techeniia nizkotemperaturnoi plazmy v magnetogazodinamicheskom kanale koaksial'nogo tipa/.  
13 p2305 A69-27386

**GRISHIN, I. N.**  
Morphological investigation of noctilucous clouds on July 3-4, 1967 /Morfologicheskoe issledovanie serebristyykh oblakov 3-4 iulia 1967 g./.  
18 p3132 A69-35335

**GRISHIN, S. D.**  
Nonequilibrium two-phase flow in a Laval nozzle with the coagulation of particles of the polydispersed condensate /Neravnovesnoe dvukhfaznoe techenie v sope Lavalia s koagulyatsiei chastits polydispersnogo kondensata/.  
14 p2391 A69-29621

**GRISHIN, V. L.**  
Certain problems in the interaction of titanium with fillers in diffusion brazing.  
06 p0945 A69-17896

**GRISHKEVICH, L. V.**  
Polar-type absorption in the mid-latitude ionosphere during the global magnetic storm of May 26, 1967 /Pogloshchenie poliarnogo tipa v ionosfere srednikh shirot vo vremia mirovoi geomagnitnoi buri 26 maia 1967 g./.  
10 p1688 A69-23935

**GRISSETT, F. R.**  
Attitude control of a manned earth orbiting space station.  
[AIAA PAPER 69-846] 21 p3822 A69-39376

**GRISWOLD, R. E.**  
Microwave components for wide-band phased arrays.  
04 p0571 A69-14318

**GRITSYNA, V. V.**  
Luminescence spectra of nitrogen, oxygen, and air excited by fast electrons in the infrared region of the spectrum, and comparison of them with polar aurora spectra /Spektry svecheniia azota, kisloroda i vozdukh, vozbuzhdennykh bystryimi elektronami, v infrakrasnoi oblasti spektra i sravneniie ikh so spektrami poliarnykh siiani/.  
10 p1687 A69-23916

**GRITZMACHER, T. J.**  
A plasma scanner and data processing system for current-voltage curves.  
14 p2450 A69-29568

**GROBMAN, W. D.**  
New conclusions concerning the observation of faint sources from a sunlit spacecraft.  
16 p2861 A69-32301  
Electrostatic potential distribution of the sunlit lunar surface.  
20 p3609 A69-38077

**GROBOV, V. A.**  
Nonlinear spatial oscillations of a satellite about a center of mass during its motion in a circular orbit /Nelineinye prostranstvennye kolebania sputnika ot nositel'no tsentra mass pri dvizhenii ego po krugovoi orbite/.  
04 p0665 A69-14270

**GROCE, I. J.**  
Solid state batteries.  
10 p1640 A69-23998

**GRODEN, C. M.**  
On the non-uniformly illuminated p super plus -n junction. I.  
03 p0486 A69-13636

**GRODNEV, I. I.**  
Shielding in a wide frequency range /Ekranirovanie v shirokom diapazone chastot/.  
15 p2562 A69-30120

**GRODZOVSKII, G. L.**  
Bodies of revolution with a minimum drag coefficient and low heat transfer at high supersonic flight velocities /O telakh vrashcheniia s minimal'nykh koef-fitsientom lobbogo soprotivleniia i maloi teploperedachei pri bol'shikh sverkhzvukovykh skorostiakh poleta/.  
02 p0191 A69-12578  
Scientific results of a flight of the lantar I automatic ionospheric laboratory /Nauchnye rezultaty poleta avtomaticheskoi ionosfernoi laboratorii "lantar-I"/.  
05 p0830 A69-16056  
Optimal systems for heat removal by radiation /A review/ /Optimal'nye sistemy otvoda tepla izlucheniem /obzor/.  
06 p1033 A69-17600  
Scientific results of the flight of the automatic ionospheric laboratory "Yantarr-1".  
20 p3618 A69-37966  
Variational problems in space flight mechanics.  
24 p4383 A69-42956

**GROEGLER, N.**  
Rare-gas measurements in separate mineral phases of the Otis and Elenovka chondrites.  
19 p3418 A69-36137

**GROGNOT, P.**  
Physiopathological reactions of the human being exposed to infrasounds applied via the auricular canal /Reactions physiopathologiques de l'etre humain - Expose a des infra-sons appliques par voie auriculaire/.  
13 p2215 A69-28590

**GROH, G.**  
A new method for producing point holograms.  
11 p1886 A69-25058  
Multiple imaging by means of holograms of correlated objects.  
21 p3727 A69-39777

**GROH, K.**  
Extraction and acceleration mechanism in RF- ion thrusters.  
[AIAA PAPER 69-284] 09 p1564 A69-21237

**GROLL, H.**  
New microwave measurement methods /Neuere Messverfahren der Mikrowellentechnik/.  
13 p2223 A69-28605  
Q-measurements of microwave cavities /Zur Messung des Guetefaktors von Mikrowellenresonatoren/.  
13 p2223 A69-28606  
Electronically variable phase shifters and attenuators in strip line technology /Elektronisch steuerbare Phasenschieber und Daempfungsglieder in Streifenleitungstechnik/.  
16 p2763 A69-32582

**GROLL, M.**  
Results of studies of thermionic reactor systems /Ergebnisse von Studien ueber Thermionikreaktorsysteme/.  
02 p0279 A69-12662  
Optimal design of radiators for power-supply plants of space vehicles /Optimale Auslegung von Radiatoren



## GROLMES, M. A.

- fuer Energieversorgungsanlagen von Raumfluggeraeten/.  
02 p0354 A69-12664
- An improved out-of-core thermionic reactor for low power.  
09 p1441 A69-21836
- Results of studies on various fast and thermal thermionic reactor systems.  
14 p2480 A69-29182
- GROLMES, M. A.**  
Condensing injector experiments and analysis of performance with supersonic inlet vapour.  
13 p2372 A69-27486
- GROMER, R. D.**  
A new look at microwave silicon technology.  
09 p1462 A69-21410
- GROMOV, A. N.**  
Features of motion of the moving part of the transducer of a measuring gyroscopic synchronous servosystem /Ob osobennostiakh dvizheniya podvizhnoi chasti priemnika izmeritel'noi girokopicheskoi sinkhronno-slediashchei sistemy/.  
11 p1881 A69-24558
- GROMOV, I. U. N.**  
Method for calculating the population and the excitation rates of the working levels in a CO sub 2 laser /Metod rascheta zaselenosti i skorostei vzbuzhdeniya rabochikh urovnei OKG na CO sub 2/.  
22 p3964 A69-40795
- GROMOV, V. G.**  
Chemically nonequilibrium laminar boundary layer in dissociated air.  
07 p1050 A69-18734
- Algebra of Volterra operators and its application to problems of viscoelasticity.  
12 p2182 A69-26677
- GROMOV, V. P.**  
Multiple series of Dirichlet polynomials /Kratnye riady polinomov Dirikhle/.  
19 p3361 A69-36639
- GROMOV, V. V.**  
Soil-density meter-penetrator of the automatic lunar station Luna-13.  
03 p0430 A69-13424
- Generation spectrum of a chemical laser using a mixture of H sub 2 and Cl sub 2.  
14 p2461 A69-29672
- GROMOVA, L. I.**  
Temperature stability of the parameters of waveguide Y-circulators /K voprosu o temperaturnoi stabil'nosti parametrov volnovodnykh Y-tsirkulyatorov/.  
23 p4123 A69-41951
- GROMOVA, L. S.**  
Application of the root locus method for determining autovibration parameters /Primenenie metoda kornevo gologo grafika dlia opredeleniya parametrov avtokolebaniy/.  
14 p2445 A69-28919
- GROMYKO, G. O.**  
Diffusion of beryllium in zirconium and titanium /Diffuziia berillia v tsirkonii i titane/.  
18 p3157 A69-35251
- GRONICH, S.**  
Nonintegral burn of nuclear rockets - An approach to low-cost space exploration.  
[AIAA PAPER 68-589]  
21 p3768 A69-39026
- GRONROOS, H. G.**  
Uninsulated in-core thermionic diode concept.  
14 p2398 A69-29186
- Stability and control considerations for thermionic reactors.  
14 p2481 A69-29189
- GROOTENHUIS, P.**  
Vibration control with viscoelastic materials.  
15 p2622 A69-30704
- GROOTHOFF, C. C.**  
The influence of rotation on the burning rate of a small hybrid rocket motor.  
23 p4203 A69-41932
- GROPPER, B. A.**  
The effect of the operator's handedness on some directional stereotypes in control-display relationships.  
02 p0203 A69-12212
- GROSCH, C. E.**  
The stability of steady and time-dependent plane Poiseuille flow.  
01 p0175 A69-10333

## GROSCH, D. S.

- Mutational responses of insects in the Biosatellite II experiment.  
20 p3476 A69-37618

## GROSHEV, V. IA.

- Limits of applicability of asymptotic expressions in the method of standard functions /O granitsakh primenimosti asimptoticheskikh vyrazhenii v metode etalonnnykh funktsii/.  
07 p1076 A69-18520

## GROSOF, G. M.

- Effect of microwaves on the eye.  
10 p1648 A69-23185

## GROSS, B.

- Elastic displacements for various edge-cracked plate specimens.  
05 p0841 A69-16433

## GROSS, B. M.

- The new systems budgeting.  
10 p1811 A69-23351

## GROSS, C. G.

- Cortical responses to light in unanesthetized monkeys and their alteration by visual system lesions.  
22 p3876 A69-40263

## GROSS, D. W.

- Prediction of inflight stalled airloads from oscillating airfoil data.  
[AHS PAPER 322]  
17 p2895 A69-33536

## GROSS, E. F.

- Local oscillations and structure of copper impurity centers in gallium arsenide crystals /Lokal'nye kolebaniia i struktura primesnykh tsentrov medi v kristallakh arsenida gallia/.  
16 p2824 A69-31571

## GROSS, F.

- An in-core thermionic reactor for powering space vehicles /Der Incore-Thermionik-Reaktor zur Energieversorgung von Raumflugkoerpern/.  
02 p0279 A69-12666

- Comparison of delay lines in high-power traveling-wave tubes /Vergleich von Verzoegerungsleitungen fuer Hochleistungswanderfeldroehren/.  
07 p1095 A69-18428

- Frequency- and power-stable backward-wave oscillators as energy pumps for molecular and parametric amplifiers /Frequenz- und leistungstabile Rueckwaertswellen- Oszillatoren als Energiepumpen fuer molekular- und parametrische Verstaerker/.  
07 p1095 A69-18430

- Design and characteristics of an actinium fueled thermionic generator.  
14 p2399 A69-29192

- Laboratory life test and inpile irradiation studies of cylindrical thermionic converters.  
14 p2399 A69-29199

- Post irradiation investigations of UO sub 2 -fueled thermionic emitters.  
14 p2481 A69-29200

## GROSS, IA.

- Effects of isolation and sensory deprivation.  
08 p1263 A69-19937

## GROSS, J.

- Mass spectrometric investigation of the thermosphere at high latitudes.  
20 p3533 A69-38086

## GROSS, R. A.

- Normal and transverse ionizing shock studies.  
18 p3180 A69-34454

## GROSS, R. W. F.

- Chemically pumped CO sub 2 laser.  
12 p2104 A69-25986

- Stimulated emission behind overdriven detonation waves in F sub 2 O-H sub 2 mixtures.  
22 p4052 A69-41188

- Mirror mount for a shock tube laser cavity.  
22 p3951 A69-41233

## GROSS, S.

- Heat generation in sealed batteries.  
18 p3093 A69-34780

## GROSS, S. D.

- Beam shape loss and surveillance optimization for pencil beam arrays.  
20 p3506 A69-37717

## GROSS, S. H.

- On the exospheric temperature of Venus.  
02 p0319 A69-12109

## GROSS, W. A.

- A review of developments in externally pressurized gas bearing technology since 1959.  
[ASME PAPER 68-LUBS-8]  
13 p2267 A69-27281

## GROSS, W. H.

- Power systems for the Apollo Applications Program.  
23 p4069 A69-42244

## GROSSBACH, R.

- Improved tunable ferrimagnetic filter using a magnetic T.  
04 p0573 A69-14343

## GROSSBERG, S.

- On learning of spatiotemporal patterns by network with ordered sensory and motor components. I - Excitatory components of the cerebellum.  
22 p3887 A69-41196

## GROSSI, M. D.

- Radio occultation measurements of planetary atmospheres and ionospheres from an orbiting pair.  
[AIAA PAPER 69-53]  
06 p1011 A69-18104

## GROSSIE, H. H. R.

- Star chains around Eta Carinae.  
16 p2856 A69-31931

## GROSSKREUTZ, J. C.

- The effects of the surface on the mechanical properties of metals.  
03 p0448 A69-13864

- Plastic yielding and strain distribution in filament-reinforced metals.  
06 p0940 A69-16947

- Critical mechanisms in the development of fatigue cracks in 2024-T4 aluminum.  
10 p1710 A69-23076

- Mechanical properties of metal oxide films.  
[ECS PAPER 81]  
22 p3973 A69-40736

## GROSSMAN, J. J.

- Electrostatic charge distribution on ultrahigh vacuum cleaved silicates.  
13 p2322 A69-28018

## GROSSMAN, K.

- Multiple light scattering in planetary atmospheres.  
02 p0319 A69-12105

## GROSSMAN, L. M.

- Excitation and ionization processes in non-equilibrium MHD plasmas.  
10 p1732 A69-23444

## GROSSMAN, P. L.

- Nonlinear vibrations of shallow spherical shells.  
[ASME PAPER 69-APMW-6]  
24 p4402 A69-43107

## GROSSMANN, W.

- Two-dimensional equilibrium for high-beta mirror devices including particle loss.  
03 p0475 A69-13152

## GROSVALD, G.

- Fluctuation voltage at the terminals of a polar-dielectric capacitor /Tension de fluctuations aux bornes d'un condensateur a dielectrique polaire/.  
08 p1295 A69-21151

## GROSVALET, M.

- Effect of radiation on MIS structures /Effets des radiations sur les structures M.I.S./.  
15 p2625 A69-30829

## GROSZEK, A. J.

- The effect of particle shape on the abrasiveness of lamellar solids.  
22 p3966 A69-39877

## GROSZKOWSKI, J.

- The Bayard-Alpert type gauge with and without modulation /La jauge du type Bayard-Alpert avec et sans modulation/.  
20 p3464 A69-37407

## GROTEN, E.

- On the masses necessary to produce the anomalous gravitational geopotential as obtained from satellite observations.  
02 p0244 A69-12178

## GROUNES, M.

- A reaction-rate treatment of the extrapolation methods in creep testing.  
14 p2464 A69-29442

## GROVER, G. M.

- Advances in heat pipe technology.  
14 p2538 A69-29202

## GROVES, G. V.

- Low-latitude easterly winds at 95-km altitude revealed by sounding rockets and gun-probes.  
09 p1487 A69-21621

- Measurement of upper atmosphere winds and temperature from rocket-grenade-TMA experiments conducted from Sonmiani in spring and autumn of 1966-67.  
15 p2598 A69-31317
- Seasonal and latitudinal models of atmospheric structure between 30 and 120 km altitude.  
15 p2600 A69-31367
- Anticipated vacuum conditions on the moon.  
18 p3189 A69-34236
- Wind models from 60 to 130 km altitude for different months and latitudes.  
23 p4154 A69-41306
- GROVES, H. T.**  
Effects of bonding techniques on the reliability of hybrid microcircuits.  
22 p3911 A69-39956
- GROVES, R. N., JR.**  
Ablation test specimen environment at high temperature.  
12 p2191 A69-26815
- GROVES, S. H.**  
Electroreflection study of inversion asymmetry and warping-induced interband magneto-optical transitions in InSb.  
19 p3386 A69-36521
- GROVES, W. O.**  
Electroluminescence of diffused GaAs sub 1-x P sub x diodes with low donor concentrations.  
16 p2758 A69-31699
- GROW, R. W.**  
Investigation of synchronous-wave R-F to D-C conversion.  
02 p0212 A69-12816  
Optically pumped millimeter wave maser.  
07 p1146 A69-18480
- GROW, T. L.**  
Effect of a wing on its tip vortex.  
11 p1819 A69-25372
- GRUBB, W. F., III**  
Pion capture in super 6 Li and super 7 Li, the formation of super 4 H, a search for super 5 H.  
12 p2132 A69-26296  
Search for an excited state of the triton.  
12 p2132 A69-26297
- GRUBBS, H. Y., JR.**  
Astronaut safety features for Apollo lunar surface experiments package.  
[SAE PAPER 680721] 03 p0433 A69-13448
- GRUBER, G. M.**  
Unresolved background radiation at 2695 MHz.  
20 p3606 A69-37830
- GRUBER, J.**  
Studies on the functional significance of efferent innervation in the auditory system - Afferent neuronal activity as influenced by contralaterally applied sound.  
23 p4094 A69-42073
- GRUBER, M.**  
Path integrals and Liapunov functionals.  
24 p4295 A69-43317
- GRUBER, R. J.**  
Poly /2,4-perfluoroalkylene-6- perfluoroalkyl-triazine/ s - New high temperature elastomers.  
19 p3264 A69-35535
- GRUBIN, C.**  
Attitude commands for single-axis finite rotation.  
09 p1610 A69-21998
- GRUBISIC, V.**  
Problem of the strength hypothesis in the generalized case of multiaxial vibration load /Zur Frage der Festigkeitshypothese im verallgemeinerten Fall einer mehrachsigen Schwingbeanspruchung/.  
09 p1620 A69-22575
- GRUDNITSKII, V. G.**  
Algorithms for numerical schemes of the method of integral relations for calculating mixed gas flows.  
04 p0587 A69-14621
- GRUEFF, G.**  
The Italian cross radio telescope. III - Operation of the telescope.  
19 p3295 A69-36643
- GRUEN, E.**  
Penetration studies of iron dust particles in thin foils.  
21 p3719 A69-38344
- GRUENBERG, R.**  
Measurements of attachment coefficients of electrons in oxygen /Messungen des Anlagerungskoeffizienten von Elektronen in Sauerstoff/.  
21 p3774 A69-39238
- GRUENBERGER, W.**  
Study of precipitation processes in an iron-nickel-chromium-beryllium alloy by means of transmission electron microscopy /Untersuchungen der Ausscheidungsreaktionen an einer Eisen-Nickel-Chrom-Beryllium-Legierung mittels elektronenmikroskopischer Durchstrahlung/.  
08 p1333 A69-20447
- GRUENDLINGH, M. L.**  
Representation of balloon altitude-intensity data in terms of primary and secondary cosmic-ray particle absorption lengths.  
21 p3791 A69-39249
- GRUENINGER, G.**  
Development of a fiberglass-reinforced plastic lightweight design and its testing during the construction of a test aircraft - A review of work done on project DFL/LFU 205 and results obtained /Entwicklung einer Glasfaserkunststoff-Leichtbauweise und ihre Erprobung beim Bau eines Versuchsflugzeugs - Ein Ueberblick ueber die Arbeiten am Projekt DFL/LFU 205 und deren Ergebnisse/.  
08 p1321 A69-20867
- GRUENINGER, P. G.**  
Technology and physicomechanical properties of newly developed reinforcing fibers /Technologie und physikalisch-mechanische Eigenschaften neuartiger Verstärkungsfasern/.  
23 p4179 A69-42154  
Structures and construction methods using advanced composites with particular regard to boron fibers /Strukturen und Bauweisen aus neuartigen Faserverbundstoffen unter besonderer Berücksichtigung der Borfasern/.  
23 p4179 A69-42155
- GRUENINGER, R. A.**  
Hybrid polyimide/epoxy glass multilayer fabrication.  
19 p3319 A69-35545
- GRUETTER, A. A.**  
Influence of systematic phase deviations on the output of mode-locked lasers.  
21 p3741 A69-39683  
The output intensity of a non-ideally mode-locked laser.  
21 p3741 A69-39684
- GRUHL, W.**  
Effect of aging and cold work hardening on deformability of an age-hardenable aluminum alloy /Der Einfluss von Aushärtung und Kaltverfestigung auf die Verformbarkeit einer aushärtbaren Aluminiumlegierung/.  
02 p0254 A69-12677  
The stress corrosion behavior of AlZnMg alloys /Das Spannungsrissskorrosionsverhalten der AlZnMg-Legierungen/.  
16 p2800 A69-31779  
Influencing coarse grain formation in extruded sections of aluminum alloys /Beeinflussung der Grobkornbildung bei Pressprofilen aus Aluminiumlegierungen/.  
18 p3160 A69-35472
- GRUIN, I.**  
Significance of the surface treatment of aluminum and its alloys in elements subjected to adhesive bonding /Znaczenie obróbki powierzchni aluminium i jego stopow w elementach podlegających klejeniu/.  
07 p1141 A69-19312
- GRUM-GRZHIMAILO, N. V.**  
Investigation of alloys of the Nb-Zr-Cr system /Issledovanie spлавov sistemy Nb-Zr-Cr/.  
08 p1333 A69-20440
- GRUMBACH, A.**  
Development of a transistorized low-frequency generator /Realisation d'un generateur basse frequence transistorise/.  
04 p0579 A69-15225
- GRUNBERG, G.**  
Study and development of a wire-type space memory /Etude et realisation d'une memoire a fils spatiale/.  
20 p3503 A69-37403
- GRUNDHAUSER, F. F.**  
3 nanosecond exposures with X-rays, electrons and light.  
12 p2086 A69-26164
- GRUNDHAUSER, F. J.**  
Cineradiography using field emission technology.  
12 p2086 A69-26163  
Nanosecond photography with super radiant light, X rays or electrons.  
19 p3305 A69-35721
- GRUNDITZ, D. W.**  
Wide range heat flux measurements using surface temperature sensors.  
15 p2716 A69-30379
- GRUNDMAN, W. A.**  
Thermal effects in large mirrors.  
12 p2056 A69-26408
- GRUNDY, R. E.**  
Unsteady spherically symmetric expansion of a fixed mass of gas into vacuum.  
16 p2772 A69-32168
- GRUNERT, W. E.**  
Super insulation - Thin, lightweight protection against re-entry heat.  
12 p2060 A69-26817  
Opacified fibrous insulations.  
[AIAA PAPER 69-605] 17 p3072 A69-33282
- GRUNEWALD, W.**  
Digital simulation of a spatial diffusion model of oxygen supply in biological tissue /Digitale Simulation eines räumlichen Diffusionsmodells der O<sub>2</sub>-Versorgung biologischer Gewebe/.  
23 p4097 A69-42098
- GRUNT, A.**  
Investigation of the effect of impurities on the corrosivity of nitrogen tetroxide.  
21 p3748 A69-39488
- GRUSAS, P. A.**  
Satellite attitude determination from celestial sightings.  
24 p4348 A69-43244
- GRUSS, R.**  
Transmission of laser radiation through the atmosphere /Uebertragung von Laserstrahlung durch die Atmosphäre/.  
11 p1841 A69-25638
- GRUSZCZYNSKI, J. S.**  
Experimental study of radiation cooling effects in a hypervelocity shock layer.  
[AIAA PAPER 69-719] 18 p3084 A69-34416
- GRUZA, G. V.**  
Integral characteristics of general atmospheric circulation /Integral'nye kharakteristiki obshchei tsirkulatsii atmosfery/.  
14 p2476 A69-29824
- GRUZDEV, V. A.**  
Electron gun with a plasma cathode /Elektronnaia pushka s plazmennym katodom/.  
04 p0598 A69-14857
- GRUZDEV, V. N.**  
Influence of the turbulence characteristics of the flow on flame stabilization by means of a bluff body /Vliianie kharakteristik turbulentnosti potoka na stabilizatsiiu plameni s pomoshch'iu plokhogo obtekaemogo tela/.  
24 p4408 A69-43078
- GRUZDEVA, H. M.**  
The zirconium corner of the zirconium-niobium-chromium system phase diagram /Tsirkonievyy ugol diagrammy sostoianiya sistemy tsirkonii-niobii-khrom/.  
02 p0264 A69-11861
- GRUZDEVA, N. M.**  
The zirconium corner of the phase diagram and properties of alloys of the zirconium-aluminum-chromium system /Tsirkonievyy ugol diagrammy sostoianiya i svoistva spлавov sistemy tsirkonii-aluminiy-khrom/.  
02 p0262 A69-11842  
The zirconium corner in the zirconium-iron-niobium phase diagram /Tsirkonievyy ugol diagrammy sostoianiya tsirkonii-zhelezo-niobii/.  
02 p0263 A69-11851  
The zirconium corner of the phase diagram of the zirconium-molybdenum-nickel system /Tsirkonievyy ugol diagrammy sostoianiya sistemy tsirkonii-molibden-nikel/.  
02 p0264 A69-11855  
The zirconium corner of the phase diagram of the zirconium-molybdenum-niobium system /Tsirkonievyy ugol diagrammy sostoianiya sistemy tsirkonii-molibden-niobii/.  
02 p0264 A69-11856  
Corrosion properties of zirconium-molybdenum-niobium alloys /Korroziionnye svoistva spлавov tsirkonii-molibden-niobii/.  
02 p0264 A69-11857
- GRUZIN, P. L.**  
Mechanism of the influence of molybdenum on the processes of reversible temper brittleness of steel /Mekhanizm vlianiia molibdena na protsessy obratimoi otpusknoi khрупkosti stali/.  
13 p2283 A69-28491



## GRUZINSKII, V. V.

Diffusion during high-temperature exposure of protective coatings on molybdenum /O diffuzii pri vysokotemperaturnoi sluzhbe zashchitnykh pokrytii na molibdene/.  
19 p3345 A69-36156

## GRUZINSKII, V. V.

Use of interference to produce nonpolarized and single-frequency gas laser radiation /Ispol'zovanie interferentsii dlia polucheniia nepoliarizovannogo i odnochastotnogo izlucheniia gazovogo lazera/.  
07 p1149 A69-18936

Gas laser with mirror-windows /Gazovyi laser s oknami-zerkalami/.  
14 p2457 A69-29160

## GRYCAN, J.

The problems of utilization of satellite radio observations for ionosphere research.  
15 p2594 A69-30028

## GRYGAR, J.

Nova Vulpeculae 1968 no. 1. I - Photoelectric observation at Ondrejov in 1968.  
23 p4208 A69-41290

## GRVNAK, D. A.

Absorption of infrared radiant energy by CO sub 2 and H sub 2 O. IV.  
12 p2132 A69-26248

## GRYZINSKI, M.

Review of research on hot plasma performed at the Department of Plasma Physics and Technology of the Institute of Nuclear Research.  
06 p0964 A69-17174

Steady-state non-equilibrium ionization.  
21 p3777 A69-39479

## GRZEDZIELSKI, M.

A high temperature cyclic oxidation apparatus.  
12 p2093 A69-26483

## GRZEDZIELSKI, S.

Solar /stellar/ wind with magnetic field and anisotropic heat conduction.  
05 p0817 A69-16703

Solar-wind model including the effects of rotation, magnetic fields, and anisotropic heat conduction.  
08 p1380 A69-20643

## GSCHNEIDNER, K. A., JR.

On the interrelationships of the physical properties of lanthanide compounds - The melting point, heat of formation and lattice parameter/s/.  
07 p1168 A69-19597

## GSCHWINDT, A.

The satellite radio observation station of the Budapest Technical University - Reception of APT pictures /Sputnikovaia radionabliudatel'naia stantsia Tekhnicheskogo Universiteta v Budapeshte - Priem APT- Kartin/.  
12 p2059 A69-26449

## GUALTIEROTTI, T.

A neutral buoyancy micro-electrode for prolonged recording from single nerve units.  
02 p0202 A69-11865

## GUARDABASSI, G.

Optimization of discrete systems with delayed control variables - A structural approach.  
09 p1476 A69-22674

On the existence of the optimal control for linear uncontrollable systems.  
10 p1666 A69-23887

## GUARGUAGLINI, P.

Diagrams for designing a moving-window radar extractor in the presence of fluctuating targets /Diagrammi per la progettazione di un estrattore radar a finestra mobile in presenza di bersagli fluttuanti/.  
04 p0558 A69-15073

## GUARGUAGLINI, P. F.

Improvement factor for limited coherent MTI.  
04 p0556 A69-14338

ELDO satellite command decoder performance.  
11 p1834 A69-24563

Clutter residues of a coherent MTI radar receiver.  
13 p2220 A69-27941

## GUARNIERI, A.

Photoelectric observations of Nova Delphini 1967.  
20 p3599 A69-37475

## GUASSON, Y.

Variation of the detonation velocity in liquid nitromethane with initial pressure /Variation, avec la pression initiale, de la celerite de detonation dans le nitromethane liquide/.  
22 p4051 A69-40713

## GUASTAVINO, F.

Faraday effect of n type gallium antimonide at 20 K /Effet Faraday de l'antimoniure de gallium de type n a 20 deg K/.  
02 p0298 A69-12039

## GUBANKOV, V. N.

A possible estimate of the impurity concentration in n-type InSb.  
02 p0294 A69-11631

Investigation of the temperature dependence of the detection properties of n-type InSb in the millimeter and submillimeter bands.  
07 p1199 A69-18683

## GUBBAY, J.

Trans-Pacific interferometer measurements at 2,300 MHz.  
15 p2701 A69-31530

## GUBBINS, K. E.

Salting out of nonpolar gases in aqueous potassium hydroxide solutions.  
10 p1651 A69-22937

## GUBENKO, V. S.

Potential possibilities of short-range ionospheric prediction for communications purposes /O potentsial'nykh vozmozhnostiakh kratkosrochnogo prognozirovaniia ionosfery v interesakh svyazi/.  
03 p0421 A69-13377

Some patterns in the coefficients of variation and mean square deviations of critical frequencies of the F sub 2 layer of the ionosphere.  
03 p0422 A69-13514

Simulation of F sub 2 layer disturbance on electronic computers.  
03 p0423 A69-13516

The formation of pseudorandom uniformly distributed numbers from noise-like signals /Formirovanie psevdosluchainykh ravnomerno raspredelennykh chisel iz shumopodobnykh signalov/.  
13 p2218 A69-27248

The potentialities of short-term ionospheric forecasting for communications purposes.  
14 p2433 A69-28827

## GUBERMAN, SH. A.

Interaction in biological systems /Vzaimodeistvie v biologicheskikh sistemakh/.  
21 p3662 A69-39708

## GUBERNATOROV, O. I.

Selection and calculation of some parameters of digital frequency synthesizers /K vyboru raschetu nekotorykh parametrov tsifrovyykh sintezatorov chastot/.  
19 p3284 A69-36594

## GUBIN, M. A.

Change of the shape of the gain line in the saturation by the proper field in a 3.39 mu laser.  
08 p1323 A69-19942

## GUBIN, V. P.

Short-term frequency stability of a Rb super 87 vapor laser /Kratkovremennaiia stabil'nost chastoty kvantovogo generatora na parakh Rb super 87/.  
05 p0770 A69-15656

Dependence of the Rb laser frequency on the pump radiation intensity.  
09 p1520 A69-22636

Short-term frequency stability of an Rb87 vapor maser.  
16 p2798 A69-32513

Experimental investigation of the steady-state operation of an Rb super 87-vapor laser with optical pumping /Eksperimental'noe issledovanie statsionarnogo rezhima raboty kvantovogo generatora na parakh Rb super 87 opticheskoi nakachko/.  
19 p3336 A69-36343

Light-induced shift of rubidium laser frequency during modulated optical pumping /Svetovoi sdvig chastoty rubidievogo kvantovogo generatora pri modulirovannoi opticheskoi nakachke/.  
19 p3336 A69-36344

## GUCHAN-BECK, F.

Stability of super 7 Be in the galactic cosmic radiation /Stabilite de super 7 Be dans le rayonnement cosmique galactique/.  
18 p3189 A69-35482

## GUDBJARNASON, S.

Changes in the activities of lysosomal enzymes in infarcted canine heart muscle.  
24 p4259 A69-42636

## GUDERJAHN, C. A.

Magnetic suspension and guidance for high speed rockets by superconducting magnets.  
17 p2946 A69-33789

## GUDIEV, A. KH.

Generalized solutions of second-order parabolic equations with discontinuous coefficients /Obobshchennyye resheniya parabolicheskikh uravnenii vtorogo poriadka s razryvnymi koeffitsientami/.  
02 p0272 A69-12222

Generalized solutions of second-order parabolic equations with discontinuous coefficients.  
23 p4182 A69-41973

## GUDIMA, K. K.

Contribution to the calculation of inelastic interactions of cosmic nuclei.  
13 p2330 A69-28370

## GUDIMOV, M. M.

The influence of biaxial orientation on the fracture kinetics of polymethyl methacrylate /K voprosu vlianiia dvukhosnoi orientatsii na kinetiku razrusheniia polimetilmetakrilata/.  
18 p3162 A69-35354

## GUDKOV, S. I.

Effect of stress concentrators on the mechanical properties of titanium and titanium alloys at low temperature.  
03 p0443 A69-13028

Mechanical properties of structural alloys at temperatures down to -269 deg C /Mekhanicheskie svoystva konstruktivnykh splavov pri temperaturakh do -269 deg C/.  
04 p0614 A69-14574

Mechanical properties of structural alloys at temperatures down to -269 deg C.  
15 p2638 A69-30275

## GUDOVICH, N. N.

On formulae for numerical differentiation.  
02 p0271 A69-11653

## GUDYMENKO, L. F.

Temperature dependence of the refractive index of CdS single crystals.  
04 p0644 A69-15268

## GUDZENKO, L. I.

Relaxation processes and stimulation of radiation in a dense plasma /O relaksatsionnykh protsessakh i usilenii izlucheniia v plotnoi plazme/.  
01 p0131 A69-10789

Analysis of the nature of a quasar nucleus from statistical properties of its optical variability.  
04 p0662 A69-15235

Some applications of the relaxation theory of a highly ionized hydrogen plasma /Nekotorye prilozheniia teorii relaksatsii vysokoionizovannoi vodorodnoi plazmy/.  
07 p1191 A69-18996

Acceleration of a plasma by its own radiation.  
07 p1195 A69-19595

Relaxation processes and amplification of radiation in a dense plasma.  
20 p3582 A69-38006

## GUEFFIER, G.

Dynamic roentgenology of the cervical spine - General interest of the method in aeronautical medicine /La radiographie dynamique du rachis cervical - Interet general de la methode en medecine aeronautique/.  
23 p4087 A69-41797

Results of a dynamic X-ray study of the cervical spine in military pilots of jet aircraft /Resultats de l'exploration radiodynamique du rachis cervical des pilotes militaires d'avions a reaction/.  
23 p4087 A69-41798

The role of radiology in medical investigations after ejection of military jet pilots /La part de la radiologie dans l'enquete medicale apres ejection des pilotes militaires d'avions a reaction/.  
24 p4266 A69-43379

## GUEGUEN, C.

Construction of a minimal representation in state variables /Construction d'une representation minimale en variables d'etats/.  
12 p2047 A69-26070

The influence of structure and representation on the determination of limit cycles of non linear multivariable systems.  
12 p2048 A69-26078

## GUEKOS, G.

Correlation between laser emission noise and voltage noise in GaAs CW laser diodes.  
12 p2038 A69-26328

## GUELIN, M.

Measurement of pulsar distances by galactic hydrogen absorption.  
06 p1012 A69-18225

- Neutral hydrogen distribution and dynamics in galaxies. 1 / Distribution de l'hydrogene neutre et dynamique des galaxies. 1/.  
07 p1224 A69-19711
- GUEN, F.**  
Equations of motion of nonholonomic systems in Poincare-Chetaev variables / K uravneniim dvizheniia negolonomnykh mekhanicheskikh sistem v peremennykh Puankare-Chetaeva/.  
05 p0793 A69-15778  
A version of the equations of motion of mechanical systems / Ob odnoi forme uravnenii dvizheniia mekhanicheskikh sistem/.  
22 p3980 A69-40106
- GUENA, J.**  
Transistorized receiver for satellite telecommunications / Recepteur transistorise pour telecommunications par satellites/.  
05 p0734 A69-16594
- GUENDEL, H. H.**  
Solar and cosmic electromagnetic and charged-particle radiations.  
01 p0145 A69-10945
- GUENOCHE, H.**  
Contribution to the study of the hypersonic flow of a nonequilibrium gas around a wedge / Contribution a l'etude de l'ecoulement hypersonique d'un gaz hors d'equilibre vibratoire autour d'un diedre/.  
01 p0005 A69-10161
- GUENOK, E. P.**  
Domain structure of barium titanate crystals / Domennaia struktura kristallov titanata bariia/.  
21 p3783 A69-39559
- GUENTHER, A. H.**  
Time-resolved spectroscopy of exploding wires.  
01 p0119 A69-10671  
Pressure and temperature dependence of the acoustic velocities in polymethylmethacrylate.  
16 p2825 A69-31695
- GUENTHER, K.**  
Electrical properties of xenon pulse plasmas / Elektrische Eigenschaften von Xenon-Impulsplasmen/.  
05 p0801 A69-15746
- GUENTHER, R. A.**  
Nonexistence of axisymmetric separated flow.  
23 p4060 A69-41905
- GUENZEL-LINGNER, U.**  
Astronomical Annual Report. Volume 67 - Literature for the Year 1967 / Astronomischer Jahresbericht. Volume 67 - Die Literatur des Jahres 1967/.  
09 p1602 A69-22223
- GUERILLON, J.-P.**  
Contribution to the study of certain metastable phases of the binary zirconium-niobium system / Contribution a l'etude de certaines phases metastables du systeme binaire zirconium-niobium/.  
05 p0781 A69-16614
- GUERNSEY, R. L.**  
Surface waves in hot plasmas.  
24 p4356 A69-43364
- GUERRAUD, C.**  
Variation of the gas pressure behind detonation fronts in strictly propane-oxygen mixtures - Influence of the tube diameters and the initial pressure / Variation de la pression des gaz derriere le front des detonations dans les melanges stricts propane-oxygene - Influence du diametre des tubes et de la pression initiale/.  
08 p1421 A69-20757
- GUERRIERI, V.**  
A computing program derived from Chree's method.  
13 p2225 A69-27617
- GUERS, K.**  
The CO sub 2 laser / Der CO sub 2 Laser/.  
04 p0612 A69-15173  
The laser as amplifier and oscillator / Der Laser als Verstaerker und Oszillator/.  
06 p0937 A69-18006  
Optically pumped solid-state lasers / Der optisch gepumpte Festkoerperlaser/.  
06 p0937 A69-18007  
Applications / Anwendungen/.  
06 p0938 A69-18012  
The laser and its applications / Der Laser und seine Anwendung/.  
10 p1702 A69-23384
- GUERZONI, A.**  
DC-to-DC converter stabilized at high performance / Convertitore corrente continua - corrente continua stabilizzato ad alto rendimento/.  
16 p2765 A69-32443
- GUESS, T. R.**  
Some dynamic mechanical properties of distended carbons.  
12 p2119 A69-26847
- GUEST, G. E.**  
Experimental strong turbulent heating.  
17 p3014 A69-33827
- GUEST, J. E.**  
Size-frequency distributions of particles and lunar surface materials.  
02 p0325 A69-12567  
Explosion craters on the earth and moon.  
04 p0656 A69-14670  
Nature and origin of Tsiolkovsky crater, lunar far-side.  
06 p1003 A69-17386
- GUETIN, P.**  
Franz-Keldysh effect with Gunn domains in bulk GaAs.  
02 p0300 A69-12650  
Franz-Keldysh effect in Gunn domains and related phenomena.  
07 p1197 A69-18454
- GUETTLER, G.**  
Impurity photovoltaic effect in silicon.  
19 p3381 A69-35679
- GUFFLET, P.**  
Extractors and the automatic processing of secondary radar in the civil system / Les extracteurs et le traitement automatique du radar secondaire dans le systeme civil/.  
05 p0721 A69-16592
- GUFFROY, D.**  
Effect of angle of attack and Reynolds number on hypersonic flow past a circular cone / Effet de l'incidence et du nombre de Reynolds sur l'ecoulement hypersonique autour d'un cone circulaire/.  
[ONERA-TP-692] 11 p1818 A69-24751  
Wall flow at M sub infinity equals 7, around a cone at incidence / Ecoulement parietal autour d'un cone en incidence a M sub infinity equals 7/.  
19 p3241 A69-36759
- GUGELOT, P. C.**  
Elastic scattering of 600 Mev protons from He super 3.  
03 p0472 A69-13464  
Polarization in proton-super 4 He scattering at 540 Mev.  
04 p0632 A69-14966
- GUGGENHEIM, H. J.**  
Precision thermometer for the region 10-40 K.  
06 p0927 A69-17703
- GUIASU, S.**  
Applications of Information Theory - Dynamical Systems, Cybernetic Systems / Aplicatii ale Teoriei Informatiei - Sisteme Dinamice, Sisteme Cibernetic/.  
04 p0580 A69-14520
- GUILBAUD**  
Resistance of the human body to high accelerations of short duration / Resistance du corps humain aux accelerations elevees et de courte duree/.  
13 p2215 A69-28591
- GUIBERGIA, J.-P.**  
Influence of vibrational relaxation on the laminar boundary layer downstream of a moving shock wave / Influence de la relaxation de vibration sur la couche limite laminaire a l'aval d'une onde de choc mobile/.  
08 p1303 A69-20269
- GUIBERT, J.**  
Measurement of pulsar distances by galactic hydrogen absorption.  
06 p1012 A69-18225
- GUIDA, A.**  
Solving the equation for the maximum a posteriori estimate.  
17 p2994 A69-32917
- GUIDI, G. N. G.**  
Instrumental measurement of the visual range of a runway / Misura strumentale della portata visuale di pista/.  
07 p1132 A69-18673
- GUIGNARD, E. A.**  
Effect of diode geometry on saturated ion current.  
09 p1440 A69-21832
- GUIGNARD, J. C.**  
Research on vibration nuisance - The need for a rational approach.  
13 p2213 A69-28091
- GUILBAUD, M.**  
Influence of the immersion depth on the characteristics of a hydrofoil with ventilation induced on the topside / Influence de la profondeur d'immersion sur les caracteristiques d'un profil a ventilation provoquee a l'extrados/.  
01 p0007 A69-11132
- GUILLE, R. N.**  
Measurements in free jet mixing/combustion flows. [AIAA PAPER 69-538] 16 p2843 A69-32705
- GUILLAUME, G.**  
Automatic drawing of printed circuits with the aid of a computer / Trace automatique des circuits imprimes a l'aide d'un ordinateur/.  
08 p1296 A69-19979
- GUILLAUME, P.**  
Canonical invariance / L'invariance canonique/.  
10 p1721 A69-23987  
Families of symmetric periodic orbits of the restricted three body problem, when the perturbing mass is small.  
22 p4031 A69-40908
- GUILLAUME, R.**  
Wall flow at M sub infinity equals 7, around a cone at incidence / Ecoulement parietal autour d'un cone en incidence a M sub infinity equals 7/.  
19 p3241 A69-36759
- GUILLEMET, C.**  
Dynamic study of the shape of the fracture front in the thickness of a toughened glass plate / Etude dynamique de la forme du front de fracture dans l'epaisseur d'une plaque de verre trempee/.  
12 p2118 A69-26194
- GUILLEMIN, G.**  
The attitude correction magnetometer of the Aurorae satellite / Le magnetometre de restitution d'attitude du satellite Aurorae/.  
15 p2611 A69-31087
- GUILLERMIN, M.**  
Analysis of the efficiency of a group of radar operators adapted to night work in a series of unaccustomed psychomotor tasks accomplished at night / Analyse du rendement d'un groupe d'operateurs radar adaptes au travail nocturne dans une serie de taches psychomotrices inhabituelles effectuees de nuit/.  
21 p3666 A69-39268  
Inquiry on the sleep habits of a group of radar operators working in alternating crews / Enquete sur les habitudes de sommeil d'un groupe d'operateurs radaristes travaillant en equipes alternantes/.  
21 p3666 A69-39269
- GUILLET, H.**  
A subnanosecond risetime electro-optic shutter for use in a laser system.  
09 p1493 A69-21422
- GULLIEN, R.**  
Study of the attenuation of the current induced by continuous electron bombardment in a cadmium sulfide crystal / Etude de l'attenuation du courant induit par bombardement electronique continu dans un cristal de sulfure de cadmium/.  
19 p3392 A69-36727
- GUILLOU, M.**  
Conducting and insulating materials that can be used in a magnetohydrodynamic nozzle / Les materiaux conducteurs et isolants utilisables dans une tuyere magnetohydrodynamique/.  
21 p3751 A69-38456
- GUINLE, L. DE M. F.**  
Deviations from classical free convection boundary-layer theory at low Prandtl numbers.  
01 p0177 A69-11409
- GUINN, D. F.**  
The fast Fourier-Hadamard transform and its use in signal representation and classification.  
03 p0392 A69-13249
- GUINOT, B.**  
Spectrographic measurements of motions in the Venusian atmosphere / Mesure spectrographique de mouvements dans l'atmosphere de Venus/.  
10 p1778 A69-23409
- GUION, W. G.**  
Output polarization rotation sensitivity of a HeNe laser.  
07 p1198 A69-18646  
Propagation in the earth's atmosphere.  
11 p1837 A69-25003
- GUIRAO, C.**  
Models for the sublimation of ammonium perchlorate. [WSCI PAPER 69-22] 16 p2832 A69-32360



GUIRAUD, J. P.

The Boltzmann H theorem and related mathematical topics.

11 p1870 A69-25008

GUIRAUD, J.-P.

Separation of a laminar boundary layer /A propos de la separation d'une couche limite laminaire/. [ONERA-TP-677]

08 p1303 A69-19878

GUISSARD, A.

Response curves of frequency-changer circuits /Les circuits changeurs de frequence courbes-reponses/.

07 p1114 A69-18279

Stability of frequency-converter circuits /Stabilite des circuits changeurs de frequence/.

08 p1299 A69-21148

GUIU, F.

Slip asymmetry in molybdenum single crystals deformed in direct shear.

19 p3342 A69-35811

GUK, I. M.

Determination of combination noise and selection of frequencies during frequency conversion in mixers /Opredelenie kombinatsionnykh pomekh i vybor chastot pri preobrazovanii chastoty na smesteliakh/.

17 p2931 A69-33911

GUK, I. U. P.

Crack nucleation in deformed aluminum alloys.

15 p2638 A69-30277

GUKHMAN, A. A.

Some results of an investigation into heat transfer from a liquid to a highly overheated wall.

11 p1996 A69-24228

Investigation of the heat transfer and hydrodynamic resistance for a turbulent gas flow in the field of longitudinal sign- variable pressure gradient. I /Issledovanie teploobmena i gidrodinamicheskogo soprotivleniia pri turbulentnom techenii gaza v pole prodol'nogo znakovremenennogo gradienta davleniia. I/.

15 p2548 A69-31173

Investigation of heat transfer and hydrodynamic resistance for a turbulent gas flow in the field of longitudinal pressure gradient of variable sign. II /Issledovanie teploobmena i gidrodinamicheskogo soprotivleniia pri turbulentnom techenii gaza v pole prodol'nogo znakovremenennogo gradienta davleniia. II/.

21 p3848 A69-38635

GULAK, I. U. K.

A method of deriving the law of universal gravitation from Kepler's laws.

16 p2813 A69-32481

GULANIAN, E. KH.

Holograms on photochromic films.

11 p1881 A69-24631

GULANIANE, E. KH.

Holograms on photochromic films. [IEEE PAPER F-1]

07 p1133 A69-19053

GULATI, S.

The flow of a hydromagnetic fluid between two flat plates oscillating with any phase difference.

12 p2135 A69-26273

GULATI, S. P.

On the motion of an elastico-viscous fluid in and around an oscillating sphere.

10 p1800 A69-23240

GULBRANSEN, L. B.

Flow stress of 6061 Al alloy composites. [ASME PAPER 68-WA/MET-10]

05 p0780 A69-16150

GULDEN, T. D.

Some observations of matrix precipitation in a 45-Fe 35-Ni 20-Cr alloy.

23 p4176 A69-41508

GULELMI, A. V.

The propagation of slow waves in a moving plasma.

01 p0068 A69-11114

Change in the frequency of Pc 1 micropulsations during a sudden deformation of the magnetosphere /Izmenenie chastoty mikropul'satsii Pc 1 pri vnezapnoi deformatsii magnitosfery/.

02 p0240 A69-11697

Determination of the dimensions of the subsolar magnetosphere from the results of ground observations of geomagnetic micropulsations /Opredelenie razmerov podsolnechnoi magnitosfery po dannym nazemnykh nabludenii geomagnitnykh mikropul'satsii/.

02 p0244 A69-12356

Cyclotron instability of outer radiation-belt protons.

06 p0919 A69-17721

Theory of plasma concentration diagnostics based on the dispersion of hydromagnetic whistlers /K teorii

diagnostiki kontsentratsii plazmy po dispersii gidromagnitnykh svistov/.

10 p1688 A69-23934

Geomagnetic pulsations and diagnostics of the magnetosphere /Geomagnitnye pul'satsii i diagnostika magnitosfery/.

13 p2254 A69-28176

Change in the frequency of Pc1 micropulsations during a sudden deformation of the magnetosphere.

13 p2258 A69-28728

Effect of a sudden discontinuation of type Pc 2-4 geomagnetic pulsations /Effekt vnezapnogo prekrashcheniia geomagnitnykh pul'satsii tipa Pc 2-4/.

14 p2438 A69-29080

GULIAEV, A. P.

Regularities of the change in properties of binary vanadium alloys /Zakonomernosti izmeneniia svoistv dvoynykh vanadiyevykh spлавov/.

08 p1333 A69-20439

Mechanical properties of high-melting-point metals /Mekhanicheskie svoistva tugoplavki metallov/.

09 p1525 A69-22138

GULIAEV, I. U. V.

Criterion of electric drift instability in semiconductors /O kriterii dreifovoi elektricheskoi neustoiichivosti v poluprovodnikakh/.

13 p2318 A69-27891

GULIAEV, V. I.

Conformal mapping and the difference method in stress concentration problems /Konformnoe otobrazhenie i raznostnyi metod v zadachakh o kontsentratsii napriazhenii/.

11 p1971 A69-24648

Integrodifferential equations in the coupled theory of thermoelasticity for thin shells /Integro-differentsial'nye uravneniia teorii svyazannoi termouprugosti dlia tonkikh obolochek/.

18 p3225 A69-35368

GULIANITSKII, B. S.

Reduction of titanium tetrachloride to titanium by magnesium /Vosstanovlenie titana iz tetrakhlorida magniia/.

07 p1163 A69-18784

GULIANTS, E. S.

Hypothalamic neurosecretion and the state of adrenal glands in rats under high-altitude conditions /Gipotalamicheskaia neurosekretsiia i sostoiianie nadpocheknikov kryv v usloviakh vysokogor'ia/.

13 p2211 A69-28615

GULKIS, S.

Occultation studies of weak radio sources - List 2.

02 p0326 A69-12704

The magnetosphere of Jupiter.

21 p3812 A69-39517

Declination measurements of selected 4C sources using the Arecibo 1000-ft reflector.

22 p4014 A69-40128

GULLON, E.

Solar activity in 1967 /Actividad solar en 1967/.

18 p3202 A69-35290

GULLOTTI, D. V.

Properties of nickel-molybdenum-aluminum age hardening steels.

04 p0613 A69-14527

GUMAN, W. J.

Pulsed plasma microthruster propulsion system for synchronous orbit satellite.

09 p1562 A69-21227

GUN, J. D.

Solar arrays utilizing large area silicon solar cells.

19 p3253 A69-35708

GUNBIN, B. L.

Comparison of experimental data for flow in a centrifugal compressor impeller wheel with results calculated by the methods of lattice theory /Soglasovanie rezul'tatov rascheta potoka v tsentrobezhnom kompressornom kolese metodami teorii reshetok s eksperimental'nymi dannymi/.

23 p4058 A69-41727

GUNDER, O. A.

Plastic scintillators with increased transparency /Plastmassovye tsintilliatory s povyshennoi prozrachnost'iu/.

21 p3724 A69-39073

GUNDERMANN, E. J.

Interplanetary scintillations. IV - Observations near the sun.

08 p1385 A69-20069

GUNDERMANN, S.

Experimental studies of drifting layers /Experimentelle Untersuchungen an laufenden Schichten/.

05 p0800 A69-15736

GUNDERSEN, R. M.

The decay of a magnetohydrodynamic shock wave.

05 p0806 A69-16736

Steady flow of a finitely conducting compressible fluid.

08 p1369 A69-20843

GUNDERSON, R.

A rapidly converging triangular plate element.

04 p0677 A69-14742

GUNDLACH, K. H.

On the potential barrier shape in Al-Al sub 2 O sub 3 -Al tunnel junctions.

07 p1196 A69-18243

GUNIAEV, G. M.

Stresses occurring in resins of various compositions during solidification on glass films /Napriazheniia, vznikaiushchie v smolakh razlichnogo sostava pri ikh otverzhenii na stekliannykh plenkach/.

22 p3973 A69-40746

GUNN, G. J.

Modern application of engine oil analysis to airline operation.

23 p4169 A69-41647

GUNN, J. B.

Thermodynamics of nonlinearity and noise in diodes.

04 p0574 A69-14435

Spontaneous reverse current due to the Brillouin EMF in a diode.

10 p1661 A69-22950

GUNN, J. E.

Magnetic dipole radiation from pulsars.

09 p1592 A69-21463

Acceleration of high-energy cosmic rays by pulsars.

11 p1950 A69-24927

Are some quasi-stellar objects associated with clusters of galaxies/ques/

22 p4029 A69-40763

On the nature of pulsars. I - Theory.

24 p4377 A69-42666

Do pulsars turn off/ques/

24 p4389 A69-43745

GUNN, N. J. F.

Fatigue crack propagation in clad RR58 sheet to DTD 5070A - Analysis and correlation of test results.

13 p2280 A69-27835

GUNN, S. V.

Feed systems and nozzles for Phoebus reactor experiments.

21 p3769 A69-39751

GUNN, W. W. H.

A bird warning system for aircraft in flight.

17 p2899 A69-33367

GUNNING, J. W.

Telegraph time-division-multiplex equipment for satellite-communication systems.

17 p2920 A69-33420

GUNSHINAN, B. F.

How to set up a micromin lab.

04 p0559 A69-15198

GUNSTON, M. A. R.

Errors and inconsistencies in the determination of system noise parameters.

16 p2755 A69-32800

GUNSTON, W. T.

Carbon fibres.

06 p0947 A69-18236

GUNTER, D. E., JR.

Atmospheric turbulence considerations for future aircraft designed to operate at low altitudes.

01 p0011 A69-11023

GUNTER, E. J.

Influence of flexibly mounted rolling element bearings on rotor response. I - Linear analysis.

18 p3212 A69-34382

GUNTER, E. J., JR.

The influence of internal friction on the stability of high speed rotors with anisotropic supports.

10 p1805 A69-24160

GUNTON, R. C.

Production of NO sub 2 super plus ions in air.

11 p1879 A69-25158

## GUNZBURGER, M.

Diffraction of shock wave by moving thin wing.  
[AIAA PAPER 69-647] 17 p2891 A69-33459

## GUPTA, A. P.

Transverse vibrations of a solid rectangular beam.  
21 p3832 A69-38447

## GUPTA, A. S.

Dispersion of soluble matter in the hydromagnetic laminar flow between two parallel plates.  
04 p0638 A69-15194  
Transverse waves induced by a disc oscillating about a state of steady rotation in magneto-hydrodynamics.  
10 p1728 A69-23239

## GUPTA, B. L.

Combustion of composite solid rocket propellants.  
13 p2324 A69-28234

## GUPTA, B. M.

Microwave free-carrier Faraday effect in piezoelectric semiconductors.  
04 p0643 A69-15201

## GUPTA, G. P.

Generation of microwave second harmonic and sum and difference frequency in semiconductors at low temperatures.  
01 p0137 A69-10334

Generation of sum and difference frequencies in plasmas by non-uniform microwave fields.  
14 p2507 A69-29350  
Nonlinear sum and difference frequency generation in an inhomogeneous magnetoplasma.  
16 p2821 A69-32036

The column method of measuring thermal conductivity of gases - Results on carbon monoxide and oxygen in the temperature range 350 deg to 1500 deg K.  
[AIAA PAPER 69-603] 17 p3073 A69-33298

## GUPTA, J. C.

Lunar daily harmonic geomagnetic variation as indicated by spectral analysis.  
07 p1123 A69-18817

Notes on the computation of the solar and lunar daily magnetic variations of X and Y from hourly or bihourly values of H and declination.  
16 p2782 A69-32457

## GUPTA, K. C.

The problem of coupling in beam-plasma devices.  
09 p1463 A69-21805  
Non-quasistatic analysis of the wave propagation along magnetized plasma columns surrounded by a dielectric medium.  
10 p1658 A69-24061

Coupling coefficient and excitation impedance for a plasma column excited by a ring source.  
10 p1659 A69-24064

## GUPTA, K. K.

The bending of flat plate structures with rectangular symmetry.  
11 p1986 A69-25241

## GUPTA, P. R.

Magnetohydrodynamic flow due to an oscillating infinite plane.  
22 p3991 A69-41036

## GUPTA, R. C.

Flow behaviour of power law fluids in the entry region of a circular pipe.  
19 p3240 A69-36472

## GUPTA, R. K.

Effect of plasma on propagation constant and radiation of a linear antenna with feed points displaced transverse to the antenna axis.  
06 p0896 A69-17476

Propagation constant and radiation field patterns of linear antennas in weakly ionized plasma.  
08 p1285 A69-20551  
On the evaluation of scattered power and radar cross section of a space vehicle in warm plasma.  
13 p2221 A69-27965

Histochemical studies in pulmonary oxygen toxicity.  
14 p2407 A69-29298

## GUPTA, S. C.

Linear processing of digital communication signals.  
03 p0391 A69-13226  
Threshold investigation of phase-locked discriminators.  
04 p0580 A69-15471

Analog computer solution of a third-order Pontryagin optimum control system.  
05 p0739 A69-16473  
Stresses in an elastic cone due to an axial force at a point on the axis.  
08 p1415 A69-20689

Domain analysis and measurement techniques for distributed RC structures. I - Analysis in the reciprocal time domain.  
09 p1471 A69-21327

## GUPTA, S. P.

A study of the lower ionosphere over the geomagnetic equator at Thumba using a Langmuir and plasma noise probe.  
21 p3702 A69-38353

Irregularities in the equatorial E region over Thumba.  
23 p4160 A69-42430

## GURA, I. A.

An algebraic solution of the state estimation problem.  
23 p4182 A69-41880

## GURALNICK, S. A.

Buckling of folded-plate structures.  
15 p2709 A69-30679

## GURALNIK, D. E.

Improving the reliability of welded titanium high pressure vessels.  
11 p1892 A69-25670

## GURASHVILI, V. A.

Parameters of MHD generators taking account of the ionization instability of the plasma /Parametry MGD-generatorov s uchetom ionizatsionnoi neustoiichivosti plazmy/.  
06 p0871 A69-17912

## GUREL, O.

A guide to the generation of Liapunov functions.  
11 p1908 A69-24317

## GURETSKII, V. V.

On the choice of the optimal parameters of shock-absorber characteristics.  
16 p2794 A69-32297

Maximum possibilities of damping in the case of vibrational loads /O predel'nykh vozmozhnostiakh amortizatsii pri vibratsionnykh nagruzhkakh/.  
18 p3171 A69-34563

## GUREV, T. T.

Problem of mode competition in an ionized krypton laser /K voprosu o konkurentsii perekhodov v OKG na ionizirovannom kriptone/.  
15 p2635 A69-31106

## GUREVICH, A. G.

Parallel pumping in RbNiF sub 3 /Parallel'naia podkachka v RbNiF sub 3/.  
21 p3781 A69-39069

## GUREVICH, A. V.

Occurrence of strong discontinuities in a plasma moving in a magnetic field.  
04 p0634 A69-14431

Non-linear stationary state of electron oscillations in a plasma.  
04 p0635 A69-14552  
Self-similar motion of a low-density plasma. II.  
08 p1359 A69-19951

Nonlinear resonance of modulated radio waves in a plasma /the ionosphere/ /Nelineinyi rezonans dlia modulirovannykh radiovoln v plazme /ionosfere/.  
09 p1453 A69-21543  
Self-action of waves in a rarefied plasma situated in a magnetic field /Samovozdeistvie voln v razrezhennoi plazme, nakhodiashchiesia v magnitnom pole/.  
13 p2314 A69-28444

Nonlinear resonance for modulated radio waves in a plasma /ionosphere/.  
16 p2754 A69-32538

Dynamics of inhomogeneities of fast electrons and ions in the earth's magnetosphere. I /Dinamika neodnorodnostei bystrykh elektronov i ionov v magnitosfere zemli. I/.  
20 p3520 A69-37029

Relaxation method of determining the nature of a continuum in nonequilibrium arc discharges /Relaksatsionnyi metod opredeleniia prirody kontinuum v neravnovesnykh dugovykh razriadakh/.  
04 p0639 A69-15369

Study of the mechanism of spectral excitation in a helium arc plasma /Issledovanie mekhanizma vzbuzhdeniia spektra v plazme geliievoi dugi/.  
10 p1742 A69-24077

Relaxation method for determining the nature of continuum in nonequilibrium arc discharges.  
16 p2822 A69-32116

## GUREVICH, G. L.

Unsteady processes in a traveling-wave laser with a bleachable-absorber filter /Nestatsionarnye protsessy v

OKG begushchei volny s prosvetliaushchimsia fil'trom/.  
10 p1705 A69-23949

## GUREVICH, I. A. B.

Mechanical properties of single crystals of the alloy nickel-chromium-titanium-aluminum /Nimonic/ in different structural states.  
02 p0268 A69-12192

## GUREVICH, I. U. G.

Theory of electromagnetic wave propagation in non-linear media /K teorii rasprostraneniia elektromagnitnykh voln v nelineinykh sredakh/.  
03 p0396 A69-13707

## GUREVICH, L. E.

Contribution to the theory of current fluctuations in a semiconductor /K teorii fluktuatsii toka v poluprovodnike/.  
08 p1372 A69-20545

Elastic and inelastic evolution of concentrated gravitational systems. I /Uprugaia i neuprugaia evoliutsiia konsentrirovannykh gravitatsionnykh sistem. I/.  
15 p2687 A69-30548

## GUREVICH, M. A.

Limiting conditions of ignition of a metallic particle /Predel'nye usloviia vospalmeneniia metallicheskoii chastitsy/.  
02 p0355 A69-12670

Ignition of a metallic particle /Vospalmenenie metallicheskoii chastitsy/.  
08 p1375 A69-20343

## GUREVICH, S. B.

Transmission of holographs by a standard phototelegraphic channel with a limited number of halftones /Peredacha gologramm po standartnomu fototelegrafnomu kanalu s ogranichenным chislom polutonov/.  
11 p1889 A69-25549

## GUREVICH, S. M.

The weldability of a thermally stable titanium alloy.  
06 p0940 A69-17092  
Problems of welding titanium and its alloys /Problemy svarki titana i ego splavov/.  
07 p1139 A69-18789

Formation of pores in fusion welds in titanium.  
24 p4319 A69-42885

## GUREVICH, V. I.

A method of diminishing the dead zone of a meteorological radar /Ob odnom metode umen'sheniia mertvoi zony meteorologicheskogo radiolokatora/.  
16 p2791 A69-32281

## GUREVICH, V. L.

Interaction of sound with conduction electrons in many-valley semiconductors. I.  
07 p1199 A69-18680  
Interaction of sound with conduction electrons in many-valley semiconductors. II.  
07 p1199 A69-18681

Theory of acoustic properties of piezoelectric semiconductors /Review/.  
14 p2503 A69-28786  
Current fluctuations in a semiconductor in a strong electric field /Fluktuatsii toka v poluprovodnike v sil'nom elektricheskom pole/.  
16 p2824 A69-31569

## GURFINKEL, V. S.

Coordination of posture and motion of man under conditions of increased and decreased gravitation /Koordiniatsiia pozy i dvizheniia cheloveka v usloviakh povyshennoi i ponizhennoi gravitatsii/.  
07 p1063 A69-18593

## GURGANUS, T. B.

Wetting of binary aluminum alloys in contact with Be, B sub 4 C, and graphite.  
[ACS PAPER 15-C-68F] 12 p2114 A69-26301

## GURIAN, I. A.

Micrometeoritic investigations on the Cosmos 135 satellite /mikrometeornye issledovaniia na sputnike "Kosmos-135"/.  
01 p0152 A69-10578

Micrometeoroid investigations on the satellite "Kosmos-135".  
15 p2691 A69-30748

## GURIEV, N. F.

Stressed state of a circular plate weakened by a square hole /O napriazhennom sostoianii krugloi plastinki, oslablennoi kvadratnym otverstiem/.  
23 p4227 A69-41712

## GURIEVICH, S. V.

Diffraction by two parallel cylinders.  
02 p0217 A69-12261



## GURIN, A. A.

- Influence of pair collisions on the stability of a plasma/beam system /O vlianii parnykh stolknovenii na ustoiichivost' sistemy plazma-puchok/.  
07 p1189 A69-18539
- Effect of binary collisions on the stability of beam plasma systems.  
21 p3776 A69-38691

## GURIN, A. I.

- Stability of motion of a gyroscope in gimbal support with spring restraint and damper in a Newtonian central force field.  
05 p0765 A69-16684

## GURIN, I. S.

- Medicinal therapy and flight safety /Lekarstvennaia terapiia i bezopasnost' poletov/.  
01 p0014 A69-10583
- Drug therapy and flight safety.  
15 p2555 A69-30753

## GURK, H. M.

- Television system for earth resources satellite.  
21 p3720 A69-38619

## GURNETT, D. A.

- The low-frequency cutoff of ELF emissions.  
03 p0399 A69-14021
- VLF emissions during magnetic storms and their association with 40-kev electrons.  
09 p1488 A69-21698
- VLF electric and magnetic fields observed in the auroral zone with the Javelin 8.46 sounding rocket.  
20 p3533 A69-38080
- Ionospheric observation of VLF electrostatic noise related to harmonics of the proton gyrofrequency.  
21 p3714 A69-38550
- Initial observations of VLF electric and magnetic fields with the Injun 5 satellite.  
22 p3938 A69-40503

## GURO, G. M.

- Microwave absorption by free carriers in barium titanate /Pogloschenie SVCh na svobodnykh nositeliakh v titanate bariia/.  
08 p1374 A69-21189
- Polarization stabilization time for semiconductors /O vremenu ustanovleniia polarizatsii v poluprovodnikakh/.  
13 p2317 A69-27880
- Microwave absorption by free carriers in barium titanate.  
18 p3183 A69-35158

## GUROV, V. M.

- Contribution to the theory of an erosion-type electrodynamic plasma accelerator with inductive energy storage /K teorii eroziionnogo elektrodinamicheskogo uskoritelia plazmy induktivnym nakiopitel'em energii/.  
13 p2311 A69-28110

## GUROVICH, V. TS.

- Evolution of waves in an inhomogeneous dispersive medium /Ob evoliutsii voln v neodnorodnoi dispergiuushchei srede/.  
07 p1181 A69-19001
- The Poincare recurrence theorem and the problem of gravitational collapse /Teorema vozvrashcheniia Puankare i problema gravitatsionnogo kollapsa/.  
09 p1593 A69-21567

## GUROVSKII, N. N.

- Study of the effects of various work and rest schedules on subjects under conditions of relative isolation /Izuchenie vlianiia razlichnykh rezhimov truda i otdykha na ispytatelei, nakhodiashchikhsia v usloviakh otnositel'noi izolatsii/.  
03 p0381 A69-14201
- Sensory reactions and the state of arbitrary motions of man under conditions of weightlessness /Sensornye reaktsii i sostoianie proizvol'nykh dvizhenii cheloveka v usloviakh nevesomosti/.  
07 p1060 A69-18575
- Some results of the biomedical experiment on the biosatellite "Kosmos-110."  
08 p1261 A69-19827
- Quantitative evaluation of the activity of animal cardiovascular systems during prolonged orbital flight.  
08 p1261 A69-19828

## GURSKI, T. R.

- Simultaneous mode-locking and second-harmonic generation by the same nonlinear crystal.  
20 p3555 A69-37731

## GURSKY, H.

- The location of the X-ray source in Vela.  
02 p0308 A69-12594
- The spectrum of diffuse cosmic X-rays, 1-13 kev.  
13 p2326 A69-27570

## X-ray spectral data from GX3 plus 1.

20 p3594 A69-38172

## GURTIN, M. E.

- A general theory of heat conduction with finite wave speeds.  
03 p0533 A69-13956
- On the thermodynamics of non-simple elastic materials with two temperatures.  
08 p1422 A69-20847
- On the symmetry of the conductivity tensor and other restrictions in the nonlinear theory of heat conduction.  
13 p2377 A69-28193

## GURTNER, R. W.

- Avalanche drift instability in planar passivated p-n junctions.  
10 p1743 A69-23174

## GURTMAN, G. A.

- Dispersive pulse propagation parallel to the interfaces of a laminated composite. [ASME PAPER 69-APMW-20]  
24 p4401 A69-43098

## GURTNER, G. H.

- Alveolar to mixed venous P sub CO sub 2 difference under conditions of no gas exchange.  
22 p3885 A69-40976

## GURTOVENKO, E. A.

- Active prominences of 9 and 11 July 1966.  
10 p1764 A69-23739
- The use of a laser beam for investigating the instrumental profile of a double-pass solar spectrograph.  
11 p1893 A69-24431
- A new type of solar flares /Novyi tip vspyshek na solntse/.  
15 p2674 A69-30506
- Spectral emission of active prominences /Spektral'noe izuchenie aktivnykh protuberantsev/.  
15 p2674 A69-30510
- The sodium density in comet Ikeya-Seki /1965 f/ /O plotnosti natriia v komete Ikeya-Seki /1965 f/.  
15 p2685 A69-30526

## GURTOVOI, M. I.

- A directional short-wave antenna for meteor studies /Napravleniiaia korotkovolnovaia antenna dlia issledovaniia meteorov/.  
17 p2939 A69-33903

## GURVICH, A. S.

- The determination of turbulence characteristics from light scattering experiments.  
02 p0274 A69-11437
- Effect of absorption on fluctuations in the level of a signal propagating in the atmosphere /O vlianii pogloscheniia na fluktuatsii urovnia signala pri rasprostraneni v atmosfere/.  
05 p0717 A69-15634
- Light intensity fluctuations in diverging beams /Fluktuatsii intensivnosti sveta v raskhodiashchikhsia puchkakh/.  
08 p1351 A69-20437
- Averaging effect of a receiving aperture on light intensity fluctuations /Usredniaushche deistvie priemnoi apertury na fluktuatsii intensivnosti sveta/.  
10 p1658 A69-23950
- Effect of absorption on the fluctuation in signal level during atmospheric propagation.  
16 p2754 A69-32492

## GURVICH, G. I.

- Use of a two-gas artificial atmosphere in manned spacecraft /O primeneni dvukh gazovoi iskusstvennoi atmosfery v obitaemykh kosmicheskikh korabliakh/.  
17 p2912 A69-32940

## GUSACHENKO, I. I.

- Accuracy of the amplitude characteristics of two types of logarithmic amplifiers /Tochnost' amplitudnykh kharakteristik dvukh tipov logarifmicheskikh usilitel'ei/.  
15 p2574 A69-30128

## GUSAK, D. V.

- First passage time of a given level for processes with independent increments /O momente pervogo prokhozheniia zadannogo urovnia dlia protsessov s nezavisimymi priirashcheniiami/.  
01 p0104 A69-10265
- On the first passage time across a given level for processes with independent increments.  
19 p3360 A69-36200

## GUSAK, I. A. M.

- Critical speeds of high-speed rotors running in friction bearings.  
18 p3147 A69-34545

## GUSAKOV, G. S.

- Optimization of space communication systems /Optimizatsiia kosmicheskikh sistem svyazi/.  
[UN PAPER 68-95772] 06 p0886 A69-17030

## GUSAR, N. N.

- Influence of temperature on the mechanical properties of fiberglass-reinforced textolites /Vlianie temperatury na mekhanicheskie svoista stekloestekstolitov/.  
23 p4179 A69-41993

## GUSAROV, B. G.

- Investigation of the decomposition of urea by urease in relation to space cabin life support systems.  
08 p1265 A69-19834
- Some characteristics of the thermal mineralization of biocomplex wastes in a closed system.  
10 p1649 A69-23504
- Investigation of the oxidative-catalytic method of mineralization of wastes in a closed ecological system.  
10 p1649 A69-23579

## GUSEIN-ZADE, M. I.

- On the derivation of a theory of bending of layered plates.  
04 p0684 A69-15534

## GUSEINZADE, A. A.

- Variability of the envelope of the Wolf-Rayet eclipsing binary CQ Cephei equals HD 214419.  
16 p2864 A69-32593

## GUSENKOV, G. N.

- Relaxation self-oscillations during the combustion of gunpowder in a semiclosed volume /Relaksatsionnye avtokolebaniia pri goreнии porokha v poluzamknutom ob'eme/.  
04 p0686 A69-14987

## GUSEV, V. D.

- Polarization of scattered electromagnetic waves /Polarizatsiia rasseiannykh elektromagnitnykh voln/.  
09 p1453 A69-21527
- Measurements of the phase fluctuations of a signal reflected from the ionosphere in the case of oblique incidence /Izmereniia fluktuatsii fazy otrazhennogo ot ionosfery signala pri naklonnom padenii/.  
10 p1657 A69-23913

- Effect of inhomogeneities on the state of polarization of radio waves reflected from the ionosphere /O vlianii neodnorodnosti na sostoianie polarizatsii radiovoln, otrazhennykh ot ionosfery/.  
14 p2417 A69-29862

- Polarization of scattered electromagnetic waves.  
16 p2754 A69-32522

## GUSEV, V. G.

- Analysis of errors arising in an automatic system during the realization of the control law on a digital computer and in the case of harmonic or random input effects /Analiz pogreshnosti voznikaushchikh v avtomaticheskoi sisteme pri realizatsii zakona upravleniia na tsifrovoy vychislitel'noi mashine i garmonicheskoi ili sluchainom vkhodnykh vozdetsviiax/.  
01 p0050 A69-10208

- Analysis of the errors that appear in an automatic system when the control law is implemented on a digital computer, and harmonic or random inputs are present.  
14 p2424 A69-28744

## GUSEV, V. M.

- Conductivity and carrier density distributions in silicon doped by ion bombardment.  
04 p0643 A69-15254

- High-frequency planar silicon transistor based on a p-n-p structure obtained by an ion doping technique /Kremnievy vysokochastotnyi planarnyi tranzistor na osnove p-n-p-struktury, poluchennyi metodom ionnogo legirovaniia/.  
22 p3916 A69-40960

## GUSEV, V. N.

- Nature of the flow and aerodynamic characteristics of bodies of very simple form in a viscous hypersonic gas flow.  
05 p0699 A69-16673

## GUSEVA, L. N.

- Problems of the interpretation of infrared cloud images transmitted by meteorological earth satellites /Voprosy interpretatsii infrakrasnykh izobrazhenii oblachnosti s meteorologicheskikh sputnikov zemli/.  
06 p0952 A69-17984

- Martensite phase with an fcc lattice in a titanium alloy with 5.9 percent iron /O martensitnoi faze s g. ts. k. reshetkoi v splave titana s 5,9 percent zheleza/.  
15 p2636 A69-30105

- Strengthening of nickel solid solutions during deformation /Uprochnenie tverdykh rastvorov nikelia pri deformatsii/.  
18 p3157 A69-35246

- GUSEVA, V. M.**  
The transmission of colorless optical glasses in the near ultraviolet.  
12 p2130 A69-26599
- GUSH, H. P.**  
Spectrum of the night airglow between 3 and 4 microns.  
03 p0426 A69-14251  
The emission spectrum of the night airglow from 2 to 4 mu m.  
13 p2252 A69-27586
- GUSHCHIN, A. K.**  
Rate of stabilization of the solution of a boundary-value problem for a parabolic equation /O skorosti stabilizatsii resheniia kraevoi zadachi dlia parabolicheskogo uravneniia/.  
09 p1532 A69-21627
- GUSHCHINA, R. T.**  
Effect of solar activity on the electromagnetic conditions in interplanetary space according to data concerning the modulation effects in cosmic rays /Vozdeistvie solnechnoi aktivnosti na elektromagnitnye uslovia v mezplanetnom prostranstve po dannym o moduliatsionnykh effektakh kosmicheskikh luchei/.  
10 p1759 A69-22841
- GUSHCHINA, Z. M.**  
Aging of some ferrites with a spinel structure /O starenii nekotorykh ferritov so strukturoi shpineli/.  
13 p2320 A69-27997
- GUSIATINSKII, I. A.**  
Long-range Tropospheric Communications /Dal'naiia Troposfernaia Radiosviaz'/.  
04 p0558 A69-14919
- GUSINOW, M. A.**  
Spectral temperatures of nonuniform plasmas.  
09 p1552 A69-22251  
Formation of molecular helium during the early afterglow.  
16 p2782 A69-32465
- GUSKOV, IU. K.**  
Plasma Thermionic Energy Conversion /Plazmennoe Termoemissionnoe Preobrazovanie Energii/.  
12 p2017 A69-26850  
The characteristics of thermionic converters filled with vapour mixture.  
14 p2402 A69-29239
- GUSKOV, IU. P.**  
Control of the maneuver of turning the plane of a circular satellite orbit so as to make the satellite pass through a given point /Upravlenie manevrom povorota ploskosti krugovoi orbity sputnika obespechivaushchee prokhozhdenie sputnika cherez zadannuiu točku/.  
21 p3765 A69-39640
- GUSKOV, L. N.**  
Detection of coherent light fluxes /Registratsiia kogherentnykh svetovykh potokov/.  
09 p1515 A69-21438
- GUSKOV, V. P.**  
Approximate solution to the problem of a pressure drop in the control element during the process of readjustment /Priblizhennoe reshenie zadachi o perepade davlenii na reguliruiushchem organe v rezhime perenastroiki/.  
19 p3393 A69-35819
- GUSKOVA, E. G.**  
Magnetic properties of meteorites in the Soviet collection /Magnitnye svostva meteoritov kollektsii Sovetskogo Soiuza/.  
19 p3415 A69-36122
- GUSKOVA, E. I.**  
Variation of the quantity and composition of the beta-phase during heat treatment of the alloy VTZ-1 /Izmenenie kolichestva i sostava beta-fazy pri termicheskoi obrabotke splava VTZ-1/.  
07 p1163 A69-18777
- GUSLIAKOV, A. A.**  
Friction in vacuum.  
03 p0434 A69-13915
- GUSS, D. E.**  
Composition of the 2nd September 1966 solar particle event.  
06 p0989 A69-17280  
Composition of cosmic rays measured in Gemini XI.  
21 p3787 A69-38350
- GUSSAK, L. A.**  
Study of the stability of a normal flame front /Issledovanie ustichivosti fronta normal'nogo plameni/.  
08 p1421 A69-20344
- GUSSEV, O. B.**  
Scattering materials in holography /Rasseivateli v golografii/.  
11 p1889 A69-25550
- GUSSEV, V. D.**  
Investigation of the ionospheric echoes by the coherent method.  
17 p2927 A69-33860  
Scattering of radiowaves in homogeneous gyrotropic medium.  
17 p2927 A69-33861
- GUSTAFSON, A.**  
A method for solving problems of nonshallow shells.  
23 p4225 A69-41407
- GUSTAFSON, F. B.**  
Notes on rotor aerodynamic research.  
23 p4057 A69-41372
- GUSTAFSON, R. M.**  
Making reference radiographs for steel welds.  
18 p3150 A69-35425
- GUSTAFSON, T. K.**  
Self-modulation, self-steepening, and spectral development of light in small-scale trapped filaments.  
08 p1352 A69-20745
- GUSTAFSON, W. A.**  
Effects of curvature on laminar boundary layers in sink-type flows.  
[ASME PAPER 68-WA/FE-20]  
05 p0749 A69-16096
- GUSTAFSSON, G.**  
The auroral orientation curves for the IQSY.  
24 p4308 A69-43009
- GUSTAFSSON, L.**  
Reliability - Experience with the Vigen computer /Tillfoerlighthet - Erfarenheter fran Viggens datamaskin/.  
15 p2577 A69-30620
- GUSTYR, L. IA.**  
Measurement of the radiation divergence of gas lasers operating in the TEM sub nm modes /Izmerenie rashodimosti izlucheniia gazovykh lazerov pri generatsii na modakh TEM sub nm/.  
07 p1148 A69-18804  
Measurement of the divergence of the radiation of gas lasers operating in TEM sub nm modes.  
21 p3736 A69-38949
- GUTA, C.**  
Considerations regarding an optimum maneuver for space vehicles propelled by low-thrust jet engines /Consideratii asupra unor manevre optime ale aparatelor cosmice propulsate de motoare reactive de mica tractiune/.  
05 p0829 A69-15879
- GUTAREV, V. V.**  
Investigation of the heat transfer and hydrodynamic resistance for a turbulent gas flow in the field of a longitudinal sign- variable pressure gradient. I /Issledovanie teploobmena i gidrodinamicheskogo soprotivleniia pri turbulentnom techenii gaza v pole prodol'nogo znakoperemennogo gradienta davleniia. I/.  
15 p2548 A69-31173  
Investigation of heat transfer and hydrodynamic resistance for a turbulent gas flow in the field of longitudinal pressure gradient of variable sign. II /Issledovanie teploobmena i gidrodinamicheskogo soprotivleniia pri turbulentnom techenii gaza v pole prodol'nogo znakoperemennogo gradienta davleniia. II/.  
21 p3848 A69-38635
- GUTBIER, H.**  
Removal of the reaction water from fuel cells by diffusion and condensation /Abtrennung des Reaktionsswassers aus Brennstoffzellen durch Diffusion und Kondensation/.  
16 p2736 A69-32200
- GUTENBAUM, J.**  
Problems of the adaptive control of multidimensional dynamic plants /Zagadnienia adaptacyjnego sterowania wielowymiarowymi obiektami dynamicznymi/.  
01 p0053 A69-10875
- GUTENBERG, A. W.**  
Deficiencies in selected control systems with special reference to research and development.  
07 p1244 A69-18963
- GUTFREUND, H.**  
Correlation effects of pi electrons. III - Oscillator strength distribution.  
20 p3580 A69-37497
- GUTH, S. L.**  
On luminance additivity and related topics.  
22 p3880 A69-40849
- GUTHRIE, B. N. G.**  
Heavy-element abundances in peculiar A stars.  
14 p2527 A69-29945
- GUTHRIE, D., JR.**  
Relationships among potential sorties, ground support, and aircraft reliability.  
05 p0743 A69-16238
- GUTIERREZ-MORENO, A.**  
A photometric investigation of the Scorpio-Centaurus association.  
06 p1001 A69-17195  
The atmospheric extinction at Cerro Toloio.  
10 p1777 A69-23386  
Spectrophotometric parameters of early type stars. I - Equivalent widths of hydrogen lines.  
10 p1777 A69-23387
- GUTJAHR, H. J.**  
Line reversal and excitation temperatures in low-pressure flames /Linienumkehr und Anregungstemperaturen in Niederdruckflammen/.  
02 p0350 A69-11709
- GUTKIN, A. M.**  
Adsorption mechanism of the leakage of the lunar atmosphere /Adsorbtionnyi mekhanizm utechki lunnoi atmosfery/.  
05 p0824 A69-16062  
Loss of the lunar atmosphere by an adsorptive mechanism.  
15 p2680 A69-30261
- GUTKIN, L. S.**  
Radio Control of Rocket Missiles and Space Vehicles /Radioupravlenie reaktivnymi snariadami i kosmicheskimi apparatami/.  
20 p3574 A69-37232
- GUTKIN, T. I.**  
Drift instability of a collisionless plasma in the high-frequency field of an E wave /Dreifovaia neustoiichivost' besstolknovitel'noi plazmy v vysokochastotnom pole E-volny/.  
09 p1546 A69-21564
- GUTKNECHT, P.**  
A duty cycle generator for switching regulators.  
23 p4073 A69-42293
- GUTMAN, E.**  
Elastic scattering of negative pions from deuterons at 2.01, 3.77, and 5.53 GeV/c.  
17 p3007 A69-32885  
Pi super minus p elastic scattering at 2.51, 2.76, and 3.01 GeV/c near t approximately equal to minus 3 /GeV/c super 2/.  
24 p4352 A69-43049
- GUTMAN, L. N.**  
Mesometeorological solitary waves.  
02 p0274 A69-11445  
A non-stationary problem of a mesoscale atmospheric vortex with vertical axis.  
03 p0462 A69-13932
- GUTMAN, T. L.**  
Electromagnetic wave diffraction at an arbitrarily moving surface /K voprosu o difraktsii elektromagnitnykh voln na proizvol'no dvizhushcheisia poverkhnosti/.  
03 p0397 A69-13719
- GUTMANN, E.**  
Effect of tension upon rate of incorporation of amino acids into proteins of cross-striated muscle.  
23 p4083 A69-41458
- GUTMANN, F.**  
Electronic properties of some TCNQ complexes.  
11 p1832 A69-25675
- GUTOWSKI, R.**  
The behaviour of the solutions of equations of motion of the mechanical systems with program constraints.  
17 p3053 A69-33017
- GUTS, V. V.**  
Dependence of the current and electroluminescence brightness on the reverse voltage in SiC diodes /Zavisimost' toka i iarkosti elektroluminestsentsii ot obratnogo napriazheniia v diodakh SiC/.  
15 p2573 A69-30062
- GUTSHIN, G. I.**  
Thermionic converter electrical characteristics with matrix circuit connections.  
14 p2400 A69-29225



## GUTTERMAN, M.

An operational method in partial differential equations.  
21 p3756 A69-39500

## GUTTINGER, B.

Action of an electric field on the temperature of a flame /Action d'un champ électrique sur la température d'une flamme/.  
01 p0176 A69-10389

## GUTTMAN, A.

Extinction coefficient measurements on clear atmospheres and thin cirrus clouds.  
04 p0596 A69-14280

## GUTTMAN, D. S.

Dielectrophoretic orientation.  
04 p0591 A69-15504

## GUTTZEIT, H.

Sensor for O sub 2 partial pressure telemetry /Messfühler fuer die Telemetrie des O sub 2 -Partialdruckes/.  
15 p2559 A69-31231

## GUTWEIN, J. M.

A double sideband-quadrature carrier multiplex telemetry system.  
07 p1084 A69-19131

Suppression of interference in a congested spectrum.  
23 p4128 A69-42503

## GUY, L. D.

Structural and decelerator design options for Mars entry.  
[AIAA PAPER 68-344] 04 p0683 A69-15507

## GUYONNET, J.

Development of type II ceramic capacitors within the framework of the Concerto space program /Developpement des condensateurs ceramiques de type II dans le cadre du programme spatial Concerto/.  
11 p1853 A69-25393

Development of very high reliability components in mass production within the Concerto program framework /Le developpement de composants de tres haute fiabilité au sein d'une fabrication de grande serie dans le cadre du programme Concerto/.  
15 p2627 A69-30844

## GUYOT, D.

Experimental study of the ionization of deuterium under the action of a short-pulse laser /Etude experimentale de l'ionisation du deuterium sous l'action d'un laser a impulsion courte/.  
02 p0255 A69-11545

Plasma production with the aid of steep-front laser pulses /Creation de plasma a l'aide d'impulsions laser a front de montee rapide/.  
05 p0770 A69-15584

Gas breakdown with nanosecond pulses.  
[IEEE PAPER U-3] 07 p1155 A69-19085

## GUYOT, L.

Image intensifier tubes and slit-type electronic cameras with high-sensitivity multiple integral images - Applications /Tubes intensificateurs d'images et cameras electroniques et fentes et a images integrales multiples a haute sensibilité - Applications/.  
12 p2083 A69-26143

## GUYOT, P.

Survey of the possibilities of adapting a turbojet/ramjet combination to the propulsion of high-Mach aircraft /Aperçu sur les possibilités d'adaptation du combine turbostato a la propulsion des avions a grand Mach/.  
17 p3020 A69-33348

## GUYTON, A. C.

Coronary perfusion pressure and left ventricular function.  
23 p4092 A69-42061

## GUZ, A. N.

Stability of three-dimensional elastic bodies /Ob ustoiichivosti trekhmernykh uprugikh tel/.  
05 p0834 A69-15784

Solution of two-dimensional physically nonlinear problems in the theory of elasticity for multiply connected regions /O reshenii ploskikh fizicheskikh nelineinykh zadach teorii uprugosti dlia mnogosviaznykh oblastei/.  
05 p0841 A69-16203

Solution of two-dimensional and three-dimensional problems of the mechanics of continua for multiply connected regions /O reshenii dvukhmernykh i trekhmernykh zadach mekhaniki sploshnoi sredy dlia mnogosviaznykh oblastei/.  
11 p1972 A69-24651

Formulation of the theory of stability of unidirectional fibrous materials /O postroenii teorii

ustoiichivosti odnonapravlennykh voloknistykh materialov/.  
11 p1985 A69-25172

Axisymmetric oscillations of two spherical shells in a compressible fluid /Osesimmetrichnye kolebaniia dvukh sfericheskikh obolochek v szhimaemoi zhidkosti/.  
11 p1875 A69-25467

Stress concentration around holes in thin shells /Survey/ /Kontsentratsiia napriazhenii okolo otverstii v tonkikh obolochkakh/ obzor/.  
14 p2532 A69-28977

On the stability of three-dimensional elastic bodies.  
18 p3223 A69-35036

Influence of the properties of a plate material on the critical strength value /O vliianii svoistv materiala plastinki na velichinu kriticheskoi sily/.  
18 p3225 A69-35361

Deformational instability of sandwich materials /O neustoiichivosti deformirovaniia sloistykh materialov/.  
18 p3226 A69-35374

Diffraction of elastic waves at an infinite array of circular cylinders /Difraktsiia uprugikh voln na beskonechnom riade krugovykh tsilindrov/.  
19 p3437 A69-36144

## GUZ, O. M.

Determination of the theoretical compression strength of reinforced materials /Pro viznachennia teoretichnoi granitsi mitsnosti na stisk armovaniykh materialiv/.  
14 p2532 A69-28973

## GUZEI, V. M.

Thermal stability of a DC plasmatron arc /Temperaturnaia ustoiichivost' dugi plazmatrona postoiannogo toka/.  
15 p2663 A69-30994

## GUZHVIN, V. V.

On the development of cascade showers in heavy materials.  
13 p2303 A69-28412

Cascade shower theory with inclusion of positron annihilation, the Compton effect, and relativistic delta electron production.  
13 p2303 A69-28413

Angular distribution of electrons at different stages of cascade shower development.  
13 p2303 A69-28414

## GUZHOVSKII, I. T.

Interaction between plasmoids and an axisymmetric magnetic field /Vzaimodeistvie plazmennyykh sgustkov s aksial'no-simmetrichnym magnitnym polem/.  
24 p4358 A69-43472

Interaction between plasmoids and an axisymmetric magnetic field of acute-angle geometry /Vzaimodeistvie plazmennyykh sgustkov s aksial'no-simmetrichnym magnitnym polem ostrougol'noi geometrii/.  
24 p4358 A69-43473

## GUZMAN, J. A.

Distortions of controlled transients by shock-monitoring systems.  
04 p0603 A69-15430

## GVATUA, SH. SH.

Stimulated emission of active fibrous filaments /Vynuzhdennoe izluchenie aktivnykh volokonnykh nitei/.  
05 p0761 A69-15657

The induced emission of active fibers.  
16 p2792 A69-32514

## GYERDTSITELI, I. G.

Current oscillations and electromagnetic radiation in low-pressure thermal-emission converters.  
14 p2402 A69-29246

Low-voltage arc in the cesium-barium mixture.  
14 p2403 A69-29247

Low-voltage Knudsen arc in the cesium-inert gas mixture.  
14 p2403 A69-29248

## GVOZDEVA, L. G.

Shock Waves in Real Gases /Udarnye Volny v Real'nykh Gazakh/.  
04 p0589 A69-14937

Mach reflection of shock waves in real gases.  
19 p3450 A69-36363

## GYFTOPOULOS, E. P.

Comments on work function theories.  
14 p2505 A69-29262

Quantum thermodynamic meaning of electronegativity and work function.  
14 p2505 A69-29263

## GYLFE, J. D.

Status report on small reactor-thermoelectric power systems for unmanned space applications.  
23 p4187 A69-42255

25 kwe reactor-thermoelectric power system for manned orbiting space stations.  
23 p4187 A69-42256

## GYOERGY, H.

The application of phase-synchronized oscillators in frequency multipliers /Fazisszinkronizalt oszcillatorok alkalmazasa frekvenciasokszorozokban/.  
09 p1464 A69-22113

## GYOROG, D. A.

Thermal isolation with low conductance interstitial materials under compressive loads.  
[AIAA PAPER 69-25] 06 p1036 A69-18072

Thermal contact resistance of selected low-conductance interstitial materials.  
[AIAA PAPER 68-31] 23 p4239 A69-41889

## GYR, A.

Stability of an anisotropic viscoelastic liquid film /Stabilitaet eines anisotropen viskoelastischen Fluessigkeitsfilmes/.  
22 p3929 A69-39893

## GYUERKI, J.

Analysis and synthesis of control systems on a digital computer by the root-locus method /Szabalyozasi rendszerek analize es szintezise digitalis szamolegepen gyok-helygoerbe modszerral/.  
07 p1114 A69-18291

## H

## HAAB, P.

Ventilation-perfusion relationships during high-altitude adaptation.  
22 p3875 A69-40227

## HAACK, G. R.

Optimal design of coaxial low-pass filters.  
16 p2757 A69-31583

## HAAG, E.

Coupling problems in the oscillography of impulses /Ankoppelungsprobleme beim Oszillographieren von Impulsen/.  
11 p1880 A69-24541

## HAAGENSEN, H. F.

Economic planning of satellite earth station equipment.  
07 p1117 A69-19347

## HAAK, F. A.

Simultaneous HCN and H sub 2 O laser emission in mixtures containing H, C, N, and O.  
12 p2107 A69-26330

## HAAS, E.

The formation of carbon during the production of pure silicon /Zum Einbau von Kohlenstoff bei der Herstellung von Reinsilicium/.  
03 p0486 A69-13635

## HAAS, M.

Defective bacteriophage PBSh in Bacillus subtilis. II.  
15 p2555 A69-30446

## HAAS, T. W.

Low-energy electron scattering from clean and hydrogen-covered Nb /110/ surfaces.  
06 p0980 A69-17758

## HAAS, V. B.

Synthesis of time-optimal control of a second-order nonlinear process.  
24 p4289 A69-42955

## HAASE, M.

Release of noradrenalin from the dog heart after a temporary occlusion of coronary artery /Noradrenalinabgabe aus dem Hundeherzen nach voruebergelender Okklusion einer Koronararterie/.  
23 p4092 A69-42053

## HAASE, R.

Thermodynamics of Irreversible Processes.  
11 p1999 A69-24533

## HAASEN, P.

Mechanism of hardening superconductor /Mechanismen der Haertung von Supraleitern/.  
12 p2145 A69-27119

## HABAS, L. A.

NERVA - Contributing today and tomorrow.  
18 p3170 A69-35075

**HABERICH, F. J.**

The influence of portal blood pressure on diuresis in unanesthetized rats /Ueber den Einfluss des Druckes im Portalkreislauf auf die Diurese der wachen Ratte/.  
23 p4094 A69-42074

**HABERKORN, H.**

Strain hardening mechanisms in AlZn and AlAg alloys /Verfestigungsmechanismen in AlZn- und AlAg-Legierungen/.  
16 p2800 A69-31776

**HABERMANN, C. E.**

A high-temperature forge for refractory metals.  
17 p2945 A69-33419

**HABERMAYER, M.**

Stability test of linear control systems with dead time.  
13 p2238 A69-27395

**HABERSTICH, M.**

Electrochemical grinding as applied to jet engine overhaul.  
[SAE PAPER 680662] 03 p0433 A69-13453

**HABERT, R.**

Behavior of the complex refractive index of an isotropic plasma.  
07 p1193 A69-19183

**HABETLER, G. J.**

A completeness theorem for non-selfadjoint eigenvalue problems in hydrodynamic stability.  
21 p3754 A69-38426

**HABIB, I. S.**

Heat transfer in turbulent pipe flow with optically thin radiation.  
[ASME PAPER 68-WA/HT-17] 05 p0847 A69-16121

Nongray radiative transport in a cylindrical medium.  
[ASME PAPER 69-HT-38] 24 p4411 A69-43534

**HABING, H. J.**

Cosmic-ray heating of the interstellar gas.  
10 p1770 A69-24095

A comparison of radio and optical spectral lines of neutral interstellar gas.  
14 p2519 A69-29135

**HABRAKEN, L.**

Structural stability of MAR-M 509, a cobalt-base superalloy.  
05 p0781 A69-16448

Microstructure of cobalt-base high-temperature alloys.  
14 p2465 A69-29890

**HACH, J.-P.**

A very sensitive airborne microwave radiometer using two reference temperatures.  
[DVL-895] 02 p0220 A69-12435

**HACHE, J.-C.**

Results of questionnaire given to flight personnel concerning the lighting of instrument panels /Resultats d'une enquete aupres du personnel navigant concernant l'eclairage des tableaux de bord/.  
05 p0715 A69-16622

**HACHENBERG, O.**

Studies for the construction of the 100-m telescope /Studien zur Konstruktion des 100-m-Teleskops/.  
15 p2589 A69-30864

The 100-m radio telescope of the Max Planck Institute for Radio Astronomy in Bonn /Das 100-m-Radioteleskop des Max-Planck-Instituts fuer Radioastronomie in Bonn/.  
17 p2975 A69-33702

Investigation of the structure of the interstellar neutral hydrogen in mean galactic latitudes /Untersuchungen zur Struktur des interstellaren neutralen Wasserstoffs in mittleren galaktischen Breiten/.  
17 p3039 A69-33766

The 100-m radio telescope of the Max Planck Institute for radio astronomy in Bonn.  
23 p4148 A69-42122

**HACK, M.**

Spectroscopic evidence for mass loss from CH Cygni.  
08 p1396 A69-20651

The problem of lithium and the other light elements deuterium, beryllium and boron.  
08 p1403 A69-20912

Forbidden emissions in the spectrum of CH Cygni and VV Cephei.  
19 p3423 A69-36228

Luminosity and temperature criteria for O-type stars.  
20 p3598 A69-37463

Radial velocity variations of the shell of zeta Tauri.  
20 p3599 A69-37471

Mass Loss from Stars, Astronomical Observatory of Trieste, Colloquium on Astrophysics, 2nd, Trieste, Italy, September 12-17, 1968, Proceedings.  
21 p3812 A69-39520

**HACKER, T.**

Problems of optimal flight stabilization.  
05 p0702 A69-16024

Neutral dynamic stability of the aircraft.  
15 p2551 A69-31012

**HACKETT, J. E.**

Vortex wakes behind high-lift wings.  
[AIAA PAPER 69-740] 18 p3083 A69-34405

**HACKETT, R. M.**

Viscoelastic stress distribution in a two-phase composite material model.  
02 p0348 A69-12540

A photoviscoelastic analysis of time-dependent stresses in a polyphase system.  
03 p0524 A69-13061

**HADCOCK, R. N.**

Strength of multidirectional boron-epoxy laminates.  
08 p1337 A69-20484

**HADDAD, G. I.**

A large-signal analysis of IMPATT diodes.  
05 p0733 A69-16555

Large-signal analysis of avalanche-diode oscillators.  
07 p1098 A69-18458

**HADDAD, G. N.**

Experimental oscillator strengths for the Schumann-Runge band system in oxygen.  
02 p0284 A69-12832

**HADDAD, R. A.**

Air-ground, ground-air communications using pseudonoise through a satellite.  
01 p0033 A69-11009

**HADDENHORST, R. G.**

Management and control of product engineering changes for aircraft.  
[ASME PAPER 69-DE-67] 14 p2540 A69-28850

**HADDICAN, P. J.**

A telemetry channel frequency response correction technique.  
10 p1654 A69-23291

**HADDLE, G. P.**

The physics of flow noise.  
17 p3004 A69-32953

**HADDOW, J. B.**

Elastic-plastic flow through a converging conical channel.  
12 p2063 A69-27114

**HADEISHI, T.**

Observations of Lamb shifts in H using spatially periodic potentials.  
18 p3179 A69-35488

**HADEN, C. R.**

Application of the point-matching method in determining the reflection and transmission coefficients in linearly tapered waveguides.  
01 p0044 A69-10629

Superconducting antennas.  
17 p2937 A69-33784

**HADGIGEORGE, G.**

Daytime ground-to-satellite laser ranging experiments.  
23 p4174 A69-42193

**HADJ-CHIKH, T.**

On the theory of transverse wave-beam interaction in a finite, homogeneous magnetostatic field.  
21 p3672 A69-38435

**HADJIDEMETRIOU, J. D.**

Dynamics of close binary systems with mass exchange.  
08 p1395 A69-20634

Dynamic effects of mass exchange in close binary systems.  
11 p1962 A69-25113

Second-order stability of dynamical systems with two degrees of freedom.  
22 p4013 A69-40123

**HADJIDIMOS, A.**

On a generalised alternating direction implicit method for solving Laplace's equation.  
01 p0107 A69-11366

**HADLEY, D. W.**

Anisotropy in oriented fibres from synthetic polymers.  
09 p1528 A69-21504

**HADLEY, M. L.**

Characteristic ranges for LSA oscillation.  
05 p0810 A69-16568

**HADLEY, R. L.**

Nickel-cadmium cells for optimum overcharge capability.  
10 p1639 A69-23991

**HADLOCK, F. O.**

Realization of sequential machines with threshold elements.  
18 p3105 A69-34618

**HAEBERLI, W.**

Charge-exchange collisions between hydrogen ions and cesium vapor in the energy range 0.5-20 kev.  
08 p1356 A69-20737

**HAEBERLIN, O.**

Toward the orbital station /Vers la station orbitale/.  
06 p1013 A69-17266

**HAEFER, R. A.**

Distribution of the molecular flux density in space simulation chambers with cryowalls /Verteilung der Molekularstromdichte in Raumsimulationskammern mit Kryowanden/.  
01 p0057 A69-11153

Investigation of the molecular flux distribution in space-simulation chambers /Untersuchungen zur Verteilung des molekularen Flusses in Raumsimulations-Anlagen/.  
13 p2241 A69-28081

**HAENDEL, S. K.**

Influence of adsorbed gases on the emission of X-rays from exploding tungsten wires in vacuum.  
01 p0118 A69-10668

Flash radiography using exploding wire technique.  
12 p2092 A69-26480

**HAENSCH, T.**

Power broadening in a He-Ne laser.  
01 p0089 A69-10182

Coherence phenomena in the coupling of laser transitions.  
11 p1898 A69-25045

Power broadening of gas-laser transitions.  
11 p1898 A69-25046

Interaction of laser light waves by dynamic Stark splitting.  
22 p3965 A69-41125

**HAENSCH, T. W.**

On pressure broadening in a He-Ne laser.  
12 p2105 A69-26317

**HAENSEL, CH.**

Remarks on the determination of temperature advection from wind measurements /Bemerkungen zur Bestimmung der Temperaturadvektion aus Windmessungen/.  
09 p1534 A69-21509

**HAERENDEL, G.**

Artificial plasma clouds in space.  
01 p0151 A69-10533

Loss processes and equilibrium distribution of trapped particles.  
11 p1948 A69-24856

Highly irregular artificial plasma clouds in the auroral zone.  
21 p3710 A69-38507

**HAERING, R. R.**

Solid State Physics, Simon Fraser University Summer School on Solid State Physics, Alta Lake, British Columbia, Canada, August 21-September 1, 1967, Lectures. Volume 1 - Electrons in Metals.  
05 p0809 A69-16552

A high voltage thin-film transistor.  
16 p2757 A69-31614

**HAUSELER, E.**

Some special methods of estimating the safety of rocket propellants /Einige spezielle Methoden zur Beurteilung der Sicherheit von Raketentreibstoffen/.  
02 p0302 A69-11525

**HAUSER, W.**

Optimal method of series representation of absolute topographies of the 500-mb surface in the Northern Hemisphere /Ein optimales Verfahren der Reihendarstellung nordhemisphaerischer absoluter Topographien der 500-mb-Flaeche/.  
24 p4346 A69-43157

**HAEUSLER, E.**

Interferometric investigation of shock- processes in plane steel and glass models, using a Q-switched ruby laser as a high-speed light source /Interferometrische Untersuchung von Stossvorgaengen in ebenen Stahl-



- und Glasmodellen mit einem Q-switched Rubinlaser als Kurzzeitlichtquelle/.  
12 p2089 A69-26185
- HAFER, J., JR.**  
Abnormal mitral valve motion as demonstrated by the ultrasound technique in apparent pure mitral insufficiency.  
24 p4261 A69-42727
- HAFF, C.**  
Investigation of high pressure burning characteristics of composite solid propellants.  
[AIAA PAPER 69-438] 16 p2834 A69-32704
- HAFFNER, J. W.**  
Calculated dose rates in Jupiter's Van Allen belts.  
[AIAA PAPER 69-18] 06 p0997 A69-18129
- HAFFORD, W.**  
General concepts in Rawin systems.  
07 p1057 A69-19581
- HAFI AHMAD, M.**  
Large-scale wind motion and turbulence in the upper atmosphere from rocket experiments.  
21 p3703 A69-38362
- HAFNER, D. J.**  
Fail-operational landing commands using Kalman filtering.  
17 p3003 A69-34106
- HAFNER, E. M.**  
Techniques of interstellar communication.  
17 p3028 A69-32971
- HAFNER, M. P.**  
Cineradiography using field emission technology.  
12 p2086 A69-26163
- HAFNER, R.**  
The future of rotorcraft.  
05 p0702 A69-16392
- HAFNER, S. S.**  
Cooling history of orthopyroxenes.  
20 p3523 A69-37518
- HAGAN, R. S.**  
General aviation flight testing philosophy.  
06 p1043 A69-17667
- HAGE, K. D.**  
Evaluation of the Atlantic City mesonet for short range prediction of aviation terminal weather.  
24 p4342 A69-42892
- HAGEDORN, P.**  
First-order instability range of the Mathieu equation with square-law damping /Zum Instabilitätsbereich erster Ordnung der Mathieugleichung mit quadratischer Dämpfung/.  
10 p1724 A69-22920
- Combination resonance and instability regions of the second type in the case of parametrically excited oscillations with nonlinear damping /Kombinationsresonanz und instabilitätsbereiche zweiter art bei parametererregten schwingungen mit nichtlinearer dämpfung/.  
23 p4230 A69-42107
- HAGEMAIER, D.**  
Ultrasonic testing of melt-through welds in small-diameter, thin-walled tubing couplers.  
02 p0252 A69-11810
- Nondestructive testing of brazed rocket engine components.  
10 p1699 A69-23054
- Detection of titanium hydride by neutron radiography.  
24 p4320 A69-42998
- HAGEMAIER, D. J.**  
Nondestructive testing of brazed rocket engine components.  
01 p0085 A69-10534
- Braze bond inspection of open face honeycomb seals using low viscosity liquid.  
07 p1140 A69-18797
- Thermal insulation moisture detector.  
24 p4312 A69-42755
- HAGEMEYER, W. A.**  
Lunar surface temperatures and thermal characteristics - Surveyor 5 science results.  
02 p0321 A69-12227
- HAGEN, A. L.**  
On the application of digital computer simulation as a maintainability design and prediction tool.  
10 p1668 A69-22974
- HAGEN, C. A.**  
Probability of growth /pG/ of viable microorganisms in Martian environments.  
01 p0018 A69-11091
- HAGEN, J. H.**  
The development of a composite main rotor blade for the Sud-Aviation SA-330 helicopter.  
[SAE PAPER 680693] 03 p0366 A69-13444
- HAGEN, W. F.**  
Efficient second-harmonic generation with diffraction-limited and high-spectral-radiance Nd-glass lasers.  
09 p1514 A69-21333
- Diffraction-limited high-radiance Nd-glass laser system.  
10 p1704 A69-23654
- HAGENBUCH, K. M.**  
Simple model for a rotating neutral planetary exosphere.  
22 p4023 A69-40524
- HAGENE, M.**  
Study of a molecular beam of plane symmetry of supersonic origin /Etude d'un faisceau moléculaire a symetrie plane d'origine supersonique/.  
20 p3579 A69-37432
- HAGERMAN, J. R.**  
Data correlation from investigations of a high-subsonic speed transport aircraft model in three major transonic wind tunnels.  
[AIAA PAPER 69-794] 19 p3237 A69-35636
- HAGERMAN, L. L.**  
An optimum inertial/Doppler-satellite navigation system.  
08 p1349 A69-21199
- HAGFORS, T.**  
Methods for the measurement of vertical ionospheric motions near the magnetic equator by incoherent scattering.  
09 p1489 A69-21704
- HAGG, E. L.**  
Observation of electrostatic resonances of the ionospheric plasma.  
01 p0067 A69-10983
- The interpretation of topside sounder ionograms.  
20 p3529 A69-37863
- Properties of high-latitude ionospheric ducts deduced from Alouette II two-hop echoes.  
20 p3531 A69-37890
- HAGGARTY, R. D.**  
A 10,000-1 pulse compression filter using a tapped delay line linear filter synthesis technique.  
03 p0403 A69-13217
- HAGGENMACHER, G. W.**  
Transformation of variables for redundancy optimization in the rank force method.  
11 p1993 A69-25529
- HAGIHARA, H.**  
Experimental study on reading efficiency of round and vertical type displays in aircraft.  
06 p0883 A69-18025
- Experimental study on finger dexterity with pressure gloves.  
06 p0884 A69-18032
- HAGIWARA, Y.**  
An experimental study on the liquid conditioning jackets.  
06 p0883 A69-18027
- How to reduce the weight of pressure garments.  
06 p0884 A69-18037
- HAGL, S.**  
Model analysis of a Doppler ultrasonic flowmeter /Modellanalyse eines Doppler-Ultraschallstromungsmessers/.  
23 p4166 A69-42085
- HAGLER, M. O.**  
The use of Hamilton's modified principle to solve nonlinear control problems.  
15 p2583 A69-31304
- Polarization modulation using the Macaluso-Corbino effect.  
21 p3739 A69-39447
- HAGON, P. J.**  
100 MHz surface acoustoelectric amplifier exhibiting stable terminal gain with DC drift field.  
14 p2422 A69-29559
- HAGRUP, K.**  
Jumbo jet.  
23 p4063 A69-41819
- HAGSTON, W. E.**  
Absorption and infra-red emission of nickel and cobalt doped alkali halides.  
03 p0490 A69-13941
- HAGUE, D. S.**  
Application of multivariable search techniques to optimal aerodynamic shaping problems.  
20 p3459 A69-37527
- HAHN, D. W.**  
An approximate technique for predicting thrust-limited performance.  
09 p1585 A69-21214
- HAHN, G.**  
Investigation of argon discharges with metal capillary cathodes.  
10 p1733 A69-23450
- HAHN, G. T.**  
Plastic zones generated by cracks growing under load.  
01 p0098 A69-10762
- The speed of ductile-crack propagation and the dynamics of flow in metals.  
02 p0343 A69-12283
- Criteria for crack extension in cylindrical pressure vessels.  
[ASM PAPER W9-13.3] 21 p3833 A69-38658
- Criteria for crack extension in cylindrical pressure vessels.  
22 p4046 A69-41040
- HAHN, H. T.**  
Low-thrust solid and hybrid system analyses.  
[AIAA PAPER 69-433] 16 p2834 A69-32745
- HAHN, M.**  
Experimental investigation of separated flow over a cavity at hypersonic speed.  
[AIAA PAPER 68-672] 20 p3458 A69-37185
- HAHN, P.**  
EEG monitoring during the treatment of decompression illness /"bends"/.  
19 p3261 A69-36268
- HAHN, P. M.**  
Beam shape loss and surveillance optimization for pencil beam arrays.  
20 p3506 A69-37717
- HAHN, W.**  
Some examples of stability problems occurring in the theory of automatic control.  
16 p2804 A69-32242
- HAHNE, E. W. P.**  
Natural convection heat transfer through an enclosed horizontal layer of supercritical carbon dioxide.  
04 p0688 A69-15398
- Heat transfer and natural convection patterns of a horizontal circular plate.  
20 p3632 A69-37523
- HAHNE, G. E.**  
Analytic continuation of Appell's hypergeometric series F sub 2 to the vicinity of the singular point x equals 1, y equals 1.  
12 p2123 A69-26605
- HAIBACH, E.**  
State of the art and future aims of fatigue strength research /Stand und künftige Ziele der Betriebsfestigkeitsforschung/.  
09 p1619 A69-22571
- HAIGHT, C. H.**  
Trimodal solutions for shock structure in a gas of spherocylinders.  
03 p0414 A69-13136
- Large deflections of circular air-mat plates.  
24 p4405 A69-43688
- HAINES, E. L.**  
Spectrum and yield of electrons emitted when heavy ions pass through metal films.  
03 p0471 A69-13164
- Degradation of the time characteristics of surface barrier detectors with fission fragment dose.  
10 p1694 A69-23348
- HAINES, G. W.**  
IF amplifier using C sub c compensated transistors.  
07 p1103 A69-18884
- HAINES, K. A.**  
Holography by scanning.  
07 p1136 A69-19640
- HAINES, L. K.**  
Theory of transport coefficients for moderately dense gases.  
14 p2540 A69-29469
- HAINES, M. G.**  
Fluid equations for a collisionless plasma including finite ion Larmor radius and finite beta effects.  
08 p1368 A69-20802

- Closed-cycle MPD experiments with applied electric and magnetic fields. 10 p1738 A69-23479
- HAINES, R. F.**
  - Detection time to a point source of light appearing on a star field background with and without a glare source present. 06 p0881 A69-17215
  - Irradiation and manual navigation. 07 p1177 A69-19208
  - Changes in perceived size of high luminance targets. 19 p3259 A69-36458
- HAIR, H. A.**
  - Thin ferrite devices for microwave integrated circuits. 01 p0040 A69-10192
- HAIR, T.**
  - The measurement of frequency modulation noise with a delay line. 23 p4137 A69-41606
- HAISLER, W. E.**
  - Nonlinear analysis of shells of revolution by the matrix displacement method. 02 p0346 A69-12511
  - A rapidly converging triangular plate element. 04 p0677 A69-14742
- HAIT, J. R.**
  - A method for experimental determination of the characteristics of a hyperabrupt-junction varactor / Sur une methode de determination experimentale des caracteristiques d'un varactor - a jonction hyperabrupte/. 12 p2039 A69-26375
- HAJDUK, A.**
  - On the separation of the sporadic background from the radar observations of meteor showers. 04 p0659 A69-15035
- HAJJAR, D. G.**
  - A shock-tunnel driver for use with hydrogen at elevated temperatures and pressures. [AIAA PAPER 68-367] 09 p1477 A69-21993
- HAKEN, H.**
  - Exact stationary solution of a Fokker-Planck equation for multimode laser action including phase locking. 08 p1325 A69-20291
- HAKIM, E. B.**
  - The effects of neutron radiation on second breakdown and thermal behavior of silicon transistors. 06 p0975 A69-16873
- HAKKINEN, R. J.**
  - Merging of uniform shear flows at a trailing edge. 13 p2248 A69-28223
- HAKURA, Y.**
  - The polar-cap absorption on 7-10 July 1966. 10 p1683 A69-23770
- HALAJIAN, J. D.**
  - Albedo and photometry of Surveyor footprints. 04 p0660 A69-15124
  - Correlation of mechanical and thermal properties of the lunar surface. 20 p3613 A69-38248
- HALANAY, A.**
  - Qualitative Theory of Sampled-Data Systems / Teoria Calitativa a Sistemelor cu Impulsori/. 04 p0630 A69-14563
- HALBACH, C. R.**
  - Life test of six high temperature resistojets. [AIAA PAPER 69-294] 09 p1563 A69-21232
- HALBERG, F.**
  - Rat body composition - Sensor implantation and lighting effects. 12 p2020 A69-26557
  - Agreement in endpoints from circadian rhythmometry on healthy human beings living on different continents. 23 p4083 A69-41457
  - Circadian system of nonhuman primates - Summary of a symposium in 1968 and of some earlier work. 24 p4261 A69-42709
- HALBIG, H.**
  - A method of determining the cross section of a thin iron whisker / Ein Verfahren zur Ermittlung des Querschnittes von duennen Eisen-Whiskers/. 22 p3919 A69-40233
- HALCHAK, J.**
  - Detection of titanium hydride by neutron radiography. 24 p4320 A69-42998
- HALDEMAN, C. W.**
  - Reentry plasma sheath simulated in conventional wind tunnel. 03 p0412 A69-13679
- HALDEN, F. A.**
  - Static and cyclic fatigue of alumina. 24 p4334 A69-43343
- HALDON, R. A.**
  - Transitions in glasses at low temperatures. 04 p0621 A69-15308
  - Transitions in glasses at low temperatures. 05 p0717 A69-16493
  - Thermal expansivities of polymers at cryogenic temperatures. 07 p1172 A69-19730
- HALE, D. P.**
  - The versatility of electrically propelled spacecraft for planetary missions. [AIAA PAPER 69-253] 09 p1585 A69-21244
- HALE, H. B.**
  - Decompression stress in simulated orbital flight. 01 p0022 A69-11336
  - Endocrine-metabolic response to sequential decompression during simulated orbital flight. 01 p0022 A69-11337
  - Nitrogen and helium as factors affecting decompression stress severity. 01 p0018 A69-11338
  - Anticipatory stress and flight stress in F-102 pilots. 12 p2023 A69-26552
  - Aeromedical aspects of the first nonstop transatlantic helicopter flight. III - Endocrine-metabolic effects. 19 p3263 A69-36452
- HALE, J. K.**
  - Dynamical systems and stability. 11 p1909 A69-25409
- HALE, L. C.**
  - Measurements of an ionizable constituent of the low ionosphere using a Lyman-alpha source and blunt probe. 15 p2598 A69-31316
- HALENKA, J.**
  - New method of forecasting geomagnetic activity using features of the solar corona. 01 p0150 A69-10372
  - On correlating "cosmic" flares with geomagnetic storms. 14 p2514 A69-29416
  - A universal interpretation of the generation of geomagnetic storms using features of the solar corona. 16 p2777 A69-32100
- HALES, A. L.**
  - Velocity distribution in the lower mantle. 07 p1129 A69-19502
  - Upper mantle structure - Are the low velocity layers thin/ques/. 09 p1491 A69-22153
- HALES, J. R. C.**
  - Respiratory responses of the conscious dog to severe heat stress. 23 p4081 A69-41432
- HALES, K. A.**
  - Minimum-fuel attitude control of a spacecraft by an extended method of steepest-descent. 03 p0522 A69-14100
- HALEY, R. L.**
  - Meteorological satellites - Beyond the first nine years. [AAS PAPER 69-421] 24 p4392 A69-42835
- HALFORD, G. J.**
  - Plasma noise sources of improved accuracy. 02 p0210 A69-12439
- HALHUBER, M.**
  - Agreement in endpoints from circadian rhythmometry on healthy human beings living on different continents. 23 p4083 A69-41457
- HALIJA, C. A.**
  - Proper digital filters. 02 p0213 A69-12815
- HALL, A. D., III**
  - Three-dimensional morphology of systems engineering. 18 p3236 A69-35235
- HALL, B.**
  - The Civil Aeronautics Board policy favoring subsidy reduction to local service carriers - Its role and implementation in the decisional process. II - The decisional effectuation of the CAB policy of subsidy reduction in route certification of local service carriers. 16 p2882 A69-32336
- HALL, B. M.**
  - Extraterrestrial construction. [AAS PAPER 69-208] 24 p4296 A69-42875
- HALL, C. F.**
  - Development and management of the interplanetary Pioneer spacecraft. 06 p1017 A69-17605
  - The Pioneer mission to Jupiter. [AAS PAPER 69-290] 24 p4381 A69-42863
- HALL, C. J.**
  - New approach to logistics management. [AAS PAPER 69-204] 24 p4417 A69-42812
- HALL, C. R.**
  - Automated scaling for hybrid computers. 18 p3105 A69-34617
- HALL, C. R., JR.**
  - Supersonic wake flow visualization. [AIAA PAPER 69-346] 13 p2200 A69-28281
- HALL, D. F.**
  - Electrostatic rocket exhaust effects on solar- electric spacecraft subsystems. [AIAA PAPER 69-271] 09 p1569 A69-21874
- HALL, D. G.**
  - An analysis of the large deflections of beams using the Rayleigh-Ritz finite element method. 05 p0833 A69-15711
- HALL, D. J.**
  - The criterion for tolerable roughness in a laminar boundary layer. 12 p2063 A69-26774
- HALL, D. L.**
  - Photometric evidence supporting the revised calibration of Vega by Hayes. 09 p1603 A69-22233
  - On the theoretical /U-B/- and /B-V/- colors. 15 p2694 A69-30786
- HALL, E. C.**
  - Reliability assessment of microcircuits and microelectronic systems. [AGARDOGRAPH-114] 08 p1291 A69-20984
  - Case history of the Apollo guidance computer. [AGARDOGRAPH-114] 08 p1279 A69-20990
- HALL, E. L.**
  - A digital modified discrete Fourier transform Doppler radar processor. 03 p0389 A69-13196
- HALL, F. F., JR.**
  - A physical model of cirrus 8-13-mu infrared radiance. 01 p0111 A69-10848
- HALL, G. F.**
  - A method of analysis for propellers at extreme angles-of-attack. 11 p1819 A69-25375
- HALL, G. R.**
  - The "fountain effect" and VTOL exhaust ingestion. [AIAA PAPER 68-79] 12 p2012 A69-26761
  - Experimental investigations of ground-jet suppression fences for VTOL aircraft prepared sites. [AIAA PAPER 68-639] 17 p2902 A69-34028
- HALL, G. W.**
  - An in-flight investigation of bank-angle control parameters for cruising flight. [AIAA PAPER 69-893] 21 p3648 A69-39425
- HALL, J. A.**
  - A low-noise class-C oscillator using a directional coupler. 02 p0220 A69-12452
- HALL, J. F.**
  - Thermal protection in life raft exposures. 06 p0883 A69-17841
- HALL, J. L.**
  - Pressure shift and broadening of methane line at 3.39 mu studied by laser-saturated molecular absorption. 04 p0633 A69-15424
  - The laser absolute wavelength standard problem. [IEEE PAPER P-1] 05 p0775 A69-16323
- HALL, J. M.**
  - A precision autocollimating solar sensor. [AIAA PAPER 69-858] 21 p3762 A69-39386
- HALL, J. R.**
  - The general problem of data return from deep space. 14 p2517 A69-29096



# HALL, K. R.

HALL, K. R.  
A gas bath cryostat for operation between 50 deg and -190 deg C.  
17 p2975 A69-33669

HALL, K. S.  
New non-linear feedback shift-register circuits.  
08 p1298 A69-20835

HALL, L. A.  
Solar extreme ultraviolet emissions in the range 260-1300 angstrom units observed from OSO-III.  
09 p1578 A69-22168  
Solar-cycle variation of extreme ultraviolet radiation.  
20 p3592 A69-38103

HALL, L. B.  
The importance of sterilization techniques in space exploration.  
05 p0712 A69-15935  
Potential effects of recent findings on spacecraft sterilization requirements.  
11 p1828 A69-25460  
Spacecraft sterilization by destructive heating.  
15 p2560 A69-31472

HALL, M. G.  
The boundary layer over an impulsively started flat plate.  
16 p2769 A69-31812  
A numerical method for calculating unsteady two-dimensional laminar boundary layers.  
23 p4152 A69-42108

HALL, M. P. M.  
Further evidence of V.H.F. propagation by successive reflections from an elevated layer in the troposphere.  
01 p0034 A69-11139  
Statistics of tropospheric radio-refractive-index soundings taken over a 3-year period in the United Kingdom.  
13 p2254 A69-28428

HALL, N. S.  
A polynomial force model for determining near-equatorial, near-synchronous orbits.  
[AAS PAPER 68-141]  
21 p3806 A69-39234

HALL, N. T.  
Tensile and impact behavior of a series of glass-fortified thermoplastic resins as a function of straining rate.  
08 p1337 A69-20480

HALL, P. G.  
Regional planning and airport location.  
22 p3926 A69-40432

HALL, R. B.  
P-n junctions as artificial diffusion barriers for native defects.  
05 p0808 A69-16286  
Perturbation of microwave cavities by lossy dielectrics and plasmas.  
09 p1544 A69-21323  
Microwave measurements on laser-produced blast waves.  
09 p1514 A69-21324  
Laser production of blast waves in low pressure gases.  
16 p2796 A69-31705

HALL, R. C.  
Comments on rescue and return of astronauts on earth and in outer space.  
20 p3637 A69-37115

HALL, R. G. N.  
Repetitive Q-switched laser light sources for interferometry and holography.  
12 p2087 A69-26170  
Holographic recording of rapid transient events and the problems of evaluation of the reconstructions.  
12 p2087 A69-26171

HALL, R. N.  
Photomechanical and electromechanical effects in semiconductors.  
19 p3386 A69-36526

HALL, R. W.  
NASA programs for development of high-temperature alloys for advanced engines.  
[ICAS PAPER 68-26]  
24 p4335 A69-43718

HALL, S.  
Evaluation of VTOLports for improved airport access.  
[AIAA PAPER 69-804]  
19 p3288 A69-35592

HALL, T. J.  
Personnel subsystems impact on C-5 equipment and system design.  
19 p3261 A69-36024

HALL, W. D.  
A technique for particle sizing in moving streams.  
19 p3306 A69-35733

HALL, W. J.  
Evaluation of fracture tests and specimen preparation.  
17 p2989 A69-33565

HALL, W. L., JR.  
Description of the NDC 1070 computer system.  
17 p2933 A69-34060

HALLADAY, H. E.  
On the high frequency excess noise and equivalent circuit representation of the MOS-FET with n-type channel.  
09 p1463 A69-22094

HALLAM, T. G.  
On the asymptotic growth of the solutions of a system of nonhomogeneous linear differential equations.  
08 p1342 A69-20348  
Asymptotic expansions for the solutions of a class of nonhomogeneous differential equations.  
14 p2471 A69-29680

HALLERT, B.  
Notes on calibration of cameras and photographs in photogrammetry.  
06 p0925 A69-17469

HALLETT, J.  
Freezing and shattering of supercooled water drops.  
02 p0275 A69-12693

HALLEY, J.-C.  
Influence of the temperature velocity parameter on the behavior of elastoviscoplastic solids /Influence du parametre vitesse de temperature sur le comportement des solides elasto-visco-plastiques/.  
[ONERA-TP-644]  
01 p0164 A69-10036

HALLGREN, D. S.  
Time variation of the altitude distribution of the "cosmic" dust layer in the upper atmosphere.  
15 p2698 A69-31353

HALLIDAY, I.  
A study of ultraviolet meteor spectra.  
15 p2700 A69-31500  
Comments on the mean density of Pluto.  
19 p3403 A69-35969

HALLIDAY, M. D.  
The role of twinning in the fatigue behaviour of alpha-titanium.  
12 p2116 A69-26913

HALLINAN, T. J.  
Flickering, a 10-cps fluctuation within bright auroras.  
04 p0594 A69-15129

HALLLOCK, H. B.  
Coherence-polarization phenomena in remote sensing.  
14 p2448 A69-29532

HALLS, D. J.  
The equilibrium between H and OH radicals in turbulent hydrogen flames.  
11 p1999 A69-24487

HALLS, G. A.  
Turbine blade cooling - The global picture.  
17 p3020 A69-33352

HALLUM, C. E.  
New functional approaches for redundant inert gas thruster systems.  
[AIAA PAPER 69-843]  
21 p3786 A69-39373

HALMOS, F.  
Application of satellite observations to the coupling of geodetic grids /Primenenie nabludenii ikusstvennykh sputnikov zemli dlia soedineniia geodezicheskikh setei/.  
12 p2069 A69-26433

HALO BURDO, J.  
EKG transmission from emergency vehicles.  
19 p3262 A69-36271

HALOW, J.  
Application of the cluster variation method to the s-d interaction Hamiltonian.  
03 p0485 A69-13298

Range and spatial variation of the Kondo spin-compensated state.  
22 p3983 A69-40061

HALPERIN, B. I.  
Glass reinforced polyimide laminate - A new high performance material.  
09 p1530 A69-22366

HALPERIN, W.  
Further observations of the gamma-Cygni radio source.  
08 p1387 A69-20071

HALPERN, B.  
Determination of steric purity and configuration of diketopiperazines by gas-liquid chromatography, thin layer chromatography, and nuclear magnetic resonance spectrometry.  
07 p1075 A69-19471

The use of  $\alpha$ -menthyl chloroformate in the optical analysis of asymmetric amino and hydroxyl compounds by gas chromatography.  
07 p1075 A69-19499

Optical activity for exobiology and the exploration of Mars.  
23 p4213 A69-41623

The synthesis of the pentapeptide related to the Gm/a antigen of human gamma G-globulin.  
24 p4279 A69-42711

Alcoholysis of the Merrifield-type peptide - Polymer bond with an anion exchange resin.  
24 p4279 A69-42711

Transesterification with an anion-exchange resin.  
24 p4280 A69-43513

HALPERN, G.  
Dynamics of a charged particle in a spiral field.  
03 p0503 A69-14015

HALPIN, J. C.  
Ribbon reinforcement of composites.  
01 p0172 A69-11265

Primer on Composite Materials- Analysis.  
12 p2179 A69-26238

HALSTEAD, C. J.  
Photometric methods for determining radical concentrations in hot gases in nozzles.  
09 p1496 A69-21952

HALSTED, A. S.  
Properties of low order transverse modes in argon ion lasers.  
03 p0440 A69-13540

Properties of low order transverse modes in argon ion lasers.  
11 p1896 A69-24841

HALVERSON, S. L.  
Frequency-shifting method of exciting a plasma in a resonant cavity.  
10 p1727 A69-22959

HAM, N. D.  
Discussion of the paper by C. F. Niebanck "A comparison of dynamically scaled model rotor test data with discrete azimuth aeroelastic stability theory." [AHS PAPER 341A]  
17 p3059 A69-33505

HAM, W. T., JR.  
Some biological effects of laser radiation.  
[AGARDOGRAPH-111]  
08 p1266 A69-20676

HAMADA, K.  
Dynamic stability tests of V/STOL model.  
06 p0866 A69-17091

Theory of stress concentration of two normally intersecting cylindrical shells.  
13 p2359 A69-27255

HAMADA, M.  
Numerical solutions of two-dimensional elastic plastic problems by conformal mapping and finite-difference method. II - Elastic torsion of circumferentially grooved shafts.  
02 p0346 A69-12419

Numerical solutions of two-dimensional elastic plastic problems by conformal mapping and finite-difference method. III - Elasto-plastic torsion of circumferentially grooved shafts.  
02 p0346 A69-12420

HAMADA, S.  
Stability of a plasma with loss from the ends of an axially symmetric magnetic bottle.  
15 p2664 A69-31100

HAMAGUCHI, H.  
The abundances of arsenic, tin and antimony in chondritic meteorites.  
13 p2344 A69-27633

HAMAL, K.  
A mode-locked laser as a light source for schlieren photography.  
[IEEE PAPER H-1]  
05 p0774 A69-16311

- Schlieren photography using a mode-locked laser as the light source. 21 p3736 A69-38795
- HAMAMOTO, A. S.**  
Liquid viscoelasticity under rare-gas infusion. 05 p0796 A69-15912
- HAMAN, K.**  
On the influence of convective clouds on the large scale stratification. 09 p1536 A69-22165
- HAMASAKI, J.**  
Electromagnetic circuit elements of lasers. 09 p1518 A69-22127
- HAMASAKI, S.**  
Electromagnetic microinstabilities of plasmas in a uniform magnetic induction. 08 p1368 A69-20804
- HAMATSUKI, T.**  
Space simulation tests of the highly stable crystal oscillators for space use. 22 p3927 A69-40590
- HAMBERGER, S. M.**  
Plasma turbulence in solar flares as an explanation of some observed phenomena. 20 p3589 A69-37549  
On a possible proton origin for Type V continuum radiation from a solar flare /Research note/. 22 p4003 A69-40301
- HAMBLIN, F. D.**  
Abridged Thermodynamic and Thermochemical Tables with Charts British Units. 04 p0688 A69-15459
- HAMEL, B. B.**  
Exhaust plume rarefaction. [AIAA PAPER 69-657] 17 p2892 A69-33465
- HAMEL, P.**  
Application of the root locus method for aeroelastically coupled systems /Anwendung des Wurzelortskurvenverfahrens auf aeroelastisch gekoppelte Systeme/. 04 p0677 A69-14835
- HAMER, H. A.**  
A concept of midcourse and terminal guidance with single position fixes obtained from onboard optical measurements. 19 p3368 A69-35792
- HAMER, R. C.**  
Microwave-frequency synthesizers. 12 p2030 A69-26390
- HAMERNIK, R. P.**  
Interaction of an advancing shock front with a concentrated heat /entropy/ source. 18 p3228 A69-34468
- HAMID, M. A. K.**  
Diffraction by a conical horn. 02 p0218 A69-12327  
Higher order asymptotic terms of the two-dimensional diffraction by a small aperture. 03 p0396 A69-13631  
Mode coefficients in a sectoral horn by ray theory. 09 p1468 A69-22590  
Perturbation analysis in dielectric-loaded waveguides. 12 p2039 A69-26381
- HAMID, S. E.**  
Influence of a comet belt beyond Neptune on the motions of periodic comets. 01 p0158 A69-11327
- HAMIELEC, A. E.**  
Numerical studies of viscous flow around circular cylinders. 11 p1867 A69-24279
- HAMILL, D. W.**  
Fabricating SiC parts by chemical vapor deposition. 09 p1509 A69-22344
- HAMILL, T. D.**  
Hyperbolic heat-conduction equation - A solution for the semi-infinite body problem. [ASME PAPER 69-HT-1] 24 p4414 A69-43564
- HAMILTON, A.**  
Radar digital processing and display system for air traffic control. 21 p3760 A69-38328
- HAMILTON, A. E.**  
Recovery of gamma dose military specification failures during low and high power life testing of silicon transistors. 06 p0976 A69-16878
- HAMILTON, C. H.**  
The stress-strain behavior of concentric composite cylinders. 01 p0171 A69-11263
- HAMILTON, D. O.**  
Aircraft reliability growth characteristics. 18 p3090 A69-34521
- HAMILTON, F. L.**  
Reliability testing - A tool for success. 22 p3952 A69-40023
- HAMILTON, G. E.**  
Spares kit evaluation model. 10 p1669 A69-22981
- HAMILTON, J. W.**  
Results of the UHF telemetry system R and D flight tests at White Sands Missile Range. 07 p1082 A69-19116
- HAMILTON, P. A.**  
Spectral fine structure in pulsar radiation. 01 p0150 A69-10273  
Observations of the southern sky at 10.02 MHz. 07 p1206 A69-19272
- HAMILTON, R. A.**  
Air-earth current measurements. 05 p0758 A69-16419
- HAMILTON, W. E., JR.**  
On computational solutions of state constrained optimization problems. 24 p4292 A69-43286
- HAMITER, L. C., JR.**  
How reliable are MOS ICs - As good as bipolars, says NASA. 16 p2759 A69-31851
- HAMM, R. L. V.**  
Environmental testing - The key to high reliability. 18 p3143 A69-34481
- HAMMARSKJOELD, K.**  
Traffic growth. 22 p4052 A69-40425
- HAMMEL, H. T.**  
Skin temperature and cutaneous pain during warm water immersion. 08 p1267 A69-20683
- HAMMER, E. L.**  
Rapid annealing in silicon transistors. 06 p0975 A69-16870
- HAMMER, S.**  
Development of advanced electroforming techniques for injector and composite thrust chamber fabrication. [AIAA PAPER 69-583] 16 p2794 A69-32757
- HAMMER, W.**  
The last resort. 06 p0878 A69-16961
- HAMMERTON, M.**  
An investigation into the effect of exercising particular limb-segments upon performance in a tracking task. 23 p4101 A69-41453
- HAMMITT, A. G.**  
A simplified theory for chemical rockets. 03 p0495 A69-13004
- HAMMITT, R. L.**  
Meteoroid perforation effects on space cabin design. [AIAA PAPER 69-365] 13 p2357 A69-28297
- HAMMOND, A. H.**  
Laser damage thresholds for ocular tissues. 18 p3097 A69-34312
- HAMMOND, C.**  
The crystallography of titanium alloy martensites. 18 p3154 A69-34245
- HAMMOND, J. A.**  
Thermal decomposition behavior of perchlorate oxidizers studied by flash mass thermal analysis. [WSCI PAPER 69-19] 16 p2832 A69-32357
- HAMMOND, J. K.**  
On the response of single and multidegree of freedom systems to non-stationary random excitations. 05 p0844 A69-16763
- HAMMOND, J. L., JR.**  
Asymptotic sampling errors in closed-loop hybrid systems. 12 p2053 A69-26508
- HAMMOND, M. L.**  
Crystal structure of vapor-deposited boron filaments. 02 p0268 A69-12405
- Macrostructural integrity of vapor-deposited boron and silicon carbide filament. 18 p3160 A69-34266
- HAMMOND, W. E.**  
Linear voltage-amplitude to pulse-width conversion utilizing a controlled unijunction monostable multivibrator. 02 p0217 A69-12151
- HAMPEL, D.**  
Threshold logic for LSI. 17 p2943 A69-34122
- HAMPSON, P. J.**  
Dissociation energy of TiO/g/ and the high-temperature vaporization and thermodynamics of the titanium oxides. V. 08 p1268 A69-21012
- HAMPTON, D. J.**  
Advanced display techniques. 04 p0600 A69-15029  
Application of optimal control theory to controllers which exhibit other than "bang-bang" time responses. 18 p3090 A69-34681
- HAMROCK, B. J.**  
Rayleigh step journal bearing. II - Incompressible fluid. 04 p0605 A69-14587
- HAN, J.**  
Organic analysis on the Pueblito de Allende meteorite. 13 p2337 A69-27520
- HAN, S. S.**  
Studies on hypoxia. IV. 22 p3887 A69-41193  
Studies on hypoxia. III - Effects on leucine-super 3 H incorporation by submandibular gland cells of rat neonates. 22 p3887 A69-41195
- HANAFEE, J.**  
Effects of hydrostatic pressure on the mechanical behavior of polycrystalline beryllium. 01 p0092 A69-10059
- HANAFEE, J. E.**  
Deformation of beryllium single crystals under high pressure. 13 p2279 A69-27760
- HANAFUSA, T.**  
Sonic anemometer comparison and measurements in the atmospheric surface layer. 16 p2808 A69-32600
- HANAGUD, S.**  
Elastic-plastic impact of plates. 14 p2534 A69-29027
- HANASZ, J.**  
Chains of type I solar radio bursts. 22 p4010 A69-39985
- HANBABA, R.**  
Trajectories of electromagnetic waves emitted by artificial satellites across an anisotropic ionosphere /Trajectoires des ondes electromagnetiques emises par les satellites artificiels a travers une ionosphere anisotrope/. 01 p0068 A69-11115
- HANCOCK, C. W.**  
A 3-m spherical test-volume space-simulation facility for ESTEC. 13 p2241 A69-28080
- HANCOCK, J. P.**  
C-5 engine inlet development. [ASME PAPER 69-GT-52] 09 p1570 A69-22481  
Inlet development for the L-500. [AIAA PAPER 69-448] 16 p2733 A69-32684
- HANCOCK, J. R.**  
Plastic yielding and strain distribution in filament-reinforced metals. 06 p0940 A69-16947
- HAND, J. A.**  
Star/horizon measurements for onboard spacecraft navigation. 19 p3369 A69-35800
- HANDEL, D.**  
Plasma-cyclotron interaction in a symmetrical double beam system. 17 p3015 A69-33831
- HANDEL, S.**  
Pattern perception - Integrating information presented in two modalities. 02 p0200 A69-12724



## HANDLER, E. H.

Skimmer amphibian gets better performance with new hydrofoil.  
10 p1633 A69-23223

## HANDLER, H.

Measurement of average and rms values.  
06 p0891 A69-17220

## HANDSCHIN, J. E.

Monte Carlo techniques to estimate the conditional expectation in multi-stage non-linear filtering.  
10 p1667 A69-24039

## HANEFELD, R. V.

Correlation analysis of current fluctuations in plasma.  
11 p1934 A69-25715

## HANEMAN, F.

Microwave radiometric capabilities and techniques.  
12 p2033 A69-26976

## HANES, H. D.

Friction welding of aerospace materials.  
09 p1508 A69-22335  
Fabrication of complicated powder-metallurgical shapes by hydrostatic pressing.  
09 p1511 A69-22353

## HANEY, D. W.

On optimizing the Omega radionavigation system.  
03 p0463 A69-13212

## HANEY, E. G.

Effect of "pure" methanol on the cracking of titanium.  
09 p1521 A69-21400

## HANEY, W. L.

The instrumentation of payloads of scientific sounding rockets.  
02 p0335 A69-12689

## HANF, F.

Frequency- and power-stable backward-wave oscillators as energy pumps for molecular and parametric amplifiers / Frequenz- und leistungsstabile Rueckwaertschwellen- Oszillatoren als Energiepumpen fuer molekular- und parametrische Verstaerker/.  
07 p1095 A69-18430

## HANFORD, D. R.

Cost optimization of mixture ratio control systems for a low cost launch vehicle.  
[AIAA PAPER 69-441]  
16 p2870 A69-32775

## HANIK, D. K.

Advanced coatings on superalloy blades and vanes for hot corrosion and oxidation resistance.  
[SAE PAPER 690480]  
24 p4335 A69-43515

## HANIN, J. B.

Effects of inhalation of amyl nitrite on the carotidogram of a healthy subject / Action de l'inhalation de nitrite d'amyle sur le carotidogramme du sujet sain/.  
21 p3661 A69-39278

## HANIN, M.

Hypersonic flow past an oscillating slender cone.  
14 p2389 A69-29020

## HANINK, D. K.

Weldability of low alloy steels heat treated after welding.  
12 p2100 A69-25827

## HANK, D.

Venous tone and skin and muscle blood flow in forearm and hand during exercise / Venentonus, Haut- und Muskeldurchblutung an Unterarm und Hand bei Beinarbeit/.  
23 p4096 A69-42090

## HANKY, W. L.

Hypersonic lifting body optimization.  
02 p0189 A69-12378  
Hypersonic lifting body optimization.  
[AIAA PAPER 68-1157]  
03 p0362 A69-13557  
Investigation of the leeward side of a delta wing at hypersonic speeds.  
[AIAA PAPER 68-675]  
09 p1431 A69-21992

## HANKS, B. R.

The use of helium bubbles as a pogo fix in launch vehicle propellant lines.  
11 p1967 A69-25498

## HANKS, R. W.

A theory of laminar flow stability.  
05 p0750 A69-16187

## HANKS, T. C.

The early thermal history of the earth.  
22 p3936 A69-40136

## HANLEY, H. J. M.

Density dependence of experimental transport coefficients of gases.  
08 p1353 A69-21009  
Selection of the intermolecular potential. II - From data of state and transport properties taken in pairs.  
10 p1652 A69-23391

## HANLEY, J.

EEG monitoring during the treatment of decompression illness ("bends").  
19 p3261 A69-36268  
Combined telephone and radiotelemetry of the EEG.  
21 p3664 A69-38978

## HANLEY, M. J.

Electronic states of molecules. II.  
22 p3985 A69-40721

## HANNA, D. C.

Tunable lasers.  
11 p1893 A69-24343  
Measurement of the stimulated emission cross section of Nd super 3 super plus in CaWO sub 4.  
11 p1938 A69-25049  
Transverse-mode selection of rotating-mirror Q switched lasers.  
22 p3961 A69-40316

## HANNA, G. R.

A rapid and simple method for the fabrication of arrays of recording electrodes.  
02 p0204 A69-12601

## HANNA, S. R.

A method of estimating vertical eddy transport in the planetary boundary layer using characteristics of the vertical velocity spectrum.  
03 p0460 A69-13338

## HANNA, W. D.

Effect of orientation on the fatigue behavior of surface grains in polycrystalline aluminum.  
20 p3561 A69-37597

## HANNA, W. T.

Transient electro-osmosis in capillary tubes.  
04 p0555 A69-14862

## HANNAH, B. W.

Quantitative schlieren measurements by the photomultiplier technique.  
19 p3306 A69-35741

## HANNAH, R. G.

Development of an advanced space radiation system.  
23 p4190 A69-42304

## HANNAN, W. J.

Elimination of speckle noise in holograms with redundancy.  
01 p0082 A69-10850  
Comparison of electrooptic modulation methods.  
04 p0562 A69-15474

## HANNAN, W. M.

Engineering advances and related economic aspects of the Lockheed L-1011.  
[RAES PAPER 15]  
22 p3863 A69-40494

## HANNAUER, G.

Automatic patching for analog and hybrid computers.  
16 p2756 A69-32551

## HANRATTY, T. J.

Velocity gradients at the wall for flow around a cylinder at Reynolds numbers from  $5 \times 10$  super 3 to  $10$  super 5.  
11 p1872 A69-25132  
Numerical solution for the flow around a cylinder at Reynolds numbers of 40, 200 and 500.  
11 p1872 A69-25133  
Limiting behavior of the transverse turbulent velocity fluctuations close to a wall.  
17 p2949 A69-33013

## HANSEL, J. G.

Hydrodynamic effects in the flame spreading, ignitability and steady burning of liquid fuels.  
11 p1999 A69-24484

## HANSELL, H. F.

Microwave studies for determining re-entry heat shield bond integrity and thickness.  
09 p1499 A69-22306

## HANSEN, C.

Gastric blood flow and its distribution during restraint.  
17 p2908 A69-33170

## HANSEN, C. F.

Apparent activation energy of chemical reactions at high temperature.  
18 p3099 A69-34443

## HANSEN, C. J.

General relativistic instability in white dwarfs.  
06 p1010 A69-17977  
A calculation of a white dwarf supernova.  
12 p2156 A69-26210

## HANSEN, D.

Heat conduction in linear amorphous high polymers - Orientation anisotropy.  
19 p3359 A69-36442

## HANSEN, J. E.

Comments on the paper by D. G. Rea and B. T. O'Leary, "On the composition of the Venus clouds."  
01 p0157 A69-11293  
Radiative transfer by doubling very thin layers.  
08 p1420 A69-20063  
Exact and approximate solutions for multiple scattering by cloudy and hazy planetary atmospheres.  
17 p3032 A69-33159  
Theoretical spectral scattering of ice clouds in the near infrared.  
18 p3126 A69-34283

## HANSEN, J. P.

Profiling with a GaAs laser diode radar.  
17 p2980 A69-32922

## HANSEN, J. R.

Recording of star spectra with a fiber optic electrostatic image intensifier.  
[WERL-68-1C2-TAEC-P1]  
04 p0603 A69-15444

## HANSEN, J. V. E.

Processing success story - Boron carbide body armor.  
08 p3320 A69-20411  
Selection of armor for advanced aircraft systems.  
[SAWE PAPER 764]  
18 p3094 A69-34878

## HANSEN, J. W.

Optical sampling of subnanosecond light pulses.  
02 p0259 A69-12656  
Compression of pulses from a mode-locked He-Ne laser.  
09 p1516 A69-21745  
Optical pulse compression.  
09 p1519 A69-22445

## HANSEN, L. K.

The spacing effect in the ignited mode diode.  
14 p2401 A69-29230

## HANSEN, N.

Strengthening of aluminium by a three-dimensional network of aluminium-oxide particles.  
13 p2276 A69-27371

## HANSEN, N. K.

An investigation of the tropospheric fine scale properties using radio, radar and direct methods.  
22 p3941 A69-40914

## HANSEN, R. D.

A high-temperature forge for refractory metals.  
17 p2945 A69-33419

## HANSEN, R. T.

Coronal electron densities during the period of the July 1966 proton flare.  
10 p1763 A69-23733  
Brightness variations of the white light corona during the years 1964-67.  
18 p3205 A69-35394

## HANSEN, S.

Coronal electron densities during the period of the July 1966 proton flare.  
10 p1763 A69-23733

## HANSEN, S. F.

Brightness variations of the white light corona during the years 1964-67.  
18 p3205 A69-35394

## HANSEN, S. M.

A crater formed by gas erosion of a nuclear explosion vent.  
22 p3937 A69-40409

## HANSEN, V. G.

A sequential logic for improving signal detectability in frequency-agile search radars.  
01 p0033 A69-11008  
Weak-signal optimization of multilevel quantization and corresponding detection performance.  
09 p1456 A69-22293

## HANSON, C.

On optimum fibre orientation in an annulus.  
19 p3447 A69-36851

- HANSON, D. C.**  
Non-isothermal effects in bulk GaAs transit-time oscillators. 02 p0299 A69-12240
- HANSON, F. B.**  
The near-wake of a circular cylinder in crossflow. [ASME PAPER 68-FE-5] 05 p0747 A69-16068  
Kinetic description of the propagation of plane sound waves in a diatomic gas. 11 p1920 A69-24287
- HANSON, J.**  
Laser-induced Teflon char. 24 p4336 A69-43266
- HANSON, J. V.**  
Envelope detection at low signal-to-noise ratios. 22 p3902 A69-41225
- HANSON, K. J.**  
Absorption of solar radiation in tropical regions. 20 p3591 A69-38058
- HANSON, K. L.**  
The "hot spot" failure mode for solar arrays. 23 p4142 A69-42273
- HANSON, M. A.**  
On duality for real and complex programming problems. 04 p0623 A69-14947
- HANSON, M. E.**  
Difference equation for two-dimensional elastic flow. 04 p0681 A69-15286
- HANSON, M. P.**  
Glass-boron- and graphite-filament-wound resin composites and liners for cryogenic pressure vessels. 05 p0785 A69-16488  
Tensile and cyclic fatigue properties of graphite filament-wound pressure vessels at ambient and cryogenic temperatures. 19 p3355 A69-35521
- HANSON, R. J.**  
Simplification of second order systems of ordinary differential equations with a turning point. 01 p0104 A69-10316
- HANSON, W. B.**  
Conflicting electron temperature measurements in the upper F region. 05 p0756 A69-16283  
Thermal structure of an Alouette 2 topside profile as deduced from rocket measurements. 14 p2510 A69-28942  
Radiative recombination of atomic oxygen ions in the nighttime F region. 18 p3129 A69-34957
- HANST, P. L.**  
Iodine infrared laser. [IEEE PAPER T-5] 07 p1154 A69-19082  
A wavelength-selective, repetitively pulsed CO sub 2 laser. 08 p1327 A69-21088
- HANSZEN, K.-J.**  
Energy distribution in the beam of an electron gun with a single-crystal spherical cathode /Die Energieverteilung im Strahlenbündel einer Elektronenkanone mit einkristalliner Kugelkathode/. 09 p1464 A69-22396
- HANTZSCHE, E.**  
The theory of backscattering /Zur Theorie der Rueckstreuung/. 05 p0800 A69-15738
- HANUSKA, A.**  
Reissner algorithms in investigations of plates /Die Reissnerschen Algorithmen bei der Untersuchung von Platten/. 10 p1793 A69-22883
- HAPP, H.**  
The temperature dependence of absorption of sodium nitrite in the far infrared. 03 p0490 A69-13940
- HAPP, W. W.**  
Domain analysis and measurement techniques for distributed RC structures. I - Analysis in the reciprocal time domain. 09 p1471 A69-21327  
Coding schemes for run-length information based on Poisson distribution. 19 p3272 A69-36262  
Programmed test patterns for multiterminal devices. 21 p3679 A69-39604
- Algorithms for test patterns in multiterminal devices with symmetry constraints. 23 p4134 A69-42524
- HAPPE, R. A.**  
Evaluation of boron-aluminum composite material for space structures. 19 p3318 A69-35507
- HAPPEK, G.**  
The Effect of Small Additions of Yttrium On the Tension and Compression Behavior of Niobium and Molybdenum at High Temperatures in a Vacuum /Einfluss geringer Yttrium-Zusätze auf das Zug- und Druckverhalten von Niob und Molybdaen bei hohen Temperaturen im Vakuum/. 17 p2990 A69-33570
- HAQ, K. E.**  
Reactive deposition of cubic silicon carbide. 09 p1554 A69-21350  
Chemical processes in SiC formation by reactive deposition and chemical conversion. 09 p1554 A69-21351  
Adhesion mechanism of gold-underlayer film combinations to oxide substrates. 13 p2321 A69-28007
- HAQUE, S. M. A.**  
The slow motion of a fluid under a horizontal temperature gradient. 12 p2066 A69-26134
- HARA, E. H.**  
Depolarized Rayleigh scattering in gases as a new probe of intermolecular forces. [IEEE PAPER B-11] 07 p1157 A69-19485
- HARA, H. H.**  
Application of functional optimization techniques for the serial hybrid computer solution of partial differential equations. 04 p0566 A69-15344
- HARADA, K.**  
Solvent effect in a sterically controlled synthesis of optically active alpha-amino acids from alpha-keto acids by hydrogenolytic asymmetric transamination. 12 p2026 A69-25779  
Synthesis of optically active alanine from oxaloacetic acid by hydrogenolytic asymmetric transamination. 12 p2026 A69-25780
- HARADA, M.**  
Effect of abrupt deceleration on the heart rate in monkeys. 06 p0876 A69-18031
- HARADA, T.**  
Piston driven shock tube of Kyoto University. 22 p3928 A69-41046
- HARADA, Y.**  
Present status of researches on satellite triangulation in Japan. [UN PAPER 68-95285] 01 p0064 A69-10475
- HARALICK, R. M.**  
Adaptive pattern recognition of agriculture in western Kansas by using a predictive model in construction of similarity sets. 12 p2097 A69-26990  
Pattern recognition with measurement space and spatial clustering for multiple images. 14 p2448 A69-29533
- HARANG, L.**  
Radio noise from aurora. 16 p2775 A69-32085  
Electromagnetic emissions in the kHz band during aurora. 21 p3708 A69-38494  
Bursts of VLF-emission simultaneous with sharp dip of absorption and SC in geomagnetic H. 24 p4308 A69-43001
- HARANG, O.**  
Upper atmosphere temperatures deduced from spectra of BaO recorded during barium release experiments. 09 p1488 A69-21664  
Summary on spectroscopy of rocket releases. 21 p3712 A69-38522
- HARANG, O. E.**  
The occurrence of the N ii 4176 angstrom units emission line in connection with type-B auroras. 24 p4309 A69-43012
- HARBEKE, G.**  
Optical Properties and Band Structure of Semiconductors. 13 p2323 A69-28200
- HARCOURT, R. A. G.**  
Assessment of cleanliness in hydraulic systems. 19 p3256 A69-36715
- HARD, T. M.**  
Sulfur dioxide submillimeter laser. 10 p1706 A69-24005  
Simultaneous HCN and H sub 2 O laser emission in mixtures containing H, C, N, and O. 12 p2107 A69-26330
- HARDAWAY, R. H.**  
An algorithm for finding a solution of simultaneous nonlinear equations. 04 p0565 A69-15335
- HARDEBECK, E. J. G.**  
Declination measurements of selected 4C sources using the Arecibo 1000-ft reflector. 22 p4014 A69-40128
- HARDEL, P.**  
Advantages of bloodless methods of measuring heart flow /Interet des methodes non sanglantes de mesure du debit cardiaque/. 09 p1448 A69-22730  
Advantage of nonsurgical methods of measuring cardiac output in aerospace medicine /Interet des methodes non sanglantes de mesure du debit cardiaque en medecine aeronautique et spatiale/. 23 p4088 A69-41813
- HARDEMAN, L. J.**  
MERA modules - How good in an array/ques/. 22 p3912 A69-40067
- HARDER, R. L.**  
Electromagnetic acceleration of ions in axially symmetric fields. [AIAA PAPER 69-111] 06 p0985 A69-18175
- HARDESTY, E. E.**  
Advanced composite, high-modulus tape placement machines - the next three generations - Digital settings to full-time tape control. 19 p3323 A69-35584
- HARDIE, F. H.**  
CITS - An automatic system self-test tool. 11 p1866 A69-25083
- HARDIN, T.**  
An approach to diagnostics for a digital data handling system. [AIAA PAPER 69-967] 22 p3906 A69-40348
- HARDING, R. C.**  
Response of a one-dimensional Vlasov plasma to external electric fields. 01 p0133 A69-11214
- HARDORP, J.**  
Waviness of the tail rays of the comet Morehouse 1908 III /Die Welligkeit der Schweifstrahlen des Kometen Morehouse 1908 III/. 02 p0311 A69-11459  
Directional fluctuation of the solar wind at middle heliographic latitude /Richtungsfluktuation des Sonnenwindes in mittlerer heliographischer Breite/. 06 p0985 A69-16981  
Microturbulence in 3 Centauri A. 07 p1211 A69-18407
- HARDOUIN DUPARC, J.**  
General method of calculating the complex transmission and reflection coefficients of a dielectric film with a permittivity gradient - Application to plasma diagnostics /Methode generale de calcul des coefficients de transmission et de reflexion complexes d'une lame dielectrique a gradient de permittivite - Application au diagnostic des plasmas/. 07 p1194 A69-19334
- HARDT, A. P.**  
Burning rates of solid propellants by a variable pressure method. 06 p0982 A69-17505
- HARDWICK, B.**  
Homologous bursts of spectral type II. 17 p3024 A69-33803
- HARDY, A. C.**  
Apollo 4 and 6 radiation analysis. [AIAA PAPER 69-17] 06 p0884 A69-18202
- HARDY, F. W.**  
Quasi-optimum proportional navigation. 24 p4348 A69-43292
- HARDY, G. H.**  
Man's role in launch vehicle guidance and control. [AIAA PAPER 69-876] 21 p3824 A69-39402
- HARDY, J. D.**  
Thermal Problems in Aerospace Medicine. 08 p1263 A69-20667



- Skin and subcutaneous temperature changes during exposure to intense thermal radiation.  
[AGARDOGRAPH-111] 08 p1264 A69-20671
- Responses of man to thermal transients.  
[AGARDOGRAPH-111] 08 p1265 A69-20675
- Skin temperature and cutaneous pain during warm water immersion.  
08 p1267 A69-20683
- Proposed standard system of symbols for thermal physiology.  
23 p4078 A69-41317
- HARDY, J.-M.**
- Nozzle adaptation problems /Problemes d'adaptation de tuyeres/.  
[ONERA-TP-600] 02 p0187 A69-11620
- HARDY, K. R.**
- Probing the clear atmosphere with high power, high resolution radars.  
14 p2415 A69-29518
- Radar investigations of atmospheric structure and CAT in the 3 to 20-km region.  
17 p2999 A69-33740
- Radar investigations of convective patterns in the clear atmosphere.  
20 p3573 A69-38059
- Simultaneous radar, aircraft and meteorological investigations of clear air turbulence.  
24 p4342 A69-42894
- HARDY, L. M.**
- Continuous attitude determination for a spin-stabilized satellite.  
09 p1610 A69-21987
- HARDY, R.**
- Cost data for economical orbital transportation system design.  
[AIAA PAPER 69-439] 16 p2882 A69-32654
- HAREL, D.**
- The influence of high oxygen pressure on the electrical activity of the brain.  
21 p3656 A69-38977
- HARGER, R. O.**
- Synthetic aperture radar - Introduction.  
20 p3489 A69-37634
- Synthetic aperture principle and radar - Simplified discussion.  
20 p3489 A69-37635
- SAR signal, image and SNR.  
20 p3489 A69-37638
- SAR system design. I.  
20 p3489 A69-37639
- Phase errors.  
20 p3490 A69-37642
- Nonlinearities.  
20 p3490 A69-37643
- HARGREAVES, J. K.**
- Observations of auroral phenomena at conjugate points.  
21 p3708 A69-38493
- Conjugate and closely-spaced observations of auroral radio absorption. I, II.  
22 p3934 A69-39966
- Auroral absorption of HF radio waves in the ionosphere - A review of results from the first decade of riometry.  
22 p3902 A69-41218
- HARICHAUX, P.**
- Significance of simultaneous double recording of mouth pressure and heart rate in the Flack test /Interet d'une double inscription simultanée de la pression buccale et du rythme cardiaque dans le test de Flack/.  
05 p0710 A69-16626
- HARIHARAN, S.**
- Sharpening of E-plane radiation patterns of E-plane sectoral horns by metallic grills.  
11 p1836 A69-24992
- HARIHARAN, T. A.**
- An airborne polarimeter for atmospheric radiation studies.  
06 p0923 A69-16924
- HARKER, J. H.**
- An investigation into heat transfer from unseeded propane-air flames augmented with D.C. electrical power.  
06 p1035 A69-17934
- HARKER, K. J.**
- Nonlinear interaction of cyclotron harmonic waves.  
06 p0968 A69-17766
- Parametric amplification of cyclotron harmonic waves in plasma.  
07 p1189 A69-18439
- Nonlinear interaction between extraordinary waves in a cold plasma.  
23 p4195 A69-41538
- Nonlinear interaction between whistlers.  
24 p4309 A69-43174
- HARKER, R. I.**
- Subsolidus stability relations in the system KTaO sub 3 - KNbO sub 3.  
08 p1332 A69-20373
- HARKINS, C. G.**
- Relation of the catalytic activity of MgO to its electron energy states.  
07 p1073 A69-18374
- HARKINS, J. A.**
- The real world of system effectiveness.  
19 p3455 A69-36044
- HARKNESS, R. E.**
- Performance of the GEOS-II heat pipe system.  
23 p4224 A69-42082
- HARLAN, E. A.**
- Photographic position observations of Icarus.  
01 p0159 A69-11331
- HARLAN, J. D.**
- The Kennedy Airport access project - A mass transit system from Manhattan to John F. Kennedy International Airport.  
[AIAA PAPER 69-803] 19 p3453 A69-35596
- HARLOW, R. D.**
- A new documentation system for the Mississippi Test Facility.  
18 p3118 A69-35063
- HARMAN, T. C.**
- Bismuth-doped Pb sub 1-x Sn sub x Te diode lasers with low-threshold currents.  
12 p2109 A69-26641
- HARMAN, W. A.**
- High power TWT for satellite communication.  
07 p1094 A69-18427
- HARMAN, W. H.**
- Filtering effects in a spread-spectrum communication system.  
23 p4122 A69-41774
- HARMON, L. D.**
- Picture processing by computer.  
11 p1842 A69-24588
- HARMON, W. A.**
- Hybrid diagnostic techniques.  
04 p0568 A69-15360
- HARMSWORTH, C. L.**
- Fatigue behavior of titanium castings.  
[ASME PAPER 69-GT-22] 09 p1619 A69-22497
- HARN, E. W.**
- Civil airport design criteria.  
15 p2588 A69-30408
- HARNDEN, F. R., JR.**
- Observation of pulsed hard X-radiation from NP 0532 from 1967 data.  
18 p3186 A69-34316
- HARNEY, P. F.**
- Flight and laboratory testing of a double sideband FM telemetry system.  
07 p1084 A69-19132
- HAROLD, G. M.**
- Trends in computer technology.  
08 p1349 A69-21194
- Trends in avionics systems.  
17 p2976 A69-34058
- HAROULES, G. G.**
- Radiometric measurement of attenuation and emission by the earth's atmosphere at wavelengths from 4 cm to 8 mm.  
02 p0210 A69-12432
- Analysis of a multiplicative feed system for monopulse tracking applications.  
20 p3510 A69-37704
- The simultaneous investigation of attenuation and emission by the earth's atmosphere at wavelengths from 4 centimeters to 8 millimeters.  
21 p3718 A69-39747
- A 60-GHz multifrequency radiometric sensor for detecting clear air turbulence in the troposphere.  
23 p4144 A69-42536
- HARP, J. C.**
- Weak scattering in random media, with applications to remote probing.  
14 p2414 A69-29511
- HARPAVAT, G.**
- Stability of three-dimensional laminar and turbulent shear layers.  
22 p3932 A69-40893
- HARPER, A. D.**
- Hi-thrust throttleable monopropellant engine system.  
[AIAA PAPER 69-420] 16 p2841 A69-32685
- HARPER, C. A.**
- Handbook of Electronic Packaging.  
22 p3911 A69-40046
- HARPER, C. R.**
- Perceptual style differences between airline pilots and engineers.  
12 p2023 A69-26556
- Flight-deck vision and the aging eye.  
23 p4089 A69-41829
- A study of simulated airline pilot incapacitation.  
24 p4277 A69-43386
- HARPER, C. W.**
- NASA and flight safety research.  
07 p1057 A69-19764
- HARPER, D. J.**
- Medium scale integration in hybrid technology.  
05 p0735 A69-16752
- HARPER, D. W.**
- Laser damage in glasses.  
12 p2117 A69-26193
- HARPER, H. P.**
- Development of VTOL flying and handling qualities requirements using the mission task performance oriented approach.  
[AHS PAPER 360] 17 p2900 A69-33522
- HARPER, T. P.**
- The selection of spacecraft optical coatings for temperature control.  
[AIAA PAPER 69-979] 22 p4050 A69-40359
- HARRACH, R. J.**
- Determination of ultrashort pulse widths by two-photon fluorescence patterns.  
13 p2270 A69-27198
- HARRAH, C. B.**
- Conduction cooling of the human body - A biothermal analysis.  
06 p0880 A69-17088
- HARRAND, Y.**
- Computer-aided projects - Brilliant prospects associated with numerous difficulties /Projets assistés par calculateurs - De brillantes perspectives associées à de nombreuses difficultés/.  
08 p1278 A69-19971
- HARRI, J.**
- A rocket borne scintillation spectrometer for observing cosmic X rays.  
14 p2449 A69-29566
- HARRIES, J. A.**
- Measurement of cosmic ray anisotropy of solar origin by Explorer 34 satellite.  
24 p4373 A69-43619
- HARRIES, J. E.**
- Dimers of the water molecule in the earth's atmosphere.  
05 p0759 A69-16658
- Submillimetre absorption by isotopic and vibrationally excited forms of water vapour.  
15 p2568 A69-30699
- Millimetre wavelength spectroscopic observations of the water dimer in the vapour phase.  
18 p3177 A69-35240
- HARRIES, J. R.**
- Observations of Cen XR-2, Sco XR-1, and terrestrial X-rays.  
04 p0649 A69-15440
- Solar X-ray bursts observed on IMP-F.  
09 p1582 A69-22746
- HARRIGAN, W. C.**
- Measurements of Young's modulus of polycrystalline nickel-tungsten alloys at elevated temperatures.  
06 p0943 A69-17232
- HARRIMAN, J. E.**
- First- and second-order density matrices of symmetry-projected single-determinant wavefunctions.  
24 p4351 A69-43810
- HARRINGTON, J. P.**
- On continuum absorption by heavy elements in high-excitation planetary nebulae.  
10 p1790 A69-24140

- The intrinsic polarization of Mira variables.  
16 p2866 A69-32820
- Ionization stratification and chemical abundances in the planetary nebula NGC 7662.  
18 p3191 A69-34294
- HARRINGTON, J. V.**  
Properties of solar wind turbulence deduced by radio astronomical measurements.  
03 p0502 A69-14001
- Radio occultation measurements of planetary atmospheres and ionospheres from an orbiting pair. [AIAA PAPER 69-53]  
06 p1011 A69-18104
- HARRINGTON, R. F.**  
Radiation from apertures in conducting cylinders of arbitrary cross section.  
11 p1836 A69-24985
- Radiation and scattering from bodies of revolution.  
22 p3899 A69-40014
- HARRINGTON, T. M.**  
An electronics system for gamma-ray spectrometry in satellite applications. [IEEE PAPER 3A-7]  
07 p1134 A69-19194
- HARRIS, A. B.**  
Dynamics of the Heisenberg ferromagnet at low temperatures.  
01 p0135 A69-10016
- HARRIS, A. E.**  
Full-scale development of lift engine inlets for the XV-4 B aircraft. [AIAA PAPER 68-636]  
20 p3585 A69-37150
- HARRIS, B.**  
Solution-hardening and deformation of niobium-tungsten alloys.  
01 p0095 A69-10488
- Newer forms of carbon and their uses.  
05 p0786 A69-16657
- Silane coupling in carbon fibre-reinforced polyester resin.  
16 p2803 A69-31806
- HARRIS, B. J.**  
Local failure of plastic-foam core sandwich panels.  
13 p2357 A69-27207
- Accurate flux densities at 5009 MHz of 753 radio sources.  
24 p4382 A69-42922
- HARRIS, C. E.**  
Physiologic evaluation of sea survival equipment.  
12 p2020 A69-26550
- HARRIS, C. G., III**  
The effect of in vitro and in vivo caffeine, theophylline, and hydrocortisone on the phosphodiesterase activity of the pituitary, median eminence, heart, and cerebral cortex of the rat.  
02 p0199 A69-11885
- HARRIS, C. J.**  
Experimental identification of shock tunnel flow regimes. [AIAA PAPER 68-729]  
09 p1477 A69-21970
- HARRIS, C. L.**  
Friction and wear studies in ultra-high vacuum and the evaluation of electrical slip-rings. [IME PAPER 7]  
07 p1138 A69-18561
- Lubrication of bearings and gears for operation in a space environment. [IME PAPER 6]  
07 p1138 A69-18562
- HARRIS, D.**  
Acoustic emission - A new nondestructive testing tool.  
19 p3314 A69-36634
- HARRIS, D. E.**  
Declination measurements of selected 4C sources using the Arecibo 1000-ft reflector.  
22 p4014 A69-40128
- HARRIS, D. H.**  
Measuring the accuracy of human inspection.  
03 p0433 A69-13386
- Lunar volcanic eruptions near Aristarchus.  
04 p0657 A69-14676
- HARRIS, E. G.**  
Velocity-anisotropy instabilities.  
24 p4355 A69-42686
- HARRIS, F. D.**  
Prediction of inflight stalled airloads from oscillating airfoil data. [AHS PAPER 322]  
17 p2895 A69-33536
- HARRIS, F. E.**  
Metastability of the super I D state of the nitrogen negative ion.  
02 p0284 A69-12598
- HARRIS, F. S., JR.**  
Changes in polarization angular distribution of scattered radiation during cloud formation.  
08 p1346 A69-21093
- Particle characteristics from light scattering measurements.  
15 p2595 A69-30223
- HARRIS, F. W.**  
Design of digital systems - The parse- implement approach.  
21 p3680 A69-39663
- HARRIS, G.**  
Conductive EMI - Responsibility and control.  
07 p1079 A69-18944
- HARRIS, G. L.**  
Turbulent skin friction on compliant surfaces. [AIAA PAPER 69-164]  
06 p0914 A69-18163
- Turbulent skin friction on compliant surfaces. [AIAA PAPER 69-164]  
24 p4306 A69-43685
- HARRIS, H. E.**  
A survey of temperature programming methods.  
22 p3954 A69-40038
- HARRIS, H. J.**  
Steady periodic solar heating of a rotating thick plate in space. [AIAA PAPER 69-614]  
17 p3071 A69-33266
- HARRIS, I.**  
On the semiannual variation of the upper atmosphere.  
12 p2064 A69-26012
- HARRIS, I. R.**  
A study of some palladium-indium, platinum-indium and platinum-tin alloys.  
05 p0779 A69-15832
- HARRIS, J. H.**  
Optical surface waves on thin films and their application to integrated data processors.  
13 p2229 A69-27676
- HARRIS, K. D.**  
Some aspects of laser safety.  
22 p3892 A69-40241
- Some aspects of laser safety.  
24 p4327 A69-42576
- HARRIS, K. K.**  
Gravity waves observed by ionospheric temperature measurements in the F region.  
05 p0754 A69-16262
- Structure of the topside ionosphere from early orbits of OGO-V.  
15 p2599 A69-31345
- OGO-V ion spectrometer.  
19 p3314 A69-36679
- HARRIS, N. D.**  
Forecasting military aircraft.  
01 p0009 A69-10147
- HARRIS, R. C.**  
Hot plastic molding of ceramics.  
17 p2978 A69-33376
- HARRIS, R. D.**  
Pneumatic sensing line nonlinear model. [AIAA PAPER 69-117]  
06 p0913 A69-18106
- Pneumatic sensing-line nonlinear model. [AIAA PAPER 69-117]  
24 p4301 A69-43259
- HARRIS, S. E.**  
Visible CW parametric oscillator.  
02 p0260 A69-12701
- Nonlinear optical properties of Ba sub 2 NaNb sub 5 O sub 15 in the tetragonal phase.  
09 p1515 A69-21354
- Acousto-optic tunable filter.  
17 p2943 A69-34157
- Method to lock an optical parametric oscillator to an atomic transition.  
18 p3133 A69-34263
- HARRIS, S. J.**  
The fabrication of fibre-reinforced metals by filament-winding and electrodeposition - An evaluation of some electroplating solutions.  
11 p1890 A69-24337
- HARRIS, S. P.**  
Electro-propulsion with colloids.  
03 p0495 A69-13396
- HARRIS, T. A.**  
On the effectiveness of hollow balls in high-speed thrust bearings.  
01 p0087 A69-10908
- HARRIS, T. I.**  
Application of variable optics to solar simulation systems for generation of high intensity light beams. [AIAA PAPER 69-997]  
22 p3920 A69-40375
- HARRIS, T. J.**  
Laser wavelength selection.  
01 p0091 A69-10841
- HARRIS, W. C.**  
Infrared and Raman spectra of substituted hydrazines. I - Methylhydrazine.  
10 p1752 A69-23528
- Vibrational spectra and structure of small-ring compounds. XII.  
14 p2410 A69-29922
- HARRIS, W. J.**  
Investigation of environmental effects on pure fluid amplifiers. [ASME PAPER 68-WA/FE-31]  
05 p0705 A69-16104
- HARRISON, A. W.**  
The night airglow spectrum 1.02 mu-1.13 mu.  
09 p1488 A69-21656
- Recent observations of the auroral spectrum between 1.02 mu and 1.13 mu.  
10 p1681 A69-23161
- Helium emission /1.083 mu/ in sunlit aurora.  
16 p2780 A69-32311
- Some observations of twilight He /1.083/ emission.  
19 p3303 A69-36484
- HARRISON, C. G. A.**  
What is the true rate of reversals of the earth's magnetic field/ques/  
19 p3304 A69-36869
- HARRISON, C. W., JR.**  
On the response of a missile with exhaust trail of tapered conductivity to a plane wave electromagnetic field.  
17 p2921 A69-33671
- On the bistatic scattering cross section of a reentry capsule with ionized wake.  
23 p4116 A69-41593
- HARRISON, D. R.**  
Heat-transfer telemetry for models using thermocouple sensors. [AIAA PAPER 68-407]  
04 p0604 A69-15514
- FM/AM telemetry to measure impact accelerations.  
10 p1654 A69-23279
- HARRISON, E. F.**  
Direct entry longitudinal range dispersion of unmanned Mars landers.  
02 p0324 A69-12390
- Evaluation of entry and terminal deceleration systems for unmanned Martian landers. [AIAA PAPER 68-1147]  
03 p0521 A69-13670
- HARRISON, E. R.**  
On the origin of galaxies.  
07 p1218 A69-19280
- Generation of galactic magnetic fields.  
16 p2866 A69-32812
- HARRISON, G.**  
Subcellular particles in echinoderm tube feet. II - Class Holothuroidea.  
05 p0708 A69-15984
- HARRISON, H. F.**  
Rapid and frequent measurement of human systolic and diastolic blood pressures.  
01 p0079 A69-10296
- HARRISON, J. D.**  
Significance of weld defects. [SBAC PAPER 17]  
20 p3550 A69-37450
- HARRISON, J. K.**  
Non-diffuse infrared emission from the lunar surface.  
21 p3803 A69-38973
- Effect of the moon's infrared emission on thermal calculations.  
24 p4385 A69-43254
- HARRISON, J. M.**  
The value of satellite techniques in the evaluation of natural resources of large areas. [UN PAPER 68-95529]  
06 p0917 A69-17067
- Suggestions toward a co-ordinated approach to aerodynamic research.  
23 p4146 A69-41373
- HARRISON, J. Y.**  
Analysis of proportional fluid amplifiers in cascade and with feedback.  
24 p4255 A69-43268



## HARRISON, N.

- Boeing 747 - Constructing the colossus.  
09 p1514 A69-22713
- Boeing 747.  
09 p1435 A69-22714

## HARRISON, R.

- Analysis of the statistics and threshold of the phase-lock loop.  
05 p0720 A69-16342

## HARRISON, R. G.

- Bragg reflection of laser light from a phase grating in a Q-switching liquid.  
05 p0771 A69-15811

## HARRISON, R. I.

- Characteristic ranges for LSA oscillation.  
05 p0810 A69-16568
- A theoretical appraisal of the quenched multiple domain mode in GaAs microwave diodes.  
08 p1282 A69-20107

## HARRISON, T.

- The effect of transverse straps on the bending and torsional behaviour of a thin-walled prismatic beam of open cross-sectional profile.  
10 p1802 A69-23890

## HARRJE, D. T.

- Fundamental problems of injector design.  
16 p2836 A69-31999

## HARROD, D. L.

- Fracture toughness of beryllium.  
23 p4178 A69-42450

## HARROLD, R. W.

- An evaluation of measurable characteristics within Army laboratories.  
15 p2721 A69-31070

## HARROLD, T. W.

- Air motion and precipitation growth in a wave depression.  
18 p3166 A69-34419

## HARROLD, W.

- Permanent magnets for microwave devices.  
[IEEE PAPER 2.3] 01 p0045 A69-10713

## HARSHA, P. T.

- The use of turbulent kinetic energy in free mixing studies.  
[AIAA PAPER 69-683] 17 p2956 A69-33492

## HARSTAD, K. G.

- Ratios of Ramsauer gas kinetic electron-atom collision integrals.  
06 p0963 A69-17822

- Differential approximation for radiant energy losses in nonequilibrium plasmas.  
22 p3988 A69-40102

## HARSTON, J. D.

- Fracture path of stress corrosion cracks in austenitic stainless steels.  
09 p1522 A69-21486

## HART, E. W.

- Mechanical effects of prominent structure elements.  
03 p0450 A69-13882

## HART, H. H.

- Effect of supersonic interference on lateral stability of low-aspect-ratio missiles in combined pitch and yaw.  
[AIAA PAPER 68-21] 02 p0189 A69-12377

- Hypersonic flowfield effects on small delta-tail surfaces.  
[AIAA PAPER 68-891] 22 p3859 A69-40539

## HART, J. D.

- Recurrent nature of Lagrange multipliers for optimal low-thrust earth-Jupiter transfers.  
23 p4215 A69-41896

## HART, L. A.

- A 10,000-1 pulse compression filter using a tapped delay line linear filter synthesis technique.  
03 p0403 A69-13217

## HART, P. J.

- The Earth's Crust and Upper Mantle.  
21 p3717 A69-39731

## HART, P. M.

- Mission influence on the aerothermodynamic environment for a Venus entry vehicle.  
02 p0332 A69-12823

## HART, R. H. B.

- An investigation into the performance of a N.A.C.A. submerged intake at a Mach number of 2.5.  
19 p3242 A69-36819

## HART, R. R.

- Oxygen surface-density measurements based on characteristic X-ray production by 100-keV protons.  
04 p0631 A69-14446

- Oxygen K-shell X-ray production in thin films of aluminum oxide by 20- to 100-keV protons.  
14 p2489 A69-29994

## HART, W.

- Air terminals 1975.  
[AIAA PAPER 69-805] 19 p3288 A69-35591

## HARTBOWER, C. E.

- Monitoring crack growth of hydrogen embrittlement and stress corrosion cracking by acoustic emission.  
19 p3350 A69-36893

## HARTECK, P.

- Chemiluminescent emission in gaseous reactions at low concentrations.  
01 p0024 A69-10618

## HARTEL, B.

- Space simulation tests of planetary spacecraft.  
02 p0227 A69-11757

## HARTEL, E.

- A new approach to the on-board weight and balance system.  
[SAWE PAPER 748] 18 p3137 A69-34883

## HARTENSTEIN, R.

- On-board spacecraft processor.  
22 p3903 A69-39921
- An on-board processor for OAO-C.  
23 p4132 A69-41736

## HARTFIELD, E. D.

- A new ultra-high speed camera.  
12 p2085 A69-26158

## HARTH, O.

- Sensor for O sub 2 partial pressure telemetry /Messfühler fuer die Telemetrie des O sub 2 -Partialdruckes/.  
15 p2559 A69-31231

## HARTH, W.

- Q dependence of IMPATT-diode F.M. noise.  
06 p0899 A69-17826
- Analogue-computer model for an avalanche-diode oscillator.  
15 p2577 A69-30615

## HARTHILL, W. P.

- A comparison of expected flight times for intercept and pure pursuit missiles.  
20 p3618 A69-37716

## HARTHUN, N.

- General circuit theory for calculating linearity errors in sawtooth voltages /Allgemeine Schaltungstheorie zur Berechnung der Linearitätsfehler von Saegzahnspannungen/.  
08 p1296 A69-20105

## HARTING, D. R.

- The -S/N- Fatigue Life Gage - Response to random inputs.  
15 p2613 A69-31270

- The -S/N- fatigue life gage - Response to random inputs.  
20 p3537 A69-37007

## HARTLE, R. E.

- Ion-exosphere with variable conditions at the baropause.  
11 p1879 A69-25284

- Simple model for a rotating neutral planetary exosphere.  
22 p4023 A69-40524

## HARTLEY, D. L.

- Kinetic theory of the sharp leading edge problem. I - Supersonic flow.  
06 p0861 A69-17637

- Kinetic theory of the sharp leading edge problem in supersonic flow.  
11 p1817 A69-24288

## HARTLEY, H. F.

- Wideband technique for improving FSK reception in atmospheric noise.  
09 p1458 A69-22473

## HARTMAN, B. O.

- Psychomotor and physiologic changes during accelerations of 5, 7, and 9 plus G sub x.  
01 p0019 A69-11340

- Aeromedical aspects of the first nonstop transatlantic helicopter flight. I - General mission overview and subjective fatigue analyses.  
19 p3262 A69-36450

## HARTMAN, K. O.

- Effect of doped ammonium perchlorate on composite propellant burning rates.  
[WSCI PAPER 69-18] 16 p2831 A69-32356

## HARTMAN, P. L.

- New measurements of the fluorescence efficiency of air under electron bombardment.  
02 p0284 A69-12734

## HARTMAN, S. R.

- Mode-locked lasers - Measurements of very fast radiative decay in fluorescent systems.  
12 p2105 A69-26310

## HARTMAN, T. E.

- Electromigration in thin gold films.  
17 p2936 A69-32896

## HARTMANN, A.

- Theory and test of flow mixing for turbofan engines.  
[AIAA PAPER 67-416] 01 p0143 A69-11015

- Studies of Mixing in Ducted Fanjet Engines /Untersuchungen ueber die Mischung bei Zweikreistreibturbinen-luftstrahltriebwerken/.  
03 p0496 A69-14048

## HARTMANN, C.

- Equilibrium problem of an elastic medium with stress couples in linearized theory /Probleme d'equilibre d'un milieu elastique avec couples de contraintes en theorie linearisee/.  
02 p0340 A69-12035

- Asymptotic expansion of the solution to a problem of equilibrium of an elastic medium with stress couples in linearized theory /Developpement asymptotique de la solution d'un probleme d'equilibre d'un milieu elastique avec couples de contraintes, en theorie linearisee/.  
16 p2871 A69-31830

## HARTMANN, F.

- X-ray mapping of flaws by computer graphics.  
20 p3551 A69-38311

## HARTMANN, G.

- A mass spectrometric investigation of the lower thermosphere above Fort Churchill with special emphasis on the helium content.  
09 p1489 A69-21712

- Tropospheric diffraction phenomena of radio signals from the beacon satellite Explorer 22.  
14 p2411 A69-29107

- Solar X-ray intensities measured via SOLRAD satellites and their influence on the D and E region of the ionosphere.  
15 p2677 A69-31346

## HARTMANN, G. L.

- Kalman filter with delayed states as observables.  
09 p1473 A69-22438

## HARTMANN, H.

- Thermodynamic functions of ideal gases for temperatures up to 6000 K /Thermodynamische Funktionen idealer Gase fuer Temperaturen bis 6000 deg K/.  
04 p0686 A69-15153

## HARTMANN, H. P.

- Degradation of signal-to-noise ratio due to IF filtering.  
08 p1270 A69-19851

## HARTMANN, K.

- Strain hardening mechanisms in AlZn and AlAg alloys /Verfestigungsmechanismen in AlZn- und AlAg-Legierungen/.  
16 p2800 A69-31776

## HARTMANN, S. R.

- Photon, spin, and Raman echoes.  
[IEEE PAPER H-3] 07 p1152 A69-19062

## HARTMANN, W. K.

- Lunar crater counts. III - Post Mare and "Archimedean" variations.  
04 p0656 A69-14671

- Lunar crater counts. IV - Mare Orientale and its basin system.  
04 p0656 A69-14672

- Lunar crater counts. V - Latitude independence and sources of impacting bodies.  
04 p0656 A69-14673

- Lunar crater counts. VI - The young craters Tycho, Aristarchus, and Copernicus.  
04 p0656 A69-14674

- Lunar volcanic eruptions near Aristarchus.  
04 p0657 A69-14676

- Mare Orientale and its intriguing basin.  
04 p0664 A69-15421

- Terrestrial, lunar, and interplanetary rock fragmentation.  
20 p3613 A69-38250
- Terrestrial, lunar and interplanetary rock fragmentation /synopsis/.  
21 p3800 A69-38677
- HARTNAGEL, H. L.**  
The stability and reflection gain of subcritically doped Gunn diodes.  
01 p0038 A69-10121
- High-speed computer logic with Gunn-effect devices.  
01 p0042 A69-10438
- Gunn-effect domain formation controlled by a complex load.  
06 p0981 A69-18217
- Theory of Gunn-effect logic.  
07 p1089 A69-18244
- Microwave logic with Gunn diodes.  
07 p1097 A69-18453
- Theory of periodic electrostatic focusing of electron beams.  
07 p1102 A69-18659
- Memory loop with Gunn-effect pulse diodes.  
08 p1279 A69-19912
- HARTNETT, J. P.**  
Mass transfer cooling on a porous flat plate in carbon-dioxide and air streams.  
03 p0413 A69-12996
- Advances in Heat Transfer. Volume 5.  
11 p1997 A69-24456
- Mass transfer cooling in laminar boundary layers.  
13 p2377 A69-28146
- HARTNETT, W. E.**  
A family of codes for the correction of substitution and synchronization errors.  
09 p1452 A69-21316
- HARTON, E. E., JR.**  
Safety planning for the use of reactive cryogenics in large volume.  
04 p0645 A69-14468
- HARTRANFT, F. R.**  
Diurnal wind variations, surface to 30 kilometers.  
18 p3166 A69-34828
- HARTRANFT, R. J.**  
Uniqueness of the concentrated-load problem in the linear theory of couple-stress elasticity.  
02 p0338 A69-11720
- The use of eigenfunction expansions in the general solution of three-dimensional crack problems.  
24 p4395 A69-42641
- HARTT, W. H.**  
Shear accommodation kinking at second order /1011-/1012/ twins in magnesium.  
01 p0093 A69-10063
- HARTUNG, R. F.**  
Axisymmetric vibration of conical shells.  
11 p1992 A69-25519
- HARTUNG, W.**  
Small rocket engine research /Forschungsarbeiten an Raketenkleintriebwerken/.  
08 p1376 A69-20870
- Effects of propellant injection on resonant combustion.  
16 p2877 A69-31731
- HARTWICK, F. D. A.**  
Some uncertainties in Population II stellar models near the main sequence.  
09 p1601 A69-22214
- HARTWIG, Q. L.**  
Contributions of space technology to solutions of medical problems.  
[UN PAPER 68-95417] 01 p0020 A69-10471
- HARTWIG, W. H.**  
Automatic tuning of a superconducting cavity using optical feedback.  
17 p2937 A69-33781
- Use of superconducting cavities to resolve carrier trapping effects in CdS.  
17 p3016 A69-33782
- An X-band oscillator using a superconducting cavity.  
21 p3683 A69-39453
- Properties of metal-polymer-silicon thin film structures.  
21 p3782 A69-39464
- HARTZ, T. R.**  
Type III solar radio noise bursts at hectometer wavelengths.  
09 p1594 A69-21665
- Radio noise levels within and above the ionosphere.  
20 p3495 A69-37874
- Nonlinear plasma effects in the Alouette recordings.  
20 p3495 A69-37886
- HARVEY, J. K.**  
On the effect of a sharp bend in a fully developed turbulent pipe-flow.  
03 p0419 A69-13952
- Electron-beam rotational temperature measurements including the effect of secondary electrons.  
16 p2814 A69-32175
- HARVEY, J. M.**  
Large deflections of rectangular plates subjected to uniform lateral pressure and compressive edge loading.  
20 p3620 A69-37000
- HARVEY, R. A.**  
An introduction to the statistical approach.  
08 p1344 A69-21162
- HARVEY, R. W.**  
Evidence of electrostatic proton cyclotron harmonic waves from Alouette 2 satellite data.  
20 p3497 A69-38079
- HARVEY, W. D.**  
Velocity fluctuation intensities in a hypersonic turbulent boundary layer.  
16 p2770 A69-31908
- HARVEY, W. L.**  
The survivability of delicate components in a sustained high g load environment.  
19 p3431 A69-36037
- HARWIT, M.**  
Observational evidence for the existence of dense clouds of interstellar molecular hydrogen.  
09 p1599 A69-22191
- Rocket-borne liquid helium cooled telescope.  
11 p1885 A69-24852
- Near infrared night sky background.  
13 p2342 A69-27600
- Far-infrared observations of the night sky.  
16 p2781 A69-32445
- Limb darkening on the earth's night side at wavelengths of 1-3  $\mu$  and 3-7.5  $\mu$ .  
17 p2960 A69-33167
- Infrared rocket astronomy.  
20 p3605 A69-37800
- HARWIT, M. O.**  
Preliminary observations of the far-infrared night-sky background radiation.  
01 p0121 A69-11249
- False signal rejection in optical-infrared collision warning systems.  
12 p2129 A69-26772
- HARWOOD, W. D.**  
Nondestructive measurement of the quality of electroexplosive interfaces.  
04 p0607 A69-14973
- HASBACH, A.**  
Solar array configurations and performance on the Martian surface.  
23 p4073 A69-42289
- HASBROOK, A. H.**  
Crash load vectors in severe but survivable light plane accidents.  
[SAE PAPER 690336] 11 p1822 A69-24492
- HASEGAWA, A.**  
Heating of the magnetospheric plasma by electromagnetic waves generated in the magnetosheath.  
11 p1950 A69-25149
- Computer experiments on plasma instabilities due to anisotropic velocity distributions.  
15 p2661 A69-30920
- Parametric amplification in plasmas with negative energy waves.  
20 p3582 A69-38244
- HASEGAWA, F.**  
Impurity transfer in GaAs vapor growth and carrier-concentration profiles of the grown films.  
05 p0807 A69-15957
- HASEGAWA, H.**  
Effects of high magnetic fields on electronic states in semiconductors - The Rydberg series and the Landau levels.  
16 p2826 A69-31824
- HASEGAWA, I.**  
Catalogue of periodic comets /1967/.  
10 p1777 A69-23396
- HASEGAWA, K.**  
Root sensitivity of linear feedback control systems.  
05 p0740 A69-16588
- HASEGAWA, S.**  
Composite heat transfer with thermal radiation in non-gray medium.  
03 p0533 A69-13884
- HASEGAWA, Y.**  
Fundamentals of laser beam modulation and deflection techniques.  
09 p1518 A69-22128
- HASELOFF, J.**  
Theoretical considerations and work in the development of a reentry flight-test vehicle /Ueberlegungen und Arbeiten zur Entwicklung eines Wiedereintrittsflugversuchskoerpers/.  
16 p2867 A69-31934
- HASHIM, A.**  
The radial and azimuthal components of cosmic ray streaming in interplanetary space.  
16 p2850 A69-32304
- HASHIMOTO, M.**  
Flexible channel multiplier.  
22 p3917 A69-41234
- HASHIMOTO, T.**  
Effects of space harmonics in the design of helix-type traveling wave tube.  
07 p1105 A69-18950
- HASHIMOTO, Y.**  
Effect of abrupt deceleration on the heart rate in monkeys.  
06 p0876 A69-18031
- Propagation of shock waves in inhomogeneous gases.  
VI. 15 p2680 A69-30202
- HASHMI, M.**  
Langmuir probes compared with other diagnostic techniques in a Q-device.  
02 p0288 A69-12172
- HASKELL, B. G.**  
The computation and bounding of rate-distortion functions.  
24 p4284 A69-42719
- HASKELL, G. P.**  
Anisotropic fluxes of energetic particles in the outer magnetosphere.  
11 p1950 A69-25146
- The solar proton event of 9th June 1968 observed from the ESO II satellite.  
15 p2677 A69-31347
- HASKELL, W. W.**  
The controlling role of cool flames in two-stage ignition.  
11 p1998 A69-24479
- HASKIN, L. A.**  
Relative and absolute terrestrial abundances of the rare earths.  
08 p1310 A69-20942
- HASKIN, M. A.**  
Relative and absolute terrestrial abundances of the rare earths.  
08 p1310 A69-20942
- HASLER, A. F.**  
A photographic summary of the earth's cloud cover for the year 1967.  
24 p4343 A69-42897
- HASLER, H. G.**  
Measurement of the charge spectrum of the primary cosmic radiation during the minimum solar activity of 1965 /Messung des Ladungsspektrums der primären kosmischen Strahlung während des solaren Minimums 1965/.  
02 p0308 A69-12043
- HASLETT, J. W.**  
Small-signal, high-frequency equivalent circuit for the metal-oxide-semiconductor field-effect transistor.  
13 p2238 A69-28429
- HASOFER, A. M.**  
A statistical theory of the brittle fracture of steel.  
10 p1803 A69-24033
- HASS, G.**  
Reflectance, solar absorptivity, and thermal emissivity of SiO sub 2-coated aluminum.  
11 p1918 A69-24835
- Vacuum deposition of dielectric and semiconductor films by a CO sub 2 laser.  
24 p4329 A69-43755
- HASSAN, H.**  
Correction for temperature loading and high gas pressure effects for the constant-temperature hot-wire anemometer.  
06 p0930 A69-18218



## HASSAN, H. A.

- Analysis of MPD arcs with nonequilibrium ionization.  
[AIAA PAPER 68-87] 02 p0291 A69-12505
- Influence of surface parameters on anode losses in arcs.  
[AIAA PAPER 69-107] 06 p1039 A69-18185
- Parametric study of sheath-boundary interactions.  
08 p1369 A69-20818
- Onset of instabilities in coaxial Hall current accelerators.  
[AIAA PAPER 69-230] 09 p1563 A69-21231

## HASSAN, S. D.

- On liquid driver shock tubes.  
19 p3295 A69-36471

## HASSE, W. E.

- V/STOL aircraft in air transport - An opportunity for the German aircraft industry /V/STOL-Flugzeuge fuer den Luftverkehr - Eine Chance der deutschen Luftfahrtindustrie/.  
13 p2203 A69-28039

## HASSEEM, H. MD.

- A simple compensator for photoelasticity.  
22 p4042 A69-40442

## HASSLER, J. C.

- Far-infrared lasing in H sub 2 S, OCS, and SO sub 2.  
10 p1706 A69-24008

## HASSEON, R.

- Applications, to the study of thermionic emitters, of a new molybdenum reagent /Sur les applications, aux etudes des emetteurs thermo-ioniques, d'un nouveau reactif du molybdene/.  
14 p2505 A69-29221

## HASTED, J. B.

- Current problems in the experimental study of electronic and atomic collisions.  
07 p1187 A69-19662
- Drift measurements of ion-molecule reactions.  
08 p1355 A69-20210
- Resonance scattering of electrons by diatomic molecules.  
11 p1921 A69-24418

## HASTENRATH, S.

- On the role of meridional circulations in the kinetic energy budget of the Northern Hemisphere.  
20 p3523 A69-37505
- The mean meridional circulation in equatorial latitudes /Zur mittleren Meridionalzirkulation in aquatorialen Breiten/.  
24 p4345 A69-43152

## HASTENRATH, S. L.

- On mean meridional circulations in the tropics.  
03 p0460 A69-13334
- On the role of eddy mechanisms in the meridional energy transports.  
04 p0627 A69-15085
- A study of the atmospheric energy budget between equator and 60 deg N during the winter and summer seasons. I.  
12 p2066 A69-26132

## HASTINGS, N. A. J.

- A stochastic model for Weibull failures as an aid to forecasting replacement requirements.  
09 p1504 A69-22149

## HASTINGS, R. N.

- Dependence of the micropulsation periods on the size of the magnetosphere.  
18 p3131 A69-35193

## HASTINGS, S. P.

- An existence theorem for a problem from boundary layer theory.  
14 p2432 A69-29677

## HATA, T.

- Transient thermoelastic problem for a transversely anisotropic hollow cylinder with temperature-dependent properties.  
01 p0166 A69-10302

## HATALA, R. W.

- Welding of superalloy turbine hardware.  
[ASM PAPER D8-16.3] 20 p3551 A69-38137

## HATANAKA, K.

- Deformation and surface temperature rise of 18-8 austenitic steels under double-repeated fatigue tests at elevated temperature.  
10 p1711 A69-23393

## HATCH, A. J.

- Frequency-shifting method of exciting a plasma in a resonant cavity.  
10 p1727 A69-22955

## HATCH, G. M.

- Communication subsystem design trends for the defense satellite communications program.  
23 p4131 A69-42537

## HATCH, H. G., JR.

- Application of differential synthesis to design of multi-axis stability augmentation systems.  
[AIAA PAPER 68-834] 20 p3616 A69-37156

## HATCHER, B. R.

- Collimation of row-and-column steered phased arrays.  
04 p0570 A69-14304
- Granularity of beam positions in digital phased arrays.  
04 p0570 A69-14306

## HATFIELD, L. L.

- Intense polarized electron beams from optically pumped helium discharges.  
12 p2130 A69-26312

## HATHAWAY, R. G. W.

- The structural design aspects of Intelsat II.  
08 p1408 A69-19907
- Three possible tank configurations for a fuel system in a spinning satellite.  
18 p3219 A69-34796

## HATHAZI, D.

- Experience obtained from fatigue tests of wooden gliders /Erfahrungen beim Ermuedungsversuch von Holzsegelflugzeugen/.  
24 p4398 A69-42912

## HATHEWAY, A. E.

- Packaging of high voltage power supplies for electric propulsion.  
22 p3999 A69-39948

## HATORI, T.

- Longitudinal dielectric function for a magnetoplasma.  
22 p3988 A69-40066

## HATSOPOULOS, G. N.

- Comments on plasma theories for cesium diodes.  
14 p2401 A69-29229
- Quantum thermodynamic meaning of electronegativity and work function.  
14 p2505 A69-29263

## HATTA, K.

- Fin efficiency and effectiveness of seam-welded U-type fin.  
19 p3452 A69-36371

## HATTA, Y.

- Decay of neutral waves into ion waves.  
03 p0475 A69-13158
- Measurements of growth and damping rate of resistive instability in gaseous plasma.  
08 p1369 A69-20886
- Plasma distributions around a circular cylinder in weakly ionized gas flow.  
19 p3380 A69-35839

## HATTON, C. J.

- Barometric coefficients of multiplicities in neutron monitors.  
03 p0425 A69-14025

## HATTORI, A.

- Polar cap of Mars.  
07 p1212 A69-18603

## HATTORI, C.

- Microwave conductivity in a turbulent plasma with a magnetic field.  
05 p0804 A69-16442

## HATTORI, S.

- Properties of inductively excited Ar super plus ion lasers in high-current regions.  
06 p0935 A69-17767

## HATWELL, H.

- Discontinuous precipitation of M sub 23 C sub 6 carbide in a nickel-base superalloy.  
23 p4176 A69-41507

## HATZENBELER, H.

- Mariner 1969 - Preliminary results of the infrared radiometer experiment.  
24 p4384 A69-43196

## HATZOPOULOS, G. J.

- Predawn enhancement of 6300 angstrom units airglow in conjugate regions.  
24 p4308 A69-43011

## HAUBOLD, K.

- Statistical foundations of thermodynamics. I.  
09 p1623 A69-22395

- Statistical foundations of thermodynamics. II - Equivalence problem - Stability conditions.  
12 p2191 A69-27148

## HAUCK, H.

- Microelectronics in astronautics /Mikroelektronik in der Raumfahrt/.  
07 p1089 A69-18256

## HAUER, J. F.

- A time-optimal problem with recoverability constraint.  
12 p2052 A69-26504

## HAUG, E. J.

- Optimal design of structures with constraints on natural frequency.  
11 p1989 A69-25496

## HAUG, R.

- Application of a polycrystalline probe in plasma diagnostics /Utilisation d'une sonde polycrystalline dans le diagnostic de plasma/.  
23 p4196 A69-41696
- Study of the phase shift existing between oscillations of density and local potential in a cesium plasma /Etude du dephasage existant entre les oscillations de densite et de potentiel local dans un plasma de cesium/.  
24 p4354 A69-42676

## HAUG, W.

- Results of studies of thermionic reactor systems /Ergebnisse von Studien ueber Thermionikreaktorsysteme/.  
02 p0279 A69-12662
- Results of studies on various fast and thermal thermionic reactor systems.  
14 p2480 A69-29182

## HAUG, W. S.

- Flexible printed circuitry in the AWG-10 missile control system on the F-4J.  
09 p1511 A69-22356

## HAUGE, O.

- The abundance of beryllium in the solar atmosphere.  
06 p1010 A69-17971

## HAUGEN, R.

- Laminar flow along a vertical wall.  
[ASME PAPER 68-APM/Z] 04 p0586 A69-14388

## HAUGHEY, J. W.

- Problems in planning for the introduction of primary electric propulsion.  
[AIAA PAPER 69-247] 09 p1565 A69-21251

## HAUGLAND, R. P.

- Dependence of the kinetics of singlet-singlet energy transfer on spectral overlap.  
22 p3895 A69-40056

## HAUGSJAA, P. O.

- Charge-transfer cross sections for N sub 2 super plus ions incident on H sub 2 and D sub 2 between 20 and 1000 ev.  
05 p0796 A69-15914
- Excitation resonances for the production of metastable atoms in low-energy argon ion-atom collisions.  
08 p1354 A69-19809
- Ionization in low-energy atomic collisions of neon with neon and krypton with krypton.  
08 p1356 A69-20740

## HAUPT, I.

- Survey of operational utilization of meteorological satellite data.  
15 p2650 A69-31364

- Some features of the large antenna array with comments on its mode of operation /Beschreibung der grossen Empfangsanlage und Bemerkungen zu ihrer Funktionsweise/.  
17 p2946 A69-33768

## HAURWITZ, M. W.

- Auroral substorm activity in relation to storm sudden commencements, ring current effects, and energetic solar protons.  
14 p2511 A69-28954

## HAUS, H. A.

- CO sub 2 laser linewidth by measurement of step response.  
05 p0773 A69-16293

- Small-signal step response of laser amplifiers and measurement of CO sub 2 laser linewidth.  
[IEEE PAPER G-9] 07 p1151 A69-19056

- Self-modulation, self-steepening, and spectral development of light in small-scale trapped filaments.  
08 p1352 A69-20745

- Force in a nonconducting electric fluid with viscosity and hysteresis as an example of the principle of virtual power.  
12 p2136 A69-26404

- Gain saturation and diffusion in CO sub 2 lasers.  
19 p3338 A69-36692
- HAUSER, D.**  
Electron beam welding of beryllium. II.  
02 p0252 A69-11863
- HAUSER, F. D.**  
Computerized optimization of flexible booster autopilots.  
[AIAA PAPER 69-875] 21 p3823 A69-39401
- HAUSER, H. A.**  
Welding of superalloy turbine hardware.  
[ASM PAPER D8-16.3] 20 p3551 A69-38137
- HAUSER, J. R.**  
Beta falloff in transistors at high collector currents.  
04 p0574 A69-14347  
Some observations on charge buildup and release in silicon dioxide irradiated with low energy electrons.  
10 p1743 A69-23172
- HAUTH, F. F.**  
Investigation of clouds above snow surfaces utilizing radiation measurements obtained from the Nimbus II satellite.  
15 p2596 A69-30455
- HAVALDA, A.**  
Investigation of the influence of tungsten on the morphology of the gamma precipitation in nickel-base superalloys.  
20 p3558 A69-36962
- HAVEKOTTE, J. C.**  
Near free-molecule heat transfer and density distribution between concentric spheres.  
16 p2877 A69-31921
- HAVEL, J.**  
On a method of experimental searching for the optimal decision function.  
21 p3756 A69-39265
- HAVEL, J. V.**  
Experimental studies bearing on mechanistic modeling of composite solid propellant combustion.  
[WSCF PAPER 69-16] 16 p2831 A69-32354
- HAVILAND, R. P.**  
Space broadcasting - How, when and why.  
[UN PAPER 68-95287] 01 p0028 A69-10497
- HAVNER, K. S.**  
The theoretical behavior of a polycrystalline solid as related to certain general concepts of continuum plasticity.  
08 p1414 A69-20525  
Path criterion for deformation plasticity theory.  
17 p3062 A69-33711
- HAVNES, O.**  
A search for correlation between rotational velocity and space velocity in early-type stars.  
06 p1010 A69-17972
- HAWARD, L. R. C.**  
The effects on respiratory disturbance of different types of oxygen face mask.  
03 p0378 A69-12884  
The use of specially devised thematic apperception cards in aviation psychology.  
23 p4112 A69-42365
- HAWEL, W.**  
Investigation of the effect of vertical vibration on the emotional state of test subjects /Untersuchung zur Wirkung vertikalen Schwingens auf die Stimmung von Versuchspersonen/.  
19 p3260 A69-35986  
Investigation of catecholamine secretion in the urine as a criterion of emotional stress - Vibration loading, film presentations, and testing situations /Untersuchungen zur Frage der Catecholaminausscheidung im Harn als Kriterium fuer emotionalen Stress unter verschiedenen Umgebungsbedingungen - Vibrationsbelastung, Filmdarbietungen und Pruefungssituation/.  
21 p3654 A69-38909
- HAWKES, T.**  
Method for the measurement of signal-to-noise ratio in a PCM bit synchronizer.  
19 p3271 A69-36248
- HAWKING, S.**  
On the rotation of the universe.  
10 p1771 A69-22851
- HAWKING, S. W.**  
The existence of cosmic time functions.  
06 p0957 A69-17471  
Singularities in collapsing stars and expanding universes.  
15 p2694 A69-30854
- HAWKINS, D. L.**  
Sound generation by turbulence and surfaces in arbitrary motion.  
13 p2247 A69-27974
- HAWKINS, B. J.**  
STAN - Integral weight and balance system - "An updating."  
[SAWE PAPER 755] 18 p3136 A69-34882
- HAWKINS, J. K.**  
Circuit Design of Digital Computers.  
06 p0892 A69-17869
- HAWKINS, M. F.**  
Problems of survival resulting from passenger aircraft accidents in the Arctic.  
23 p4107 A69-41811
- HAWKINS, R. L.**  
Multi-mode propagation communication system.  
03 p0389 A69-13191
- HAWORTH, D. R.**  
Heat transfer from spheres into subcooled liquid sodium during forced convection.  
[ASME PAPER 67-WA/HT-32] 02 p0351 A69-12202
- HAWRYLEWICZ, E. J.**  
Probability of growth /pG/ of viable microorganisms in Martian environments.  
01 p0018 A69-11091
- HAWTHORNE, W. R.**  
The aerodynamics of turbo-machinery.  
18 p3086 A69-34925
- HAY, D. R.**  
Microstrain behavior of metal-matrix composites.  
06 p0939 A69-16945
- HAY, E. I.**  
Cylindrical pressure vessels with flat-end closures.  
21 p3842 A69-39306
- HAY, J.**  
Methods of interpreting and treating acoustic information in studies of aircraft engine noise /Methodes de depouillement et de traitement de l'information acoustique pour l'etude du bruit des moteurs d'avion/.  
20 p3462 A69-37756
- HAY, M. G.**  
Nitride hardening of a molybdenum-titanium alloy by glow discharge.  
15 p2637 A69-30212
- HAY, N.**  
Comparison of predicted and measured wall temperatures in a turbulent boundary layer with arbitrary pressure gradients.  
19 p3302 A69-36853
- HAYAKAWA, M.**  
Electromagnetic wave scattering by ionospheric regularities.  
18 p3102 A69-34963  
Ducted propagation of hydromagnetic whistlers in the magnetosphere.  
18 p3102 A69-34966  
Whistler propagation in magnetically disturbed periods at two lower latitudes.  
18 p3102 A69-34967  
Penetration of whistlers through the ionosphere.  
18 p3130 A69-34972
- HAYAKAWA, S.**  
Galactic X-ray sources.  
03 p0497 A69-12930  
Origin of light elements in the solar system.  
13 p2354 A69-28495  
Measurement of the absolute intensity of cosmic X-rays.  
17 p3023 A69-33068  
Correlation between the densities of X-ray sources and interstellar gas.  
17 p3030 A69-33069  
Interpretations of the background component of X-rays and gamma rays.  
21 p3789 A69-38818
- HAYAMI, R. A.**  
Calibration and use of electrostatic probes for hypersonic wake diagnostics.  
19 p3291 A69-35717
- HAYASE, K.**  
Measurements of slow theta pinch plasma by Mach-zehnder interferometer with giant pulse ruby laser.  
12 p2091 A69-26394
- HAYASHI, C.**  
Collapse and flare-up of protostars.  
15 p2680 A69-30206
- HAYASHI, F. Y.**  
A systems approach to flammability control for aerospace safety application.  
24 p4336 A69-43422
- HAYASHI, H.**  
Closed-cycle traveling-wave maser.  
02 p0256 A69-11992
- HAYASHI, K.**  
Polar chorus emission and worldwide geomagnetic variation.  
10 p1681 A69-22803  
Solar flare effect on VLF chorus.  
14 p2514 A69-29385
- HAYASHI, S.**  
Deformation and strength of a pressure vessel with elliptical cross section.  
11 p1983 A69-25023  
A note about the surveying position of outlet flow in cascade experiments.  
22 p3859 A69-40065
- HAYASHI, T.**  
Estimation of surface temperature variation of satellite.  
01 p0162 A69-10761  
Theory of stress concentration of two normally intersecting cylindrical shells.  
13 p2359 A69-27255  
An application of the parametron amplifier to the X-band ESR spectrometer.  
14 p2423 A69-29757  
Flexible channel multiplier.  
22 p3917 A69-41234  
Analytical study of interlaminar shear stresses in a laminated composite plate.  
24 p4399 A69-43052  
Creep buckling of a column under non-uniform temperature distribution over its sections.  
24 p4400 A69-43053  
On the law of mixture of creep strength of fiber reinforced composite materials.  
24 p4400 A69-43054
- HAYASHI, Y.**  
Stress analysis of orthotropic plates.  
12 p2188 A69-27100  
Large-scale equatorial waves penetrating from the upper troposphere into the lower stratosphere.  
23 p4159 A69-42345
- HAYASI, Y.**  
Stress analysis of orthotropic plates - On the problems for lateral bending and plane thermal stress of rectangular plate.  
01 p0168 A69-10416
- HAYAT, G. S.**  
X-ray imaging with multiple-pinhole cameras using a posteriori holographic image synthesis.  
22 p3943 A69-40019
- HAYATSU, R.**  
Analyses of pyrimidine and purine bases by a combination of paper chromatography and time-of-flight mass spectrometry.  
11 p1832 A69-24738
- HAYCOCK, O. C.**  
Measurement of air density.  
02 p0251 A69-12809  
Air density measurement.  
17 p2971 A69-32898
- HAYDEN, H. W.**  
Observations of localized deformation during ductile fracture.  
08 p1333 A69-20574  
The ductility and toughness of iron-nickel alloys in liquid mercury.  
20 p3563 A69-38025
- HAYDEN, J. H.**  
Rotary transformer utilization in a spin stabilized spacecraft power system.  
17 p3050 A69-34111
- HAYDEN, P.**  
Circadian rhythm in mammalian body temperature entrained by cyclic pressure changes.  
16 p2745 A69-32447
- HAYES, A. F.**  
New forging techniques for beryllium.  
09 p1504 A69-22073
- HAYES, B.**  
Electric signals generated by shock and detonation waves.  
[WSCF PAPER 68-44] 07 p1240 A69-18360



## HAYES, D. T.

Observation of electroacoustic resonance in a reentry sheath. 17 p3010 A69-32915

## HAYES, J. D.

Studies of ultraviolet irradiation effects in ZnO-type thermal control coating pigments. [AIAA PAPER 69-639] 17 p2992 A69-33288

## HAYES, J. F.

Effect of delay on uncertainty feedback systems. 09 p1453 A69-21322  
Power allocation - Rapidly varying phase error. 09 p1456 A69-22459  
Optimum power allocation for phase and synchronization error in a two channel system. 19 p3274 A69-36283

## HAYES, J. J.

Wideband PCM-FM bit error probability using discriminator detection. 07 p1082 A69-19106

## HAYES, J. M.

Studies on the formation and transformation of esters. LXXX. 16 p2747 A69-31808

## HAYES, M.

Static implications of the strong-ellipticity condition. 17 p3058 A69-33415  
Longitudinal and transverse waves in finite elastic strain - Hadamard and Green materials. 19 p3440 A69-36588

## HAYES, P. J.

Destructive breakdown in thin films of SiO<sub>2</sub>, MgF sub 2, CaF sub 2, CeF sub 3, CeO sub 2, and Teflon. 13 p2322 A69-28012  
Destructive breakdown in thin films of SiO<sub>2</sub>, MgF sub 2, CaF sub 2, CeF sub 3, CeO sub 2, and Teflon. 16 p2761 A69-32323

## HAYES, R. J.

NASA aviation electronics research. 05 p0850 A69-16718

## HAYES, S. H.

Solid propellant as a self contained source of energy for starting large engines and the actuation of mechanical devices - Power cartridges. 02 p0302 A69-11524

## HAYES, W. F.

Practical impedance matching of a phased array radiating element. 04 p0572 A69-14323  
MERA modules - How good in an array/ques/ 22 p3912 A69-40067

## HAYHURST, D. R.

The deformations and stresses in a stretched thin plate containing a hole during stress redistribution caused by creep. 06 p1022 A69-17368  
A long narrow foil strain gauge for special purposes. 08 p1314 A69-20258

## HAYLI, A.

The problem of n bodies in an external field - Application to the dynamic evolution of open clusters. II /Le probleme des n corps dans un champ exterieur - Application a l'evolution dynamique des amas ouverts. II/. 02 p0322 A69-12270

## HAYMAKER, W.

Effects of acute exposure to high-energy protons on primates. 03 p0374 A69-13498

## HAYMAN, C.

Improved silicide coatings for the protection of molybdenum-0.5 percent titanium alloy. 22 p3957 A69-40972

## HAYMES, R. C.

Search for gamma radiation from Centaurus A. 09 p1580 A69-22269  
Observation of pulsed hard X-radiation from NP 0532 from 1967 data. 18 p3186 A69-34316

## HAYMES, R. F.

Observations of the southern sky at 10.02 MHz. 07 p1206 A69-19272

## HAYMOND, R. E.

Non-iterative solutions to functional equations. 15 p2644 A69-30424

## HAYNAM, K. W.

Minimization of training cost and quantity of multi-skilled personnel when requirements are uncertain. [AAS PAPER 69-116] 24 p4271 A69-42818

## HAYNES, C. W.

Diffusion bonding makes complex designs possible. 09 p1504 A69-22066

## HAYNES, G. W.

Laser induced breakdown in high pressure gases. 21 p3738 A69-39445

## HAYNES, J. A.

A liquid-helium cryopump. 01 p0088 A69-11155

## HAYNIE, F. H.

An electrochemical study of the mechanism of stress corrosion cracking in an aluminum-zinc-magnesium alloy. 19 p3351 A69-36899

## HAYRE, H. S.

Doppler return from a random rough surface. 14 p2413 A69-29488

## HAYS, L. G.

Effect of high-velocity lithium on structural materials. 13 p2278 A69-27478

## HAYS, P. B.

Stellar spectra and atmospheric composition. 03 p0421 A69-13346  
Interferometric measurements of the 6300 A Doppler temperature during a magnetic storm. 20 p3546 A69-38099

## HAYS, W. L.

Probabilistic information processing systems - Design and evaluation. 01 p0037 A69-10954

## HAYWORTH, D. R.

On the application of digital computer simulation as a maintainability design and prediction tool. 10 p1668 A69-22974

## HAZAMA, K.

Reflection and transmission of a plane electromagnetic wave by a moving isotropic plasma - A general solution. 23 p4114 A69-41360

## HAZARD, C.

Occultation studies of weak radio sources - List 2. 02 p0326 A69-12704  
Declination measurements of selected 4C sources using the Arecibo 1000-ft reflector. 22 p4014 A69-40128  
Discrete sources and the microwave background in steady-state cosmologies. 22 p4029 A69-40765

## HAZELL, C. R.

A fibre optical angular displacement transducer. 06 p0923 A69-16929  
Visualization of lateral displacements of vibrating plates by the shadow moire method. 20 p3537 A69-37067

## HAZELRIGG, G. A.

Analytical determination of the adjoint vector for optimum space trajectories. [AIAA PAPER 69-916] 21 p3808 A69-39345

## HAZELRIGG, G. A., JR.

Mission analysis for electrically propelled interplanetary spacecraft. 09 p1585 A69-21210

## HAZEN, W. E.

Polarization of radio pulses from extensive air showers. 04 p0595 A69-15425

## HAZNEDAROGLU, G.

Subjective and objective measurement of adaptation to darkness using the same equipment, and application of the latter to a comparative study of adaptation from infancy to adulthood /Mesure subjective et objective de l'adaptation a l'obscurite a l'aide du meme appareillage et application de celui-ci a l'etude comparative de l'adaptation depuis l'enfance jusqu'a l'age adulte/. 22 p3881 A69-40861

## HEACOCK, R. R.

Large amplitude Pc 1 events at College. [AFRL-69-0059] 02 p0244 A69-12397  
Some observations of ssc micropulsation wave-packets. 14 p2440 A69-29129

## HEAD, M. R.

Reversion of turbulent to laminar flow. 03 p0414 A69-13016  
Effect of uniform injection on heat transfer in the constant property turbulent boundary layer. [ASME PAPER 68-WA/HT-24] 05 p0847 A69-16126

Turbulent boundary-layer flow on a rotating disk. 17 p2957 A69-33601

The calculation of the three-dimensional turbulent boundary layer. III. 17 p2958 A69-34047

Some observations on skin friction and velocity profiles in fully developed pipe and channel flows. 22 p3932 A69-40897

## HEADING, J.

Differential and integral equations arising at coupling points in propagation theory. 02 p0208 A69-12130

Propagation in an inhomogeneous gyrational medium. 08 p1353 A69-21000

Polarization of obliquely reflected waves from an isotropic plane-stratified plasma. 16 p2752 A69-32391

## HEADLEY, J. W.

Axially symmetric bodies having a minimum pressure variation with Mach number. 04 p0542 A69-14738

## HEADLEY, R. C.

Reliability of palladium-silver thick-film resistors /Die Zuverlaessigkeit von Palladium-Silber-Dickfilm-widerstaenden/. 08 p1283 A69-20131

## HEADLEY, V. B.

Oscillation criteria for elliptic equations. 09 p1533 A69-22771  
Elliptic equations of order 2m. 11 p1909 A69-24882

## HEALD, P. T.

The fatigue growth of a disc-shaped crack. 10 p1802 A69-24028

## HEALEY, G. T.

Possibilities for future versions of Black Arrow. I. 01 p0143 A69-10835  
Possibilities for future versions of Black Arrow. II. 02 p0335 A69-12681

## HEALEY, M.

Principles of Automatic Control. 06 p0904 A69-17856

## HEALY, M. J.

A computerized method for crewstation geometry evaluation. [AIAA PAPER 69-977] 22 p3892 A69-40357

## HEANEY, J. B.

Reflectance, solar absorptivity, and thermal emissivity of SiO sub 2-coated aluminum. 11 p1918 A69-24835

Results from the ATS-3 reflectometer experiment. [AIAA PAPER 69-644] 17 p3071 A69-33270

## HEAP, M. P.

The relationship between flame pressure and burning velocity. 21 p3849 A69-38806

## HEARN, A. D.

Space vehicle system simulation for verification of checkout procedures. [AIAA PAPER 69-321] 09 p1478 A69-22378

## HEARN, A. G.

The ultraviolet resonance lines of neutral helium from the sun. 08 p1390 A69-20392

A suggestion for the measurement of He II line intensities emitted by the sun. 10 p1772 A69-22859

The differences between quiet and active regions measured by spectroheliograms in the neutral helium resonance lines. 23 p4222 A69-42405

## HEARN, C. J.

Theoretical frequency of the L.S.A. mode for gallium arsenide at frequencies above 10 GHz. 01 p0137 A69-10321

## HEARNE, P. A.

Avionics - Towards the twenty-first century. 03 p0431 A69-14085

Towards digital control in aircraft. I - Hardware concepts. II - System applications. [RAES PAPER 4] 22 p3908 A69-40485

## HEASELL, E. L.

The effects of induced stress during laser flash illumination of semiconductors. 02 p0256 A69-12245

- HEATH, C. A.**  
Possible instabilities in a thermionic reactor with all negative reactivity coefficients.  
09 p1442 A69-21841
- HEATH, G. A.**  
Chemical erosion of graphite rocket nozzles.  
23 p4180 A69-42156
- HEATH, G. W.**  
SAR-assist "Searchmeter."  
06 p0878 A69-16963
- HEATH, K. R.**  
Gain stabilization of parametric amplifiers.  
09 p1467 A69-22585
- HEATON, A. G.**  
Confirmation of abnormally high electron density in a transient mercury-vapour plasma by laser-interferometer measurements.  
18 p3153 A69-35307  
High-resolution laser interferometer for measurement of electron density in transient plasma.  
22 p3965 A69-40924
- HEATON, M.**  
Nonorthogonal natural orbitals from open-shell configuration-interaction calculations.  
23 p4194 A69-42206
- HEAVENS, O. S.**  
Doped-crystal and gas lasers.  
08 p1323 A69-19869
- HEBERLEIN, J.**  
Temperature fields in the jets of transpiration and water-cooled argon arcs.  
15 p2657 A69-30155
- HEBRARD, P.**  
Calculation of the detached turbulent flow downstream of a sudden widening in a stream of circular cross section /Calcul de l'écoulement turbulent decolle en aval de l'élargissement brusque dans une veine de section circulaire/.  
19 p3299 A69-36648
- HECHLER, K.**  
Fast neutron damage and the current carrying capacity of niobium nitride.  
17 p3008 A69-33765
- HECHT, F.**  
Considerations on the sampling of extraterrestrial material.  
[UN PAPER 68-95381] 01 p0150 A69-10480  
Meteorites and the high-temperature origin of terrestrial planets.  
19 p3407 A69-36079
- HECHT, H.**  
Cost-effectiveness of test selection.  
15 p2720 A69-30401
- HECHT, K.**  
Dependence of pharmacological effects on the noise level /Zur Abhaengigkeit pharmakologischer Effekte vom Geraeuschepegel/.  
24 p4262 A69-42947  
Correlations between the noise level and conditioned reflex performance /Wechselbeziehungen zwischen Geraeuschepegel und bedingt-reflektorischem Leistungsvermoegen/.  
24 p4262 A69-42948
- HECHT, M.**  
Suboptimal decision feedback communications systems.  
10 p1656 A69-23534
- HECHT, T.**  
Dependence of pharmacological effects on the noise level /Zur Abhaengigkeit pharmakologischer Effekte vom Geraeuschepegel/.  
24 p4262 A69-42947  
Correlations between the noise level and conditioned reflex performance /Wechselbeziehungen zwischen Geraeuschepegel und bedingt-reflektorischem Leistungsvermoegen/.  
24 p4262 A69-42948
- HECHTEL, J. R.**  
The double-gap catcher, a means for improving the efficiency of klystrons.  
07 p1095 A69-18432  
DC-to-RF energy conversion in unrigged klystron gaps.  
12 p2041 A69-26629
- HECKEL, K.**  
Critical reflections regarding the determination of the mechanical loss factor from the resonance curve /Kritische Ueberlegungen zur Bestimmung des mechanischen Verlustfaktors aus der Resonanzkurve/.  
20 p3623 A69-37435
- HECKEL, R. W.**  
In situ measurements of deformation behavior of individual phases in composites by X-ray diffraction.  
06 p0939 A69-16944  
An analysis of microstructural changes in 52100 steel bearings during cyclic stressing.  
08 p1319 A69-20004
- HECKER, N.**  
An FM-AM calibration modulator for noise measurement stands /Ein FM-AM- Eichmodulator fuer Rauschmessplaetze/.  
11 p1856 A69-25631
- HECKER, S. S.**  
The stress-strain behavior of concentric composite cylinders.  
01 p0171 A69-11263
- HECKL, M.**  
Generation of structure-borne sound in elastic structures by neighboring sound sources /Koerperschallanregung von elastischen Strukturen durch benachbarte Schallquellen/.  
13 p2363 A69-28186
- HECKMAN, D.**  
Observations on electrostatic probe behavior in collision-dominated ionized turbulent gas flows in ballistic ranges.  
19 p3291 A69-35716
- HECKMAN, H. H.**  
Low-altitude trapped protons during solar minimum period, 1962-1966.  
18 p3187 A69-34944
- HED, A. Z.**  
High-temperature oxidation of Co-10 W/O Cr alloys. I - Microstructure of oxide scales.  
[ECS PAPER 413] 08 p1332 A69-20363  
High temperature oxidation of Co-10 W/O Cr alloys. II - Oxidation kinetics.  
[ECS PAPER 413] 08 p1332 A69-20364  
Complex defects in CoO.  
14 p2508 A69-29925
- HEDEMAN, E. R.**  
Increasing optical evidence for mass motions in solar flares, 1937-1967.  
06 p0993 A69-17428  
The solar particle event of July 16-19, 1966 and its possible association with a flare on the invisible solar hemisphere.  
09 p1579 A69-22181  
Later development of the center of activity of the proton flare, 7 July 1966 - Optical observations.  
10 p1766 A69-23758  
The history and morphology of solar activity, 1964-1965.  
15 p2679 A69-30006
- HEDEMAN, W. R.**  
The sun as a calibration signal source for L- and S-band telemetry.  
07 p1082 A69-19113
- HEDEN, C.-G.**  
Some benefits to be derived from space microbiology.  
[UN PAPER 68-95861] 01 p0014 A69-10456  
The value of agreed standards of sterility.  
05 p0712 A69-15936
- HEDENSKOG, G.**  
Investigation of some methods for increasing the digestibility in vitro of microalgae.  
21 p3667 A69-39701
- HEDERVARI, P.**  
Ring-shaped and linear structures on Mars.  
14 p2515 A69-28769
- HEDGEPEETH, J. M.**  
Dynamics of spin-stiffened deployable space structures.  
11 p1994 A69-25530
- HEDLAND, D. A.**  
Dynamics of a libration-damped discretized cruciform structure.  
11 p1989 A69-25502
- HEDLEY-WHYTE, J.**  
Supersaturation of blood with O sub 2.  
23 p4077 A69-41296
- HEDRICK, H. G.**  
Microbiological degradation of aircraft materials.  
19 p3341 A69-35569
- HEEKS, J. S.**  
Transferred-electron bulk effects in gallium arsenide.  
03 p0484 A69-13292
- An experimental study of high peak power Gunn effect oscillators.  
07 p1097 A69-18447
- HEENAN, N. I.**  
Permutation and circulant matrices and the fast Fourier transform.  
23 p4182 A69-41761
- HEER, C. V.**  
Theory for the measurement of the earth's velocity through the 3 deg K cosmic radiation.  
03 p0511 A69-13475
- HEER, E.**  
Aeroshell structural development for Martian entry.  
[AIAA PAPER 68-1159] 03 p0521 A69-13667  
Test facility for simulation of system- environment interaction during Martian entry.  
15 p2587 A69-30390
- HEERAN, M. P.**  
A simple airglow photometer with improved red sensitivity.  
16 p2777 A69-32107  
Predawn enhancement of 6300 angstrom units airglow in conjugate regions.  
24 p4308 A69-43011
- HEEREMA, C. E.**  
Optical processing of planetary radar data - Preliminary results.  
08 p1270 A69-19816
- HEESCHEN, D. C.**  
Absolute luminosities and surface brightnesses of extragalactic radio sources /Absolutnyye svetimosti i poverkhnostnye iarkosti vnegalakticheskikh radioistochnikov/.  
12 p2166 A69-27035
- HEEZEN, B. C.**  
Physical and chemical properties of Australasian microtektites.  
08 p1305 A69-19815
- HEFFELS, K. H.**  
The photovoltaic effect in the Cu-Cd-S system.  
19 p3382 A69-35682  
Photoconductivity study of annealing of radiation defects in lithium-doped silicon.  
19 p3382 A69-35696
- HEFFERNAN, P. J.**  
The S-band Telemetry, Tracking, and Command Experiment.  
23 p4121 A69-41759
- HEFFES, H.**  
Optimal allocation of tracking pulses for an array radar.  
24 p4283 A69-43311
- HEFFINGTON, J. C.**  
Earth sensor for attitude control of deep-space probes.  
15 p2609 A69-30593
- HEFFNER, H.**  
Progress in radio electronics.  
19 p3284 A69-36433
- HEFLINGER, L. O.**  
Holographic interferometry and pulsed laser holography.  
11 p1883 A69-24682  
Holographic contouring via multifrequency lasers.  
20 p3540 A69-37733  
Moire gauging using optical interference patterns.  
21 p3726 A69-39775
- HEGARTY, J. C.**  
Gravitational effect of electromagnetic radiation.  
16 p2812 A69-32049
- HEGBLOM, E. R.**  
Coordinated measurements from two multi-experiment rockets in an aurora.  
21 p3703 A69-38361
- HEGEMIER, G. A.**  
On linear ordinary differential equations with exponential coefficients.  
01 p0103 A69-10231  
Stress waves in a temperature-dependent viscoelastic half-space subjected to impulsive electromagnetic radiation.  
04 p0676 A69-14705  
On Michell trusses.  
08 p1410 A69-19893  
Influence of damping on the snapping of a shallow arch under a step pressure load.  
24 p4405 A69-43654



**HEGER, K.****HEGER, K.**

Effect of double scattering on sky radiation and outgoing radiation of the earth's atmosphere under the assumption of a disturbed atmosphere /Der Einfluss der Zweifachstreuung auf die Himmelsstrahlung und auf die Erdatmosphäre verlässende Strahlung unter der Annahme einer getrüebten Atmosphäre/.  
07 p1175 A69-18270

**HEGNER, H. R.**

In-flight and flight-line checkout techniques for foreign object damage to jet engines.  
01 p0056 A69-11055

**HEHN, A. H.**

In-flight and flight-line checkout techniques for foreign object damage to jet engines.  
01 p0056 A69-11055

**HEIDE, K. V. D.**

Fraunhofer lines with hyperfine structure /Fraunhoferlinien mit Hyperfeinstruktur/.  
02 p0311 A69-11458

**HEIDEL, J. W.**

Qualitative behavior of solutions of a third order nonlinear differential equation.  
09 p1533 A69-22772

**HEIDEMAN, J. C.**

Use of the method of particular solutions in quasi-linearization.  
02 p0273 A69-12550

Use of the method of particular solutions in non-linear, two-point boundary-value problems.  
09 p1531 A69-21416

The restoration of constraints in holonomic and non-holonomic problems.  
19 p3361 A69-36758

Application of the method of particular solutions to boundary-layer analyses.  
20 p3515 A69-37532

**HEIDMANN, J.**

The distance of the Virgo galactic clusters and the value of Hubble's constant /Sur la distance de l'amas de galaxies de Virgo et sur la valeur de constante de Hubble/.  
19 p3427 A69-36652

**HEIDMANN, N.**

Masses and angular momenta of galaxies.  
16 p2866 A69-32818

**HEIDRICH, P. F.**

Electron beam writing of spatial filters.  
10 p1697 A69-23870

**HEIL, R.**

Sputter etching of microcircuits and components.  
04 p0606 A69-14874

**HEILES, C.**

A new way of determining the optical depth of interstellar neutral hydrogen clouds.  
08 p1398 A69-20774

A survey of dust clouds for OH emission.  
09 p1603 A69-22267

An upper limit to the abundance of He super 3 in Messier 17.  
10 p1785 A69-24098

Neutral hydrogen in dark dust clouds.  
15 p2691 A69-30763

Temperatures and OH optical depths in dust clouds.  
20 p3611 A69-38147

**HEILIG, P.**

The effect of psychopharmacological drugs on retinal neuron activity /Die Wirkung von Psychopharmaka auf die Aktivitaet retinaler Neurone/.  
22 p3879 A69-40846

The effect of psychopharmacological drugs on visually evoked potentials in cats /Die Wirkung von Psychopharmaka auf visuell evozierte Potentiale der Katze/.  
22 p3879 A69-40847

**HEILIG, W. H.**

Diffraction of a shock wave by a cylinder.  
18 p3120 A69-34472

**HEILMAN, M. D.**

Detailed plant and soil thermal regime in agronomy.  
12 p2075 A69-26989

**HEILMANN, W.**

Experimental and theoretical boundary layer investigations of flat decelerating cascades in a compressible flow, in particular during a change in the axial flow-density ratio and the upstream turbulence /Experimentelle und grenzschichttheoretische Untersuchungen an ebenen Verzögerungsgittern bei kompressibler Strömung, insbesondere bei Änderung des

axialen Stromdichteverhältnisses und der Zuström-turbulenz/.  
11 p1818 A69-24639

**HEIMANN, W.**

Image transmission and amplification as research aids in experimental physics /Bildübertragung und Bildverstärkung als modernes Hilfsmittel der Experimentalphysik/.  
22 p3943 A69-39974

**HEIME, K.**

Thin-film transistors with a spray-deposited CdS film /Duennschichttransistoren mit gespruehter CdS-Schicht/.  
02 p0214 A69-11596

**HEIMER, L.**

Olfactory bulb removal - Effects on brain norepinephrine.  
22 p3871 A69-40055

**HEIMERDINGER, A. G.**

Design for safety - Third generation and ahead.  
22 p3867 A69-41133

**HEIMKE, G.**

Estimation of impact pressures during collisions between two bodies /Abschaetzung von Stossdrucken beim Zusammenschlagen zweier Koerper/.  
21 p3836 A69-38943

**HEINE, W.**

Minimum-impulse, time-free transfer between neighboring noncoplanar elliptical orbits with major axes perpendicular to the line of nodes.  
[AIAA PAPER 68-94] 23 p4215 A69-41879

**HEINEMAN, W., JR.**

A total perspective weight technique for advanced manned spacecraft.  
[SAWE PAPER 793] 18 p3208 A69-34864

**HEINHOLD, J.**

Dynamic optimization /Zur dynamischen Optimierung/.  
03 p0456 A69-13737

**HEINISCH, R. P.**

Approximate solution of the transient free convection laminar boundary layer equations.  
08 p1305 A69-20842

Configuration factors between a small plane and a large sphere.  
24 p4351 A69-43683

**HEINLE, P. J.**

Plastics for semiconductor encapsulation.  
02 p0270 A69-12161

**HEINLE, W.**

Theory of the Gunn effect /Theorie des Gunn-Effekts/.  
03 p0486 A69-13610

Theory of the Gunn effect. II /Theorie des Gunn-Effekts. II/.  
05 p0807 A69-15821

Relationship between electron temperature and population ratio in the Gunn effect.  
05 p0810 A69-16576

Calculation of hot electron distribution functions and of the threshold field in the Gunn effect.  
15 p2665 A69-30025

**HEINRICH, B.**

Unbalanced respiratory growth of Euglena.  
10 p1647 A69-24186

**HEINRICH, H.**

Time dependence of "transverse breakdown" and instabilities in indium-antimonide.  
19 p3389 A69-36546

**HEINRICH, H. G.**

Opening time of parachutes under infinite-mass conditions.  
[AIAA PAPER 68-12] 17 p2902 A69-34032

**HEINRICH, M. R.**

The effect of time of heating on the thermal polymerization of L-lysine.  
13 p2218 A69-28439

Determination of the water-soluble dinitrophenylamino acids by ion-exchange chromatography.  
17 p2917 A69-33651

**HEINS, J. F.**

Modularization of high-power inverters and converters.  
23 p4073 A69-42292

**HEINSOHN, R. J.**

Temperature profiles of an opposed-jet diffusion flame subjected to an electric field.  
21 p3852 A69-39597

**HEINTZ, W. D.**

The geometric determination of visual binary orbits.  
19 p3403 A69-35968

**HEINTZE, J. R. W.**

A tentative model of the solar atmosphere and the low chromosphere.  
14 p2518 A69-29131

On the temperature scale of B-type stars.  
14 p2518 A69-29132

**HEINZ, M. H.**

Effects of sterilization and decontamination on hydrazine propulsion systems.  
21 p3786 A69-39768

**HEINZINGER, K.**

Content and isotopic composition of carbon in the light and dark portions of gas-rich chondrites.  
19 p3408 A69-36081

**HEISER, W. H.**

Systematic evaluation of cooled turbine efficiency.  
[ASME PAPER 69-GT-63] 09 p1572 A69-22517

**HEISS, K..P.**

Planning space activities in the 1970's.  
[AAS PAPER 69-113] 24 p4418 A69-42878

**HEISS, W.-D.**

The effect of psychopharmacological drugs on retinal neuron activity /Die Wirkung von Psychopharmaka auf die Aktivitaet retinaler Neurone/.  
22 p3879 A69-40846

The effect of psychopharmacological drugs on visually evoked potentials in cats /Die Wirkung von Psychopharmaka auf visuell evozierte Potentiale der Katze/.  
22 p3879 A69-40847

**HEISSLER, H.**

High-stress plastics /Kunststoffe fuer hohe Beanspruchungen/.  
12 p2117 A69-25853

**HEITERT, R. E.**

Reliability/maintainability field test evaluation of Flying Crane helicopter.  
19 p3247 A69-36017

**HEITMAN, G. H.**

Development of a new high strength, deep hardenable titanium alloy.  
[AIME PAPER S69-3] 21 p3747 A69-39472

**HEIZER, N. W.**

Analysis of rectangular RC distributed circuits with shaped electrodes.  
11 p1858 A69-24938

**HEIZMAN, C. L.**

A digitally controlled vibration or acoustics testing system. III - Hardware requirements and implementation.  
15 p2587 A69-30389

**HELBING, R. K. B.**

Crossed-beam study of ionization of Cs by Br sub 2.  
23 p4194 A69-42208

**HELD, D. R.**

Ventilation-perfusion relationships during high-altitude adaptation.  
22 p3875 A69-40227

**HELD, H.**

Ionic species present in argon-cesium and cesium discharges.  
09 p1440 A69-21830

**HELD, M.**

Selective stroboscope /Selektives Stroboskop/.  
12 p2086 A69-26162

Detonation system /Zuendsystem/.  
17 p3050 A69-33698

**HELFRICH, W. J.**

Observations on the initiation of stress corrosion cracking in aluminum alloy 7039.  
06 p0944 A69-17855

**HELLAND, J. C.**

A systems approach to data management.  
[AAS PAPER 69-366] 24 p4417 A69-42806

**HELLER, G. E.**

New perspectives in electronic information processing suggested from observations of living systems.  
17 p2911 A69-34092

**HELLER, G. S.**

Nonreciprocal polycrystalline antiferromagnetic devices for millimeter and submillimeter wavelengths.  
[IEEE PAPER 17.11] 01 p0045 A69-10720

- HELLER, H. H.**  
Dynamics of an acoustic probe for measuring pressure fluctuations on a hypersonic re-entry vehicle.  
01 p0008 A69-11278
- HELLER, J.**  
Sensitivity comparison of optimal controls.  
05 p0737 A69-15866
- HELLER, J. A.**  
Study of a 300 kWe Rankine cycle advanced nuclear-electric space power system.  
23 p4189 A69-42266
- HELLER, R. A.**  
Interlaminar shear stress in sandwich beams.  
22 p4041 A69-40080
- HELLER, R. C.**  
Previsual detection of ponderosa pine trees dying from bark beetle attack.  
12 p2098 A69-26993
- HELLEWELL, A. B.**  
Post-irradiation properties of cultured Chinese hamster cells exposed to ultraviolet light.  
19 p3257 A69-35975
- HELLIWEEL, R. A.**  
Whistlers and VLF emissions.  
07 p1127 A69-19354  
Low-frequency waves in the magnetosphere.  
12 p2072 A69-26745  
Latitudinal cutoff of VLF signals in the ionosphere.  
14 p2434 A69-28958  
Banded chorus - A new type of VLF radiation observed in the magnetosphere by OGO 1 and OGO 3.  
16 p2774 A69-31981
- HELLMAN, P.**  
Automatic check-out of the integrated electronic system in "Viggen" using an integrated, computer controlled test equipment.  
05 p0726 A69-16767
- HELLMANN, R.**  
Lunar Module thermal-vacuum simulation utilizing conformal heater thermal control.  
[AIAA PAPER 69-312] 09 p1479 A69-22386
- HELLUMS, J. D.**  
A general formulation of the boundary conditions on the vector potential in three-dimensional hydrodynamics.  
01 p0058 A69-10228
- HELLWIG, H.**  
Maser oscillations with external gain.  
04 p0611 A69-14443
- HELM, R.**  
Development of an F-5 boron-epoxy contoured landing gear door.  
12 p2103 A69-26826
- HELMAN, J. S.**  
The dielectric constant of liquid metals. I / La constante dielectrica de los metales liquidos. I/.  
07 p1196 A69-18298
- HELMICK, H. H.**  
Design of a nuclear furnace reactor.  
[AIAA PAPER 69-513] 16 p2810 A69-32656
- HELMKEN, H. F.**  
A search for discrete sources of cosmic gamma rays of energies near  $2 \times 10$  super 12 ev.  
02 p0308 A69-12597  
Upper limits to gamma ray fluxes from three pulsating radio sources.  
03 p0513 A69-13772
- HELMREICH, R.**  
Groups under Stress- Psychological Research in SEALAB II.  
04 p0552 A69-14533
- HELMS, H. E.**  
Evaluation of internal heat-transfer coefficients for impingement-cooled turbine airfoils.  
[AIAA PAPER 68-564] 17 p3022 A69-34021
- HELMS, H. H., JR.**  
A fluxgate sensor of high stability for low field magnetometry.  
[IEEE PAPER 10.2] 01 p0081 A69-10715
- HELMSEN, M.**  
Validity of topography representation by truncated series of surface harmonics.  
13 p2344 A69-27647
- HELSTROM, C. W.**  
A bound on the probability that a Gaussian process exceeds a given function.  
09 p1452 A69-21319
- Approximate calculation of cumulative probability from a moment-generating function.  
12 p2120 A69-25927
- Detection and resolution of incoherent objects seen through a turbulent medium.  
12 p2029 A69-26252
- Performance of an ideal quantum receiver of a coherent signal of random phase.  
14 p2414 A69-29502
- Detection of incoherent objects by a quantum-limited optical system.  
23 p4191 A69-42147
- HELSZAJN, J.**  
A symmetrical design of a short ferrite Faraday rotator.  
01 p0048 A69-11034
- HELVEY, W. M.**  
Manned test of a regenerative life support system.  
07 p1071 A69-19427  
An orbital biomedical laboratory.  
23 p4223 A69-41801
- HEMAMI, H.**  
Derivation of a matrix identity.  
22 p3975 A69-41014
- HEMBREE, G. D.**  
Experimental extended predictions with a nine-level hemispheric model.  
07 p1175 A69-18895
- HEMEL, A.**  
Slash ROM sizes with equivalent functions.  
07 p1089 A69-19778
- HEMENWAY, C. L.**  
The biological effectiveness of solar electromagnetic radiation in space.  
01 p0017 A69-11086  
The survival of terrestrial microorganisms in space at orbital altitudes during Gemini satellite experiments.  
01 p0018 A69-11087  
Survival of micro-organisms in space.  
11 p1828 A69-25457  
Time variation of the altitude distribution of the "cosmic" dust layer in the upper atmosphere.  
15 p2698 A69-31353  
Oscillating fiber microbalance.  
21 p3720 A69-38592
- HEMESATH, N. B.**  
Complementing VOR/DME with INS - An improved navigation system.  
[SAE PAPER 690338] 11 p1914 A69-24499  
The optimum complementation of VOR/DME with air data.  
[AIAA PAPER 69-841] 21 p3762 A69-39372
- HEMMI, C. O.**  
Practical impedance matching of a phased array radiating element.  
04 p0572 A69-14323  
Pressure broadening of the 1.63-mm water-vapor absorption line.  
07 p1184 A69-18911
- HEMMINGS, P. L.**  
Preliminary toughness results on TRIP steel.  
08 p1330 A69-20012  
Interactions between crack growth and strain-induced transformation.  
10 p1709 A69-23074
- HEMPEL, P.**  
Regular and singular controls in multidimensional optimum transfer problems.  
19 p3400 A69-35677
- HEMSWORTH, M. C.**  
Development and experiences of the first high bypass ratio engine - TF39.  
[RAES PAPER 21] 22 p4000 A69-40622
- HENATSCH, H.-D.**  
Influence of temperature on the afferent and efferent motor innervation of the spinal cord. II - Temperature dependence of muscle spindle function /Der Einfluss der Temperatur auf die afferente und efferente motorische Innervation des Rueckenmarks. II - Temperaturabhaengigkeit der Muskelspindelfunktion/.  
23 p4093 A69-42067
- HENCH, L. L.**  
Dielectric relaxation in materials analysis.  
09 p1559 A69-22307
- HENDEL, A. Z.**  
Polarization of radio pulses from extensive air showers.  
04 p0595 A69-15425
- HENDEL, H. W.**  
Collisional drift waves - Identification, stabilization, and enhanced plasma transport.  
03 p0474 A69-13145  
Drift instabilities in a uniformly rotating plasma cylinder.  
11 p1924 A69-24300
- HENDER, D.**  
The use of TGA data in the simulation of the degradation of plastics.  
09 p1529 A69-22312
- HENDERSHOT, K. C.**  
Applications of a tube wind tunnel in supersonic testing.  
[AIAA PAPER 69-335] 13 p2242 A69-28271
- HENDERSON, A., JR.**  
Influence of measured free-stream disturbances on hypersonic boundary-layer transition.  
[AIAA PAPER 69-704] 17 p2953 A69-33453  
Electron beam flow visualization in hypersonic helium flow.  
19 p3291 A69-35722
- HENDERSON, C. B.**  
Analysis of dilatational failure of heterogeneous materials by reaction rate theory.  
15 p2710 A69-30813  
Advances in solid-fuel propulsion systems for tactical rockets.  
16 p2836 A69-31998
- HENDERSON, E. P.**  
Some metallographic observations on the Tishomingo, Oklahoma, meteorite.  
13 p2353 A69-28159
- HENDERSON, L. F.**  
The cellular structure of shock waves and detonation waves.  
19 p3451 A69-36369
- HENDERSON, M.**  
A dual-beam source of actinic light for photosynthesis research.  
19 p3312 A69-36378
- HENDERSON, N. K.**  
Degradation of continuous-channel electron multipliers in a laboratory operating environment.  
14 p2449 A69-29565
- HENDERSON, R. E.**  
The quasi-steady design of a compressor or pump stage for minimum fluctuating lift.  
[ASME PAPER 68-WA/FE-12] 05 p0698 A69-16092  
The quasi-steady design of a compressor or pump stage for minimum fluctuating lift.  
[ASME PAPER 68-WA/FE-12] 19 p3240 A69-36419
- HENDERSON, T. L.**  
Application of state variable techniques to optimal feature extraction.  
05 p0740 A69-16577
- HENDL, R. G.**  
On the role of joule heating as a source of gravity-wave energy above 100 km.  
12 p2064 A69-26010
- HENDLER, E.**  
Cutaneous receptor response to microwave irradiation.  
[AGARDOGRAPH-111] 08 p1266 A69-20677
- HENDRICKS, C. D.**  
Mean adsorption lifetimes and activation energies of silver and gold on clean, oxygenated, and carburized tungsten surfaces.  
23 p4198 A69-41542
- HENDRICKS, J. B.**  
Performance of stabilized superconducting cables under controlled heat transfer conditions.  
[IEEE PAPER 13.5] 01 p0176 A69-10718
- HENDRICKS, R.**  
Low-noise receiver for satellite communication ground terminals.  
09 p1458 A69-22470
- HENDRICKS, T. C.**  
Stochastic crew motion modeling.  
[AIAA PAPER 69-1006] 22 p3921 A69-40380
- HENDRICKSON, J. G.**  
The analysis of adhesive resins in aerospace applications.  
24 p4338 A69-43463



## HENDRICKX, R. V.

## HENDRICKX, R. V.

A measurement of auroral electrons in the 1-10 Mev range.

09 p1576 A69-21663

## HENDRIKS-VAN ITTERBEEK, W.

Properties of epitaxially grown silver and gold films and the influence of alpha irradiation.

03 p0486 A69-13582

## HENDRY, D. P.

Periodic shock with added clock.

10 p1644 A69-23304

## HENDRY, R. G.

Development of a nonrecirculating wind-tunnel configuration insensitive to external winds.

[AIAA PAPER 68-398] 17 p2947 A69-34024

## HENGSTENBERG, T. F.

Fracture toughness of beryllium.

23 p4178 A69-42450

## HENIKA, M.

Boron nitride in aerospace.

02 p0270 A69-11802

## HENIZE, K. G.

Ultraviolet objective-prism spectra from Gemini XI and XII manned space flights.

01 p0153 A69-10870

A comment on the nebulosity about FG Sagittae.

24 p4381 A69-42887

## HENKE, R. W.

The future of fluidics.

10 p1636 A69-23402

## HENKEL, H.

Direct interpretation of 2-dimensional gravity anomalies with a self-adjusting procedure using a digital computer. I.

12 p2076 A69-27088

## HENKIN, R.

Stimulus sensitivity and stimulus intensity control.

21 p3653 A69-38897

## HENLEY, C.

Microtubules in spermatozoa of Childia /Turbellaria, acocla/ revealed by negative staining.

07 p1066 A69-19263

## HENN, F.

Astronomical Annual Report. Volume 67 - Literature for the Year 1967 /Astronomischer Jahresbericht. Volume 67 - Die Literatur des Jahres 1967/.

09 p1602 A69-22223

## HENNE, R.

On the effect of barium on converter materials.

14 p2467 A69-29215

## HENNECKE, D. K.

Heat transfer by Hagen-Poiseuille flow in the thermal development region with axial conduction.

04 p0687 A69-15397

## HENNEMAN, W. E.

Vacuum heat treating - 1969 its advantages, applications, and economics.

[ASM PAPER D8-22.3] 20 p3551 A69-38132

## HENNIG, H.-P.

On the conduction mechanism in the instable range of a double injection diode.

02 p0222 A69-12686

## HENNIG, K.

Contribution to the theory of isotropic plates /Ein Beitrag zur Theorie isotroper Platten/.

03 p0526 A69-13738

Calculation of Shells by Means of the Linear Three-Dimensional Elasticity Theory /Zur Berechnung von Schalen im Rahmen der linearen dreidimensionalen Elastizitätstheorie/.

12 p2188 A69-26902

## HENNING, A. B.

Dynamic stability characteristics of large-size 120 deg blunted conical spacecraft in a simulated Martian environment.

[AIAA PAPER 69-104] 06 p1019 A69-18210

Damping derivatives of 120 deg conical spacecraft from flights in a low-density environment.

22 p4036 A69-40550

## HENNING, D.

Zonal components of the wind over Fernando Noronha /Zonalkomponente des Windes ueber Fernando Noronha/.

11 p1913 A69-25204

Studies of the regional distribution of transports of atmospheric field variables over the equator. I - Transport of relative angular momentum /Untersuchungen zur regionalen Verteilung von Transporten at-

mosphärischer Feldgrößen ueber den Äquator. I - Die Verfrachtung von relativem Drehimpuls/.

16 p2773 A69-31793

## HENNING, H.

Stark-broadening of hydrogen Balmer lines in the presence of strong magnetic fields in plasmas.

09 p1542 A69-22248

## HENON, M.

Interplanetary orbits which encounter the earth twice /Sur les orbites interplanétaires qui rencontrent deux fois la terre/.

03 p0514 A69-13782

Numerical exploration of the restricted problem. V.

08 p1393 A69-20572

Rates of escape from isolated clusters with an arbitrary mass distribution.

17 p3038 A69-33721

## HENOUX, J. C.

A sunspot umbra model /Un modele de l'ombre des taches/.

20 p3605 A69-37825

## HENRARD, J.

A manifold of periodic orbits.

04 p0653 A69-14611

Periodic orbits emanating from L sub 4 at the 1/4 internal resonance /Sur les orbites periodiques issues de L sub 4 a la resonance interne 1/4/.

22 p4031 A69-40909

## HENRICHON, E. G., JR.

A nonparametric partitioning procedure for pattern classification.

24 p4285 A69-43062

## HENRICI, J.

Heos 1 - A successful project management /Heos 1 - Ein erfolgreiches Projektmanagement/.

17 p3050 A69-33699

## HENRICKSON, C. H.

Lewis acidity of alanes - Interactions of trimethylalane with amines, ethers, and phosphines.

07 p1074 A69-18630

Donor abilities of sulfoxides, sulfonamides, and thionylamides.

07 p1074 A69-18631

## HENRIKSEN, R. N.

On the shell instability of Pleione.

13 p2347 A69-27716

## HENRIKSEN, T.

Free radicals induced in enzymes by electrons and heavy ions.

03 p0372 A69-13484

## HENRY, A.

Passive Q-switching of a hydrochloric acid chemical laser /Declenchement passif d'un laser chimique a acide chlorhydrique/.

16 p2796 A69-31840

## HENRY, B. Z.

An assessment of variable geometry spacecraft performance potential.

[AIAA PAPER 68-1164] 03 p0520 A69-13562

## HENRY, F. C.

Experiments on decompression bubbles in the circulation using ultrasonic and electromagnetic flowmeters.

21 p3663 A69-38914

## HENRY, G. R.

Distribution of blackbody cavity radiation in a moving frame of reference.

08 p1380 A69-19784

## HENRY, J. P.

Transmission of cardiovascular data from dogs.

07 p1071 A69-19133

## HENRY, L.

Study of the Lamb dip and of rotational competition in a carbon dioxide laser.

[IEEE PAPER P-6] 07 p1153 A69-19075

Passive Q-switching of a hydrochloric acid chemical laser /Declenchement passif d'un laser chimique a acide chlorhydrique/.

16 p2796 A69-31840

## HENRY, R.

Production of polonium 210 for radiothermal propulsion /Production de polonium 210 pour la propulsion radio-thermique/.

05 p0791 A69-15594

## HENRY, R. C.

Absence of pulsar characteristics in several X-ray sources.

07 p1218 A69-19254

On X-ray line emission from Scorpius XR-1.

13 p2325 A69-27313

X-ray spectra of several discrete cosmic sources.

20 p3593 A69-38152

K-line photometry of A stars.

22 p4015 A69-40154

## HENRY, R. E.

Pressure wave propagation in two-phase mixtures.

24 p4409 A69-43511

## HENRY, R. J.

An extra-strong maraging steel.

22 p3971 A69-40833

## HENRY, R. J. W.

Photoelectrons in planetary atmospheres.

02 p0321 A69-12118

The influence of autoionizing states on absorption cross sections for atomic oxygen.

04 p0633 A69-15127

Collision strengths and photoionization cross sections for nitrogen, oxygen, and neon.

22 p3988 A69-41244

Scattering of electrons by C, N, O, N plus, O plus and O plus plus.

23 p4193 A69-41452

## HENRY, R. P.

Maximum Hall-to-electrode current ratio in coaxial plasma accelerators.

[AIAA PAPER 69-280] 09 p1562 A69-21228

Course on the science and technology of vacuums /Cours de science et technique du vide/.

20 p3576 A69-37408

## HENRY, T. A.

Vibration amplitudes of compressor blades resulting from scatter in blade natural frequencies.

[ASME PAPER 68-WA/GT-3] 05 p0837 A69-16139

## HENRY, V. F.

Radio frequency interference experiment design for the Applications Technology Satellite.

03 p0392 A69-13242

## HENSELER, H.

Second-order similarity boundary layer solutions for hydrodynamic and thermal boundary layers on longitudinally curved walls with boundary layer effect /Aehnliche Grenzschichtloesungen zweiter Ordnung fuer Stromungs- und Temperaturgrenzschichten an longitudinal gekruemmten Waenden mit Grenzschichtbeeinflussung/.

12 p2060 A69-25761

## HENSELER, H. J.

Flow and Temperature Boundary Layers on Longitudinally Curved Walls /Stromungs- und Temperaturgrenzschichten an longitudinal bekruemmten Waenden/.

15 p2591 A69-30933

## HENSELER, K.

Directional coupler with lumped circuit elements /Richtkoppler aus konzentrierten Schaltelementen/.

16 p2763 A69-32581

## HENSHAW, J.

AVCO 3-D composites - A tailored materials concept.

08 p1340 A69-20509

A practical method of fabricating efficient aerostructures, utilizing unidirectional boron composite with metal.

24 p4323 A69-43419

## HENSHALL, R. D.

Clough-Tocher triangular plate-bending element in vibration.

13 p2365 A69-28246

Transmission of vibration in beam systems.

15 p2706 A69-30431

## HENSLEY, W. E.

Effects of hydrogen on 5Al-2.5Sn ELI titanium.

[AIAA PAPER 69-585] 16 p2803 A69-32760

## HENSS, P.

Measurement of the radiation patterns of TV transmitter antennas of the German federal mails using a helicopter and Decca radar navigation /Messungen der Helicopterdigramme von Fernseh-Sendeantennen der Deutschen Bundespost mit einem Hubschrauber und der Decca-Navigation als Hilfsmittel/.

08 p1274 A69-20130

## HENTLEY, E. L.

A low noise wideband parametric amplifier for satellite communications.

07 p1099 A69-18462

## HENY, L.

Studies in stellar evolution. VIII - The time scale for the diffusion of energy in the stellar interior.

15 p2692 A69-30767

- HENZI, A.**  
On the fidelity of high-speed photographic systems for dynamic photoelasticity. 22 p3945 A69-40077
- HEPPELL, T. A.**  
Vacuum System Design. 07 p1180 A69-18549
- HEPPNER, J. P.**  
Propagation of the sudden commencement of July 8, 1966, to the magnetotail. 01 p0075 A69-11226  
Electric fields in the vicinity of auroral forms from motions of barium vapor releases. 18 p3128 A69-34935  
Magnetospheric convection patterns inferred from high latitude activity. 21 p3709 A69-38503
- HEPPNER, R. A.**  
Detection of metastable atoms and molecules with continuous channel electron multipliers. 22 p3917 A69-41235
- HERAKOVICH, C. T.**  
Elastic-plastic torsion of hollow bars by quadratic programming. 06 p1023 A69-17370  
Quadratic programming and plasticity. 18 p3218 A69-34661
- HERAN, H.**  
Nervous control in insect flight /Der Insektenflug und seine nervoese Steuerung/. 21 p3651 A69-38780
- HERBETTE, G.**  
Simulation of micrometeorites by means of a wire explosion plasma /Sur la simulation des micrometeorites au moyen d'un plasma d'explosion de fil/. 16 p2821 A69-31839
- HERBIG, G. H.**  
Forbidden emission transitions in cool stars. 19 p3424 A69-36232
- HERBST, W.**  
The variable weight growth factor /Der Vergroesserungsfaktor des variablen Zusatzgewichts/. 11 p1987 A69-25432  
Relation between design iterations and growth factors of fighter aircraft. [SAWE PAPER 732] 18 p3221 A69-34893
- HERCEG, J. E.**  
Characteristics of a low-voltage helium-neon laser. 10 p1704 A69-29852
- HERCHENROEDER, R. B.**  
In-process metallurgy of wrought cobalt-base alloys. 14 p2456 A69-29892
- HERCHER, M.**  
An experimental study of saturable absorbers for ruby lasers. 07 p1155 A69-19089  
Tunable single mode operation of gas lasers using intracavity tilted etalons. 24 p4329 A69-43752
- HERCHNER, D.**  
Noise characteristics of transistorized feedback amplifier stages /Rauschkennwerte ruckgekoppelter Verstaerkerstufen mit Transistoren/. 07 p1090 A69-18284
- HERCZEG, I.**  
The notion of space activity and some problems of registration. 20 p3637 A69-37118
- HERCZEG, T.**  
Cosmogonical aspects in the theory of planetary interiors. 22 p4018 A69-40185
- HERD, P. A.**  
Effect of norepinephrine and uncoupling agents on brown adipose tissue. 19 p3258 A69-36294
- HERGENROTHER, R. C.**  
A new means for control of secondary electron redistribution at image tube storage targets. 11 p1848 A69-24749
- HERGET, P.**  
Revised orbit of comet Schwassmann-Wachmann I. 01 p0158 A69-11328  
Outer satellites of Jupiter. 01 p0158 A69-11330
- HERGET, W. F.**  
Rocket stability monitoring by temporal radiometry. [AIAA PAPER 69-580] 16 p2839 A69-32670
- HERING, M.**  
Optimization of electric models of heat exchange systems /Optymizacja elektrycznych modeli ukldow wymiany ciepla/. 19 p3256 A69-36717
- HERING, R. G.**  
Surface radiation properties from electromagnetic theory. 04 p0684 A69-14357  
Selected topics on radiative heat transfer. 13 p2376 A69-28140  
Apparent radiation properties of a rough surface. [AIAA PAPER 69-622] 17 p3071 A69-33271  
Surface roughness effects on equilibrium temperature. 22 p4050 A69-40558
- HERISHEN, J. T.**  
Diode mixer coefficients for spurious response prediction. 03 p0399 A69-13905
- HERISTCHI, DJ.**  
Balloon measurements of solar protons in Northern Scandinavia on 7 July 1966. 10 p1767 A69-23763
- HERITAGE, M. B.**  
Direct recording electron diffraction for thin film materials studies. 09 p1499 A69-22303
- HERLACH, F.**  
Megagauss magnetic fields. 01 p0115 A69-10049  
Exploding wire detonators for use in experimental physics. 01 p0120 A69-10676
- HERLEY, P. J.**  
Dependence of the thermal decomposition induction period on prior gamma- and X-ray irradiation. [WSCI PAPER 69-21] 16 p2832 A69-32359
- HERMAN, B. M.**  
Estimating the vertical atmospheric ozone distribution by inverting the radiative transfer equation for pure molecular scattering. 07 p1126 A69-19042  
Wavelength dependence of polarization. XIV - Atmosphere of Jupiter. 13 p2348 A69-27805
- HERMAN, F.**  
Spectral analysis of photoemissive yields in GaAs and related crystals. 01 p0140 A69-11254
- HERMAN, H.**  
Advances in Materials Research. Volume 3. 06 p0944 A69-17501
- HERMAN, J. R.**  
Conjugate echoes in Alouette-2 topside-sounder data. 08 p1274 A69-20045  
The influence of varying solar flux on ionospheric temperatures and densities - A theoretical study. 16 p2849 A69-32082  
F-region ionization and heating during magnetic storms. 16 p2775 A69-32083  
The role of atomic oxygen in the ionospheric E- and F-region behavior. 16 p2780 A69-32314
- HERMAN, L.**  
Stark-broadening of hydrogen Balmer lines in the presence of strong magnetic fields in plasmas. 09 p1542 A69-22248
- HERMAN, S.**  
The effect of vignetting on the impulse response of coherent optical processors. 12 p2036 A69-25912
- HERMAN, W.**  
Low-noise parametric amplifier for the L band cooled by liquid nitrogen /Niskoszumny wzmacniacz parametryczny na pasmo L chlodzony cieklym azotem/. 13 p2237 A69-28644  
Measurement of varactor diodes by a reflection method /Pomiary diod waraktorowych metoda odbiciowa/. 13 p2237 A69-28645
- HERMAN, Z.**  
Crossed-beam studies of ion-molecule reaction mechanisms. 03 p0382 A69-13460  
A crossed-beam apparatus for investigation of ion-molecule reactions. 12 p2092 A69-26477
- HERPERS, U.**  
Crossed-beam studies of energy dependence of intermediate complex formation in an ion-molecule reaction. 24 p4280 A69-43813  
Direct mechanism of reaction CH sub 3 super plus plus x CH sub 4 yields C sub 2 H sub 5 super plus plus H sub 2. 24 p4280 A69-43814
- HERMANCE, C. E.**  
Gas phase ignition theory, with feedback, of a homogeneous propellant under shock tube conditions. [AIAA PAPER 69-559] 16 p2880 A69-32740
- HERMANN, A. M.**  
Electronic properties of some TCNQ complexes. 11 p1832 A69-25675
- HERMANN, P. C.**  
Prestressed brittle structures. 17 p3060 A69-33568
- HERMANS, J. J.**  
The dielectric constants of nonconducting suspensions. 13 p2287 A69-28677  
The elastic constants of fiber reinforced materials. 20 p3626 A69-37759
- HERMANSDORFER, H.**  
Microwave diagnostic techniques. 08 p1316 A69-20470
- HERMANSEN, L.**  
Oxygen uptake during maximal treadmill and bicycle exercise. 22 p3874 A69-40226
- HERMES, M. E.**  
Rotor induced velocities in forward flight by momentum theory. [AIAA PAPER 69-224] 07 p1052 A69-19562
- HERMSEN, R. W.**  
Nucleation and growth of oxide particles in metal vapour flames. 21 p3783 A69-38799
- HERMSEN, W.**  
Interdependence of aircraft size and fare formulation /Interdependenz zwischen Flugzeuggrosse und Tarifgestaltung/. 04 p0689 A69-14805
- HERNANDEZ, E. N.**  
Forward scattering in the Born approximation. [OSA PAPER WH-16] 18 p3174 A69-35245
- HERNANDEZ, G.**  
The NI /super 4 S deg sub 3/2 - super 2 D deg sub 5/2, 3/2/ transitions in the upper atmosphere at night. 14 p2440 A69-29120
- HERNESS, E. D.**  
Astra - Boeing's advanced structural analyzer. 23 p4232 A69-42144
- HEROLD, H.**  
CO sub 2 -laser interferometer for the measurement of transient low-density plasmas. 06 p0935 A69-17706
- HEROLD, W.**  
The influence of hard limiting in a communications satellite on the transmission capacity of a time-function multiplex method /Der Einfluss der harten Begrenzung in einem Nachrichtensatelliten auf die Uebertragungskapazitaet eines Zeitfunktionmultiplex-Verfahrens/. 17 p2919 A69-33320
- HERON, R.**  
Unstable burning of solid propellants - Some experiments using T-burners. 02 p0302 A69-11521
- HEROUX, L.**  
Measurements of radiative lifetimes in the extreme ultraviolet. 03 p0471 A69-13165  
Photoelectron counting in the extreme ultraviolet. 04 p0595 A69-14277
- HERPE, G.**  
Effects of angle of attack and blunting on the aerodynamic characteristics of a flat plate in a hypersonic flow at low Reynolds numbers /Effets d'incidence et d'emoussement sur les caracteristiques aerodynamiques d'une plaque plane dans un ecoulement hypersonique aux faibles nombres de Reynolds/. 13 p2200 A69-28358
- HERPERS, U.**  
Evaluation of super 53 mn by /n gamma/ activation, super 26 Al and special trace elements in meteorites by gamma-coincidence techniques. 19 p3412 A69-36103



## HERR, E. A.

Reliability of epoxy transistors.  
18 p3145 A69-34498

## HERR, L. E.

Pressurized Navajo environmental system.  
[SAE PAPER 690330] 11 p1829 A69-24504

## HERR, P. N.

Space storable propellant performance demonstration.  
[AIAA PAPER 69-505] 16 p2845 A69-32762

## HERR, R. B.

Identification list of spectroscopic and eclipsing binaries subject to occultations by the moon.  
12 p2171 A69-27152  
Absolute magnitudes and intrinsic colors of OB stars.  
13 p2348 A69-27806

## HERR, W.

Moessbauer spectroscopy applied to the classification of stone meteorites.  
19 p3408 A69-36083  
Evaluation of super 53 mn by  $\gamma$  activation, super 26 Al and special trace elements in meteorites by gamma-coincidence techniques.  
19 p3412 A69-36103

## HERREMAN, W.

On the shear viscosity of liquid oxygen.  
05 p0846 A69-15916

## HERREN, P. C., JR.

Alternating current operation of a colloid source.  
[AIAA PAPER 69-495] 16 p2846 A69-32773

## HERRERO, F. A.

Differential elastic scattering of low-energy protons by argon atoms.  
20 p3580 A69-37499

## HERRICK, R. C.

Analysis of the elastic contact of a hollow ball with a flat plate.  
[ASME PAPER 69-LUBS-5] 18 p3212 A69-34383

## HERRIGEL, H. R.

Stress corrosion preventative paints for titanium alloys.  
14 p2469 A69-29936  
Spray deoxidizing for aluminum metalbonding.  
19 p3321 A69-35564

## HERRIMAN, A. G.

Mariner 6 television pictures - First report.  
21 p3803 A69-38981  
Mariner 7 television pictures - First report.  
21 p3806 A69-39330

## HERRIMAN, A. H.

Mariner 6 and 7 television pictures - Preliminary analysis.  
24 p4384 A69-43195

## HERRING, J. J.

Ambipolar diffusion in radio-frequency-excited magnetoplasmas.  
16 p2818 A69-31672

## HERRING, J. R.

Statistical theory of thermal convection at large Prandtl number.  
11 p1997 A69-24283

## HERRMANN, C. R.

The development and application of a methodology of program risk evaluation.  
19 p3455 A69-36008

## HERRMANN, G.

Stability of an elastic arch in a rigid cavity.  
03 p0524 A69-13066  
On the vibrations of a laminated body.  
[ASME PAPER 68-WA/APM-10] 04 p0668 A69-14392  
A modified cylindrical wave approximation.  
04 p0671 A69-14410  
Dynamics of Structured Solids, American Society of Mechanical Engineers, Winter Annual Meeting, New York, N.Y., December 4, 1968, Proceedings.  
04 p0675 A69-14684  
Wave motion in solids with lamellar structuring.  
04 p0675 A69-14685  
Vibrations of thin cylindrical shells under axisymmetric thermal stresses.  
04 p0675 A69-14704  
Some theorems on stability of discrete circulatory systems.  
05 p0836 A69-15875

Vibrations of thin cylindrical shells with initial stresses due to thermal loadings.  
[AIAA PAPER 69-59] 06 p1028 A69-18143

Applications of theories of generalized Cosserat continua to the dynamics of composite materials.  
10 p1798 A69-23148

The usefulness of adjoint systems in solving nonconservative stability problems of elastic continua.  
19 p3446 A69-36835

## HERRMANN, K.

A plane inhomogeneous problem of thermoelasticity / Ueber ein ebenes inhomogenes Problem der Thermoelastizitaet/.  
02 p0349 A69-12826  
A plane field of thermal stress of discontinuous inhomogeneity type / Ueber ein ebenes Temperaturspannungsfeld von diskontinuierlichem Inhomogenitaetstyp/.  
10 p1793 A69-22884

## HERRMANN, L. R.

Mechanical property tests for cylindrically orthotropic materials.  
07 p1232 A69-18718

## HERRMANN, O.

Quadrature filters with a rational transfer function / Quadraturfilter mit rationalem Uebertragungsfaktor/.  
08 p1277 A69-21167

## HERRON, T. J.

Tracking jet stream winds from ground level pressure signals.  
12 p2125 A69-26015  
A model for atmospheric pressure fluctuations in the mesoscale range.  
12 p2126 A69-26016

## HERRON, W. C.

Corrosion and corrosion control of aircraft integral fuel tanks.  
12 p2013 A69-25946

## HERSCH, M.

Vortex enhancement of jet penetration in supersonic flow.  
[AIAA PAPER 69-664] 17 p2953 A69-33437

## HERSH, M.

Joining of aluminum-boron metal matrix composite.  
[ASM PAPER W9-23.4] 14 p2455 A69-29449

## HERSH, M. S.

The effects of discontinuities on the fatigue strength of aluminum welds.  
09 p1527 A69-22372  
Development of fabrication methods for aluminum-boron composite aircraft structures.  
[AIME PAPER S69-1] 21 p3732 A69-39471  
Effect of discontinuities on fatigue properties of aluminum welds.  
24 p4331 A69-42940

## HERSH, R. T.

Ferredoxin from two thermophilic Clostridia.  
22 p3897 A69-41068

## HERSH, S.

Theoretical calculations of additive effects in hydrogen-oxygen ignition.  
[WSCI PAPER 68-52] 07 p1239 A69-18316

## HERSHEY, D.

Diffusion coefficients for oxygen transport in whole blood.  
02 p0200 A69-12479

## HERSKOWITZ, G. J.

Output power and loss analysis of 2 super n injection-locked oscillators combined through an ideal and symmetric hybrid combiner.  
13 p2232 A69-28061

## HERTEL, H.

The vibrating camera - A photographic method for measuring velocity / Die vibrierende Kamera - Ein photographisches Verfahren zur Geschwindigkeitsmessung/.  
13 p2261 A69-27913  
Fatigue Strength in Construction / Ermuedungsfestigkeit der Konstruktionen/.  
14 p2534 A69-29333

## HERTZ, J. H.

Mutual influence of two different laser transitions with the same ground level. II - Experiment / Gegenueberseitige Beeinflussung zweier verschiedener Laseruebergaeenge mit dem gleichen Grundniveau. II - Experiment/.  
08 p1325 A69-20284

## HERTZBERG, R. W.

The fatigue characteristics of unidirectionally solidified Al - Al sub 3 Ni eutectic alloy.  
08 p1329 A69-20000  
Microstructure and crystallography of the Ni-Ni sub 3 Ti eutectic alloy.  
10 p1707 A69-22949  
Structure and elevated-temperature mechanical behavior of unidirectionally solidified Ni-Ni sub 3 Ti eutectic alloy.  
13 p2276 A69-27400  
Elevated-temperature mechanical properties and fracture behavior of a Ni-Ni sub 3 Ti eutectic alloy.  
13 p2277 A69-27400

## HERVE, P. Y.

Primers and other explosive wire devices - Conditions for using them on missiles / Les amorces et autres artifices a fil explose - Leurs conditions d'emploi sur missiles/.  
10 p1751 A69-23022

## HERVEY, G. R.

Regulation of energy balance.  
15 p2555 A69-30699

## HERZ, R.

Proposal for the communications subsystem of the Symphonic satellite.  
15 p2562 A69-30084

## HERZBERG, G.

Forbidden transitions in diatomic molecules - Introductory report.  
19 p3421 A69-36211

## HERZBERG, L.

Ionospheric conditions following the proton flare of 7 July 1966 as deduced from topside soundings.  
10 p1684 A69-23788

## HERZIGER, G.

Nonresonant continuous laser oscillation in the visible.  
01 p0091 A69-10815  
High-efficiency ion lasers / Ionenlaser hoher Leistung/.  
06 p0938 A69-18221  
High power ion laser / Hochleistungs-Ionenlaser/.  
09 p1515 A69-21487

## HERZOG, A. H.

Electroluminescence of diffused GaAs sub 1-x P sub x diodes with low donor concentrations.  
16 p2758 A69-31699

## HERZOG, G. B.

COS/MOS - The best of both worlds.  
07 p1113 A69-19760

## HERZOG, J. A.

Development and future of whisker research / Entwicklungen und Zukunft in der Whiskerforschung/.  
04 p0616 A69-14843

## HERZOG, J. H.

Manual control using the matched manipulator control technique.  
02 p0202 A69-11951

## HES, L.

Visualization of temperature fields as isotherms / Sichtbarmachen der Temperaturfelder als Isothermen/.  
20 p3539 A69-37437

## HESKESTAD, G.

A suction scheme applied to flow through sudden enlargement.  
[ASME PAPER 68-FE-11] 05 p0748 A69-16074

## HESLIN, T. M.

Apparatus for the precision measurement of internal friction.  
03 p0428 A69-13108

## HESS, D. T.

Quantized second order frequency locked loop.  
03 p0390 A69-13202

## HESS, I. J.

Electroforming of aluminum composite structures by codeposition of high strength, high modulus fibers.  
19 p3318 A69-35510

## HESS, K.

Non-ohmic microwave conductivity in semiconductor posts.  
08 p1373 A69-20859

## HESS, L. D.

Reversible photodissociative laser system.  
19 p3337 A69-36444

## HESS, M. S.

The end problem for a laminated elastic strip. I.  
13 p2370 A69-28672

- HESS, R. B.**  
On-the-job training of logistics publications engineers.  
10 p1811 A69-22977
- HESS, R. I.**  
Proposal of an error-detecting test using generated number sequences.  
[AIAA PAPER 69-946] 22 p3974 A69-40329
- HESS, R. V.**  
Onset of rotating disturbance in the interelectrode region and exhaust jet of an MPD arc.  
[AIAA PAPER 69-232] 09 p1562 A69-21225  
Onset of rotating disturbance in linear Hall current accelerator.  
[AIAA PAPER 69-381] 09 p1568 A69-21731
- HESS, S.**  
Investigation of a new long-period variable.  
18 p3195 A69-34431
- HESS, S. L.**  
The hydrodynamics of Mars and Venus.  
02 p0320 A69-12110
- HESS, T. E.**  
Thermostructural simulation of lifting vehicle structures.  
12 p2060 A69-26836
- HESS, W.**  
The exploration of the moon.  
23 p4216 A69-42200
- HESS, W. N.**  
Generation of an artificial aurora.  
18 p3127 A69-34365
- HESSE, J.**  
Experimental investigations of the effect of the wall space charge layer in the extraction of positive ions /Experimentelle Untersuchungen ueber den Einfluss der Wand- Raumladungsschicht bei der Extraktion positiver Ionen/.  
07 p1188 A69-18276  
Mass spectrometer studies of the ion composition in the pink afterglow.  
08 p1308 A69-20292
- HESSEL, A.**  
Plane wave scattering from modulated corrugated structures.  
01 p0033 A69-10973  
Element pattern nulls in phased arrays and their relation to guided waves.  
04 p0570 A69-14310  
Ray description for point source excited surface waves in stratified anisotropic media.  
07 p1079 A69-18918  
Scattering by a multimode corrugated structure with application to p type wood anomalies.  
17 p2925 A69-33844
- HESSELT, F.**  
Aging behavior of glass-fiber-reinforced plastics. I, II /Beitrag zum Alterungsverhalten von glasfaserverstaerten Kunststoffen. I, II/.  
03 p0454 A69-13823
- HESSEMER, R. A., JR.**  
Another source of VOR omni error.  
08 p1271 A69-19863
- HESSENMUELLER, H.**  
Companding in a PCM time multiplex system operating according to the counting principle and the measurement of its signal-to-noise ratio /Die Kompan-dierung bei einem nach dem Zaehlprinzip arbeitenden PCM- Zeitvielfachsystem und die Messung des Signal-geraeschabstandes/.  
01 p0031 A69-10739
- HESSER, J. E.**  
Radiative lifetimes for n II ultraviolet multiplets.  
02 p0280 A69-11928  
H sub 2 Lyman-band oscillator strengths.  
06 p0962 A69-17818  
Ultrashort-period stellar oscillations. III. Power-spectrum analysis of photometric observations of white dwarfs.  
10 p1788 A69-24124  
Radiative lifetimes of ultraviolet transitions of argon II.  
15 p2656 A69-31034
- HESSLER, V. P.**  
Preliminary results of micropulsation studies at mag-netoconjugate points in the Arctic and Antarctic.  
01 p0068 A69-11112
- HESSTVEDT, E.**  
Nucleation and growth of noctilucent cloud particles.  
21 p3702 A69-38346
- Airglow and vertical eddy transport.  
21 p3713 A69-38523
- HESTER, S. D.**  
A laboratory study of the electrodynamic influences on the wakes of ionospheric satellites.  
[AIAA PAPER 69-673] 17 p2893 A69-33488
- ETHERINGTON, A.**  
Beats produced by "negative" Faraday effect in in-fared ring lasers.  
01 p0088 A69-10028  
Measurement of Fresnel drag produced by electron motion in semiconductors.  
05 p0807 A69-16026
- ETHERINGTON, N.**  
Calculations of the effect of roughness on microwave emissivity with application to the moon and Venus.  
02 p0207 A69-12017
- ETHERINGTON, N. W.**  
Diurnal rhythm of the pituitary-adrenocortical response to stress - Effect of constant light and constant darkness.  
15 p2556 A69-31330  
Mechanisms of action of light on circadian rhythms in the monkey.  
15 p2556 A69-31336
- HETNARSKI, R. B.**  
Stresses in long cylinder due to rotating line source of heat.  
13 p2364 A69-28206
- HETSRONI, G.**  
Two-phase turbulent jet prediction analysis.  
13 p2247 A69-27787
- HETTICHE, L. R.**  
Theoretical and experimental study on longitudinal impact of tapered rods.  
06 p1022 A69-17365
- HETTEL, H. J.**  
Further experiments on ion-cyclotron-wave genera-tion in the RF self-sustained mode.  
03 p0474 A69-13113  
Molecular hydrogen inelastic electron impact cross sections - A semiclassical method.  
09 p1542 A69-22249
- HEUN, H. J.**  
Parametric frequency converters for 12 GHz /Parametrische Frequenzumsetzer fuer 12 GHz/.  
11 p1854 A69-25614
- HEURING, H.**  
Electrostatic control for portable clean rooms.  
19 p3428 A69-35550
- HEUSCHKEL, J.**  
Weld metal composition control.  
22 p3955 A69-40460
- HEUSELER, H.**  
Martian canals as observed in Mariner 4 experiments /Die Marskanale aus der Sicht des Mariner-4-Experi-ments/.  
12 p2171 A69-27133  
Surface conditions of the planet Mars /Die Oberflaechenverhaeltnisse des Planeten Mars/.  
17 p3029 A69-33040  
Extremes on Mars /Extrême auf Mars/.  
17 p3043 A69-34141
- HEUSINKVELD, M.**  
One-dimensional calculations on a finite-length MHD induction generator.  
13 p2206 A69-27494
- HEUSSER, G.**  
Radiation ages of chondrites.  
19 p3412 A69-36102
- HEVESH, A. H.**  
Cost of reliability improvement.  
18 p3231 A69-34485
- HEWENS, E. J.**  
The interpretation of topside sounder ionograms.  
20 p3529 A69-37863
- HEWISH, A.**  
Pulsing radio sources.  
12 p2160 A69-26895  
Radio investigation of the solar plasma.  
12 p2161 A69-26942
- HEWITT, J. R.**  
Numerical application of Szego's method for con-structing Liapunov functions.  
12 p2122 A69-26520
- HEWITT, L. W.**  
Ionization increases associated with the small solar proton events of 5 February 1965 and 16 July 1966.  
07 p1205 A69-18956
- HEWSON-BROWNE, R. C.**  
A new model for the magneto-hydrostatic cavity formed round a line dipole-line current combination in a plasma at uniform pressure.  
08 p1369 A69-20998
- HEY, J. S.**  
High power radar for ionospheric research.  
03 p0398 A69-13768
- HEYBORNE, R. L.**  
Latitudinal cutoff of VLF signals in the ionosphere.  
14 p2434 A69-28958  
Ion depletion in the high-latitude exosphere - Simul-taneousOGO 2 observations of the light ion trough and the VLF cutoff.  
18 p3187 A69-34939
- HEYDEGGER, H. R.**  
Zn super 65, nickel, copper, and zinc contents of the Bogou iron meteorite.  
23 p4209 A69-41321
- HEYDT, G.**  
Spectral parameters of the VLF radio noise observed as functions of the azimuth.  
01 p0033 A69-10971
- HEYER, R. E.**  
Carbon dioxide build-up characteristics in spacesuits.  
21 p3665 A69-39170
- HEYES, A. D.**  
A high-speed photographic investigation of the con-trolled fracture of conducting solids and the interrup-tion of electric current.  
12 p2113 A69-26195
- HEYKE, H. J.**  
The optical resonator as a Q meter /Der optische Resonator als Guetemesser/.  
08 p1312 A69-20106
- HEYM, A.**  
Measurement of electron density with the aid of an improved interferometer /Mesure de densite elec-tronique a l'aide d'un interferometre ameliore/.  
05 p0760 A69-15613
- HEYMAN, R. J.**  
Combustion in compressible mixing flows.  
[WSCI PAPER 68-28] 06 p0969 A69-17794
- HEYMANN, D.**  
Ages of calcium-rich achondrites. I - Eucrites.  
05 p0819 A69-15623  
Elements 112 to 119 - Were they present in meteorites/ques/.  
15 p2681 A69-30325  
Ages of the Ca-rich achondrites.  
19 p3413 A69-36107
- HEYMANN, P.**  
Effect of the electron distribution function on microwave emission and high-frequency conductivity of a weakly ionized discharge plasma /Der Einfluss der Elektronenverteilungsfunktion auf Mikrowellenemission und Hochfrequenzleitfaehigkeit eines schwach ionisierten Entladungsplasmas/.  
05 p0799 A69-15734
- HEYNATZ, J. T.**  
Flutter vibrations of sails fixed along one edge and of single-wing weather vanes in supersonic flows /Flat-terschwingungen einseitig befestigter Segel und ein-fluegeliger Windfahnen in Ueberschallstroemungen/.  
02 p0192 A69-12824  
Unsteady incident flow in a rotating pot, taking the bottom effect into account /Die instationaere Anlauf-stroemung in einem rotierenden Topf unter Beruecksichtigung des Bodeneinflusses/.  
03 p0414 A69-13019  
Ground effect in the case of accelerating and decelerating flow of viscous fluids in rotating cylinders /Der Bodeneinfluss bei Anlauf- und bei Brem-sstroemungen zaehrer Flussigkeiten in rotierenden Zylindergefaessen/.  
10 p1677 A69-22896
- HEYNSCH, B.**  
Telemetry transmitters and command receivers of AZUR, the first German research satellite /Telemetriesender und Kommandoempfaenger des ersten deutschen Forschungssatelliten AZUR/.  
16 p2759 A69-31854  
Equipment of the central station of the German ground station system /Gerate fuer die Zentralstation des deutschen Bodenstationssystems /Z-DBS//.  
16 p2759 A69-31856
- HEYNS, A. J.**  
Determinants of oxygen consumption and maximum oxygen intake of Bantu and Caucasian males.  
21 p3655 A69-38911



- HEYNS, A. J. A.  
Differential acclimatisation as a function of duration of exposure. 21 p3654 A69-38905
- HEYROTH, J. W.  
Space-ground link subsystem development and implementation in the Air Force Satellite Control Facility. 14 p2427 A69-28879
- HEYSON, H. H.  
Wind-tunnel wall effects at extreme force coefficients. 05 p0741 A69-15574  
The flow throughout a wind tunnel containing a rotor with a sharply deflected wake. 18 p3119 A69-35228
- HEYVAERTS, J.  
Pulsars as nonradial oscillators. 18 p3196 A69-34645
- HEYWOOD, J. B.  
Current distribution around a normal shock in an MHD duct. 11 p1931 A69-25359
- HIATT, E. P.  
Three-week exposure of rodents to a neon enriched atmosphere. 01 p0019 A69-11342
- HIBBERD, F.  
An investigation of the total electron content in the equatorial anomaly of East Africa. 23 p4160 A69-42434
- HIBBS, A. R.  
Surveyor results. 06 p1001 A69-17162
- HIBINO, M.  
Design of Chebyshev filters with flat group-delay characteristics. 08 p1299 A69-21169
- HIBNER, J.  
Lateral distribution of the muon component in the central region of extensive air showers. 15 p2677 A69-31481
- HIBSMAN, D. E.  
The systems effectiveness function - From a managerial point of view. 19 p3454 A69-36006
- HICKEN, E.  
Effect of an initial temperature varying over the cross section on the heat transfer in laminar tube flow /Der Einfluss einer ueber dem Querschnitt unterschiedlichen Anfangstemperatur auf den Waermeuebergang in laminar durchstroemten Roehren/. 12 p2189 A69-25762  
A simple approximate method for determining the heat transfer of fins in the case of temperature-dependent boundary conditions /Ein einfaches Naecherungsverfahren zur Ermittlung der Waermeuebertragung von Rippen bei temperaturabhaengigen Randbedingungen/. 12 p2190 A69-25763
- HICKEY, J. R.  
The calibration of multichannel radiometers for application in spacecraft and space simulation programs. 06 p0926 A69-17620  
The calibration of a satellite infrared spectrometer. 06 p0926 A69-17621  
The Eppley-JPL solar constant measurement program. 09 p1576 A69-21647
- HICKMAN, B. S.  
The formation of omega phase in titanium and zirconium alloys - A review. 18 p3155 A69-34634  
Omega phase precipitation in alloys of titanium with transition metals. 19 p3344 A69-35928
- HICKMAN, C. E.  
Circular arrays of tangential dipoles. 06 p0898 A69-17765
- HICKMAN, D. M.  
Physiological recording with dry electrodes. 21 p3666 A69-39441
- HICKMAN, G. D.  
Application of an airborne pulsed laser for near shore bathymetric measurements. 15 p2609 A69-30459
- HICKS, D. B.  
Primary electron detector experiment for OGO-E. [IEEE PAPER 3C-4] 07 p1135 A69-19198

- HICKS, J. J.  
Radar observations of a gravitational wave in clear air near the tropopause associated with CAT. 24 p4342 A69-42893
- HICKS, R. B.  
Removal of meteorological effects from meson-telescope data. 19 p3308 A69-35991  
Pronounced diurnal variation in cosmic-ray intensity as seen by inclined meson telescopes. 20 p3593 A69-38109  
Periodic solar time variations in the cosmic-ray muon component near sea level. 23 p4207 A69-42498
- HICKSON, V. M.  
Gas strain gauges for application to structures. 21 p3725 A69-39324  
Strain survey of an adhesive-bonded box beam. 21 p3844 A69-39325
- HIDAKA, T.  
Resonant emission of difference frequency due to optical mixing in active quantum system under laser oscillation. 07 p1144 A69-18470
- HIDAKA, Y.  
The induction period in shock-heated CO-O sub 2 mixtures. 16 p2877 A69-31768
- HIDALGO, H.  
High altitude aerodynamics and its effects on lifting reentry performance. 06 p0860 A69-17634
- HIDVEGHY, J.  
Influence of precipitation during the deformation process on static and dynamic tensile test results of the aluminum alloy D 16 /Vplyv precipitacie v procese deformacie na vysledky tahovej statickej a dynamickej skusky pri hlinikovej zliatine D 16/. 22 p3972 A69-41082
- HIEBLT, J.  
The ionosphere /L'ionosphere/. 02 p0242 A69-11903
- HIEKE, M.  
A plane inhomogeneous problem of thermoelasticity /Ueber ein ebenes inhomogenes Problem der Thermoelastizitaet/. 02 p0349 A69-12826  
A plane field of thermal stress of discontinuous inhomogeneity type /Ueber ein ebenes Temperaturspannungsfeld von diskontinuierlichem Inhomogenitaetstyp/. 10 p1793 A69-22884
- HIEU, V. H.  
Negative resistance converter using an operational amplifier /Convertisseur pour resistance negative utilisant un amplificateur operationnel/. 15 p2580 A69-31091
- HIERL, P.  
Direct mechanism of reaction CH sub 3 super plus plus x CH sub 4 yields C sub 2 H sub 5 super plus plus H sub 2. 24 p4280 A69-43814
- HIERONYMUS, W. S.  
Carbon composite program gains. 21 p3732 A69-38989
- HIESBOECK, H. G.  
Investigations on a quantitative mineralogical characterization of meteorites by modal analysis. 19 p3416 A69-36125
- HIESTER, N. K.  
Ablative characterization of seven heat shield materials - A review of the NASA-SRI Round-Robin program. 12 p2119 A69-26813
- HIEU, H.  
Turbulent detachment in an incompressible fluid on thick bodies /Decollement turbulent en fluide incompressible sur des corps epais/. 24 p4299 A69-42674
- HIGA, W.  
The ultra cone - An ultra-low-noise space communication ground radio-frequency system. [JPL-TR-32-1340] 02 p0220 A69-12429
- HIGA, W. H.  
Cryogenic applications in space communications. 17 p2921 A69-33685
- HIGASHIMURA, M.  
Development of ionospheric absorption associated with sudden stratospheric warmings. 24 p4306 A69-42680

- HIGASHINO, F.  
Character of hypersonic shock tunnels with real gas effects. II - Dissociational nonequilibrium flow through a converging-diverging nozzle. 22 p3927 A69-40588
- HIGDON, D. T.  
Reactor requirements for first generation thermionic nuclear electric propulsion. [AIAA PAPER 69-250] 09 p1539 A69-21258
- HIGGINBOTHAM, C. W.  
Band structure and optical constants of InSb, InAs and GaSb - The k-p method. 19 p3385 A69-36511
- HIGGINBOTHAM, R. E.  
Design of sensitivity-constrained optimal linear state regulator control systems. 04 p0582 A69-14944
- HIGGINS, C. S.  
Optical and radio observations of the flare star UV Ceti in Australasia during September-October 1967. 07 p1214 A69-18666
- HIGGINS, E. A.  
Effects of body thermal state on manual performance. 03 p0381 A69-14074
- HIGGINS, J. B.  
Preparation and properties of boron carbide continuous filaments. [ECS PAPER 210] 05 p0783 A69-16236
- HIGGINS, J. E.  
Solar-cycle variation of extreme ultraviolet radiation. 20 p3592 A69-38103
- HIGGINS, L. D.  
Collision integrals for high temperature gases. 01 p0124 A69-10929
- HIGGINS, R. W.  
The choice between one engine or two. 02 p0193 A69-12066  
The choice between one engine or two for tactical strike/close support aircraft. 19 p3248 A69-36858
- HIGGINS, T. J.  
Nonlinear analysis of transistor networks by Kron's mesh approach. 09 p1471 A69-21632  
Analysis of periodically-responding nonlinear systems by methods stemming from the calculus of variations. 09 p1474 A69-22448
- HIGGINS, T. P.  
The department of defense Selenodetic Control System and the force function of the moon. 14 p2527 A69-29942  
Volume integrals of the products of spherical harmonics and their application to viscous dissipation phenomena in fluids. 14 p2487 A69-29980
- HIGGINS, V. J.  
Gallium arsenide IMPATT diodes. 20 p3504 A69-36914
- HIGGINS, W. T., JR.  
A comparison of conventional and tracking filter systems for launch vehicle stabilization. [AIAA PAPER 69-874] 21 p3823 A69-39400
- HIGGINSON, F. D.  
A printed wiring technique for use with strain gauge rosettes. 02 p0250 A69-12231
- HIGGS, A. J.  
The Doppler effect in radio astronomy. 16 p2853 A69-31565
- HIGGS, L. A.  
Further observations of the gamma-Cygni radio source. 08 p1387 A69-20090
- HIGH, R. W.  
The Saturn fireball. 04 p0645 A69-14475
- HIGHLEY, F. M., JR.  
Air-to-air recovery of re-entry vehicles. [AIAA PAPER 68-1163] 03 p0520 A69-13563
- HIGHTOWER, J. D.  
Experimental studies relating to the combustion mechanism of composite propellants. 03 p0532 A69-13007

- HIGUCHI, M.**  
Photographic observations on fatigue fracture of polycarbonate. 06 p0946 A69-17205  
Stiffness increase associated with fatigue of polycarbonate. 06 p0946 A69-17206  
Heat generation in polycarbonate due to pulsating tensile load. 18 p3163 A69-35498
- HILADO, C. J.**  
Flammability Handbook for Plastics. 04 p0620 A69-14952
- HILBERG, W.**  
Elementary treatment of the coupling of pulses and sine waves between parallel lines /Elementare Behandlung der Ueberkopplung von Impulsen und Sinuswellen zwischen parallelen Leitungen/. 19 p3266 A69-35768
- HILBISH, R. T.**  
Frequency conversion in the sheath capacitance of a glow discharge plasma. 04 p0634 A69-14456
- HILBORN, C. G., JR.**  
Optimal estimation in the presence of unknown parameters. 06 p0901 A69-17362  
Optimal estimation in the presence of unknown parameters. 11 p1858 A69-24935
- HILBURN, J. L.**  
Circular arrays of tangential dipoles. 06 p0898 A69-17765
- HILDEBRAND, B. P.**  
Holography by scanning. 07 p1136 A69-19640
- HILDEBRANDT, A.**  
Square wave generator for the power supply of a junction laser /Generator impulsow prostokatnych do zasilania lasera zlaczowego/. 13 p2274 A69-28643
- HILDEBRANDT, A. F.**  
Entrainment of second sound in steady-state counter-flowing normal and superfluid helium II. 13 p2297 A69-27460
- HILDENBRAND, D. L.**  
Dissociation energy and ionization potential of silicon monoxide. 22 p3896 A69-40725
- HILKER, J.**  
Compression effects on transformers, relays, and other piece parts in an encapsulated structure - Lunar module signal conditioner. 22 p3910 A69-39953
- HILL, B.**  
Electrooptical resonance modulation in the microwave region /Elektrooptische Resonanzmodulation im Mikrowellenbereich/. 19 p3266 A69-35763
- HILL, C. D.**  
On the numerical solution of degenerate elliptic-parabolic equations. 10 p1719 A69-23517
- HILL, D. E.**  
Free-carrier and exciton recombination radiation in GaAs. 01 p0140 A69-11253
- HILL, E. R.**  
A continuum survey of the Southern Milky Way at 1410 MHz. 07 p1214 A69-18667  
Radio emission from 16 possible supernova remnants. 17 p3035 A69-33610
- HILL, F. K.**  
Spectroscopic determination of high velocity flow field static temperatures. 19 p3294 A69-35752
- HILL, G. F.**  
Uniformity of proton beams available at the NASA synchrocyclotron /SREL/. 05 p0742 A69-15992  
Uniformity of proton beams available at the NASA synchrocyclotron /SREL/. 16 p2814 A69-32201
- HILL, G. S.**  
Economics of air operations as affected by current transport aircraft design trends. 17 p3077 A69-34205
- HILL, H.**  
Observations of polar faculae. 12 p2160 A69-26897
- HILL, H. W.**  
A compatible satellite meteorological data collection system. [AIAA PAPER 68-1095] 21 p3819 A69-39029
- HILL, J. A. F.**  
Photometric measurements of turbulence in a hypersonic wake. [AIAA PAPER 69-70] 06 p0864 A69-18158  
Rarefaction in underexpanded flows. 23 p4152 A69-41920
- HILL, J. C.**  
A-7 Corsair II status report - Fleet introduction and combat operations. 06 p0867 A69-17660  
Equations for errors in turbulence measurements with inclined hot wires. 18 p3134 A69-34442
- HILL, J. E.**  
S-band antenna systems for missiles. 23 p4137 A69-41753
- HILL, J. G.**  
Dynamic behaviour of a gas under the impact of radiation. 19 p3449 A69-36355
- HILL, J. L.**  
Dynamic stresses in a case-bonded cylinder due to transient angular accelerations. 13 p2364 A69-28209
- HILL, J. M.**  
The facile isolation of a structural phospholipoprotein from *Hydrogenomonas facilis* and *Neurospora crassa*. 22 p3871 A69-40049
- HILL, J. W.**  
Non-contact method of measuring small eye movements and stabilizing the retinal image. 09 p1446 A69-21908  
A laser photographic system for aeroballistic range photography. 19 p3306 A69-35732
- HILL, P. R.**  
Multimegawatt thermionic reactor systems for space applications. 14 p2480 A69-29183  
Theory of thermionic converter operation with applications to thermionic reactor analysis. 14 p2400 A69-29222
- HILL, R. A.**  
Rapid scan spectrometers for the diagnostics of transient plasmas. 01 p0082 A69-10838  
Spectral temperatures of nonuniform plasmas. 09 p1552 A69-22251
- HILL, R. D.**  
Saturn V longitudinal oscillation /POGO/ solution. [AIAA PAPER 69-548] 16 p2868 A69-32658  
Excitation of extremely low frequency sferics. 23 p4115 A69-41562
- HILL, R. J.**  
Vibration and strain analysis by means of holography. 17 p2974 A69-33351  
Vibration and strain analysis by means of holography. 22 p4040 A69-39960
- HILL, R. W.**  
X-ray airglow in the daytime sky. 02 p0307 A69-12022  
The soft X-ray spectrum of SCO XR-1. 02 p0309 A69-12711  
A search for soft X-rays from the Galaxy. 07 p1204 A69-18599
- HILL, V. G.**  
Subsolidus stability relations in the system KTaO sub 3 - KNbO sub 3. 08 p1332 A69-20373
- HILL, W. G., JR.**  
Initial development of turbulent, compressible free shear layers. [ASME PAPER 68-WA/FE-21] 05 p0749 A69-16097  
Initial development of turbulent, compressible free shear layers. [ASME PAPER 68-WA/FE-21] 14 p2430 A69-29443
- HILLAIRET, J.**  
Migration and precipitation of vacancies in quenched magnesium. 02 p0267 A69-12187
- HILLE, S. J.**  
A plan for the efficient use of Washington's area airports. 22 p4053 A69-40709
- HILLEARY, D. T.**  
The calibration of a satellite infrared spectrometer. 06 p0926 A69-17621
- HILLENKAMP, F.**  
On the calibration of laser-cone calorimeters. 01 p0079 A69-10220  
Influence of interference fringes of equal inclination on the reflection of laser beams from plane parallel plates. 11 p1896 A69-24840
- HILLER, H.**  
Use of the moon's attraction to accelerate a spacecraft to hyperbolic flight. 09 p1593 A69-21620
- HILLER, M.**  
Damping criteria for gravity-stabilized satellites /Daempfungskriterien fuer gravitationsstabilisierte Satelliten/. 10 p1791 A69-22921  
Damping criteria for gravity-gradient stabilized satellites /Criteres d'amortissement pour satellites stabilises par gradient de gravite/. 17 p3047 A69-33230
- HILLER, W.**  
High-frequency interferometry as a basis for statistical-numerical oscillation analyses of unsteady, plane transonic flow /Hochfrequenzinterferometrie als Grundlage statistisch-numerischer Schwingungs-analyse bei instationaeren, ebenen, transsonischen Stroemungen/. 12 p2089 A69-26188
- HILLESLAND, H. L.**  
Fabrication of a dispenser for an eight satellite payload. 09 p1512 A69-22369
- HILLESTAD, R. J.**  
Computer modeling of the human systemic arterial tree. 07 p1072 A69-19727
- HILLIARD, J. E.**  
On the measurement of the orientation distribution of lineal and areal arrays. 14 p2470 A69-29363
- HILLIER, M.**  
Development and potentialities of gas lasers. 22 p3961 A69-40242
- HILLIER, R. R.**  
A sky-scan for discrete sources of gamma-rays in the energy region 240 to 1000 kev. 11 p1946 A69-24593  
Attempt to detect X-ray pulses from the Crab Nebula. 12 p2149 A69-26226
- HILLJE, E. R.**  
Status of the aerodynamic characteristics of the Apollo entry configuration. [AIAA PAPER 68-1143] 03 p0519 A69-13556
- HILLMANN, H.**  
Influence of structure on the superconductivity properties of NbTi 50 and NbTi 65 /Der Einfluss der Struktur auf die Supraleitungseigenschaften von NbTi 50 und NbTi 65/. 02 p0269 A69-12763  
Technology of hard superconductors /Technologie der harten Supraleiter/. 12 p2103 A69-27120
- HILLS, F. A.**  
Computer-generated graphics in aerospace design and analysis. [ASME PAPER 69-DE-27] 14 p2454 A69-28854
- HILLSMAN, M. J.**  
Interaction of high-powered focused laser beam with exploding wire. 01 p0090 A69-10666
- HILLYARD, L. A.**  
Intermediary metabolism in hypothermic rat livers. 10 p1642 A69-23119
- HILSDEN, F. J.**  
Gunn-diode operation at Q band frequencies. 02 p0297 A69-11944



## HILSENDAGER, D.

The structure of complex physical performance.  
18 p3098 A69-35085

## HILSUM, C.

The variation of energy gap with composition in In sub x Ga sub 1-P mixed crystals.  
19 p3390 A69-36553

## HILT, D. E.

Improvement of astronomical constants and ephemerides from Pioneer radio-tracking data.  
[AAS PAPER 68-130] 20 p3595 A69-37179

## HILTNER, W. A.

Simultaneous observations of the optical and X-ray spectra of Sco XR-1.  
07 p1220 A69-19391

A spectroscopic study of the association Scorpius OB 1.  
15 p2692 A69-30771

Further simultaneous observations of the optical and X-ray spectra of Sco X-1.  
15 p2676 A69-30885

X-ray sources.  
18 p3193 A69-34364

MK spectral types for bright southern OB stars.  
20 p3612 A69-38161

## HIMES, R. H.

Ferredoxin from two thermophilic Clostridia.  
22 p3897 A69-41068

## HIMMEL, N. S.

Loading devices designed for giant jets.  
20 p3511 A69-37916

## HIMMLER, C. R.

Comparative performances of servo valves with fluidic and electrical inputs.  
19 p3255 A69-36711

## HIMORI, A.

Theoretical and experimental investigations of a propeller working at static condition.  
02 p0188 A69-11957

Theoretical and experimental investigations of a propeller working at static condition.  
06 p0857 A69-17194

## HIMY, A.

Performance with stable separators.  
10 p1640 A69-23996

## HINADA, M.

Experimental study on the drag of blunt bodies of revolution at hypersonic speeds.  
09 p1433 A69-22568

## HINATA, T.

Reflection of electromagnetic waves at the boundary surface between media moving relative to each other and parallel to both the boundary plane of incidence.  
15 p2568 A69-30796

Design of optimum signal for energy detection.  
18 p3104 A69-35484

## HINCHEY, F. A.

On the finite range Wiener-Hopf equation.  
23 p4181 A69-41608

## HINCKLEY, G. F. S.

Advanced recruiting and training methods.  
22 p4054 A69-41148

## HIND, E. C.

Analysis of proportional fluid amplifiers in cascade and with feedback.  
24 p4255 A69-43268

## HINDERER, J. H.

Identification of a class of nonlinear control systems.  
[ASME PAPER 68-WA/AUT-19] 05 p0738 A69-16173

## HINDERMAN, J. D.

An ATS-E solar cell space radiator utilizing heat pipes.  
[AIAA PAPER 69-630] 17 p3072 A69-33277

Determination of properties of capillary media useful in heat pipe design.  
[ASME PAPER 69-HT-18] 24 p4412 A69-43548

## HINDLEY, K.

Unraveling the Milky Way.  
08 p1387 A69-20136

Portrait of a planet.  
19 p3401 A69-35840

## HINDLEY, K. B.

The 11 Canis Minorid meteor stream.  
08 p1394 A69-20621

## HINDMARSH, W. R.

The interpretation of the wing of the solar line H alpha.  
08 p1390 A69-20394

## HINDS, J. J.

Use of superconducting cavities to resolve carrier trapping effects in CdS.  
17 p3016 A69-33782

## HINE, A.

Magnetic Compasses and Magnetometers.  
08 p1315 A69-20444

## HINE, C. H.

Clinical toxicologic studies on Freon R FE 1301.  
18 p3098 A69-35061

## HINE, R. J.

Measurement of the relaxation frequency of the asymmetric stretching mode of carbon dioxide.  
11 p1922 A69-25128

## HINES, J.

Short-term frequency stability of the HCN maser.  
24 p4327 A69-42614

## HINES, M. E.

FM noise suppression of an injection phase-locked oscillator.  
02 p0220 A69-12450

## HINKLE, D. K.

Histologic changes in rat skin after 13 Mev proton irradiation.  
14 p2407 A69-29299

## HINKLEY, E. D.

Direct observation of the Lorentzian line shape as limited by quantum phase noise in a laser above threshold.  
21 p3734 A69-38326

## HINNOV, E.

Plasma diagnostics with ionized barium and tunable dye lasers.  
22 p3962 A69-40532

## HINRICHS, P. R.

GO/NO-GO logic synthesis.  
11 p1843 A69-25078

## HINSON, B. L.

Inlet development for the L-500.  
[AIAA PAPER 69-448] 16 p2733 A69-32684

## HINTENBERGER, H.

Rare gases in the iron and in the inclusions of the Campo del Cielo Meteorite, El Taco.  
19 p3419 A69-36140

## HINTEREGGER, H. E.

Solar extreme ultraviolet emissions in the range 260-1300 angstrom units observed from OSO-III.  
09 p1578 A69-22168

Solar-cycle variation of extreme ultraviolet radiation.  
20 p3592 A69-38103

## HINTON, B. B.

A sweeping neutral and positive ion mass spectrometer for atmospheric composition at satellite altitudes.  
19 p3314 A69-36681

## HINTON, J. H.

Management training for executive development.  
11 p2005 A69-25305

## HINTON, L. J. T.

A broad-band multi-beam array.  
08 p1288 A69-20965

## HINTRINGER, O.

He-Ne laser for optical correction and guide-beam techniques /He-Ne Laser fuer optische Justier- und Leitstrahlverfahren/.  
07 p1146 A69-18484

## HINTZ, E.

Experimental results on the generation and structure of collisionless shockwaves.  
17 p3013 A69-33819

## HINTZ, E. A.

Collisionless shock waves and turbulent heating in high voltage theta pinches.  
17 p3013 A69-33825

## HINTZ, J.

Materials for a minimum cost space launch vehicle.  
12 p2175 A69-26844

## HINZPETER, G.

The relationship between moving striations and ion acoustic waves /Zum Zusammenhang zwischen laufenden Schichten und Ionenschallwellen/.  
14 p2494 A69-29695

## HIOKI, R.

Stereo-radiography using holographic techniques.  
08 p1313 A69-20179

## HIORTH, N.

Descent speed, lift/drag ratio, and wing load - An approximation formula for the calculation of descent speed and lift/drag ratio /Sinkgeschwindigkeit, Gleitzahl und Flaeichenbelastung - Eine Naerungsformel zur Berechnung von Sinkgeschwindigkeit und Gleitzahl/.  
10 p1633 A69-22873

Range and flight economy of motor gliders /Reichweite und Flugoeconomie von Motorseglern/.  
24 p4253 A69-43142

## HIPPI, J. E.

Propagation in the earth's atmosphere.  
11 p1837 A69-25003

## HIRABAYASHI, H.

Galactic background at 4 GHz.  
18 p3200 A69-34996

## HIRAI, K.

Stability of nonlinear multivariable control systems with time lags by Lyapunov's direct method.  
12 p2048 A69-26079

## HIRAI, M.

Spectral analysis of a peculiar carbon star, WZ Cassiopeiae.  
18 p3204 A69-35350

## HIRAL, T.

Siliconated pyrolytic graphite. III - Structural features. IV - Electrical resistivity.  
24 p4335 A69-42926

## HIRAKAWA, K.

Fundamental investigations of fretting fatigue. I - On the relative slip amplitude of press-fitted axle assemblies.  
01 p0167 A69-10305

Fundamental investigations of fretting fatigue. III - Some phenomena and mechanisms of surface cracks.  
20 p3563 A69-38110

Fundamental investigations of fretting fatigue. IV - The effect of mean stress.  
20 p3563 A69-38111

Fundamental investigations of fretting fatigue. V.  
24 p4404 A69-43628

## HIRAMOTO, T.

Experimental study on MHD generators with segmented electrodes at high Hall parameters.  
10 p1637 A69-23476

Rates of total and local radiative energy losses in nonequilibrium plasmas.  
13 p2305 A69-27374

## HIRANO, J.

Applications of lasers in communications.  
09 p1456 A69-22131

Multiple mode locking of lasers.  
17 p2980 A69-32957

## HIRANO, K.

Matrix representations of noise figures and noise figure charts in terms of power wave variables.  
02 p0211 A69-12444

Experimental study of penetration of a high-velocity plasma into a cusped field.  
05 p0805 A69-16655

## HIRANO, Y.

Axisymmetric vibrations of thin drums.  
20 p3629 A69-38114

On a study of vibrations of cylindrical shells - Lagrangian based on the Fluegge's equation.  
22 p4039 A69-39924

## HIRAO, K.

Electron temperature probe.  
05 p0761 A69-15701

Rocket observation of the ionosphere in twilight conditions.  
21 p3702 A69-38355

## HIRAO, Y.

The abundances of arsenic, tin and antimony in chondritic meteorites.  
13 p2344 A69-27630

## HIRAOKA, K.

Experiments on supersonic panel flutter.  
17 p3051 A69-32923

Influence of shearing force and shear buckling deformation on supersonic panel flutter of simply supported rectangular plates.  
24 p4400 A69-43055

- HIRAOKA, M.**  
A variational principle for transport phenomena. II - Applications to several problems.  
15 p2716 A69-30022
- HIRASAKI, G. J.**  
A general formulation of the boundary conditions on the vector potential in three-dimensional hydrodynamics.  
01 p0058 A69-10228
- HIRASAWA, K.**  
Array design for a specified pattern by matrix methods.  
20 p3507 A69-37847
- HIRASAWA, T.**  
Ionospheric effect on geomagnetic micropulsations at low latitudes.  
14 p2441 A69-29380  
Formation of galaxies from hydrogen gas.  
15 p2680 A69-30204
- HIRAYAMA, H.**  
Waveform degradation of trapezoidal pulses due to band limitation.  
05 p0719 A69-16296
- HIRAYAMA, T.**  
Occultation of BD -17 deg 4388 by Neptune on 7 April 1968. I - Observations and the determination of a preliminary value for the radius of Neptune.  
06 p1007 A69-17693
- HIROE, S.**  
Excitation of electron cyclotron harmonic waves in plasmas.  
01 p0127 A69-10335
- HIROSAWA, H.**  
Plasma generation by laser beam irradiation on a single solidified gas particle.  
24 p4354 A69-42645
- HIROSE, H.**  
Present status of researches on satellite triangulation in Japan.  
[UN PAPER 68-95285] 01 p0064 A69-10475
- HIROSHIGE, Y.**  
One-dimensional free expansion of a collisionless plasma.  
16 p2819 A69-31685
- HIROTA, M.**  
X-ray studies on the reaction product formed in the metallized layer-ceramic interface of metal-to-ceramic seal.  
08 p1320 A69-20375  
Mechanisms of Mo-Mn-Ti metallizing and Cu brazing in metal-to-ceramic seals.  
21 p3733 A69-39599
- HIRSCH, A. E.**  
The tolerance of man to impact.  
04 p0552 A69-14469
- HIRSCH, C.**  
Magnetohydrodynamic flow in a channel of square cross section in the presence of a transverse magnetic field - Case where the walls parallel to the magnetic field are conducting /Ecoulement magnétohydrodynamique en tube de section carrée en présence d'un champ magnétique transversal - Cas où les parois parallèles au champ magnétique sont conductrices/.  
05 p0799 A69-15697
- HIRSCH, H.**  
Splitting of an EPR line by intense optical pumping in a ruby /Aufspaltung einer EPR-Linie durch intensives optisches Pumpen beim Rubin/.  
21 p3735 A69-38582
- HIRSCH, P. B.**  
Dislocation structures in deformed single crystals and work-hardening theories.  
05 p0778 A69-15754
- HIRSCH, P. M.**  
The kinoform - A new wavefront reconstruction device.  
10 p1697 A69-23867
- HIRSCH, R.**  
Method of calculation of streamlined rotors used at Nord-Aviation /Methodes de calcul des rotors carènes employés à Nord-Aviation/.  
08 p1252 A69-20655  
Turbulent boundary layer of a flat plate and Navier-Stokes equations /La couche limite turbulente d'une plaque plane et les équations de Navier-Stokes/.  
13 p2251 A69-28632
- HIRSCH, R. H.**  
Nonlinear and collisional effects on Landau damping.  
01 p0133 A69-11215
- HIRSCH, R. L.**  
Experimental studies of a deep, negative, electrostatic potential well in spherical geometry.  
03 p0475 A69-13153
- HIRSCH, S. N.**  
Project Fire Scan - Summary of 5 years' progress in airborne infrared fire detection.  
12 p2193 A69-26994
- HIRSCH, W. M.**  
Cannibalization in multicomponent systems and the theory of reliability.  
01 p0086 A69-10651
- HIRSCHEL, E. H.**  
Normal injection in a three-dimensional laminar boundary layer.  
[DVL-902] 09 p1482 A69-21971  
Numerical stability of three-dimensional boundary layer solutions /Numerische Stabilität dreidimensionaler Grenzschichtlösungen/.  
10 p1631 A69-22902
- HIRSCHFELD, R. A.**  
Linear integrated circuits in communication systems.  
01 p0035 A69-11389
- HIRSCHFELDER, J. O.**  
Comment on approximate molecular orbitals. III.  
01 p0123 A69-10547  
Separation of rotational coordinates from the n-electron diatomic Schroedinger equation.  
04 p0554 A69-14861  
On the modification of exchange perturbation theories.  
07 p1184 A69-18288  
Exchange and Coulomb energy of H sub 2 determined by various perturbation methods.  
07 p1186 A69-19446  
Extending the domain of the Laplacian operator with the use of delta functions.  
07 p1174 A69-19495  
Summary of exchange perturbation calculations for H sub 2 at large separations.  
17 p3009 A69-34170
- HIRSH, M. N.**  
Ionization and attachment in O sub 2 and airlike N sub 2 -O sub 2 mixtures irradiated by 1.5-Mev electrons.  
13 p2302 A69-27456
- HIRSHBERG, J.**  
Interplanetary field and geomagnetic variations - A unified view.  
16 p2862 A69-32309
- HIRTH, A.**  
Realization of a single-mode ruby laser and applications to the holography of ultrahigh-speed phenomena /Realisation d'un laser à rubis monomode et applications à l'holographie des phénomènes ultra-rapides/.  
13 p2262 A69-27980
- HIRTH, J. P.**  
Work Hardening, American Institute of Mining, Metallurgical and Petroleum Engineers, Symposium, Chicago, Ill., November 1, 2, 1966, Proceedings.  
05 p0777 A69-15752
- HIRTH, W.**  
Period distribution of pulsars.  
18 p3201 A69-35203
- HISLOP, J. D.**  
Flaw size evaluation in immersed ultrasonic testing.  
19 p3323 A69-35578
- HISSEN, H.**  
The design of radar signals /Zur Dimensionierung von Radarsignalen/.  
20 p3496 A69-37904
- HISTAND, M. B.**  
Dispersion and attenuation of small artificial pressure waves in the canine aorta.  
04 p0553 A69-14692
- HITCHCOCK, N. S.**  
A data acquisition and processing system for mass producing topside ionograms.  
20 p3503 A69-37860
- HITCHIN, D.**  
The Delphi technique - Implementation in the corporate environment.  
01 p0180 A69-11250
- HITT, E. F.**  
Evaluation of strapdown guidance systems on interplanetary missions.  
[AIAA PAPER 68-828] 19 p3370 A69-35953  
Astrionics selection and operation on interplanetary missions.  
[AIAA PAPER 69-882] 21 p3764 A69-39408
- HITT, J. D.**  
Effect of vibration on the operation of decimal input devices.  
17 p2916 A69-34010
- HITZ, L.**  
Discrete positive-real functions and their application to system stability.  
05 p0739 A69-16349
- HITZL, D. L.**  
Nonlinear attitude motion near resonance.  
[AAS PAPER 68-124] 20 p3616 A69-37178  
Resonant and non-resonant gravity-gradient perturbations of a tumbling tri-axial satellite.  
[AIAA PAPER 69-922] 21 p3821 A69-39353
- HIVELY, J. W.**  
Circuit design for minimum thermal effects.  
06 p0894 A69-17217
- HIVERT, A.**  
Preparation of refractory alloys in powders, fibers, and sintered billets by a thermochemical method /Elaboration d'alliages réfractaires en poudres, en fibres et en billettes frittées par voie thermochimique/.  
[ONERA TP-636] 02 p0251 A69-11625  
Some essential aspects of the strengthening of metals by a ceramic phase /Quelques aspects essentiels du renforcement des métaux par une phase céramique/.  
[ONERA TP-661] 16 p2802 A69-32204
- HIZA, M. J.**  
Adsorption kinetics in a ternary system containing hydrogen.  
[NAS-NRC PAPER H-4] 22 p3981 A69-40629  
A multipurpose phase equilibrium apparatus to study mixtures of cryogenic fluids - Applications to argon methane.  
[NAS-NRC PAPER H-3] 22 p3947 A69-40630
- HJELLMING, R. M.**  
Intensities of radio recombination lines.  
14 p2517 A69-29088  
Properties of interstellar clouds and the intercloud medium.  
17 p3038 A69-33726  
A theoretical analysis of methods of interpreting radio-line data from H II regions.  
22 p4025 A69-40645  
The low energy cosmic ray spectrum.  
24 p4365 A69-42608
- HLACHOVA, P.**  
An attempt at mathematical description of the spiral structure of cloudiness in the occluded cyclone on the basis of the solution of omega-equation.  
[UN PAPER 68-95429] 01 p0109 A69-10505
- HLASNÍK, I.**  
Transition of a homogeneous type II superconductor cylinder under the influence of axial current.  
08 p1371 A69-20202
- HLASTALA, M. P.**  
Influence of bubble size and blood perfusion on absorption of gas bubbles in tissues.  
21 p3651 A69-38389
- HLAVACEK, I.**  
Variational principles for parabolic equations.  
22 p3974 A69-40231
- HLAWICZKA, P.**  
Generalized critical-state model of type II superconductors.  
02 p0298 A69-12030  
Surface structure and A.C. losses in superconductive niobium.  
02 p0298 A69-12031
- HO, J. T.**  
Divergences of the magnetic properties of CrBr sub 3 near the critical point.  
15 p2668 A69-30686
- HO, P. Y.**  
Dynamics of bag-type breakup of droplets in various flow fields.  
[AIAA PAPER 69-669] 17 p2954 A69-33456
- HO, T. L.**  
Propagation of the fourth-order coherence function in a random medium /a non-perturbative formulation/.  
10 p1724 A69-23042



- Log-amplitude fluctuations of laser beam in a turbulent atmosphere. 14 p2460 A69-29638
- HO, W.**  
Pressure-induced microwave absorption in N sub 2. 03 p0472 A69-13317
- HO, Y. C.**  
Nonzero-sum differential games. 15 p2645 A69-31237  
Further properties of nonzero-sum differential games. 17 p2943 A69-32834
- HO, Y.-C.**  
Detection of changes in the characteristics of a Gauss-Markov process. 01 p0083 A69-11002  
On pattern classification algorithms - Introduction and survey. 05 p0725 A69-16571  
On pattern classification algorithms - Introduction and survey. 11 p1843 A69-25445
- HOAG, D. G.**  
Apollo navigation, guidance, and control systems - A progress report. 19 p3369 A69-35799
- HOAGLAND, J. C.**  
Decade forecasting methodology based on information progression. [AAS PAPER 69-409] 24 p4417 A69-42803
- HOAK, D. E.**  
Stability derivative estimation at subsonic speeds. 05 p0700 A69-15545
- HOANG BINH, D.**  
Influence of dielectronic recombination on the radio recombination lines of carbon. 13 p2346 A69-27703
- HOANG-BINH, D.**  
Radio recombination lines - Populations of highly excited states of hydrogen. 06 p1010 A69-17970
- HOBART, J. L.**  
New high-power stable modes of operation of the argon laser. 05 p0773 A69-16292
- HOBBIE, D.**  
Instrumental innovations in the orthoprojector Gigas-Zeiss /Instrumentelle Neuerungen am Orthoprojektor Gigas-Zeiss/. 22 p3951 A69-41247
- HOBBS, L. M.**  
Interferometric studies of interstellar sodium lines. 20 p3611 A69-38148  
The profiles of the interstellar sodium D-lines. 20 p3611 A69-38149
- HOBBS, P. V.**  
An automatic cloud condensation nuclei counter. 09 p1494 A69-21640
- HOBBS, R. W.**  
Variability of the linear polarization of 3C 120 and 3C 279. 02 p0325 A69-12592  
Linear polarization of radio sources at 2.07-centimeter wavelength. 02 p0326 A69-12705  
The flux density of Taurus A at 4.3-mm wavelength. 09 p1591 A69-21450  
Observations of variable radio sources at 9.55-millimeter wavelength. 13 p2334 A69-27309  
Observations of radio sources at 4.3-mm wavelength. 22 p4014 A69-40126
- HOBBS, W. E.**  
7-exo-bromo-2-oxabicyclo[4.1.0]hept-7-yl lithium. 07 p1074 A69-19479
- HOBSON, R. M.**  
Initial ionization rates and collision cross sections in shock-heated argon. 01 p0132 A69-11206
- HOCH, R.**  
Concept and characteristics of the Concorde exhaust noise suppressor. [AIAA PAPER 67-391] 12 p2148 A69-26759  
French research on turbojet noise /Recherches francaises sur le bruit des turboreacteurs/. 13 p2325 A69-28589
- HOCHANADEL, C. J.**  
Pulse radiolysis of NO - Production of NO sub 2 and N sub 2 O sub 3 and the production and relaxation of vibrationally excited NO. 14 p2410 A69-29928
- HOCHHEID, B.**  
Kinetic study of the transformations of the titanium alloy TA 6 V under isothermal conditions /Etude cinetique des transformations de l'alliage de titane TA 6 V en conditions isothermes/. 16 p2802 A69-32180
- HOCHHEISER, R. M.**  
Some fan engine noise design considerations. [AIAA PAPER 69-491] 16 p2839 A69-32667
- HOCHSTADT, H.**  
Plane wave scattering from modulated corrugated structures. 01 p0033 A69-10973  
The distribution of eigenvalues of ordinary differential operators. 17 p2995 A69-33404
- HOCHSTEIN, L. I.**  
Factors affecting the cation requirement of a halophilic NADH dehydrogenase. 10 p1651 A69-23127
- HOCHSTIM, A. R.**  
Kinetic Processes in Gases and Plasmas. 23 p4193 A69-41511  
Calculations of transport coefficients in ionized gases. 23 p4195 A69-41517
- HOCHULI, U. E.**  
Display of 8521-angstrom line of cesium utilizing a swept GaAs laser. 19 p3339 A69-36696
- HOCK, F.**  
Multivariable and feedforward control by means of self-adaptive models /Stoergroessenkompensation und Mehrfachregelung mit Hilfe adaptiver Modelle/. 12 p2046 A69-26063
- HOCKENBURY, R. W.**  
Neutron radiative capture and transmission measurements of W and Zr isotopes in the kev region. 18 p3175 A69-34314
- HOCKER, L. O.**  
Accurate laser wavelength measurements in the infrared and far infrared using a Michelson interferometer. 17 p3006 A69-33405  
Extension of absolute frequency measurements to the 84 mu range. 17 p2982 A69-33406
- HOCKEY, M. S.**  
Spectrophotometric observations of the magnetic variable HD 125248. 11 p1963 A69-25264
- HOCKHAM, G. A.**  
Solution of an optical communication dielectric waveguide problem. 17 p2930 A69-33892
- HOCKING, J. S.**  
Boron-epoxy systems in action. 09 p1529 A69-22068
- HOCKLEY, B. S.**  
Vibration and strain analysis by means of holography. 17 p2974 A69-33351  
Vibration and strain analysis by means of holography. 22 p4040 A69-39960
- HOCKNEY, R. W.**  
Gravitational experiments with a cylindrical galaxy. 02 p0322 A69-12271  
Galactic experiments with differential rotation. 07 p1216 A69-19204
- HODARA, H.**  
Radiation characteristics of a cavity-backed cylindrical gap antenna. 22 p3914 A69-40698
- HODAREV, I. U. K.**  
Discrete control system simulation method for spacecraft. 20 p3502 A69-37393
- HODGE, D. C.**  
Hazardous exposure to impulse noise. 07 p1066 A69-19171
- HODGE, P. G., JR.**  
Numerical methods for the limit analysis of plates. [ASME PAPER 68-WA/APM-21] 04 p0670 A69-144050
- Elastic-plastic torsion of hollow bars by quadratic programming. 06 p1023 A69-173700
- Quadratic programming and plasticity. 18 p3218 A69-34661
- HODGE, P. W.**  
Studies of particles for extraterrestrial origin. VI - Comparisons of previous influx estimates and present satellite flux data. 04 p0654 A69-146555  
Upper limits to the micron and submicron particle flux at satellite altitudes. 07 p1215 A69-18841  
The radial distribution of H II regions in spiral galaxies. 08 p1384 A69-20052  
Studies of the Large Magellanic Cloud. X. 14 p2526 A69-29853  
Distribution of H II regions in irregular galaxies. 18 p3190 A69-34289  
The structure of dwarf elliptical galaxies of the local group. 18 p3194 A69-34424  
A new and unusual variable star in the Large Magellanic Cloud. 19 p3403 A69-35965  
A semiempirical estimate of the micrometeorite flux at the earth's surface and its implications. 20 p3614 A69-38251  
Meteor physics and the density of particles satellite and balloon altitudes. 21 p3701 A69-38342  
H II regions in twenty nearby galaxies. 22 p4015 A69-40153
- HODGES, E. B.**  
Studies of high-power CW and quasi-CW parametric UV generation by ADP and KDP in an argon-ion laser cavity. [IEEE PAPER B-1] 05 p0773 A69-16308
- HODGES, J. D., JR.**  
The prime technical information source - The local work environment. 02 p0204 A69-12219
- HODGES, R. R., JR.**  
Lateral transport in planetary exospheres. 03 p0515 A69-14010  
Radiative decay in carbon dioxide. 07 p1215 A69-18843  
Ion pair annihilation by aerosols in the lower ionosphere. 14 p2434 A69-28941  
Eddy diffusion coefficients due to instabilities in internal gravity waves. 20 p3534 A69-38090
- HODGSON, G. W.**  
Porphyrins in meteorites - Metal complexes in Orgueil, Murray, Cold Bokkeveld, and Mokoia carbonaceous chondrites. 22 p4008 A69-39889  
Trace porphyrin complexes - Fluorescence detection by demetalation with methanesulfonic acid. 24 p4279 A69-42557
- HODGSON, J. P.**  
Measurement of the relaxation frequency of the asymmetric stretching mode of carbon dioxide. 11 p1922 A69-25128
- HODGSON, J. W.**  
Visco-type gas sealing. [ASLE FICFS PREPRINT 34] 15 p2621 A69-30494
- HODSHIRE, J. O.**  
Advanced coatings on superalloy blades and vanes for hot corrosion and oxidation resistance. [SAE PAPER 690480] 24 p4335 A69-43515
- HOEFER, E. E. E.**  
Frequency and noise characteristics of gyrator circuits /Frequenz- und Rauschverhalten von Gyrtorschaltungen/. 05 p0735 A69-16621
- HOEFFLINGER, B.**  
An efficient multiresonant avalanche diode oscillator in the 1.5 to 11 GHz range. 04 p0573 A69-14334  
Experimental analysis of high-efficiency avalanche-resonance pumped oscillators. 06 p0893 A69-16938  
Recent developments on avalanche diode oscillators. 07 p1098 A69-18456

- High current density operation and analysis of avalanche transit-time diodes.  
07 p1098 A69-18457
- High-efficiency avalanche-resonance pumped amplification.  
08 p1279 A69-19909
- Recent developments on avalanche diode oscillators.  
10 p1665 A69-23873
- HOEGBERG, L.**  
High-Speed Photography, Proceedings of the Eighth International Congress, Stockholm, Sweden, June 23-29, 1968.  
12 p2080 A69-26135
- HOEHN, D. H.**  
Depolarization of a laser beam at 6328 angstrom units due to atmospheric transmission.  
11 p1896 A69-24842
- HOEHNE, V. O.**  
The quieted aircraft as a military tool.  
[AIAA PAPER 69-792] 19 p3243 A69-35637
- HOEHNE, W.**  
Data collection system for climatological stations /Messwerterfassungsanlage fuer Klimastationen/.  
20 p3538 A69-37428
- HOEKSEMA, M.**  
Linearly polarized monochromatic radiation from a water-vapor laser at 118.6 microns.  
10 p1702 A69-23160
- Far-infrared gas lasers as sources of linearly polarized radiation.  
23 p4172 A69-41400
- HOELL, E. E.**  
Color centers and ruby laser output energy degradation.  
02 p0256 A69-12358
- Color centers and ruby-laser output-energy degradation.  
16 p2795 A69-31697
- HOELSCHER, E.**  
Synchros - Application and Design /Drehmelder-Systeme - Anwendung und Berechnung/.  
21 p3681 A69-38450
- HOENERIOH, H.**  
Areas of expectation for automatic scanning of flying objects /Erwartungsgebiete fuer die automatische Flugobjekt-Beobachtung/.  
01 p0035 A69-11296
- HOENICKE, H.**  
Transmission characteristics of narrow-band microwave bandpass filters /Uebertragungseigenschaften von schmalbandigen Mikrowellenbandpassfiltern/.  
11 p1857 A69-25677
- HOENIG, R.**  
Comparative evaluation of avionic installations /Die Vergleichsbewertung von Avionikanlagen/.  
11 p1887 A69-25212
- HOENIG, S. A.**  
Ion and electron currents from hot filaments - Effect of alloying on electron emission.  
04 p0577 A69-14875
- Emission of high-energy electrons during alloy-evaporation processes on hot metal filaments.  
16 p2827 A69-32016
- HOENL, H.**  
Astrophysical consequences of Dirac's hypothesis of a variable gravitational number.  
09 p1603 A69-22270
- HOEPFNER, C. H.**  
Miniature telemetry.  
10 p1654 A69-23251
- HOERSTER, H.**  
Investigation of low alpha sub s /epsilon-coatings in a simulated space environment.  
16 p2867 A69-31741
- HOERZ, G.**  
Concentration changes in binary metal-gas solutions during simultaneous removal of gas and evaporation of metal. II /Konzentrationsaenderungen in binaeren Metall-Gas-loesungen bei gleichzeitiger Abgabe von Gas und Metall. II/.  
09 p1528 A69-22732
- HOELICH-ABATE, E.**  
Phenomenological theory of damped and undamped intensity oscillations in lasers.  
12 p2110 A69-27014
- HOELICH, F.**  
Phenomenological theory of damped and undamped intensity oscillations in lasers.  
12 p2110 A69-27014
- On the definition of entropy for non-equilibrium states.  
23 p4238 A69-41366
- HOEFER, E.**  
Distribution of moments of rotation on the main engine and control nozzles of propelled flight vehicles /Ueber die Verteilung der Drehmomente auf Haupttriebwerk und Steuerdusen bei angetriebenen Flugkoerpern/.  
04 p0665 A69-14832
- Time-optimal controlled linear systems with optimally chosen parameters /Zeitoptimal gesteuerte lineare Systeme mit optimal gewaehlten Parametern/.  
10 p1666 A69-22922
- HOEFER, E. P.**  
Optimal systems coupled by parameters.  
12 p2050 A69-26086
- One-switching optimal control for pitch motion of a satellite.  
18 p3207 A69-34677
- HOFF, F.**  
Statistical equilibrium of a finite stochastic queueing system in equipment reliability calculations /Statistisches Gleichgewicht eines endlichen stochastischen Bedienungssystems bei der Berechnung der Zuverlaessigkeit von Geraten/.  
10 p1664 A69-23693
- Application of queueing theory to the practical calculation of electronic equipment reliability /Pouziti teorie hromadne obsluhy pro prakticky vypočet spolehlivosti elektronických zařízení/.  
24 p4287 A69-43129
- HOFF, M.**  
Hot-film anemometry in liquid Mercury.  
11 p1886 A69-25087
- Experimental velocity profile determinations in MHD flow through a dielectric circular channel.  
13 p2307 A69-27501
- HOFF, N. J.**  
Perturbation solutions for the buckling problems of axially compressed thin cylindrical shells of infinite or finite length.  
[ASME PAPER 68-WA/APM-22] 04 p0669 A69-14398
- Remarks on the buckled shapes of thin-walled circular cylindrical and conical shells subjected to axial compression.  
19 p3443 A69-36793
- The axisymmetric buckling of initially imperfect complete spherical shells.  
19 p3446 A69-36834
- Mechanics of composite structures.  
21 p3836 A69-38931
- Creep buckling of simply supported moderately thin circular cylindrical shells.  
23 p4234 A69-42413
- HOFF, P. W.**  
CO sub 2 laser linewidth by measurement of step response.  
05 p0773 A69-16293
- Small-signal step response of laser amplifiers and measurement of CO sub 2 laser linewidth.  
[IEEE PAPER G-9] 07 p1151 A69-19056
- HOFF, W. D.**  
X-ray diffraction studies of the effects of deformation on niobium alloys containing titanium, vanadium and zirconium.  
04 p0618 A69-15202
- HOFFLEIT, D.**  
Investigation of a new long-period variable.  
18 p3195 A69-34431
- HOFFLER, G. W.**  
An attempt to produce acclimatization to hypoxia by intermittent altitude exposure with vigorous exercise.  
23 p4086 A69-41678
- HOFFMAN, A. C.**  
Power conditioning development for the Sert II ion thruster.  
23 p4075 A69-42301
- HOFFMAN, A. L.**  
Calculations of gas conductivity in magnetohydrodynamic shock producing devices.  
21 p3776 A69-38708
- Experiments and calculations in an inverse pinch.  
21 p3776 A69-38709
- HOFFMAN, A. R.**  
Determination of the terminal sterilization cycle for a possible Mars capsule.  
02 p1201 A69-11772
- Determination of terminal sterilization process parameters.  
05 p0712 A69-15942
- HOFFMAN, B. F.**  
Cardiac muscle - Changes in optimal length during inotropic interventions.  
23 p4084 A69-41461
- HOFFMAN, E. J.**  
Elongational flow.  
10 p1681 A69-23976
- HOFFMAN, J. D.**  
Analysis of three-dimensional scramjet exhaust nozzle flow fields by a new second-order method of characteristics.  
[AIAA PAPER 69-5] 06 p0862 A69-18048
- A simple hydraulic analog of acoustic waves in baffle cells.  
09 p1570 A69-22004
- Three dimensional supersonic nozzle flow field calculations.  
[AIAA PAPER 69-463] 16 p2734 A69-32766
- HOFFMAN, J. E., JR.**  
Real-time Fourier spectroscopy.  
11 p1884 A69-24837
- HOFFMAN, J. H.**  
Ion mass spectrometer on Explorer XXXI satellite.  
20 p3545 A69-37879
- Comparison of results of Explorer XXXI direct measurement probes.  
20 p3531 A69-37882
- HOFFMAN, M. A.**  
The M.I.T. non-equilibrium MHD generator.  
10 p1636 A69-23471
- HOFFMAN, O.**  
The static strength of syntactic foams.  
[ASME PAPER 69-APMW-24] 24 p4336 A69-43095
- HOFFMAN, P. E.**  
Liquid crystals.  
06 p0885 A69-17842
- HOFFMAN, R. A.**  
Ring current particle distributions derived from ring current magnetic field measurements.  
01 p0147 A69-11227
- Low-energy electron precipitation at high latitudes.  
14 p2512 A69-28964
- HOFFMAN, R. K.**  
Ethylene oxide sterilization rates and protective influences.  
05 p0707 A69-15940
- Microbiological sampling of surfaces.  
05 p0715 A69-15982
- HOFFMAN, W. C.**  
A landing approach guidance scheme for unpowered lifting vehicles.  
[AIAA PAPER 69-865] 21 p3763 A69-39391
- HOFFMAN, W. F.**  
Design of digital loaded-line phase-shift networks for microwave thin-film applications.  
01 p0040 A69-10198
- HOFFMANN, B.**  
General relativistic influence on observed pulsar frequencies if pulsars are orbiting objects.  
17 p3037 A69-33645
- Pulsars and a possible new test of general relativity.  
17 p3037 A69-33646
- HOFFMANN, H.**  
Biotelemetric examinations of the heart and circulatory system of jet pilots during flight to determine a number of flight-induced stresses /Biotelemetrische Untersuchungen des Herz-Kreislauf-Systems bei Strahlflugzeugpiloten waehrend des Fluges zur Feststellung der Unterschiedlichen fliegerischen Belastung/.  
05 p0715 A69-16707
- Biotelemetric examinations of the heart and circulatory systems of helicopter pilots to determine various in-flight stresses /Biotelemetrische Untersuchungen des Herz-Kreislauf-Systems bei Hubschrauberpiloten zur Feststellung der unterschiedlichen fliegerischen Belastung/.  
11 p1829 A69-24347
- HOFFMANN, H. J.**  
On the equation of state of fully ionized quantum plasmas.  
01 p0128 A69-10346
- HOFFMANN, J. C.**  
A method for experimental determination of the characteristics of a hyperabrupt-junction varactor /Sur une methode de determination experimentale des caracteristiques d'un varactor a jonction hyperabrupte/.  
12 p2039 A69-26375



## HOFFMANN, K.

Mutual influence of two different laser transitions with the same ground level. II - Experiment /Gegen-seitige Beeinflussung zweier verschiedener Lasereübergänge mit dem gleichen Grundniveau. II - Experiment/.  
08 p1325 A69-20284

## HOFFMANN, K. H.

Continuity of the Chebyshev operator /Zur Stetigkeit des Tschebyscheff-Operators/.  
10 p1718 A69-22875

## HOFFMANN, K. P.

Effect of D-amphetamine on the activity of single neurons of the cat's tectum opticum.  
23 p4084 A69-41466

## HOFFMANN, W.

Spectroscopic investigations in a thermionic converter plasma.  
14 p2491 A69-29259

## HOFFMANN, W. F.

Far-infrared observation of the galactic-center region at 100 microns.  
09 p1603 A69-22264

A far infrared sky survey.  
13 p2342 A69-27599

## HOFFSOMMER, J. C.

Nuclear radiation damage vs. thermal decomposition of 1,3-diamino-2,4,6-trinitrobenzene and 2,2',4,4',6,6'-hexanitrostilbene.  
02 p0304 A69-12500

## HOFLAND, R.

A miniature transducer for measuring low transient pressures.  
22 p3950 A69-41227

## HOFMANN, D. J.

Observations of the screening of solar cosmic rays by the outer magnetosphere.  
02 p0309 A69-12740

Magnetospheric cosmic-ray cutoffs and their variations.  
14 p2513 A69-29099

## HOFMANN, H.

Agreement in endpoints from circadian rhythmometry on healthy human beings living on different continents.  
23 p4083 A69-41457

## HOFMANN, H. H.

The sense of taste in man /Der Geschmackssinn des Menschen/.  
21 p3652 A69-38783

## HOFMANN, K.

Reduced build-up of domains in sheet-type gallium-arsenide Gunn oscillators.  
02 p0215 A69-11933

## HOFMANN, L. G.

Application of a new method in adaptive control.  
24 p4394 A69-43301

## HOFMEISTER, L. D.

Optimized components in truss synthesis.  
02 p0347 A69-12536

## HOFSTETTER, E. M.

Detection and parameter estimation in an amplitude-comparison monopulse radar.  
09 p1452 A69-21312

The design of clutter-resistant radar waveforms with limited dynamic range.  
17 p2921 A69-33625

## HOFSTETTER, W. R.

Data correlation from investigations of a high-subsonic speed transport aircraft model in three major transonic wind tunnels.  
[AIAA PAPER 69-794] 19 p3237 A69-35636

## HOFSTRA, R.

Clinical studies of radiation effects in man - A preliminary report of a retrospective search for dose-relationships in the prodromal syndrome.  
03 p0374 A69-13503

## HOGAN, J. S.

Empirical determination of heating efficiencies in the Mars and Venus atmospheres.  
12 p2155 A69-26019

Exospheric temperatures on Mars and Venus.  
12 p2155 A69-26020

Ocean circulation and climatic changes.  
12 p2067 A69-26333

Solar cycle variation of exospheric temperatures on Mars and Venus - A prediction for Mariner 6 and 7.  
20 p3595 A69-37136

## HOGAN, L. E.

Brightness discrimination in reflected laser light.  
24 p4276 A69-43323

## HOGARTH, C. A.

A novel method for the direct determination of the small signal bulk minority carrier lifetime in the middle region of a semiconductor sandwich.  
01 p0136 A69-10242

Some properties of mixed oxide layers having amorphous structures.  
19 p3391 A69-36561

## HOGUE, D.

Controlled voltage converter systems for onboard electric power supplies in spacecraft /Geregelte Spannungskonverter-Systeme fuer elektrische Bordnetze von Raumflugkoerpern/.  
12 p2015 A69-25867

## HOGG, D. C.

Relationship between cross-path winds and fading rates in microwave propagation beyond the horizon.  
01 p0030 A69-10566

Progress in radio and non-ionized media.  
19 p3276 A69-36427

## HOGG, D. E.

The structure of quasi-stellar radio sources.  
10 p1790 A69-24138

## HOGG, J. E.

Application of an airborne pulsed laser for near shore bathymetric measurements.  
15 p2609 A69-30459

## HOGGATT, C. R.

Stress-strain data obtained at high rates using an expanding ring.  
24 p4330 A69-42735

## HOGGATT, J. T.

Joint concepts for carbon composite structures.  
24 p4323 A69-43426

## HOGLEY, J.

The spadoryc - A method of determining damping.  
01 p0087 A69-11029

## HOGLUND, R. F.

Ablation test specimen environment at high temperature.  
12 p2191 A69-26815

Two-dimensional analysis of transonic gas-particle flows in axisymmetric nozzles.  
[AIAA PAPER 69-572] 16 p2731 A69-31847

A unified theory of particle growth in rocket chambers and nozzles.  
[AIAA PAPER 69-541] 16 p2844 A69-32724

Dynamics of bag-type breakup of droplets in various flow fields.  
[AIAA PAPER 69-669] 17 p2954 A69-33456

## HOH, F. C.

Alfven waves in relativistic plasmas.  
04 p0636 A69-15043

## HOHENBERG, R.

The engine usage indicator.  
[ASME PAPER 69-GT-69] 09 p1572 A69-22519

## HOHENEMSER, K. H.

Flapping response of lifting rotor blades to atmospheric turbulence.  
[AIAA PAPER 69-206] 07 p1057 A69-19577

Dynamics of a rigid-rotor controlled by a high-speed gyro as it slows/stops at high forward speed.  
17 p2899 A69-33507

On the dynamics of lifting rotors with thrust or tilting moment feedback controls.  
[AHS PAPER 340] 17 p2899 A69-33510

## HOHL, F.

Computer solutions of the gravitational n-body problem.  
02 p0322 A69-12272

Numerical experiments on one-dimensional stellar models /Experiences numeriques sur les modes stellaires unidimensionnels/.  
02 p0323 A69-12274

Minimum energy property of a bounded one-dimensional plasma.  
11 p1924 A69-24305

## HOHLA, K.

Determination of the blast-wave energy of a laser-induced gas breakdown /Energiebestimmung der Stosswelle eines laserinduzierten Gasdurchbruchs/.  
24 p4299 A69-42651

## HOHMAN, A. E.

Corrosion protection of high strength landing gear components.  
21 p3743 A69-38730

## HOHMANN, C. J.

Pumps for fluid power. II.  
06 p0930 A69-17168

## HOHNSTREITER, G. F.

The influence of boundary layers on spectroscopic temperature measurements in MHD channels.  
10 p1731 A69-23434

## HOLACEK, S.

Problem of stability of hypereutectic AlSi alloys /Zur Frage der Stabilität der ueberutektischen AlSi-Legierungen/.  
22 p3968 A69-40063

## HOLAN, L.

Magnetophonon oscillations of the transverse magnetoresistance of n-type epitaxial GaAs /Oscillations de magnetophonons de la magnetoresistance transverse du GaAs epitaxial de type n/.  
08 p1373 A69-20760

## HOLBERT, C. D.

Reliability/maintainability field test evaluation of Flying Crane helicopter.  
19 p3247 A69-36017

## HOLBROOK, J. A. D.

Irregularities in the lower ionosphere deduced from beacon satellite observations.  
05 p0757 A69-16405

An isolated field-aligned irregularity.  
20 p3497 A69-38108

## HOLDAWAY, H. W.

Evaluation tests of a fixed frequency vibroscope.  
04 p0599 A69-15018

## HOLDEN, D. J.

Some extended radio sources in monoceros.  
07 p1223 A69-19625

178 MHz observations of galactic radio sources.  
21 p3801 A69-38701

## HOLDEN, R. L.

Air-gap isolated microcircuits - Beam-lead devices.  
02 p0221 A69-12469

## HOLDEN, S. J.

Apparatus for the precision measurement of internal friction.  
03 p0428 A69-13108

## HOLDER, A. F.

The optimum calibration interval program.  
10 p1699 A69-23288

## HOLDREDGE, E. S.

Radiation heat transfer for annular fins of trapezoidal profile.  
[ASME PAPER 69-HT-6] 24 p4413 A69-43553

## HOLECEK, D. J.

Gravity-independent liquid collection and fluid phase-separation system.  
[AAS PAPER 69-473] 24 p4272 A69-42845

## HOLGATE, T.

Elastic wind-tunnel models for predicting longitudinal stability derivatives of elastic airplanes.  
[AIAA PAPER 68-56] 01 p0011 A69-11018

## HOLICK, H.

Laboratory life test and inpile irradiation studies of cylindrical thermionic converters.  
14 p2399 A69-29199

## HOLIGHAUS, R.

Investigation of film vaporization of fuel in combustion chambers /Untersuchungen zur filmfoermigen Kraftstoffverdampfung in Brennkammern/.  
20 p3633 A69-37921

## HOLITZA, F. J.

A note on lightning strikes to aircraft.  
03 p0458 A69-13031

## HOLL, J. W.

Thermodynamic effects on desinent cavitation on hemispherical nosed bodies in water at temperatures from 80 deg F to 260 deg F.  
[ASME PAPER 69-FE-1] 20 p3516 A69-37986

## HOLL, R. J.

Nonintegral burn of nuclear rockets - An approach to low-cost space exploration.  
[AIAA PAPER 68-589] 21 p3768 A69-39026

## HOLLADAY, H. P.

Matched metal molding of discontinuous graphite fiber composites.  
08 p1339 A69-20502

## HOLLADAY, T. M.

Partial defocus correction by defocus of a coherent optical system.  
14 p2450 A69-29641

- HOLLAND, B. B.**  
Doppler tracking of near-synchronous satellites /DODGE/.  
[AAS PAPER 68-128] 21 p3674 A69-39202
- HOLLAND, F. C.**  
Simulation of a multiprocessing system using GPSS.  
02 p0213 A69-12492  
Simulation design of a multiprocessing system.  
04 p0629 A69-15365
- HOLLAND, H. D.**  
The abundance of CO sub 2 in the earth's atmosphere through geologic time.  
08 p1310 A69-20946
- HOLLAND, J. C.**  
Electronics synchronizes air-turbine motors powering C-5A "kneeling."  
20 p3466 A69-38179
- HOLLAND, J. W.**  
Long term operations of in-pile and out-of-pile thermionic converters.  
14 p2399 A69-29197
- HOLLAND, L.**  
Degradation of lubricating fluids in a vacuum. [IME PAPER 11]  
07 p1137 A69-18558
- HOLLAND, M. W.**  
Nonmesonic decay of hydrogen hyperfragments.  
12 p2133 A69-26298
- HOLLAND, R. A. B.**  
Rate of O sub 2 dissociation from O sub 2 Hb and relative combination rate of CO and O sub 2 in mammals at 37 deg C.  
21 p3650 A69-38384  
Rate at which CO replaces O sub 2 from O sub 2 Hb in red cells of different species.  
21 p3650 A69-38385
- HOLLAND, R. L.**  
A first-order theory for the rotational motion of a triaxial rigid body orbiting an oblate primary.  
16 p2861 A69-32240
- HOLLAND, W.**  
A method for digital computation of spacecraft response in the docking maneuver.  
11 p1967 A69-25501
- HOLLANDER, J.**  
Synthesis of fluorinated polyurethanes.  
05 p0717 A69-16498
- HOLLANDER, M.**  
Certain uncorrelated nonparametric test statistics.  
01 p0106 A69-10925
- HOLLE, G. F.**  
Experimental results of the deployment/rapid inflation characteristics of a buoyant Venus station balloon. [AIAA PAPER 69-1017]  
22 p3922 A69-40389
- HOLLENDER, H. A.**  
Food technology problems related to space feeding.  
15 p2560 A69-31459
- HOLLER, R. A.**  
Secondary vortex generation in the near wake of circular cylinders.  
[AIAA PAPER 69-755] 18 p3084 A69-34411
- HOLLERAN, P. M.**  
Rapid osmometry with diffusible polymers.  
01 p0024 A69-10933
- HOLLIDAY, W. G.**  
Experiment and analysis of a flat disk squeeze-film bearing including effects of supported mass motion. [ASME PAPER 68-LUBS-35]  
13 p2266 A69-27280
- HOLLINGER, D. L.**  
Mass spectrometer leak testing by a calibrated enclosure method.  
04 p0598 A69-14974
- HOLLINGER, H. B.**  
Lorentz model and time-dependent diffusion.  
22 p3984 A69-40530
- HOLLINGER, J. P.**  
Search for an effect of mass on frequency during a close approach of pulsar CP 0950 to the sun.  
02 p0323 A69-12298  
Variability of the linear polarization of 3C 120 and 3C 279.  
02 p0325 A69-12592  
Linear polarization of radio sources at 2.07-centimeter wavelength.  
02 p0326 A69-12705  
Absence of pulsar characteristics in several X-ray sources.  
07 p1218 A69-19254
- HOLLINGER, R. H.**  
The prime manufacturer/supplier "partnership." II - The supplier's view.  
09 p1502 A69-21388
- HOLLINGSWORTH, B. L.**  
New fibre-filled thermoplastics.  
08 p1337 A69-20470
- HOLLINGSWORTH, C. S.**  
Chemiluminescent reactions of He /2 super 3 S/ with nitrogen, oxygen, carbon monoxide, and carbon dioxide.  
20 p3483 A69-36936
- HOLLINGSWORTH, E. H.**  
A new solution potential measurement for predicting stress corrosion performance of 2219 aluminum alloy products.  
16 p2798 A69-31716
- HOLLINGSWORTH, H. M.**  
A critique of the hydrogenic approximation in the calculation of stellar opacity.  
07 p1223 A69-19626
- HOLLIS, J. M.**  
Federal Government contracting - The legal debate regarding NASA service contracts.  
05 p0850 A69-15987
- HOLLISTER, W. M.**  
The effect of constraints on optimum approach and departure paths for VTOL terminal operations. [AIAA PAPER 69-209]  
07 p1178 A69-19570  
Castles in space.  
16 p2856 A69-32011  
Periodic orbits for interplanetary flight. [AAS PAPER 68-102]  
21 p3804 A69-39203  
Interplanetary orbits for multiple swingby missions. [AIAA PAPER 69-931]  
21 p3809 A69-39359
- HOLLOMAN, G. H., JR.**  
A sampled-data regulator for maintaining a constant alveolar CO sub 2.  
07 p1072 A69-19480
- HOLLOWAY, R. B.**  
Aircraft performance benefits from modern control systems technology. [AIAA PAPER 69-767]  
19 p3245 A69-35656
- HOLLOWAY, R. J.**  
Intermediary metabolism in hypothermic rat livers.  
10 p1642 A69-23119
- HOLLOWAY, W. W., JR.**  
Optical properties of cerium-activated garnet crystals.  
07 p1201 A69-19647
- HOLLOWS, J. D.**  
The energy-loss spectrum of extensive air showers recorded by the Haverah Park 500 m array.  
23 p4207 A69-42499
- HOLLWAY, D. L.**  
The Australian National Standards Laboratory X-band radiometer for the calibration of noise sources.  
02 p0220 A69-12440  
A high-resolution swept-frequency reflectometer.  
16 p2759 A69-31940
- HOLLWEG, J. V.**  
Solar coronal effects on pulsar signals.  
02 p0328 A69-12727  
Properties of solar wind turbulence deduced by radio astronomical measurements.  
03 p0502 A69-14001  
Interaction of the solar wind with the moon and formation of a lunar limb shock wave.  
03 p0502 A69-14006  
The occulting disk of the sun at radio wavelengths.  
09 p1607 A69-22432  
A statistical ray analysis of the scattering of radio waves by the solar corona.  
10 p1773 A69-22960  
Stochastic heating of protons by fast hydromagnetic wave.  
16 p2848 A69-31969
- HOLM, J. C.**  
Effect of inhaled CO sub 2 on hemorrhagic consolidation due to unilateral pulmonary arterial ligation.  
23 p4082 A69-41441
- HOLM, R. J.**  
Relation of azimuth and position errors in a long-range aircraft inertial system.  
02 p0278 A69-12361
- HOLMAN, J. P.**  
Individual droplet heat-transfer rates for splattering on hot surfaces.  
10 p1809 A69-23196
- HOLMAN, W. R.**  
CVD tungsten and tungsten-rhenium alloys for structural applications. I.  
01 p0096 A69-10641  
CVD tungsten and tungsten-rhenium alloys for structural applications. II.  
01 p0097 A69-10648
- HOLMBOE, V.**  
Optimal transport aircraft /Det optimala Transportflygplanet/.  
01 p0012 A69-11293
- HOLMES-SIEDLE, A.**  
Injection-level effects in irradiated, lithium-containing solar cells.  
19 p3252 A69-35698
- HOLMES-SIEDLE, A. G.**  
Recovery rate and capacitance measurements on irradiated lithium-containing solar cells.  
06 p0974 A69-16867  
A prediction and selection system for radiation effects in planar transistors.  
06 p0976 A69-16879  
Designing MOS systems for radiation environments.  
15 p2577 A69-30595  
Long term stability of lithium-doped solar cells irradiated with electrons, protons, or neutrons.  
19 p3252 A69-35697
- HOLMES, C. M.**  
Yield of adhesive joints.  
16 p2794 A69-32573
- HOLMES, J. F.**  
Relativistic communications effects associated with moving space antennas.  
22 p3914 A69-40700
- HOLMES, J. K.**  
Two stochastic approximation procedures for identifying linear systems.  
06 p0900 A69-17359  
Optimum and sub-optimum detection of digital sequences corrupted by white noise.  
07 p1081 A69-19097  
Two stochastic approximation procedures for identifying linear systems.  
22 p3918 A69-41013
- HOLMES, L. B.**  
Precursors ahead of shock waves. II - Photoionization.  
20 p3511 A69-38238
- HOLMES, L. S.**  
Measurement of light scattered from density fluctuations within a collisionless shock.  
24 p4360 A69-43748
- HOLMES, R.**  
Assessing unbalance effects in a small turbo-rotor. [ASME PAPER 69-DE-9]  
14 p2453 A69-28839
- HOLMES, R. A.**  
An agricultural remote sensing information system.  
03 p0400 A69-13195  
Frequency conversion in the sheath capacitance of a glow discharge plasma.  
04 p0634 A69-14456
- HOLMES, R. W.**  
The use of value engineering techniques in determining the worth of probabilistic events.  
13 p2382 A69-28093
- HOLMGREN, J. S.**  
Application of heat pipe technology to rocket engine cooling. [AIAA PAPER 69-582]  
16 p2839 A69-32668
- HOLMQUIST, F. N.**  
A conductivity probe for tenuous plasmas. [AIAA PAPER 68-170]  
09 p1496 A69-21936
- HOLONYAK, N., JR.**  
The laser transition and photon energy of GaAs in the lightly-doped limit.  
02 p0257 A69-12615  
Time behavior of exciton formation and laser emission in Cd/SeS/ platelets.  
10 p1703 A69-23512  
Laser transition to band edge or to impurity states in GaAs-Ge.  
13 p2270 A69-27193  
Time behavior of laser modes in GaAs platelet lasers.  
16 p2796 A69-31704
- HOLSCHER, A. A.**  
Atomic processes in chemisorption by metals.  
22 p3895 A69-39898



## HOLST, D.

Electrical measurements of an erectable parabola for space missions.  
02 p0223 A69-12812

## HOLSTROM, G. B.

Lunar mascons - A near-surface interpretation.  
04 p0654 A69-14630  
Strategy for scientific exploration of the terrestrial planets.  
22 p4022 A69-40449

## HOLT, A. G. J.

Synthesis of multiple loop feedback systems. I.  
10 p1667 A69-24037  
Synthesis of multiple loop feedback systems. II.  
10 p1667 A69-24038

## HOLT, C. R.

The Turbo Commander bleed air environmental system.  
[SAE PAPER 690331] 11 p1941 A69-24494

## HOLT, D.

Seen through a hologram darkly.  
08 p1312 A69-19894  
Phase-only acoustic holography.  
13 p2259 A69-27243  
Acoustical holography and its applications.  
23 p4167 A69-42198

## HOLT, E. H.

Shear stabilization of a collision-dominated plasma.  
03 p0473 A69-12925  
Electron radiation temperature measurements in a CO sub 2 laser amplifier.  
04 p0611 A69-14445  
Lorentz model and time-dependent diffusion.  
22 p3984 A69-40530

## HOLT, J. F.

Merged stagnation shock layer of nonequilibrium dissociating gas.  
02 p0189 A69-12521  
A plasma scanner and data processing system for current-voltage curves.  
14 p2450 A69-29568

## HOLT, J. M.

Avionics systems for the SST era.  
02 p0279 A69-12364

## HOLT, M.

Laminar boundary layer separation and reattachment near a concave corner.  
06 p0911 A69-17592  
Extrapolation of creep-rupture data for aluminum alloys.  
[ASM PAPER D8-9.7] 07 p1169 A69-19665

## HOLT, S. S.

On the generation of synchrotron and X-ray emission from electrons with energy below mc super 2 in solar flares.  
09 p1580 A69-22203  
Iron line emission from X-ray sources.  
09 p1580 A69-22231  
Very high energy solar X-rays observed during the proton event of 7 July 1966.  
10 p1766 A69-23753  
2-20 kev spectrum of X-rays from the Crab Nebula and the diffuse background near galactic anticenter.  
15 p2675 A69-30759  
Microwave and hard X-ray bursts from solar flares.  
20 p3589 A69-37551  
Pulsed X-ray emission of NP 0532 in March 1968.  
20 p3590 A69-37574

## HOLTET, J.

Simultaneous ground and satellite measurements of the enhanced electromagnetic band emission between 500 and 1000 Hz.  
21 p3708 A69-38496

## HOLTMAN, R. F.

An automatic multichannel instrument for monitoring electrical transients on aircraft.  
17 p2947 A69-34135

## HOLTON, J. R.

A theory of the quasi-biennial oscillation.  
03 p0461 A69-13342  
A diagnostic numerical model of the quasi-biennial oscillation.  
03 p0461 A69-13681  
The diurnal boundary layer wind oscillation above sloping terrain.  
03 p0462 A69-13682

## HOLTON, R. W.

Fatty acids in blue-green algae - Possible relation to phylogenetic position.  
05 p0707 A69-15751

## HOLTSLAG, D. J.

In-reactor thermionic converter testing experience at General Electric.  
14 p2399 A69-29195

## HOLTZMAN, J. C.

A dual band array.  
02 p0219 A69-12344

## HOLUB, E. M.

Cryoquenching eliminates distortion.  
18 p3150 A69-35419

## HOLWEGGER, H.

Revised solar iron abundance and its influence on the solar photospheric model /Revision der solaren Eisenhaefugkeit und ihre Bedeutung fuer das Modell der Sonnenphotosphaere/.  
21 p3796 A69-38475  
Abundances of iron and some other elements in the sun and in meteorites.  
24 p4385 A69-43223

## HOLY, Z. J.

A synthesis technique for variable surface heat transfer.  
03 p0531 A69-12864

## HOLYOAK, B.

A theoretical analysis of extensive air showers. III - Muon showers at large zenith angles.  
15 p2678 A69-31483

## HOLZER, R. E.

OGO 3 observations of ELF noise in the magnetosphere. I.  
07 p1124 A69-18834  
Magnetic emissions in the magnetosheath at frequencies near 100 Hz.  
16 p2774 A69-31985  
OGO search coil magnetometer experiments.  
19 p3284 A69-36675  
High-frequency magnetic fluctuations associated with the earth's bow shock.  
22 p3938 A69-40501

## HOLZER, T. E.

The polar wind.  
01 p0077 A69-11239  
Accidentally resonant charge exchange and ion momentum transfer.  
16 p2822 A69-32108

## HOLZMANN, R. T.

Chemical Rockets and Flame and Explosives Technology.  
22 p3998 A69-40866

## HOLZSCHUH, R.

Recent results in the field of inductive magnetoplasma dynamic (MPD) converters /Ueber einige neuere Ergebnisse auf dem Gebiet der induktiven magnetoplasma dynamischen /MPD/ Wandler/.  
22 p3999 A69-39905

## HOLZWORTH, M. L.

Hydrogen embrittlement of type 304L stainless steel.  
12 p2115 A69-26616

## HOMASURIDZE, N. G.

Solution of the equations for a shallow spherical shell /K resheniiu uravnenii pologoi sfericheskoi obolochki/.  
10 p1792 A69-22848

## HOMBURG, A.

Investigations in the problem of jet mixing taking particular account of applications to aircraft engines /Untersuchungen zum Problem der Strahlmischung unter besonderer Beruecksichtigung der Anwendung bei Flugtriebwerken/.  
09 p1429 A69-21305

## HOMBURGER, H.

Specific inhibition of the relaxation process in the mammalian myocardium at very low temperatures /1 to 10 deg C/ /Spezifische Hemmung des Erschlaffungsprozesses am stark gekuehlten Warmbluetermyokard /1 deg C-10 deg C//.  
23 p4092 A69-42060

## HOMIC, S. G.

Two-dimensional representation of planetary probe targeting considerations.  
02 p0331 A69-12820

## HOMICK, J. L.

Auditory temporal masking and the perception of order.  
11 p1830 A69-24795

## HOMILIUS, K.

Testing equipment for determining the mass, mass distribution, operational characteristics, and physical properties of spacecraft /Pruefeinrichtungen zur Bestimmung von Masse, Massenverteilungen, Betriebs- u. Festigkeits/eigenschaften von Raumflugkoerpern/.  
24 p4296 A69-42669

## HOMMEL, R.

A PCM-telemetry system for sounding rocket payloads.  
07 p1081 A69-19099

## HON, W.

Practical phase reference detectors for fully modulated PSK signals.  
03 p0403 A69-13203

## HONAKER, W. C.

Uniformity of proton beams available at the NASA synchrocyclotron /SREL/.  
05 p0742 A69-15992  
Uniformity of proton beams available at the NASA synchrocyclotron /SREL/.  
16 p2814 A69-32201

## HONDA, H.

Electronic boresight shift in space-borne monopulse systems.  
14 p2411 A69-28895

## HONDA, M.

An analysis of second-order effects on laminar boundary-layer flow.  
11 p1872 A69-25127  
Application of neutron activation method for super 53 Mn in meteoritic iron.  
20 p3601 A69-37504

## HONDA, T. S.

All-fluidic servo controls helicopter stability.  
24 p4255 A69-42800

## HONDA, Y.

Rhythmic wavelets recorded from an in vitro preparation of mammalian retina.  
23 p4101 A69-41471

## HONES, E. W., JR.

Simultaneous observations of electrons /E greater than 45 kev/ at 2000-kilometer altitude and at 100,000 kilometers in the magnetotail.  
03 p0503 A69-14013  
Review and interpretation of particle measurements made by the Vela satellites in the magnetotail.  
07 p1208 A69-19362  
Very high energy solar X-rays observed during the proton event of 7 July 1966.  
10 p1766 A69-23753  
Observations in the magnetotail and their interpretation.  
21 p3711 A69-38512

## HONEY, J. C.

Education for public service - Challenge to the universities.  
20 p3641 A69-38282

## HONEYCOMBE, R. W. K.

The Plastic Deformation of Metals.  
05 p0841 A69-16369

## HONEYCUTT, C. R.

Wall thickness measurements for advanced gas turbine engine airfoils.  
24 p4312 A69-42753

## HONG, G. W.

Switching of phase-locked states in the intracavity phase-modulated He-Ne laser.  
20 p3552 A69-36994

## HONGO, K.

Beam wave propagation in a circular hollow cylinder.  
24 p4282 A69-42987

## HONGO, S.

Noise in He-Ne laser oscillators.  
19 p3330 A69-35760

## HONIG, A. K.

Canadian helicopter inboard magnetic anomaly detection evaluation.  
[AIAA PAPER 68-487] 12 p2094 A69-26771

## HONIG, J. M.

Nature of the electrical transition in Ti sub 2 O sub 3.  
03 p0490 A69-13923

## HONIG, R. E.

Evidence of laser-induced stimulated Brillouin scattering in CdS.  
02 p0257 A69-12614

- HONING, J. M.**  
Crystallography and defect chemistry of solid solutions of vanadium and titanium oxides.  
20 p3484 A69-37526
- HONJI, H.**  
Vortex wakes of oscillating circular cylinders.  
18 p3086 A69-35169
- HONNELL, P. M.**  
The Matric Computer for the solution of mechanical vibrations problems.  
[ASME PAPER 69-VIBR-12]  
10 p1806 A69-24167
- HONRUBIA, V.**  
Dependence of the cochlear microphonics and the summing potential on the endocochlear potential.  
23 p4085 A69-41574
- HOO, E.**  
Communication systems using synchronous and near synchronous satellites.  
09 p1458 A69-22468
- HOOD, C. G.**  
An integral analysis of turbulent reattachment applied to plane supersonic base flows.  
03 p0361 A69-12990
- HOOD, D. W.**  
Electron beam welding 2219 aluminum alloy for pressure vessel applications.  
24 p4319 A69-42941
- HOOD, E. R.**  
Air Transport Total In-Flight Simulator- 707.  
[SAWE PAPER 747]  
18 p3118 A69-34884
- HOOD, P. J.**  
Aeromagnetic profiles across the Reykjanes ridge southwest of Iceland.  
04 p0592 A69-14660
- HOOD, W. B., JR.**  
Registration of intravascular pressure and sound by a fiberoptic catheter.  
17 p2917 A69-34172
- HOODBHOY, S.**  
The behavior of the first normal modes and the lateral wave in a weak dielectric layer.  
01 p0033 A69-10975
- HOOGE, F. N.**  
Amplitude distribution of  $l/f$  noise.  
16 p2752 A69-32383
- HOOGENBOOM, W. P. H.**  
Evaluation of the skiagram.  
24 p4267 A69-43399  
Acquired myopia in young pilots.  
24 p4267 A69-43400
- HOOGENDOORN, J.**  
Prevention of food-borne diseases in civil aviation.  
24 p4278 A69-43392
- HOOGERHEIDE, J.**  
Evaluation of the skiagram.  
24 p4267 A69-43399  
Acquired myopia in young pilots.  
24 p4267 A69-43400
- HOOKE, C. J.**  
The elastohydrodynamic lubrication of high-pressure face seals.  
[ASLE FICFS PREPRINT 16]  
15 p2621 A69-30493
- HOOKE, R.**  
Approximate analysis of the large deflection elastic behaviour of clamped, uniformly loaded, rectangular plates.  
20 p3620 A69-36998
- HOOKE, W. H.**  
E-region ionospheric irregularities produced by internal atmospheric gravity waves.  
01 p0073 A69-11175  
Electron, ion, and neutral gas temperatures in temperate latitude sporadic-E layers.  
01 p0073 A69-11176  
Radar Thomson scatter observations of E-region temperatures interpreted as revealing reversible heating by atmospheric tides.  
11 p1879 A69-25159  
Electron, ion and neutral-gas temperatures in temperate latitude sporadic-E layers.  
14 p2440 A69-29127  
E-region ionospheric irregularities produced by internal atmospheric gravity waves.  
14 p2440 A69-29128
- HOOKE, W. M.**  
Interaction of an electron beam with a whistler/helicon/ wave in a semiconductor plasma.  
10 p1742 A69-24107
- HOOKER, J. W.**  
Existence and oscillation theorems for a class of nonlinear second order differential equations.  
10 p1720 A69-23637
- HOOKER, W. W.**  
A set of dynamical attitude equations for an arbitrary n-body satellite having rotational degrees of freedom.  
[AIAA PAPER 69-923]  
21 p3821 A69-39354  
Reaction-boom attitude control systems.  
[AIAA PAPER 69-834]  
21 p3822 A69-39365
- HOOKEY, C. A.**  
The Black Arrow control system.  
14 p2530 A69-29630
- HOOKS, J. T., JR.**  
A manned air-to-air combat simulator.  
[AIAA PAPER 68-253]  
20 p3510 A69-37159
- HOOPER, G. T. J.**  
Numerical solutions of the Navier-Stokes equations for axisymmetric flows.  
03 p0419 A69-13990
- HOOPER, H. O.**  
Nuclear magnetic resonance study of the niobium-nitrogen system NbN sub x.  
19 p3383 A69-36445
- HOOPER, W. E.**  
Some technical aspects of Boeing helicopters.  
13 p2202 A69-27836
- HOOTON, E. N.**  
Design for the future in terminal air traffic control.  
[AIAA PAPER 68-1101]  
20 p3573 A69-37160
- HOOTON, N. A.**  
Metal-ceramic composites in high-energy friction applications.  
17 p2987 A69-33375
- HOOVER, G. M.**  
Infrared absorptance of carbon monoxide at low temperatures.  
07 p1183 A69-19644
- HOOVER, R. B.**  
X-ray imaging with multiple-pinhole cameras using a posteriori holographic image synthesis.  
22 p3943 A69-40019
- HOOVER, W. R.**  
The fatigue characteristics of unidirectionally solidified Al - Al sub 3 Ni eutectic alloy.  
08 p1329 A69-20006
- HOPE, L. L.**  
A spatially nonuniform laser model.  
[IEEE PAPER Q-6]  
07 p1154 A69-19078
- HOPFENFELD, J.**  
Prediction of the one-dimensional equilibrium cutting gap in electrochemical machining.  
[ASME PAPER 68-WA/PROD-16]  
05 p0768 A69-16193
- HOPF, F. A.**  
Theory of an inhomogeneously broadened laser amplifier.  
15 p2635 A69-31239
- HOPFGARTEN, N.**  
Penning discharge in a strongly inhomogeneous magnetic mirror field.  
01 p0133 A69-11218
- HOPFIELD, H. S.**  
Two-quartic tropospheric refractivity profile for correcting satellite data.  
21 p3678 A69-39748
- HOPFINGER, E.**  
A study of thermal transpiration for the development of a new type of gas pump.  
[ASME PAPER 68-WA/ENER-4]  
05 p0706 A69-16162
- HOPKINS, A. K.**  
The effects of bumper material properties on the operation of spaced hypervelocity particle shields.  
[AIAA PAPER 69-379]  
13 p2283 A69-28309
- HOPKINS, A. L., JR.**  
SIRU - A new inertial system concept for inflight reliability and maintainability.  
19 p3370 A69-35803
- HOPKINS, B. D.**  
Isotope shifts in the 4416- angstrom units cadmium laser.  
10 p1705 A69-23812
- HOPKINS, B. J.**  
The effect of temperature on the work function minimum of cesiated tungsten surfaces.  
09 p1558 A69-21809
- HOPKINS, E. J.**  
Use of Preston tubes for measuring hypersonic turbulent skin friction.  
[AIAA PAPER 69-345]  
13 p2249 A69-28280
- HOPKINS, J. B.**  
Optimum design of germanium microwave backward diodes.  
22 p3916 A69-41224
- HOPKINS, R. A.**  
Motion of a bubble in a rotating liquid.  
09 p1483 A69-22006
- HOPKINS, R. B.**  
Adapting fatigue data to real parts.  
16 p2794 A69-32433
- HOPKINS, V.**  
Effect of surface finish and hardness on the wear-life of an inorganic solid lubricant film.  
[ASLE PREPRINT 68AM 7C-3]  
07 p1139 A69-18623  
Film thickness effect on the wear life of a bonded solid lubricant film.  
[ASLE PREPRINT 68AM 7C-4]  
07 p1139 A69-18624  
Friction and wear-life of selected solid lubricant films at -100 F.R.T., and 400 F.  
[ASLE PREPRINT 69AM 6C-1]  
15 p2619 A69-30471
- HOPMAN, H. J.**  
The electron cyclotron instability and high-frequency ionization in a beam-plasma experiment.  
05 p0798 A69-15612  
Time resolved beam distribution functions in a beam-plasma experiment.  
17 p3014 A69-33829
- HOPMANN, J.**  
Relative heights on the moon - Third series containing 182 observations - Accuracy investigations /Relative Höhen auf dem Monde - Dritte reihe mit 182 beobachtungen - Genauigkeitsuntersuchungen/.  
10 p1782 A69-23697  
Relative heights on the moon. IV /Relative Höhen auf dem Monde. IV/.  
18 p3196 A69-34693
- HOPPE, J.**  
Recent views concerning the nature of zodiacal light /Neuere Ansichten ueber die Natur des Zodiacallichtes/.  
20 p3597 A69-37336
- HOPPF, M.**  
Recent fossil track studies bearing on extinct Pu super 244 in meteorites.  
19 p3407 A69-36077
- HOPPENBROUWERS, A. M. H.**  
Amplitude distribution of  $l/f$  noise.  
16 p2752 A69-32383
- HOPPENBROUWERS, R.**  
Selective g-force application in the treatment of retinal detachment.  
24 p4268 A69-43405
- HOPPENSTADT, F.**  
Asymptotic series solutions for nonlinear ordinary differential equations with a small parameter.  
11 p1908 A69-24881
- HOPPER, A. T.**  
A comparison of approximate methods for the solution of plate bending problems.  
[AIAA PAPER 68-296]  
16 p2874 A69-32160  
Transient heat conduction with time dependent boundary conditions.  
[ASME PAPER 69-HT-50]  
24 p4410 A69-43521
- HOPPER, D. J.**  
High-efficiency boost regulator design for planetary spacecraft.  
23 p4075 A69-42302
- HOPPER, V. D.**  
Evidence for a point source of high energy cosmic gamma rays.  
24 p4365 A69-42606
- HOPPIN, G. S., III**  
Fusion welding of age-hardenable superalloys.  
[SAE PAPER 690102]  
09 p1503 A69-21558
- HOPPIN, G. S., III**  
Diffusion bonding of superalloys.  
19 p3320 A69-35559



## HORA, H.

Nonlinear confining and deconfining forces associated with the interaction of laser radiation with plasma.

11 p1923 A69-24297

Self-focusing of laser beams in a plasma by ponderomotive forces.

22 p3961 A69-40417

## HORACEK

Observation of some circulatory reactions after cumulation of vegetative stimuli.

24 p4266 A69-43375

## HORAI, K.-I.

Thermal conductivity of rock-forming minerals.

24 p4310 A69-43216

## HORAK, G.

Variation with temperature of the degree of polarization of the radiation from GaAs laser diodes.

13 p2227 A69-27328

## HORAK, J.

Preparation of BiTeI crystals /Preparation de cristaux du compose BiTeI/.

02 p0294 A69-11540

Properties of the semiconductor compound BiTeBr /Proprietes du compose semi-conducteur BiTeBr/.

05 p0810 A69-16609

## HORAK, R.

Theory of electromagnetic field in measurable quantities.

10 p1725 A69-24049

Correlation theory of quantized electromagnetic field. I.

20 p3575 A69-37304

## HORAK, V.

Inverse variational problems of the linear mechanics of solid bodies /Inverse Variationsaufgaben der linearen Mechanik fester Koerper/.

03 p0526 A69-13739

Principles of inverse variation in the solid-state mechanics /Inverse Variationsprinzipien der Mechanik fester Koerper/.

10 p1793 A69-22885

## HORAK, Z.

Metagalactic light measurements from the moon.

18 p3189 A69-34242

Inertia, relativity and cosmology.

18 p3206 A69-35470

## HORAN, D. M.

Measurements of solar X-ray emission from the OGO-IV spacecraft.

24 p4371 A69-43611

## HORAN, P. K.

Free radical destruction by gamma-irradiation at 77 K.

19 p3265 A69-36376

## HORD, C. W.

Mariner 6 - Ultraviolet spectrum of Mars upper atmosphere.

22 p4023 A69-40568

The atmosphere of Mars and the Mariner '69 UV experiment. [AAS PAPER 69-091]

24 p4393 A69-42881

## HORD, W. E.

Application of reciprocal latching ferrite phase shifters to lightweight electronic scanned phased arrays.

04 p0572 A69-14320

Theory of the suppressed-rotation reciprocal ferrite phase shifter.

06 p0896 A69-17484

## HORDON, M. J.

High vacuum adhesion test apparatus.

21 p3689 A69-38594

## HORECKY, J.

Hypothermic cardiopulmonary bypass in white rats.

05 p0708 A69-15971

## HORGAN, C. O.

On the exponential decay of stresses in circular elastic cylinders subject to axisymmetric self-equilibrated end loads.

06 p1023 A69-17507

## HORI, G.

Stellar orbits in the galactic plane.

08 p1381 A69-19792

## HORI, H.

The EEG of pilots. II.

06 p0875 A69-18021

Characteristics of pilots on personality tests. I.

06 p0876 A69-18033

## HORI, S.

Fatigue behavior and grain size of commercially pure aluminum plates.

10 p1711 A69-23356

## HORIE, K.

Application of neutron activation method for super 53 Mn in meteoritic iron.

20 p3601 A69-37504

## HORING, S.

Optimal allocation of tracking pulses for an array radar.

24 p4283 A69-43311

## HORIO, T.

Microwave conductivity in a turbulent plasma with a magnetic field.

05 p0804 A69-16442

## HORITA, R. E.

Electrostatic waves in the ionosphere excited around the lower hybrid resonance frequency.

06 p0918 A69-17381

Some remarks on the origin of lower hybrid resonance noise in the ionosphere.

21 p3702 A69-38358

## HORIUCHI, G.

Lower thermosphere ions in the nighttime auroral zone.

21 p3704 A69-38365

## HORIUCHI, H. S.

Preliminary experiment results from the Omega position location equipment /OPLÉ/.

07 p1176 A69-19135

## HORLOCK, J. H.

The aero-thermodynamics of subsonic propulsion.

05 p0695 A69-15551

Fluctuating lift forces on aerofoils moving through transverse and chordwise gusts [ASME PAPER 68-FE-28]

05 p0697 A69-16070

The quasi-steady design of a compressor or pump stage for minimum fluctuating lift. [ASME PAPER 68-WA/FE-12]

05 p0698 A69-16092

Some recent research in turbo-machinery.

05 p0751 A69-16534

Recent developments in the aerodynamic design of axial flow compressors.

12 p2147 A69-25792

The quasi-steady design of a compressor or pump stage for minimum fluctuating lift. [ASME PAPER 68-WA/FE-12]

19 p3240 A69-36419

Flow disturbances due to blade thickness in turbomachines.

20 p3457 A69-37084

## HORMUTH, G. A.

A list of equipment environmental conditions.

17 p2910 A69-33661

Resistance thermometers for precision temperature measurement.

18 p3139 A69-35480

## HORN, H. J.

Iterative guidance applied to generalized missions.

[AIAA PAPER 67-620]

04 p0629 A69-15501

## HORN, J.

Evolution of close binaries. III.

11 p1964 A69-25414

Models for main-sequence stars.

23 p4208 A69-41286

## HORN, K. L.

Detection of slowly fading targets with frequency agility.

17 p2917 A69-32919

## HORN, K. P.

Further experiments on spreading of liquids injected into a supersonic flow.

09 p1482 A69-21966

## HORN, L. H.

A computational study of the energetics of a limited region of the atmosphere.

15 p2648 A69-30220

The contribution of infrared cooling to the vertical motion field and its implication in atmospheric energetics.

17 p2962 A69-33689

## HORNAK, T.

Contribution to the evaluation of the frequency stability of a microwave source in a radar transmitter with fixed target suppression /Prispevek k vyhodnoteni

kmitovetovej stability mikrovlnneho zdroja vo vysielaci radiolokatoru s potlacimim pevných cieľov/.

20 p3485 A69-36943

## HORNBUCKLE, G. D.

Diagnosis of single-gate failures in combinational circuits.

15 p2583 A69-31112

## HORNE, M. R.

Elastic-plastic, axisymmetric analysis of a thin-walled cylindrical shell subjected to a radial pressure difference. [ASME PAPER 68-APM/AA]

04 p0670 A69-14404

The structural setting and operation of large paraboloid radio antennae for optimum performance.

06 p1023 A69-17372

## HORNE, R. S.

Development of a semiautomatic fatigue-evaluation system for transport aircraft.

01 p0165 A69-10118

## HORNE, W. E.

Recovery of gamma dose military specification failures during low and high power life testing of silicon transistors.

06 p0976 A69-16878

## HORNE, W. G.

Hydraulic systems for a 140-ft radio telescope.

[ASME PAPER 68-WA/PEM-2]

05 p0743 A69-16147

## HORNECK, G.

The effect of a vacuum and radiation on microorganisms /Zur Wirkung von Vakuum und Strahlung auf Mikroorganismen/.

07 p1064 A69-18943

Survival of microorganisms under simulated space conditions.

15 p2557 A69-31388

Discussion of a possible contamination of space with terrestrial life.

20 p3475 A69-37615

## HORNEMANN, U.

Deformation microstructures in shock-loaded olivine.

05 p0818 A69-15607

## HORNER, F.

Measurement of terrestrial radio noise.

21 p3759 A69-39259

## HORNER, J. L.

Optical spatial filtering with the least mean-square-error filter.

15 p2611 A69-31033

## HORNUNG, E. W.

The thermal conductivity of silicon dioxide glass from 0.5 to 4.2 K.

09 p1493 A69-21426

## HORONJEFF, R.

Sizing of departure lounges in airport buildings.

16 p2766 A69-32330

## HORONJEFF, R. D.

Judged noisiness of modulated and multiple tones in broad-band noise.

11 p1830 A69-24796

## HOROVITZ, B.

A turbulent free jet study at the exit of a miniature nozzle.

05 p0746 A69-16012

Theoretical analysis of a free jet flow close to a wall in the presence of a control port with and without control flow.

14 p2428 A69-28877

## HOROWITZ, I.

Design of zero-sensitivity frequency-selective integrated circuits.

08 p1300 A69-21174

## HOROWITZ, I. M.

Optimum linear adaptive design of dominant-type systems with large parameter variations.

22 p3918 A69-41011

## HOROWITZ, J. M.

A correction technique for structural impact modeling using dissimilar materials.

24 p4406 A69-43692

## HOROWITZ, L.

Direct-ranging LORAN.

17 p3002 A69-34079

## HOROWITZ, N. H.

Sterile soil from Antarctica - Organic analysis.

16 p2746 A69-31552

- Mariner 6 television pictures - First report.  
21 p3803 A69-38981
- Mariner 7 television pictures - First report.  
21 p3806 A69-39330
- Mariner 6 and 7 television pictures - Preliminary analysis.  
24 p4384 A69-43195
- HOROWITZ, S.**  
Numerical solution of differential equations with slowly varying coefficients.  
17 p2996 A69-33879
- HORR, K. S.**  
A new, sensitive, rapid materials contamination screening system.  
24 p4297 A69-42931
- HORRIGAN, F.**  
Windows for high-power lasers.  
07 p1144 A69-18401
- HORRIGAN, F. A.**  
Optical degradation of high-power ionized argon gas lasers.  
[IEEE PAPER L-4] 05 p0775 A69-16322  
Life and parameter studies on sealed CO sub 2 lasers.  
07 p1155 A69-19091  
CW operation of high-pressure flowing CO sub 2 lasers.  
23 p4173 A69-41496
- HORSEWOOD, J. L.**  
Toward a unified set of low-thrust mission analysis techniques.  
09 p1585 A69-21208  
Mission window definition for Jupiter swingbys to the outer planets.  
[AAS PAPER 68-115] 19 p3402 A69-35936
- HORSKY, J.**  
The exact static exterior and interior metric of a thick plane plate.  
15 p2654 A69-31477  
Conservation laws in general relativity.  
16 p2813 A69-32362
- HORSLEY, A. W.**  
Glow-discharge unit makes multilayer deposition easy.  
06 p0931 A69-17201
- HORST, R. L., JR.**  
A new solution potential measurement for predicting stress corrosion performance of 2219 aluminum alloy products.  
16 p2798 A69-31716
- HORSTEIN, M.**  
Sequential signal design for channels with feedback.  
03 p0408 A69-12868
- HORSTMAN, C. C.**  
Hypersonic viscous interaction on slender cones.  
[AIAA PAPER 68-2] 02 p0189 A69-12520  
Cone drag in rarefied hypersonic flow.  
[AIAA PAPER 69-140] 06 p0865 A69-18184
- HORTON, B. H.**  
Satellite measurement of upper atmospheric molecular oxygen densities.  
20 p3523 A69-37413
- HORTON, J. O., JR.**  
Great circle route.  
02 p0278 A69-12360
- HORTON, M. D.**  
Design considerations for combustion stability.  
[AIAA PAPER 68-532] 12 p2191 A69-26788
- HORTON, P. W.**  
Measurement of the spectrum of 387 radio sources at centimetre wavelengths. I.  
18 p3200 A69-35132
- HORTON, W. F.**  
Sensitivity in multivariable control systems.  
[ASME PAPER 68-WA/AUT-9] 05 p0738 A69-16179
- HORTON, W. H.**  
Experimental studies of the effect of general imperfections on the elastic stability of thin shells.  
14 p2533 A69-29022  
An experimental study of the local buckling of ring-stiffened cylinders subject to axial compression.  
14 p2534 A69-29030
- HORVATH, R.**  
Multispectral survey in the Alaskan Arctic.  
12 p2075 A69-26996
- HORVATH, A.**  
The change in the periods of the satellites 1963 53A and 1964 76A in August and September of 1966 /Izmenenie periodov iskusstvennykh sputnikov zemli 1963 53A i 1964 76A v avguste i sentyabre 1966 goda/.  
12 p2174 A69-26446
- HORVATH, F.**  
Some theoretical contributions concerning the Doppler geodetical measurements.  
15 p2601 A69-31375
- HORVATH, L.**  
Measurements with semiconductor strain gauges /Felvezetok nyulasmeroebelyeges meresek/.  
22 p3947 A69-40938
- HORWEDEL, J. H.**  
An application of pattern recognition theory to weather prediction using quantized radar data.  
21 p3678 A69-39458
- HORWITZ, B. A.**  
Effect of norepinephrine and uncoupling agents on brown adipose tissue.  
19 p3258 A69-36294  
Brown fat and thermogenesis.  
23 p4091 A69-42013
- HORWITZ, L. D.**  
Cardiovascular effects of low-oxygen atmospheres in conscious and anesthetized dogs.  
23 p4078 A69-41314
- HOSACK, G. A.**  
Performance of the aerobell extendible nozzle rocket engine.  
[AIAA PAPER 69-4] 06 p0985 A69-18195  
Analytical methods for computing the effects of turbine exhaust and film-coolant injection on rocket engine performance.  
[AIAA PAPER 69-473] 16 p2844 A69-32726
- HOSHIMIYA, N.**  
Abnormal current changes of the junction field effect transistors.  
01 p0038 A69-10122
- HOSHIZAKI, H.**  
Measurements of the total radiant intensity of air.  
04 p0685 A69-14719
- HOSHIZAKI, T.**  
Central nervous, cardiovascular and metabolic data of a Macaca nemestrina during a 30-day experiment.  
24 p4260 A69-42703
- HOSIER, W. J.**  
Noise susceptibility of integrated circuits in digital systems.  
03 p0410 A69-13579
- HOSINSKY, G.**  
Possible effects of rotation in flares and prominences.  
06 p0994 A69-17434
- HOSKING, J. R.**  
Data system for turbine engine development.  
10 p1660 A69-23284
- HOSKING, R. J.**  
Rayleigh-Taylor problem for a Hall plasma.  
04 p0637 A69-15050
- HOSLER, C. L.**  
Freezing of water droplets in equilibrium with different gases.  
12 p2126 A69-26018
- HOSODA, J.**  
DNA replication in vivo by a temperature-sensitive polynucleotide ligase mutant of T4.  
10 p1647 A69-24188
- HOSODA, T.**  
Study on a semi-hot wall duct for MHD generators.  
13 p2372 A69-27473
- HOSOKAWA, K.**  
Role of 5S ribosomal RNA in polypeptide synthesis.  
23 p4113 A69-41491
- HOSONO, T.**  
Reflection of electromagnetic waves at the boundary surface between media moving relative to each other and parallel to both the boundary plane of incidence.  
15 p2568 A69-30796  
Design of optimum signal for energy detection.  
18 p3104 A69-35484
- HOSPERS, J.**  
New determinations of ancient earth radii from palaeomagnetic data.  
22 p3937 A69-40183
- HOSSEINIEH, H. H.**  
Midlatitude nighttime total electron content behavior during magnetically disturbed periods.  
03 p0426 A69-14030
- HOTCHIN, J.**  
The biological effectiveness of solar electromagnetic radiation in space.  
01 p0017 A69-11086  
The survival of terrestrial microorganisms in space at orbital altitudes during Gemini satellite experiments.  
01 p0018 A69-11087  
Panspermia revisited, or have we already contaminated Mars/ques/.  
05 p0714 A69-15951
- HOTTEL, H. C.**  
Scattering of radiation by particle layers.  
[AIAA PAPER 68-30] 02 p0282 A69-12503
- HOTZ, G. M.**  
Sampling.  
23 p4146 A69-41620
- HOTZ, M. C. B.**  
The sulphation of nickel and cobalt ferrites and sulphides by molten sodium pyrosulphate and sodium bisulphate.  
16 p2747 A69-32567
- HOU, K. C.**  
Single-pulse shock-tube studies of the pyrolysis of fluorocarbons and of the oxidation of perfluoroethylene.  
18 p3099 A69-34467
- HOUBOLT, J. C.**  
Evaluation of aerothermoelasticity problems for unmanned Mars-entry vehicles.  
[AIAA PAPER 68-283] 09 p1610 A69-21991
- HOUCK, J. R.**  
Preliminary observations of the far-infrared night-sky background radiation.  
01 p0121 A69-11249  
Paschen-line observations of the Orion Nebula.  
08 p1384 A69-20058  
Rocket-borne liquid helium cooled telescope.  
11 p1885 A69-24852  
Far-infrared observations of the night sky.  
16 p2781 A69-32445
- HOUDAS, Y.**  
Effects of a sharp increase of radiant temperature on the human organism /Effets sur l'organisme d'une augmentation brutale de la temperature radiante/.  
[AGARDOGRAPH-111] 08 p1264 A69-20670  
Coefficients of heat exchange by convection - An experimental study /Coefficients d'echange de chaleur par convection - Etude experimentale/.  
[AGARDOGRAPH-111] 08 p1266 A69-20673  
Effects of immersion in cold water on man /Effets sur l'homme de l'immersion dans l'eau froide/.  
08 p1267 A69-20682
- HOUGH, E. A.**  
The parafoveal visual response of a tritanope and an interpretation of the V lambda sensitivity functions of mesopic vision.  
22 p3882 A69-40869  
The Purkinje shift.  
22 p3883 A69-40880
- HOUGH, W. W.**  
Solar array performance as a function of orbital parameters and spacecraft attitude.  
13 p2203 A69-27419
- HOUGHTON, J. E.**  
Self-lubricating composite materials for high-temperature applications.  
[IME PAPER 12] 07 p1137 A69-18560
- HOUGHTON, J. T.**  
The selective chopper radiometer for atmospheric temperature sounding.  
[UN PAPER 68-95797] 01 p0080 A69-10531  
Absorption and emission by carbon-dioxide in the mesosphere.  
08 p1308 A69-20308
- HOULIHAN, R. T.**  
Effect of isolation on blood pressure, behavior and response to epinephrine in the rat.  
14 p2407 A69-29296  
Effects of increased oxygen pressure on adrenal steroid and catecholamine release.  
23 p4087 A69-41791
- HOULT, C. P.**  
Rocket transportation for measurements in the upper atmosphere.  
[AIAA PAPER 69-159] 06 p1018 A69-18066



## HOULT, D. P.

Euler-Lagrange relationship for random dispersive waves.

01 p0121 A69-11202

## HOUMINER, Z.

Ionospheric electron content and scintillation studies at widely-spaced low-latitude stations.

02 p0235 A69-11427

## HOUSE, L. L.

Hartree-Fock calculations of coronal forbidden lines in the argon I isoelectronic sequence.

08 p1385 A69-20071

Reinterpretation of the feature at 23.28 angstrom units in solar soft-X-ray spectra.

09 p1580 A69-22232

Radiative transport in finite homogeneous cylinders by the Monte Carlo technique.

12 p2191 A69-26970

The treatment of resonance scattering of polarized radiation in weak magnetic fields by the Monte Carlo technique.

20 p3577 A69-38157

Theoretical wavelengths for K alpha-type X-ray lines in the spectra of ionized atoms/carbon to copper/.

22 p3984 A69-40156

## HOUSE, R. D.

Monitoring equipment for turbine engine development.

10 p1692 A69-23253

## HOUSLEY, T. A.

Application of satellites to the telecommunications scene.

[UN PAPER 68-95286] 06 p0886 A69-17066

## HOUSTON, J. T.

The growth of grain boundary gas bubbles in chemically vapor deposited tungsten.

01 p0097 A69-10646

## HOUSTON, R. C.

Human factors and airline training.

01 p0019 A69-10450

## HOUSTON, R. E., JR.

A measurement of the effective recombination coefficient in the lower ionosphere.

14 p2511 A69-28960

A sensitive radio receiver for ionospheric measurements.

17 p2936 A69-33062

## HOUTGAST, J.

Continuum location and total line absorption in the solar spectrum from 2988 to 4087 angstrom units.

05 p0828 A69-16611

## HOUTS, R. C.

Digital compensation of tape recorder time-base error.

19 p3312 A69-36284

## HOUZIAUX, L.

Spectroscopic study of some Be stars in the photographic near infrared. II - HD 217050 /Etude spectroscopique de quelques étoiles Be dans le proche infrarouge photographique. II - HD 217050/.

18 p3201 A69-35144

Forbidden lines in the infrared spectra of NGC 1976, IC 418, and IC 4997 /Raies interdites dans le spectre infrarouge de NGC 1976, IC 418 et IC 4997/.

19 p3422 A69-36222

Spectroscopic observations of Be stars /Observations spectroscopiques d'étoiles Be/.

23 p4213 A69-41720

## HOVANESSIAN, S. A.

Matrix-Computer Methods in Engineering.

23 p4234 A69-42421

## HOVE, R. G.

Microelectronic filters for frequency division multiplex.

09 p1466 A69-22452

## HOVEL, H. J.

The electrical characteristics of nZnSe-pGe heterodiodes.

11 p1851 A69-25114

## HOVERMALE, J. B.

A technique of objective analysis and initialization for the primitive forecast equations.

24 p4344 A69-43065

## HOVEY, W. J.

Hypoxia warning - A new technique.

07 p1071 A69-19430

## HOWARD, D. A.

Payload maximization and mission mode comparison for hard and soft Martian landers.

02 p0335 A69-12822

## HOWARD, D. C.

Selection of astronaut cooling systems for extravehicular space missions.

[AIAA PAPER 69-617] 17 p2914 A69-33278

## HOWARD, D. D.

Radar target amplitude, angle, and Doppler scintillation from analysis of the echo signal propagating in space.

02 p0211 A69-12447

Contour pattern analysis of a monopulse radar Cassegrainian antenna.

04 p0576 A69-14769

## HOWARD, H. T.

Simultaneous optical and radio observations of NP 0532.

15 p2680 A69-30233

## HOWARD, J. C.

An algorithm for deriving the equations of mathematical physics by symbolic manipulation.

04 p0564 A69-14858

## HOWARD, J. H. G.

Unsteady flow phenomena in rotating centrifugal impeller passages.

[ASME PAPER 69-GT-35] 09 p1432 A69-22489

## HOWARD, J. R.

Development of the Mariner Mars 1971 meteoroid shield.

[AIAA PAPER 69-377] 13 p2357 A69-28307

## HOWARD, L. L.

Complex impedance characteristics of low-resistance bismuth films.

13 p2322 A69-28011

## HOWARD, P.

A method for the estimation of the cardiac output during space flight.

[UN PAPER 68-95746] 01 p0151 A69-10527

## HOWARD, R.

A large-scale pattern in the solar magnetic field.

04 p0665 A69-15532

Some regularities in the distribution of large-scale magnetic fields on the sun.

08 p1394 A69-20610

On the solar sources of recurrent geophysical effects.

11 p1964 A69-25415

Solar activity and recurrences in magnetic-field distribution.

14 p2528 A69-29966

On long-term forecasts of solar activity.

24 p4374 A69-43625

On forecasts of interplanetary and geophysical conditions.

24 p4387 A69-43626

## HOWARD, R. C.

Converter SD-4 design and summary of test results.

11 p1827 A69-25398

Development of a 100 watt/e/ isotope thermionic electrical power module.

14 p2398 A69-29190

SNAP-13 generator development program.

14 p2481 A69-29191

Converter SD-4 design and summary of test results.

14 p2399 A69-29196

## HOWARD, R. G.

Infrared in-process micro-weld evaluator.

09 p1510 A69-22347

## HOWARD, R. T.

Electrical conductivity as an index of cure cycle in adhesive bonding of age hardening alloys.

19 p3321 A69-35565

## HOWARD, R. W.

Microwave components for wide-band phased arrays.

04 p0571 A69-14318

## HOWARD, W. E.

Application of a k-p band model to GeTe and SnTe.

19 p3385 A69-36516

## HOWARD, W. H.

Effects of acute exposure to high-energy protons on primates.

03 p0374 A69-13498

## HOWDEN, D. G.

The feasibility of resistance welding in hard vacuum.

12 p2103 A69-26622

The feasibility of resistance welding in a hard vacuum.

19 p3319 A69-35554

## HOWE, M. S.

On gravity-coupled magnetohydrodynamic waves in the sun's atmosphere.

13 p2337 A69-27549

## HOWE, P. W. H.

Thermal stress and non-steady creep.

21 p3843 A69-39310

## HOWE, R. M.

Computer mechanization of six-degree of freedom flight equations.

02 p0212 A69-11998

Preliminary investigation of a hybrid method for solving partial differential equations.

04 p0567 A69-15348

Trajectory optimization by a direct descent process.

06 p1006 A69-17570

## HOWE, R. O.

Effects of dielectric permittivity on radome performance.

07 p1110 A69-19519

## HOWELL, B. J.

Design procedure for Ritchey-Chretien corrector.

17 p2972 A69-33087

## HOWELL, C.

A burnout criterion for Schottky-Barrier mixer diodes.

04 p0574 A69-14352

## HOWELL, J. C.

Design criteria for film cooling for small liquid-propellant rocket engines.

[AIAA PAPER 68-617] 09 p1570 A69-21978

Main tank injection for packaged liquid missiles.

[AIAA PAPER 68-627] 19 p3429 A69-35947

## HOWELL, J. N.

Mechanical fasteners for high temperature structure.

24 p4325 A69-43441

## HOWELL, J. R.

Application of Monte Carlo to heat transfer problems.

11 p1997 A69-24457

Effective slip coefficients for coupled conduction-radiation problems.

13 p2374 A69-27784

## HOWELL, J. S.

Howell engine hot section analyzer and its applications.

10 p1671 A69-23263

## HOWELL, N. A.

Computerized ray optics method of calculating average value radar cross section.

02 p0209 A69-12332

## HOWELL, R. H.

Numerical solution of subsonic compressible flow at two-dimensional inlets.

23 p4060 A69-41915

## HOWELLS, P.

The motion of oxygen ions in oxygen.

05 p0795 A69-15662

## HOWER, G. L.

Further comparison of spread-F and backscatter sounder measurements.

18 p3129 A69-34958

## HOWETH, M. S.

Boron-epoxy systems in action.

09 p1529 A69-22068

## HOWEY, D. C.

A two-dimensional study of miniaturized calorimetric techniques for extreme stagnation heating rates /3000-10,000 BTU/FT super 2-SEC/.

01 p0079 A69-10299

## HOWIE, I. H.

Atmospheric noise at 33.5 GHz.

05 p0721 A69-16661

## HOWLAND, B.

An electromagnetic attitude control system for a synchronous satellite.

21 p3827 A69-39755

## HOWLAND, F. J.

ATC automation.

05 p0790 A69-16719

## HOWLAND, G. R.

A high-gain proportional amplifier.

10 p1638 A69-23555

## HOWLETT, L. C.

Rocket-borne Rayleigh scattering instrumentation to measure atmospheric density.

06 p0927 A69-17698

- HOWSON, D. P.**  
High-frequency mixers using square-law diodes.  
03 p0404 A69-13580  
Minimum loss of a general broadband mixer.  
11 p1845 A69-24550
- HOWZE, H. H.**  
Future military applications of VTOL aircraft.  
[AIAA PAPER 69-326] 07 p1055 A69-19556
- HOYAUX, M. F.**  
Fast randomization of an electron gas by trapped electro-acoustic waves.  
02 p0289 A69-12236  
A new spectroscopic method of high pressure arc diagnostics.  
12 p2094 A69-26968
- HOYDYSH, W. G.**  
An experimental investigation of hypersonic turbulent boundary layers in adverse pressure gradient.  
[AIAA PAPER 68-44] 04 p0588 A69-14716
- HOYER, J.**  
The effect of psychopharmacological drugs on retinal neuron activity /Die Wirkung von Psychopharmaka auf die Aktivitaet retinaler Neurone/.  
22 p3879 A69-40846  
The effect of psychopharmacological drugs on visually evoked potentials in cats /Die Wirkung von Psychopharmaka auf visuell evozierte Potentiale der Katze/.  
22 p3879 A69-40847
- HOYLE, F.**  
Cosmology and electrodynamics.  
03 p0468 A69-13773  
Condensed objects in the Crab Nebula.  
09 p1592 A69-21485  
Solid hydrogen and the microwave background.  
10 p1776 A69-23216  
Highly condensed objects.  
13 p2334 A69-27190  
Pulsed radio sources.  
17 p3037 A69-33640  
Interstellar grains.  
20 p3615 A69-38260  
Electrodynamics of direct interparticle action. I - The quantum mechanical response of the universe.  
22 p3980 A69-40169  
Magnetic fields and highly condensed objects.  
22 p4035 A69-41207
- HOYT, W. G.**  
Computerized operational training for aerospace systems - Automated programmed instruction /API/.  
[AIAA PAPER 69-956] 22 p3905 A69-40338
- HOZUMI, H.**  
Closed-cycle traveling-wave maser.  
02 p0256 A69-11992
- HRIBAR, A. E.**  
On the interaction of intense acoustic fields and viscous fluid flows.  
[ASME PAPER 68-WA/FE-8] 05 p0748 A69-16091  
On the interaction of intense acoustic fields and viscous fluid flows.  
[ASME PAPER 68-WA/FE-8] 14 p2430 A69-29444  
Secondary flow induced by a transverse resonant acoustic field in a circular duct.  
[AIAA PAPER 69-667] 17 p2954 A69-33457
- HRISTOV, W. K.**  
Fundamental parameters for the earth ellipsoid and the formula for the normal acceleration /Ausgangssparameter fuer das Erdellipsoid und die Formel fuer die Normalbeschleunigung/.  
09 p1487 A69-21633
- HRIVNAK, J. S.**  
Evaluation of the effects of simulated space storage on solid propellant rocket motors.  
06 p0982 A69-17594
- HRUSHOW, W. K.**  
Euler's rotational equations for bodies with the inertia tensor varying due to mass redistribution and mass loss.  
09 p1616 A69-21956
- HRUSKA, A.**  
Interaction of plasma waves and particles in the non-uniform magnetosphere and acceleration of auroral particles.  
02 p0235 A69-11429  
The magnetodynamic toroidal waves.  
02 p0236 A69-11430  
Two-dimensional model of the neutral sheet in the earth's magnetotail.  
14 p2440 A69-29119
- Long time-scale magnetodynamic noise in the geomagnetic tail.  
22 p3935 A69-39967
- HRUSKOVA, J.**  
Long time-scale magnetodynamic noise in the geomagnetic tail.  
22 p3935 A69-39967
- HSIA, T. C.**  
Learning model approach for nonlinear system identification.  
05 p0737 A69-15805  
A discrete method for parameter identification in linear systems with transport lags.  
13 p2289 A69-27945
- HSIA, Y.**  
Dopant dependency of Fermi level location in heavily doped silicon.  
05 p0808 A69-16285
- HSIAO, C. C.**  
Behavior of elastic networks of various degrees of orientation in the kinetic theory of fracture.  
02 p0345 A69-12401  
Creep in anisotropic stress analysis.  
07 p1234 A69-19381
- HSIAO, M.-Y.**  
Error Detecting Logic for Digital Computers.  
02 p0212 A69-11453
- HSIEH, H. C.**  
Focusing of a relativistic electron flow.  
05 p0796 A69-15715
- HSIEH, T. Y.**  
Three-dimensional laminar jet mixing.  
16 p2768 A69-31687  
Linearized theory of three-dimensional jet mixing with and without walls.  
[ASME PAPER 69-FLCS-22] 20 p3516 A69-37976
- HSING, F. C.**  
Mean free path effect in spiral-grooved thrust bearings.  
[ASME PAPER 68-LUBS-17] 13 p2266 A69-27273  
Analysis of pulsating flows in infinite and finite conical nozzles.  
[ASME PAPER 69-APM-16] 18 p3214 A69-34392
- HSU, C. S.**  
On the final states of shallow arches on elastic foundations subjected to dynamical loads.  
[ASME PAPER 68-WA/APM-26] 04 p0669 A69-14394
- HSU, C. T.**  
Vibrational relaxation of diatomic gases behind shock waves.  
01 p0061 A69-11204
- HSU, C.-C.**  
A time-optimal problem with recoverability constraint.  
12 p2052 A69-26504  
A simple solution for boundary layer flow of power law fluids past a semi-infinite flat plate.  
15 p2589 A69-30002  
Boundary-layer growth behind a plane wave.  
24 p4305 A69-43596
- HSU, I.-C.**  
Paleomagnetic investigation of some Arkansas alkaline igneous rocks.  
14 p2445 A69-29884
- HSU, J. J.**  
The penetration and mixing of air jets directed perpendicular to a stream.  
[ASME PAPER 68-WA/GT-8] 05 p0750 A69-16143
- HSU, L.-C.**  
Synthesis of ultrahigh molecular weight poly(ethylene terephthalate)/.  
05 p0797 A69-16496
- HSU, N.**  
Hypervelocity target dynamics as seen by three dimensional markers.  
[AIAA PAPER 69-368] 13 p2367 A69-28300
- HSU, S. K. T.**  
Preliminary investigation of a hybrid method for solving partial differential equations.  
04 p0567 A69-15348
- HSU, T.**  
Hydrogen embrittlement of 18Cr-8Ni stainless steel and its correspondence to corrosion cracking.  
19 p3358 A69-35774
- HSU, T. C.**  
Application of generalised strain-measure to simple deformation problems in the field of plasticity.  
21 p3844 A69-39321
- HSU, T. R.**  
Thermal shock on a finite disk due to an instantaneous point heat source.  
13 p2363 A69-28130
- HSU, Y. Y.**  
Stability of cylindrical bubbles in a vertical pipe.  
[ASME PAPER 69-HT-28] 24 p4411 A69-43540
- HSUAN, H. C. S.**  
Profile measurements of plasma columns using microwave resonant cavities.  
02 p0290 A69-12403
- HSUEH, P. C.**  
Rotation of a conducting fluid in a finite cylinder due to crossed electric and magnetic fields.  
[AIAA PAPER 69-726] 17 p3011 A69-33472
- HSUEH, Y.**  
Buoyant Ekman layer.  
24 p4347 A69-43356
- HU, P. Y.**  
Response of linear systems to magnitude limited random excitation.  
[ASME PAPER 69-VIBR-41] 10 p1807 A69-24179
- HU, S. S.**  
Guidance scheme for low-thrust parabolic insertion.  
[AAS PAPER 69-403] 24 p4379 A69-42832
- HU, W. C. L.**  
Transmission characteristics of conical and cylindrical shells under lateral excitation.  
06 p1021 A69-17147  
Nonsymmetric modes of complete spherical shells.  
17 p3061 A69-33706
- HUANG, A. B.**  
Kinetic theory of the sharp leading edge problem. I - Supersonic flow.  
06 p0861 A69-17637  
Kinetic theory of the sharp leading edge problem in supersonic flow.  
11 p1817 A69-24288  
The supersonic leading edge problem according to the ellipsoidal model.  
[AIAA PAPER 69-652] 17 p2892 A69-33464
- HUANG, C. C.**  
An analysis of precession and critical speeds of rotor systems.  
[ASME PAPER 69-VIBR-54] 10 p1805 A69-24154
- HUANG, C. L.**  
The energy function for anisotropic materials with couple stresses - Cubic and hexagonal systems.  
01 p0169 A69-10811
- HUANG, C.-L.**  
On forced vibration of anisotropic cylinders.  
09 p1611 A69-21440
- HUANG, H.-S.**  
Unsteady compressible laminar boundary-layer flow over a flat plate.  
04 p0588 A69-14715
- HUANG, K.-Y.**  
Production of interferon in mice - Effect of altered gaseous environments.  
24 p4262 A69-42888
- HUANG, N. C.**  
Optimum critical impulse for snap-through in systems of one degree of freedom.  
[AIAA PAPER 68-143] 02 p0346 A69-12508  
Axisymmetric dynamic snap-through of elastic clamped shallow spherical shells.  
09 p1616 A69-21977  
Dynamic snap-through of an elastic-plastic simple shallow truss.  
19 p3446 A69-36836  
On elastic filament reinforcement of a viscoelastic cylinder.  
[ASME PAPER 69-APMW-23] 24 p4401 A69-43096
- HUANG, S.-S.**  
On the Eddington approximation.  
02 p0282 A69-12703  
Origin of binaries from a consideration of angular momentum.  
05 p0822 A69-15856  
Occurrence of planetary systems in the universe as a problem in stellar astronomy.  
17 p3032 A69-33105



- Transfer of radiation in circumstellar dust envelopes.  
I - Extreme cases. 22 p4027 A69-40655
- HUANG, T. C.**  
An analysis of precession and critical speeds of rotor systems.  
[ASME PAPER 69-VIBR-54] 10 p1805 A69-24154  
Response and stability of a self-sustained two-degrees-of-freedom system with nonlinear damping.  
[ASME PAPER 69-VIBR-24] 10 p1806 A69-24171
- HUANG, Y. S.**  
Analysis of temperature distributions in heat pipe wicks.  
[ASME PAPER 69-HT-23] 24 p4412 A69-43545
- HUART, L. J.**  
The application of micro plasma, tungsten inert gas and submerged arc welding in the manufacture of rocket motor gases and allied projects.  
[SBAC PAPER 7] 20 p3550 A69-37449
- HUBBARD, A. L.**  
Anodic oxidation of cyclic hydrocarbons at fuel cell electrodes.  
[ECS PAPER 330] 15 p2562 A69-31540
- HUBBARD, E. L.**  
Linear ion accelerators. 09 p1553 A69-22697
- HUBBARD, J. S.**  
Sterile soil from Antarctica - Organic analysis. 16 p2746 A69-31552
- HUBBARD, R. P.**  
Crack growth under cyclic compression.  
[ASME PAPER 68-WA/MET-16] 05 p0838 A69-16154
- HUBBARD, W. B.**  
Thermal models of Jupiter and Saturn. 09 p1607 A69-22428  
Thermal conduction by electrons in stellar matter. 22 p4014 A69-40147
- HUBBELL, R. D.**  
Development of solid lubricant compacts for use in ball bearing separators.  
[ASLE PAPER 68-LC-16] 07 p1139 A69-18626
- HUBBLE, P. E.**  
A numerical approach to the estimation of gas turbine combustion chamber performance. 09 p1573 A69-22621
- HUBBOLD, R. J.**  
A scheme for man-machine interactive structural analysis. 12 p2035 A69-27098
- HUBE, F. K.**  
Thermocouple total-temperature, probe-radiation errors. 16 p2789 A69-31903
- HUBER, D.**  
Transport properties of indium antimonide thin films. 18 p3182 A69-34348
- HUBER, D. L.**  
Resonant scattering of monochromatic light in gases.  
[IEEE PAPER T-8] 05 p0776 A69-16328
- HUBER, F. R.**  
Construction of the large antenna array in Berlin for the reception of weather satellite transmissions /Die Konstruktion der grossen Berliner Empfangsanlage fuer Wettersatellitensendungen/. 17 p2946 A69-33767  
The hyperbolic technique for contactless measurement of the surfaces of large parabolic antennas. 19 p3281 A69-35766
- HUBER, M.**  
Absolute gf-values for Fe I and Fe II lines. 18 p3175 A69-34304
- HUBER, R. K.**  
Operational and analytical considerations for establishing design requirements in the development of aircraft /Operationsanalytische Beitrage zur Erstellung von Entwurfsforderungen fuer Flugzeugentwicklungen/. 03 p0366 A69-13646
- HUBERMAN, J. A.**  
Enzymatic synthesis of deoxyribonucleic acid. XXX. 22 p3898 A69-41074
- HUBERT, B.**  
Articulations for gravity gradient stabilized satellites /Les articulations pour satellites stabilises par gradient de gravite/. 17 p3048 A69-33234
- HUBERT, J.**  
Asymptotic study of the sonic flow of a viscous fluid at a great distance from a plane obstacle /Etude asymptotique de l'ecoulement sonique d'une fluide visqueux a grande distance d'un obstacle plan/. 04 p0544 A69-15057
- HUBERT, L. F.**  
Estimating hurricane wind speeds from satellite pictures. 17 p2997 A69-33690
- HUBERT, P.**  
The thermonuclear future of "Tokamak" type magnetic configurations /Sur l'avenir thermonucleaire des configurations magnetiques du type "Tokamak"/. 11 p1927 A69-25099
- HUCHITAL, D. A.**  
Lorentz model and time-dependent diffusion. 22 p3984 A69-40530
- HUCHTMEIER, W.**  
Measurement of pulsar distances by galactic hydrogen absorption. 06 p1012 A69-18225
- HUCKLE, P. R.**  
On the radiation from a ferrite slab excited by a line source. 17 p2926 A69-33852
- HUDDLE, J. R.**  
Degradation of linear filter performance due to modeling error. 02 p0225 A69-11971
- HUDDLESTON, J. V.**  
Finite deflections and snap-through of high circular arches.  
[ASME PAPER 68-WA/APM-18] 04 p0669 A69-14399
- HUDDLESTON, R. E.**  
Maximum principle methods for the discretization error in the approximation of the Bergman harmonic kernel by finite difference methods. 03 p0456 A69-13555
- HUDGENS, C. R.**  
Boron modifications produced in an induction-coupled argon plasma. 08 p1372 A69-20687
- HUDICK, M. G.**  
Apparatus for the precision measurement of internal friction. 03 p0428 A69-13108
- HUDOCK, R. P.**  
Qualitative V/STOL air traffic control requirements.  
[AIAA PAPER 69-211] 07 p1177 A69-19552
- HUDON, R.**  
On the hysteresis of on-off elements. 12 p2053 A69-26506
- HUDSON, C. M.**  
Effect of stress ratio on fatigue-crack growth in 7075-T6 aluminum-alloy sheet. 19 p3346 A69-36435
- HUDSON, H. S.**  
Solar and cosmic X-rays above 7.7 kev. 09 p1578 A69-22171  
Solar and cosmic X-rays above 7.7 kev. 09 p1579 A69-22173  
The hard solar X-ray spectrum observed from the third orbiting solar observatory. 20 p3593 A69-38166  
The time structure of solar X-ray bursts above 7.7 kev. 24 p4371 A69-43610
- HUDSON, J. B.**  
Impurity effects on heterogeneous nucleation from the vapor. III - Mercury on pyrex glass. 13 p2321 A69-28005  
Hydrogen permeation through alpha-palladium. 23 p4175 A69-41502
- HUDSON, J. P.**  
On the application of Luke's weight coefficients for evaluating the linearized Rayleigh problem in a rarefied gas flow. 10 p1679 A69-23596
- HUDSON, J. R.**  
Galvanostatic transients in passive iron.  
[ECS PAPER 84] 03 p0382 A69-13858
- HUDSON, J. W.**  
Comparative effects of depressed metabolism in homeotherms. 10 p1642 A69-23121
- HUDSON, M. L.**  
Flutter boundary for simply supported unstiffened cylinders. 23 p4228 A69-41914
- HUDSON, P. D.**  
Nonuniformity of solar protons over the polar caps on March 24, 1966. 16 p2848 A69-31967
- HUDSON, R. D.**  
Atmospheric implications of predissociation in N sub 2. 05 p0756 A69-16282  
Absorption of oxygen at elevated temperatures /300 to 900 K/ in the Schumann-Runge system. 06 p0962 A69-17803  
Predissociation in the Schumann-Runge band system of O sub 2 - Laboratory measurements and atmospheric effects. 20 p3534 A69-38089
- HUDSON, R. M.**  
A simple second-order correction to first order Faraday rotation theory in the region of quasi-transverse propagation of radio-waves through the ionosphere. 16 p2777 A69-32101
- HUDSON, R. R.**  
Structural response to sonic booms. 21 p3647 A69-38987
- HUDSON, W. R.**  
Flux flow in materials where kappa approximates 1. 17 p3016 A69-33754
- HUEGEL, F. J.**  
CVD tungsten and tungsten-rhenium alloys for structural applications. I. 01 p0096 A69-10641  
CVD tungsten and tungsten-rhenium alloys for structural applications. II. 01 p0097 A69-10648
- HUELSMAN, L. P.**  
The distributed-lumped-active network - Its application to filtering problems. 23 p4144 A69-41401
- HUET, C.**  
Research of an optimum solution for a fixed geometry ramjet, in the Mach 3 - Mach 7 range, with successively subsonic and supersonic combustion.  
[ONERA-TP-656E] 07 p1203 A69-18415
- HUET, J.-J.**  
High temperature compatibility of refractory metals in contact with refractory materials. 14 p2463 A69-29219
- HUETTER, G. T.**  
The attenuation of space protons by thin cylindrical shell and slab disk shields. 10 p1723 A69-23165
- HUETTER, U.**  
Composite shells under general loading /Composite-Schalen unter allgemeiner Belastung/. 12 p2176 A69-25851
- HUETZ, J.**  
Study of validity of logarithmic temperature laws /Etude de la validite des lois logarithmiques de temperature/. 08 p1420 A69-19877  
The analogy between momentum and energy transfers in turbulent convection /Sur l'analogie des transferts de quantite de mouvement et d'energie en convection turbulente/. 09 p1480 A69-21687
- HUFF, H. W.**  
Fully plastic crack growth under monotonic and repeated bending. 10 p1797 A69-23077
- HUFF, R. J.**  
A sampled-data delay-lock loop for synchronizing TDMA space communications systems. 03 p0390 A69-13216
- HUFF, W. W., JR.**  
A manned air-to-air combat simulator.  
[AIAA PAPER 68-253] 20 p3510 A69-37159
- HUFFAKER, R. M.**  
Application of laser Doppler velocity instrumentation to the measurement of jet turbulence.  
[SAE PAPER 690266] 09 p1494 A69-21555
- HUFFINGTON, J. D.**  
The frictional method of measuring contact area between surfaces and its relation to the surface microtopography of some abraded metals and polymers. 08 p1319 A69-19994

- HUFFMAN, R. E.**  
Effect of absorption by atomic oxygen and atomic nitrogen lines on upper atmosphere composition measurements.  
03 p0425 A69-14019
- HUFSCHMIDT, W.**  
Liquid-vapour interaction and evaporation in heat pipes.  
14 p2539 A69-29207
- HUG, D. P.**  
Processing techniques for boron filament wound composite structures.  
14 p2455 A69-29413
- HUGENSCHMIDT, M.**  
Photographic investigation of ultrahigh-speed processes in multiply reflected laser light /Photographische Untersuchung von Hoechstgeschwindigkeitssprozessen im mehrfach reflektierten Laserlicht/.  
12 p2086 A69-26168
- HUGGETT, G. R.**  
Mode-locking of CW lasers by regenerative RF feedback.  
02 p0260 A69-12657
- HUGHES, A. J.**  
A study of the spatial structure of turbulent flow by intensity-fluctuation spectroscopy.  
09 p1493 A69-21491
- HUGHES, A. R. W.**  
Satellite evidence for the generation of VLF emissions at medium latitude by the transverse resonance instability.  
12 p2073 A69-26947  
V.L.F. observations on Ariel III.  
21 p3717 A69-39262
- HUGHES, C. W.**  
High temperature in hydraulic systems.  
04 p0550 A69-14662
- HUGHES, D. L.**  
The flight investigation of pressure phenomena in the air intake of an F-111A airplane.  
[AIAA PAPER 69-488] 16 p2843 A69-32706
- HUGHES, E. C.**  
One key to R and D success - The right kind of proposal.  
12 p2192 A69-26733
- HUGHES, E. J.**  
On measuring the properties of adhesives in bonded joints.  
09 p1500 A69-22309
- HUGHES, G. F.**  
Conjugacy of visual auroras during magnetically quiet periods.  
05 p0753 A69-16247
- HUGHES, I. G.**  
A new cryogenic storage system for spacecraft.  
24 p4393 A69-43045
- HUGHES, J. D. H.**  
Boron autoradiography with the electron microscope.  
20 p3567 A69-38263
- HUGHES, J. L.**  
Homopolar generator as the energy store for a large laser.  
04 p0612 A69-15151  
Use of a pulsed laser tracking system for tracking satellites.  
13 p2222 A69-28192
- HUGHES, J. P.**  
Materials in a nuclear environment.  
19 p3356 A69-35530
- HUGHES, J. S.**  
Flight software development laboratory.  
[AIAA PAPER 69-324] 09 p1479 A69-22384
- HUGHES, R.**  
Temperature measurements in the low temperature combustion of n-pentane.  
02 p0353 A69-12321
- HUGHES, R. H.**  
Spectroscopy with gas targets.  
03 p0471 A69-13162
- HUGHES, V. A.**  
The radio nebula NRAO 591/593.  
10 p1790 A69-24136  
Radio observations of pre-protostars.  
15 p2701 A69-31531  
A detailed survey of the galactic plane at a wavelength of 9.26 cm between longitudes 32 deg and 49 deg.  
18 p3195 A69-34426
- Observations of W49 at 2800 MHz with an east-west resolution of 1.5.  
18 p3195 A69-34427
- HUGHES, W. E.**  
Current controlled negative resistance in n-type gallium arsenide.  
01 p0138 A69-10557
- HUGHES, W. G.**  
Nutational stability of multi-body spin-stabilized satellites.  
06 p1015 A69-17585  
Techniques for earth-pointing attitude control of a spacecraft.  
21 p3760 A69-38620
- HUGHES, W. L.**  
Economic high-pressure hydrogen-oxygen regenerative fuel-cell systems.  
23 p4076 A69-42308
- HUGUENIN, G. R.**  
Two new pulsating radio sources.  
09 p1592 A69-21484  
Dynamic spectra of pulsars.  
14 p2517 A69-29087  
Periodic intensity fluctuations in pulsars.  
24 p4389 A69-43744
- HUGUIER, P.**  
Gravity gradient stabilization and magnetic hysteresis damping - Design of the damping system /Stabilisation par gradient de gravite et amortissement par hysteresis magnetique - Dimensionnement du systeme amortisseur/.  
17 p3047 A69-33231
- HUI, P. S.**  
Implementation of a semi-active gravity gradient controller.  
07 p1227 A69-18334
- HUI, W. H.**  
Stability of oscillating wedges and caret wings in hypersonic and supersonic flows.  
24 p4249 A69-43659  
Interaction of a strong shock with Mach waves in unsteady flow.  
24 p4306 A69-43674
- HUIE, C. R.**  
The effects of mild acute physical stress on delivery and neonatal mortality in rats.  
24 p4266 A69-43381
- HUININK, B.**  
Parametric studies to optimize a V/STOL jet transport with lift engines /Parametrische Untersuchungen zur Optimierung eines V/STOL-Strahltransporters mit Hubtriebwerken/.  
04 p0547 A69-14812
- HUKUHARA, T.**  
Behavioral responses to short periods of lowered gravitational force in blind goldfish.  
11 p1828 A69-25464
- HUKUHARA, Z.**  
Dynamic stability tests of V/STOL model.  
06 p0866 A69-17091
- HULBERT, L. E.**  
A comparison of approximate methods for the solution of plate bending problems.  
[AIAA PAPER 68-296] 16 p2874 A69-32160  
Transient heat conduction with time dependent boundary conditions.  
[ASME PAPER 69-HT-50] 24 p4410 A69-43521
- HULETT, H. R.**  
Limitations on prebiological synthesis.  
24 p4269 A69-43514
- HULETT, R. H.**  
Avionic application of a heat pipe.  
23 p4075 A69-42305  
An avionic heat pipe.  
[ASME PAPER 69-HT-16] 24 p4413 A69-43552
- HULL, A. B.**  
The pointing calibration of the Haystack antenna.  
08 p1281 A69-20032
- HULL, D.**  
Effect of temperature on the brittle fracture of polycrystalline tungsten.  
12 p2116 A69-27135  
The brittle fracture of /100/ axis tungsten single crystals.  
15 p2637 A69-30226
- HULL, D. G.**  
Axisymmetric bodies of minimum drag in hypersonic flow.  
10 p1632 A69-23886
- Hypersonic shapes of maximum drag for a given heat-transfer rate.  
24 p4244 A69-42960
- HULL, G. W., JR.**  
Superconductors with magnetic impurities in a singlet ground state.  
02 p0295 A69-11778
- HULL, M. N.**  
Solid electrolyte batteries.  
10 p1640 A69-23999
- HULM, J. K.**  
Preparation and superconducting properties of thin films of transition metal interstitial compounds.  
13 p2321 A69-28009  
High field properties of pure niobium nitride thin films.  
17 p3016 A69-33790  
Applications of superconductivity.  
19 p3382 A69-35807
- HULT, J. L.**  
The promise of UHF satellites for mobile, broadcast, and austere services.  
[AAS PAPER 69-333] 24 p4282 A69-42872
- HULTGREN, R. O.**  
Finite element formulation for solving complicated boundary value problems in structural analysis.  
03 p0526 A69-13736
- HULTQVIST, B.**  
Auroras and polar substorms - Observations and theory.  
12 p2072 A69-26740  
Auroral and polar cap absorption.  
21 p3707 A69-38488  
Polar cap absorption and ground level effects /Invited review paper/.  
24 p4373 A69-43618
- HUM, M. R.**  
An analog computer simulation of a closed Brayton cycle system.  
[ASME PAPER 69-GT-50] 09 p1442 A69-22479
- HUMBERT, G. F.**  
A real-time processing system for determination of metabolic rates of a suited astronaut.  
[AIAA PAPER 69-993] 22 p3893 A69-40371
- HUMBLE, J. E.**  
An anomalous Forbush decrease.  
09 p1582 A69-22753
- HUME, C. R.**  
The Tiros M satellite in an ERTS role.  
21 p3818 A69-38621
- HUME, F. R.**  
Interference measuring instrument calibration.  
15 p2577 A69-30375
- HUMMEL, D.**  
The effect of vortex breakdown on the aerodynamic coefficients of small-aspect-ratio delta wings during yawing /Ueber den Einfluss des Aufplatzens der Wirbel auf die aerodynamischen Beiwerte von Deltafluegeln mit kleinem Seitenverhaeltnis beim Schiebeflug/.  
04 p0543 A69-14821
- HUMMEL, F. A.**  
Pressure-temperature study of sulfospinels.  
02 p0266 A69-12162
- HUMMEL, R. L.**  
Nondisturbing tracer technique for quantitative measurements in turbulent flow.  
09 p1495 A69-21911
- HUMMELS, D. R.**  
Threshold investigation of phase-locked discriminators.  
04 p0580 A69-15471
- HUMMER, D. G.**  
Non-coherent scattering. IV - Doppler redistribution functions in moving atmospheres.  
07 p1219 A69-19286  
Non-coherent scattering. V.  
23 p4192 A69-42403
- HUMPHREY, F. B.**  
A nanosecond Kerr magneto-optic camera.  
17 p2970 A69-32853  
Dynamic Kerr observations of high-speed flux reversal and relaxation processes in permalloy thin films.  
19 p3383 A69-36446
- HUMPHREY, L. C.**  
Horizon focusing effects observed on ionospherically reflected radio waves.  
03 p0395 A69-13627



**HUMPHREYS, R. M.**

A new composite spectrum of the VV Cephei type.  
24 p4387 A69-43353

**HUMPHRY, D. E.**

Microsecond response system for measuring shock arrival by changes in stream electrical impedance in a shock tube.  
03 p0428 A69-13104

**HUMPHRYES, R. F.**

Acoustic bulk-surface-wave transducer.  
15 p2607 A69-30167

**HUND, M.**

Approximate calculation of the characteristic frequencies of gas bubbles in liquids /Zur näherungsweise Berechnung der Eigenfrequenzen von Gasblasen in Flüssigkeiten/.  
11 p1915 A69-24582

Investigations of single-bubble cavitation at 10 Hz in a water-filled pressure chamber /Untersuchungen zur Einzelblasenkavitation bei 10 Hz in einer wasser-gefüllten Druckkammer/.  
19 p3302 A69-36871

**HUNDHAUSEN, A. J.**

Direct observations of solar-wind particles.  
14 p2513 A69-29098

Plasma flow pattern in the earth's magnetosheath.  
16 p2773 A69-31961

Numerical simulation of flare-generated disturbances in the solar wind.  
16 p2848 A69-31970

**HUNEKE, J. C.**

Short exposure ages of meteorites determined from the spallogenic super 36 Ar/super 38 Ar ratios.  
19 p3418 A69-36138

Spallogenic rare gases in taenite separated from iron meteorites.  
19 p3419 A69-36139

The thermal release of rare gases from separated minerals of the Mocs meteorite.  
19 p3419 A69-36141

Nuclear chronologies for the Galaxy.  
22 p3986 A69-40766

**HUNG, H. M.**

Heat transfer of thin fins with stochastic root temperature.  
[ASME PAPER 68-HT-35] 13 p2374 A69-27780

**HUNG, J. C.**

Design of low sensitivity sample-data control systems.  
[ASME PAPER 68-WA/AUT-15] 05 p0738 A69-16177

**HUNG, T.-K.**

Slow non-Newtonian flow in a zone of separation.  
04 p0587 A69-14594

**HUNGER, K.**

Collective constituent of a plasma microfield /Zum kollektiven Anteil des Plasma-Mikrofeldes/.  
02 p0287 A69-11871

The atmosphere of the helium-carbon star BD plus 10 deg 2179.  
22 p4026 A69-40652

**HUNI, J. P.**

Stability and space-time measurements of concentric detonations.  
20 p3632 A69-37215

Detonation driven shocks of high Mach number.  
23 p4198 A69-41545

**HUNOT, C.**

Barkhausen oscillator using cesium ions /Oscillateur de Barkhausen utilisant des ions de césium/.  
08 p1280 A69-19981

**HUNSPERGER, R.**

Photon loss in the active and passive regions of a semiconductor laser.  
13 p2271 A69-27467

**HUNSPERGER, R. G.**

The presence of deep levels in ion implanted junctions.  
05 p0808 A69-16287

**HUNSUCKER, R. D.**

Survey of polar and auroral region effects on HF propagation.  
12 p2032 A69-26859

Remote sensing of the terrestrial environment with an HF radio high-resolution azimuth and elevation scan system.  
14 p2448 A69-29520

**HUNT, B. G.**

An investigation of thermal tidal oscillations in the earth's atmosphere using a general circulation model.  
03 p0457 A69-13030

Experiments with a stratospheric general circulation model. III - Large-scale diffusion of ozone including photochemistry.  
13 p2294 A69-28492

**HUNT, C. R., JR.**

NbZn - A mu-phase.  
15 p2636 A69-30086

**HUNT, D. E.**

Improved multifunction array radar performance with multifrequency operations.  
03 p0388 A69-13182

**HUNT, E. B.**

A formal deductive problem-solving system.  
01 p0037 A69-10806

**HUNT, G. C.**

Changing periodicities in the pulsars.  
05 p0825 A69-16352

**HUNT, G. E.**

Solution of radiative transfer problems in planetary atmospheres.  
07 p1213 A69-18610

The transport equation of radiative transfer with isotropic scattering.  
07 p1241 A69-18808

Solution of radiative transfer problems using the invariant S sub n method.  
07 p1183 A69-19623

**HUNT, G. R.**

Orbital infrared experiments.  
[AAS PAPER 68-196] 02 p0312 A69-11474

Compositional implications of the spectral behaviour of the Martian surface.  
12 p2156 A69-26225

Mid-infrared spectroscopic observations of the moon.  
13 p2341 A69-27582

**HUNT, J. B.**

How lubricant film affects dynamic response of machines.  
03 p0435 A69-13948

**HUNT, J. C. R.**

A uniqueness theorem for magnetohydrodynamic duct flows.  
07 p1190 A69-18813

**HUNT, L. M.**

A real-time hybrid solution of human body dynamics used to simulate zero-g activity.  
21 p3664 A69-39034

**HUNT, M. A.**

Two electronic stethoscopes for use in high noise level environments.  
21 p3667 A69-39444

**HUNT, W. W., JR.**

Mass discrimination in a time-of-flight mass spectrometer. I - Geometric mass discrimination at magnetic electron multiplier.  
04 p0599 A69-15014

**HUNTEN, D. M.**

Quantitative spectroscopy of Venus in the region 8,000-11,000 angstrom units.  
02 p0319 A69-12107

The ionosphere and upper atmosphere of Mars.  
02 p0320 A69-12112

The ratio of deuterium to hydrogen in the Venus atmosphere.  
11 p1962 A69-25145

Venus - The next phase of planetary exploration.  
23 p4216 A69-42201

**HUNTER, A. N.**

Ionospheric electron content and scintillation studies at widely-spaced low-latitude stations.  
02 p0235 A69-11427

Faraday rotation of the 136 MHz transmission from the geostationary satellite "Canary Bird" observed at Nairobi.  
23 p4160 A69-42433

An investigation of the total electron content in the equatorial anomaly of East Africa.  
23 p4160 A69-42434

**HUNTER, C.**

Asymptotic solutions of certain linear difference equations, with applications to some eigenvalue problems.  
04 p0623 A69-14946

Dynamics of the bending of the Galaxy.  
10 p1786 A69-24110

The spectra of small oscillations of thin disk galactic models.  
18 p3196 A69-3455

Short-wavelength oscillations of cold-disk galactic models.  
20 p3611 A69-3815

**HUNTER, C. E.**

Defense integrated management engineering systems.  
15 p2588 A69-30427

**HUNTER, E. T.**

The effects of neutron radiation on second breakdown and thermal behavior of silicon transistors.  
06 p0975 A69-16873

**HUNTER, H. F.**

The application of filament composites to aeroelastic models.  
11 p1990 A69-25508

**HUNTER, H. M.**

A multi-mission interplanetary probe using 3-kw solar electric propulsion.  
06 p0984 A69-17593

**HUNTER, H. W.**

The energy-loss spectrum of extensive air showers recorded by the Haverah Park 500 m array.  
23 p4207 A69-42499

**HUNTER, I. M.**

Collision avoidance in the air.  
19 p3371 A69-36735

**HUNTER, J.**

Production of fast jets of ionized barium using explosive shaped charges.  
09 p1539 A69-21752

**HUNTER, J. E.**

Determining residual stresses rapidly.  
18 p3150 A69-35423

**HUNTER, J. H.**

H alpha auroral activity on Jupiter.  
20 p3598 A69-37414

**HUNTER, J. H., JR.**

Optical variations of 3C454.3.  
08 p1397 A69-20701

The collapse of interstellar gas clouds and the formation of stars.  
11 p1963 A69-25261

**HUNTER, L. G., JR.**

Non-similar MHD boundary layers on insulating walls.  
[AIAA PAPER 69-46] 06 p0972 A69-18192

**HUNTER, R. E.**

Cesium contact ion microthruster experiment aboard applications technology satellite /ATS/ IV.  
[AIAA PAPER 69-297] 09 p1561 A69-21218

Cesium contact ion microthruster experiment aboard applications technology satellite /ATS/ - IV.  
[AIAA PAPER 69-297] 24 p4365 A69-43238

**HUNTER, R. W.**

Phosphorus-containing resins and composites for environmental extremes.  
19 p3356 A69-35528

**HUNTER, S. C.**

Similarity solution for the rapid uniform expansion of a spherical cavity in a compressible elastic-plastic solid.  
03 p0528 A69-13798

**HUNTER, W. D.**

Some environmental aspects in the operation of military aircraft.  
14 p2392 A69-29503

**HUNTLEY, D. J.**

Magnetic field dependence of the thermoelectric power at low temperatures for very dilute alloys of Fe in Au.  
10 p1639 A69-23861

**HUNTRESS, W. T., JR.**

Ion-molecule reactions in hydrogen cyanide.  
20 p3485 A69-38262

**HUNTZ, A.-M.**

New applications of autoradiographic methods in studies of diffusion and phase transformation in iron-chromium alloys /Nouvelles applications des methodes autoradiographiques dans les etudes de diffusion et de transformation de phase dans les alliages fer-chrome/.  
20 p3561 A69-37416

**HUPPI, E. R.**

Infrared emission of the atmosphere and aurorae measured from 35,000 to 40,000 ft.  
13 p2254 A69-28261

- Sunset to sunrise variations of the OH emission of the night sky.  
21 p3712 A69-38520
- HURD, J. T.**  
Adsorption of nitrogen, hydrogen, oxygen, and carbon monoxide on a beryllium film.  
13 p2322 A69-28017
- HURD, W. J.**  
Digital transition tracking symbol synchronizer for low SNR coded systems.  
23 p4130 A69-42513
- HURIET, J.**  
Micromachining with a laser beam /Micro- usinage par faisceau laser/.  
08 p1324 A69-19980  
Preliminary study of the D-2 experiment /Etude preliminaire a l'experience D-2/.  
11 p1949 A69-24869
- HURLBURT, R. W.**  
A high power versatile feed system for communication satellite usage.  
23 p4120 A69-41750  
A 17-1 dual band circularly polarized focused two-channel monopulse tracking system.  
23 p4120 A69-41752
- HURLBUT, F. C.**  
Rarefied gas dynamics.  
18 p3122 A69-34812
- HURLE, I. R.**  
Shock-wave observations of rate constants for atomic hydrogen recombination from 2500 to 7000 deg K - Collisional stabilization by exchange of hydrogen atoms.  
14 p2488 A69-29637
- HURLEY, F. X.**  
Airfoil pressure distributions in low-speed stall.  
24 p4250 A69-43726
- HURLOCK, S. C.**  
Infrared emission from a V-shaped metal groove compared with that from a flat surface of the same metal.  
19 p3313 A69-36491
- HURNIK, H.**  
Satellite camera Poznan 2 /Sputnikovaia kamera Poznan' 2/.  
12 p2092 A69-26450
- HURSH, J. W.**  
Traffic control.  
05 p0789 A69-15560
- HURST, G. S.**  
Collisions of monoenergetic electrons with NO sub 2 - Possible lower limits to electron affinities of O sub 2 and NO.  
13 p2301 A69-27363
- HURST, V. W., III**  
Ventricular performance during graded hypovolemia induced by lower body negative pressure.  
22 p3874 A69-40225
- HURT, C. R.**  
Fluorescence spectra of homogeneous and mixed europium complexes.  
01 p0024 A69-10893
- HURT, W. B.**  
Late-time source of atomic light in the helium afterglow.  
08 p1356 A69-20743  
The Faraday dark space of a glow discharge.  
09 p1540 A69-22099
- HURTAUD, J. P.**  
Means of aerial evacuation at the disposal of a Paris hospital /Les moyens d'evacuations aeriens a la disposition d'un service hospitalier parisien/.  
23 p4105 A69-41785
- HURTER, M.**  
The development of a high performance microminiature latching relay.  
13 p2232 A69-28049
- HURTUBISE, R. A.**  
Sample sizes and confidence intervals associated with a Monte Carlo simulation model possessing a multinomial output.  
10 p1661 A69-23853
- HURUKAWA, K.**  
The table of E-M in Kepler's equation.  
10 p1777 A69-23395
- HURWITT, S.**  
Sputter etching of microcircuits and components.  
04 p0606 A69-14874
- HURWITZ, H., JR.**  
Suppression of del B drift in curved theta pinch.  
11 p1925 A69-24313
- HURWITZ, M.**  
Dielectrophoretic orientation.  
04 p0591 A69-15504  
Dielectrophoretic liquid expulsion.  
24 p4300 A69-43237
- HURWITZ, M. G.**  
Geometric optical image aberrations of single and double mirrors.  
11 p1918 A69-24836
- HUSAR, R. B.**  
Free convection from a plane vertical surface with a non-horizontal leading edge.  
13 p2379 A69-28342  
Longitudinal vortices in natural convection flow on inclined plates.  
18 p3124 A69-35383
- HUSCHENBETT, E.**  
Investigation of electrically heated turbulent flames in a cylindrical combustion chamber /Untersuchungen an elektrisch aufgeheizten turbulenten Flammen in einer zylindrischen Brennkammer/.  
21 p3853 A69-39707
- HUSIMI, K.**  
Collision cross-section and reciprocity relation on the collision process in the kinetic theory of gases.  
14 p2488 A69-29993
- HUSNEY, R. M.**  
Effect of in vivo hyperoxia on erythrocyte fatty acid composition.  
03 p0375 A69-14070
- HUSON, G.**  
Achievement of synchronous orbit using electric propulsion.  
[AIAA PAPER 69-275]  
09 p1586 A69-21265
- HUSS, W.**  
Sputter etching of microcircuits and components.  
04 p0606 A69-14874
- HUSSAIN, M.**  
A variational method for inclusion and indentation problems.  
19 p3440 A69-36589
- HUSSAIN, M. A.**  
On the detachment of the ends of microfibers from the matrix due to tension in the composite.  
01 p0171 A69-11259
- HUSSAINY, S. A.**  
Exact analysis of St. Venant torsion and flexure of prismatic bars with arbitrary triangular and polygonal cross-sections. III - Torsion of hollow bars.  
09 p1621 A69-22770
- HUSSEIN, F. H.**  
Second order tracking loop statistics and optimum receiver design.  
19 p3275 A69-36286
- HUSSEY, R. G.**  
High-amplitude torsional oscillations of a disk in a viscous fluid.  
08 p1417 A69-20781
- HUSSON, J. C.**  
The French geodetic satellites /Les satellites francais de geodesie/.  
[UN PAPER 68-95835]  
06 p1013 A69-17065
- HUSSON, J.-C.**  
Space geodesy in France /La geodesie spatiale en France/.  
17 p2961 A69-33382
- HUSTIN, A.**  
The Azzi-Demanez retarded voice test in the investigation of recruitment /Test de la voix retardee d'Azzi-Demanez dans les recherches de recrutement/.  
24 p4270 A69-42604
- HUSTON, R. L.**  
Nonlinear vibration of a pendulum in a viscous stream.  
21 p3773 A69-39679
- HUSZAR, R. J.**  
EKG transmission from emergency vehicles.  
19 p3262 A69-36271
- HUTCHESON, J. H.**  
TACTICS - A three-body simulation program.  
[AIAA PAPER 69-890]  
21 p3678 A69-39415
- HUTCHING, C.**  
Weight watching a weightlifter.  
18 p3092 A69-35464
- HUTCHINGS, J. B.**  
Expanding atmospheres in OB supergiants. II.  
07 p1223 A69-19637  
Expanding atmospheres in OB supergiants. I.  
08 p1387 A69-20091  
Expanding atmospheres in OB supergiants. III.  
22 p4023 A69-40471
- HUTCHINS, C. W.**  
L500 cargo transport.  
[SAWE PAPER 745]  
18 p3091 A69-34908
- HUTCHINSON, C. E.**  
An analysis of the effect of integral and sigma pulse frequency modulation on white noise.  
01 p0034 A69-11221  
Low sensitivity filters for state estimation in the presence of large parameter uncertainties.  
22 p3918 A69-41016
- HUTCHINSON, F.**  
Stability measurement problems and techniques for operational airborne pulse Doppler radar.  
20 p3492 A69-37711
- HUTCHINSON, J. R.**  
Higher modes of longitudinal wave propagation in thin rods.  
04 p0678 A69-14869  
Stress waves in layered materials.  
16 p2872 A69-31923
- HUTCHINSON, P.**  
A study of the spatial structure of turbulent flow by intensity-fluctuation spectroscopy.  
09 p1493 A69-21491
- HUTCHINSON, W. C. A.**  
New pulse technique for measuring point discharge in the atmosphere.  
15 p2610 A69-30698
- HUTCHISON, P. B.**  
Polarization of the nightglow - Line versus continuum.  
02 p0235 A69-11428
- HUTH, G. C.**  
A solid state X-ray fluorescence analyzer for use in hostile environments.  
[IEEE PAPER 3B-9]  
07 p1135 A69-19201
- HUTSON, V.**  
A note on an integral equation occurring in thermoelasticity.  
08 p1418 A69-21004
- HUTTLY, N. A.**  
Automatic manufacture of wiring diagrams and conductor patterns for printed circuits /Die automatische Herstellung von Verdrahtungsplanen und Leitungsfuehrungen auf gedruckten Schaltungsplatten/.  
15 p2632 A69-31520
- HUTTON, R.**  
Electromagnetic induction in the earth by the equatorial electrojet.  
13 p2252 A69-27519
- HUTTON, R. E.**  
Lunar surface mechanical properties.  
02 p0321 A69-12225
- HUTTON, R. S.**  
Final control elements for the direct digital control of test stands.  
10 p1671 A69-23259
- HUVA, J.**  
Non-linear dynamic instability of Black Brant single stage rockets.  
15 p2703 A69-31545
- HUXLEY, L. G. H.**  
The properties of a drifting and diffusing pulse of electrons and Townsend's coefficient of ionization alpha sub T.  
04 p0633 A69-15443
- HWANG, C.**  
Random acoustic response of a cylindrical shell.  
11 p1990 A69-25506
- HWANG, C. J.**  
Photoluminescence study of thermal conversion in GaAs grown from silica boats.  
04 p0639 A69-14434  
Effect of heat treatment on photoluminescence of Te doped GaAs.  
16 p2825 A69-31708
- HWANG, G. J.**  
Thermal instability in plane Poiseuille flow.  
[ASME PAPER 69-HT-37]  
24 p4411 A69-43533



## HWANG, I. K.

Theory of photons in a fully ionized gas. I - Photon momentum distribution. 08 p1357 A69-20747

## HWANG, P. F.

The supersonic leading edge problem according to the ellipsoidal model. [AIAA PAPER 69-652] 17 p2892 A69-33464

## HYAKUTAKE, H.

The tension test of grooved plates of polycarbonate. 21 p3753 A69-39809

## HYATT, K. H.

Extravascular dehydration as an etiologic factor in post-recumbency orthostatism. 17 p2909 A69-33179

## HYDE, A. S.

Some effects of acute and chronic microwave irradiation of mice. 08 p1266 A69-20678

## HYDE, G.

Studies of the focal region of a spherical reflector - Stationary phase evaluation. 08 p1272 A69-20017

Earth station antenna sidelobe envelope analysis. 23 p4143 A69-42517

## HYDE, R. W.

Effect of carbon monoxide on function and structure of the lung. 22 p3874 A69-40224

## HYDEN, J.

Plastics in Electronic Packaging, Society of Plastics Engineers, Regional Technical Conference, Binghamton, N.Y., October 24, 1968, Technical Papers. 04 p0620 A69-14953

## HYDER, C. L.

The infall-impact mechanism and solar flares. 06 p0993 A69-17430

Polarization of emission lines in astronomy. VI. 09 p1600 A69-22204

Transits of Mercury and the sizes of small solar features /Research note/. 11 p1958 A69-24434

## HYDREAN, P. P.

Properties of nickel-molybdenum-aluminum age hardening steels. 04 p0613 A69-14527

## HYLAND, R. E.

Cavity reactor critical experiments. 07 p1179 A69-18954

## HYMAN, B. I.

Exploratory tests on fiber-reinforced plates with circular holes under tension. 24 p4404 A69-43602

## HYMAN, H.

Diffusion characteristics and applications of doped silicon dioxide layers deposited from silane, /SiH sub 4/. 07 p1198 A69-18619

## HYMAN, J., JR.

LM cathode electron bombardment thrusters. [AIAA PAPER 69-302] 09 p1569 A69-21876

## HYMER, W. C.

Effect of hypoxia exposure on RNA synthesis in the rat anterior pituitary in vitro. 01 p0015 A69-10923

## HYMOWITZ, E. W.

Galactic Jupiter probes. 02 p0324 A69-12303

## HYNDS, R. J.

The solar proton event of 9th June 1968 observed from the ESRO II satellite. 15 p2677 A69-31347

## HYNECEK, J.

Interaction of plasma clusters with an axially symmetric magnetic field. 16 p2823 A69-32365

## HYSON, P.

Windfinding data from radar tracking of high altitude sensors. 02 p0276 A69-12700

## HYSPECKA, L.

Study of the conditions of brittle fracture in very high strength steels /Studium podminek krehkeho poruseni oceli o velmi vysokych pevnostech/. 07 p1158 A69-18402

## HYVARINEN, W. E.

Aircraft AC power system conversion from brush-to-brushless. 17 p2905 A69-34109

## I

## IABLOCHKIN, V. D.

The use of heat treatment in an inert gas medium for the "improvement" of elastic foam polyurethane to reduce toxic outgasing. 10 p1716 A69-23503

## IABLOCHNIKOV, B. A.

Dynamic characteristics of a straight turbulent discharge. 07 p1195 A69-19592

## IABLOKOV, V. A.

Axisymmetric oscillations of a hemispherical shell partially filled with a liquid /Osesimmetrichnye kolebaniia polusfericheskoi obolochki, chastichno zapolnennoi zhidkost'iu/. 04 p0679 A69-14922

## IABLONIK, L. M.

Piezoelectric matching transducer with sandwich damper. 10 p1697 A69-24074

## IACHNEV, I. L.

A neodymium-doped glass pulsed laser with selected second harmonic radiation. 12 p2108 A69-26594

## IAGLENKO, V. T.

Mercury flow with a hydraulic shock in a channel situated in a transverse magnetic field /Technie rtuti s gidravlicheskim pryzhkom v lotke v poperechnom magnitnom pole/. 13 p2307 A69-27499

## IAGLOM, A. M.

Asymptotic behavior of the turbulence spectrum in various models of spectral energy transfer. 19 p3301 A69-36818

## IAGODKIN, V. I.

Use of channels with porous walls for investigating the flows arising during the combustion of solid rocket propellants /Primenenie kanalov s poristymi stenkami dlia issledovaniia tehnii, obrazuiushchikhia pri gorenii tverdykh raketnykh topliv/. 06 p1034 A69-17626

## IAGOLA, A. G.

Interpretation of the brightness curves of eclipsing systems under the condition of monotonicity of the unknown functions /Interpretatsiia krivyykh bleska zatmennykh sistem pri uslovii monotonnosti iskomyykh funktsii/. 09 p1588 A69-21363

Interpretation of the light curves of eclipsing systems if the unknown functions are monotonic. 18 p3197 A69-34753

Determination of the brightness distribution over the source /O vosstanovlenii raspredelenia radioiarkosti po istochniku/. 20 p3606 A69-38033

## IAGUDAIEV, G. R.

Photoelectric phenomena in thin-film diodes with a CdS-CdTe heterojunction /Fotoelektricheskie iavleniia v plenochnykh diodakh s geteroperekhodom CdS-CdTe/. 13 p2230 A69-27882

## IAKHIND, A. K.

The spectral properties of tellurite glasses containing vanadium pentoxide. 14 p2468 A69-29329

## IAKHONTOVA, N. L.

Method for calculating the population and the excitation rates of the working levels in a CO sub 2 laser /Metod rascheta zaselenosti i skorostei vzbuzhdeniia rabochikh urovnei OKG na CO sub 2/. 22 p3964 A69-40795

## IAKIMENKO, I. P.

E waves in a circular waveguide with an inhomogeneous plasma /E-volny v kruglom volnovode s neodnorodnoi plazmoi/. 11 p1844 A69-24437

Nonlinear effects accompanying the scattering of electromagnetic waves in a confined plasma /O nelineinykh effekтах pri rasseianii elektromagnitnykh voln v ogranichennoi plazme/. 15 p2569 A69-30938

Diffraction by an inhomogeneous cylinder and thermal radiation /Difraktsiia na neodnorodnom tsilindre i teplovoe izluchenie/. 23 p4123 A69-42028

Wave scattering in a plane waveguide with an isotropic plasma /O rasseianii voln v ploskom volnovode s izotropnoi plazmoi/. 23 p4125 A69-42040

## IAKIMENKO, L. F.

Diffusion in vapor-deposited nickel layers on niobium substrate /Difuziia v sloiakh nikelia, skondenirovannogo iz parovoi fazy na niobievuii podlozhu/. 20 p3560 A69-37366

## IAKIMENKO, M. N.

Angular and energy distribution of gamma quanta during a Compton effect at relativistic electrons /Uglovoe i energeticheskoe raspredeleniia gamma-kvantov pri Kompton-effekte na relativistskikh elektronakh/. 10 p1701 A69-23132

## IAKIMENKO, V. L.

Thermodynamic analysis of a closed cycle with a MHD-generator and MHD-compressor. 03 p0369 A69-14152

Closed cycle MHD generator and compressor with heavy gas flow. 11 p1824 A69-24223

Mechanism of generation and the development of pearls during cyclotron instability of the outer proton zone /Mekhanizm generatsii i razvitie zhemchuzhin pri tsiklotronnoi neustoiichivosti vneshnei protonnoi zony/. 23 p4206 A69-41850

## IAKIMOV, A. V.

Natural fluctuations in a semiconductor oscillator. 09 p1469 A69-22632

## IAKIMOV, I. U. L.

Equations of motion of a thin body in the disturbed flow of an incompressible fluid /Uravneniia dvizheniia tonkogo tela v vozmushchennom potoke neszhimaemoi zhidkosti/. 11 p1876 A69-25488

Axisymmetric detached flow past a solid of revolution with small cavitation numbers. 11 p1877 A69-25741

Parametric resonance in communicating vessels under variable vertical accelerations /Parametricheskii rezonans v soobshchayushchikhia sosudakh pri vertikal'nykh peremennykh peregruzkakh/. 14 p2432 A69-29628

A numerical method of solving unsteady axisymmetric problems of the hydrodynamics of an ideal fluid with free surfaces /Chislennyi metod resheniia nestatsionarnykh osesimmetrichnykh zadach gidrodinamiki ideal'noi zhidkosti so svobodnymi poverkhnostiami/. 24 p4302 A69-43500

## IAKIMOV, V. V.

Experimental investigation of the effect of the thermodynamic properties of a liquid on cavitation phenomena. 21 p3696 A69-39101

## IAKIMOVICH, K. A.

Experimental investigation of an injector model as a vaporizer for MHD systems /Eksperimental'noe issledovanie modeli inzhektora kak razgonnogo ustroistva dlia MGD-ustanovok/. 06 p0871 A69-17918

Thermodynamic analysis of new liquid-metal MHD-generator cycles /Termodinamicheski analiz novykh tsiklov s zhidkometallicheskimi MGD-generatorami/. 13 p2372 A69-27489

Experimental investigation of a wet-steam injector /Eksperimental'noe issledovanie parovodnogo inzhektora/. 13 p2246 A69-27490

## IAKIREVICH, D. I.

Using the harmonics of a transducer signal in the measurement of mechanical stresses in steel by the eddy-current method. 24 p4296 A69-42654

## IAKOBSON, A. M.

X-ray stroboscope. 18 p3138 A69-35114

## IAKOVENKO, A. A.

Recombination radiation in solid Al sub x Ga sub 1-x As solutions with a variable forbidden band width /Rekombinatsionnoe izluchenie v tverdykh rastvorakh Al sub x Ga sub 1-x As s peremennoi shirinai zapreshchennoi zony/. 19 p3391 A69-36606

Spontaneous emission sources based on structures with heterojunctions in the AlAs-GaAs system

- /Istochniki spontannogo izlucheniia na osnove struktur s geteroperekhodami v sisteme AlAs-GaAs/.  
22 p3964 A69-40608
- IAKOVENKO, V. M.**  
The theory of overheating instability in a semiconductor plasma.  
18 p3182 A69-35022
- Instability of spiral waves in finite conductors /Neustoiichivost' spiral'nykh voln v ogranichennykh provodnikakh/.  
21 p3782 A69-39556
- IAKOVETS, T. K.**  
Absorption of cosmic radio emission during the IQSY above Alma-Ata /Pogloschenie kosmicheskogo radioizlucheniia v period MGSS nad Alma-Atoi/.  
17 p2968 A69-33992
- IAKOVLEV, A. I.**  
Increasing the energetic cooling efficiency of vortex tubes used for cooling aircraft components /K voprosu o povyshenii energeticheskoi effektivnosti polucheniia kholoda vikhrevymi trubkami pri okhlazhdenii imi aviatsionnykh detalei/.  
04 p0684 A69-14488
- IAKOVLEV, A. P.**  
Damping properties of certain materials for turbine blades at high temperatures /Dempfiruiushchie svoystva nekotorykh turbolopatochnykh materialov pri vysokikh temperaturakh/.  
17 p2990 A69-33932
- Influence of static tension on energy dissipation in a material subjected to transverse vibrations /O vlianii staticheskogo raztazheniia na rasseianiye energii v materiale pri poperechnykh kolebaniiah/.  
17 p2991 A69-33934
- Some results of a study of the damping properties of coatings for elements of aircraft structures /Nekotorye rezul'taty issledovaniia dempfiuiushchikh svoystv pokrytiy elementov samoletnykh konstruktsii/.  
17 p2993 A69-33941
- IAKOVLEV, E. A.**  
Investigation of the operation of a plasma generator /Issledovanie rabocheho protsessa plazmogeneratora/.  
24 p4255 A69-43077
- IAKOVLEV, I. U. P.**  
Regenerative cooling of combustion chambers and engine nozzles with a supercritical heat-transfer mode /Regenerativnoe okhlazhdenie kamer sgoraniia i sopol dvigatelya s sverkhkrisynym rezhimom teploobmena/.  
03 p0495 A69-12970
- Calculation of heat transfer in diathermic systems with supercritical boiling conditions /K raschetu teploobmena v diathermichnykh sistemakh s sverkhkrisynym rezhimom kipeniia/.  
24 p4408 A69-43080
- IAKOVLEV, I. U. S.**  
Selection of a core storage with a rectangular hysteresis loop for digital control units /Vibir zapamiativuiuchego pristroia na oserdiax z priamokutnoi petlei gisterezisu pristroiv tsifrovogo keruvannia/.  
14 p2418 A69-29145
- IAKOVLEV, L. A.**  
Piezoelectric matching transducer with sandwich damper.  
10 p1697 A69-24074
- IAKOVLEV, O. I.**  
Scattering of meter radio waves by the lunar surface.  
07 p1087 A69-19615
- Microwave propagation in the Venusian atmosphere /O rasprostraneni UKV v atmosfere Venery/.  
13 p2223 A69-28567
- IAKOVLEV, S. G.**  
Measurement of the corpuscular radiation intensity in the upper atmosphere at various latitudes /Izmerenie intensivnosti korpuskuliarnogo izlucheniia v verkhnei atmosfere na razlichnykh shirokakh/.  
05 p0814 A69-16052
- Contribution of corpuscular radiation to the ionization of the ionospheric D layer /Vklad korpuskuliarnogo izlucheniia v ionizatsiiu D-sloia ionosfery/.  
09 p1577 A69-21770
- Measurements of the intensity of corpuscular radiation in the upper atmosphere at different latitudes.  
20 p3591 A69-37962
- The ionization of the lower ionosphere under the influence of corpuscular radiation.  
21 p3787 A69-38352
- IAKOVLEV, S. P.**  
Formulation of the yield condition and the associated yield law of an anisotropic body /O formulirovke usloviia tekuchesti i assotsiirovannogo zakona tekheniia anizotropnogo tela/.  
22 p3934 A69-41169
- IAKOVLEV, V. A.**  
Investigation of ultrashort light pulses employing time-base image converter tube.  
12 p2083 A69-26139
- IAKOVLEV, V. I.**  
New data on high-energy muons and nuclear-interacting particles obtained with the Tyan'-Shan' installation for study of extensive air showers.  
13 p2331 A69-28395
- Investigation of the shape of nuclear cascade showers in lead and the energy spectrum of nuclear-active particles with the aid of a calorimeter with lead absorbers.  
13 p2303 A69-28399
- Test of the hypothesis of the existence of a passive baryon state by means of the calorimeter telescope technique.  
13 p2331 A69-28401
- Dependence of the energy of an electron-photon cascade, produced by collision of a nuclear-active cosmic-ray particle with a lead nucleus, on the energy of the interacting particle.  
17 p3008 A69-33387
- IAKOVLEV, V. N.**  
Impulse Generators in Transistors /Impul'snye Generatory na Tranzistorakh/ /2nd Revised Edition/.  
04 p0578 A69-15053
- IAKOVLEV, V. P.**  
Antenna Synthesis Theory /Teoriia sinteza anten/.  
20 p3508 A69-38208
- IAKOVLEVA, A. V.**  
Determination of the absolute sensitivity of the UTs-3 photographic emulsion to vacuum ultraviolet.  
07 p1136 A69-19620
- IAKOVLEVA, E. F.**  
Phase composition of heat-resistant ferritic and austenitic steels with intermetallic hardening /Fazovyi sostav zharoprochnykh ferritnykh i austenitnykh stalei s intermetallidnym uprochneniem/.  
13 p2283 A69-28487
- IAKOVLEVA, G. D.**  
Microwave propagation in the Venusian atmosphere /O rasprostraneni UKV v atmosfere Venery/.  
13 p2223 A69-28567
- IAKOVLEVA, I. IA.**  
Combined effect of two-month hypokinesia and acceleration on the cardiovascular system.  
02 p0197 A69-11495
- General resistance in 62-day periods of hypokinesia with exposure to acceleration.  
02 p0198 A69-11513
- Effect of prolonged slow rotation on hearing /Vlianie dlitel'nogo medlennogo vrashcheniia na slukh/.  
20 p3470 A69-37251
- IAKOVLEVSKII, O. V.**  
The calculation of the shape of an isobaric mixing chamber.  
07 p1049 A69-18395
- IAKSOO, I. U. I.**  
Adaptive control of an inertialess plant /Ob adaptivnom upravlenii bezynertsionnym ob'ektom/.  
22 p3918 A69-40739
- IAKUBENKO, A. E.**  
Investigation into unidimensional stationary flows in electrohydrodynamics.  
12 p2135 A69-26398
- Electrohydrodynamic equations and transfer coefficients in a strong electric field.  
12 p2135 A69-26399
- Study of electrohydrodynamic flows at large electric Reynolds numbers /Issledovanie elektrotigrodinamicheskikh tekhenii pri bol'shikh elektricheskikh chislakh Reinfol'dsa/.  
13 p2305 A69-27379
- Calculation of the boundary layer at the electrode of an MHD generator of variable cross section /Raschet pogranichnogo sloia na elektrode MGD-generatora peremennogo sечeniia/.  
13 p2309 A69-28028
- Equations of electrohydrodynamics and transfer coefficients in a strong electric field /Upravneniia elektrotigrodinamiki i koefitsienty perenosu v sil'nom elektricheskom pole/.  
14 p2492 A69-29610
- One-dimensional flows in electrohydrodynamics /Odnomernye tekheniia v elektrotigrodinamike/.  
18 p3181 A69-35315
- IAKUBOV, B. A.**  
Sensory reactions and the state of arbitrary motions of man under conditions of weightlessness /Sensorye reaktsii i sostoianie proizvol'nykh dvizhenii cheloveka v usloviakh nevesomosti/.  
07 p1060 A69-18575
- IAKUBOV, I. T.**  
Nonequilibrium low-temperature plasma. II - Energy distribution of the free electrons.  
05 p0802 A69-15889
- Theory of nonequilibrium low-temperature plasma /K teorii neravnovesnoi nizkoterapturnoi plazmy/.  
06 p0969 A69-17906
- Contribution to the theory of nonequilibrium ionization in a low-temperature plasma /K teorii neravnovesnoi ionizatsii v nizkoterapturnoi plazme/.  
10 p1732 A69-23440
- Low-temperature nonequilibrium plasma. III - Electron concentration in a nonequilibrium plasma /Neravnovesnaia nizkoterapturnaia plazma. III - Kontentsiia elektronov v neravnovesnoi plazme/.  
15 p2662 A69-30975
- IAKUBOVICH, E. D.**  
Design of equivalent systems for a certain class of multivariable linear automatic control systems /Postroenie sistem zamesheniia dlia nekotorigo klassa mnogomernykh lineinykh sistem avtomaticheskogo upravleniia/.  
12 p2052 A69-26280
- IAKUBOVICH, T. P.**  
Drifts of inhomogeneities in the E sub s layer /Dreify neodnorodnosti v sloe E sub s/.  
14 p2444 A69-29869
- IAKUBOVICH, V. A.**  
Theory of adaptive systems /K teorii adaptivnykh sistem/.  
01 p0050 A69-10377
- Theory of adaptive systems.  
12 p2054 A69-26670
- A class of nonlinear differential equations whose problems of stability in the large and instability can be solved effectively /Ob odnom klasse nelineinykh differentsial'nykh uravnenii, dlia kotorykh voprosy ob ustoiichivosti v tselom i o neustoiichivosti mogut byt' resheny effektivno/.  
21 p3755 A69-38960
- IAKUPOV, M. SH.**  
Einstein spaces of the second embedding class.  
06 p0957 A69-17547
- IAKUPOV, R. G.**  
Calculation of self-oscillations of gases in an afterburner taking into account the nonlinear properties of the heat-supply zone /Raschet avtokolebaniy gazov v forsazhnoi kamere sgoraniia s uchedom nelineinykh svoystv zony teplopodvoda/.  
11 p2002 A69-25339
- IAKUSHENKOV, I. U. G.**  
Computation of the directional characteristic of electrooptical goniometric system.  
14 p2420 A69-29332
- IAKUSHEV, E. M.**  
Acceleration of cosmic particles by electromagnetic waves with a variable rate of propagation /Ob uskorenii kosmicheskikh chastits elektromagnitnymi volnami s peremennoi skorost'iu rasprostraneniia/.  
10 p1756 A69-22816
- IAKUSHEV, V. V.**  
Certain problems of the polarization of dielectrics in shock waves /Nekotorye voprosy polarizatsii dielektrikov v udarnykh volnakh/.  
04 p0589 A69-14988
- IAKUSHIN, M. I.**  
Optical properties of a plasma from an electrodeless discharge in an airstream /Opticheskie svoystva plazmy bezelektrodnogo razriada v vozduzhnom potoke/.  
07 p1191 A69-18995
- Experimental study of the ablation of meteorites.  
15 p2697 A69-31252
- IAKUSHIN, V. I.**  
Instability of fluid motion in a thin spherical layer /O neustoiichivosti dvizheniia zhidkosti v tonkom шаровом слое/.  
11 p1875 A69-25486
- IALAMOV, I. U. I.**  
Kinetic theory of a gas flowing over a solid wall in a velocity-gradient field /Kineticheskaia teoriia tekheniia gaza, nakhodiashegosia nad tverdoi stenoi v pole gradianta skorosti/.  
06 p0910 A69-17346
- IALOVEGA, N. V.**  
A high-temperature device for signaling the level of conducting fluids /Vysokoterapturnyi signalizator urovniia provodiashchikh zhidkosti/.  
20 p3536 A69-36980



## IALOVENKO, L. IA.

## IALOVENKO, L. IA.

Determination of the power spectrum of a random process from a discrete sequence of instantaneous values /Opredelenie spektra moshchnosti sluchainogo protsessu po diskretnoi posledovatel'nosti mgnovennykh znachenii/.

13 p2239 A69-28514

## IALOVIK, M. S.

Effective cross sections of absorption of ultraviolet radiation by molecular oxygen at temperatures from 3000 to 10,000 K /Efektivnyye secheniia pogloscheniia ul'trafiolietovogo izlucheniia molekuliarnym kislorodom pri temperaturakh ot 3000 do 10,000 deg K/.

11 p1921 A69-24617

## IAMAIAKIN, V. E.

Direction of the maximum of the major lobe of a linear antenna pattern in scanning by consecutive switching.

04 p0577 A69-14785

Optimization of the amplitude distribution over a circular cophase aperture with a shaded central region /Optimizatsiia amplitudnogo raspredeleniia na kruglom sinfaznom raskeye s zatenennoi tsentral'noi oblast'iu/.

23 p4138 A69-41939

## IAMANOVSKII, V. M.

Transmission spectra of gallium arsenide irradiated by protons with an energy of approximately 5 Mev /Spektry propuskaniia arsenida galliia, obleechnenno protonami s energiei priblizhno 5 Mev/.

20 p3582 A69-36969

## IAMPIETRO, P. F.

Hyperventilation-induced hemolysis in the dog.

22 p3887 A69-41192

## IAMPOLSKII, E. S.

Testing procedures for phase meters with frequency modulation /Metodika ispytaniia fazometrov s chastotnoi modulatsiei/.

14 p2497 A69-29797

A two-frequency phase meter for plasma diagnostics /Dvukhchastotnyi fazometr dlia diagnostiki plazmy/.

14 p2451 A69-29798

A three channel microwave phase meter /Trekhnakanal'nyi SVCh-fazometr/.

14 p2497 A69-29799

Microwave phase meters for plasma diagnostics /Sverkhvysokochastotnye fazometry dlia diagnostiki plazmy/.

14 p2452 A69-29804

## IAMPOLSKII, V. G.

Directional properties of an electric vibrator positioned at a reflecting cylinder /Napravlennye svoistva elektricheskogo vibratora, raspolzhenno u otrazhaushchego tsilindra/.

04 p0574 A69-14459

Directional properties of an electric dipole lying near a reflecting cylinder.

14 p2418 A69-28830

## IAMPOLSKII, V. S.

Influence of vertical motions of the lower ionosphere during nighttime hours on slow variations of the total field strength of radio waves /O vliianii vertikal'nykh peremeshchenii nizhniei ionosfery v nochnye chasy na medlennye izmeneniia polnoi napriazhennosti polia radiovoln/.

02 p0207 A69-11689

Influence of vertical movements of the lower ionosphere at night on slow changes in the total field strength of radio waves.

13 p2224 A69-28720

## IANBIKH, G. F.

Problems involved in the optimization of airline networks /Problemi optimizatsii meretzi avialinii/.

14 p2540 A69-29141

## IANCHARINA, A. M.

Study of the discharge conditions in a hollow cathode for obtaining lasing at lambda equals 1.15 mu of neon /Issledovanie uslovii razriada v polom katode dlia poluchenii generatsii na lambda 1,15 mk neona/.

09 p1516 A69-21507

## IANCHUKOVSKII, A. L.

Spectrographic method of analyzing the variations in cosmic-ray intensity /Spektrograficheskii metod analiza variatsii intensivnosti kosmicheskikh luche/.

10 p1759 A69-22836

## IANCHUR, V. P.

Investigation of the physicomachanical properties of zirconium nitride in the homogeneity range /Izuchenie fiziko-mekhanicheskikh svoistv nitrida tsirkoniia v oblasti gomogenosti/.

20 p3558 A69-37014

## IANENKO, N. N.

Systems of Quasi-linear Equations and their Application to Gasdynamics /Sistemy Kvazilineinykh Uravnenii i ikh Prilozheniia k Gazovoi Dinamike/.

16 p2771 A69-32113

## IANISHEVSKII, A. P.

The integral equation method in gyrocompass theory /O metode integral'nykh uravnenii v teorii girokompasov/.

17 p2995 A69-33617

Influence of dry friction forces in the precession axes of gyroscopes on the motion of the sensing element of a gyrocompass /O vliianii sil sukhogo treniia v osiakh pretssii giroskopov na dvizhenie chuvstvitel'nogo elementa girokompasa/.

18 p3135 A69-34560

## IANKELEVICH, IU. B.

Current and voltage of a spark during pulsed breakdown in a gas interspace in the nanosecond time range /Tok i napriazhenie iskry pri impul'snom probroe gazovogo promezhutka v nanosekundnom diapazone vremeni/.

12 p2137 A69-26534

## IANKINA, A. A.

Measuring the electrical conductivity of high-resistance epitaxial semiconducting films by the three-probe method.

04 p0597 A69-14538

## IANKOLOVA, I. M.

Model of the thin radial filaments observed in the planetary nebula NGC 7293 /Model' tonkikh radial'nykh volokon, nabliudaemykh v planetarnoi tumanosti NGC 7293/.

11 p1955 A69-24384

## IANKOVICH, Z.

Electric conductivity of a superdense plasma /Elektroprovodnost' sverkhplotnoi plazmy/.

10 p1739 A69-23493

## IANKOVSKAIA, Z. B.

Mechanisms of the Biological Action of Ionizing Radiation /Mekhanizmy Biologicheskogo Deistviia Ioniziruiushchikh Izluchenii/.

21 p3656 A69-39049

## IANKOVSKII, A. A.

Spectrum-analytical characteristics of a plasma obtained by means of a laser in regular and quasi-stable regimes of emission /O spektral'no-analiticheskikh osobennostiakh plazmy, poluchennoi s pomoshch'iu OKG v reguliarnom i kvazistatsionarnom rezhimakh generatsii/.

22 p3964 A69-40793

## IANKULOVA, I. M.

A model for the fine radial filaments observed in the planetary nebula NGC 7293.

24 p4390 A69-43774

## IANNETTI, V.

Analytical and instrumental technique for determining traces of metals in some aeronautical products /Metodika analitico-strumentale per la determinazione delle tracce di metalli in alcuni prodotti aeronautici/.

03 p0435 A69-14101

## IANNUZZI, F. A.

Experiments on roughness effects on cone boundary-layer transition up to Mach 16.

[AIAA PAPER 68-377] 13 p2242 A69-28213

## IANNUZZI, M.

Observation of the spectrum and the amplitude fluctuations of light propagating through nonequilibrium liquid helium.

06 p0957 A69-17267

## IANOSLAVSKII, A. I.

Investigation of the broadening of plasmoids with the aid of quasi-optical microwave systems /Issledovanie rasshireniia plazmennyykh sgustkov pri pomoshchi kvaziopticheskikh SVCh-sistem/.

14 p2497 A69-29793

## IANOVITSKAIA, G. T.

Initial and future orbits of the Comet 1959 IV Alcock /Pervonachal'naia i budushchaia orbity komety 1959 IV Olkoka/.

20 p3597 A69-37319

## IANOVITSKII, E. G.

Influence of atmospheric scintillation on the brightness distribution over the disk of a planet /O vliianii atmosfernogo drozhanii na raspredelenie iarkosti po disku planety/.

11 p1960 A69-24729

Diffuse reflection of monochromatic radiation /K zadache o diffuznom otrazhenii monokhromaticheskogo izlucheniia/.

11 p1960 A69-24732

Brightness coefficients of a homogeneous plane layer of a turbid medium /O koefitsientakh iarkosti odnorodnogo ploskogo sloia mutnoi sredy/.

11 p1960 A69-24733

## IANOVSKII, V. N.

Time relationships during the reception of a single radio pulse by a panoramic radio receiver and the subsequent analysis /Vremennyye sootnosheniia pri prieme odinodnogo radioimpul'sa panoramnym radiopriemnikom s posledovatel'nykh analizom/.

17 p2931 A69-33910

## IANSON, L.

High bypass ratio compound fan-shaft engines for convertible rotary wing aircraft.

[ASME PAPER 69-GT-51] 09 p1572 A69-22511

## IANTOVSKII, E. I.

One-dimensional flow of a magnetized fluid /Odnomernoe techenie namagnichennoi zhidkosti/.

07 p1191 A69-19014

Effect of the nozzle expansion ratio for an ionized gas on the specific power of an MHD generator.

10 p1636 A69-23103

Investigation of a liquid-metal induction MHD generator /Issledovanie zhidkometallichesko MGD-generatora induktsionnogo tipa/.

13 p2208 A69-27513

Basic relationships of an asynchronous MHD generator in an autonomous mode of operation /Osnovnyye sootnosheniia asinkhronnogo MGD-generatora v avtonomnom rezhime raboty/.

14 p2405 A69-29457

## IANTOVSKII, S. A.

Disaster in the Apollo spacecraft cabin and measures of increasing fire and explosion safety during space flights /O katastrofe v kabine kosmicheskogo korablia "Apollo" i merakh, povyshaiushchikh pozharo- i vzyryvobezopasnost' kosmicheskikh poletov/.

07 p1071 A69-18970

On the catastrophe in the cabin of space ship "Apollo-1" and on improved measures for the prevention of fire and explosion during space flights.

20 p3483 A69-38218

## IANUSHAUSKAS, A.

On the behavior in the neighborhood of the degeneracy hypersurface of solutions of an elliptic equation the order of which degenerates.

11 p1908 A69-24696

## IANUSHEVSKII, R. T.

Some problems of synthesis of multivariable control systems.

12 p2046 A69-26061

## IAREMA, S. IA.

Stressed state of a shallow shell with a crack under symmetrical loading /Napruzhenii stan pologo obolonki z trishchiniu pri simetrichnom navantazhenii/.

12 p1821 A69-26614

## IARIN, L. P.

Calculation of a homogeneous turbulent gas flame.

08 p1420 A69-19998

Unsteady jet flow of a viscous fluid /O nestatsionarnom dvizhenii viazkoi zhidkosti/.

14 p2432 A69-29608

## IARKHO, A. A.

Method of determining the temperature dependence of the thermal conductivity and specific heat of sublimating heatproof materials.

02 p0350 A69-11580

## IARKHO, S. A.

Film boiling of subcooled liquid nitrogen in turbulent flow.

07 p1243 A69-19737

## IARKOVOI, V. S.

Investigation of the processes of strain aging the SAV-1 alloy /Issledovanie protsessov deformatsionnogo starenii splava SAV-1/.

04 p0614 A69-14575

Strain aging processes in alloy SAV-1.

15 p2638 A69-30276

## IARITSKII, A. G.

Determination of the reaction of a uniformly swirled flow to incidence on a contour /Opredelenie reaktsii ravnomerno-zavikhrennogo potoka na obtekaemyi kontur/.

04 p0589 A69-14996

Slender profile in a diverging two-dimensional flow of a compressible fluid /Tonkii profil' v rashodiaschemsia dvumernom potoke szhimaemoi zhidkosti/.

24 p2424 A69-42584

Generalization of the Chaplygin problem of an eddy flow past a semicylindrical surface /Obobshchenie

- ... zadachi chaplygina o vikhrevom potoke, obtekaushchem polutsilindricheskuiu poverkhnost'/.  
24 p2425 A69-43477
- IARMOLIUK, V. K.**  
Solution to a class of boundary-value problems with mixed boundary conditions for regions of complex form /O reshenii odnogo klassa kraevykh zadach so smeshannymi granichnymi usloviyami dlia oblasti slozhnoi formy/.  
05 p0787 A69-16455
- IAROSHENKO, A. R.**  
Resolving system of equations and boundary conditions for a shell in a shape of a sloping helicoid /Razreshaiushchaya sistema uravnenii i kraevye uslovia dlia obolochki v vide kosogo gelikoida/.  
15 p2714 A69-31197
- IAROSHETSKII, I. D.**  
Investigation of laser action in CO sub 2 in the case of pulsed excitation /Issledovanie lazernogo deistviia v CO sub 2 pri impul'snom vzbuzhdenii/.  
01 p0090 A69-10787
- Gallium phosphide emission near the indirect transition during multiphoton excitation /Izluchenie fosfida galliia vblizi nepriamogo perekhoda pri mnogofotonnom vzbuzhdenii/.  
03 p0489 A69-13892
- Generation of the second harmonic in ternary semiconductor compounds /Generatsiia vtoroi garmونيki v troinykh poluprovodnikovyykh soedineniyakh/.  
03 p0489 A69-13894
- Luminescence of gallium phosphide near an indirect transition in the multiphoton excitation case.  
11 p1939 A69-25693
- Generation of a second harmonic in ternary semiconducting compounds.  
11 p1939 A69-25695
- Investigation of the laser effect in CO sub 2 during pulsed excitation.  
20 p3555 A69-38004
- IAROSHEVICH, G. B.**  
Study of the properties of maraging steels with increased cobalt and molybdenum content /Issledovanie svoystv martensitno stareiushchikh stalei s povyshennym soderzhaniiem kobal'ta i molibdena/.  
01 p0098 A69-10731
- IAROSHEVICH, G. O.**  
Method of successive approximations for periodic solutions of the differential equations of nonlinear oscillations /Metod poslovedatel'nykh priblizhenii periodicheskikh reshenii differentsial'nykh uravnenii nelineinykh kolebani/.  
18 p3174 A69-35311
- IAROSHEVICH, S. V.**  
Influence of atmosphere on the oscillation of a cosmic apparatus.  
10 p1792 A69-24208
- IAROSHEVSKII, V. A.**  
Spacecraft control during reentry into the atmosphere /Upravlenie kosmicheskim apparatom pri vkhode v atmosferu/.  
13 p2355 A69-27681
- IAROSLAVSKII, A. I.**  
Fabry-Perot interferometer for studying the spatial distribution of the electron concentration in a plasma /Interferometr Fabri-Pero dlia issledovaniia prostranstvennogo raspredeleniia kontsentratsii elektronov v plazme/.  
14 p2451 A69-29777
- High-speed photography of plasmas in the region of soft X-radiation and ultraviolet radiation /Vysokoskorostnaia s'emka plazmy v oblasti miagkogo rentgenovskogo i ul'trafioletovogo izlucheni/.  
14 p2496 A69-29784
- IAROSLAVSKII, N. G.**  
Dissociation of CO sub 2 in a CO sub 2 laser gas discharge plasma /Dissotsiatsiia CO sub 2 v plazme gazovogo razriada OKG na CO sub 2/.  
12 p2107 A69-26540
- IAROSLAVTSEV, V. P.**  
Radio profilograph and its utilization in aerial radio leveling /Radioprofilograf i ego ispol'zovanie pri aeroradiionivelirovani/.  
07 p1132 A69-19006
- IARTSEV, V. A.**  
Stresses occurring in resins of various compositions during solidification on glass films /Napriazheniia, voznikaiushchie v smolakh razlichnogo sostava pri ikh otverzhenii na stekliannykh plenkach/.  
22 p3973 A69-40746
- IARUSHEK, V. E.**  
Synthesis of digital-signal processing circuits /Sintez skhem dlia obrabotki tsifrovyykh signalov/.  
16 p2749 A69-31627

- IARUSHKIN, I. U. P.**  
Compact betatrons for nondestructive testing applications.  
18 p3136 A69-34779
- IARYGIN, A. V.**  
Monitoring recorder of cosmic rays.  
12 p2094 A69-26697
- IAS, D. S.**  
Erosion wear of mica-ceramic materials /Eroziionnyi iznos sludokeramicheskikh materialov/.  
15 p2643 A69-31186
- ISAKOV, V. A.**  
Investigation of the stability of a diffusion flame /Issledovanie ustoiichivosti diffuzionnogo plameni/.  
19 p3448 A69-35855
- IASHIN, I. U. I. A.**  
The question of resorting to a geometrical-optics approximation in the electrodynamics of inhomogeneous anisotropic media /K voprosu o perekhode k priblizheniiu geometricheskoi optiki v elektrodinamike neodnorodnykh anizotropnykh sred/.  
07 p1076 A69-18519
- IASHIN, V. I. L.**  
Study of the stability of a plasma with anisotropic pressure in a quasi-hydrodynamic approximation /Issledovanie ustoiichivosti plazmy s anizotropnym davleniem v kvazigidrodinamicheskoi priblizhenii/.  
02 p0291 A69-12552
- Stability of plasma with anisotropic pressure in the quasi-hydrodynamic approximation.  
15 p2658 A69-30249
- IASINSKAIA, A. A.**  
Collection of meteorites in the museums of Lvov /Kollektsii meteoritov v muzeikh L'vova/.  
01 p0160 A69-11388
- IASINSKII, F. N.**  
Solution of nonlinear aerodynamic problems by digital computer /Reshenie nelineinykh aerodinamicheskikh zadach s pomoshch'iu tsifrovyykh elektronnykh vychislitel'nykh mashin/.  
03 p0364 A69-13921
- Application of the Monte Carlo method to nonlinear aerodynamic problems /O primeneni metod Monte-Karlo k nelineinym aerodinamicheskim zadacham/.  
06 p0858 A69-17334
- IASIULENIS, A. I.**  
Matrix-harmonic method in vibration studies. I, II /Matrichno-garmonicheskii metod pri issledovanii kolebani. I, II/.  
03 p0468 A69-13860
- Matrix-harmonic method in vibration studies. III /Matrichno-garmonicheskii metod pri issledovanii kolebani. III/.  
03 p0468 A69-13861
- IASKELIÄINEN, E. I.**  
Cementation of Al and V by metallic titanium in titanium-containing concentrated chloride melts /Tsementatsiia Al i V metallicheskim titanom v titansoderzhashchikh kontsentrirrovannykh khloridnykh rasplavakh/.  
22 p3957 A69-40918
- IASKEVICH, E. P.**  
Aerodynamic characteristics of a satellite with allowance for its position and orientation in the orbit /Aerodinamicheskie kharakteristiki sputnika s ucheto ego polozenia i orientatsii na orbite/.  
22 p4037 A69-41102
- Additional aerodynamic forces and moments acting on a body of revolution rotating about the symmetry axis in free-molecular flow /Dopolnitel'nye aerodinamicheskie sily i momenty, deistvuiushchie na telo vrashcheniia, zakruchennoe otноситel'no osi simmetrii v svobodnomlekuliarnom potoke/.  
24 p4243 A69-42583
- IASKO, O. I.**  
Heat transfer between an arc column and a wall of the discharge chamber of a vortex linear plasmatron /Teplobmen mezhdu dugovym stolbom i stenoi razriadnoi kamery vikhrevogo lineinogo plazmatrona/.  
01 p125 A69-10091
- Problems of generalizing electric arc properties /Voprosy obobshcheniia kharakteristik elektricheskikh dug/.  
01 p0125 A69-10099
- Plasmatron with a bilateral outflow and a variable electrode diameter /Plazmatron dvustoronnego istecheniia s peremennym diametrom elektrodov/.  
01 p0125 A69-10102
- IASNetskii, A. M.**  
Experimental investigation of the motion of individual charged particles in a mirror device.  
15 p2659 A69-30724

- IASNOV, L. V.**  
The 1.6-cm radio emission of solar sources associated with sunspots and flocculi.  
04 p0649 A69-15241
- IASOVSKII, S. R.**  
Determination of the strength of glued joints during cyclic loading.  
04 p0605 A69-14540
- IASTREBENETSKII, M. A.**  
Model of the failure sequence of an automatic system subjected to steady random external effects /Model' potoka otkazov apparatury avtomatiki pri stacionarnykh sluchainykh vneshnikh vozeistviyakh/.  
24 p4289 A69-42953
- IASULAITIS, A. I.**  
Multidimensional discrete sequential filtration with correlated measurement errors /Bagatovimirna diskretna poslidovna fil'tratsiia pri korel'ovaniakh pokhibkakh vimiriuvani/.  
11 p1859 A69-24967
- IATSENKO, V. P.**  
Strain-energy theory of failure of oriented fiberglass-reinforced plastic laminates under biaxial compression /Energetichna teoriia ruiniuvannia orientovaniykh shruvatikh sklopastikov pri dvovisnomu stisku/.  
02 p0270 A69-12142
- IATSKIV, I. A. S.**  
The selection of the degree of smoothing during equalization of observation results /O vybere stepeni sglazhivaniia pri vyrvanivanii rezul'tatov nabludeni/.  
17 p3028 A69-32877
- IATSUK, K. P.**  
Dispersion properties and coupling impedance of a logarithmic spiral resting on an anisotropic magnetodielectric layer /Dispersionnye svoystva i soprotivlenie svyazi logarifmicheskoi spirali na sloe anizotropnogo magnitodielektrika/.  
13 p2235 A69-28512
- Experimental investigation of the dispersion of dielectric waveguides for millimeter wavelengths /Ob eksperimental'nom issledovanii dispersii dielektricheskikh volnovodov millimetrovogo diapazona voln/.  
21 p3674 A69-39130
- Investigation of surface waves in radial spiral structures /Issledovanie poverkhnostnykh voln v radial'nykh spiral'nykh strukturakh/.  
22 p3916 A69-40951
- IATSUN, V. A.**  
Analytic continuation of expansions in Jacobi polynomial series /Analiticheskoe prodolzhenie razlozhenii po mnogochlenam Iakobi/.  
21 p3757 A69-39537
- IAVICH, L. R.**  
Determination of the transfer matrix of quadrupoles derived from octupoles /Opredelenie matritsy peredachi chetyrekhpoliusnikov, proizvodnykh ot vos'mipoliusnikov/.  
22 p3912 A69-40257
- IAVNEL, A. A.**  
Equilibrium in the composition of iron-magnesia silicates in ordinary chondrites /O ravновesii sostava zhelezo-magnezial'nykh silikatov v obyknovennykh khondritakh/.  
01 p0025 A69-11368
- Prior's diagram for chondrites /Diagramma Praiora dlia khondritov/.  
19 p3407 A69-36078
- IAVNIKO, I. V.**  
Incoming microwave power meter based on a directional coupler /Izmeritel' prokhodiashchei moshnosti SVCh na osnove napravlenno otvetvliia/.  
19 p3282 A69-35826
- IAVOISKII, V. I.**  
Solubility of hydrogen in solid and liquid titanium /Rastvorimost' vodoroda v tverdom i zhidkom titane/.  
11 p1905 A69-24963
- IAVOR, I. P.**  
Low-voltage cesium arc in thermionic converter with extended cathode surface.  
14 p2403 A69-29250
- IAVORSKII, A. I.**  
An aspiration psychrometric probe /Aspiratsionnyi psikhrometricheskii zond/.  
06 p0927 A69-17689
- IAVORSKII, V. N.**  
A case of variation of the transfer function of an invariant servo drive /Sluchai izmeneni peredatochnoi funktsii invariantnogo slediashchego privoda/.  
04 p0584 A69-15418



## IAZARENKO, V. R.

Absolute measurement by the scintillation method of neutron pulses generated by a hot plasma /Absolютное измерение стнтилляционных методом нейтронных импульсов, генерируемых горячеи плазмой/.

14 p2452 A69-29809

## IAZDOVSKII, V. I.

Possibility of Chlorella cultivation of solutions with mineralized human wastes.

02 p0200 A69-11511

Basic problems in the study of weightlessness /Osnovnye voprosy izucheniia nevesomosti/.

02 p0199 A69-12120

Possibilities of protective adaptation and adaptation limits under conditions of maximum accelerations and weightlessness /Vozmozhnosti zashchitnykh prispoblenii organizma i granitsy adaptatsii v usloviakh maksimal'nykh peregruzok i sostoiianiia nevesomosti/.

03 p0376 A69-14192

Blood circulation under conditions of weightlessness /Krovoobrashchenie v usloviakh nevesomosti/.

03 p0376 A69-14194

Preliminary data concerning physiological studies relating to manned space flight /Pervye dannye o fiziologicheskikh issledovaniakh pri poete cheloveka v kosmos/.

07 p1060 A69-18569

Reactions of cosmonauts under conditions of weightlessness /Reaktsii kosmonavtov v usloviakh nevesomosti/.

07 p1060 A69-18570

Sensory reactions and the state of arbitrary motions of man under conditions of weightlessness /Sensornye reaktsii i sostoianie proizvol'nykh dvizhenii cheloveka v usloviakh nevesomosti/.

07 p1060 A69-18575

Physiological reactions of animals during flights on the third, fourth, and fifth spacecraft satellites /Fiziologicheskie reaktsii zhivotnykh pri poletakh na tret'ei, chetvertom i piatom kosmicheskikh korabliakh-sputnikakh/.

07 p1061 A69-18578

Myogenic tonus under conditions of weightlessness /O myshechnom tonuse v usloviakh nevesomosti/.

07 p1062 A69-18590

Isolation of metabolic products from culture broths of Chlorella.

08 p1262 A69-19833

## IBBERSON, V. J.

M.H.D. research - Present and future.

11 p1925 A69-24469

## IBELE, W. E.

Helium transport properties and the Lennard-Jones 6-9 potential. [ASME PAPER 67-WA/HT-1]

02 p0351 A69-12205

Heat transfer - A review of current literature.

04 p0684 A69-14354

Heat transfer bibliography.

06 p1033 A69-17558

Heat transfer bibliography.

13 p2379 A69-28341

## IBEN, I. JR.

Age and initial helium abundance of stars in the globular cluster M15.

01 p0149 A69-10135

Electron conduction in red giants.

02 p0327 A69-12709

Low-mass red giants.

02 p0327 A69-12710

Central convection and solar neutrinos.

06 p1001 A69-17192

Central convection and solar neutrinos.

09 p1574 A69-21453

The CI super 37 solar neutrino experiment and the solar helium abundance.

20 p3592 A69-38068

Age and initial helium abundance of globular cluster stars.

22 p4035 A69-41205

## IBRAEV, T. A.

Determination of preatmospheric meteorite sizes from the effects of nuclear reactions produced by cosmic rays /Opredelenie doatmosfernykh razmerov meteoritov po effekтам iadernykh reaktsii, vyzvannykh kosmicheskimi luchami/.

01 p0159 A69-11375

Radioactivity of the moon and meteorites /Radioaktivnost' luny i meteoritov/.

10 p1756 A69-22817

Cosmic-radiation-induced radioactivity of the moon and meteorites and the origin of meteorites /Radioaktivnost' luny i meteoritov, vyzvannaia kosmicheskimi luchami, i proiskhozhdenie meteoritov/.

19 p3410 A69-36092

## IBRAGIM, M. A.

Diffraction effects during the passage of plane shock waves through a channel-diaphragm /Difraktsionnye iavleniia pri prokhozhenii ploskikh udarnykh voln cherez kanal-diafragmu/.

02 p0234 A69-12589

## IBRAGIMOV, A. B.

Behavior of the strain anisotropy matrix along trajectories of arbitrary curvature /Povedenie matritsy deformatsionnoi anizotropii na traektoriiakh proizvol'noi krivizny/.

22 p4039 A69-39914

Investigation of the elastic properties of the strain anisotropy matrix /Issledovanie uprugikh svoistv matritsy deformatsionnoi anizotropii/.

22 p4039 A69-39915

## IBRAGIMOV, K. Z.

Spacecraft control during reentry into the atmosphere /Upravlenie kosmicheskimi apparatami pri vkhode v atmosferu/.

13 p2355 A69-27681

## IBRAGIMOV, M. KH.

Method of computing temperature fields in noncircular channels.

07 p1243 A69-19734

Calculation of a secondary flow in a turbulent fluid flow /Raschet vtorichnogo techeniia v turbulentnom potoke zhidkosti/.

24 p4303 A69-43501

## IBRAGIMOV, N. B.

Investigation of the 2 by 2 prismatic, Cassegrainian-focus spectrograph of the two-meter telescope of the Shemakha Astronomical Observatory /Issledovanie 2 x 2 prizmennogo spektrografa fokusa Kassegrena dvukhmetrovogo teleskopa ShAO/.

19 p3313 A69-36582

## IBRAGIMOVA, N. K.

On the stability of certain systems under resonance conditions.

03 p0466 A69-13404

## IBRUS, IU.

Spectrophotometric study of HD 190603 /Spektrofotometricheskoe issledovanie HD 190603/.

12 p2157 A69-26336

Spectrophotometric study of HD 190603 /Spektrofotometricheskoe issledovanie HD 190603/.

14 p2519 A69-29357

## ICE, M. W.

Astra - Boeing's advanced structural analyzer.

23 p4232 A69-42144

## ICERMAN, L. J.

Optimal structural design for given dynamic deflection.

13 p2369 A69-28350

## ICHIKAWA, K.

Optimization problem with bounded state variable.

12 p2050 A69-26087

Optimal control theory due to parameter optimization method and its application to the design of optimal control equipment for aircraft.

22 p3919 A69-41051

## ICHIKAWA, M.

A criterion for unstable elastic-plastic fracture based on energy balance considerations.

07 p1238 A69-19693

## ICHIKAWA, T.

Observations of M arc at Moscow, Idaho, U.S.A.

12 p2065 A69-26105

## ICHIKAWA, Y.

Conductivity of a plasma with random and coherent fluctuations.

14 p2502 A69-29990

## ICHIMARU, S.

Kinetic theory of fluctuations in turbulent plasmas.

14 p2502 A69-29989

## ICHIMURA, K.

Occultation of BD -17 deg 4388 by Neptune on 7 April 1968. II - Observation at Okayama station and the scale height of Neptune.

06 p1008 A69-17694

Photoelectric observation of Sco X-1.

06 p1008 A69-17695

Photoelectric observations of the flare star AD Leo.

06 p1008 A69-17697

Continual photoelectric monitoring of the flare star UV Cet.

22 p4032 A69-40945

Continual photoelectric monitoring of the flare star YZ CMi.

22 p4032 A69-40947

## ICHIMURA, T.

Fundamental study of operational performance of a laser radar system employing A-scope representation.

20 p3487 A69-37283

Measurement of propagation characteristics of optical beams in the atmosphere and analyses of returned echo signals using a laser radar system with A-scope representation.

20 p3487 A69-37284

## ICHINOSE, M.

Investigations of the transequatorial propagation mode in the VHF band.

10 p1653 A69-23192

## IDELCHIK, I. E.

Mechanism of the influence of inlet conditions on the resistance of diffusers /O mekhanizme vliianiia uslovii vkhoda na soprotivlenie diffuzorov/.

14 p2391 A69-29899

## IDELSOHN, J. M.

Application of bionics to spacecraft energy allocation.

07 p1058 A69-18389

The adaptive filter - A component for use in pattern recognition and trainable systems.

17 p2942 A69-34093

## IESAN, D.

On the plane coupled micropolar thermoelasticity. I, II.

03 p0525 A69-13607

The theory of coupled thermoviscoelasticity /Sur la theorie de la thermoviscoelasticite couplee/.

07 p1233 A69-19327

## IEVLEV, V. N.

Experimental investigation of the influence of the combustion-product composition on the conductivity in the presence of a potassium additive /Eksperimental'noe issledovanie vliianiia sostava produktov sgoraniia na provodimost' pri nalichii dobavki kaliia/.

06 p0870 A69-17908

## IEVLEVA, J. I.

Insulating materials of thermoemission converters.

14 p2467 A69-29214

## IFTIMIE, V.

The Dirichlet problem for equations with measurable coefficients /Sur le probleme de Dirichlet pour des equations aux coefficients mesurables/.

08 p1343 A69-20659

## IGA, K.-I.

Experimental studies on the limitation of focussing power of hyperbolic-type gas lens.

12 p2107 A69-26392

## IGARASHI, A.

Simultaneous Wiener-Hopf equations and their application to diffraction problems in electromagnetic theory. IV.

13 p2287 A69-27299

## IGARASHI, J.

The measurement of the flexural wave propagation velocity by correlation techniques.

15 p2562 A69-30094

## IGBAL, M.

On limiting Nusselt numbers from membrane analogy for combined free and forced convection through vertical ducts.

21 p3851 A69-38974

## IGENBERGS, E. B.

Contributions to magnetogasdynamic stagnation point flow /Beitrage zur magnetogasdynamischen Staupunktstroemung/.

09 p1543 A69-21300

## IGIUNI, A.

Design and calibration of a counter for the measurement of the atmospheric and earth leakage flux of secondary cosmic-ray neutrons.

07 p1209 A69-19454

## IGLESIAS, R.

T-wave inversion of the ECG of healthy individuals with vagotonia.

09 p1445 A69-22557

## IGLITSYN, M. F.

Some properties of the ternary compound GaAs sub 1-x P sub x alloyed with selenium /Nekotorye svoistva troinogo soedineniia GaAs sub 1-x P sub x, legirovanogo selenom/.

13 p2317 A69-27875

## IGLITSYN, M. I.

Effect of laminar inhomogeneity on the results of measuring the resistivity and Hall effect in semiconductors.

04 p0642 A69-14534  
Influence of two kinds of carriers on the Hall effect in GaAs sub 1-x P sub x.

06 p0978 A69-16988  
Recombination in intrinsic indium arsenide.

06 p0979 A69-16997  
Determination of ionization energy of cadmium in indium arsenide.

06 p0979 A69-16998  
Anomalous Hall effect in indium arsenide /Anomallyy efekt Kholla v arsenide indii/.

09 p1555 A69-21472  
Supplementary absorption in solid solutions of GaAs sub 1-x P sub x in the wavelength region from 1 to 4  $\mu$  /Dopolnitel'noe pogloshchenie v tverdykh rastvorakh GaAs sub 1-x P sub x v oblasti dlin voln 1-4 mkm/.

13 p2318 A69-27894  
Anomalous Hall effect in indium arsenide.

15 p2669 A69-30717  
Some properties of the ternary compound GaAs sub 1-x P sub x doped with selenium.

21 p3782 A69-39141  
IGNALL, E.  
On getting close to but not beyond a boundary.

24 p4341 A69-43235  
IGNAT, D. W.  
Resonant absorption in zero-temperature nonuniform plasma.

15 p2661 A69-30922  
IGNATENKO, V. N.  
Optimal control with prediction of inertial plants in the presence of a time lag /Optimal'noe upravlenie s prognozirovaniem inertsionnykh ob'ektami pri nalichii zapazdyvaniia/.

24 p4295 A69-43706  
IGNATENKO, V. V.  
Rational profiling of the shielding disk of a centrifugal-compressor impeller /O ratsional'nom profilirovani pokryvaiushchego diska koleasa tsentroběžhnogo kompressora/.

17 p3057 A69-33193  
IGNATEV, I. U. A.  
Certain specific features in the redistribution of charged particles in the ionosphere in the presence of wind shifts /O nekotorykh osobennostiakh pereraspredelenia zariadzhennykh chastits v ionosfere pri nalichii vetrovykh sdvigov/.

23 p4155 A69-41840  
IGNATEV, P. P.  
Origin and properties of secondary emission recorded during low-altitude satellite flights /Proiskhozhdenie i svoystva dopolnitel'nogo izlucheniia, registriruемого pri polete sputnikov na mal'kikh vysoatakh/.

10 p1757 A69-22821  
Results of measurements of fast charged particles by the Cosmos 137 satellite /Rezultaty izmerenii bystrykh zariadzhennykh chastits na sputnike "Kosmos-137"/.

13 p2327 A69-27693  
IGNATOV, A. A.  
Filtration of signals given by differential equations with variable coefficients /Fil'tratsiia signalov, zadannykh differentsial'nymi uravneniiami s peremennymi koeffitsientami/.

13 p2218 A69-27251  
IGNATOV, D. V.  
Oxygen diffusion parameters in beta-titanium /O parametrah diffuzii kisloroda v beta-titane/.

07 p1163 A69-18783  
Texture of acicular crystals and the crystallographic orientation of dendrites in molybdenum ingots /Tekstura stolbchatykh kristallov i kristallograficheskaiia orientirovka dendritov v slitkakh molibdena/.

11 p1903 A69-24538  
IGNATOVICH, N. M.  
Diffusion Processes in Metals /Diffuzionnye Protse-sy v Metallakh/.

11 p1890 A69-24798  
The Annular Solar Eclipse of May 20, 1966 /Kol'tseobraznoe Solnechnoe Zatmenie 20 maia 1966 g./.

15 p2685 A69-30530  
IGOSHIN, V. I.  
Influence of constant electric and magnetic fields on the resonance radiation of molecules, and overlapping fields /Vliianie postoiannykh elektricheskikh i magnitnykh polei na rezonansnoe izluchenie molekul i perekryvaiushchiesia polia/.

15 p2655 A69-30943  
IGRAKOV, A. I.  
The resolving power of a compressed signal spectral analyzer taking into account the dynamic amplitude range /Razreshaiushchaia sposobnost' analizatora spektra szhatogo signala s uchedom dinamicheskogo diapazona amplitud/.

17 p2939 A69-33906  
The use of a weighted signal treatment in a spectral analyzer with an in-phase storage /Primenenie vesovoi obrabotki signala v spektroanalizatore s sinfaznym nakopleniem/.

17 p2931 A69-33908  
IGUCHI, S.-I.  
Q-switching of ruby laser by natural chlorophyll and its derivatives.

11 p1900 A69-25581  
IGUMENSHCHEV, E. D.  
Production features of thermally strengthened titanium alloys /Osobennosti proizvodstva termicheskii uprochniaemykh titanovykh spлавov/.

11 p1902 A69-24276  
IGUMNOV, D. V.  
The operation of a planar transistor in the micromode during avalanche breakdown of the collector junction.

12 p2041 A69-26648  
Small-signal steady-state input impedance of a planar transistor /Statsicheskoe vkhodnoe soprotivlenie planarnogo tranzistora v mikrorezhime/.

12 p2042 A69-26878  
Influence of the base width on the transistor parameters in the microampere current range /O vlianii shiriny bazy na parametry tranzistora v mikroampernom diapazone tokov/.

12 p2042 A69-26879  
IIDA, H. T.  
A Stokes-like region around a slightly yawed needle in the hypersonic strong-interaction regime.

04 p0542 A69-14732  
IIDA, S.  
Time-variation of spectral output of GaAs diode laser.

05 p0772 A69-15961  
The charge ratio of high-energy cosmic-ray muons at large zenith angles.

17 p3023 A69-33321  
Approximate velocity profiles of equilibrium turbulent boundary layers.

22 p3934 A69-41180  
IIJIMA, K.  
Histochemical studies on the nucleus basalis of Meynert of the squirrel monkey /Saimiri sciureus/.

12 p2018 A69-25774  
IIJIMA, T.  
Constitution of polar magnetic disturbances.

02 p0240 A69-11723  
Worldwide geomagnetic change preceding the onset of auroral electrojet.

10 p1681 A69-22804  
Comparison of magnetic field variation on the ground, in the magnetosphere and interplanetary space.

14 p2441 A69-29387  
IINO, N.  
A mechanical model for fatigue crack propagation.

10 p1797 A69-23082  
IRZHICHEK, F.  
Characteristics of whistlers in central Europe during a solar activity minimum /Kharakteristiki svistiaschikh atmosferikov v srednei Evrope vo vremia minimuma solnechnoi aktivnosti/.

09 p1485 A69-21531  
Characteristics of whistlers in Central Europe during a solar activity minimum.

16 p2783 A69-32526  
IIZUKA, K.  
Microwave holograms and microwave reconstruction.

07 p1135 A69-19449  
An experimental study of a monopole over a grounded hemisphere.

08 p1282 A69-20040  
IIZUKA, M.  
Method of estimating whole-body cold tolerance and its relation to seasonal variation of BMR.

06 p0876 A69-18024  
Hypothermia induced by hypoxia in the rat.

13 p2210 A69-28532  
IIZUKA, Y.  
Study on navigation satellite system.

[UN PAPER 68-95251] 01 p0112 A69-10470  
IKAWA, H.  
Weldability of nickel-base heat resisting superalloy - Effect of aluminum content on the weld crackings in Inconel 713C.

11 p1906 A69-25577  
Transmission electron microstructures in the various heat-treated titanium alloys - On Ti-8 percent Mn alloy.

11 p1906 A69-25578  
IKEDA, K.  
On the collapse probability of fail safe structure.

22 p4045 A69-40820  
Effect of the bending stiffness of the rocket body on the pitching moment coefficient.

22 p4037 A69-41048  
IKEDA, M.  
Study on a semi-hot wall duct for MHD generators.

13 p2372 A69-27473  
IKEDA, T.  
An equivalent circuit of the single-winding transformer.

15 p2578 A69-30793  
IKEGAMI, H.  
Transient changes in oxygen consumption, CO sub 2 elimination and R.Q. during and after acutely induced hypoxia to rabbits.

06 p0876 A69-18026  
IKEGAMI, K.  
The influence of prestrain on subsequent yield surfaces. I.

01 p0166 A69-10303  
Experimental study of the subsequent yield surface by using cross-shaped specimens.

04 p0682 A69-15302  
IKEGAMI, T.  
Direct modulation of semiconductor junction laser.

12 p2110 A69-27069  
IKEZI, H.  
Probe noise in quiescent plasmas.

06 p0967 A69-17715  
Spatial ion-wave echoes.

16 p2818 A69-31676  
Large-amplitude ion acoustic waves in a plasma.

22 p3991 A69-41008  
IKHSANOV, R. N.  
Investigation of the magnetic field and radial gas velocities in a sunspot at different depth. II /Issledovanie magnitnogo polia i luchevyykh skorosti gaza v solnechnom piate na raznykh glubinakh. II/.

20 p3615 A69-38299  
IKOMA, T.  
Observations of current waveforms of the transferred-electron oscillators.

07 p1097 A69-18443  
Observations of voltage and current waveforms of the transferred electron oscillators.

12 p2036 A69-25908  
IKUI, T.  
Operating characteristics of DC arc plasma torch. I.

02 p0291 A69-12424  
Investigations of the aerodynamic characteristics of the shock tubes. I - The effects of tube diameter on the tube performance.

24 p4297 A69-43630  
Investigations of the aerodynamic characteristics of the shock tubes. II - On the formation of shock waves.

24 p4305 A69-43631  
ILCHENKO, M. E.  
Phenomenon of resonance rotation of the polarization plane in a circular waveguide with a ferrite resonator /Javlenie rezonansnogo povorota ploskosti polarizatsii v kruglom volnovode s ferritovym rezonatorom/.

05 p0718 A69-15640  
Resonance bending of the plane of polarization in a circular waveguide with a ferrite cavity.

16 p2762 A69-32498  
ILCHENKO, O. M.  
Generation of a dense plasma by injecting an electron beam into a magnetic trap /Utvorenniia schil'noi plazmy pri inzhektirii elektronnoho puchka v magnitnii ulovliuvach/.

22 p3990 A69-40791  
ILCHEVICH, M. V.  
Changes in the functional state of the cardiovascular system during locomotions /Pro zmini funktsional'nogo stanu sertservo-sudinnoi sistemi pri lokomotsiakh/.

22 p3885 A69-40966  
Variations in basic hemodynamic characteristics under the action of decortication /Zmini osnovnykh



gemodinamichnikh pokaznikov pod vplyvom dekortikat-sii/.  
22 p3888 A69-41271

## ILCHISHINA, D. I.

Surface waves created by colliding elastic bodies /O poverkhnostnykh volnakh, voznikaiushchikh pri soudarenii uprugikh tel/.  
23 p4226 A69-41702

## ILCHUKOVA, L. V.

Effect of macroscopic roughness on the character of the emission from a surface.  
18 p3229 A69-34711

## ILES, P.

Impurity effects on annealing of radiation defects in silicon.  
10 p1747 A69-24006

## ILES, P. A.

Effects of lithium on solar cell properties.  
19 p3252 A69-35695

## ILGACH, G. V.

Possibility of Chlorella cultivation of solutions with mineralized human wastes.  
02 p0200 A69-11511

Investigation of the oxidative-catalytic method of mineralization of wastes in a closed ecological system.  
10 p1649 A69-23579

## ILIASOV, I. U. P.

Synthesis of hybrid junctions /Sintez gibridnykh soedinenii/.  
01 p0043 A69-10593

## ILIC, D.

Surface waves on inhomogeneous plasma columns.  
02 p0289 A69-12242

## ILICHEV, V. IA.

Strength of some glass-fiber-reinforced plastics at low and high temperatures /Prochnost' nekotorykh stekloplastikov pri nizkikh i vysokikh temperaturakh/.  
11 p1907 A69-25181

## ILIFF, K. W.

Experience using Balakrishnan's epsilon technique to compute optimum flight profiles.  
[AIAA PAPER 69-75] 06 p0868 A69-18058

A comparison of Newton-Raphson and other methods for determining stability derivatives from flight data.  
[AIAA PAPER 69-315] 09 p1434 A69-22379

## ILIFF, R. L.

Daytime ground-to-satellite laser ranging experiments.  
23 p4174 A69-42193

## ILIN, A. M.

Energy integral of a system of equations for a quasi-geostrophic approximation /Ob integrale energii sistemy uravnenii kvazigeostroficheskogo priblizhenia/.  
05 p0759 A69-16641

The energy integral of the equation system for the quasi-geostrophic approximation.  
14 p2433 A69-28797

## ILIN, B. M.

Processing basic pilot balloon observations on the Ural-4 computer /Obrabotka bazisnykh sharoplotnykh nabludenii na evm "Ural-4"/.  
20 p3572 A69-37700

## ILIN, M. A.

Determination of inhomogeneity in semiconductor materials by the optical reflection method.  
05 p0764 A69-16664

## ILIN, V. A.

Problems of localization and convergence for Fourier series in fundamental systems of functions of the Laplace operator.  
15 p2644 A69-30287

Synthesis of round-trip trajectories closely encircling the moon.  
18 p3196 A69-34704

## ILIN, V. B.

The new AFA-TES-10 aerial camera /Novyi aerofotoapparat AFA-TES-10/.  
18 p3139 A69-35328

## ILIN, V. D.

Role of nonadiabatic particle losses in the inner radiation belt.  
06 p0921 A69-17742

Nonadiabatic losses of protons captured in the earth's dipole trap /Neadiabatcheskije poteri zakhvachennykh protonov v dipol'noi lovushke zemli/.  
20 p3587 A69-37042

## ILINA-KAKUEVA, E. I.

Some effects developing during hypokinesia.  
02 p0198 A69-11502

## ILINA, N. P.

Possibilities for determining the pion-to-kayon ratio from the angular distribution of muons.  
13 p2332 A69-28421

## ILINOV, M. P.

Wave processes in an optical amplifier with allowance for the distribution of the population inversion over the cross section of the active medium /Volnovye protsessy v opticheskom usilitele s uchedom raspredeleniia inversnoi naseleonnosti po secheniiu aktivnoi sredy/.  
11 p1893 A69-24447

## ILINOVA, T. M.

Wave processes in an optical amplifier with allowance for the distribution of the population inversion over the cross section of the active medium /Volnovye protsessy v opticheskom usilitele s uchedom raspredeleniia inversnoi naseleonnosti po secheniiu aktivnoi sredy/.  
11 p1893 A69-24447

## ILINSKII, A. I.

Internal macrostresses in metallic vacuum condensates /Vnutrennie makronapriazheniia v metallicheskih vakuumnykh kondensatakh/.  
12 p2143 A69-26457

## ILINSKII, V. N.

Micrometeoritic investigations on the Cosmos 135 satellite /mikrometeoritnye issledovaniia na sputnike "Cosmos-135"/.  
01 p0152 A69-10578

Micrometeoroid investigations on the satellite "Cosmos-135".  
15 p2691 A69-30748

## ILIUHIN, A. A.

Conditions constraining the parameters in a particular solution to the problem of the motion of a body containing a liquid /Ob usloviakh, stesniaiushchikh parametry v odnom chastnom reshenii zadachi o dvizhenii tela s zhidkim zapolnieniem/.  
11 p1868 A69-24775

Concerning Kowalewski's solution to the equations of motion of a body having a fixed point /O reshenii N. Kovalevskogo uravnenii dvizheniia tela, imeiushchego nepodvizhnyi tochku/.  
11 p1917 A69-24776

## ILIUHIN, A. G.

Determination of the temperature field inside thin-walled rods of near-circular open profile situated in the solar radiation field /Opredelenie temperaturnogo polia vnutri nakhodiashchikhsia v pole solnechnogo izlucheniia tonkostennykh sterzhnei otkrytogo profilia, blizkogo k krugovomu/.  
11 p1999 A69-24779

## ILIUHIN, A. V.

Experimental verification of the permissible radiation doses for extended space missions ("chronic experiments" with dogs) /K eksperimental'nomu obosnovaniiu dopustimnykh doz radiatsii pri dlitel'nykh kosmicheskikh poletakh /provedenie khronicheskogo eksperimenta na sobakakh/.  
05 p0708 A69-16508

Experimental verification of permissible radiation doses during prolonged space flights - A "chronic experiment" on dogs.  
18 p3095 A69-34727

## ILIUSHIN, G. P.

High-speed SP-III spectrophotochronograph.  
12 p2085 A69-26161

## ILIUTOVICH, A. E.

Analysis of a system for controlling the motion of a low-thrust vehicle /Analiz sistemy upravleniia dvizheniem apparata s maloi tiagoi/.  
01 p0113 A69-10572

Control of the motion of a system with limited power under conditions of mass accumulation /Upravlenie dvizheniem sistemy s ogranichennoi moshchnost'iu v rezhime nakopleniia massy/.  
13 p2356 A69-27686

An analysis of the equations of motion of a low-thrust device.  
15 p2651 A69-30742

## ILL, M.

Systematic analysis of the density variations of the upper atmosphere with respect to reference models /Analyse systematique des ecart des densites de la haute atmosphere par rapport a des modeles de reference/.  
08 p1397 A69-20761

Determination of the velocity of a subsatellite point /Opredelenie skorosti odnoi podsputnikovoi tochki/.  
12 p2158 A69-26435

## ILNITSKII, L. IA.

DC amplifier with a controllable and reversible transfer constant /Usilitel' postoiannogo toka s upravliaemym i reversiruемым koefitsientom peredachi/.  
13 p2235 A69-28511

## IMACHI, I.

On the problem of extraction of string from a bobbin.  
22 p3930 A69-40585

## IMAEDA, K.

Azimuth angle distribution of the secondary particles of cosmic-ray jets.  
17 p3024 A69-33763

## IMAGAWA, F.

The table of E-M in Kepler's equation.  
10 p1777 A69-23395

## IMAI, M.

On a curved gas lens with idealized medium.  
13 p2270 A69-27181

## IMAI, Y.

Heat generation in polycarbonate due to pulsating tensile load.  
18 p3163 A69-35498

## IMAKI, K.

Structure of superlayer in the turbulent boundary layer.  
01 p0061 A69-10759

Structure of the superlayer in the turbulent boundary layer. II.  
07 p1118 A69-18299

## IMAMOV, R. M.

An electron diffraction study of the semiconductor CuAsSe sub 2.  
02 p0298 A69-12045

Electron-diffraction determination of the structures of Ge sub 2 Sb sub 2 Te sub 5 and GeSb sub 4 Te sub 7.  
02 p0298 A69-12046

## IMAMURA, M.

Some stable and long-lived nuclides produced by spallation in meteoritic iron.  
19 p3411 A69-36099

Application of neutron activation method for super 53 Mn in meteoritic iron.  
20 p3601 A69-37504

## IMAMURA, S.

Three-photon photoelectric effect in K sub 3 Sb.  
05 p0771 A69-15813

## IMAMURA, T.

Study on application of maraging stainless steel to liquid rocket propellant tank.  
07 p1166 A69-19236

The Wiener-Hermite expansion with time-dependent ideal random function.  
15 p2644 A69-30201

## IMANI, K.

A shock tube study of nonequilibrium MHD power generation.  
02 p0196 A69-12425

## IMAS, IA. A.

Temperature dependence of the optical constants of a metal in heating by laser radiation.  
06 p0932 A69-16915

## IMAZHANOVA, K.

Cosmic ray anisotropy and Forbush effects during a solar activity minimum /Anizotropiia kosmicheskikh luche i efekty Forbusha v minimume solnechnoi aktivnosti/.  
10 p1758 A69-22835

## IMBERT, P.

Temporary launching sites /Les bases de lancement temporaires/.  
02 p0228 A69-11921

## IMBERT, R.

Structural problems in scientific satellites /Problemes de structures pour les satellites scientifiques/.  
13 p2357 A69-28479

Structural problems in the design of scientific satellites.  
18 p3208 A69-34792

## IMBRECHTS, C.

Aid rendered by CAD in choosing components with a view to circuit optimization /Aide apportee par le CAO pour le choix des composants en vue de l'optimisation des circuits/.  
15 p2628 A69-30849

**IMENKOV, A. N.**  
Power epitaxial GaAs tunnel diodes /Moshchnye epitaksial'nye tunnel'nye diody iz GaAs/.  
03 p0489 A69-13895  
High-power epitaxial GaAs tunnel diodes.  
11 p1939 A69-25696

**INGRAM, D. A.**  
Designing for experimentation.  
23 p4223 A69-42457

**IMHOF, P. R.**  
Beta-blockade and emotional tachycardia - Radiotelemetric investigations in ski jumpers.  
23 p4078 A69-41313

**IMHOF, W. L.**  
Source of high-energy protons trapped on low L shells.  
24 p4367 A69-43176

**IMIANITOV, I. M.**  
Investigation of the static electrification of aircraft /Issledovanie staticheskoi elektrizatsii samoletov/.  
04 p0549 A69-15107  
Charge of an LI-2 aircraft in stratus clouds /Zariazhenie samoleta LI-2 v oblakakh sloistyykh form/.  
04 p0549 A69-15108

**IMMEN, F. H.**  
Fail-safe vs. safe-life philosophy in V/STOL design. [AHS PAPER 376]  
17 p2900 A69-33512

**IMSHENETSKII, A. A.**  
A comparative evaluation of different methods for detection of extraterrestrial life.  
01 p0021 A69-11093

**IMSHENETSKII, A. B.**  
Determination of the coupled moments of inertia of a fluid in moving cavities on the basis of a numerical computer solution to the resolving integral equation /Opredelenie prisoedinennykh momentov inertsii zhidkosti v podviznykh polostiakh na osnovе chislennogo resheniia na ET s VM razreshaiushchego integral'nogo uravneniia/.  
11 p1868 A69-24774

**IMSHENNIK, V. S.**  
Rotation and pulsation of a gravitating gas cloud /Vrashchenie i pul'satsii gravitiruiushchego oblaka gaza/.  
02 p0317 A69-11955  
The theory of electron plasma non-linear oscillations.  
18 p3180 A69-34703

**INABA, H.**  
Resonant emission of difference frequency due to optical mixing in active quantum system under laser oscillation.  
07 p1144 A69-18470  
Self mode-locking of the transverse modes in the CO sub 2 laser oscillation.  
19 p3330 A69-35602  
Fundamental study of operational performance of a laser radar system employing A-scope representation.  
20 p3487 A69-37283  
Measurement of propagation characteristics of optical beams in the atmosphere and analyses of returned echo signals using a laser radar system with A-scope representation.  
20 p3487 A69-37284

**INALL, E. K.**  
Homopolar generator as the energy store for a large laser.  
04 p0612 A69-15151

**INAMI, S. H.**  
Thermal decomposition of ammonium perchlorate.  
02 p0304 A69-12312

**INCE, W. J.**  
Phasers and time delay elements.  
23 p4135 A69-41353

**INDENBOM, V. L.**  
Construction of Green's function in terms of Green's function of lower dimension.  
11 p1996 A69-25730

**INEMIROVSKII, I. V.**  
Stability and buckling of inhomogeneous rods beyond the elastic limit /Ob ustoiichivosti i vypuchivanii neodnorodnykh sterzhnei za predelom uprugosti/.  
19 p3446 A69-36846

**INFANTE, E. F.**  
Some remarks on the stability of time-varying systems.  
11 p1861 A69-25452  
Stability of a column subjected to a time-dependent axial load.  
16 p2872 A69-31911

**INFELD, E.**  
Convective and absolute two-stream instabilities for hot plasma.  
14 p2499 A69-29844  
Degeneration and stability of magnetohydrodynamic modes in a coaxial channel with an helical field.  
15 p2664 A69-31063

**ING, D. W.**  
Study of inhomogeneities in GaAs using a scanning electron microscope.  
09 p1557 A69-21746

**INGALLS, R. P.**  
Scattering properties of Venus at 3.8 cm.  
13 p2349 A69-27818  
Venus - Mapping the surface reflectivity by radar interferometry.  
21 p3806 A69-39331

**INGARD, U.**  
On sound-transmission anomalies in the atmosphere.  
13 p2301 A69-28666  
Acoustic wave propagation in a gas discharge.  
20 p3578 A69-38243

**INGBER, J. F.**  
Reactor requirements for first generation thermionic nuclear electric propulsion. [AIAA PAPER 69-250]  
09 p1539 A69-21253

**INGER, G. R.**  
Discontinuous supersonic flow past an ablating wavy wall.  
16 p2770 A69-31909  
Effect of gaseous injection on the hypersonic flow around transpiration-cooled bodies.  
21 p3644 A69-39014  
Strong blowing across a Couette-Poiseuille shear flow.  
24 p4301 A69-43354

**INGERSOLL, A. P.**  
Inertial Taylor columns and Jupiter's Great Red Spot.  
20 p3609 A69-38060

**INGERSON, P. G.**  
Log-periodic antennas with modulated impedance feeders.  
08 p1281 A69-20015

**INGHAM, D. B.**  
Magnetohydrodynamic flow in a container.  
11 p1930 A69-25279

**INGHAM, H. S., JR.**  
Flame-sprayed coatings.  
21 p3731 A69-38938

**INGHAM, J. D.**  
Estimation of solubility parameters from refractive index data.  
21 p3751 A69-38552

**INGHAM, M. F.**  
Observations of the polarization of the night sky and a model of the zodiacal cloud normal to the ecliptic plane.  
07 p1222 A69-19588

**INGLIS, L. P.**  
The compatibility of man in the microwave environment.  
23 p4111 A69-42216

**INGOLD, J. H.**  
Electron flow in gas diodes. I - Transition from inertia-limited flow to mobility-limited flow.  
09 p1462 A69-21325  
Electron flow in gas diodes. II - Mobility-limited flow for collision frequency proportional to electron speed.  
09 p1462 A69-21326

**INGOLDBY, R. N.**  
Guidance and control system design for a six engine Martian soft lander.  
02 p0277 A69-11740

**INGRAHAM, T. R.**  
The sulphation of nickel and cobalt ferrites and sulphides by molten sodium pyrosulphate and sodium bisulphate.  
16 p2747 A69-32567

**INGRAM, C. W.**  
An investigation of the non-linear flight dynamics of ordnance weapons. [AIAA PAPER 69-135]  
06 p0863 A69-18120  
Nonlinear aerodynamic characteristics of re-entry configurations with aerodynamic and mass asymmetries. [AIAA PAPER 69-867]  
21 p3823 A69-39393

**INGRAM, E. H.**  
Application of heat pipes to reduce cryogenic boiloff in space.  
12 p2191 A69-26793

**INGRAM, G. E.**  
The development and application of a methodology of program risk evaluation.  
19 p3455 A69-36008

**INGRAO, H. C.**  
Space-borne optical telescopes - An introduction.  
13 p2261 A69-27946

**INGULTSOV, V. L.**  
Influence of boundary conditions on the stability of a cylindrical shell under external pressure and axial tensile forces /O vlianii granichnykh uslovii na ustoiichivost' tsilindricheskoi obolochki, nagruzhennoi vnesnim davleniem i osevyimi rastiagivaiushchimi silami/.  
18 p3222 A69-34977

**INIGO, R. M.**  
A single operational amplifier notch filter.  
14 p2421 A69-29550

**INKOV, B. K.**  
Distribution of the sources of recorded atmospherics with respect to remoteness /for distances greater than 1000 km/ /O raspredelenii istochnikov registriremykh atmosferikov po udalennosti /dlia rasstoianii bol'she 1000 km//.  
04 p0593 A69-15103  
Application of linear scanning to the investigation of the azimuthal distribution of atmospherics /O primenenii lineinoi razvertki pri issledovanii azimutal'nogo raspredeleniia atmosferikov/.  
04 p0600 A69-15104

**INKSON, J. C.**  
Noise generation under large signal conditions in the Read microwave avalanche diode.  
06 p0895 A69-17472

**INMAN, M. C.**  
Shock response of nickel in the pressure range 820-1500 kb.  
15 p2637 A69-30225  
Recrystallization in thoria-dispersed nickel sheet.  
20 p3557 A69-36958

**INNANEN, K. A.**  
Illumination of high-latitude nebulae by the central region of the galactic system.  
22 p4033 A69-41059

**INNES, R. B.**  
An interpreter's perspective on modern airborne-radar imagery.  
20 p3493 A69-37735

**INOBA, F.**  
Oscillation phenomena in lasers.  
09 p1517 A69-22119

**INOUE, E.**  
Sonic anemometer comparison and measurements in the atmospheric surface layer.  
16 p2808 A69-32600

**INOUE, K.**  
Submillimeter-wave generation by difference-frequency mixing of ruby laser lines in ZnTe. [IEEE PAPER B-4]  
14 p2457 A69-28927

**INOUE, M.**  
Studies on corrosion of aluminum by fungi culture.  
04 p0616 A69-14765  
Study on corrosion of aluminum by fungus culture.  
06 p0941 A69-17123

**INOUE, N.**  
Effects of hydrostatic pressure on the mechanical behavior of polycrystalline beryllium.  
01 p0092 A69-10059  
Thermalization of the kinetic energy of a plasma flow by a magnetic mirror field in BSG-I experiments.  
02 p0289 A69-12176  
Grain-size refinement of ingot beryllium by straining under hydrostatic pressure.  
08 p1330 A69-20013  
Deformation of beryllium single crystals under high pressure.  
13 p2279 A69-27760

**INOUE, T.**  
Thermal fatigue combined with static mean stress and reversed mechanical stress.  
21 p3847 A69-39813

**INOUE, Y.**  
Solitary waves propagating at an angle to a magnetic field in a collisionless warm plasma.  
01 p0127 A69-10336



- Wave trains propagating at an angle to a magnetic field in a collisionless plasma. 13 p2304 A69-27297
- INOUE, G. T.**  
Measurements of precipitated 1-20 kev protons and electrons during a breakup aurora. 18 p3187 A69-34946
- INOUE, H.**  
Interactions of refractory metals with active gases in vacua and inert gas environments. 01 p0099 A69-11042
- INOVITSKII, E. G.**  
Optical parameters of the Martian surface and temperature /Opticheskie parametry poverkhnosti i atmosfery Marsa/. 20 p3608 A69-38050
- INOZEMTSEV, N. N.**  
Formation of carbide coatings on graphite in molten media /K voprosu obrazovaniia karbidnykh pokrytii na grafite v rasplavlenykh sredakh/. 20 p3566 A69-37372
- INSAROV, V. V.**  
Precision analysis of unsteady dynamic systems containing random parameters /Analiz tochnosti nestatsionarnykh dinamicheskikh sistem, soderzhashchikh sluchainye parametry/. 03 p0408 A69-12948
- INSHAKOVA, V. M.**  
Man's thermal tolerance - A review of the literature. 10 p1645 A69-23494
- INSHENETSKII, A. A.**  
Effect of high vacuum on oxidative processes in bacteria as well as on activity of certain enzymes. 15 p2557 A69-31354
- INSINGER, F. G.**  
Time resolved beam distribution functions in a beam-plasma experiment. 17 p3014 A69-33829
- INSKEEP, C. G.**  
Minimum performance standards for the aircraft downed position indicator and implementation program. 17 p2931 A69-34102
- INTERIAN, A.**  
Remote manipulators in space. 15 p2558 A69-30187  
Satellite maintenance using remote manipulator spacecraft. 19 p3430 A69-36001  
Manipulator technology - Ready for space now. 24 p4297 A69-43041
- INTRIERI, P. F.**  
Ballistic range tests of ablating and nonablating slender cones. [AIAA PAPER 69-179] 06 p1036 A69-18083
- INTRILIGATOR, D. S.**  
Preliminary comparison of solar wind plasma observations in the geomagnetospheric wake at 1000 and 500 earth radii. 12 p2151 A69-26943
- INUI, T.**  
Calculations of electron temperature across a shock wave of a partially ionized gas. 21 p3698 A69-39791
- INUISHI, Y.**  
Enhanced microwave scattering by plasma instability in a magnetic field. 06 p0967 A69-17717  
Q-switching of ruby laser by natural chlorophyll and its derivatives. 11 p1900 A69-25581  
Noise in He-Ne laser oscillators. 19 p3330 A69-35760
- INZANI, P.**  
Design and calibration of a counter for the measurement of the atmospheric and earth leakage flux of secondary cosmic-ray neutrons. 07 p1209 A69-19454
- IOFFE, A. F.**  
Computer model of the Gunn diode. 07 p1097 A69-18449
- IOFFE, I. G.**  
Compensation of errors in systems using devices for the observation of the disk of a planet. 10 p1693 A69-23320  
Systematic errors of a horizon sensor due to the nonsphericity of the planet /O metodicheskikh pogreshnostiakh ustroistva vizirovaniia gorizonta ot vlianiia nesferichnosti planety/. 13 p2260 A69-27695
- IOFFE, I. V.**  
Theory of the effect of phonon capture by electrons in semiconductors with high permittivity /K teorii efekta uvlecheniia fononov elektronami v poluprovodnikakh s bol'shoi dielektricheskoi promislaemost'iu/. 03 p0489 A69-13891  
Flexure-drift resonance in semiconductors. 08 p1371 A69-19806  
A theory of the drag of phonons by electrons in semiconductors with a high permittivity. 11 p1939 A69-25692
- IOFFE, L. A.**  
Maintenance of functional stability under complex experimental conditions by means of regular physical exercises. 08 p1262 A69-19931  
Change of orthostatic stability in athletes after 40-day hypokinesia. 10 p1646 A69-23581
- IOFFE, S. B.**  
Interferential-polarization filter with thermooptically compensated stages for solar corona observations /Interferentsionno-polarizatsionnyi fil'tr s termoopticheski kompensirovannyimi stupeniami dlia nabljudeniia korony solntsa/. 03 p0506 A69-13085  
A polarization interference filter with thermooptically compensated elements for observing the solar corona. 14 p2515 A69-28767
- IOGENSEN, L. V.**  
Fiber-optics interferometers /Volokonnye interferometry/. 24 p4315 A69-43162
- IONESCU, D.**  
Approximate method for calculating a laminar boundary layer /O metoda aproximativa pentru calculul stratului-limita laminar/. 15 p2593 A69-31263
- IONESCU, V.**  
Laser Applications in Plasma Physics /1962- 1968/. 14 p2498 A69-29842
- IONOV, V. P.**  
Experimental determination of the recombination rate constants for oxygen and nitrogen under conditions of dissociated gas flow in nozzles /Eksperimental'noe opredelenie konstant skorosti rekombinatsii kisloroda i azota v usloviakh techeniia dissiatsirovannykh gazov v soplakh/. 06 p1030 A69-17349
- IORDANOV, D.**  
Turbulent diffusion in the boundary layer /Ueber die turbulente Diffusion in der Bodenschicht/. 09 p1535 A69-21513
- IOSHPA, B. A.**  
Magnetic field decay in the group 21034 during the proton flare period of July 1966. 10 p1766 A69-23759
- IOSIFESCU, M.**  
The law of the iterated logarithm for a class of dependent random variables. 11 p1910 A69-25699
- IOTKOVSKII, B. G.**  
Approximate solution of the equations for the boundary layer on the walls of an MHD generator /O priblizhennom reshenii uravnenii pogrannichnogo sloia na stenkakh MGD-generatora/. 06 p0871 A69-17914  
Effect of boundary layers on the electrical characteristics of MHD generators. 11 p1824 A69-24221  
Applicability of the method of successive approximations for calculating the boundary layer during magnetohydrodynamic flow in channels /O primenimosti metoda posledovatel'nykh priblizhenii dlia rascheta pogrannichnogo sloia pri magnitogidrodinamicheskom techenii v kanalakh/. 11 p1932 A69-25491
- IOZENAS, V. A.**  
Determination of the vertical ozone distribution in the upper layers of the atmosphere from satellite measurements of ultraviolet solar radiation scattered by the earth's atmosphere. 06 p0996 A69-17733  
Investigation of the earth's ozonosphere from satellites /Issledovaniia ozonosfery zemli so sputnikov/. 12 p2064 A69-25952  
Investigation of the planetary distribution of ozone on the basis of ultraviolet spectra measured by satellites /Issledovanie planetarnogo raspredeleniia ozona po ul'trafioletovym spektram, izmerennym na sputnikakh/. 15 p2597 A69-30654
- IPSER, J. R.**  
Relativistic, spherically symmetric star clusters. II - Sufficient conditions for stability against radial perturbations. 15 p2691 A69-30765  
Relativistic star clusters. 21 p3814 A69-39570
- IQBAL, M.**  
Radiant heating of a solid spherical satellite. 16 p2877 A69-31922  
Temperature distribution and curvature produced in long solid cylinders in space. 22 p4043 A69-40546
- IR, P. K.**  
Propagation of electromagnetic waves in a cylindrical plasma waveguide /Rasprostranenie elektromagnitnykh voln v tsilindricheskom plazmennom volnovode/. 02 p0285 A69-11463
- IRELAND, J. G.**  
Galactic discontinuity near I super II equals 140 deg. 10 p1776 A69-23215  
Defects in interstellar grains. 22 p4023 A69-40472
- IRELAND, R. A.**  
Ceramic radomes for aerospace vehicles. 07 p1171 A69-19511  
Why radomes are necessary. 17 p2942 A69-34084
- IRELAND, W.**  
Mid-latitude radio-satellite scintillation - The morphology near sunspot minimum. 16 p2780 A69-32307
- IREMASHVILI, D. V.**  
Measurements of the resistivity of semiconductor materials /Ob izmereniiakh udel'nogo soprotivleniia poluprovodnikovykh materialov/. 04 p0642 A69-14853  
Microwave cavity measurements of resistivity of semiconductor materials. 15 p2667 A69-30245
- IREMONGER, M. J.**  
Effects of geometry on stresses in discontinuous composite materials. 20 p3565 A69-36942
- IREY, R. K.**  
Methods for determining thermal accommodation coefficients from free molecule flow heat transfer data. 18 p3230 A69-35071
- IRGASHEV, D. I.**  
Analysis of rapid density variations in the upper atmosphere /K analizu bystrykh izmenenii v plotnosti verkhnai atmosfery/. 12 p2069 A69-26436
- IRGER, D. S.**  
On guaranteed evaluations of the reliability of a system with incomplete information about the reliability of the elements. 02 p0251 A69-11652
- IRIE, T.**  
Base transit time of minority carriers in double-diffused transistors with small emitter area. 02 p0297 A69-11995
- IRISAWA, H.**  
Summation of baroreceptor reflex effects on sympathetic nerve activities. 20 p3479 A69-38073
- IRISAWA, J.**  
Experimental study of penetration of a high-velocity plasma into a cusped field. 05 p0805 A69-16655
- IRISOVA, N. A.**  
Metrics of submillimeter waves /Metrika submillimetrovyykh voln/. 02 p0250 A69-12247  
Obtaining a visible image of radio emission in the millimeter band. 04 p0560 A69-15272
- IRISOWA, N. A.**  
Spectroscopy in the submillimeter wavelength range /Spektroskopii v pasmie chastotyi submillimetrovyykh/. 17 p2932 A69-34162
- IRISSOU, P.**  
Fabrication of hybrid thin film circuits with a high degree of reliability /Fabrication de circuits hybrides en couches minces presentant un degre eleve de fiabilite/. 15 p2628 A69-30845

- IRIUCHIJIMA, J.**  
Sympathetic vasoconstrictor activity to the kidney in carotid occlusion pressor reflex.  
22 p3887 A69-41190  
The constituents of arterial pressure change.  
23 p4085 A69-41473
- IRONS, B. M.**  
A conforming quartic triangular element for plate bending.  
15 p2706 A69-30430  
Economic computer techniques for numerically integrated finite elements.  
15 p2711 A69-30873  
A version of the Aitken accelerator for computer iteration.  
20 p3498 A69-36950  
The isoparametric finite element system - A new concept in finite element analysis.  
21 p3732 A69-39314
- IROSHNIKOV, R. S.**  
Nature of differential solar rotation /Priroda differentsial'nogo vrashcheniia solntsa/.  
11 p1955 A69-24390  
The nature of the sun's differential rotation.  
24 p4390 A69-43780
- IRVIN, J. C.**  
Low-temperature hysteresis effects in metal-oxide-silicon capacitors caused by surface-state trapping.  
10 p1744 A69-23179
- IRVINE, C. H.**  
Psychophysical studies of physiological fatigue criteria.  
17 p2911 A69-34013
- IRVINE, R. G.**  
Real time, wide band shock response analysis.  
15 p2618 A69-30359
- IRVINE, T. F., JR.**  
Advances in Heat Transfer. Volume 5.  
11 p1997 A69-24456
- IRVINE, W. M.**  
An evaluation of Romanova's method in the theory of radiative transfer.  
02 p0319 A69-12106  
Multicolor photoelectric photometry of the brighter planets. III - Observations from Boyden Observatory.  
04 p0663 A69-15383
- IRVING, A. M.**  
Evaluation of head protection in aircraft.  
17 p2913 A69-33169
- IRVING, F. G.**  
The stick-force/speed characteristics of various types of tails and elevator trimmers.  
09 p1434 A69-22597
- IRVING, J.**  
Strong shock wave generation by the interaction of a giant laser pulse with a solid target.  
21 p3736 A69-38942
- IRVING, R. A.**  
The No. 2 antenna system, Goonhilly.  
12 p2044 A69-26923
- ISAACS, D.**  
Nonlinear programming and recursive optimal estimation.  
06 p0902 A69-17403
- ISAACS, G. T.**  
Glow discharge electron beam welding.  
04 p0608 A69-15480
- ISAACSON, L. K.**  
Temperature laws for a turbulent boundary layer with injection and heat transfer.  
04 p0685 A69-14729
- ISABEAU, J. G.**  
The high speed tape transport.  
23 p4165 A69-41776
- ISAENKO, V. I.**  
Study of the effectiveness of various types of polymethine dyes used in passive Q-switches of neodymium lasers /Issledovanie effektivnosti razlichnykh tipov polimetinovykh krasitelei, primeniayemykh v passivnykh zatvorakh neodimovykh OKG/.  
17 p2983 A69-33968
- ISAEV, A. I.**  
The electrical discharge machining of heat-resisting alloys.  
18 p3147 A69-34547
- ISAEV, G. S.**  
Certain results of photoelectric measurements of atmospheric polarization in the city of Shakhty /Nekotorye rezul'taty fotoelektricheskikh izmerenii atmosferno polarizatsii v g. Shakhty/.  
01 p0075 A69-11190
- ISAEV, I. F.**  
Dense-plasma diagnostics with the aid of gamma-ray resonance scattering /O diagnostike plotnoi plazmy pri pomoshchi rezonansnogo rasseianiia gamma-luchei/.  
02 p0291 A69-12481
- ISAEV, S. I.**  
Polar Auroras /Poliarnye Siianiia/.  
17 p2962 A69-33949
- ISAEV, V. K.**  
Optimal landing of a space vehicle on the surface of the moon /Optimal'naia posadka kosmicheskogo aparata na poverkhnost' luny/.  
19 p3431 A69-36616  
Optimal liftoff of a space vehicle from the surface of the moon /Optimal'noe vyvedenie kosmicheskogo aparata s poverkhnosti luny/.  
19 p3431 A69-36617
- ISAKHANOV, G. V.**  
Mechanical properties of metal-glass materials obtained by impregnation /Mekhanicheskie svoista metallostekliannykh materialov, poluchennykh propitkoi/.  
15 p2643 A69-31188
- ISAKOV, A. L.**  
Approximate method for determining the minimum admissible spacing between a nozzle and an obstacle /Priblizhennyi metod opredeleniia minimal'nodopustimogo rassoiianiia mezhdu soplom i pregradoi/.  
03 p0361 A69-12955
- ISAKOV, P. K.**  
Gravitational effects during the formation of functions of the organism /Gravitatsionnye vozdeistviia v formirovaniі funktsii organizma/.  
07 p1060 A69-18572  
Coordination of posture and motion of man under conditions of increased and decreased gravitation /Kordinatsiia pozy i dvizheniia cheloveka v usloviakh povyshennoi i ponizhennoi gravitatsii/.  
07 p1063 A69-18593
- ISAKOV, V. I.**  
Calculation of temperature fields in multilayer cylindrical bodies /Raschet temperaturykh polei v mnogosloynnykh tsilindricheskikh telakh/.  
21 p3855 A69-39855
- ISAKOVICH, T. D.**  
Ionospheric studies /Ionosfernye issledovaniia/.  
20 p3523 A69-37654
- ISAKSON, G.**  
Discrete-element plastic analysis of structures in a state of modified plane strain.  
13 p2365 A69-28237
- ISATAEV, S. I.**  
Heat transfer from a sphere in a free flow of finite width /Teplootdacha shara v svobodnom potoke konechnoi shiriny/.  
21 p3855 A69-39849  
Flow structure in the wake behind a cylinder in a channel /Struktura techeniia v slede za tsilindrom v kanale/.  
21 p3698 A69-39850
- ISEEV, L. R.**  
Study of the effects of various work and rest schedules on subjects under conditions of relative isolation /Izuchenie vliianiia razlichnykh rezhimov truda i otdykha na ispytatelei, nakhodiaschchikhsia v usloviakh otnositel'noi izoliatsii/.  
03 p0381 A69-14201  
Tolerance of humans to physical stress during a four month stay in a closed space.  
08 p1263 A69-19933  
Similar changes of the oxygen balance in man during bed rest and stay in sealed chamber.  
10 p1646 A69-23507
- ISENBERG, G. R.**  
Urinary excretion of electrolytes in mice during acute hypoxia exposure.  
01 p0015 A69-10921
- ISENBERG, H. D.**  
The origin of microbial life on earth and its implications for extraterrestrial forms.  
17 p2907 A69-32972
- ISHAI, O.**  
Tensile characteristics of discontinuous "unidirectional" glass-epoxy composites.  
08 p1339 A69-20496
- The effect of temperature on the delayed yield and failure of "plasticized" epoxy resin.  
10 p1717 A69-24218
- ISHCHENKO, E. F.**  
Lasers /Opticheskoe Kvantovye Generatory/.  
18 p3151 A69-34357
- ISHCHENKO, I. I.**  
Strain studies by means of a thermoelectric method /Issledovanie deformatsii s pomoshch'iu termoelektricheskogo metoda/.  
11 p1985 A69-25178
- ISHCHENKO, L. A.**  
Natural oscillations of a liquid in a spherical vessel /Sobstvennye kolebaniia zhidkosti v sfericheskom sosude/.  
06 p0910 A69-17333
- ISHCHENKO, O. V.**  
Calculation of a conical shell with an elastic filler under axisymmetric loading /Raschet konicheskoi obolochki s uprugim zapolnitelem pri osemimetricnoi nagruzhke/.  
19 p3436 A69-35846
- ISHIDA, K.**  
Absolute isophotometry of galactic HII regions in H alpha light.  
07 p1217 A69-19231
- ISHIDA, N.**  
Waveform degradation of trapezoidal pulses due to band limitation.  
05 p0719 A69-16296  
On envelopes of PM pulses affected by band limitation.  
15 p2569 A69-30803
- ISHIDA, S.**  
The effect of minor impurities in water on corrosion of aluminum.  
04 p0617 A69-14932
- ISHIDA, T.**  
Laser radar.  
09 p1456 A69-22132
- ISHIGURO, R.**  
Turbulent heat transfer from a surface having stepwise discontinuities on the wall temperature.  
18 p3229 A69-34836
- ISHIHARA, F.**  
Waveform degradation of trapezoidal pulses due to band limitation.  
05 p0719 A69-16296  
On envelopes of PM pulses affected by band limitation.  
15 p2569 A69-30803  
Ladder-type delay equalizer for millimeter-wave communication systems.  
23 p4135 A69-41361
- ISHIHARA, T.**  
Separable expansion for off-shell two-body t matrix with Coulomb potential.  
08 p1354 A69-20205
- ISHII, H.**  
Photographic observations on fatigue fracture of polycarbonate.  
06 p0946 A69-17205  
Stiffness increase associated with fatigue of polycarbonate.  
06 p0946 A69-17206  
The effect of air pressure on the rate of fatigue crack growth.  
13 p2276 A69-23793  
Heat generation in polycarbonate due to pulsating tensile load.  
18 p3163 A69-35498
- ISHII, K.**  
Spectroscopic studies of a helium plasma in a linear Z-pinch tube.  
08 p1369 A69-20887
- ISHII, M.**  
A new running test facility for the study of flight dynamics.  
17 p2944 A69-32851
- ISHII, R.**  
The numerical study of flows over blunt bodies by method of integral relations.  
21 p3645 A69-39790  
On the nonequilibrium nozzle flows of weakly ionized helium and argon plasmas.  
22 p3861 A69-41047
- ISHII, T.**  
Diurnal field strength and phase variations on VLF /NWC signals/ transmissions over a transequatorial path. I.  
06 p0889 A69-17654



ISHII, T. K.

ISHII, T. K.

- Calculating Gunn-diode output.  
01 p0049 A69-11195  
Resonance characteristics of klystron cavities.  
05 p0729 A69-15978  
Theory of one-port coupled microwave oscillators.  
09 p1466 A69-22444  
Telemetry by the reflex klystron accelerometer and seismometer.  
19 p3272 A69-36255

ISHIKAWA, H.

- Influence of the atmospheric aerosols on the ion density profile up to 30 km altitude.  
18 p3129 A69-34962  
Balloon observation of small ion density and electric conductivity in the stratosphere.  
18 p3130 A69-34970

ISHIMARU, A.

- Propagation of spherical waves in locally homogeneous random media.  
12 p2029 A69-26251  
Fluctuations of a beam wave propagating through a locally homogeneous medium.  
12 p2032 A69-26855  
Fluctuations of a focused beam wave for atmospheric turbulence probing.  
14 p2414 A69-29512  
Radiation characteristics of a circumferential leaky-wave antenna on a conducting cylinder.  
20 p3506 A69-37834  
Relativistic communications effects associated with moving space antennas.  
22 p3914 A69-40700  
Radiation from a circularly polarized antenna through the ionized wake of a Mars-entry capsule.  
22 p3914 A69-40701

ISHIMOTO, T.

- Optical shape factor data processing through computer graphics.  
18 p3134 A69-34373

ISHIYAMA, S.-I.

- A note about the effect of exit slide walls on cascade performances.  
19 p3241 A69-36753

ISHIZAKI, Y.

- Design of Chebyshev filters with flat group-delay characteristics.  
08 p1299 A69-21169  
An iterative Chebyshev approximation method for network design.  
08 p1299 A69-21170

ISHIZAWA, Y.

- Radio observation of galactic HII regions at 4170 MHz. II.  
06 p1008 A69-17696

ISHIZUKA, T.

- Propagation of shock waves in inhomogeneous gases. VII.  
17 p2952 A69-33383

ISHLINSKII, A. IU.

- Inertial Control of Ballistic Rockets /Inertsial'noe Upravlenie Ballisticheskimi Raketami/.  
01 p0113 A69-10994  
Comparison of two models of crack propagation in a solid body /Sopostavlenie dvukh modelei razvitiia treshech v tverdom tele/.  
07 p1238 A69-19692

- Physics, Mathematics, Mechanics, Moscow Conference of Young Scientists, 1st, Moscow, USSR, December 1964, Proceedings /Fizika, Matematika, Mekhanika, Moskovskaia Konferentsiia Molodykh Uchenykh, 1st, Moscow, USSR, December 1964, Trudy/.  
13 p2300 A69-28430

ISHMUKHAMETOV, B. KH.

- Plasma oscillations of collective electrons.  
20 p3580 A69-37818

ISHMURATOVA, M. S.

- Optical cements transparent in the infrared.  
08 p1336 A69-20387

ISIDORI, A.

- The order of linear continuous systems described by the impulse response matrix.  
11 p1858 A69-24567

ISKANDER-ZADE, Z. A.

- On the question of the stability of trivial solutions of parabolic systems of partial differential equations.  
03 p0456 A69-13405

ISKOLDSKII, A. M.

- Nanosecond image converter framing camera types.  
12 p2083 A69-26141

- Multiframe image converter registration of the process of ruby laser giant pulse formation.  
12 p2083 A69-26142

- Superfast optical methods for high-speed plasma processes.  
12 p2089 A69-26186

- Millimicrosecond photographic recording of processes in a low-density theta-pinch /Millimikrosekundnaia fotoregistratsiia protsessov v theta-pinch nizkoi plotnosti/.  
14 p2496 A69-29787

ISKUDARIAN, S. G.

- Nuclei of spiral galaxies /O iadrakh spiral'nykh galaktik/.  
12 p2165 A69-27028

ISLER, R. C.

- Corrections for modulation and time-constant effects on isolated level-crossing signals.  
17 p3009 A69-34155

ISLES, G. L.

- Flame structure and flame reaction kinetics. III - Measurement of temperature profiles in flames at atmospheric pressure.  
07 p1242 A69-19489

ISLEY, L.

- A new approach to the on-board weight and balance system.  
[SAWE PAPER 748]  
18 p3137 A69-34883

ISLEY, W. C.

- Optimal control application for electrothermal multijet systems on synchronous earth spacecraft.  
[AIAA PAPER 67-723]  
02 p0305 A69-12375  
MEPSIS - Minimal electric propulsion systems for interplanetary spacecraft.  
[AIAA PAPER 69-499]  
16 p2844 A69-32714

ISMAIL, A.

- Effects of lengthwise lift distribution on sonic boom of SST configurations.  
24 p4253 A69-43661

ISMAILOV, I.

- GaP sub x As sub 1 sub -x -based injection lasers.  
02 p0255 A69-11879  
Laboratory clamp-type diode holders for injection lasers and electroluminescent diodes.  
03 p0435 A69-12985

- Radiative recombination in p-n junctions in indium phosphide.  
03 p0492 A69-14166

- Observation of the memory effect in injection lasers /Nabliudenie efekta pamiati v inzhetsionnykh lazerakh/.  
07 p1147 A69-18542

- About the threshold phenomena in the injection lasers.  
19 p3337 A69-36527

- Memory effect in injection lasers.  
21 p3735 A69-38694

ISMAILOV, I. M.

- Impurity photoconductivity of indium antimonide at low temperatures.  
04 p0644 A69-15270

ISMAILOV, Z. A.

- Investigation of the 2 by 2 prismatic, Cassegrainian-focus spectrograph of the two-meter telescope of the Shemakha Astronomical Observatory /Issledovanie 2 x 2 prizmennogo spektrografa fokusa Kassegrena dvukhmetrovoogo teleskopa ShAO/.  
19 p3313 A69-36582

ISOBE, S.

- Optical observation of the Orion nebula.  
22 p4031 A69-40942

ISOGAI, Y.

- Frequency bandwidth of slotted array aerial system.  
08 p1286 A69-20836

ISOM, K. B.

- Spontaneous reignition analysis for solid restartable motors.  
[AIAA PAPER 69-444]  
16 p2842 A69-32695

ISOMICHI, Y.

- Uncertainty of realizable filters.  
02 p0226 A69-12306

ISOZAKI, S.

- Characteristics of low-latitude VLF emissions.  
03 p0398 A69-13900

ISRAEL, H.

- Electrostatic charge formations in the atmospheric region /Elektrostatische Ladungsbildungen im atmosphaerischen Bereich/.  
21 p3758 A69-38785

ISRAEL, G.-M.

- Aeronomy /L'aeronomie/.  
02 p0242 A69-11902

ISRAEL, H.

- Introduction to Geophysics /Einfuehrung in die geophysik/.  
23 p4154 A69-41367

ISRAEL, M. H.

- Power spectral density analysis of V-STOL aircraft structures.  
01 p0168 A69-10407

- Cosmic-ray electrons between 12 Mev and 1 Gev in 1967.  
22 p4005 A69-40510

- Characteristics of the diurnally varying electron flux near the polar cap.  
22 p4005 A69-40511

ISSA, A. M. H.

- On "synthesis of particular unit real functions of reflection coefficient."  
13 p2221 A69-28074

ISSENDORFF, H. V.

- Organization and strategy of an automated monoradar surveillance system /Organisation und Strategie eines automatischen Monoradarbeobachtungssystems/.  
03 p0383 A69-12872

ISSHIKI, H.

- Theory of stress concentration of two normally intersecting cylindrical shells.  
13 p2359 A69-27255

ISTOMIN, V. G.

- Scientific and practical aspects of a study of the structure and variation of the upper atmosphere of the earth /Nauchnye i prakticheskie aspekty issledovaniia struktury i variatsii verkhnei atmosfery zemli/.  
[UN PAPER 68-05755]  
06 p0917 A69-17042

- Ion composition of the upper atmosphere at altitudes of 130-155 km during the period of meteor shower Orionides activity.  
15 p2603 A69-31406

- Scientific and practical aspects of investigations into the structure and parameter variations of the upper earth's atmosphere /Nauchnye i prakticheskie aspekty issledovaniia struktury i variatsii parametrov verkhnei atmosfery zemli/.  
20 p3519 A69-36983

ISTOMINA, L. G.

- Certain results of a study of the earth's brightness with the aid of the Cosmos 149 satellite /Nekotorye rezul'taty issledovaniia iarkosti zemli s pomoshch'iu ISZ "Kosmos-149"/.  
15 p2596 A69-30650

ISTRATOV, A. G.

- Kinetics of the deformation and breakup of a liquid droplet in a gas flow /K kinetike deformatsii i drobleniia zhidkoi kapli v gazovom potoke/.  
11 p1875 A69-25466

- On the stability of gasdynamic discontinuities associated with chemical reactions - The case of a spherical flame.  
19 p3450 A69-36358

ISUPOV, I. A.

- Method of computing temperature fields in noncircular channels.  
07 p1243 A69-19734

ISUPOV, V. A.

- Investigation of the dielectric polarization of BaTiO sub 3 and Ba sub x Sr sub 1-x TiO sub 3 in pulsed fields in the paraelectric phase /Issledovanie dielektricheskoi polarizatsii BaTiO sub 3 i Ba sub x Sr sub 1-x TiO sub 3 v impul'snykh poliakh v paraelektricheskoi faze/.  
22 p3996 A69-41165

ITAGAKI, H.

- Fatigue strength under varying load. I - Testing apparatus and preliminary tests.  
19 p3434 A69-35777

ITAKURA, T.

- Single anomaly of electromagnetic waves diffracted by infinitely extended plane gratings.  
15 p2568 A69-30795

ITEN, O.

- Control dynamics of gas turbines with adjustable guide vanes /Regeldynamik von Gasturbinen mit verstellbaren Leitapparaten/.  
21 p3784 A69-38449

ITIKAWA, Y.

- Longitudinal dielectric function for a magnetoplasma.  
22 p3988 A69-40066

## ITIN, V. I.

Exothermal effects during sintering of a nickel-aluminum powder mixture. I /Ekzotermicheskie efekty pri spekanii smesi poroshkov nikelia i aluminia. I/.  
02 p0269 A69-12838

Exothermal effects during sintering of a nickel-aluminum powder mixture. II /Ekzotermicheskie efekty pri spekanii smesi poroshkov nikelia i aluminia. II/.  
02 p0269 A69-12843

## ITKINA, M. A.

On frequency dependence of abnormal ionospheric absorption in auroral zone.  
01 p0063 A69-10425

Method of finding the electron concentration profile in the D-layer of the ionosphere from the frequency dependence of radio wave absorption.  
06 p0920 A69-17729

Frequency dependence of anomalous absorption of cosmic radio emission in the ionospheric auroral zone /Chastotnaia zavisimost' anomal'nogo pogloshchenia kosmicheskogo radioizlucheniia v ionosfere v zone poliarnykh sianii/.  
20 p3587 A69-37033

## ITO, G.

The effect of minor impurities in water on corrosion of aluminum.  
04 p0617 A69-14932

## ITO, H.

Impedance of an antenna in anisotropic plasma.  
12 p2044 A69-27071

Self mode-locking of the transverse modes in the CO sub 2 laser oscillation.  
19 p3330 A69-35602

Fundamental study of operational performance of a laser radar system employing A-scope representation.  
20 p3487 A69-37283

## ITO, K.

High-power transmitting tubes for satellite communication earth stations.  
05 p0728 A69-15668

Temperature dependence of laser-induced damage in polyethylmethacrylate with Q-switching dye.  
06 p0936 A69-17777

On a curved gas lens with idealized medium.  
13 p2270 A69-27181

## ITO, R.

Eddy diffusivities for heat in the region near the wall.  
13 p2380 A69-28497

Behavior of hot electrons under strong magnetic fields in pure n-type InSb.  
19 p3388 A69-36544

## ITO, T.

Study on the self-sustained oscillation of a piston-type valving system. II - Analysis of a valving system with a capacity and some experiments.  
01 p0012 A69-10310

## ITO, Y. M.

Fatigue crack nucleation in metals.  
22 p4041 A69-40053

## ITOGA, S. Y.

Role of correlations in navigation satellite error analysis. [AAS PAPER 68-145]  
21 p3761 A69-39222

## ITOH, K.

On a scheme for symmetric M-ary signaling.  
05 p0720 A69-16297

## ITOH, N.

Hydrostatic instability in very high temperature stars.  
20 p3580 A69-37926

## ITOH, S.

Toroidal theta pinch collapse by the snowplow model.  
11 p1924 A69-24303

## ITOH, Y.

Hologram schlieren and phase-contrast methods.  
08 p1313 A69-20176

## ITSIKSON, T. M.

Investigation of the operational properties of esters of trimethylol propane as synthetic lubricating oils /Issledovanie ekspluatatsionnykh svoystv efirov trimetilol-propana v kachestve sinteticheskikh smazochnykh masel/.  
12 p2103 A69-27090

## ITZKAN, I.

A single frequency argon ion laser for holographic applications.  
11 p1895 A69-24689

## IUBOV, IU. M.

Photoelectric phenomena in thin-film diodes with a CdS-CdTe heterojunction /Fotoelektricheskie iavleniia v plenochnykh diodakh s geteroperekhodom CdS-CdTe/.  
13 p2230 A69-27882

## IUCHI, M.

A new running test facility for the study of flight dynamics.  
17 p2944 A69-32851

## IUDIN, D. M.

Study of the effect of the degree of bond covalence in glasses on the splitting of the electron levels of activator ions /Issledovanie vliianiia stepeni kovalentnosti svyazi v steklakh na rassheplenie elektronnykh urovnei ionov aktivatora/.  
11 p1907 A69-25031

Investigation of the effect of ionizing radiation on glass activated by transition metals /Issledovanie deistviia ioniziruiushchei radiatsii na stekla, aktivirovannye perekhodnymi metallami/.  
23 p4180 A69-42470

Study of the effect of gamma irradiation on photochromatic glass by the EPR method /Izuchenie metodom EPR deistviia gamma-oblucheniia na fotokhromnye stekla/.  
23 p4180 A69-42471

## IUDIN, I. A.

Minerology of the Kaali meteorite /K mineralogii meteorita Kaali/.  
01 p0159 A69-11370

Microscopic investigation of the Nerft and Kaande stony meteorites /Mikroskopicheskoe issledovanie kamennykh meteoritov nerft i Kaande/.  
01 p0159 A69-11374

Investigation of the minerals in the ablated crust of the Saratov meteorite /Issledovanie mineralov kory plavleniia meteorita Saratov/.  
01 p0160 A69-11385

Investigation of the meteoric dust of the Tunguska meteorite /Issledovanie meteornoi pyli tungusskogo meteorita/.  
01 p0160 A69-11386

Origin and mineralogical composition of the "stone hail" /Sterlitamak / O proiskhozhdenii i mineral'nom sostave "kamennogo grada" /Sterlitamak/.  
01 p0160 A69-11387

## IUDIN, I. I.

Polarization characteristics of the emission of a ring laser with a circularly anisotropic resonator /Polarizatsionnye kharakteristiki izlucheniia kol'tsevo go lazera s tsirkuliarno anizotropnym rezonatorom/.  
24 p4328 A69-43160

## IUDIN, IU. I.

Formation of gaseous products during laser action on polymethylmethacrylate /Obrazovanie gazobraznykh produktov pri lazernom vozdeistvii na polimetilmetakrilate/.  
02 p0270 A69-11980

Damage in polymers under critical loads during the action of laser radiation /Razrushenie v polimerakh pri predel'nykh nagruzkakh pod vozdeistviem lazernogo izlucheniia/.  
08 p1328 A69-21190

Laser radiation-induced breakdown processes in polymers at the load limit.  
18 p3152 A69-35159

## IUDIN, M. I.

Immediate perspective of using data obtained by meteorological satellites for quantitative weather forecast.  
06 p0949 A69-17032

Factors influencing the instability of general atmospheric circulation /O faktorakh, obuslovliivaiushchikh nestatsionarnost' obshchei tsirkulatsii atmosfery/.  
14 p2476 A69-29820

## IUDIN, O. I.

Quasiperiodic low-frequency solar radiowave fluctuations.  
06 p1004 A69-17535

Quasi-periodic variations of the intensity of solar radio emission at the 3.3-cm wavelength /Kvaziperiodicheskie izmeneniia intensivnosti radioizlucheniia solntsa na volne 3,3 cm/.  
07 p1211 A69-18516

## IUDINA, E. N.

A fluorite - Samarium laser.  
14 p2458 A69-29328

## IUDINTSEV, IU. N.

Hypersonic profile with specified bending strength and minimum drag.  
21 p3644 A69-39099

## IUDKEVICH, B. A.

Testing Aircraft Electrical Equipment /Ispytaniia aviatsionnogo elektrooborudovaniia/.  
20 p3464 A69-37237

## IUDOVICH, L. A.

Variation of N/h/ profiles during a positive perturbation /Izmenenie N/h/-profiliei vo vremia polozhitel'nogo vozmushcheniia/.  
17 p2967 A69-33986

Electron density distribution in the polar region /Raspredelenie elektronnoi plotnosti v pripolusnoi oblasti/.  
20 p3526 A69-37664

Relation between the values of f sub zero F2 at high-latitude stations during the winter season /Sviaz' mezhdu znacheniami f sub zero F2 na stantsiiakh vysokikh shirot v zimnii sezon/.  
20 p3526 A69-37665

## IUDOVICH, V. I.

Calculation of the secondary steady flow between rotating cylinders /Raschet vtorighnogo statiionarnogo techeniia mezhdu vrashchaiushchimisia tsilindrami/.  
05 p0745 A69-15780

Analysis of secondary steady flow between rotating cylinders.  
18 p3123 A69-35032

## IUFFROV, V. B.

Generation of a dense plasma by injecting an electron beam into a magnetic trap /Utvorenniia shchil'noi plazmi pri inzhektzii elektronno go puchka v magnitnyi ulovlivauch/.  
22 p3990 A69-40791

## IUGANOV, E. M.

Gravitational effects during the formation of functions of the organism /Gravitatsionnye vozdeistviia v formirovanii funktsii organizma/.  
07 p1060 A69-18572

Sensory reactions and the state of arbitrary motions of man under conditions of weightlessness /Sensornye reaktzii i sostoiianie proizvol'nykh dvizhenii cheloveka v usloviakh nevesomosti/.  
07 p1060 A69-18575

Vestibular-vegetative reactions under the action of angular and Coriolis accelerations under conditions of weightlessness /O vestibulo-vegetativnykh reaktziiakh pri vozdeistvii uglovnykh i koriolisovykh uskorenii v usloviakh nevesomosti/.  
07 p1062 A69-18587

Vestibular reactions of cosmonauts during the flight on the Voskhod spacecraft /Vestibuliarnye reaktzii kosmonavtov pri Plete na korabe "Voskhod"/.  
07 p1062 A69-18588

Functional features and interaction between the otolith and cupular apparatuses of the vestibular analyzer of man under conditions of altered gravitation /K probleme osobennosti funktsii i vzaimodeistviia otolitovogo i kupuliarnogo apparatov vestibuliarnogo analizatora cheloveka v usloviakh izmenennoi vesomosti/.  
07 p1062 A69-18589

Myogenic tonus under conditions of weightlessness /O myshechnom tonuse v usloviakh nevesomosti/.  
07 p1062 A69-18590

Motor reactions under conditions of weightlessness /Dvigatel'nye reaktzii v usloviakh nevesomosti/.  
07 p1063 A69-18595

Specific features of the functional state of the otolith apparatus under conditions of altered gravity /Osobennosti funktsional'nogo sostoiianiia otolitovogo apparata v usloviakh izmenennoi vesomosti/.  
20 p3471 A69-37253

## IUGANOVA, S. A.

Effect of the number and size of gamma- particles on the long-term strength of Ni-Cr-Al-Ti alloys.  
04 p0616 A69-14651

## IUGOV, O. K.

Determination of aircraft and engine parameters which ensure a maximum theoretical range for a given cruising speed /Opredelenie parametrov samoleta i dvigatelya, obezpechivaiushchikh maksimal'nuu teoreticheskuiu dal'nost pri zadannoi kreisreysi skorosti poleta/.  
03 p0366 A69-12950

Determination of an optimal program of motion of a winged flight vehicle /Otyskanie optimal'noi programy Vizeniia krylatogo letatel'nogo apparata/.  
21 p3767 A69-39823

## IUKHIMUK, A. K.

Acceleration of charged particles in the interplanetary medium /Ob uskorenii zariazhennykh chastits v mezplanetnoi srede/.  
09 p1575 A69-21541

Acceleration of charged particles in interplanetary space.  
16 p2851 A69-32536



## IUKHNOVSKII, I. R.

Charged particle acceleration in interplanetary plasma /Priskorennaia zariadzenikh chastinok u kosmichnoi plazmi/.

21 p3788 A69-38587

## IUKHNOVSKII, I. R.

The pseudopotential for a quasiclassical plasma.

11 p1934 A69-25701

## IUKHVIDIN, IA. A.

Short-term frequency stability of a Rb super 87 vapor laser /Kratkovremennaia stabil'nost chastoty kvantovogo generatora na parakh Rb super 87/.

05 p0770 A69-15656

Short-term frequency stability of an Rb87 vapor maser.

16 p2798 A69-32513

## IUNOVICH, A. E.

Tunneling transitions in semiconductors in strong, crossed electric and magnetic fields /Tunnel'nye perekhody v poluprovodnikakh v sil'nykh skreshchen-nykh elektricheskoi i magnitnom poliakh/.

02 p0300 A69-12634

Radiative recombination in p-n junctions in indium phosphide.

03 p0492 A69-14166

Tunnel effects in diffused p-n junctions in gallium antimonide. I - Electrical properties /Tunnel'nye efekty v diffuzionnykh p-n-perekhodakh v antimonide galliia. I - Elektricheskie svoistva/.

21 p3780 A69-39043

## IUPPETS, F. R.

Hydrogen-oxygen fuel batteries based on hydrophobicity electrodes with an alkaline electrolyte /Toplivnye vodorodno-kislorodnye baterei na osnove elektrodov gidrofobnogo tipa s shchelochnym elektrolitom/.

16 p2740 A69-32426

## IURCHENKO, A. S.

Dirichlet problem for a Karman-type equation /Zadacha Dirikle dlia uravnenii tipa Karmana/.

01 p0105 A69-10700

## IURCHENKO, E. I.

Influence of ballooning effects on plasma stability in closed systems.

06 p0965 A69-17519

## IURCHENKO, M. I.

Low-temperature breakdown by oxidation of high melting point compounds /Nizkotemperaturnoe okislitel'noe razrushenie tugoplavkikh soedinenii/.

20 p3561 A69-37375

## IURCHENKO, O. S.

Determination of generalized solutions to certain nonlinear boundary-value problems /Do znakhodzhennia uzagal'nenikh rozv'iazkiv deiakikh nelineinikh granichnikh zadach/.

02 p0272 A69-12136

## IURCHENKO, V. I.

Experimental investigation of the motion of individual charged particles in a mirror device.

15 p2659 A69-30724

## IURCHENOK, K. E.

Selection of a turbulence hypothesis in the theory of base pressure /O vybere hipotezy turbulentnosti v teorii donnogo davlennia/.

06 p0910 A69-17330

## IURCHUK, N. I.

Partially characteristic boundary-value problem for a certain type of partial differential equations. II /Chastichno kharakteristicheskaia granichnaia zadacha dlia odnogo vida uravnenii v chastnykh proizvodnykh. II/.

13 p2288 A69-27527

## IURENAS, V. L.

Thermal stability of refractory ceramic materials in a high-temperature gas flow /Termostoikost' ognepornykh keramicheskikh materialov v vysokotemperaturnom gazovom potoke/.

13 p2285 A69-27472

## IUREV, A. N.

Three-dimensional treatment of a signal with phase instabilities over the antenna array aperture /Prostranstvennaia obrabotka signala pri nestabil'nostiakh fazy po raskryvu antennoi reshetki/.

11 p1833 A69-24439

## IUREV, I. S.

Thermionic converter electrical characteristics with matrix circuit connections.

14 p2400 A69-29225

## IUREV, V. G.

Comparison of the probe and optical methods of measuring the parameters of low-temperature cesium plasma.

03 p0478 A69-13836

Low-voltage arc in thermionic converters - Comparison between theory and experiment.

06 p0963 A69-16910

Theoretical and experimental investigation of low-voltage arc in thermionic converter.

14 p2404 A69-29254

The probe and spectral investigations of dense plasma thermionic converters.

14 p2404 A69-29256

## IUREV, V. V.

Fluxes of fast neutrons in the atmosphere.

03 p0501 A69-13528

## IUREVICH, F. B.

Polytetrafluoro-ethylene ablation in high-temperature jets of different chemical compositions.

20 p3632 A69-37522

## IUROV, B. N.

Reactions of cosmonauts during parabolic aircraft flights /Reaktsii kosmonavtov vo vremia parabolicheskikh poletov na samoletakh/.

07 p1061 A69-18580

Certain physiological reactions in humans under conditions of brief weightlessness /Nekotorye fiziologicheskie reaktsii cheloveka v usloviakh kratkovremennoi nevesomosti/.

07 p1061 A69-18581

Some results of the biomedical experiment on the biosatellite "Kosmos-110."

08 p1261 A69-19827

## IUROV, IU. IA.

Analysis of the coupling of rectangular waveguides by a system of oblique slots in a common broad face /Analiz svyazi priamougol'nykh volnovodov cherez sistemu naklonnykh shchelei v obshchei shirokoi stenke/.

23 p4123 A69-41941

Contribution to the theory of thin conductors located in a waveguide /K teorii tonkikh provodov, nakhodiashchikhsia v volnovode/.

23 p4123 A69-41942

## IUROVA, E. S.

Influence of two kinds of carriers on the Hall effect in GaAs sub 1-x P sub x.

06 p0978 A69-16988

Some properties of the ternary compound GaAs sub 1-x P sub x alloyed with selenium /Nekotorye svoistva troinogo soedineniia GaAs sub 1-x P sub x, legirovanogo selenom/.

13 p2317 A69-27875

Supplementary absorption in solid solutions of GaAs sub 1-x P sub x in the wavelength region from 1 to 4  $\mu$  /Dopolnitel'noe pogloschenie v tverdykh rastvorakh GaAs sub 1-x P sub x v oblasti dlin voln 1-4  $\mu$ m/.

13 p2318 A69-27894

Some properties of the ternary compound GaAs sub 1-x P sub x doped with selenium.

21 p3782 A69-39141

## IURYSHEV, N. N.

Spectrum of an aluminum plasma excited by laser radiation /Spektr aluminiovoi plazmy, vzbuzhdaemoi lazernym izlucheniem/.

12 p2134 A69-26027

## IUSHCHENKO, A. A.

Existence of solutions for a system of differential equations over an entire straight line and for a Liapunov function /Sushchestvovanie reshenii sistemy differentsial'nykh uravnenii na vsei priamoj i funktsii Liapunova/.

05 p0787 A69-16451

## IUSHKO, V. M.

Strength analysis of rectangular plates with a compliant base under concentrated loads /Raschet priamougol'nykh plit na sosredotochennye nagruzki s vvedeniem v raschetnuu skhemu plity podatlivogo osnovaniia/.

19 p3434 A69-35827

## IUSHKOV, IU. G.

Traveling wave resonator in an autoresonance accelerator /Rezonator begushchei volny v avtoresonansnom uskoritele/.

07 p1107 A69-19160

## IUSHKOV, M. P.

Effect of a tensile force on the critical rotation rate of a shaft resting on two bearings /Vliianie rastiagiavushchei sily na kriticheskuiu skorost' vrashcheniia dvukhopornogo vala/.

13 p2269 A69-28323

## IUSUPOV, R. M.

Sensitivity equations of pulsed control systems /U-ravneniia chuvstvitel'nosti impul'snykh sistem upravleniia/.

17 p2994 A69-33143

## IUZEFOVICH, A. P.

Instruments for determining vertical speed of an aircraft during an aerial gravimetric survey.

03 p0429 A69-13261

Influence of a connecting duct on the readings of a string-type vertical airspeed indicator during aerial gravimetric surveying /Vliianie soedinitel'nogo truboprovoda na pokazaniia strunnogo izmeritel'ia vertikal'noi skorosti pri aerogravimetricheskoi sm'emke/.

13 p2260 A69-27828

## IVAKHNENKO, A. G.

A discrete prediction filter that uses the integrals of a random function.

09 p1473 A69-21851

## IVAKHNENKO, O. G.

Method of data handling by groups in the pattern recognition and decision making problem /Metod grupovogo urakhivannia argumentiv u zadachi razpoznavaniia obraziv i priiniattia rishe/.

08 p1278 A69-20420

The group method of data handling in pattern recognition and decision problems.

14 p2418 A69-29658

Probability algorithms for the calculation of argument groups in the problem of random event prediction /Imovirnisni algoritmi metodu grupovogo vrakhivannia argumentiv u Zadachi peredbachennia vipadkovikh podii/.

19 p3287 A69-36664

## IVAKHNENKO, P. S.

Formation of F centers and electron recombination luminescence in alkali-halide crystals activated with Eu super 2 plus /Obrazovanie F-tsentrov i elektronnaia rekombinatsionnaia liuminesentsiia v shchelochnogoaloidnykh kristallakh, aktivirovannykh Eu super 2 plus/.

19 p3383 A69-36164

## IVAKIN, B. A.

A problem of unsteady diffusion /K odnoi zadache o nestatsionarnoi diffuzii/.

13 p2251 A69-28561

## IVAKIN, V. M.

Electronic device for measurements of limbs photographs /Elektronnaia ustanovka dlia izmerenii fotografii limba/.

17 p2970 A69-32884

## IVANCHENKO, V. D.

Analysis of selective amplifiers with AGC by emitter current /K analizu izbratel'nykh usilitelei s ARU po toku emittra/.

12 p2043 A69-26887

## IVANCHENKO, V. G.

Phase diagram of the chromium-cerium system /Diagrama staniv sistemi khrom-tserii/.

15 p2640 A69-30666

## IVANCHIK, I. I.

Microwave absorption by free carriers in barium titanate /Pogloschenie SVCh na svobodnykh nositeliakh v titanate barii/.

08 p1374 A69-21189

Microwave absorption by free carriers in barium titanate.

18 p3183 A69-35158

## IVANCHUK, V. I.

Magnetic field and polar rays of the solar corona /Survey/ /Magnitnoe pole i poliarnye лучи solnechno korony /obzor/.

14 p2525 A69-29718

## IVANEK, F.

Investigation of waveguide-below-cutoff resonators for solid-state active devices.

15 p2577 A69-30613

## IVANENKO, D.

Remarks on quark stars.

19 p3401 A69-35912

## IVANENKO, I. P.

On the development of cascade showers in heavy materials.

13 p2303 A69-28412

Cascade shower theory with inclusion of positron annihilation, the Compton effect, and relativistic delta electron production.

13 p2303 A69-28413

Angular distribution of electrons at different stages of cascade shower development.

13 p2303 A69-28414

## IVANENKO, V. I.

Method of transforming the observation space in statistical synthesis of closed nonlinear multiple control systems /Metod peretvorennia prostoru spostezhen'.

- pri statistichnomu sintezi nelineinikh zamknennikh sistem s kil'koma keruvanniami/.  
19 p3287 A69-36662
- IVANKA, C.**  
Magnetoresistivity of n-type GaAs single crystals in the impurity scattering range.  
03 p0492 A69-14177
- IVANKO, A. A.**  
Hardness. Handbook /Tverdst'. Spravochnik/.  
04 p0617 A69-15033
- IVANNIKOVA, A. D.**  
Effect of surface impurities in titanium on the formation of pores in welds.  
06 p0945 A69-17894
- IVANOFF, S.**  
Means of aerial evacuation at the disposal of a Paris hospital /Les moyens d'evacuations aeriens a la disposition d'un service hospitalier parisien/.  
23 p4105 A69-41785
- IVANOV-KHOLODNYI, G. S.**  
Rate of variation of the electron concentration in the E region at large Z /O skorosti izmeneniia elektronnoi kontsentratsii v oblasti E pri bol'shikh Z./.  
02 p0239 A69-11683  
Estimates of the composition of the upper atmosphere from the vertical density distribution.  
03 p0423 A69-13532  
Diurnal temperature variations and fluxes of matter in the upper atmosphere.  
03 p0423 A69-13533  
Rate of variation of electron concentration in the E-region at large Z theta.  
13 p2258 A69-28714  
Quasi-equilibrium ion concentrations in the ionospheric E-region /Kvaziravnovesnye kontsentratsii ionov v E-oblasti ionosfery/.  
20 p3520 A69-37031
- IVANOV, A. A.**  
Effect of a high-frequency magnetic field on plasma instability.  
10 p1739 A69-23623  
Propagation of heat in a plasma along a magnetic field /a substitution wave/ /Rasprostraneniye tepla v plazme vdol' magnitnogo polia /volna zameshcheniia/./.  
10 p1741 A69-23896
- IVANOV, A. B.**  
High-melting-point oxide and carbide materials for electrode walls of MHD generators /Tugoplavkiye oksidnye i karbidnye materialy v elektrodnykh stenkakh MGD-generatorov/.  
13 p2284 A69-27471  
The linear problem of the torsional oscillations of a solid elastically connected sphere in a viscous liquid bounded by an immobile concentric sphere /Lineinaia zadacha o krutit'nykh kolebaniyakh uprugosviazannogo tverdogo shara v viazkoi zhidkosti, ogranichennoi kontsentratsiei nepodvizhnoi sferoi/.  
18 p3175 A69-35320
- IVANOV, A. I.**  
Spectral brightness of the sky /Spektral'naia iarkost' neba/.  
01 p0074 A69-11187  
Light Scattering in the Atmosphere. Part 2 /Rasseianie sveta v atmosfere. Part 2/.  
07 p1211 A69-18545  
Polarization of daytime skylight and the atmospheric aerosols /Polarizatsiia sveta dnevnogo neba i atmosfernyi aerosol'/.  
09 p1491 A69-22708
- IVANOV, A. P.**  
Method of investigation of the scattering indicatrices of optical elements in the "backwards" direction /Metod issledovaniia indikatsii rasscianiia opticheskikh detalei v napravlenii "nazad"/.  
20 p3554 A69-37609
- IVANOV, A. V.**  
Finely dispersed cosmic material from lower Permian salts /Melkodispersnoe kosmicheskoe veshchestvo iz nizhneperskikh solei/.  
12 p2154 A69-25821  
Thickness and internal structure of a direct shock wave in a highly underexpanded jet discharging into a low-density volume /Tolshchina i vnutrenniia struktura priamogo skachka uplotneniia, obrazuiushchegosia pri istechenii sil'no nedorasshirennoi strui v prostranstvo s maloi plotnost'iu/.  
19 p3239 A69-36396
- IVANOV, B. F.**  
Calculation of the higher harmonics of the natural vibrations of beams with characteristics varying slowly along the length.  
16 p2873 A69-32130
- IVANOV, B. I.**  
Propagation of high-intensity electromagnetic waves in plasma waveguides /Rasprostraneniye elektromagnitnykh voln bol'shoi intensivnosti v plazmennyykh volnovodakh/.  
03 p0482 A69-14228
- IVANOV, D. I.**  
Life-support Systems for High-altitude and Space Flights /Sistemy Zhizneobespecheniia Cheloveka pri Vysotnykh i Kosmicheskikh Poletakh/.  
12 p2024 A69-27074
- IVANOV, E. A.**  
Work activity of a cosmonaut during weightlessness and in unsupported space /Rabochoia deiatel'nost' kosmonavta v nevesomosti i bezopornom prostranstve/.  
02 p0203 A69-12123
- IVANOV, E. F.**  
DC plasmatron for heating argon with potassium additions /Plazmatron postoiannogo toka dlia nagreva argona s prisadkoi kalii/.  
09 p1547 A69-21596
- IVANOV, G. V.**  
Plate bending in the case of unsteady creep /Izhib plastin pri neustanovivshiesia polzuchest'i/.  
04 p0679 A69-14923  
Elastoplastic yield of shells in the presence of the Mises yield condition /Uprugo-plasticheskoe techenie obolochek pri usloviu tekuchesti Mizesa/.  
21 p3838 A69-39189
- IVANOV, I. A.**  
Investigation of a liquid-metal jet MHD generator /Issledovanie zhidkometallicheskogo struinogo MGD-generatora/.  
13 p2208 A69-27511
- IVANOV, I. U.**  
A single-row system of circular jets in a bounded transverse flow /Odnoriadnaia sistema kruglykh strui v ogranichennom poperechnom potoke/.  
10 p1679 A69-23567
- IVANOV, K. G.**  
Change in the frequency of Pc 1 micropulsations during a sudden deformation of the magnetosphere /Izmeneniye chastoty mikropul'satsii Pc 1 pri vnezapnoi deformatsii magnitosfery/.  
02 p0240 A69-11697  
Method of determining the S sub q variation and the system of S sub q currents in the ionosphere.  
03 p0424 A69-13541  
Deformation as the cause of large-scale variations of the magnetic field in interplanetary plasma fluxes /Deformatsiia kak prichina krupnomasshtabnykh variatsii magnitnogo polia v potokakh mezhplanetnoi plazmy/.  
09 p1592 A69-21540  
Injection of plasma into the magnetosphere during the main phase of a magnetic storm /Ob inzhetsii plazmy vntr' magnitosfery v glavnuu fazu magnitnoi buri/.  
10 p1687 A69-23923  
Velocity and width of interplanetary plasma flows at various meridional distances from the centers of active regions.  
12 p2149 A69-26698  
Change in the frequency of Pc1 micropulsations during a sudden deformation of the magnetosphere.  
13 p2258 A69-28728  
Tangential discontinuity in the solar wind and the ground magnetic disturbance /Tangentsial'nyi razryv v solnechnom vetre i nazemnoe magnitnoe voz-mushchenie/.  
14 p2512 A69-29041  
Characteristic features of the magnetic storm of September 14, 1966, according to observations in the tail of the magnetosphere and on the surface of the earth /Osobennosti magnitnoi buri 14.IX. 1966 g. po nabludeniiam v khvoste magnitosfery i na poverkhnosti zemli/.  
14 p2438 A69-29078  
Deformation as the reason for large-scale magnetic field variations in interplanetary plasma flows.  
16 p2864 A69-32535  
Characteristics of the interplanetary plasma flow at various meridional distances from the center of the active region /Svoistva potoka mezhplanetnoi plazmy na razlichnykh meridional'nykh rastoianiyakh ot tsentra aktivnoi oblasti/.  
20 p3594 A69-37020  
Conditions for the preservation of velocity circulation in the solar wind /Bo usloviyakh sokhraneniia tsirkulatsii skorosti v solnechnom vetre/.  
20 p3587 A69-37041
- IVANOV, L. V.**  
Dielectric mirrors for parametric light generators /Dielektricheskie zerkala dlia parametricheskikh generatorov sveta/.  
03 p0438 A69-13049
- IVANOV, M. M.**  
Use of the vertical and solar components for the exact measurement of magnetic declination from a moving object /Ob ispol'zovanii vertikal'noi i sol-nechnoi sostavliaiushchikh dlia tochnogo izmereniia magnitnogo skloneniia s dvizhushchegosia ob'ekta/.  
09 p1486 A69-21538  
Use of the vertical and solar components for the exact measurement of magnetic declination from a moving object.  
16 p2783 A69-32533
- IVANOV, N. N.**  
Theoretical and experimental investigation of fluidic elements.  
02 p0195 A69-12074
- IVANOV, O. N.**  
Design of fiberglass-reinforced plastic bottoms prepared jointly with cylindrical shells /Raschet stekloplastikovyykh dnishch, izgotovlennykh sovместno s tsilindricheskimi obolochkami/.  
06 p1025 A69-17685
- IVANOV, O. R.**  
Some characteristics of the thermal mineralization of biocomplex wastes in a closed system.  
10 p1649 A69-23504
- IVANOV, O. S.**  
Physicochemistry of Zirconium Alloys /Fiziko-Khimiia Splavov Tsrkonii/.  
02 p0261 A69-11839  
The zirconium corner in the phase diagram of the zirconium-beryllium-niobium system /Tsrkonievyy ugol diagrammy sostoiianiia sistemy tsrkonii-berillii-niobii/.  
02 p0262 A69-11843  
The omega-phase and the beta solid solution in zirconium-vanadium-tantalum alloys quenched from 900 deg C /Omega-faza i beta-tverdyi rastvor v splavakh tsrkonii-vanadii-tantal, zakalennykh s 900 deg/.  
02 p0263 A69-11850  
Four-specimen vacuum device for tensile creep tests at temperatures of up to 1200 deg C.  
07 p1116 A69-19318  
Four-specimen device for bending creep tests at temperatures of up to 900 deg C.  
10 p1696 A69-23851
- IVANOV, P. P.**  
Studies of human adaptation to space flight effects under low-calorie diet conditions.  
20 p3482 A69-37621
- IVANOV, S.**  
Physics. Yearbook of the Higher Technical Institutes of Learning. Volume 3. Number 1 /Fizika. Godishnik na Vysshite Tekhnicheski Uchebni Zavedeniia. Volume 3. Number 1/.  
05 p0792 A69-15693  
Capacitive changes in sintered CdS under pulse radiation /Kapatsitivnyi izmeneniia v sinterovan CdS pri impul'sno osvetiavane/.  
05 p0806 A69-15694  
Influence of gamma-radiation on certain parameters of transistors and diodes /Vliianie na gama-l'chenieto v'rkhu niakoi parametri na tranzistori i diodi/.  
05 p0728 A69-15695
- IVANOV, S. N.**  
Synthesis of hybrid junctions /Sintez gibridnykh soedinenii/.  
01 p0043 A69-10593  
Physics of Microwave Semiconductor Diodes.  
21 p3682 A69-38990
- IVANOV, T. F.**  
Steady rotational motions of fluid masses at low Reynolds numbers.  
07 p1119 A69-18748
- IVANOV, U. I.**  
Transfer coefficients of inhomogeneous systems in an electromagnetic field /Koeffitsienty perenosa neodnorodnykh sistem v elektromagnitnom pole/.  
07 p1193 A69-19024
- IVANOV, V.**  
Antireflection by means of a three-layer symmetric coating /Prosvetlenie trekhslainym simmetrichnym pokrytiem/.  
18 p3173 A69-35147
- IVANOV, V. A.**  
A possibility of increasing the noise stability of a DC conversion amplifier /Ob odnoi vozmozhnosti



## IVANOV, V. E.

povysheniia pomekhozashchishchennosti usilitelia postoiannogo toka s preobrazovaniem/.

11 p1845 A69-24555

Dissociation of CO sub 2 in a CO sub 2 laser gas discharge plasma /Dissotsiatsiia CO sub 2 v plazme gazovogo razriada OKG na CO sub 2/.

12 p2107 A69-26540

## IVANOV, V. E.

Influence of silicide coatings on the mechanical properties of molybdenum /Vliianie silitsidnykh pokrytii na molibdene na ego mekhanicheskie svoistva/.

02 p0264 A69-11883

Sintered beryllium-base compositions. 1.

10 p1711 A69-23334

Sintered beryllium-base compositions. II - Corrosion properties and possibilities of raising corrosion resistance in humid atmospheres.

10 p1711 A69-23338

Effect of silicide coatings on the mechanical properties of molybdenum.

18 p3156 A69-35043

## IVANOV, V. I.

Statistical characteristics of signals from infrared scanning equipment /Statisticheskie kharakteristiki signalov skaniruiushchei infrakrasnoi apparatury/.

06 p0929 A69-17980

Possibility of detecting clouds and the underlying surface from signals of an IR system /Veroiatnost' obnaruzheniia oblachnosti i podstilaushchei poverkhnosti po signalam ik sistemy/.

06 p0952 A69-17986

Galactic and solar cosmic ray flux in relation to the conditions in interplanetary space /Potok galakticheskikh i solnechnykh kosmicheskikh lucheiv v zavisimosti ot uslovii v mezplanetnom prostranstve/.

10 p1758 A69-22833

Ionospheric measurements by the method of incoherent radio wave scattering /K ionosfernym izmereniam metodom nekogerentnogo rassianiiia radiovoln/.

10 p1686 A69-23910

## IVANOV, V. K.

The approximate solution of operator equations of the first kind.

04 p0622 A69-14622

## IVANOV, V. L.

Some results of an experimental investigation of a cooled turbine.

21 p3785 A69-39103

## IVANOV, V. N.

The new 22-meter parabolic reflector radio telescope of the Crimean Astrophysical Observatory of the USSR Academy of Sciences /Novyi radioteleskop Krymskoi Astrofizicheskoi Observatorii AN SSSR s 22-metrovym parabolicheskim reflektorom/.

04 p0584 A69-13476

Relation between the stability parameters of the atmospheric boundary layer and the Rayleigh number /O svyazi parametrov ustoiichivosti v pogranichnom sloe atmosfery s chislom Releia/.

09 p1491 A69-22709

Surface waves in a semiinfinite grid /Poverkhnostnye volny v polubeskonechnoi reshetke/.

11 p1833 A69-24438

Relation of the stability parameters in the atmospheric boundary layer to the Rayleigh number.

16 p2808 A69-32488

## IVANOV, V. P.

Measurement of the absorption coefficient of a plasma with the aid of a laser /Izmerenie koefitsienta poglushcheniia plazmy s pomoshch'iu OKG/.

03 p0442 A69-14218

Determination of the absorption coefficients of a plasma using a gas optical quantum generator.

05 p0762 A69-15900

Study of an optically dense plasma consisting of one element /Issledovanie opticheski plotnoi plazmy odnoelementnogo sostava/.

06 p0964 A69-17251

Damping power of thin-walled fiberglass-reinforced plastic structure during high-frequency vibrations in various eigenmodes /Dempfriushchaia sposobnost' tonkostennykh stekloplastikovykh konstrukttsii pri vysokochastotnykh kolebaniiah po razlichnym sobstvennym formam/.

17 p3065 A69-33938

## IVANOV, V. S.

Human tolerance to local infrared irradiation.

10 p1647 A69-23589

## IVANOV, V. V.

On an approximate method of solution of nonlinear heat-conduction problems.

04 p0688 A69-15409

Theory of Approximate Methods and its Application to the Numerical Solution of Singular Integral Equations /Teoriia priblizhennykh metodov i ee primeneniye k chislennomu resheniiu singuliarnykh integral'nykh uravnenii/.

07 p1174 A69-19580

Investigation of the total error in problems of minimization of functionals in the presence of constraints /Issledovanie polnoi pogreshnosti v zadachakh minimizatsii funktsionalov pri nalichii ogranichenii/.

08 p1342 A69-20319

On optimal regularization.

10 p1721 A69-23882

Long-distance tropospheric propagation at short and moderate wavelengths /O dal'nem troposfernom rasprostraneni khorotkikh i srednikh voln/.

19 p3279 A69-36879

## IVANOVA-STEPANOVA, N. F.

Status and prospects of titanium application /Sostoianie i perspektivy vnedreniia titana/.

07 p1161 A69-18767

## IVANOVA, I. E.

Possibility of Chlorella cultivation of solutions with mineralized human wastes.

02 p0200 A69-11511

## IVANOVA, N. N.

Diffuse galactic radiation at the areas of the Northern Coalsack /Diffuznaia galakticheskaiia radiatsiia v ploshchadkakh bol'shoi razviki Mlechnogo Puti/.

21 p3817 A69-39725

## IVANOVA, T. A.

Infrared polarizing microscope.

12 p2093 A69-26595

## IVANOVA, V.

Satellite Observations. Number 7 /Nabliudeniia Iskusstvennykh Sputnikov Zemli. Number 7/.

12 p2067 A69-26424

Method of determining the geocentric orientation of a quasi-geocentric system of coordinates /Sposob opredeleniia geotsentricheskoi orientatsii kvazigeotsentricheskoi koordinatnoi sistemy/.

12 p2158 A69-26429

## IVANOVA, V. F.

Evaluating the possibility of mass spectrum analysis of lunar surface matter.

10 p1698 A69-24207

## IVANOVA, V. S.

Increasing heat resistance by creating optimal dislocation structures /Povyshenie zharoпрочnosti putem sozdaniia optimal'nykh dislokatsionnykh struktur/.

09 p1525 A69-22141

Reinforced metallic materials /Armirovannye metallicheskie materialy/.

11 p1904 A69-24898

Dislocation-energetical hypothesis of ductile and brittle fracture.

17 p3052 A69-32984

## IVANTSOV, I. G.

Machine for testing the creep and long-term strength of metallic specimens.

04 p0584 A69-14537

## IVANYOS, L.

The frequency dependence of the input impedance of voltage-controlled amplifier stages /Feszueltsegutanhuzos erositofokozatok bemeneti impedanciajanak frekvenciafuggese/.

07 p1090 A69-18294

## IVASHCHENKO, R. K.

Change in the mechanical properties and in the dislocation structure of deformed molybdenum alloys during annealing /Izmenenie mekhanicheskikh svoistv i dislokatsionnoi struktury deformirovannykh molibdenovykh spлавov pri otzhige/.

14 p2463 A69-29312

Some results of a study of the damping properties of coatings for elements of aircraft structures /Nekotorye rezul'taty issledovaniia dempfriushchikh svoistv pokrytii elementov samoletnykh konstrukttsii/.

17 p2993 A69-33941

## IVASHCHENKO, T. M.

Thermochemical treatment of steel and titanium in a medium consisting of the pyrolysis products of tetraethoxysilane /Khimiko-termicheskaiia obrabotka stali i titana v srede produktov piroliza tetraetoksisilana/.

19 p3328 A69-36161

## IVASHIN, V. V.

Kinetics of fine structural changes during aging of the El437B alloy /Kinetika tonkikh strukturykh izmenenii pri starenii splava El437B/.

14 p2463 A69-29310

## IVASHKIN, V. V.

Joint analysis of the correction and braking problems for a class of planetary landing trajectories /Sovmestnyi analiz zadach korrektsii i tormozheniia dlia odnogo klassa traektorii posadki na planetu/.

01 p0151 A69-10568

Optimal impulse transitions inside an annulus on orbits not intersecting the annulus boundary.

10 p1790 A69-24191

Combined analysis of correction and braking problems in a certain class of trajectories for landing on a planet.

15 p2691 A69-30738

## IVCHENKO, I. N.

Kinetic theory of a gas flowing over a solid wall in a velocity-gradient field /Kineticheskaiia teoriia techeniia gaza, nakhodiashchegosia nad tverdoi stenкой v pole gradianta skorosti/.

06 p0910 A69-17346

## IVCHENKO, M. P.

Worldwide Isopor charts for the period from 1960 through 1965 /Mirovyie karty izopor dlia perioda 1960-1965 gg/.

10 p1687 A69-23920

## IVELAND, T. D.

Computer design of inhomogeneous quarter-wave transformers.

14 p2423 A69-29762

## IVENSEN, V. A.

Study of changes in the structure of WC-Co alloys during plastic deformation /Issledovanie izmenenii v strukture spлавov WC-Co pri plasticheskoi deformatsii/.

18 p3158 A69-35261

## IVERSEN, R. J.

Detection of fast infrared laser pulses with thin film thermocouples.

05 p0773 A69-16284

## IVISON, J. M.

A simple telemetering system for strain measurement.

22 p3946 A69-40314

## IVLEV, D. D.

The relations on surfaces of stress discontinuity in three-dimensional perfectly rigid-plastic bodies.

11 p1996 A69-25738

On deformation theories of plasticity.

19 p3443 A69-36794

## IVLEV, L. S.

Aerosol structure of the troposphere and the stratosphere /Aeroloznaia struktura troposfery i stratosfery/.

18 p3132 A69-35340

## IVLEV, V. V.

Determination of the optimum content of redundant elements for complex technological systems /Opredelenie optimal'nogo ob'ema zapasnykh elementov dlia slozhnykh tekhnicheskikh sistem/.

14 p2426 A69-29422

## IVLEVA, V. S.

Doping effect observed during measurements of microhardness in GaSb and InSb /Effekt legirovaniia, nabliudaemyi pri izmerenii mikrotrverdosti GaSb i InSb/.

01 p0139 A69-10832

Effect of doping, as observed in the measurements of the microhardness of GaSb and InSb.

11 p1936 A69-24699

Nonuniform distribution of electrical properties in indium arsenide single crystals /Neodnorodnost' raspredeleniia elektricheskikh svoistv v monokristallakh antimonida indii/.

15 p2670 A69-31049

## IVLIEV, D. IA.

Diurnal energy variation of auroral electrons /Sutchnyi khod energii avoral'nykh elektronov/.

10 p1687 A69-23915

## IWAI, A.

A new direction finding network for locating the sources of atmospherics.

18 p3102 A69-34961

Electromagnetic wave scattering by ionospheric regularities.

18 p3102 A69-34963

Ducted propagation of hydromagnetic whistlers in the magnetosphere.

18 p3102 A69-34966

Whistler propagation in magnetically disturbed periods at two lower latitudes.

18 p3102 A69-34967

Penetration of whistlers through the ionosphere.

18 p3130 A69-34972

IWAI, Z.  
On the noninteracting control of linear time-variant  
multivariable systems. 15 p2582 A69-30024

IWAKURA, C.  
Studies on the methanol fuel cell - Cathodic polariza-  
tion characteristics of hydrogen peroxide electrode. 11 p1825 A69-24523

IWAMOTO, K.  
Behaviour of lowcycle fatigue at elevated tempera-  
tures. 10 p1797 A69-23081  
Investigation of low cycle fatigue at elevated tem-  
peratures. 18 p3219 A69-34834

IWANAGA, S.  
Investigation of low cycle fatigue at elevated tem-  
peratures. 18 p3219 A69-34834

IWANE, M.  
Effects of Coriolis stimulus during mild centrifugal g  
load upon stick performance. 06 p0876 A69-18023  
Alteration of manual performance during sustained  
acceleration exposure by means of hand-writing pres-  
sure measurement in man. 06 p0884 A69-18030

IWASA, S.  
Application of gas lasers to high-resolution mag-  
netospectroscopy. 16 p2796 A69-31822

IWASAKI, H.  
The polymorphism of the oxide Ti sub 3 O sub 5. 07 p1168 A69-19601

IWASAKI, M.  
Theoretical and experimental investigations of a  
propeller working at static condition. 02 p0188 A69-11957  
Theoretical and experimental investigations of a  
propeller working at static condition. 06 p0857 A69-17194

IWASAWA, H.  
Anomalous enhancement of substrate terminal cur-  
rent beyond pinch-off in silicon n-channel MOS  
transistors and its related phenomena. 04 p0574 A69-14348  
Power dependence on repetition time of the Q-  
switched CO sub 2 laser. 23 p4173 A69-41566

IWATA, A.  
Balloon observation of small ion density and electric  
conductivity in the stratosphere. 18 p3130 A69-34970

IWATA, K.  
Application of a Fraunhofer hologram to correlation  
operation. 09 p1499 A69-22276  
Creep of thick-walled cylinder under internal pres-  
sure. 15 p2703 A69-30070

IWATAKI, N.  
An experimental study on the discrimination of  
figure proportion. 06 p0875 A69-18022  
Questionnaire survey of approach light. 06 p0884 A69-18029  
Visual problems concerning landing accidents. 06 p0884 A69-18036

IWAUCHI, S.  
The effects of traps in the semiconductor on the  
characteristics of MOS transistors. 02 p0299 A69-12183  
Effects of interface states on the characteristics of  
MOS transistors. 06 p0979 A69-17117

IYENGAR, S. R. K.  
Flow and heat transfer of a non-Newtonian fluid  
about an unsteadily rotating disk. 05 p0745 A69-15793

IYENGAR, V. S.  
Anisotropies in Forbush decreases. 06 p0990 A69-17290  
Azimuth effect of cosmic ray meson intensity at Ah-  
medabad. 06 p0925 A69-17295  
The 0.5 Mev gamma ray flux at balloon altitudes  
over 7.6 deg N geomagnetic latitude. 06 p0992 A69-17313

IZADPANAH, S. H.  
High-speed computer logic with Gunn-effect  
devices. 01 p0042 A69-10438  
Memory loop with Gunn-effect pulse diodes. 08 p1279 A69-19912

IZAWA, T.  
Relationship between observed winds and cloud  
velocities determined from pictures obtained by the  
ESSA III, ESSA V and ATS I satellites. 21 p3758 A69-38371  
Formation and structure of equatorial anticyclones  
caused by large-scale cross-equatorial flows deter-  
mined by ATS-I photographs. 24 p4342 A69-42895

IZAWA, Y.  
A new sampling technique of multi-coincidence  
method of photon counting for optical tracking system  
of satellite. 11 p1841 A69-25579  
Experiments on collisionless shock waves in plasmas. 17 p3013 A69-33822  
Experiments on collisionless shock waves in plasmas. 19 p3379 A69-35759

IZHVANOV, L. A.  
Beryllium - A new structural metal /Berillii - Novyi  
konstruktsionnyi metall/. 11 p1904 A69-24897

IZIUMOV, A. O.  
Amplitude and phase fluctuations of a plane  
monochromatic submillimeter wave in a near- ground  
layer of moisture-containing turbulent air. 05 p0722 A69-16778  
Correlation of the amplitude and phase fluctuations  
of a plane monochromatic wave in the submillimeter  
range during propagation in a turbulent atmospheric  
boundary layer /O korreliatsii fluktuatsii amplitudy i  
fazy ploskoi monokhromaticheskoi volny submil-  
limetrovogo diapazona pri rasprostraneni v prizem-  
nom sloe turbulentnoi atmosfery/. 21 p3674 A69-39129

IZMAILOV, O. M.  
Experimental investigation of plasma drift instability  
in an external high-frequency field. 14 p2489 A69-28740

IZQUIERDO, M.  
Solar eclipse - Temperature, wind, and ozone in the  
stratosphere. 06 p0916 A69-17008

IZRAETSKAIA, N. N.  
Investigation of the atmospheric density according to  
meteor data obtained from 1957 to 1965 /Issledovanie  
plotnosti atmosfery po meteornym dannym, poluchen-  
nym v Odesse v 1957- 1965 gg./ 10 p1688 A69-23936

IZRAILOVICH, M. IA.  
Method of solving certain final-state optimization  
problems /Ob odnom sposobie resheniia nekotorykh  
zadach optimizatsii konechnogo sostoiianiia/. 12 p2045 A69-25965

IZUMI, T.  
Estimation of surface temperature variation of satel-  
lite. 01 p0162 A69-10761

IZUMNOV, D. V.  
Micromode operation of a planar transistor during  
avalanche breakdown of the collector junction /Rabota  
planarnogo tranzistora v mikrorezhime pri lavinnom  
proboe kollektornogo perekhoda/. 01 p0047 A69-10884

IZUPAK, E. A.  
Heat removal from a laser rod by means of a metallic  
conductor. 12 p2108 A69-26592

J

JAARSMAN, D.  
On adaptive synchronous detection with finite  
memory. 03 p0400 A69-13228

JABLONOWSKI, E. J.  
What we can expect in the 1970's. 09 p1524 A69-22067

JACCARINO, V.  
Precision thermometer for the region 10-40 K. 06 p0927 A69-17703

JACCAUD, M.  
Study of atomic collisions in a helium-neon laser  
containing a small quantity of a foreign gas /argon,  
krypton, or xenon/ /Etude des collisions atomiques  
dans un laser helium-neon contenant une petite  
quantite d'un gaz etranger /argon, krypton ou xenon/. 08 p1325 A69-20278

JACCHIA, L. G.  
A study of the semi-annual density variation in the  
upper atmosphere from 1958 to 1966, based on satel-  
lite drag analysis. 06 p0918 A69-17380  
Recent advances in upper atmosphere structure. 15 p2600 A69-31355

JACK, J. R.  
Experimental measurements of thermal radiation  
properties by cyclic incident radiation. 01 p0176 A69-10847  
Solar absorptance and hemispherical emittance of  
various metals at space conditions. [AIAA PAPER 69-60] 06 p0945 A69-18154

JACKA, F.  
Studies on auroral hydrogen emission using an image  
intensifier. 10 p1684 A69-23824  
Simultaneous geomagnetic and cosmic noise absorp-  
tion pulsations near geomagnetic noon. 15 p2597 A69-30697

JACKLET, J. W.  
Circadian rhythm of optic nerve impulses recorded  
in darkness from isolated eye of Aplysia. 14 p2406 A69-28870

JACKLYN, R. M.  
Solar diurnal anisotropy of cosmic rays. 21 p3788 A69-38547

JACKMAN, L. A.  
Very-short-time, very-high-temperature creep rup-  
ture of type 347 stainless steel and correlation of data.  
[ASME PAPER 68-WA/MET-2] 14 p2464 A69-29439

JACKMAN, R. W.  
Residual gas analyzer for monitoring sublimation  
from spacecraft materials. 02 p0227 A69-11758  
A new, sensitive, rapid materials contamination  
screening system. 24 p4297 A69-42931

JACKS, H. G.  
The reliability of long life repairable equipment. 15 p2581 A69-31134

JACKSON, B.  
The design and evaluation of high G/T aerials using  
radio modelling techniques. 08 p1279 A69-19961

JACKSON, B. W.  
The Goddard Experiment Package - An automated  
space telescope. 13 p2261 A69-27948

JACKSON, D. B.  
Specifying hardness of elastomers for rotary shaft  
seals. 16 p2794 A69-32432

JACKSON, D. D.  
Elastic relaxation model for seismic wave attenua-  
tion in the earth. 15 p2596 A69-30624

JACKSON, D. W.  
Experiments in long-distance holographic imagery. 23 p4167 A69-42184

JACKSON, E. D.  
Chemical composition of the lunar surface at the  
Surveyor landing sites. 04 p0655 A69-14658

JACKSON, F. C.  
Radar altimetry from a spacecraft and its potential  
applications to geodesy. 15 p2609 A69-30460  
Oceanographic applications of radar altimetry from  
a spacecraft. 15 p2609 A69-30461

JACKSON, G. A.  
A method for the direct measurement of crossover  
model parameters. 12 p2022 A69-25930

JACKSON, J. E.  
Objectives, history, and principal achievements of  
the topside sounder and ISIS programs. 20 p3529 A69-37855



- The reduction of topside ionograms to electron-density profiles.  
20 p3529 A69-37864
- Comparisons between topside and ground-based soundings.  
20 p3495 A69-37865
- JACKSON, J. H.**  
Fracture toughness behavior of AlZnMgCu alloys /Das Bruchverhalten von AlZnMgCu-Legierungen/.  
16 p2800 A69-31780
- JACKSON, J. L.**  
Equilibrium theory of a partially ionized plasma.  
08 p1365 A69-20746
- JACKSON, P.**  
Computer controlled testing in airline shops.  
11 p1864 A69-25061
- JACKSON, P. E.**  
Linear voltage-amplitude to pulse-width conversion utilizing a controlled unijunction monostable multivibrator.  
02 p0217 A69-12151
- JACKSON, P. W.**  
Mechanical behavior of a fiber reinforced metal and its effect upon engineering applications.  
06 p0940 A69-16949  
Some studies of the compatibility of graphite and other fibers with metal matrices.  
[ASM PAPER W9-20.1] 21 p3751 A69-38670
- JACKSON, R.**  
The creep of niobium-molybdenum alloys.  
10 p1711 A69-23375
- JACKSON, R. J.**  
Metallographic techniques for vacuum-cast rolled ingot beryllium sheet.  
13 p2281 A69-28160
- JACKSON, S. K., JR.**  
Locally similar hypersonic laminar boundary-layer error estimate.  
16 p2772 A69-32174
- JACKSON, S. R.**  
Factors influencing heat release in combustion chambers and consideration of the related materials and structures.  
09 p1625 A69-22619
- JACKSON, T. M.**  
Laser cuts masks to size, eliminating most errors.  
06 p0931 A69-17200
- JACKSON, W. R.**  
Attempt to detect X-ray pulses from the Crab Nebula.  
12 p2149 A69-26226
- JACOB, C.**  
On some extensions of the circle-theorem and their applications to mechanics of continua.  
10 p1723 A69-22877  
On a new proof of the formulae of L. I. Sedov in the theory of thin wings.  
19 p3242 A69-36795
- JACOB, K.**  
Calculation of separated incompressible flow around airfoils sections and determination of the maximum lift /Berechnung der abgeloesten inkompressiblen Stromung um Tragflugelprofile und Bestimmung des maximalen Auftriebs/.  
20 p3459 A69-37421
- JACOB, R. F.**  
Modeling plasma effects on radar cross section of reentry vehicles.  
20 p3485 A69-36925
- JACOB, S. W.**  
Therapeutic potential of dimethyl sulfoxide /DMSO/ in aerospace medicine.  
06 p0883 A69-17851
- JACOBS, A.**  
On the temperature dependence of the ratio of O VIII Ly-alpha and Ly-beta radiation from the solar corona /Research note/.  
03 p0516 A69-14042
- JACOBS, A. J.**  
The mechanism of stress corrosion cracking in 7075 aluminum.  
19 p3351 A69-36897
- JACOBS, B. L.**  
Introductory remarks - New techniques for corrosion studies.  
21 p3749 A69-39494
- JACOBS, H.**  
Photon-induced current changes in a CO sub 2 laser amplifier.  
23 p4172 A69-41398
- JACOBS, J. A.**  
Investigation of quasi-periodic VLF emissions and their relation to geomagnetic micropulsations.  
01 p0063 A69-10274  
The earth's magnetic field.  
03 p0420 A69-12935
- JACOBS, J. D.**  
Measurement of temperatures associated with bubbles in subcooled pool boiling.  
[ASME PAPER 68-HT-47] 13 p2374 A69-27779
- JACOBS, J. E.**  
Imaging systems for weld inspection.  
07 p1139 A69-18796
- JACOBS, K. C.**  
Cosmologies of Bianchi type I with a uniform magnetic field.  
08 p1383 A69-20049
- JACOBS, K. G.**  
Wind measurements by radio observation of meteor trails and comparison with fading-drift results /Windmessungen durch Radio-Beobachtungen von Meteorstreifen und Vergleich mit Fading-Drift-Ergebnissen/.  
02 p0275 A69-12042
- JACOBS, L. D.**  
Response of complex structures to turbulent boundary layers.  
[AIAA PAPER 69-20] 06 p0914 A69-18132
- JACOBS, O. L. R.**  
Simulation and dimensional analysis of a stepping extremum control system.  
07 p1114 A69-18287  
Stability of a sinusoidal-perturbation extremal-control system.  
12 p2052 A69-26384
- JACOBS, P. W. M.**  
The role of sublimation in the combustion of ammonium perchlorate propellants.  
11 p1940 A69-24481  
Thermal decomposition of ammonium perchlorate plus magnesium perchlorate mixtures.  
[AIAA PAPER 69-500] 16 p2833 A69-32661  
Mechanism of the decomposition of ammonium perchlorate.  
21 p3784 A69-39593
- JACOBS, T. A.**  
Shock-tube studies of sulfur hexafluoride.  
18 p3100 A69-35475  
Kinetics of hydrogen halides in shock waves. IV - HBr.  
20 p3484 A69-37347  
Stimulated emission behind overdriven detonation waves in F sub 2 O-H sub 2 mixtures.  
22 p4052 A69-41188
- JACOBSEN, C. W.**  
Formation of carbon trioxide in the photolysis of ozone in liquid carbon dioxide.  
23 p4112 A69-41338
- JACOBSEN, E. H.**  
Maser amplification of 9.5-gigahertz elastic waves in sapphire doped with divalent nickel impurity ions.  
16 p2795 A69-31554
- JACOBSON, A. D.**  
Motion picture holography.  
10 p1697 A69-24002  
Hologram recording on photopolymer materials.  
13 p2258 A69-27199
- JACOBSON, C. F.**  
Holographic technique for determining the phase of vibrating objects.  
17 p2974 A69-33324
- JACOBSON, D. A.**  
S-matrix theory without momentum.  
03 p0467 A69-13754
- JACOBSON, D. H.**  
New second-order and first-order algorithms for determining optimal control - A differential dynamic programming approach.  
09 p1531 A69-21415  
Differential dynamic programming methods for solving bang-bang control problems.  
11 p1860 A69-25444  
A transformation technique for optimal control problems with a state variable inequality constraint.  
24 p4291 A69-43270
- Singular optimal control problems.  
24 p4292 A69-43282
- JACOBSON, D. L.**  
Effective work function determinations of rhenium and molybdenum.  
09 p1557 A69-21807
- JACOBSON, K. A.**  
Fabricating SiC parts by chemical vapor deposition.  
09 p1509 A69-22344
- JACOBSON, L. A.**  
A concise method for reducing photographic spectrograph calibrations.  
01 p0082 A69-10839
- JACOBSON, M. I.**  
Controlled microstructures of Al-CuAl sub 2 eutectic composites and their compressive properties.  
06 p0942 A69-17227
- JACOBY, E. A.**  
FAMILY I - Software for NASA-Ames simulation systems.  
04 p0567 A69-15353
- JACOBY, G.**  
Comparison of fatigue life estimation processes for irregularly varying loads.  
[DVL-780] 10 p1802 A69-24020  
Testing machines for metallic materials /Pruefmaschinen fuer metallische Werkstoffe/.  
[DVL-865] 11 p1889 A69-25682  
Evaluation of the tensile strength of components on the basis of crack toughness /Beurteilung der Bruchfestigkeit von Bauteilen auf Grund der Risszaehigkeit/.  
12 p2176 A69-25861  
Comparison of fatigue life estimation processes for irregularly varying loads.  
17 p3052 A69-32977
- JACQUEMIN, J. P.**  
Experimental results of MHD conversion using a rare gas /Resultats d'experiences de conversion MHD a gaz rare/.  
10 p1738 A69-23475
- JADY, R. J.**  
Normal modes of decay of a magnetic field in magnetohydrodynamics.  
08 p1369 A69-20999
- JAEGER, F. W.**  
On problems, tasks and working aids in solar research.  
15 p2682 A69-30437
- JAEGER, H.**  
Exploding wires as a light source for quantitative spectroscopy.  
01 p0117 A69-10658  
Breakdown phenomena in Schottky diodes /Durchbruchphaenomene an Schottky-Dioden/.  
08 p1286 A69-20860
- JAEGER, PH.**  
Flow in a short asymmetric tube /Zur Stroemung im asymmetrischen kurzen Rohr/.  
03 p0419 A69-13969
- JAEGER, R. E.**  
Transient effects of nuclear radiation on the dielectric properties of refractory low-loss ceramics at microwave frequencies.  
20 p3584 A69-38065
- JAEGER, R. G.**  
Engineering Compendium on Radiation Shielding. Volume 1 - Shielding Fundamentals and Methods.  
05 p0791 A69-15830
- JAEGER, R. R.**  
Shock-induced preferred disorder in solids.  
15 p2671 A69-31538
- JAENKE, M. G.**  
The dynamic characteristics of test pads.  
[AIAA PAPER 69-860] 21 p3690 A69-39388
- JAESCHKE, R.**  
Scientific mission of ESRO-I/Aurorae.  
13 p2381 A69-27748  
The scientific mission of the Aurorae satellite /La mission scientifique du satellite Aurorae/.  
15 p2702 A69-31081
- JAFFE, I.**  
Shock sensitivity of solid explosives and propellants.  
02 p0302 A69-11520
- JAFFE, L.**  
Overview of space applications programs.  
[UN PAPER 68-95437] 01 p0178 A69-10472  
International experimentation with communications satellites.  
[UN PAPER 68-95421] 01 p0108 A69-10474

- JAFFE, L. D.**  
 Surveyor 5 science results. 02 p0317 A69-12023  
 Principal science results from Surveyor 5. 02 p0321 A69-12224  
 Lunar surface mechanical properties. 02 p0321 A69-12225  
 The Surveyor lunar landings. 15 p2681 A69-30324  
 Lunar surface - Recent spacecraft observations. 15 p2698 A69-31356  
 Lunar surface material - Spacecraft measurements of density and strength. 18 p3193 A69-34366  
 Recent observations of the moon by spacecraft. 18 p3205 A69-35410  
 Strength-density relations in particulate silicates of complex shape and their possible lunar significance. 24 p4383 A69-43040
- JAFFE, N. A.**  
 The determination of spatial amplification factors and their application to predicting transition. [AIAA PAPER 69-10] 06 p0914 A69-18127
- JAFFE, P.**  
 Angle-of-attack motion of a spinning entry vehicle. 04 p0666 A69-15522  
 Terminal dynamics of atmospheric entry capsules. 20 p3617 A69-37197
- JAFFE, S. B.**  
 Energy requirements for the hydrogen iodide reaction. 01 p0123 A69-10686
- JAFFEE, C. L.**  
 Leadership attempting - Why and when/ques/ 23 p4110 A69-42015
- JAGACIAK, G. J.**  
 Effect of surface chemistry on the physical properties of pressure sintered beryllium metal. 24 p4332 A69-42963
- JAGANNATH, D. V.**  
 Experimental investigation of gas turbine blade vibration - A review. [ASME PAPER 69-VIBR-59] 10 p1805 A69-24155
- JAGANNATHAN, P. S.**  
 Analysis of lateral conduction and radiation along two parallel long plates. 24 p4415 A69-43594
- JAGDT, R. L.**  
 Fused silica lightweight mirror blanks. 13 p2261 A69-27954
- JAHN, H.**  
 Technology and physicomaterial properties of new reinforcement fibers /Technologie und physikalisch-mechanische eigenschaften neuartiger verstaerkungsfasern/. 22 p3951 A69-39907  
 Technology and physicomaterial properties of newly developed reinforcing fibers /Technologie und physikalisch-mechanische Eigenschaften neuartiger Verstaerkungsfasern/. 23 p4179 A69-42154
- JAHN, R. G.**  
 Energy transfer from a pulse network to a propagating current sheet. [AIAA PAPER 69-113] 06 p0971 A69-18123  
 Current pattern and gas flow stabilization in pulsed plasma accelerators. [AIAA PAPER 69-112] 06 p0971 A69-18140  
 Quasi-steady plasma acceleration. [AIAA PAPER 69-267] 09 p1563 A69-21234  
 Pressure distribution in the structure of a propagating current sheet. [AIAA PAPER 69-264] 09 p1564 A69-21243  
 Ion density and current distributions in a propagating current sheet, determined by microwave reflection technique. 16 p2816 A69-31639  
 Status of electric propulsion. [AIAA PAPER 69-497] 16 p2838 A69-32655  
 Electron beam from a magnetoplasma dynamic arc. 20 p3582 A69-38236
- JAHNKE, L.**  
 Cellular localization of acetyl-coenzyme A synthetase in yeast. 04 p0554 A69-15333
- JAHS, W.**  
 An in-core thermionic reactor for powering space vehicles /Der Incore-Thermionik-Reaktor zur Energieversorgung von Raumflugkoerpern/. 02 p0279 A69-12666
- JAHOBA, F. C.**  
 CO sub 2 -laser interferometer for the measurement of transient low-density plasmas. 06 p0935 A69-17706  
 Submicrosecond holographic cine-interferometry of transmission objects. 18 p3133 A69-34265
- JAHOBA, J. A.**  
 Response of thermally softened defect structures in alloys to an applied stress. 07 p1165 A69-18906
- JAHSMAN, W. E.**  
 Static and dynamic material behavior of syntactic foam. 02 p0345 A69-12295
- JAIN, A. R.**  
 Collision frequency of electrons in the F- region. 16 p2779 A69-32197  
 On the validity of some approximations to the Appleton-Hartree magneto-ionic formula. 23 p4126 A69-42354
- JAIN, A. V.**  
 Implications of shock effects in iron meteorites. 01 p0149 A69-10134  
 Shock histories of hexahedrites and Ga-Ge group III octahedrites. 19 p3418 A69-36136
- JAIN, M. K.**  
 Effect of wall conductivity on heat transfer by Hartmann's flow in thermal entrance region. 21 p3847 A69-38442
- JAIN, N. K.**  
 The elastic response of a large thin plate to an impulsive pressure distribution of polynomial character. 12 p2180 A69-26271
- JAIN, S. C.**  
 Total and spectral emittance of cobalt. 05 p0716 A69-16447
- JAIN, V. K.**  
 Extinction criterion of a monopropellant droplet burning in an atmosphere of inerts. 13 p2378 A69-28250  
 Theory of laminar flame propagation with non-normal diffusion. 21 p3849 A69-38802
- JAKEMAN, E.**  
 Statistics of heterodyne detection of Gaussian light. 07 p1182 A69-19416  
 Spectrum of clipped photon-counting fluctuations of Gaussian light. 15 p2571 A69-31486
- JAKES, W. C., JR.**  
 Hologram heterodyne scanners. 03 p0431 A69-13827
- JAKIMCOWA, M.**  
 A statistical investigation of sunspots and chromospheric flares. 22 p4001 A69-39996
- JAKIMCZYK, S. J.**  
 Mathematical modeling of long term gyro drift rate. 03 p0463 A69-13213
- JAKIMIEC, M.**  
 Stochastic analysis of solar activity fluctuations. 12 p2149 A69-26221
- JAKUBOWSKI, I.**  
 Review of properties of selected microcircuits produced by means of a hybrid technique /Przeglad wlasnosci wybranych mikroukladow realizowanych za pomoca techniki hybrydowej/. 24 p4286 A69-42906
- JAKUBOWSKI, L.**  
 A laboratory electron gun of 50 kv /Laboratoryjne dzialo elektronowe 50 kv/. 09 p1464 A69-22243
- JAKUBOWSKI, M.**  
 Pneumatic analog-digital and digital-analog converters. [ASME PAPER 68-WA/AUT-16] 05 p0706 A69-16176
- JAMERSON, F. E.**  
 Fission fragment generated plasmas for thermionic diodes - An assessment. 09 p1440 A69-21829
- JAMES, A. V.**  
 A high-accuracy microwave phase standard for use in primary calibration laboratories. 06 p0896 A69-17487
- JAMES, B. G.**  
 Kilowatt CW klystron amplifiers at Ku and Ka bands. 03 p0405 A69-13724
- JAMES, B. W.**  
 Chapman-Jouguet solution for normal ionizing shock waves in hydrogen. 21 p3691 A69-38332
- JAMES, C. R.**  
 Nonlinear interaction of electromagnetic waves in bounded plasmas. 08 p1273 A69-20030
- JAMES, D.**  
 Design for safety. 22 p3867 A69-41134
- JAMES, D. A.**  
 Wide-range electronic tuning of a Gunn diode by an yttrium-iron garnet /Y.I.G./ ferrimagnetic resonator. 01 p0042 A69-10320
- JAMES, D. J. G.**  
 Stability analysis of a model reference adaptive control system with sinusoidal inputs. 08 p1297 A69-20357  
 Stability of a sinusoidal-perturbation extremal-control system. 15 p2582 A69-30616
- JAMES, D. W.**  
 High damping metals for engineering applications. 10 p1715 A69-24044
- JAMES, E.**  
 An advanced contact ion microthruster system. [AIAA PAPER 68-552] 21 p3785 A69-39212
- JAMES, E. L.**  
 Cesium contact ion microthruster experiment aboard applications technology satellite /ATS/IV. [AIAA PAPER 69-297] 09 p1561 A69-21218  
 Cesium contact ion microthruster experiment aboard applications technology satellite /ATS/ - iv. [AIAA PAPER 69-297] 24 p4365 A69-43238
- JAMES, H.**  
 The nature of the explosive process of the combustion of hydrogen at high pressures /Sur la nature du processus explosif de la combustion de l'hydrogene a hautes pressions/. 05 p0849 A69-16615
- JAMES, J. F.**  
 Theoretical Fraunhofer line profiles in the spectrum of the zodiacal light. 08 p1308 A69-20391
- JAMES, J. R.**  
 Prediction of arbitrary electromagnetic fields from measured data. 17 p2929 A69-33881
- JAMES, O. B.**  
 Jadeite - Shock-induced formation from oligoclase, Ries crater, Germany. 22 p3941 A69-40569
- JAMES, P. M.**  
 Derivation and application of unit cost expressions perturbed by design changes. 01 p0180 A69-10652
- JAMES, R. W.**  
 Elementary air mass analysis. 15 p2647 A69-30193  
 On the significance of multipole axes. 23 p4158 A69-42172
- JAMES, W. E.**  
 Gravity-independent liquid collection and fluid phase-separation system. [AAS PAPER 69-473] 24 p4272 A69-42845
- JAMERSON, R. F.**  
 Observations of the polarization of the night sky and a model of the zodiacal cloud normal to the ecliptic plane. 07 p1222 A69-19588
- JAMINET, J. F.**  
 Experiments on vortex shedding from rotating circular cylinders. 24 p4248 A69-43601
- JAMISON, D. T.**  
 Alternatives for instructional broadcast satellites. 13 p2381 A69-27373
- JANAK, J. F.**  
 Thermal expansion in a constrained elastic cylinder. 14 p2534 A69-29284



- JANC, R.**  
An experimental comparison of nondiversity and dual frequency diversity for HF FSK modulation.  
10 p1656 A69-23536
- JANCARIK, J.**  
Electron heating by beam-plasma interaction in uniform magnetic field.  
05 p0804 A69-16458  
Generation and heating of plasma by beam-plasma interaction.  
17 p3014 A69-33828
- JANCEL, R.**  
Application of a successive approximation method to the calculation of the electron distribution function of a homogeneous Lorentzian plasma subjected to a frequency-modulated electric field /Application d'une methode d'approximations successives au calcul de la fonction de distribution electronique d'un plasma lorentzien homogene soumis a un champ electrique module en frequence/.  
02 p0285 A69-11543  
Nonlinear electron conductivity of a Lorentzian plasma subjected to the action of a frequency-modulated electric field /Conductivite electronique non lineaire d'un plasma Lorentzien soumis a l'action d'un champ electrique module en frequence/.  
21 p3778 A69-39573
- JANCELEWICZ, B.**  
Investigations on plastic strains intensity distribution using an orthogonal lattice.  
09 p1617 A69-22221  
Mechanical machine for fatigue testing of thin-walled structures /Mechaniczna maszyna zmeczeniowa do badania konstrukcji cienkoscienne/.  
18 p3118 A69-34833
- JANDALI, T.**  
A potential flow theory for airfoil spoilers.  
[AIAA PAPER 69-737] 18 p3083 A69-34402
- JANDOS, F.**  
Contribution to the problem of the occurrence of light boundaries of former austenitic grains in Cr-Mo-W-V steels /Prispevek k otazce vyskytu "svetlych hranic" byvalych austenitickych zrn v Cr-Mo-W-V ocelich/.  
01 p0100 A69-11295
- JANES, A. F.**  
A sky-scan for discrete sources of gamma-rays in the energy region 240 to 1000 kev.  
11 p1946 A69-24593
- JANES, K.**  
Photometric selection of quasi-stellar objects.  
09 p1604 A69-22272
- JANES, M.**  
Use of the infrared camera for the solution of special problems in spaceflight technology /Ueber die Verwendung einer Infrarot-Kamera zur Loesung spezieller Probleme in der Raumfahrttechnik/.  
08 p1315 A69-20455
- JANESELLI, R.**  
Double diurnal oscillation of atmospheric pressure and of the vertical gradient of the electromagnetic field /Doppia oscillazione diurna della pressione atmosferica e del gradiente verticale del campo elettromagnetico/.  
08 p1306 A69-19866  
Convective cells and periodic variations in the vertical gradient of the electro-atmospheric field /Celle convettive e variazioni periodiche del gradiente verticale del campo elettro-atmosferico/.  
22 p3934 A69-39939
- JANICKI, J. S.**  
A device to test mechanical properties of tissues and transducers.  
22 p3890 A69-40204
- JANIN, J.**  
Study of atomic collisions in a helium-neon laser containing a small quantity of a foreign gas /argon, krypton, or xenon/ /Etude des collisions atomiques dans un laser helium-neon contenant une petite quantite d'un gaz etranger /argon, krypton ou xenon/.  
08 p1325 A69-20278
- JANIS, J. M.**  
A gas/oil seal system for closed-cycle turbomachinery in a nuclear power plant.  
13 p2268 A69-27367
- JANKOVICH, E.**  
Numerical solution and experimental evaluation of elastoplastic problems for multiply connected shells of revolution.  
06 p1025 A69-17614
- JANNER, K.**  
An in-core thermionic reactor for powering space vehicles /Der Incore-Thermionik-Reaktor zur Energieversorgung von Raumflugkoerpern/.  
02 p0279 A69-12666
- JANNICHE, P. J., JR.**  
Cosmic ray experiments source-encoding in the IMP-1 spacecraft.  
23 p4118 A69-41738
- JANNOT, M.**  
Stability criterion of a natural convection boundary layer on an isothermal vertical plane wall /Criter de stabilite d'une couche limite de convection naturelle sur une paroi plane verticale et isotherme/.  
02 p0188 A69-12038  
Influence of thermal and electric contact resistances on the output of thermoelectric-conversion generators /Influence des resistances thermiques et electriques de contact sur le rendement des generateurs a conversion thermo-electrique/.  
12 p2016 A69-26364
- JANOCKO, M. A.**  
Preparation and superconducting properties of thin films of transition metal interstitial compounds.  
13 p2321 A69-28009
- JANOW, C.**  
Guidance and control components for space applications.  
09 p1500 A69-24234
- JANSE, M. J.**  
Refractory period of the dog's ventricular myocardium following sudden changes in frequency.  
24 p4257 A69-42628
- JANSEN, G. R.**  
Flight evaluation of direct lift control on the DC-8 super 63.  
06 p0867 A69-17666
- JANSEN, J.**  
Communication satellites for educational television.  
06 p1017 A69-17624
- JANSSENS, G.**  
ONERA cascade wind tunnel - First experimental results /La soufflerie de grilles d'aubes O.N.E.R.A. - Premiers resultats experimentaux/.  
17 p2895 A69-33591
- JANSSENS, T.**  
A new solar observatory in California.  
11 p1862 A69-24792
- JANSSON, P. A.**  
A table of the equivalent widths of isolated lines with combined Doppler and collision broadened profiles.  
05 p0796 A69-15747
- JARAY, F. F.**  
"Wire sheet" wound pipes and tanks - Properties and method of calculation.  
08 p1414 A69-20487
- JAROSCH, E.**  
Fatigue properties and test procedures of glass reinforced plastic rotorblades.  
[AHS PAPER 370] 17 p3060 A69-33518
- JAROSEWICH, E.**  
Chemical analyses with notes on one mesosiderite and seven chondrites.  
11 p1953 A69-24336
- JARRETT, A. H.**  
Some applications of optical interferometers in geophysics and astronomy.  
05 p0760 A69-15590
- JARRETT, O., JR.**  
Onset of rotating disturbance in the interelectrode region and exhaust jet of an MPD arc.  
[AIAA PAPER 69-232] 09 p1562 A69-21225
- JARRY, M. F.**  
The structure of the sources of stationary type IV bursts and noise-storm enhancements.  
02 p0328 A69-12753
- JARVINEN, P. O.**  
Analysis of radar return from turbulent rocket exhaust plumes.  
[AIAA PAPER 69-71] 06 p0891 A69-18071
- JARVINEN, W.**  
A study of Saturn AS-502 coupling longitudinal structural vibration and lateral bending response during boost.  
[AIAA PAPER 69-58] 06 p1019 A69-18204
- JASCHEK, C.**  
A study of the bright A stars. I - A catalogue of spectral classifications.  
16 p2860 A69-32233
- JASCHEK, M.**  
The spectrum of HR 3817.  
12 p2172 A69-27160  
A study of the bright A stars. I - A catalogue of spectral classifications.  
16 p2860 A69-32233
- JASINSKI, J. R.**  
A broad-band, high-gain, L-band power-amplifier module.  
14 p2418 A69-28892
- JASKOLSKI, S. V.**  
Calculating Gunn-diode output.  
01 p0049 A69-11195
- JASPER, S. J.**  
The effects of measurement errors and geometry on navigational accuracy.  
17 p3002 A69-34098
- JASSBY, D. L.**  
Measurement of plasma end losses in a Q machine.  
08 p1358 A69-19810  
Improved plasma confinement in a Q machine with symmetrically heated end plates.  
11 p1925 A69-24314
- JASTROW, R.**  
Education and training.  
[UN PAPER 68-95809] 01 p0179 A69-10515
- JATCZAK, J.**  
Experimental determination of the mean distance between the equipment and the axis of extensive air showers as a function of shower size and the number of hit detectors /Eksperymentalne wyznaczenie sredniej odleglosci od aparatury osi wielkich pekow kosmicznych w funkcji liczby trafionych detektorow i wielkosci pekow/.  
01 p0144 A69-10749  
Extensive air showers of cosmic radiation /Wielkie peki atmosferyczne promieniowania kosmicznego/.  
01 p0144 A69-10752  
The neutrino in the universe /Neutrino we wszechswiecie/.  
01 p0145 A69-10754  
Possibility of experimental determination of mean distance between the "magnetic clouds" in cosmic space /O mozliwosci eksperymentalnego wyznaczenia sredniej odleglosci miedzy "oblokami magnetycznymi" w przestrzeni kosmicznej/.  
10 p1760 A69-23293  
Hodoscope systems of Conversi detectors for recording cosmic radiation /Uklady hodoskopowe detektorow conversiego do rejestracji promieniowania kosmicznego/.  
10 p1693 A69-23296  
Determination of the mean distance of the shower axis from the apparatus by a method of measuring the ratio of the penetrating component density to the density of charged particles in the shower /Wyznaczenie sredniej odleglosci osi pekow od aparatury metoda pomiaru stosunku gestosci skladowej przenikliwej do gestosci czastek naladowanych w pekach/.  
17 p3024 A69-33580  
Mean logarithmic distance of the shower axis from the apparatus /Srednia logarytmiczna odleglosc osi pekow od aparatury/.  
17 p3024 A69-33581
- JAUMANN, J.**  
Determination of optical constants of semiconductors using samples with nonideal surfaces /Bestimmung der optischen Konstanten von Halbleitern an Proben mit nichtidealen Oberflaechen/.  
21 p3782 A69-39240
- JAUMOTTE, A. L.**  
Ram recovery of a flush intake for air cushion vehicles.  
01 p0005 A69-10026  
Magnetohydrodynamic flow in a channel of square cross section in the presence of a transverse magnetic field - Case where the walls parallel to the magnetic field are conducting /Ecoulement magnetohydrodynamique en tube de section carree en presence d'un champ magnetique transversal - Cas ou les parois paralleles au champ magnetique sont conductrices/.  
05 p0799 A69-15697  
Study of the fixed-point support of a new type of air-cushion vehicle with two pressure stages /Etude de la sustentation au point fixe d'un type nouveau de vehicule a coussin d'air a deux etages de pression/.  
06 p0857 A69-16820
- JAUNCEY, D. L.**  
Declination measurements of selected 4C sources using the Arecibo 1000-ft reflector.  
22 p4014 A69-40128

- JAUNZEMIS, W.**  
Thin rods and shells viewed as Cosserat continua.  
07 p1234 A69-19382
- JAVAN, A.**  
A high-resolution study of the C super 3 pi sub 1 goes to B super 3 pi sub g /0,0/ stimulated transitions in N sub 2.  
02 p0284 A69-12621  
Observation of hyperfine level crossing in stimulated emission.  
07 p1156 A69-19398  
Strong mode coupling induced in a gas laser by an intracavity saturable absorbing medium.  
08 p1324 A69-20166  
Laser-induced line-narrowing effects in coupled Doppler-broadened transitions.  
09 p1519 A69-22282  
Accurate laser wavelength measurements in the infrared and far infrared using a Michelson interferometer.  
17 p3006 A69-33405  
Extension of absolute frequency measurements to the 84 mu range.  
17 p2982 A69-33406  
Pressure dependence of the decay rate for impinged 4.35-mu spontaneous emission in CO sub 2.  
18 p3179 A69-35478
- JAVOY, M.**  
Study of the distribution and abundance of transition elements in the earth's crust compared to the rare earths /Etude de la distribution et de l'abondance des elements de transition dans l'ecorce terrestre, comparee a celles des terres rares/.  
08 p1310 A69-20943
- JAWA, M. S.**  
Torsional flow of certain anisotropic fluids.  
12 p2062 A69-26277
- JAYAKARAN ISAAC, R.**  
Study of combined effect of Kelvin-Helmholtz instability and gravitational instability on a selfgravitating fluid layer.  
07 p1182 A69-19276
- JAYAKARAN, ISAAC, R.**  
Stability of a cold plasma traversed by two electron beams in the presence of an external magnetic field.  
07 p1195 A69-19465
- JAYANTHI, U. B.**  
Time variation of the optical intensity of the Sco X-1 X-ray source.  
16 p2852 A69-32805  
X-ray flux from Centaurus X-2 in the energy range 2-20 kev.  
22 p4007 A69-40773  
Energy spectrum and time variation of SCO X-1.  
22 p4030 A69-40774
- JAYE, F. C.**  
Analog simulation of a chemically reacting system. [WSCI PAPER 68-49]  
07 p1073 A69-18318  
The thermal dissociation of chlorine- trifluoride behind incident shock waves.  
07 p1202 A69-18355  
[WSCI PAPER 68-40]  
The thermal dissociation of chlorine trifluoride behind incident shock waves.  
21 p3670 A69-39739
- JAYNES, D. N.**  
Hydrocarbon gas absorption by a HeNe laser beam at a 3.39-mu wavelength.  
23 p4174 A69-42192
- JAYNES, E. T.**  
Radiative effects in semiclassical theory.  
21 p3769 A69-38578
- JAZWINSKI, A. H.**  
Limited memory optimal filtering.  
06 p0905 A69-17946  
Adaptive filtering.  
12 p2045 A69-26059  
Optimization of stochastic processes - Midcourse guidance.  
18 p3109 A69-34660  
Adaptive filtering in satellite orbit estimation.  
18 p3110 A69-34676  
Adaptive filtering.  
23 p4146 A69-42446
- JEAN-LOUIS, A. M.**  
InSb sub 1-x Bi sub x alloy, a small band gap semiconductor.  
19 p3390 A69-36552
- JEAN, A. G.**  
Multisensor detection of ionospheric phenomena.  
14 p2448 A69-29526
- JEAN, B.**  
Radiation from hypervelocity impact generated plasma.  
[AIAA PAPER 69-364]  
13 p2313 A69-28296
- JEANNIN, G.**  
Influence of the oxidizer concentration in the hypergolic ignition of the nitric acid paraphenylene-diamine system /Influence de la concentration du comburant dans l'inflammation hypergolique du systeme acide nitrique- paraphenylenediamine/.  
15 p2561 A69-30185
- JEANNIOT, P. J.**  
A maintenance simulation for complex assemblies.  
09 p1503 A69-21802
- JEANS, M. A.**  
Remotely fluid-operated flow control valve.  
11 p1827 A69-25646
- JEDWAB, J.**  
Morphological variations of the magnetite of carbonaceous meteorites of Alais, Ivuna and Orgueil /Variations morphologiques de la magnetite des meteorites carbonées d'Alais, Ivuna et Orgueil/.  
08 p1406 A69-20932
- JEFFERIES, J. T.**  
Studies in spectral line formation. I, II.  
01 p0124 A69-10962  
Studies in spectral line formation. III - Non-linear multi-level atom problems.  
12 p2133 A69-26967  
Forbidden lines in the solar corona - Introductory report.  
19 p3422 A69-36216  
Emission line spectrum of the solar corona.  
19 p3422 A69-36217
- JEFFERIS, A. K.**  
Ultimate communications capacity of the geostationary-satellite orbit.  
21 p3673 A69-38757  
Satellite television distribution - Service from geostationary satellites to community antennas in multiple-coverage areas.  
22 p3902 A69-41252
- JEFFERS, W. Q.**  
Relaxation phenomena in the water vapor laser.  
05 p0771 A69-15810  
Correlation effects in H sub 2 O and D sub 2 O laser transitions.  
09 p1515 A69-21349
- JEFFERY, C. B.**  
Vertical navigation requirements for S.S.T.  
02 p0277 A69-11590
- JEFFERY, M. H.**  
Construction and performance of the 150-ft NRC antenna at Algonquin Radio Observatory, Ontario, Canada.  
23 p4149 A69-42134
- JEFFES, J. H. E.**  
The production of refractory crystals by vapour transport reactions.  
03 p0453 A69-13619
- JEFFRESS, L. A.**  
Mathematical and electrical models of auditory detection.  
02 p1201 A69-11821
- JEFFREY, A.**  
Liapunov's direct method in stability problems for semilinear and quasilinear hyperbolic systems.  
09 p1534 A69-22799  
Formation and decay of electromagnetic shock waves.  
21 p3697 A69-39670
- JEFFRIES, A. J.**  
The suspected phase anomaly and atmosphere of Mercury.  
17 p3034 A69-33414
- JEFFS, A. T.**  
A high-pressure transfer system for liquid hydrogen.  
01 p0013 A69-11145
- JEGO, J. M.**  
Production of a giant pulse by coherent pumping /Production d'une impulsion geante a l'aide d'un pompage coherent/.  
07 p1146 A69-18486
- JEGO, J.-M.**  
Production of a giant pulse with the aid of coherent pumping /Production d'une impulsion geante a l'aide d'un pompage coherent/.  
07 p1156 A69-19333
- JEGO, M. J.**  
Generation of a monomode giant pulse laser by coherent pumping.  
16 p2797 A69-32018
- JEHN, H.**  
Solubility of nitrogen in tungsten at high temperatures /Zur Hochtemperaturloeslichkeit von Stickstoff in Wolfram/.  
07 p1168 A69-19602
- JEITSCHKO, W.**  
V and E phases in ternary systems with transition metals and silicon or germanium.  
10 p1708 A69-22992
- JELINEK, F.**  
Probabilistic Information Theory- Discrete and Memoryless Models.  
01 p0037 A69-11030  
An upper bound on moments of sequential decoding effort.  
09 p1471 A69-21318  
Tree encoding of memoryless time-discrete sources with a fidelity criterion.  
24 p4284 A69-42720
- JELISJEJEW, P. G.**  
Properties of emission band of a semiconductor laser /O wlasnosciach pasma promieniowania lasera polprzewodnikowego/.  
17 p2984 A69-34161
- JELLEY, J. V.**  
Search for high energy gamma-rays from CP 1133.  
02 p0307 A69-11823
- JELLISON, J.**  
Sliding friction of copper alloys in vacuum.  
[ASLE PAPER 68-LC-5]  
15 p2622 A69-30610
- JELLUM, E.**  
Alcoholysis of the Merrifield-type peptide - Polymer bond with an anion exchange resin.  
24 p4279 A69-42713
- JELLY, D. H.**  
The high-latitude ionosphere.  
20 p3530 A69-37868
- JEN, T.-S.**  
A new spectroscopic method of high pressure arc diagnostics.  
12 p2094 A69-26968
- JENDO, S.**  
Optimum design of surface axis-symmetric suspended structures - Application of the minimum weight criterion.  
18 p3212 A69-34354
- JENG, D. R.**  
Unsteady MHD flow in arbitrary ducts by point-matching method.  
24 p4359 A69-43678
- JENIN, P.**  
Direct electrochemical conversion of the energy of a radioactive element /Conversion electrochimique directe de l'energie d'un radioelement/.  
08 p1269 A69-21054  
Direct electrochemical conversion of the energy of a radioelement /Conversion electrochimique directe de l'energie d'un radioelement/.  
16 p2740 A69-32425
- JENKINS, C. W.**  
Impingement cooling of concave surfaces with lines of circular air jets.  
[ASME PAPER 68-WA/GT-1]  
05 p0848 A69-16137
- JENKINS, D. R.**  
Photometric methods for determining radical concentrations in hot gases in nozzles.  
09 p1496 A69-21952
- JENKINS, E. B.**  
Rocket observations of Orion stars with an all-reflective ultraviolet spectrograph.  
02 p0327 A69-12712  
Far-ultraviolet spectra of zeta Puppis and gamma super 2 Velorum.  
10 p1788 A69-24120  
Rocket spectra of Venus and Jupiter from 2000 to 3000 angstroms.  
22 p4028 A69-40661



## JENKINS, G. M.

Stacking-faults in tellurium-doped gallium arsenide.  
03 p0486 A69-13614

## JENKINS, H. H.

Error reduction in HF loop DF systems.  
14 p2413 A69-29493

## JENKINS, J. L., JR.

Flight investigation of the wing-rotor lift-sharing characteristics of a hingeless rotor compound helicopter.  
14 p2393 A69-29702

## JENKINS, L. E.

Flight failure analysis.  
18 p3145 A69-34502

## JENKINS, R. E.

A satellite observation of the relativistic Doppler shift.  
23 p4126 A69-42389

## JENKINS, R. M.

A unified theory of particle growth in rocket chambers and nozzles.  
[AIAA PAPER 69-541] 16 p2844 A69-32724

## JENKINS, R. W.

Cosmic ray neutron monitor for OGO-F.  
19 p3314 A69-36678

## JENKS, C. W.

Seven stages in the development of space law.  
20 p3638 A69-37128

## JENNE, R. L.

The half-yearly oscillations in the tropics of the Southern Hemisphere.  
12 p2064 A69-26011

## JENNINGS, A.

A sparse matrix scheme for the computer analysis of structures.  
07 p1089 A69-19723

## JENNINGS, D. M.

UHF radio pulses from the zenith associated with extensive air showers.  
21 p3792 A69-39613

## JENNINGS, H. A.

Reliability and maintainability analysis of a two-year manned spacecraft mission.  
[AIAA PAPER 68-1059] 12 p2174 A69-26797

## JENNINGS, M. C.

Observations of an unusual cold cloud in the Galaxy.  
22 p4025 A69-40644

## JENNINGS, V. A.

Performance of a bandwidth limited PCM/PSK/PM telemetry system.  
07 p1081 A69-19098

## JENNY, F. F.

An advanced computer subsystem for tactical avionics use.  
17 p2933 A69-34059

## JENSCH, A.

Dome-movement control of the 2 metre-pcc telescope-installations.  
15 p2588 A69-30441

## JENSEN, A. O.

Arc-mode thermionic converter performance - Measurements and interpretation.  
14 p2398 A69-29177

## JENSEN, D. E.

Determination of positive ion concentrations in high-velocity laminar flames.  
13 p2380 A69-28463

## JENSEN, D. P.

An ice detection and control system for fixed and rotary wing aircraft.  
01 p0083 A69-11046

## JENSEN, R. C.

Charge-exchange excitation and CW oscillation in the zinc-ion laser.  
21 p3735 A69-38598

## JENSEN, V. O.

Continuous supersonic plasma wind tunnel.  
15 p2589 A69-30909

## JENSSEN, D.

The accuracy of finite difference analogues of simple differential operators.  
19 p3365 A69-36510

## JEONG, T. H.

Holography comes out of the cellar.  
05 p0761 A69-15774

## JEPPESEN, P.

High power hybrid mode oscillations in GaAs.  
07 p1196 A69-18444

## JEPSSON, R. W.

Numerical solutions to free-surface axisymmetric flows.  
09 p1481 A69-21920

## JEPSSON, B.

High power hybrid mode oscillations in GaAs.  
07 p1196 A69-18444

Pulse power from LSA devices at centimeter through millimeter wavelengths.  
07 p1097 A69-18445

Solution regrowth epitaxial gallium arsenide for Gunn, hybrid and LSA devices.  
07 p1197 A69-18451

## JERGER, E. W.

Condensing injector experiments and analysis of performance with supersonic inlet vapour.  
13 p2372 A69-27486

## JERIE, H. G.

Techniques, evaluation and applications of auxiliary data in aerial triangulation.  
22 p3944 A69-40042

## JERVOLINO, G.

Considerations on the different fatigue behaviors of maraging and conventional steels in rotational bending /Considerazioni sul differente comportamento alla fatica a flessione rotante degli acciai maraging e di quelli tradizionali/.  
24 p4335 A69-43802

## JERZYKIEWICZ, M.

Further evidence of the extinction of starlight by the interplanetary medium.  
10 p1775 A69-23198

## JESKE, H.

An investigation of the tropospheric fine scale properties using radio, radar and direct methods.  
22 p3941 A69-40914

## JESPERS, P.

Approximate expressions for non conventional transistor configurations.  
02 p0213 A69-11532

## JESPERS, P. G. A.

Charge pumping in MOS devices.  
15 p2573 A69-30033

## JESPERSEN, M.

Electron and positive ion density measurements during conditions of auroral absorption.  
03 p0421 A69-13327

## JESS, J.

Interpolation filters with restricted transmission zeros in the transmission function /Interpolationsfilter mit beschraenkten Sperrstellen des Uebertragungsfaktors/.  
05 p0735 A69-16617

## JESSEN, R. T., JR.

The procurement of the Boeing A-7000 /7 module/ solar simulator.  
15 p2588 A69-30403

## JESTER, A.

An in-core thermionic reactor for powering space vehicles /Der Incore-Thermionik-Reaktor zur Energieversorgung von Raumflugkoerpern/.  
02 p0279 A69-12666

Laboratory life test and inpile irradiation studies of cylindrical thermionic converters.  
14 p2399 A69-29199

## JESTER, J. L.

Characteristics of a finite-length MHD traveling-wave cylindrical accelerator or generator.  
[AIAA PAPER 67-714] 16 p2736 A69-32152

## JETHON, Z.

Specific problems of physical training of cosmonauts.  
15 p2560 A69-31460

## JETTE, A. N.

Theory of polarization of molecular line radiation excited by electron impact.  
06 p0961 A69-17140

## JEWITT, D. E.

Incidence and management of supraventricular arrhythmias after acute myocardial infarction.  
24 p4262 A69-42729

## JEX, H. R.

A manual control-display theory applied to instrument landings of a jet transport.  
10 p1650 A69-23877

## JEZEK, J.

Electron-microscope study of carbide precipitation in stainless steels /Elektronenmikroskopische Untersuchung der Carbidausscheidungen in korrosionsbestaendigen Staehlen/.  
10 p1713 A69-23820

Contribution to the problem of the heat resistance of low-alloy CrMoWV steels. II - Effect of niobium, cerium, zirconium, and boron on the heat resistance of steels of the type CSN 41 5335 /Prispevek k podstate zarupevnosti nizkokolegovanych CrMoWV oceli. II - Vliv obsahu niobu, ceru, zirkonu a boru na zarupevnost oceli typu CSN 41 5335/.  
22 p3972 A69-41079

Contribution to the theory of the heat resistance of low-alloy CrMoWV steels. I - Influence of the vanadium content on the heat resistance in steels of the type CSN 41 5335 /Prispevek k podstate zarupevnosti nizkokolegovanych CrMoWV oceli. I - Vliv obsahu vanadu na zarupevnost oceli typu CSN 41 5335/.  
22 p3972 A69-41083

## JEZEWSKI, D. J.

A closed-form solution for minimum-fuel, constant thrust trajectories.  
[AIAA PAPER 69-905] 21 p3806 A69-39337

## JHA, S. S.

Nonlinear electromagnetic response of Bloch electrons in a magnetic field. II - Two-band model for semiconductors.  
03 p0487 A69-13753

Nonlinear optical coefficients in group IV and III-V semiconductors.  
[IEEE PAPER V-7] 05 p0776 A69-16329

## JIEWERTZ, B.

Data processor for the Swedish satellite project.  
20 p3501 A69-37387

## JIMENEZ, J.

Directions of approach of cosmic rays for high latitude stations.  
18 p3187 A69-34940

## JIMMA, T.

Improvement of moire and grid methods of plastic strain analysis and their application to extrusion.  
13 p2359 A69-27256

## JINDAL, P. C.

On the hardness and recrystallized grain size of alpha titanium.  
06 p0943 A69-17235

## JINDOH, H.

Experimental investigation of the propagation of ELF atmospherics.  
23 p4114 A69-41362

## JIRACEK, G. R.

Some factors affecting electromagnetic detection of lunar subsurface water.  
11 p1958 A69-24693

## JIRAUCH, D. H.

A control module for real-time automated checkout.  
11 p1843 A69-25072

## JIRBERG, R. J.

Automatic distortionless control of magnetic field modulation.  
06 p0897 A69-17708

Variable-voltage, direct-current power supplies for energizing cryogenically cooled and superconductive electromagnets.  
12 p2017 A69-26498

Flux flow in materials where kappa approximates 1.  
17 p3016 A69-33754

## JIRGAL, G. H., JR.

Elastic deformation and the coefficient of friction.  
19 p3329 A69-36494

## JIRICEK, F.

Estimation of electron density profile in the magnetosphere using mid-latitude whistler observations.  
15 p2677 A69-31357

## JIRINA, M.

A method of analyzing electrical circuits suitable for solution by computer /Metoda analyzy elektrickeho obvodu vhodna k reseni na pocitaci/.  
05 p0737 A69-15766

## JIROUSEK, J.

A method of equilibrating loads and its application to the solution of boundary-value problems of the theory of elasticity /Metoda vyrovnavacich bremen a její pouziti pri reseni okrajovych uloh teorie pruznosti/.  
22 p4046 A69-40967

Solution of the bending of cylindrical shells by the method of cylindrical strips /reseni ohybu valcovych skorepin metodou valcovych pasu/.  
22 p4046 A69-40968

- Stiffness matrix of rectangular curved element and the finite element analysis of cylindrical shells.  
22 p4046 A69-40969
- JISCHKE, M. C.**  
Application of the method of parametric differentiation to radiative gasdynamics.  
[AIAA PAPER 68-668] 23 p4059 A69-41892
- JIT SINGH, S.**  
On the summation of certain Legendre series.  
01 p0171 A69-11072
- JIUSTO, J. E.**  
Fog modification with giant hygroscopic nuclei.  
01 p0111 A69-10696
- JOACHIM, R. J.**  
Thermal protection techniques for electronics of air-launched missiles.  
22 p4049 A69-39943
- JOATTON, R.**  
Thermal protection by ablation - Physical and chemical phenomena - Corresponding methods of calculation /La protection thermique par ablation - Phenomenes physiques chimiques - Methodes de calcul correspondantes/.  
02 p0351 A69-11890
- JOB, F.**  
Orbit of the visual binary star ADS 12447 /Orbita della stella doppia visuale ADS 12447/.  
20 p3598 A69-37466  
Study of the visual binaries ADS 1223, Don 91, and ADS 9756 /Studio delle stelle doppie visuali ADS 1223, Don 91, ADS 9756/.  
20 p3600 A69-37480
- JOCHAUD DU PLESSIX, M.**  
Nickel-cadmium and silver-cadmium storage batteries for space applications /Batteries d'accumulateurs nickel-cadmium et argent-cadmium pour applications spatiales/.  
16 p2740 A69-32422
- JOCKERS, K.**  
A two-component model of the solar wind with collisionless ions.  
06 p0986 A69-16983
- JOENSSON, F.**  
Essential hypertension in airline pilots.  
06 p0875 A69-17850
- JOFFRE, B.**  
International co-operation on helicopter airworthiness requirements.  
13 p2202 A69-27837
- JOGA RAO, C. V.**  
General theory of vibrations of cylindrical tubes. I.  
01 p0164 A69-10065  
General theory of vibrations of cylindrical tubes. II - Uncoupled torsional vibrations of closed tubes.  
09 p1620 A69-22769  
General theory of vibrations of cylindrical tubes. III - Uncoupled flexural vibrations of closed tubes.  
15 p2703 A69-30210  
General theory of vibrations of cylindrical tubes. IV - Uncoupled torsional vibrations of open tubes.  
23 p4233 A69-42347  
General theory of vibrations of cylindrical tubes. V.  
23 p4233 A69-42350
- JOHANNES, R. P.**  
Aircraft performance benefits from modern control systems technology.  
[AIAA PAPER 69-767] 19 p3245 A69-35656
- JOHANSEN, CHR.**  
Problems of communication in interplanetary space /Probleme der Nachrichteuebertragung im interplanetaren Raum/.  
12 p2027 A69-25875
- JOHANSEN, S. H.**  
Endurance time in static work during partial curarization.  
22 p3890 A69-40213
- JOHANSON, R. A.**  
The facile isolation of a structural phospholipoprotein from *Hydrogenomonas facilis* and *Neurospora crassa*.  
22 p3871 A69-40049
- JOHANSSON, B. W.**  
Electrocardiographic changes in depressed metabolism.  
10 p1643 A69-23123
- JOHANSSON, K.**  
The open clusters NGC 2483 and NGC 2489.  
08 p1388 A69-20239
- JOHANSSON, R. B.**  
Penning discharge in a strongly inhomogeneous magnetic mirror field.  
01 p0133 A69-11218
- JOHN, F.**  
Refined interior shell equations.  
11 p1977 A69-24802
- JOHN, L. W.**  
Stress-induced desorption from aluminum, magnesium, and molybdenum.  
23 p4176 A69-41541
- JOHNS, D. J.**  
Temperature distributions and thermal stresses in bimetallic I-beam structures.  
06 p1024 A69-17610  
Effects of inplane and rotary inertia on the frequencies of eccentrically stiffened cylindrical shells.  
11 p1992 A69-25520
- JOHNS, K. A.**  
Energy flux from the 3 deg K radiation.  
04 p0649 A69-15150
- JOHNSON, A. C.**  
Computer correction of distortion in ATS-SSCC photographs.  
10 p1689 A69-22945
- JOHNSON, A. K.**  
Symmetric 3 sigma weight and C.G. program.  
[SAWE PAPER 734] 18 p3221 A69-34892
- JOHNSON, A. L.**  
Determination of surface structures using LEED and energy analysis of scattered electrons.  
09 p1554 A69-21340  
Model for the prediction of closed compartment fire propagation.  
[AIAA PAPER 69-618] 17 p3074 A69-33704
- JOHNSON, A. M.**  
Field experiments - How they help solve operational problems and validate models.  
[AAS PAPER 69-478] 24 p4296 A69-42884
- JOHNSON, A. W.**  
Weather satellites. II.  
04 p0626 A69-14690
- JOHNSON, B. A.**  
Dynamic infrared detection of fatigue cracks.  
15 p2631 A69-31505
- JOHNSON, B. L.**  
Stability analysis of nonlinear control systems on the digital computer.  
[IS-ERI-71] 24 p4285 A69-42984
- JOHNSON, B. R.**  
Role of potential curve crossing in subexcitation molecular collisions - Exact /two-state/ computations vs decoupling approximations for resonance positions.  
12 p2131 A69-25983
- JOHNSON, B. V.**  
Experimental study of one- and two-component coaxial flow jets in short chambers.  
[AIChE PAPER 25B] 04 p0587 A69-14509
- JOHNSON, C. B.**  
The RCA developmental high-resolution 4.5-inch image-intensifier/return-beam vidicon and camera system.  
17 p2976 A69-34063
- JOHNSON, C. C.**  
Investigation of synchronous-wave R-F to D-C conversion.  
02 p0212 A69-12816
- JOHNSON, C. D.**  
Optimal control of the linear regulator with constant disturbances.  
02 p0225 A69-11970  
Optimization of a certain quality of complete controllability and observability for linear dynamical systems.  
[ASME PAPER 68-WA/AUT-4] 05 p0738 A69-16182  
Invariant subspaces and the controllability and observability of linear dynamical systems.  
05 p0740 A69-16597
- JOHNSON, C. E.**  
Development of electric power supplies for electric propulsion.  
[AIAA PAPER 69-826] 16 p2741 A69-32709
- JOHNSON, C. H.**  
Stochastic crew motion modeling.  
[AIAA PAPER 69-1006] 22 p3921 A69-40380
- JOHNSON, C. J.**  
A pulsed Brewster window water vapor laser operating between 20 and 120 mu.  
05 p0776 A69-16334  
Measurement of far-infrared laser power.  
09 p1515 A69-21424
- JOHNSON, C. L.**  
Some development aspects of the YF-12A interceptor aircraft.  
[AIAA PAPER 69-757] 19 p3245 A69-35652
- JOHNSON, C. S.**  
Nonlinear effects in telemetry transmitter-receiver RF links.  
19 p3270 A69-36239
- JOHNSON, C. V., III**  
Optical and mechanical properties of birefringent polymers.  
15 p2642 A69-30678
- JOHNSON, C. Y.**  
Structure and composition above White Sands, New Mexico.  
01 p0071 A69-11166
- JOHNSON, D. A.**  
Freezing and shattering of supercooled water drops.  
02 p0275 A69-12693
- JOHNSON, D. A. H.**  
Cross-correlation techniques and their application to communication channel evaluation.  
16 p2750 A69-31757
- JOHNSON, D. B.**  
On a restricted problem of two rigid spheroids.  
16 p2863 A69-32402
- JOHNSON, D. E.**  
An efficient higher-order difference method for two-dimensional structures.  
13 p2365 A69-28239  
Stress-wave propagation in a class of nonhomogeneous elastic media.  
24 p4403 A69-43574
- JOHNSON, D. F.**  
A precision autocollimating solar sensor.  
[AIAA PAPER 69-858] 21 p3762 A69-39386
- JOHNSON, D. H.**  
Multifluid theory for stagnation flow of partially ionized plasma.  
08 p1369 A69-20817
- JOHNSON, D. J.**  
The fine structure of graphitized fibres.  
16 p2803 A69-32572  
Synchronous satellites as part of a complex tracking network.  
[AIAA PAPER 68-449] 21 p3674 A69-39019  
An application of a colored noise Kalman filter to a radio-guided ascent mission.  
[AIAA PAPER 69-840] 21 p3686 A69-39371
- JOHNSON, D. L.**  
Application of ellipsometry to oxidation studies of binary titanium-aluminum alloys.  
24 p4316 A69-43322
- JOHNSON, D. R.**  
The contribution of infrared cooling to the vertical motion field and its implication in atmospheric energetics.  
17 p2962 A69-33689  
Procedure for calculating the loudness of sonic bangs.  
23 p4063 A69-42454
- JOHNSON, D. S.**  
Operational weather satellites and their implications.  
[UN PAPER 68-95823] 01 p0108 A69-10473
- JOHNSON, D. W.**  
Development of recovery systems for high-altitude sounding rockets.  
[AIAA PAPER 68-959] 21 p3820 A69-39227
- JOHNSON, E.**  
Solution regrowth epitaxial gallium arsenide for Gunn, hybrid and LSA devices.  
07 p1197 A69-18451
- JOHNSON, E. G.**  
Future system applications for fluidics.  
17 p2904 A69-34070
- JOHNSON, E. J.**  
Characterization of ribulose diphosphate carboxylase and phosphoribulokinase from *Thiobacillus thioparus* and *Thiobacillus neapolitanus*.  
02 p0199 A69-11866



- Control of ATP-dependent CO sub 2 fixation in extracts of *Hydrogenomonas facilis* - NADH regulation of phosphoribulokinase. 15 p2554 A69-30036
- JOHNSON, E. M.**  
Entrainment of second sound in steady-state counter-flowing normal and superfluid helium II. 13 p2297 A69-27460
- JOHNSON, E. T.**  
Telemetry system performance tests at the Eastern Test Range. 11 p1840 A69-25300
- JOHNSON, E. W.**  
Fully austenitic stainless steel welding electrodes for high-temperature applications. 04 p0607 A69-15220
- JOHNSON, F. O.**  
Interference emission filtering in high power microwave transmitters. 23 p4142 A69-42235
- JOHNSON, F. S.**  
Mariner IV and the atmosphere of Mars. 02 p0320 A69-12113  
Lateral transport in planetary exospheres. 03 p0515 A69-14010  
Origin of planetary atmospheres. 17 p3033 A69-33369  
Composition changes in the lower thermosphere. 21 p3704 A69-38366  
Induced magnetosphere of Venus. 21 p3794 A69-38381
- JOHNSON, F. T.**  
An approximate technique for predicting thrust-limited performance. 09 p1585 A69-21211  
Approximate finite-thrust trajectory optimization. [AAS PAPER 68-080] 20 p3595 A69-37170
- JOHNSON, G.**  
Performance of epoxy molding compounds on DIP integrated circuits. 19 p3280 A69-35546
- JOHNSON, G. E.**  
Retrodirective antenna array system. 02 p0223 A69-12813
- JOHNSON, G. W.**  
Evaluating dispersion in gel permeation chromatography. I. 04 p0555 A69-14885  
A deterministic theory of estimation and control. 24 p4291 A69-43276
- JOHNSON, H. E.**  
Production and loss of He super 3 in the earth's atmosphere. 14 p2435 A69-28965
- JOHNSON, H. H.**  
Kinetics of sub-critical crack growth in high strength materials. 03 p0449 A69-13874
- JOHNSON, H. L.**  
Eight-color narrow-band photometry of 985 bright stars. 02 p0313 A69-11487  
Stellar spectroscopy, 1.2 mu to 2.6 mu. 04 p0655 A69-14667  
The infrared spectrum of the NML Cygnus object. 09 p1602 A69-22229  
Thirteen-color narrow-band photometry of one thousand bright stars. 17 p3038 A69-33692  
The infrared spectrum of the NML Cygnus object. 21 p3800 A69-38678
- JOHNSON, H. M.**  
Narrow-band and UVB photometry of GX3 plus 1 and two Wolf-Rayet stars. 02 p0325 A69-12596  
Narrow-band photometry of five combination-variable stars and the X-ray source CYG X-2. 09 p1591 A69-21451  
Physical characteristics of Sco X-1. III. 09 p1601 A69-22213
- JOHNSON, H. R.**  
Chromospheres and polarization in late-type stars. 13 p2340 A69-27579  
Neutral helium lines and departures from LTE in hot stars. 21 p3801 A69-38761
- JOHNSON, H. T.**  
A turbine-speed fuel pump for small gas-turbine engines. [ASME PAPER 69-GT-45] 09 p1513 A69-22485
- JOHNSON, I. L., JR.**  
Impulsive orbit transfer optimization by an accelerated gradient method. 19 p3402 A69-35956
- JOHNSON, J. C.**  
A technique for correcting coefficient quantization errors in hybrid control systems. 18 p3111 A69-34687  
A technique for optimizing the selection of quantized coefficients in digital controllers. 24 p4292 A69-43283  
On the correction of coefficient quantization errors in hybrid control systems. 24 p4293 A69-43302
- JOHNSON, J. E.**  
Multi-junction solar cells. 19 p3251 A69-35690
- JOHNSON, J. H.**  
The formation of chlorine pentafluoride in an electrochemical cell. I - From chlorine trifluoride. 13 p2217 A69-28134  
The formation of chlorine pentafluoride in an electrochemical cell. II - From chlorine. 13 p2217 A69-28135
- JOHNSON, J. L.**  
Geodesic acoustic waves in hydromagnetic systems. 03 p0475 A69-13147  
Determination of stellarator equilibria using guiding-center equations. 09 p1552 A69-22044  
Classical diffusion of a stationary toroidal plasma. 11 p1925 A69-24312  
Global solutions for an extended class of hyperbolic systems of conservation laws. 11 p1909 A69-25163  
Application of the energy principle to Astron-type and other axisymmetric devices. 16 p2821 A69-32035
- JOHNSON, J. R.**  
Observation of phase pulsations and combination tones in the output of a CW gas laser. 12 p2108 A69-26635
- JOHNSON, K.**  
A solution of the EMC problem. 17 p2947 A69-34136
- JOHNSON, K. A.**  
International Metallographic Society, Annual Technical Meeting, 1st, Denver, Colo., November 11-13, 1968, Proceedings. 13 p2280 A69-28154
- JOHNSON, K. L.**  
Strength of surfaces in rolling contact. 02 p0339 A69-11989
- JOHNSON, K. M.**  
X-band integrated circuit mixer with reactively terminated image. 01 p0039 A69-10189
- JOHNSON, K. P.**  
Launch and mission influences on space propulsion system design. 12 p2148 A69-26834  
Nonintegral burn of nuclear rockets - An approach to low-cost space exploration. [AIAA PAPER 68-589] 21 p3768 A69-39026
- JOHNSON, K. R.**  
Radar calibration test satellite. 20 p3617 A69-37714
- JOHNSON, K. W.**  
Temperature and height variability in the middle and upper stratosphere during 1964-1966 as determined from constant pressure charts. 13 p2290 A69-27637  
Proposed indices characterizing stratospheric circulation and temperature fields. 22 p3977 A69-39929
- JOHNSON, L. C.**  
Plasma diagnostics with ionized barium and tunable dye lasers. 22 p3962 A69-40532
- JOHNSON, L. F.**  
Coherent emission from rare earth ions in electrooptic crystals. 09 p1514 A69-21339
- JOHNSON, M. A.**  
Phased-array beam steering by multiplex sampling. 04 p0570 A69-14307
- JOHNSON, M. K.**  
Characterization of ribulose diphosphate carboxylase and phosphoribulokinase from *Thiobacillus thioparus* and *Thiobacillus neapolitanus*. 02 p0199 A69-11866  
Control of ATP-dependent CO sub 2 fixation in extracts of *Hydrogenomonas facilis* - NADH regulation of phosphoribulokinase. 15 p2554 A69-30036
- JOHNSON, P.**  
Nuclear rocket applications - Mission and launch-vehicle versatility. [AIAA PAPER 69-555] 16 p2867 A69-31849
- JOHNSON, P. C.**  
Comparative evaluation of the thoracic impedance and isotope dilution methods for measuring cardiac output. 14 p2408 A69-29304  
Physiological response to steady state hypoxia. 23 p4085 A69-41673
- JOHNSON, R. A.**  
25 kwe reactor-thermoelectric power system for manned orbiting space stations. 23 p4187 A69-42256
- JOHNSON, R. C.**  
Geodesic lenses for radar antennas. 03 p0402 A69-13184  
Venturi meter with separable diffuser. [ASME PAPER 68-WA/FM-2] 05 p0763 A69-16135  
The development of compact antenna range techniques. 11 p1852 A69-25314  
Venturi meter with separable diffuser. [ASME PAPER 68-WA/FM-2] 14 p2447 A69-29447
- JOHNSON, R. D.**  
Extraterrestrial biology - Prospects and problems in the early 1970's. [AIAA PAPER 68-1122] 03 p0375 A69-13700
- JOHNSON, R. E.**  
Antidiuretic hormone and human eccrine sweating. 23 p4077 A69-41311
- JOHNSON, R. G.**  
Satellite measurements on auroral particle fluxes. 21 p3709 A69-38500  
Satellite observations of the average properties of auroral particle precipitations - Latitudinal variations. 22 p3938 A69-40502
- JOHNSON, R. H.**  
Radome performance for G.W. systems. 07 p1112 A69-19540  
Analysis of an optical motor system energized with a laser. 09 p1442 A69-22457
- JOHNSON, R. I.**  
Boundary layer acoustic measurements in transitional and turbulent flow at M infinity equals 4.0. [AIAA PAPER 69-344] 13 p2249 A69-28279
- JOHNSON, R. L.**  
A thermal model of wire explosions in methane. 01 p0119 A69-10674  
Preliminary evaluation of greases to 600 F and solid lubricants to 1500 F in ball bearings. [ASLE PREPRINT 68AM 7C-2] 01 p0087 A69-10912  
Shaft face seal with self-acting lift augmentation for advanced gas turbine engines. [ASLE FICFS PREPRINT 27] 15 p2621 A69-30492  
On the dynamics of lifting rotors with thrust or tilting moment feedback controls. [AHS PAPER 340] 17 p2899 A69-33510  
Energy dissipation in an oscillating sphere filled with a viscous fluid. 24 p4305 A69-43587
- JOHNSON, R. N.**  
A rapid and simple method for the fabrication of arrays of recording electrodes. 02 p0204 A69-12601
- JOHNSON, R. R.**  
Influence of the self-induced magnetic field on the stability of a plasma column in a longitudinal magnetic field. 24 p4356 A69-43366

- JOHNSON, R. S.**  
Adaptive detection mode with threshold control as a function of spatially sampled clutter-level estimates.  
01 p0026 A69-10178  
A digital simulation of a carrier demodulator/tracking phase-locked loop in a noisy, multipath environment.  
03 p0390 A69-13204  
A digital simulation of a phased locked receiver in a fading multipath environment.  
11 p1839 A69-25298  
A computation of radar SEP and CEP.  
13 p2221 A69-27963
- JOHNSON, R. T.**  
A "fluidic transmitter."  
24 p4256 A69-43300
- JOHNSON, R. T., JR.**  
Resistive properties of indium and indium-gallium contacts to CdS.  
03 p0487 A69-13638  
Radioactive decay and associated electrical changes in fast-neutron-irradiated CdS.  
22 p3993 A69-40728
- JOHNSON, R. W.**  
Water electrolysis - Prospect for the future.  
03 p0379 A69-12987  
Computerized design of optimal direct lift controller.  
12 p2014 A69-26765  
The lunar colony.  
13 p2240 A69-27906  
Direct lift control for approach and landing.  
17 p2902 A69-34027
- JOHNSON, S. C.**  
"Mental holography" - Stereograms portraying ambiguously perceivable surfaces.  
04 p0603 A69-15445
- JOHNSON, S. G.**  
Solar absorption photometry and the determination of atmospheric composition.  
12 p2065 A69-26106
- JOHNSON, S. L.**  
Narrow-band and intermediate-band photometry of globular star clusters.  
24 p4387 A69-43352
- JOHNSON, S. W.**  
Analysis of products evolved from selected thermal control coating materials during ultraviolet radiation in vacuum.  
[AIAA PAPER 69-640] 17 p2992 A69-33289  
Simulating the effects of gravitational field and atmosphere on behavior of granular media.  
[AIAA PAPER 69-1009] 22 p3921 A69-40382
- JOHNSON, T. S.**  
Laser beam directed at the lunar retro-reflector array - Observations of the first returns.  
24 p4384 A69-43197
- JOHNSON, T. V.**  
Differences between proposed Apollo sites. II - Visible and infrared reflectivity evidence.  
21 p3815 A69-39586  
Relative spectral reflectivity 0.4-1  $\mu$  of selected areas of the lunar surface.  
21 p3815 A69-39588
- JOHNSON, W.**  
Discussion of the paper by C. F. Niehanck "A comparison of dynamically scaled model rotor test data with discrete azimuth aeroelastic stability theory."  
[AHS PAPER 341A] 17 p3059 A69-33505  
The effect of dynamic stall on the response and air-loading of helicopter rotor blades.  
20 p3463 A69-37809
- JOHNSON, W. A.**  
Performance of a 3.3-mm radiometer.  
02 p0220 A69-12433
- JOHNSON, W. B.**  
Frequency shifts of the Lamb dip minimum in the helium-neon laser.  
14 p2457 A69-28929
- JOHNSON, W. C.**  
Observations of lower hybrid resonance phenomena on the OGO 2 spacecraft.  
05 p0754 A69-16257
- JOHNSON, W. E.**  
Oblique impact calculations using a 3D Eulerian code.  
[AIAA PAPER 69-353] 13 p2365 A69-28286
- JOHNSON, W. J.**  
Flight simulators and airline pilot training.  
23 p4112 A69-42366
- JOHNSON, W. M.**  
Aircraft accident investigation in Canada.  
13 p2201 A69-27540
- JOHNSON, W. P.**  
Elastomers and coatings for extreme environments - Current and future.  
19 p3357 A69-35586
- JOHNSON, W. S.**  
A mathematical model for the prediction of the induced flow in a pulsejet ejector with experimental verification.  
[ASME PAPER 68-WA/FE-33] 05 p0812 A69-16106
- JOHNSTON, A. H.**  
Effect of temperature on microcircuit radiation response.  
06 p0977 A69-16881  
Models for predicting transient radiation responses in microcircuits.  
06 p0977 A69-16887
- JOHNSTON, A. M.**  
Total in-flight simulation - A major resource for air transport safety.  
15 p2558 A69-30453
- JOHNSTON, B. M.**  
Uncoupled dynamic thermal stresses in infinite flat plates with instantaneous and transient internal heating.  
15 p2709 A69-30669
- JOHNSTON, D. M.**  
Effectiveness of filters in improving air-to-ground target identification performance on a television display.  
06 p0887 A69-17210
- JOHNSTON, J. P.**  
Effects of nonuniform inlet velocity profiles on flow regimes and performance in two-dimensional diffusers.  
[ASME PAPER 68-WA/FE-25] 05 p0698 A69-16100
- JOHNSTON, J. R.**  
Effect of temperature and pressure on cavitation damage to a cobalt base alloy in sodium.  
18 p3157 A69-35184
- JOHNSTON, P. A.**  
A solid state X-ray fluorescence analyzer for use in hostile environments.  
[IEEE PAPER 3B-9] 07 p1135 A69-19201
- JOHNSTON, R. A.**  
Acoustic and internal damping in uniform beams.  
20 p3620 A69-37062
- JOHNSTON, R. H.**  
Optimised frequency multipliers using an ideal step-recovery diode without idlers.  
12 p2039 A69-26378
- JOHNSTON, T. L.**  
On the temperature dependence of the flow stress of nickel-base alloys.  
21 p3744 A69-38738
- JOHNSTON, T. W.**  
Plane-wave dispersion in gyrotropic media.  
21 p3675 A69-39285
- JOHNSTON, W. C.**  
Mechanical properties of unidirectionally solidified Ni-Cr eutectic.  
19 p3343 A69-35921
- JOHNSTON, W. M.**  
Passenger transport at low supersonic speeds.  
[AIAA PAPER 69-776] 19 p3244 A69-35647
- JOHNSTONE, A. D.**  
Modulation of auroral electrons at large distances from the earth.  
12 p2065 A69-26108  
Modulation of auroral electrons near the equatorial plane.  
21 p3709 A69-38499
- JOHNSTONE, J. L.**  
RTOS - Extending OS/360 for real time spaceflight control.  
21 p3679 A69-39602
- JOHNSTONE, R. B.**  
Development of the waveoff decision device.  
20 p3573 A69-37161
- JOHRI, V. B.**  
Perturbation of cosmological models.  
13 p2343 A69-27619
- JOINER, W. C. H.**  
Resistance minimum in type-II superconductors.  
07 p1198 A69-18642
- JOINES, W. T.**  
The general transfer matrix for networks with open-circuited or short-circuited stubs.  
21 p3687 A69-39660
- JOKI, E. G.**  
Satellite measurements of auroral ultraviolet and 3914-angstrom unit radiation.  
22 p3939 A69-40507
- JOKIPII, J. R.**  
Discussion of paper by K. V. S. K. Nathan and J. A. Van Allen, "Diffusion of solar cosmic rays and the power spectrum of the interplanetary magnetic field."  
01 p0147 A69-11243  
Stochastic aspects of magnetic lines of force with application to cosmic-ray propagation.  
10 p1770 A69-24111  
Cosmic-ray life and the stochastic nature of the galactic magnetic field.  
10 p1771 A69-24112  
Physical basis of the transport and composition of cosmic rays in the Galaxy.  
18 p3185 A69-34276  
Long-wavelength turbulence and the heating of the solar wind.  
18 p3186 A69-34299  
Stochastic variations of cosmic rays in the solar system.  
18 p3186 A69-34300  
Interstellar polarization of starlight and the turbulent structure of the Galaxy.  
22 p4030 A69-40771  
Faraday rotation, dispersion in pulsar signals, and the turbulent structure of the Galaxy.  
24 p4375 A69-42659
- JOLAS, F.**  
Behavior of a zinc electrode in alkaline media /Comportement d'une electrode de zinc en milieu alcalin/.  
08 p1268 A69-21048  
Behavior of a zinc electrode in an alkaline medium /Comportement d'une electrode de zinc en milieu alcalin/.  
16 p2739 A69-32419
- JOLISSAINT, C.**  
A telemetry channel frequency response correction technique.  
10 p1654 A69-23291
- JOLLES, E.**  
Demonstration, by radioisotopes, of the structural heredity of iron-nickel alloys with less than 20 percent nickel content in the course of transformations by cooling /Mise en evidence par les radio-isotopes de l'heredite structurale au cours des transformations au refroidissement des alliages fer-nickel de teneurs inferieures a 20 percent en nickel/.  
20 p3562 A69-37781
- JOLLS, K. R.**  
A new ferroelectric transducer for use in heat transfer and flow studies.  
19 p3307 A69-35749
- JOLLY, A. B.**  
Whistler-Mode Waves in Plasma.  
21 p3779 A69-39868
- JOLLY, S. A.**  
Pulse modulation of triode oscillators.  
09 p1470 A69-22793
- JOLLY, W. D.**  
Acoustic emission exposes cracks during welding.  
08 p1318 A69-19963
- JOLY, F.**  
Influence of dielectronic recombination on the radio recombination lines of carbon.  
13 p2346 A69-27703
- JOLY, R.**  
VHF electromagnetic radiation from radar antennas /Au sujet des rayonnements electromagnetiques T.H.F. des aeriens-radars/.  
05 p0715 A69-16701  
The electromagnetic environment - Biological effects and possible danger of radar antenna radiation /L'environnement electro-magnetique - Effets biologiques et danger eventuel du rayonnement des aeriens-radar/.  
13 p2215 A69-28597  
Possible biological and physiopathological effects of the UHF electromagnetic radiation of radar antennas /Effets biologiques et physio-pathologiques eventuels des rayonnements electromagnetiques U.H.F. des "aeriers-radars"/.  
24 p4273 A69-42996



JONAS, J. J.

- The back stress in high temperature deformation.  
11 p1987 A69-25388  
A comparison of creep and hot working strain- rate relationships.  
13 p2278 A69-27417

JONAS, M.

- Thermistor thermometer for linearized magnetic recording and telemetry.  
14 p2449 A69-29562

JONAS, P.

- Boundary layer on moving surface /Summary report/.  
03 p0417 A69-13792

JONCICH, M. J.

- Hydrocarbon formation under exploding wire conditions.  
01 p0120 A69-10675  
Apparatus with electronic crowbar for chemical investigations of exploding wire phenomena.  
01 p0081 A69-10680

JONES, A.

- The solution of the steady-state equations for an adiabatic stirred reactor.  
02 p0352 A69-12316  
Range difference navigation.  
09 p1538 A69-21996  
Shock-wave observations of rate constants for atomic hydrogen recombination from 2500 to 7000 deg K - Collisional stabilization by exchange of hydrogen atoms.  
14 p2488 A69-29637

JONES, A. H.

- Prediction of elastic-plastic wave profiles in aluminum 1060-0 under uniaxial strain loading.  
02 p0344 A69-12289

JONES, A. R.

- Scattering of focused electromagnetic waves by infinite cylinders.  
15 p2664 A69-31478  
Nonferrous conductivity standards.  
20 p3537 A69-37008

JONES, A. R., SR.

- Electrical conductivity measurement standards.  
01 p0081 A69-10830

JONES, A. T.

- The advantages of three-shaft turbofan engines for civil transport operation.  
08 p1376 A69-20627

JONES, A. V.

- Spectroscopic morphology of aurora.  
15 p2593 A69-30017  
Balloon observations of the temporal variation of the infrared atmospheric oxygen bands in the airglow.  
16 p2776 A69-32091  
Studies of auroral hydrogen emissions in West- Central Canada. III - Proton and electron auroral ovals.  
19 p3302 A69-35993  
Auroral spectroscopy.  
21 p3707 A69-38486

JONES, B.

- Protection against hazards in fluidic adder and subtractor circuits.  
02 p0195 A69-12080

JONES, B. G.

- Recent developments in turbulence measuring and analyzing techniques.  
13 p2263 A69-28148

JONES, B. P.

- Density-depth model for the lunar outermost layer.  
04 p0655 A69-14659  
Predicting lunar temperatures.  
18 p3194 A69-34374

JONES, C.

- Measurement of icing conditions for airplane flight testing.  
01 p0055 A69-11044  
Spectral considerations of microwave solar bursts.  
24 p4372 A69-43616

JONES, C. D.

- Electrically controlled heat transfer.  
02 p0353 A69-12324  
Optimum arrangement of rectangular fins on horizontal surfaces for free-convection heat transfer. [ASME PAPER 69-HT-44]  
24 p4409 A69-43517

JONES, C. K.

- Preparation and superconducting properties of thin films of transition metal interstitial compounds.  
13 p3231 A69-28009

- High field properties of pure niobium nitride thin films.  
17 p3016 A69-33790

JONES, C. W.

- Mirror axial support hardware.  
12 p2057 A69-26412

JONES, D.

- Geomagnetic and interplanetary field variability, Mariners II, IV, and V compared.  
02 p0241 A69-11737  
The effect of the latitudinal variation of the terrestrial magnetic field strength on ion cyclotron whistlers.  
18 p3100 A69-34253

JONES, D. E.

- Further evidence on the correlation between transverse fluctuations in the interplanetary magnetic field and Kp.  
14 p2510 A69-28948  
The radial dependence of the interplanetary magnetic field - 1.0-1.5 AU.  
16 p2856 A69-31964  
Search for a lunar wake at large distances from the moon - Mariner 4.  
16 p2856 A69-31986  
Flares, Forbush decreases, and geomagnetic storms.  
18 p3187 A69-34937  
Morphology of a solar-terrestrial event in March 1966.  
18 p3199 A69-34938  
A comparison of the photospheric and interplanetary magnetic fields during the flight of Mariner IV.  
18 p3205 A69-35399

JONES, D. G. C.

- Self-locking of three modes in the He-Ne laser.  
05 p0773 A69-16290  
Variation with cavity Q of the beat frequency between axial modes of a gas laser.  
07 p1156 A69-19412  
Mode self-locking in gas lasers.  
07 p1156 A69-19413  
The intensity of a single-mode gas laser as a function of cavity Q.  
07 p1157 A69-19414  
Phase fluctuations in the output of a 0.633  $\mu$ m He-Ne laser under free-running and self-locked conditions.  
11 p1898 A69-25048

JONES, D. H. P.

- Observations of 17 southern planetary nebulae.  
08 p1392 A69-20561  
Three colour photometry of the eclipsing binary AG Persei.  
12 p2156 A69-26220  
Observations of southern RR Lyrae stars.  
21 p3801 A69-38764

JONES, D. I. G.

- A resonant beam tuned damping device. [ASME PAPER 68-WA/GT-2]  
05 p0837 A69-16138  
Material damping.  
17 p2992 A69-33660

JONES, D. L.

- Faraday rotation measurements of the precursor ionization from an exploding wire discharge.  
01 p0129 A69-10663  
Dynamic balance error terms for rotating aerospace vehicles. [SAWE PAPER 740]  
18 p3137 A69-34887

JONES, D. M.

- Current and future range considerations. [AAS PAPER 69-110]  
24 p4419 A69-42879

JONES, D. W.

- Trajectory and mission analysis aspects of Jupiter flyby probes.  
06 p1007 A69-17598

JONES, E.

- Piezoelectric shakers for wide-frequency calibration of vibration pickups.  
17 p2975 A69-33665

JONES, E. E.

- Small twist of a circular cylindrical tube exhibiting cylindrical aeolotropy of a nonorthogonal type.  
05 p0831 A69-15580

JONES, E. R.

- Human factors in aircraft development.  
01 p0019 A69-10449  
Strength of glass filament RP in biaxial loading.  
10 p1794 A69-22943

JONES, F. C.

- Relativity, heat and "fictitious" forces.  
01 p0122 A69-11288

JONES, F. G.

- The equilibrium between aluminum and nitrogen in liquid 18 pct Cr-8 pct Ni stainless steel.  
06 p0942 A69-17228

JONES, F. H.

- The need to look twice.  
01 p0009 A69-10351

JONES, F. W.

- Earth currents and magnetic field variations in the period range 10-200 s.  
10 p1682 A69-23593

JONES, G.

- Mass spectrometry in structural and stereochemical problems. CLXI - Elucidation of the course of the characteristic ring D fragmentation of steroids.  
07 p1069 A69-19497  
Work hardening during stress relaxation in titanium at 300 deg K.  
19 p3342 A69-35812  
Temperature of metal oxide particles in flames.  
21 p3852 A69-39592

JONES, G. A.

- A mass spectrometric study of the ethylene oxide-oxygen flame.  
11 p1831 A69-24478

JONES, G. M.

- From land to space in a generation - An evolutionary challenge.  
03 p0380 A69-14067  
Man-machine integration - A long term look.  
11 p1831 A69-25656

JONES, G. S.

- The existence and nonexistence of critical points in bounded flows.  
22 p3975 A69-40571

JONES, H. G.

- Dispersion of electron plasma waves.  
01 p0126 A69-10277

JONES, H. S., JR.

- Recent advances in radant designs.  
07 p1109 A69-19513

JONES, I. S. F.

- Fluctuating turbulent stresses in the noise-producing region of a jet.  
14 p2431 A69-29577

JONES, J.

- On the apparent mass distributions of underdense radio meteors.  
03 p0518 A69-14254  
Measurement of radio-meteor ionization profiles.  
19 p3283 A69-35992  
The reflection of radio waves from irregularly ionized meteor trains.  
22 p3899 A69-39969

JONES, J. A.

- Grease lubrication of ball bearings in helium. [IME PAPER 1]  
07 p1137 A69-18559

JONES, J. B.

- A calorimetric method and apparatus for evaluating transducer assemblies.  
16 p2790 A69-32079

JONES, J. C.

- Preliminary study of a new charge image detector.  
02 p0248 A69-11822  
The effect of oxygen-supply impurities on the performance of a hydrogen-oxygen fuel cell.  
04 p0551 A69-15310

JONES, J. E.

- The admittance of a parallel-plate waveguide aperture illuminating a metal sheet.  
02 p0218 A69-12328  
The influence of air-gap tolerances on the admittance of a dielectric-coated slot antenna.  
11 p1851 A69-24986  
Reflection coefficient of a TEM mode symmetric parallel-plate waveguide illuminating a dielectric layer.  
18 p3108 A69-34802

JONES, J. F.

- Glass reinforced p13n polyimide laminates having improved processing characteristics.  
19 p3353 A69-35505  
A new polyimide resin in boron reinforced composites.  
19 p3354 A69-35514

JONES, J. G.

- Effect of acceleration on regional lung emptying.  
23 p4083 A69-41448

- JONES, J. J.**  
Multichannel FSK and DPSK reception with three-component multipath.  
10 p1656 A69-23533
- JONES, J. L.**  
Problems of flow simulation in wind tunnels.  
[AIAA PAPER 69-660] 17 p2945 A69-33471
- JONES, J. P.**  
Steady-state flow of a subsonic inviscid stream through statistically roughened wall ducts.  
01 p0062 A69-11279  
Vortex motion in low-speed aerodynamics.  
05 p0696 A69-15562  
Dynamics of a flexibly bonded two-layered Timoshenko-type cylindrical shell.  
[AIAA PAPER 68-354] 09 p1616 A69-21941  
Supersonic flow through statistically roughened wall ducts.  
15 p2593 A69-31148  
Some problems in the numerical solution of vortex motion equations.  
23 p4150 A69-41376
- JONES, J. R.**  
Non-Newtonian effects in flows of some elasticoviscous liquids in curved channels.  
02 p0234 A69-12608  
Non-Newtonian effects in axially symmetric rotational flows of some elasto-viscous liquids.  
07 p1180 A69-18815  
Influence of load, speed, and coating thickness on the wear life of a bonded solid lubricant.  
[ASLE PREPRINT 69AM 5C-3] 15 p2619 A69-30474  
Adhesive shear strength of ice to bonded solid lubricants.  
19 p3323 A69-35581
- JONES, J. S.**  
The quality demands for the propulsion system of a modern transport.  
15 p2629 A69-31122  
Ultrasonic dispersive delay lines - An approach to better radar systems.  
24 p4286 A69-42901
- JONES, K. E.**  
Continuously scaled transmission lines with applications to log-periodic antennas.  
11 p1850 A69-24977
- JONES, K. G.**  
Messier's nebulae and star clusters.  
18 p3206 A69-35471
- JONES, K. L.**  
Radio scintillations produced by irregularities at sporadic-E level.  
04 p0594 A69-15125  
Variation in the properties of scintillation activity with the latitude of the observer.  
14 p2439 A69-29114
- JONES, K. M.**  
Boundary layer discontinuity on a helicopter rotor blade in hovering.  
[AIAA PAPER 69-197] 07 p1051 A69-19561
- JONES, K. W.**  
Band-gap effects in the stopping of Ge super 72 atoms in germanium.  
01 p0140 A69-11245
- JONES, L. D.**  
Heat capacities of solid polymers.  
19 p3359 A69-36287
- JONES, L. E., III**  
On the use of a priori information in learning control systems.  
06 p0900 A69-17355  
Space, Technology, and Society, Canaveral Council of Technical Societies, Space Congress, 6th, Cocoa Beach, Fla., March 17-19, 1969, Proceedings. Volume 2.  
18 p3233 A69-35055  
Space, Technology, and Society, Canaveral Council of Technical Societies, Space Congress, 6th, Cocoa Beach, Fla., March 17-19, 1969, Proceedings. Volume 1.  
18 p3234 A69-35070
- JONES, L. M.**  
Microwave refraction as a technique for satellite meteorology - Some problems.  
21 p3671 A69-38376
- JONES, L. R.**  
Inflatable solar shields for cryogenic space vehicles.  
06 p1017 A69-17609
- JONES, L. W.**  
A cosmic ray program for the study of strong interaction physics in the range of 100-1000 GeV.  
03 p0499 A69-12942
- JONES, M. C.**  
Flow and heat transfer characteristics of subtriple-point cryogenics in heated tubes.  
01 p0176 A69-11146
- JONES, M. H.**  
Sharp cone drag measurements in a rarefied hypersonic flow.  
13 p2199 A69-28244  
Clevis design for compact tension specimens used in plane strain fracture toughness testing.  
15 p2612 A69-31150
- JONES, M. T.**  
Benzene anion radical - Removal of the orbital degeneracy at 4.2 deg K.  
03 p0382 A69-13379  
A single-color investigation into the uniformity of the light-scattering properties of the lunar surface.  
13 p2344 A69-27648
- JONES, M. W.**  
Carbon fibre reinforced plastic components for aerospace use.  
17 p2992 A69-33647  
Carbon fibre reinforced plastic components for aerospace use.  
24 p4336 A69-43209
- JONES, N.**  
Combined distributed loads on rigid-plastic circular plates with large deflections.  
06 p1023 A69-17508  
The collapse pressure of a flush cylindrical nozzle intersecting a conical pressure vessel axisymmetrically.  
15 p2704 A69-30289
- JONES, N. D.**  
Development of high temperature thyristors for large nuclear electrical space power systems.  
11 p1847 A69-24744
- JONES, P. F.**  
Temperature effects on the phosphorescence of aromatic hydrocarbons in poly(methylmethacrylate).  
10 p1652 A69-23523
- JONES, R. C.**  
Deformation of wire reinforced metal matrix composites.  
06 p0940 A69-16950
- JONES, R. E.**  
Generalized variational principles in the finite-element method.  
[AIAA PAPER 68-290] 23 p4227 A69-41882
- JONES, R. G.**  
Dimers of the water molecule in the earth's atmosphere.  
05 p0759 A69-16658  
Transient phenomena in the 337- $\mu$  M maser.  
17 p2981 A69-33088  
A study of submillimetre atmospheric absorption using the HCN maser.  
18 p3152 A69-35241
- JONES, R. H.**  
Lunar surface mechanical properties.  
02 p0321 A69-12225  
Characterization of multichannel sources and their utilization in molecular beam systems.  
19 p3376 A69-36175
- JONES, R. L.**  
The effect of strain rate, temperature and impurity content on the strain hardening of alpha-titanium.  
01 p0095 A69-10610  
The tensile deformation of copper single crystals containing BeO particles.  
08 p1334 A69-20575  
The effect of grain size on the strength of alpha-titanium at room temperature.  
13 p2280 A69-27766
- JONES, R. M.**  
Equivalence between single-layered and certain multilayered shells.  
02 p0346 A69-12509  
Buckling of circular cylindrical shells with multiple orthotropic layers and eccentric stiffeners.  
02 p0346 A69-12510  
A quasi-optical method for calculating propagation of LF radio waves in the presence of an ionosphere with horizontal gradients - Ray theory for lossy media and diffraction by the earth.  
17 p2928 A69-33866
- JONES, R. R.**  
Buckling of stiffened two-layered shells of revolution with a circumferentially cracked unbonded layer.  
24 p4405 A69-43657
- JONES, R. R.**  
Now - Ferrite microstrip devices.  
07 p1090 A69-18399
- JONES, R. W.**  
Infrared evaluation of multilayer boards.  
07 p1117 A69-19698  
The effect of angular velocity of stimulus on human torsional eye movements.  
22 p3883 A69-40874
- JONES, S.**  
Millimeter-wave integrated circuits.  
01 p0040 A69-10197  
Frequency-stable microstripline X-band Gunn oscillator.  
12 p2036 A69-25924
- JONES, S. S. D.**  
ATC and landing aids for V/STOL aircraft.  
17 p2897 A69-33210
- JONES, T. B.**  
Validity of the  $f \cos i$  theorem for the absorption of very low frequency radiowaves in the ionosphere.  
13 p2222 A69-28473
- JONES, T. G.**  
Microwave study of the elastic scattering of electrons from argon atoms.  
[AIAA PAPER 68-138] 04 p0632 A69-14701
- JONES, W. D.**  
Simultaneous measurements of ion-acoustic-wave potential and plasma density perturbation to yield gamma sub e.  
03 p0475 A69-13148  
Transient plasma sheath - Discovered by ion-acoustic waves.  
11 p1929 A69-25272  
Experimental strong turbulent heating.  
17 p3014 A69-33827
- JONES, W. L.**  
Reflection and stability of waves in stably stratified fluids with shear flow - A numerical study.  
03 p0424 A69-13953  
Ray tracing for internal gravity waves.  
12 p2067 A69-26345  
The transport of energy by internal waves.  
15 p2595 A69-30218  
Non-divergent oscillations in the solar atmosphere.  
17 p3029 A69-33048
- JONES, W. P.**  
Compressibility effects on oscillating rotor blades in hovering flight.  
11 p1821 A69-25514  
On the prediction of laminar-turbulent boundary layers.  
[ASME PAPER 69-HT-13] 24 p4303 A69-43556  
A note on Bradshaw's hypothesis for laminarization.  
[ASME PAPER 69-HT-12] 24 p4304 A69-43557
- JONES, W. R.**  
Symmetrically truncated right-angle corners in parallel-plate and rectangular waveguides.  
01 p0044 A69-10624  
Impedance characteristics of a class of multiconductor transmission lines.  
14 p2423 A69-29756
- JONG, I. C.**  
On stability of a circulatory system with bilinear hysteresis damping.  
13 p2363 A69-28127
- JONGENEEL, J. W.**  
Douglas design for powerplant reliability and maintainability.  
[SAE PAPER 690391] 23 p4201 A69-41664
- JONKER, G. H.**  
Semiconducting properties of lanthanum-cobalt oxide.  
21 p3780 A69-38612
- JONSSON, I.**  
Behavior of hydrophilic porous oxygen electrodes with silver electrocatalyst.  
20 p3484 A69-38071
- JOOSTEN, L. J. M.**  
DYDRA-data logger for dynamic measurements.  
19 p3293 A69-35746
- JOPPA, R. G.**  
Wall interference effects in wind-tunnel testing of STOL aircraft.  
[AIAA PAPER 68-399] 17 p2947 A69-34022



**JORASCH, R. E.**

Synthesis of an aeronautical service satellite system.  
03 p0464 A69-13235

**JORDAN, A. G.**

V and E phases in ternary systems with transition metals and silicon or germanium.  
10 p1708 A69-22992

**JORDAN, C.**

Long wavelength satellites to the He-like ion resonance lines in the laboratory and in the sun.  
09 p1598 A69-22158

The ionization equilibrium of elements between carbon and nickel.  
11 p1928 A69-25262

Relative intensities of selected Si II multiplets in the spectrum of the sun and ZETA.  
13 p2326 A69-27551

**JORDAN, D. P.**

Film and transition boiling.  
11 p1997 A69-24458

**JORDAN, F. D.**

An analog computer simulation of a closed Brayton cycle system.  
[ASME PAPER 69-GT-50] 09 p1442 A69-22479

**JORDAN, H. S.**

Engines of the future.  
09 p1567 A69-21387

**JORDAN, J. A., JR.**

Beam spectroscopy at tandem energies.  
03 p0471 A69-13163

The kinoform - A new wavefront reconstruction device.  
10 p1697 A69-23867

**JORDAN, J. E.**

Scattering of high-velocity neutral particles. XVI - Ar-Ar, Ar-He, and Ar-H sub 2.  
22 p3988 A69-41187

**JORDAN, J. F.**

Orbit determination for powered flight space vehicles on deep space missions.  
[AAS PAPER 68-144] 19 p3402 A69-35939

**JORDAN, K. R.**

Long range order and the grain boundary strengthening of Fe-49 percent Co-2 percent V.  
07 p1166 A69-19264

**JORDAN, P.**

On the possibility of avoiding Ramsey's hypothesis in formulating a theory of earth expansion.  
22 p4018 A69-40178

**JORDAN, P. F.**

Remarks on applied subsonic lifting surface theory.  
04 p0543 A69-14818

Effect of small bending stiffness on deformation of inflated structures.  
06 p1024 A69-17607

Observations on the mechanism of thermal torque instability.  
11 p1994 A69-25531

**JORDAN, S.**

Missile and space structures.  
19 p3438 A69-36324

**JORDAN, S. D.**

Why the temperature rise does not occur in radiative equilibrium in stellar chromospheres of dominant H super minus opacity.  
20 p3613 A69-38173

**JORDAN, T. P.**

VHF mechanically despun antenna for spin-stabilized synchronous satellites.  
01 p0161 A69-10350

Comparative evaluation of mechanically and electronically despun antennas for spacecraft.  
06 p0897 A69-17590

**JORDAN, T. S. R.**

The design and development of intake pressure and temperature sensors.  
05 p0767 A69-16773

**JORGENSEN, T. S.**

VLF and LF emissions in auroral regions of the ionosphere.  
21 p3708 A69-38495

**JORTNER, J.**

Radiative decay of polyatomic molecules.  
14 p2488 A69-29924

**JOSELYN, J. A.**

Physical properties of lambda 5303 coronal emission regions.  
15 p2693 A69-30782

**JOSEPH, J. G.**

A liquid helium cooled 4-GHz broad-band parametric amplifier.  
02 p0221 A69-12458

**JOSEPH, D. D.**

Stability of parallel flow between concentric cylinders.  
01 p0061 A69-11201

Stability of Poiseuille flow in pipes, annuli, and channels.  
07 p1121 A69-19475

Existence of convective solutions of the generalized Benard problem which are analytic in their norm.  
14 p2540 A69-29679

Eigenvalue bounds for the Orr-Sommerfeld equation. II.  
16 p2768 A69-31591

**JOSEPH, G.**

Solar neutrons.  
06 p0989 A69-17281

Transistorised multichannel pulse height analyser and recording system for balloon borne cosmic ray telescope.  
06 p0924 A69-17284

**JOSEPH, J. A.**

Spacecraft failure rates - Where are we/ques/  
18 p3207 A69-34519

**JOSEPH, J. H.**

Research related to G. A. R. P. in Israel.  
15 p2650 A69-31422

**JOSEPH, P. D.**

Filtering for Stochastic Processes with Applications to Guidance.  
04 p0580 A69-14386

**JOSEPHSON, B., JR.**

Acoustic paramagnetic resonance in arsenic-doped germanium.  
02 p0296 A69-11835

**JOSHI, D. S.**

A simple technique for the determination of Young's modulus.  
22 p4042 A69-40443

**JOSHI, K. K.**

Electrical charging of liquid sprays in high-pressure gas flows for electrofluid dynamic processes.  
12 p2138 A69-26631

**JOSHI, N. E.**

A space-time functional formalism for magnetohydrodynamic turbulence.  
04 p0638 A69-15277

**JOSHI, R. K.**

Self-consistent approximation procedure for theoretical evaluation of transport properties of binary gas mixtures.  
24 p4352 A69-43135

**JOSHI, S. B.**

Radial particle distribution profile in a low temperature gas discharge plasma.  
11 p1925 A69-24330

**JOSIFOVIC, M.**

An invariant in statically indeterminate systems /Eine Invariante bei statisch unbestimmten Systemen/.  
15 p2713 A69-31018

**JOSLOFF, A. T.**

Thermo/structural analysis of a large flexible paraboloid antenna.  
[AIAA PAPER 68-333] 02 p0345 A69-12372

**JOSSO, E. R.**

Utilization of titanium alloys for thermionic conversion /Utilisation des alliages de titane en conversion thermo-ionique/.  
14 p2462 A69-29217

**JOST, D.**

Concentration of CO sub 2 in the upper troposphere and lower stratosphere.  
11 p1879 A69-25254

**JOST, G. S.**

Combined stress crack propagation in thin panels.  
10 p1797 A69-23078

**JOST, W.**

Aspects of physico-chemical research in a lunar laboratory.  
18 p3113 A69-34237

**JOSTAN, J. L.**

Electrodeposition of tellurium-containing Permalloy films /Galvanische Abscheidung duenner tellurhaltiger Permalloyschichten/.  
11 p1935 A69-24332

**JOUAN, R.**

Description of a time indicator /Description d'un marqueur temps/.  
05 p0762 A69-15825

**JOUAN, Y.**

The consequences of flights at supersonic speeds. Legal, social, and physical effects /Les consequences des vols a vitesse supersonique - Effets physiques. sociaux et juridiques/.  
17 p3075 A69-32841

**JOUANIN, C.**

Study of the surface properties of simple liquid. /Etude des proprietes de surface des liquides simples/.  
19 p3452 A69-3672

**JOUBERT, P. N.**

The measurement of skin friction in turbulent boundary layers with adverse pressure gradients.  
11 p1889 A69-25559

Rough wall turbulent boundary layers.  
18 p3125 A69-35387

**JOULAIN, P.**

Study of solid-fuel ablation by liquid and physically homogeneous nitric acid.  
24 p4363 A69-43568

**JOUNG, K. S.**

Derivation of axisymmetric flexural vibration equations of a cylindrically aeolotropic circular plate.  
23 p4228 A69-41911

**JOURDAN, P.**

Thickness of a resistivity-controlled hydromagnetic shock wave.  
06 p0970 A69-17956

**JOUSSOT-DUBIEN, J.**

Flash spectroscopy by Q-switched laser excitation - Application to the study of naphthalene /Spectroscopie par éclair a excitation par laser declenche - Application a l'etude du naphthalene/.  
02 p0254 A69-11544

**JOVAN, D. M.**

The effect of positive pressure breathing on the cerebral circulation and the content of catecholamines in hypothalamus and adrenals.  
24 p4265 A69-43371

**JOVANOVIC, S.**

Mercury abundances and thermal history of meteorites.  
08 p1404 A69-20920

Some halogen measurements on achondrites.  
24 p4382 A69-42929

**JOVIN, T. M.**

Enzymatic synthesis of deoxyribonucleic acid. XXVI.  
22 p3898 A69-41070

Enzymatic synthesis of deoxyribonucleic acid. XXVII.  
22 p3898 A69-41071

Enzymatic synthesis of deoxyribonucleic acid. XXX.  
22 p3898 A69-41074

**JOVY, D.**

Dependence of tilt-table and acceleration tolerance on body build and physical fitness /Die Abhaengigkeit der Orthostase- und Beschleunigungstoleranz von Koerperbau und Leistungsaehigkeit/.  
[DVL-834] 09 p1444 A69-21304

Influence of stature and physical fitness on tilt-table and acceleration tolerance.  
22 p3889 A69-39940

The influence of stature and physical fitness on tilt-table and acceleration tolerance.  
23 p4108 A69-41821

**JOWETT, J. K. S.**

Ultimate communications capacity of the geostationary-satellite orbit.  
21 p3673 A69-38757

**JOWITT, P.**

Non-destructive testing.  
20 p3547 A69-36921

Non-destructive testing. II.  
21 p3719 A69-38391

**JOY, R. J. T.**

Energy cost of piloting fixed- and rotary-wing aircraft.  
22 p3891 A69-40218

**JOYCE, G.**

Shock-like solutions of the electrostatic Vlasov equation.  
08 p1359 A69-19982

- JOYCE, J. A.**  
Fully plastic crack growth under monotonic and repeated bending.  
10 p1797 A69-23077
- JOYCE, W. G.**  
Elastomers for the supersonic transport.  
24 p4338 A69-43455
- JOYNER, U. T.**  
Steerable landing gear for vehicles with main gear skids.  
[AIAA PAPER 69-790] 19 p3243 A69-35639  
Recent studies on effects of runway grooving on airplane operations.  
[AIAA PAPER 69-773] 19 p3244 A69-35649
- JUBE, G.**  
New contributing technologies for wire-wound rocket motors /Technologies nouvelles tribulaires des propulseurs d'engins en fil bobine/.  
17 p3021 A69-33357
- JUDAY, R. D.**  
Riometer measurements, solar proton intensities and radiation dose rates.  
16 p2850 A69-32321
- JUDD, A. M.**  
Analysis of the transient boiling of liquid metals.  
08 p1420 A69-20101
- JUDD, M.**  
The magnetic suspension system as a wind tunnel dynamic balance.  
19 p3292 A69-35738
- JUDGE, M. E.**  
Atmospheric scattering at wavelengths of 0.69 and 1.06 micron.  
11 p1837 A69-25040
- JUDICA-CORDIGLIA, A.**  
Telecommunication of physiological data in aerospace flight - Principles, techniques, and results /La teletrasmissione dei dati fisiologici nel volo aerospaziale - Principi - Tecniche - Risultati/.  
12 p2023 A69-26491
- JUDY, W. V.**  
Comparative evaluation of the thoracic impedance and isotope dilution methods for measuring cardiac output.  
14 p2408 A69-29304
- JUETTNER, B.**  
Prebreakdown current in a high vacuum. II - Nature of the emission centers /Der Vordurchschlagsstrom im Hochvakuum. II - Ueber die Natur der Emissionszentren/.  
05 p0800 A69-15740
- JUILLEN, J.-C.**  
Approximate calculation of boundary layers and heat transfers at the walls of shock tubes /Calcul approche des couches limites et des transferts de chaleur aux parois d'un tube a choc/.  
[ONERA-TP-647] 03 p0412 A69-12875
- JUKES, J. D.**  
Plasma stability in magnetic traps. II - Micro-stability theory.  
01 p0125 A69-10048
- JUKES, T. H.**  
Recent advances in studies of evolutionary relationships between proteins and nucleic acids.  
11 p1828 A69-25456  
Non-Darwinian evolution.  
22 p3871 A69-40060
- JULESZ, B.**  
"Mental holography" - Stereograms portraying ambiguously perceivable surfaces.  
04 p0603 A69-15445
- JULIAN, G. M.**  
Decay of super 136 La and super 134 La.  
01 p0122 A69-10100
- JULIAN, W. H.**  
Overstability of thin stellar systems.  
09 p1605 A69-22413  
Pulsar electrodynamics.  
22 p4027 A69-40657
- JULICH, P. M.**  
Asymptotic stability with output constraints.  
11 p1909 A69-25290  
Region of acceptable motions.  
11 p1861 A69-25453
- JULLIEN, M.**  
Influence of the refraction errors of the radome of a nose-mounted radar on a modern aircraft /Influences des erreurs de refraction du radome d'un radar de pointe avant sur avion moderne/.  
07 p1086 A69-19512
- JUMARIE, G.**  
A new presentation of the first-harmonic method /Une nouvelle presentation de la methode du premier harmonique/.  
19 p3287 A69-36709
- JUNDI, Z.**  
Simple treatments of three-body ionic recombination.  
05 p0795 A69-15661
- JUNE, R. R.**  
Compressive strength of boron-epoxy composites.  
07 p1170 A69-18713
- JUNEAU, P. W., JR.**  
Processing techniques for boron filament wound composite structures.  
14 p2455 A69-29413
- JUNG, H.**  
Inactivation of ribonuclease by elastic nuclear collisions.  
03 p0371 A69-13482  
Influence of slow protons on infectious DNA of bacteriophage phiX174 /Einwirkung von langsamen Protonen auf infektiöse dns des Bakteriophagen phiX174/.  
23 p4081 A69-41431
- JUNG, O.**  
Extension of the shear-field pattern to the calculation of parallelogram- and trapezoid- shaped stiffened sheet-metal structures /Eine Erweiterung des Schubfeldschemas zur Berechnung parallelogrammfoermig und trapezfoermig ausgesteifter Blechkonstruktionen/.  
10 p1801 A69-23645
- JUNGE, H. J.**  
Calculation model for Hall type electromagnetic plasma accelerators /Ein Rechenmodell fuer elektromagnetische Plasmabeschleuniger vom Hall-Typ/.  
11 p1866 A69-25214
- JUNGEN, CH.**  
Absorption spectrum of the NO molecule. IX - The structure of the f complexes, the ionization potential of NO, and the quadrupole moment of NO super plus.  
22 p3984 A69-40477
- JUNGHANS, H.**  
Accuracy of mean temperature values determined from values at fixed periods /Die Genauigkeit von Temperaturmitteln aus Terminwerten/.  
09 p1534 A69-21511
- JUNGLING, K. C.**  
Investigation of a Q-switched pulsed discharge CO sub 2 laser.  
22 p3963 A69-40566
- JUNGSMANN, J. A.**  
Synthesis of an on board hybrid computer for an advanced helicopter fire control system.  
17 p2934 A69-34074
- JUNGOWSKI, W. M.**  
Investigation of flow pattern, boundary conditions and oscillation mechanism in a compressible flow through sudden enlargement of a duct.  
15 p2549 A69-31220
- JUNGWIRTH, K.**  
Dispersion relation and the energy transfer of a wave-packet in inhomogeneous anisotropic media.  
01 p0126 A69-10278  
Kinetic theory of the stability of collisional plasma in curved magnetic field.  
16 p2816 A69-31636
- JUPITER, R.**  
Filters extend life of aircraft hydraulic components.  
15 p2552 A69-30069
- JUPP, A. H.**  
A solution of the ideal resonance problem for the case of libration.  
12 p2152 A69-25800
- JUPPETS, F. R.**  
Hydrogen-oxygen fuel cells with hydrophobic type electrodes and an alkaline electrolyte /Piles a combustible hydrogen-oxygene a electrodes d'un type hydrophobe a electrolyte alcalin/.  
08 p1261 A69-21055
- JURA, M.**  
Periodic intensity fluctuations in pulsars.  
24 p4389 A69-43744
- JURAN, W.**  
Dissolved gas and Helmholtz resonance in rocket injectors.  
12 p2148 A69-26806
- Gas effects in attitude control systems.**  
[AIAA PAPER 69-434] 16 p2870 A69-32765
- JURDJEVIC, V.**  
Performance equivalence in a two level system.  
24 p4294 A69-43308
- JURICH, L.**  
Expandable airlock experiment for the orbital workshop.  
[IAF PAPER SD-49] 02 p0334 A69-11949
- JURIS, M. A.**  
High density environmental circular connectors conforming to MIL-C-81511.  
22 p3910 A69-39947
- JUST, TH.**  
Comparison of measurements of relaxing combustion gases in a nozzle flow with chemical-kinetic calculations /Vergleich von Messungen an relaxierenden Feuergasen in einer Duesenstroemung mit chemisch-kinetischen Rechnungen/.  
[DVL-896] 10 p1809 A69-23644
- JUSTI, E.**  
Electrodialytic regeneration of alkaline electrolytes in fuel cells.  
08 p1260 A69-21043  
Electrodialytic regeneration of alkaline electrolytes in fuel cells.  
16 p2738 A69-32414
- JUSTICE, B. H.**  
Molecular freedom of the ammonium ion - Heat capacity and thermodynamic properties of ammonium perchlorate from 5 deg -350 deg K.  
20 p3484 A69-37344
- JUSTUS, C. G.**  
Measurement of the magnitude of the irregular winds in the altitude region near 100 kilometers.  
03 p0426 A69-14031  
Measurements of tidal-period winds in the 95- to 135-kilometer region.  
20 p3574 A69-38092

## K

- KAAE, J. L.**  
Some observations of matrix precipitation in a 45-Fe 35-Ni 20-Cr alloy.  
23 p4176 A69-41508
- KABAEV, N. I.**  
Power-dip contour in a gas laser in the presence of elastic collisions /Kontur provala po moshchnosti v gazovom OKG pri nalichii uprugikh stolknovenii/.  
17 p2983 A69-33972
- KABANOV, M. V.**  
Polarization of laser radiation scattered by fog and smoke /Polarizatsia izlucheniia OKG, rasseinnogo tumanami i dymami/.  
03 p0393 A69-13275  
Experimental investigation of attenuation of infrared radiation in the transparency windows of the atmosphere in the 1-2.5 mu region.  
05 p0760 A69-16695  
Propagation of laser beams in scattering media.  
08 p1328 A69-21092  
The optical transfer function for scattering media.  
09 p1536 A69-21865  
Experimental investigations of the brightness of multiply forward scattered light with propagation of narrow collimated beams.  
10 p1722 A69-23328  
"Spotted" structure of the scattered background during the propagation of laser radiation /O "piatnistoi" strukture rasseinnogo fona pri rasprostraneni lazernogo izlucheniia/.  
13 p2273 A69-28550  
Polarization of OPG /optical photon generator/ radiation scattered by fog and smoke.  
14 p2410 A69-28783  
Experimental study of the reflection of short pulses of optical radiation from fog and smoke /Eksperimental'noe issledovanie otrazheniia korotkikh impul'sov opticheskogo izlucheniia tumanami i dymami/.  
15 p2562 A69-30077  
Calculation of the light intensity during coherent scattering /O raschete intensivnosti sveta pri kogerentnom rasseianii/.  
15 p2635 A69-31108
- KABANOV, V. V.**  
Influence of the edge effect on strength and stability of an anisotropic cylindrical shell under axial compression, internal pressure, and heating.  
16 p2873 A69-32131



- Stability of eccentrically reinforced circular cylindrical shells under external pressure /Ustoichivost' ekstsentrchno podkreplennykh krugovykh tsilindricheskikh obolochek pri vneshnem davlenii/.  
18 p3216 A69-34576
- Effect of heating on the stability of shells /Vliianie nagreva na ustoychivost' obolochek/.  
21 p3838 A69-39190
- KABANOVA, L. F.**  
Pulse ruby lasers with mercury pumping sources /Impul'snye opticheskie generatory na rubine s rtutnymi istochnikami nakachki/.  
19 p3336 A69-36347
- KABASHNIKOV, V. P.**  
Nonlinear absorption of laser emission by molecular gases /Nelineinoe pogloshchenie lazernogo izlucheniia molekuliarnymi gazami/.  
17 p2983 A69-33973
- KABELEVSKII, M. G.**  
Short-term strength of full-scale titanium alloy disks /O kratkovremennoi prochnosti titanovykh diskov iz titanovogo splava/.  
06 p1026 A69-18018
- KABELITZ, H.-P.**  
Resistance and heat-transfer measurements on cylindrical bodies with cavities at hypersonic speeds /Widerstands- und Waermeuebergangsmessungen an zylindrischen Koerpern mit Hohlräumen bei Hyperschall- Machzahlen/.  
[DVL-850]  
04 p0543 A69-14822
- KABES, K.**  
Zener-diode function generators /Funkeni menice se zenerovymi diodami/.  
02 p0214 A69-11595
- Single-purpose analog computer for calculating the Nyquist diagram /Jednocyelovy analogovy pocitac pro vypočet Nyquistova diagramu/.  
08 p1278 A69-20397
- KACHALA, N. N.**  
Fast-acting composite transistor /Bystrodeistvuiushchii sostavnoi tranzistor/.  
13 p2235 A69-28517
- KACHANOV, A. V.**  
Electrodynamic description of a high-frequency flame discharge /Elektrodinamicheskoe opisaniye vysokochastotnogo fakel'nogo razriada/.  
12 p2140 A69-27125
- Applicability of an electrodynamic model to a high-frequency flame discharge stabilized by axial injection /O primenimosti elektrodinamicheskoi modeli k vysokochastotnomu fakel'nomu razriadu, stabilizirovannomu oseym produvom/.  
12 p2140 A69-27126
- Certain problems of the generation of dense plasma jets in a flowing high-frequency flame discharge /Nekotoryye voprosy generatsii plotnykh plazmennyykh strui v protochom vysokochastotnom fakel'nom razriade/.  
12 p2140 A69-27127
- A shielded high-frequency flame discharge /Ekranirovannyi vysokochastotnyi fakel'nyi razriad/.  
12 p2140 A69-27128
- Certain problems of matching high-frequency oscillators to a load in the form of a flame discharge /Nekotoryye voprosy soglasovaniia vysokochastotnykh generatorov s nagruzkoi v vide fakel'nogo razriada/.  
12 p2140 A69-27129
- KACHANOV, P. V.**  
An O-shaped unsaturated magnetic system with two excitation coils designed for MHD-machinery.  
10 p1636 A69-23102
- KACHANOVA, I. M.**  
Damping capacity and resistance to resonance fatigue of steels and alloys based on titanium and aluminum.  
03 p0443 A69-13025
- KACHELMEIER, E. J.**  
Development and selection of filler metals for bulk welding.  
11 p1891 A69-24931
- KACHEN, G.**  
Selection and amplification of a single mode-locked optical pulse.  
03 p0441 A69-14185
- KACHKIN, S. S.**  
A method of manufacturing aspherical surfaces which deviate only slightly from the sphere.  
12 p2102 A69-26597
- KACHLISHVILI, Z. S.**  
Theory of galvanomagnetic phenomena in semiconductors in a strong electric field /K teorii gal'vanomagnitnykh iavlenii v poluprovodnikakh v sil'nom elektricheskom pole/.  
14 p2505 A69-29037
- KACHURIN, G. A.**  
Kinetics of new-phase formation under ion bombardment.  
06 p0978 A69-16985
- KACKER, S. C.**  
The effect of slot height and slot-turbulence intensity on the effectiveness of the uniform density, two-dimensional wall jet.  
[ASME PAPER 68-HT-4]  
02 p0352 A69-12209
- Some properties of the two-dimensional, turbulent wall jet in a moving stream.  
[ASME PAPER 68-WA/APM-13]  
04 p0586 A69-14390
- KACPRZYNSKI, J. J.**  
On the calculation of unsteady nonlinear three-dimensional supersonic flow past wings.  
[ASME PAPER 68-FE-31]  
05 p0698 A69-16078
- KACZMAREK, F.**  
Energy flux densities and the electric and magnetic field strengths of laser beams /Gestosci strumieni energii i natezenia pol elektrycznego i magnetycznego wiązki światła laserów/.  
15 p2633 A69-30708
- KADAMBI, V.**  
Singular perturbations in free convection.  
24 p4407 A69-42916
- KADANER, E. S.**  
Mechanism of the action of V sub 2 O sub 5 additions on the combustion rates of compositions based on ammonium perchlorate and metallic fuels /O mekhanizme deistviia dobavki V sub 2 O sub 5 na skorost' goreniia sostavov na osnove perklorata ammoniia i metallicheskh goruchikh/.  
08 p1375 A69-20342
- Effect of additional alloying on the mechanical properties of an Al-Zn-Mg-Li alloy /Vliianie dopolnitelnogo legirovaniia na mekhanicheskie svoistva splava Al-Zn-Mg-Li/.  
11 p1901 A69-24270
- KADAR, I.**  
A simplified optimum selection of modulation indices for multitone phase modulation.  
09 p1457 A69-22463
- KADDOU, A.-F. K.**  
The feasibility of joining metal using a solar furnace.  
16 p2793 A69-31818
- KADEN, H.**  
Magnetostatic shielding action of thin-walled stretched ellipsoids of revolution /Die magnetostatische Schirmwirkung duennwandiger, gestreckter Rotationsellipsoide/.  
13 p2237 A69-28610
- Distortion noise and error rate in data transmission by frequency modulation /Verzerrungsgerausch und Fehleratte bei der Datenerbertragung mittels Frequenzmodulation/.  
20 p3496 A69-37905
- KADO, R. T.**  
A miniaturized telemetry device for the transmission of the electrical activity of single nerve cells in the brain.  
19 p3261 A69-36270
- Combined telephone and radiotelemetry of the EEG.  
21 p3664 A69-38978
- KADOMTSEV, B. B.**  
Landau damping and echo in a plasma.  
20 p3582 A69-38012
- KADOTA, T. T.**  
Optimum estimation of nonstationary Gaussian signals in noise.  
12 p2029 A69-26202
- KADOYA, S.**  
Differential color responses in the visual cortex of the squirrel monkey.  
22 p3879 A69-40844
- KADYEV, R. K.**  
Relativistic theory of annual parallaxes /Relativistskaia teorii godichnykh parallaksov/.  
03 p0506 A69-13091
- The relativistic theory of annual parallaxes.  
14 p2516 A69-28773
- KADYKOVA, G. N.**  
Temperature coefficient of the elasticity modulus of niobium alloys.  
04 p0615 A69-14642
- KADYROV, M. A.**  
Investigation of some properties of iron-doped gallium arsenide.  
04 p0643 A69-15263
- KADYSHNIKOV, V. M.**  
Construction of a multilevel scheme with stable initial data for short-range weather forecasts /Postroeniye ustoychivoi po nachal'nykh dannym mnogourovnennoi skhemy kratkosrochnogo prognoza pogody/.  
05 p0789 A69-16632
- The construction of a multilevel short-term weather prediction model, stable in regard to initial data.  
14 p2472 A69-28792
- KAEGI, E. M.**  
Measured and predicted air ionization in blunt body shock layers.  
[AIAA PAPER 69-81]  
06 p0863 A69-18101
- KAehler, W.**  
Laser welding structural alloys and parts.  
19 p3789 A69-35551
- KAEKINA, T. M.**  
Study of methods of exciting transverse normal waves in plates /Issledovanie metodov, vzbuzhdeniia poperechnykh normal'nykh voln v plastinakh/.  
04 p0678 A69-14901
- Investigation of methods for the excitation of normal modes in plates.  
12 p2182 A69-26654
- KAFALAS, P.**  
An image intensifier system for high-speed spectrography.  
12 p2085 A69-26160
- KAFENGAUZ, N. L.**  
Interrelationship between the temperature of a cooled surface and the frequency of the self-oscillations of pressure during heat transfer to a turbulent fluid flow /O vzaimosvazi temperatury okhlazhdaemoi poverkhnosti i chastoty avtokolebaniy davleniia pri teploobmene s turbulentnym potokom zhidkosti/.  
01 p0173 A69-10094
- KAFTAN-KASSIM, M. A.**  
A survey of high-frequency radio radiation from planetary nebulae.  
08 p1384 A69-20056
- KAGAN, B. A.**  
Means of studying the interaction between the ocean and the atmosphere /Puti izucheniia vzaimodeistviia okeana i atmosfery/.  
14 p2442 A69-29838
- KAGAN, E. S.**  
Mechanical properties of stainless maraging steels /Mekhanicheskie svoistva nerzhavieushchikh stali s stareiushchim martensitom/.  
15 p2640 A69-30631
- KAGAN, I. U. M.**  
Plasma diagnostics in a magnetic field with the aid of a thin cylindrical probe /O diagnostike plazmy v magnetnom pole s pomoshch'iu tonkogo tsilindricheskogo zonda/.  
02 p0292 A69-12556
- On the Langmuir paradox.  
06 p0960 A69-16922
- Investigation of the positive column of a neon discharge at medium gas pressures. I, II /Untersuchung der positiven Saule der Neonentladung bei mittleren Gasdruecken. I, II/.  
10 p1740 A69-23723
- Plasma diagnostics in a magnetic field using thin cylindrical probes.  
15 p2658 A69-30253
- KAGAN, M. B.**  
Determination of the recombination parameters and depth of levels of a p-n junction in semiconductor photocells /Opredeleniye rekombinatsionnykh parametrov i glubiny zaleganiia p-n-perekhoda v poluprovodnikovyykh fotoelementakh/.  
09 p1560 A69-22718
- KAGAN, M. L.**  
Effect of the shape of a body on pressure gauge readings in a highly rarefied gas flow /O vlianii formy tela na pokazaniia datchika davleniia v potoke sil'no razrezhennogo gaza/.  
01 p0080 A69-10358
- Rarefied gas flow past permeable surfaces /Obtekanie pritisnemykh poverkhnostei potokom razrezhennogo gaza/.  
20 p3459 A69-37438
- KAGAN, R. L.**  
Coordination of the geopotential and wind fields /K voprosu o soglasovanii polei geopotentsiala i vetra/.  
12 p2126 A69-26580
- KAGAN, V. A.**  
Equipment for low-cycle fatigue testing of specimens in bending with rotation.  
15 p2583 A69-30207

## KAGAN, V. IA.

Experimental investigation of the dispersion of dielectric waveguides for millimeter wavelengths /Ob eksperimental'nom issledovanii dispersii dielektricheskikh volnovodov millimetrovogo diapazona voln/.

21 p3674 A69-39130

## KAGANER, M. G.

Solution to the problem of the monotonic heating of a plate by various methods /Reshenie zadachi o monotonnom nagreve plastiny razlichnymi metodami/.

01 p0174 A69-10097

Thermal-design and test methods for liquefied- gas vessels under unsteady insulation-cooling conditions /Metod teplovogo rascheta i ispytaniy sosudov dlia szhizhennykh gazov v nestatsionarnom rezhime okhlazhdeniia izoliatsiit/.

04 p0687 A69-15162

Heat transfer by the combined effect of conduction and radiation in absorbing and scattering media.

20 p3631 A69-37097

## KAGANOVICH, E. B.

Hall mobility of photoelectrons in cadmium sulfide layers /Kholliivs'ka rukhlivst' fotoelektroniv u sharakh sul'fidu kadmiiu/.

03 p0491 A69-14055

Single-crystal CdS films.

11 p1939 A69-25709

Hall mobility of photoelectrons in layers of cadmium sulfide.

18 p3182 A69-35048

## KAGANOVICH, I. N.

Some problems associated with the improvement of the production technology and increasing the quality of titanium alloy blanks /Nekotorye voprosy sovershenstvovaniia tekhnologii proizvodstva i povysheniia kachestva polufabrikatov iz titanovykh spavov/.

07 p1161 A69-18765

Features of the production technology of semifinished products of titanium and its alloys /Osobennosti tekhnologii proizvodstva polufabrikatov iz titana i ego spavov/.

07 p1164 A69-18786

Production features of thermally strengthened titanium alloys /Osobennosti proizvodstva termicheski uprochniaemykh titanovykh spavov/.

11 p1902 A69-24276

Deformation conditions and quenching temperature for bars of alloy VT14 /Rezhimy deformirovaniia i temperatura zakalki prutkov splava VT14/.

19 p3328 A69-36152

## KAGANSKII, M. G.

The effect of a transverse magnetic field on a toroidal discharge in the Tuman experiment.

06 p0963 A69-16906

## KAGERER, R. W.

Structure design for future high-speed aircraft /Bauweisen fuer zukuenftige Hochgeschwindigkeitsflugzeuge/.

21 p3646 A69-38460

Structural designs of future high-speed aircraft /Bauweisen zukuenftiger Hochgeschwindigkeitsflugzeuge/.

23 p4233 A69-42164

## KAGIWADA, H.

Flux equivalences among Rayleigh, isotropic, and other scattering models.

04 p0687 A69-15281

Initial-value methods for integral equations arising in theories of the solar atmosphere.

13 p2350 A69-27859

Estimating parameters of an inhomogeneous medium by probing with rays.

18 p3172 A69-34667

A new approach to the auxiliary equation with application to the Greenhouse effect.

23 p4239 A69-41607

## KAGIWADA, H. H.

Verification of the invariant imbedding method for certain Fredholm integral equations.

01 p0103 A69-10002

Invariant imbedding and sequential interpolating filters for nonlinear processes. [ASME PAPER 68-WA/AUT-3]

05 p0738 A69-16183

Derivation and validation of an initial-value method for certain nonlinear two-point boundary-value problems.

09 p1531 A69-21413

## KAHALAS, S. L.

Formation of a collisionless magnetohydrodynamic shock wave.

14 p2502 A69-29958

## KAHAN, T.

Application of a successive approximation method to the calculation of the electron distribution function of a homogeneous Lorentzian plasma subjected to a frequency-modulated electric field /Application d'une methode d'approximations successives au calcul de la fonction de distribution electronique d'un plasma lorentzien homogene soumis a un champ electrique module en frequence/.

02 p0285 A69-11543

Nonlinear electron conductivity of a Lorentzian plasma subjected to the action of a frequency-modulated electric field /Conductivite electronique non lineaire d'un plasma Lorentzien soumis a l'action d'un champ electrique module en frequence/.

21 p3778 A69-39573

## KAHL, G. D.

Vaporization waves in metals.

01 p0117 A69-10655

## KAHLE, A. B.

Intensity of radiation from a Rayleigh-scattering atmosphere.

03 p0426 A69-14026

Determination of surface motions of the earth's core.

18 p3129 A69-34951

Prediction of geomagnetic secular change confirmed.

20 p3523 A69-37490

## KAHLER, S. W.

The solar particle event of July 16-19, 1966 and its possible association with a flare on the invisible solar hemisphere.

09 p1579 A69-22181

Spatial gradients of energetic protons and electrons observed after the 7 July 1966 solar flare.

10 p1767 A69-23767

A comparison of energetic storm protons to halo protons.

20 p3589 A69-37555

## KAHLES, J. F.

Surface integrity - Its effect on product quality.

18 p3149 A69-35129

## KAHN, D.

Wave coupling across a density discontinuity in a magnetized plasma.

08 p1367 A69-20795

Longitudinal wave propagation in viscous fully ionized plasmas.

08 p1367 A69-20796

## KAHN, F. D.

The flow of ionized gas from a globule in interstellar space.

10 p1782 A69-23682

Outer layers of the red dwarf star YZ CMi.

17 p3043 A69-34166

## KAHN, S. F.

Reentry safety of isotopic systems. [AIAA PAPER 68-1166]

03 p0465 A69-13561

Re-entry safety of isotopic systems. [AIAA PAPER 68-1166]

22 p3979 A69-40551

## KAHN, W. K.

An optical technique for measurement of gas flow profiles utilizing a ring laser.

04 p0596 A69-14281

Mutual coupling and element efficiency for infinite linear arrays.

04 p0571 A69-14317

## KAHN, W. K. K.

A formulation of the interrelation among mutual coupling, element efficiency, active impedance and patterns in linear arrays.

17 p2929 A69-33874

## KAHNE, S. J.

Comparisons of sensitivity improvement techniques for linear optimal control systems.

13 p2238 A69-27936

Sensitivity aspects of linear digital control systems.

17 p2944 A69-33742

Automated scaling for hybrid computers.

18 p3105 A69-34617

Design of time lag systems with sensitivity constraints.

24 p4293 A69-43293

## KAHNG, S. W.

Osculatory interpolation.

24 p4341 A69-43230

## KAHNG, W.-H.

Symmetry properties of Cameron-Martin-Wiener kernels.

24 p4301 A69-43358

## KAHO, S.

Photographic magnitudes of five supernovae.

22 p4032 A69-40944

## KAHRILAS, P. J.

Design of electronic scanning radar systems /ESRS/.

04 p0556 A69-14301

HAPDAR - An operational phased array radar.

04 p0556 A69-14324

## KAI, K.

Evolutional features of solar microwave type IV bursts.

04 p0648 A69-14364

Type II solar radio bursts observed with the Culgoora radioheliograph during a flare on 17 June 1968.

09 p1582 A69-22750

Radio bursts associated with active region McMath No. 8362 of July 1966.

10 p1764 A69-23742

The complete type IV burst associated with the 7 July 1966 proton event.

10 p1765 A69-23752

Correlated bursts at distant sources on the sun.

17 p3024 A69-33804

Observation of strong circular polarization in a moving type IV burst.

17 p3024 A69-33806

## KAIBYSHEV, O. A.

Peculiarities in the flow mechanism of a magnesium alloy with hydro-explosive loading.

04 p0615 A69-14639

Mechanism of the high-speed deformation of metals /Mekhanizm vysokoskorostnoi deformatsii metallov/.

12 p2113 A69-26043

## KAIDANOVSKII, N. L.

Reflector radio telescope with a resolution of 15 arc seconds /Reflektornyi radioteleskop s razreshaushchei sposobnost'iu 15 sekund dugi/.

15 p2679 A69-30102

## KAIFU, N.

Radio observations of four diffuse H II regions.

24 p4388 A69-43641

## KAJISER, L.

Physical exercise under hyperbaric oxygen pressure.

22 p3878 A69-40834

## KAILATH, T.

Mathematical modeling of stochastic processes.

04 p0623 A69-14694

A general likelihood-ratio formula for random signals in Gaussian noise.

17 p2920 A69-33622

Application of a resolvent identity to a linear smoothing problem.

21 p3754 A69-38432

## KAIMIRASOVA, S. D.

Aerodynamics of a turbulent twisted jet in a slipstream /Aerodinamika turbulentnoi zakruchennoi strui v sputnom potoke/.

21 p3645 A69-39848

## KAIN, R. Y.

Block structures, indirect addressing, and garbage collection.

19 p3280 A69-36207

## KAINOVA, G. E.

Effect of short-term heating after deformation during thermomechanical treatment on the properties of the VT15 alloy and welded joints of this alloy /Vlianie kratkovremennogo nagreva posle deformatsii pri mekhaniko-termicheskoi obrabotke na svoistva splava VT15 i ego svarnykh soedinenii/.

11 p1889 A69-24277

Weldability of aluminum alloy 01420 /Svarivaemost' aluminievogo splava 01420/.

11 p1891 A69-24896

## KAINTH, P. S.

Charge composition and energy spectra of cosmic ray nuclei with Z equals 10-28.

06 p0988 A69-17274

## KAINUMA, S.

Investigations of the transequatorial propagation mode in the VHF band.

10 p1653 A69-23192

## KAISOV, D. K.

Structural changes in a molybdenum single crystal under the action of laser radiation /Strukturnye izmeneniia monokristalla molibdena pod deistviem lazernogo obluicheniia/.

21 p3750 A69-39842

## KAISER, A. B.

Latitude variation in VLF modal interference.

03 p0396 A69-13628



An explanation of VLF diurnal phase change observations.  
07 p1078 A69-18912

## KAISER, C.

Stability and habituation of nonspecific GSRs.  
03 p0380 A69-13462

## KAISER, D.

Diuresis during total immersion in a thermally neutral bath /Die Diurese bei Immersion in ein thermoidifferentes Vollbad/.  
23 p4094 A69-42075

Change of human plasma volume during immersion in a thermally neutral water bath /Aenderung des Plasmavolumens des Menschen bei Immersion in ein thermoidifferentes Wasserbad/.  
23 p4096 A69-42087

## KAISER, E.

An 8-channel telemeter system for E.E.G.  
23 p4106 A69-41802

## KAISER, R.

Considerations relative to the calculation of radiation doses in view of the quantification of biological effects in the case of supersonic transport /Considerations relatives aux calculs des doses de radiations en vue de la quantification des effets biologiques dans le cas du transport supersonique/.  
11 p1830 A69-24865

Necessity of using the direct correlations between the damages caused and the trajectories in the study of the biological effects of heavy ions in cosmic radiation /Necessite d'utiliser les correlations directes entre les dommages causes et les trajectoires dans l'etude des effets biologiques des ions lourds du rayonnement cosmique/.  
23 p4089 A69-41831

## KAISER, R. L.

The Australian commercial satellite communication station.  
09 p1458 A69-22469

## KAISER, T. R.

Satellite evidence for the generation of VLF emissions at medium latitude by the transverse resonance instability.  
12 p2073 A69-26947

Ambipolar diffusion and motion of ion clouds in the earth's magnetic field.  
12 p2074 A69-26961

V.L.F. observations on Ariel III.  
21 p3717 A69-39262

## KAISER, W.

K/Ar-age determinations of iron meteorites. V.  
19 p3412 A69-36106

## KAITMAZOV, S. D.

Investigation of optical breakdown in air by a laser operating in the mode-synchronization regime.  
06 p0934 A69-17546

Characteristics of a mode-locked laser.  
06 p0934 A69-17549

## KAIUK, I. A. F.

Stress concentration in thin shells during large deflections /Konsentratsiia napriazhenii v tonkikh obolochkakh pri bol'shikh progibakh/.  
11 p1972 A69-24654

## KAJIKAWA, M.

Analysis of the topside ionospheric data from Aouette II over Japan. I.  
01 p0065 A69-10548

Diversity reception in VHF space communications.  
06 p0889 A69-17653

Diversity reception in VHF space communications.  
10 p1775 A69-23191

## KAKARAS, G.

Photometric effects in unresolvable binaries of the UB system /Fotometricheskie efekty nerazdelimyykh dvoynykh zvezd v sisteme UB/.  
07 p1216 A69-18854

## KAKAURIDZE, D. B.

Inelastic interaction cross section of  $7 \times 10$  super 10 to 10 super 12 eV nuclear-interacting particles in carbon and iron.  
13 p2330 A69-28383

## KAKICHASHVILI, SH. D.

Two-lens compensator for the chromatic aberration of holograms /Dvukhliznynyi kompensator khromatizma hologramm/.  
01 p0080 A69-10430

## KAKIMOTO, Y.

Relationships between flying safety and human factors from job-satisfaction in JASDF. I.  
06 p0884 A69-18035

## KAKINUMA, T.

The slowly varying component of the radio emission during the period of the July 1966 proton flare.  
10 p1783 A69-23734

High-resolution observations of solar radio bursts with multi-element compound interferometers at 3.75 and 9.4 GHz.  
11 p1946 A69-24428

A high-resolution quick-scan interferometer for solar studies at 3.75 GHz.  
18 p3118 A69-34968

A statistical study of solar bursts at microwave frequencies.  
18 p3187 A69-34969

## KAKINUMA, Y.

Supplements to a multimode direction tracking system - Simultaneous usage with a polarization tracker.  
06 p0888 A69-17652

Error probability and power spectrum of PCM/PM signals with small phase deviation.  
06 p0889 A69-17656

## KAKO, K.

Regulation of leucine incorporation into cardiac protein by work loads.  
23 p4083 A69-41456

## KAKOLEWSKI, J. W.

Short-latency antidiuresis following the initiation of food ingestion.  
01 p0014 A69-10860

Hypothalamic motivational systems - Fixed or plastic neural circuits/questions.  
09 p1444 A69-21310

A comparison of stimulus-bound drinking and drinking induced by water deprivation.  
17 p2910 A69-33750

The motivation underlying eating elicited by lateral hypothalamic stimulation.  
17 p2910 A69-33752

Ventromedial hypothalamic lesions and changes in body weight and food consumption in male and female rats.  
17 p2910 A69-33756

## KAKURIN, L. I.

Theoretical aspects of the selection of the physiological parameter complex for medical control during space flights /Teoreticheskie aspekty vybora kompleksa fiziologicheskikh parametrov dlia meditsinskogo kontrolya v kosmicheskikh poletakh/.  
07 p1071 A69-18978

Effect of prolonged restriction of muscular activity on the human body and the hypokinetic component of weightlessness.  
08 p1262 A69-19837

Studies of human adaptation to space flight effects under low-calorie diet conditions.  
20 p3482 A69-37621

Theoretical approach to the selection of physiological parameters for the medical monitoring of space flights.  
20 p3483 A69-38226

## KAKUSHADZE, A. M.

Calculation of plates by a method analogous to the method of forces of structural mechanics /Ispl'zovanie metoda analogichnogo metoda sil stroitel'noi mekhaniki dlia rascheta plit/.  
10 p1792 A69-22849

## KAKUSHADZE, T. I.

Magnetic properties of ferrites with a garnet structure /Magnitnye svoystva ferritov so strukturoi granata/.  
13 p2323 A69-28564

## KAKUTANI, T.

Weak non-linear hydromagnetic waves in a cold collision-free plasma.  
17 p3010 A69-32866

## KALA, F.

Electrohydraulic attitude servomechanism for a pilot training cabin /Polohovy elektrohidraulicky servomechanizmus pro pilotni cvicnou kabinu/.  
06 p0906 A69-16966

## KALABA, R.

Flux equivalences among Rayleigh, isotropic, and other scattering models.  
04 p0687 A69-15281

Initial-value methods for integral equations arising in theories of the solar atmosphere.  
13 p2350 A69-27859

Reflection and transmission functions for finite isotropically scattering atmospheres with specular reflectors.  
15 p2597 A69-31152

Estimating parameters of an inhomogeneous medium by probing with rays.  
18 p3172 A69-34667

A new approach to the auxiliary equation with application to the Greenhouse effect.  
23 p4239 A69-41607

## KALABA, R. E.

Verification of the invariant imbedding method for certain Fredholm integral equations.  
01 p0103 A69-10062

Invariant imbedding and sequential interpolating filters for nonlinear processes.  
[ASME PAPER 68-WA/AUT-3]  
05 p0738 A69-16187

Derivation and validation of an initial-value method for certain nonlinear two-point boundary-value problems.  
09 p1531 A69-21413

Dynamic programming and optimal trajectories for quadratic variational processes.  
11 p1910 A69-25410

## KALABEGASHVILI, M. G.

Determination of load carrying capacity of an anisotropic circular cylindrical shell /Opredeleniye nesushchei sposobnosti anizotropnoi krugovoi tsilindricheskoi obolochki/.  
20 p3629 A69-38075

## KALABUKHOVA, E. P.

On guaranteed evaluations of the reliability of a system with incomplete information about the reliability of the elements.  
02 p0251 A69-11652

## KALACHEV, P. D.

The constructive schemes of multisupport steerable parabolic antennas.  
23 p4149 A69-42128

## KALAFUS, R. M.

Microwave radiometric capabilities and techniques.  
12 p2033 A69-26976

## KALAGHAN, P. M.

Radiometric observations of the planets Jupiter, Venus, and Mars at a wavelength of 8.6 mm.  
02 p0327 A69-12716

Observations of the phase effect of Venus at 8.6-mm wavelength.  
10 p1773 A69-22959

The phase effect of Venus at short wavelengths.  
12 p2153 A69-25806

## KALANDAROVA, M. P.

Qualitative and quantitative distribution of bone marrow in adult dogs.  
08 p1262 A69-19835

Radiobiological evidence on the importance of local protection of the astronaut.  
08 p1263 A69-19939

## KALANDIJA, A. I.

Numerical solution of plane problems in the theory of elasticity.  
18 p3219 A69-34709

Stressed state of rib-reinforced plates /O napriazhenom sostoianii v plastinkakh, usilennykh rebrami zhestkosti/.  
22 p4041 A69-40114

## KALASHNIKOV, V. V.

Estimation of the reliability of redundant systems with a constant recovery time, by using an analog of the Liapunov direct method /Otsenka nadezhnosti rezervirovannykh sistem s postoiannym vremenem vosstanovleniya pri pomoshchi analoga priamogo metoda Liapunova/.  
23 p4144 A69-41953

## KALATA, K.

Polarimeter for celestial X rays.  
23 p4207 A69-42382

## KALBERLAH, A.

Electrolytic regeneration of alkaline electrolytes in fuel cells.  
08 p1260 A69-21043

Electrolytic regeneration of alkaline electrolytes in fuel cells.  
16 p2738 A69-32414

## KALELKAR, A.

Statistical theory of dissociation and recombination for moderately complex molecules.  
02 p0283 A69-12181

## KALER, J. H.

Spectrophotometric studies of gaseous nebulae.  
[ARL-68-0200]  
02 p0327 A69-12708

- KALES, A.**  
Psychological, psychophysiological, and biochemical correlates of prolonged sleep deprivation.  
23 p4099 A69-42195
- KALESTYNSKI, A.**  
Reconstruction of holograms in the back diffraction field.  
08 p1312 A69-20086
- KALICHEVA, T. S.**  
Study of the distribution of Sc, Ce, and Eu in various phases of meteorite material /Izuchenie raspredelenia Sc, Ce i Eu mezhdu razlichnymi fazami meteoritnogo veshchestva/.  
01 p0026 A69-11376
- KALIKHMAN, L. E.**  
Boundary layer of a two-temperature plasma at the electrodes of a magnetohydrodynamic channel with crossed electric and magnetic fields and large values of the Hall parameter /Pogranichnyi sloi dvukhtemperaturnoi plazmy na elektrodakh magnetogidrodinamicheskogo kamala so skreshchennymi elektricheskimi i magnitnymi poliami pri bol'shikh znacheniiakh parametra kholla/.  
22 p3991 A69-41022
- KALINCHENKO, I. R.**  
Influence of high oxygen concentrations on animal organisms /Vliianie povyshennykh kontsentratsii kisloroda na organizm zhivotnykh/.  
05 p0709 A69-16512  
The effect of high oxygen concentrations on the animal organism.  
08 p1262 A69-19831  
Variation pulsograms and indices of respiratory function in acute hypoxia.  
10 p1647 A69-23592  
Phagocytic activity and certain characteristics of the carbohydrate metabolism in neutrophils of men exposed to an atmosphere with increased oxygen content /Fagotsitarnaiia aktivnost' i nekotorye pokazateli uglevodnogo obmena neutrofilov u liudei, nakhodivshiesia v atmosfere s povyshennym soderzhaniiem kisloroda/.  
17 p2907 A69-32942  
Effects of high oxygen concentrations on animals.  
18 p3095 A69-34731
- KALINICHENKO, S. S.**  
Heating of plasma ions by an external stochastic field.  
09 p1553 A69-22527
- KALININ, A. I.**  
Diffraction of radio waves around the earth in a nonuniform atmosphere.  
03 p0399 A69-14130  
Statistical distribution of thermal noise intensity in the channels of tropospheric radio relay systems /O statisticheskom raspredelenii moshchnosti teplovyykh shumov v kanalakh troposfernykh radioreleinykh lini/.  
14 p2412 A69-29425
- KALININ, E. K.**  
Investigation of heat exchange intensification in a packed tube bundle in longitudinal air flow /Issledovanie intensifikatsii teploobmena v prodol'no omyvaemom vozdukhom tesnom puchke trub/.  
01 p0173 A69-10092  
Film boiling of subcooled liquid nitrogen in turbulent flow.  
07 p1243 A69-19737
- KALININ, G. P.**  
The anomalies of the properties of titanium alloys with beta stabilizing elements.  
03 p0443 A69-13029  
Fabrication of a bimetallic sheet of titanium-28 percent vanadium alloy plated with niobium by means of the hot-rolling method /Poluchenie bimetallicheskoj lenty splava titana s 28 percent vanadiia, plakirovannoi niobiem metodom gorichaei prokatki/.  
18 p3155 A69-34652
- KALININ, IU. A.**  
Effect of inverted-population distribution on transverse laser modes.  
06 p0932 A69-16913  
A laser with a resonator mirror transmittance which is variable over the cross section /OKG s peremennym po secheniiu propuskaniem zerkal resonatora/.  
15 p2634 A69-30962
- KALININ, IU. G.**  
Investigation of the energy losses and effectiveness of the turbulent heating of a plasma by a current /Issledovanie energeticheskikh poter' i effektivnosti turbulentnogo nagreva plazmy tokom/.  
11 p1935 A69-25753
- Scattering of electromagnetic waves by turbulent plasma fluctuations.  
15 p2659 A69-30728
- KALININ, L. G.**  
Study of the heat transfer of a rotating sphere under conditions of natural convection by the Schlieren method /Issledovanie teploobmena vrashchaisheisia sfery v usloviakh estestvennoi konveksii s primeneniem Shliren-metoda/.  
01 p0174 A69-10095
- KALININ, N. G.**  
Experimental investigation of the damping characteristics of foam plastic fillers /Eksperimental'noe issledovanie dempfiiruiushchikh svoystv penoplastovykh zapolnitelei/.  
17 p2993 A69-33942
- KALININ, P. I.**  
Thermodynamic properties of zirconium-niobium alloys.  
07 p1165 A69-18940
- KALININ, V. G.**  
Generators of high-voltage nanosecond controlled-amplitude pulses /Generatory vysokovol'nykh nanosekundnykh impul'sov s reguliruemoi amplitudoi/.  
04 p0597 A69-14849
- KALINKIN, L. F.**  
Study of cosmic-ray electrons and gamma quanta at altitudes up to 27.5 km /Issledovanie elektronov i gamma-kvantov kosmicheskikh luchei na vysotakh do 27,5 km/.  
10 p1758 A69-22830  
A device for recording electrons with energies from 0.1 to 1.5 GeV in cosmic radiation /Pribor dlia registratsii elektronov s energiei 0,1 to 1,5 GeV v kosmicheskom izluchении/.  
21 p3724 A69-39074
- KALINKINA, I. N.**  
Investigation of the second optical harmonic generated in divergent laser beams /Issledovanie vtoroi opticheskoi garmoniki, generirovannoi v raskhodiashchiesia puchkakh lazera/.  
24 p4328 A69-43161
- KALINKOV, M.**  
Autocorrelation of solar activity /Avtokorrelatsiia solnechnoi aktivnosti/.  
02 p0314 A69-11677  
Autocorrelation of solar activity.  
13 p2355 A69-28708  
Discreteness of the distances to extragalactic objects /V'rkhu diskretizatsiia na razstoianniia do izv'nagalaktichni obekti/.  
21 p3802 A69-38843
- KALINOVICH, D. F.**  
State of nickel in a nickel molybdenum alloy /O sostoianii nikelia v nikel'molebdenovom splave/.  
07 p1159 A69-18535
- KALINOVICH, V. M.**  
Errors in an autonomous determination, caused by the inaccurate introduction of the initial conditions for coordinates /Pro pokhibki avtonomnogo viznachennia, obumovleni netochnim vvedeniiem pochatkovykh umov dlia koordinat/.  
21 p3760 A69-38572
- KALINOVSKAIA, G. P.**  
Residual nighttime absorption /Ob ostatocnom nochnom pogloshchenii/.  
20 p3528 A69-37678
- KALINOVSKII, A. P.**  
A system for the processing of physiological information in the course of cosmic flights.  
10 p1649 A69-23509  
A method of measuring physiological characteristics with the aid of a digital computer /Ob odnom sposobe izmereniia fiziologicheskikh pokazatelei s pomoshch'iu ETsVM/.  
17 p2912 A69-32941
- KALINOWSKI, A. J.**  
Optimum performance bounds and synthesis of dynamic systems.  
18 p3106 A69-34663
- KALINOWSKI, C. A.**  
Concept of an interactive system as an experimenter. [AIAA PAPER 69-953]  
22 p3904 A69-40335
- KALINSKI, J.**  
A new principle for automatic compensation of unwanted signal level fluctuation in measuring setups which include a microwave generator and detector.  
06 p0903 A69-17489  
New method and system for measuring the amplitude ratio of two AC signals /Nowa metoda i uklad do pomiaru ilorazu amplitud dwuch sygnalow zmiennych/.  
17 p2975 A69-33615
- KALISH, D.**  
Diboride materials, candidates for aerospace applications.  
19 p3355 A69-35526
- KALISKI, M. E.**  
On-line simulation of block-diagram systems.  
16 p2755 A69-31709
- KALISKI, S.**  
Instability limits of parametric self-excited vibrations of elastic and aeroelastic systems with travelling waves.  
02 p0337 A69-11561  
Direct amplification of ultra and hypersonic surface waves in semiconducting crystals of the wurtzite group.  
03 p0490 A69-13925  
Experimental realization of a perfect piezo-semiconductor resonator /a phaser/.  
03 p0431 A69-13930  
Critical drift threshold in the amplification problem of surface waves in a semi-conductor in a magnetic field.  
05 p0810 A69-16648  
The influence of damping in electronic-ultrasonic amplifiers with an external electron stream.  
16 p2761 A69-32061  
Aero-magnetic flutter of an infinite cylindrical duct.  
18 p3226 A69-35462
- KALISTRATOV, G. F.**  
Evoked potentials of the fields of primary somatosensory projections on the dorsolateral surface of the brain cortex of cats /Vyzvannye potentsialy poei pervichnykh somatosensornykh proektsii na dorsolateral'noi poverkhnosti kory mozga koshek/.  
22 p3886 A69-41121
- KALITKIN, N. N.**  
Conductivity of a low-temperature plasma /Provodimost' nizkotemperaturnoi plazmy/.  
02 p0291 A69-12486
- KALITSKII, I. I.**  
Degeneration of a three-parameter correction of interplanetary swinby trajectories /O vyzhodnii trekh-parametricheskoi korrektsii mezplanetnykh obletnykh traektorii/.  
19 p3427 A69-36613
- KALITZIN, N.**  
Basov's experiments and the multitemporal theory of relativity.  
21 p3770 A69-38839  
On a possible connection between solar activity and quasi-periodical variability of the gravitational constant.  
21 p3802 A69-38842
- KALIZHNYI, L. V.**  
Correlation of changes in EEG and food-procuring reflex of rabbits during increasing hypoxia.  
02 p0197 A69-11492  
Influence of high oxygen concentrations at normal pressure on the evoked potential of the cortical optic zone and some subcortical zones /Vliianie vysokikh kontsentratsii kisloroda pri normal'nom davlenii na vyzvannyi potentsial zritel'noi oblasti kory i nekotorykh oblastei podkorki/.  
05 p0709 A69-16515  
Influence of high oxygen concentration on the conditioned reflex activity and biological activity of certain cortical areas and subcortical formations of rabbits /Vliianie vysokikh kontsentratsii kisloroda na uslovnorefleksionnuu deiatel'nost' i bioelektricheskuu aktivnost' nekotorykh oblastei kory i podkorkovykh obrazovani krolikov/.  
07 p1065 A69-18976  
The effect on the evoked potential of the cortical optic and some subcortical zones of high oxygen concentrations at normal pressure.  
18 p3096 A69-34734  
Effect of high oxygen concentrations on conditioned reflexes and bioelectrical activity of certain areas of the cortex and subcortical formations of rabbits.  
20 p3479 A69-38224
- KALIVRETNOS, C. A.**  
Hypersonic turbulent boundary-layer separations at high Reynolds numbers.  
22 p3930 A69-40557
- KALKBRENNER, E.**  
Creep and Elastic Aftereffect of Pure Titanium /Kriechen und elastische Nachwirkung von Reintitan/.  
01 p0101 A69-11363
- KALLARD, T.**  
Holography- State of the Art Review ... 1969.  
09 p1502 A69-22773
- KALLEND, A. S.**  
Effect of sulphur dioxide on equilibrium in hydrogen flames.  
21 p3669 A69-38807



## KALLERT, S.

"Demultiplicated" neuronal discharge periodicities correlated with stimulus frequency in colliculus inferior and geniculatum mediale /Reizfrequenzkorrelierte "untersetzte" neuronale entladungsperiodizitaet im colliculus inferior und im corpus geniculatum mediale/.  
23 p4096 A69-42089

Sound-correlated DC changes on the intact skull of human subjects /Akustischen Reizen zugeordnete Gleichspannungsänderungen am intakten Schädel des Menschen/.  
23 p4098 A69-42101

## KALLIES, H.-E.

Performance Behavior of Flapper Valves /Ueber das Leistungsverhalten von Prallplattenventilen/.  
09 p1435 A69-21296

## KALLINGS, L. O.

The place of radiation sterilization in combined techniques.  
05 p0713 A69-15947

## KALLIO, F. H.

Solid state synchro data interface techniques.  
11 p1842 A69-24543

## KALLISTRATOVA, M. A.

Measurement of vibrations of the solar limb image /Izmereniia drozhanii kraia solnechnogo izobrazheniia/.  
01 p0156 A69-11183

## KALMA, A. H.

Effect of 50 Mev electrons of the ultimate Fermi level in germanium.  
04 p0640 A69-14444

## KALMYKOV, A. A.

The influence of Hall currents on plasmoid dynamics in a spatially-periodic magnetic field.  
08 p1370 A69-21017

## KALMYKOV, N. N.

Study of high-energy muons in extensive air showers.  
13 p2332 A69-28409  
Concerning interactions of components of extensive air showers.  
13 p2332 A69-28410

## KALNIBOLOTSKII, I. U. M.

Algorithms in electronic circuit analysis /Algoritmy analiza elektronnykh skhem/.  
09 p1472 A69-21777

Optimal computer solution of the problem of canonical synthesis of electronic circuits /Optimal'noe resheniye zadach kanonicheskogo sinteza elektronnykh skhem s pomoshch'yu ETSVM/.  
09 p1472 A69-21781

Topological analysis of electronic circuits /Topologicheskii analiz elektronnykh skhem/.  
15 p2582 A69-30112

## KALNIN, I. L.

The effect of filament winding process variables on the performance of carbon or fiberglass reinforced NOL rings.  
08 p1338 A69-20489

## KALNIN, R. K.

Allowance for the image brightness distribution during photoelectric recording of the transit of stars /Uchet raspredeleniia iarkosti izobrazheniia pri fotoelektricheskoi registratsii prokhozheniia zvezd/.  
20 p3608 A69-38053

## KALNINS, A.

On the derivation of a general theory of elastic shells.  
23 p4226 A69-41535

## KALNYNIA, R. P.

Charge motion in MOS-structures with a pyrolytic SiO sub 2 film on germanium /Dvizhenie zariadov v MOS-strukturakh s piroliticheskoi plenкой SiO sub 2 na germanii/.  
07 p1200 A69-19010

## KALOUSEK, J.

Conclusions from the visit to the Fokker firm in Schiphol, Holland /Poznatky z navstevy firmy Fokker, Schiphol Holandsko/.  
03 p0434 A69-13791

## KALOUSTIAN, H. D.

Lactate dehydrogenase of lobster /homarus Americanus/ tail muscle. I.  
22 p3897 A69-41069

## KALRA, G. L.

Effect of finite ion Larmor radius on the stability of rotating superposed fluids.  
12 p2062 A69-26461

## KALT, A.

Strioscopic methods for measuring mass volume in hypersonic wakes in a hot-shot tunnel /Methodes

strioscopiques de mesure des masses volumiques dans les sillages hypersoniques en tunnel de tir/.  
19 p3293 A69-35740

## KALTENECKER, H.

Aspects of international responsibility of international space organizations /Aspect de la responsabilité internationale des organisations internationales de l'espace/.  
20 p3635 A69-37108

## KALTENHAUSER, R.

Weldability of precipitation hardening steels.  
12 p2111 A69-25829

## KALUGINA, L. I.

Properties of a p-n junction in cadmium telluride /O svoistvakh p-n-perekhoda v telluride kadmiia/.  
10 p1744 A69-23212

## KALUZHSKII, I. I.

Certain problems concerning the plasticity of orthotropic media /Nekotorye voprosy plastichnosti ortotropnykh sred/.  
24 p4400 A69-43083

## KAMACH, I. U. E.

Optical alignment of lasers with electrooptical Q-modulation.  
12 p2107 A69-26589

A laser with an electrooptical quartz Q-modulator.  
12 p2108 A69-26591

Single-block shutter-reflector for operation with unpolarized radiation /Monoblochnyi zatvor-otrazhatel' dlia raboty s nepoliarizovannym izlucheniem/.  
20 p3554 A69-37611

Shadow images of bodies obtained at hypersonic speeds by means of a single-pulse laser /Poluchenie tenevykh izobrazhenii tel pri giperzvukovykh skorostiakh s pomoshch'yu monoimpul'snogo opticheskogo kvantovogo generatora/.  
22 p3963 A69-40601

## KAMADA, T.

The effects of temperature and ions on the refractive index of VLF radio waves in the lower ionosphere.  
18 p3102 A69-34971

Artificial sea phenomena due to high-altitude nuclear explosion.  
20 p3492 A69-37701

## KAMARINOS, G.

Distribution of carriers in a quasi-intrinsic bar of germanium subjected to an electric field up to several kilovolts per centimeter /Repartition des porteurs dans un barreau de germanium quasi intrinseque, soumis a un champ électrique jusqu'a quelques kilovolts par centimetre/.  
08 p1372 A69-20277

## KAMARYTOVA, B.

The solution of shells by the moire method.  
15 p2713 A69-31056

Solution of shells by means of the moire method.  
15 p2715 A69-31546

## KAMAT, A. P.

Transistorised multichannel pulse height analyser and recording system for balloon borne cosmic ray telescope.  
06 p0924 A69-17284

## KAMBE, T.

Magnetic cavity due to line currents in a plasma. [ISAS-433]  
09 p1553 A69-22569

The stability of an axisymmetric jet with parabolic profile.  
13 p2244 A69-27300

## KAMBOUR, R. P.

Stress-strain behavior of the craze.  
01 p0102 A69-10915

## KAMCHALOVA, I. E.

Obtaining a Chlorella biomass with an enhanced content of sulphur-containing amino acids and its nutritive value /Poluchenie biomassy Khlorelli s povyshennym soderzhaniiem serusoderzhashchikh aminokislot i ee pishchevaia tsennost'/.  
13 p2216 A69-28620

## KAMEDA, S.

A matching technique to inject microwave power into high-density plasmas.  
21 p3779 A69-39746

## KAMEI, A.

A criterion for unstable elastic-plastic fracture based on energy balance considerations.  
07 p1238 A69-19693

## KAMEKO, V. F.

Aerodynamic characteristics of a satellite with allowance for its position and orientation in the orbit

/Aerodinamicheskie kharakteristiki sputnika s uchetom ego polozheniia i orientatsii na orbite/.  
22 p4037 A69-41102

## KAMEL, H. A.

Computational stability in nonlinear discrete structural systems.  
12 p2185 A69-26819

## KAMEN, I.

Laser link modulation means for wide spectrum telemetry world wide and urban communications systems.  
19 p3272 A69-36257

## KAMENETSKAIA, G. KH.

Excitation of longitudinal waves by an equatorial jet stream /O vozbuzhdenii prodol'nykh voln tokom ekvatorial'noi strui/.  
14 p2437 A69-29073

## KAMENETSKY, L. G.

Extravascular dehydration as an etiologic factor in post-recumbency orthostatism.  
17 p2909 A69-33179

## KAMENIR, I. A.

The Hydraulic Servo Drive /Gidravlicheskii Slediaschii Privod/.  
18 p3093 A69-34356

## KAMENOMOSTSKAIA, S. L.

Burning and stabilization of a hydrogen flame in an axisymmetric flow /Gorenie i stabilizatsiia plameni vodoroda v osesimmetrichnom potoke/.  
02 p0355 A69-12673

## KAMENSKAIA, S. A.

Absolute measurements of radio-emission intensity of the discrete sources Cassiopeia-A and Cygnus-A at 30-60 cm wavelengths /Absolutnyie izmereniia intensivnosti radioizlucheniia diskretnykh istochnikov Kassiopeia-A i Lebed'-A na volnakh 30-60 cm/.  
19 p3428 A69-36876

## KAMENSKII, G. A.

Necessary condition for the optimum control of systems with a deviating neutral-type argument /Neobkhodimoe uslovie optimal'nogo upravleniia dlia sistem s otkloniaushchimsia argumentom neutral'nogo tipa/.  
14 p2426 A69-29419

## KAMESWARA RAO, A.

Effect of boundary condition description on convergence of solution in a boundary-value problem.  
04 p0681 A69-15283

## KAMI, S.

Plasma generator for space vehicle neutralization. [AIAA PAPER 69-273]  
09 p1567 A69-21263

## KAMIDE, Y.

Worldwide geomagnetic change preceding the onset of auroral electrojet.  
10 p1681 A69-22804

## KAMIJO, F.

Supersaturation of carbon vapour in the carbon stars. II.  
10 p1782 A69-23681

## KAMIMOTO, G.

The numerical study of flows over blunt bodies by method of integral relations.  
21 p3645 A69-39790

Calculations of electron temperature across a shock wave of a partially ionized gas.  
21 p3698 A69-39791

Hypersonic aerodynamic characteristics for lifting bodies.  
21 p3645 A69-39793

Spectroscopic measurements of weakly ionized argon plasma jet. II.  
21 p3779 A69-39794

Measurements of the vibrational relaxation time and the dissociation rate constant of CO sub 2 in shock waves.  
21 p3775 A69-39801

Measurements of the hypersonic aerodynamic characteristics for several kinds of wave riders.  
21 p3645 A69-39802

New hypersonic gun tunnel at Kyoto University.  
22 p3927 A69-40587

Spectroscopic measurements of a weakly ionized argon plasma jet. I - Electronic excitation temperature and electron density measurements in a test section and a plenum chamber.  
22 p3990 A69-40596

Piston driven shock tube of Kyoto University.  
22 p3928 A69-41046

On the nonequilibrium nozzle flows of weakly ionized helium and argon plasmas.  
22 p3861 A69-41047

- Spectroscopic measurements of weakly ionized argon plasma jet. III. 22 p3991 A69-41052
- KAMIMURA, M.**  
Input admittance of the Fabry-Perot resonator with infinitely long conic-section cylindrical reflectors. 05 p0731 A69-16295  
Leaky waveguide - Te sub 01 circular waveguide with periodic array of circular apertures. 13 p2233 A69-28063
- KAMINER, A. A.**  
Experimental facilities for investigating the energy dissipation for cantilever rods oscillating in airstreams /Eksperimental'nye ustanovki dlia issledovaniia raseianiiia energii pri kolebaniakh konsol'nykh sterzhnei v vozdukhnykh potokakh/. 17 p2947 A69-33928  
Investigations of energy dissipation during vibrations of bars in airstreams /Issledovanie raseianiiia energii pri kolebaniakh sterzhnei v vozdukhnykh potokakh/. 17 p3066 A69-33948
- KAMINER, N. S.**  
Dependence of cosmic-ray increases on the structure of the interplanetary magnetic field before Forbush effects /Zavisimost' vozrastanii kosmicheskikh luchej pored Forbush-effektami ot struktury mezplanetnogo magnitnogo polia/. 14 p2512 A69-29044  
Solar cosmic ray flare on January 28, 1967 /Vspysy-shka solnechnykh kosmicheskikh luchej 28.i.1967 g./. 14 p2513 A69-29066  
Acceleration of cosmic rays by corpuscular fluxes and the characteristics of the solar wind /Ukorenenie kosmicheskikh luchej korpuskularnymi potokami i kharakteristiki solnechnogo vetra/. 23 p4205 A69-41838  
Barometric effect of the neutron component of cosmic rays in the presence of a background /Barometricheskii efekt neitronnoi komponenty kosmicheskikh luchej pri nalichii fona/. 23 p4206 A69-41855
- KAMINSKI, S.**  
Variational method for calculating beams under dynamic or static load /Variatsionnaya metoda obliczaniia belek obiazannykh dynamicznie lub statychnie/. 22 p4043 A69-40459
- KAMINSKII, A. A.**  
Laser with combined active medium. 04 p0611 A69-14546  
Propagation of cracks near an arbitrary curvilinear hole. 04 p0674 A69-14562  
CW laser employing LaNa/MoO sub 4/ sub 2 - Nd super 3 super plus crystals for operation at 300 K /Opticheskii kvantovyi generator nepriernynogo deistviia na osnove kristallov LaNa/MoO sub 4/ sub 2 - Nd super 3 super plus, rabotaiushchii pri 300 deg K/. 06 p0934 A69-17262  
High-temperature spectroscopic investigation of stimulated emission from lasers based on crystals and glasses activated with Nd super 3 super plus ions. 08 p1323 A69-19944  
Continuous stimulated emission of an LaF sub 3 - Nd super 3 super plus laser at room temperature. 08 p1323 A69-19945  
Analysis of the Stark structure of Tr super 3 super plus ion spectra by the method of induced-emission spectroscopy /Analiz shtarkovskoi struktury spektrov ionov Tr super 3 super plus metodom spektroskopii induktivirovannogo izlucheniia/. 10 p1701 A69-23129  
Quasi-CW lasers with pyrotechnic excitation /Kvazinepriernynye OKG s pirotekhnicheskimi vzbuzhdeniiem/. 13 p2272 A69-28116  
Procedure for the investigation of auto-resonant energy transfer in laser active media. 14 p2460 A69-29644  
Spectroscopic investigation of stimulated emission from lasers based on CeF sub 3 - Nd super 3 super plus crystals. 14 p2460 A69-29645  
Applicability of the Volterra principle in studies of crack propagation hereditarily elastic media /O primenimosti printsipa Vol'terra pri issledovanii dvizheniia treshchin v nasledstvenno-uprugikh sredakh/. 15 p2715 A69-31201  
Development of cracks near holes in compressed bodies /Razvitie treshchin voze otverstii v szhatykh telakh/. 18 p3218 A69-34603
- KAMIRYO, K.**  
Optimum design of elliptic-cylindrical chambers for optical pumping of solid-state lasers. 10 p1706 A69-24010
- Optimum design of spherical and ellipsoidal pumping chambers for solid-state lasers. 24 p4327 A69-42986
- KAMIYA, Y.**  
The charge ratio of high-energy cosmic-ray muons at large zenith angles. 17 p3023 A69-33321
- KAMIYAMA, H.**  
Multi-component diffusion in the topside ionosphere. 14 p2441 A69-29381
- KAMLET, S. G.**  
Noise relationships in amplifier circuits with AGC. 05 p0729 A69-16085
- KAMMASH, T.**  
A study of plasma stability in sheared magnetic fields. 02 p0289 A69-12173
- KAMMER, P. A.**  
Further studies of diffusion bonding below 1000 deg F. 15 p2617 A69-30100  
Effect of experimental 2219 and 2014 aluminum weld composition variations. 22 p3956 A69-40461
- KAMMERER, C. C.**  
Project Apollo - Automated ultrasonic bond-quality inspection. 15 p2632 A69-31515
- KAMON, T.**  
The use of the "baseband equation" for satellite system design. 07 p1085 A69-19180
- KAMPFHENKEL, H.**  
Compensation of parasitic reactances in reactance filters /Der Ausgleich parasitaerer Reaktanzen in Reaktanzfiltern/. 08 p1283 A69-20128
- KAMPSCHAFER, A. R.**  
Weight trends - Past and predicted. 15 p2550 A69-30463
- KAMSHILOVA, E. M.**  
Effect of space flight factors on the frequency of recessive lethal sex-related mutations in *Drosophila melanogaster* /Vlianie faktorov kosmicheskogo poleta na chastoty vozniknoveniia steplennykh s polom retsessivnykh letal'nykh mutatsii u drosophila melanogaster/. 07 p1063 A69-18598
- KAMSLER, W. F.**  
Antenna positioning by digital computer. 19 p3267 A69-35997
- KAMUZ, A. M.**  
Nature of the propagation of high-power light beams in certain transparent cubic crystalline media /O kharaktere rasprostraneniia moshchnykh svetovykh puchkov v nekotorykh prozrachnykh kubicheskikh kristallicheskikh sredakh/. 03 p0438 A69-13051
- KAMUZ, O. M.**  
Investigation of the effect of intense ruby laser radiation on the optical properties of a CdS crystal /Doslizhennia vplivu intensivnogo viprominiuvannia rubinovogo lazera na optichni vlastivosti kristala CdS/. 14 p2457 A69-28999
- KAMYNNIN, L. I.**  
Smoothness of thermal potentials. VI - Special thermal potentials P and Q on certain surfaces /O gladkosti teplovykh potentsialov. VI - Spetsial'nye teplovye potentsialy P i Q na osobennykh poverkhnostiakh/. 05 p0849 A69-16452  
Solution of the fourth and fifth boundary value problems for a second-order one-dimensional parabolic equation in a curvilinear region /O reshenii iv i v kraevykh zadach dlia odnomernogo parabolicheskogo uravneniia 2-go poriadka v krivolineinnoi oblasti/. 20 p3631 A69-36991
- KAMYSHKOV, A. S.**  
Study of the influence of prolonged heating in vacuum and thermal cycling on the properties of SAP sheets /Issledovanie vlianiia dlitel'nykh nagrevov v vakuumie i teplosmen na svoista listovykh polufabrikatov SAPa/. 02 p0266 A69-12126
- KAN, H. K. A.**  
Low-energy electron-diffraction studies of the interaction of oxygen with a molybdenum /100/ surface. 16 p2748 A69-32795
- KAN, J. R.**  
Noise spectrum received by an antenna in a plasma. 21 p3683 A69-39284
- A guiding centre Vlasov equation and its application to Alfvén waves. 23 p4197 A69-42416
- KAN, N. Z.**  
Problem of small motions of a body containing a cavity which is partially filled with a viscous liquid /Zadacha o malykh dvizheniiakh tela s polost'iu, chastichno zapolnennoi viazkoi zhidkost'iu/. 12 p2061 A69-25884  
Motion of a pendulum containing a damper /O dvizhenii maiatnika, soderzhashchego dempfer/. 18 p3135 A69-34557  
Asymptotic method in the problem of the oscillations of a highly viscous fluid /Asimptoticheskii metod v zadache o kolebaniakh sil'no viazkoi zhidkosti/. 22 p3929 A69-40111
- KAN, S. N.**  
Influence of boundary conditions on the stability of a cylindrical shell under external pressure and axial tensile forces /O vlianii granichnykh uslovii na ustoiichivost' tsilindricheskoi obolochki, nagruzhennoi vneshnim davleniem i osevmi rastiagivaiushchimi silami/. 18 p3222 A69-34977
- KAN, S. S.**  
Stability of shells of revolution with arbitrarily curved generators. 06 p1021 A69-17179  
Stability of shells of revolution under axial tension /Ustoiichivost' obolochek vrashcheniia pri osevom rastiagivanii/. 18 p3222 A69-34976
- KAN, T.**  
Laser parameters for the 10.8-mu N sub 2 O molecular laser. [IEEE PAPER G-10] 07 p1151 A69-19057  
Observation of the central tuning dip in N sub 2 O and CO sub 2 molecular lasers. 19 p3339 A69-36698
- KANA, D. D.**  
Transmission characteristics of conical and cylindrical shells under lateral excitation. 06 p1021 A69-17147  
Influence of a rigid top mass on the response of a pressurized cylinder containing liquid. 09 p1616 A69-21979  
Dynamic stability of cylindrical propellant tanks. 11 p1989 A69-25499
- KANAI, K.**  
Optimal control theory due to parameter optimization method and its application to the design of optimal control equipment for aircraft. 22 p3919 A69-41051
- KANASEWICH, E. R.**  
Dirac's principle of cosmology and radioactive dating. 22 p4017 A69-40176
- KANATCHINOV, A. K.**  
Recombination coefficients for a dense weakly ionized cesium plasma /Koeffitsienty rekombinatsii v plotnoi slaboionizovannoi tsezievoi plazme/. 08 p1359 A69-19844
- KANAZAWA, K.**  
Behaviour of lowcycle fatigue at elevated temperatures. 10 p1797 A69-23081  
Investigation of low cycle fatigue at elevated temperatures. 18 p3219 A69-34834
- KANAZAWA, T.**  
Plastic deformation and rupture of thin circular plate under lateral pressure. I - Studies on rupture disc. 06 p1020 A69-17129  
Rupture of thin circular plate under static and pulsating lateral pressure - Studies on rupture disc - the second report. 19 p3434 A69-35773
- KANCHELLI, O. V.**  
On the theory of multiple production at high energies. 13 p2303 A69-28372
- KANDA, K.**  
Computerization of system/product fault trees. 19 p3280 A69-36029
- KANDEL, G. E.**  
Evaluating body composition. 14 p2409 A69-29295
- KANDIDOV, V. P.**  
Discrete model for investigating the vibrations of beams /Diskretnaia model' dlia issledovaniia kolebanii balok/. 02 p0336 A69-11462



## KANE, J.

Electronic simulation of the dynamic stability of an elastic beam-type structure /Elektronnoe modelirovanie dinamicheskoi ustoychivosti uprugoi konstruktivskiy balochnogo tipa/.  
11 p1986 A69-25344

## KANE, J.

Hadamard transform image coding.  
07 p1078 A69-18859

## KANE, J. A.

Electron and positive ion density measurements during conditions of auroral absorption.  
03 p0421 A69-13327

D-region electron density measurements during the solar eclipse of May 20, 1966.  
14 p2439 A69-29116

Results of rocket measurements in the lower auroral ionosphere.  
16 p2778 A69-32187

## KANE, R. P.

Modulation of galactic cosmic rays /Review/.  
06 p0989 A69-17287

Daily variation of cosmic ray intensity - Solar and terrestrial relationship.  
06 p0990 A69-17291

## KANE, S. R.

Observations of the screening of solar cosmic rays by the outer magnetosphere.  
02 p0309 A69-12740

An atlas of 10-50 kev solar flare X-rays and tentative atlas of solar proton events observed by the OGO-I and OGO-III ionization chambers /Research note/.  
07 p1206 A69-19251

Observations of energetic X-rays and solar cosmic rays associated with the 23 May 1967 solar flare event.  
09 p1579 A69-22182

Observations of two components in energetic solar X-ray bursts.  
22 p4007 A69-40775

## KANE, T. R.

On a restricted problem of two rigid spheroids.  
16 p2863 A69-32402

A method of active attitude control based on energy considerations.  
19 p3429 A69-35958

A dynamical explanation of the falling cat phenomenon.  
19 p3259 A69-36832

## KANEDA, E.

Hydrogen emission preceding auroral break-up.  
14 p2441 A69-23986

## KANEV, M. A.

Radiation-induced changes in CdS crystals in the process of stimulation of coherent emission in them /O radiatsionnykh izmeneniakh kristallov CdS v protsesse vozbuzhdeniya v nikh kogherentnogo izlucheniya/.  
21 p3780 A69-39047

## KANEKO, Y.

An experimental study on the diffusion characteristics of turbulent flow in a low speed wind tunnel.  
13 p2250 A69-28496

## KANTEL, G. I.

Parameters of Mach reflection in Plexiglas cylinders /Parametry makhovskogo otrazheniya v pleksiglasovykh tsilindrakh/.  
19 p3302 A69-36845

## KANTEL, I. A.

Certain model systems of equations of gasdynamics /O nekotorykh model'nykh sistemakh uravnenii gazovoi dinamiki/.  
19 p3297 A69-35861

## KANEMA, S.

Matrix representations of noise figures and noise figure charts in terms of power wave variables.  
02 p0211 A69-12444

## KANER, E. A.

Electromagnetic waves in metals in a magnetic field.  
02 p0299 A69-12565

Instability of spiral waves in finite conductors /Neustoychivost' spiral'nykh voln v ogranichenykh provodnikakh/.  
21 p3782 A69-39556

## KANER, V. V.

Aperture limitations of the effectiveness of nonlinear optical processes /Ob aperturnykh ogranicheniyakh effektivnosti nelineynykh opticheskikh protsessov/.  
03 p0439 A69-13056

## KANESADA, F.

Synthesis of automatic flight control systems using optimal control theory.  
22 p3864 A69-40588

## KANEVSKAIA, E. A.

Some characteristics of neutral pion production in interactions of nucleons with energies above 10 super 13 ev.  
13 p2303 A69-28376

Spectrum of 10 super 11 to 10 super 13 ev photons in the upper atmosphere.  
13 p2330 A69-28378

## KANEVSKII, I. N.

Measurement of the diffusion coefficient of copper in gallium arsenide by an ultrasonic method /Izmerenie koeffitsienta diffuzii medi v arsenide galliia ul'trazvukovym metodom/.  
09 p1555 A69-21471

Measurement of the diffusion coefficient of copper in gallium arsenide by an ultrasonic method.  
15 p2669 A69-30716

## KANG, S.-W.

Hypersonic, low-Reynolds-number flow over a blunt body with mass injection.  
24 p4249 A69-43663

## KANGAS, J.

On the relationship between auroral-zone X-ray pulsations and development of the auroral electrojet.  
12 p2065 A69-26109

## KANGAST, J.

Balloon measurements of solar protons in Northern Scandinavia on 7 July 1966.  
10 p1767 A69-23763

## KANIA, M. J.

A systematic approach to accelerated testing. [AIAA PAPER 69-1036]  
22 p3925 A69-40403

## KANIEL, S.

A sufficient condition for smoothness of solutions of Navier-Stokes equations.  
12 p2124 A69-26971

## KANIUK, A. I.

Status and prospects of titanium application /Sostoi- anie i perspektivy vnedreniya titana/.  
07 p1161 A69-18767

## KANNAM, P. J.

Some limitations of the power output capability of VHF transistors.  
07 p1101 A69-18653

## KANNANGARA, M. L. T.

Nighttime equatorial Pi 2 micropulsations.  
07 p1125 A69-18841

## KANNE, W. R., JR.

Nature of slip line and substructure formation during creep in stoichiometric NiAl at temperatures between 475 deg and 775 deg C.  
19 p3343 A69-35923

## KANDEL, J. W.

Simulation of ball-bearing lubrication with a rolling-disk apparatus. [ASME PAPER 69-LUBS-16]  
18 p3140 A69-34380

## KANNINEN, M. F.

The speed of ductile-crack propagation and the dynamics of flow in metals.  
02 p0343 A69-12283

## KANO, M.

On the determination of backscattering and extinction coefficient of the atmosphere by using a laser radar.  
07 p1126 A69-18966

## KANO, T.

Optimum design of elliptic-cylindrical chambers for optical pumping of solid-state lasers.  
10 p1706 A69-24010

Confirmation of abnormally high electron density in a transient mercury-vapour plasma by laser-interferometer measurements.  
18 p3153 A69-35307

High-resolution laser interferometer for measurement of electron density in transient plasma.  
22 p3965 A69-40924

Optimum design of spherical and ellipsoidal pumping chambers for solid-state lasers.  
24 p4327 A69-42986

## KANSAKU, H.

Visual discrimination through scratched canopy.  
13 p2214 A69-28533

## KANT, M.

Development of a liquid flow MHD alternating current generator /Determinatoin d'un generateur alternatif MHD a veine liquide/.  
13 p2206 A69-27495

## KANTER, B. M.

X-ray stroboscope.  
18 p3138 A69-35114

## KANTIUK, S. P.

Analysis of a double-beam parametric electron amplifier /Analiz dvukhluchevogo elektronogo parametricheskogo usilitelia/.  
13 p2237 A69-28578

## KANTNER, E.

High rate battery charger system.  
10 p1640 A69-23994

Advanced secondary power sources for aircraft application.  
17 p2905 A69-34113

## KANTOR, A. J.

Effect of range on apparent height and frequency of high-altitude radar precipitation echoes.  
18 p3101 A69-34826

## KANTOR, B. IA.

Critical state of a flexible shallow conical shell in a temperature field /Kriticheskie sostoi- ania poble- pologi konicheskoi obolochki v temperaturnom pole/.  
02 p0341 A69-12256

Numerical Methods in the Applied Theory of Elasticity /Chislennye metody v prikladnoi teorii uprugosti/.  
18 p3211 A69-34331

Supercritical bending of thermoelastic uniformly loaded circular plates /Zakriticheskiy izgib termouprugikh ravnomerno nagruzhennykh kruglykh plastin/.  
19 p3434 A69-35829

## KANTOR, F. W.

X-ray optics and X-ray astronomy.  
05 p0794 A69-16587

## KANTOR, G. J.

Evidence for a function for the UAA codon in vivo.  
20 p3480 A69-38265

## KANTOR, I. J.

Low-latitude ionospheric electron content measurements during half a solar cycle.  
23 p4161 A69-42435

## KANTOR, L. IA.

The "Orbita" satellite communication receiving system.  
06 p0886 A69-17043

Optimum design of satellite communications systems with frequency division multiple access /Ob optimal'- nom proektirovanii sistem sputnikovoi svyazi s chastot- nym mnogostantsionnym dostupom/.  
14 p2412 A69-29426

Transmission of newspaper pages in the "Orbit" system /Peredacha polos gazet v sisteme "Orbita"/.  
19 p3277 A69-36567

## KANTOR, M. M.

Texture of acicular crystals and the crystallographic orientation of dendrites in molybdenum ingots /Tekstura stolbchatykh kristallov i kristallograficheskaya orien- tirovka dendritov v slitkakh molibdena/.  
11 p1903 A69-24538

## KANTOWSKI, R.

Corrections in the luminosity-redshift relations of the homogeneous Friedmann models.  
09 p1605 A69-22411

The Coma Cluster as a spherical inhomogeneity in relativistic dust.  
10 p1789 A69-24133

## KANTSSEDAL, V. P.

Device for obtaining and investigating long high-current high-pressure arcs /Ustanovka dlia polucheniia i issledovaniia sil'notochnykh dlinnykh dug vysokogo davleniia/.  
09 p1547 A69-21593

## KANWAL, R. P.

Integral equations formulation of classical elasticity.  
14 p2535 A69-29361

Hidromagnetic waves - Theory and applications.  
20 p3616 A69-38317

## KANYUCK, A. J.

Statistical analysis of antenna pattern loss effects.  
08 p1270 A69-19858

## KANZAWA, A.

Heat transfer from plasma to solid wall with potential difference.  
02 p0290 A69-12423

## KAO, F. F.

Irreversible blunted respiratory sensitivity to hypoxia in high altitude natives.  
12 p2018 A69-26130

- KAO, J.-S.**  
Circular sandwich plates under eccentric load.  
09 p1615 A69-21926
- KAO, K. C.**  
Coherent light scattering measurements on single and clad optical glass fibres.  
11 p1918 A69-25044  
Solution of an optical communication dielectric waveguide problem.  
17 p2930 A69-33892
- KAPANDRITIS, G. N.**  
Automation of rocket engine test facilities.  
10 p1671 A69-23258
- KAPANEV, V. I.**  
Physiological aspects of the weightlessness problem /Fiziologicheskie aspekty problemy nevesomosti/.  
07 p1060 A69-18573
- KAPELIN, G. G.**  
Spectra of electrical signals at the output of ferroprobe sensors when inspecting spherical defects.  
10 p1675 A69-24072
- KAPER, H. G.**  
Greenhouse effect in a finite anisotropically scattering atmosphere.  
22 p4031 A69-40910
- KAPFER, V. C.**  
Failure analysis - Its role in screening decisions.  
18 p3108 A69-34499
- KAPFER, W.**  
Electron beam radiation curing of liquid mercaptan terminated butadiene-acrylonitrile copolymers.  
09 p1512 A69-22368
- KAPINOS, V. M.**  
Convective heat transfer in the closed cavity between two rotating disks in a turbulent flow regime.  
16 p2837 A69-32139
- KAPION, M. F.**  
High-energy proton, helium, and gamma-ray observations on OSO-III.  
09 p1579 A69-22172
- KAPITANOVA, T. P.**  
Some characteristics of the stability of atmospheric flows with respect to mesoscale disturbances /Nekotorye kharakteristiki ustoiichivosti atmosferykh potokov otноситel'no mezomasshtabnykh vozmushchenii/.  
18 p3167 A69-35343
- KAPLAFKA, J. P.**  
Vacuum ultraviolet perturbation spectroscopy on the argon ion laser.  
08 p1324 A69-20161
- KAPLAN, A. E.**  
Bending of trajectories of asymmetrical light beams in nonlinear media.  
13 p2298 A69-27662
- KAPLAN, B.**  
Numerical solution and utilization of Green's functions.  
15 p2710 A69-30870
- KAPLAN, D.**  
Image intensifier tubes and slit-type electronic cameras with high-sensitivity multiple integral images - Applications /Tubes intensificateurs d'images et cameras electroniques et fentes et a images integrales multiples a haute sensibilite - Applications/.  
12 p2083 A69-26143  
Temperature dependence of the spin resonance in n-type InSb and InAs.  
19 p3389 A69-36549
- KAPLAN, E.**  
Design and performance of a mobile waste heat organic Rankine cycle system providing electric power and environmental control.  
23 p4070 A69-42267
- KAPLAN, F.**  
Identification of collision-induced fragmentation pathways by ion cyclotron double resonance.  
19 p3265 A69-36292
- KAPLAN, I. I.**  
Beam-type oscillations of cylindrical shells with allowance for contour deformation /Balochnye kolebaniia tsilindricheskikh obolochek s ucheto deformatsii kontura/.  
05 p0841 A69-16204
- KAPLAN, J. L.**  
Nonlinear constrained optimization by a nonrandom complex method.  
06 p1022 A69-17366
- KAPLAN, K. R.**  
The delay method of analyzing Markov chains.  
04 p0624 A69-15002
- KAPLAN, L. D.**  
Carbon monoxide in the Martian atmosphere.  
23 p4220 A69-42379
- KAPLAN, L. J.**  
Radar calibration test satellite.  
20 p3617 A69-37714
- KAPLAN, M. H.**  
Hopping transporters for lunar exploration. [AIAA PAPER 68-1139]  
22 p3927 A69-40547
- KAPLAN, N.**  
Precision thermometer for the region 10-40 K.  
06 p0927 A69-17703
- KAPLAN, N. O.**  
Significance of substrate inhibition of dehydrogenases.  
01 p0015 A69-10931  
D-lactate specific pyridine nucleotide lactate dehydrogenase in animals.  
01 p0018 A69-11198  
Lactate dehydrogenase of lobster /homarus Americanus/ tail muscle. I.  
22 p3897 A69-41069  
The subunits of dogfish M sub 4 lactic dehydrogenase.  
24 p4280 A69-43051
- KAPLAN, P.**  
A study of prediction techniques for aircraft carrier motions at sea. [AIAA PAPER 68-123]  
17 p2902 A69-34014
- KAPLAN, R.**  
Infrared studies of combined resonance in n-type InSb.  
19 p3385 A69-36520
- KAPLAN, S. A.**  
On the theory of coherent synchrotron radiation from cosmic radio sources.  
03 p0500 A69-13407  
Conversion of plasma waves into electromagnetic waves in a strong magnetic field.  
11 p1922 A69-24245  
The buildup of electromagnetic waves by an induced Compton effect as a possible source of powerful radio emission /Raskachka elektromagnitnykh voln induktivirovannym Kompton-effektom kak vozmozhnyi istochnik moshchnogo radioizlucheniia/.  
11 p1957 A69-24402  
Radio emission of fast cosmic ions.  
12 p2149 A69-26209  
Plasma mechanisms of radiation in astrophysics /Plazmennyye mekhanizmy izlucheniia v astrofizike/.  
12 p2159 A69-26619  
Application of the method of straight lines to the solution of the transport equation for an unsteady radiation field /Primenenie metoda priamykh dlia resheniia uravneniia perenosu nestatsionarnogo polia izlucheniia/.  
13 p2350 A69-27858  
Scattering of radiation in the spectral line of a turbulent plasma /Rasseianiie izlucheniia v spektral'noi linii turbulentnoi plazmoi/.  
19 p3396 A69-36573  
The buildup of electromagnetic waves by the induced Compton effect as a possible source of strong radio emission.  
24 p4391 A69-43792
- KAPLAN, S. M.**  
Criterion for estimating spacecraft shroud acoustic field reductions.  
09 p1609 A69-21892  
Integrated structural and dynamic testing plans for a large interplanetary spacecraft.  
15 p2588 A69-30399
- KAPLAN, V. B.**  
Comparison of the probe and optical methods of measuring the parameters of low-temperature cesium plasma.  
03 p0478 A69-13836  
Low-voltage arc in thermionic converters - Comparison between theory and experiment.  
06 p0963 A69-16910  
Theoretical and experimental investigation of low-voltage arc in thermionic converter.  
14 p2404 A69-29254  
The probe and spectral investigations of dense plasma thermionic converters.  
14 p2404 A69-29256
- KAPLAN, V. S.**  
Three-dimensional laminar boundary layer on a permeable plate /Trekhmernyi laminarnyi pogranichnyi sloi na pronitsaemoi plastine/.  
14 p2433 A69-29898
- KAPLANOV, M. R.**  
The Molniya I communication satellite. [UN PAPER 68-95771]  
06 p1013 A69-17044
- KAPLANSKII, A. S.**  
Histological investigation of the internal organs of mice exposed for 20 days to an atmosphere with a high oxygen content /Gistologicheskoe issledovanie vnutrennykh organov myshei, nakhodivshikhsia 20 dnei v atmosfere s povyshennym soderzhaniiem kisloroda/.  
05 p0709 A69-16513  
Immunological and histochemical characteristic of the reactivity of mice placed in a medium with a high oxygen content /Immunologicheskaiia i gistokhimicheskaia kharakteristika reaktivnosti myshei, nakhodivshikhsia v srede s povyshennym soderzhaniiem kisloroda/.  
07 p1065 A69-18975  
Phagocytic activity and certain characteristics of the carbohydrate metabolism in neutrophils of men exposed to an atmosphere with increased oxygen content /Fagotsitarnaia aktivnost' i nekotorye pokazатели uglevodnogo obmena neitrofilov u liudei, nakhodivshikhsia v atmosfere s povyshennym soderzhaniiem kisloroda/.  
17 p2907 A69-32942  
Histological examination of the internal organs of mice after twenty days in a hyperoxic atmosphere.  
18 p3096 A69-34732  
Immunological and histological study on the reactivity of mice exposed to a hyperoxic atmosphere.  
20 p3479 A69-38223
- KAPLEVATSKII, I. D.**  
Stability of an annular plate with rigid supporting ribs /Ustoichivost' kol'tsevoi platiny s opornymi rebrami zhestkosti/.  
14 p2533 A69-28983
- KAPLIANSKII, A. A.**  
Concentration-dependent line-shift in optical spectra of ruby.  
10 p1744 A69-23321
- KAPLON, M. F.**  
Flux of hydrogen, helium, and electrons at Fort Churchill in 1967.  
05 p0756 A69-16277  
Differential energy spectrum of protons, helium nuclei, and electrons.  
07 p1204 A69-18833  
Balloon measurement of proton and alpha particle fluxes from Palestine, Texas.  
14 p2511 A69-28951
- KAPLOUN, W. A.**  
The statistical approach to modern radomes design.  
07 p1111 A69-19531  
Deformations of radiation patterns due to sharp-angle radomes /Deformations des diagrammes de rayonnement dues aux radomes a angle aigu/.  
07 p1112 A69-19539
- KAPOOR, M. P.**  
Rates of change of eigenvalues and eigenvectors.  
02 p0347 A69-15232  
Structural optimization in the dynamics response regime - A computational approach.  
11 p1989 A69-25495
- KAPORSKII, L. N.**  
Thermionic emission and expansion of a plasma formed by focused single-pulse laser radiation on a solid target.  
03 p0441 A69-14141  
Stimulated emission in a laser having an active medium of arbitrary shape.  
12 p2109 A69-26715
- KAPP, L. B.**  
A new method of determining the transport coefficients for high pressure arcs from experimental data.  
16 p2817 A69-31644
- KAPP, M. S.**  
Construction practice for hot-mix bituminous pavements.  
01 p0057 A69-11276
- KAPPUS, P. G.**  
Design concept for a V/STOL intercity jet. [AIAA PAPER 69-200]  
07 p1056 A69-19571  
STOL and V/STOL concepts for future intercity airliners.  
17 p2898 A69-33356



- Final solution to intercity short-haul dilemma identified.  
[AIAA PAPER 69 220] 24 p4251 A69-42648
- KAPRANOV, M. V.**  
Asymptotic method of calculating the lock-on band of a second-order phase-locked automatic frequency control with a filter containing a nonlinear capacitance /Asimptoticheskiy sposob vychisleniya polosy zakhvata fazovoi avtopodstroiki chastoty vtorogo poriadka s filterom, soderzhashchim nelineinuyu emkost'/.  
19 p3277 A69-36569
- KAPRELIAN, J.**  
Use of Langmuir probes to determine the attitude of a vehicle moving in the ionosphere /Utilisation des sondes de Langmuir pour la determination de l'incidence d'un vehicule se deplacant dans l'ionosphere/.  
17 p3001 A69-33222
- KAPRIZOV, V. A.**  
Methods of making high-temperature tests of refractory metals in a vacuum.  
10 p1714 A69-23848
- KAPTELIN, I. U. P.**  
Experimental investigation of the effect of short-period plastic deformation on unsteady creep in VT-6 type titanium alloy under uniaxial tension /Eksperimental'noe issledovanie vliyaniya kratkovremennoi plasticheskoi deformatsii na neustanovivshuisia polzhest' titanovogo splava tipa VT-6 pri odnoosnom raztazhenii/.  
22 p3971 A69-41032
- KAPTUR, G. E.**  
Measurement of the axial rigidity of gyromotor flanges /Izmerenie osovoi zhestkosti flantsev gyromotorov/.  
09 p1513 A69-22704
- KAPUR, V. K.**  
Magnetohydrodynamic pivoted slider bearing with a convex pad surface.  
21 p3733 A69-39744
- KAPUSTA, A.**  
Calculation of the frequency characteristics of complex radio circuits with the aid of a digital computer /Raschet chastotnykh kharakteristik slozhnykh radioelektronykh skhem pri pomoshchi tsifrovoy vychislitel'noi mashiny/.  
09 p1472 A69-21783
- KAPUSTIN, I. N.**  
Instrument for the automatic recording of cosmic-ray bursts.  
03 p0430 A69-13545
- KAPYRIN, G. I.**  
Thin-foil electron microscope structure studies of certain titanium alloys.  
05 p0782 A69-16807
- KAR, S.**  
Theoretical prediction of discharge coefficients for Herschel type smooth venturimeters.  
02 p0250 A69-12414  
Theory and performance of conical diffuser/exit duct combinations.  
[ASME PAPER 68-WA/FE-45] 05 p0698 A69-16112  
A theoretical and experimental investigation of a mechanical seal.  
[ASLE FICFS PREPRINT 17] 15 p2621 A69-30499
- KARAALI, S.**  
A new method for the determination of colour indices of the cluster stars.  
08 p1387 A69-20122
- KARACHENTSEV, I. D.**  
Absorbing matter in clusters of galaxies /O pogloshchayushchem veshchestve v skopleniyakh galaktik/.  
09 p1587 A69-21356  
Absorbing material in clusters of galaxies.  
18 p3197 A69-34746
- KARAFIATH, E.**  
The photolytic conversion of an allene to a cyclopropylidene - The photolysis of 1,2-cyclononadiene.  
02 p0205 A69-12721
- KARAFIATH, L. L.**  
Effect of ultrahigh vacuum on the friction between metals and granular soils.  
13 p2298 A69-28014
- KARAGEORGII-ALKALAEV, P. M.**  
Solar pumping of semiconductor lasers and luminescent devices /Solnechnaia nakuchka poluprovodnikovyykh lazerov i luminiscentnykh ustroystv/.  
13 p2272 A69-27969

**KARAGIANES, M. T.**

- Detection of gas emboli associated with decompression using the Doppler flowmeter.  
21 p3663 A69-38915

**KARAKHANIAN, R. A.**

- Investigation of the dislocation structure of molybdenum deformed by hydroextrusion /Issledovanie dislokatsionnoi struktury molibdena, deformirovannogo gidroekstruziei/.  
14 p2463 A69-29311

**KARAKHANOV, V. IA.**

- Current oscillations and electromagnetic radiation in low-pressure thermal-emission converters.  
14 p2402 A69-29246  
Low-voltage Knudsen arc in the cesium-inert gas mixture.  
14 p2403 A69-29248

**KARAM, R. D.**

- Some aspects of thermal modeling theory and analysis as applied to spacecraft temperature control.  
[SAE PAPER 690199] 07 p1239 A69-18301

**KARAMALIEV, R. A.**

- Cascade generation in gas lasers /Kaskadnaia generatsiia v gazovykh lazerakh/.  
06 p0934 A69-17496

**KARAMCHETI, K.**

- Rarefied flow past a sphere.  
04 p0542 A69-14731  
The role of repulsive forces in the shape of collision-broadened spectral lines and in the output of gas lasers.  
[IEEE PAPER T-6] 07 p1154 A69-19083  
Comparison of continuum and discrete lattice results for gas-surface interactions.  
14 p2409 A69-29092

**KARAPETIAN, G. O.**

- Study of the effect of the degree of bond covalence in glasses on the splitting of the electron levels of activator ions /Issledovanie vliyaniya stepeni kovalentnosti svyazei v steklakh na rasshechlenie elektronnykh urovnei ionov aktivatora/.  
11 p1907 A69-25031  
Investigation of the effect of ionizing radiation on glass activated by transition metals /Issledovanie deistviya ioniziruyushchei radiatsii na stekla, aktivirovannyye perekhodnymi metallami/.  
23 p4180 A69-42470

**KARASEV, V. G.**

- Experimental investigation of liquid-metal MHD generators /Eksperimental'nye issledovaniya zhidkometallicheskiy MGD-generatorov/.  
13 p2208 A69-27512

**KARASEVA, L. A.**

- Specific features of the development and prolongation of artificial hypobiosis in rats /Osobennosti razvitiia i prolongirovaniya iskusstvennogo gipobioza u krys/.  
22 p3877 A69-40278

**KARASHIMA, K.**

- An experimental study of ablation near the region of stagnation point of blunt-nosed axially symmetric bodies at hypersonic speeds.  
01 p0006 A69-10758

**KARASHIMA, S.**

- Studies on substructures around a fatigue crack in fcc metals and alloys.  
02 p0260 A69-11826  
The effects of substructure on fatigue crack propagation.  
12 p2188 A69-26915

**KARASIK, B. IA.**

- Application of moire patterns for "angle-phase" transforms.  
14 p2447 A69-29327

**KARASSEV, M. D.**

- Input conductance of resonant modulators with varactors.  
10 p1665 A69-24066

**KARASUDHI, P.**

- Vibratory motion of a body on an elastic half plane.  
[ASME PAPER 68-WA/APM-12] 04 p0668 A69-14393

**KARATAEV, V. V.**

- The shape of the spectral band of n-GaAs edge emission /K voprosu o forme polosy spektra kraevogo izlucheniia n-GaAs/.  
19 p3392 A69-36610

**KARATZAS, N. B.**

- Propagation of blood flow pulse in the normal human pulmonary arterial system.  
24 p4259 A69-42638

**KARVAEV, I. I.**

- Latitudinal dependence of the spectral intensities of terrestrial radiation into space according to observations of Cosmos 45 and Cosmos 65 satellites.  
03 p0422 A69-13507

- Estimation of corrections for nonuniformity of measurement to the correlation relationships between spectral densities of radiation from the earth /Otsenka popravok na neodnovernennost' izmereniia k korrelyatsionnym zavisimostiam mezhdu spektral'nyimi intensivnostiami izlucheniia zemli/.  
14 p2435 A69-29043

**KARAVANOV, V. S.**

- Frequency spectrum of distributed cosmic radio emission in the range from 6.3 to 40 MHz /O chastotnom spektre raspredelenogo kosmicheskogo radioizlucheniia v diapazone 6.3-40 MGTs/.  
03 p0500 A69-13080  
Frequency spectrum of the distributed cosmic radio emission in the range from 6.3 to 40 MHz.  
14 p2509 A69-28762

**KARBOWIAK, A. E.**

- Solution of the excitation problem in resonant dissipative and inhomogeneous structures.  
17 p2926 A69-33849

**KARCHAGINA, E. V.**

- Certain dynamic effects in ferrites /Nekotorye dinamicheskie efekty v ferritakh/.  
13 p2319 A69-27993

**KARCHEVSKII, ZH.**

- Relation between the irregular pulsations of the geomagnetic field and the pulsations of polar aurorae and ULF radiation /O svyazi iregulyarnykh pulsatsii geomagnitnogo polia s pul'satsiami poliarnykh siliami i UNCh-izlucheniem/.  
09 p1485 A69-21536

- Relationship between irregular geomagnetic field pulsations and the pulsations of auroras and of VLF emission.  
16 p2783 A69-32531

**KARCEWSKI, J. F.**

- Successive development of electromagnetic /ULF and VLF/ and light emissions during magnetic substorms /Developpement successif des emissions electromagnetiques /U.B.F. et T.B.F./ et lumineuses au cours des sous-orages magnetiques/.  
16 p2788 A69-32648

**KARD, P.**

- Antireflection by means of a three-layer symmetric coating /Prosvetlenie trekhslainym simmetrichnym pokrytiem/.  
18 p3173 A69-35147

**KARDASHOV, A. A.**

- Application of Z-transforms to exponential approximation of correlation and transient functions.  
03 p0409 A69-12976

**KARDESTUNCER, H.**

- Tensor properties of the stiffness matrix of elastic structures.  
21 p3831 A69-38415

**KARDONSKII, V. M.**

- High-strength maraging steel N18K9M5T /MS 200/.  
04 p0615 A69-14645  
High-strength maraging steel with a reduced cobalt concentration.  
04 p0616 A69-14649  
Structural changes during the martensitic ageing of a Fe-Ni-Ti alloy.  
05 p0783 A69-16813

**KAREEV, I. U. A.**

- Parameters of MHD generators taking account of the ionization instability of the plasma /Parametry MGD-generatorov s uchetom ionizatsionnoi neustoiichivosti plazmy/.  
06 p0871 A69-17912

- Cesium-doped mercury as a working fluid for studying the specific features of MHD generators based on a Rankine cycle /Rtut's tezieim kak rabochee veshchestvo dlia izucheniia osobennosti MGD-generatorov, rabotayushchikh na tsikle Renkina/.  
10 p1636 A69-23458

**KARENIKOV, D. V.**

- On the development of a low voltage arc in a thermionic diode with extended electrodes.  
14 p2402 A69-29244

**KAREV, V. N.**

- Neutron activation analysis determination of oxygen in beryllium.  
20 p3544 A69-37811

**KARGATHRA, L. V.**

- Large area scintillation telescopes.  
06 p0925 A69-17296

**KARGOPOLOV, I. D.**

Equalization of photogrammetric networks, using external orientation elements of aerial photographs /U-ravnivanie fotogrammetricheskikh setei s ispol'zovaniem elementov vneshnego orientirovaniia aerosnimkov/.  
12 p2079 A69-26032

**KARHAN, T.**

Diffusion coefficients for oxygen transport in whole blood.  
02 p0200 A69-12479

**KARIAGINA, Z. V.**

Tail spectrum of comet Ikeya-Seki /196 5f/. /Spektr khvostov komety Ikeya-Seki /196 5f/.  
15 p2685 A69-30524  
Spectrophotometric investigation of the IC 349 nebula /Spektofotometricheskoe issledovaniia tumanosti IC 349/.  
21 p3817 A69-39728

**KARIAPPA**

Theoretical Determination of the Free-Free Oscillations of a Delta Wing /Theoretische Bestimmung der Frei-Frei-Schwingungen eines Delta-Fluegels/.  
01 p0172 A69-11358  
Application of matrix displacement methods in the study of panel flutter.  
04 p0676 A69-14707

**KARIM, G. A.**

The prediction of the time variation of the state of a reacting non-adiabatic homogeneous system undergoing independent changes in density.  
[AIAA PAPER 69-87]  
06 p1036 A69-18054

**KARIUS, S.**

Solar-cell generators for missions near the sun /Solarzellen-Generatoren fuer sonnennahe Missionen/.  
02 p0197 A69-12665

**KARKHANIN, IU. I.**

Investigation of the impedance of high resistivity gallium arsenide samples with a nonlinear current-voltage characteristic /Issledovanie impedansa obratsov vysokomnogo arsenaia galliia s nelineinoi vol'tampernoii kharakteristikoi/.  
13 p2317 A69-27881  
Impedance of high-resistivity gallium arsenide samples with nonlinear current-voltage characteristics.  
21 p3782 A69-39143

**KARKHOV, A. N.**

Excitation of electromagnetic waves of whistler type during an interaction between electrons and a plasma /Vozbuzhdenie elektromagnitnykh voln tipa svistiaschikh atmosferikov pri vzaimodeistvii puchka elektronov s plazmoi/.  
13 p2314 A69-28443

**KARKLIN, V. G.**

Tunnel-diode slideback sampling gate /Avtokompensatsionnyi stroboskopicheskii preobrazovatel' na tunnel'nom diode/.  
13 p2236 A69-28538

**KARKLIN, V. P.**

Ellipticity of the trajectory of free motions of the earth's pole.  
06 p0919 A69-17536  
Annual global atmospheric pressure wave /Godovaia volna atmosfernogo davleniia na zemnom share/.  
23 p4185 A69-42493

**KARLASHOV, A. V.**

Corrosion resistance of Duralumin in certain working media.  
12 p2113 A69-26124

**KARLE, D. W.**

Phosphorus-containing resins and composites for environmental extremes.  
19 p3356 A69-35528

**KARLOV, G. I.**

Nondestructive method for checking the early stages of fatigue damage.  
07 p1141 A69-19316

**KARLOV, N. V.**

Control of the frequency of a CO sub 2 laser by a boron trichloride filter.  
08 p1323 A69-19804  
Paramagnetic masers with different active materials /Paramagnitnye mazery s razlichnymi rabochimi veshchestvami/.  
09 p1519 A69-22288  
Investigation of inversion in a CO sub 2 laser during pulsed pumping /Issledovanie invertsi v CO sub 2 -lazere pri impul'snoi nakachke/.  
09 p1519 A69-22289

Influence of the choice of the instant of Q-switching in pulsed pumping of a CO sub 2 laser on the intensity of the generated pulses.  
10 p1703 A69-23619

Bleachable filter in a CO sub 2 laser in the case of active Q-switching /Prosvetliaushchisia fil'tr v CO sub 2 -lazere pri aktivnoi moduliatsii dobrotnosti/.  
11 p1894 A69-24454

Pulsed CO sub 2 laser with double modulation.  
14 p2457 A69-28926

Influence of dissociation of the inversion on a CO sub 2 laser with pulsed pumping.  
18 p3151 A69-34620

Use of luminophors in the visualization of CO sub 2 laser radiation /Primenenie luminoforov dlia vizualizatsii izlucheniia lazerov na CO sub 2/.  
18 p3153 A69-35259

**KARLOVITZ, B.**

Equations of the electromagnetic field containing plasma.  
06 p0965 A69-17517

**KARLSON, E. T.**

Variational principle for stationary magnetohydrodynamic equilibria.  
15 p2660 A69-30910

**KARLSSON, B.**

Investigations of a region in Monoceros. III - MK classification of stars.  
23 p4211 A69-41487

**KARLSSON, S. K. F.**

Experimental studies of the interaction between collisionless plasmas and electromagnetic fields.  
24 p4359 A69-43646

**KARMAZINSKII, A. N.**

Analysis of the operation of a switching circuit using MOS unित्रons and having a nonlinear load /Analiz raby kluchevoi skhemy s nelineinoi nagruzkoi na MDP: unित्रonakh/.  
13 p2234 A69-28507  
Classification of unित्रon switching circuits /Klassifikatsiia unित्रonnykh kluchevykh skhem/.  
15 p2574 A69-30122  
Influence of the substrate potential on the current-voltage characteristics of unित्रon with a metal-dielectric-semiconductor (MDS) structure /Vliianie potentsiala podlozhki na vol'tampernye kharakteristiki unित्रona so strukturoi metall-dielektrik-poluprovodnik /MDP//.  
19 p3284 A69-36592

**KARMENIAN, K. V.**

Laser with a nonreciprocal element.  
03 p0435 A69-12983

**KARNAUKHOV, V. G.**

Propagation of waves in an infinite viscoelastic medium with allowance for thermomechanical coupling /Rasprostranenie voln v neogranichennoi viazkoupругoi srede s uchetom termomekhanicheskogo sopriazheniia/.  
01 p0164 A69-10076  
Infrared absorption and reflection in degenerate gallium antimonide.  
03 p0492 A69-14174

Heat formation in viscoelastic bodies consisting of material with resonance dispersion /Pro toploutvoreniiia u v'iazko-pruzhnykh tilakh z materialu z rezonansnoi dispersiei/.  
06 p1019 A69-16826

Extended electron-hole junctions in single crystals of gallium antimonide.  
10 p1745 A69-23329

Heat generation in elastoviscous bodies during periodic interactions /O teplotobrazovanii v viazkoupругikh tilakh pri periodicheskikh vozdustviakh/.  
11 p2000 A69-25168

**KARNES, C. H.**

The plate impact configuration for determining mechanical properties of materials at high strain rates.  
02 p0544 A69-12290

**KARNES, E. W.**

The structure of complex physical performance.  
18 p3098 A69-35085

**KARNI, Z.**

The general strain tensor.  
20 p3624 A69-37584

**KARNOPP, B. H.**

Canadian Congress of Applied Mechanics, Laval University, Quebec, Canada, May 22-26, 1967, Proceedings.  
02 p0339 A69-11984  
Reissner's variational principle and elastodynamics.  
05 p0835 A69-15870

**KARNOPP, D.**

Complete response of distributed systems controlled by a finite number of linear feedback loops.  
[ASME PAPER 69-VIBR-61]  
10 p1668 A69-24145

**KARNOPP, D. C.**

A new criterion for optimizing linear vibration isolator systems subject to random input.  
[ASME PAPER 69-VIBR-44]  
10 p1807 A69-24182

Comparative study of optimization techniques for shock and vibration isolation.  
[ASME PAPER 69-VIBR-45]  
10 p1808 A69-24183

**KARNOVSKII, M. I.**

Calculation of the signal-to-noise ratio at the output of a typical radio section /O vychislenii otosheniia signal/pomekha na vykhode tipovogo radiotekhnicheskogo zvena/.  
13 p2222 A69-28506

Noise stability of a "preselector-detector- noncommutated low-pass filter-threshold device" network during the detection of a finite-duration noise signal /Pomekhoustoichivost' trakta "preselektor- detektor-nekommutiruemyi fil'tr niznykh chastot-porogovoe ustroistvo" pri obnaruzhenii shumovogo signala konechnoi dlitel'nosti/.  
15 p2563 A69-30142

**KAROLI, A. R.**

The calibration of a satellite infrared spectrometer.  
06 p0926 A69-17621

**KARP, A.**

Circuit properties of microwave dielectric resonators.  
04 p0575 A69-14750

**KARP, S.**

Radiation models using discrete radiator ensembles.  
01 p0030 A69-10556  
M-ary Poisson detection and optical communications.  
19 p3276 A69-36486

**KARPENKO, G. V.**

Wear and fatigue resistance of some titanium alloys after nitriding /Iznosostoikost' i ustalost' nekotorykh titanovykh spлавov posle azotirovaniia/.  
19 p3347 A69-36743  
Effect of nonmetallic inclusions on the mechanism of formation of fatigue cracks /O vlianii nemetalicheskikh vkluchenii na mekhanizm vozniknoveniia treshchin ustalosti/.  
22 p4047 A69-41064

**KARPENKO, S. G.**

Investigation of certain tensors appearing in problems of nonlinear optics /Issledovanie nekotorykh tenzorov, vstrechaushchikhsia v zadachakh nelineinoi optiki/.  
19 p3334 A69-35882

**KARPENKO, V. A.**

Waveguide properties of an anisotropic p-n junction layer /Volnovodnye svoistva anizotropnogo p-n perekhodnogo sloia/.  
17 p2983 A69-33971

**KARPINOS, D. M.**

Thermal stresses in fiber-reinforced metals. II /Termicheskie napriazheniia v metallakh, armirovannykh voloknami. II/.  
04 p0682 A69-15393

Development of techniques for the production of nickel reinforced with mullite whiskers.  
05 p0782 A69-16794

Fiber-reinforced metals /FRM/ /Literature review/.  
10 p1711 A69-23335

Thermal stresses in fiber-reinforced metals. I.  
15 p2638 A69-30285

Thermal stresses in fiber-reinforced metals. II.  
18 p3223 A69-35021

Study of the failure characteristics of reinforced nickel by the method of high-temperature metallography. I /Issledovanie osobennostei razrusheniia armirovannogo nikelia metodom vysokotemperaturnoi metallografii. I/.  
21 p3743 A69-38616

**KARPINSKAS, S. A.**

Characteristics of a contact between gold and a polycrystalline cadmium selenide film /Svoistva kontakta zlota s polikristallicheskim sloem selenistogo kadmia/.  
19 p3384 A69-36480

**KARPINSKII, V. N.**

The Fraunhofer spectrum of the sun. I /Fraunhoferov spektr solntsa. I/.  
20 p3615 A69-38297



## KARPLIUK, K. S.

## KARPLIUK, K. S.

Nonlinear interaction of volume waves and surface waves in a bounded plasma. 08 p1370 A69-21014

Magnetohydrodynamic waves in a cylindrical plasma column. 14 p2489 A69-28732

Influence of temperature on wave propagation in a bounded plasma. 14 p2410 A69-28733

Excitation of "red" and "violet" satellites in the instability of Alfvén waves. 14 p2489 A69-28735

## KARPLUS, W. J.

Heat transfer in pyrolytic graphite - A hybrid computer simulation. 02 p0353 A69-12387

Application of functional optimization techniques for the serial hybrid computer solution of partial differential equations. 04 p0566 A69-15344

Error analysis of hybrid computer systems. 05 p0725 A69-16472

## KARPOV, A. V.

Forced vibrations of a sandwich plate with a load-bearing middle layer with dissipation of vibrational energy in the material of the layers taken into consideration. 16 p2873 A69-32143

## KARPOV, E. M.

Features of motion of the moving part of the transducer of a measuring gyroscopic synchronous servo-system /Ob osobennostiakh dvizheniya podvighnoi chasti priemnika izmeritel'noi girokopicheskoi sinkhronno-slediaschei sistemy/. 11 p1881 A69-24558

## KARPOV, I. M.

Noise stability of the reception of a binary frequency-modulated signal with the aid of an ordinary frequency detector /K voprosu o pomekhoustoichivosti priema dvoichnogo chastotno-modulirovannogo signala s pomoshch'yu obychnogo chastotnogo detektora/. 15 p2564 A69-30145

## KARPOV, N. I.

Vibrations of a circular cylinder whose thickness changes in time /Kolebaniya krugovogo tsilindra, tolschina kotorogo izmeniaetsia vo vremeni/. 14 p2533 A69-28985

## KARPOV, R. G.

Differentiation of pulse-frequency signals /Differentirovanie chastotno-impul'snykh signalov/. 09 p1454 A69-21755

## KARPOVA, G. P.

Fabrication of nichrome bars containing dispersed oxide inclusions /Poluchenie prutkov nichroma, soderzhashchego dispersnye vklucheniya oksidov/. 01 p0085 A69-10397

## KARPOVA, L. I.

Investigation of the motor activity of man under conditions of hypodynamia and increased CO<sub>2</sub> content /Issledovanie dvigatel'noi deiatel'nosti cheloveka v usloviakh gipodinamii i povyshennogo soderzhaniiia SO sub 2/. 03 p0377 A69-14205

## KARPOVICH, I. A.

Dependence of the forbidden bandwidth of indium antimonide films on their thickness /Zavisimost' shiriny zapreshchennoi zony plenok antimonida indii ot tolschiny/. 15 p2666 A69-30044

Structure of the absorption edge of indium antimonide thin films /Struktura kraia polosy pogloshcheniia tonkikh plenok antimonida indiiia/. 21 p3783 A69-39560

## KARPUKHIN, V. I.

Accuracy of measurements of radio-signal frequency and arrival time in the presence of phase-amplitude distortions /Tochnost' izmereniia chastoty i vremeni prikhoa radiosignalov pri nalichii amplitud-nofazovykh iskazhenii/. 11 p1835 A69-24959

Interaction between two plasmoids in the magnetic field of a divertor /Vzaemodiia dvokh plazmovikh gustykh v magnitnomu poli divortora/. 12 p2133 A69-25976

Interaction between plasma fluxes and a plasma cylinder in the magnetic field of a divertor /Vzaemodiia plazmovikh potokiv z plazmovim tsilindrom v magnitnomu poli divortora/. 12 p2134 A69-25977

Plasma capture in the divertor aperture in the case of asynchronous injection of two plasma streams /Zakhlopleniia plazmy v aperturu divortora pri asinkhronnoi inzhetskii dvokh plazmovikh potokiv/. 21 p3776 A69-38585

## KARPUKHIN, V. T.

Rate of propagation of the ionization front in a magnetic field /Skorost' rasprostraneniia fronta ionizatsii v magnitnom pole/. 10 p1733 A69-23447

Cesium-doped mercury as a working fluid for studying the specific features of MHD generators based on a Rankine cycle /Rtut' s tseziem kak rabochee veshchestvo dlia izucheniia osobennostei MGD-generatorov, rabotaiushchikh na tsikle Renkina/. 10 p1636 A69-23458

Current distribution in an E x H-discharge with split electrodes in a plasma with nonequilibrium conductivity /Raspreделение тока v E x H-razriade s sektionirovannyimi elektrodami pri neravnovesnoi provodimosti plazmy/. 15 p2663 A69-30980

## KARPUS, A. S.

Peculiarities of the optical characteristics of antimony trisulfide in the near- and mid-infrared region of the spectrum /Osobennosti opticheskikh svoistv trekhsernistoi sur'my v blizhnei i srednei infrakrasnoi oblasti spektra/. 19 p3384 A69-36481

## KARR, C.

Calculation of the shear stress and the velocity profile in an MHD duct /Calcul de la contrainte de cisaillement et du profil de vitesse dans une tuyere MHD/. 13 p2309 A69-28024

## KARR, G. R.

Aerodynamic torque on a spinning spherical satellite with application to measurement of accommodation coefficients. 09 p1611 A69-22087

## KARRER, R.

Visual beats - Differential brightness of the stimuli and estimation of brightness. 22 p3884 A69-40889

## KARSON, S.

Some relations between personality factors and job performance ratings in radar controllers. 21 p3665 A69-39169

## KARSTADT, M.

Azotobacter vinelandii RNA polymerase. VII - Enzyme transitions during unprimed rII-C synthesis. 22 p3895 A69-40050

## KARTASHEV, K. B.

Interaction between an ion beam and a plasma target in the presence of charge exchange /Vzaimodeistvie ionnogo potoka s plazmoi misheni pri pereziaridke/. 03 p0481 A69-14200

## KARTASHOV, E. M.

Construction of Green's function for generalized boundary-value problems of the heat-conduction equation using the method of integral equations /Postroenie funktsii Grina obobshchennykh kraevykh zadach uravnenii teploprovodnosti metodom integral'nykh uravnenii/. 13 p2380 A69-28548

Method of integral equations for constructing the Green's functions of generalized boundary value problems in the analytical theory of heat conduction /Metod integral'nykh uravnenii v analiticheskoi teorii teploprovodnosti pri postroenii funktsii grina kraevykh zadach obobshchennogo tipa/. 15 p2716 A69-30075

## KARTASHOV, G. D.

The principle of "heredity" in the theory of reliability. 08 p1319 A69-20346

## KARTASHOV, V. M.

Some aspects of the use of a half-wave antenna to investigate radio emission from extensive air showers. 13 p2332 A69-28408

## KARTEN, H.

Enzymatic conversion of norepinephrine to epinephrine by the brain. 10 p1644 A69-23303

## KARTMAZOV, G. N.

Diffusion in vapor-deposited nickel layers on niobium substrate /Diffuziia v sloiakh nikelia, skonden-sirovannogo iz parovoi fazy na niobievuiu podlozhu/. 20 p3560 A69-37366

## KASABOV, G. A.

Cross section measurements needed for controlled fusion research, MHD generators, and other plasma studies. 07 p1195 A69-19652

## Instabilities.

21 p3777 A69-39481

## KASAHARA, A.

Computer experiments in the global circulation of the earth's atmosphere. 04 p0628 A69-15363

## Simulation of the earth's atmosphere.

18 p3127 A69-34668

## KASAHARA, E.

The Toshiba blow-down MHD test facility, and experiments on non-equilibrium ionization. 10 p1673 A69-23477

A study of an ionizing shock wave into a transverse magnetic field. 22 p3992 A69-41176

## KASAHARA, T.

Stereo-radiography using holographic techniques. 08 p1313 A69-20178

## KASAMANIAN, Z. A.

Effect of impurities on the energy spectrum of electrons in semiconductors /K voprosu o vlianii primesi na energeticheskii spektr elektronov v poluprovodnikakh/. 09 p1554 A69-21467

Effect of an impurity on the energy spectrum of electrons in semiconductors. 15 p2669 A69-30712

## KASATKIN, A. M.

Scientific program and scientific equipment complex of the Cosmos 149 artificial earth satellite /Nauchnaia programma i kompleks nauchnoi apparatury ISZ "Kosmos-149"/. 14 p2447 A69-29403

Learning model of motor behavior /Samobuchaishchaisia model' dvigatel'nogo povedeniia/. 23 p4109 A69-41977

## KASATKIN, B. S.

Spherulite boundaries and some specific features of interspherulite breakdown /Granitsy sferolitov i nekotorye osobennosti mezhsferolitnogo razrusheniia/. 22 p3973 A69-40740

## KASATKINA, O. I.

Experimental study of light scattering at cloud particles. I - Water droplet simulation /Eksperimental'noe issledovanie rasseianiia sveta oblachnymi chastitsami. I - Modelirovanie kapel' vody/. 06 p0953 A69-17992

Experimental study of light scattering at cloud particles. II - Measurement of light scattering indicatrices on water droplet models /Eksperimental'noe issledovanie rasseianiia sveta oblachnymi chastitsami. II - Izmerenie indikatsii rasseianiia sveta modeliami vodiannykh kapel'/. 06 p0953 A69-17993

## KASCAK, A. F.

The potential of nuclear power for high-speed ocean-going air-cushion vehicles. [AIAA PAPER 69-416] 15 p2550 A69-30480

Parametric study of large nuclear surface effects machines. 18 p3171 A69-35180

## KASCAK, T. J.

A comparison of the performance of two rhenium, niobium cylindrical thermionic converters. 03 p0368 A69-13126

The performance of a rhenium, niobium cylindrical thermionic converter. 05 p0707 A69-16359

A comparison of the performance of two rhenium, niobium cylindrical thermionic converters. 09 p1438 A69-21816

The performance of a rhenium, niobium cylindrical thermionic converter. 09 p1438 A69-21817

## KASCHAK, G. R.

Long-range supersonic propagation of infrasonic noise generated by missiles. 07 p1078 A69-18853

## KASCHOWITZ, H.

A flash-stimulating apparatus for biological studies /Ein Lichtreizgeraet fuer biologische Untersuchungen/. 23 p4110 A69-42054

**KASHCHEEV, B. K.**  
A radar wind patrol /Vetrovoi radiolokatsionnyi patrol'/.  
17 p2939 A69-33901

**KASHCHEEV, B. L.**  
Meteor Communications /Meteornaia Sviaz'/.  
04 p0562 A69-15488  
Radar studies of the distribution of meteoric matter /Radiolokatsionnye issledovaniia raspredeleniia meteornogo veshchestva/.  
17 p3041 A69-33894  
Study of meteor trail drift according to an IQSY program /1964-1965/ /Izuchenie dreifa meteornykh sledov po programme MGSS /1964-1965 gg.//.  
17 p3041 A69-33897

**KASHCHEEV, V. N.**  
Effect of complex alloying with niobium and chromium on the mechanical properties of G13L steel /Vliianie kompleksnogo legirovaniia niobiem i khromom na mekhanicheskie svoistva stali G13L/.  
04 p0614 A69-25379

**KASHELKIN, V. V.**  
The buckling of a ring under unsteady creep conditions /Splushchivanie kol'tsa pri neustanovivsheisia polzuchestii/.  
17 p3062 A69-33716

**KASHIN, A. A.**  
Investigation of the relation between drifts in the upper ionosphere and current systems of the dynamo region at middle and high latitudes /Issledovanie svyazi dreifov verkhnei ionosfery s tokovymi sistemami dinamoblasti v umerennykh i vysokikh shirotakh/.  
10 p1682 A69-23611  
Results of an investigation of the parameters of small-scale inhomogeneities of the ionosphere in Antarctica /Rezultaty issledovaniia parametrov melkomasshtabnykh neodnorodnostei ionosfery v Antarktike/.  
14 p2444 A69-29867

**KASHIN, V. A.**  
Optimization of the directive gain of an antenna array subject to an additional condition /Optimizatsiia knd antennoi reshetki pri dopolnitel'nom uslovii/.  
05 p0728 A69-15652  
The electromagnetic field of a coherent light beam.  
05 p0777 A69-16789  
Some properties of a narrow monochromatic light beam /Nekotorye svoistva uzkoogo monokhromaticheskogo svetovogo puchka/.  
07 p1147 A69-18524  
Optimization of the directive gain of an antenna array with an auxiliary condition.  
16 p2762 A69-32509

**KASHIRSKII, I. S.**  
A method for transforming radio circuits /Metod preobrazovaniia radiotekhnicheskikh skhem/.  
09 p1472 A69-21784

**KASHIWAGI, M.**  
A new direction finding network for locating the sources of atmospherics.  
18 p3102 A69-34961

**KASHKAROV, L. L.**  
Determination of uranium in iron meteorites by recording fission fragment tracks /Opredelenie urana v zheleznykh meteoritakh metodom registratsii trekov oskolokov deleniia/.  
01 p0026 A69-11377

**KASHKAROV, V. P.**  
Free convection at a vertical wall at large Prandtl numbers /Svobodnaia konvektsiia u vertikal'noi stenki pri bol'shikh chislakh Prandtlia/.  
21 p3854 A69-39843  
Distribution of an admixture substance in a nonisothermal semibounded jet /O raspredelenii primesi veshchestva v neizotermicheskoi polugranichennoi strue/.  
21 p3854 A69-39844  
Heat problem for a semibounded jet propagating along a porous surface /Teplovaia zadacha dlia polugranichennoi strui vdol' poristoï poverkhnosti/.  
21 p3854 A69-39846

**KASHPROVSKII, V. E.**  
Field calculations for long-range short-wave paths /O raschete polia na KV-trassakh bol'shoi protiazhenosti/.  
20 p3520 A69-37035

**KASHPRUK, V. F.**  
Theory of electrodynamic acceleration of a plasma in a high-current pulsed accelerator /K teorii elektrodinamicheskogo uskoreniia plazmy v sil'notochnom impul'snom uskoritele/.  
21 p3778 A69-39548

**KASHTANER, V. L.**  
Device for the measurement of plasma velocity by the Doppler effect with photoelectric recording /Ustanovka dlia izmereniia skorosti plazmy po Dopplereffektu s fotoelektricheskoi registratsiei/.  
12 p2079 A69-26021

**KASHYAP, R. L.**  
Recursive algorithms for pattern classification using misclassified samples.  
06 p0891 A69-17357  
Algorithms for pattern classification.  
06 p0892 A69-17395

**KASHYAP, S. C.**  
Perturbation analysis in dielectric-loaded waveguides.  
12 p2039 A69-26381

**KASIAN, I. I.**  
Basic problems in the study of weightlessness /Osnovnye voprosy izucheniia nevesomosti/.  
02 p0199 A69-12120  
Simulation of the regulatory function of the cardiovascular system during weightlessness /O modelirovanii funktsii regulatsii serdechno-sosudistoi sistemy v nevesomosti/.  
03 p0376 A69-14193  
Blood circulation under conditions of weightlessness /Krovoobrashchenie v usloviakh nevesomosti/.  
03 p0376 A69-14194  
Results of physiological-biochemical study of members of the crew of the spacecraft Voskhod /Rezultaty fiziologo-biokhimicheskogo obsledovaniia chlenov ekipazha kosmicheskogo korablia "Voskhod"/.  
03 p0377 A69-14195  
Changes in cardiac activity and respiration of cosmonauts during light physical exertion in an orbital flight on the spacecraft Voskhod /Izmeneniia serdechnoi deiatel'nosti i dykhanii u kosmonavtov pri legkoi fizicheskoi nagruzke vo vremia orbital'nogo poleta na kosmicheskogo korablia "Voskhod"/.  
03 p0377 A69-14196  
Some physiological mechanisms of the effect of weightlessness on human organism /O nekotorykh fiziologicheskikh mekhanizmkh vliianiia nevesomosti na organizm cheloveka/.  
03 p0377 A69-14197  
Reactions of cosmonauts under conditions of weightlessness /Reaktsii kosmonavtov v usloviakh nevesomosti/.  
07 p1060 A69-18570  
Certain data concerning the conditions of the cosmonauts during the flight of the first space expedition on the Voskhod spacecraft /Nekotorye dannye o sostoianii kosmonavtov vo vremia poleta pervoi kosmicheskoi ekspeditsii na korabli "Voskhod"/.  
07 p1060 A69-18571  
Gravitational effects during the formation of functions of the organism /Gravitatsionnye vozeistviia v formirovanii funktsii organizma/.  
07 p1060 A69-18572  
Physiological aspects of the weightlessness problem /Fiziologicheskie aspekty problemy nevesomosti/.  
07 p1060 A69-18573  
Sensory reactions and the state of arbitrary motions of man under conditions of weightlessness /Sensornye reaktsii i sostoianie proizvol'nykh dvizhenii cheloveka v usloviakh nevesomosti/.  
07 p1060 A69-18575  
Reactions of the cardiovascular and respiratory systems of animals during flights in sealed compartments of rockets to an altitude of 212 km /Reaktsii serdechno-sosudistoi i dykhatel'noi sistem zhivotnykh pri poletakh v germeticheskikh kabinakh raket do vysoty 212 km/.  
07 p1060 A69-18576  
Certain physiological reactions of animals during flights in biocompartments of ballistic rockets to altitudes of 450 to 473 km /Nekotorye fiziologicheskie reaktsii zhivotnykh pri poletakh v biokabinakh balisticheskikh raket do vysoty 450-473 km/.  
07 p1061 A69-18577  
Physiological reactions of animals during flights on the third, fourth, and fifth spacecraft satellites /Fiziologicheskie reaktsii zhivotnykh pri poletakh na tret'em, chetvertom i piatom kosmicheskikh korabliakh-sputnikakh/.  
07 p1061 A69-18578  
Certain physiological reactions of man under conditions of intermittent accelerations and short-term weightlessness /Nekotorye fiziologicheskie reaktsii cheloveka v usloviakh peremezhaushchegosia vliianiia peregruzok i kratkovremennoi nevesomosti/.  
07 p1061 A69-18579  
Reactions of cosmonauts during parabolic aircraft flights /Reaktsii kosmonavtov vo vremia parabolicheskikh poletov na samoletakh/.  
07 p1061 A69-18580

Certain physiological reactions in humans under conditions of brief weightlessness /Nekotorye fiziologicheskie reaktsii cheloveka v usloviakh kratkovremennoi nevesomosti/.  
07 p1061 A69-18581  
Physiological reactions of cosmonauts in unsupported space /Fiziologicheskie reaktsii kosmonavtov v bezopornom prostranstve/.  
07 p1061 A69-18582  
Reactions of the cardiovascular and respiratory systems of cosmonauts under conditions of orbital flight on the Voskhod spacecraft /Reaktsii serdechnososudistoi i dykhatel'noi sistem kosmonavtov v usloviakh orbital'nogo poleta na kosmicheskogo korabli "Voskhod"/.  
07 p1061 A69-18584  
Certain reactions of the cardiovascular and respiratory systems of cosmonauts during orbital flight on the Voskhod 2 spacecraft /Nekotorye reaktsii serdechnososudistoi i dykhatel'noi sistem kosmonavtov v orbital'nom polete na kosmicheskogo korabli "Voskhod 2"/.  
07 p1062 A69-18585  
Sensitivity of the vestibular analyzer and sensory reactions of man during short-term weightlessness /Chuvstvitel'nost' vestibuliarnogo analizatora i sensornye reaktsii cheloveka pri kratkovremennoi nevesomosti/.  
07 p1062 A69-18586  
Vestibular reactions of cosmonauts during the flight on the Voskhod spacecraft /Vestibuliarnye reaktsii kosmonavtov pri Plete na korabli "Voskhod"/.  
07 p1062 A69-18588  
Myogenic tonus under conditions of weightlessness /O miyechnom tonuse v usloviakh nevesomosti/.  
07 p1062 A69-18590  
Bioelectric activity of skeletal muscles under conditions of alternating periods of acceleration and weightlessness /Bioelektricheskaiia aktivnost' skeletnoi muskulatury v usloviakh peremezhaushchegosia deistviia peregruzok i nevesomosti/.  
07 p1062 A69-18591  
Certain reactions of man under conditions of reduced gravitation /O nekotorykh reaktsiiakh cheloveka v usloviakh ponizhennoi nevesomosti/.  
07 p1062 A69-18592  
Motor reactions under conditions of weightlessness /Dvigatel'nye reaktsii v usloviakh nevesomosti/.  
07 p1063 A69-18595  
Efficiency of man under conditions of reduced gravitation /K voprosu o rabotosposobnosti cheloveka v usloviakh ponizhennoi nevesomosti/.  
07 p1063 A69-18596  
Changes in the indices of external respiration, gas exchange, and energy expenditure in humans under conditions of weightlessness /Izmeneniia pokazatelei vneshnego dykhanii, gazoobmena i energotrat cheloveka v usloviakh nevesomosti/.  
12 p2020 A69-26563  
Some problems of weightlessness in space medicine /Nekotorye problemy nevesomosti v kosmicheskoi meditsine/.  
17 p2909 A69-33384

**KASIAN, V. G.**  
Investigation of the outflow of evaporation products during the electrical explosion of a wire cone /Issledovanie itecheniia produktov ispareniiia pri elektricheskomo vzryve provolochnogo konusa/.  
19 p3372 A69-35823

**KASIANENKO, A. P.**  
Single-circuit partially split magnetron with electron retuning of the frequency /Odnokonturnyi chastichno razrezannyi magnetron s elektronnoi perestroikoi chastoty/.  
21 p3682 A69-39128

**KASIKOV, I. I.**  
On low-voltage arc in cesium vapor.  
14 p2401 A69-29234

**KASIMENKO, T. V.**  
Determination of the velocity of a subsatellite point /Opredelenie skorosti odnoi podsputnikovoi tochki/.  
12 p2158 A69-26435  
Changes in the draconic period of the satellite 1965-11-D /Cosmos 54 rocket/ /Izmeneniia drakonicheskogo perioda sputnika 1965-11-D /raketa Kosmosa 54/.  
12 p2174 A69-26444

**KASIMOV, L. N.**  
Effect of cutting speed on surface layers of titanium alloy.  
18 p3148 A69-34548

**KASIMZADE, M. S.**  
Electrokinetic converter of biomechanical parameters /Elektrokineticheskii preobrazovatel' biomekhanicheskikh parametrov/.  
14 p2409 A69-29471



## KASLIN, V. M.

Effect of temperature on the properties of pulsed laser action on electron transitions in diatomic molecules.

09 p1520 A69-22654

## KASOVA, I.

Electron-microscope study of carbide precipitation in stainless steels /Elektronenmikroskopische Untersuchung der Carbidabscheidungen in korrosionsbestaendigen Staehlen/.

10 p1713 A69-23820

## KASOWSKI, R. V.

Superconductivity and band structure from a single pseudopotential - Zinc and cadmium.

04 p0642 A69-14965

## KASPAR, F. G.

Power spectrum of object flux transmittance by holographic techniques.

12 p2090 A69-26254

## KASPAR, J.

Colour in high-speed photography by modified schlieren apparatus.

12 p2088 A69-26183

## KASPAROVA, O. V.

Nonuniform decomposition of the beta-phase in the VT15 titanium alloy /Neravnomernyi raspad beta-fazy v titanovom splave VT15/.

11 p1902 A69-24275

## KASPER, J. F., JR.

Orbit estimation using manual space navigation sensors.

19 p3369 A69-35793

Autometric gyro for satellite relativity experiments.

23 p4162 A69-41543

## KASPER, U.

Heuristic establishment of a tetrad theory of the gravitational field /Heuristische Begrueundung einer Tetrudentheorie des Gravitationsfeldes/.

08 p1351 A69-20287

## KASPRZAK, W. T.

A study of day-night variations in the neutral composition of the lower thermosphere.

01 p0076 A69-11231

Mass spectrometric studies of the composition of the lower thermosphere during summer 1967.

03 p0425 A69-14009

Evidence for a helium flux in the lower thermosphere.

07 p1125 A69-18848

## KASPRZYK, S.

Defect localization in complex plants /Lokalizacja uszkodzen w obiektach zlozonych/.

05 p0767 A69-15765

## KASSABOV, J.

Magneto-electric characteristics of inversion layers.

08 p1372 A69-20460

Magneto-electric characteristics of p-inversion layer silicon.

13 p2323 A69-28331

## KASSEL, P. C., JR.

Flash X-ray technique for recession measurements in ablating models.

19 p3291 A69-35720

## KASSELMANN, J. T.

Fluidic valve for warm gas flow control. [AIAA PAPER 69-118]

06 p0872 A69-18147

## KASSIR, M. K.

External elliptical crack in elastic solid.

10 p1802 A69-24026

Thermal stresses in a solid weakened by an external circular crack.

12 p2179 A69-26216

## KASSOY, D. R.

Heat transfer to cylinders in nitrogen-helium and nitrogen-neon mixtures.

21 p3848 A69-38706

## KAST, H. B.

Fluidic overspeed sensor for a power turbine. [ASME PAPER 69-GT-17]

09 p1571 A69-22500

## KASTALSKII, A. A.

Emission of energy-deficient photons from germanium subjected to uniaxial compression.

04 p0643 A69-15255

## KASTE, O. C.

A comprehensive approach to design of the NF106B-VST model follower system. [AIAA PAPER 69-886]

21 p3764 A69-39412

## KASTEN, F.

Effect of aerosol size distribution and its variation with relative humidity on the visual range /Der Einfluss der Aerosol- Groessenverteilung und ihrer Aenderung mit der relativen Feuchte auf die Sichtweite/.

02 p0276 A69-12760

## KASTENBERG, W. E.

On the asymptotic stability of a particular class of distributed parameter feedback control systems.

01 p0050 A69-10239

## KASTNER, J.

Effect of soil and water on cosmic ray neutrons.

22 p4002 A69-40094

## KASTNER, S. O.

Approximate higher ionization potentials for the heavier elements.

14 p2488 A69-29923

## KASTURI RANGAN, K.

Balloon observations of cosmic X rays in the energy range 20-200 kev.

24 p4368 A69-43185

## KASTURIRANGAN, K.

On the rigidity spectra of total primary cosmic radiation.

06 p0989 A69-17279

## KASU, M.

Design of the blowing-type BLC system on the Japanese STOL seaplane.

05 p0695 A69-15546

## KASUYA, K.

Experiments on collisionless shock waves in plasmas.

19 p3379 A69-35759

## KASUYA, K.

The relaxation phenomena in an ionized shock front.

10 p1726 A69-23685

Experiments on collisionless shock waves in plasmas.

17 p3013 A69-33822

## KASUYA, T.

Undulation in the output of a pulsed water- vapor laser.

14 p2461 A69-29887

## KASYMOVA, A.

Ionization index, electron formation, and effective recombination coefficient in the E sub 2-layer.

06 p0920 A69-17725

## KASYMOVA, A. G.

Basic patterns in the planetary distribution of the E2 layer /Osnovnye zakonomernosti planetarnogo raspredeleniia sloia E2/.

20 p3527 A69-37672

## KATAEV, I. U. P.

Constrained elastoplastic torsion of closed thin-walled shells /Stesnennoe uprugoplasticchesko kruchenie zamknutykh tonkostennykh obolochek/.

18 p3222 A69-34978

Elastoplastic torsion of thick-walled closed shells of variable thickness /Uprugoplasticchesko kruchenie zamknutykh tolstostennykh obolochek s peremennoi tolshchinoi/.

21 p3835 A69-38882

## KATAGIRI, M.

On a numerical calculation of laminar boundary layer flows.

22 p3929 A69-39925

## KATAOKA, S.

Microwave oscillation and amplification in a long bulk GaAs with BaTiO sub 3 sheets on the surface.

07 p1197 A69-18452

Microwave emission from InSb avalanche plasma under a magnetic field.

07 p1197 A69-18466

Suppression of travelling high-field-domain mode oscillations in GaAs by dielectric surface loading.

08 p1371 A69-19911

## KATAYAMA, K.

Numerical methods in transient heat conduction. I - Methods using the analog computer.

18 p3229 A69-34835

## KATGERT, P.

A remnant of a large-scale explosive event in the galactic plane around longitude 60 deg.

07 p1225 A69-19717

## KATILIUS, R.

Current fluctuations in a semiconductor in a strong electric field /Fluktuatsii toka v poluprovodnike v sil'nom elektricheskom pol'e/.

16 p2824 A69-31569

## KATKOV, V. L.

Group classification of solutions of the Hopf equation.

07 p1118 A69-18700

## KATKOV, V. P.

Precision "angle-code" type converters employing frequency sensors of quantum magnetometers /Prezisionnyye preobrazovateli tipa "ugol-kod" na chastotnykh datchikakh kvantovykh magnitometrov/.

12 p2016 A69-25963

## KATKOVSKII, B. S.

Basal metabolism of man during prolonged rest in bed.

02 p0197 A69-11497

Similar changes of the oxygen balance in man during bed rest and stay in sealed chamber.

10 p1646 A69-23507

Effect of prolonged hypokinesia on the resistance of the human organism to physical stress /Vliianie dlitel'noi gipokinezii na ustoiчивost' organizma cheloveka k fizicheskoi nagruzke/.

17 p2907 A69-32939

## KATO, H.

Frequency conversion with gain through sideband locking of an IMPATT diode oscillation.

12 p2036 A69-25909

## KATO, K.

Improvement of moire and grid methods of plastic strain analysis and their application to extrusion.

13 p2359 A69-27256

## KATO, M.

The effect of minor impurities in water on corrosion of aluminum.

04 p0617 A69-14932

Fourier-transform holograms by Fresnel zone- plate achromatic-fringe interferometer.

12 p2090 A69-26249

## KATO, N.

Experimental study on finger dexterity with pressure gloves.

06 p0884 A69-18032

## KATO, S.

Formation of sporadic E layer due to wind shear in the presence of electrostatic field.

01 p0072 A69-11174

Discussion on theories of movement of ionospheric irregularities.

05 p0758 A69-16416

Transequatorial reception of VLF radio waves from Australia.

12 p2032 A69-26860

A consideration on the tidal wave transmission through the ionized atmosphere.

23 p4155 A69-41561

## KATO, T.

Laser machining.

09 p1504 A69-22247

Measurement of the absolute intensity of cosmic X-rays.

17 p3023 A69-33068

Correlation between the densities of X-ray sources and interstellar gas.

17 p3030 A69-33069

## KATO, Y.

The effect on the geomagnetic field of the solar eclipse of Nov. 12, 1966 at and near the dip equator.

02 p0241 A69-11727

Changes in the conductivity of the ionosphere at and near the dip equator during the solar eclipse of November 12, 1966.

02 p0241 A69-11728

Liapunov's direct method in stability problems for semilinear and quasilinear hyperbolic systems.

09 p1534 A69-22799

## KATONA, J.

New results in testing the reliability of electronic components.

08 p1293 A69-21109

## KATOW, M. S.

Techniques used to evaluate the performance of the NASA/JPL 210-ft-reflector structure under environmental loads.

23 p4231 A69-42132

## KATRICH, G. A.

Photoelectric emission from GaAs /Fotoelektronna emissiia arsenidu galiu/.

14 p2504 A69-28993

- KATS, A. V.**  
Bending of surface and self-focusing of a laser beam in a linear medium.  
14 p2461 A69-29674  
Forced scattering at surface waves /Vynuzhdennoe rasseyanie na poverkhnostnykh volnakh/.  
21 p3770 A69-38963
- KATS, M. E.**  
Acceleration of charged particles in the interplanetary medium /Ob uskorenii zariadennykh chastits v mezplanetnoi srede/.  
09 p1575 A69-21541  
Acceleration of charged particles in interplanetary space.  
16 p2851 A69-32536  
Charged particle acceleration in interplanetary plasma /Priskorennia zariadzenikh chastinok u kosmichnoi plazmi/.  
21 p3788 A69-38587
- KATS, M. L.**  
Multiphoton excitation of luminescence and photoconductivity in KCl-Eu single crystals by ruby and neodymium lasers /Mnogofotonnoe vozbuzhdenie luminesentsii i fotoprovodimosti monokristallov KCl-Eu rubinovym i neodimovym lazerami/.  
19 p3335 A69-36165
- KATSANIS, D. J.**  
Observations regarding the use of gas mixtures in shock tubes.  
23 p4146 A69-41547
- KATSANIS, T.**  
Numerical solution of symmetric positive differential equations.  
03 p0455 A69-13370  
Programs for computation of velocities and streamlines on a blade-to-blade surface of a turbomachine. [ASME PAPER 69-GT-48]  
09 p1432 A69-22495  
Numerical solution of Tricomi equation using theory of symmetric positive differential equations.  
24 p4339 A69-42792
- KATSENELSON, I. B.**  
Predawn effect in the f sub 0 F2 variations caused by sunrise at a magnetically conjugate point /Predrassvetnyi effekt v variatsiiakh f sub 0 F2 obuslovlennyy voskhodom solntsa v magnitno-sopriazhennoi točke/.  
02 p0238 A69-11681  
Predawn effect in f sub 0 F sub 2 variations caused by sunrise at a magnetically-conjugate point.  
13 p2257 A69-28712
- KATSEV, I. L.**  
Integral characteristics of unsteady light scattering /Ob integralnykh kharakteristikakh pri nestatsionarnom rasseyanii sveta/.  
11 p1915 A69-24604  
The propagation of modulated light radiation in a semiinfinite isotropic scattering medium /Rasprostraneniye modulirovannogo svetovogo izlucheniya v polubeskonechnoi izotropno rasseyivayuschei srede/.  
12 p0209 A69-26026  
Asymptotic solution of an unsteady transport equation /Asimptoticheskoe reshenie nestatsionarnogo uravneniya perenosu/.  
22 p3983 A69-41267
- KATSKOVA, O. N.**  
Three-dimensional supersonic gas flows with nonequilibrium processes /Prostranstvennyye sverkhzvukovyye techeniya gaza s neravnovesnymi protsessami/.  
01 p0060 A69-10724
- KATSENELSON, S. S.**  
Design of an MHD generator with an electric conductivity waveform at small magnetic Reynolds numbers /Raschet MGD-generatorsa s volnoi elektroprovodnosti pri malom magnitnom chisle Reinaldsa/.  
14 p2405 A69-29911
- KATTAWAR, G. W.**  
Radiative transfer in an atmosphere-ocean system.  
11 p1877 A69-24851
- KATTERFELD, G. N.**  
Annular and linear Martian structures /Kol'tsevye i lineinye struktury Marsa/.  
03 p0506 A69-13087  
Ring-shaped and linear structures on Mars.  
14 p2515 A69-28769
- KATZ, A. H.**  
Electron density variations in the Southern Hemisphere topside ionosphere during a magnetic storm.  
10 p1685 A69-23835  
Let aircraft make earth-resource surveys.  
16 p2881 A69-31632
- KATZ, I.**  
Simultaneous radar reflectivity measurements and refractive index spectra in the clear atmosphere.  
01 p0032 A69-10969  
Probing the clear atmosphere with high power, high resolution radars.  
14 p2415 A69-29518  
Gel permeation chromatography of nominally linear aliphatic polyesters.  
21 p3670 A69-39806
- KATZ, L.**  
Evidence for a geoelectric field over the polar cap.  
04 p0648 A69-14682  
The versatility of electrically propelled spacecraft for planetary missions.  
[AIAA PAPER 69-253]  
09 p1585 A69-21244  
The effects of magnetic storms on electrons and protons at L greater than 2.5.  
15 p2676 A69-31314
- KATZ, R.**  
Standing waves on the moon.  
20 p3604 A69-37565  
A computerized method for crewstation geometry evaluation.  
[AIAA PAPER 69-977]  
22 p3892 A69-40357
- KATZ, S.**  
Synthesis of multivariable automatic control systems with the aid of time-domain characteristics - Synthesis of an aircraft speed controller /Synteza układow automatycznej regulacji o wielu zmiennych za pomoca charakterystyk czasowych - Synteza regulatora predkosci samolotu/.  
05 p0737 A69-15887  
Pressure dependence of the infrared absorption of calcite.  
12 p2141 A69-25783
- KATZ, Y.**  
Dimensionless fracture-toughness parameters.  
05 p0780 A69-16080  
On the pop-in mode of fracture.  
15 p2642 A69-30814
- KATZBERG, S. J.**  
Electrical properties of vacuum deposited bismuth.  
02 p0296 A69-11878
- KATZENELBAUM, B. Z.**  
Expansion of the forced oscillations of open-circuit systems in eigenfunctions of the discrete spectrum /Razlozheniye vynuzhdennykh kolebaniy nezamknytykh sistem po sobstvennym funktsiiam diskretnogo spektra/.  
07 p1084 A69-19151
- KATZENSTEIN, J.**  
Bragg reflection of laser light from a phase grating in a Q-switching liquid.  
05 p0771 A69-15811
- KATZMAN, H.**  
An application of optical telemetry to shock tube measurements.  
14 p2449 A69-29561
- KAUFFMAN, W. L.**  
The temperature dependence of ideal gain in double diffused silicon transistors.  
05 p0733 A69-16558
- KAUFMAN, A.**  
On the precipitation of Ni sub 3 Nb.  
24 p4331 A69-42903
- KAUFMAN, A. N.**  
On the kinetic equation for resonant three-wave coupling.  
08 p1360 A69-19989
- KAUFMAN, B.**  
The effects of the Galilean moons on Jupiter flyby trajectories.  
[AIAA PAPER 69-932]  
21 p3809 A69-39361
- KAUFMAN, D. F.**  
Deformation and fracture of beryllium bicrystals.  
06 p0942 A69-17225
- KAUFMAN, H.**  
Biological monitoring of a full scale simulated Mars lander.  
02 p1201 A69-11774
- KAUFMAN, I. A.**  
Pressure-induced microwave absorption in N sub 2.  
03 p0472 A69-13317
- KAUFMAN, J. G.**  
Fracture toughness of aluminum alloys.  
23 p4175 A69-41476
- KAUFMAN, J. J.**  
LCAO-MO-SCF calculations using Gaussian basis functions. II - BeH sub 2.  
05 p0811 A69-15910
- KAUFMAN, J. W.**  
Clinical toxicologic studies on Freon R FE 1301.  
18 p3098 A69-35061
- KAUFMAN, M.**  
Survey of the region of Lacerta OB1.  
12 p2153 A69-25813
- KAUFMAN, W. C.**  
Inadequacies of meteorological data for predicting thermal stress.  
03 p0381 A69-14077  
Telemetry system for physiological evaluation of space suits.  
06 p0883 A69-17845  
Skin temperature changes caused by intense diffuse thermal radiation.  
[AGARDOGRAPH-111]  
08 p1264 A69-20669  
Physiologic evaluation of sea survival equipment.  
12 p2020 A69-26550  
Prediction of the final volume of the human body exposed to a vacuum.  
19 p3258 A69-36456
- KAUFMAN, W. F.**  
New functional approaches for redundant inert gas thruster systems.  
[AIAA PAPER 69-843]  
21 p3786 A69-39373
- KAUFMANN, J. P.**  
Radial velocities and distances in four stellar fields in the southern Milky Way /Radialgeschwindigkeiten und Entfernungen in vier Sternfeldern der suedlichen Milchstrasse/.  
22 p4020 A69-40317
- KAUFMANN, K.**  
Mode interaction in a spatially inhomogeneous laser.  
02 p0258 A69-12632  
The eigenmodes of a spatially inhomogeneous laser.  
17 p2984 A69-34046
- KAUFMANN, M.**  
Design criteria for high-pressure rocket engines.  
03 p0495 A69-12888
- KAUFMANN, P.**  
On the polarization and intensity distribution of solar bursts at 7 GHz.  
04 p0652 A69-14417  
A note on lower ionosphere equivalent height diurnal variation.  
05 p0752 A69-15666  
Polarization bursts in the sun observed at microwave frequencies.  
05 p0813 A69-15761  
Some peculiar tropospheric and ground effects on solar noise radio measurements at 7 GHz.  
07 p1215 A69-18819  
On the possible emission of polarized microwave radiation from the solar hemispheres.  
13 p2326 A69-27550  
Some comments in diurnal change of lower ionosphere equivalent height.  
15 p2595 A69-30224
- KAUFMANN, R.**  
Specific inhibition of the relaxation process in the mammalian myocardium at very low temperatures /I to 10 deg C /Spezifische Hemmung des Erschlaffungsprozesses am stark gekuehlten Warmbluetermyokard /I deg C-10 deg C//.  
23 p4092 A69-42060
- KAUFMANN, R. L.**  
Explorer 12 magnetopause observations - Large-scale nonuniform motion.  
18 p3128 A69-34947
- KAUFMANN, W. J., III**  
The exterior solution for radiating spheres with zero limb darkening in general relativity.  
13 p2339 A69-27566
- KAUL, C. N.**  
Weak discontinuities in shallow-liquid magnetohydrodynamics.  
08 p1362 A69-20354
- KAULA, W. M.**  
An Introduction to Planetary Physics- The terrestrial Planets.  
01 p0154 A69-10920  
A tectonic classification of the main features of the earth's gravitational field.  
23 p4154 A69-41318



## KAUMEYER, R. A.

Development of polyimide-glass fabric laminates with nonflammable characteristics in high oxygen concentration spacecraft environments.  
09 p1531 A69-22366

## KAUSCH-BLECKEN VON SCHMELING, H. H.

Behavior of elastic networks of various degrees of orientation in the kinetic theory of fracture.  
02 p0345 A69-12401

## KAUSCH-BLECKEN, H. H.

A note on the paper of V. R. Regel and A. M. Leksovsky "A study of fatigue within the framework of the kinetic concept of fracture."  
15 p2709 A69-30807

## KAUSEN, R. C.

Syntactic foam prepreps - A new composite construction material.  
19 p3353 A69-35512

## KAUSHAL, H.

A two-dimensional array absorber for microwaves.  
12 p2035 A69-25901

## KAUSHAL, S. K.

Rb super 87 - Sr super 87 age of bronzite /H group/ chondrites.  
14 p2526 A69-29881

## KAUSHANSKII, N. I.

The singular integral method in the problem of approximation by a function with a spectrum of limited extent.  
09 p1460 A69-22642

## KAUSHIKA, N. D.

Effect of magnetic activity on drifts and anisotropy of E-region ionization irregularities over Ahmedabad.  
21 p3715 A69-38561

## KAUTZ, W. H.

A survey of progress in coding theory in the Soviet Union.  
09 p1460 A69-21393

## KAUTZLEBEN, H.

Statistical description of the main geomagnetic field as a random vector field /K statisticheskomu opisaniiu glavnogo geomagnitnogo polia, kak sluchainogo vektornogo polia/.  
14 p2437 A69-29062

Spherical harmonic analysis and the deduction of normal fields /Sfericheskii garmonicheskii analiz i vyvod normal'nykh poliev/.  
14 p2437 A69-29063

A geomagnetic normal field of the vertical component in Central Europe.  
16 p2782 A69-32461

## KAUZLARICH, J. J.

Friction and wear characteristics of hot pressed MoS sub 2 - Ni composites in a face seal configuration. [ASLE FICFS PREPRINT 23]  
15 p2620 A69-30491

## KAVADAS, A.

Attitude determination of rocket-released probes from polarization measurements.  
02 p0207 A69-11813

Periodic fading in 42-MHz auroral backscatter.  
18 p3102 A69-34950

A stabilized rocket-released magnetometer.  
19 p3309 A69-35994

A rocket-released magnetometer probe for upper atmospheric measurements.  
19 p3309 A69-35995

## KAVANAGH, R. J.

Self and forced oscillations in multivariable relay control systems.  
12 p2049 A69-26084

Fourier analysis of pseudorandom binary sequences.  
13 p2287 A69-27245

## KAVANAUGH, W. P.

Study of a global search algorithm for optimal control.  
17 p2933 A69-33745

## KAVCHUK, A. A.

Probability analysis of distortion caused by impulse noise.  
09 p1476 A69-22678

Probabilistic analysis of the distortion of an elementary code message in the presence of pulse noise /Veroiatnostnyi analiz iskazhenii elementarnoi kodovoi posylki pri nalichii impul'snykh pomekh/.  
17 p2919 A69-33145

## KAVERINA, S. N.

Structural changes and mechanical properties of molybdenum on annealing.  
02 p0268 A69-12191

Structural changes and cold shortness of molybdenum subjected to deformation.  
04 p0615 A69-14637

Change in the mechanical properties and in the dislocation structure of deformed molybdenum alloys during annealing /Izmenenie mekhanicheskikh svoistv i dislokatsionnoi struktury deformirovannykh molibdenovykh splavov pri otzhege/.  
14 p2463 A69-29312

## KAVRAK, I.

Sound radiation from vibrating objects.  
02 p0282 A69-12800

## KAW, P.

Optical absorption and expansion of laser-produced plasmas.  
16 p2818 A69-31679

## KAW, P. K.

Nonlinear propagation of a moderately strong electromagnetic wave in a fully ionized plasma.  
01 p0133 A69-11213

Higher order thermal diffusion of electrons in ionized gases.  
04 p0636 A69-14878

Nonlinear high-frequency plasma conductivity.  
11 p1929 A69-25271

## KAWA, A.

Evoked release of 5-HT and NEFA from the hypothalamus of the conscious monkey during thermoregulation.  
23 p4084 A69-41472

## KAWABE, K.

Q-switching of ruby laser by natural chlorophyll and its derivatives.  
11 p1900 A69-25581

## KAWABE, T.

Suppression of plasma ion oscillations by electron plasma oscillations.  
02 p0287 A69-11934

Plasma ion oscillations in discharges produced by back diffusion plasma sources.  
13 p2304 A69-27301

## KAWADA, H.

A shock tube study of nonequilibrium MHD power generation.  
02 p0196 A69-12425

## KAWAGISHI, M.

Kinetic aspects of fatigue crack propagation.  
10 p1795 A69-23062

## KAWAGUCHI, I.

The flash spectrum observed at the total eclipse of February 5, 1962.  
24 p4388 A69-43636

## KAWAGUCHI, S.

The charge ratio of high-energy cosmic-ray muons at large zenith angles.  
17 p3023 A69-33321

## KAWAGUCHI, Y.

• Anomalous resistance and magnetoresistance in two dimensional transport in InAs.  
19 p3388 A69-36543

## KAWAHARA, T.

A successive approximation for turbulence in the Burgers model fluid.  
01 p0059 A69-10338

## KAWAI, S.

The spot diagrams of Schmidt camera.  
20 p3546 A69-38272

## KAWAI, T.

Analysis of large deflection of plates by the finite element method.  
15 p2706 A69-30435

## KAWAI, Y.

Suppression of plasma ion oscillations by electron plasma oscillations.  
02 p0287 A69-11934

Plasma ion oscillations in discharges produced by back diffusion plasma sources.  
13 p2304 A69-27301

## KAWAJI, A.

Lasing wavelength of a GaAs injection laser.  
02 p0256 A69-11993

## KAWAJI, S.

Anomalous resistance and magnetoresistance in two dimensional transport in InAs.  
19 p3388 A69-36543

## KAWAJIRI, N.

A morphological study of galactic HII regions.  
01 p0151 A69-10552

Absolute isophotometry of galactic HII regions in H alpha light.  
07 p1217 A69-19231

## KAWAKAMI, S.

An optical waveguide with the optimum distribution of the refractive index with reference to waveform distortion.  
04 p0575 A69-14749

## KAWAMOTO, M.

Influences of silicon content and grain size of primary silicon crystals on the wear of high silicon aluminium alloys.  
09 p1526 A69-22281

## KAWASAKI, N.

Mechanical relaxation of poly-4-methyl-pentene-1 at cryogenic temperatures.  
05 p0785 A69-16492

## KAWASAKI, S.

A study of diurnal anisotropy based on directional measurements of cosmic ray mesons.  
02 p0306 A69-11730

Thermalization of the kinetic energy of a plasma flow by a magnetic mirror field in BSG-I experiments.  
02 p0289 A69-12176

Natural frequency of thin plates.  
22 p4045 A69-40821

## KAWASE, Y.

Study on application of maraging stainless steel to liquid rocket propellant tank.  
07 p1166 A69-19236

## KAWASHIMA, F.

Method of estimating whole-body cold tolerance and its relation to seasonal variation of BMR.  
06 p0876 A69-18024

## KAWASHIMA, K.

On the residual deformation of an elasto-plastically bent thin circular plate after perfect unloading.  
19 p3438 A69-36306

## KAWASHIMA, M.

Microwave oscillation and amplification in a long bulk GaAs with BaTiO sub 3 sheets on the surface.  
07 p1197 A69-18452

Suppression of travelling high-field-domain mode oscillations in GaAs by dielectric surface loading.  
08 p1371 A69-19911

## KAWASHIMA, N.

Analysis of fluctuations in the interplanetary magnetic field obtained by IMP 2.  
05 p0824 A69-16264

## KAWATA, K.

On some photoelastic, micromechanic studies on FRP.  
21 p3846 A69-39796

## KAWATRA, M. P.

Effect of ferromagnetic ordering on the thermoelectric power of GdAl sub 2.  
03 p0485 A69-13322

## KAY, E.

The corrosion of steel in contact with molybdenum disulphide.  
01 p0094 A69-10367

## KAY, H. L.

Design of maintenance aids for advanced airborne electric power systems.  
17 p2905 A69-34112

## KAY, I. W.

Some basic concepts and results from electromagnetic theory.  
03 p0383 A69-12902

## KAY, J.

Long term operations of in-pile and out-of-pile thermionic converters.  
14 p2399 A69-29197

## KAYE, H.

Numerical solution of near-equilibrium boundary layers.  
04 p0588 A69-14737

Species concentration decay in a turbulent boundary layer. [AIAA PAPER 69-709]  
17 p2955 A69-33480

## KAYE, M.

Genetic significance of the chemical composition of tektites /A review/.  
23 p4210 A69-41346

## KAYE, S.

Circuit for liquid level measurements using carbon resistors.  
04 p0577 A69-15025

- Synergistic effects of ethylene oxide and other agents.  
05 p0713 A69-15945
- A solid state ozone generator.  
10 p1693 A69-23346
- KAYLOR, R.**  
Instability of the thermal wind.  
17 p2998 A69-33734
- KAYS, M. D.**  
Circulation in the arctic mesosphere in summer.  
06 p0949 A69-17005
- KAYS, T. H.**  
Scattering by two-component random distributions of spheres.  
04 p0555 A69-14282
- KAYS, W. M.**  
The turbulent boundary layer on a porous plate - Experimental heat transfer with uniform blowing and suction.  
04 p0586 A69-14356  
The turbulent boundary layer on a porous plate - Experimental skin friction with variable injection and suction.  
21 p3696 A69-39431  
Heat transfer to the highly accelerated turbulent boundary layer with and without mass addition.  
[ASME PAPER 69-HT-53] 24 p4409 A69-43518
- KAYTON, M.**  
Avionics Navigation Systems.  
18 p3168 A69-34843  
The navigation equations.  
18 p3169 A69-34845  
Inertial navigation.  
18 p3169 A69-34850  
Air-data systems.  
18 p3169 A69-34854  
Landing guidance.  
18 p3170 A69-34857
- KAZACHEVSKAIA, T. V.**  
Measurement of the energy of soft electrons in the upper atmosphere on December 21, 1966 /Izmerenie energii miagkikh elektronov v verkhnei atmosfere 21 dekabria 1966 g./.  
01 p0144 A69-10586  
Measurement of the energy of soft electrons in the upper atmosphere on December 21, 1966.  
15 p2675 A69-30756  
Measurement of electron fluxes in the upper atmosphere at middle latitudes.  
15 p2677 A69-31413
- KAZAKIAVICHUS, K. A.**  
Thermal stability of refractory ceramic materials in a high-temperature gas flow /Termostoikost' ognepurnykh keramicheskikh materialov v vysokotemperaturnom gazovom potoke/.  
13 p2285 A69-27472
- KAZAKOV, N. F.**  
Ultrasonic welding of thin-film components.  
04 p0605 A69-14561  
Diffusion Welding in Vacuum /Diffuzionnaia svarka v vakuumе/.  
19 p3329 A69-36748
- KAZAKOV, V. A.**  
Noise immunity of a memoryless comparison communication system with a limited number of repetitions.  
09 p1459 A69-22639
- KAZAKOV, V. K.**  
Mechanical properties of refractory materials based on boron and silicon nitrides.  
15 p2643 A69-31244
- KAZAKOV, V. M.**  
Four-specimen device for bending creep tests at temperatures of up to 900 deg C.  
10 p1696 A69-23851
- KAZANDZHAN, E. P.**  
Calculation of axisymmetric supersonic flows, using the results of optical measurements /Raschet sverkhzvukovykh osesimmetrichnykh potokov s ispol'zovaniem rezul'tatov opticheskikh izmerenii/.  
24 p4247 A69-43496
- KAZANKOV, V. I.**  
Capacitance sensor of the vertical employing a flexible electrode /Emkostnyi datchik vertikal's s uprugim elektrodom/.  
23 p4163 A69-41550
- KAZANSKII, V. V.**  
Peaked electron emission from a nickel surface under the action of laser radiation /Pichkovaia clek-
- tronnaia emissiia s poverkhnosti nikelia pod deistviem lazernogo izlucheniia/.  
10 p1703 A69-23572
- KAZANTSEV, A. N.**  
Field intensity of short radio waves emitted by an artificial earth satellite in an inhomogeneous ionosphere /Naprizhennost' polia korotkikh radiovoln, izluchaemykh isskustvennym sputnikom zemli v neodnorodnoi ionosfere/.  
20 p3491 A69-37689
- KAZANTSEV, A. P.**  
Theory of a gas laser with nonlinear absorption.  
10 p1704 A69-23625  
Quantum theory of the laser /K kvantovoi teorii lazera/.  
21 p3737 A69-38996
- KAZANTSEV, IU. N.**  
Eigenwaves in gas-dielectric beamguides /waveguides/.  
05 p0736 A69-16783  
Attenuation of electromagnetic waves in a gas-dielectric waveguide /Zatukhanie elektromagnitnykh voln v gazovo-dielektricheskom volnovode/.  
21 p3674 A69-39123
- KAZANTSEV, V. F.**  
Ultrasonic modulation of a laser /Ul'trazvukovaia moduliatsiia opticheskogo kvantovogo generatora/.  
13 p2271 A69-27534  
Ultrasonic modulation of a laser.  
20 p3556 A69-38201
- KAZANTSEV, V. I.**  
Engineering design of H-plane waveguide Y-circulators /Inzhenernyi raschet volnovodnykh H-ploskostnykh Y-tsirkulyatorov/.  
04 p0575 A69-14460  
Design of H-plane waveguide Y-circulators.  
14 p2418 A69-28831
- KAZANTSEVA, N. A.**  
Cermet material for radial sealing of high-temperature turbines /Metallokeramicheskii material dlia radial'nogo uplotneniia vysokotemperaturnykh turbin/.  
13 p2275 A69-27344
- KAZARIAN, L. E.**  
Variations of spinal alignment in egress systems and their effect.  
23 p4102 A69-41681
- KAZARIAN, V. S.**  
Ferroelectric and magnetic properties of /1 - x/BiMnO sub 3 - xPbTiO sub 3 solid solutions /Segnetoelektricheskie i magnitnye svoistva tverdykh rastvorov /1 - x/BiMnO sub 3 - xPbTiO sub 3/.  
22 p3996 A69-41163
- KAZARINOV, R. F.**  
Superfluidity of excitons in semiconductors.  
03 p0486 A69-13415
- KAZAROV, R. E.**  
Investigation of the spectrum of ionization bursts produced by the penetrating component of extensive air showers.  
13 p2332 A69-28403  
Energy and angular distributions of 10 super 11 to 10 super 12 ev muons.  
13 p2332 A69-28420
- KAZAZIAN, V. T.**  
Temperature distributions in a layer with internal sources of heat and in a turbulent fluid flow cooling the layer /Raspreделение temperatur v sloe s vnutrennimi istochnikami tepla i okhlazhdaushchem ego turbulentnom potoke zhidkosti/.  
15 p2718 A69-31169
- KAZBEKOV, A. R.**  
Dynamic properties of electrohydraulic servomechanisms having a variable structure.  
03 p0368 A69-13686
- KAZEL, S.**  
High-sensitivity real-time microwave holography and imaging.  
20 p3545 A69-37901
- KAZENIN, D. A.**  
Some results of an investigation into heat transfer from a liquid to a highly overheated wall.  
11 p1996 A69-24228
- KAZIMIROVSKII, E. S.**  
Diurnal variations of fluctuations of the electron density in the ionosphere of the Northern Hemisphere /Sutochnnye variatsii fluktuatsii elektronnoi plotnosti v ionosfere severnogo polushariia/.  
14 p2444 A69-29870  
Ionospheric Processes /Ionosfernye Protsessy/.  
18 p3126 A69-34358
- Solar activity and the dynamics of the upper atmosphere /Survey/ /Solnechnaia aktivnost' i dinamika verkhnei atmosfery /obzor//.  
20 p3590 A69-37684
- KAZIMIRSKI, Z. B.**  
Calculation of the two-dimensional flow of an incompressible fluid past a cascade of arbitrary profiles vibrating with an arbitrary phase shift /Raschet obtekaniiia reshetki proizvol'nykh profilei, vibriruiushchikh s proizvol'nym sdlvigom faz, ploskim potokom neszhimaemoi zhidkosti/.  
02 p0190 A69-12574
- KAZIMIRTCHAK-POLONSKAIA, H. I.**  
The capture of comets by large planets /De la capture des cometes par les grosses planetes/.  
03 p0517 A69-14128
- KAZIN, S. B.**  
Fan compressor noise reduction.  
[ASME PAPER 69-GT-9] 09 p1571 A69-22505
- KAZIUTINSKII, V. V.**  
Problems of Present-Day Cosmogony /Problemy Sovremennoi Kosmogonii/.  
21 p3813 A69-39525
- KAZMIROWSKI, A.**  
Measurement of the spectrum of laser emission by a Fabry-Perot interferometer /Zagadnienie pomiaru widma promieniowania laserowego interferometrem Fabry-Perot/.  
20 p3536 A69-36945
- KEANE, L. M.**  
Recent progress in navigation satellites.  
07 p1177 A69-19212
- KEAR, B. H.**  
The role of interfaces in Ni-base superalloys.  
03 p0449 A69-13878  
Work-hardening in off-stoichiometric Ni sub 3 Al.  
05 p0779 A69-15760
- KEARTON, R. R.**  
An approach to low cost space transportation.  
21 p3857 A69-39690
- KEAST, P.**  
The third boundary value problem for elliptic equations.  
04 p0625 A69-15133
- KEATING, G. M.**  
The polar exosphere near solar maximum.  
15 p2600 A69-31351
- KEATING, P. N.**  
The liquid-gas interface as a recording medium for acoustical holography.  
10 p1695 A69-23542
- KEATS, E. S.**  
Consideration of some marine uses of navigation satellites.  
[UN PAPER 68-95305] 01 p0112 A69-10469
- KEBULADZE, T. V.**  
Dependence of cosmic-ray increases on the structure of the interplanetary magnetic field before Forbush effects /Zavisimost' vozzrastanii kosmicheskikh luchei pored Forbush-effektami ot struktury mezplanetnogo magnitnogo polia/.  
14 p2512 A69-29044  
Acceleration of cosmic rays by corpuscular fluxes and the characteristics of the solar wind /Uskorenie kosmicheskikh luchei korpuskuliarnymi potokami i kharakteristiki solnechnogo vetra/.  
23 p4205 A69-41838
- KECECIOGLU, D.**  
Distributions of cycles-to-failure in simple fatigue and the associated reliabilities.  
19 p3437 A69-36032
- KECK, J.**  
Statistical theory of dissociation and recombination for moderately complex molecules.  
02 p0283 A69-12181  
Monte Carlo trajectory calculations of atomic excitation and ionization by thermal electrons.  
18 p3176 A69-34790
- KECK, J. C.**  
Classical theory for the interaction of gas atoms with solid surfaces.  
04 p0632 A69-15008
- KECKLER, C. R.**  
Description of a real-time digital full-scale CMG control system simulation for manned spacecraft.  
[AIAA PAPER 69-940] 22 p3919 A69-40323
- KEDDY, E. S.**  
Advances in heat pipe technology.  
14 p2538 A69-29202



## KEEFE, S. E.

Standing wave methods for measuring permittivities at meter and decimeter wavelengths.  
04 p0599 A69-15015

## KEEFER, D. R.

A theory for the low-pressure electrodeless discharge.  
[AIAA PAPER 69-703] 17 p3011 A69-33479

## KEELING, K. B., JR.

An induced-convection effect upon the peak-boiling heat flux.  
24 p4409 A69-43516

## KEEMAR, L.

Glass cloth and resin for rectification.  
06 p0931 A69-17713

## KEEN, B. E.

Low frequency wave mixing in a magneto-plasma.  
16 p2820 A69-31769

## KEEN, M. J.

Possible edge effect to explain magnetic anomalies off the Eastern Seaboard of the U.S.  
11 p1879 A69-25405

## KEEN, R. S.

Failure mechanisms and analyses in large-scale integrated circuits.  
19 p3282 A69-35787

## KEEN, R. S., JR.

Failure mechanisms in large-scale integrated circuits.  
17 p2935 A69-32887

## KEENAN, P. C.

HD 191980 - A peculiar B-type star.  
11 p1958 A69-24594  
High-dispersion classification of K2-M6 giants of high and low velocity.  
13 p2338 A69-27556

Carbon stars in a south galactic pole region.  
16 p2860 A69-32232

Is there NbO in S-type stars/ques/  
19 p3403 A69-35964

## KEENE, G. T.

Lunar photography for Apollo.  
21 p3719 A69-38325

## KEENE, S. J., JR.

Putting predictions into perspective.  
18 p3147 A69-34516

## KEENER, E. R.

Use of Preston tubes for measuring hypersonic turbulent skin friction.  
[AIAA PAPER 69-345] 13 p2249 A69-28280

## KEER, L. M.

Torsion of a finite elastic cylindrical rod partially bonded to an elastic half space.  
07 p1236 A69-19474

Indentations of an elastic layer by moving punches.  
21 p3837 A69-39155

## KEESEY, U. T.

Changes induced in stabilized image visibility by experimental alteration of the ongoing EEG.  
22 p3871 A69-40159

## KEIDEL, W. D.

"Demultiplicated" neuronal discharge periodicities correlated with stimulus frequency in colliculus inferior and geniculatum mediale /Reizfrequenzkorrelierte "untersetzte" neuronale entladungsperiodizitaet im colliculus inferior und im corpus geniculatum mediale/.  
23 p4096 A69-42089

Sound-correlated DC changes on the intact skull of human subjects /Akustischen Reizen zugeordnete Gleichspannungsaenderungen am intakten Schaedel des Menschen/.  
23 p4098 A69-42101

## KEIL, K.

Mineralogical and chemical relationships among enstatite chondrites.  
02 p0317 A69-12016

Electron microprobe analysis of vanadium in the presence of titanium.  
07 p1073 A69-18419

Meteorite composition.  
22 p4032 A69-40981

Ilmenite in ordinary chondrites.  
24 p4382 A69-42890

## KEIL, L. C.

Changes in growth and body composition of mice exposed to chronic centrifugation.  
17 p2910 A69-33746

## KEIL, R.

Interaction of laser light waves by dynamic Stark splitting.  
22 p3965 A69-41125

## KEILHACKER, M.

Investigation of energy dissipation in collisionless shock waves.  
17 p3013 A69-33820

## KEIN, V. M.

Two variants of a solution to the problem of obtaining an equivalent /O dvukh variantakh resheniia zadachi ekvivalentirovaniia/.  
19 p3286 A69-36191

Dynamic characteristics of auto-oscillatory temperature control /Dinamicheskie kharakteristiki avtogeneratornogo regulatora temperatury/.  
22 p3869 A69-40254

## KEIPERT, F. A.

A new approach to telemetry data processing - The data reduction laboratory.  
22 p3919 A69-40352

## KEIS, I.

Optimal asymptotic stabilization of the relative equilibrium of a free gyrost. II /K optimal'noi asimpoticheskoi stabilizatsii otositel'nogo ravnovesiia svobodnogo girostata. II/.  
01 p0079 A69-10261

Optimal asymptotic stabilization of the relative equilibrium of a gyrost. I /K optimal'noi asimpoticheskoi stabilizatsii otositel'nogo ravnovesiia girostata. I/.  
18 p3210 A69-35145

## KEISER, B. E.

An automatic system for the control of multiple drone aircraft.  
14 p2392 A69-29495

## KEISTER, F. Z.

An evaluation of materials and processes for integrated microwave circuits.  
01 p0040 A69-10199

## KEITH, R. E.

Development of magnesium-lithium alloy honeycomb core.  
24 p4323 A69-43417

## KEKRE, H. B.

Modified scheme for simulation of a delayor for polynomial inputs.  
12 p2120 A69-25922

## KELDYSH, L. V.

Nonlinear polarizability of semiconductors /Nelineinaia poliarizuemost' poluprovodnikov/.  
03 p0483 A69-13035

Collective properties of excitons in semiconductors.  
08 p1371 A69-19955

## KELDYSH, V. V.

Lift-drag ratio of a winged conical sector under conditions corresponding to sectional cutouts from the flow about a circular cone at zero angle of attack /Aerodinamicheskoe kachestvo konicheskogo sektora s krylom na rezhimakh, sootvetstvuiushchikh vyzkam iz techeniia v okrestnosti kruglogo konusa pri nulevom ugle ataki/.  
06 p0858 A69-17340

Gasdynamic design considerations for hypersonic aircraft /Gazodinamicheskoe konstruirovaniye giperzvukovykh samoletov/.  
19 p3248 A69-36399

## KELKAR, V. S.

Stresses in a cylindrical shell supported by a core of a different material.  
05 p0835 A69-15871

## KELLAR, W. J.

More strain gages - Less slip rings.  
09 p1496 A69-22014

## KELLEHER, J. J.

Radio frequency interference experiment design for the Applications Technology Satellite.  
03 p0392 A69-13242

Millimeter wavelengths for space communications/ques/.  
03 p0397 A69-13721

## KELLEHER, M.

Taylor-Goertler vortices and their effect on heat transfer.  
[ASME PAPER 69-HT-3] 24 p4414 A69-43563

## KELLEHER, R. F.

The F-region equatorial irregularity belt as observed from scintillation of satellite transmissions.  
05 p0758 A69-16418

## KELLER, D. W.

Earth resources satellite systems.  
21 p3720 A69-38623

## KELLER, H. B.

Accurate difference methods for linear ordinary differential systems subject to linear constraints.  
21 p3754 A69-38744

## KELLER, H. H.

Radiation heat transfer for annular fins of trapezoidal profile.  
[ASME PAPER 69-HT-6] 24 p4413 A69-43555

## KELLER, J. B.

Perturbation theory of nonlinear boundary-value problems.  
09 p1540 A69-21894

Perturbation theory of nonlinear electromagnetic wave propagation.  
21 p3677 A69-39465

Survey of the theory of turbulence.  
23 p4152 A69-42313

Bounds on elastic moduli of composite media.  
24 p4406 A69-43701

## KELLER, J. D.

Wave soldering - Process control requirements.  
18 p3146 A69-34512

## KELLER, P.

Nonlinearity in electromagnetic wave propagation.  
17 p2928 A69-33867

## KELLER, R.

The formation of chlorine pentafluoride in an electrochemical cell. II - From chlorine.  
13 p2217 A69-28135

## KELLER, R. B.

Forced and self-excited oscillations in propellant lines.  
[ASME PAPER 69-FE-6] 20 p3586 A69-37987

## KELLER, W. F.

Reaction controls for jet-lift VTOL aircraft.  
[AIAA PAPER 69-545] 16 p2735 A69-32756

## KELLERER, H.

The creep behaviour of aluminium-alumina /SAP/ alloys.  
12 p2120 A69-26933

Quenching of titanium 6Al-4V to aging temperatures.  
21 p3730 A69-38667

## KELLERMANN, K. I.

The spectra of opaque radio sources.  
09 p1591 A69-21447

Measurements of the flux density and spectra of discrete radio sources at centimeter wavelengths. II - The observations at 5 GHz /6 cm/.  
10 p1773 A69-22958

Observations of changes in the spectra of certain radio sources /Nabliudeniia izmenenii v spektrakh nekotorykh radioistochnikov/.  
12 p2167 A69-27043

The spectra of radio sources in the revised 3C catalogue.  
20 p3609 A69-38138

The structure and evolution of extragalactic sources.  
24 p4378 A69-42699

## KELLERMANN, K. J.

Power transfer between double-tuned bandpass filters /Zur Leistungsebertragung abgestimmter Zweikreis-Bandfilter/.  
05 p0729 A69-15964

## KELLETT, P. M.

Electrochemical oxidation of fuels in liquid ammonia.  
[ECS PAPER 212] 03 p0382 A69-13857

## KELLEY, C. R.

Predictor display for remote roving surface vehicle control.  
06 p0928 A69-17925

## KELLEY, D. M.

Prediction of nonlinear transient response of structures.  
11 p1993 A69-25526

## KELLEY, G. F.

Optimum maneuvers of a skip vehicle with bounded lift constraints.  
17 p3025 A69-32836

## KELLEY, H. J.

Modeling and adjoints for continuous systems.  
15 p2645 A69-31236

- Rocket trajectory optimization by a second-order numerical technique. 16 p2857 A69-32154
- Note on sequential estimation of second partial derivatives. 24 p4340 A69-42958
- KELLEY, J. D.**  
Simple expression for "steric factor" in translational-vibrational energy transfer. 12 p2134 A69-25988
- KELLEY, J. G.**  
Evaluation of the driver chamber efficiency for an arc driven shock tube. 18 p3116 A69-34456
- KELLEY, M. J.**  
Nonelectric cathode heating. 11 p1848 A69-24748
- KELLEY, O. A., JR.**  
Comments on aerospace vehicle dynamic balancing. [SAWE PAPER 772] 18 p3208 A69-34875
- KELLEY, P. L.**  
Self-modulation, self-steepening, and spectral development of light in small-scale trapped filaments. 08 p1352 A69-20745  
Transient and steady state thermal self-focusing. 10 p1706 A69-24009
- KELLEY, R. E.**  
Simplicity - A virtue in rocket guidance. 02 p0279 A69-12362
- KELLEY, R. N.**  
Evaluating dispersion in gel permeation chromatography. II. 04 p0555 A69-14884  
Evaluating dispersion in gel permeation chromatography. I. 04 p0555 A69-14885  
Evaluating dispersion in gel permeation chromatography - Axial dispersion of polymer molecules in packed beds of nonporous glass beads. 22 p3894 A69-39873
- KELLNER, H.**  
A point signal system for aerial photography [Beitraege zur Punktsignalisierung fuer Luftaufnahmen]. 14 p2450 A69-29600
- KELLNER, H. A.**  
Calculation of the special perturbations of equatorial, moderately elliptical satellite orbits in terms of local invariants. 17 p3039 A69-33796
- KELLOCK, H. A.**  
A calorimeter for infra-red laser power measurement. 11 p1885 A69-24903
- KELLOGG, D. H.**  
Low cycle fatigue of Ti-6Al-4V alloy. [ASM PAPER D8-24.4] 07 p1169 A69-19669
- KELLOGG, E. M.**  
The location of the X-ray source in Vela. 02 p0308 A69-12594  
The spectrum of diffuse cosmic X-rays, 1-13 kev. 13 p2326 A69-27570
- KELLOGG, R. B.**  
A nonlinear alternating direction method. 18 p3163 A69-34329
- KELLOGG, R. S.**  
Motion sickness precipitated in the weightless phase of parabolic flight by Coriolis accelerations. 21 p3659 A69-39168  
Motion sickness susceptibility under weightless and hypergravity conditions generated by parabolic flight. 21 p3660 A69-39176
- KELLY, A.**  
Stress-strain curve of a fibre-reinforced composite. 21 p3845 A69-39709
- KELLY, A. J.**  
Electronically variable time-delay network for broad-band phased-array steering. 04 p0580 A69-15469
- KELLY, C. N.**  
Optimal processing of satellite down-linked data. 21 p3677 A69-39462
- KELLY, D. C.**  
Collision operator for a relativistic Lorentz gas. 16 p2817 A69-31668
- KELLY, D. F.**  
Effect of carbon monoxide on function and structure of the lung. 22 p3874 A69-40224
- KELLY, D. H.**  
Non-contact method of measuring small eye-movements and stabilizing the retinal image. 09 p1446 A69-21908
- KELLY, G. L.**  
Pattern recognition with measurement space and spatial clustering for multiple images. 14 p2448 A69-29533
- KELLY, G. N.**  
Search for heavy mass particles in the sea level cosmic radiation. 16 p2846 A69-31600
- KELLY, H. P.**  
Frequency-dependent polarizability of atomic oxygen calculated by many-body theory. 24 p4354 A69-43816
- KELLY, J. L.**  
Evaluation of NOMAD buoy telemetry system. 03 p0391 A69-13223
- KELLY, J. M.**  
Finite deflection of a circular viscoplastic plate subject to projectile impact. 02 p0349 A69-12798
- KELLY, K. K.**  
Mariner 6 - Ultraviolet spectrum of Mars upper atmosphere. 22 p4023 A69-40568
- KELLY, M. G.**  
Aerial photography for the study of near-shore ocean biology. 22 p3894 A69-40995
- KELLY, P. M.**  
The crystallography of titanium alloy martensites. 18 p3154 A69-34245
- KELLY, R. B.**  
Enzymatic synthesis of deoxyribonucleic acid. XXXI. 22 p3898 A69-41075
- KELLY, R. E.**  
Neutrally stable disturbances for a nonplanar, parallel flow. 03 p0415 A69-13155
- KELLY, R. J.**  
A real-time processing system for determination of metabolic rates of a suited astronaut. [AIAA PAPER 69-993] 22 p3893 A69-40371  
Physiological response to steady state hypoxia. 23 p4085 A69-41673
- KELLY, T. W.**  
Balloon platforms for scientific research. [AIAA PAPER 69-156] 06 p1010 A69-18067
- KELM, R. W.**  
The etching of germanium with water vapor and hydrogen sulfide. 22 p3970 A69-40737
- KELM, S.**  
High-temperature energy systems with plasma reactors and inductive magnetoplasmadynamic converters. 10 p1738 A69-23489
- KELMAN, G. R.**  
Effect of mild hypoxia on mental performance assessed by a test of selective attention. 09 p1445 A69-22553  
Impairment of mental performance at a simulated altitude of 8,000 feet. 23 p4102 A69-41680
- KELNER, S. R.**  
Energy losses of muons in pair production. 13 p2304 A69-28423
- KELNHOFER, W. J.**  
Wall temperature and Prandtl number effects on turbulent boundary layer thicknesses and shape factors for subsonic compressible gas flow over a flat plate. [ASME PAPER 69-GT-55] 09 p1432 A69-22513
- KELOV, K.**  
On the stability of a Gaussian beam in a non-uniformly amplifying medium. 09 p1520 A69-22685
- KELTZ, W. L.**  
Performance tradeoffs in fluidic attitude control systems. 17 p2904 A69-34069
- KELZON, A. S.**  
Dynamics of a rigid shaft rotating in hinged and elastic bearings /Dinamika zhestkogo vala, vrashchayushchegosia v sharnirnoi i uprugoi oporakh/. 23 p4171 A69-42483
- KEMENY, A. P.**  
Life testing of semiconductor rectifiers with energy sparing synthetic circuits. 08 p1293 A69-21113  
Automatic testing system for transistor reliability evaluation. 08 p1294 A69-21119  
Life testing of semiconductor rectifiers with energy sparing synthetic circuits. 15 p2579 A69-31041
- KEMENY, G.**  
A derivation of the Langevin equation for shear viscosity in monatomic liquids. 16 p2815 A69-32370
- KEMME, J. E.**  
Advances in heat pipe technology. 14 p2538 A69-29202  
Ultimate heat-pipe performance. 23 p4239 A69-41719
- KEMMERER, W. W., JR.**  
Physical, chemical, and biological activities at the Lunar Receiving Laboratory. 21 p3690 A69-38896
- KEMP, D. E.**  
Federal Aviation Administration air safety program. 06 p1041 A69-16839
- KEMP, E. D. G.**  
Studies of exhaust-gas recirculation for VTOL aircraft. [AIAA PAPER 67-439] 12 p2013 A69-26760
- KEMP, H. T.**  
Biological experimentation - Methods and results. 01 p0016 A69-10948
- KEMP, J. H., JR.**  
Preliminary results from an experimental investigation of nozzle wall boundary layer at Mach numbers ranging from 27 to 47. [AIAA PAPER 69-686] 17 p2953 A69-33441  
Hypersonic viscous interaction on sharp and blunt inclined plates. [AIAA PAPER 68-720] 23 p4059 A69-41886
- KEMP, L. A. W.**  
A simple compact anti-vibration instrument mounting. 09 p1502 A69-22692
- KEMP, N.**  
Similarity solutions to the massive blowing problem. 24 p4305 A69-43658
- KEMP, N. H.**  
Structure of the laminar ablating air-Teflon boundary layer. [AIAA PAPER 69-99] 06 p1037 A69-18086
- KEMP, R. F.**  
Colloid microthruster test stand. [AIAA PAPER 69-314] 09 p1478 A69-22380
- KEMPE, W.**  
The stony meteorite Kraehenberg - Its chemical composition and the Rb-Sr age of the light and dark portions. 05 p0826 A69-16439
- KEMPINSKII, M. M.**  
Trajectory of the motion of a point image in a rotating angular mirror /Traektoriya dvizheniya izobrazheniya tochki vo vrashchayushchemsia uglovom zerkale/. 11 p1881 A69-24562
- KEMPTER, R. H.**  
Value engineering incentive vs. product improvement. 13 p2383 A69-28100
- KEMURDZHIAN, A. L.**  
Investigations of the physical and mechanical properties of the moon's soil from Luna 13. 18 p3113 A69-34239
- KENDALL, B. R. F.**  
Gas analysis with pulsed vacuum networks. 13 p2247 A69-28085  
Theory of pulsed molecular-flow networks. 16 p2813 A69-32325
- KENDALL, D. L.**  
Diffusion. 04 p0641 A69-14502



## KENDALL, D. P.

A comparison of results of axial-tension, rotating-beam and pressurized-cylinder fatigue tests.  
15 p2709 A69-30676

## KENDALL, E. G.

Materials for a minimum cost space launch vehicle.  
12 p2175 A69-26844

## KENDALL, P. C.

A model midnight meridian magnetospheric field.  
13 p2252 A69-27532  
A physical explanation of difficulties appearing in the theory of toroidal magnetohydrodynamic oscillations.  
14 p2492 A69-29369

## KENDALL, W. B.

A precision frequency measurement technique for a moving signal with a low signal-to-noise ratio.  
12 p2038 A69-26051

## KENDRICK, J. B.

Comparison of six designs of low cost launch vehicles.  
21 p3827 A69-39694

## KENESHEA, F. J.

The thermodynamic properties of gaseous niobium chlorides.  
23 p4112 A69-41339

## KENIGSBERG, I. J.

Power spectral density analysis of V/STOL aircraft structures.  
01 p0168 A69-10407

## KENIGSBERG, N. L.

Cadmium sulfide thin-film hypersonic transducers.  
15 p2575 A69-30236

## KENIN, L. M.

Noise immunity of a linear amplitude detector with a threshold when separating a weak sinusoidal signal from noise.  
09 p1460 A69-22645

## KENNA, B. T.

Radioactive decay and associated electrical changes in fast-neutron-irradiated CdS.  
22 p3993 A69-40728

## KENNEDY, A. J.

The prospects for materials.  
08 p1332 A69-20306

## KENNEDY, B. W.

Thin film temperature sensor.  
22 p3950 A69-41229

## KENNEDY, C. D. S.

Helicopter armament for land operations.  
01 p0010 A69-10869

## KENNEDY, D. I.

Voltage dependence of electroluminescence from GaP diodes prepared by liquid epitaxial techniques.  
10 p1663 A69-23664

## KENNEDY, D. W.

Laser display systems. I - Scanners.  
04 p0600 A69-15028  
Laser display systems. II.  
09 p1492 A69-21394

## KENNEDY, P. B.

Composite structural elements for missile interstage application.  
24 p4325 A69-43444

## KENNEDY, P. M.

Radial velocities of southern OB stars and supergiants.  
14 p2519 A69-29368

## KENNEDY, R. S.

Motion sickness precipitated in the weightless phase of parabolic flight by Coriolis accelerations.  
21 p3659 A69-39168

## KENNEDY, W. K., JR.

Pulse power from LSA devices at centimeter through millimeter wavelengths.  
07 p1097 A69-18445  
Cavity design for millimeter-wavelength gallium arsenide devices.  
20 p3508 A69-37900

## KENNEL, C. F.

Magnetosonic wave propagating across a magnetic field in a warm collisionless plasma.  
03 p0479 A69-14020  
Detection of electric-field turbulence in the earth's bow shock.  
04 p0592 A69-14681  
Magnetic turbulence in shocks.  
07 p1194 A69-19366

Small amplitude waves in high beta plasmas.  
08 p1359 A69-19986

Consequences of a magnetospheric plasma.  
12 p2072 A69-26748

Instability phenomena of the magnetosphere.  
24 p4306 A69-42692

## KENNER, T.

The dynamics of pulsatile flow in the coronary arteries.  
23 p4098 A69-42103

## KENNER, V. H.

Longitudinal impact on a hollow cone.  
[ASME PAPER 69-APMW-15]  
24 p4401 A69-43101

## KENNERUD, K. L.

A technique for identifying the cause of performance degradation in cadmium sulfide solar cells.  
23 p4070 A69-42271

## KENNET, H.

Spacecraft sizing technique for planetary missions.  
[AIAA PAPER 69-125]  
06 p1018 A69-18076  
Spacecraft sizing technique for planetary missions.  
[AIAA PAPER 69-125]  
21 p3828 A69-39770

## KENNEY, J. F.

Magnetospheric parameters determined from structured micropulsations.  
01 p0076 A69-11229

## KENNEY, J. M.

The simultaneous measurement of gain and noise using only noise generators.  
02 p0210 A69-12430

## KENNOY, J.

A study of Saturn AS-502 coupling longitudinal structural vibration and lateral bending response during boost.  
[AIAA PAPER 69-58]  
06 p1019 A69-18204

## KENNY, D. P.

A novel low-cost diffuser for high-performance centrifugal compressors.  
[ASME PAPER 68-GT-38]  
19 p3240 A69-36420

## KENNY, P.

Fracture Toughness- An Examination of the Concept in Predicting the Failure of Materials.  
02 p0336 A69-11431

## KENT, A.

Stability of laminar magnetofluid flow along a parallel magnetic field.  
04 p0637 A69-15045

Plasma fluctuations and convective modes.  
11 p1924 A69-24301

## KENT, G.

Resonant frequencies and fields in a cavity containing a magnetoplasma dielectric.  
06 p0968 A69-17763

## KENT, G. S.

Ionospheric electron content and scintillation studies at widely-spaced low-latitude stations.  
02 p0235 A69-11427  
Investigation of the stratospheric aerosol by infrared and lidar techniques.  
04 p0592 A69-14654

## KENT, J. T.

Ground traces of artificial earth satellites.  
19 p3398 A69-35614

## KENT, K. G.

The background to the weldable Al-Zn-Mg alloys.  
02 p0266 A69-12063

## KENT, M. J.

Time-dependent processes in CO sub 2 laser amplifiers.  
08 p1324 A69-20098

## KENT, R. C.

S-band phased array telemetry receiver.  
23 p4120 A69-41751

## KENWORTHY, M. J.

Development of low smoke emission combustors for large aircraft turbine engines.  
[AIAA PAPER 69-493]  
19 p3394 A69-36299

## KENYON, G. C.

Mission analysis of general aviation in the 1970's.  
[AIAA PAPER 69-818]  
19 p3453 A69-35624

## KENYON, N.

Design of base metals for weldability - Maraging steels.  
15 p2617 A69-30098

## KENYON, R. A.

An extended figure of merit for the plasma thermocouple.  
22 p3869 A69-40134

## KEOUGH, J. B.

Testing a sterilizable liquid propulsion system.  
02 p0228 A69-11764

## KERALY, F.-X. L.

Analysis of the infrared spectrum of diborene hydrazine /Analyse du spectre infrarouge de l'hydrazine diborene/.  
12 p2027 A69-26917

## KERANEN, T. W.

Research and development of a vortex valve for flow modulation of a 16-percent aluminized 550 deg F solid propellant gas.  
[AIAA PAPER 69-424]  
16 p2844 A69-32723

## KERBER, H. E.

Evaluation of a motion simulator not requiring cockpit motion.  
17 p2947 A69-34007

## KERBER, R. L.

Moire interferometry with embedded grids - Effect of optical refraction.  
14 p2531 A69-28883

## KERBLAI, T. S.

Synoptic observations of the F sub 2 -layer of the ionosphere in the magnetically conjugate regions Kerguelen-Arkhangelsk province.  
06 p0919 A69-17723

## KERBLAY, T.

Synoptic observations of the F2 layer in the magnetically conjugate regions of Kerguelen and Archangel /Les observations synoptiques de la couche F2 dans les regions magnetiquement conjuguees de Kerguelen et Arkhangelsk/.  
16 p2784 A69-32612

## KERBY, R. C.

The sulphation of nickel and cobalt ferrites and sulphides by molten sodium pyrosulphate and sodium bisulphate.  
16 p2747 A69-32567

## KERCHER, D. M.

Heat transfer by a square array of round air jets impinging perpendicular to a flat surface including the effect of spent air.  
[ASME PAPER 69-GT-4]  
09 p1624 A69-22508

## KERDILES, J.

Production of a giant pulse by coherent pumping /Production d'une impulsion geante a l'aide d'un pompage coherent/.  
07 p1146 A69-18486

## KERECMAN, A. J.

Photon-induced current changes in a CO sub 2 laser amplifier.  
23 p4172 A69-41398

## KEREM, D.

The influence of high oxygen pressure on the electrical activity of the brain.  
21 p3656 A69-38977

## KERES, KH. P.

Albert Einstein's general theory of relativity /Obshchaya teoriya otositel'nosti Al'berta Einsteina/.  
14 p2483 A69-28857

The role of the rigid space concept in the development of the theory of gravitation /Rol' poniatiia zhestkogo prostranstva v razvitiu teorii tiagoteniia/.  
14 p2484 A69-28863

## KERIMBEKOV, M. B.

Observations of solar granulation at the Shemakha Astrophysical Observatory. II /O nabludeniakh solnechnoi granuliatsii v Shemakhinskoi Astrofizicheskoi Observatorii. II/.  
02 p0317 A69-11958

Application of television systems in observations of solar granulation /O primeneni televizionnykh sistem dlia nabludeniia solnechnoi granuliatsii/.  
24 p4389 A69-43711

## KERIMOV, N. M.

Facility for automatic recording of the spectral distribution of the photoconductivity of high-resistance semiconductors /Ustanovka dlia avtomaticheskoi registratsii spektral'nogo raspredeleniia fotoprovodimosti vysokoomnykh poluprovodnikov/.  
14 p2447 A69-29409

## KERIMOVA, T. G.

Interband transitions in A super III B super VI multiple-layer-structure semiconductors /O mezhzonnnykh perekhodakh v sloistvykh poluprovodnikakh A super III B super VI/.  
13 p2317 A69-27883

## KERKHOVEN, M. A.

Thrust power measurement. II /Stuwkrachtsmeting. II/.  
08 p1300 A69-20155

- Thrust power measurement. I /Stuwkrachtsmeting. I/.  
08 p1301 A69-20156
- KERLE, E. J.**  
Effect of polymer structure on chemical resistance of reinforced plastics.  
08 p1338 A69-20490
- KERLINS, V.**  
Electron fractographic techniques.  
04 p0619 A69-15395  
Analyzing fracture characteristics by electron microscopy.  
13 p2269 A69-28181
- KERMAREC, J.**  
Significance of external mechanograms in the interpretation of systolic murmurs when evaluating flight personnel /Interet des mecanogrammes externes dans l'interpretation des souffles systoliques lors de l'expertise du personnel navigant/.  
09 p1445 A69-22726  
Advantages of bloodless methods of measuring heart flow /Interet des methodes non sanglantes de mesure du debit cardiaque/.  
09 p1448 A69-22730  
Morphological variations of the arterial pulse wave - Experimental and clinical correlations /Variations morphologiques de l'onde pulsatile arterielle - Correlations experimentales et cliniques/.  
21 p3661 A69-39272  
Effects of inhalation of amyl nitrite on the carotidogram of a healthy subject /Action de l'inhalation de nitrite d'amyle sur le carotidogramme du sujet sain/.  
21 p3661 A69-39278  
Advantage of nonsurgical methods of measuring cardiac output in aerospace medicine /Interet des methodes non sanglantes de mesure du debit cardiaque en medecine aeronautique et spatiale/.  
23 p4088 A69-41813
- KERN, E. A.**  
Minimum-fuel thrust-limited transfer trajectories between coplanar elliptic orbits. [AIAA PAPER 69-914]  
21 p3808 A69-39344
- KERN, E. L.**  
Fabricating SiC parts by chemical vapor deposition.  
09 p1509 A69-22344
- KERN, R. F.**  
Selecting steels for heat-treated parts. I.  
01 p0101 A69-11397
- KERNAHAN, J. A.**  
Absolute transition probability of the auroral green line.  
03 p0424 A69-13936  
Absolute transition probability measurement for the electric quadrupole 5577 angstrom units auroral green line.  
16 p2781 A69-32319
- KERNEL, I.**  
Diagrams for high-temperature measurements.  
03 p0481 A69-14146
- KERNEL, R. L.**  
Performance of ultraviolet gratings as affected by simulated space environment.  
08 p1318 A69-21097
- KERNER, H.**  
Memory reduction through higher level language hardware. [AIAA PAPER 69-963]  
22 p3905 A69-40344
- KEROVA, N. I.**  
Effect of the introduction of high-polymer DNA on the nucleic acid content in radiation sickness dynamics /Vliianie vvedeniia vysokopolimernoi DNK na soderzhanie nukleinovyykh kislot v dinamike luchevoi bolezni/.  
21 p3657 A69-39050
- KERR, A. B.**  
Thermoplastic bonding in new aircraft designs.  
24 p4326 A69-43459
- KERR, A. D.**  
An application of the extended Kantorovich method to the stress analysis of a clamped rectangular plate.  
05 p0835 A69-15872  
Buckling of continuously supported beams.  
09 p1615 A69-21927  
An extended Kantorovich method for the solution of eigenvalue problems.  
16 p2876 A69-32783  
On the strength of high altitude balloons.  
24 p4251 A69-42714
- KERR, A. R.**  
On two-idler parametric amplifiers.  
13 p2233 A69-28066
- KERR, C. N.**  
The stability of systems with multiplicative feedback.  
04 p0583 A69-15112
- KERR, F. J.**  
Occultations of the galactic center region in the 1667-MHz OH line.  
06 p1009 A69-17961  
A low latitude survey from I II equals 27 deg to 38 deg at 1410 and 2650 MHz.  
14 p2526 A69-29772  
The large-scale distribution of hydrogen in the Galaxy.  
21 p3810 A69-39503  
Parkes hydrogen-line survey of the Milky Way. II.  
24 p4383 A69-42961
- KERR, J.**  
A seismic refraction system for lunar use.  
23 p4162 A69-41533
- KERR, L. G.**  
Selective stimulation of two form-sensitive mechanisms.  
22 p3880 A69-40852
- KERR, L. M.**  
Vibratory motion of a body on an elastic half plane. [ASME PAPER 68-WA/APM-12]  
04 p0668 A69-14393
- KERREBROCK, J. L.**  
The M.I.T. non-equilibrium MHD generator.  
10 p1636 A69-23471
- KERRIDGE, J. F.**  
Magnetite content of a type I carbonaceous meteorite.  
02 p0328 A69-12729  
The use of selected-area electron diffraction in meteorite mineralogy.  
19 p3311 A69-36111
- KERRISK, D. J.**  
Early exploration of the asteroids region by solar powered electrically propelled spacecraft. [AAS PAPER 69-322]  
24 p4381 A69-42868
- KERSHENSTEIN, J. C.**  
Visible sidelight emission in a CO sub 2 laser.  
18 p3153 A69-35243
- KERSHNER, R. B.**  
The U.S. navy navigation satellite system.  
01 p0112 A69-10457
- KERSHTEIN, I. M.**  
Estimate of the anisotropy of the short- and long-term strength of fiberglass-reinforced plastics /K voprosu ob otsenke anizotropii kratkovremennoi i dlitel'noi prochnosti stekloplastikov/.  
18 p3162 A69-35352
- KERSLAKE, D. MCK.**  
Thermal radiation in the investigation of cutaneous vasomotor and sudomotor control. [AGARDGRAPH-111]  
08 p1265 A69-20672
- KERSLAKE, W. R.**  
Durability of the SERT II hollow cathode and future applications of hollow cathodes. [AIAA PAPER 69-304]  
09 p1562 A69-21224  
Bombardment thruster investigations at the Lewis Research Center.  
12 p2148 A69-26787
- KERSTEN, R.**  
Variation of the signal-to-noise ratio with pulse-code modulation using coding and decoding facilities that are not exactly matched with respect to amplitude /Die Aenderung des Signal-Geraeusch-Abstandes bei Pulscod-Modulation mit amplitudennaessig nicht exakt angepassten Codier- und Decodiereinrichtungen/.  
10 p1656 A69-23692
- KERSTETTER, J.**  
Crossed-beam studies of ion-molecule reaction mechanisms.  
03 p0382 A69-13460
- KERSTETTER, J. D.**  
A crossed-beam apparatus for investigation of ion-molecule reactions.  
12 p2092 A69-26477
- KERTESZ, A. E.**  
The effect of angular velocity of stimulus on human torsional eye movements.  
22 p3883 A69-40874
- KERVALISHVILI, N. A.**  
Suppression and parametric amplification of ion sound in a plasma.  
16 p2821 A69-31797
- KERWIN, W. J.**  
Multiloop distributed RC active networks for low parameter sensitivity with low amplifier gain.  
18 p3111 A69-34679
- KERZHANOVICH, V. V.**  
Results of a determination of the dynamics of the Venusian atmosphere from measurements of the radial velocity of the Venera 4 automatic interplanetary station /Rezultaty opredeleniia dinamiki atmosfery Venery po dannym izmerenii radial'noi skorosti AMS "Venera-4"/.  
22 p4034 A69-41099
- KERZHENTSEVA, N. P.**  
Reflection factor of bent multiwave waveguide.  
04 p0576 A69-14773
- KESAMANLY, F. P.**  
Dependence of the effective mass of electrons on their concentration in indium phosphide crystals /Zavisimost' effektivnoi massy elektronov ot ikh kontsentratsii v kristallakh fosfida indii/.  
03 p0489 A69-13889  
Phenomena in solid solutions.  
04 p0641 A69-14505  
Dependence of the effective mass of electrons on their density in indium phosphide crystals.  
11 p1939 A69-25690
- KESAVA RAO, P. S.**  
Height variation of drift and anisotropy parameters in the ionosphere during magnetically disturbed days.  
10 p1659 A69-24062
- KESICH, D.**  
Energy spectrum of isotropic turbulence at large wavenumbers.  
21 p3694 A69-38834
- KESSEL, P. G.**  
Gyroscopically induced vibrations of plates and membranes.  
02 p0347 A69-12519  
Vibrations of circular cylindrical shells due to gyroscopically induced inertia loads.  
07 p1236 A69-19459  
On the response of a beam subjected to a cyclic moving load. [ASME PAPER 69-VIBR-13]  
10 p1806 A69-24166
- KESSEL, W.**  
A linear high resolution gate /Ein lineares Tor mit hoher Aufloesung/.  
15 p2581 A69-31523
- KESSELMAN, P. M.**  
Second virial coefficients of atomic nitrogen and oxygen.  
03 p0473 A69-14158
- KESSELRING, C. B.**  
Steep descent landing systems for VTOL aircraft.  
22 p3978 A69-40674
- KESSELRING, R. C.**  
Combustion stabilization with acoustic absorbers.  
03 p0532 A69-13133
- KESSELYAK, P.**  
Elimination of arbitrarily given failure criteria /as hidden parameters/ from the reliability characteristics of certain electrical components.  
08 p1293 A69-21114
- KESSLER, A. H.**  
Computer-design of diode-using microwave components, and a computer-dimensioned, X-band parametric amplifier.  
10 p1661 A69-23874
- KESSLER, D. J.**  
Upper limit on the spatial density of asteroidal debris.  
02 p0324 A69-12545
- KESSLER, E.**  
Effect of hydrogen adaptation on fluorescence in normal and manganese-deficient algae.  
04 p0554 A69-15325  
Effect of manganese deficiency on growth and chlorophyll content of algae with and without hydrogenase.  
15 p2558 A69-31551



## KESSLER, L. L.

Design of maintenance aids for advanced airborne electric power systems. 17 p2905 A69-34112

## KESSLER, T. J.

A theory for two-dimensional supersonic turbulent base flows. [AIAA PAPER 69-68] 06 p0864 A69-18137

## KESTEN, A. S.

Turbulent diffusion of heat and mass in catalytic reactors for hydrazine decomposition. [AIAA PAPER 69-421] 16 p2846 A69-32768  
Analytical study of catalytic reactors which promote endothermic reactions of hydrocarbon fuels. [AIAA PAPER 69-588] 17 p3071 A69-33265

## KESTER, W. A.

A new reference frequency standard for the L multiplex system. 04 p0561 A69-15451

## KESTEVEN, M. J. L.

Supernova remnants as radio sources. 04 p0664 A69-15441

## KESTIGIAN, M.

Optical properties of cerium-activated garnet crystals. 07 p1201 A69-19647

## KESTNER, N. R.

Double perturbation theory applied to frequency-dependent polarizabilities. I. 03 p0472 A69-13314  
Double perturbation theory applied to frequency-dependent polarizabilities. II. 03 p0472 A69-13315

## KETCHEL, J.

The effects of high intensity light adaptation on electronic display visibility. 16 p2746 A69-32788

## KETTANI, M. A.

Fast randomization of an electron gas by trapped electro-acoustic waves. 02 p0289 A69-12236

## KETTERER, F. D.

Electromechanical costreaming and counterstreaming instabilities. 01 p0062 A69-11208  
Electromechanical stream-structure instabilities. 11 p1923 A69-24289

## KEUNE, D. L.

Time behavior of exciton formation and laser emission in Cd/SeS platelets. 10 p1703 A69-23512  
Time behavior of laser modes in GaAs platelet lasers. 16 p2796 A69-31704

## KEUSENHOF, J.

Theoretical investigation of the influence of wall friction on the three-dimensional flow in axial-flow turbomachines /Theoretische Untersuchungen ueber den Einfluss der Wandreibung auf die raemliche Stroemung in axialen Turbomaschinen/. 08 p1252 A69-20724

## KEVAN, L.

EPR of neutral Ag site conversion in gamma-irradiated frozen AgNO<sub>3</sub> sub 3 ices. 22 p3992 A69-40574

## KEVANISHVILI, G. SH.

Diffraction of a plane electromagnetic wave on an oblique screen composed of conducting wires /Difraktsiia ploskoi elektromagnitnoi volny na skoshennoi reshetke iz provodiashchikh provolok/. 07 p1084 A69-19150

## KEVLISHVILI, P. V.

High-speed SP-III spectrophotochronograph. 12 p2085 A69-26161

## KEVORKIAN, J.

An asymptotic solution for a class of periodic orbits of the restricted three-body problem. 04 p0663 A69-15382  
Numerical analysis of the asymptotic solution for earth-to-moon trajectories. 16 p2857 A69-32155

## KEY, M. H.

Scattering of laser light in radiation-driven breakdown waves in gases. 11 p1915 A69-24420  
Enhanced plasma heating in laser-induced gas breakdown at the shock front of a blast wave. 14 p2460 A69-29604

Experimental and theoretical studies of the time and space development of plasma parameters in a laser-induced spark in helium. 14 p2492 A69-29636

## KEY, P.

Ionization effects in a hydrodynamic model of radiation-driven breakdown wave propagation. 18 p3174 A69-35286  
Bragg reflection of laser light from a phase grating in a Q-switching liquid. 05 p0771 A69-15811

## KEY, P. L.

Dimensionless fracture-toughness parameters. 05 p0780 A69-16080  
The effect of yielding on the strain energy release rate. [ASME PAPER 68-WA/MET-17] 05 p0838 A69-16155  
On the pop-in mode of fracture. 15 p2642 A69-30814

## KEY, S. W.

Experimental-theoretical correlations of impulsively loaded clamped circular plates. 15 p2709 A69-30675  
A variational principle for incompressible and nearly-incompressible anisotropic elasticity. 22 p4040 A69-39980

## KEYES, J. J., JR.

Hydromagnetic stabilization experiments with jet-driven vortex flow. 05 p0798 A69-15611

## KEYES, J. W.

Flow phenomena and separation over delta wings with trailing-edge flaps at Mach 6. [AIAA PAPER 68-97] 02 p0189 A69-12522

## KEYS, R. D.

Fracture behavior of two new high-strength aluminum alloys. 21 p3743 A69-38668

## KHABAKHPASHEVA, E. M.

Application of a laser to the investigation of wall turbulence /Ispol'zovanie opticheskogo kvantovogo generatora dlia issledovaniia pristennoi turbulentnosti/. 09 p1515 A69-21434

## KHABIBULLIN, SH. T.

Systems of selenographic coordinates, precession, and nutation of the moon's rotation axis. 04 p0662 A69-15250

## KHACHAPURIDZE, R. A.

Diffusion processes during the formation of coatings by the condensation method /Diffuzionnye protsessy pri obrazovanii pokrytii metodom kondensatsii/. 20 p3549 A69-37365

## KHACHATRIAN, A. A.

On the stability of rectangular transverse isotropic plates. 06 p1021 A69-17178

Bending of a transversely isotropic plate with a circular hole /Ob izgibe transversal'no-izotropnoi plastinki s krugovym otverstiem/. 15 p2707 A69-30580

Theory of weak-moment shells prepared from materials with different moduli /Teoriia slabomomentnykh obolochek, izgotovlennykh iz raznomodul'nogo materiala/. 18 p3225 A69-35367

Contribution to the elasticity theory of materials with variable modulus of elasticity /K voprosu teorii uprugosti raznomodul'nogo materiala/. 22 p4047 A69-41171

## KHACHATURIANTS, L. S.

Work activity of a cosmonaut during weightlessness and in unsupported space /Rabochaia deiatel'nost' kosmonavta v nevesomosti i bezopornom prostranstve/. 02 p0203 A69-12123

## KHACHIKIAN, A. S.

Equilibrium of an inhomogeneous elastic plane with a thin-walled elastic inclusion /Ravновесие neodnorodnoi uprugoi ploskosti s tonkostennym uprugim vklucheniem/. 09 p1611 A69-21482

## KHACHIKIAN, E. E.

Spectral observations of Markarian's galaxies with an ultraviolet continuum. I /Spektral'nye nabludeniia galaktik Markariana s ul'traioletovym kontinuumom. I/. 13 p2351 A69-27866

Spectral observations of Markarian galaxies with an ultraviolet continuum. II /Spektral'nye nabludeniia

galaktik Markariana s ul'traioletovym kontinuumom. II/. 19 p3426 A69-36577

## KHADZHI, P. I.

Photoionization of large-radius excitons with transfer of one of the current carriers into a second zone /Fotoionizatsiia eksitonov bol'shogo radiusa s perebrosom odnogo iz nositelei toka v druguiu zonu/. 15 p2632 A69-30057

## KHAFIS, L.

Collective interactions in a fast thiatron discharge. 09 p1552 A69-22046

## KHAI, C. T.

Method of measuring absolute phase heights in the ionosphere /Metod izmereniia absoliutnykh fazovykh vysot v ionosfere/. 20 p3520 A69-37032

## KHAIKIN, B. I.

Critical conditions for self-ignition of a particle agglomeration /Kriticheskie usloviia samovosplameneniia sovokupnosti chastits/. 17 p3070 A69-33142

## KHAIKIN, M. D.

Effect of aromatic hydrocarbons on the combustion characteristics of jet fuel /O vlianii aromaticheskikh uglevodorodov na kharakteristiki sgoraniia reaktivnogo topliva/. 18 p3184 A69-35382

## KHAIKIN, M. S.

Investigation of the magnetic surface levels of electrons in metals /Izucheniie magnitnykh poverkhnostnykh urovnei elektronov v metallakh/. 13 p2316 A69-27641

## KHAIKIN, S. E.

Reflector radio telescope with a resolution of 15 arc seconds /Reflektornyi radioteleskop s razreshaiushchei sposobnost'iu 15 sekund dugi/. 15 p2679 A69-30102

## KHAIKOV, A. Z.

Theory of klystrons with distributed and multiple interaction /K teorii klisotronov s raspredelennym i mnogokratnym vzaimodeistviem/. 15 p2573 A69-30117

## KHAILOV, V. M.

Taking into account chemical kinetics in calculating a nozzle flow of products of combustion of hydrogen in air /Uchet khimicheskoi kinetiki pri raschete techeniia v sople produktov sgoraniia vodoroda v vozdukh/. 02 p0353 A69-12488

A method of graphic interpolation of the results of calculations of nozzle flows in a state of chemical nonequilibrium /Sposob graficheskoi interpolatsii rezul'tatov rascheta khimicheskii neravnovesnykh techenii v soplakh/. 15 p2717 A69-30987

## KHAIMOV-MALKOV, V. I. A.

Optical homogeneity of ruby crystals and its relation to laser radiation divergence /Opticheskaiia odnorodnost' kristallov rubina i ee sviaz' s rashodimost'iu izlucheniia opticheskikh kvantovykh generatorov/. 01 p0139 A69-10831

Optical homogeneity of ruby crystals and its relation to the radiation divergence of lasers. 11 p1936 A69-24698

Surface and volume scattering, surface-damage, and optical homogeneity studies of ruby crystals and their connection with laser-emission characteristics. [IEEE PAPER U-7] 12 p2106 A69-26322

## KHAIMOVICH, E. M.

The Hydraulic Servo Drive /Gidravlicheskie Slediaschchie Privod/. 18 p3093 A69-34356

## KHAIRETDINOVA, A. K.

Spectroscopic study of the thermodynamic dissociation constants of alkyl phenols /O vlianii elektrootritsatel'nykh zamestitelei na sposobnost' spirtov obrazovyvat' mezhmolekuliarnye vodorodnye sviazi/. 11 p1831 A69-24539

## KHAIRULLINA, A. I. A.

Investigation of the coherent properties of radiation diffused by a turbid medium /Izucheniie kogerentnykh svoystv rasseiannogo mutnoi sredoi izlucheniia/. 22 p3964 A69-40798

## KHAIRULLINA, I. I. A.

Method of investigation of the scattering indicatrices of optical elements in the "backwards" direction /Metod issledovaniia indikatsii rasseianiia opticheskikh detalей v napravlenii "nazad"/. 20 p3554 A69-37609

**KHAIRULLINA, O. B.**

Traveling space waves in a barotropic gas /O prostranstvennykh begushchikh volnakh v barotropnom gaze/.  
12 p2061 A69-25889

**KHAIRUTDINOV, R. I.**

Nonequilibrium two-phase flow in a Laval nozzle with the coagulation of particles of the polydispersed condensate /Neravnoesnoe dvukhfaznoe techenie v sope Lavalia s koaguliatsiei chastits polidispersnogo kondensata/.  
14 p2391 A69-29621

**KHAITUN, F. I.**

Transmission and detection of optical pulses.  
14 p2412 A69-29324

**KHAKIMOV, E.**

Study of the effect of latent heat of condensation in cloud formation processes /Izuchenie efekta skrytoi teploy kondensatsii v protsessakh oblakoobrazovaniia/.  
17 p2997 A69-33188

**KHALATNIKOV, I. M.**

The nature of the singularities in the general solutions of the gravitational equations /K voprosu o kharaktere osobennosti v obshchikh resheniiakh uravnenii gravitatsii/.  
18 p3173 A69-35018

**KHALATOV, A. A.**

Generalization of the gradient method of studying heat transfer to the case of an arbitrary temperature dependence of the thermal conductivity coefficient of the wall material /Obobshchenie gradientnogo metoda issledovaniia teplootdachi na sluchai proizvol'noi zavisimosti koefitsienta teploprovodnosti materiala stenki ot temperatury/.  
18 p3230 A69-34988

**KHALILOV, V. R.**

Emission from a scalar particle in the field of two electromagnetic waves propagating toward each other /Izluchenie skaliarnoi chastitsy v pole dvukh begushchikh navstrechu drug drugu elektromagnitnykh voln/.  
11 p1900 A69-25568

**KHALIN, N. F.**

Neutron activation analysis determination of oxygen in beryllium.  
20 p3544 A69-37811

**KHALOUPKA, P.**

Changes in the amplitude and phase of the solar diurnal variation /Izmeneniia amplitudy i fazy solnechno-sutochnoi variatsii/.  
10 p1759 A69-22837

**KHALTURIN, V. S.**

Possibility of using an artificial atmosphere with a variable gas composition in air-tight cabins /O vozmozhnosti ispol'zovaniia v germeticheskikh kabinakh iskusstvennoi atmosfery s nestatsionarnym gazovym sostavom/.  
22 p3892 A69-40284

**KHAMARIN, V. I.**

Statistical structure of outgoing radiation fields /O statisticheskoi strukture poei ukhodiaschei radiatsii/.  
11 p1913 A69-24832

**KHAMBATY, M. B.**

A study of the gallium arsenide injection laser and an investigation of its application in a communication system.  
14 p2459 A69-29349

**KHAN, J. M.**

Oxygen surface-density measurements based on characteristic X-ray production by 100-keV protons.  
04 p0631 A69-14446  
Oxygen K-shell X-ray production in thin films of aluminum oxide by 20- to 100-keV protons.  
14 p2489 A69-29994

**KHAN, M. A.**

Interpretation of the sources of the satellite-determined gravity field.  
20 p3523 A69-37566  
Figure of the earth and mass anomalies defined by satellite orbital perturbations.  
21 p3718 A69-39734

**KHAN, M. A. A.**

On unsteady hydromagnetic flow of an electrically conducting incompressible fluid in contact with a harmonically oscillating plate.  
04 p0638 A69-15093  
Laminar source flow between two parallel coaxial rotating porous discs.  
06 p0909 A69-17243

**KHAN, M. I.**

Developing a STOL port policy for the city-center. [RAES PAPER 3]  
22 p3927 A69-40484

**KHANDUROVA, I. S.**

Computer analysis of infrared cloud images obtained from the Cosmos 122 satellite /Mashinnyi analiz infrakrasnykh izobrazhenii oblachnosti, poluchennykh so sputnika "Kosmos-122"/.  
11 p1884 A69-24833

Correlation functions and the spectral densities of the intensity of outgoing radiation in the spectral range from 0.6 to 0.8 micron /according to Cosmos 45 satellite measurements/ /Korrelatsionnye funktsii i spektral'nye plotnosti intensivnosti ukhodiaschego izlucheniia v intervalle spektra 0.6-0.8 mkm /po izmereniiam so sputnika "Kosmos-45"/.  
19 p3366 A69-36672

**KHANEVICHEV, V. A.**

Stimulated emission of active fibrous filaments /Vynuzhdennoe izluchenie aktivnykh volokonnykh nitei/.  
05 p0761 A69-15657  
The induced emission of active fibers.  
16 p2792 A69-32514

**KHANEVSKAIA, I. V.**

The Temperature Regime of the Free Atmosphere Above the Northern Hemisphere /Temperaturnyi rezhim svobodnoi atmosfery nad Severnym Plushariem/.  
13 p2294 A69-27934

**KHANIN, I. A. I.**

The theory of the two-level solid-state maser.  
07 p1158 A69-19751  
Influence of the resonator-field inhomogeneities on the transient processes in a quantum oscillator /Vliianie neodnorodnosti polia rezonatora na perekhodnye protsessy v kvantovom generatore/.  
10 p1705 A69-23948  
Quantum Electronics. Volume 1 - Basic theory.  
17 p2982 A69-33686  
Quantum Electronics. Volume 2 - Maser amplifiers and oscillators.  
17 p2982 A69-33687

**KHANSEVAROV, R. IU.**

Formation of radiation defects in indium antimonide at subthreshold radiation energies /Obrazovanie radiatsionnykh defektov v antimonide indii pri doporogovykh energiiakh izlucheniia/.  
13 p2318 A69-27885  
Formation of radiation defects in indium antimonide at subthreshold radiation energy.  
21 p3782 A69-39144

**KHANTADZE, A. G.**

Turbulence in a conducting atmosphere /O turbulentnosti v provodiashchei atmosfere/.  
02 p0274 A69-11678  
Vertical variation in wind speed and direction in a turbulent, electrically conductive atmosphere.  
03 p0461 A69-13510  
Propagation of discontinuities in a conductive atmosphere. I.  
03 p0422 A69-13511  
Dynamics of winds in the ionosphere.  
06 p0919 A69-17722  
Unsteady generalized Ohm's law for a weakly ionized gas /O nestatsionarnom obobshchenom zakone oma dlia slabo ionizirovannogo gaza/.  
11 p1925 A69-24319  
Turbulence in a conductive atmosphere.  
13 p2295 A69-28709

Unsteady flow of a horizontal wind in the upper atmosphere /O nestatsionarnom techenii gorizontalnogo vetra v verkhnei atmosfere/.  
21 p3758 A69-38411  
Dispersion of magnetohydrodynamic waves in the ionosphere /O dispersii magnitogidrodinamicheskikh voln v ionosfere/.  
23 p4155 A69-41841

**KHANZHIN, P. S.**

Sensitivity of leak detection at low pressures and concentrations of probe gases.  
24 p4296 A69-42656

**KHAPAEV, M. M.**

Method of averaging in integral equations /Metod usredneniia v integral'nykh uravneniiakh/.  
23 p4181 A69-41731

**KHAPALJUK, A. P.**

Theory of self-channeling of light in a nonlinear isotropic medium /K teorii samokanalizatsii sveta v nelineinoy izotropnoi srede/.  
17 p3007 A69-33975

**KHAPLANOV, G. M.**

Short-term frequency stability of a Rb super 87 vapor laser /Kratkovremennaia stabil'nost chastoty kvantovogo generatora na parakh Rb super 87/.  
05 p0770 A69-15656  
Short-term frequency stability of an Rb87 vapor maser.  
16 p2798 A69-32513

**KHARACH, G. M.**

Correlation between calculated and experimental estimates of friction surface wear /Korrelatsiia raschetnykh otsenok iznosa poverkhnosti treniia s eksperimentom/.  
15 p2618 A69-30106

**KHARADLY, M. M. Z.**

Properties of dielectric-tube waveguides.  
08 p1284 A69-20296

**KHARAKHORIN, F. F.**

Behavior of manganese in indium antimonide.  
04 p0643 A69-15257

**KHARAUZOV, K. N.**

A criterion for estimating the usefulness of characteristics in the problem of image recognition /Kriterii otsenki poleznosti priznakov v zadache raspoznavaniia obrazov/.  
23 p4134 A69-41954

**KHARCHENKO, F. M.**

Equivalent circuit of a semiconductor diode operating in a switching mode /Skhema zameshcheniia poluprovodnikovogo dioda v perekliuchatel'nykh rezhimakh/.  
01 p0046 A69-10747

**KHARCHENKO, V. K.**

Static strength of refractory compounds at high temperatures.  
09 p1523 A69-21873

**KHARE, S. P.**

Energy spectrum of the secondary electrons and the fluorescent efficiency of electrons in the 3914-angstrom units band.  
16 p2850 A69-32315

**KHARINSKAIA, M. A.**

Influence of rare-earth element additions on the threshold properties of ferrites having garnet and spinel structures /Vliianie dobavok redkozemel'nykh elementov na porogovye svoistva ferritov so strukturami granata i shpineli/.  
13 p2320 A69-27999

**KHARITONCHIK, A. E.**

Investigation of nonaxisymmetric forms of stability loss in annular plates subjected to axisymmetric heating /K issledovaniu neosesimmetrichnykh form poteri ustoychivosti kol'tsevykh plastin pri osesimmetrichnom nagreve/.  
20 p3623 A69-37327

**KHARITONOV, A. V.**

Investigation of the process of spreading of liquid titanium- and zirconium-base alloys on graphite /Issledovanie protsessa rastekaniia po grafitu zhidkikh splavov na osnove titana i tsirkoniia/.  
03 p0446 A69-13573  
Mean absolute energy distribution in the solar spectrum from 1800 angstrom units to 4 mm, and the solar constant.  
11 p1951 A69-24242

Determination of the surface energy of titanium in the solid phase /Opredelenie poverkhnostnoi energii titana v tverdoi faze/.  
12 p2113 A69-26045

**KHARITONOV, F. I.**

Investigation of the air cooling systems of the turbine rotors of AI-20 engines /Issledovanie sistem vozduzhnogo okhlazhdeniia rotorov turbin dvigatelei AI-20/.  
24 p4364 A69-43081

**KHARITONOV, L. A.**

Ultraviolet lasers using organic-scintillator molecules.  
13 p2271 A69-27657

**KHARITONOV, V. P.**

Influence of fluid-flow twisting on the intensification of convective heat transfer in a circular cylindrical tube /Vliianie zakrutki potoka zhidkosti na intensifikatsiiu konvektivnogo teploobmena v krugloi tsilindricheskoi trubke/.  
13 p2251 A69-28559

**KHARITONOV, V. V.**

Some aspects of similarity theory with reference to momentum transfer processes /Nekotorye aspekty teorii podobiiia primenitel'no k protsessom perenosu kolichestva dvizheniia/.  
13 p2380 A69-28560



- Thermal conductivity in the case of a finite heat propagation rate /K voprosu o teploprovodnosti pri konechnoi skorosti rasprostraneniya tepla/.  
15 p2719 A69-31181
- KHARITONOVA, G. A.**  
Determination of the transmission factors of the earth's atmosphere by a short method /Opredelenie koefitsientov prozrachnosti zemnoi atmosfery korotkim metodom/.  
01 p0074 A69-11185
- KHARITONOVA, I. V.**  
Transverse electrooptical effect in crystals of the 4 bar.m class /Poperechniy elektroopticheskiy effekt v kristallakh klassa 4 bar.m/.  
04 p0639 A69-14427
- KHARITONOVA, V. IA.**  
Chemical composition of the stone meteorites Borodino, Lavrent'evka, Alfianello, and Nardoo II /Khimicheskiy sostav kamennykh meteoritov Borodino, Lavrent'evka, Alfianello i Nardoo II/.  
01 p0026 A69-11382
- KHARKHUN, G. I.**  
Some problems concerning the natural oscillations of three-layer plates /Nekotorye zadachi sobstvennykh kolebaniy trekhslonnykh plastinok/.  
11 p1976 A69-24773
- KHARLAMOV, A. G.**  
Thermal conductivity of polycrystalline beryllium oxide /Teploprovodnost' polikristallicheskoj okisi berillia/.  
11 p1906 A69-25225
- KHARLAMOV, P. V.**  
Helical motions of a body in a fluid /O vintovykh dvizheniyakh tela v zhidkosti/.  
11 p1868 A69-24790
- KHARLAMOVA, E. I.**  
Investigation of Steklov's solution to the equations of motion of a body having a fixed point /Issledovanie resheniya V. A. Steklova uravneniy dvizheniya tela, imeiushchego nepodvizhnuu točku/.  
11 p1918 A69-24791
- KHARLAMOVA, O. I.**  
Motion of a body with a fluid-filled cavity /Pro rukh tila z porozhniinui, zapovnennoi ridinoiu/.  
06 p0957 A69-16823
- KHARTEBROT, G.**  
The system of differential equations of a pulse-frequency modulator of the second kind, and a method for its numerical solution /Sistema differentsial'nykh rvyvnyan' chastochno-impul'snogo moduliatora drugogo rodu i sposib ii chisel'nogo rozv'iazaniia/.  
14 p2426 A69-29148
- KHARTSIEV, V. E.**  
Photodissociation waves in a gas.  
08 p1354 A69-19950
- KHASHCHAN, M.**  
Theory of a multilayer interferometer /resonator/ /K teorii mnogoslonoynogo interferometra/rezonatora/.  
23 p4165 A69-41729
- KHASIS, A. L.**  
Stress state of a prismatic beam under the action of a steady temperature field /Napiazhennoe sostoiianie v prizmaticheskoi balke, nakhodiashcheisia pod vozdeistviem statsionarnogo temperaturnogo polia/.  
23 p4227 A69-41708
- KHATRI, H. C.**  
Identification of distributed parameter systems using finite differences.  
[ASME PAPER 68-WA/AUT-1]  
05 p0738 A69-16185
- Frequency domain stability criteria for distributed parameter systems.  
24 p4294 A69-43309
- KHATSKEVICH, I. G.**  
Results of a determination of orientation from on-board measurement data.  
17 p3001 A69-33221
- Determination of the orientation of artificial earth satellites in a given measurement system /Opredelenie orientatsii iskusstvennykh sputnikov zemli po zadannoi sisteme izmerenii/.  
22 p4037 A69-41089
- Results of a determination of the orientation of the Proton 2 satellite and description of its motion with respect to its center of mass /Rezultaty opredeleniya orientatsii sputnika "Proton-2" i opisaniye ego dvizheniya otnositel'no tsentra mass/.  
22 p4037 A69-41090
- KHATUNTSEV, A. N.**  
The elongation of cavities in automatic inert gas-shielded welds in titanium alloys.  
05 p0767 A69-15972

- Sources of porosity in welding titanium alloys.  
11 p1892 A69-25668
- KHAUEMSON, A. M.**  
Near-electrode processes in a rarefied plasma flow in the presence of a boundary layer /Prielektrodnye protsessy v potoke razrezhennoi plazmy pri nalichii pogranichnogo sloia/.  
12 p2137 A69-26532
- KHAUSTOVICH, G. P.**  
Critical aperture in plasma diagnostics by the scattering method.  
02 p0251 A69-12416
- Spectrum of laser light scattered by atmospheric pressure plasma.  
11 p1922 A69-24233
- Effect of the aperture on the plasma parameters determined during diagnostics by the method of scattering /Vliianie apertury na opredeliayemye parametry plazmy pri diagnostike metodom rasseianiia/.  
15 p2664 A69-30996
- KHAVIN, V. P.**  
Approximation in the mean by polynomials in certain non-caratheodory domains. I /Approksimatsiia mnogochlenami v srednem v nekotorykh nekarateodorievykh oblastiakh. I/.  
02 p0272 A69-12164
- KHAVKINA, I. V.**  
Glycolysis rate and lactic acid content in the rat myocardium during different periods of adaptation to hypoxia.  
10 p1645 A69-23501
- KHAZAN, M. A.**  
Spacecraft control during reentry into the atmosphere /Upravlenie kosmicheskim apparatom pri vkhode v atmosferu/.  
13 p2355 A69-27681
- KHAZAN, S. M.**  
Ionization of gases by fast N super plus and N super 2 super plus ions /Ionizatsiia gazov bystryimi ionami N super plus i N super 2 super plus/.  
13 p2304 A69-28440
- KHAZANOV, B. I.**  
Radiation measurements in space.  
20 p3591 A69-38018
- KHAZEN, E. M.**  
Methods of Optimal Statistical Solutions and Problems of Optimal Control /Metody optimal'nykh statisticheskikh reshenii i zadachi optimal'nogo upravleniia/.  
09 p1473 A69-21932
- KHAZEN, I. M.**  
Outlines of Space Physiology /Ocherki po Kosmicheskoi Fiziologii/.  
01 p0014 A69-10743
- Structural and functional disturbances in certain body systems on exposure to extreme stress factors - Animal experiments.  
02 p0197 A69-11488
- Decompression problems in space medicine /Problemy dekompressii v kosmicheskoi meditsine/.  
13 p2212 A69-28622
- KHAZHINSKII, G. M.**  
Derivation of a theory of creep with anisotropic hardening /K postroeniiu teorii polzuchesti s anizotropnym uprochneniem/.  
21 p3839 A69-39196
- KHAZIN, L. G.**  
The theory of electron plasma non-linear oscillations.  
18 p3180 A69-34703
- KHAZOV, I. D.**  
Luminous discharge on nonabsorbing surfaces produced by a single-pulse laser.  
08 p1327 A69-21021
- Induced Mandelstam-Brillouin scattering /IMBS/ in glass in the case of self-focusing of the monopulse laser beam.  
09 p1521 A69-26286
- Anisotropy of the stability of calcite /CaCO sub 3/ to laser radiation /Anizotropiia stoikosti kal'tsita /CaCO sub 3/ k lazernomu izlucheniui/.  
11 p1900 A69-25553
- KHEDERVARI, P.**  
Annular and linear Martian structures /Kol'tsevye i lineinye struktury Marsa/.  
03 p0506 A69-13087
- KHEIFETS, V. L.**  
Behavior of manganese in indium antimonide.  
04 p0643 A69-15257

- KHEILO, E. S.**  
Investigation of RR Lyrae type stars in the globular cluster M3 /Issledovanie peremennykh zvezd tipa RR Liry v sharovom skoplenii M3/.  
15 p2683 A69-30511
- KHENOKH, M. A.**  
The effect of extreme cooling on globular and fibrillar proteins.  
01 p0018 A69-11089
- Photolysis of aliphatic amino acids in the presence of salt ions.  
01 p0025 A69-11094
- Photolysis of aliphatic amino acids in the presence of metal oxides.  
01 p0025 A69-11095
- Photosensitizing effect of cations on amino acids and peptides.  
20 p3477 A69-37626
- KHENTOV, A. A.**  
First-approximation stability of one rotation of an artificial earth satellite about its center of mass /Ob ustoiichivosti po pervomu priblizheniiu odnogo vrashcheniya iskusstvennogo sputnika zemli vokrug svoego tsentra mass/.  
01 p0161 A69-10585
- Stability of rotation of an artificial earth satellite about its center of mass in the first approximation.  
15 p2702 A69-30755
- Application of conservative magnetic moments to satellite stabilization by means of the earth's magnetic field /Ispol'zovanie konservativnykh magnitnykh momentov dlia stabilizatsii ISZ po magnitnomu poli zemli/.  
21 p3830 A69-39834
- Effect of the geomagnetic field and aerodynamic moments on the motion of a satellite about its center of mass /Vliianie geomagnitnogo polia i aerodinamicheskikh momentov na dvizhenie sputnika okolo svoego tsentra mass/.  
21 p3830 A69-39835
- KHERMANIS, E. KH.**  
Tunnel-diode slideback sampling gate /Avtokompensatsionnyi stroboskopicheskii preobrazovatel' na tunnel'nom diode/.  
13 p2236 A69-28538
- KHESTANOV, R. KH.**  
Lateral radiation of nonsymmetric mirror antennas /Bokovye izlucheniye nesimmetrichnykh zerkal'nykh antenn/.  
02 p0214 A69-11601
- Fringe radiation of nonsymmetric mirror antennas.  
11 p1846 A69-24708
- KHETSURIANI, TS. S.**  
Measurement of the line contours of the Paschen series for hydrogen in the solar spectrum /Izmerenie konturov linii pashenovskoi serii vodoroda v solnechnom spektre/.  
01 p0148 A69-10126
- Photometry of chromospheric flares at near minimum solar activity /Fotometriia khromosfernykh vspyshek okolo minimuma solnechnoi aktivnosti/.  
01 p0149 A69-10127
- KHETTSKHEIM, KH.**  
The pseudopotential for a quasiclassical plasma.  
11 p1934 A69-25701
- KHILCHEVSKII, V. V.**  
Calculation of the effect of static stresses on the energy dissipation in materials in the presence of free oscillations /Pro vrakhuvaniia vplivu statichnykh napruzhen' na rozsiianiia energii v materialii pri vil'nikh kolivanniakh/.  
11 p1919 A69-25092
- Energy dissipation in a cyclically deformed material in the presence of static stresses /Pro rozsiianiia energii v materialii, shcho tsiklichno deformuet'sia, pri naiavnosti v n'omu statichnykh napruzhen'/.  
12 p2181 A69-26612
- KHILIL, V. V.**  
Measurement of plasma electron concentration from the group delay time of electromagnetic oscillations /Izmerenie kontsentratsii elektronov v plazme po gruppovomu vremeni zapazdyvaniia elektromagnitnykh kolebaniia/.  
14 p2497 A69-29796
- A homodyne phase meter for measuring plasma electron concentrations, using the frequency modulation of the microwave oscillator /Gomodinni fazometr s chastochnoi moduliatsiei kolebaniy generatara SVCh, primeniamyi dlia izmereniia kontsentratsii elektronov v plazme/.  
14 p2451 A69-29800

Bitonal homodyne frequency conversion /Dvukhtonal'noe gomodinnoe preobrazovanie chastoty/. 14 p2451 A69-29801

Passage of oscillations with rapid phase variations through the discriminator circuits of high-speed electronic phase meters /Prokhozhdenie kolebanii s bystrym izmeneniiem fazy cherez izbiratel'nye tsep'i bystrodeistviushchikh elektronnykh fazometrov/. 14 p2452 A69-29805

**KHINEN, E. V.**

Engineering equations of oscillations of nonideally elastic thin plates /Ob inzhenernykh uravneniiakh kolebanii neideal'no-uprugikh tonkikh plastin/. 19 p3437 A69-35989

**KHISMATULLIN, A. IA.**

Generalization of experimental data concerning the limits of flame stabilization by means of jets /Obobshchenie eksperimental'nykh dannykh po predelam stabilizatsii plameni na struiakh/. 03 p0531 A69-12956

Some problems of jet gasdynamics in a cross flow with combustion. 16 p2879 A69-32140

Influence of the blast angle on the gasdynamics of fanjets in a crosswind /Vliianie ugla vduva na gazodinamiku veerennykh strui v snosiashchem potoke/. 21 p3850 A69-38863

**KHITRIK, A. S.**

Determination of the structural formulas of magnesium and aluminum-magnesium microwave ferrites /Opredelenie strukturnykh formul magnievykh i aliumino-magnievykh SVCh-ferritov/. 15 p2670 A69-31184

**KHITRIK, M. S.**

Spacecraft control during reentry into the atmosphere /Upravlenie kosmicheskimi apparatami pri vkhode v atmosferu/. 13 p2355 A69-27681

**KHIIPPENEN, V. P.**

Method of emission line selection in lasers /Ob odnom metode selektsii linii generatsii v lazerakh/. 20 p3555 A69-37730

Peculiarities of the competition of transitions in a single-mode He-Ne laser /Osobennosti konkurentsii perekhodov v odnomodovom He-Ne lazere/. 24 p4328 A69-43165

**KHIZHAK, L. S.**

The atmospheric refraction coefficient for IR radiation /in the 1-6 mu spectral range/. 04 p0591 A69-14300

**KHIZHNAK, N. A.**

Longitudinal polarization of plasma stream in a transverse magnetic field. 08 p1370 A69-21018

Nonlinear theory of longitudinal waves in an electron plasma /K nelineinoy teorii prodol'nykh voln v elektronnoy plazme/. 09 p1550 A69-22026

Electron beam instability in crossed magnetic and inhomogeneous electrical fields. 12 p2133 A69-26714

Investigation of an oscillating electron-ion discharge in a longitudinal magnetic field /Issledovanie kolebatel'nogo elektronno- ionnogo razriada v prodol'nom magnitnom pole/. 13 p2311 A69-28109

Contribution to the theory of an erosion-type electrodynamic plasma accelerator with inductive energy storage /K teorii erozionnogo elektrodinamicheskogo uskoritelia plazmy induktivnym nakopitelem energii/. 13 p2311 A69-28110

Study of the self-induction of a conical electrode-type plasma accelerator /Issledovanie samoiudktsii konicheskogo elektrodno uskoritelia plazmy/. 19 p3379 A69-35821

Single-circuit partially split magnetron with electron retuning of the frequency /Odnokonturnyi chastichno razrezannyi magnetron s elektronnoy perestroikoi chastoty/. 21 p3682 A69-39128

Plasma acceleration in a conical induction source /Uskorenie plazmy v induktsionnom konicheskom istochnike/. 24 p4357 A69-43468

Longitudinal polarization of a plasma flux in a transverse magnetic field /Prodol'naia polarizatsiia plazmennogo potoka v poperechnom magnitnom pole/. 24 p4358 A69-43471

**KHIZHNAK, V. N.**

Single-frequency oscillations in multidimensional quasi-linear systems with delay, during the action of random forces /Ob odnochastotnykh kolebaniyakh v mnogomernykh kvazilineinykh sistemakh s zapazdyvaniem pri deistvii sluchainykh sil/. 01 p0170 A69-10825

**KHIZHNAKOVA, I. P.**

Measurement of radio wave absorption in the atmosphere at the 31.9-cm wavelength /Izmerenie pogloshcheniia radiovoln v atmosfere na volne 31,9 cm/. 07 p1076 A69-18518

Notes on the distribution of ionized interstellar gas /Zamechaniia o raspredelenii ionizovannogo mezhzvezdnogo gaza/. 15 p2695 A69-30935

**KHLEBNIKOV, G. F.**

Modeling human movements in weightlessness and in a water environment from the viewpoint of a biomechanical approach /O modelirovanii dvizhenii cheloveka v nevesomosti i v vodnoi srede s biomechanicheskikh pozitsii/. 17 p2915 A69-33385

Vestibular training of test pilots by passive methods /Vestibuliarnaia trenirovka ispytately passivnymi metodami/. 20 p3472 A69-37266

Importance of parabolic flights, reproducing a brief weightlessness, in the vestibular professional selection of astronauts /K voprosu o znachenii parabolicheskikh poletov s vosproizvedeniem kratkovremennoi nevesomosti v vestibuliarnom profobrobo kosmonavtov/. 20 p3481 A69-37276

**KHLEVNOI, S. S.**

Ignition of ballistite powder by incandescent wires /Zazhiganiye ballistitnogo porokha nakalennymi provolochkami/. 02 p0354 A69-12668

**KHLOPOV, B. V.**

Actinometric instruments on board Soviet meteorological satellites /Aktinometricheskaia apparatura sovetskikh meteorologicheskikh sputnikov zemli/. 06 p0929 A69-17977

**KHLYSTOV, A. I.**

Determination of the probability of the electron transition of the red "atmospheric" band system of the O sub 2 molecule /Opredelenie veroiatnosti elektronnoy perekhoda krasnoi "atmosfernoi" sistemy polos molekuly O sub 2/. 03 p0420 A69-13276

Model of the photosphere based on the rotational temperatures of CH, NH, OH, C sub 2, CN, and CO molecules. 03 p0512 A69-13694

Determination of the electronic transition probability of the red "atmospheric" system of the O sub 2 molecule bands. 14 p2487 A69-28784

**KHLYSTOVSKAIA, M. D.**

Electrical properties of In sub 1-x Ga sub x As solid solutions /x equals 0.2-0.25/. 07 p1199 A69-18689

**KHMARA, I. S.**

Study of electromagnetic methods for vibrational treatment of metals during the crystallization process /Issledovanie elektromagnitnykh metodov vibratsionnoi obrabotki metallov v protsesse kristallizatsii/. 14 p2456 A69-29916

**KHMELEVSKAIA, M. E.**

Heat resistance of ZhS6-K alloy subjected to multicomponent diffusion saturation /Zharostoikost' splava ZhS6-K posle mnogokomponentnogo diffuzionno nasyscheniia/. 19 p3345 A69-36159

**KHMELEVTSOV, S. S.**

Relation between the spatial coherence of laser radiation and the number of generated frequencies /O svyazi prostranstvennoi kogerentnosti izlucheniia lazera s chislom generiruemnykh chastot/. 07 p1148 A69-18803

Investigation of fluctuations in the angle of arrival of laser emission in the atmospheric boundary layer /Issledovanie fluktuatsii uglov prikhoda lazernogo izlucheniia v prizemnom sloe atmosfery/. 11 p1840 A69-25570

Transparency of the atmospheric boundary layer to laser emissions in the infrared region of the spectrum /Prozrachnost' prizemnogo sloia atmosfery dlia izlucheniia nekotorykh OKG v infrakrasnoi oblasti spektra/. 12 p2028 A69-25957

The relationship between the spatial coherence of laser radiation and the number of generated frequencies. 21 p3736 A69-38948

**KHOCHOLAVA, G. M.**

Influence of the 11-year solar-activity cycle on the critical frequency of the F2 region of the ionosphere /O vlianii 11-letnego tsikla solnechnoi aktivnosti na kriticheskuiu chastotu oblasti F2 ionosfery/. 02 p0238 A69-11680

Influence of the 11-year solar activity cycle on the critical frequency of the ionospheric F sub 2 -region. 13 p2257 A69-28711

The problem of positive disturbances in the F2 layer /K voprosu o polozhitel'nykh vozmushcheniiakh v sloe F2/. 20 p3527 A69-37674

**KHODAREV, IU. K.**

The development of information transmission systems for space exploration. 06 p0886 A69-17045

A communications system for interplanetary spacecraft /Sistema svyazi s mezhplanetnymi kosmicheskimi apparatami/. 06 p0886 A69-17623

**KHODNEVICH, A. D.**

Oscillators employing avalanche transit-time diodes at centimeter wavelengths /Generatory na lavinno-proletnom diode v santimetrovom diapazone voln/. 07 p1107 A69-19155

Avalanche transit-time diode oscillators with electrical frequency retuning and multidiode oscillators /Generatory na lavinno-proletnom diode s elektricheskoi perestroikoi chastoty i mnogodiodynye generatory/. 11 p1844 A69-24449

**KHODORKOVSKII, IA. S.**

Unsteady boundary layer on a porous plate /Nestatsionarnyi pogranichnyi sloi na poristo plastine/. 21 p3692 A69-38609

**KHODOVOI, V. A.**

Optimum gas mixture in the He-Ne laser and the field distribution in the resonator. 03 p0441 A69-13847

Optimal ratio between the mixture components in an annular He-Ne laser /Ob optimal'nom sootnoshenii komponent smesi v kol'tsevom He-Ne lazere/. 04 p0612 A69-15176

Study of the properties of the He-Ne laser with a small discharge space. 06 p0935 A69-17683

Optimum composition ratio in a He-Ne ring laser. 18 p3152 A69-34718

**KHODYREV, V. I.**

Calculation of the probabilistic frequency spectrum of the natural oscillations of impeller blades of turbomachines /O raschete veroiatnostnogo spektra chastot sobstvennykh kolebanii rabochikh lopat ok turbomashin/. 19 p3436 A69-35844

**KHODZHAEV, A. Z.**

Plasma jet cutoff by a transverse magnetic field /Otsechka plazmennoi strui poperechnym magnitnym polem/. 02 p0292 A69-12558

Cutoff of a plasma jet by a transverse magnetic field. 15 p2658 A69-30255

**KHODZHAINTS, IU. M.**

A basis for designing frequency-pulse integral-estimate systems using integrating chemotron tetrodes /Osnovy rascheta chastotno- impul'snykh ustroystv integral'noi otsenki na khimotronnykh integriuiushchikh tetrodkh/. 13 p2227 A69-27522

**KHOKHLOV, M. Z.**

"Inertial cooling" and temperature anisotropy in the solar wind. 03 p0500 A69-13525

Determination of the solar wind temperature for an anisotropic distribution function /Ob opredelenii temperatury solnechnogo vetra pri anizotropnoi funktsii raspredeleniia/. 19 p3396 A69-36631

Electrostatic analyzers with symmetrical angular characteristics for investigating the solar wind /Elektrostaticheskie analizatory s simmetrichnymi uglovymi kharakteristikami dlia issledovaniia solnechnogo vetra/. 19 p3396 A69-36632

**KHOKHLOV, R. V.**

Theory of parametric light generators /K teorii parametricheskikh generatorov sveta/. 03 p0437 A69-13044

Tunable parametric generator employing a KDP crystal /Perestraivaemyi parametricheskii generator sveta na kristalle KDP/. 03 p0437 A69-13045



- Thermal self-actions of laser beams.  
[IEEE PAPER E-12] 05 p0774 A69-16311  
Nonstationary nonlinear optical effects and ultrashort light pulse formation.  
[IEEE PAPER H-5] 05 p0774 A69-16316  
Parametric interactions in optics and tunable light oscillators.  
[IEEE PAPER K-5] 07 p1152 A69-19066  
Ultraviolet lasers using organic-scintillator molecules.  
13 p2271 A69-27657  
New developments in non-linear optics.  
20 p3555 A69-38014
- KHOKHLOV, V. P.**  
Mechanical properties of diffused chromized layers.  
03 p0450 A69-13913  
Chromizing of steels by vacuum diffusion /Vakuum-diffuzionnoe khromirovanie staley/.  
19 p3329 A69-36572
- KHOKHRIAKOV, A. IA.**  
On the Green's matrix of a periodic boundary value problem for a system of linear differential equations.  
04 p0624 A69-15098
- KHOKHRIAKOV, V. A.**  
Optimal regimes of flight vehicle motion in a high-density medium /Optimal'nye rezhimy dvizheniya letatel'nykh apparatov v srede bol'shoi plotnosti/.  
21 p3768 A69-39824
- KHOL, R.**  
Computer stress analysis.  
02 p0341 A69-12153  
A-C fluidics.  
07 p1058 A69-18938
- KHOLIAYKO, V. I.**  
Vortex flow of an ideal incompressible fluid past a circular cylinder /Obtekanie krugovogo tsilindra vikhrevym potokom ideal'noi neszhimaemoi zhidkosti/.  
04 p0541 A69-14484
- KHOLIN, N. A.**  
Possibility of determining lunar rock types by the mass spectrometric method /O vozmozhnosti opredeleniia tipa lunnykh porod mass-spektrometricheskimi metodami/.  
22 p4034 A69-41106  
Possibility and advantages of mass-spectrometric analysis of lunar soil material from the ion component of the products of vaporization of the lunar soil by an electron beam /O vozmozhnosti i preimushchestvakh mass-spektrometricheskogo analiza veshchestva grunta luny po ionnoi komponente produktov ispareniia grunta elektronnykh luchom/.  
22 p4034 A69-41107
- KHOLIN, S. A.**  
Investigation of the stability of motion of a compressible gas.  
07 p1215 A69-18706
- KHOLOD, A. I.**  
Bending theory for two-layer plates /K teorii izгиба dvukhsloynnykh plastin/.  
15 p2714 A69-31198
- KHOLODNYI, L. P.**  
Effect of alloying additions on the anisotropy of plastic deformation in GaAs single crystals /O vliianii legiruiushchikh primesei na anizotropiiu plasticheskoi deformatsii monokristallov GaAs/.  
11 p1936 A69-24537
- KHOLODOV, A. S.**  
Construction of difference schemes for hyperbolic-type equations on the basis of characteristic relations /O postroenii raznostnykh skhem dlia uravnenii giperbolicheskogo tipa na osnove kharakteristicheskikh sootnoshenii/.  
14 p2430 A69-29475
- KHOLOPOV, G. K.**  
Spectral emittance of molybdenum, tantalum, niobium, and zirconium in the infrared region of the spectrum.  
05 p0846 A69-15903
- KHOLOPOV, P. N.**  
Star cluster structure and masses of the component stars /Stroenie zvezdnykh skoplenii i massy vkhodiashchikh v nikh zvezd/.  
09 p1589 A69-21368  
The unity in the structure of star clusters.  
11 p1951 A69-24246  
The structure of star clusters and the mass of the member stars.  
18 p3198 A69-34757

- KHOLUIANOV, G. F.**  
Role of vacancies and substitutional impurities in the formation of the 1.7-ev luminescence band of gallium phosphide.  
04 p0643 A69-15258
- KHOMA, I. IU.**  
Bending and torsion of a plate with a hole /Izgi b i kruchenie plastinki s otverstiem/.  
21 p3835 A69-38725  
Effect of a breaking force on the stressed state of a plate weakened by a hole /Vpliv rozschepiluiuchoi sili na napruzhenii stan plastini, oslablenoi otvorom/.  
23 p4233 A69-42341
- KHOMASURIDZE, N. G.**  
Transformation and solution of the equations of a shallow circular spherical shell /K preobrazovaniu i resheniiu uravnenii pologoi krugovoi sfericheskoi obolochki/.  
13 p2369 A69-28565
- KHOMCHENKO, V. S.**  
Effect of electrical polarization on electroluminescence brightness waves in zinc sulfide films /Vpliv elektrichnoi polarizatsii na khvili iskravosti elektroluminesentsii v plivkakh srichistogo tsinku/.  
05 p0807 A69-16213
- KHOMENKO, I. L.**  
Determination of the absorption coefficients of a plasma using a gas optical quantum generator.  
05 p0762 A69-15900
- KHOMENKO, V. S.**  
The technique of measuring instantaneous pressures.  
07 p1050 A69-18752
- KHOMIAKOV, E. N.**  
Certain problems of the statistical synthesis of two-antenna direction finding systems /Nekotorye voprosy statisticheskogo sinteza dvukhantennykh sistem pelen-govaniia/.  
15 p2562 A69-30110
- KHOMUTOVA, M. D.**  
Theory of static electrical domains in semiconductors containing hot electrons - Ambipolar case.  
06 p0978 A69-16989
- KHOMUTOVA, S. S.**  
Magnetic field effect on GaAs injection laser emission.  
19 p3387 A69-36529
- KHONG AN, V.**  
Diamagnetic plasmoids in the field of a magnetic dipole /Sgustki diamagnitnoi plazmy v pole magnitnogo dipolia/.  
14 p2489 A69-28910  
Equilibrium plasma configurations in magnetic fields near a neutral point. I /Ravnovesnye konfiguratsii plazmy v magnitnykh poliakh vblizi neutral'noi tochki. I/.  
19 p3380 A69-36467
- KHOP, N. T.**  
On the normal solvability of Dirichlet's problem for an elliptic system.  
03 p0456 A69-13603
- KHORENKO, V. K.**  
Sintered beryllium-base compositions. I.  
10 p1711 A69-23334  
Sintered beryllium-base compositions. II - Corrosion properties and possibilities of raising corrosion resistance in humid atmospheres.  
10 p1711 A69-23338
- KHOREV, A. I.**  
Heat treatment of beta-titanium alloys /Termicheskai obrabotka beta-titanovykh splavov/.  
01 p0093 A69-10213  
Heat treatment of beta-titanium alloys.  
15 p2637 A69-30269
- KHOROKHORINA, V. I.**  
Production features of thermally strengthened titanium alloys /Osobennosti proizvodstva termicheskii uprochniaemykh titanovykh splavov/.  
11 p1902 A69-24276
- KHOROLSKII, V. M.**  
Stresses induced in a wedge by symmetrically and antisymmetrically distributed load and temperature /Napriazheniia v kline ot simmetrichno i antisimmetrichno raspredelennoi nagruzki i temperatury/.  
21 p3833 A69-38644
- KHOROSHEVA, O. V.**  
Relation between high-latitude geomagnetic disturbances and electron fluxes at the boundary of the outer radiation belt /Sviaz' vysokoshirotnykh geomagnitnykh vozmushchenii s potokami elektronov na granitse vneshnego radiatsionnogo poiasa/.  
14 p2438 A69-29079

- Altitude asymmetry of an instantaneous auroral zone /Vysotnaia asimmetriia mgnovennoi zony siiani/.  
20 p3522 A69-37056
- KHOROSHILOV, A. F.**  
Theory of the formation of waves in a radiating atmosphere by orographic inhomogeneities of the underlying surface /K teorii formirovaniia voln v izluchaiushchei atmosfere orograficheskimi neodnorodnostiami podstilaushchei poverkhnosti/.  
23 p4185 A69-42492
- KHOROSHKO, K. S.**  
Hypersonic wake behind blunt bodies /Giperzvukovoi sled za zatuplennymi telami/.  
14 p2391 A69-29618
- KHOROSHUN, L. P.**  
Elasto-hereditary characteristics of composite materials /Uprugo-nasledstvennyye svoystva kompozitnykh materialov/.  
04 p0667 A69-14263  
Relationships between stresses and deformations in lamellar media.  
06 p1021 A69-17176
- KHOROSHUN, V. V.**  
Diffraction of plane electromagnetic waves by a screened array with a transversely magnetized real ferrite /Difraktsiia ploskikh elektromagnitnykh voln na ekranirovannoi reshetke s poperechno namagnichen-nym real'nyim ferritom/.  
23 p4124 A69-42032
- KHORUNZHII, V. A.**  
The question of the attainable signal compression coefficient /K voprosu o dostizhimom koefitsiente szhatii signala/.  
17 p2931 A69-33907  
The use of a weighted signal treatment in a spectral analyzer with an in-phase storage /Primenenie vesovoi obrabotki signala v spektroanalizatore s sinfaznym nakopleniem/.  
17 p2931 A69-33908
- KHORUZHENKO, A. F.**  
Some interpretations of the biological effects of chronic gamma irradiation.  
02 p0197 A69-11494
- KHOSHEV, IU. M.**  
Theory of a helical discharge /skin effect/ at atmospheric pressure in air and argon /Teoriia vikhrevogo razriada /skin-effekta/ pri atmosfernom davlenii v vozdukh i argone/.  
12 p2140 A69-27122  
A helical discharge in argon at atmospheric pressure with injection /Vikhrevoi razriad v argone pri atmosfernom davlenii s produmvom/.  
12 p2141 A69-27131
- KHOT, N. S.**  
Postbuckling behavior of geometrically imperfect composite cylindrical shells under axial compression. [AIAA PAPER 69-93]  
06 p1029 A69-18194  
Buckling and postbuckling behavior of composite cylindrical shells under axial compression.  
12 p2187 A69-26843
- KHOTINOK-KHOTENKO, V. I.**  
Statistical studies of the form of the relations between the minute blood circulation volume, the oxygen capacity of the blood, and the coefficient of utilization of blood oxygen by tissues /Statisticheskie issledovaniia formy svyazi mezhdru velichinami minutno ob'ema krovoobrashcheniia, kislorodnoi emkosti krovi i koefitsienta ispol'zovaniia kisloroda krovi tkaniami/.  
19 p3260 A69-35896
- KHOTKEVICH, V. G.**  
Investigation of type M sub 3 X superconductors with two overlapping energy bands by the method of nuclear magnetic resonance.  
07 p1198 A69-18513
- KHOTUNTSEV, IU. L.**  
Stability of regenerative amplifiers during the simultaneous charge in reactive parameters and negative resistance.  
04 p0577 A69-14778  
Influence of reactive-parameter scatter on the frequency characteristics of regenerative amplifiers /O vliianii razbroa reaktivnykh parametrov na chastotnye kharakteristiki regenerativnykh usilitelei/.  
13 p2235 A69-28515  
Synthesis of a tunnel-diode amplifier with series stabilization /Sintez tunnel'nogo usilitel'a s posledovatel'noi stabilizatsiei/.  
13 p2236 A69-28575

## KHOUB, B.

Experimental measurements of the diffusion coefficients of H atoms in H sub 2 and in H sub 2 -He and H sub 2 -Ar mixtures.

07 p1185 A69-19300

## KHOVANSKII, I. M.

Analytical design of stabilization systems in the presence of disturbances with unknown characteristics /Analiticheskoe konstruirovaniye sistem stabilizatsii pri vozeistviyakh s neizvestnymi kharakteristikami/.

13 p2259 A69-27425

## KHOZE, A. N.

An aspiration psychrometric probe /Aspiratsionnyi psikhrometricheskii zond/.

06 p0927 A69-17689

## KHOZHAINOV, A. I.

Unsteady flow of a conducting fluid in an MHD generator channel, taking into account the external circuit inductance /Nestatsionarnoe techeniye provodiashchei zhidkosti v kanale MGD-generatora s ucheto inaktivnosti vnesheinei tsepi/.

06 p0969 A69-17915

Transient processes in the channels of conduction-type magnetohydrodynamic generators in the presence of a nonlinear induction in the external circuit /Perekhodnye protsessy v kanalakh MGD-generatorov konduktivnogo tipa pri naliczii vo vnesheinei tsepi nelineinoi inaktivnosti/.

12 p2017 A69-26545

Elements of the general transient-response theory of liquid-metal conduction MHD generators /Elementy obshchei teorii perekhodnykh rezhimov raboty zhidkometallicheskih MGD-generatorov konduktivnogo tipa/.

13 p2207 A69-27506

## KHRAMOV, N. E.

Heat exchange in the region of an interaction between an axisymmetric supersonic jet and an obstruction /Teploobmen v oblasti vzaimodeistviya osesimmetrichnoi sverkhzvukovoi strui s pregradoi/.

24 p4246 A69-43493

## KHRAMTSOV, V. A.

A neodymium-doped glass pulsed laser with selected second harmonic radiation.

12 p2108 A69-26594

## KHRAPACH, V. T.

Absolute photometry and the determination of the tail type of the comet Ikeya Seki 1965f /Absoluitnaya fotometriya i opredeleniye tipa khvosta komety Ikeya-Seki 1965f/.

14 p2524 A69-29709

## KHRAPKO, R. I.

A calculation for the observable surface of a part of a Friedmann universe.

02 p0314 A69-11644

## KHRAPKOV, A. A.

First fundamental problem for a piecewise-homogeneous plane with a slit perpendicular to the line of separation.

14 p2531 A69-28805

## KHRENOV, B. A.

Phenomenological characteristics of extensive air showers at sea level.

13 p2332 A69-28406

Study of high-energy muons in extensive air showers.

13 p2332 A69-28409

## KHRGIAN, A. KH.

Problems of ozone circulation in the earth's atmosphere /Problemy tsirkulyatsii ozona v zemnoi atmosfere/.

14 p2442 A69-29830

Ozone concentrations in the lower stratosphere which are harmful to humans /O vrednykh dlya cheloveka kontsentratsiyakh ozona v nizhnii stratosfere/.

15 p2596 A69-30642

## KHRGUIAN, A.

Dynamics of atmospheric ozone /Dynamique de l'ozone atmospherique/.

16 p2787 A69-32643

## KHRISTIANSEN, G. B.

The investigation of the extensive air showers at sea level.

03 p0498 A69-12937

Study of the structure of extensive air showers at sea level with the modernized hodoscope system of the Moscow University installation.

13 p2332 A69-28405

Phenomenological characteristics of extensive air showers at sea level.

13 p2332 A69-28406

Observation of radio emission from extensive air showers with an array of half-wave antennas at the Moscow University installation.

13 p2332 A69-28407

Some aspects of the use of a half-wave antenna to investigate radio emission from extensive air showers.

13 p2332 A69-28408

Study of high-energy muons in extensive air showers.

13 p2332 A69-28409

## KHRISTOV, V. K.

Determination of the rectangular space coordinates for points on the earth by means of observations from artificial earth satellites /Determinatsiya koordinatov rektangularnykh d'essya de points de la terre moyennant observations des satellites artificiels de la terre/.

[UN PAPER 68-95265] 06 p0917 A69-17064

## KHROBAK, O.

An experiment in the use of a digital computer for reliability simulation /Opyt po primeneniui tsifrovoy vychislitel'noi mashiny dlya modelirovaniia nadezhnosti/.

08 p1277 A69-21100

## KHROMOV, G. S.

Planetary nebulae as possible X-ray sources.

04 p0661 A69-15144

Forbidden lines and physical conditions in planetary nebulae - Methodical comments.

19 p3423 A69-36224

## KHROMOV, V. G.

Burning ability and inflammability of mixtures of powdered highly calorific metals with organic compounds of the C sub x H sub y O sub z series /Sposobnost' k goreniui i vospaleniui smesi poroshkov vysokokaloriinykh metallov s organicheskimi veshchestvami formuly C sub x H sub y O sub z/.

02 p0355 A69-12669

## KHROMUSHKIN, A. I.

Life-support Systems for High-altitude and Space Flights /Sistemy Zhizneobespecheniia Cheloveka pri Vysotnykh i Kosmicheskikh Poletakh/.

12 p2024 A69-27074

## KHROMYKH, A. M.

Polarization characteristics of the emission of a ring laser with a circularly anisotropic resonator /Polarizatsionnye kharakteristiki izlucheniia kol'tsevoogo lazera s tsirkuliarno anizotropnym rezonatorom/.

24 p4328 A69-43160

## KHROMYKH, K. M.

Investigation of the current change in a CO sub 2 -N sub 2 -He discharge under the effect of emission /Issledovanie izmeneniia toka v razрядe CO sub 2 -N sub 2 -He pod vlianiem generatsii/.

14 p2458 A69-29161

## KHROMYKH, V. G.

Distribution functions of an estimate of the signal-to-noise ratio /Funktsii raspredeleniia otsenki otnosheniia signal/shum/.

15 p2564 A69-30149

## KHROPULO, I. G.

Induced combinational scattering on infrared-active transitions /O vyzhdenno kombinatsionnom rasseyanii na infrakrasno-aktivnykh perekhodakh/.

02 p0282 A69-12636

## KHROSTOV, N. I.

Systems for the Deflection of the Jet Stream of Turbojet Engines /Ustroistva dlya Otkloneniia Reaktivnoi Strui Turboreaktivnykh Dvigateli/.

04 p0647 A69-14934

## KHROLEV, V. V.

Observations of the polarization of cosmic radio emission near the galactic anticenter at wavelengths of 70, 60, and 40 cm /Nabludeniya polarizatsii kosmicheskogo radioizlucheniia vblizi antitsentra galaktiki na volnakh 70, 60 i 40 cm/.

03 p0501 A69-13704

A supplementary comment on a method of measuring the linear polarization of cosmic radio emission /Dopolnitel'nye zamechaniia k metodike izmereniia lineinoi polarizatsii kosmicheskogo radioizlucheniia/.

03 p0501 A69-13705

Measurement of radio wave absorption in the atmosphere at the 31.9-cm wavelength /Izmerenie pogloscheniia radiovoln v atmosfere na volne 31,9 cm/.

07 p1076 A69-18518

## KHRUSTALEV, B. A.

Combined heat transfer calculations.

23 p4237 A69-41328

Methods of determining the integral and spectral radiative properties of materials at high temperatures.

23 p4237 A69-41329

Radiative properties of tantalum, molybdenum, niobium, graphite and niobium carbide at high temperatures.

23 p4175 A69-41331

## KHRUSTATEV, V. A.

Actinometric instruments on board Soviet meteorological satellites /Aktinometricheskaia apparatura sovetskikh meteorologicheskikh sputnikov zemli/.

06 p0929 A69-17977

## KHRYPUN, V. G.

Classes of functions which are quasi-analytic with respect to an ordinary linear differential operator /Klassy funktsii, kvazianaliticheskie otnositel'no obyknovennogo lineinogo differentsial'nogo operatora/.

13 p2290 A69-28484

## KHUDAIBERDIEV, R.

A coupled gyro system /Ob odnoi svyazannoi giroskopicheskoi sisteme/.

13 p2264 A69-28527

Theory of coupled gyroscopic systems /K teorii svyazannykh giroskopicheskikh sistem/.

21 p3273 A69-38829

## KHUDENKO, B. G.

Calculation of the direction of the axis of a stream resulting from the mixing of turbulent jets.

04 p0591 A69-15411

Turbulent submerged jets of real gases.

07 p1049 A69-18398

Deformation of the axes of plane-parallel jets due to turbulent mixing.

21 p3696 A69-39095

Mixing of gas jets near a wall.

21 p3785 A69-39102

## KHUDIAKOV, G. E.

Effect of the initial flow turbulence on the aerodynamic drag of poorly streamlined bodies with sharp edges /Vliianie nachal'noi turbulentsnosti potoka na aerodinamicheskoe soprotivleniye plokhok obtekaemykh tel s ostrymi kromkami/.

14 p2391 A69-29625

Aerodynamic characteristics of prismatic bodies of moderate aspect ratio /Aerodinamicheskii kharakteristiki prizmaticheskikh tel srednego udlineniia/.

17 p2896 A69-33717

## KHUKHUNASHVILI, Z. V.

Determination of the groups of an equation of motion. I /K opredeleniiu grupp Li uravneniia dvizheniia. I/.

02 p0282 A69-12840

Determination of the Lie algebra of linear equations. II /K opredeleniiu algebry Li lineinykh uravnenii. II/.

02 p0273 A69-12841

## KHUNDZHUA, T. G.

Relations between radioactivity distributions in the atmosphere at different altitudes /O svyaziakh raspredeleniia radioaktivnosti na razlichnykh vysoatakh atmosfery/.

11 p1945 A69-24320

Regularities of the altitude distribution of radon decay products in the atmosphere and the magnitude of vertical turbulent diffusion /Zakonomenosti raspredeleniia produktov raspada radona po vysoate v atmosfere i velichina vertikal'noi turbulentnoi diffuzii/.

20 p3533 A69-38076

## KHURTIN, L. A.

Frequency stabilization in a He plus Ne laser by using low-frequency oscillations of its intensity /Stabilizatsiia chastoty He plus Ne-lazera s ispol'zovaniem nizkочастотnykh kolebaniy ego intensivnosti/.

21 p3738 A69-39078

## KHUSANOV, KH.

Certain features of electrical conductivity of the rare earth metals lanthanum, cerium, praseodymium, and neodymium, in the solid and liquid states /Nekotorye osobennosti elektroprovodnosti legkikh redkozemel'nykh metallov lantana, tserii, prazodima i neodima v tverdom i zhidkom sostoianiiakh/.

21 p3781 A69-39070

## KHVALENSKII, I. A.

Probability forecast of the time of conservation of the sign of air temperature anomalies /Veroyatnostnyi prognoz vremeni sokhraneniia znaka anomalii temperatury vozdukh/.

13 p2294 A69-27855

## KHVILON, E. A.

Necessary condition for the optimum control of systems with a deviating neutral-type argument /Neobkhodimoe uslovie optimal'nogo upravleniia dlya sistem s otkloniaiusheimsia argumentom neutral'nogo tipa/.

14 p2426 A69-29419



## KHVOROSTENKO, N. P.

Statistical Theory of Discrete Signal Demodulation /Statisticheskaya teoriya demodulatsii diskretnykh signalov/.  
09 p1455 A69-21933

## KHVOROSTUKHIN, L. A.

Problem of friction during diamond honing /K voprosu o trenii pri almaznom vyglazhivanii/.  
22 p3958 A69-41170

## KHVOSTENKO, G.

Interference of light scattered by a system of atoms /Interferentsiya sveta, rasseiannogo sistemoi atomov/.  
17 p3005 A69-33109

Line width of spontaneous gas laser emission /Shirina linii spontannogo izlucheniia gazovogo lazera/.  
17 p2981 A69-33116

## KHVOSTIKOV, I. A.

Influence of atomic oxygen on the thermal conditions of the atmosphere in the region of the mesopause /Vliianie atomarnogo kisloroda na teplovoy rezhim atmosfery v oblasti mezopauzy/.  
01 p0062 A69-10129

## KHVOSTOV, V. A.

Investigation of the internal photoeffect in the excitation region of the absorption spectrum of CdS single crystals /Doslizhennia vnutrishn'ogo fotoefektu v eksitonnoi oblasti spektra poglannia monokristaliv CdS/.  
14 p2504 A69-28990

## KHVOSTYNTSEV, K. I.

Influence of purity of the charge materials on the properties of beta titanium alloys /Vliianie chistoty shikhtovykh materialov na svoistva beta-titanovykh splavov/.  
01 p0094 A69-10216

Effect of charge material purity on the properties of beta-titanium alloys.  
15 p2638 A69-30272

## KHWAJA, I.

Large deflexions of cantilevers by the electronic analogue computer.  
03 p0522 A69-12865

## KIANG, R. L.

Nonlinear theory of inviscid Taylor instability near the cutoff wavenumber.  
21 p3693 A69-38703

## KIANG, T.

The distribution in space of clusters of galaxies.  
16 p2862 A69-32371

## KIBEL, I. A.

Allowance for an interaction between the boundary layer and the free atmosphere in prognostic problems of mesometeorology /Uchet vzaimodeistviia pogranichnogo sloia i svobodnoi atmosfery v prognosticheskikh zadachakh mezometeorologii/.  
15 p2646 A69-30107

## KIBENKO, A. V.

An existence and uniqueness theorem /Ob odnoi teoreme sushchestvovaniia i edinstvennosti/.  
19 p3360 A69-36373

## KIBLER, J. J.

Cylindrical and spherical shells with cracks.  
22 p4046 A69-41041

## KICHER, T. P.

An experimental study of the buckling of anisotropic plates.  
12 p2186 A69-26840

The analysis of unbalanced cross-ply elliptic plates under uniform pressure.  
20 p3626 A69-37762

## KICZKA, K.

Application of the tape-recorder for simultaneous double-channel recording in electrophysiological investigations.  
07 p1131 A69-18640

## KIDA, T.

A linearized theory of a thin jet-flapped aerofoil in proximity of the ground.  
09 p1431 A69-22275

Two-dimensional jet penetration with free streamlines.  
22 p3859 A69-40143

On a calculation of the lift of a tunnel type ram wing.  
22 p3860 A69-40819

An approximate analysis for an aerofoil with a thin jet flap which hits the ground in a case of separation from its leading edge.  
22 p3861 A69-41184

## KIDDER, R. E.

Zeeman splitting used to increase energy from a Q-switched iodine laser.  
05 p0773 A69-16288

## KIDERA, G. J.

Glaucoma in commercial pilots.  
03 p0376 A69-14078

Perceptual style differences between airline pilots and engineers.  
12 p2023 A69-26556

Uncommon cause for grounding a pilot.  
12 p2024 A69-26559

Beta-adrenergic blockade - An aid in diagnosis.  
17 p2909 A69-33184

Glaucoma in commercial pilots.  
23 p4088 A69-41805

Flight-deck vision and the aging eye.  
23 p4089 A69-41829

A study of simulated airline pilot incapacitation.  
24 p4277 A69-43386

## KIDNAY, A. J.

Adsorption kinetics in a ternary system containing hydrogen.  
[NAS-NRC PAPER H-4]  
22 p3981 A69-40629

## KIDRON, I.

On the measurement of low level turbulence using a pair of sensors.  
14 p2446 A69-29018

## KIDSON, J. W.

Exchange of atmospheric angular momentum between the hemispheres.  
07 p1127 A69-19258

Observational studies of the general circulation of the tropics - Long term mean values.  
18 p3165 A69-34418

## KIDWELL, R.

The selection of spacecraft optical coatings for temperature control.  
[AIAA PAPER 69-979]  
22 p4050 A69-40359

## KIEFER, J. W.

The influence of visual imaging experiments on unmanned Mars spacecraft missions.  
[SMPTE PAPER 104-21]  
04 p0650 A69-14361

## KIEFER, T. F.

Fracture behavior of two new high-strength aluminum alloys.  
21 p3743 A69-38668

## KIEFFER, H. E.

Polymeric Schiff bases. XV - The synthesis of cross-linked polymeric azomethines from amino aryl ketones.  
08 p1269 A69-21060

Polymeric Schiff bases. XIV - The synthesis of cross-linked polymeric azomethines by exchange reactions.  
08 p1269 A69-21061

## KIEFFER, H. H.

Differences between proposed Apollo sites. I - Synthesis.  
21 p3815 A69-39585

Differences between proposed Apollo sites. II - Visible and infrared reflectivity evidence.  
21 p3815 A69-39586

## KIEFFER, R.

Experiments on deoxidation of sintered molybdenum with carbon, boron, and silicon /Versuche zur Desoxidation von Sintermolybdaen mit Kohlenstoff, Bor und Silizium/.  
02 p0265 A69-12002

Studies of binding materials of group VIa metals /Untersuchungen ueber Verbundwerkstoffe der VIa-Metalle/.  
05 p0780 A69-15991

Carbidothemic production of metals of groups IVa, Va, and VIa, and their alloys /Ueber die karbidothemiche Herstellung von Metallen der IVa-, Va- und VIa-Gruppe und deren Legierungen/.  
09 p1514 A69-22731

Hard materials and hard metals containing NbC and HfC /Ueber NbC- und HfC-haltige Hartstoffe und Hartmetalle/.  
14 p2464 A69-29323

The carbidothemic production of high-melting metal alloys, with special reference to titanium alloys /Ueber die karbidothemiche Herstellung von hochschmelzenden Legierungen, insbesondere Titanlegierungen/.  
16 p2800 A69-31777

## KIEFLING, L. A.

A study of Saturn AS-502 coupling longitudinal structural vibration and lateral bending response during boost.  
[AIAA PAPER 69-58]  
06 p1019 A69-18204

## KIEHLO, N. R.

A systems approach to flammability control for aerospace safety application.  
24 p4336 A69-43422

## KIEHN, R. M.

Intrinsic transport theorem.  
24 p4350 A69-43368

## KIELICH, S.

Optical saturation in laser light scattering.  
07 p1149 A69-18900

Saturation of optical activity by intense laser light /Saturation d'activite optique par lumiere laser intense/.  
22 p3959 A69-40017

## KIEMLE, H.

High-efficiency Lippmann-Bragg phase holograms /Lippmann-Bragg-Phasenhogramme mit hohem Wirkungsgrad/.  
06 p0926 A69-17481

## KIEPENHEUER, K. O.

Observational aspects of flare and surge theories.  
06 p0994 A69-17437

## KIESL, W.

Considerations on the sampling of extraterrestrial material.  
[UN PAPER 68-95381]  
01 p0150 A69-10480

Meteorites and the high-temperature origin of terrestrial planets.  
19 p3407 A69-36079

## KIESLING, E. W.

Linear limit stresses of some photoelastic and mechanical model materials.  
20 p3628 A69-37777

## KIESSLING, M. D.

Titanium advances in jet engine design/ manufacturing technology.  
[ASM PAPER D8-26.4]  
07 p1143 A69-19673

Titanium's role in superjet engines.  
09 p1570 A69-22062

## KIEVITS, F. J.

The influence of trace element additions on the precipitation behaviour of industrial aluminum alloys /Die Beeinflussung des Ausscheidungsverhaltens technischer Aluminiumlegierungen durch Zusaetze von Spurenelementen/.  
16 p2801 A69-31783

## KIFUNE, T.

Search for quarks.  
15 p2674 A69-30308

## KIHARA, T.

Models of the concentration of matter into galaxies in an expanding universe. II.  
08 p1381 A69-19794

Electrical conductivity of weakly ionized gases in quiescent and turbulent states.  
14 p2502 A69-29991

## KIHIRA, M.

Natural frequency of thin plates.  
22 p4045 A69-40821

## KIHLMAN, B. A.

Survival, chromosome abnormalities, and recovery in heavy-ion- and X-irradiated mammalian cells.  
03 p0373 A69-13492

## KIL, V. I.

Experimental study in the simulation of various types of neurons /Eksperimental'noe issledovanie po modelirovaniu neuronov razlichnykh tipov/.  
20 p3471 A69-37256

## KILANOVSKII, M. P.

Relation between the values of  $f_{sub\ 0}$  and  $F_2$  at high-latitude stations during the winter season /Sviaz mezhdu znacheniiami  $f_{sub\ 0}$  i  $F_2$  na stantsiakh vysokikh shirot v zimniy sezon/.  
20 p3526 A69-37665

## KIIATOV, K. K.

Effective mass of electrons in cadmium arsenide /Efektivnaya massa elektronov v arsenide kadmia/.  
13 p2318 A69-27897

## KIJKO, I. A.

A cylindrical shell under the influence of an axial impact load /Tsilindricheskaya obolochka pod deistviem osetoi udarnoi nagruzki/.  
18 p3217 A69-34599

**KIKO, F. J.**  
Results of VOR path stability investigations.  
03 p0392 A69-13245

**KIKUCHI, B.**  
Power dependence on repetition time of the Q-switched CO sub 2 laser.  
23 p4173 A69-41566  
CO sub 2 gas laser.  
24 p4327 A69-42640

**KIKUCHI, C.**  
Paramagnetic resonance of erbium in CaWO sub 4.  
04 p0643 A69-15141

**KIKUCHI, S.**  
On the complete system of integrals in celestial mechanics.  
08 p1382 A69-19872  
Preparation and properties of epitaxial gallium arsenide.  
[ECS PAPER 62]  
08 p1373 A69-21067

**KIKUCHI, Y.**  
Numerical simulation of the blocking process.  
16 p2809 A69-32602

**KIKUHARA, S.**  
Design of the blowing-type BLC system on the Japanese STOL seaplane.  
05 p0695 A69-15546

**KIKVIDZE, R. R.**  
Current-convective instability in an inhomogeneous solid-state plasma /Tokovo- konvektivnaia neustoiichivost' v neodnorodnoi tverdotel'noi plazme/.  
15 p2665 A69-30042

**KILB, R. W.**  
Suppression of del B drift in curved theta pinch.  
11 p1925 A69-24313

**KILBOM, A.**  
Physical demands on cabin personnel in civil aviation.  
21 p3665 A69-39180

**KILCHEVSKAIA, E. N.**  
Theory of collisions of elastic bodies in the presence of thermoelastic effects /K teorii soudarenii uprugikh tel pri nalichii termouprugikh effektiv/.  
05 p0841 A69-16207

**KILCHEVSKII, N. A.**  
The Gauss principle in the mechanics of continua /Printsip Gaussa v mekhanike sploshnoi sredy/.  
11 p1984 A69-25170  
Theory of Collisions of Solid Bodies /Teoriia Soudarenii Tverdykh Tel/.  
18 p3210 A69-34259  
Surface waves created by colliding elastic bodies /O poverkhnostnykh volnakh, voznikaushchikh pri soudarenii uprugikh tel/.  
23 p4226 A69-41702

**KILDEGAARD, A.**  
Bending of a cylindrical shell subject to axial loading.  
11 p1979 A69-24818

**KILDIUSHOVA, L. A.**  
Measurement of the electrical conductivity of the air behind incident and reflected shock waves by the electrode method /Izmerenie elektroprovodnosti vozdukh na padaiushchei i otrazhennoi udarnoi volnoi elektrodnykh metodom/.  
11 p1888 A69-25220

**KILGROE, J. D.**  
Ignition models - Solid propellant rocket motors.  
[WSCI PAPER 68-35]  
07 p1203 A69-18352

**KILIN, V. S.**  
Integral hemispherical emissivity of pyrolytic zirconium carbide /Integral'naia polusfericheskaia izluchatel'naia sposobnost' piroliticheskogo karbida tsirkonia/.  
15 p2640 A69-30985

**KILION, N. E.**  
A case of variation of the transfer function of an invariant servo drive /Sluchai izmenenii peredatochnoi funktsii invariantnogo slediashchego privoda/.  
04 p0584 A69-15418

**KILLIAN, H. W.**  
ASTRID.  
17 p3001 A69-33424

**KILLIAN, J.**  
Design evolution of mechanically despun antennas from ATS to Intelsat.  
03 p0403 A69-13239

**KILLIAN, J. D.**  
The design of the mechanically despun antenna for the Intelsat-III communications satellite.  
22 p3913 A69-40691

**KILLIANY, J. M.**  
Effects of electric fields on annealing of radiation damage in MOSFET's.  
05 p0733 A69-16562

**KILLIP, E. L.**  
Airport problems in flight operations.  
17 p3004 A69-34207

**KILMER, E. E.**  
Application of heat resistant explosives to space systems.  
10 p1750 A69-23014

**KILMER, W. L.**  
A learning model of brain stem reticular formation.  
05 p0711 A69-15802  
Assembly of computers to command and control a robot.  
21 p3679 A69-39603  
A model of the vertebrate central command system.  
24 p4273 A69-42910

**KILZ, M.**  
A step towards an automated ATC - The SRE- III medium range radar.  
20 p3496 A69-37932

**KIM, A. KH.**  
Circular motion of a fluid with variable rheological characteristics between two coaxial cylindrical surfaces /Krugovoe dvizhenie zhidkosti s peremennymi reologicheskimi kharakteristikami mezhdu dvumia koaksial'nyimi tsilindricheskimi poverkhnostiami/.  
01 p0061 A69-10733

**KIM, C.**  
High-power and high-efficiency GaAs avalanche diodes.  
16 p2760 A69-32015

**KIM, C. K.**  
Gallium arsenide IMPATT diodes.  
20 p3504 A69-36914

**KIM, D. P.**  
Controllability conditions in a pursuit problem /Ob usloviakh upravliaemosti v odnoi zadache sblizhenia/.  
21 p3825 A69-39629

**KIM, G. I.**  
Energy integral in the dynamics of a system of points of variable mass.  
05 p0794 A69-16685

**KIM, H. H.**  
Iodine infrared laser.  
[IEEE PAPER T-5]  
07 p1154 A69-19082

**KIM, H. W.**  
An adsorption study of O sub 2 and H sub 2 on Mo by field emission retarding potential analyser.  
08 p1268 A69-20179

**KIM, I. V.**  
Steady-state problems of an elastic orthogonally anisotropic cylinder /Staticheskie zadachi dlia ortogonal'nogo- anizotropnogo uprugogo tsilindra/.  
13 p3269 A69-28528

**KIM, J. H.**  
Studies on hypoxia. III - Effects on leucine- super 3 H incorporation by submandibular gland cells of rat neonates.  
22 p3887 A69-41195

**KIM, J. J.**  
Nonlinear theory of the Ex B instability.  
16 p2819 A69-31682

**KIM, J. S.**  
Observations of M arc at Moscow, Idaho, U.S.A.  
12 p2065 A69-26105

**KIM, K. H.**  
Uniformity of proton beams available at the NASA synchrocyclotron /SREL/.  
05 p0742 A69-15992  
Uniformity of proton beams available at the NASA synchrocyclotron /SREL/.  
16 p2814 A69-32201

**KIM, K. I.**  
Liquid-metal MHD systems with laminar flow and electric power generation by the synchronous principle /Zhidkometallicheskie MGD-sistemy so sloistym potokom i otkorom elektricheskoi moshchnosti po sinkhronnomu printsipu/.  
13 p2206 A69-27491  
Rayleigh-Taylor instability and methods of stabilizing it in synchronous liquid-metal MHD generators /Neustoiichivost' Releia- Teilora v zhidkometallicheskiikh sinkhronnykh MGD-generatorakh i sposoby ee stabilizatsii/.  
13 p2307 A69-27508

Stability criterion for the motion of piston flow in a traveling magnetic field /Kriterii ustoiichivosti dvizhenia porshnevoogo potoka v begushchem magnitnom pole/.  
14 p2500 A69-29903

**KIM, L. P.**  
Discrete model for investigating the vibrations of beams /Diskretnaia model' dlia issledovaniia kolebaniia balok/.  
02 p0336 A69-11462  
Electronic simulation of the dynamic stability of an elastic beam-type structure /Elektronnoe modelirovanie dinamicheskoi ustoiichivosti uprugoi konstruktсии balochnoogo tipa/.  
11 p1986 A69-25344

**KIM, M. J.**  
MOS-FET fabrication problems.  
20 p3506 A69-37779

**KIM, M. S.**  
Studies on hypoxia. IV.  
22 p3887 A69-41193

**KIM, S. K.**  
Modified admittance, perpendicular susceptibilities, and transformation of correlations of the Ising model.  
01 p0115 A69-10019  
Theory of localized and non-localized adsorption.  
06 p0980 A69-17387  
Involutorial matrices based on the representation theory of GL/2/.  
20 p3568 A69-31579

**KIM, V. F.**  
Quasigeostrophic model of geopotential forecast on a hemisphere.  
02 p0273 A69-11434

**KIM, W. J.**  
On the zeros of solutions of y super /n/ plus py equals 0.  
07 p1172 A69-18378

**KIM, Y. W.**  
Construction of a shock tube for metallic vapors.  
18 p3116 A69-34453

**KIMBALL, D. S.**  
Dynamics of the aurora and associated phenomena.  
15 p2595 A69-30214  
The auroral and polar magnetic substorms over Alaska.  
15 p2595 A69-30215

**KIMMEL, E. R.**  
Recrystallization in thoria-dispersed nickel sheet.  
20 p3557 A69-36958

**KIMMITT, M. F.**  
Time-dependent processes in CO sub 2 laser amplifiers.  
08 p1324 A69-20098  
High peak power from a CO sub 2 laser system.  
11 p1899 A69-25053  
Rate processes in the CO sub 2 laser.  
11 p1899 A69-25054  
Gain saturation in CO sub 2 laser amplifiers.  
11 p1899 A69-25055  
Rotational relaxation and gain saturation in CO sub 2 laser amplifiers.  
21 p3736 A69-38941

**KIMOTO, K.**  
A study of combustion in simple combustion chamber.  
18 p3230 A69-34837

**KIMPARA, A.**  
The developments of the study on whistlers and atmospherics in Japan for the last 40 years.  
15 p2595 A69-30418

**KIMURA, H.**  
Ionospheric wind and diffusion detected by the sodium cloud method.  
20 p3529 A69-37796

**KIMURA, I.**  
A study on probe measurements of flowing partially-ionized high-density gases.  
06 p0964 A69-17196  
Electron density measurement by radio propagation technique.  
20 p3542 A69-37792

**KIMURA, K.**  
Considerations on requirements to capacities of navigation satellite system around Japan.  
[UN PAPER 68-95226]  
01 p0113 A69-10520



## KIMURA, M.

- Analysis and design of wall attachment device by a jet model of unsymmetrical velocity profile.  
02 p0231 A69-12072
- Study on a semi-hot wall duct for MHD generators.  
13 p2372 A69-27473

## KIMURA, R.

- Wear properties of plastics.  
11 p1892 A69-25021

## KIMURA, T.

- Multiple mode locking of lasers.  
17 p2980 A69-32957
- New hypersonic gun tunnel at Kyoto University.  
22 p3927 A69-40587

## KIMURA, Y.

- Stereo-radiography using holographic techniques.  
08 p1313 A69-20178

## KINAWI, A. A.

- Impurity effects on heterogeneous nucleation from the vapor. III - Mercury on pyrex glass.  
13 p2321 A69-28005

## KINBER, B. E.

- Lateral radiation of nonsymmetric mirror antennas /Bokovye izlucheniye nesimmetrichnykh zerkal'nykh anten/.  
02 p0214 A69-11601
- Diffraction by two parallel cylinders.  
02 p0217 A69-12261
- Methods of designing collimator lenses /Metody rascheta kollimatorynykh linz/.  
06 p0895 A69-17454
- Fringe radiation of nonsymmetric mirror antennas.  
11 p1846 A69-24708
- Design of collimator lenses.  
20 p3508 A69-37939

## KINCAID, W. K., JR.

- Control task performance in the lunar visual environment.  
12 p2059 A69-26554

## KINDL, H.

- Receiving APT-pictures with simple electronic instruments.  
[UN PAPER 68-95451] 01 p0108 A69-10458
- Signal conversion by multiple modulation in optical communication systems.  
07 p1075 A69-18472

## KINDLER, K.

- Status of measurement techniques in the DVL-plasma wind tunnel PK 1 /Stand der Messtechnik am DVL-Plasmainkanal PK 1/.  
[DVL-849] 04 p0584 A69-14823
- Response times in pressure pipes for arbitrary Knudsen numbers /Ansprechzeiten in Druckleitungen fuer beliebige Knudsenzahlen/.  
10 p1677 A69-22900

## KINDRATENKO, A. M.

- Reflection of an electromagnetic wave from a magnetoactive plasma in the case of oblique incidence. II /Pro vidbitiia elektromagnitnok ehvili vid magnitoaktivnoi plazmi pri pokhilonu padinni. II/.  
22 p3990 A69-40788
- Nonlinear interaction of surface waves /Pro nelineinu vzaemodiiu poverkhnevikh khvil/.  
22 p3990 A69-40790

## KING-HELE, D. G.

- Geophysical research based on visual observations of satellites.  
[UN PAPER 68-95789] 01 p0064 A69-10459
- Profile of upper atmosphere density at heights between 130 and 160 km, from the orbit of the satellite 1968-59B.  
02 p0245 A69-12728
- The decay of Cosmos 253 rocket.  
05 p0830 A69-16656
- Air density at a height of 470 km between January 1967 and May 1968, from the orbit of the satellite 1966-118A.  
09 p1488 A69-21659
- The effect of atmospheric rotation on a satellite orbit, when scale height varies with height.  
09 p1594 A69-21660
- Variations in upper atmosphere density at heights of 140-180 km between July and October 1968.  
12 p2066 A69-26229
- Evaluation of odd zonal harmonics in the geopotential, of degree less than 33, from the analysis of 22 satellite orbits.  
14 p2439 A69-29118

- Air density at heights between 130 and 180 km, from analysis of the orbits of 1968-59A and B.  
15 p2599 A69-31348

- Comparison of air densities derived from the orbits of 1966-51A, B and C.  
15 p2600 A69-31349

- The upper atmosphere and its influence on satellite orbits.  
15 p2600 A69-31350

- Average rotational speed of the upper atmosphere from changes in satellite orbits.  
15 p2600 A69-31352

- Air density at heights between 130 and 160 km, from analysis of the orbit of 1968-59B.  
16 p2776 A69-32095

- Air density at heights of 140-180 km, from analysis of the orbit of 1968-59A.  
22 p3935 A69-39971

## KING-SMITH, E. A.

- Periodic cycles in integral pulse frequency modulation /IPFM/ systems.  
05 p0737 A69-15865

## KING, C. B.

- Dielectric processing for low-cost ablation heat shields.  
19 p3318 A69-35538

## KING, D. G.

- Pulse compression by optical correlation techniques.  
03 p0397 A69-13732

## KING, D. S.

- Pulsating stars.  
04 p0653 A69-14625

## KING, E. A.

- Moessbauer investigation of shocked and unshocked iron meteorites and fayalite.  
03 p0517 A69-14231

## KING, E. A., JR.

- Meteorite fall at Pueblito de Allende, Chihuahua, Mexico - Preliminary information.  
08 p1396 A69-20686

## KING, E. L.

- Multifunction receiver system for integrated tracking, telemetry and ranging data acquisition.  
07 p1081 A69-19101

## KING, E. O.

- The dynamic simulation of turbine engine compressors.  
[AIAA PAPER 69-486] 16 p2842 A69-32697

## KING, G.

- Transferred-electron bulk effects in gallium arsenide.  
03 p0484 A69-13292

## KING, G. A. M.

- The validity of the "overlay" technique for analysing the F1-F2 transition.  
12 p2065 A69-26102

## KING, H.

- A proposed low cost proximity warning device for aircraft.  
17 p2917 A69-34103

## KING, H. J.

- Systems characteristics of liquid mercury cathode thrusters.  
[AIAA PAPER 69-237] 09 p1565 A69-21246
- Plasma generator for space vehicle neutralization.  
[AIAA PAPER 69-273] 09 p1567 A69-21263
- 2-1/2 kw low specific impulse, hollow cathode mercury thruster.  
[AIAA PAPER 69-300] 09 p1569 A69-21880

## KING, I. P.

- Elasto-plastic solutions of engineering problems - "Initial stress", finite element approach.  
15 p2706 A69-30433

## KING, J. A.

- The transient performance of a hydraulic turbine-driven inducer - Computer predictions and test verifications.  
[AIAA PAPER 69-552] 16 p2741 A69-32747

## KING, J. E.

- Nonisothermal wave propagation and instabilities in indium antimonide.  
07 p1197 A69-18467

## KING, J. L.

- Non-Darwinian evolution.  
22 p3871 A69-40060

## KING, J. W.

- An explanation of the magnetic declination effect in the ionospheric F2-layer.  
18 p3126 A69-34256

- A review of topside sounder studies of the equatorial ionosphere.  
20 p3530 A69-37869

## KING, J., JR.

- Kinetic analysis of the ion-molecule reactions in nitrogen-hydrogen mixtures using ion cyclotron resonance.  
12 p2131 A69-25985

- Analysis of the ion-molecule reactions in gaseous H sub 2, D sub 2, and HD by ion cyclotron resonance techniques.  
20 p3578 A69-36934

## KING, L. J.

- Biocrystallography - An interdisciplinary challenge.  
21 p3656 A69-38922

## KING, M.

- Holographic processing of radar returns.  
19 p3314 A69-36598
- Holographic storage of electric signals.  
23 p4164 A69-41626

## KING, P. G. R.

- Ring-laser bias using reciprocal optical components.  
21 p3735 A69-38651

## KING, R. J.

- Correlation of gas turbine exhaust silencer performance in the laboratory and in service.  
[ASME PAPER 68-WA/GT-9] 05 p0812 A69-16144

- Electromagnetic wave propagation over a constant impedance plane.  
10 p1655 A69-23422

- Prediction methods and trends for helicopter rotor noise.  
18 p3088 A69-35224

## KING, R. W.

- Post Boost propulsion subsystem accident/incident response methods study.  
10 p1753 A69-22972

- Considerations in the design of a model propagation path to study obstacle diffraction.  
17 p2917 A69-32847

- Welding of superalloy turbine hardware.  
[ASM PAPER D8-16.3] 20 p3551 A69-38137

## KING, R. W. P.

- A simple formula of current in dipole antennas.  
02 p0218 A69-12330

- Arrays of cylindrical dipoles.  
04 p0574 A69-14353

- Theoretical and experimental studies on the long dipole antenna.  
08 p1281 A69-20019

## KING, T. T.

- Technical note - Effect of applied current on stress corrosion of beryllium.  
21 p3747 A69-39436

## KING, W.

- A new solution potential measurement for predicting stress corrosion performance of 2219 aluminum alloy products.  
16 p2798 A69-31716

## KING, W. H.

- Additional studies on the diffusion welding of titanium.  
01 p0086 A69-10535

- Medical evaluation of missile fuel handlers.  
09 p1447 A69-22556

- The tensile properties and fracture characteristics of titanium diffusion welds.  
24 p4331 A69-42939

## KING, W. S.

- Hypersonic strong interaction on flat plate with uniform blowing.  
04 p0588 A69-14722

## KING, W. W.

- Vibration of a cantilever subjected to a tensile follower force.  
16 p2871 A69-31899

## KINGSBURY, J.

- Plastics in space flight programs.  
21 p3751 A69-38533

## KINGSEP, A. S.

- Influence of nonlinear effects on plasma current instability /Vliianie nelineinykh effektiv na neustoiichivost' toka v plazme/.  
15 p2662 A69-30965

## KINGSLAND, L., JR.

- A simplified technique for estimating the navigational accuracy of an interplanetary spacecraft.  
[AIAA PAPER 69-899] 21 p3761 A69-39334

- Trajectory analysis for a Grand Tour mission to the outer planets.  
[AIAA PAPER 68-1055] 22 p4023 A69-40544
- KINGSTON, J. G.**  
An analysis of two-dimensional aligned-field magnetogasdynamics flows.  
05 p0806 A69-16735
- KINKEAD, W. K.**  
Frequency diversity for UHF telemetry.  
23 p4122 A69-41777
- KINMAN, T. D.**  
Redshifts of twelve quasi-stellar objects.  
09 p1602 A69-22225
- KINNARD, H. W. O.**  
Utilization of helicopters in military activities.  
[AIAA PAPER 69-190] 07 p1244 A69-19547
- KINNEMAN, R. E.**  
Protection of pilots against lasers.  
07 p1072 A69-19436
- KINNEY, G. F.**  
Response of structures to blast - A new criterion.  
04 p0671 A69-14476
- KINNEY, R. A.**  
An approximate method for solving the wave equation in an inhomogeneous medium.  
06 p1030 A69-17116
- KINNEY, R. B.**  
Fully developed frictional and heat-transfer characteristics of laminar flow in porous tubes.  
01 p0177 A69-11408  
Evaporation of mist by an intense light beam.  
09 p1539 A69-21346  
Turbulent flow, heat transfer, and mass transfer in a tube with surface suction.  
[ASME PAPER 69-HT-4] 24 p4414 A69-43562
- KINO, G. S.**  
Transport properties of GaAs.  
01 p0140 A69-11255  
The effect of small transverse dimensions on the operation of Gunn devices.  
04 p0639 A69-14335  
Effect of magnetic field and collisions on the ion current to a cylindrical probe.  
21 p3776 A69-38712
- KINOSHITA, T.**  
On a stochastic approach to the pulsating phenomena in the two-phase flow.  
24 p4305 A69-43633
- KINOSHITA, Y.**  
Propagation of Gaussian light beams in a random medium.  
02 p0208 A69-12308  
Fluctuation distribution of collimated and focused Gaussian beams propagated through a random medium.  
12 p2130 A69-26393
- KINSLOW, R.**  
Properties of reflected stress waves.  
[AIAA PAPER 69-363] 13 p2366 A69-28295
- KINZEL, J. A.**  
A generalized class of signal processing arrays.  
08 p1287 A69-20959
- KIPARISOV, S. S.**  
Preparation and properties of titanium carbide based cermets with an alloy-steel binder /Poluchenie i svoystva kermetov na osnove karbida titana so svyazkoi iz legirovannoi stali/.  
22 p3971 A69-40919
- KIPERMAN, M. E.**  
Application of nonlinear limb darkening laws in compact eclipsing binary systems /O primenenii nelineinykh zakonov potemnennia k kraiu v tesnykh dvoynykh sistemakh/.  
15 p2689 A69-30563
- KIPPENHAHN, R.**  
On the ages of delta Cephei stars.  
08 p1392 A69-20564  
Secularly unstable differential rotation in stars.  
20 p3605 A69-37826
- KIPPER, T.**  
Relative contents of elements in the atmospheres of 41 Cyg, nu Her, and sigma Boo /Otnositel'noe soderzhanie elementov v atmosferakh 41 Cyg, nu Her i sigma Boo/.  
12 p2157 A69-26335  
Relative abundances of elements in the atmospheres of 41 Cyg, upsilon Her and sigma Boo /Otnositel'noe soderzhanie elementov v atmosferakh 41 Cyg, upsilon Her i sigma Boo/.  
14 p2519 A69-29356
- KIPPER, T. A.**  
Spectrophotometry of F stars. II.  
16 p2864 A69-32596  
Spectrophotometry of F stars. IV - Line profiles in the spectra of sigma Boo, nu Her, and 41 Cyg /Spektrofotometriia F-zvezd. IV - Kontury linii v spektrakh sigma Boo, nu Her i 41 Cyg/.  
19 p3426 A69-36578
- KIPPOLA, W. J.**  
An experimental study of a cumulative fatigue damage indicator.  
17 p3053 A69-32989
- KIPRIANOV, A. I.**  
Study of the effectiveness of various types of polymethine dyes used in passive Q-switches of neodymium lasers /Issledovanie effektivnosti razlichnykh tipov polimetinovykh krasitelei, primeniayemykh v passivnykh zatvorkakh neodimovykh OKG/.  
17 p2983 A69-33968
- KIRAL, A.**  
The stellar group Ba 6 /Die Strenggruppe Ba 6/.  
16 p2854 A69-31650  
The open galactic cluster NGC 2254 /Der offene Sternhaufen NGC 2254/.  
16 p2854 A69-31651
- KIRBY, H. D.**  
An advanced color chemistry for adaptation to black and white processors.  
22 p3948 A69-40990
- KIRBY, M. J.**  
Measuring maintenance effectiveness.  
10 p1669 A69-22982
- KIRBY, R. R.**  
Function of the Bird respirator at high altitude.  
14 p2406 A69-29290
- KIRCH, O.**  
Method for calculating the natural vibrations of plane wide blades of turbomachines /Ein Berechnungsverfahren fuer die Eigenschwingungen flacher, breiter Schaufeln in axialen Turbomaschinen/.  
08 p1376 A69-20764
- KIRCHGAESSNER, K.**  
Stability of bifurcation solutions of a hydrodynamic boundary-value problem /Stabilitaet von Verzweigungslösungen der hydrodynamischen Randwertaufgabe/.  
10 p1677 A69-22901  
Branching analysis for the Taylor problem.  
17 p2958 A69-34152  
Branching solutions of the Benard problem.  
19 p3301 A69-36791
- KIRCHHOFF, H. W.**  
Telemetry in industrial and efficiency medicine with special consideration of pulse rate measurement /Die Telemetrie in der Arbeits- und Leistungs-medicin unter besonderer Beruecksichtigung der Pulsfrequenzmessung/.  
15 p2559 A69-31228  
A new method of determining the flow rate in the ascending aorta, the stroke volume and the cardiac output with the aid of ballistocardiography /Ueber eine neue Methode der Bestimmung des Stromungsgeschwindigkeit in der Aorta ascendens, des Schlagvolumens und der Herzleistung mit Hilfe der Ballistokardiographie/.  
17 p2915 A69-33772  
Hypertension and aviation medicine.  
23 p4087 A69-41795
- KIRCHHOFF, R. H.**  
An experimental study of the shock structure in a partially ionized gas.  
[AIAA PAPER 69-697] 17 p3011 A69-33466
- KIRCHNER, H. P.**  
New finishing processes for oxide ceramics.  
09 p1510 A69-22350  
Thermal expansion anisotropy of oxides and oxide solid solutions.  
20 p3567 A69-38066
- KIRCHNER, S.**  
Improvement of the wind evaluation accuracy with the aid of a new instrument /Verbesserung der Windauswertgenauigkeit mit Hilfe eines neuen Gerates/.  
12 p2079 A69-25896
- KIREEV, E. K.**  
Polarization errors in phase-type direction finding.  
04 p0561 A69-15404
- KIREEV, P. S.**  
Zone structure of Si-SiO sub 2 /O zonnnoi strukture Si-SiO sub 2/.  
09 p1555 A69-21478  
Investigation of the electrophysical properties of the Cd sub x Hg sub 1-x Te alloy /Issledovanie elektrofizicheskikh svoystv splava Cd sub x Hg sub 1-x Te/.  
09 p1557 A69-21737  
Properties of a p-n junction in cadmium telluride /O svoistvakh p-n-perekhoda v telluride kadmia/.  
10 p1744 A69-23212  
Effect of temperature on the photosensitivity spectrum of cadmium telluride thin films /Vliianie temperatury na spektr fotochuvstvitel'nosti tonkikh sloev tellurida kadmia/.  
13 p2318 A69-27889  
Band structure of Si-SiO sub 2.  
15 p2669 A69-30723  
Studies on the electrical properties of Cd sub x Hg sub 1-x Te alloys.  
20 p3584 A69-38215
- KIREEV, V. T.**  
Influence of nonequilibrium chemical reactions on the decay of an arbitrary discontinuity.  
07 p1119 A69-18705  
Calculation of the motion of a shock wave and flow parameters in a shock tube with a noninstantaneously opening diaphragm /Raschet dvizheniia udarnoi volny i parametrov potoka pri nemgnovennom otkrytii diafragmy v udarnoi trube/.  
14 p2432 A69-29623  
Reflection of a strong shock wave from a sphere and a cylinder /Ob otrazhenii sil'noi udarnoi volny ot sfery i tsilindra/.  
19 p3298 A69-36385
- KIREEVA, G. B.**  
Buckling of a circular plate under radial compression /Vypuchivanie krugloi radial'no szhatoi plastinki/.  
21 p3834 A69-38722
- KIREEVA, N. I.**  
Unsteady flow around models in an electromagnetic shock tube.  
07 p1119 A69-18744
- KIRENSKII, L. V.**  
Experimental biological life support system. I - Continuous cultivation of algae as a link of a closed ecosystem.  
01 p0020 A69-11077  
Experimental biological life support system. II - Gas exchange between man and microalgae culture in a 30-day experiment.  
01 p0021 A69-11078
- KIRIAN, G. V.**  
Analysis of the chemical composition of lunar surface by direct methods.  
11 p1832 A69-24629
- KIRICHENKO, A. IA.**  
Allowance for the effects of multiple reflection from dielectric walls in the microwave probing of plasmas /Uchet effektivov mnogokratnogo otrazheniia od dielektricheskikh stenok pri SVCh-zondirovanii plazmy/.  
14 p2498 A69-29806
- KIRICHENKO, A. N.**  
Stability and vibration of truncated orthotropic conical shells.  
16 p2873 A69-32133
- KIRICHENKO, A. P.**  
Characteristic reflection curves with normal irradiation of a surface.  
03 p0534 A69-14161
- KIRICHENKO, IU. A.**  
Heat transfer by free convection in a spherical volume /Teploobmen pri svobodnoi konveksii v sferovom ob'eme/.  
04 p0686 A69-14992  
Investigation of free convection in closed axisymmetric volumes /Issledovanie svobodnoi konveksii v zamknytykh osesimmetrichnykh ob'ekakh/.  
21 p3848 A69-38634
- KIRICHENKO, M. F.**  
Sufficient conditions for the stability of motion in the finite and in the whole of nonlinear systems /Pro dostatni umovi stikosti rukhu v skhinennomu i tsilomu nelineiniikh sistem/.  
15 p2652 A69-30660
- KIRICHENKO, N. F.**  
Theory of N. G. Chetaev concerning the stability of an unsteady motion during a given time interval /K teorii N. G. Chetaeva ob ustoiichivosti neustanovivshiesia dvizheniia na zadannom intervale vremeni/.  
05 p0794 A69-16209



Stability of a motion in the case of constantly acting disturbances in the finite /Ustoichivost' dvizheniia pri postoianno deistviushchikh vozmushcheniakh v konechnom/.  
05 p0794 A69-16450

**KIRICHINSKII, B. R.**

Measurement of the X-ray radiation in microwave devices /Izmerenie rentgenovskogo izlucheniia v SVCh-ustanovkakh/.  
21 p3664 A69-39059

Biological action of ruby laser emission /O biologicheskome deistvii izlucheniia rubinovogo lazera/.  
21 p3665 A69-39060

**KIRICHOK, P. P.**

X-ray study of scandium-containing ferrites /Rentgeniv'ske vivcheniia feritiv, shcho mistiat' skandii/.  
03 p0491 A69-14053

X-ray investigation of scandium-containing ferrites.  
18 p3182 A69-35046

**KIRICHUK, A. S.**

Dependence of the current and electroluminescence brightness on the reverse voltage in SiC diodes /Zavisimost' toka i iarkosti elektroluminestentsii ot obratnogo napriazheniia v diodakh SiC/.  
15 p2573 A69-30062

**KIRIENKO, V. I.**

Autoionic-microscopic study of defects in the crystalline structure of neutron-irradiated tungsten /Avtoionno-mikroskopicheskoe issledovanie defektov kristallicheskogo stroeniia v vol'frame, obluchennom neutronami/.  
21 p3749 A69-39623

**KIRIK, I. U. M.**

Noise immunity of interrupted FM signal reception.  
09 p1459 A69-22640

**KIRIKOV, G. N.**

A year-long medical-technological experiment in a ground-based life-support system facility /Godovoi mediko-tekhnicheskii eksperiment v nazemnom komplekse sistem zhizneobespecheniia/.  
13 p2216 A69-28612

**KIRILENKO, V. M.**

Estimation of discharge formation time /K voprosu ob otsenke vremeni formirovaniia razriada/.  
19 p3381 A69-36603

**KIRILLIN, A. V.**

Continuous radiation of nitrogen plasma.  
11 p1922 A69-24231

**KIRILLIN, V. A.**

Magnetohydrodynamic Method of Obtaining Electrical Energy /Magnitogidrodinamicheskii Metod Polucheniia Elektroenergi/.  
06 p0870 A69-17905

Experimental investigation of the transport properties of a partially ionized plasma /Eksperimental'noe issledovanie transportnykh svoistv chastichno ionizirovannoi plazmy/.  
06 p0969 A69-17907

Explosive magnetohydrodynamic generator with a superconducting magnetic system /Vzryvnoi magnitogidrodinamicheskii generator so sverkhprovodiashechi magnitnoi sistemoi/.  
14 p2393 A69-28911

**KIRILLOV-UGRIUMOV, V. G.**

Study of cosmic-ray electrons and gamma quanta at altitudes up to 27.5 km /Issledovanie ekektrov i gamma-kvantov kosmicheskikh lucheii na vysotakh do 27,5 km/.  
10 p1758 A69-22830

Energy and angular distributions of 10 super 11 to 10 super 12 ev muons.  
13 p2332 A69-28420

Variations in the electron and gamma quanta intensities in the atmosphere /Ob izmeneniakh intensivnosti elektronov i gamma-kvantov v atmosfere/.  
20 p3587 A69-37046

A device for recording electrons with energies from 0.1 to 1.5 Gev in cosmic radiation /Pribor dlia registratsii elektronov s energiei 0,1 to 1,5 Gev v kosmicheskome izlucheni/.  
21 p3724 A69-39074

**KIRILLOV, I. R.**

Experimental investigation of a single-wave MHD machine /Eksperimental'noe issledovanie odnovolnovoi MGD-mashiny/.  
07 p1058 A69-19026

Experimental investigation of liquid-metal MHD generators /Eksperimental'nye issledovaniia zhidkometallicheskikh MGD-generatorov/.  
13 p2208 A69-27512

**KIRILLOV, N. E.**

Statistical characteristics of the individual magnetoionic components of an obliquely incident wave /Statisticheskie kharakteristiki otdel'nykh magnitoionnykh komponent volny pri naklonnom padenii/.  
02 p0314 A69-11691

The formation of pseudorandom uniformly distributed numbers from noise-like signals /Formirovanie psevdosluchainykh ravnomerno raspredelennykh chisel iz shumopodobnykh signalov/.  
13 p2218 A69-27248

Statistical characteristics of individual magnetoionic wave components in oblique incidence.  
13 p2355 A69-28722

**KIRILLOV, P. L.**

Apparatus for study of the boiling of potassium in tubes.  
03 p0534 A69-14150

**KIRILLOV, V. A.**

Calculation of the direction of the axis of a stream resulting from the mixing of turbulent jets.  
04 p0591 A69-15411

**KIRILLOV, V. V.**

Approximate solution of the equations for the boundary layer on the walls of an MHD generator /O priblizhennom reshenii uravnenii pogranichnogo sloia na stenkakh MGD-generatora/.  
06 p0871 A69-17914

Effect of boundary layers on the electrical characteristics of MHD generators.  
11 p1824 A69-24221

Applicability of the method of successive approximations for calculating the boundary layer during magnetohydrodynamic flow in channels /O primenimosti metoda posledovatel'nykh priblizhenii dlia rascheta pogranichnogo sloia pri magnitogidrodinamicheskom techenii v kanalakh/.  
11 p1932 A69-25491

Diffraction of electromagnetic waves in a plasma cylinder of small radius /Difraktsiia elektromagnitnykh voln na plazmennom tsilindre malogo radiusa/.  
16 p2751 A69-32031

Investigation of the dielectric polarization of BaTiO sub 3 and Ba sub x Sr sub 1-x TiO sub 3 in pulsed fields in the paraelectric phase /Issledovanie dielektricheskoi polarizatsii BaTiO sub 3 i Ba sub x Sr sub 1-x TiO sub 3 v impul'snykh poliakh v paraelektricheskoi faze/.  
22 p3996 A69-41165

**KIRILOVA, L. S.**

Incorrect problems in optimal control theory /A Review/ /Nekorrektnye zadachi v teorii optimal'nogo upravleniia /Obzor/.  
03 p0409 A69-13067

Incorrect problems in optimal control theory /survey/.  
14 p2424 A69-28749

**KIRILOVA, M. M.**

Interband transitions in molybdenum.  
03 p0442 A69-12986

**KIRILOVA, R. P.**

Microheterogeneity of monophase /according to the phase diagram/ titanium alpha-alloys /Mikroneodnorodnost' odnofaznykh po ravnovesnym diagrammam sostoiianiia alpha-splavov titana/.  
04 p0617 A69-14939

**KIRIN, I. U. M.**

Radiative perturbation of potassium terms in a ruby-laser radiation field.  
13 p2271 A69-27656

**KIRIUKHINA, A. I.**

Turbulent velocities and the structure of quiescent prominences /Turbulentnye skorosti i struktura spokoiynykh protuberantsev/.  
11 p1945 A69-24387

Turbulent velocities and the structure of quiescent prominences.  
24 p4375 A69-43777

**KIRIUSHENKOV, V. N.**

Orbits with small eccentricities and inclinations in the generalized problem of two fixed centers /Orbita s malymi ekscentrisitetami i naklonnostiami v obobshchennoi zadache dvukh nepodvizhnykh tsevtrov/.  
10 p1779 A69-23613

Effect of zonal harmonics on the motion of the fifth satellite of Jupiter /Vliianie zonal'nykh garmonik na dvizhenie piatogo sputnika Iupitera/.  
14 p2521 A69-29463

Influence of Galilean satellites on the motion of the fifth satellite of Jupiter /Vliianie galileevykh sputnikov na dvizhenie piatogo sputnika Iupitera/.  
23 p4214 A69-41730

**KIRK, B. E.**

Complement-fixing antigen from BHK-21 cell cultures infected with lymphocytic choriomeningitis virus.  
24 p4263 A69-43336

**KIRK, C. L.**

Runway excited vibrations in aircraft.  
14 p2392 A69-29504

**KIRK, D. B.**

Ballistic range tests of ablating and nonablating slender cones.  
[AIAA PAPER 69-179] 06 p1036 A69-18083

A new method for extracting aerodynamic coefficients from free-flight data.  
[AIAA PAPER 69-134] 06 p0864 A69-18161

**KIRK, J. N.**

The potential of radar in geological exploration.  
12 p2099 A69-27009

**KIRK, J. V.**

Reingestion characteristics and inlet flow distortion of V/STOL lift-engine fighter configurations.  
[AIAA PAPER 68-78] 12 p2012 A69-26762

**KIRKLAND, F. P.**

Fluid and thermodynamic modeling of a nuclear rocket vehicle.  
[SAE PAPER 690201] 07 p1178 A69-18306

**KIRKLEY, E. L.**

Limitations of the shock pulse as a design and test criterion.  
12 p2182 A69-26731

**KIRKO, I. M.**

Experimental discovery of the electromotive force along the external magnetic field induced by a flow of liquid metal /alpha-effect/.  
04 p0635 A69-14547

**KIRKPATRICK, D. L.**

Dry-lubricant films.  
15 p2642 A69-30328

**KIRKPATRICK, D. L. I.**

Experimental demonstration of the similarity of leading-edge vortices above slender wings in subsonic conical flow.  
04 p0543 A69-14820

**KIRKPATRICK, G. M.**

The future of cockpit TV-radar.  
[SAE PAPER 690327] 11 p1833 A69-24506

**KIRKPATRICK, H. B.**

Correlation of Ti-6Al-4V fractographs with mechanical behavior in methanol-acid, methanol, and air environments.  
16 p2799 A69-31718

**KIRKPATRICK, J. E.**

Development of a commuter airliner - A new role for general aviation.  
06 p0867 A69-17668

**KIRKPATRICK, J. P.**

The design and performance of a versatile 25 solar constant simulator.  
15 p2586 A69-30383

Thermal tests of an improved louver system for spacecraft thermal control.  
[AIAA PAPER 69-627] 17 p3071 A69-33269

**KIRKPATRICK, M. E.**

A study of chemical compatibility between ceramic whiskers and metallic matrix materials.  
09 p1527 A69-22359

Structure and properties of porous ionizer materials.  
10 p1710 A69-23166

A continuous process for the production of whisker reinforced composites.  
13 p2269 A69-28676

Development of new materials of construction for fuel cells.  
23 p4075 A69-42299

**KIRKWOOD, S.**

Carbohydrate components of Paleozoic plants.  
21 p3669 A69-39333

Carbohydrate components of upper carboniferous plant fossils from Radstock, England.  
21 p3661 A69-39534

**KIRNAS, I. G.**

Electrical properties of pyrolusite.  
05 p0809 A69-16374

**KIROV, K.**

Transient processes with double injection in CdS single crystals.  
21 p3780 A69-38833

## KIRPICHNIKOV, S. N.

Accurate calculation of the motion of artificial moon satellites, including solar and lunar radiation pressure. 04 p0662 A69-15251

## KIRPIKOV, V. A.

Investigation of the heat transfer and hydrodynamic resistance for a turbulent gas flow in the field of a longitudinal sign- variable pressure gradient. I /Issledovanie teploobmena i gidrodinamicheskogo soprotivleniia pri turbulentnom techenii gaza v pole prodol'nogo znakeremennogo gradianta davleniia. I/. 15 p2548 A69-31173

Investigation of heat transfer and hydrodynamic resistance for a turbulent gas flow in the field of longitudinal pressure gradient of variable sign. II /Issledovanie teploobmena i gidrodinamicheskogo soprotivleniia pri turbulentnom techenii gaza v pole prodol'nogo znakeremennogo gradianta davleniia. II/. 21 p3848 A69-38635

## KIRS, I. A.

Infrared effects in cadmium sulfide crystals with edge emission /Infrazrasnye efekty v kristallakh sul'fida kadmii s kraevym izlucheniem/. 10 p1746 A69-23565

## KIRSANOV, B. P.

Variation of the refractive index of liquids and glasses in a high intensity field of a ruby laser. 10 p1703 A69-23622

Nonlinear interactions of electromagnetic waves in an active medium and the possibility of using them in the creation of new types of lasers /Nelineinye vzaimodeistviia elektromagnitnykh voln v aktivnoi srede i vozmozhnost' ikh ispol'zovaniia dlia sozdaniia novykh tipov kvantovykh generatorov/. 12 p2110 A69-26910

The problem of obtaining a laser with smooth tuning of the lasing frequency. IV /K probleme sozdaniia lazera s pлавnoi perestroikoi chastoty generatsii. IV/. 20 p3554 A69-37723

Contribution to the problem of designing a laser with smooth emission-frequency retuning. V /K probleme sozdaniia lazera s pлавnoi perestroikoi chastoty generatsii. V/. 21 p3739 A69-39539

## KIRSCH, J.

Nonsimilar structure of blast wave with expanding interface, and application to hypersonic flows. 06 p0860 A69-17636

## KIRSCHNER, H. J.

Representation of observed Eulerian correlation functions in analytical form /Zur Darstellung gemessener Eulerscher Korrelationsfunktionen in analytischer Form/. 20 p3571 A69-37507

## KIRSHNER, J. M.

Jet flows. 05 p0746 A69-16008  
Fluerics 1969 - The state of the art. 17 p2904 A69-34067

## KIRSTEN, G.

Investigations of reversal phenomena of the main geomagnetic field /Untersuchungen zu Umkehrungserscheinungen des geomagnetischen Hauptfeldes/. 16 p2782 A69-32462

## KIRSTEN, P.

Considerations concerning the proof of the existence of periodic motions of simple nonlinear oscillators with velocity discontinuities /Ueberlegungen zum Existenzbeweis fuer periodische Bewegungen einfacher nicht-linearer Schwinger mit Geschwindigkeitsspruengen/. 21 p3771 A69-39009

## KIRSTEN, R.

The effect of training in swimming and running on the cellular function and structure of muscle /Die Wirkung von Schwimm- und Lauftraining auf die cellulaere Funktion und Struktur des Muskels/. 23 p4095 A69-42084

## KISELEV, A. A.

Some results of the biomedical experiment on the biosatellite "Kosmos-110." 08 p1261 A69-19827

Quantitative evaluation of the activity of animal cardiovascular systems during prolonged orbital flight. 08 p1261 A69-19828

## KISELEV, A. S.

The problem of vestibulo-vegetative reflexes during the action of Coriolis acceleration /K voprosu o vestibulo-vegetativnykh refleksakh pri deistvii uskoreniia koriolis/. 20 p3472 A69-37259

## KISELEV, A. Z.

Shaping of a randomly polarized signal with a given spectrum /Formirovanie sluchaino polarizovannogo signala szdannym spektrom/. 01 p0031 A69-10880

Optimal reception of an elliptically polarized signal in the presence of randomly polarized noise /Optimal'-nyi priem ellipticheskii polarizovannogo signala pri nalichii sluchaino polarizovannogo shuma/. 09 p1456 A69-22285

Shaping of a randomly polarized signal with a prespecified spectrum. 12 p2031 A69-26644

## KISELEV, B. A.

Thermooxidative degradation of various heat-resistant organosilicon binder resins. 17 p2992 A69-33744

## KISELEV, I. U. N.

Asymptotic solution of a time-optimal problem for control systems which are nearly linear. 10 p1666 A69-23883

## KISELEV, L. V.

Analysis of nonlinear control systems by the method of successive approximations /Analiz nelineinykh sistem upravleniia metodom posledovatel'nykh priblizhenii/. 13 p2237 A69-27252

## KISELEV, M. I.

Magneto-elastic flutter. 10 p1798 A69-23094

## KISELEV, O. M.

Problem of a gas bubble in a plane flow of an ideal fluid /K zadache o gazovom puzyre v ploskom potoke ideal'noi zhidkosti/. 24 p4302 A69-43478

## KISELEV, O. N.

Experimental studies of slow amplitude and phase variations of 10-centimeter radio waves on near-ground paths /Eksperimental'nye issledovaniia medlen-nykh variatsii amplitudy i fazy 10-santimetrovykh radiovoln na prizemnykh trassakh/. 08 p1275 A69-20424

## KISELEV, V. M.

Study of the causes of the effect of the gas temperature on He-Ne laser power output at lambda equals 6328 angstrom units /Issledovanie prichin vliianiia temperatury gaza na moshchnost' generatsii He-Ne lazera na lambda equals 6328 angstrom units/. 10 p1706 A69-24078

## KISELEVA, E. V.

Nonuniform distribution of electrical properties in indium arsenide single crystals /Neodnorodnost' raspredeleniia elektricheskikh svoistv v monokristallakh antimoniida indii/. 15 p2670 A69-31049

## KISELEVSKII, L. I.

Study of impulsive discharge in axial rotational air flow. 02 p0285 A69-11571

Use of a pulse discharge with a restricted channel cross section in experimental spectroscopy /K voprosu o primeneniim impul'snogo razriada s ogranichenным secheniem kanala v eksperimental'noi spektroskopii/. 06 p0964 A69-17253

## KISH, G.

Determination of the variations in the period of the satellites 63171 /Cosmos 17/ and 64531 /Cosmos 44/ /Opredelenie izmenenii perioda iskusstvennykh sputnikov 63171 /Kosmos 17/ i 64531 /Kosmos 44/. 12 p2173 A69-26439

## KISHAN RAO, K.

Axissymmetric thermal stresses in a spheroidal shell of arbitrary thickness. 05 p0836 A69-15923

## KISHI, F. H.

Approach guidance to cruise orbits. [AIAA PAPER 69-986] 22 p3978 A69-40366

## KISHIDA, H.

Error probability and power spectrum of PCM/PM signals with small phase deviation. 06 p0889 A69-17656

## KISHIDA, K.

New experimental method for determining dynamic stress-strain relation of metals. 03 p0524 A69-13065

## KISHKIN, S. T.

Possibility of attaining high strength with help of whisker crystals /Vozmozhnost' dostizheniia vysokoi prochnosti s pomoshch'iu nitevidnykh kristallov/. 09 p1525 A69-22142

Study of the diffusion mobility of nickel in the beta-phase of titanium and its alloys /Issledovanie diffuzionnoi podvizhnosti nikelia v beta-faze titana i ego splavov/. 11 p1902 A69-24274

Influence of the test conditions on the state of the surface layer of nozzle guide vanes /Vliianie uslovii ispytaniia na sostoianie poverkhnostnogo sloia lopatok soplovoego apparata/. 20 p3561 A69-37370

## KISIN, B. S.

Calculation of positive-curvature shells by the method of displacements, taking into account shear strain /Raschet obolochek polozhitel'noi krivizny metodom peremeshchenii s uchedom deformatsii sdviga/. 12 p2178 A69-26006

## KISLENKO, S. A.

Analysis of circuits with arbitrary magnetic couplings on a digital computer /Analiz tsepei s proizvol'nymi magnitnymi svyaziami s pomoshch'iu ETsVM/. 01 p0036 A69-10745

## KISLEVA, M. S.

Stratospheric humidity as determined from the absorption of solar radiation by a resolved spectral structure of water vapor. 09 p1536 A69-21864

## KISLIAKOV, A. G.

Experimental study of the altitude dependence of atmospheric absorption at the 4.1 mm wavelength. 02 p0206 A69-11450

Determination of radiowave absorption in atmosphere from the data on radiation. 05 p0723 A69-16779

Wideband superheterodyne radiometers of the millimeter wave range /Shirokopoloznye supereterodinye radiometri millimetrovogo diapazona voln/. 07 p1131 A69-18517

Radio emission of Venus and Jupiter at 2.25 and 8 mm wavelengths /Radioizluchenie Venery i Iupitera na volnakh 2.25 i 8 mm/. 11 p1956 A69-24396

Investigation of the Crab Nebula at wavelengths of 2.16 and 8.2 mm /Issledovaniia krabovidnoi tumanosti na volnakh 2,16 i 8,2 mm/. 19 p3428 A69-36875

Observation of solar radio emission by the 22-m radio telescope at the Crimean Astrophysical Observatory at 2.25 mm and 8.15 mm wavelengths. 22 p4020 A69-40295

Radio emission of Venus and Jupiter at 2.25 and 8 mm. 24 p4390 A69-43786

## KISLIAKOV, N. I.

Measurement of gas streams with nonorientable five-channel adapters /Izmerenie gazovykh potokov neorientiruemyimi piatikanal'nymi nasadkami/. 11 p1888 A69-25340

## KISLIAKOV, V. A.

Action of a centrifugal force on caloric nystagmus /O deistvii tsentrobezhnoi sily na kaloricheski nistagm/. 20 p3471 A69-37252

Microelectrode study of the vestibular neurons of the mesencephalon /Mikroelektroodnoe issledovanie vestibuliarnykh neuronov srednego mozga/. 20 p3471 A69-37254

## KISLIAKOVSKII, A. V.

A waveguide band filter /Volnovodnyi polosovoi fil'tr/. 23 p4139 A69-41945

## KISLITSYN, V. A.

Precision analysis of unsteady dynamic systems containing random parameters /Analiz tochnosti nestatsionarnykh dinamicheskikh sistem, soderzhashchikh sluchainnye parametry/. 03 p0408 A69-12948

## KISLIUK, V. S.

Hypsometric levels of the lunar surface. 03 p0512 A69-13689

Determination of lunar coordinate corrections from the observation of the annular solar eclipse of May 20, 1966 /Opredelenie popravok koordinat luny po nabludeniui kol'tseobraznogo solnechnogo zatmeniiia 20 maia 1966 g./. 15 p2686 A69-30532

Determination of lunar rotation elements from the distances between Moesting A and limb craters /Opredelenie elementov vrashcheniia luny po rassstoi-aniiam Mesting A-kraevoi krater/. 17 p3028 A69-32876



## KISLOOKII, V. N.

Shell and plate oscillations /Kolebaniia obolochek i plastin/.  
23 p4230 A69-42004

## KISLOV, A. IA.

Distribution of potential in a quasistationary coaxial plasma injector.  
03 p0478 A69-13838

## KISSELL, K. E.

Diagnosis of spacecraft surface properties and dynamical motions by optical photometry.  
21 p3671 A69-38340

## KISSEN, A. T.

Hypoxia warning - A new technique.  
07 p1071 A69-19430

## KISTEMAKER, J.

The electron cyclotron instability and high-frequency ionization in a beam-plasma experiment.  
05 p0798 A69-15612  
Ionization and current growth in an E x B discharge.  
09 p1552 A69-22042

## KISTIAKOWSKY, G. B.

Isotopic exchange between oxygen and carbon monoxide in shock waves.  
24 p4353 A69-43807

## KISTLER, R. D.

A sweeping neutral and positive ion mass spectrometer for atmospheric composition at satellite altitudes.  
19 p3314 A69-36681

## KISTOVA, E. J.

Gas sub x As sub 1 sub -x -based injection lasers.  
02 p0255 A69-11879

## KISTOVA, E. M.

Some properties of the ternary compound GaAs sub 1-x P sub x alloyed with selenium /Nekotorye svoystva troinogo soedineniia GaAs sub 1-x P sub x, legirovanogo selenom/.  
13 p2317 A69-27875  
Some properties of the ternary compound GaAs sub 1-x P sub x doped with selenium.  
21 p3782 A69-39141

## KIT, G. S.

Temperature stresses in an elastic plane with a temperature-insulated arc-shaped crack /Temperaturnye napriazheniia v uprugoi ploskosti s termoizolirovannoi dugoobraznoi treshchinoi/.  
01 p0164 A69-10078  
Influence of a homogeneous heat flux on the limit load of plates with cracks /O vlianii odnorodnogo teplovogo potoka na predel'nuu nagruzku dlia plastiny s treshchinoi/.  
19 p3441 A69-36744

## KITAIEV-SMYK, L. A.

Interaction between sensory systems in weightlessness.  
02 p0197 A69-11499  
Reactions of humans to short-term weightlessness /Reaktsii liudei pri kratkovremennoi nevesomosti/.  
07 p1060 A69-18574

Interaction between certain analysors during the formation of motor reactions in animals during weightlessness /O vzaimodeistvii nekotorykh analizatorov pri formirovani motornykh reaktsii zhivotnykh v nevesomosti/.  
20 p3470 A69-37247

Investigation of the orientation reflexes of animals in weightlessness /Issledovanie ustanovochnykh refleksov zhivotnykh pri nevesomosti/.  
20 p3470 A69-37248

## KITAIEV, V. F.

On the inversion mechanism in the CW argon-ion laser.  
12 p2106 A69-26319

## KITAGAWA, H.

Numerical solutions of two-dimensional elastic, plastic problems by conformal mapping and finite-difference method. II - Elastic torsion of circumferentially grooved shafts.  
02 p0346 A69-12419

Numerical solutions of two-dimensional elastic, plastic problems by conformal mapping and finite-difference method. III - Elastic-plastic torsion of circumferentially grooved shafts.  
02 p0346 A69-12420

## KITAGAWA, S.

Fatigue strength of aluminium alloy under actual service loads.  
19 p3342 A69-35772

## KITAIGORODSKII, A. B.

Determination of the parameters of linear vibrational systems from their reactions to pulse effects /Ob opredelenii parametrov lineinykh kolebatel'nykh sistem po ikh reaktsii na impul'snoe vozdeistvie/.  
12 p2178 A69-26004

## KITAIGORODSKII, S. A.

Certain problems in the physics of the near-water-atmospheric layer /in connection with the calculation of turbulent flow, amount of movement, heat, and humidity over the sea/ /Nekotorye voprosy fiziki privodnogo sloia atmosfery /v sviazi s raschetom turbulentnykh potokov kolichestva dvizheniia, tepla i vlagi nad morem//.  
14 p2443 A69-29839

## KITAMURA, M.

Light and radial-velocity changes in close binary systems.  
04 p0653 A69-14612  
Spectroscopic study of the eclipsing system R Canis Majoris.  
08 p1396 A69-20646

## KITAMURA, S.

Time variation of the velocity spheroid in the Galaxy due to star-cloud encounters.  
07 p1215 A69-18668  
Stability of nonlinear multivariable control systems with time lags by Lyapunov's direct method.  
12 p2048 A69-26079

## KITAMURA, T.

Investigation of quasi-periodic VLF emissions and their relation to geomagnetic micropulsations.  
01 p0063 A69-10274

## KITANIN, E. L.

The boundary layer of a conducting fluid in a magnetic field.  
10 p1727 A69-23093

## KITAO, K.

Effect of magnetic curvature on density gradient drift instabilities.  
13 p2305 A69-27375

## KITAYANA, S.

Transsequatorial reception of VLF radio waves from Australia.  
12 p2032 A69-26860

## KITAZAWA, M.

Fatigue behavior and grain size of commercially pure aluminum plates.  
10 p1711 A69-23356

## KITCHEL, D. L.

Saturn V holddown and service arm electrical systems development. [AIAA PAPER 69-309]  
10 p1670 A69-23043

## KITCHEN, W. J.

Electrical properties of vacuum deposited bismuth.  
02 p0296 A69-11878

## KITCHENSIDE, A. W.

Carbon fibres take to the air.  
21 p3750 A69-38428

## KITCHIN, A. L.

Properties of nickel-molybdenum-aluminum age hardening steels.  
04 p0613 A69-14527

## KITCHINGMAN, W. J.

X-ray diffraction studies of the effects of deformation on niobium alloys containing titanium, vanadium and zirconium.  
04 p0618 A69-15202

## KITINA, Z. V.

The InAs-InP phase diagram.  
03 p0483 A69-13024

## KITRILAKIS, S. S.

Organic Rankine cycle with reciprocating engine.  
23 p4067 A69-42237

## KITSENKO, A. B.

Excitation of oscillations in surface waves.  
11 p1931 A69-25365

## KITTERMAN, W. L.

Compact ZrH reactor development status and reactor thermoelectric space power systems.  
16 p2809 A69-31723

## KITTS, E. L., JR.

Ultrasonic paramagnetic resonance of Pr super 3 plus-CaF sub 2.  
24 p4360 A69-42790

## KIUN, G. I.

Solar activity and the dynamics of the upper atmosphere /Survey/ /Solnechnaia aktivnost' i dinamika verkhnnei atmosfery /obzor//.  
20 p3590 A69-37684

## KIUN, V. V.

Problem of mode competition in an ionized krypton laser /K voprosu o konkurentсии perekhodov v OKG na ionizirovannom kriptone/.  
15 p2635 A69-31106

## KIVSHIK, A. F.

Propagation of high-intensity electromagnetic waves in plasma waveguides /Rasprostraneniye elektromagnitnykh voln bol'shoi intensivnosti v plazmennyykh volnovodakh/.  
03 p0482 A69-14228

## KIWAK, R. S.

Diffusion bonding of metals.  
17 p2978 A69-33374

## KIYA, M.

The effects of buoyancy on the velocity and temperature distributions in a vertical wake of a heated body.  
19 p3296 A69-35761  
A contribution to the spreading of an axisymmetric wake with streamwise pressure gradient.  
19 p3296 A69-35762

## KIYAMA, S.

Electrical DC conductivity of a turbulent plasma.  
13 p2305 A69-27302

## KIYOKAWA, Y.

An analysis of second-order effects on laminar boundary-layer flow.  
11 p1872 A69-25127

## KIYOTO, S.

An analysis for the calibration data of a direction finder.  
06 p0897 A69-17533

## KIZILIRMAK, A.

Minima and new light-elements for eclipsing binaries.  
12 p2160 A69-26853

## KIZIMA, G. A.

Free oscillations of shells of zero Gaussian curvature with meridional ribs /Svobodnye kolebaniia obolochek nulevoi gaussovoi krivizny s meridional'nymi rebrami//.  
12 p2177 A69-25996

## KIZIUN, L. N.

Calculation of the physical libration constants of the moon from Schlueter's observations with the heliometer in Koenigsberg /1841-1843/ /Vychisleniye postoiannykh fizicheskoi libratsii luny iz geliometricheskikh nabludenii shliuteva v Kenigsberge /1841-1843 gg.//.  
17 p3028 A69-32875

## KIZNER, M.

A solid state S-band to VHF converter for 1970.  
19 p3270 A69-36238

## KJELAAS, A. G.

Spectral measurements and atmospheric stability.  
17 p2960 A69-33157

## KJELLBERG, R. N.

Time-intensity data in solar cosmic-ray events - Biological data relevant to their effects in man.  
03 p0374 A69-13500

## KLAASSEN, F. M.

Noise of VHF and MOS tetrodes.  
15 p2577 A69-30603

## KLAPP, E.

Application of numerical methods to the spreading of free turbulent gas jets /Die Anwendung numerischer Verfahren auf das Ausbreiten freier turbulenter Gass-trahlen/.  
15 p2590 A69-30157

## KLAPPROTT, D. K.

Dynamic mechanical properties of adhesives.  
24 p4338 A69-43460

## KLARMANN, J.

Observation of trans-iron nuclei in the primary cosmic radiation.  
21 p3787 A69-38327

## KLASS, P. J.

Radiation-hardened avionics gain interest.  
23 p4135 A69-41528

## KLASSEN, D. M.

Spectroscopic studies of ruthenium /III/ complexes - Assignment of the luminescence.  
07 p1200 A69-19219  
Ligand-field transitions in tertiary phosphine and arsine complexes of ruthenium /II/ and osmium /II/.  
07 p1075 A69-19483

- KLATT, D. H.**  
A limited speech recognition system.  
04 p0565 A69-15338
- KLATT, M.**  
Judgments of the acceptability of aircraft noise in the presence of speech.  
18 p3097 A69-34325
- KLAUDER, J. R.**  
Correlation effects in the display of picosecond pulses by two-photon techniques.  
02 p0259 A69-12654  
Spectral criterion for mode locked laser signals.  
13 p2270 A69-27197
- KLAUE, H. J.**  
Investigations of a Supersonic Radial-Flow Compressor /Untersuchungen an einem Ueberschall-Radialverdichter/.  
17 p2889 A69-32992
- KLAUS, E. E.**  
Boundary Lubrication- An Appraisal of World Literature.  
11 p1891 A69-24925
- KLAWANS, B. B.**  
Flight performance analysis of space systems.  
18 p3206 A69-34501
- KLEBANOV, A. G.**  
Investigation of the influence of the Reynolds number and gas and air temperatures on turbine- blade edge cooling efficiency /Issledovanie vlianiia chisla Reinal'dsa, temperatur gaza i vozdukh na effektivnost' okhlazhdeniia turbinnikh lopatok/.  
24 p4364 A69-43082
- KLEBER, P.**  
Distribution of the molecular flux density in space simulation chambers with cryowalls /Verteilung der Molekularstromdichte in Raumsimulationskammern mit Kryowaenden/.  
01 p0057 A69-11153  
Investigation of the molecular flux distribution in space-simulation chambers /Untersuchungen zur Verteilung des molekularen Flusses in Raumsimulations-Anlagen/.  
13 p2241 A69-28081
- KLEBESADEL, R. W.**  
Vela-4 satellite energetic particle experiment.  
[IEEE PAPER 3C-2] 07 p1134 A69-19196
- KLECZEK, J.**  
Oscillatory phenomena in quiescent prominences.  
07 p1205 A69-19245  
Relation of 1420 MHz radio emission to the distribution of photospheric magnetic fields, coronal emission and filaments.  
11 p1964 A69-25417  
Splintering loop prominences.  
17 p3029 A69-33052
- KLEEN, W.**  
Lasers /Laser/.  
06 p0936 A69-18002  
Phenomenological description and review /Phaenomenologische Beschreibung und Uebersicht/.  
06 p0936 A69-18003
- KLEIMAN, L. A.**  
Project Icarus.  
04 p0652 A69-14564
- KLEIMAN, Z. IA.**  
Measurement of the light pressure and pulse energy of laser radiation /Izmerenie svetovogo davlennia i energii impul'sa lazernogo izlucheniia/.  
22 p3961 A69-40246
- KLEIMENOV, A. F.**  
Oscillations in nearly-Liapunov self- contained systems with lag.  
14 p2482 A69-28799  
Periodic solutions of time-lag systems close to Liapunov systems /Periodicheskie resheniia sistem s posledeistviem, blizkikh k sistemam Liapunova/.  
22 p3980 A69-40107
- KLEIMENOVA, L. N.**  
Changes in the calcium metabolism of rats under conditions of hypokinesia /Izmenenie kal'tsiyevogo obmena u krys v usloviakh gipokinezii/.  
13 p2212 A69-28618
- KLEIMENOVA, N.**  
Attempt to distinguish between very low frequency /VLF/ day and evening emissions by means of magnetic activity - Application to magnetospheric storm periods /Essai de distinction entre les emissions a tres basses frequences /T.B.F./ du jour et du soir au moyen de l'activite magnetique - Application aux periodes d'orage magnetospherique/.  
13 p2253 A69-27740
- Successive development of electromagnetic /ULF and VLF/ and light emissions during magnetic substorms /Developpement successif des emissions electromagnetiques /U.B.F. et T.B.F./ et lumineuses au cours des sous-orages magnetiques/.  
16 p2788 A69-32648
- KLEIMENOVA, N. G.**  
Relationship between middle-latitude VLF emissions and magnetic activity.  
06 p0920 A69-17735  
Relation between the irregular pulsations of the geomagnetic field and the pulsations of polar aurorae and ULF radiation /O svyazi iregulyarnykh pul'satsii geomagnitnogo polia s pul'satsiiami poliarnykh siiani i UNCh- izlucheniem/.  
09 p1485 A69-21536  
Relationship between irregular geomagnetic field pulsations and the pulsations of auroras and of VLF emission.  
16 p2783 A69-32531
- KLEIN, A. A.**  
Aluminum coatings for aerospace fasteners.  
[ASM PAPER D8-5.2] 07 p1142 A69-19663
- KLEIN, C.**  
Windows for high-power lasers.  
07 p1144 A69-18401
- KLEIN, C. A.**  
CO sub 2 laser radiation absorption in semi-insulating gallium arsenide.  
02 p0258 A69-12619
- KLEIN, D.**  
The self-pointing telemetry antenna of the "Henri Poincare" /L'antenne de mesure autopointee du "Henri Poincare"/.  
10 p1664 A69-23803
- KLEIN, E.**  
Flashing of superheated liquid through convergent-divergent nozzles.  
13 p2245 A69-27477
- KLEIN, E. J.**  
Exploratory investigation on the measurement of skin friction by means of liquid crystals.  
14 p2427 A69-29029
- KLEIN, G.**  
Generating the sum or difference of two signal frequencies.  
10 p1665 A69-24047
- KLEIN, G. A.**  
Multiplication of dislocations and rearrangement of the dislocation structure of molybdenum single crystals in the process of thermal fatigue.  
21 p3746 A69-39162
- KLEIN, H. P.**  
Some biological problems in the search for extraterrestrial life.  
02 p0198 A69-11770  
Extraterrestrial biology - Prospects and problems in the early 1970's.  
[AIAA PAPER 68-1122] 03 p0375 A69-13700  
Cellular localization of acetyl-coenzyme A synthetase in yeast.  
04 p0554 A69-15333
- KLEIN, J. F.**  
Investigation of high-pressure, vortex- stabilized R-F plasma discharges.  
[AIAA PAPER 69-695] 17 p3010 A69-33442  
Electric arc stabilization in crossed convective and magnetic fields.  
[AIAA PAPER 68-709] 24 p4359 A69-43572
- KLEIN, K.**  
Dependence of tilt-table and acceleration tolerance on body build and physical fitness /Die Abhaengigkeit der Orthostase- und Beschleunigungstoleranz von Koerperbau und Leistungsfahigkeit/.  
[DVL-834] 09 p1444 A69-21304  
Time-dependent calculations for transonic nozzle flow.  
09 p1431 A69-21974
- KLEIN, K. E.**  
Impairment of pilot efficacy by alcohol and drugs - An attempt to deduce standard limits from experimental results /Die einschraenkung der flugtaechtigkeit durch alkohol und medikamente - Versuch einer experimentellen erarbeitung von richtwerten/.  
21 p3663 A69-38792  
Influence of stature and physical fitness on tilt-table and acceleration tolerance.  
22 p3889 A69-39940  
Physical fitness and tolerances to environmental extremes.  
23 p4102 A69-41683
- The influence of stature and physical fitness on tilt-table and acceleration tolerance.  
23 p4108 A69-41821
- KLEIN, L.**  
Green's function theory of atomic line broadening in plasmas.  
08 p1361 A69-20147
- KLEIN, L. S.**  
Equilibrium theory of a partially ionized plasma.  
08 p1365 A69-20746
- KLEIN, M.**  
Note on sequential search.  
01 p0104 A69-10653  
Selection of the intermolecular potential. II - From data of state and transport properties taken in pairs.  
10 p1652 A69-23391
- KLEIN, M. J.**  
Creep of a dispersion strengthened columbium- base alloy.  
19 p3343 A69-35924
- KLEIN, M. S.**  
Digital time-base error compensator for wideband telemetry recorder/reproducers.  
23 p4137 A69-41775
- KLEIN, O.**  
On the foundations of general relativity theory and the cosmological problem.  
18 p3200 A69-34997
- KLEIN, P. I.**  
A short-baseline radiating interferometer navigation satellite concept incorporating methods to eliminate systematic navigation error.  
03 p0463 A69-13208
- KLEIN, R. L.**  
Measuring maintenance effectiveness.  
10 p1669 A69-22982
- KLEIN, S.**  
Interpretation of double-probe characteristics in a flame with strong injection of electronegative gas /Interpretation des caracteristiques de sonde double dans une flamme avec forte injection de gaz electronegatif/.  
01 p0176 A69-10385  
Action of an electric field on the temperature of a flame /Action d'un champ electrique sur la temperature d'une flamme/.  
01 p0176 A69-10389  
Equivalence between single-layered and certain multilayered shells.  
02 p0346 A69-12509  
Structural analysis and experimental correlation of a complex shell under asymmetric loads.  
12 p2184 A69-26811
- KLEIN, V.**  
About statistical concept of frequency response curve fitting.  
05 p0844 A69-16764
- KLEIN, W.**  
Traveling-wave tube for the communication satellite "Symphonie."  
[AIAA PAPER 68-430] 12 p2041 A69-26786
- KLEINER, C. T.**  
Predicting combined neutron degradation and gamma induced effects on a closed loop system.  
06 p0899 A69-16889
- KLEINER, M. L.**  
Operational experience with T53 engines in U.S. Army helicopters.  
[AHS PAPER 215] 07 p1203 A69-18867
- KLEINGARTNER, A.**  
The characteristics and work adjustment of engineering technicians.  
15 p2723 A69-31242
- KLEINMAN, A. J.**  
Numerical methods for the solution of the degenerate nonlinear elliptic equations arising in optimal stochastic control theory.  
02 p0224 A69-11963
- KLEINMAN, D. A.**  
Infrared detection by optical mixing.  
10 p1704 A69-23656
- KLEINMAN, D. L.**  
On the design of linear systems with piecewise- constant feedback gains.  
02 p0224 A69-11964  
The human as an optimal controller and information processor.  
12 p2022 A69-25929



## KLEINMAN, R. E.

Scattering theory.

17 p2930 A69-33884

## KLEINMANN, B.

Magnetite bearing spherules in tektites.

23 p4210 A69-41349

## KLEINMANN, D. E.

Multicolor photometry of Seyfert galaxies and measurement at 1.55  $\mu$  of the jet in M87.

04 p0663 A69-15386

The infrared spectrum, diameter, and polarization of the galactic nucleus.

22 p4029 A69-40767

## KLEIST, G.

Experimental investigation of the formation and acceleration of the current layer in a Z-pinch discharge /Experimentelle Untersuchung der Entstehung und Beschleunigung der stromfuehrenden Schicht in einer Z-Pinch-Entladung/.

09 p1552 A69-22397

## KLEJMAN, H.

Lasing quantum systems /Laserujace układy kwantowe/.

17 p2984 A69-34150

Current state and prospects of laser applications /Stan i perspektywy zastosowania laserow/.

17 p2984 A69-34163

## KLEM, B. F.

Atmospheric effects on the reduction of contrast between an object and its sky background.

01 p0111 A69-11100

Atmospheric and psychophysiological effects on the observation of aerospacecraft.

10 p1649 A69-23872

## KLEM, F. K.

Thermal protection in life raft exposures.

06 p0883 A69-17841

## KLEMENS, P. G.

Energy considerations in electron beam welding.

[ECS PAPER 144]

08 p1320 A69-20360

## KLEMENT, E.

Attempts to increase the power of a closed CO sub 2 laser by spinning the filling gas /Versuche zur Leistungssteigerung eines abgeschlossenen CO sub 2 - Lasers durch Umdrehen des Füllgases/.

07 p1145 A69-18476

## KLEMENTEV, A. F.

Comments on the stability of two-point pseudo-Runge-Kutta methods /Zamechania ob ustoiichivosti dvukhtocheknykh metodov psevdorunge-kutta/.

15 p2646 A69-31261

## KLEMIN, V. V.

Spectral brightness of clouds and landscape features in the visible and near infrared spectral regions /Spektral'naiia iarkost' oblakov i ob'ektov landshafta v vidimom i blizhnem infrakrasnom uchastkakh spektra/.

06 p0953 A69-17991

## KLEMM, G.

Kormoran - A new missile weapon system /Kormoran - Ein neues Flugkoerperwaffensystem/.

17 p3050 A69-33697

## KLEMOLA, A. R.

Photographic position observations of Icarus.

01 p0159 A69-11331

## KLEPACZKO, J.

A certain case of anisotropy /O pewnym przypadku anizotropii/.

19 p3447 A69-36857

## KLEPCZYNSKI, W. J.

Mass of Pluto.

02 p0315 A69-11808

Orbit of Neptune and the mass of Pluto.

04 p0663 A69-15385

The mass of Jupiter and the motion of four minor planets.

22 p4013 A69-40121

## KLEPIKOVA, N. A.

On a class of exact particular solutions of the equations of transonic gas flows.

07 p1118 A69-18698

## KLEPPINGER, D. D.

Extensions of pn junction theory.

11 p1938 A69-25306

## KLEPTSOVA, A. P.

Dynamics of the elimination of certain products of metabolism in humans kept in isolation.

10 p1646 A69-23508

## KLESICKA-BALTRUKIEWICZ, G.

Application of the method of successive approximations to a certain boundary problem in the theory of the quasi-linear parabolic equation /Zastosowanie metody kolejnych przyblizen do pewnego zagadnienia brzegowego w teorii rownania parabolicznego quasi-liniowego/.

23 p4181 A69-41411

## KLESNIL, M.

Dislocation substructure associated with propagating fatigue crack.

10 p1797 A69-23079

## KLESTOV, E. A.

Method of distributed moments in problems of optimal quick action /Metod raspredelennykh momentov v zadachakh optimal'nogo bystrodeistviia/.

21 p3685 A69-38847

Optimal quick-response control in a system with distributed parameters /Optimal'noe po bystrodeistviu upravlenie v odnoi sisteme s raspredelennymi parametrami/.

21 p3686 A69-38891

## KLETT, D. E.

Methods for determining thermal accommodation coefficients from free molecule flow heat transfer data.

18 p3230 A69-35071

## KLETTER, L.

The use of weather satellite photography to improve weather forecast and analysis /Die Verwendung der Bilder von Wettersatelliten zur Verbesserung der Wetteranalyse und der Wettervorhersage/.

04 p0628 A69-15090

Typical weather developments in Europe as observed by meteorological satellites. [UN PAPER 68-95711]

06 p0950 A69-17070

Cloud production in low-pressure areas over Europe, as observed by meteorological satellites /Die Wolkenproduktion von Tiefdruckgebieten ueber Europa, beobachtet mit meteorologischen Satelliten/.

06 p0950 A69-17619

## KLEVANS, E. H.

Longitudinal waves in a plasma half-space.

01 p0134 A69-11287

Dipole modes and the one-wave approximation for trapped modes in magnetoplasma cylinders.

06 p0967 A69-17756

Trapped modes in plasma slabs and cylinders.

17 p2926 A69-33850

## KLEVATT, P. L.

Orbital experimentation for advancing cryogenic technology. [AIAA PAPER 67-454]

12 p2174 A69-26782

## KLEVTSUR, S. A.

Vapor phase coating of particles /Obrazovanie pokrytii na chastitsakh iz parogazovoi fazy/.

20 p3548 A69-37363

Investigation of the process of niobium carbide formation on graphite particles /Issledovanie protsessa obrazovaniia karbida niobiia na grafitovykh chastitsakh/.

20 p3566 A69-37369

## KLIAKOTKO, M. A.

The dependence of telluric-line parameters on the air mass and the height of the place of observation.

03 p0512 A69-13695

## KLIATSKIN, I. G.

Method of advanced potentials and antenna synthesis.

03 p0408 A69-14131

## KLIATSKIN, V. I.

Space-time spectrum of the micropulsations of a pressure field /O prostranstvenno-vremennom spektre mikropul'satsii polia davlennii/.

09 p1492 A69-22710

The space-time spectrum of microfluctuations of the pressure field.

16 p2782 A69-32489

Strong fluctuations of a plane light wave moving in a medium with weak random inhomogeneities.

18 p3173 A69-35127

## KLIIVINIA, A. P.

Experimental discovery of the electromotive force along the external magnetic field induced by a flow of liquid metal /alpha-effect/.

04 p0635 A69-14547

## KLIIVLIN, V. V.

Investigation of the fiber distribution in oriented fiberglass-reinforced plastics /Issledovanie raspredeleniia volokon v oriietirovannykh stekloplastikakh/.

18 p3162 A69-35355

Cylindrical shell reinforced unidirectionally by low-fiber fibers under torsion in the reinforcement plane /Tsilindricheskaia obolochka, odnonapravlenno armirovannaia polymi voloknami, pri kruchenii v ploskosti armirovaniia/.

18 p3225 A69-35369

## KLICKA, M. V.

Food technology problems related to space feeding.

15 p2560 A69-31459

## KLICPERA, M.

Effect of tension upon rate of incorporation of amino acids into proteins of cross-striated muscle.

23 p4083 A69-41458

## KLIEGEL, J. R.

Discussion of chemical kinetic integration techniques. [WSCI PAPER 68-45]

07 p1073 A69-18315

Chemical species and chemical reactions of importance in nonequilibrium rocket engine performance calculations.

11 p1940 A69-24905

Transonic flow in small throat radius of curvature nozzles.

23 p4060 A69-41906

## KLIKH, IU. A.

Inclusion of singular sections into an optimal trajectory /O vklucheni osobykh uchastkov v optimal'nuu traektoriiu/.

11 p1960 A69-24764

## KLIMA, R.

The tensor of time-averaged stresses for plasma with an oscillating field.

02 p0286 A69-11588

Some new results concerning the radiation pressure on the plasma-vacuum boundary.

08 p1361 A69-20200

Kinetic study of the transformations of the titanium alloy TA 6 V under isothermal conditions /Etude cinetique des transformations de l'alliage de titane TA 6 V en conditions isothermes/.

16 p2802 A69-32180

## KLIMA, S. J.

Ultrasonic detection and measurement of fatigue cracks in notched specimens.

01 p0078 A69-10113

Ultrasonic detection and measurement of fatigue cracks in notched specimens.

14 p2445 A69-28882

## KLIMANOV, F. P.

Results of an investigation of the parameters of small-scale inhomogeneities of the ionosphere in Antarctica /Rezultaty issledovaniia parametrov melkomashstabykh neodnorodnostei ionosfery v Antarktike/.

14 p2444 A69-29867

## KLIMANOVA, L. F.

Cross section for pionization in interactions of 100 Gev cosmic ray neutrons and pions with carbon and lead nuclei.

13 p2330 A69-28382

## KLIMCHUK, E. F.

Equipment for measuring the earth's brightness from the Cosmos 149 satellite /Apparatura dlia izmereniia iarkosti zemli so sputnika "Kosmos-149"/.

14 p2447 A69-29404

Procedure and certain results of the determination of the temperature of the underlying surface from the Cosmos 149 satellite /Metodika i nekotorye rezultaty opredeleniia temperatury podstlaiushchei poverkhnosti so sputnika "Kosmos-149"/.

15 p2596 A69-30651

Method and certain results of measurements of the earth's short- and long-wave emission fluxes on the Cosmos 149 satellite /Metod i nekotorye rezultaty izmerenii potokov korotkovolnovogo i dlinnovolnovogo izlucheniia zemli na ISZ "Kosmos-149"/.

15 p2597 A69-30652

## KLIMCHUK, V. I.

Motion of an astatic gyroscope in a Cardan suspension mounted on a movable base.

06 p0924 A69-17183

## KLIMENKO, I. S.

Holographic recording of focused images and their reconstruction in white light /Golograficheskaia registratsiia sfokusirovannykh izobrazhenii i ikh vostanovlenie v belom svete/.

21 p3725 A69-39543

## KLIMIN, A. V.

Spacecraft control during reentry into the atmosphere /Upravlenie kosmicheskimi apparatami pri vkhode v atmosferu/.

13 p2355 A69-27681

**KLIMISHIN, I. A.**  
Contribution to the theory of unsteady nonadiabatic shock waves /K teorii nestatsionarnykh neadiabatcheskikh udarnykh voln/.  
15 p2682 A69-30508

**KLIMKIN, V. F.**  
Investigation of an argon arc at high pressure /Issledovanie dugi v argone pri vysokom davlenii/.  
02 p0291 A69-12482

**KLIMKIN, V. M.**  
Study of the discharge conditions in a hollow cathode for obtaining lasing at lambda equals 1.15 mu of neon /Issledovanie usloviy razriada v polom katode dlia polucheniia generatsii na lambda 1,15 mk neona/.  
09 p1516 A69-21507

**KLIMKOV, IU. M.**  
Lasers /Opticheskie Kvantovye Generatory/.  
18 p3151 A69-34357

**KLIMONTOVICH, IU. L.**  
Statistical theory of inelastic process in a plasma. II - Processes due to a transverse electromagnetic field.  
03 p0476 A69-13412  
Theory of the natural line width and amplitude fluctuations of a gas laser /K teorii estestvennoi shiriny linii i fluktuatsii amplitudy gazovogo lazera/.  
10 p1701 A69-23135

**KLIMOV, N. N.**  
Winds at heights of 150-400 km in the atmosphere.  
06 p0921 A69-17747  
A dynamic model of the F region of the ionosphere including temperature variations /Dinamicheskaiia model' oblasti F ionosfery, vkluchaiushchaia temperaturnye izmeneniia/.  
23 p4156 A69-41843

**KLIMOV, S. G.**  
Effect of sulfides contained in fuels on their operational properties /Vliianie sul'fidov, soderzhashchikh-sia v toplivakh, na ikh ekspluatatsionnye svoistva/.  
07 p1202 A69-19456

**KLIMOV, V. A.**  
Bandpass step filter for decimeter wavelengths /Polosovoi stupenchatyi fil'tr detsimetrovogo diapazona/.  
23 p4139 A69-41947

**KLIMOV, V. I.**  
Influence of the gyroscopic moment created by the power plant on an aircraft maneuver /Vliianie giproskopeskogo momenta ot silovoi ustanovki na manevr samoleta/.  
18 p3092 A69-34973

**KLIMOVA, T. V.**  
Nature of the flow and aerodynamic characteristics of bodies of very simple form in a viscous hypersonic gas flow.  
05 p0699 A69-16673

**KLIMOVSKAIA, L. D.**  
Some evidence of the mechanism in acceleration-induced disturbance of cerebellar reception.  
02 p0198 A69-11504  
Dependence of the change in the evoked activity of the cerebellar cortex of white rats on the level of acting acceleration /Zavisimost' izmeneniia vyzvannoi aktivnosti kory mozghechka belykh krys ot velichiny deistvuiushchego uskoreniia/.  
22 p3877 A69-40279

**KLIN, D. E.**  
Dynamic mechanical behavior of stress-graphitized and boron-doped pyrolytic carbon.  
10 p1716 A69-23036

**KLIN, J. F.**  
Aerodynamic studies of scale model turbines for the M-1 engine. [AIAA PAPER 69-553]  
16 p2840 A69-32678

**KLIN, J. S.**  
Electroreflectance in Ge - Si alloys.  
02 p0295 A69-11784

**KLIN, K. A.**  
Heat conduction in fluids with substructure.  
02 p0351 A69-12052  
On thermodynamics of directed continuous media.  
02 p0354 A69-12611  
On continuum theories of suspensions of deformable particles.  
05 p0752 A69-16738  
A theory of mixtures with microstructure.  
13 p2371 A69-27318  
A reciprocal theorem in the linear theory of directed continuous media.  
19 p3373 A69-36307

**KLIN, R. C.**  
Potential effects of recent findings on spacecraft sterilization requirements.  
11 p1828 A69-25460

**KLINBERG, J. M.**  
Theory of laminar viscous-inviscid interactions in supersonic flow. [AIAA PAPER 69-7]  
06 p0913 A69-18095

**KLING, M.**  
Spectroscopic azimuthal and axial measurement of velocity in the MPD thruster X9 /Spektroskopische azimutale und axiale Geschwindigkeitsmessung am MPD-Triebwerk X9/. [DGLR-69-024B]  
23 p4202 A69-41925

**KLING, R.**  
Extinction of a solid-propellant motor by depressurization - Study by electrical analogy /L'extinction d'un propulseur a propergol solide par detente - Etude par analogie electrique/.  
17 p3021 A69-33355  
The extinction of solid propellant rocket motors by rapid depressurization - Study by electrical analogy /L'extinction d'un propulseur a propergol solide par detente - Etude par analogie electrique/. [ONERA-TP-722]  
18 p3184 A69-34637

**KLINGENBERG, H.**  
Arc phenomena and gasdynamic effects due to interaction of shock waves with magnetic fields.  
07 p1188 A69-18273

**KLINGENMAIER, C. H.**  
Blood oxygen content measured by oxygen tension after release by carbon monoxide.  
22 p3873 A69-40203

**KLINGER, E.**  
Feedback effects and social facilitation of vigilance performance - Mere coaction versus potential evaluation.  
24 p4271 A69-42751

**KLINGER, M. I.**  
Electrons in low-mobility and disordered semiconductors - Theory of transport and related optical phenomena.  
01 p0135 A69-10047

**KLINGLER, L. R.**  
Reduction of noise in instrumentation systems.  
10 p1691 A69-23231

**KLINGLESMTIH, D.**  
The atmosphere of the helium-carbon star BD plus 10 deg 2179.  
22 p4026 A69-40652

**KLINK, R.**  
Water- and heat-transport mechanism in the H sub 2 O-removal system for fuel-cell units /Ueber den Wasser- und Waermetransportmechanismus im H sub 2 O-Entzugssystem fuer Brennstoffzellen- Aggregate/.  
04 p0552 A69-15316  
Improved water- and heat-removal unit for H sub 2 /O sub 2 fuel cell systems.  
05 p0704 A69-15676

**KLINKE, R.**  
Studies on the functional significance of efferent innervation in the auditory system - Afferent neuronal activity as influenced by contralaterally applied sound.  
23 p4094 A69-42073

**KLINKER, L.**  
Investigation of short-period field strength variations in the meter and decimeter wavelength range /Untersuchungen ueber kurzperiodische Feldstaerkevariationen im Meter- und Dezimeterwellenbereich/.  
24 p4281 A69-42612

**KLINKER, O.**  
SAAB Viggen and its first flight phase.  
06 p0867 A69-17662

**KLINKSIEK, W. F.**  
Simultaneous lateral skewing in a three-dimensional turbulent boundary-layer flow. [ASME PAPER 69-FE-24]  
20 p3517 A69-37998

**KLINTS, R. V.**  
Relationship of paper speed to precision of pulse wave measurements - A multiple observer study of left ventricular ejection time.  
19 p3258 A69-36449

**KLINZING, G. E.**  
Frictional losses in foam-damped flexible tubes.  
04 p0608 A69-15331

**KLIORE, A.**  
Venus - Lower atmosphere not measured.  
01 p0157 A69-11197

**KLIORE, A. J.**  
S-band occultation experiments. [AAS PAPER 68-185]  
02 p0311 A69-11470

**KLIORE-DASHINSKII, M. I.**  
Conversion of the carrier frequency of a modulated signal with the aid of a solid-state optical quantum amplifier /Preobrazovanie chastoty nesushchei modulirovannogo signala s pomoshch'iu opticheskogo kvantovogo usilitelia na tverdom tele/.  
21 p3739 A69-39540

**KLIOBIN, V. V.**  
Longitudinal mode selection in the He-Ne laser.  
03 p0441 A69-13844

**KLIOCHNIKOV, A. D.**  
Radiative heat transfer in a closed system of solid bodies, separated by a light-transmitting medium, when the degree of blackness of the bodies varies over the spectrum.  
02 p0350 A69-11578

**KLIOCHNIKOV, N. I.**  
Thermodynamic stability of a plasma with strong interaction /O termodinamicheskoi ustoiichivosti plazmy s sil'nym vzaimodeistviem/.  
02 p0292 A69-12635

**KLIOCHNIKOVA, L. A.**  
Calculation of the high wind velocity profile in the lowest 100-m layer of the atmosphere according to ground data /Raschet profila bol'shikh skorostei vetra v nizhnem 100-metrovom sloe atmosfery po nazez-nym dannym/.  
20 p3571 A69-37695

**KLIOEV, V. P.**  
Excitation and propagation of longitudinal elastic waves with frequencies from 200 to 2000 MHz in lithium niobate crystals.  
03 p0487 A69-13729  
Thermal properties of lithium niobate crystals.  
03 p0487 A69-13730

**KLIOEVA, N. M.**  
Ion composition of the polar ionosphere.  
15 p2604 A69-31414

**KLIOUKIN, L. N.**  
Some results of forecasting the geopotential field by means of a quasi-solenoidal model /Nekotorye rezul'taty prognoza polia geopotentsiala s pomoshch'iu kvazisoloidal'noi modeli/.  
21 p3758 A69-39110

**KLIOUSHKINA, N. S.**  
Problem of reproduction of food protein by autotrophic organisms in extraterrestrial conditions.  
01 p0021 A69-11079  
Effect of diet containing unicellular algae on the composition of enteric microflora in animals.  
02 p0197 A69-11490  
Biological value of Chlorella proteins.  
02 p0198 A69-11510  
Changes in the intestinal microflora of rats caused by protein-free diets /Izmeneniia kishchnoi mikroflory pri bezbelkovom pitanii krysi/.  
05 p0709 A69-16516  
Influence of diets containing unicellular algae on the recovery of metabolic processes in protein-deficient white rats /Vliianie ratsiona s odnokletochnymi vodorosliami na vosstanovlenie obmennyykh protsessov u belykh krys posle belkovogo golodaniia/.  
07 p1065 A69-18977  
Effect of the alcohol-soluble fraction of a biomass of protozoocci seaweeds on the organism of white rats /Vliianie spirtorastvorimoi fraktsii biomassy protokokovykh vodoroslei na organizm belykh krysi/.  
17 p2906 A69-32930  
Changes in the intestinal microflora of protein-starved rats.  
18 p3096 A69-34735  
Effect of diets containing unicellular algae on the recovery of metabolism in protein-deficient white rats.  
20 p3479 A69-38225

**KLIVANS, L. S.**  
A-V-I-A-R-M-F-I-C-S - Avionics-Armament- Fire Control System for the Cheyenne Weapon System. [AHS PAPER 312]  
17 p2903 A69-33542



## KLOBA, A. A.

A stimulated reflection experiment to demonstrate correlation between photons from independent laser beams.

18 p3153 A69-35292

## KLOBUCHAR, J. A.

Midlatitude nighttime total electron content behavior during magnetically disturbed periods.

03 p0426 A69-14030

Acoustic waves in the ionosphere.

[AFCLR-69-0291] 12 p2065 A69-26104

## KLOBUCHAV, J. A.

Electron content latitude dependence - March 1966 period.

01 p0146 A69-11128

## KLOCHKOV, V. P.

Perfect monocrystalline silicon films on sapphire.

07 p1198 A69-18509

Single-crystal CdS films.

11 p1939 A69-25709

## KLOCKZIEN, V. G.

Thermal scale modeling of spacecraft.

[SAE PAPER 690196] 07 p1116 A69-18304

## KLOEPPER, D.

Laser welding structural alloys and parts.

19 p3320 A69-35556

## KLOFAT, W.

Production of adenosine triphosphate in normal cells and sporulation mutants of bacillus subtilis.

22 p3886 A69-41076

## KLOMP, M.

Orbits of four spectroscopic binaries in Lacerta OB 1.

14 p2519 A69-29137

## KLOPP, D. A.

Jupiter gravity-assisted trajectories.

[AAS PAPER 68-116] 21 p3805 A69-39224

## KLOPP, W. D.

Superplasticity in tungsten-rhenium alloys.

10 p1707 A69-22990

## KLOSE, D. R.

Suboptimum, physically realizable detection procedures for a class of nonGaussian processes with dependent samples.

03 p0392 A69-13248

A new representation theory and detection procedures for a class of non-Gaussian channels. [IEEE PAPER 69-TP-10-COM]

19 p3277 A69-36488

## KLOSNER, J. M.

Inadequacies of acoustic approximations in fluid-shell interactions.

18 p3223 A69-35174

## KLOSOWICZ, B.

The nonhomogeneous spherical pressure vessel of maximum rigidity. I - Theoretical approach.

01 p0167 A69-10326

The nonhomogeneous spherical pressure vessel of maximum rigidity. II - Practical applications.

01 p0167 A69-10327

## KLOSTERMEYER, J.

Gravity waves in the F-region.

05 p0756 A69-16402

## KLOTYNSH, E. E.

Interaction between impurities in the diffusion of copper in gallium arsenide /Vzaimodeistvie primesei pri diffuzii medi v arsenide gallia/.

07 p1199 A69-19009

## KLOTZ, M. A.

Hydroxylamine complexes of some inorganic salts.

17 p2917 A69-33657

## KLUCZYNSKI, M. L.

Mini servo strokes reduce B-52 structural fatigue.

20 p3467 A69-38184

## KLUG, A.

Is Venus prolate/ques/

10 p1784 A69-23958

## KLUG, W.

Diffusion in the atmospheric surface layer - Comparison of similarity theory with observations.

02 p0276 A69-12695

## KLUGE, H.

Cutting tool for preparing endless magnetic tapes /Schneidvorrichtung zum Anfertigen endloser Magnetbandschleifen/.

08 p1321 A69-20876

## KLUGE, K.

Diagrams for high-temperature measurements.

03 p0481 A69-14146

## KLUGE, W.

Investigations on semiconducting collector materials.

09 p1558 A69-21825

Evaluation of semiconducting collector surfaces in thermionic converters.

14 p2506 A69-29269

## KLUSMANN, F. W.

Influence of temperature on the afferent and efferent motor innervation of the spinal cord. I - Temperature dependence of afferent and efferent spontaneous activity /Der Einfluss der Temperatur auf die afferente und efferente motorische Innervation des Rueckenmarks. I - Temperaturabhaengigkeit der afferenten und efferenten Spontantaetigkeit/.

23 p4093 A69-42066

Influence of temperature on the afferent and efferent motor innervation of the spinal cord. II - Temperature dependence of muscle spindle function /Der Einfluss der Temperatur auf die afferente und efferente motorische Innervation des Rueckenmarks. II - Temperaturabhaengigkeit der Muskelspindelantwort/.

23 p4093 A69-42067

Influence of spinal cord temperature on the stretch response of tonic and phasic alpha-motoneurons /Der Einfluss der Rueckenmarkstemperatur auf die Dehnungsantwort tonischer und phasischer alpha-Motoneurone/.

23 p4098 A69-42099

## KLYGIN, L. P.

Fatigue resistance of bimetallic sheets.

21 p3835 A69-38773

## KLYPIN, B. A.

Mechanical properties of high-melting-point metals /Mekhanicheskie svoystva tugoplavkikh metallov/.

09 p1525 A69-22138

## KLYSHKO, D. N.

Nonlinear absorption of ruby laser radiation in CdS, ZnS, and SiC /Nelineinoe pogloschenie izlucheniya rubinovogo lazera v CdS, ZnS i SiC/.

03 p0436 A69-13038

Observation of parametric luminescence in a lithium niobate crystal excited by an argon laser.

08 p1323 A69-19941

Neodymium laser with regulated pulse duration.

14 p2460 A69-29670

## KMETZ, A. R.

Threshold switching delayed response in ferrite memory cores. [IEEE PAPER 16.4]

01 p0045 A69-10719

Origin of threshold-response delay in ferrite memory cores.

15 p2668 A69-30688

## KMETZ, J. M.

Spectral analysis of hematoxylin in tissue sections.

01 p0015 A69-10924

## KMITO, A. A.

Informative properties of infrared scanning equipment of meteorological satellites /Informatsionnye svoystva skaniruiushchei infrakrasnoi apparatury meteorologicheskikh sputnikov/.

06 p0929 A69-17979

## KMONICEK, V.

The equilibrium properties of carbon dioxide behind the primary and reflected shock waves.

15 p2592 A69-31054

## KNAAP, H. F. P.

Depolarized Rayleigh scattering in gases as a new probe of intermolecular forces.

07 p1157 A69-19485

## KNACKE, R. F.

Circumstellar infrared emission from two peculiar objects - R Aquarii and R Coronae Borealis.

09 p1603 A69-22263

The spectrum of NML Cygnus from 7.5 to 14 microns.

10 p1785 A69-24101

A possible identification of interstellar silicate absorption in the infrared spectrum of I 19 Tauri.

10 p1786 A69-24104

## KNAFLICH, H. B.

Magnetospheric parameters determined from structured micropulsations.

01 p0076 A69-11229

## KNAPEN, M. G. J.

Cutting of thin carbon films with a CO sub 2 - gas laser. II - Experiments on cylindrical bodies.

15 p2635 A69-31038

## KNAPP, H.

Design of GaAs injection lasers for continuous-wave operation at high temperatures /Aufbau von GaAs-Injektionslasern fuer Dauerstrichbetrieb bei hohen Temperaturen/.

02 p0255 A69-11710

Groeber's method and its application to the numerical computation of orbits in celestial mechanics. II /Die Groebnersche Methode und ihre Anwendung auf die numerische Bahnberechnung in der Himmelsmechanik. II/.

02 p0322 A69-12250

The Groeber method and its application to the numerical calculation of trajectories in celestial mechanics. III /Die Groebnersche Methode und ihre Anwendung auf die numerische Bahnberechnung in der Himmelsmechanik. III/.

23 p4223 A69-42476

## KNAPP, M. H.

Synthetic lubricants.

18 p3163 A69-35481

## KNAPP, P. M.

A second generation automatic test system for depot level maintenance.

11 p1864 A69-25067

## KNAPPE, W.

Thermal properties of plastics /Thermische Eigenschaften von Kunststoffen/.

18 p3161 A69-34839

## KNAUER, W.

The radial field Kaufman thruster.

[AIAA PAPER 69-259] 09 p1569 A69-21877

Study and optimization of 15 cm Kaufman thruster discharges.

[AIAA PAPER 69-257] 09 p1569 A69-21878

## KNAUF, W.

The selection of radar echoes of reflection centers located very close to each other /Zur selektion von radarechos eng benachbarter reflexionszentren/.

22 p3899 A69-40533

## KNAUERHASE, K.

Problem of lightning protection for aircraft radomes /Probleme de protection contre la foudre pour les radomes d'avion/.

07 p1142 A69-19535

## KNAUSENBERGER, W.

Ellipsometric method for the determination of all the optical parameters of the system of an isotropic nonabsorbing film on an isotropic absorbing substrate - Optical constants of silicon.

07 p1201 A69-19648

## KNAUSENBERGER, W. H.

Thin film characterization by electron microprobe and ellipsometry - SiO sub 2 films on silicon.

10 p1742 A69-22946

Determination of the change of optical constants by modulation techniques.

18 p3173 A69-35014

Ellipsometric liquid immersion method for the determination of all the optical parameters of the system - Nonabsorbing film on an absorbing substrate.

24 p4316 A69-43321

## KNAUSS, W. G.

On the numerical determination of relaxation and retardation spectra for linearly viscoelastic materials.

02 p0348 A69-12605

## KNAVE, B.

Long-term changes in retinal function induced by short, high intensity flashes.

23 p4084 A69-41468

## KNEIFEL, J. L.

Competition in North Atlantic Commercial Air Transport - A Study of the Competition Conditions and Competition Factors /Der Wettbewerb im Nordatlantischen Luftverkehr - Eine Untersuchung der Wettbewerbsverhaeltnisse und Wettbewerbsfaktoren/.

16 p2881 A69-31866

## KNEISEL, K. M.

Prediction of interstitial gas pressure in a multilayer insulation during rapid evacuation. [AIAA PAPER 69-608]

17 p3072 A69-33275

## KNEPPER

Infrared radiometer for a Jupiter probe.

17 p2974 A69-33425

## KNEPPO, I.

Iterative method for nonlinear system identification /Iteracna metoda identifikacie nelinearnykh sustav/.

14 p2426 A69-29306

## KNEPPO, P.

A contribution to the determination of the conjugated gradient in automatic control systems /Prispevok

- k urceniu konjugovaného gradientu v sustavach automatickeho riadenia/.  
11 p1857 A69-24367
- KNETS, I. V.**  
Influence of initial defects on the equilibrium states of elastoplastic plates /Vliianie nachal'nykh nesovershenstv na ravnovesnye sostoianiia uprugoplasticheskikh plastinok/.  
06 p1025 A69-17684  
Development of the concepts of a deformation localizability function and of a slip function in statistical theories of plasticity /Razvitie poniatii funktsii lokal'nosti deformatsii i funktsii skol'zheniia v statisticheskikh teoriakh plastichnosti/.  
22 p4044 A69-40742
- KNETSCH, H. D.**  
Reflections in a rotationally symmetrical jump in the cross section of a circular waveguide /Reflexionen an einem rotationssymmetrischen Querschnittsprung im Rundhohlleiter/.  
11 p1855 A69-25622
- KNEUBUEHL, F. K.**  
Resonator interferometry of pulsed submillimeter-wave lasers.  
10 p1705 A69-23810
- KNIAZEV, A. V.**  
Method of averaging in integral equations /Metod usredneniia v integral'nykh uravneniakh/.  
23 p4181 A69-41731
- KNIAZEV, G. N.**  
Directional stability of flight vehicles /O kursvoi ustoiichivosti letatel'nykh apparatov/.  
21 p3830 A69-39836
- KNIAZEV, I. U. R.**  
Device for obtaining and investigating long high-current high-pressure arcs /Ustanovka dlia polucheniia i issledovaniia sil'notochnykh dlinnykh dug vysokogo davleniia/.  
09 p1547 A69-21593
- KNIAZEVA, G. D.**  
Influence of high oxygen concentrations on animal organisms /Vliianie povyshennykh konsentratsii kisloroda na organizm zhivotnykh/.  
05 p0709 A69-16512  
The effect of high oxygen concentrations on the animal organism.  
08 p1262 A69-19831  
Effects of high oxygen concentrations on animals.  
18 p3095 A69-34731
- KNIAZIUK, V. S.**  
Velocity distribution density of air and ground targets /Plotnost' raspredeleniia skorosti vozdukhnykh i nazemnykh tselei/.  
15 p2567 A69-30349
- KNIAZZEH, A.**  
Theory of gas breakdown in hot cracks with application to thermionic trilayer insulation.  
09 p1441 A69-21840
- KNIFFEN, D. A.**  
A gamma ray telescope utilizing large area wire spark chambers. [IEEE PAPER 3A-5]  
07 p1134 A69-19192
- KNIGHT, C. E.**  
Photoelastic analysis of anisotropic fiber reinforced composites.  
07 p1170 A69-18715  
Residual strain distribution in layered rings.  
20 p3628 A69-37774
- KNIGHT, D. D.**  
Electron thermochemical nonequilibrium effects in re-entry boundary layers. [AIAA PAPER 69-82]  
06 p0915 A69-18190
- KNIGHT, M.**  
1 KVA three-phase DC-AC inverter with digital control.  
23 p4074 A69-42294
- KNIGHT, P.**  
Influence of the ground near transmitting and receiving aeriels on the strength of medium-frequency sky waves.  
17 p2918 A69-33029  
Polarisation of waves reflected from the ionosphere.  
22 p3941 A69-40922
- KNIGHT, S. P.**  
Hybrid integrated lumped-element microwave amplifiers.  
01 p0039 A69-10190
- KNITTEL, G. H.**  
Element pattern nulls in phased arrays and their relation to guided waves.  
04 p0570 A69-14310
- KNIVILA, A. R.**  
A new one-part silicone encapsulant.  
19 p3281 A69-35549
- KNIZHNIKOV, V. N.**  
Some peculiarities of I-V curves of the thermionic converters in cesium vapor at the pressure 10<sup>-5</sup> super 2 - 5 torr.  
14 p2402 A69-29241
- KNOBELOCH, G. W.**  
Dynamic response of a composite shell. [AIAA PAPER 68-351]  
16 p2871 A69-31877
- KNOBLOCH, H. W.**  
Second order differential inequalities and a non-linear boundary value problem.  
07 p1173 A69-18730
- KNOEBIG, D.**  
Flight Vehicles for Extremely Low Flight /Flugkoerper fuer den Extremen Tiefflug/.  
11 p1823 A69-24638
- KNOEDLER, J. L.**  
Importance of navigation analysis to mission planning during the 1970's. [AAS PAPER 69-406]  
24 p4347 A69-42833
- KNOELL, A. C.**  
The development of hexagonal and nonhexagonal cell phenolic honeycomb as an energy-dissipating material.  
19 p3353 A69-35503  
Structural research on an impact limiter system for Mars "hub-and-tire" type hard landers. [AIAA PAPER 68-161]  
21 p3820 A69-39228
- KNOEYES, S.**  
A quantitative schlieren technique for measuring one-dimensional density gradients in transparent media.  
12 p2088 A69-26181
- KNOEPFEL, H.**  
The electrical conductivity of metals at very high temperatures.  
01 p0119 A69-10673
- KNOLLE, K.**  
Experimental and Theoretical Research on Atmospheric Circulations, the Jetstream, and Cyclonic Disturbances /Experimentelle und theoretische Untersuchungen ueber die atmosphaeischen Zirkulationen, den jet stream und die zyklonalen Stoerungen/.  
17 p2999 A69-33757  
Model experiments about cyclogenesis in an entropy field of jetstream type /Modelexperimente ueber Zyklogenesis in Entropiefeld vom jet stream-Typ/.  
17 p3000 A69-33760
- KNOLLMAN, G. C.**  
Liquid viscoelasticity under rare-gas infusion.  
05 p0796 A69-15912
- KNOPS, R. J.**  
Stability in linear elasticity.  
03 p0530 A69-14066  
Continuous data dependence for the equations of classical elastodynamics.  
24 p4397 A69-42750
- KNORRE, K. G.**  
Some problems of consolidation and differentiation of the matter of the solar system in relation to the time stages of its formation /O nekotorykh voprosakh konsolidatsii i differentsiatsii veshchestva solnechnoi sistemy v sviazi s vremennymi etapami ee stanovleniia/.  
19 p3406 A69-36076
- KNOSP, H.**  
Microreflection measurements on pressure-sintered samples of the titanium-TiN-TiC and zirconium-ZrN-ZrC systems /Mikroreflexionsmessungen und druckgesinterten Proben der Systeme Titan-TiN-TiC und Zirkonium-ZrN-ZrC/.  
20 p3559 A69-37330
- KNOTHE, H.**  
Satellites and Riemannian geometry.  
19 p3397 A69-35610
- KNOTT, E. F.**  
Simulation of reentry vehicle motion during laboratory measurements of radar cross section.  
20 p3511 A69-37850
- KNOTT, J.**  
Slot-jet interaction studies at M sub infinity equals 4 and 5.  
24 p4249 A69-43686
- KNOTTS, J.**  
Experiments in long-distance holographic imagery.  
23 p4167 A69-42184
- KNOWLES, C. P.**  
The stability of the laminar natural convection boundary layer.  
05 p0744 A69-15719
- KNOWLES, G. E., JR.**  
Value control-control program for C-5.  
13 p2383 A69-28095
- KNOWLES, G. R.**  
Payload maximization and mission mode comparison for hard and soft Martian landers.  
02 p0335 A69-12822
- KNOWLES, J. K.**  
On the exponential decay of stresses in circular elastic cylinders subject to axisymmetric self-equilibrated end loads.  
06 p1023 A69-17507
- KNOWLES, L. S.**  
Boundary of underexpanded axisymmetric jets in still air.  
09 p1482 A69-21968
- KNOWLES, S. H.**  
Search for an effect of mass on frequency during a close approach of pulsar CP 0950 to the sun.  
02 p0323 A69-12298  
Spectra, variability, size, and polarization of H sub 2 O microwave emission sources in the Galaxy.  
09 p1587 A69-21307  
Determination of the astronomical unit from hydrogen line radial-velocity measurements.  
13 p2350 A69-27822  
Distribution of ammonia density, velocity, and rotational excitation in the region of Sagittarius B2.  
21 p3799 A69-38647
- KNOWLTON, K. C.**  
Picture processing by computer.  
11 p1842 A69-24588
- KNOWLTON, P. H.**  
The use of an algebraic language as both a source and target language.  
01 p0036 A69-10710
- KNOX, B. E.**  
Vaporization of antimony and tellurium in the vicinity of the critical point.  
22 p3993 A69-40719
- KNOX, F.**  
Ionospheric effect caused by celestial X-rays.  
17 p3024 A69-33378
- KNOX, F. B.**  
Growth of a packet of finite amplitude very-low-frequency waves, with special reference to the magnetosphere.  
06 p0917 A69-17378
- KNOX, R. M.**  
In-flight and flight-line checkout techniques for foreign object damage to jet engines.  
01 p0056 A69-11055
- KNUDSEN, K.**  
A single frequency argon ion laser for holographic applications.  
11 p1895 A69-24689
- KNUDSEN, W. C.**  
Gravity waves observed by ionospheric temperature measurements in the F region.  
05 p0754 A69-16262  
Neutral atmosphere wave generation by the equatorial electrojet.  
20 p3593 A69-38107
- KNUTH, E. L.**  
Molecular-beam time-of-flight spectroscopy.  
10 p1652 A69-23340  
Classification and dynamic calibration of ionization sensors and detectors.  
13 p2262 A69-28083  
Measurement of Ar-Kr integral cross sections at intermediate energies with an arc-heated aerodynamically accelerated atom beam.  
19 p3378 A69-36185  
Properties of low-density freejets measured using molecular-beam techniques.  
20 p3514 A69-37206  
A metastable atom detection system for ground state atom beams.  
22 p3950 A69-41230



## KNUTH, R.

Ionospheric conditions following the proton flare event of 7 July 1966 as measured at ground-based stations. I - Low-energy particle effects in the lower ionosphere at medium latitudes.

10 p1684 A69-23782

Space research activities in the German Democratic Republic.

15 p2724 A69-31453

## KNYSTAUTAS, R.

Laser spark ignition of chemically reactive gases. [AIAA PAPER 68-146]

09 p1622 A69-21951

## KO, D. R. S.

Supersonic laminar boundary layer along a two-dimensional adiabatic curved ramp. [AIAA PAPER 68-109]

09 p1430 A69-21949

## KO, H. C.

Spectral considerations of microwave solar bursts.

24 p4372 A69-43616

## KO, H. Y.

Lunar surface mechanical properties.

02 p0321 A69-12225

## KO, S.-H.

Low Reynolds number instability of an incompressible half-jet.

11 p1874 A69-25280

## KOBAK, V. O.

Oscillation spectrum with harmonic phase modulation /K voprosu o spektre kolebaniia s garmonicheskoi fazovoi moduliatsiei/.

14 p2412 A69-29427

## KOBAL, M.

Radiation effects on electronic components in space flight /Strahlenbeeinflussung von Bauelementen der Elektronik in der Raumfahrt/.

11 p1946 A69-24521

## KOBARENKOV, A. P.

Dismountable thermionic converter.

02 p0194 A69-11587

Device for investigating thermionic energy converters.

18 p3136 A69-34700

## KOBAYASH, S.

Natural frequency of thin plates.

22 p4045 A69-40821

## KOBAYASHI, A.

Delamination effects on strength of filament-wound composites.

06 p0946 A69-17126

On the possibility to detect the strength defects of filament-wound materials through the ultrasonic technique.

21 p3733 A69-39798

## KOBAYASHI, A. S.

Stress intensity magnification factors for surface-flawed tension plate and notched round tension bar.

10 p1797 A69-23080

Crack-opening displacements and normal strains in centrally notched plates.

12 p2189 A69-27163

## KOBAYASHI, H.

Gas lasers.

09 p1517 A69-22121

## KOBAYASHI, M.

Phase-locking phenomena of multitransverse, longitudinal modes in He-Ne lasers. [IEEE PAPER Q-1]

07 p1153 A69-19076

## KOBAYASHI, R.

Experimental determinations of the molar heat and entropy of adsorption and the activity coefficient of the adsorbed phase for the methane-ethane-silica gel system.

10 p1652 A69-23370

## KOBAYASHI, S.

Precipitation hardening and recrystallization of Al-0.3 wt percent Zr alloys of various grades.

04 p0617 A69-14931

Undulation in the output of a pulsed water-vapor laser.

14 p2461 A69-29887

Experiments on supersonic panel flutter.

17 p3051 A69-32923

A high-resolution quick-scan interferometer for solar studies at 3.75 GHz.

18 p3118 A69-34968

Vibration characteristics of a swept-back box beam.

21 p3846 A69-39803

Supersonic panel flutter boundary of clamped rectangular plates.

22 p3930 A69-40584

Vibration of shallow shells caused by random loading.

22 p4044 A69-40600

Natural frequencies of buckled rectangular plates.

22 p4046 A69-41049

The influence of prebuckling deformation on the buckling load of orthotropic cylindrical shells under axial compression.

22 p4047 A69-41182

Analytical study of nonlinear random vibration of a rectangular plate with initial imperfection.

22 p4048 A69-41183

Influence of shearing force and shear buckling deformation on supersonic panel flutter of simply supported rectangular plates.

24 p4400 A69-43055

Influence of initial deflection and internal pressure on supersonic panel flutter of simply supported rectangular plates.

24 p4400 A69-43056

## KOBAYASHI, T.

Determination of flaws and fracture sites in materials using liquid crystal coatings.

10 p1699 A69-23053

Fundamental study of operational performance of a laser radar system employing A-scope representation.

20 p3487 A69-37283

Measurement of propagation characteristics of optical beams in the atmosphere and analyses of returned echo signals using a laser radar system with A-scope representation.

20 p3487 A69-37284

## KOBAYASHI, Y.

Study on a semi-hot wall duct for MHD generators.

13 p2372 A69-27473

Experimental study of the hypersonic rarefied gas flow past a flat plate and around a cylinder.

19 p3294 A69-35755

An experimental investigation on rocket plumes expanding into vacuum.

22 p4000 A69-40594

## KOBAYASHI, K.

On the stochastic types of motion in a system of coupled harmonic oscillators.

19 p3374 A69-36752

## KOBIAKOV, V. L.

Use of an electronic switch for discrete control of a filter passband /Ob ispol'zovanii elektronnoy perekliuchatelia pri diskretnoi regulirovke polosy propuskaniia fil'trov/.

12 p2040 A69-26489

## KOBILINSKI, Z.

Cosmic-ray modulation by a solar wind whose characteristics depend on the angle between them and the helioequatorial plane /O moduliatsii kosmicheskikh i chei solnechnym vetrom, kharakteristikii kotorogo zavisiat ot ugla s ploskosti u gelioekvatora/.

10 p1759 A69-22842

## KOBIN, L.

Adhesion mechanism of gold-underlayer film combinations to oxide substrates.

13 p2321 A69-28007

## KOBISK, E. H.

Ultrahigh vacuum electron microscope.

04 p0599 A69-15016

## KOBIZSKOI, V. L.

Some aspects of the use of a half-wave antenna to investigate radio emission from extensive air showers.

13 p2332 A69-28408

## KOBLOVA, M. M.

Electrooptical effect in GaAs crystals at lambda equals 10.6 mu /Elektroopticheskii efekt v kristallakh GaAs na lambda equals 10.6 mik/.

06 p0934 A69-17466

The electro-optic effect in GaAs crystals at r equals 10.6 um.

20 p3555 A69-37949

## KOBRAV, G. P.

Method of calculating the illuminance of a space vehicle due to reflected solar radiation /Sposob rascheta osveshchennosti kosmicheskogo apparata otrazhennoi solnechnoi radiatsiei/.

01 p0151 A69-10576

Method of calculating illumination of a space vehicle due to reflected solar radiation.

15 p2691 A69-30746

## KOBIRIN, A. I.

Stability of two-coordinate automatic tracking systems /Ob ustoychivosti dvukhkoordinatnykh sistem avtomaticheskogo soprovozhdeniia/.

01 p0053 A69-10803

Motion of a body with a cavity filled with a viscous fluid about its center of mass in a potential mass-force field /K zadache o dvizhenii tela s polost'iu, zapolnennoi viazkoi zhidkost'iu, otноситel'no tsentra mass v potentsial'nom pole massovykh sil/.

22 p3980 A69-40109

## KOBIRINSKAIA, L. M.

Vibrations in a certain gyroscopic system /O kolebaniiax v odnoi giroskopicheskoi sisteme/.

21 p3723 A69-38832

## KOBIRINSKII, A. A.

Classification of periodic motions in a single-mass impact vibration system /Klassifikatsiia periodicheskikh dvizhenii v odnomassovoi vibroudarnoi sisteme/.

18 p3172 A69-34565

## KOBRYNSKI, M.

Determination of the acoustic field generated by a jet aircraft in motion /Determinacion du champ sonore produit par l'evolution des avions a reaction/.

20 p3462 A69-37757

## KOBRYCHKIN, V. S.

Axisymmetric oscillations of a hemispherical shell partially filled with a liquid /Osimmetrichnye kolebaniia polusfericheskoi obolochki, chastichno zapolnennoi zhidkost'iu/.

04 p0679 A69-14922

## KOBYLARZ, T. J.

Computer determination of symbolic state equations for nonlinear circuits.

12 p2055 A69-27097

## KOBYLKIN, A. N.

Four-specimen vacuum device for tensile creep tests at temperatures of up to 1200 deg C.

07 p1116 A69-19318

## KOBYSHEV, A. A.

Estimating the accuracy of approximate solutions of integral equations for radiant heat transfer.

18 p3230 A69-35119

## KOBZAREV, G. I.

Analysis of a double-frequency regenerative parametric amplifier with the aid of scattering matrices /Analiz dvukhchastotnogo regenerativnogo parametricheskogo usilitelia pri pomoshchi matrits rasseyaniia/.

06 p0895 A69-17456

Instability of the characteristics of a negative resistance amplifier caused by changes in the circuit parameters /Nestabil'nost' kharakteristik usilitelia s otritsatel'nyy soprotivleniem pri izmenenii parametrov skhemy/.

22 p3916 A69-40962

## KOBZENKO, G. F.

Phase diagram of the chromium-cerium system /Diagrama staniv sistemi khrom-tserii/.

15 p2640 A69-30666

## KOBZEV, G. A.

The optical properties of hot air. I - Basic processes and spectral properties /Opticheskie svoystva goracheogo vozdukh. I - Osnovnye protsessy i spektral'nye kharakteristiki/.

07 p1185 A69-19166

The optical properties of hot air. II - Integral characteristics between 4000 and 20,000 K /Opticheskie svoystva goracheogo vozdukh. II - Integral'nye kharakteristiki 4000-20 000 deg K/.

07 p1185 A69-19167

Continuous radiation of nitrogen plasma.

11 p1922 A69-24231

## KOCH, B.

Investigation of shock processes by means of a laser interferometer /Untersuchung von Stossvorgaengen mittels eines Laser-Interferometers/.

02 p0282 A69-12607

New laser interferometry methods of measuring high speed model missiles.

11 p1886 A69-25042

## KOCH, C.

Calibration of measuring instruments at the Centre National d'Etudes Spatiales /L'etalonnage des appareils de mesure du Centre National d'Etudes Spatiales/.

12 p2080 A69-26123

## KOCH, E.

A theory of motion of charged particles in a magnetic field of constant direction, but which varies ex-

- ponentially with time. II /Zur Theorie der Bewegung geladener Teilchen in richtungs-konstanten Magnetfeldern exponentieller Zeitabhaengigkeit. II/.  
05 p0801 A69-15744
- KOCH, E. F.**  
Mass spectrometer leak testing by a calibrated enclosure method.  
04 p0598 A69-14974
- KOCH, G. F.**  
Coaxial radiator as feed for low noise paraboloid antennas.  
11 p1856 A69-25635  
Effective area of a transmitting antenna /Die Wirkflaeche einer Antenne fuer den Sendefall/.  
19 p3281 A69-35765
- KOCH, J.**  
PDM command coder for the central station of the German ground station system /PDM- Kommandokoder fuer die Zentralstation des deutschen Bodens-tationssystems/.  
16 p2755 A69-31859
- KOCH, K. R.**  
Alternate representation of the earth's gravitational field for satellite geodesy.  
12 p2076 A69-27089
- KOCH, L.**  
First French satellite experiment in nuclear astrophysics /Premiere experience francaise d'astrophysique nucleaire en satellite/.  
03 p0427 A69-12849  
Elementary composition and origins of primary cosmic radiation /Composition elementaire et origines du rayonnement cosmique primaire/.  
05 p0818 A69-16816
- KOCH, M.**  
Biotelemetric examinations of the heart and circulatory system of jet pilots during flight to determine a number of flight-induced stresses /Biotelemetrische Untersuchungen des Herz-Kreislauf-Systems bei Strahlflugzeugpiloten waehrend des Fluges zur Feststellung der Unterschiedlichen fliegerischen Belastung/.  
05 p0715 A69-16707  
Biotelemetric examinations of the heart and circulatory systems of helicopter pilots to determine various in-flight stresses /Biotelemetrische Untersuchungen des Herz-Kreislauf-Systems bei Hubschrauberpiloten zur Feststellung der unterschiedlichen fliegerischen Belastung/.  
11 p1829 A69-24347
- KOCH, R. H.**  
Spectrographic and photometric analyses of HR 7484.  
15 p2693 A69-30776
- KOCH, S.**  
Interference capability of noise of different frequency bandwidths /Die Stoerfaehigkeit von Geraeuschen verschiedener Frequenzbandbreite/.  
08 p1276 A69-20857
- KOCHANSKI, K. B.**  
Condition monitoring.  
[ASME PAPER 69-GT-66] 09 p1501 A69-22518
- KOCHARIANTS, A. B.**  
Geomagnetic pulsations with an intensity maximum at mid-latitudes /Geomagnitnye pul'satsii s maksimum intensivnosti v srednikh shirotakh/.  
20 p3522 A69-37059
- KOCHAROV, G. E.**  
Interaction of superhigh-energy cosmic rays with neutrinos in the universe /K voprosu o vzaimodeistvii kosmicheskikh lucheii sverkhvysokoi energii s neitrino vo vselennoi/.  
10 p1757 A69-22826  
Generation of various neutrino groups in the internal regions of the sun /O generatsii razlichnykh grupp neitrino vo vnutrennykh oblastiakh solntsa/.  
10 p1757 A69-22827  
Analysis of the chemical composition of lunar surface by direct methods.  
11 p1832 A69-24629
- KOCHELAEV, I. U. S.**  
Film boiling of subcooled liquid nitrogen in turbulent flow.  
07 p1243 A69-19737
- KOCHENDOERFER, R.**  
Structures and structural methods using new fiber-reinforced composite materials, with special attention given to boron fibers /Strukturen und Bauweisen aus neuartigen Faserverbundstoffen unter besonderer Beruecksichtigung der Borfaeden/.  
22 p4038 A69-39908
- Structures and construction methods using advanced composites with particular regard to boron fibers /Strukturen und Bauweisen aus neuartigen Faserverbundstoffen unter besonderer Beruecksichtigung der Borfasern/.  
23 p4179 A69-42155
- KOCHENOVA, N. A.**  
A method of processing riometric data /O metodike obrabotki riometricheskikh dannikh/.  
14 p2436 A69-29056  
Vertical distribution of cosmic radio emission absorption /Vysotnoe raspredelenie pogloshchenia kosmicheskogo radioizlucheniia/.  
20 p3590 A69-37676
- KOCHEROV, A. V.**  
Effect of hydro-extrusion on the mechanical properties of molybdenum.  
02 p0267 A69-12189
- KOCHERYZHENKOV, G. V.**  
Solution of turbulent boundary layer problems with longitudinal pressure gradients.  
07 p1122 A69-19735  
Multi-component turbulent boundary layer of a plate.  
20 p3513 A69-37093
- KOCHETKOV, A. M.**  
Bending of beams at large displacements.  
05 p0843 A69-16682
- KOCHETKOV, V. T.**  
Statistical synthesis of discrete nonlinear control systems.  
14 p2425 A69-28825
- KOCHETOV, O. A.**  
Measurement of the total heats of high-temperature polymer gasification /Izmerenie summarnykh teplov vysokotemperaturnoi gazifikatsii polimerov/.  
17 p3069 A69-33133
- KOCHIASHVILI, G. G.**  
Bending of circular annular disks of variable thickness deformed in a centrifugal force field /Izhib kruglykh kol'tsevykh diskov peremennoi tolshchiny, deformiruiushchikhisia v pole tsentrobezhnykh sil/.  
01 p0168 A69-10401
- KOCHMANOVA, L. V.**  
The effect of the construction of the working channel on the flow parameters of a plasma obtained in a shock tube.  
03 p0481 A69-14160
- KOCK, M.**  
Experimental transition probabilities and the solar abundance of copper /Experimentelle Uebergangswahrscheinlichkeiten und die solare Haeufigkeit des Kupfers/.  
02 p0204 A69-11456  
Experimental oscillator strengths for Fe I lines /Experimentelle Oszillatorenstaerken von Fe I-Linien/.  
20 p3581 A69-37823  
Revised solar iron abundance and its influence on the solar photospheric model /Revision der solaren Eisenhaeufigkeit und ihre Bedeutung fuer das Modell der Sonnenphotosphaere/.  
21 p3796 A69-38475  
Abundances of iron and some other elements in the sun and in meteorites.  
24 p4385 A69-43223
- KOCK, W. E.**  
Microwave holography.  
03 p0430 A69-13354  
Stationary coherent /hologram/ radar and sonar.  
05 p0721 A69-16578  
A hologram form of bistatic radar or sonar.  
07 p1078 A69-18866  
Microwave holograms using liquid crystal displays.  
12 p2079 A69-25917  
Fundamentals of lasers.  
16 p2797 A69-32377  
Acoustics and optics.  
23 p4191 A69-42179
- KOCMOND, W. C.**  
Fog modification with giant hygroscopic nuclei.  
01 p0111 A69-10696
- KOCSIS, M.**  
Comments on the theory of "second breakdown".  
08 p1294 A69-21115  
Some problems of failures of high voltage semiconductor diodes.  
08 p1294 A69-21116
- KOCZELA, L. J.**  
The design of a highly parallel computer organization.  
21 p3856 A69-39133
- KODAIRA, K.**  
Abundances in two horizontal-branch A stars.  
08 p1385 A69-20061
- KODAMA, M.**  
Balloon-borne instrument for auroral X-ray measurements.  
23 p4166 A69-42011  
Day-to-day variation of cosmic ray diurnal variation and interplanetary magnetic field.  
23 p4206 A69-42012
- KODAMA, S.**  
Stability of nonlinear feedback systems with backlash.  
02 p0225 A69-11968  
On the steady-state error of nonlinear control systems.  
13 p2237 A69-27188
- KOE, B. A.**  
The effect of color coding on performance of an alphabetic filing task.  
17 p2916 A69-34004
- KOECHLIN, Y.**  
East-west asymmetry and charge sign ratio of primary cosmic-ray electrons at 8.3 Gv rigidity cut-off.  
15 p2678 A69-31497
- KOECKELENERGH, A.**  
Solar activity in 1967 /Activite solaire en 1967/.  
02 p0313 A69-11533
- KOEHLER, A. M.**  
Dosimetry of proton beams using small silicon diodes.  
03 p0430 A69-13481  
Time-intensity data in solar cosmic-ray events - Biological data relevant to their effects in man.  
03 p0374 A69-13500
- KOEHLER, J. A.**  
A stabilized rocket-released magnetometer.  
19 p3309 A69-35994  
A rocket-released magnetometer probe for upper atmospheric measurements.  
19 p3309 A69-35995
- KOEHLER, L. E.**  
An air-launched windsone.  
10 p1692 A69-23254
- KOEHLER, U.**  
The eclipsing variable chi super 2 Hya equals BV 722 /Der bedeckungsveraenderliche chi super 2 Hya equals BV 722/.  
08 p1392 A69-20565
- KOEHNE, R.**  
Further investigations on low density Hall accelerators.  
[AIAA PAPER 69-281] 09 p1562 A69-21229
- KOELLE, D. E.**  
Technological problems of a solar probe to 0.3 AU minimum distance.  
03 p0519 A69-12855  
Design criteria and alternatives of solar probes with perihelion distances for 0.3 to 0.1 AU /Entwurfskriterien und -Alternativen fuer Sonnensonden mit 0.3 bis 0,1 AE Periheldistanz/.  
17 p3050 A69-33797  
Fluid propulsion modules for 24-hour satellites /Fluessigkeits-Antriebsmodule fuer 24h-Satelliten/.  
[DGLR-69-014] 23 p4202 A69-41929
- KOENECY, J. E.**  
A solid state ozone generator.  
10 p1693 A69-23346
- KOENIG, B.**  
Contribution to the theory of thermoelectric phenomena in inhomogeneous semiconductors /Prispevek k teorii termoelektrickych javov v nehomogennykh polovodicoch/.  
22 p3994 A69-40933
- KOENIG, E. W.**  
A review of the image dissector meteorological cameras and a view of their future.  
18 p3137 A69-35101
- KOENIG, H.**  
Problems in multivariable flight control systems for hypersonic flight vehicles /Ueber Probleme bei Mehrfach-Flugregelsystemen von Hyperschallflugzeugen/.  
12 p2128 A69-26066



KOENIG, H. A.

The damped transient behaviour of finite beams and plates.

15 p2710 A69-30868

Finite deflections of an elastic circular plate with a central hole.

[ASME PAPER 69-APM-20] 18 p3214 A69-34395

KOENIG, J. A.

A shakedown theorem for temperature dependent elastic moduli.

18 p3212 A69-34353

KOENIG, J. H.

X-ray spectrographic camera.

03 p0427 A69-13101

KOENIG, J. L.

Cryogenic Properties of Polymers, Proceedings of the NASA-Case Conference on the Properties of Polymers at Cryogenic Temperatures, NASA Lewis Research Center and Case-Western-Reserve University, Cleveland, Ohio, April 25-27, 1967.

05 p0784 A69-16485

KOENIG, T. H.

Review of dynamic seal literature through 1967. [ASLE FICFS PREPRINT 29]

15 p2620 A69-30490

KOENKE, E. J.

Evaluation of strapdown guidance systems on interplanetary missions. [AIAA PAPER 68-828]

19 p3370 A69-35953

KOEPCKE, W. W.

Capabilities of in-flight thrust reversing. [AIAA PAPER 68-880]

17 p2902 A69-34031

KOEPP, R.

Preferential Recombination of Ions in Gases Under a High Pressure /Zur bevorzugten Rekombination von Ionen in Gasen unter hohem Druck/.

17 p2949 A69-32999

KOEPEL, B. W.

A simulation of airborne antenna designation functions.

11 p1840 A69-25309

KOEPSSEL, W. W.

Electromagnetic wave scattering from a layer with plane interface in front and a rough interface in back.

21 p3677 A69-39459

KOERBS, T.

Special uses of glass-fiber-reinforced plastic in aircraft construction /Besondere Anwendungen von Glasfaser-Kunststoff im Flugzeugbau/.

03 p0454 A69-13821

KOERNER, C.

Possibilities of reducing the noise of idling aircraft by a sound-insulating hangar /Moeglichkeiten zur Laerminderung bei Flugzeug-Standlaeuften durch eine Laermerschutzhalle/.

01 p0054 A69-10033

KOESTER, H.

The supersonic wind tunnel of the Braunschweig research center of the DFVLR /Der Ueberschallwindkanal des Forschungszentrums Braunschweig der DFVLR/.

20 p3510 A69-37422

KOESTERER, M. G.

An experiment to determine the effects of solid and liquid rocket engine combustion on the viability of microorganisms.

05 p0714 A69-15949

KOESTLIN, H.

Investigation of low alpha sub s /epsilon/ coatings in a simulated space environment.

16 p2867 A69-31741

KOETSER, H.

Subnanosecond pulse coupling of an He-Ne laser.

19 p3339 A69-36823

KOETZOLD, B. R.

A lens-raster high-speed camera with a mechanical shutter of minimum intrinsic time for self-illuminated and time-indeterminate phenomena /Linienraster-Hochgeschwindigkeitskamera mit einem mechanischen Verschluss kuerzester Eigenzeit fuer selbstleuchtende, zeitlich unbestimmte Ereignisse/.

12 p2085 A69-26159

KOFFLER, S. A.

Hydrogen permeation through alpha-palladium.

23 p4175 A69-41502

KOFMAN, V. D.

Precision analysis of unsteady dynamic systems containing random parameters /Analiz tochnosti nestat-

sionarykh dinamicheskikh sistem, soderzhashchikh sluchainye parametry/.

03 p0408 A69-12948

KOFSKEY, M.

Instrumentation used to define performance of small size, low power gas turbines. [ASME PAPER 69-GT-104]

09 p1501 A69-22522

KOFSTAD, P.

Effect of impurities on the defects in oxides and their relationship to oxidation of metal.

03 p0444 A69-13312

KOFSTAD, P. K.

High-temperature oxidation of Co-10 W/O Cr alloys. I - Microstructure of oxide scales. [ECS PAPER 413]

08 p1332 A69-20363

High temperature oxidation of Co-10 W/O Cr alloys. II - Oxidation kinetics. [ECS PAPER 413]

08 p1332 A69-20364

KOGA, T.

The axisymmetric buckling of initially imperfect complete spherical shells.

19 p3446 A69-36834

KOGA, Y.

Wrinkling of the pressurized fixed-free membrane column.

22 p4045 A69-40814

KOGAEV, V. P.

Simulation of metal fatigue by the Monte Carlo method.

07 p1233 A69-19314

KOGAN-BELTSKII, G. I.

Structural characteristics of the surface wind for aviation needs /Strukturnye kharakteristiki prizemnogo vetra dlia nuzhd aviatsii/.

13 p2293 A69-27844

KOGAN, A. B.

Effect of prolonged fixation on certain functions of an animal organism /Vliianie dritel'noi fiksatsii zhivotnogo na nekotorye funktsii ego organizma/.

13 p2212 A69-28617

Simulation of an adequate light signal by electrical stimulation of the visual cerebral cortex /Modelirovanie adekvatnogo svetovogo signala elektricheskimi razdrazheniem zritel'noi kory mozga/.

22 p3885 A69-41066

KOGAN, B. I.

Application of a plate-like analog to the determination of thermal stresses in a two-dimensional problem of the theory of elasticity /Primenenie plastinchatoi analogii k opredeleniiu temperaturnykh napriazhenii v ploskoi zadache teorii uprugosti/.

04 p0668 A69-14272

KOGAN, B. IA.

The modelling of irrational transfer functions.

09 p1476 A69-22677

KOGAN, E. IA.

Hydrodynamic models as applied to the investigation of magnetic plasma stability.

07 p1190 A69-18694

Low-frequency hydrodynamic instabilities in an inhomogeneous current-carrying plasma /Nizkочастотные гидродинамические неустойчивости неоднородной плазмы с током/.

11 p1932 A69-25537

KOGAN, IA. D.

Influence of nitriding on the heat resistance and transition temperature of molybdenum alloys /Vliianie azotirovaniia na zharoprochnost' i temperaturnyi porog khрупkosti molibdenovykh spлавov/.

01 p0093 A69-10212

Effect of nitriding on heat resistance and cold-brittleness threshold of molybdenum alloys.

15 p2637 A69-30268

Investigation of the diffusion saturation of molybdenum and its alloys by nitrogen /Issledovanie diffuzionnogo насыщения молибдена и его сплавов азотом/.

18 p3158 A69-35288

KOGAN, L. M.

Efficient GaP diode sources of red radiation.

06 p0979 A69-16999

KOGAN, M. N.

Mathematical experiment for the calculation of transport coefficients.

03 p0415 A69-13419

Solution of linear problems in rarefied-gas dynamics by the Monte Carlo method /Reshenie lineinykh zadach dinamiki razrezhennogo gaza metodом Monte-Karlo/.

06 p0910 A69-17345

On equations of nonequilibrium flow of polyatomic gases in the Eucken approximation.

19 p3300 A69-36787

Solutions to the problem of the temperature jump /the flow in a Knudsen layer/ and to the linear problem of heat transfer between two parallel plates in a rarefied gas /Reshenie zadachi o skachke temperatury /techenie v sloe Knudsen/ i lineinoi zadachi o peredache tepla mezdu dvumia parallel'nymi plastinami v razrezhennom gase/.

24 p4246 A69-43490

KOGAN, N. IA.

Stability of a single-axis gyrostabilizer in the presence of dry friction in the precession axis /Ob ustoychivosti odnoosnogo girostabilizatora pri nalichii sukhogo treniia v osi pretsessii/.

09 p1502 A69-22701

Stability of a single-axis gyrostabilizer in the presence of dry friction at the stabilization axis /Ob ustoychivosti odnoosnogo girostabilizatora pri nalichii sukhogo treniia v osi stabilizatsii/.

14 p2445 A69-28922

KOGAN, R. L.

Surface alloying of ZhS6-K alloy by three elements /Poverkhnostnoe legirovanie splava ZhS6-K tremia elementami/.

19 p3345 A69-36157

Heat resistance of ZhS6-K alloy subjected to multicomponent diffusion saturation /Zharostoikost' splava ZhS6-K posle mnogokomponentnogo diffuzionnogo насыщения/.

19 p3345 A69-36159

Structure and phase composition of silicide layers in niobium.

20 p3563 A69-37820

KOGAN, SH. M.

Superheating instability in a semiconductor plasma in crossed electric and magnetic fields.

02 p0298 A69-12099

Anisotropic photoelectric effects /Anizotropnye fotoelektricheskie efekty/.

10 p1701 A69-23138

Physical phenomena in semiconductors with negative differential conductivity /Fizicheskie iavleniia v poluprovodnikakh s otritsatel'noi differentsial'noi provodimost'iu/.

10 p1744 A69-23300

Theory of fluctuations in a nonequilibrium electron gas /K teorii fluktuatsii v neravновесном электронном gase/.

13 p2314 A69-28445

KOGAN, V. I.

Radiation transfer in a plasma /O perenose izlucheniia v plazme/.

07 p1188 A69-18282

Cross section measurements needed for controlled fusion research, MHD generators, and other plasma studies.

07 p1195 A69-19652

KOGAN, V. S.

Diffusion in vapor-deposited nickel layers on niobium substrate /Diffuziia v sloiakh nikelia, skondensirovannogo iz parovoi fazy na niobievuiu podlozhku/.

20 p3560 A69-37366

KOGANOVSKA, M. M.

Changes in the basic hemodynamic characteristics of puppies of pubertal age during a decrease in the oxygen partial pressure in the air /Zmini osnovnykh gemodinamicheskikh pokaznikov u shcheniat pubertatnogo viku pri nizhenii partial'nogo tisku kisniu v povitri/.

19 p3257 A69-36169

KOGARKO, B. S.

Parametric resonance in communicating vessels under variable vertical accelerations /Parametricheskii rezonans v soobshchayushchikhsia sosudakh pri vertikal'nykh peremennykh peregruzkakh/.

14 p2432 A69-29628

KOGARKO, S. M.

Ignition of fuel films behind shock waves in air and oxygen.

02 p0353 A69-12317

Burning and stabilization of a hydrogen flame in an axisymmetric flow /Gorenie i stabilizatsiia plameni vodoroda v osemimmetrichnom potoke/.

02 p0355 A69-12673

Causes of the occurrence of a spherical detonation in a closed volume /O prichinakh vozniknoveniia sfericheskoi detonatsii v zamknutom ob'eme/.

10 p1810 A69-23897

Promotion of combustion /Promotirovanie goreniia/.

17 p3069 A69-33139

KOGELSCHATZ, U.

- Doppler-shift measurements of axial and rotational velocities in an MPD arc.  
[AIAA PAPER 69-110] 06 p0972 A69-18171
- Experimental investigation of the formation and acceleration of the current layer in a Z-pinch discharge /Experimentelle Untersuchung der Entstehung und Beschleunigung der stromfuehrenden Schicht in einer Z-Pinch-Entladung/. 09 p1552 A69-22397

KOGLIN, B.

- Heat transport in foam materials /Der Waermetransport in Schaumstoffen/. 08 p1421 A69-20716

KOGURE, T.

- Contribution to the study of the emission profiles of so-called "pole on" Be stars /Contribution a l'etude des profils d'emission d'etoiles Be dites "Pole On"/. 09 p1596 A69-22052
- On the formation of the Balmer line spectrum in the extended atmospheres of Be stars and shell stars. 18 p3204 A69-35349
- The spot diagrams of Schmidt camera. 20 p3546 A69-38272

KOGUT, G. I.

- Influence of the parameters of rib-reinforced cylindrical shells on their stress-strain state /O vlianii parametrov rebristykhs tsilindricheskikh obolochek na ikh napriazhenno-deformirovannee sostoianie/. 23 p4229 A69-42001

KOHL, H.

- Wind systems in the thermosphere. 15 p2603 A69-31403
- An explanation of the magnetic declination effect in the ionospheric F2-layer. 18 p3126 A69-34256

KOHL, J. W.

- Solar proton monitoring. 08 p1318 A69-21142

KOHL, R. F.

- A high heat flux sensor employing semiconductors. 19 p3307 A69-35748

KOHL, R. H.

- Theory for the measurement of the earth's velocity through the 3 deg K cosmic radiation. 03 p0511 A69-13475

KOHL, W. H.

- The compatibility of materials. 06 p0945 A69-17872

KOHLER, P.

- Echo 1 - 93 months in space /Echo 1 - 93 mois dans l'espace/. 10 p1792 A69-23804

KOHLHARDT, M.

- Dependence of dv/dt and dp/dt of ventricular pressure of the heart on physical systolic results /Die Abhaengigkeit von dv/dt und dp/dt des Ventrikeldruckes des Herzens von physikalischen Resultaten der Systole/. 23 p4095 A69-42076

KOHLHASE, C. E.

- The 1969 Mariner mission to Mars. 18 p3201 A69-35141
- Mariner Mars 1969 flight-path design and mission analysis. [AAS PAPER 68-134] 19 p3402 A69-35938

KOHLMAN, D. L.

- Vortex breakdown on slender sharp-edged wings. [AIAA PAPER 69-778] 19 p3237 A69-35644
- Experiments on the use of dry ice ablating wind-tunnel models. 24 p4297 A69-43255

KOHLMAYR, G. F.

- Characterization of single-blow temperature responses by first moments. 21 p3851 A69-39291

KOHLSCHE, K.

- Some considerations regarding the significance of the absolute kinetic energy of the atmosphere with a presentation of numerical values for the Northern Hemisphere /Einige Betrachtungen ueber die Bedeutung der absoluten kinetischen Energie der Atmosphaere mit Angabe von Zahlenwerten fuer die Nordhalbkugel/. 24 p4345 A69-43151

KOHN, S.

- Contribution to the study of the ablation of some materials based on phenolic resins. 11 p1999 A69-24908

KOHNKE, E. E.

- Effect of chemisorbed oxygen on the electrical conductivity of Zn-doped polycrystalline SnO sub 2. 07 p1201 A69-19478

KOHNKEN, K. H.

- Ceramic armor systems today. 19 p3355 A69-35525

KOHOUTEK, L.

- Some physical characteristics of very young planetary nebulae and of their nuclei. 19 p3423 A69-36226
- Nova Vulpeculae 1968 no. 1. I - Photoelectric observation at Ondrejov in 1968. 23 p4208 A69-41290

KOIDAN, V. S.

- Dynamic characteristics of a straight turbulent discharge. 07 p1195 A69-19592

KOIFMAN, I. I.

- Two-dimensional physically and geometrically nonlinear problems in the theory of elasticity for multiply connected bodies /Ploski fizichno ta geometrichno nelineini zadachi teorii pruzhnosti dlia bagatozv'iaznykh til/. 02 p0340 A69-12139
- Large elastic deflections of a rectangular plate in plane bending by edge moments. 06 p1021 A69-17177
- Generalized boundary value problems of nonlinearly elastic plates with a reinforced edge /Uzagal'neni granichni zadachi dlia nelineino pruznykh plastin z pidkriplenim kraem/. 21 p3833 A69-38574

KOIG, M. B.

- An integrated nonvolatile read-write memory with addressing. 17 p2942 A69-34120

KOITABASHI, M.

- Mush cathodes for high power klystrons. 23 p4144 A69-42532

KOITER, W. T.

- Foundations and basic equations of shell theory - A survey of recent progress. 11 p1978 A69-24808
- On the thermodynamic background of elastic stability theory. 19 p3444 A69-36796

KOIVO, A. J.

- A second-order variational method for discrete-time optimal control problems. 01 p0054 A69-11416
- Quantization error and design of digital control systems. 12 p2053 A69-26507
- On computational solutions of state constrained optimization problems. 24 p4292 A69-43286

KOIZUMI, M.

- Possible existence of dense ferrimagnetic perovskite allotropic form of yttrium iron garnet. 08 p1372 A69-20372

KOIZUMI, T.

- Stratification of F region during solar minimum and its variation comparing with solar maximum's. 17 p2959 A69-33005

KOJIMA, T.

- A new running test facility for the study of flight dynamics. 17 p2944 A69-32851

KOJIMA, Y.

- Effect of heat treatment on resistance to stress corrosion cracking of Al-Zn-Mg ternary alloys. I. 04 p0617 A69-14933

KOK, B.

- Reaction between primary and secondary electron acceptors of photosystem II of photosynthesis. 01 p0024 A69-10928

KOKEN, C.

- Receiver signal-to-noise ratio losses for binary transmissions from interplanetary space probes /Empfangsseitige Stoerabstandsverluste bei binaeren Uebertragungen von interplanetaren Raumsonden/. 13 p2223 A69-28609

KOKHANENKO, P. N.

- Possibility of determining the radiation wavelength of an active ruby from its temperature. I, II /O vozmozhnosti opredeleniia dliny volny izlucheniia aktivnogo rubina po ego temperature. I, II/. 20 p3552 A69-36967

KOKHMANIUK, S. S.

- Application of a digital computer to a study of the stressed state of asymmetrically loaded shells /Primenenie ETsVM dlia issledovaniia napriazhennogo sostoiannia asimmetrichno nagruzhennykh obolochek/. 06 p1026 A69-18016

KOKONCHEV, L. Z.

- M-type backward wave tube with a step interaction space /Usilitel' tipa lov-M so stupenchatym prostranstvom vzaimodeistviia/. 13 p2237 A69-28583

KOKOREV, D. T.

- Nonequilibrium carriers during depolarization in semiconductors /Neravnovesnye nositeli pri depolarizatsii v poluprovodnikakh/. 01 p0138 A69-10434

KOKORIN, N. A.

- Determination of the displacements of plane-truss joints /Opredelenie peremeshchenii uzlov ploskikh ferm/. 23 p4225 A69-41420

KOKORIN, V. V.

- Features of the decomposition of a supersaturated solid solution of niobium in cobalt - Precipitation mechanism in a matrix with a hexagonal closely packed lattice /Osobennosti raspada peresyshchennogo tverdogo rastvora niobiia v kobal'te - Mekhanizm vydeleniia v matritse s geksagonal'noi plotnoupakovanoi reshetkoi/. 21 p3750 A69-39788

KOKOSHA, E. P.

- A radar wind patrol /Vetrovoi radiolokatsionnyi patrol'. 17 p2939 A69-33901

KOKOSHKIN, V. A.

- The face effect in single crystals of gallium antimonide, grown according to the Czochralski method. 09 p1558 A69-21870
- Morphological peculiarities and the distribution of impurities in single crystals of GaSb with extended junctions. 10 p1745 A69-23330

KOKOTOVIC, P.

- Sensitivity comparison of optimal controls. 05 p0737 A69-15866

KOKOTOVIC, P. V.

- Singular perturbation method for reducing the model order in optimal control design. 02 p0224 A69-11967
- Near-optimum design of linear systems by a singular perturbation method. 12 p2052 A69-26503

KOKOTT, W.

- The status of Venus research /Zum Stand der Venus-Forschung/. 08 p1391 A69-20456

KOKOUROV, V. D.

- Diurnal variations of fluctuations of the electron density in the ionosphere of the Northern Hemisphere /Sutochnye variatsii fluktuatsii elektronnoi plotnosti v ionosfere severnogo polusharii/. 14 p2444 A69-29870
- Investigation of diffuse reflections /Issledovanie rasseyaniykh otrazhenii/. 17 p2968 A69-33997
- Ionospheric Processes /Ionosfernye Protssy/. 18 p3126 A69-34358
- Dynamics of the diffused reflection process according to observations at the Irkutsk station /Dinamika protsessa rasseiannykh otrazhenii po nabludeniiam na stantsii Irkutsk/. 20 p3529 A69-37687

KOKTS, I. I. A.

- Tunnel-diode slideback sampling gate /Avtokompensatsionnyi stroboskopicheskii preobrazovatel' na tunnel'nom diode/. 13 p2236 A69-28538

KOKUBUN, S.

- Hydromagnetic emissions associated with storm sudden commencements. 02 p0241 A69-11726
- Polar chorus emission and worldwide geomagnetic variation. 10 p1681 A69-22803
- Solar flare effect on VLF chorus. 14 p2514 A69-29385

KOKURIN, I. L.

- Investigation of the physical libration of the moon by an optical location method. 01 p0158 A69-11311



## KOLACHEV, B. A.

Radio-astronomical investigation of ionospheric inhomogeneities by the method of space-diversity reception /Radioastronomicheskoe issledovanie ionosfernykh neodnorodnostei metodom prostranstvennoraznennogo priema/.

02 p0237 A69-11665

Radio astronomical investigation of ionospheric inhomogeneities by the spaced receiver method.

13 p2257 A69-28696

Radio astronomical investigations of the parameters of large-scale ionospheric inhomogeneities /Radioastronomicheskoe issledovanie parametrov krupnomasshtabnykh ionosfernykh neodnorodnostei/.

14 p2436 A69-29053

## KOLACHEV, B. A.

Effect of hydrogen on Young's modulus in titanium beta-alloy VT15 /Vliianie vodoroda na moduli uprugosti titana i beta-titanovogo splava VT15/.

04 p0618 A69-15178

Nature of hydrogen brittleness of titanium and its alloys /Priroda vodorodnoi khrupkosti titana i ego splavov/.

07 p1162 A69-18772

Effect of hydrogen on tensile strength and stress-rupture strength of /alpha plus beta/- titanium alloys VTZ-1 and VT14 /Vliianie vodoroda na kratkovremennuiu i dlitel'nuu prochnost' alpha plus beta-titanovykh splavov VTZ-1 i VY14/.

11 p1905 A69-24962

## KOLACZEK, B.

Lunar spherical astronomy /Ksiezycowa astronomia sferyczna/.

21 p3798 A69-38605

## KOLAR, J.

Some effects of laser upon the bones.

23 p4101 A69-41464

## KOLB, A. C.

Hydrogen molecular vacuum ultraviolet laser theory.

05 p0771 A69-15814

Collisionless shock waves and turbulent heating in high voltage theta pinches.

17 p3013 A69-33825

## KOLBASOV, G. IA.

Applicability of the fluctuation-dissipation theorem to a description of nonequilibrium noise of semiconductor diodes.

07 p1113 A69-19596

## KOLBE, O.

An optimal rendezvous of two active flight vehicles /Ein optimales Rendezvous zweier aktiver Flugkoerper/.

10 p1791 A69-22923

## KOLBIG, J.

Remarks on special features of the wind field caused by the earth's relief and noted up to 300 m above the ground /Einige Bemerkungen zu reliefbedingten Besonderheiten des Windfeldes bis 300 m ueber Grund/.

09 p1535 A69-21517

## KOLBIN, M. N.

Effect of the surface potential on noise and photoconductivity in p-type indium antimonide /Vliianie poverkhnostnogo potentsiala na shumy i fotoprovodimost' antimonida indii p-tipa/.

24 p4362 A69-43738

## KOLBIN, M. N.

Impact damping of vibrations /Udarnee dempfirovaniye kolebaniy/.

17 p3066 A69-33946

## KOLCHENKO, A. P.

Interaction of atom with monochromatic field in the strong-collision model.

08 p1354 A69-19954

## KOLCHIN, A. D.

A method of integrating the equations of the plastic three-dimensional stressed state /Ob odnom metode integrirvaniya uravnenii plasticheskogo ploskogo napriazhennogo sostoiianiya/.

04 p0679 A69-14924

## KOLCHINSKII, I. G.

Corrections for refraction in the observation of objects at heights between 5 and 300 km /Popravki za refraktzii pri nabludenii ob'ektov na vysote 5-300 km/.

09 p1490 A69-21918

Tables of corrections for refraction during observation of objects in the earth's atmosphere /Tablitsy popravok za refraktzii pri nabludenii ob'ektov v zemnoi atmosfere/.

15 p2646 A69-30160

Certain results of the observation of stellar scintillation spectra with the AZT-7 telescope at Goloseevo /Nekotorye rezul'taty nabludeniya spektrov mertsaniia zvezd na teleskope AZT-7 v Goloseve/.

15 p2647 A69-30165

## KOLCHUZHINA, A. I.

Investigation of the precipitation mechanism of the Ni sub 3 Ti phase in the alloy Ni plus 16.3 percent Cr plus 5.8 percent Ti /Issledovanie mekhanizma vydeleniya fazy Ni sub 3 Ti v splave Ni plus 16.3 percent Cr plus 5.8 percent Ti/.

20 p3558 A69-36968

## KOLENSKII, L. L.

Penetration of pulsed electromagnetic waves into the cavity of a conducting cylinder /Proniknovenie impul'snykh elektromagnitnykh voln v polost provodiashchego tsilindra/.

15 p2569 A69-30950

## KOLESNICHENKO, A. F.

Calculation of air film cooling for a rotating disk /K raschetu plenochного vozdušnogo okhlazhdeniya vrashchayushchegosia diska/.

06 p1034 A69-17814

## KOLESNICHENKO, E. G.

Temperature dependence of model potentials of an intermolecular interaction /O zavisimosti model'nykh potentsialov mezhmolekuliarnogo vzaimodeistviya ot temperatury/.

15 p2655 A69-30982

Calculation of transfer coefficients of rarefied gases by the Monte Carlo method.

18 p3121 A69-34710

## KOLESNICHENKO, IA. I.

Influence of pair collisions on the stability of a plasma/beam system /O vlianii parnykh stolknovenii na ustoiichivost' sistemy plazma-puchok/.

07 p1189 A69-18539

Stability of a magnetoactive plasma with a monoenergetic component /Ustoiichivost' magnitoaktivnoi plazmy s monoenergetichnoi komponentoi/.

09 p1546 A69-21566

Magnetohydrodynamic waves in a cylindrical plasma column.

14 p2489 A69-28732

Effect of binary collisions on the stability of beam plasma systems.

21 p3776 A69-38691

Stability of a homogeneous magnetoactive plasma with an isotropic monoenergetic component /Do pitan-ia pro stikist' odnorodnoi magnitoaktivnoi plazmy z izotropnoi monoenergetichnoi komponentoi/.

22 p3990 A69-40789

## KOLESNIKOV, A. A.

Theory of electron states at deep levels in indium antimonide /K teorii elektronnykh sostoiiani na glubokikh urovniakh v antimonide indii/.

09 p1556 A69-21508

Transmission of holographs by a standard phototelegraphic channel with a limited number of halftones /Peredacha gologramm po standartnomu fototelegrafnomu kanalu s ogranichenным chislom polutonov/.

11 p1889 A69-25549

## KOLESNIKOV, G. F.

Experimental study in the simulation of various types of neurons /Eksperimental'noe issledovanie po modelirovaniu neironov razlichnykh tipov/.

20 p3471 A69-37256

## KOLESNIKOV, K. S.

The Liquid Rocket as a Controlled Plant /Zhidkost-naia Raketa kak Ob'ekt Regulirovaniya/.

18 p3206 A69-34333

Application of a finite difference technique to the problem of the natural longitudinal oscillations of straight rods of variable cross section /O primenении metoda konechnykh raznostei k zadache o sobstvennykh prodol'nykh kolebaniakh priamykh sterzhnei peremennogo secheniya/.

18 p3217 A69-34581

## KOLESNIKOV, P. M.

Simple and shock waves in nonlinear, high-intensity, unsteady state heat and mass transfer /Prostye i udarnye volny pri nelineinom vysokointensivnom nestatsionarnom protsesse teplo- i massoprenosa/.

01 p0174 A69-10096

Reduction of equations of unsteady nonlinear highly intensive heat and mass transfer to equivalent linear equations - Analogies in the theory of highly intensive heat and mass transfer /O privedenii uravnenii nelineinogo nestatsionarnogo vysokointensivnogo teplo- i massoobmena k ekvivalentnym lineinym uravneniyam - Analogii teorii vysokointensivnogo teplo- i massoobmena/.

01 p0174 A69-10104

Study of the influence of mass transfer processes and resistance forces on the electrodynamic acceleration of a plasma /Issledovanie vliianiia protsessov massoprenosa i sil soprotivleniia na elektrodinamicheskoe uskorenie plazmy/.

13 p2315 A69-28555

Energy relations and energy conversion coefficient for electrodynamic plasma acceleration with allowance for mass transfer processes /Energeticheskie sootnosheniia i koeffitsient preobrazovaniia energii pri elektrodinamicheskoi uskorenii plazmy s uchedom protsessov massoprenosa/.

15 p2664 A69-31176

Approximate solution of the supersonic gas flow equations /O priblizhennom reshenii uravnenii sverkhzvukovogo techeniya gaza/.

21 p3643 A69-38637

Theory of electrodynamic acceleration of a plasma in a high-current pulsed accelerator /K teorii elektrodinamicheskoi uskorenii plazmy v sil'notochnom impul'snom uskoretele/.

21 p3778 A69-39548

## KOLESNIKOV, S. M.

Problems in the Theory of Space, Time, and Matter /Problemy Teorii Prostranstva, Vremeni i Materii/.

16 p2812 A69-32110

## KOLESNIKOV, V. M.

New measurement techniques in the investigation of the influence of microwave fields on biological objects /O novykh metodakh izmerenii pri issledovanii vlianiia polei SVCh-diapazona na biologicheskie ob'ekty/.

24 p4279 A69-43705

## KOLESNIKOV, V. N.

Thermal radiation of nitrogen plasma in the region from 0.5 to 1.1 mu /Teplovoe izluchenie azotnoi plazmy v oblasti 0.5-1.1 mkm/.

07 p1189 A69-18283

Electron forces of the 1 super plus system of N sub 2 bands of the Meinel system of N sub 2 super plus. II /Elektronnyye sily 1 super plus sistemy polos N sub 2 i sistemy Mainela N sub 2 super plus. ii/.

20 p3579 A69-37307

## KOLESNIKOVA, M. F.

Influence of high oxygen concentrations on animal organisms /Vliianie povyshennykh kontsentratsii kisloroda na organizm zhivotnykh/.

05 p0709 A69-16512

The effect of high oxygen concentrations on the animal organism.

08 p1262 A69-19831

Effects of high oxygen concentrations on animals.

18 p3095 A69-34731

## KOLESNIKOVA, N.

Spectra of micrometeorological, synoptic, and climatic oscillations of the meteorological fields /O spektrakh mikrometeorologicheskikh, sinopticheskikh i klimaticheskikh kolebaniy meteorologicheskikh polei/.

14 p2476 A69-29823

## KOLESNIKOVA, V. N.

Determining the radiative heat flux in the lower layers of the atmosphere.

10 p1682 A69-23327

## KOLESOV, G. M.

Study of the distribution of Sc, Ce, and Eu in various phases of meteorite material /Izuchenie raspredeleniya Sc, Ce i Eu mezhdu razlichnymi fazami meteoritnogo veshchestva/.

01 p0026 A69-11376

## KOLESOV, L. N.

Components of the functional synthesis of microelectronic radio equipment /Komponenty funktsional'nogo sinteza radiotekhnicheskoi mikroelektronnoi apparatury/.

18 p3109 A69-35162

## KOLESOVA, V. I.

Representation of the geomagnetic field at the earth's surface and in outer space with the aid of dipole models /Predstavleniye geomagnitnogo polia na poverkhnosti zemli i vo vneshnem prostranstve s pomoshch'yu dipol'nykh modelei/.

02 p0238 A69-11673

Dipole model of the main geomagnetic field /based on an analysis of the Z sub ao field/.

03 p0424 A69-13543

Analytical modeling of the geomagnetic field.

03 p0424 A69-13544

Spatial structure of the residual Z sub ae field.

06 p0922 A69-17755

Dipole model of the geomagnetic field /on the basis of an analysis of the Z sub ae field/.

12 p2071 A69-26695

- Representation of the geomagnetic field at the surface of the earth and in outer space by means of dipole models.  
13 p2257 A69-28704
- KOLEZHUK, K. V.**  
Parameters of slow recombination centers of heat-treated CdSe single crystals.  
09 p1560 A69-22664
- KOLGADIN, V. A.**  
Theory of elastoplastic bending of plates with a nonlinear stress-strain diagram /K teorii uprugoplasticheskogo izгиба plastin s nelineinoy diagrammoy deformirovaniya/.  
04 p0667 A69-14269  
Stress-strain state of plates during bending, taking into account strengthening of the material /Napriazhenno-deformirovannoe sostoyaniye plastin pri izgibe s uchetom uprochneniya materiala/.  
11 p1985 A69-25175
- KOLGADIN, V. O.**  
Equations of the bending theory of plates made of an orthotropic material with different moduli /Rivniannia teorii zginu plastin z riznomodul'noy ortotropnogo materiala/.  
15 p2708 A69-30661
- KOLIANO, IU. M.**  
Nonstationary generalized planar temperature field and thermal stress in a crystal plate.  
02 p0340 A69-12044  
Thermal stresses in heat-releasing anisotropic plates heated by heat sources /Temperaturnye napriazheniya v nagrevaemykh istochnikami tepla anizotropnykh plastinkakh s teplootdachei/.  
12 p2177 A69-25992
- KOLIN, A.**  
A new principle for electromagnetic catheter flow meters.  
22 p3889 A69-40058
- KOLLAR, E. J.**  
Psychological, psychophysiological, and biochemical correlates of prolonged sleep deprivation.  
23 p4099 A69-42195
- KOLLBERG, E.**  
Rutile traveling-wave maser system for the Onsala 84-foot radio telescope.  
02 p0257 A69-12463
- KOLLEY, W.**  
Calculation of the electrical conductivity of a fully ionized plasma in a magnetic field.  
06 p0965 A69-17482
- KOLM, H. H.**  
Search for magnetic monopoles.  
22 p3981 A69-40197
- KOLMAKOV, A. P.**  
Thermionic converter electrical characteristics with matrix circuit connections.  
14 p2400 A69-29225
- KOLMAN, E. R.**  
Free oscillations of a conical shell for various boundary conditions /Svobodnye kolebaniya konicheskoi obolochki pri razlichnykh granichnykh usloviyakh/.  
17 p33058 A69-33201  
Experimental determination of the natural oscillation frequencies of truncated conical steel shells of revolution /Eksperimental'noye opredeleniye sobstvennykh chastot kolebaniy stal'nykh usechennykh konicheskikh obolochek vrashcheniya/.  
17 p33058 A69-33202
- KOLNSBERG, H. J.**  
Water reclamation by membrane vapor diffusion.  
03 p0379 A69-12992
- KOLOBOV, IU. G.**  
The cathode materials of the thermoemission converters research /TEC/.  
14 p2505 A69-29265
- KOLOBOV, G. A.**  
Fundamentals of electroplating titanium, vanadium, and their alloys from molten salts /Osnovy polucheniya pokrytiy iz titana, vanadiya i ikh spлавov elektrolizom rasplavlennykh soley/.  
03 p0446 A69-13574
- KOLOBOVA, A. P.**  
Latitudinal dependence of ionospheric parameters /O shirotnoi izmenchivosti ionosfernykh parametrov/.  
17 p2964 A69-33963
- KOLOBOVA, K. M.**  
X-ray spectrum investigation of Ti-Al alloys /Rentgenospektral'noye issledovanie Ti-Al spлавov/.  
21 p3749 A69-39787
- KOLODNYI, G. IA.**  
CW laser employing LaNa/MoO sub 4/ sub 2 - Nd super 3 super plus crystals for operation at 300 K /Opticheskiy kvantovyy generator nepriyemno deystviya na osnove kristallov LaNa/MoO sub 4/ sub 2 - Nd super 3 super plus, rabotaiushchii pri 300 deg K/.  
06 p0934 A69-17262
- KOLODTSSEV, I. K.**  
Experimental investigation of heat transfer in boiling dissociative liquid.  
[ASME PAPER 69-HT-58] 24 p4411 A69-43536
- KOLODZIEJCZAK, J.**  
On the theory of optical mixing and higher harmonics generation in semiconductors.  
19 p3385 A69-36519
- KOLODZIEJSKI, J.**  
Analysis of failure mechanisms of semiconductor devices.  
08 p1294 A69-21117
- KOLODZINSKI, E.**  
Certain problems in the construction of runway surfaces /Niektore zagadnienia budowy nawierzchni lotniskowych/.  
17 p2948 A69-34215
- KOLOGRIVOV, V. N.**  
Geometry and kinematics of mirror scanning /Geometriya i kinematika zerkal'noi razvertki/.  
12 p2091 A69-26367
- KOLOM, A. L.**  
Titanium diffusion-bonded honeycomb - Optimum structure for material, joining medium, and configuration.  
[AIAA PAPER 68-973] 24 p4326 A69-43716
- KOLOMEETS, E. V.**  
Determination of the cosmic-ray modulation spectrum in interplanetary space.  
03 p0501 A69-13527  
Solar-diurnal Cosmic-Ray Variations from Maximum to Minimum Solar Activity /Solnechno-sutochnye variatsii kosmicheskikh luchej ot maksimuma do minimuma solnechnoi aktivnosti/.  
07 p1209 A69-19500  
Spectra of Forbush decreases in the low-energy region according to earth satellite measurements in 1964 and 1965 /Spektry Forbush-ponizhenii v oblasti mal'nykh energii po izmereniyam na sputnikakh zemli v 1964-1965 gg./.  
10 p1758 A69-22829  
Galactic and solar cosmic ray flux in relation to the conditions in interplanetary space /Potok galakticheskikh i solnechnykh kosmicheskikh luchej v zavisimosti ot uslovii v mezplanetnom prostranstve/.  
10 p1758 A69-22833  
Cosmic ray anisotropy and Forbush effects during a solar activity minimum /Anizotropiya kosmicheskikh luchej i efekty Forbusha v minimume solnechnoi aktivnosti/.  
10 p1758 A69-22835  
Effect of the sectoral structure of the interplanetary magnetic field on the cosmic ray intensity and geomagnetic field /Vliyaniye sektornoy struktury mezplanetnogo magnitnogo polya na intensivnost' kosmicheskikh luchej i magnitnoye pole zemli/.  
10 p1769 A69-23905
- KOLOMENSII, V. D.**  
Investigation of the meteoric dust of the Tunguska meteorite /Issledovanie meteornoj pyli tunguskogo meteora/.  
01 p0160 A69-11386
- KOLOMIETS, B. T.**  
The energy spectrum and transport mechanism for current carriers in amorphous semiconductors.  
19 p3391 A69-36558  
Glassy semiconductors /Stekloobraznye poluprovodniki/.  
19 p3392 A69-36641  
Basic parameters on switches based on glassy chalcogenide semiconductors - Parameters and physical principles of switches based on glassy chalcogenide semiconductors /Osnovnye parametry perekliuchatelei na osnove khal'kogenidnykh stekloobraznykh poluprovodnikov - Parametry i fizicheskie osnovy perekliuchatelei na osnove khal'kogenidnykh stekloobraznykh poluprovodnikov/.  
21 p3780 A69-39045
- KOLOMIETS, N. F.**  
Modulation of laser emission by a frequency of 36.6 GHz /Modulirovaniye izlucheniya OKG chastotой 36.6 Ggts/.  
19 p3334 A69-35884
- KOLOMIETS, V. G.**  
Investigation of single-frequency random oscillations of nonautonomous systems with distributed parameters /Issledovanie odnochastotnykh sluchainykh kolebaniy u neavtonomnykh sistemakh s raspredelennymi parametrami/.  
11 p1916 A69-24761  
Periodic solutions to strongly nonlinear systems with a delay /Periodicheskie resheniya sil'no nelineynykh sistem s zapazdyvaniyem/.  
11 p1916 A69-24765  
Random oscillations of elastic nonlinear systems with distributed parameters /Sluchainye kolebaniya uprugikh nelineynykh sistem s raspredelennymi parametrami/.  
11 p1918 A69-24781
- KOLOMIETS, V. P.**  
A method for determining stresses and strains over the cross section of a beam under complex loading with allowance for the  $\sigma$ ,  $\epsilon$  diagram.  
16 p2873 A69-32132
- KOLOMIEVSKII, M. L.**  
Certain indices of the state of the cardiovascular system in practically healthy men /Nekotoryye pokazateli sostoyaniya serdечно-sosudistoi sistemy u prakticheski zdorovykh liudei/.  
07 p1066 A69-18983  
Some indices of the state of the cardiovascular system in ostensibly healthy subjects.  
20 p3480 A69-38231
- KOLOMITSEV, O. P.**  
Variations of the rate of ion production in a quiet F2 layer in the southern polar cap /Variatsii skorosti ionoobrazovaniya v spokoinom sloe F2 v iuzhnoi poliar'noi shapke/.  
02 p0238 A69-11679  
Variations in the ionization rate in a quiet F sub 2-layer in the south polar cap.  
13 p2257 A69-28710  
Steady distribution of the electron concentration in the F region /Statsionarnoe raspredeleniye elektronnoy kontsentratsii v oblasti F/.  
20 p3525 A69-37657  
Solar diurnal variations in certain parameters of a quiet F2 layer in Antarctica /Solnechno-sutochnye variatsii nekotorykh parametrov spokoinogo sloia F2 v Antarktike/.  
20 p3526 A69-37662
- KOLOMITSEVA, G. I.**  
Test of the use of satellite data for the study of secular variations /Opyt ispol'zovaniya dannykh ISZ dlia izucheniya vekovykh variatsii/.  
09 p1485 A69-21534  
Worldwide Isopore charts for the period from 1960 through 1965 /Mirovye karty izopor dlia perioda 1960-1965 gg./.  
10 p1687 A69-23920  
An experiment in the use of satellite data for the study of secular variations.  
16 p2783 A69-32529
- KOLOMITSOV, V. IU.**  
A method for calculating a short-wave radiation field reflected anisotropically from an underlying surface /Metodika rascheta polya korotkovolnovoi radiatsii pri anizotropnom otrazhenii ot podstilaushchei poverkhnosti/.  
06 p0952 A69-17985
- KOLOMNIKOV, IU. D.**  
Stabilization of reproducibility of frequencies of He-Ne lasers at 0.63 mu. [IEEE PAPER P-4]  
07 p1153 A69-19073
- KOLONINA, I. I.**  
Electric arc intensity in the region of interaction with a turbulent boundary layer in a vortex-stabilized plasmatron /Napriazhennost' elektricheskoi dugi v oblasti vzaimodeystviya s turbulentsym pogranichnym sloem v plazmotrone s vikhrevoi stabilizatsiei/.  
09 p1545 A69-21432
- KOLOS, W.**  
Exchange and Coulomb energy of H sub 2 determined by various perturbation methods.  
07 p1186 A69-19446
- KOLOSKOVA, L. F.**  
An approximate method for determining the boundaries of clouds /O priblizhennom sposobe opredeleniya granits oblastnosti/.  
20 p3569 A69-36986
- KOLOSOV, G. E.**  
Optimum control of quasi-harmonic plants in the case of incomplete information of the values of the phase coordinates /Optimal'noye upravleniye kvazigar-



monicheskimi ob'ektami pri nepolnoi informatsii o znacheniiakh fazovykh koordinat.  
14 p2426 A69-29420

**KOLOSOV, I. A.**

Reactions of cosmonauts during parabolic aircraft flights /Reaktsii kosmonavtov vo vremia parabolicheskikh poletov na samoletakh/.  
07 p1061 A69-18580

Certain physiological reactions in humans under conditions of brief weightlessness /Nekotorye fiziologicheskie reaktsii cheloveka v usloviakh kratkovremennoi nevesomosti/.  
07 p1061 A69-18581

Physiological reactions of cosmonauts in unsupported space /Fiziologicheskie reaktsii kosmonavtov v bezopornom prostranstve/.  
07 p1061 A69-18582

Vestibular reactions of cosmonauts during the flight on the Voskhod spacecraft /Vestibuliarnye reaktsii kosmonavtov pri Plete na korabe "Voskhod"/.  
07 p1062 A69-18588

Efficiency of man under conditions of reduced gravitation /K voprosu o rabotosposobnosti cheloveka v usloviakh ponizhennoi vesomosti/.  
07 p1063 A69-18596

Time perception under conditions of brief weightlessness /O vospriyatii vremeni v usloviakh kratkovremennoi nevesomosti/.  
07 p1065 A69-18981

Modeling human movements in weightlessness and in a water environment from the viewpoint of a biomechanical approach /O modelirovani dvizhenii cheloveka v nevesomosti i v vodnoi srede s biomechanicheskikh pozitsii/.  
17 p2915 A69-33385

Importance of parabolic flights, reproducing a brief weightlessness, in the vestibular professional selection of astronauts /K voprosu o znachenii parabolicheskikh poletov s vosproizvedeniem kratkovremennoi nevesomosti v vestibuliarnom profotbore kosmonavtov/.  
20 p3481 A69-37276

Perception of time during short-term weightlessness.  
20 p3480 A69-38229

**KOLOSOV, I. E.**

Nature of negative creep in austenitic steels Kh18N-22V2T2 and Kh12N20T3R /Priroda otritsatel'noi polzuchesti v austenitnykh staliakh Kh18N22V2T2 i Kh12N20-T3R/.  
10 p1708 A69-22999

**KOLOSOV, I. U. A.**

Some aspects of the motion of biaxial gyrostabilizers /O nekotorykh osobennostiakh dvizhenii dvukhosnykh girostabilizatorov/.  
09 p1498 A69-22112

**KOLOSOV, M. A.**

Specific features of the method of microwave radiometric sounding of the atmosphere from on board aircraft /Osobennosti metoda sverkhvysokochastotnogo radiometricheskogo zondirovani atmosfery s letatel'nykh apparatov/.  
06 p0954 A69-18001

Relation between the attenuation coefficient of laser emission and the water content of artificial fogs /Sv'яз' koeffitsienta oslableniia intensivnosti lazernogo izlucheniia s vodnost'iu v iskusstvennykh tumanov/.  
21 p3738 A69-39118

**KOLOSOV, V. A.**

Observation of the optical rectification effect in lithium metaniobate crystals /O nabludenii efekta opticheskogo vypryamleniia v kristallakh metaniobata litii/.  
14 p2458 A69-29168

**KOLOT, V. I. A.**

Influence of oxygen pressure on the tungsten oxidation process /Vliianie davleniia kisloroda na protsess oksleniia vol'frama/.  
21 p3746 A69-39071

**KOLOTILO, D. M.**

Study of contact carburization of molybdenum and niobium castings /Issledovanie kontaktnogo nasyscheniia uglerodom otlivok iz molibdena i niobii/.  
04 p0619 A69-15391

Chemical bond and properties of graphite materials /Khimicheskaiia sv'яз' i svoistva grafitovykh materialov/.  
07 p1171 A69-18932

Contact carbon impregnation of molybdenum and niobium castings.  
18 p3156 A69-35019

Chemical bond and properties of graphite materials.  
21 p3752 A69-39153

**KOLOVSKII, M. Z.**

Application of linearization methods in the study of forced oscillations in nonlinear systems.  
16 p2813 A69-32284

**KOLPAKOV, M. G.**

Role of aldosterone and hydrocortisone in the control of the sodium metabolism of the organism /Rol' aldosterona i gidrokortizona v regulatsii obmena natriia v organizme/.  
21 p3656 A69-38965

**KOLPAKOV, P. E.**

Problem of variations in sunspot magnetic fields with time /K voprosu ob izmenenii magnitnykh polei solnechnykh piatek so vremenem/.  
04 p0651 A69-14369

**KOLPAKOVA, N. N.**

Faraday effect of free carriers in InSb and GaAs.  
06 p0979 A69-16996

**KOLPAKOVA, N. P.**

Certain problems of structural synthesis of spatial motion control systems for an orbital aircraft in the earth's atmosphere /Nekotorye voprosy sinteza struktural'nykh sistem upravleniia prostranstvennym dvizheniem orbital'nogo samoleta v atmosfere zemli/.  
21 p3766 A69-39645

**KOLPAKOVA, T. I.**

Approximation of the current-voltage characteristic of tunnel diodes by high even-degree polynomials of a voltage reckoned from the minimum voltage /Ob aproksimatsii vol't-ampernoii kharakteristiki tunnel'nykh diodov polinomami vysokikh chetnykh stepeni napriazheniia, otschityvaemogo ot napriazheniia minimuma/.  
06 p0898 A69-17802

**KOLPASHNIKOV, A. I.**

Press Working of Aviation Materials /Obrabotka Davleniem Aviatsonnykh Materialov/.  
03 p0451 A69-14117

Determination of the stressed state over the entire volume of upset metal /Opredelenie napriazhennogo sostoiianiia po vsemu ob'emu osazhivaemogo metallu/.  
03 p0435 A69-14118

Study of the effect of iron and silicon impurities on the properties and structure of duraluminum type alloys during the fabrication of compacted semfinished products from granules /Issledovanie vliianiia primеси zheleza i kremniia na svoistva i strukturu spлавov tipa duraliumin pri proizvodstve kompaktnykh polufabrikatov iz granul/.  
03 p0452 A69-14120

Effect of the degree of cold deformation and subsequent annealing on the properties of semfinished SAP sheet products /Vliianie stepeni kholodnoi deformatsii i posleduiushchego otziga na svoistva listovykh polufabrikatov SAPa/.  
03 p0452 A69-14121

**KOLSKY, H.**

Stress waves and fracture.  
13 p2275 A69-27229

**KOLTUNOV, M. A.**

Application of tabulated singular kernels to problems associated with flexible shells made of hereditary materials /Primenenie tabulirovannykh singular'nykh iader v zadachakh o gibkikh obolochkakh iz nasledstvennykh materialov/.  
08 p1413 A69-20335

The stress state in a hollow viscoelastic cylinder with a variable inner radius /Napriazhennoe sostoiianie pologo viazko-uprugogo tsilindra s peremennym vnutrennim radiusom/.  
13 p2361 A69-27744

**KOLYSHEV, N. D.**

Vortex-flow cooled laser.  
21 p3734 A69-38399

**KOMAI, K.**

Behaviour of corrosion potential and current and life of corrosion fatigue.  
19 p3342 A69-35775

Crack propagation of corrosion fatigue under service loads.  
21 p3750 A69-39814

**KOMAMIYA, Y.**

Microwave oscillation and amplification in a long bulk GaAs with BaTiO sub 3 sheets on the surface.  
07 p1197 A69-18452

**KOMAR, A. P.**

Gabor holograms with a pure reference beam /Gaborovskie gologrammy s chistym opornym puchkom/.  
21 p3726 A69-39624

**KOMARNITSKAIA, N. I.**

Isophotes of zodiacal light and its terrestrial component.  
03 p0512 A69-13693

**KOMAROV, A. A.**

Analysis of the steady-state operation of a transistorized circuit with nonlinear feedback through an inverted tunnel diode /Analiz staticheskogo rezhima tranzistornoi skhemy s nelineinoi obratnoi sv'яз'iu cherez obrashchennyi tunnel'nyi diod/.  
15 p2573 A69-30114

**KOMAROV, B. I.**

Effect of aromatic hydrocarbons on the combustion characteristics of jet fuel /O vlianii aromaticheskikh uglevodorodov na kharakteristiki sgoraniia reaktivnogo topliva/.  
18 p3184 A69-35382

**KOMAROV, I. U. A.**

Modified nonstationary method of determining the absorptivity of materials /Modifitsirovannyi nestatsionarnyi metod opredeleniia pogloshchatel'noi sposobnosti materialov/.  
09 p1528 A69-22720

Method of determining the integral hemispheric radiative capacity of materials in the temperature range from -100 to 1000 deg C.  
18 p3156 A69-34698

**KOMAROV, R. I.**

Transient process in a nonlinear amplifier /O perekhodnom protsesse v nelineinom usilitеле/.  
01 p0047 A69-10781

Transients in a nonlinear amplifier.  
10 p1661 A69-23110

**KOMAROV, V. A.**

Signal-to-noise ratio in FM signal recordings /Otnoshenie signal/pomekha pri zapisi ChM signalov/.  
11 p1834 A69-24612

**KOMAROV, V. D.**

Classification of barium titanate modifiers /Klassifikatsiia modifikatorov titanata barii/.  
22 p3996 A69-41161

**KOMAROV, V. S.**

Moisture content of the stratosphere /K voprosu o vlagosoderzhanii stratosfery/.  
12 p2070 A69-26582

**KOMAROVA, M. F.**

Different conditions of ageing and recovery in aluminium-magnesium alloys.  
05 p0783 A69-16811

**KOMAROVICH, V. F.**

Calculation of the probability distributions of signal amplitudes, concentrated noise, and the relation between them under conditions of Rayleigh and log-normal fading /Raschet raspredelenii veroiatnostei amplitud signalov, sosedotochennykh pomekh i ikh otosheniia v usloviakh releevskikh i logaritmicheskikh normal'nykh zamirani/.  
11 p1833 A69-24440

Diversity reception under conditions of random radio noise /O raznesennom prieme v usloviakh sluchainykh radiopomekh/.  
11 p1835 A69-24968

**KOMASHCHENKO, V. M.**

Photocells with p-n heterojunctions based on compressed sintered cadmium selenide /Fotoelementy s p-n geteroperekhodami na osnovi spresovanogo spechenogo selenidu kadmiu/.  
08 p1374 A69-21084

**KOMASHCHENKO, V. N.**

Photoelements based on films of cadmium selenide with p-n heterotransitions.  
07 p1198 A69-18512

**KOMATCH, I. U. E.**

Optical quantum generator application for high-speed photography and holography in ballistic investigations.  
12 p2088 A69-26177

**KOMATSUBARA, K. F.**

Behavior of hot electrons under strong magnetic fields in pure n-type InSb.  
19 p3388 A69-36544

**KOMBERG, B. V.**

X-ray emission of radio galaxies and quasars /O rentgenovskom izluchanii ot radiogalakтик i kvazarov/.  
03 p0500 A69-13079

A possible structure of wide emission lines in the spectra of some quasars.  
04 p0662 A69-15236

X-ray emission from radio galaxies and quasars.  
14 p2509 A69-28761

- Theory of the formation and stability of ejections from the nuclei of radio galaxies and quasars /K teorii obrazovaniia i ustoiichivosti vybrosov iz iader radiogalaktik i kvazarov/.  
20 p3606 A69-38032
- KOMELKOV, V. S.**  
Plasmoid structure in a coaxial injector.  
03 p0478 A69-13841  
Interaction between plasmoids and longitudinal magnetic fields /Vzaimodeistvie plazmennyykh sgustkov s prodol'nymi magnitnymi poliimi/.  
03 p0481 A69-14212  
A coaxial plasma accelerator with pulsed azimuthal and longitudinal magnetic fields /Koaksial'nyi uskoritel' plazmy s impul'snymi azimutal'nymi i prodol'nymi magnitnymi poliimi/.  
03 p0481 A69-14213  
Cascade acceleration of a plasma /Kaskadnoe uskorenie plazmy/.  
03 p0482 A69-14215  
Deceleration and purification of a plasma jet by a rapidly increasing magnetic field /Tormozhenie i oshistka plazmennoi strui bystronarastaiushchim magnitnym polem/.  
13 p2311 A69-28107
- KOMEM, Y.**  
A versatile uniaxial tensile testing machine.  
22 p3926 A69-40441
- KOMENDANTOV, G. L.**  
Motion sickness as a problem of space medicine /Ukachivanie kak problema kosmicheskoi meditsiny/.  
02 p0200 A69-12122
- KOMESAROFF, M. M.**  
Spectral fine structure in pulsar radiation.  
01 p0150 A69-10273  
Measurements on the period of the pulsating radio source at 1919 plus 21.  
07 p1214 A69-18665  
Evidence in support of a rotational model for the pulsar PSR 0833-45.  
09 p1592 A69-21461
- KOMISAROVA, I. I.**  
Two-wavelength holography of a laser spark.  
16 p2789 A69-31771
- KOMISSARCHIK, M. G.**  
Influence of inhomogeneities on the thermoelectric properties of 80 mol. and Bi sub 2 Te sub 3 plus 20 mol. and Bi sub 2 Se sub 3 alloy.  
04 p0644 A69-15265
- KOMISSAROV, G. D.**  
Recording meteorite particles by means of piezoelectric transducers /O registratsii meteornyykh chastits p'ezodatchikami/.  
01 p0152 A69-10587  
Piezoprobe detection of meteoritic particles.  
15 p2691 A69-30757
- KOMISSAROV, G. G.**  
Problems of nitrogen fixation under mild conditions /Problemy fiksatsii azota v miagkikh usloviyakh/.  
03 p0382 A69-14198
- KOMISSAROV, I. A. S.**  
An apparatus for studying diffraction effects on periodic structures in the millimeter wavelength range /Ustanovka dlia issledovaniia diffraktsionnykh iavlenii na periodicheskikh strukturakh v millimetrovom diapazone voln/.  
04 p0598 A69-14852  
Diffraction of plane electromagnetic wave obliquely incident on a beveled grid.  
05 p0723 A69-16788  
Theoretical and experimental investigation of the diffraction of a plane wave at a grid composed of squared beams /Teoreticheskoe i eksperimental'noe issledovaniia diffraktsii ploskoi volny na reshetke iz brus'ev/.  
07 p1084 A69-19149  
Diffraction of an electromagnetic wave incident obliquely on an array of rods with a rectangular cross section /Diffraktsiia elektromagnitnoi volny pri kosom padenii na reshetku, sostavlennuu iz brus'ev priamougol'nogo poperechnogo secheniia/.  
08 p1275 A69-20433  
Instrument for investigating diffraction phenomena at periodic structures in the millimeter band.  
15 p2607 A69-30244  
Experimental substantiation of requirements imposed on measurements in the study of diffraction effects /Eksperimental'noe obosnovanie trebovaniy k izmereniiam pri issledovanii diffraktsionnykh iavlenii/.  
23 p4139 A69-42042
- Experimental study of the diffraction of an H sub x prime polarized wave on a skewed array /Eksperimental'noe issledovanie diffraktsii H sub x prime polarizovanoi volny na skoshennoi reshetke/.  
23 p4125 A69-42043
- KOMISSAROVA, I. I.**  
Holograph investigation of laser sparks.  
08 p1317 A69-21022
- KOMKOV, V.**  
On a variational formulation of problems in the classical continuum mechanics of solids.  
07 p1232 A69-19173
- KOMLENKO, I. U.**  
Existence of solutions for ordinary nonlinear differential equations with linear boundary conditions /O sushchestvovanii reshenii nelineynykh obyknovennykh differentsial'nykh uravnenii s lineinymi kraevymi usloviiami/.  
04 p0621 A69-14416
- KOMO, J.**  
An application of non-linear filter theory to PCM bit synchronization.  
19 p3270 A69-36245
- KOMOLOVA, G. S.**  
Influence of "artificial Mars" conditions on some enzymes /Vlianie uslovii "iskusstvennogo Marsa" na nekotorye fermenty/.  
07 p1065 A69-18974  
Effect of high vacuum on oxidative processes in bacteria as well as on activity of certain enzymes.  
15 p2557 A69-31354  
Effect of a simulated Martian environment on certain enzymes.  
20 p3479 A69-38222
- KOMOTSKII, V. A.**  
Sensitivity of the memory matrix in laser-beam perforated recordings /Chuvstvitel'nost' matrits pamiaty pri perforatsionnoi zapisi lazernym luchom/.  
19 p3335 A69-36198
- KOMOV, V. S.**  
Calculation of a conical shell on a digital computer /Raschet konicheskoi obolochki na ETsVM/.  
11 p1981 A69-24943
- KOMPA, K. L.**  
UF sub 6 -H sub 2 hydrogen fluoride chemical laser - Operation and chemistry.  
05 p0771 A69-15906
- KOMPANEETS, E. B.**  
Simulation of an adequate light signal by electrical stimulation of the visual cerebral cortex /Modelirovanie adekvatnogo svetovogo signala elektricheskim razdrasheniem zritel'noi kory mozga/.  
22 p3885 A69-41066
- KOMPANETS, I. N.**  
Investigation of spike regime operation of the injection laser on gallium arsenide.  
19 p3337 A69-36535  
Investigation of the performance of a GaAs semiconductor injection laser in the pulsed mode of operation /Issledovaniia raboty inzhketskonnogo PKG na GaAs v rezhime pul'satsii izlucheniia/.  
22 p3963 A69-40603
- KOMSHALIUK, S. E.**  
Changes in the electropotentials of the heart in flying personnel after flight causing intense neuroemotional stress /Izmeneniia elektropotentsialov serdtsa u letnogo sostava posle poletov, vyzvaiaushchikh bol'shoe nervno-emotsional'noe napriazhenie/.  
03 p0378 A69-14207
- KON, A. I.**  
Averaging of the fluctuations of a spherical wave over the receiving aperture /Usrednenie fluktuatsii sfericheskoi volny po priemnoi aperture/.  
08 p1351 A69-20438  
Correlation of the transverse shifts of rays in a turbulent atmosphere /Korrelatsiia poperechnykh smeshchenii lucei v turbulentnoi atmosfere/.  
10 p1657 A69-23942
- KONAR, A. F.**  
Sensitivity aspects of linear digital control systems.  
17 p2944 A69-33742
- KONASHENOK, V. N.**  
On the physical conditions near the mesopause.  
03 p0422 A69-13408
- KONCZER, O.**  
An alternative solution to the interface problem for display systems /Adatmegielenitoe rendszers interface problemainak lehetseges megoldasa/.  
22 p3908 A69-40936
- KONDILENKO, I. I.**  
Investigation of the emission from a composite ruby element /Doslidzhennia generatsii skladenogo rubinovogo elementa/.  
08 p1327 A69-21076  
Generation of the second harmonic in media having a center of inversion /K voprosu o generatsii vtoroi garmoniki v sredakh s tsentrom inversii/.  
19 p3332 A69-35872
- KONDIURIN, I. U. N.**  
Certain problems in improving the accuracy of the Monte Carlo method by applying probability characteristics of nonlinear automatic control systems /Nekotorye voprosy povysheniia tochnosti metoda Monte-Karlo s primeneniem k raschetu veroiatnostnykh kharakteristik nelineynykh sistem avtomaticheskogo regulirovaniia/.  
01 p0105 A69-10730
- KONDO, I.**  
Sudden increase in high energy gamma-ray intensity observed at balloon altitude.  
24 p4371 A69-43612
- KONDO, M.-A.**  
On the formation of condensation in an expanding universe.  
18 p3203 A69-35347
- KONDO, R.**  
Radiation fields from an electrical dipole moving in a compressible isotropic plasma.  
23 p4114 A69-41359
- KONDO, S.**  
The Gemini XI S-4 spaceflight-radiation interaction experiment - The human blood experiment.  
23 p4085 A69-41600  
A review of symposium on genetic effects of space environment.  
23 p4091 A69-42050
- KONDO, T.**  
Search for quarks.  
15 p2674 A69-30308
- KONDO, Y.**  
Investigation of possible abundance anomalies in close binaries of spectral types A0-A2 and F5-F6.  
05 p0822 A69-15854  
On the thermal decomposition rate of molybdenum sesquisulphide /Mo sub 2 S sub 3/ in vacuum.  
14 p2467 A69-29287  
Curve-of-growth analysis for the close binary HR 5317.  
18 p3191 A69-34297
- KONDRASHOV, N. G.**  
Realization of a numerical solution to a heat-transfer problem /O realizatsii chislennogo resheniia odnoi zadachi perenosu tepla/.  
07 p1241 A69-18923
- KONDRATEEV, I. G.**  
Electromagnetic beams in anisotropic media.  
17 p2925 A69-33845
- KONDRATENKO, A. M.**  
The reflection of an obliquely incident electromagnetic wave from a magnetoactive plasma. I.  
14 p2417 A69-29661  
Penetration of the longitudinal field into a magnetoactive plasma.  
14 p2493 A69-29665
- KONDRATENKO, A. N.**  
The reflection of electromagnetic waves from a moving magnetoactive plasma layer.  
06 p0886 A69-16895  
Excitation of ion-acoustic waves in the skin depth of a nonisothermal plasma.  
08 p1370 A69-21025  
Kinetic theory of the passage of electromagnetic waves through a magnetoactive plasma layer /Kineticheskaiia teoriia prokhozhdeniia elektromagnitnykh voln cherez magnitoaktivnyi sloi plazmy/.  
09 p1550 A69-22022  
Kinetic theory of electromagnetic waves in a laminated plasma medium /K kineticheskoi teorii elektromagnitnykh voln v sloisto-plazmennoi srede/.  
09 p1550 A69-22023  
The coupling of a whistler with acoustic waves in a high pressure plasma.  
18 p3180 A69-35024
- KONDRATENKO, V. F.**  
Stability of a solution to linear systems of differential equations /K ustoiichivosti resheniia lineynykh sistem differentsial'nykh uravnenii/.  
03 p0465 A69-13129



## KONDRATEV, A. I.

Gas flow from a tube into a vacuum in the case of unsteady mass and energy input /Istechenie gaza iz trub'y v vakuum pri nestatsionarnom podvode massy i energii/. 24 p4408 A69-43489

## KONDRATEV, A. S.

Oscillations of systems with one degree of freedom taking into account the various resisting forces /Kolebaniia sistem s odnoi stepen'iu svobody s uchedom razlichnykh sil soprotivleniia/. 17 p3007 A69-33913

Parametric fluctuations of a weakly nonlinear system /Parametricheskie kolebaniia slabo nelineinoi sistemy/. 18 p3171 A69-34564

## KONDRATEV, I. G.

Nonlinear interaction of a plane electromagnetic wave with an inhomogeneous plasma layer /Nelineinoe vzaimodeistvie ploskoi elektromagnitnoi volny s neodnorodnym plazmennym sloem/. 17 p2922 A69-33693

## KONDRATEV, I. U.

Obtaining a Chlorella biomass with an enhanced content of sulphur-containing amino acids and its nutritive value /Poluchenie biomassy Khlorelly s povyshennym soderzhaniiem serosoderzhashchikh aminokislot i ee pishchevaya tsennost'/. 13 p2216 A69-28620

## KONDRATEV, K. IA.

Inverse problems of satellite meteorology. 02 p0277 A69-12778

Possibilities of interpreting from space images of the earth observed in various spectral regions /Vozmozhnosti interpretatsii izobrazhenii zemli iz kosmosa, nabludaemykh v raznykh zonakh spektra/. 05 p0763 A69-16054

Geophysical investigations on manned spacecrafts. 05 p0759 A69-16633

Application of regularization methods in inverse problems of atmospheric optics. 06 p0919 A69-17616

Problems of the interpretation of infrared cloud images transmitted by meteorological earth satellites /Voprosy interpretatsii infrakrasnykh izobrazhenii oblachnosti s meteorologicheskikh sputnikov zemli/. 06 p0952 A69-17984

Radiation in the Atmosphere. 12 p2073 A69-26918

Meteorological studies /Meteorologicheskie issledovaniia/. 13 p2290 A69-27348

Methods of introducing corrections taking into account the thickness of the atmosphere, in the determination of the underlying-surface temperature from satellites /Metodiki vvedeniia popravok, uchityvaishchikh vliianie tolschi atmosfery pri opredelenii temperatury podstilaushchei poverkhnosti so sputnikov/. 13 p2293 A69-27850

The possibility of interpreting the results of measurements of outgoing thermal radio emission for the purpose of determining the temperature of the underlying surface and the moisture content of the atmosphere /K vozmozhnosti interpretatsii dannykh izmerenii ukhodiashchego teplovogo radioizlucheniia s tsel'iu opredeleniia temperatury podstilaushchei poverkhnosti i vlagosoderzhanii atmosfery/. 15 p2648 A69-30641

Numerical modeling of the transmission functions for narrow spectral intervals of the CO sub 2 15-mu band /Chislennoe modelirovanie funktsii propuskaniia dlia uzakh spektral'nykh intervalov 15 mkm polosy CO sub 2/. 15 p2597 A69-30653

Aerosol structure of the troposphere and the stratosphere /Aerol'naia struktura troposfery i stratosfery/. 18 p3132 A69-35340

Possible interpretation of space photographs of the earth taken in different spectral bands. 20 p3545 A69-37964

Problems of infrared spectroscopy of the atmosphere connected with the solution of the problem of determining the temperature of the underlying surface by satellites /O problemakh infrakrasnoi spektroskopii atmosfery, svyazannykh s resheniem zadachi opredeleniia temperatury podstilaushchei poverkhnosti so sputnikov/. 21 p3759 A69-39114

Allowance for radiation factors in simulating general circulation processes in the atmosphere /Ob uchete radiatsionnykh faktorov pri modelirovanii protsessov obshchei tsirkulatsii atmosfery/. 23 p4184 A69-42487

## KONDRATEV, V. A.

Certain properties of positive solutions to evolutionary hypoelliptic equations /O nekotorykh svoistvakh polozhitel'nykh reshenii evoliutsionnykh gipoellipticheskikh uravnenii/. 11 p1908 A69-24534

Some properties of positive solutions of evolutionary hypoelliptic equations. 21 p3756 A69-39151

## KONDRATEV, V. N.

Kinetics of the combustion reactions of gaseous-phase systems /Kinetika reaktssii goreniia gazofaznykh sistem/. 11 p2000 A69-25185

## KONDRATEVA, S. P.

Television-optical observations of Icarus /Optiko-televizionnye nabludeniia Ikara/. 21 p3719 A69-38402

## KONDRATIEV, F. V.

Experimental verification on the Rasor phenomenonological theory of the arc mode regime of a cesium thermionic converter. 14 p2402 A69-29242

## KONDRATIUK, A. A.

Entire functions with positive zeros having a finite maximum density /Tselye funktsii s polozhitel'nyimi nuliymi imeiushchimi konechnuiu maksimal'nuu plotnost'/. 20 p3568 A69-37442

## KONDRATSKII, V. IA.

High-speed ultrasonic instrument for on-line inspection of welded tube seams. 18 p3136 A69-34778

## KONECCI, E. B.

Manned space flight safety. 06 p0882 A69-17650

## KONENKO, O. R.

Diffusion plasma buildup in steady fluxes /Diffuzionoe nakoplenie plazmy v statsionarnykh potokakh/. 02 p0291 A69-12483

## KONEV, I. U. B.

Investigation of inversion in a CO sub 2 laser during pulsed pumping /Issledovanie inversii v CO sub 2 - lazere pri impul'snoi nakachke/. 09 p1519 A69-22289

Pulsed CO sub 2 laser with double modulation. 14 p2457 A69-28926

Influence of dissociation of the inversion on a CO sub 2 laser with pulsed pumping. 18 p3151 A69-34620

## KONG, J.-A.

Wave reflections from a conducting surface with a moving uniaxial sheath. 02 p0209 A69-12334

Scattering from a conducting cylinder coated with a moving uniaxial medium. 07 p1086 A69-19469

## KONIKOFF, J. J.

Wet oxidation for space waste management. [SAE PAPER 680714] 03 p0380 A69-13443

## KONINGSTEIN, J. A.

Laser-induced phonon spectrum of an oriented crystal of thulium gallium garnet. 02 p0256 A69-11925

New developments in Raman spectroscopy with lasers - Electronic transitions. 14 p2507 A69-29334

## KONISHI, S.

Load carrying capacities of thin films of lubricant compositions. 1 - Load carrying capacities free of thermal effect. 07 p1140 A69-18968

## KONIUKHOV, G.

Antireflection by means of a three-layer symmetric coating /Prosvetlenie trekhslainym simmetrichnym pokrytiem/. 18 p3173 A69-35147

## KONIUKHOVA, N. B.

Numerical calculation of radio-wave propagation in a vertically inhomogeneous troposphere /Chislennyi raschet rasprostraneniia radiovoln v vertikal'no-neodnorodnoi troposfere/. 21 p3674 A69-39121

## KONIUKOV, M. V.

Plasma outflow from the sun, showing the essential role of viscosity /Istechenie plazmy iz solntsa s sushchestvennoi rol'iu вязkosti/. 10 p1769 A69-23899

Plasma emission from the sun with thermal conductivity playing a significant role. 12 p2149 A69-26680

Equations for the ejection of plasma from the sun with allowance for the ion composition /Uravneniia istechniia plazmy iz solntsa s uchedom ionnogo sostava/. 20 p3594 A69-37018

## KONKOV, A. A.

Intensity of the emission continuum of a negative nitrogen ion /Ob intensivnosti kontinuumu izlucheniia otritsatel'nogo iona azota/. 04 p0639 A69-15370

Problems associated with radiant heat transfer in hypersonic aerodynamics /Problemy luchistogo teploobmena v giperzvukovoi aerodinamike/. 11 p2002 A69-25233

On the intensity of emission continuum of the negative nitrogen atom. 16 p2822 A69-32117

Experimental study of spectral properties of high-temperature air. 18 p3231 A69-35122

## KONKOV, I. D.

Effect of a longitudinal alternating magnetic field on lasing in ionized argon /Vozeistvie prodol'nogo peremennogo magnitnogo polia na generatsiiu v ionizovannom argone/. 06 p0934 A69-17467

Effect of longitudinal alternating magnetic field on generated power in ionized argon. 20 p3555 A69-37950

## KONKOV, V. L.

Measuring the electrical conductivity of high-temperature epitaxial semiconducting films by the three-probe method. 04 p0597 A69-14538

## KONONCHUK, L. V.

The photoelectron multiplier FEU-77 for recording light pulses from optical quantum generators /lasers/ in the 700-nm range. 03 p0440 A69-13264

## KONONENKO, I. U. G.

Production of high-intensity hydrogen-ion beams. 03 p0412 A69-13842

A possible chain mechanism of arc discharge development in crossed electric and magnetic fields /O vozmozhnom tsepnom mekhanizme razvitiia dugovogo razriada v skreshchennykh elektricheskoi i magnitnom poliakh/. 11 p1932 A69-25540

Analysis of equations for determining the normal flame speed by the constant-volume bomb method /Analiz uravnenii dlia opredeleniia normal'noi skorosti plameni metodom bomby postoianного ob'ema/. 17 p3069 A69-33137

## KONONENKO, V. I.

Microwave emission of a plasma from an electrodeless inductive discharge at low pressures /Mikrovolnovoe izluchenie plazmy bezelektrodnogo induktsionnogo razriada pri nizkikh davleniakh/. 09 p1549 A69-22017

Determination of electron concentration from the change in the amplitude of a microwave signal reflected from an anisotropic plasma /Opredelenie kontsentratsii elektronov po izmeneniiu amplitudy otrazhennogo mikrovolnovogo signala ot anizotropnoi plazmy/. 09 p1550 A69-22027

Simplified microwave interferometer for studying a pulse discharge plasma /Uproshchennyi mikrovolnovyi interferometr dlia issledovaniia plazmy impul'snykh razriadov/. 09 p1496 A69-22030

## KONONENKO, V. K.

Dependence of the threshold current on losses in an interband transition model without a selection rule /O zavisimosti porogovogo toka ot poter' v modeli mezhzonnnykh perekhodov bez pravila otbora/. 06 p0933 A69-17257

## KONONENKO, V. O.

Spatial nonlinear vibrations of solid bodies /Prostranstvennye nelineinye kolebaniia tverdykh tel/. 11 p1919 A69-25167

Vibrating systems with a limited power supply. 23 p4170 A69-42166

## KONONENKO, V. V.

X-ray investigation of finely dispersed titanium in various states /Rentgenovskoe issledovanie melkodispersnogo titana v razlichnom sostoianii/. 21 p3745 A69-38952

## KONONKOVA, G. E.

Laboratory study of the statistical characteristics of the initial stage of wave development /Laboratornoe issledovanie statisticheskikh kharakteristik nachal'noi stadii razvivaiushchegosia volneniia/.  
18 p3167 A69-35341

## KONONOV, A. A.

Wollaston-prism device for discrete deflection of a laser beam /Ustroistvo diskretnogo otkloneniia lazernogo luchia na prizmakh Vollastona/.  
14 p2459 A69-29391

## KONONOV, B. A.

Study of proton channeling in single crystals of ionic compounds and semiconductors /Issledovanie kanalirovaniia protonov v monokristallakh ionnykh soedinenii i poluprovodnikov/.  
01 p0140 A69-11109

## KONONOV, B. N.

The gamma spectrometer on "Luna-10" for the study of the lunar rocks.  
01 p0084 A69-11314  
Multichannel amplitude analyzer for space research.  
01 p0084 A69-11315

## KONONOV, E. IA.

Fine structure of the ground level of Ca XV and the coronal lines /Tonkaia struktura osnovnogo terma Ca XV i koronal'nye linii/.  
15 p2688 A69-30553

## KONONOVICH, E. V.

Use of a Fabry-Perot etalon for obtaining monochromatic solar images.  
02 p0248 A69-11634

## KONOPKA, J.

Temperature dependence of the spin resonance in n-type InSb and InAs.  
19 p3389 A69-36549

## KONOPLEVA, V. P.

Cometary observations in 1964-1965 /Nabliudenie komet v 1964-1965 gg./.   
14 p2525 A69-29716  
Brightness variations and photometric parameters of comet Kilston 1966 b /Izmenenie bleska i fotometricheskie parametry komety 1966 b Kilstona/.  
15 p2685 A69-30529

## KONOROV, P. P.

Surface potential of an anodized surface of n-type silicon.  
04 p0643 A69-15260

## KONOSEVICH, B. I.

Two particular solutions of the problem of motion of a body with a fixed point.  
11 p1920 A69-25748

## KONOTOPOV, IU. A.

Possibility of unequivocal experimental determination of the Faraday angle of rotation of the polarization plane of radio signals emitted by celestial bodies /O vozmozhnosti odnoznachnogo eksperimental'nogo opredeleniia faradeevskogo ugla povorota ploskosti polarizatsii radiosignalov, izluchaemykh s kosmicheskikh ob'ektov/.  
01 p0030 A69-10574

Unambiguous experimental determination of the Faraday rotation of the plane of polarization of radio waves emitted by cosmic objects.  
15 p2568 A69-30744

## KONOV, V. I.

Laser spark in the "slow combustion" regime.  
23 p4172 A69-41492

## KONOVALENKO, V. V.

Method of data handling by groups in the pattern recognition and decision making problem /Metod grupovogo urakuvaniia argumentiv u zadachi razpiznavaniia obraziv i priinattiia rishe/.  
08 p1278 A69-20420

The group method of data handling in pattern recognition and decision problems.  
14 p2418 A69-29658

## KONOVALOV, A. E.

Heat fluxes toward the electrodes under the conditions of a high-current discharge /Teplovyie potoki k elektrodam v usloviakh sl'notochnogo razriada/.  
11 p1928 A69-25227

## KONOVALOV, A. I.

Sensory reactions and the state of arbitrary motions of man under conditions of weightlessness /Sensornye reaktsii i sostoianie proizvol'nykh dvizhenii cheloveka v usloviakh nevesomosti/.  
07 p1060 A69-18575

## KONOVALOV, A. N.

Numerical solution of a mixed problem in the theory of elasticity /O chislennom reshenii smeshannoi zadachi teorii uprugosti/.  
14 p2536 A69-29479

## KONOVALOV, E. G.

A residual stress gauge /RSG/ /Izmeritel' ostatochnykh napriazhenii /ION/.  
06 p0926 A69-17497

Distribution of the field and current in the cross section of a blank during electromagnetic shaping /Raspredelenie polia i toka po secheniiu zagotovki pri elektromagnitnoi formovke/.  
18 p3151 A69-35456

Derivation of the equation of mechanical state for metals during the process of creep /K vyvodu uravneniia mekhanicheskogo sostoiianiia metallov v protsesse polzuchesti/.  
22 p4048 A69-41268

Influence of ultrasonic oscillations on the elements of electronic devices /Vliianie uz-kolebaniia na elementy radioelektronnoi apparatury/.  
23 p4138 A69-41873

## KONOVALOV, G. E.

Influence of ultrasonic oscillations on the elements of electronic devices /Vliianie uz-kolebaniia na elementy radioelektronnoi apparatury/.  
23 p4138 A69-41873

## KONOVALOV, IU. G.

Analysis of flight regularity and safety under complex meteorological conditions /Analiz reguliarnosti i bezopasnosti poletov v slozhnykh meteorologicheskikh usloviakh/.  
14 p2475 A69-29740

## KONOVALOV, O. G.

Calibration of a dE/dx-counter by cosmic ray muons /Kalibrovka dE/dx-schetchika miuonami kosmicheskogo izlucheniia/.  
21 p3724 A69-39075

## KONOVALOV, S. M.

Diffusion of high-density radiation in a one-dimensional medium /Difuziia viprominiuvannia visokoi gustini v odnovimirnomo seredovishchi/.  
21 p3769 A69-38586

## KONOVALOV, V. A.

Influence of the orientation of the gyroscopes in a triaxial power gyrostabilizer on its dynamic errors /Vliianie orientatsii giroskopov v trekhosnom silovom girostabilizatore na ego dinamicheskie pogreshnosti/.  
11 p1881 A69-24560

Systematic drifts of a triaxial gyrostabilizer during rocking at large angles of displacement of its platform /O sistematicheskikh ukhodakh trekhosnogo silovogo girostabilizatora na kachke pri bol'shikh uglakh otkloneniia ego platformy/.  
13 p2259 A69-27430

## KONOVALOV, V. E.

Dispersion properties of a ridge-slot-ridge slow-wave structure /Dispersionnye svoistva zamedliaushchei sistemy grebenka-schel'-grebenka/.  
23 p4140 A69-42049

## KONOVALOVA, G. M.

The synthesis of optimal systems with a limited transfer process time.  
14 p2425 A69-28820

## KONOVALOVA, S. A.

Wollaston-prism device for discrete deflection of a laser beam /Ustroistvo diskretnogo otkloneniia lazernogo luchia na prizmakh Vollastona/.  
14 p2459 A69-29391

Polarization of the radiation of glass activated by neodymium /Polarizatsiia izlucheniia stekla, aktivirovannogo neodimom/.  
17 p2984 A69-33974

## KONOWALOW, D. D.

Natural orbitals for H sub 2.  
06 p0960 A69-17112

## KONOTENKO, I. D.

Certain problems concerning the radiation physics of nonmetallic crystals /O nekotorykh voprosakh radiatsionnoi fiziki nemetallicheskikh kristallov/.  
02 p0298 A69-12119

## KONRAD, T. G.

Simultaneous radar reflectivity measurements and refractive index spectra in the clear atmosphere.  
01 p0032 A69-10969  
Radar as a tool in meteorology, entomology and ornithology.  
12 p2034 A69-27004

## KONRAD, A.

135-1650 kev solar protons after the flare of July 7, 1966, observed in the magnetotail and magnetosheath.  
09 p1576 A69-21699  
Explorer 12 magnetopause observations - Large-scale nonuniform motion.  
18 p3128 A69-34947

## KONRAD, G. G.

Achievements in studies of properties of materials used for space objects and their use in industry.  
06 p0945 A69-17046

## KONSHEV, V. A.

A cuvette for recording combination light scattering spectra using a helium-neon laser as the excitation source /Kiuvela dlia s'emki spektrov krs s ispol'zovaniem geli-neonovogo lazera v kachestve istochnika vozbuzhdeniia/.  
15 p2635 A69-31105

## KONSTANTINESCU, A.

Study of the effect of elements on properties of a heat-resistant steel containing 12 percent Cr /Issledovanie vliianiia elementov na svoistva zharoprochnoi stali s 12 percent Cr/.  
10 p1708 A69-23000

## KONSTANTINESKU, K.

Majority carrier lifetime in p-type GaAs /Vremia zhizni osnovnykh nositelei v GaAs p-tipa/.  
15 p2666 A69-30056

## KONSTANTINOV, A. B.

Transmission of holographs by a standard phototelegraphic channel with a limited number of halftones /Peredacha gologramm po standartnomu fototelegrafnomu kanalu s ogranichenym chislom polutono/.  
11 p1889 A69-25549

## KONSTANTINOV, B. P.

Micrometeorite investigations on the Cosmos 135 satellite /mikrometeornye issledovaniia na sputnike "Kosmos-135".  
01 p0152 A69-10578

Interaction of superhigh-energy cosmic rays with neutrinos in the universe /K voprosu o vzaimodeistvii kosmicheskikh lucheii sverkhvysokoi energii s neutrino vo vselennoi/.  
10 p1757 A69-22826

Analysis of the chemical composition of lunar surface by direct methods.  
11 p1832 A69-24629

Transmission of holographs by a standard phototelegraphic channel with a limited number of halftones /Peredacha gologramm po standartnomu fototelegrafnomu kanalu s ogranichenym chislom polutono/.  
11 p1889 A69-25549

Micrometeoroid investigations on the satellite "Cosmos-135".  
15 p2691 A69-30748

## KONSTANTINOV, G. A.

A numerical method of solving unsteady axisymmetric problems of the hydrodynamics of an ideal fluid with free surfaces /Chislennyy metod resheniia nestatsionarnykh osesimmetrichnykh zadach gidrodinamiki ideal'noi zhidkosti so svobodnymi poverkhnostiami/.  
24 p4302 A69-43500

## KONSTANTINOV, K. M.

Effect of hydrogen on Young's modulus in titanium beta-alloy VT15 /Vliianie vodoroda na moduli uprugosti titana i beta-titanovogo сплава VT15/.  
04 p0618 A69-15178

Decomposition of titanium-vanadium martensite during heating /Raspad titano-vanadiyevogo martensita pri nagreve/.  
07 p1163 A69-18778

Interdiffusion in Ti-V, Ti-Nb, Ti-Ta, and Ti-Mo systems /Vzaimnaia diffuziia v sistemakh Ti-V, Ti-Nb, Ti-Ta, Ti-Mo/.  
21 p3745 A69-38954

Disintegration of titanium-vanadium martensite on continuous heating.  
21 p3746 A69-39160

## KONSTANTINOV, O. V.

Causes of the polarization of spontaneous recombination radiation in semiconductors of gallium arsenide type in an electric field /O prichinakh polarizatsii spontannogo rekombinatsionnogo izlucheniia poluprovodnikov tipa arsenida galliia v elektricheskom pole/.  
24 p4362 A69-43736

## KONSTANTINOV, V. B.

Transmission of holographs by a standard phototelegraphic channel with a limited number of halftones /Peredacha gologramm po standartnomu fototelegrafnomu kanalu s ogranichenym chislom polutono/.  
11 p1889 A69-25549



- Scattering materials in holography /Rasseivatel' v golografii/. 11 p1889 A69-25550
- KONSTANTINOVA, I. V.**  
Influence of high oxygen concentrations on animal organisms /Vliianie povyshennykh kontsentratsii kisloroda na organizm zhivotnykh/. 05 p0709 A69-16512  
The effect of high oxygen concentrations on the animal organism. 08 p1262 A69-19831  
Effects of high oxygen concentrations on animals. 18 p3095 A69-34731
- KONTA, J.**  
Chemical composition and bulk density of mol-davites. 23 p4210 A69-41348
- KONTOROVA, V. I.**  
Increasing the radiation sensitivity of the nervous system by enzyme poisons affecting the oxidation processes /O povyshenii radiochuvstvitel'nosti nervnoi sistemy fermentnymi iadami, narushaiushchimi oksilitel'nye protsessy/. 21 p3658 A69-39053
- KONTOROVICH, I. E.**  
Certain features of martensitic transformation in Ti-Al-Mo alloys /Nekotorye osobennosti martensitnogo prevrashcheniia v splavakh Ti-Al-Mo/. 04 p0617 A69-14940
- KONTOROVICH, V. I. A.**  
Noise rejection of the reception of binary discrete-information signals in fading channels in the case of simultaneous action of normal fluctuating and "non-Gaussian" noise /K voprosu o pomekhoustoichivosti priema binarnykh signalov diskretnoi informatsii v kanalakh s zamiraniiami pri odnoveremnom vozdeistvii normal'no-fluktuatsionnoi i "negaussovoi" pomekh/. 03 p0394 A69-13376  
Noise immunity of binary data reception in fading channels subject simultaneously to normal fluctuation and non-Gaussian noise. 14 p2410 A69-28826
- KONTOROVICH, V. M.**  
Radio lines of interstellar NO molecules /O radioliniakh mezhzvezdnykh molekul NO/. 09 p1590 A69-21377  
Possibility of transformation of an antiferromagnetic semiconductor into a metal in a strong magnetic field. 09 p1556 A69-21672  
Bending of surface and self-focusing of a laser beam in a linear medium. 14 p2461 A69-29674  
Radio lines of the interstellar NO molecule. 18 p3198 A69-34765  
Forced scattering at surface waves /Vynuzhdennoe rasseianie na poverkhnostnykh volnakh/. 21 p3770 A69-38963
- KONZ, S. A.**  
The effect of color coding on performance of an alphabetic filing task. 17 p2916 A69-34004
- KOOB, K.**  
Antennas for spacecraft instrumentation - A survey of problems and structural types /Antennen fuer Raum-fluggeraete - Eine Uebersicht ueber die Probleme und Ausfuehrungsformen/. 16 p2763 A69-32584
- KOOB, S. J.**  
Investigation of a method for the general analysis of time dependent two-dimensional laminar boundary layers. [ASME PAPER 68-FE-10] 05 p0748 A69-16076
- KOOI, P. S.**  
Harmonic generation using Gunn diodes. 13 p2226 A69-27235
- KOOKER, D. E.**  
Heat-transfer and pressure analysis of rocket exhaust impingement on flat plates and curved panels. 12 p2190 A69-26781
- KOOKOOTSEDES, G. J.**  
Silicone plastics for electrical insulation. 13 p2286 A69-27990
- KOOMEN, M. J.**  
Solar rocket observations on an eclipse day. 15 p2696 A69-31099
- KOOPMAN, D. W.**  
Charge exchange in CH sub 4 and NH sub 3. 06 p0884 A69-17114

- Products of charge exchange by light ions in molecular gases. 13 p2301 A69-27455
- Atomic spectroscopy with the shock tube. 18 p3176 A69-34446
- KOOY, J. M. J.**  
Tachyons and gravitation /Ueber Tachyonen und Gravitation/. 02 p0282 A69-12746
- KOOZEKANANI, S. H.**  
Formation of ionized excited states through the loss of the metastable electron in noble-gas atoms. 06 p0961 A69-17137
- KOPACHEVSKII, N. D.**  
Small oscillations of an ideal liquid in a vessel under close-to-weightlessness conditions /O mal'kikh kolebaniakh ideal'noi zhidkosti v sosude v usloviakh, blizkikh k nevesomosti/. 03 p0418 A69-13811  
Determination of the primary frequency of the oscillations of an ideal liquid in a cylindrical vessel in a weak gravitational field /Opredelenie pervoi chastoty kolebaniia ideal'noi zhidkosti v tsilindricheskom sosude v slabom gravitatsionnom pole/. 03 p0418 A69-13812  
Hydrodynamics in weak fields of force - The small oscillations of a viscous liquid in a potential field of force. 04 p0587 A69-14620  
The Cauchy problem for small oscillations of a viscous liquid in a weak field of mass forces. 06 p0959 A69-17888  
Hydrodynamics in weak force fields, small oscillations of an ideal liquid. 07 p1119 A69-18746  
Free oscillations of a self-gravitating fluid sphere taking the viscous and capillary forces into account /O svobodnykh kolebaniakh zhidkogo samogravitiruiushchego shara s uchedom viazki i kapillarnykh sil/. 09 p1481 A69-21790
- KOPAL, V.**  
Problems arising from interpretation of agreement on the rescue of astronauts, return of astronauts and return of objects launched into outer space. 20 p3636 A69-37114
- KOPAL, Z.**  
Advances in Astronomy and Astrophysics. Volume 6. 04 p0652 A69-14610  
Light and radial-velocity changes in close binary systems. 04 p0653 A69-14612  
Gravity-darkening in eclipsing binaries. I - W Ursae Maioris-type systems. 10 p1776 A69-23217  
The moon and man. 13 p2352 A69-27901  
Volume integrals of the products of spherical harmonics and their application to viscous dissipation phenomena in fluids. 14 p2487 A69-29980  
The erosion processes on the lunar surface. 21 p3794 A69-38378  
The precession and nutation of deformable bodies. II. 21 p3797 A69-38539  
The precession and nutation of deformable bodies. III. 22 p4030 A69-40904
- KOPANEV, V.**  
Artificial gravitation on spacecraft /Iskusstvennaia gravitatsiia na kosmicheskikh korabliakh/. 16 p2746 A69-31930
- KOPANEV, V. I.**  
Basic problems in the study of weightlessness /Osnovnye voprosy izucheniia nevesomosti/. 02 p0199 A69-12120  
Motion sickness as a problem of space medicine /Ukachivanie kak problema kosmicheskoi meditsiny/. 02 p0200 A69-12122  
Blood circulation under conditions of weightlessness /Krovoobrashchenie v usloviakh nevesomosti/. 03 p0376 A69-14194  
Some physiological mechanisms of the effect of weightlessness on human organism /O nekotorykh fiziologicheskikh mekhanizmkh vlianiia nevesomosti na organizm cheloveka/. 03 p0377 A69-14197

- Reactions of cosmonauts under conditions of weightlessness /Reaktsii kosmonavtov v usloviakh nevesomosti/. 07 p1060 A69-18570
- Physiological reactions of cosmonauts in unsupported space /Fiziologicheskie reaktsii kosmonavtov v bezopornom prostranstve/. 07 p1061 A69-18582
- Vestibular reactions of cosmonauts during the flight on the Voskhod spacecraft /Vestibuliarnye reaktsii kosmonavtov pri Plete na korabe "Voskhod"/. 07 p1062 A69-18588
- Motor reactions under conditions of weightlessness /Dvigatel'nye reaktsii v usloviakh nevesomosti/. 07 p1063 A69-18595
- Efficiency of man under conditions of reduced gravitation /K voprosu o rabotosposobnosti cheloveka v usloviakh ponizhennoi vesomosti/. 07 p1063 A69-18596
- Certain dynamic characteristics of the vestibular analyser under the action of Coriolis forces /Nekotorye dinamicheskie pokazateli vestibuliarnogo analizatora pri deistvii uskorennii korolisla/. 20 p3472 A69-37262
- KOPASENKO, V. V.**  
Bending of a strip. 11 p1996 A69-25734
- KOPCZYNSKI, L.**  
Dynamic stability of an isotropic circular plate with a central hole, loaded by a variable torsional moment /Dynamiczna statecznosc izotropowej tarczy kolowej z otworem centrycznym, obciazonej zmiennym momentem skreczacym/. 22 p4043 A69-40455
- KOPECKI, H.**  
Creep buckling of a geometrically nonlinear spherical shell /Wyboczenie przy pelzaniu geometrycznie nieliniowej powloki kulistej/. 05 p0831 A69-15679  
Elastoplastic state and creep of a geometrically nonlinear conical shell /Stan sprzynasto-plastyczny i pelzanie geometrycznie nieliniowej powloki stożkowej/. 09 p1612 A69-21497
- KOPECKY, M.**  
On the energy release by magnetic field dissipation in the solar atmosphere. 03 p0516 A69-14041  
Decrease in the number of solar flares and sunspots near the central meridian. 04 p0660 A69-15040  
Some regularities in the distribution of large-scale magnetic fields on the sun. 08 p1394 A69-20610  
A few notes on the sunspot activity in dependence on the phase of the 11-year cycle and on the heliographic latitude. 08 p1379 A69-20611  
A note on the real existence of stable stages in sunspot groups evolution. 08 p1379 A69-20612  
On a more precise calculation of the electric conductivity in the photosphere and in sunspots. 09 p1579 A69-22175  
The fine structure of magnetic fields in sunspots and the dependence of the magnetic field on the spot area. 14 p2528 A69-29963  
Some notes on Babcock's theory of solar activity. 23 p4208 A69-41283
- KOPECKY, V.**  
On the determination of the dissipation time of a sunspot magnetic field. 04 p0660 A69-15039  
Kinetic instability of flute oscillations. 06 p0965 A69-17516  
Transformation and absorption of waves in an inhomogeneous beam-plasma system. 11 p1931 A69-25364  
Transformation of waves and electron heating in a radially inhomogeneous plasma. 16 p2816 A69-31638  
Generation and heating of plasma by beam-plasma interaction. 17 p3014 A69-33828
- KOPELMAN, G.**  
The roll-up solar array. 16 p2762 A69-32559
- KOPETSKII, CH. V.**  
Recrystallization diagrams of alloyed molybdenum /Diagrammy rekristallizatsii legirovannogo molibdena/. 10 p1715 A69-24012

- Mechanical properties of vacuum-arc melts of tungsten at 20-1100 deg C. 15 p2637 A69-30267
- KOPETSKII, M.**  
The character of the variation of the mean importance of sunspot groups in various latitude intervals /O kharaktere izmeneniia srednei moshnosti grupp piaten v razlichnykh shirotnykh intervalakh/. 20 p3616 A69-38303
- KOPILOVICH, L. IU.**  
A statistical model of reflections of radio signals from objects of complex shape. 09 p1460 A69-22662
- KOPLIK, B.**  
An application of diaptics in the determination of turbine bucket frequencies by the use of perturbations. [ASME PAPER 69-VIBR-57] 10 p1804 A69-24151  
Nonlinear vibrations of shallow spherical shells. [ASME PAPER 69-APMW-6] 24 p4402 A69-43107
- KOPNIN, IU. M.**  
Investigation of a single-impulse noncoplanar orbital transfer with allowance for the finite time of thrust action /Issledovanie odnoimpul'snogo perekhoda mezhdu nekomplanarnymi orbitami s ucheto konechnogo vremeni deistviia tiagi/. 05 p0823 A69-16044  
Evolution of satellite orbit under a small disturbing force, constant in magnitude and direction. 05 p0829 A69-16672  
Equations of the three-dimensional motion of a satellite with aerodynamic lift. 07 p1230 A69-19608  
Investigating a one-impulse transfer between noncoplanar orbits while taking the finite thrust-action time into account. 20 p3606 A69-37953
- KOPP, C.**  
Thermistor thermometer with low energy dissipation intended for measurement in a flowing fluid - Principle of assembly /Thermometre a thermistance a faible dissipation d'energie destinee a la mesure dans un fluide en ecoulement - Principe du montage/. 15 p2608 A69-30296
- KOPP, W.-U.**  
Ternary system aluminum-manganese-vanadium /Das Dreistoffsystem Aluminium-Mangan-Vanadium/. 24 p4330 A69-42601
- KOPPE, E.**  
Observations of Uranus using the A. Danjon astrolabe of the Sao Paulo Observatory /Observations d'Uranus effectuees a l'astrolabe A. Danjon de l'observatoire de Sao Paulo/. 22 p4031 A69-40912
- KOPPE, V. T.**  
Luminescence spectra of some molecular gases excited by fast electrons in the infrared spectral region /Spektry svescheniia nekotorykh molekuliarnykh gazov v infrakrasnoi oblasti spektra, vzbuzhdennykh bystryimi elektronami/. 09 p1590 A69-21382  
Luminescence spectra of nitrogen, oxygen, and air excited by fast electrons in the infrared region of the spectrum, and comparison of them with polar aurora spectra /Spektry svescheniia azota, kisloroda i vozdukh, vzbuzhdennykh bystryimi elektronami, v infrakrasnoi oblasti spektra i sravnenie ikh so spektrami poliarnykh siianii/. 10 p1687 A69-23916  
Infrared emission spectra of some molecular gases excited by fast electrons. 18 p3176 A69-34770
- KOPPEL, V.**  
The thermal release of rare gases from separated minerals of the Mocs meteorite. 19 p3419 A69-36141
- KOPPEN, H. T.**  
Air traffic control systems. 06 p0955 A69-17858
- KOPROV, B. M.**  
Experimental investigation of the spectra of turbulent heat and momentum fluxes in the ground layer of the atmosphere /Eksperimental'noe issledovanie spektrov turbulentnykh potokov tepla i kolichestva dvizheniia v prizemnom sloe atmosfery/. 15 p2649 A69-30648
- KOPROVA, L. I.**  
Statistical structure of the vertical profile of the aerosol attenuation factor in the stratosphere /O statisticheskoi strukture vertikal'nogo profil'a koefitsienta aerol'no go oslableniia v stratosfere/. 12 p2125 A69-25956
- KOPTEV, G. I.**  
Emitter self-bias in the power stages of transistor transmitters /Emitternoe avtomeshchenie v moshchnykh kaskadakh tranzistornykh peredatchikov/. 13 p2226 A69-27217
- KOPTIAEV, G. A.**  
Radar method of spiral scanning at a constant altitude /Radiolokatsionnyi metod spiral'nogo obzora postoiannoii vysoty/. 03 p0459 A69-13286
- KOPTILOV, V. S.**  
Invariance of generalized elasto-geometric characteristics of inhomogeneous shells /Invariantnost' obobshchennykh uprugoi-geometricheskikh kharakteristik neodnorodnykh obolochek/. 07 p1232 A69-19011
- KOPVILLE, U. KH.**  
Acoustic paramagnetic resonance in Cr super 3 super plus and Nd super 3 super plus ferroelectrics in polydomain LiNbO sub 3 /Akusticheskii paramagnitnyi rezonans v segnetoelektrike- Cr super 3 super plus i Nd super 3 super plus v polidomennom LiNbO sub 3/. 09 p1556 A69-21563
- KOPYLOVA, V. A.**  
Structure alterations of nickel during interaction with a high-speed air flow at elevated temperatures. 05 p0783 A69-16812
- KOPYSHEV, V. P.**  
The second virial coefficient of a plasma /Vtoroi virial'nyi koefitsient plazmy/. 02 p0292 A69-12639
- KOPYSOV, IU. S.**  
Neutrino emission from massive stars and supernovae /Ob izluchении neutrino massivnykh zvezdami i sverkhnovymi/. 10 p1756 A69-22814
- KOPYTECKI, E.**  
Application of the tape-recorder for simultaneous double-channel recording in electrophysiological investigations. 07 p1131 A69-18640
- KOPYTENKO, IU. A.**  
Some characteristics of distribution of plasma concentration and the field of Alfvén velocities in the earth's magnetosphere. 10 p1742 A69-24205  
The nature of stable short-period pulsations /Pc3 and Pc4/ in the earth's magnetic field. 10 p1689 A69-24206  
Relation between stable geomagnetic-field pulsations and the magnetosphere parameters /Sviaz' ustoiichivnykh pul'satsii geomagnitnogo polia s parametrami magnitosfery/. 13 p2253 A69-27692
- KOPYTOV, N. V.**  
Probability characteristics of the parameters of semiconductor equipment /Veroiatnostnye kharakteristiki parametrov ustroistv na poluprovodnikovnykh priborakh/. 01 p0047 A69-10783  
Transistor amplifier supply voltage limits. 05 p0729 A69-16083  
Probability characteristics of the parameters of systems using semiconductor devices. 10 p1661 A69-23112
- KORABLEV, L. V.**  
Instability of a plasma with an isotropic distribution function. 08 p1359 A69-19949
- KORABLEV, S. S.**  
Statistical characteristics of mechanical vibrations reproducible on a vibrostand /O statisticheskikh kharakteristikakh mekhanicheskikh kolebani, vospriizvodimyykh na vibrostende/. 14 p2536 A69-29743
- KORADO, V. A.**  
Optimal detection of random signals in random noise of unknown intensity at a constant false-alarm probability. 02 p0208 A69-12264  
Optimum detection of signals with random parameters against the background of noise of unknown intensity under conditions of constant false alarm probability. 04 p0557 A69-14788  
Detection characteristics of a coherent pulse packet with a random initial phase on a background of Gaussian noise of unknown intensity /Kharakteristiki obnaruzheniia kogerentnoi pachki impul'sov so sluchainoi nachal'noi fazoi na fone gaussovoi pomekhi s nezvestnoi intensivnost'iu/. 06 p0887 A69-17463
- Detection characteristics of a coherent pulse train with a random initial phase against a background of a Gaussian noise of an unknown intensity. 20 p3496 A69-37946
- KORALIUK, V. S.**  
On the first passage time across a given level for processes with independent increments. 19 p3360 A69-36200
- KORB, C. L.**  
A table of the equivalent widths of isolated lines with combined Doppler and collision broadened profiles. 05 p0796 A69-15747
- KORB, G.**  
Numerical integration of divergent barotropic model equations by means of the method of characteristics /Numerische Integration der divergent-barotropen Modellgleichungen mit Hilfe des Nebencharakteristiken-Verfahrens/. 11 p1911 A69-24585
- KORB, G. M.**  
A computer program for predicting temperature distribution and heat transfer through coated and uncoated window systems. [AIAA PAPER 69-28] 06 p1038 A69-18178
- KORB, L. J.**  
Advanced composite material applications in future boosters and spacecraft. 19 p3340 A69-35502
- KORBUT, B. A.**  
Calculation of a conical shell with an elastic filler under axisymmetric loading /Raschet konicheskoi obolochki s uprugim zapolnitelem pri osesimmetrichnoi nagruzke/. 19 p3436 A69-35846  
Stability under external radial pressure of cylindrical shells with an elastic core. 21 p3837 A69-39088
- KORCHAK, A. A.**  
Evolution of high-temperature regions under space conditions /Ob evoliutsii vysokotemperaturnykh oblastei v kosmicheskikh usloviakh/. 09 p1588 A69-21362  
Evolution of high-temperature regions under cosmic conditions. 18 p3197 A69-34752
- KORDIK, E. J. TH.**  
Engineering testing of helicopters of the West and East /Hubschrauber aus West und Ost technisch erprobt/. 08 p1254 A69-20169  
Technical evaluation of three medium-weight helicopters. 13 p2201 A69-27329
- KORDUS, A.**  
Measurement and analysis of the tensor conductivity of gases along the axis of a low-power MHD duct /Mesure et analyse de la conductivite tensorielle des gaz le long de l'axe d'une tuyere MHD de petite puissance/. 13 p2309 A69-28026
- KORDYLEWSKI, Z.**  
A statistical investigation of sunspots and chromospheric flares. 22 p4001 A69-39996
- KORDZINSKI, W.**  
Similarity conditions in turbine-engine tests /Warunki podobienstwa w hadaniach silnikow turbinowych/. 05 p0742 A69-16028  
Possibilities of simulating the flight conditions of turbine engines on a test stand /O mozhnosciach odwzorowywania na stoisku warunkow pracy w locie silnikow turbinowych/. 11 p1942 A69-24528
- KORENBLIT, I. IA.**  
Theory of the thermoelectric and thermomagnetic properties of bismuth at low temperatures /Teoria termoelektricheskikh i termomagnitnykh svoisty vismuta pri nizkikh temperaturakh/. 03 p0488 A69-13885  
Theory of thermoelectric and thermomagnetic properties of bismuth at low temperatures. 11 p1938 A69-25686
- KORENBLIT, L. L.**  
Electron scattering in InSb-type semiconductors. 03 p0492 A69-14170  
Transport phenomena in degenerate n-InSb type semiconductors in the case of inelastic carrier scattering. 03 p0492 A69-14171
- KORENEVSKII, D. G.**  
Investigation of nonlinear oscillations in systems with distributed parameters and delay /Issledovanie



nelineinykh kolebaniy v sistemakh s raspredelennymi parametrami i zapazdyvaniem/.  
11 p1916 A69-24766

Application of asymptotic methods to systems with distributed parameters and retardation /Primenenie asimptoticheskikh metodov k sistemam s raspredelennymi parametrami i zapazdyvaniem/.  
15 p2653 A69-31192

KORENMAN, V.

Correlations in light from a laser at threshold.  
13 p2271 A69-27399

KORESHKOV, A. A.

Effect of the posture on the sensorimotor coordination of man /Vliyanie pozy na sensorno-motornuiu koordinatsiiu cheloveka/.  
20 p3470 A69-37246

KORFF, D.

Fourier analysis and nonlinear optical systems.  
17 p3005 A69-33080

KORFF, H. C.

Relation between the equator-to-pole temperature gradient and the planetary air pressure belts /Zusammenhang zwischen dem Temperaturgefälle Äquator-Pol und den planetarischen Luftdruckgürteln/.  
24 p4345 A69-43149

KORFF, S.

Cosmic ray neutron studies.  
22 p4002 A69-40092

KORFF, S. A.

The Scientific Report of the Rockwell Polar Flight, November 14-17, 1965.  
09 p1484 A69-21401

The latitude variation of fast and slow neutrons at aircraft altitudes during solar minimum.  
09 p1574 A69-21402

KORIAGINA, E. I.

Efficiency of neodymium-activated glass laser as a function of active and inactive absorption by the glass /Koeffitsient poleznogo deistviia OKG na stekle, aktivirovannom neodimom, v zavisimosti ot aktivnogo i neaktivnogo pogloshcheniia stekla/.  
22 p3964 A69-40797

KORIAKIN, A. G.

Altitude dependence of the drift of ionospheric discontinuities /Vysotnaia zavisimost' dreifa neodnorodnosti v ionosfere/.  
10 p1686 A69-23911

KORIAVOV, P. P.

Self-similar problems of mixing of a viscous fluid.  
14 p2428 A69-28803

KORIAVOV, V. P.

Crack zone and crack front in an elastic body under pressure.  
07 p1231 A69-18699

KORICHNEV, L. P.

Transient distortions in telemetering systems /O perekhodnykh iskazheniiakh v telemetricheskikh sistemakh/.  
22 p3899 A69-40250

KORIDALIN, V. E.

Some results of neutron flux measurements on the Cosmos 53 artificial earth satellite /Nekotorye rezultaty izmerenii potokov neutronov na iskusstvennom sputnike zemli "Kosmos-53"/.  
22 p4003 A69-40274

KORINEK, S.

A simple method for computing diffusion problems with periodically varying boundary conditions.  
15 p2592 A69-31057

KORINEVSKAIA, N. A.

Additional stratification in the F region according to observations at the Alma-Ata station /Dopolnitel'nye rassloeniia v oblasti F po nabludeniiam na st. Alma-Ata/.  
02 p0237 A69-11663

Spread and oblique reflections from the F-region.  
03 p0423 A69-13529

Triple splitting of radio waves in the E-region at middle latitudes.  
12 p2031 A69-26686

Additional stratification in the F-region, according to observations at Alma-Ata.  
13 p2256 A69-28694

Some results of radio wave absorption measurements in the ionosphere by the A1 method /Nekotorye rezultaty izmereniia pogloshcheniia radiovoln v ionosfere metodom A1/.  
17 p2968 A69-33993

KORITTA, J.

Problem of stability of hypereutectic AlSi alloys /Zur Frage der Stabilität der ueberutektischen AlSi-Legierungen/.  
22 p3968 A69-40063

KORITZYSSKII, I. A.

Approximate methods of estimating the dynamic errors of devices and the distortions in the laws of motion of controlled components of certain mechanical systems /Priblizhennyye metody otsenki dinamicheskikh pogreshnostei priborov i iskazhenii zakonov dvizheniia vedomykh zven'ev nekotorykh mekhanicheskikh sistem/.  
14 p2451 A69-29747

KORKAN, K. D.

Boundary of underexpanded axisymmetric jets in still air.  
09 p1482 A69-21968

KORKEGI, R. H.

The hypersonic slipper bearing - A test track problem. [AIAA PAPER 68-736]  
09 p1477 A69-22003  
Limit case for supersonic inviscid flow in the corner of intersecting wedges.  
13 p2200 A69-28251

KORKINA, M. P.

The solution of the Einstein equations in Gaussian coordinates.  
07 p1180 A69-18507

Singularity of a spherically symmetrical solution to the Einstein equations /Pro osoblivosti sferichno simetrichnogo rozv'iazku ravnian' Einsteina/.  
12 p2129 A69-25974

KORMANY, T.

Scientific Society for Telecommunication, Symposium on Reliability in Electronics, 2nd, Budapest, Hungary, October 15-18, 1968, Proceedings. Volume A.  
08 p1321 A69-21098

Scientific Society for Telecommunication, Symposium on Reliability in Electronics, 2nd, Budapest, Hungary, October 15-18, 1968, Proceedings. Volume D.  
08 p1292 A69-21105

Scientific Society for Telecommunication, Symposium on Reliability in Electronics, 2nd, Budapest, Hungary, October 15-18, 1968, Proceedings. Volume B.  
08 p1293 A69-21111

KORN, G. A.

Digital-computer interface systems.  
05 p0723 A69-16195

A new graphic display/plotter for small digital computers.  
21 p3679 A69-39608

KORNBERG, A.

Enzymatic synthesis of deoxyribonucleic acid. XX-VII.  
22 p3898 A69-41071

Enzymatic synthesis of deoxyribonucleic acid. XX-VIII.  
22 p3898 A69-41072

Enzymatic synthesis of deoxyribonucleic acid. XXIX.  
22 p3898 A69-41073

Enzymatic synthesis of deoxyribonucleic acid. XXX.  
22 p3898 A69-41074

Enzymatic synthesis of deoxyribonucleic acid. XXXI.  
22 p3898 A69-41075

KORNBUM, J. J.

Micrometeoroid interaction with the atmosphere.  
12 p2157 A69-26341

Concentration and collection of meteoric dust in the atmosphere.  
12 p2158 A69-26342

KORNDORFER, B.

Piezoelectric variometer for measuring time-dependent pressure gradients in gaseous and fluid media /Piezoelektrisches Variometer zur Messung zeitlicher Druckgradienten gasfoermiger und fluessiger Medien/.  
11 p1889 A69-25427

KORNEEV, N. E.

High-power single-mode ruby laser.  
05 p0770 A69-15700

Investigation of a plasma blob obtained by means of focused laser radiation /Issledovanie sgustka plazmy, poluchaemoi pri fokusirovani lazernogo izlucheniia/.  
11 p1928 A69-25235

Problem of completely filling the optical resonator by a single mode of oscillations in a ruby laser /K voprosu polnogo zapolneniia opticheskogo rezonatora odnim tipom kolebaniy v rubinovom OKG/.  
14 p2458 A69-29164

A ruby laser generating a single mode /Rubinovi laser, generiruiushchii odnu modu/.  
20 p3553 A69-37607

KORNEEV, N. I.

Crack nucleation in deformed aluminum alloys.  
15 p2638 A69-30277

KORNEEV, V. G.

Application of the variational-difference method to elliptic problems with inhomogeneous boundary conditions /Primenenie variatsionno-raznostnogo metoda k ellipticheskim zadacham s neodnorodnymi kraevymi usloviiami/.  
13 p2289 A69-28318

KORNEEV, V. V.

Preliminary results of investigations of solar X-ray emission by means of the satellite "Kosmos-166."  
07 p1210 A69-19614

KORNEEVA, N. V.

Effect of transverse accelerations on acetylcholine content and cholinesterase activity in the blood of experimental animals.  
02 p0197 A69-11491

Some aspects of acetylcholine metabolism in guinea-pig brain and heart in relation to radial acceleration.  
02 p0198 A69-11505

KORNEFF, T.

Current distribution for wire exploded in vacuo.  
01 p0119 A69-10669

KORNER, P. I.

Dynamic characteristics of the cardiovascular autonomic effects during severe arterial hypoxia in the unanesthetized rabbit.  
24 p4258 A69-42632

Central nervous integration of the circulatory and respiratory responses to arterial hypoxemia in the rabbit.  
24 p4258 A69-42635

KORNEV, V. M.

The form of stability loss of elastic shells under severe load /O formakh poteri ustoiichivosti uprugikh obolochek pri intensivnom nagruzhении/.  
18 p3217 A69-34598

KORNFELD, J.

A photographic summary of the earth's cloud cover for the year 1967.  
24 p4343 A69-42897

KORNHAUSER, A. L.

Thermodynamic effects on desinent cavitation on hemispherical nosed bodies in water at temperatures from 80 deg F to 260 deg F. [ASME PAPER 69-FE-1]  
20 p3516 A69-37986

KORNHERR, M.

Investigation of energy dissipation in collisionless shock waves.  
17 p3013 A69-33820

KORNHUBER, H. H.

Distribution of readiness potential, pre-motion positivity, and motor potential of the human cerebral cortex preceding voluntary finger movements.  
22 p3875 A69-40261

KORNIENKO, D. I.

Calculation of the scattering matrix of a ferrite core waveguide transformer - Transverse magnetization /Raschet matritsy rasseianiia volnovodnogo transformatora s ferritom - Poperechnoe namagnichivanie/.  
06 p0895 A69-17455

KORNIENKO, I. U. V.

Laser alignment diagram for a working medium with random refractive index heterogeneities.  
05 p0777 A69-16550

KORNIENKO, L. A.

Sintered beryllium-base compositions. II - Corrosion properties and possibilities of raising corrosion resistance in humid atmospheres.  
10 p1711 A69-23338

KORNIENKO, L. G.

Certain problems of the statistical theory of traveling-wave antennas /Nekotorye voprosy statisticheskoi teorii anten begushchei volny/.  
06 p0898 A69-17797

KORNIENKO, P. A.

Mechanical properties of plasticizers /Mekhanicheskie svoistva plastifikatorov/.  
12 p2118 A69-26257

KORNILOV, A. A.

Axissymmetric oscillations of circular plates with allowance for energy dissipation in the material /Osesimmetrichnye kolebaniia kruglykh platin s uchetoм rasseianiia energii v materiale/.  
17 p3064 A69-33919

## KORNILOV, E. A.

Measurement of the time-variation of the temperature in a plasma-beam discharge /Измерение временного хода температуры в плазменно-пучковом разряде/.

04 p0638 A69-15368

Measurement of the correlation functions of the light emission intensity in a beam-plasma discharge /Измерение корреляционных функций интенсивности светового излучения в плазменно-пучковом разряде/.

14 p2498 A69-29814

Measurement of the time behavior of temperature in a plasma-beam discharge.

16 p2822 A69-32115

## KORNILOV, I. I.

Phase equilibria of alloys of the Ti-Al-Mo-Zr system /Фазовые равновесия в сплавах системы Ti-Al-Mo-Zr/.

04 p0618 A69-15079

Status and prospects of investigations in the titanium metalchemistry field /Состояние и перспективы исследований в области металлокими́и титана/.

07 p1161 A69-18764

Phase diagram of a part of the Ti-Al-V /up to 45 percent Al/ ternary system /Диаграмма состояния части троинной системы Ti-Al-V /до 45 percent Al/./.

07 p1161 A69-18768

Investigation of the phase equilibrium and some properties of titanium-rich alloys of the Ti-Al-Mo-Zr system /Исследования фазового равновесия и некоторых свойств сплавов системы Ti-Al-Mo-Zr, богатых титаном/.

07 p1161 A69-18769

Basic properties of the AT-3 titanium alloy and prospects of its application /Основные свойства титанового сплава AT-3 и перспективы его применения/.

07 p1163 A69-18782

A physicochemical heat-resistance theory and new heat-resistant titanium alloys /Физико-химическая теория жаропрочности и новые жаропрочные титановые сплавы/.

09 p1525 A69-22140

Effect of aluminum and iron on the hot hardness of the compound TiNi /Влияние алюминия и железа на горячую твердость соединения TiNi/.

18 p3157 A69-35249

Study of the phase transformations in titanium-rich alloys of the Ti-Al-Fe system /Исследование фазовых превращений в сплавах системы Ti-Al-Fe в части, богатой титаном/.

22 p3969 A69-40074

## KORNITSKAIA, E. A.

Influence of the horizontal gradients of the electron density distribution parameters on magnitudes of the maximum penetration frequency, skip distances, and angles of arrival /Влияние горизонтальных градиентов параметров распределения электронной плотности на величины МРЧ, расстояний скачка и углов прихода/.

14 p2436 A69-29057

## KORNOUKHOV, G. M.

Mechanism of power saturation in an isochronal traveling wave tube /О механизме насыщения мощности в изохронном ЛВУ/.

01 p0047 A69-10882

The power saturation mechanism in an isochronous traveling-wave tube.

12 p2041 A69-26646

## KOROB, V. I.

Application of a finite difference technique to the problem of the natural longitudinal oscillations of straight rods of variable cross section /О применении метода конечных разностей к задаче о собственных продольных колебаниях прямых стержней переменного сечения/.

18 p3217 A69-34581

## KOROBENIKOV, V. P.

One-dimensional unsteady flows of a combustible gas mixture, taking into account the finite rates of chemical reactions /Одномерные нестационарные течения горючей смеси газов с учетом конечной скорости химических реакций/.

06 p0909 A69-17325

Application of dimensional analysis to problems of interplanetary gas motion during solar flares /О приложении анализа размерностей к вопросам движения межпланетного газа при солнечных вспышках/.

17 p3035 A69-33627

On the gas flow due to solar flares.

18 p3189 A69-35397

The problem of point explosion in a detonating gas.

19 p3449 A69-36353

Formation and decay of electromagnetic shock waves.

21 p3697 A69-39670

## KOROBENIKOVA, M. P.

Sporadic E layer and nightglow emission at the lambda 5577-angstrom units wavelength /Спорадический слой E и эмиссия ночного неба lambda 5577 angstrom units/.

16 p2788 A69-32782

## KOROBITSYN, B. V.

Photoluminescence method of measuring the distribution of equilibrium carrier concentration in GaAs /Фотолуминесцентный метод измерения распределения концентрации носителей тока в GaAs/.

03 p0489 A69-13893

Photoluminescence method of measuring the equilibrium carrier distribution in GaAs.

11 p1939 A69-25694

## KOROBKIN, V. V.

Self-focusing effects associated with laser-induced air breakdown.

01 p0092 A69-11246

Critical aperture in plasma diagnostics by the scattering method.

02 p0251 A69-12416

Laser measurement of electron density in a plasma.

06 p0963 A69-16911

Spectrum of laser light scattered by atmospheric pressure plasma.

11 p1922 A69-24233

Image converter camera for using over wide time intervals.

12 p2083 A69-26140

Preliminary evidence for self-focusing in gas breakdown produced by picosecond laser pulses.

13 p2270 A69-27196

Effect of the aperture on the plasma parameters determined during diagnostics by the method of scattering /Влияние апертуры на определяемые параметры плазмы при диагностике методом рассеяния/.

15 p2664 A69-30996

## KOROBKO, V. I.

Development of a twisted jet in unbounded space /Развитие закрученной струи в безграничном пространстве/.

19 p3298 A69-36388

Aerodynamics and heat transfer of a twisted jet propagating in a unbounded space flooded by the same fluid /Аэродинамика и теплообмен закрученной струи, распространяющейся в безграничном пространстве, затопленном той же жидкостью/.

24 p4244 A69-43057

## KOROBKOV, A. V.

Maintenance of functional stability under complex experimental conditions by means of regular physical exercises.

08 p1262 A69-19931

Change of orthostatic stability in athletes after 40-day hypokinesia.

10 p1646 A69-23581

Problems of the scientific development of a motor activity program as an important basis for the psychophysiological training of an astronaut /Задачи научной разработки двигательного режима как важной основы психофизиологической подготовки космонавта/.

13 p2215 A69-28611

Effect of a "fractional" regime of daily activity on the human organism under conditions of relative isolation /Влияние на организм человека "дробного" режима суточной деятельности в условиях относительной изоляции/.

17 p2906 A69-32936

## KOROBKOV, I. I.

Oxidation process of alloys of the system niobium-tantalum at 550-1050 deg.

14 p2464 A69-29650

Plasticity of phases in the system titanium-oxygen in the interval from 20 to 1000 deg C /О пластичности фаз в системе титан-кислород в интервале 20-1000 deg C/.

21 p3746 A69-38959

## KOROBKOV, I. U. S.

Frequency spectrum of distributed cosmic radio emission in the range from 6.3 to 40 MHz /О частотном спектре распределенного космического радиоизлучения в диапазоне 6.3-40 МГц/.

03 p0500 A69-13080

Frequency spectrum of the distributed cosmic radio emission in the range from 6.3 to 40 MHz.

14 p2509 A69-28762

## KOROBOCHKIN, B. L.

The Hydraulic Servo Drive /Гидравлический Следиашчий Привод/.

18 p3093 A69-34356

## KOROBOVA, A. A.

Maintenance of functional stability under complex experimental conditions by means of regular physical exercises.

08 p1262 A69-19931

Changes in urinary output, creatinine excretion, and thickness of skin-subcutaneous fat layer in athletes during prolonged periods of hypokinesia.

10 p1646 A69-23582

Changes in precise motions of persons with various degrees of physical preparedness under the effects of hypokinesia /Изменение точных движений у лиц различной физической подготовленности под влиянием гипокинезии/.

17 p2906 A69-32937

## KOROBOVA, I. L.

Low-voltage arc in thermionic converters - Comparison between theory and experiment.

06 p0963 A69-16910

Current-voltage characteristics of a thermionic converter at a high current density - Ionization equilibrium in the plasma of a low-voltage arc /Вольтамперные характеристики термоэмиссионного прообразователя при высокой плотности тока - ионизационное равновесие в плазме низковольтной дуги/.

11 p1933 A69-25554

Theoretical and experimental investigation of low-voltage arc in thermionic converter.

14 p2404 A69-29254

## KOROBOVA, Z. B.

Ionized calcium lines in spectra of light bridges of sunspots /Линии ионизированного кальция в спектрах светлых мест солнечной поверхности/.

01 p0154 A69-10894

## KOROL, A. K.

Tables of refraction variations due to small temperature differences /Таблицы изменений рефракции, вызванных незначительными разностями температуры/.

17 p3028 A69-32880

## KOROLENKO, I. U. I.

Dependence of the friction coefficient on normal pressure during friction at surface films /Зависимость коэффициента трения от нормальной нагрузки при трении по поверхностным пленкам/.

23 p4170 A69-42343

## KOROLEV, A. A.

Insulating materials of thermoemission converters.

14 p2467 A69-29214

## KOROLEV, B. A.

Changes in cardiac activity during prolonged hypokinesia /according to vector analysis data/ /Изменения сердечной деятельности при длительной гипокинезии /по данным векторного анализа/.

05 p0710 A69-16519

Changes in the process of myocardial repolarization in healthy persons with restricted motor activity /Изменения процесса реполяризации миокарда у здоровых лиц при ограничении двигательной активности/.

07 p1066 A69-18984

Changes of cardiac activity during protracted hypokinesia /based on vector analysis data/.

18 p3096 A69-34738

Changes of myocardial repolarization in healthy persons due to restricted motor activity.

20 p3480 A69-38232

## KOROLEV, F. A.

Effect of high-power laser radiation on photographic materials /О действии мощного лазерного излучения на фотографические материалы/.

01 p0080 A69-10429

Power amplification of a laser pulse acting on a substance in the presence of induced Mandelstam-Brillouin backscattering.

04 p0612 A69-15414

Study of the amplification factor of an He-Ne traveling-wave amplifier at lambda equal 3.39 mu /Исследование коэффициента усиления He-Ne-усилителя бегущей волны на lambda equal 3.39 мкм/.

11 p1894 A69-24623

Traveling wave emission in a He-Ne laser at the lambda equals 3.39 mu line /Режим генерации на бегущей волне в He-Ne-лазере на линии lambda equals 3.39 мкм/.

14 p2458 A69-29165

Measurement of the power of reflected and transmitted light when focusing a laser beam in a liquid /Измерение мощности отраженного и прошедшего света при фокусировке лазерного луча в жидкости/.

14 p2459 A69-29392

Experimental determination of the lifetimes of the lower operating levels of an argon laser /Экспериментальное определение временных характеристик нижних уровней аргонного лазера/.

18 p3093 A69-34356



tal'noe opredelenie vremen zhizni nizhnikh rabochikh urovnei argonovogo lazera/.  
22 p3965 A69-40965

Determination of the parameters of a rarefied gas flow past a cylinder /Opredelenie parametrov obtekaniiia tsilindra razrezhennym gazovym potokom/.  
24 p4244 A69-43070

## KOROLEV, IU. V.

Optimal computer solution of the problem of canonical synthesis of electronic circuits /Optimal'noe reshenie zadach kanonicheskogo sinteza elektronnykh skhem s pomoshch'iu ETsVM/.  
09 p1472 A69-21781

## KOROLEV, V. A.

Transistorized two-stage amplifiers with common feedback /Dvukhskadnye tranzistornye usiliteli s obshchei obratnoi svyaz'iu/.  
04 p0575 A69-14466

## KOROLEV, V. I.

Stability of spherical shells beyond the elastic limit.  
05 p0843 A69-16693

## KOROLEVA, E. B.

Plasma synthesis of spherical particles of titanium carbide /Plazmennoe poluchenie sfericheskikh chastits karbida titana/.  
05 p0767 A69-15976

## KOROLEVA, E. M.

Stability of a cylindrical shell in the bending state of stress.  
14 p2531 A69-28808

## KOROLIUK, V. S.

First passage time of a given level for processes with independent increments /O momente pervogo prokhozheniia zadannogo urovnia dlia protsessov s nezavisimymi prirashcheniiami/.  
01 p0104 A69-10265

## KOROLKOV, D. V.

Sky noises and the sensitivity of ground-based radio telescopes /Shumy neba i chuvstvitel'nost' nazemnykh radioteleskopov/.  
07 p1099 A69-18515

Results of observations of the total solar eclipse of May 30, 1965, with the aid of a small-base radio interferometer at the 4.0-cm wavelength /Rezultaty nabludeniia polnogo solnechnogo zatmenia 30 maia 1965 g. s pomoshch'iu radiointerferometra s maloi bazoii na volne 4.0 cm/.  
20 p3616 A69-38304

Radiometer for the 4-cm range with a receiver using tunnel and parametric amplifiers /Radiometr 4-cm diapazona s priemnikom na tunnel'nykh i parametricheskikh usiliteliakh/.  
21 p3724 A69-39076

## KOROLKOV, V. I.

Coherent emission in epitaxial structures with heterojunctions in the AlAs-GaAs system /Kogerentnoe izluchenie v epitaksial'nykh strukturakh s geteroperekhodami v sisteme AlAs-GaAs/.  
03 p0489 A69-13896

Injection properties of n-Al sub x Ga sub 1-x As-p-GaAs heterojunctions.  
06 p0979 A69-16993

Coherent radiation of epitaxial heterojunction structures in the AlAs-GaAs system.  
11 p1939 A69-25697

Recombination radiation in solid Al sub x Ga sub 1-x As solutions with a variable forbidden band width /Rekombinatsionnoe izluchenie v tverdykh rastvorakh Al sub x Ga sub 1-x As s peremennoi shirinoi zapreshchennoi zony/.  
19 p3391 A69-36606

Spontaneous emission sources based on structures with heterojunctions in the AlAs-GaAs system /Istochniki spontannogo izlucheniia na osnove struktur s geteroperekhodami v sisteme AlAs-GaAs/.  
22 p3964 A69-40608

## KORONKEVICH, V. P.

A nonadjustable Fabry-Perot scanning interferometer /Neustiruemyi skaniruiushchii interferometr Fabri-Pero/.  
04 p0598 A69-14854

Nonadjustable scanning Fabry-Perot interferometer.  
15 p2608 A69-30246

## KOROSTASHEVSKII, R. V.

Operation of Aircraft Roller Bearings /Ekspluatatsiia Aviatsonnykh Podshipnikov Kacheniia/.  
04 p0606 A69-14936

## KOROTAEV, A. D.

Effect of alloying with aluminum on the nature of the decomposition of a copper-titanium alloy. II /O vlianii legirovaniia aluminiumem na prirodu raspada v splave med'-titan. II/.  
11 p1905 A69-24922

## KOROTAEV, M. M.

General resistance in 62-day periods of hypokinesia with exposure to acceleration.  
02 p0198 A69-11513

Effect of transverse accelerations on certain kidney functions.  
02 p0198 A69-11514

Influence of high-altitude mountain acclimatization on the tolerance of the organism to environmental effects /Vlianie vysokogornoii akklimatizatsii na ustoiichivost' organizma k vozdeistviu faktorov vneshnei sredy/.  
13 p2212 A69-28623

## KOROTAEVA, L. N.

Certain compressed flows in nonaxisymmetric ring nozzles /O nekotorykh tekheniakh szhatii v neosesimetricnykh kol'tsevykh soplakh/.  
07 p1120 A69-18989

## KOROTKOV, A. I.

Detonation capacity of mixtures with an ammonium perchlorate base /O detonatsionnoi sposobnosti smesei na osnove perkhlorata ammoniia/.  
02 p0305 A69-12674

Combustion and ignition of finely dispersed aluminum particles /O gorienii i vosplamenenii chastits melkodispersnogo aluminiuma/.  
08 p1375 A69-20341

## KOROTKOV, P. A.

Investigation of the emission from a composite ruby element /Doslizhdeniia generatsii skladenogo rubinovogo elementa/.  
08 p1327 A69-21076

Generation of the second harmonic in media having a center of inversion /K voprosu o generatsii vtoroi garmoniki v sredakh s tsentrom inversii/.  
19 p3332 A69-35872

## KOROTKOV, V. A.

Study of the influence of mass transfer processes and resistance forces on the electrodynamic acceleration of a plasma /Issledovanie vliianiia protsessov massopereenosia i sil soprotivleniia na elektrodinamicheskoe uskorenie plazmy/.  
13 p2315 A69-28555

## KOROTKOV, V. P.

Small-signal quasi-stationary characteristics and basic parameters of pulse transistors /Kvazistatsicheskie kharakteristiki i osnovnye parametry impul'snykh tranzistorov v rezhime mikrokov/.  
13 p2227 A69-27423

## KOROTKOVA, R. F.

Study of changes in the structure of WC-Co alloys during plastic deformation /Issledovanie izmenenii v strukture splavov WC-Co pri plasticheskoi deformatsii/.  
18 p3158 A69-35261

## KOROTKOVA, V. M.

Experimental studies of slow amplitude and phase variations of 10-centimeter radio waves on near-ground paths /Eksperimental'nye issledovaniia medlen'nykh variatsii amplitudy i fazy 10-santimetrovykh radiovoln na prizemnykh trassakh/.  
08 p1275 A69-20424

## KOROVCHINSKI, M. V.

Some characteristics of a full journal bearing lubricated with electroconducting gases. [ASME PAPER 68-LUBS-30]  
13 p2267 A69-27287

## KOROVIN, A. P.

Investigation of the electrophysical properties of the Cd sub x Hg sub 1-x Te alloy /Issledovanie elektrofizicheskikh svoistv splava Cd sub x Hg sub 1-x Te/.  
09 p1557 A69-21737

Studies on the electrical properties of Cd sub x Hg sub 1-x Te alloys.  
20 p3584 A69-38215

## KOROVIN, I. M.

Certain problems concerning the plasticity of materials loaded along a trajectory with a salient point /Nekotorye voprosy plastichnosti materiala pri nagruzenii po traektorii s tochkoi izloma/.  
21 p3839 A69-39197

## KOROVIN, L. I.

Splitting of interzone magneto-optical oscillations of the absorption coefficient in semiconductors /Rasshechenie mezhdzonnnykh magnetoopicheskikh oststsiillatsii koeffitsienta pogloscheniia v poluprovodnikakh/.  
16 p2824 A69-31574

## KOROVIN, V. M.

Possible simplifications of the equations of a two-temperature partially ionized plasma.  
07 p1190 A69-18693

## KOROVITSYN, A. V.

Realization of single-mode operation for a CO sub 2 laser /O realizatsii odnomodovogo rezhima v opticheskom generatore na CO sub 2/.  
07 p1156 A69-19157

## KOROVKINA, T. D.

Measurement of CO sub 2 temperature and concentration behind a shock wave from the infrared bands /Izmerenie temperatury i koncentratsii CO sub 2 za udarnoi volnoi po infrakrasnym polosam/.  
11 p1873 A69-25226

## KOROZA, V. I.

A variational method for the boundary value problem of wave propagation /Ob odnom variatsionnom metode dlia kraevoi zadachi o rasprostranении voln/.  
20 p3487 A69-37078

## KORPEL, A.

Acoustical imaging by diffracted light - Two-dimensional interaction.  
10 p1695 A69-23545

Rapid sampling of acoustic holograms by laser-scanning techniques.  
13 p2265 A69-28662

## KORRILOVA, E. N.

Operational characteristics of jet fuels purified of mercaptanes /Ekspluatatsionnye svoistva reaktivnykh topliv, oichishchennykh ot merkaptanov/.  
01 p0142 A69-11098

## KORS, D. L.

A liquid rocket performance model based on vaporization interactions. [AIAA PAPER 69-470]  
16 p2838 A69-32663

## KORSAKOV, V. A.

Experimental verification of the permissible radiation doses for extended space missions /"chronic experiments" with dogs/ /K eksperimental'nomu obosnovaniu dopustimnykh doz radiatsii pri dliel'nykh kosmicheskikh poletakh /provedenie khronicheskogo eksperimenta na sobakakh/.  
05 p0708 A69-16508

Experimental verification of permissible radiation doses during prolonged space flights - A "chronic experiment" on dogs.  
18 p3095 A69-34727

## KORSHAK, N. M.

Electrical properties of n-CdSnAs sub 2 over a broad range of temperatures and impurity concentrations.  
05 p0809 A69-16375

## KORSHUNOV, A. IA.

Experimental investigation of the influence of the combustion-product composition on the conductivity in the presence of a potassium additive /Eksperimental'noe issledovanie vliianiia sostava produktov sgoraniia na provodimost' pri nalichii dobavki kaliia/.  
06 p0870 A69-17908

## KORSHUNOV, G. S.

Current and voltage of a spark during pulsed breakdown in a gas interspace in the nanosecond time range /Tok i napriazhenie iskry pri impul'snom proboe gazovogo promezhutka v nanosekundnom diapazone vremeni/.  
12 p2137 A69-26534

## KORSHUNOV, I. P.

An automatic frequency control system for the beat pulsations of two lasers /Sistema avtomaticheskoi podstroiki chastoty bienii dvukh O.K.G./.  
21 p3738 A69-39079

## KORSHUNOV, IU. M.

Optimum nonlinear filters for smoothing, predicting, and differentiating on the basis of a finite number of discrete values /Optimal'nye nelineinye fil'try dlia sglazhivaniia, prognoza i differentsirovaniia po konechnomu chislu diskretnykh znachenii/.  
14 p2426 A69-29421

## KORSHUNOV, V. D.

Effect of neutron irradiation on the forward current of silicon mesa diodes /Vlianie bombardirovki neutronami na priamoi tok kremnievykh meza-diodov/.  
13 p2236 A69-28549

## KORSI, L. V.

Asymptotic estimation of radiation patterns of nonequidistant antenna arrays.  
04 p0576 A69-14772

## KORST, H. H.

Divergence losses for noncircular C-D nozzles, based on source flow.  
19 p3238 A69-35960

- KORSUN, A. A.**  
Motion of the earth's pole during the period from 1960.1 to 1965.0 /Dvizhenie poliusa zemli v 1960.1-1965.0 gg./.  
17 p2959 A69-32869
- KORSUN, A. G.**  
Channel flow of a conducting gas with a large magnetic Reynolds number in a linear approximation /Tehenie v kanale provodiashchego gaza s bol'shim magnitnym chislom Reinal'dsa v lineinom priblizhenii/.  
04 p0636 A69-14984
- KORSUNOVA, L. P.**  
Rate of variation of the electron concentration in the E region at large Z. /O skorosti izmeneniia elektronnoi kontsentratsii v oblasti E pri bol'shikh Z./.  
02 p0239 A69-11683  
Behavior of critical E-region frequencies at large solar zenith angles.  
06 p0921 A69-17748  
Diurnal variations in the sporadic E layer and wind in the ionosphere /Sutochnye zakonomernosti sporadicheskogo sloia E i vetra v ionosfere/.  
10 p1688 A69-23932  
Rate of variation of electron concentration in the E-region at large Z theta.  
13 p2258 A69-28714  
Redistribution of ionization in the ionosphere and the formation of E sub s /Pereraspredelenie ionizatsii v ionosfere i obrazovanie E sub s/.  
17 p2968 A69-33995  
Quasi-equilibrium ion concentrations in the ionospheric E-region /Kvaziravnovesnye kontsentratsii ionov v E-oblasti ionosfery/.  
20 p3520 A69-37031
- KORSUNSKII, A. M.**  
Electron beam instability in crossed magnetic and inhomogeneous electrical fields.  
12 p2133 A69-26714
- KORSUNSKII, I. L.**  
Methods for determining the thickness of thin films applied to a dissimilar material.  
15 p2607 A69-30239
- KORSUNSKII, L. M.**  
Influence of the velocity diagram on the electric field induced by an electrically conducting fluid flowing through a circular channel in the fringe field of a unidirectional inductor /O vliianii epiry skorostei na elektricheskoe pole, indutsirovannoe pri techenii elektroprovodiashchei zhidkosti v kruglom kanale v pole rasscianiia odностороннего индуктора/.  
14 p2501 A69-29915
- KORSUNSKII, V. M.**  
Electroluminescent Devices /Elektroluminescentnye Ustroistva/.  
11 p1850 A69-24976
- KORTENSKI, T.**  
Influence of gamma-radiation on certain parameters of transistors and diodes /Vliianie na gama-l'chenieto v r'khu niakoi parametri na tranzistori i diodi/.  
05 p0728 A69-15695
- KORTKHODZHIA, V. P.**  
Suppression and parametric amplification of ion sound in a plasma.  
16 p2821 A69-31797
- KORTKHONDZHIA, V. P.**  
Excitation of standing ion-acoustic waves in a weakly ionized plasma /Vozbuzhdenie stoiachikh ionno-akusticheskikh voln v slaboionizovannoi plazme/.  
02 p0292 A69-12555  
Excitation of ion-acoustic standing waves in a weakly ionized plasma.  
15 p2658 A69-30252
- KORTOVICH, C. S.**  
Characterization and thermal stability of nickel-base superalloys.  
10 p1714 A69-23977
- KORWIN-PAWLOWSKI, M.**  
Gallium arsenide photoelectric detection devices /Arsenowo-galowe fotoelektryczne przyrady odbiorcze/.  
13 p2203 A69-27465
- KORYTKOWSKI, B.**  
Remarks on the subject of the influence of radial clearance on the operation of self-lubricating bearings /Spoztrzezenia na temat wplywu luzu promieniowego na prace lozysk samosmarujacych/.  
16 p2794 A69-32067
- KORYU ISHII, T.**  
Analysis of an optical motor system energized with a laser.  
09 p1442 A69-22457
- KORZHAVIN, A. N.**  
Optical modeling of radiation patterns of antennas with variable-profile reflectors.  
05 p0736 A69-16781
- KORZHAYVI, A. P.**  
Influence of the conditions of formation of silicide layers on molybdenum on some of their properties /Vliianie uslovii polucheniia silitsidnykh sloev na molibdene na nekotorye ikh svoistva/.  
20 p3560 A69-37361
- KORZHENEVICH, I. M.**  
Damping of laser relaxation oscillations due to diffusion of excitations /Zatukhanie relaksatsionnykh kolebanii lazera, svyazannoe s diffuziei vozbuzhdenii/.  
10 p1706 A69-24079
- KORZHENIANTS, V. A.**  
Evaluation of animal tolerance for impact accelerations by blood enzyme tests.  
10 p1645 A69-23500
- KORZHENVICH, I. M.**  
Nonlinear interaction between waves in a relativistic plasma /Nelineinoe vzaimodeistvie voln v relativistskoi plazme/.  
03 p0397 A69-13710
- KORZHUEV, P. A.**  
Qualitative and quantitative distribution of bone marrow in adult dogs.  
08 p1262 A69-19835
- KORZO, V. F.**  
Zone structure of Si-SiO sub 2 /O zonnnoi strukture Si-SiO sub 2/.  
09 p1555 A69-21478  
Band structure of Si-SiO sub 2.  
15 p2669 A69-30723
- KOSACHEV, V. V.**  
Thermodynamics of a weakly relativistic plasma.  
08 p1359 A69-19953  
Relativistic corrections to the distribution functions of particles in a high-temperature plasma.  
14 p2499 A69-29847
- KOSACHEVSKAIA, E. A.**  
Distribution of steady-state solutions of the equations of motion of a body in a fluid /O raspredelenii statsionarnykh reshenii uravnenii dvizheniia tela v zhidkosti/.  
11 p1868 A69-24782
- KOSARCHIN, V. N.**  
A method of digital-computer calculation of the stress concentrations at holes in shallow shells /Ob odnom sposobe rascheta na ETsVM kontsentratsii napriazhenii u otverstii v pologikh obolochkakh/.  
19 p3436 A69-35847
- KOSCHEL, H.**  
Problems on quality, stability and reliability of integrated semiconductor circuits.  
08 p1294 A69-21118
- KOSCHMIEDER, E. L.**  
On the wavelength of convective motions.  
11 p2003 A69-25354
- KOSEKI, T.**  
Analysis of the topside ionospheric data from Alouette II over Japan. I.  
01 p0065 A69-10548
- KOSENKO, V. IU.**  
Perfect monocrystalline silicon films on sapphire.  
07 p1198 A69-18509
- KOSEVICH, V. M.**  
Mechanism of epitaxial growth of PbTe on KCl.  
10 p1745 A69-23323  
Substructural step-by-step transitions at the early stages of epitaxial growth of PbTe on NaCl.  
12 p2144 A69-26675
- KOSHEL, O. M.**  
Investigation of the emission from a composite ruby element /Doslidzhennia generatsii skladenogo rubinovogo elementa/.  
08 p1327 A69-21076
- KOSHELEV, E. L.**  
Generation spectrum of a chemical laser using a mixture of H sub 2 and Cl sub 2.  
14 p2461 A69-29672
- KOSHELEV, P. F.**  
Mechanical properties of structural alloys at temperatures down to -269 deg C /Mekhanicheskie svoistva konstruktсионnykh splavov pri temperaturakh do -269 deg C/.  
04 p0614 A69-14574  
Mechanical properties of structural alloys at temperatures down to -269 deg C.  
15 p2638 A69-30275
- Strength properties of welded joints in Kh 18N9T steel at very low temperatures.**  
22 p3958 A69-41204
- KOSHELEV, V. V.**  
Ion composition and coefficients of ionospheric reactions at altitudes from 140 to 200 km in the equatorial ionosphere /Ionnyi sostav i koeffitsienty ionosfernykh reaktsii na vysotakh 140-200 km ekvatorial'noi ionosfery/.  
10 p1688 A69-23929  
Temporal changes in daytime ion concentrations according to n sub e /h/ profile data /Vremennye izmeneniia kontsentratsii ionov v dnevnoe vremia po dannym n sub e /h/-profilei/.  
14 p2435 A69-29050
- KOSHELEVSKII, V. K.**  
Spectral characteristics of geomagnetic field pulsations of the Pi2 type /Spektral'nye kharakteristiki pul'satsii geomagnitnogo polia tipa Pi2/.  
20 p3520 A69-37038
- KOSHILAEV, E. M.**  
Optimal parameters for tube radiators with profiled fins /Optimal'nye parametry trubchatykh izluchatelei s profilirovannyimi rebrami/.  
20 p3631 A69-36978
- KOSHELOV, IU. P.**  
Variation of the atmospheric potential temperature at the tropopause level and the air exchange between the troposphere and stratosphere /Izmenenie potentsial'noi temperatury vozdukh na urovne tropopauzy i obmen vozdukhom mezhdu troposferoi i stratosferoi/.  
13 p2252 A69-27608  
The comparison of the Soviet Meteorological rocket data with the CIRA-1965 model.  
15 p2650 A69-31421
- KOSHEVAIA, S. V.**  
Magnetic retuning of a gyromonotron in the prestart and starting modes /Magnitnaia perestroika giromonotrona v dostartovykh i startovykh rezhimakh/.  
03 p0407 A69-13979
- KOSHEVOL, V. N.**  
Rocket Aerodynamics /Aerodinamika Rakety/.  
17 p2889 A69-32829
- KOSHIBA, M.**  
Ultra-high energy interactions.  
03 p0499 A69-12945  
Search for quarks.  
15 p2674 A69-30308
- KOSHKIN, V. K.**  
Film boiling of subcooled liquid nitrogen in turbulent flow.  
07 p1243 A69-19737  
Thermal contact resistance in cylindrical elements in thermionic energy converters.  
14 p2400 A69-29216
- KOSHKIN, V. M.**  
Melting points of covalent semiconductor compounds with stoichiometric vacancies /O temperaturakh plavleniia kovalentnykh poluprovodnikov so stekhiometricheskimi vakansiiami/.  
02 p0297 A69-11881  
Thermal conductivity of semiconducting alloys with stoichiometric vacancies /Teploprovodnist' napiv-provodinikovikh splavov iz stekhiometricheskimi vakansiiami/.  
12 p2142 A69-25975  
The melting points of covalent semiconductors with stoichiometric vacancies.  
18 p3182 A69-35041
- KOSHLIAKOV, V. N.**  
Influence of dry friction forces in the precession axes of gyroscopes on the motion of the sensing element of a gyrocompass /O vliianii sl sukhogo treniia v osiakh pretsessii giroskopov na dvizhenie chuvstvitel'nogo elementa girokompasa/.  
18 p3135 A69-34560
- KOSHMAROV, IU. A.**  
Heat transfer at a wedge in a hypersonic low-density gas stream.  
07 p1050 A69-18707
- KOSHY, V. K.**  
A theoretical study of the asymmetric excitation of conducting flanges by a primary aperture antenna and the consequent radiation pattern.  
02 p0217 A69-12246  
A study of the effect of the relative position of metal flanges on the radiation patterns of H-plane sectoral horn radiators.  
08 p1285 A69-20554  
An experimental investigation of the effect of conducting flanges on the H-plane radiation patterns of E-plane sectoral horns.  
10 p1665 A69-24063



Effect of asymmetry in amplitude of excitation of secondary sources by a primary aperture antenna.  
11 p1852 A69-25117

## KOSIACHENKO, L. A.

Impact ionization and the tunneling effect during electroluminescence of zinc sulfide /Udarnaya ionizatsiya i tunnel'nyi effekt pri elektroluminestsentsii sul'fida tsinka/.  
06 p0980 A69-17261

Dependence of the current and electroluminescence brightness on the reverse voltage in SiC diodes /Zavisimost' toka i iarkosti elektroluminestsentsii ot obratnogo napriazheniya v diodakh SiC/.  
15 p2573 A69-30062

## KOSIOL, R.

A particular case of helicopter instability on the ground /Szczegolny przypadek niestacelnosci smiglowca na ziemi/.  
09 p1433 A69-21385

## KOSKIMAKI, D.

Martensitic behaviour in the equi-atomic Ni-Ti alloy.  
02 p0265 A69-12024

## KOSKIN, I. U. P.

Current distribution in an MHD channel with solid electrodes of finite resistance /O raspredelenii toka v MGD-kanaale so sploshnymi elektrodami konechnogo soprotivleniya/.  
07 p1059 A69-19029

Calculation of the flow of an ionized gas in a magnetohydrodynamic channel of rectangular cross section /K voprosu o raschete techeniya ionizirovannogo gaza v magnetogidrodinamicheskom kanale priamougol'nogo secheniya/.  
14 p2500 A69-29904

## KOSKINEN, M. F.

Design and characteristics of an actinium fueled thermionic generator.  
14 p2399 A69-29192

## KOSLOVER, M.

Optimization of battery subsystems for earth satellite lifetimes of greater than 5 years.  
23 p4068 A69-42243

Synthesis of an electrical power system for a manned lunar base.  
23 p4076 A69-42541

## KOSLOVSKII, E. N.

Optical quantum generator application for high-speed photography and holography in ballistic investigations.  
12 p2088 A69-26177

## KOSMA, D.

Study of the effect of elements on properties of a heat-resistant steel containing 12 percent Cr /Issledovanie vliianiia elementov na svoystva zharoprochnoi stali s 12 percent Cr/.  
10 p1708 A69-23000

## KOSMODAMIANSKII, A. S.

Action of a concentrated force applied to the contour of a circular hole weakening a half-plane /Deistvie sosredotochennoi sily, prilozhennoi k konturu krugovogo otverstii, oslabliaiushchego poluploskosti/.  
11 p1972 A69-24653

The stress concentration in an isotropic medium weakened by curvilinear holes /K voprosu o konsentratsii napriazhenii v izotropnoi sredе, oslablennoi krivolineinymi otverstiiami/.  
11 p1972 A69-24655

Certain physically nonlinear problems in the theory of elasticity for multiply connected regions /Nekotorye fizicheski-nelineinye zadachi teorii uprugosti dlia mnogosviaznykh oblastei/.  
11 p1976 A69-24783

Refinement of the applied theory in the problem of stress concentrations arising in the bending of a perforated plate /Ob utochnenii prikladnoi teorii v zadache o konsentratsii napriazhenii pri izgibe plity s otverstiiami/.  
11 p1976 A69-24784

## KOSMODAMIANSKII, O. S.

Construction of a boundary-layer type solution in the three-dimensional plate bending problem /Pobudova rozv'iazku tipu pogranichnogo sharu v prostorovii zadachi zginu pliti/.  
15 p2708 A69-30662

## KOSMODEMIANSKAIA, G. N.

Motion of a body about a fixed point in the presence of a nonholonomic coupling /Dvizhenie tela okolo nepodvizhnoi tochki pri nalichii negolononnoi svyazi/.  
21 p3773 A69-39840

## KOSMOLINSKII, F. P.

Study of the effects of various work and rest schedules on subjects under conditions of relative isolation /Izuchenie vliianiia razlichnykh rezhimov truda i

otdykha na ispytatelei, nakhodiashechikhsia v usloviyakh otositel'noi izolatsii/.  
03 p0381 A69-14201

Change in the functional state of the human organism during tests in chambers /Izmenenie funktsional'nogo sostoiianiia organizma cheloveka pri ispytaniakh v kamerakh/.  
03 p0377 A69-14202

Changes in the electropotentials of the heart in flying personnel after flight causing intense neuroemotional stress /Izmeneniia elektropotentsialov serdtsa u letnogo sostava posle poletov, vyzvayushchikh bol'shoe nervno-emotsional'noe napriazhenie/.  
03 p0378 A69-14207

Changes in physiological functions during prolonged confinement in a closed restricted space.  
08 p1262 A69-19838

Effect of a "fractional" regime of daily activity on the human organism under conditions of relative isolation /Vliianie na organizm cheloveka "drobnogo" rezhima sutochnoi deiatel'nosti v usloviyakh otositel'noi izolatsii/.  
17 p2906 A69-32936

Study of the working capacity of a human operator during 64-hour wakefulness /Issledovanie rabotosposobnosti cheloveka-operatora pri 64-chasovom lishenii sna/.  
22 p3877 A69-40280

## KOSOFISKY, L. J.

Photo-electronic imaging systems in space exploration.  
07 p1136 A69-19591

## KOSOUIROV, G. I.

Optical Fourier transforms and holography.  
06 p0928 A69-17890

## KOSOWSKI, S.

The structure of a shock wave in an ultrarelativistic gas.  
17 p2958 A69-34145

## KOSS, E. V.

Heat resistance of ZhS6-K alloy subjected to multicomponent diffusion saturation /Zharostoikost' splava ZhS6-K posle mnogokomponentnogo diffuzionnogo nasyshcheniya/.  
19 p3345 A69-36159

## KOSS, P.

Inert gas diffusion in light metals /Edelgasdiffusion in Leichtmetallen/.  
16 p2800 A69-31775

## KOSSAK, W.

Modern germanium structural elements for microelectronics /Moderne Germanium-Bauelemente fuer die Mikroelektronik/.  
02 p0214 A69-11597

## KOSSANYI, J.

Mass spectrometry in structural and stereochemical problems. CLXVI.  
09 p1448 A69-22551

## KOSSECKA, E.

The equations of motion of a concentrated dislocation.  
02 p0336 A69-11556  
Theory of dislocation lines in a continuous medium.  
19 p3439 A69-36477

## KOSSECKI, J.

The equations of motion of a concentrated dislocation.  
02 p0336 A69-11556

## KOSSON, R. L.

Effective thermal conductivity parallel to the laminations, and total conductance of multilayer insulation. [AIAA PAPER 68-765]  
21 p3853 A69-39763

## KOSSOWSKY, R.

Unidirectionally solidified cobalt-based alloys for elevated temperature magnetic application.  
19 p3341 A69-35542

Mechanical properties of unidirectionally solidified Ni-Cr eutectic.  
19 p3343 A69-35921

## KOSTAREV, V. V.

Radar equation for precipitations and radar calibration in the measurement of multiple-target reflectivity /Urvnenie radiolokatsii osadkov i kalibrovka radiolokatora pri izmerenii otrazhaemosti mnozhestvennoi tseli/.  
16 p2806 A69-32264

Improvement of the accuracy of radar precipitation measurements /O povyshenii tochnosti radiolokatsionnogo izmereniia osadkov/.  
23 p4185 A69-42494

## KOSTENKO, A. V.

Heat resistance of ZhS6-K alloy subjected to multicomponent diffusion saturation /Zharostoikost' splava ZhS6-K posle mnogokomponentnogo diffuzionnogo nasyshcheniya/.  
19 p3345 A69-36159

## KOSTENKO, I. U.

Application of the real auxiliary operator method for adjusting the parameters of servosystems /Zastosuvaniia metody istotnogo dopomizhnogo operatora dlia nastroivanniia parametrov slidkuuchikh sistem/.  
14 p2426 A69-29146

## KOSTENKO, V. I.

Variability of the flux densities of some radio emission sources at a frequency of 5760 MHz /Peremennost' plotnostei potokov nekotorykh istochnikov radioizlucheniia na chastote 5760 MGts/.  
09 p1588 A69-21361

Variability of flux densities of some radio sources at the frequency of 5760 MHz.  
18 p3197 A69-34751

Investigation of the Crab Nebula at wavelengths of 2.16 and 8.2 mm /Issledovaniia krabovidnoi tumanosti na volnakh 2,16 i 8,2 mm/.  
19 p3428 A69-36875

## KOSTER, A.

Possibility of operating a solid-state laser with non-parallel mirrors /Possibilite de fonctionnement d'un laser solide a miroirs non paralleles/.  
03 p0440 A69-13365

Synchronisation of two Q-switched solid state lasers.  
07 p1147 A69-18488

## KOSTEREV, L. B.

Solubility of hydrogen in solid and liquid titanium /Rastvorimost' vodoroda v tverdom i zhidkom titane/.  
11 p1905 A69-24963

## KOSTERIN, V. A.

Generalization of experimental data concerning the limits of flame stabilization by means of jets /Obobshchenie eksperimental'nykh dannykh po predelam stabilizatsii plameni na struiakh/.  
03 p0531 A69-12956

Some problems of jet gasdynamics in a cross flow with combustion.  
16 p2879 A69-32140

Flame stabilization at various flow temperatures /Stabilizatsiia plameni pri razlichnykh temperaturakh potoka/.  
21 p3850 A69-38859

Influence of the blast angle on the gasdynamics of fanjets in a crosswind /Vliianie ugla vduva na gazodinamiku veermykh strui v snosiashchem potoke/.  
21 p3850 A69-38863

## KOSTETSKII, A. V.

Mathematical modeling of temperature and humidity processes in sections of sealed spaceship cabins.  
02 p0200 A69-11489

Some aspects of utilization of higher plants as nutrition source in space missions.  
15 p2560 A69-31408

## KOSTETSKII, B. I.

Anisotropy of external friction forces on textured surfaces of metals /Anizotropiia sil zovnizhn'ogo tercia na teksturovannikh poverkhniiakh metaliv/.  
18 p3149 A69-35151

## KOSTIAKOVA, E. B.

Mass distribution of the gaseous material in the head of the comet Arend-Roland 1956h /O raspredelenii massy gazovogo veshchestva v golove komety Arend-Rolana 1956h/.  
14 p2524 A69-29711

The study of the forbidden lines in the planetary-nebula spectra.  
19 p3423 A69-36223

## KOSTIANOI, G. N.

Calculation of a long-wave radiation field /K raschetu polia dlinnovolnovoi radiatsii/.  
12 p2125 A69-25951

## KOSTIK, R. I.

Matrix equations for radiation diffusion. II.  
12 p2131 A69-26661

Excitation sources of the H sub alpha line in the chromosphere /Istochniki vzbuzhdeniia khromosfernoi linii H sub alpha/.  
15 p2683 A69-30509

## KOSTIKOV, V. I.

Investigation of the process of spreading of liquid titanium- and zirconium-base alloys on graphite /Issledovanie protsessa rastekaniia po grafitu zhidkikh splavov na osnove titana i tsirkoniia/.  
03 p0446 A69-13573

- Determination of the surface energy of titanium in the solid phase /Opredelenie poverkhnostnoi energii titana v tverdoi faze/.  
12 p2113 A69-26045
- Theory of coating deposition on high-temperature materials /K teorii nanoseniia pokryti na vysokotemperaturnye materialy/.  
20 p3560 A69-37358
- KOSTIN, L. C.**  
Application of statistical parameters in defining inlet airflow dynamics.  
[AIAA PAPER 68-649]  
17 p2896 A69-34020
- KOSTIN, V. N.**  
Experimental verification of the concept of equivalent pressure in a hot mercury arc.  
03 p0478 A69-13843
- KOSTINA, T. K.**  
Behavior of ordering alloys under various deformation conditions /Povedenie uporiadochivaushchikhsia splovov pri razlichnykh usloviakh deformatsii/.  
11 p1904 A69-24706
- KOSTISHIN, M. T.**  
Dependence of photosensitivity of a semiconductor-metal system on thickness of semiconducting layer.  
14 p2508 A69-29666
- KOSTIUCHENKO, E. A.**  
Effect of neutron irradiation on the forward current of silicon mesa diodes /Vliianie bombardirovki neitronami na priamoii tok kremnievykh meza-diody/.  
13 p2236 A69-28549
- KOSTIUK, E. N.**  
Investigation of the three-dimensional contact problem of the theory of elasticity on a digital computer /Issledovanie prostranstvennoi kontaktnoi zadachi teorii uprugosti s ispol'zovaniem ETSVM/.  
06 p1026 A69-18014
- KOSTIUK, V. I.**  
Stability of multiparameter self-adaptive nonsearch gradient systems /Ustoichivost' mnogoparametricheskikh bespoiskovykh gradientnykh samonastraivaiushchikhsia sistem/.  
19 p3286 A69-35891
- KOSTIUK, V. V.**  
Film boiling of subcooled liquid nitrogen in turbulent flow.  
07 p1243 A69-19737
- KOSTIUKOV, B. V.**  
Duk-15TSLAM device for the automatic ultrasonic inspection of tube welds.  
18 p3137 A69-35111
- KOSTIUKOVSKII, I. U. M.-L.**  
Observability of nonlinear control systems /O nabliudaemosti nelineinykh upravliaemykh sistem/.  
01 p0049 A69-10206
- Simple conditions for the observability of nonlinear controlled systems /Prostye uslovia nabliudaemosti nelineinykh upravliaemykh sistem/.  
03 p0409 A69-13069
- Observability of nonlinear controlled systems.  
14 p2424 A69-28742
- Simple conditions of observability of nonlinear controlled systems.  
14 p2424 A69-28751
- KOSTIUMAKHA, P. A.**  
The dependence of the capacitance of germanium tunnel diodes on the bias voltage and signal magnitude.  
11 p1847 A69-24722
- KOSTOGAROV, S. B.**  
Beryllium - A new structural metal /Berillii - Novyi konstruktsionnyi metall/.  
11 p1904 A69-24897
- KOSTOMAROV, D. P.**  
Spatial distribution of plasma density from phase measurements.  
03 p0480 A69-14138
- Flute instability in an axially symmetric plasma with finite ion larmor radius.  
06 p0966 A69-17520
- Flute instability in a rarefied non-neutral plasma.  
08 p1370 A69-21013
- Determination of the spatial distribution of plasma density from the phase shift as measured by microwave multichannel probes /Opredelenie prostranstvennogo raspredeleniia plotnosti plazmy po fazovomu sdvigu pri mnogokanal'nom mikrovolnovom zondirovanii/.  
14 p2497 A69-29792
- KOSTROV, B. V.**  
Mechanics of brittle failure /Mekhanika khrupkogo razrusheniia/.  
21 p3839 A69-39194
- KOSTROV, N. I.**  
Effect of rocking on the functional state of the system hypophysis-adrenal cortex /Vliianie ukachivaniia na funktsional'noe sostoiianie sistemy gipofiz-kora nadpochechnikov/.  
20 p3473 A69-37268
- KOSTYCHEV, I. U. G.**  
Calculation of the propagation constants of gyrotropically filled waveguides /K raschetu postoiannykh rasprostraneniia volnovodov s girotropnym zapolneniem/.  
05 p0718 A69-15648
- The calculation of propagation constants of gyrotropic medium waveguides.  
16 p2754 A69-32505
- KOSUSHKIN, G. A.**  
The solubility of the general problem for an elastic closed cylindrical shell in a nonlinear formulation /O razreshimosti obshchei zadachi dlia uprugoi zamknutoi tsilindricheskoii obolochki v nelineinoi postanovke/.  
12 p2177 A69-25881
- KOSYREV, F. K.**  
Ionization state of cesium thermionic converter plasma.  
14 p2491 A69-29243
- KOSYREVA, N. P.**  
Ionization state of cesium thermionic converter plasma.  
14 p2491 A69-29243
- On the development of a low voltage arc in a thermionic diode with extended electrodes.  
14 p2402 A69-29244
- KOTADIA, K. M.**  
Lunar variation of ionospheric absorption of radio waves at different frequencies.  
14 p2438 A69-29104
- KOTAKE, S.**  
Evaporation and combustion of a fuel droplet.  
20 p3632 A69-37520
- KOTELES, E. S.**  
Voltage dependence of electroluminescence from GaP diodes prepared by liquid epitaxial techniques.  
10 p1663 A69-23664
- KOTELNIKOV, I. U. N.**  
Noise-immune very-high-vacuum manometer with double modulation of ion current.  
03 p0429 A69-13263
- KOTELNIKOV, K. A.**  
Comparison of experimental data on showers with energies of hundreds of Bev with characteristics of Monte-Carlo-simulated showers.  
13 p2330 A69-28374
- KOTELNIKOV, V. A.**  
Low-frequency electrical resonance oscillations in a nonisothermal plasma flow /Nizkochastotnye rezonansnye elektricheskie kolebaniia v potoke neizotermicheskoi plazmy/.  
04 p0638 A69-15174
- Low-frequency resonant electrostatic oscillations in a streaming non isothermal plasma.  
18 p3180 A69-34716
- KOTERA, N.**  
Behavior of hot electrons under strong magnetic fields in pure n-type InSb.  
19 p3388 A69-36544
- KOTERAZAWA, K.**  
Change in structure and mechanical properties of rapidly stretched metals.  
06 p0941 A69-17122
- KOTFILIA, R. P.**  
Design, development, and flight test experience with lifting body stability augmentation systems.  
[AIAA PAPER 69-887]  
21 p3647 A69-39413
- KOTIK, I. P.**  
Calculation of the scattering matrix of a ferrite core waveguide transformer - Transverse magnetization /Raschet matritsy rasseianiia volnovodnogo transformatora s ferritom - Poperechnoe namagnichivanie/.  
06 p0895 A69-17455
- KOTIK, M. G.**  
Aircraft Flight Tests /Letnye Ispytaniia Samoletov/ /2nd Edition/.  
03 p0365 A69-12900
- KOTIN, L.**  
Third order positive cyclic systems of linear differential equations.  
24 p4340 A69-43131
- KOTLIAR, G. KH.**  
Determination of free carbon in the carbides of titanium, zirconium, and hafnium.  
10 p1714 A69-23846
- KOTLIAR, L. M.**  
Schemes of differential photometers of solar magnetographs and precise recording of radial velocities /Skhemy differentsial'nykh fotometrov solnechnykh magnetografiv i tochnaia registratsiia luchevykh skrostei/.  
20 p3547 A69-38308
- KOTLIAREVSKII, D. M.**  
Inelastic interaction cross section of 7 x 10 super 10 to 10 super 12 ev nuclear-interacting particles in carbon and iron.  
13 p2330 A69-28383
- KOTOMTSEVA, L. A.**  
Development time and spectral width of a single pulse in a laser with a passive Q-switch /Vremia razvitiia i spektral'naia shirina monoimpul'sa v OKG s prosvetliaushchimsia fil'trom/.  
14 p2458 A69-29166
- KOTORYNSKI, W. P.**  
On an irregular Sturm-Liouville problem in boundary layer theory.  
04 p0590 A69-15001
- A Green's function for the energy transport equation in Oseen flow.  
08 p1305 A69-20850
- KOTOUSOV, L. S.**  
Apparatus for determining thermal-diffusion coefficients in gas mixtures.  
04 p0688 A69-15410
- Determination of the heat-excess thermodynamic functions of binary gas mixtures on the basis of the temperature effects during stationary mutual diffusion /Opredelenie teplovykh izbytochnykh termodynamicheskikh funktsii binarnykh gazovykh smesei po temperaturnym efektam pri stacionarnoi vzaimnoi diffuzii/.  
11 p2003 A69-25552
- KOTOV, I. A.**  
Some energy characteristics of exploding wires.  
09 p1539 A69-21560
- KOTOV, I. D.**  
Investigation of the spectrum of ionization bursts produced by the penetrating component of extensive air showers.  
13 p2332 A69-28403
- Energy and angular distributions of 10 super 11 to 10 super 12 ev muons.  
13 p2332 A69-28420
- Energy losses of muons in pair production.  
13 p2304 A69-28423
- KOTOV, N. F.**  
Radar method of spiral scanning at a constant altitude /Radiolokatsionnyi metod spiral'nogo obzora postoiannoii vysoty/.  
03 p0459 A69-13286
- Techniques for preparing numerical radar information charts /Metodika sostavleniia tsifrovyykh kart radiolokatsionnoi informatsii/.  
03 p0459 A69-13287
- KOTOV, R. G.**  
Automated Information-Retrieval Systems /Avtomatizirovannye Informatsionno-Poiskovyie Sistemy/.  
13 p2225 A69-27933
- KOTOVA, E. S.**  
Clinical and morphological characteristics of hemodynamic peculiarities in the vascular system of eyes of rabbits exposed to acceleration.  
08 p1262 A69-19832
- KOTOVA, L. P.**  
Quasiclassical approximation in ionization problems.  
09 p1543 A69-22658
- KOTOVSKAIA, A. R.**  
Physiological reactions of animals during flights on the third, fourth, and fifth spacecraft satellites /Fiziologicheskie reaktsii zhivotnykh pri poletakh na tret'em, chetvertom i piatom kosmicheskikh korabliakh-sputnikakh/.  
07 p1061 A69-18578
- KOTOWSKI, P.**  
Employment possibilities for European launch vehicles in science and industry /Anwendungsmöglichkeiten europäischer Traegerarketen in Wissenschaft und Wirtschaft/.  
04 p0665 A69-14808
- KOTSAKIS, D.**  
Escapes and captures.  
05 p0827 A69-16595



## KOTSARENKO, N. IA.

Incoherent reflection of electromagnetic waves from a plasma /Nekogerentnoe otrazhenie elektromagnitnykh voln ot plazmy/.

12 p2031 A69-26530

Interaction of a rotating electron beam with asymmetric waves in a magnetized plasma waveguide /V-zaimodeistvie vrashchayushchegosia elektronnoho puchka s nesimmetrichnymi volnami zamagnichennogo plazmennogo volnovoda/.

13 p2312 A69-28118

Dispersion characteristics of a magnetized plasma waveguide /Dispersionnyye kharakteristiki zamagnichennogo plazmennogo volnovoda/.

13 p2315 A69-28571

Criterion of absolute and convective instability of parametrically interacting waves /Kriterii absolutnoi i konvektivnoi neustoiichivosti dlia parametricheski vzaimodeistvuiushchikh voln/.

21 p3677 A69-39555

## KOTSEV, I. N.

Radio lines of interstellar NO molecules /O radioliniakh mezhzvezdnykh molekul NO/.

09 p1590 A69-21377

Radio lines of the interstellar NO molecule.

18 p3198 A69-34765

## KOTSIMUMAKHA, M. P.

Physicochemical study of the CdSb-Ge cross section of the Cd-Sb-Ge ternary system /Fiziko-khimichne doslidzhennia rozrizu CdSb-Ge potrinnoi sistemi Cd-Sb-Ge/.

14 p2503 A69-28975

## KOTSIMUMAKHA, P. A.

Capacitance of a germanium tunnel diode as a function of bias voltage and signal magnitude /Zavisimost' emkosti germaniynykh tunnel'nykh diodov ot napriazheniia smeshcheniia i velichiny signala/.

02 p0214 A69-11614

Characteriograph for recording of the voltage-capacitance characteristics of p-n junctions.

04 p0602 A69-15406

## KOTSUBANOV, V. D.

Optical generation in organic luminophor solutions in the 400 to 650-nm range /Opticheskaia generatsiia na rastvorakh organicheskikh luminoforov v diapazone 400-650 nm/.

04 p0612 A69-15374

The question of using light converters for optical pumping.

05 p0777 A69-16373

Xanthene dye series laser excited by second-harmonic radiation from a neodymium laser.

06 p0932 A69-16914

Emission of solutions of organic molecules excited by harmonics of a neodymium laser /Generatsiia rastvorov organicheskikh molekul pri vzbuzhdenii garmonikami neodimovogo lazera/.

12 p2104 A69-26030

Laser action in solutions of organic luminophors in the 400-650 nm range.

16 p2797 A69-32121

## KOTTHAUS, J. P.

High power output from a submillimeter CW gas laser.

04 p0609 A69-14289

## KOTVAL, P. S.

The effects of solute additions on the stacking fault energy of a nickel-base superalloy.

19 p3343 A69-35925

Discontinuous precipitation of M sub 23 C sub 6 carbide in a nickel-base superalloy.

23 p4176 A69-41507

## KOUFOPOULOS, T.

Shrinkage stresses in two-phase materials.

13 p2371 A69-28675

## KOURIS, S. S.

Relation between sunspot number and the ionospheric index IF2.

03 p0424 A69-13632

## KOUSKY, V. E.

On the relation between Kelvin waves and the quasi-biennial oscillation.

13 p2290 A69-27391

## KOUTCHMY, S.

The intensity of the solar continuum at lambda equals 20.15 mu - Absolute measurement of the brightness temperature of the center of the disk /Sur l'intensite du continuum solaire a lambda equals 20,15 mu - Mesure absolue de la temperature de brillance du centre du disque/.

02 p0318 A69-12041

The millimeter wave radio telescope of the Simeiz /USSR/ observatory /Le radiotelescope sur ondes millimetriques de l'observatoire de Simeiz /URSS/.

10 p1674 A69-23805

Weighted observation of the corona during the total solar eclipse of September 22, 1968.

13 p2354 A69-28472

A new type of coronal jet associated with chromospheric bursts and with "coronal bulbs" /Sur un type nouveau de jet coronal associe a des eruptions chromospheriques et a des "bulbes coronaux"/.

22 p4028 A69-40716

## KOUTIEV, I. S.

Dissociative velocity rates of oxygen and ozone in the ionosphere.

02 p0246 A69-12769

## KOUTSANDREAS, J. D.

Surveying earth resources with remote sensors.

19 p3312 A69-36259

## KOUTSKY, J.

Contribution to the problem of the heat resistance of low-alloy CrMoWV steels. II - Effect of niobium, cerium, zirconium, and boron on the heat resistance of steels of the type CSN 41 5335 /Prispevek k podstate zarupevnosti nizkokolegovanych CrMoWV oceli. II - Vliv obsahu niobu, ceru, zirkonu a boru na zarupevnost oceli typu CSN 41 5335/.

22 p3972 A69-41079

Contribution to the theory of the heat resistance of low-alloy CrMoWV steels. I - Influence of the vanadium content on the heat resistance in steels of the type CSN 41 5335 /Prispevek k podstate zarupevnosti nizkokolegovanych CrMoWV oceli. I - Vliv obsahu vanadu na zarupevnost oceli typu CSN 41 5335/.

22 p3972 A69-41083

## KOUTSOYANNIS, S. P.

The role of repulsive forces in the shape of collision-broadened spectral lines and in the output of gas lasers. [IEEE PAPER T-6]

07 p1154 A69-19083

## KOVACH, R.

The exploration of the moon.

23 p4216 A69-42200

## KOVACH, R. J.

Performance of various ablative materials in a large hydrogen/oxygen thrust chamber. [AIAA PAPER 69-442]

16 p2747 A69-32702

## KOVACH, R. L.

The velocity structure of the moon.

[AAS PAPER 68-205]

02 p0312 A69-11480

A seismic refraction system for lunar use.

23 p4162 A69-41533

## KOVACHEV, B.

Spectrometric study of kappa Cassiopeia. II /Spektrofotometrichesko izsledvane na kappa Kasiopeia. II/.

21 p3803 A69-38844

## KOVACS, M. A.

Pressure dependence of the decay rate for imprisoned 4.35-mu spontaneous emission in CO sub 2.

18 p3179 A69-35478

## KOVAL, A. G.

Luminescence spectra of some molecular gases excited by fast electrons in the infrared spectral region /Spektry svecheniia nekotorykh molekuliarnykh gazov v infrakrasnoi oblasti spektra, vzbuzhdennykh bystryimi elektronami/.

09 p1590 A69-21382

Luminescence spectra of nitrogen, oxygen, and air excited by fast electrons in the infrared region of the spectrum, and comparison of them with polar aurora spectra /Spektry svecheniia azota, kisloroda i vozdukh, vzbuzhdennykh bystryimi elektronami, v infrakrasnoi oblasti spektra i sravnenie ikh so spektami poliarnykh sianii/.

10 p1687 A69-23916

Infrared emission spectra of some molecular gases excited by fast electrons.

18 p3176 A69-34770

## KOVAL, D. T.

Statistical linearization of a considerable nonlinearity connected in series with a random-gain amplifier unit /Statisticheskaia linearizatsiia sushchestvennoi nelineinosti, soedinennoi posledovatel'no s usilitel'nyim zvenom so sluchainymi koefitsientom usileniia/.

14 p2425 A69-28920

## KOVAL, I. K.

Phase dependence of the brightness of Mars.

11 p1952 A69-24252

The World of Planets /Mir Planet/.

11 p1958 A69-24666

Optical characteristics of the Martian atmosphere, obtained from measured contrasts /Opticheskie

kharakteristiki atmosfery Marsa; poluchennye po izmerennym kontrastam/.

11 p1959 A69-24727

The nature of the Martian polar caps /O prirode poliarnykh shapok Marsa/.

11 p1959 A69-24728

Influence of atmospheric scintillation on the brightness distribution over the disk of a planet /O vliianii atmosferno drozhanii na raspredelenie iarkosti po disku planety/.

11 p1960 A69-24729

Optical parameters of the Martian surface and temperature /Opticheskie parametry poverkhnosti i atmosfery Marsa/.

20 p3608 A69-38050

## KOVAL, IU. D.

Heat transfer at a plate under the conditions of a hydrodynamically stabilized turbulent boundary layer flow /Teploobmen plastiny v usloviakh gidrodinamicheskii stabilizirovannogo turbulentnogo techeniia pogrannichnogo sloia/.

10 p1809 A69-23427

## KOVAL, L. R.

Solar flutter of a thin-walled open-section boom.

07 p1227 A69-18333

Energy dissipation in an oscillating sphere filled with a viscous fluid.

24 p4305 A69-43587

## KOVAL, R. N.

Tables of refraction variations due to small temperature differences /Tablitsy izmenenii refraktsii, vyzvannykh nebol'shimi raznostiami temperatury/.

17 p3028 A69-32880

## KOVAL, V. F.

The character of the influence of surface-active media on the strength of polymethyl methacrylate.

09 p1528 A69-21852

## KOVALCHUK, B. M.

Nanosecond current pulse generator for supplying semiconductor lasers.

15 p2633 A69-30234

## KOVALENKO, A. D.

Propagation of waves in an infinite viscoelastic medium with allowance for thermomechanical coupling /Rasprostranenie voln v neogranichennoi viazkoupругoi srede s uchetom termomekhanicheskogo sopriazheniia/.

01 p0164 A69-10076

Heat formation in viscoelastic bodies consisting of material with resonance dispersion /Pro teplotovoreniiia u viazko-pruzhnykh tilakh z materialu z rezonansnoi dispersiei/.

06 p1019 A69-16826

Heat generation in elastoviscous bodies during periodic interactions /O teploobrazovanii v viazkoupругykh telakh pri periodicheskikh vozdetsviakh/.

11 p2000 A69-25168

## KOVALENKO, A. N.

Slot antenna input resistance.

04 p0577 A69-14784

## KOVALENKO, E. S.

High-frequency modulation of the spatial structure of a ruby laser field /Vysokochastotnaia modulatsiia prostranstvennoi struktury polia v OKG na rubine/.

11 p1900 A69-25569

Possibility of achieving a population inversion between the sublevels of the ground state of a laser /O vozmozhnosti polucheniia inversii naselennosti mezhdu podurovniami osnovnogo sostoiianiia OKG/.

11 p1900 A69-25572

Theory of lasers with inhomogeneous pumping /K teorii OKG s neodnorodnoi nakachkoi/.

19 p3339 A69-36880

Investigation of wideband impedance decoupling structures /Issledovanie širokopolosnykh impedansnykh razviyavaiushchikh struktur/.

23 p4138 A69-41938

## KOVALENKO, S. P.

Analytical solutions of a nonlinear loaded integrodifferential equation /Analiticheskie resheniia nelineinogo nagruzhennogo integro-differentsial'nogo uravneniia/.

24 p4339 A69-42595

## KOVALENKO, V. A.

Coupling coefficients between primary and secondary cosmic-ray variations /Koefitsienty sviazi mezhdu pervichnymi i vtorichnymi variatsiiami kosmicheskikh luche/.

03 p0504 A69-14224

## KOVALENKO, V. I.

Calculation of axisymmetric supersonic flows past a cone /K raschetu osesimmetrichnogo obtekaniia konusa sverkhzvukovym potokom/.  
17 p2890 A69-33123

## KOVALEV, A. I.

Phase shape deformation and austenite stabilization in Fe-Ni and Fe-Ni-Ti alloys /O fazovom naklepe i ustoiichivosti austenita v splavakh Fe-Ni i Fe-Ni-Ti/.  
18 p3159 A69-35448

## KOVALEV, A. M.

Steady-state solutions of the differential equations of motion of a body having a fixed point /O statsionarnykh resheniiakh differentsial'nykh uravnenii dvizheniia tela, imeiushchego nepodvizhnuu točku/.  
11 p1917 A69-27480  
Motion of a body in the case of L. N. Sretenskii.  
11 p1920 A69-25746

## KOVALEV, D. P.

Radiative perturbation of potassium terms in a ruby-laser radiation field.  
13 p2271 A69-27656

## KOVALEV, E. E.

Measurement of the proton and neutron spectra on board satellites of the Cosmos series /Izmerenie spektrov protonov i neutronov na sputnikakh serii "Kosmos"/.  
05 p0814 A69-16051  
Radiation danger during prolonged space flights and radiobiological investigations.  
08 p1261 A69-19826  
Results of experimental investigations of dosimetry and shielding on board the Cosmos 110 artificial satellite /Rezultaty eksperimental'nykh issledovaniy po dozimetrii i zashchite na ISZ "Kosmos-110"/.  
13 p2356 A69-27702

Nuclear Interactions in Spacecraft Shielding /Iadernye Vzaimodeistviia v Zashchite Kosmicheskikh Korablei/.  
14 p2481 A69-29817

Characteristics of biological effects of cosmic radiation, model investigations.  
20 p3478 A69-37628  
Measurement of the proton and neutron spectra in the "Cosmos" series satellites.  
20 p3591 A69-37961

## KOVALEV, I. I.

Experimental study of the effect of the similarity factor on the radiating power /emissivity/ of metals.  
05 p0845 A69-15894

## KOVALEV, M. P.

Calculation of the displacement of the gyrorotor center in the case of purely axial loading and resilient cover plates /Raschet smeshchenii tsentra rotora giroskopa pri chisto osevoi nagruzke i podatlivykh kryshkakh/.  
09 p1502 A69-22703

## KOVALEV, S. A.

Experimental investigation of heat transfer in boiling dissociative liquid.  
[ASME PAPER 69-HT-58] 24 p4411 A69-43536

## KOVALEVA, V. A.

Aerodynamic characteristics of blunted bodies of revolution in hypersonic flow at small angles of attack /Aerodinamicheskie kharakteristiki zatuplennykh tel vrashcheniia pri giperzvukovom obtekanii s malymi uglami ataki/.  
17 p2889 A69-33122

## KOVALEVSKAIA, E. M.

Influence of the horizontal gradients of the electron density distribution parameters on magnitudes of the maximum penetration frequency, skip distances, and angles of arrival /Vliianie gorizonta'lnykh gradientov parametrov raspredeleniia elektronnoi plotnosti na velichiny MPCh, rasstoianii skachka i uglov prikhoda/.  
14 p2436 A69-29057

## KOVALEVSKII, I. V.

Nature of the interplanetary medium during a period of low solar activity /IX through X, 1962/ according to Mariner 2 data /Kharakter mezhplanetnoi sredy v period spada solnechnoi aktivnosti /IX - X 1962 g./ po dannym "Marinera II"/.  
09 p1575 A69-21522

Characteristic propagation rates of weak disturbances and Mach numbers in the interplanetary medium during a period of low solar activity /Kharakternye skorosti rasprostraneniia slablykh vozmushchenii v mezhplanetnoi srede i chisla Makha v period spada solnechnoi aktivnosti/.  
09 p1575 A69-21523

Interaction between the interplanetary medium and the magnetosphere of the earth during a period of

decreased solar activity /Vzaimodeistvie mezhplanetnoi sredy s magnitosferoi zemli v period spada solnechnoi aktivnosti/.  
10 p1769 A69-23900

Character of the interplanetary medium during decreasing solar activity /September-October 1962/, according to Mariner 2 data.  
16 p2851 A69-32517

Characteristic propagation velocities of weak disturbances in the interplanetary medium and Mach numbers during the period of decreasing solar activity.  
16 p2851 A69-32518

## KOVALEVSKY, J.

New determination of the diameter of Neptune /Nouvelle determination du diametre de Neptune/.  
01 p0150 A69-10386

First results of Doppler measurements from the French satellite Diapason /Premiers resultats dus aux mesures Doppler sur le satellite francais Diapason/.  
01 p0065 A69-10543

The atmosphere of Neptune /Sur l'atmosphere de Neptune/.  
04 p0660 A69-15061

The French program of space geodesy /Le programme francais de geodesie spatiale/.  
[UN PAPER 68-95834] 06 p0917 A69-17071  
Initial processing of French D1A satellite experience /Premieres reductions de l'experience francaise sur satellite D1A/.  
21 p3701 A69-38336

Diameter, flattening, and optical properties of the upper atmosphere of Neptune as derived from the occultation of the star BD-17 deg 4388 /Diametre, aplatissement et proprietes optiques de la haute atmosphere de Neptune d'apres l'occultation de l'etoile BD-17 deg 4388/.  
21 p3796 A69-38471

## KOVALNOGOV, A. F.

Investigation of the hydraulic resistance in pipes in the presence of local flow vorticity due to helical swirlers /Issledovanie gidravlicheskogo soprotivleniia v trubakh pri mestnoi zakrutke potoka s pomoshch'iu shnekovykh zavikhritelei/.  
21 p3695 A69-38862

## KOVALSKII, L. V.

Characteristics of a hologram in an approximation of paraxial optics /Svoistva gologrammy v priblizhenii paraksial'noi optiki/.  
19 p3308 A69-35868

## KOVALSKII, T.

Changes in the amplitude and phase of the solar diurnal variation /Izmeneniia amplitudy i fazy solnechno-sutochnoi variatsii/.  
10 p1759 A69-22837

## KOVALY, J. J.

Satellite high resolution radar mapping techniques.  
03 p0430 A69-13399

## KOVALYK, D. A.

X-ray structural study of ternary systems V-Cr-B, Nb-Cr-B, and Mo-Cr-B /Rentgenostrukturnoe issledovanie troinykh sistem V-Cr-B, Nb-Cr-B i Mo-Cr-B/.  
18 p3158 A69-35262

## KOVAR, J.

Explosive acrylic polymers /Explosive Acryl-polymer/.  
08 p1376 A69-21152

## KOVAR, N. S.

Light scattering by manned spacecraft atmospheres.  
09 p1487 A69-21654  
Space contamination due to manned vehicles.  
21 p3793 A69-38341

## KOVAR, R. P.

Light scattering by manned spacecraft atmospheres.  
09 p1487 A69-21654  
Space contamination due to manned vehicles.  
21 p3793 A69-38341

## KOVARI, K.

Spatial deflection problems of slender elastic rods with finite deformations /Rauemliche Verzweigungsprobleme des duennlen elastischen Stabes mit endlichen Verformungen/.  
11 p1970 A69-24609

## KOVASY, K.

A mathematical model for heat and material exchange in bubbles /Ein mathematisches Modell fuer den Waerme- und Stoffaustausch bei Blasen/.  
21 p3847 A69-38448

## KOVASZAY, L. S. G.

Temperature compensated linearizer for hot-wire anemometer.  
06 p0927 A69-17701

Simple phenomenological theory of turbulent shear flows.  
15 p2591 A69-30905

Turbulence measurements in the wake of a thin flat plate.  
24 p4249 A69-43694

## KOVBASE, A. P.

Combination noise and cross noise in a ferrite mixer /Kombinatsionnye i perekrestnye pomekhi v feritovom smesitele/.  
15 p2574 A69-30129

Time characteristics of microwave quadrupoles with ferrite resonators /Vremennye kharakteristiki chetyrekhpoliusnikov SVCh s feritovymi rezonatorami/.  
23 p4139 A69-41948

## KOVASIUK, V. I.

Optimization problem of linear conduction-type MHD generators /Problema optimizatsii lineinykh konduktionnykh MGD-generatorov/.  
06 p0871 A69-17916

Analysis of a power source employing an MHD generator and a thermocompressor /Analiz skhemy energeticheskoi ustanovki s MGD-generatorom i termokompresorom/.  
09 p1435 A69-21592

## KOVASIUK, V. P.

Measurement of the composite field effect in semiconductors /Izmerenie kombinirovannogo effekta polia v poluprovodnikakh/.  
10 p1698 A69-24210

A criterion of "strong doping" for centers producing deep levels, and the nature of the spectrum of fast surface traps in silicon /O kriterii "sil'nogo legirovaniia" dlia tsentrov, daishchikh glubokie urovni, i kharaktere spektra bystrykh poverkhnostnykh lovushek krenniia/.  
22 p3992 A69-40604

## KOVDA, A. V.

Dislocations in epitaxial gallium arsenide.  
06 p0981 A69-17891

## KOVENSKII, I. I.

State of nickel in a nickel molybdenum alloy /O sostoianii nikelia v nikel'molebdenovom splave/.  
07 p1159 A69-18535

## KOVES, G.

Complex metallographic characterization of wear resistant surface coating.  
13 p2282 A69-28164

## KOVETZ, A.

An analytical solution for the change of cloud and fog droplet spectra due to condensation.  
12 p2126 A69-26017  
Isentropic stars in general relativity.  
21 p3798 A69-38540

## KOVITZ, A. A.

Stability of a plane shock wave in free space and in the presence of rigid or interfacial boundaries.  
15 p2592 A69-31145

## KOVPIK, O. F.

Measurement of the time-variation of the temperature in a plasma-beam discharge /Izmerenie vremennogo khoda temperatury v plazmenno-puchkovom razriade/.  
04 p0638 A69-15368

Measurement of the time behavior of temperature in a plasma-beam discharge.  
16 p2822 A69-32115

## KOVIRGIN, A. I.

Tunable parametric generator employing a KDP crystal /Perestraivaemyi parametricheskii generator sveta na kristalle KDP/.  
03 p0437 A69-13045

Theoretical and experimental investigation of the process of generation of optical harmonics in bounded beams /Teoreticheskoe i eksperimental'noe issledovanie protsessa generatsii opticheskikh garmonik v ogranichennykh puchkakh/.  
03 p0439 A69-13057

Nonstationary nonlinear optical effects and ultrashort light pulse formation.  
[IEEE PAPER H-5] 05 p0774 A69-16316

Parametric interactions in optics and tunable light oscillators.  
[IEEE PAPER K-5] 07 p1152 A69-19066

Investigation of the angular structure of the second optical harmonic. II /Issledovanie uglovoi struktury vtoroi opticheskoi garmoniki. II/.  
17 p2981 A69-33110

Frequency discrimination in optical harmonic generators /Razlichenie chastoty v opticheskikh generatorakh garmonik/.  
22 p3965 A69-40964



KOVRIZHNYKH, L. M.

Transfer processes in toroidal magnetic traps /Protsessy perenosy v toroidal'nykh magnitnykh lovushkakh/.  
13 p2314 A69-28446

KOVROV, B. G.

Experimental biological life support system. I - Continuous cultivation of algae as a link of a closed ecosystem.  
01 p0020 A69-11077

Experimental biological life support system. II - Gas exchange between man and microalgae culture in a 30-day experiment.  
01 p0021 A69-11078

Mathematical model of a life support system.  
10 p1649 A69-23580

Study of a mathematical model of a life support system /K issledovaniyu matematicheskoi modeli sistemy zhizneobespecheniya/.  
22 p3892 A69-40272

KOVSHUN, I. N.

Radiation of fireballs.  
03 p0512 A69-13692

KOVTONIUK, N. F.

Nonequilibrium carriers during depolarization in semiconductors /Neravnovesnye nositeli pri depolarizatsii v poluprovodnikakh/.  
01 p0138 A69-10434

Microwave absorption by free carriers in barium titanate /Pogloschenie SVCh na svobodnykh nositelakh v titanate bariia/.  
08 p1374 A69-21189

Polarization stabilization time for semiconductors /O vremenakh ustanovleniya polarizatsii v poluprovodnikakh/.  
13 p2317 A69-27880

Microwave absorption by free carriers in barium titanate.  
18 p3183 A69-35158

KOVTUN, R. I.

Paraxial motion of charges in a spatially modulated magnetic field /Paraksial'noe dvizhenie zaryadov v prostranstvenno-modulirovannom magnitnom pole/.  
04 p0633 A69-14297

Application of the asymptotic method in studying the motion of a charge in a spatially modulated magnetic field /Primenenie asimptoticheskogo metoda pri izuchenii dvizheniya zariada v prostranstvenno-modulirovannom magnitnom pole/.  
04 p0634 A69-14298

Buildup of Alfvén waves with the aid of beams /K voprosu o raskachke al'fvenovskikh voln pri pomoshchi puchkov/.  
09 p1551 A69-22035

Effect of magnetic mirrors on the motion of charges in a spatially periodic magnetic field /Vliianie magnitnykh probok na dvizhenie zaryadov v prostranstvenno-periodicheskom magnitnom pole/.  
09 p1551 A69-22035

Interaction between a charge and a TE sub 01 wave in a circular waveguide in the principal resonance regime /Vzaimodeistvie zariada s volnoi TE sub 01 v kruglom volnovode v rezhime glavnogo rezonansa/.  
09 p1551 A69-22037

KOVURA, I. A.

Radio astronomical investigations of the parameters of large-scale ionospheric inhomogeneities /Radioastronomicheskie issledovaniya parametrov krupnomasshtabnykh ionosfernykh neodnorodnostei/.  
14 p2436 A69-29053

KOVYREVA, N. I.

Efficient GaP diode sources of red radiation.  
06 p0979 A69-16999

KOWAL, C.

The 1968 Palomar supernova search.  
19 p3403 A69-35963

KOWAL, C. T.

Absolute magnitudes of supernovae.  
10 p1774 A69-22967

KOWALEWICZ, A.

Mechanism of spark ignition of liquid fuel droplets atomized in air /O mechanizmie zaplonu iskrowego kropel paliwa cieklego rozpylonych w powietrzu/.  
09 p1623 A69-22220

KOWALEWSKI, J.

Evaluation of the tensile strength of components on the basis of crack toughness /Beurteilung der Bruchfestigkeit von Bauteilen auf Grund der Riss-zähigkeit/.  
12 p2176 A69-25861

KOWALSKI, R. A.

Computer correction of distortion in ATS-SSCC photographs.  
10 p1689 A69-22945

KOWALSKY, T. E.

The application of or to stop selection and sequencing for the aeromedical evacuation problem. [AAS PAPER 69-385]  
24 p4251 A69-42804

KOYAMA, T.

A study on the oxygenation velocity factor of the red blood cell by use of the rapid flow method combined with a Pt-electrode as the oxygenation detector.  
20 p3480 A69-38283

KOZACHENKO, M. V.

Increasing the wear resistance of light alloys.  
10 p1711 A69-23339

KOZAI, Y.

Revised values for coefficients of zonal spherical harmonics in the geopotential.  
15 p2600 A69-31358

Long-range variations of orbits with arbitrary inclination and eccentricity.  
17 p3031 A69-33098

KOZAK, J.

Present possibilities of the schlieren method for studying elastic wave fields /Soucasne možnosti slirove metody pro studium pole elastickeych vln/.  
17 p2973 A69-33322

KOZAK, O. V.

The effect of plasma density on the measurement of electron temperature by the intensity ratio of helium spectral lines.  
05 p0804 A69-16376

The nature of the high-frequency instability of a low-pressure discharge in a magnetic field /Pro prirodu visokochastotnoi nestiikosti rozriadu niz'kogo tisku v magnitnomu poli/.  
11 p1927 A69-24912

KOZAKEVITCH, P.

The role of surface phenomena in the elimination of solid inclusions from a metal bath /Role des phenomenes de surface dans l'elimination d'inclusions solides d'un bain metallique/.  
07 p1167 A69-19342

KOZAKI, S.

Radio wave propagation in longitudinally inhomogeneous anisotropic medium.  
13 p2218 A69-27182

Propagation of the electromagnetic pulse in inhomogeneous ionized media.  
20 p3496 A69-38030

KOZAR, M. I.

General resistance in 62-day periods of hypokinesia with exposure to acceleration.  
02 p0198 A69-11513

Study of the effects of various work and rest schedules on subjects under conditions of relative isolation /Izuchenie vlianiia razlichnykh rezhimov truda i otdykha na ispytatelei, nakhodiashchikhsia v usloviakh otositel'noi izoliatsii/.  
03 p0381 A69-14201

Change in the functional state of the human organism during tests in chambers /Izmenenie funktsional'nogo sostoiianiia organizma cheloveka pri ispytaniakh v kamerakh/.  
03 p0377 A69-14202

KOZAROV, A. S.

Certain differentiating characteristics of linear bridge circuits /O nekotorykh differentsiruiushchikh svoistvakh lineinykh mostovykh skhem/.  
12 p2037 A69-25962

KOZAROV, M.

Influence of large strains on the elastic stability of cylindrical shells filled with an elastic material, under the action of axial compression, torsion, and temperature gradients /Vliianie na golemite deformatsii v rkhru elastichnata ustoiichivost na tsilindrichni cherupki, zap'lneni s elastichen material, ot deistvieta na osov natisk usukvane i temperaturen gradient/.  
05 p0832 A69-15691

Thermal stability of thin cylindrical shells filled with an elastic material /Termoustoiichivost na t'nki tsilindrichni cherupki, zap'lneni s elastichen material/.  
05 p0832 A69-15692

KOZELEV, A. N.

Measurement of average combined losses of an H sub 01 wave in waveguide lines by a method of pulse sequences /Izmerenie srednikh summarnykh poter' volny H sub 01 v volnovodnykh liniakh metodom riada impul'sov/.  
23 p4123 A69-41949

KOZELKIN, V. V.

Achievements in studies of properties of materials used for space objects and their use in industry.  
06 p0945 A69-17046

KOZELSKII, A. V.

High-strength maraging steel N18K9M5T /MS 200/.  
04 p0615 A69-14645

KOZEMCHAK, E. B.

Computer-aided circuit design by singular imbedding.  
07 p1115 A69-19148

KOZERENKO, O. P.

Changes in cardiac function during orthostatic tests and problems in predicting the reactions of cosmonauts in flight /Izmeneniia funktsii serdechnogo avtomatizma pri probe dlitel'nogo stoiianiia i voprosy prognozirovaniia reaktivnoi kosmonavtov v polet/.  
03 p0381 A69-14229

KOZESNIK, J.

To the theory of random vibrations.  
18 p3227 A69-35491

Complex linear oscillating systems.  
23 p4236 A69-42484

KOZHAKHMETOV, K. KH.

Equations of elastic stability for thin anisotropic plates with allowance for transverse shear /Upravneniia uprugoi ustoiichivosti tonkikh anizotropnykh plastin pri uchete poperechnykh sdvigov/.  
03 p0525 A69-13130

KOZHARSKII, I. U. P.

Application of moire patterns for "angle-phase" transforms.  
14 p2447 A69-29327

KOZHEVNIKOV, N. I.

The dependence of telluric-line parameters on the air mass and the height of the place of observation.  
03 p0512 A69-13695

The use of O sub 2 molecular lines in studying physical conditions in the earth's atmosphere.  
09 p1490 A69-21863

Structure of the CO layer in the solar atmosphere /K voprosu o strukture sloia CO v solnechnoi atmosfere/.  
15 p2688 A69-30552

KOZHUKHOV, V. N.

Flux densities and spectral indices for the sources in the 3C and 3CR catalogs at 86-MHz frequency.  
11 p1951 A69-24237

KOZIELEWSKI, J.

Design of a DISA thermoanemometer and its application in studies of flow /Budowa termoanemometru f-my DISA i jego zastosowanie w badaniach przeplywowych/.  
24 p4311 A69-42558

KOZIN, F.

A survey of stability of stochastic systems.  
04 p0623 A69-14695

Investigation of a random cumulative damage theory.  
04 p0680 A69-15154

KOZIN, I. D.

Meridional radio communication of SSB radio stations.  
06 p0889 A69-17753

KOZIN, I. U. V.

A spectral analyzer /Analizator spektra/.  
17 p2939 A69-33909

KOZIN, N. S.

Self-similar solutions for the collapse of an empty cylindrical cavity in a gas with the equation of state p equals S sub rho super chi /Ob avtomodel'nykh resheniiakh dlia skhlopvaniia pustoi tsilindricheskoi polosti v gase s uravneniem sostoiianiia p equals S sub rho super chi/.  
10 p1679 A69-23367

KOZINA, G. K.

Contact interactions of silicon and boron carbides and their alloys with liquid metals /Kontaktna vzaemodiia karbidov kremnniu i boru ta ikh spoluk z rdkimi metalami/.  
18 p3156 A69-35153

KOZINA, L. N.

Solubility of nitrogen in liquid niobium and molybdenum /Rastvorimost' azota v zhidkikh niobii i molibdene/.  
10 p1710 A69-23213

KOZINA, P. E.

Meridional radio communication of SSB radio stations.  
06 p0889 A69-17753

- KOZLOV, A. N.**  
Collective properties of excitons in semiconductors.  
08 p1371 A69-19955
- KOZLOV, E. M.**  
Equipment for measuring the earth's brightness from the Cosmos 149 satellite /Apparatura dlia izmereniia iarkosti zemli so sputnika "Kosmos-149".  
14 p2447 A69-29404
- KOZLOV, G. I.**  
"Transparency" effect in plasma subjected to the action of laser pulses /Effekt "prosvetleniia" plazmy pod deistviem lazernykh impul'sov/.  
13 p2314 A69-28442  
Application of a shock wind tunnel to a study of diffusers /Primenenie udarnoi aerodinamicheskoi trubki dlia issledovaniia difфуzorov/.  
14 p2391 A69-29622  
Plasma and laser emission /Plazma i lazernoe izluchenie/.  
16 p2797 A69-32382
- KOZLOV, I. S.**  
Dependence of orbital elements on an impulse arbitrarily located in space /Zavisimost' orbital'nykh elementov ot impul'sa, raspolozhennogo proizvol'nym obrazom v prostranstve/.  
21 p3818 A69-39821  
The problem of the minimum number of correction impulses during long-range space flights /K voprosu o minimal'nom kolichestve impul'sov korrektsii pri dal'nikh kosmicheskikh poletakh/.  
21 p3818 A69-39822
- KOZLOV, IU. G.**  
High-frequency planar silicon transistor based on a p-n-p structure obtained by an ion doping technique /Kremniyevyi vysokochastotnyi planarnyi tranzistor na osnove p-n-p-struktury, poluchennoi metodom ionnogo legirovaniia/.  
22 p3916 A69-40960
- KOZLOV, IU. N.**  
Wind vector correlation based on data from time series of observations /Vektornaiia korreliatsiia vetra na materiale vremennykh riadov nabludeniia/.  
13 p2294 A69-27856
- KOZLOV, L. F.**  
Laminar Boundary Layer in the Presence of Suction /Laminarnyi Pogranichnyi Sloi pri Nalichii Ot-sasyvaniia/.  
01 p0060 A69-10615  
Integration of the equations of a three dimensional boundary layer with suction or blowing.  
06 p0909 A69-17185  
Investigation of the hydrodynamic stability of a boundary layer in the presence of suction or blowing /Issledovanie gidrodinamicheskoi ustoi-chivosti pogranichnogo sloia pri nalichii ot-sasyvaniia ili vduvaniia/.  
18 p3124 A69-35381  
Laminar boundary layer in a compressible gas at a given surface temperature in the presence of suction /Laminarnyi pogranichnyi sloi v szhimaemom gaze pri zadannoii temperature poverkhnosti i nalichii ot-sasyvaniia/.  
23 p4058 A69-41709
- KOZLOV, L. P.**  
Asymptotic boundary layer in a compressible gas in the presence of normal and tangential velocity components at the surface of the body /Asimptotichnyi pogranichnyi shar u stislivomu gazi pri naizivnosti normal'noi ta dotichnoi skladovikh shvidkosti na poverkhnii tila/.  
02 p0231 A69-12138  
Influence of the compressibility of a gas on the laminar to turbulent boundary-layer transition /Vpliv stislivosti gazu na perekhid laminarnogo pogranichnogo sharu v turbulentnii/.  
14 p2389 A69-28974  
Generalized integral equations of a boundary layer /Uzagal'neni integral'ni spivvidnoshennia dlia pogranichnogo sharu/.  
21 p3691 A69-38573
- KOZLOV, S. I.**  
Calculation of the spectral distribution of absorbed X-ray energy in the earth's atmosphere /Raschet spektral'nogo raspredeleniia pogloshchennoi energii rent-genovskogo izlucheniia v atmosfere zemli/.  
09 p1577 A69-21774  
Decrease in the electron density of the F2 region after the American high-altitude explosion of July 9, 1962 /Ob umen'shenii elektronnoi plotnosti v oblasti F sub 2 posle amerikanskogo vysotnogo vzryva 9 iulia 1962 g/.  
22 p3942 A69-41098
- KOZLOV, V. A.**  
Investigation of iron-nickel and iron-nickel-cobalt ferrites /Issledovanie zhelezo-nikelevykh i zhelezo-nikel'-kobal'tovykh ferritov/.  
13 p2319 A69-27992
- KOZLOV, V. F.**  
Investigation of the transition zone in a two-layer steel-titanium sheet /Issledovanie graničnoi zony dvukhsloinno listy stal'-titan/.  
18 p3159 A69-35450
- KOZLOV, V. N.**  
Vacuum system of the Sirius stellarator.  
03 p0412 A69-13839  
Calculation of the temperature field of an infinite plate in the case of a variable value of the heat transfer coefficient /Raschet polia temperatur neogranichennoi plastyiny pri peremennom znachenii koeffitsienta teploobmena/.  
10 p1809 A69-23430
- KOZLOV, V. P.**  
On application of the statistical method for determination of atmospheric temperature profiles from satellites.  
19 p3303 A69-36409
- KOZLOV, V. V.**  
The main problems of selenotectonics /Osnovnye problemy selenotektoniki/.  
03 p0505 A69-12899
- KOZLOVA, E. S.**  
Oscillations in nonlinear systems /O kolebaniiax v nelineinykh sistemakh/.  
13 p2300 A69-28529
- KOZLOVA, E. V.**  
Obtaining a Chlorella biomass with an enhanced content of sulphur-containing amino acids and its nutritive value /Poluchenie biomassy Khlorellы s povyshen-nym soderzhaniiem serusoderzhashchikh aminokislot i ee pishchevaia tsennost'/.  
13 p2216 A69-28620
- KOZLOVA, I. G.**  
The non-symmetric flow round the front part of a body of revolution due to a supersonic stream of an ideal or real gas.  
18 p3086 A69-35051
- KOZLOVA, K. I.**  
Analysis of the hydrogen lines of the peculiar stars alpha super 2 CVn and gamma Lyr.  
16 p2864 A69-32594
- KOZLOVSKAIA, S. V.**  
On the internal constitution and chemical composition of Mercury.  
20 p3597 A69-37331
- KOZLOVSKAIA, T. M.**  
Elastic properties of a titanium beta-alloy /IVT1/ /Uprugie svoistva beta-splava titana /IVT1//.  
22 p3969 A69-40072
- KOZLOVSKII, B. V.**  
A criterion for estimating the usefulness of characteristics in the problem of image recognition /Kriterii otsenki poleznosti priznakov v zadache raspoznavaniia obrazov/.  
23 p4134 A69-41954
- KOZLOVSKII, E. N.**  
Optical alignment of lasers with electrooptical Q-modulation.  
12 p2107 A69-26589  
Single-block shutter-reflector for operation with unpolarized radiation /Monoblochnyi zatvor-otrazhatel' dlia raboty s nepolarizovannym izlucheniem/.  
20 p3554 A69-37611  
Shadow images of bodies obtained at hypersonic speeds by means of a single-pulse laser /Poluchenie tenevykh izobrazhenii tel pri giperzvukovykh skorostiakh s pomoshch'iu monoimpul'snogo opticheskogo kvantovogo generatora/.  
22 p3963 A69-40601
- KOZLOVSKY, B.-Z.**  
The stages of ionization of oxygen and helium in the solar wind.  
03 p0503 A69-14047  
Some models of the emission-line region of 3C 273.  
10 p1790 A69-24137
- KOZMA, A.**  
Analysis of the film non-linearities in hologram recording.  
03 p0431 A69-13958  
Bias level reduction of incoherent holograms.  
11 p1885 A69-24846
- KOZMA, A. A.**  
Internal macrostresses in metallic vacuum condensates /Vnutrennie makronapriazheniia v metallicheskhikh vakuumnykh kondensatakh/.  
12 p2143 A69-26457
- KOZMANOV, IU. D.**  
Study of the high-temperature oxidation of the Sikhote-Alin iron meteorite /Issledovanie vysokotemperaturnogo oksileniia sikhote-alinskogo zhelezno-g meteorita/.  
01 p0025 A69-11373
- KOZMENKO, V. K.**  
Concerning Kowalewski's solution to the equations of motion of a body having a fixed point /O reshenii N. Kovalevskogo uravnenii dvizheniia tela, imeiushchego nepodvizhnnuiu tochku/.  
11 p1917 A69-24776
- KOZOROVITSKII, L. L.**  
Propagation of heat in a plasma along a magnetic field /a substitution wave/ /Rasprostranenie tepla v plazme vdol' magnitnogo polia /volna zameshcheniia//.  
10 p1741 A69-23896  
Allowance for the effects of multiple reflection from dielectric walls in the microwave probing of plasmas /Uchet effektiv mnogokratnogo otrazheniia ot dielektricheskikh stenok pri SVCh-zondirovaniu plazmy/.  
14 p2498 A69-29806
- KOZUB, IU. I.**  
Methods of high-temperature mechanical tests of inorganic heat-resistant coatings /Metody vysokotemperaturnykh mekhanicheskikh ispytaniy neorganicheskikh zharoostoiichykh pokrytii/.  
20 p3538 A69-37360
- KOZUBOVSKAIA, I. G.**  
Sufficient conditions of stability in the finite for time-lag systems /O dostatochnykh usloviiax ustoi-chivosti v konechnom sistem s zapazdyvaniia/.  
17 p2995 A69-33616
- KOZUBOVSKII, S. F.**  
Correlation analysis of current fluctuations in plasma.  
11 p1934 A69-25715
- KOZYRENKO, V. E.**  
Investigation of steady-state three-dimensional MHD flows in channels with a symmetry plane and a variable profile /K issledovaniu stationarnykh tekhnemykh MGD-potokov v kanalakh simmetrnogo profil'a, obladaiushchikh ploskost'iu simmetrii/.  
01 p0131 A69-10776  
Some new regularities in the theory of longitudinal terminal effects in MHD channels at arbitrary magnetic Reynolds numbers /Nekotorye novye zakonomenosti v teorii prodol'nykh kontsevykh effektivov v MGD-kanalakh pri proizvol'nykh magnitnykh chislakh Reinal'dsa/.  
14 p2500 A69-29906
- KOZYREV, B. P.**  
Method and certain results of measurements of the earth's short- and long-wave emission fluxes on the Cosmos 149 satellite /Metod i nekotorye rezul'taty izmerenii potokov korotkovolnovogo i dlinnovolnovogo izlucheniia zemli na ISZ "Kosmos-149"/.  
15 p2597 A69-30652
- KOZYREV, IU. P.**  
Angular distribution of a material vaporized by a laser beam /Uglovoe raspredelenie neshchestva, isparennoho luchom OKG/.  
21 p3737 A69-38992
- KOZYREV, N. A.**  
Water vapor in the Saturn ring and its greenhouse effect on the planet's surface /Vodianoi par v kol'tse Saturna i ego teplichnyi effekt na poverkhnosti planety/.  
20 p3616 A69-38305
- KOZYREVA, M. S.**  
Faraday effect of free carriers in InSb and GaAs.  
06 p0979 A69-16996
- KOZYRSKII, G. IA.**  
Influence of annealing time after work hardening on the creep characteristics of nickel /Vliianie vremeni otzhiga posle kholodnoi deformatsii na kharakteristiki polzuchesti nikelia/.  
18 p3159 A69-35445  
Influence of preliminary deformation on the creep characteristics of a nimonik type alloy /Vlianie predvaritel'noi deformatsii na kharakteristiki polzuchesti splava tipa nimonik/.  
18 p3159 A69-35446  
Structural changes in chromium during creep /Strukturnye izmeneniia v khrome pri polzuchesti/.  
18 p3160 A69-35453



# KRABBE, H.

## KRABBE, H.

High-frequency characteristics of wideband inverter op-amps.

11 p1857 A69-25666

## KRADINOVA, L. V.

On electro-physical properties of ZnSnSb sub 2.

15 p2667 A69-30197

## KRAEMER, S. A.

Amino acid components of some Paleozoic plant fossils and rock samples.

21 p3662 A69-39535

## KRAEMER, W. E.

The high technology trap - Too much, too soon.

18 p3232 A69-34542

## KRAEUTLE, K. J.

The thermal decomposition of ammonium perchlorate. [WSCI PAPER 69-20]

16 p2832 A69-32358

## KRAFFT, J. M.

Dynamic mechanical behavior of metal at the tip of a plane strain crack.

02 p0343 A69-12284

Tensile-ligament instability and the growth of stress-corrosion cracks in high-strength alloys.

13 p2277 A69-27404

## KRAFFT, M.

Spectroscopic investigation of a birefringent Lyot-filter for H alpha.

04 p0664 A69-15524

## KRAFFT, W. R.

Coping with the lunar environment.

11 p1958 A69-24633

## KRAFT, G.

High temperature lithium heat pipes.

14 p2462 A69-29203

## KRAFT, J.

Energy transport between vortices in turbulent flow /Ueber den Energietransport zwischen Wirbeln in turbulenter Stromung/.

14 p2430 A69-29508

## KRAFT, R.

An unusual mixed initial boundary problem in two independent variables.

08 p1342 A69-20347

## KRAFT, R. P.

Further spectroscopic observations of the optical object identified with X-ray source Cygnus X-2.

10 p1785 A69-24097

The peculiar A-type stars.

23 p4218 A69-42322

Stellar populations and the evolution of the Galaxy.

23 p4218 A69-42323

## KRAFT, R. W.

Microstructure and crystallography of the Ni-Ni sub 3 Ti eutectic alloy.

10 p1707 A69-22986

Structure and elevated-temperature mechanical behavior of unidirectionally solidified Ni-Ni sub 3 Nb eutectic alloy.

13 p2276 A69-27402

Elevated-temperature mechanical properties and fracture behavior of a Ni-Ni sub 3 Ti eutectic alloy.

13 p2277 A69-27406

## KRAGELSKII, I. V.

Correlation between calculated and experimental estimates of friction surface wear /Korrelatsiia raschetnykh otsenok iznosa poverkhnosti treniia s eksperimentom/.

15 p2618 A69-30106

## KRAHN, D.

Astronomical Annual Report. Volume 67 - Literature for the Year 1967 /Astronomischer Jahresbericht. Volume 67 - Die Literatur des Jahres 1967/.

09 p1602 A69-22223

## KRAIKO, A. N.

Development of a linear theory of equilibrium and nonequilibrium flows /K postroeniiu lineinoi teorii neravnovesnykh i ravnovesnykh treniia/.

06 p0909 A69-17327

Variational problems of magnetohydrodynamics /K variatsionnym zadacham magnitnoi gidrodinamiki/.

06 p0969 A69-17917

A variational problem of one-dimensional nonequilibrium gasdynamics.

07 p1119 A69-18737

On the solution of variational problems of supersonic flows of gas with foreign particles.

14 p2389 A69-28801

A quasi-one-dimensional two-layer model for calculating nozzle flows of gas mixtures containing foreign particles /Dvustoinaia kvaziodnomenaia model' dlia rascheta techeniia smesi gaza s inordnymi chastitsami v soplakh/.

19 p3298 A69-36389

## KRAIROJANANAN, T.

Piezoelectric generation and detection of ultrasonic surface waves by interdigital electrodes - An electrical equivalent circuit.

12 p2039 A69-26376

## KRAIUKHIN, V. I.

Peculiarities in the flow mechanism of a magnesium alloy with hydro-explosive loading.

04 p0615 A69-14639

## KRAJCINOVIC, D.

Shallow shells with large deflections - Integral equations technique.

12 p2185 A69-26820

A consistent discrete elements technique for thin-walled assemblages.

19 p3445 A69-36831

## KRAJENBRINK, F. G.

Standing waves on the moon.

20 p3604 A69-37965

## KRAJEWSKI, B.

Application of variational methods to problems of unsteady heat flow.

05 p0845 A69-15794

## KRAKHMALOV, V. A.

Multiplication of dislocations and rearrangement of the dislocation structure of molybdenum single crystals in the process of thermal fatigue.

21 p3746 A69-39162

## KRAKOW, J. S.

Azotobacter vinelandii ribonucleic acid polymerase. V - Unprimed synthesis of poly A - poly U.

10 p1647 A69-24185

Azotobacter vinelandii RNA polymerase. VII - Enzyme transitions during unprimed r/l-C/ synthesis.

22 p3895 A69-40050

## KRAKOWSKI, R. A.

Dissociation of hydrogen on tantalum using a modulated molecular beam technique.

06 p0960 A69-17107

## KRAL, W. A.

Lunar module - The moon landing vehicle - The key to a manned moon landing /"Lunar Module" - Das Mondlandegeraet - Schlusel zur bemannten Mondlandung/.

18 p3207 A69-34629

## KRALINA, A. A.

Influence of the conditions of growth in the method of zone melting without a crucible on the orientation, purity and perfection of tantalum single crystals.

16 p2803 A69-32490

## KRALL, N. A.

Ion sound instability in a collisionless shock wave.

11 p1930 A69-25273

Ballistic wake of turbulence in a plasma shock wave.

15 p2660 A69-30914

## KRAMAR, E.

Hyperbolic navigation - History and outlook.

13 p2296 A69-27334

## KRAMAR, J.

The use of ion sputtering in making electrodes for thermionic energy converters.

23 p4170 A69-42259

## KRAMARENKO, N. L.

Stability of lead oxide and cryolite dielectric coatings to laser radiation /Ustoichivost' dielektricheskikh pokrytii iz oksii svintsa i kriolita k izlucheniui OKG/.

19 p3334 A69-35886

## KRAMER, A. J.

Improving communication reliability by use of an intermittent feedback channel.

09 p1452 A69-21315

## KRAMER, B. E.

Brazed titanium honeycomb sandwich.

24 p4324 A69-43435

## KRAMER, D. A.

Evidence of laser-induced stimulated Brillouin scattering in Cds.

02 p0257 A69-12614

## KRAMER, E. N.

Certain results of photographic observations of meteors. /Nekotorye rezul'taty fotograficheskikh nabludenii meteorov/.

01 p0159 A69-11372

Investigation of the atmospheric density according to meteor data obtained from 1957 to 1965 /Issledovanie plotnosti atmosfery po meteornym dannym, poluchennym v Odesse v 1957- 1965 gg./.

10 p1688 A69-23936

Statistics and nature of meteor flares /Statistika i priroda meteornykh vspyshek/.

18 p3203 A69-35333

## KRAMER, H. W.

Band-gap effects in the stopping of Ge super 72 atoms in germanium.

01 p0140 A69-11245

## KRAMER, N. B.

Characterization and modeling of IMPATT oscillators.

07 p1101 A69-18650

## KRAMER, N. I.

Emission of energy-deficient photons from germanium subjected to uniaxial compression.

04 p0643 A69-15255

## KRAMPITZ, G.

The condensation of the adenylates of the amino acids common to protein.

22 p3895 A69-40048

## KRANC, G. M.

Conditional optimization of nonlinear adaptive control systems.

06 p0900 A69-17351

## KRANING, K. K., II

Human metabolic responses to hyperthermia during mild to maximal exercise.

22 p3891 A69-40215

Human cardiovascular adjustments to rapid changes in skin temperature during exercise.

24 p4258 A69-42633

## KRANJC, A.

Positions of Ceres, Pallas, Juno, and Vesta from 1941 to 1995 /Posizioni de Cerere, Pallade, Giunone e Vesta dal 1941 al 1995/.

16 p2859 A69-32224

## KRANKOWSKY, D.

A study of day-night variations in the neutral composition of the lower thermosphere.

01 p0076 A69-11231

Mass spectrometric studies of the composition of the lower thermosphere during summer 1967.

03 p0425 A69-14009

## KRANTZ, D. E.

Explosive forming on a production basis. [ASM PAPER C7-2.4]

04 p0604 A69-14524

## KRAPE, R.

Laboratory life test and inpile irradiation studies of cylindrical thermionic converters.

14 p2399 A69-29199

## KRAPIVIN, L. L.

Kinetics of epoxy resin breakdown under the action of laser light pulses of 10 super-3 sec duration /Kinetika razrusheniia epoksidnoi smoly svetovymi impul'sami lazera dlitel'nost'iu 10 super-3 sek/.

22 p3973 A69-40743

## KRASHENINNIKOV, S. IU

An investigation of the turbulent jets of different gases in a general stream.

13 p2200 A69-28501

## KRASIKOV, K. I.

Structure and mechanical properties of materials after hydroexplosive forming.

09 p1503 A69-21851

## KRASILNIKOV, A. I.

About the threshold phenomena in the injection lasers.

19 p3337 A69-36527

## KRASILNIKOV, A. V.

Delta wing with blunt edges at small angles of attack in hypersonic flow /Treugol'noe krylo s prituplennymi kromkami pod malymi ugami ataki v giperzvukovom potoke/.

02 p0191 A69-12584

## KRASILNIKOV, D. D.

Concerning the relation between primary particle energy and number of electrons in extensive air showers.

13 p2331 A69-28396

## KRASILNIKOV, O. M.

Temperature dependence of the elastic constants of highly doped GaAs /Temperaturnaia zavisimost' uprugikh postoiannykh sil no legirovannogo GaAs/.

03 p0484 A69-13282

Temperature dependence of the elastic constants of heavily-doped gallium arsenide.

14 p2508 A69-29655

**KRASILNIKOV, S. S.**

Increase of CO sub 2 laser power under the influence of a beam of fast protons.

08 p1323 A69-19802

**KRASILNIKOV, V. N.**

Electromagnetic oscillations in a spherical cavity with a time-variable radius /Elektromagnitnye kolebaniia v sfericheskoi polosti s meniaiushchimsia vo vremeni radiusom/.

16 p2751 A69-32029

Electromagnetic fields in resonators with an oscillating boundary /one-dimensional case/ /Elektromagnitnye polia v rezonatorakh s kolebliushchiesia granitse /odnomernyi sluchai/.

16 p2751 A69-32030

Unsteady oscillations of a plate occurring after rupture /O nestatsionarnykh kolebaniakh plastiny, vznikaiushchikh v rezul'tate ee razloma/.

16 p2873 A69-32033

**KRASILNIKOVA, T. K.**

Motion of a jet along a cylinder with suction and blowing through its surface /Dvizhenie strui vvol' tsilindra s otosom i vduvom cherez vego poverkhnost'/.  
21 p3698 A69-39845

**KRASILSHCHIKOV, A. P.**

Systematic experimental data concerning the drag of sharp- and blunt-nosed cones at hypersonic velocities /Sistematicheskie eksperimentalnye dannye po soprotivleniiu ostrykh i zatuplennykh konusov pri giperzvukovykh skorostiakh/.

19 p3239 A69-36401

**KRASILSHCHIKOV, L. B.**

Light and heat of a planet - Satellite actinometry. [UN PAPER 68-95763]

06 p0916 A69-17038

Actinometric instruments on board Soviet meteorological satellites /Aktinometricheskaia apparatura sovetskikh meteorologicheskikh sputnikov zemli/.

06 p0929 A69-17977

Principles of calibrating long-wave actinometric instruments on board meteorological satellites /Printsipy graduirovki dlinnovolnovykh aktinometricheskikh priborov meteorologicheskikh sputnikov zemli/.

06 p0929 A69-17978

**KRASILSHCHIKOV, M. N.**

Synthesis of an optimal orbit control system for a stable artificial earth satellite /Sintez optimal'noi sistemy upravleniia orbitoi statsionarnogo iskusstvennogo sputnika zemli/.

21 p3767 A69-39652

**KRASILSHCHIKOVA, E. A.**

The velocity field excited by wing vibrations propagating over the surface at supersonic velocity /Pole skorosti, vzbuzhdennoe vibratsiiami kryla, rasprostraniashchimsia po poverkhnosti so sverkhzvukovoi skorost'iu/.

02 p0188 A69-11976

Velocity field generated by wing vibrations propagating over the surface /Pole skorosti, vzbuzhdennoe vibratsiiami kryla, rasprostraniashchimsia po poverkhnosti/.

02 p0190 A69-12571

The velocity field due to a shock wave incident on a stationary thin symmetric body.

03 p0362 A69-13418

An airfoil vibration excited velocity field propagating along the surface with supersonic speed.

15 p2547 A69-30259

Flow past slender bodies in a gas stream in the presence of a moving shock wave.

19 p3242 A69-36797

**KRASINSKII, G. A.**

Quasi-periodic solutions of the first type in the plane n-body problem /Kvaziperiodicheskie resheniia pervogo sorta v ploskoi zadache n tel/.

17 p3035 A69-33620

**KRASIUK, I. K.**

Characteristics of a mode-locked laser.

06 p0934 A69-17549

Investigation of breakdown in N sub 2 under the influence of a picosecond ruby-laser pulse.

20 p3555 A69-38067

**KRASIUK, N. P.**

Effect of different distributions of raindrop sizes on radar performance.

02 p0208 A69-12259

Attenuation and scattering of electromagnetic waves by rainfalls of various natures /Oslablenie i rasscianiye elektromagnitnykh voln dozhdiami razlichnoi prirody/.

08 p1275 A69-20430

**KRASKA, I. R.**

FM Lamb wave inspection system for thin sheet metals.

10 p1699 A69-23048

**KRASNA, A. I.**

Denaturation of DNA at pH 7.0 by acid and alkali.

24 p4263 A69-43225

**KRASNIU, I. P.**

Thermodynamic theory of the gravitational effect in binary mixtures /Termodinamichna teoriia gravitatsiinogo efektu v binarnykh sumishakh/.

11 p1999 A69-24914

**KRASNOPIR, I. S.**

Experimental investigation of a thin-walled welded girder system in the case of partial stability loss /Eksperimental'noe issledovanie tonkostennoi svarnoi balochnoi sistemy, chastichno poterivshei ustoiichivost'/.  
23 p4169 A69-42007

**KRASNOPOLSKII, V. A.**

Analysis of the emissions of the night sky according to Cosmos 92 satellite observations /Analiz emissii nochnogo neba po nabliudeniiam na sputnike "Kosmos-92"/.

09 p1485 A69-21533

Spectral inhomogeneities of the lunar surface in the mid-ultraviolet according to data of the Zond-3 automatic interplanetary station /Spektral'nye neodnorodnosti lunnoi poverkhnosti v srednei ul'trafioletovoi oblasti po dannym AMS "Zond-3"/.

12 p2154 A69-25817

Investigation of the earth's ozonosphere from satellites /Issledovaniia ozonofery zemli so sputnikov/.

12 p2064 A69-25952

Night airglow variations in the range from 2500 to 3150 angstrom units according to the Cosmos 92 satellite observations /Variatsii svecheniia nochnogo neba v oblasti 2500-3150 angstrom units po nabliudeniiam na sputnike "Kosmos-92"/.

14 p2435 A69-29042

Investigation of the planetary distribution of ozone on the basis of ultraviolet spectra measured by satellites /Issledovanie planetarnogo raspredeleniia ozona po ul'trafioletovym spektram, izmerennym na sputnikakh/.

15 p2597 A69-30654

Analysis of Cosmos-92 airglow observations.

16 p2783 A69-32528

**KRASNOSHCHEKOV, M. M.**

Effect of Nuclear Radiations on the Structure and Properties of Metals and Alloys /Vozdeistvie iadernykh izlucheniia na strukturu i svostva metallov i spavov/.

12 p2114 A69-26469

**KRASNOSHCHEKOV, V. V.**

Possibility of Chlorella cultivation of solutions with mineralized human wastes.

02 p0200 A69-11511

Isolation of metabolic products from culture broths of Chlorella.

08 p1262 A69-19833

Investigation of the decomposition of urea by urease in relation to space cabin life support systems.

08 p1265 A69-19834

Investigation of the oxidative-catalytic method of mineralization of wastes in a closed ecological system.

10 p1649 A69-23579

Bactericidal effect of silver-coated activated carbons and ion-exchange resins /O bakteritsidnom deistvii poserebrennykh aktivirovannykh uglei i ionobmennykh smol/.

13 p2216 A69-28621

**KRASNOV, A. N.**

Carbide formation from spherical powders of niobium, molybdenum, and tungsten /Karbidezatsiia sfericheskikh poroshkov niobia, molibdena, vol'frama/.

19 p3345 A69-36162

**KRASNOV, N. F.**

Rocket Aerodynamics /Aerodinamika Raket/.

17 p2889 A69-32829

**KRASNOVA, V. A.**

Influence of bismuth oxide on the formation and properties of garnet ferrites /Vliianie oksii vismuta na obrazovanie i svostva ferritov-granatov/.

13 p2320 A69-27998

**KRASNOVSKII, S. S.**

Approximate calculation of the axisymmetric motions of the wall of a tube during deformation by an explosion /Priblizhennyi raschet osesimmetrichnykh dvizhenii stenki trub pri deformatsii vzryvom/.

02 p0254 A69-12675

**KRASNUSHKIN, P. E.**

Dependence of the shape of a nighttime atmospheric on its direction of arrival /Zavisimost' formy nochnogo atmosferika ot napravleniia ego prikhoda/.

22 p3941 A69-40961

**KRASNYI, L. G.**

Calculation of the signal-to-noise ratio at the output of a typical radio section /O vychislenii otноsheniia signal/pomekha na vykhode tipovogo radiotekhnicheskogo zvena/.

13 p2222 A69-28506

Noise stability of a "preselector-detector- noncommutated low-pass filter-threshold device" network during the detection of a finite-duration noise signal /Pomekhoustoiichivost' trakta "preselektor- detektor-nekommutiruemyi fil'tr nizhnikh chastot-porogovoe ustroistvo" pri obnaruzhenii shumovogo signala konechnoi dlitel'nosti/.

15 p2563 A69-30142

**KRASNYKH, I. G.**

Effect of hyperoxia on the thoracic organs of albino rats.

10 p1646 A69-23577

Possibility of using an artificial atmosphere with a variable gas composition in air-tight cabins /O vozmozhnosti ispol'zovaniia v germeticheskikh kabinakh iskusstvennoi atmosfery s nestatsionarnym gazovym sostavom/.

22 p3892 A69-40284

Effect of cystamin and of the shielding of certain parts of the body on the functional state of the gastrointestinal tract of irradiated rats /Vliianie tsistamina i ekranirovaniia nekotorykh oblastei tela na funktsional'noe sostoiianie zheludochno- kishechnogo trakta u obлучennykh krysa/.

22 p3877 A69-40285

**KRASOVEC, J.**

A custom tailored airborne digital guidance and control system for a large booster. [AIAA PAPER 69-988]

22 p3978 A69-40368

**KRASOVITSKII, V. B.**

Radial self-focusing of an electron beam in a plasma under beam plasma instability conditions /Radial'naia samofokussirovka elektronnoho puchka v plazme v usloviakh puchkovkoi neustoiichivosti/.

15 p2662 A69-30964

**KRASOVSKII, A. A.**

Analytic design of control systems for nonlinear passive plants.

14 p2424 A69-28819

Geometrical solution of the problem of pulsed transfer between close, nearly circular orbits /O geometricheskom reshenii zadachi impul'snogo perekhoda mezhdu blizkimi pochtii krugovymi orbitami/.

22 p4033 A69-41085

Methodical errors of a simplified prediction of the rotation period of a correctable artificial earth satellite /Metodicheskie oshibki uproshchennogo prognoza perioda obrashcheniia korrekiruemoi ISZ/.

22 p4033 A69-41086

Generalization of the problem of analytical design of controllers for given control and control signal performances /Obobshchenie zadachi analiticheskogo konstruirovaniia regulatorov pri zadannoi rabote upravlenii i upravliaiushchikh signalov/.

24 p4289 A69-42949

**KRASOVSKII, I. A.**

Dynamic dislocation theory of plasticity /Do dislokatsiinnoi dinamichnoi teorii plastichnosti/.

21 p3833 A69-38569

**KRASOVSKII, A. M.**

Device for investigation of wear resistance and anti-tirification properties of thin polymer coatings in vacuum.

23 p4169 A69-41599

**KRASOVSKII, A. S.**

Certain physiological reactions in humans under conditions of brief weightlessness /Nekotorye fiziologicheskie reaktsii cheloveka v usloviakh kratkovremennoi nevesomosti/.

07 p1061 A69-18581

**KRASOVSKII, I. P.**

Properties of Green's function and generalized solutions to elliptic boundary value problems /Svostva funktsii Grina i obobshchennye resheniia ellipticheskikh granichnykh zadach/.

10 p1718 A69-23207

Properties of Green's functions and generalized solutions of elliptic boundary value problems.

21 p3756 A69-39148



## KRASOVSKII, N. N.

A contribution to the observability of time-lag systems. 04 p0583 A69-15094

The problem of game interception of motions /K zadache ob igrovoi vstreche dvizhenii/. 05 p0793 A69-15777

Differential approach game /Differentsial'naia igra sbzheniia/. 13 p2288 A69-27525

The problem of convergence of controlled objects. 14 p2482 A69-28800

On the problem of games encounter of motions. 18 p3173 A69-35030

Game problem of correction of motion /Igrovaia zadacha o korrektsii dvizheniia/. 22 p3980 A69-40105

## KRASOVSKII, V. I.

Infrared radiation in the upper atmosphere /Ob infrakrasnom izluchanii verkhnei atmosfery/. 05 p0753 A69-16058

The upper atmosphere as a regulator of geomagnetic storms, substorms, and polar aurorae /Verkhniaia atmosfera kak reguliator geomagnitnykh bur', subbur' i poliarnykh siiani/. 10 p1686 A69-23903

Infrared emission of the upper atmosphere. 20 p3533 A69-37968

Intraatmospheric migration and dissipation of H and He under the action of magnetohydrodynamic waves /Vnutriatmosfernaia migratsiia i dissipatsiia H i He pod vozdeistviem magnitogidrodinamicheskikh voln/. 23 p4156 A69-41847

## KRASOWSKI, H.

Clear air turbulence /CAT/ /Turbulencja pozachmurowa/CAT/. 22 p3977 A69-40007

## KRASSOV, I. M.

Dynamic properties of electrohydraulic servomechanisms having a variable structure. 03 p0368 A69-13686

The Hydraulic Servo Drive /Gidravlicheski Slediaschii Privod/. 18 p3093 A69-34356

## KRASSOVSKII, V. I.

The upper atmosphere as a regulator of geomagnetic storms, substorms and auroras. 08 p1307 A69-20188

## KRAT, V. A.

Small flare-like phenomena in the chromosphere. 06 p0994 A69-17433

Soviet stratospheric solar observatory /Sovetskaiia stratosfernaia solnechnaia observatoriia/. 13 p2355 A69-27640

The Fraunhofer spectrum of the sun. I /Fraunhoferov spektr solntsa. I/. 20 p3615 A69-38297

## KRATOCHVIL, J.

Thermodynamics of elastic-plastic materials as a theory with internal state variables. 23 p4226 A69-41537

## KRATSCH, K. M.

Graphite ablation in high-pressure environments. [AIAA PAPER 68-1153] 04 p0686 A69-14873

## KRATZKE, A. W.

Algorithm in fault detection and isolation. 10 p1698 A69-22978

## KRAUS, G.

Thermal noise from series-connected, mismatched, passive two-ports in the microwave range /Das thermische Rauschen von seriengeschalteten, fehlangepassten passiven Vierpolen im Mikrowellenbereich/. 07 p1108 A69-19486

## KRAUS, H.

Buckling of an ellipsoid due to internal pressure. [ASME PAPER 68-WA/PVP-12] 05 p0840 A69-16190

The effect of training in swimming and running on the cellular function and structure of muscle /Die Wirkung von Schwimm- und Lauftraining auf die zelluläre Funktion und Struktur des Muskels/. 23 p4095 A69-42084

## KRAUS, J. D.

Optical identifications of Ohio radio sources with peculiar spectra. 01 p0153 A69-10854

A high-sensitivity 1415-MHz survey between declinations of 0 deg and 20 deg north. 18 p3195 A69-34428

## KRAUS, K.

Remarks on a class of almost trivial solutions of the gravitational field equation. 03 p0466 A69-13389

Thermistor for measuring of low frequencies /Thermistor zur Messung niedriger Frequenzen/. 11 p1845 A69-24522

## KRAUS, T.

The Wroclaw Observatory coronagraph. 22 p3943 A69-39999

## KRAUSE, A. R.

A theory of crack nucleation in high strain fatigue. 05 p0780 A69-16430

## KRAUSE, E.

Normal injection in a three-dimensional laminar boundary layer. [DVL-902] 09 p1482 A69-21971

Numerical stability of three-dimensional boundary layer solutions /Numerische Stabilität dreidimensionaler Grenzschichtlösungen/. 10 p1631 A69-22902

## KRAUSE, F.

Experimental discovery of the electromotive force along the external magnetic field induced by a flow of liquid metal /alpha-effect/. 04 p0635 A69-14547

Dynamo theory of stellar and planetary magnetic fields. I - Calculation of sun-like alternating field generators /Zur Dynamotheorie stellarer und planetarer Magnetfelder. I - Berechnung sonnenähnlicher Wechselfeldgeneratoren/. 10 p1782 A69-23703

Explanation of stellar and planetary magnetic fields by dynamo action of turbulent motion. 22 p4011 A69-39998

## KRAUSE, F. R.

Determination of thermodynamic properties with optical cross-correlation methods. [AIAA PAPER 67-149] 16 p2789 A69-31868

## KRAUSE, L. N.

Venturi meter with separable diffuser. [ASME PAPER 68-WA/FM-2] 05 p0763 A69-16135

Venturi meter with separable diffuser. [ASME PAPER 68-WA/FM-2] 14 p2447 A69-29447

Multiple-function probe for airflow research. 16 p2766 A69-31917

Flow-direction measurement with fixed-position probes in subsonic flow over a range of Reynolds numbers. 17 p2973 A69-33107

## KRAUSE, S.

Investigation of an MPD plasma jet by gasdynamic experimental methods. 13 p2313 A69-28242

Effect of mass entrainment on the pressure distribution in a plasma jet of the MPD thruster X9 /Einfluss der Masseneinstromung auf die Druckverteilung im Plasmastrahl des MPD-Triebwerks X9/. [DGLR-69-024A] 23 p4202 A69-41924

## KRAUSE, W. H. U.

Theory of a proton spin maser with two emission coils. 08 p1324 A69-20231

## KRAUSHAAR, W. L.

Instrumental aspects of gamma-ray astronomy - Serious need for new ideas and developments. 18 p3138 A69-35135

Soft X-ray background flux. 24 p4368 A69-43220

## KRAUSS, E. S.

Effects of shapes of conventional fuselages and of streamline bodies on drag at subsonic speeds. 05 p0697 A69-15827

## KRAUSS, L.

Approximate solution for determining the half-maximum temperature of diatomic gases /Naeherungslösung zur Ermittlung der Halbwertstemperatur zweiatomiger Gase/. [DVL-899] 15 p2656 A69-31102

## KRAUT, E. A.

Diffraction of electromagnetic waves by a right-angle dielectric wedge. 22 p3903 A69-41258

## KRAUTH, A.

Measurement of stresses in vanadium carbide and its significance /Messung von Spannungen in Vanadium-Karbid und ihre Bedeutung/. 02 p0265 A69-12001

## KRAUTKRAEMER, H.

Ultrasonic Testing of Materials. 16 p2790 A69-32125

## KRAUTKRAEMER, J.

Ultrasonic Testing of Materials. 16 p2790 A69-32125

## KRAVCHENKO, A. M.

Method of invariants in classical and relativistic physics /O metode invariantov v klassicheskoi i relativistskoi fizike/. 14 p2484 A69-28860

## KRAVCHENKO, G. I.

Excitation of a single-circuit parametric oscillator in the presence of a small external signal /Vozbuzhdenie odnokonturnogo parametricheskogo generatora v prisutstvii malogo vneshnego signala/. 11 p1845 A69-24453

## KRAVCHENKO, S. K.

Heat transfer between an arc column and a wall of the discharge chamber of a vortex linear plasmatron /Teploobmen mezhdu dugovym stolbom i stenкой razriadnoi kamery vikhrevoego lineinogo plazmatrona/. 01 p0125 A69-10091

Plasmatron with a bilateral outflow and a variable electrode diameter /Plasmatron dvustoronnego istecheniia s peremennym diametrom elektrodov/. 01 p0125 A69-10102

## KRAVCHENKO, V. A.

Composition and certain properties of the lower oxides of silicon. 15 p2643 A69-31245

## KRAVCHENKO, V. I.

Nonlinear influence of losses on stimulated emission processes /O nelineinom vliianii poteri' na protsessy vyzhdennoego izlucheniia/. 03 p0439 A69-13058

Dispersive resonators for laser frequency tuning. 05 p0777 A69-16371

Field genesis and structure in ruby and neodymium lasers with inclined external mirrors. 09 p1520 A69-22663

The problem of the frequency modulation of the emission of solid-state lasers and the experimental realization of the frequency scanning of ruby and neodymium-glass lasers during the lasing process /Problema chastotnoi modulatsii izlucheniia tverdotel'nykh lazerov i eksperimental'noe osushchestvlenie skanirovaniia chastoty rubinovogo i neodimovogo OKG v protsesse generatsii/. 19 p3331 A69-35864

Smooth retuning and control of the lasing frequency of solid-state lasers /Plavnaia perestroika i kontrol' chastot generatsii tverdotel'nykh lazerov/. 19 p3331 A69-35865

## KRAVCHENKO, V. S.

Application of X-ray diffraction topography to a study of deformed single-crystal structures /Zastosovniat' rentgeniv'skoi difraktsionnoi topografi pri vivchenii deformovaniikh struktur u monokristalakh/. 21 p3742 A69-38583

## KRAVCHUK, A. S.

Accuracy of deformation theory in the case of simple loading /O tochnosti deformatsionnoi teorii pri prostom nagruzhenii/. 07 p1237 A69-19684

## KRAVCHUK, L. A.

The effect of sodium amylal and somatotropic hormone on mice subjected to prolonged hypokinesia. 10 p1646 A69-23576

## KRAVCHUK, L. V.

Investigations of the thermal stability of heat-resistant materials in a gas flow /Issledovaniia termostoikosti ognepurnykh materialov v gazovom poteke/. 20 p3565 A69-36979

Device for testing materials under thermal and mechanical cyclic loads. 20 p3544 A69-37816

## KRAVETS T. D.

A contactless electric motor and some commutation circuits for it. 09 p1442 A69-21860

## KRAVTSEV, N. F.

Scientific results of a flight of the Lantar 1 automatic ionospheric laboratory /Nauchnye rezul'taty poleta avtomaticheskoi ionosfernoi laboratorii "Lantar-1"/. 05 p0830 A69-16056

Scientific results of the flight of the automatic ionospheric laboratory "Yantar-1". 20 p3618 A69-37966

**KRAVTSOV, I. A.**

Geometric optics of media with spatial dispersion - A scalar problem /Geometricheskaya optika sred s prostranstvennoy dispersiei - Skaliarnaia zadacha/.  
03 p0467 A69-13718

The question of resorting to a geometrical-optics approximation in the electrodynamics of inhomogeneous anisotropic media /K voprosu o perekhode k priblizheniiu geometricheskoi optiki v elektrodinamike neodnorodnykh anizotropnykh sred/.  
07 p1076 A69-18519

Limits of applicability of asymptotic expressions in the method of standard functions /O granitsakh primenimosti asimptoticheskikh vyrazhenii v metode etalonnykh funktsii/.  
07 p1076 A69-18520

Correlation theory of radio-wave scattering in the polar ionosphere /Korrelatsionnaya teoriya rasseianiia radiovoln v poliarnoi ionosfere/.  
14 p2436 A69-29055

**KRAVTSOV, N. V.**

Position-Sensitive Sensors of Optical Tracking Systems /Pozitsionno- chuvstvitel'nye datchiki opticheskikh slediaschikh sistem/.  
16 p2790 A69-32111

**KRAVTSOVA, G. V.**

Diffraction of a plane electromagnetic wave at an ideally conducting spherical segment /Difraktsiia ploskoi elektromagnitnoi volny na ideal'no provodiashchem sfericheskom segmente/.  
11 p1846 A69-24613

**KRAVTSOVA, L. P.**

Possibility of determining a dispersed phase in pipelines by ultrasonic techniques /O vozmozhnosti opredeleniia dispersnoi fazy v truboprovodakh ul'trazvukovym sposobom/.  
04 p0596 A69-14489

**KRAWCZYK, R.**

Iterative methods for systems of nonlinear equations /Ueber Iterationsverfahren bei nichtlinearen Gleichungssystemen/.  
21 p3755 A69-39002

**KRAWEC, R.**

Further experiments on ion-cyclotron-wave generation in the RF self-sustained mode.  
03 p0474 A69-13113

Improved method of injecting the audio signal in automatic Langmuir probe second derivative plotters.  
17 p2970 A69-32855

**KRAYNAK, P.**

Wafer-chip assembly for large-scale integration.  
02 p0222 A69-12472

**KREBS, H.**

High-energy rocket engines with fluorine propellants, state of the art, possible applications.  
03 p0494 A69-12889

**KRECHETNIKOV, I. U. D.**

Turbulent boundary layer at the inlet section of a tube in the case of blowing with various gases /Turbulentnyi pogranichnyi sloi v nachal'nom uchastke truby pri dvude razlichnykh gazov/.  
24 p4300 A69-43079

**KRECHETOV, G. S.**

Relation between solutions to two systems of differential equations /O svyazi mezhdru resheniiami dvukh sistem differentsial'nykh uravnenii/.  
23 p4182 A69-41959

**KRECISZ, J.**

Some problems associated with the internal dynamics of a stabilized gyroscope platform /Pewne zagadnienia zwiazane z wewnetrzna dynamika stabilizowanej platformy giroskopowej/.  
09 p1499 A69-22240

**KREGEL, M. D.**

Measurements of the time-averaged potentials in low-pressure, RF discharges using an ion-beam probe.  
02 p0287 A69-11838

**KREGERS, A. F.**

Physical relations of an orthotropic material in the localized strain theory /Fizicheskie sootnosheniia ortotropnogo materiala v teorii lokal'nosti deformatsii/.  
08 p1412 A69-20328

**KREGLOW, E. S.**

Three-week exposure of rodents to a neon enriched atmosphere.  
01 p0019 A69-11342

**KREIDER, K.**

Mechanical properties of borsic aluminum composites.  
19 p3344 A69-35926

**KREIMER, G. S.**

Strength of Hard Alloys.  
12 p2111 A69-25902

**KREIN, S. E.**

Effect of the association of sulfur-organic compounds with aromatic hydrocarbons on the oxidation stability of oil /O vlianii assotsiatsii seraorganicheskikh soedinenii s aromaticheskimi uglevodorodami na stabil'nost' masla protiv oksleniia/.  
03 p0494 A69-13800

**KREIN, S. G.**

Linear Differential Equations in Banach Space /Lineinye Differentsial'nye Uravneniia v Banakhovom Prostranstve/.  
01 p0106 A69-10996

Problem of small motions of a body containing a cavity which is partially filled with a viscous liquid /Zadacha o malykh dvizheniiax tela s polost'iu, chastichno zapolnennoi viazkoi zhidkost'iu/.  
12 p2061 A69-25884

Asymptotic method in the problem of the oscillations of a highly viscous fluid /Asimptoticheskii metod v zadache o kolebaniiax sil'no viazkoi zhidkostii/.  
22 p3929 A69-40111

**KREINDEL, I. U. E.**

Electron gun with a plasma cathode /Elektronnaia pushka s plazmennym katodom/.  
04 p0598 A69-14857

Microtron with plasma injector.  
08 p1279 A69-19803

The effect of a hollow cathode in a low-pressure Penning discharge /Effekt pologo katoda v razriade tipa Penninga nizkogo davleniia/.  
11 p1933 A69-25544

**KREINDLER, E.**

On the linear optimal servo problem.  
08 p1298 A69-20856

Sensitivity of time-varying, linear optimal control systems.  
10 p1667 A69-24058

On trajectory sensitivity in optimal control.  
14 p2427 A69-29539

Formulation of the minimum trajectory sensitivity problem.  
20 p3509 A69-37141

**KREINDLER, L. S.**

How does accident litigation affect aviation/ques/  
01 p0181 A69-11393

Our tort system and aviation safety.  
06 p1042 A69-16850

**KREINER, J.**

Influence of structural differences of the gyral and sulcal areas of the acoustic projection cortex on primary induced acoustic responses.  
23 p4079 A69-41380

**KREINER, J. M.**

Photoelectric observations of CO Lac.  
10 p1775 A69-23202

Photographic observations of Nova Her 1963 made in the year 1967.  
12 p2156 A69-26223

**KREINER, W.**

High-efficiency Lippmann-Bragg phase holograms /Lippmann-Bragg-Phasenhologramme mit hohem Wirkungsgrad/.  
06 p0926 A69-17481

**KREININ, L. B.**

A possible mechanism for the formation of complex radiation defects in silicon caused by electron bombardment.  
10 p1747 A69-23713

**KREINS, E. R.**

Satellite mapping of the Pacific tropical cloudiness.  
17 p2996 A69-33001

**KREISS, W. T.**

The influence of clouds on microwave brightness temperatures viewing downward over open seas.  
14 p2415 A69-29515

A multiwavelength line-of-sight experiment for remote atmospheric sensing.  
14 p2415 A69-29516

An example of air density determinations from electromagnetic phase measurements.  
24 p4313 A69-42898

**KREITH, F.**

Convection heat transfer in rotating systems.  
11 p1998 A69-24459

Heat transfer in the case of a radial flow between two parallel disks /Transfert de chaleur dans le cas d'un écoulement radial entre deux disques parallèles/.  
20 p3633 A69-38176

Inverse transition in radial diffusers.  
[ASME PAPER 69-HT-33] 24 p4247 A69-43530

**KREITH, K.**

A variational principle for the first eigenvalue of a semifree membrane.  
14 p2535 A69-29365

**KREITMAN, M.**

A pressure activated superfluid valve.  
22 p3870 A69-41237

**KREKHTUNOV, V. M.**

Natural oscillations of a system of n open dielectric waveguides /O sobstvennykh kolebaniiax sistemy n otkrytykh dielektricheskikh volnovodov/.  
22 p3901 A69-40954

**KREKOV, G. M.**

Possibilities of mathematical modeling of problems in experimental investigations of the structure of narrow light beams /O vozmozhnostiakh matematicheskogo modelirovaniia v zadachakh eksperimental'nogo issledovaniia struktury uzkiikh svetovyykh puchkov/.  
22 p3981 A69-40245

Spatiotemporal deformation of a light pulse in a dispersive medium with an arbitrary scattering characteristic /Prostranstvenno- vremennaiia deformatsiia impul'sa sveta v rasseivaiushchei srede s proizvol'noi indikatsiioi rasseianiia/.  
22 p3981 A69-40248

**KREMENTULO, V. V.**

Passive stabilization of the steady motion of a solid body by means of a flywheel /O passivnoi stabilizatsii statsionarnogo dvizheniia tverdogo tela pri pomoshchi makhovika/.  
07 p1183 A69-19678

**KREMER, H.**

Application of numerical methods to the spreading of free turbulent gas jets /Die Anwendung numerischer Verfahren auf das Ausbreiten freier turbulenter Gass-trahlen/.  
15 p2590 A69-30157

**KREMHELLER, A.**

Ultrasonically assisted installation of fasteners.  
09 p1478 A69-22373

**KREMNEV, V. V.**

Current and voltage of a spark during pulsed breakdown in a gas interspace in the nanosecond time range /Tok i napriazhenie iskyri pri impul'snom probie gazovogo promezhutka v nanosekundnom diapazone vremeni/.  
12 p2137 A69-26534

**KREMPASKY, J.**

Amorphous semiconductors and their applications /Amorfne polovodie a ich vyuzitie/.  
10 p1747 A69-23807

**KREMSER, G.**

Auroral-zone X-ray measurements obtained by simultaneous balloon flights in Northern Scandinavia in 1967.  
05 p0813 A69-15822

Measurements of auroral-zone X-rays during magnetospheric substorms.  
08 p1379 A69-20534

Balloon measurements of solar protons in Northern Scandinavia on 7 July 1966.  
10 p1767 A69-23763

Measurements of auroral-zone X-rays with balloon borne instruments at Kiruna/Sweden in 1968.  
21 p3791 A69-39252

Balloon observations of proton fluxes during the PCA period, May 23-30, 1967.  
23 p4204 A69-41485

**KRENTSIS, R. P.**

Thermal diffusivity and thermal conductivity of palladium at high temperatures /Temperaturuprovodnost' i teploprovodnost' palladiia pri vysokikh temperaturakh/.  
15 p2636 A69-30045

Thermal diffusivity and conductivity of titanium at high temperatures.  
18 p3156 A69-34699

**KRENZ, G.**

Jet influence on V-STOL aircraft in transitional and high-speed flight /Strahleinfluss an V-STOL-Flugzeugen im Uebergangs- und Hochgeschwindigkeitsflug/.  
16 p2734 A69-31937



## KREPAK, V. N.

## KREPAK, V. N.

E waves in a circular waveguide with an inhomogeneous plasma /E-volny v kruglom volnovode s neodnorodnoi plazmoi/.  
11 p1844 A69-24437

## KREPLIN, R. W.

X-ray line and continuum spectra of solar flares from 0.5 to 8.5 angstroms.  
02 p0308 A69-12297

The slowly varying component of solar X-ray emission in the period 1-15 July 1966.  
10 p1763 A69-23736

X-ray emission events preceding the proton flare of 7 July 1966.  
10 p1764 A69-23745

X-ray emission from the proton flare of 7 July 1966.  
10 p1766 A69-23755

Measurements of solar X-ray emission from the OGO-IV spacecraft.  
24 p4371 A69-43611

## KRESAK, L.

The discrimination between cometary and asteroidal meteors. I - The orbital criteria.  
23 p4208 A69-41284

## KRESAKOVA, M.

On the angular velocities of meteors.  
08 p1393 A69-20607

The effect of high angular velocities on the apparent brightness of meteors.  
17 p3045 A69-34222

## KRESIN, V. Z.

Electron mechanism of superconductivity in semiconductors and semimetals.  
03 p0492 A69-14176

Electromagnetic properties of superconductors with overlapping bands.  
05 p0810 A69-16802

## KRESS, G.

Visual and tactual interaction in judgments of the vertical.  
24 p4271 A69-42752

## KRESS, K. A.

Operational amplifier differentiator for photoemission studies - Origin and control of errors.  
06 p0897 A69-17700

## KRESSEL, H.

Physical basis of noncatastrophic degradation in GaAs injection lasers.  
07 p1148 A69-18857

Close-confinement gallium arsenide pn junction lasers with reduced optical loss at room temperature.  
14 p2457 A69-28893

## KRESTIANINOVA, N. S.

Turbulent boundary layer in the presence of a pressure gradient with injection.  
20 p3513 A69-37091

Turbulent boundary layer with blowing in a compressible fluid with a pressure gradient /Turbulentnyi pogranichnyi sloi so vduvom v szhimaemoy zhidkosti s gradientom davlennia/.  
21 p3643 A69-38636

## KRESTIANNIKOV, I. A.

Possibilities for determining the pion-to-kayon ratio from the angular distribution of muons.  
13 p2332 A69-28421

## KRESTOVNIKOV, A. N.

Study of the pressure of saturated vapors over solid solutions of indium arsenide-gallium arsenide /Issledovanie davlennia nasyschennykh parov nad tverdymi rastvorami arsenid indii-arsenid galliia/.  
04 p0642 A69-14938

## KRESTOVSKII, S. S.

Problem of short-term creep of the aluminum alloy D16AT during uniaxial tension /K voprosu o kratkovremennoi polzuchest aluminievogo сплава D16AT pri odnoosnom rastizhenii/.  
21 p3744 A69-38871

## KRETOV, G. G.

Investigation of wideband impedance decoupling structures /Issledovanie shirokopolosnykh impedantsnykh razvzyayvushchikh struktur/.  
23 p4138 A69-41938

## KRETSCHMANN, E.

Radiative decay of non radiative surface plasmons excited by light.  
07 p1188 A69-18278

## KRETSU, I. P.

Gallium phosphide emission near the indirect transition during multiphoton excitation /Izluchenie fosfida

galliia vzblii nepriamogo perekhoda pri mnogofotonnom vzbuzhdenii/.  
03 p0489 A69-13892

Luminescence of gallium phosphide near an indirect transition in the multiphoton excitation case.  
11 p1939 A69-25693

## KRETZ, J.-P.

Influence of the aeroelastic interaction between two wing configurations - Initial experimental results /Influence de l'interaction aeroelastique entre deux plans - Premiers resultats experimentaux/.  
17 p3061 A69-33595

## KRETZSCHMAR, G.

Contribution to the effect of the entropy gradient on laminar hypersonic boundary layers /Beitrag zum Einfluss des Entropiegradienten auf laminare Hyperschallgrenzschichten/.  
22 p3930 A69-40618

## KRETZSCHMAR, J. G.

Cutoff frequency of the TM sub c11 mode in a hollow conducting elliptical waveguide.  
15 p2575 A69-30178

## KREUTEL, R. W., JR.

Earth station antenna sidelobe envelope analysis.  
23 p4143 A69-42517

## KREUZER, J. L.

Ultrasonic holography for nondestructive testing.  
01 p0078 A69-10132

Acoustic holographic techniques for nondestructive testing.  
10 p1695 A69-23544

## KREUZER, L. B.

Single and multimode oscillation of the singly resonant optical parametric oscillator.  
11 p1897 A69-25038

## KREY, R. U.

Bremsstrahlung and recombination radiation of neutral and ionized nitrogen.  
16 p2823 A69-32466

## KREYENHAGEN, K. N.

Ballistic limit determination in impacts on multi-material laminated targets.  
[AIAA PAPER 69-356] 13 p2366 A69-28289

Numerical studies of ejecta characteristics behind thin plates.  
[AIAA PAPER 69-357] 13 p2366 A69-28290

## KRIBEL, R.

Properties of the rotating spoke in an unstable pulsed MPD arc.  
[AIAA PAPER 69-234] 09 p1561 A69-21219

## KRIDER, E. P.

Four-meter sparks in air.  
02 p0281 A69-12406

## KRIEG, J. F.

Electron fractographic study of fatigue cracks in wrought beryllium sheet.  
09 p1500 A69-22324

## KRIEGE, O. H.

The chemical partitioning of elements in gamma prime separated from precipitation-hardened, high-temperature nickel-base alloys.  
13 p2277 A69-27408

## KRIEGER, J. B.

Electron shielding in heavily doped semiconductors.  
13 p2324 A69-28683

## KRIEGER, R. B., JR.

Advances in the corrosion resistance of bonded structures.  
10 p1700 A69-24088

Advances in the corrosion resistance of bonded structures.  
24 p4334 A69-43421

## KRIENKE, R. D.

Plating wear-resistant coatings on titanium.  
18 p3148 A69-34654

## KRIER, G. E.

Flight research program. XIV - Landing performance in jet aircraft after the loss of binocular vision.  
23 p4102 A69-41675

## KRIER, H.

Errors in nonsteady combustion theory in the past decade /A review/.  
[AIAA PAPER 69-178] 06 p1037 A69-18100

Role of aluminum in suppressing instability in solid propellant rocket motors.  
19 p3393 A69-36814

## KRIKORIAN, J. S., JR.

A geometrical stability criterion, similar to the Popov criterion, for time-varying, nonlinear, continuous systems.  
09 p1476 A69-22784

## KRIKORIAN, N. H.

High pressure synthesis and superconducting properties of yttrium sesquicarbide.  
07 p1201 A69-19600

## KRIKUN, I. A.

Study of electromagnetic methods for vibrational treatment of metals during the crystallization process /Issledovanie elektromagnitnykh metodov vibratsionnoi obrabotki metallov v protsesse kristallizatsii/.  
14 p2456 A69-29916

## KRILE, T. F.

Calculation of Bayes' recognition error for two multivariate Gaussian distributions.  
15 p2572 A69-31113

## KRIMIGIS, S. M.

Observations of the solar particle event of 7 July 1966 with University of Iowa detectors.  
10 p1768 A69-23768

Solar particle observations inside the magnetosphere during the 7 July 1966 proton flare event.  
10 p1768 A69-23778

Summary on energetic particles observed during the July 1966 proton flare event.  
10 p1768 A69-23785

The radial gradient of interplanetary radiation measured by Mariners 4 and 5.  
20 p3592 A69-38096

Initial observations of geomagnetically trapped protons and alpha particles with OGO 4.  
24 p4368 A69-43184

## KRIMMEL, E. F.

New method for determining activation energies applied to substages of stage III annealing of Au-ion irradiated Au films.  
18 p3182 A69-34349

## KRINBERG, I. A.

Radial distributions of the principal characteristics of a plasma column in a free-burning electric arc /Radial'nye raspredeleniya osnovnykh kharakteristik plazmy v stolbe svobodnogoariashchei elektricheskoi dugi/.  
09 p1545 A69-21431

## KRINDACH, D. P.

Thermal self-actions of laser beams.  
[IEEE PAPER E-12] 05 p0774 A69-16311

Observation of parametric luminescence in a lithium niobate crystal excited by an argon laser.  
08 p1323 A69-19941

## KRINDACH, N. I.

Comparison of arc and high-frequency discharges in neon-helium lasers.  
03 p0441 A69-14139

## KRIPIEC, T.

Diffraction of electromagnetic quadrupole radiation on perfectly conducting wedge.  
09 p1455 A69-22082

## KRISHAN, S.

Generation of transverse waves by non-linear wave-wave interaction.  
01 p0127 A69-10280

## KRISHBERG, R. R.

Comparison of the characteristics of an ideal MHD induction converter during its pumping and generating modes of operation, taking into account the current conductivity of the channel walls /Svravnenie kharakteristik ideal'nogo induktsionnogo MGD-preobrazovatelia v nasosnom i generatornom rezhimakh s uchetom tokoprovodiashchikh stenok kanala/.  
14 p2393 A69-28887

## KRISHEN, K.

Electromagnetic wave scattering from a layer with plane interface in front and a rough interface in back.  
21 p3677 A69-39459

## KRISHER, L. C.

Microwave spectrum of 2-methylfuran.  
24 p4280 A69-43811

## KRISHNA APPARAO, M. V.

Implications of observations of very high energy gamma rays from pulsars.  
08 p1377 A69-19897

## KRISHNA MURTHY, M. G.

Transient thermal stresses in an infinite orthotropic cylinder of rectangular section.  
08 p1415 A69-20664

**KRISHNA MURTY, A. V.**

- General theory of vibrations of cylindrical tubes. I.  
01 p0164 A69-10065
- General theory of vibrations of cylindrical tubes. II -  
Uncoupled torsional vibrations of closed tubes.  
09 p1620 A69-22769
- General theory of vibrations of cylindrical tubes. III -  
Uncoupled flexural vibrations of closed tubes.  
15 p2703 A69-30210
- Vibrations of tapered cantilever beams and shafts.  
17 p3066 A69-34052
- Analysis of cylindrical tubes under torsional and  
transverse loads.  
23 p4228 A69-41916
- General theory of vibrations of cylindrical tubes. IV -  
Uncoupled torsional vibrations of open tubes.  
23 p4233 A69-42347
- General theory of vibrations of cylindrical tubes. V.  
23 p4233 A69-42350

**KRISHNA RAO, P.**

- Remote sensing of sea surface temperature.  
18 p3130 A69-35057

**KRISHNA REDDY, G. V.**

- Reduction of the equations of the membrane theory  
of shells.  
20 p3622 A69-37220

**KRISHNA SWAMY, K. S.**

- Inversion of density in the convective zone.  
09 p1595 A69-21843
- Atmospheres of metal-deficient stars - Main  
sequence stars.  
09 p1596 A69-22055
- Extinction by interstellar grains, Mie particles and  
polycyclic aromatic molecules.  
10 p1781 A69-23679
- Thermal emission by grains and the free-free emis-  
sion from planetary nebulae.  
12 p2172 A69-27158
- A spectral feature of grains at 10  $\mu$ m/ques/  
14 p2521 A69-29586
- Strengths of the fundamental bands of ice and solid  
hydrogen in composite grains.  
14 p2486 A69-29587

**KRISHNA, C. S.**

- Rigidity spectrum of cosmic ray helium nuclei  
greater than 12 bv.  
06 p0988 A69-17276

**KRISHNA, S.**

- Some limitations of the power output capability of  
VHF transistors.  
07 p1101 A69-18653

**KRISHNA, S. V.**

- A space-time functional formalism for mag-  
netohydrodynamic turbulence.  
04 p0638 A69-15277

**KRISHNAIYER, R.**

- Fluidic transmission line properties.  
01 p0012 A69-10153
- Equivalent circuit for the transverse impact modula-  
tor.  
02 p0196 A69-12082

**KRISHNAMURTHY, V.**

- Global solar radiation flux measurements over India  
during the IQSY.  
02 p0307 A69-11819

**KRISHNAMURTI, S.**

- Aeromedical evaluation of aircrew following partial  
gastrectomy /A case report/.  
10 p1645 A69-23381

**KRISHNAMURTI, T. N.**

- An experiment in numerical prediction in equatorial  
latitudes.  
20 p3573 A69-37910

**KRISHNAN KUTTY, K. K.**

- Hypercorrelation - A concept for system charac-  
terization.  
18 p3236 A69-35236

**KRISHNAPPA, G.**

- An experimental investigation of the composition of  
jet noise.  
17 p2957 A69-33602

**KRISHNASAMY, S.**

- Moment-curvature models under reverse cyclic  
straining.  
04 p0683 A69-15497

**KRISS, J. P.**

- Variable time-lapse videooscilloscope - A modifica-  
tion of the scintillation camera designed for rapid flow  
studies.  
18 p3134 A69-34541

**KRISTIAN, J.**

- On the nature of Ryle and Bailey's candidate star for  
the pulsating radio source CP 1919.  
09 p1591 A69-21455
- X-ray and optical observations of the pulsar NP 0532  
in the Crab Nebula.  
15 p2679 A69-31529
- Infrared and optical measurements of the Crab pul-  
sar NP 0532.  
18 p3191 A69-34318

**KRISTIANSEN, M.**

- Stop- and pass-bands for harmonic ion cyclotron  
waves.  
06 p0970 A69-17953
- The use of Hamilton's modified principle to solve  
nonlinear control problems.  
15 p2583 A69-31304
- Polarization modulation using the Macaluso- Cor-  
bino effect.  
21 p3739 A69-39447

**KRISTIANSSON, K.**

- An energy spectrum of primary cosmic ray helium  
nuclei determined by means of nuclear emulsions ex-  
posed in sounding rocket flights.  
08 p1378 A69-20264

**KRISTOFERSON, L.**

- Laboratory simulation experiment on solar wind in-  
teraction with the moon.  
07 p1205 A69-18851

**KRISTOFFY, I.**

- Metal forming with vibrated tools.  
[ASME PAPER 69-VIBR-8]  
10 p1700 A69-24164

**KRITCHER, E. M.**

- Reduced cardiac myosin adenosinetriphosphatase  
activity in dogs with spontaneously occurring heart  
failure.  
24 p4258 A69-42630

**KRITIKOS, A.**

- Conductivity measurements of metal- semiconductor  
sintered mixtures /Leitfahigkeitsmessungen an Ver-  
bundkoerpern Metall-Halbleiter/.  
02 p0296 A69-11790

**KRITSUK, A. A.**

- Creep and stress-rupture strength of unidirectional  
glass-fiber-reinforced plastics /Polzuchest' i dlitel'naia  
prochnost' odnonapravlenno stekloplastika/.  
01 p0101 A69-10080
- Strength of some glass-fiber-reinforced plastics at  
low and high temperatures /Prochnost' nekotorykh  
stekloplastikov pri nizkikh i vysokikh temperaturakh/.  
11 p1907 A69-25181

**KRIUKOV, A. I.**

- Frequency characteristics of pipelines with compen-  
sators /Chastotnye kharakteristiki truboprovodov s  
kompensatorami/.  
11 p1826 A69-25332

**KRIUKOV, B. I.**

- Investigation of the stationary modes of essentially  
nonlinear vibrating systems /Issledovanie statsionar-  
nykh rezhimov sushchestvenno nelineinykh  
kolebliushchikhsia sistem/.  
13 p2361 A69-27615

**KRIUKOV, M. I.**

- High-frequency inductive analyzer of concentrations  
of solutions and mixtures.  
05 p0763 A69-15994

**KRIUKOV, N. N.**

- Axissymmetric deformation of shells of revolution of  
moderate thickness /K osesimmetrichnoi deformatsii  
obolochek vrashcheniia srednei tolshchiny/.  
23 p4226 A69-41705

**KRIUKOV, P. G.**

- Generation and amplification of ultrashort optical  
pulses.  
[IEEE PAPER H-12]  
05 p0774 A69-16317
- Experiments on the observation of neutron emission  
at a focus of high-power laser radiation on a lithium  
deuteride surface.  
[IEEE PAPER O-11]  
07 p1153 A69-19072
- Generation and amplification of high-intensity light  
pulses in neodymium glass.  
08 p1323 A69-19946
- Emission of a polymethine dye employed in a  
neodymium glass laser /Generatsiia polimetinovogo

- krasitelia, primeniamogo v lazere na neodimovom ste-  
kle/.  
21 p3739 A69-39542

**KRIUKOVA, I. V.**

- Output power and efficiency of a gallium arsenide  
semiconductor laser excited with an electron beam.  
06 p0933 A69-16994
- Extended electron-hole junctions in single crystals of  
gallium antimonide.  
10 p1745 A69-23329
- Power, efficiency and temperature dependence of  
emission spectra and threshold current density in elec-  
tron-beam pumped gallium arsenide laser.  
19 p3338 A69-36538

**KRIVAIT, E. Z.**

- Electroabsorption in CdTe.  
19 p3386 A69-36523

**KRIVELEVICH, L. M.**

- Theory of drift currents in the equatorial region /K  
teorii dreifovykh techenii v ekvatorial'noi oblasti/.  
14 p2472 A69-29405

**KRIVENIUK, V. V.**

- Creep and durability of VM-1 alloy.  
15 p2638 A69-30284

**KRIVITSKII, V. P.**

- X-ray spectral study of the niobium-aluminum  
system.  
14 p2508 A69-29664

**KRIVOGLAZ, M. O.**

- Current carriers in ferromagnetic and antiferromag-  
netic semiconductors. I - Case of weak interaction  
/Nosi strumu v feromagnetnikh ta antiferomagnetnikh  
napivprovodnikakh. I - Vipadok slabkoi vzaemodii/.  
14 p2504 A69-28991

**KRIVONOGOV, G. S.**

- Damping ability of EI961 chromium-nickel steel  
after various heat treatment regimes /Demp-  
firiushchaya sposobnost' khromo-nikelevoi stali  
EI961 posle razlichnykh rezhimov termooobrabotki/.  
17 p2990 A69-33933

**KRIVORUCHKO, V. M.**

- Diffusion-kinetic range of the process of thermal  
decomposition of carbonyls of metals /O diffuzionno-  
kineticheskoi oblasti protsessa termicheskogo razloz-  
heniia karbonilov metallov/.  
20 p3558 A69-37015

- Effect of an electrical field on deposition growth dur-  
ing pyrolysis of molybdenum carbonyl /Vliianie elek-  
tricheskogo polia na rost osadkov pri pirolize karbonila  
moliбdena/.  
20 p3559 A69-37016

**KRIVOSHAPKIN, P. A.**

- Characteristics of the interplanetary magnetic field  
according to data for semidiurnal cosmic-ray vari-  
ations /Kharakteristiki mezplanetnogo magnitnogo  
polia po dannym polusutochnykh variatsii  
kosmicheskikh luche/.  
14 p2512 A69-29046

**KRIVOSHCHUKOV, G. V.**

- A method of reducing the number of ruby-laser las-  
ing modes /Ob odnom metode sokrashcheniia chisla  
generiruemnykh mod rubinovogo OKG/.  
03 p0439 A69-13059

- An electrooptically Q-switched ruby laser with a  
saturable absorber in the cavity /OKG na rubine s elek-  
troopticheskim modulatorom dobrotnosti i  
nasyshchaiushchimsia poglotitelem v rezonatore/.  
07 p1147 A69-18531

- Effect of the inhomogeneity of the radiation field in  
the active rod on the dynamics of a ruby laser /Vliianie  
neodnorodnosti polia izlucheniia v aktivnom sterzhne  
na dinamiku OKG na rubine/.  
11 p1901 A69-25756

- Single-frequency ruby laser with active Q-switch.  
13 p2272 A69-27911

- Investigation of the time-dependent characteristics  
of a Q-switched ruby laser driven by an external signal.  
15 p2634 A69-30727

- Influence of the electro-optical effect on the  
frequency of a parametric laser with a KDP crystal.  
20 p3555 A69-38003

- A single-frequency ruby laser with a tunable emis-  
sion frequency in the giant pulse mode /Odnokhastot-  
noi OKG na rubine s perestraivaeomoi chastotoi  
izlucheniia v rezhime gigantskogo impul'sa/.  
21 p3737 A69-38991

- Experimental study of the spectral, angular, and tem-  
poral characteristics of the emission of a traveling-wave  
ruby laser /Eksperimental'noe issledovanie spektral'-  
nykh, uglovnykh i vremennykh kharakteristik  
izlucheniia OKG begushchei volny na rubine/.  
21 p3741 A69-39554



## KRIVOSHEEV, M. I.

Quality control for TV transmissions over space communication lines /Kontrol' kachestva peredachi teledeniia po kosmicheskim liniim sviazi/.  
[UN PAPER 68-95773] 06 p0886 A69-17047

## KRIVOSHEEV, M. V.

Interaction between the microwave power and the plasma of a positive column discharge in a waveguide /Vzaimodeistvie sverkhvysokochastotnoi moshchnosti s plazmoi polozhitel'nogo stolba razriada v volnovode/.  
21 p3778 A69-39547

## KRIVSKY, L.

Remarks on the development and activity of the active region during the proton flare event of July 1966.  
10 p1764 A69-23743

Ionospheric effects of X-ray emission from an active region with a proton flare /30 June-11 July 1966/.  
10 p1764 A69-23744

Large-scale mutual relations of spot groups in proton complex.  
11 p1946 A69-24427

Development and spatial structure of proton flares near the limb and coronal phenomena. I - Flare on 5. IV. 1960.  
17 p3025 A69-34224

The compensation of the maximum magnetic field strengths of opposite polarities in groups of spots at the time of proton flares.  
17 p3025 A69-34225

Flares with the ejection of subsonic radiation in the region of N 27 deg. CMP May 25, 1967.  
17 p3025 A69-34226

Development and spatial structure of proton flares near the limb and coronal phenomena. II.  
23 p4208 A69-41282

## KRIZ, S.

Evolution of close binaries. III.  
11 p1964 A69-25414

Models for main-sequence stars.  
23 p4208 A69-41286

Comparison of main-sequence binaries with theoretical models.  
23 p4208 A69-41287

## KRIZAN, J. E.

Magnetic interactions in a warm plasma.  
08 p1366 A69-20749

## KRIZANOVSKA, M.

Genetic background of circadian rhythms.  
04 p0553 A69-15152

## KROCK, R. H.

Preparation and properties of cast beryllium- aluminum alloys.  
19 p3340 A69-35524

## KROEMER, H.

The Gunn effect under imperfect cathode boundary conditions.  
07 p1199 A69-18649

## KROENER, E.

Mechanics of Generalized Continua, International Union of Theoretical and Applied Mechanics, Symposium on the Generalized Cosserat Continuum and the Continuum Theory of Dislocations with Applications, Freudenstadt, August 28-31, 1967 and Stuttgart, West Germany, September 1, 2, 1967, Proceedings.  
10 p1798 A69-23146

On the symmetry properties of elastic materials with cohesive forces of finite range.  
19 p3444 A69-36798

## KROES, R. L.

Studies of ultraviolet irradiation effects in ZnO-type thermal control coating pigments.  
[AIAA PAPER 69-639] 17 p2992 A69-33288

## KROETZ, F. W.

Acute and prolonged effects of G suit inflation on cardiovascular dynamics.  
06 p0883 A69-17843

## KROGH, C.

Lunar laser ranging and the Brans-Dicke theory.  
05 p0825 A69-16362

## KROGMANN, U.

Application of state variables to error analysis in inertial navigation systems /Anwendung von Zustandvariablen bei der Fehleranalyse eines Tragheitsortungssystems/.  
11 p1914 A69-25434

## KROHN, C. A.

Hazard versus renewal rate of electronic items.  
20 p3504 A69-37070

## KROKHIN, O. N.

High temperature effects of intense laser emission focused on a solid target.  
09 p1520 A69-22656

Laser application for investigations of the high-temperature and plasma phenomena.  
10 p1741 A69-23809

Laser beam usage for high-speed photography.  
12 p2086 A69-26165

Measurement of the time variation of the temperature of the plasma of a laser flare by means of its X-radiation.  
18 p3154 A69-35496

Study of gasdynamic processes occurring during the vaporization of a solid material under the action of laser emission /Issledovanie gazodinamicheskikh protsessov, voznikaushchikh pri isparenii tverdogo veshchestva pod deistviem izlucheniia lazera/.  
21 p3740 A69-39551

## KROKOSKY, E. M.

A photoviscoelastic analysis of time-dependent stresses in a polyphase system.  
03 p0524 A69-13061

## KROL, V. M.

Self-similar motions of a gas heated by nonequilibrium continuum radiation /Avtomodel'nye dvizheniia gaza, nagrevaemogo neravnovesnym izlucheniem sploshnogo spektra/.  
04 p0686 A69-14985

Self-similar motions of a gas heated by radiation behind the front of a shock wave initiating absorption /Avtomodel'nye dvizheniia nagrevaemogo izlucheniem gaza za frontom udarnoi volny, iniitsiiruushchei pogloshchenie/.  
12 p2061 A69-25880

## KROLEVETS, N. M.

Determination of the parameters of recombination centers in copper-doped gallium arsenide.  
02 p0294 A69-11627

## KROLL, N. E. A.

Cue selection in paired-associate and concept-learning paradigms.  
07 p1064 A69-18636

## KRONAST, B.

Laser-produced sparks in a 200-kG magnetic field.  
02 p0260 A69-12659

## KRONBERG, P. P.

An interferometer of 425 metres baseline, consisting of two fully steerable radio telescopes.  
03 p0411 A69-13468

Interferometric measurement of polarization distributions in radio sources.  
08 p1390 A69-20389

## KRONGAUZ, V. G.

Induced photoconductivity and recombination luminescence in diamonds /Indutsirovannaia fotoprovodimost' i rekombinatsionnaia liuminesentsiia almazov/.  
19 p3383 A69-36167

## KROP, H. D.

Effect of induced stress on convergent and divergent thinking.  
24 p4269 A69-42555

## KROPFLI, R. A.

Simultaneous radar reflectivity measurements and refractive index spectra in the clear atmosphere.  
01 p0032 A69-10969

## KROPP, C. J.

Crack behavior and toughness of 2219-T81 aluminum alloy parent metal and weldments.  
14 p2462 A69-29003

Crack behavior and toughness of 2219-T81 aluminum alloy parent and weldments.  
[ASM PAPER W9-19.3] 21 p3743 A69-38669

## KROSHKIN, M. G.

Studies of the upper atmosphere with the aid of rockets and satellites /Issledovaniia verkhnei atmosfery s pomoshch'iu raket i sputnikov/.  
13 p2251 A69-27347

## KROSS, D. A.

Finite-element analysis of thin shells.  
04 p0674 A69-14588

## KROSZCZYNSKI, J. J.

Pulse compression by means of linear-period modulation.  
21 p3671 A69-38406

## KROTIKOV, V. D.

Thermal conditions of the upper blanket of the moon and its integral radio emission during an eclipse

/Teplovoi rezhim verkhnego pokrova luny i ee integral'noe radioizluchenie vo vremia zatmenia/.  
03 p0506 A69-13088

A possibility of signal matching in a radio interferometer with autonomous receivers /Ob odnoi vozmozhnosti sovmeshcheniia signalov radiointerferometra s avtonomnymi priemnikami/.  
03 p0431 A69-13706

Polarization characteristics of lunar radio emission, taking into account the averaging effect of a radiation pattern of knife-edge type /Poliarizatsionnye kharakteristiki radioizlucheniia luny pri uchete usredniaushchego deistviia diagrammy napravlenosti nozhevogo tipa/.  
08 p1391 A69-20423

Reduction of observations on a large-base radio interferometer /K reduktsii nabliudenii radiointerferometrom s bol'shoi bazoi/.  
08 p1314 A69-20434

Thermal conditions of the lunar topsoil and the integrated radio emission of the eclipsed moon.  
14 p2515 A69-28770

## KROTOVA, L. V.

A laser with liquid active elements based on POCI sub 3 -Nd super 3 super plus /OKG s zhidkimi aktivnymi veshchestvami na osnove POCI sub 3 -Nd super 3 super plus/.  
11 p1894 A69-24620

## KROUTIL, J. C.

Design and performance of radiation-cooled MPD arc thrusters.  
[AIAA PAPER 69-245] 09 p1566 A69-21259

## KROVONOGOV, G. S.

Damping capacity and resistance to resonance fatigue of steels and alloys based on titanium and aluminum.  
03 p0443 A69-13025

## KRUEGER, A.

Remarks on the slowly varying component of solar radio emission during the proton flare period of July 1966.  
10 p1763 A69-23735

The present state of absolute spectra of solar flux density in the cm- and dm-region.  
22 p4001 A69-39987

An investigation of solar X-ray and radio emissions and their relationship to ionospheric phenomena.  
24 p4372 A69-43615

## KRUEGER, H.

RBE values for fast neutrons in connection with estimates of the radiation burden in space.  
20 p3478 A69-37629

## KRUEGER, R.

Temperature and electron-density distribution during the late phase of a wire explosion /Temperatur- und Elektronendichte- Verteilung im Spaetstadium einer Drahtexplosion/.  
02 p0286 A69-11711

Comparison of large solid rocket motors optimized for recurring cost or gross weight.  
[SAWE PAPER 777] 18 p3208 A69-34871

## KRUEGER, R. J.

On a completely tunable active filter using fixed RC elements.  
14 p2422 A69-29551

## KRUEGER, W. E.

The formation of 3,6-diphenylpyridazine and 2,5-diphenylpyrrole from alpha-styryl azide.  
10 p1651 A69-23307

## KRUELLE, G.

Some experiments on the "spoke" phenomenon in MPD operation.  
09 p1548 A69-21962

Integral measurements in the MPD thruster X12 /Integrale messungen am MPD-triebwerk X12/.  
[DGLR-69-024D] 23 p4202 A69-41927

## KRUGER, C. H.

The influence of boundary layers on spectroscopic temperature measurements in MHD channels.  
10 p1731 A69-23434

Necessary conditions for the validity of the two-temperature plasma model.  
10 p1731 A69-23438

## KRUGER, H.

Tropospheric periods of wind vector and fluctuations of earth's rotation and pole latitude /Perioden des tropospharischen Windvektors und Schwankungen der Erdrotation und der Polhoehe/.  
08 p1309 A69-20854

- KRUGER, H. B.**  
General and special approaches to the problem of objective analysis of meteorological variables.  
08 p1345 A69-20309
- KRUGER, R.**  
Solar irradiance measurements from a research aircraft.  
23 p4216 A69-42191
- KRUGER, V. R.**  
Characterization of multichannel sources and their utilization in molecular beam systems.  
19 p3376 A69-36175
- KRUGLIAKOV, E. P.**  
Multiframe image converter registration of the process of ruby laser giant pulse formation.  
12 p2083 A69-26142  
Superfast optical methods for high-speed plasma processes.  
12 p2089 A69-26186  
Application of Michelson interferometers with large interference fields to the investigation of plasma physics /O primeneni interferometrov Maikel'sona s bol'shimy poliami interferentsii v issledovaniakh po fizike plazmy/.  
14 p2496 A69-29776
- KRUGLIKOV, R. M.**  
Activation of the synthesis of protein and RNA in the cerebrum as a factor of adaptation to high-altitude hypoxia /Aktivatsiia sinteza belka i RNK v golovnom mozge kak faktor adaptatsii k vysotnoi gipoksii/.  
22 p3886 A69-41122
- KRUGLOV, B. A.**  
Equation of the acoustic channel for the mirror-shadow method of ultrasound flaw detection.  
18 p3137 A69-35109
- KRUGLOV, M. G.**  
Study, by similarity methods, of the effect of the flow cross section of the inlet system on the process of filling an internal combustion engine /Issledovanie metodami teorii podobiiia vlianiia prokhodnogo sечения vpusknoi sistemy na protsess napolneniia dvigatel'ia vnutrennego sgoraniia/.  
19 p3393 A69-35824
- KRUGLOV, S. A.**  
Vacuum system of the Sirius stellarator.  
03 p0412 A69-13839
- KRUGLOV, S. V.**  
Influence of the electro-optical effect on the frequency of a parametric laser with a KDP crystal.  
20 p3555 A69-38003
- KRUGLOVA, G. V.**  
Phase diagram of the system TiC-Re.  
15 p2641 A69-31247
- KRUGOV, V. D.**  
Electrophotometer for weak light fluxes /Elektrofotometr slablykh svetovykh potokov/.  
11 p1884 A69-24735
- KRUH, R. F.**  
X-ray diffraction study of some concentrated cobalt /III/ chloride solutions.  
20 p3484 A69-37496
- KRUKOVA, I. V.**  
Temperature dependence of laser threshold current density and emission spectra in electron-beam pumped gallium arsenide lasers.  
02 p0260 A69-12683
- KRUKOVSKII-SINEVICH, K. B.**  
Comparative noise stability of a nonoptimal detection system for signals with noise and FM content /O sravnenii'noi pomekhoustoichivosti neoptimal'noi sistemy obnaruzheniia pri signalakh s shumovym i ChM zapolneniem/.  
13 p2222 A69-28508  
Signals with a low velocity resolution /O signalakh s nizkim razresheniem po skorosti/.  
18 p3104 A69-35265
- KRUKOVSKII, V. K.**  
Investigation concerning the deposition of a niobium coating on graphite from the vapor-gas phase /Issledovaniia po naneseniiu niobievogo pokrytiia na grafit iz parogazovoi fazy/.  
15 p2629 A69-30992
- KRULL, W. E.**  
Anisotropy in plastic flow of a Ti-8Al-1Mo-1V alloy.  
17 p2987 A69-33078
- KRUMBEIN, S. J.**  
Corrosion through porous gold plate.  
23 p4176 A69-41534
- KRUMEICH, K.**  
The visibility problem in civil aviation during bad-weather landing- Possibilities of improving visibility determination and investigations of the use of IR sighting devices /Das Problem der Sicht bei der Schlechtwetterlandung in der Zivilluftfahrt-Moeglichkeiten zur Verbesserung der Sichtbestimmung und Untersuchungen ueber den Einsatz von IR-Sichtgeraeten/.  
20 p3574 A69-38064
- KRUMME, D. W.**  
Differential-difference equations and nonlinear initial-boundary value problems for linear hyperbolic partial differential equations.  
04 p0623 A69-14949
- KRUMPHOLZ, O.**  
Design of GaAs injection lasers for continuous-wave operation at high temperatures /Aufbau von GaAs-Injektionslasern fuer Dauerstrichbetrieb bei hohen Temperaturen/.  
02 p0255 A69-11710
- KRUPCHATKIN, V. D.**  
On improving the Mar-1 X-ray microanalyzer.  
12 p2093 A69-26596
- KRUPENIO, N. N.**  
Measurement of the specific effective scattering cross section of the moon in the three-centimeter range.  
01 p0158 A69-11312  
Radiowave scattering cross section of the lunar surface.  
07 p1087 A69-19621  
The measurement of radiowave scattering characteristics of local lunar regions from space vehicles.  
15 p2571 A69-31359  
Mean scattering properties of the lunar surface at 2.25-cm wavelength.  
20 p3606 A69-37971
- KRUPINA, T. N.**  
Changes in functions of the nervous system and of some analyzers during the combined action of hypokinesia and radial accelerations.  
02 p0197 A69-11496  
Peculiarities of the response of the acoustic analyzer of man during prolonged noise effect in a year-long medico-engineering experiment.  
24 p4278 A69-43408
- KRUPKA, M. C.**  
High pressure synthesis and superconducting properties of yttrium sesquicarbide.  
07 p1201 A69-19600
- KRUPKA, R. M.**  
Bending-torsion mode of a rotating tapered- twisted turbomachine blade. [ASME PAPER 68-WA/GT-6]  
05 p0838 A69-16141  
Bending-bending mode of a rotating tapered- twisted turbomachine blade including rotatory inertia and shear deformation. [ASME PAPER 69-VIBR-50]  
10 p1804 A69-24148
- KRUPKE, W. F.**  
Passive Q-switching of a CO sub 2 laser using a mixture of SF sub 6 and C sub 2 F sub 3 Cl gases.  
13 p2274 A69-28659
- KRUPNOV, A. F.**  
Reorienting of molecules in a formaldehyde beam maser.  
07 p1158 A69-19760  
Influence of gas additions on the operation of submillimeter H sub 2 O and D sub 2 O lasers /Vliianie dobavok gazov na rabotu submillimetrovnykh lazerov na H sub 2 O i D sub 2 O/.  
21 p3738 A69-39131
- KRUPSKII, N. P.**  
Study of light scattering in single-component systems near a critical point with allowance for the gravitational effect /Vivchennia svitlorozsiannia v odnokomponentnikh sistemakh poblizh kritichnoi tochki z vrakhuvanniam gravitatsiinogo efektu/.  
14 p2485 A69-28995
- KRUPSTEDT, U.**  
Control maneuvers of a TV satellite with electric propulsion to reach a target position in a synchronous /24-hr/ circular orbit /Steuermaeuver eines Fernsehrunderfunk-Satelliten mit elektrischem Antrieb zum Erreichen eines Ziels auf der 24-h-Bahn/.  
16 p2868 A69-31935
- KRUSE, D. H.**  
Low-thrust mission to Halley's Comet.  
10 p1772 A69-22864
- KRUSE, R. B.**  
Solid propellants.  
04 p0646 A69-14583
- KRUSOS, J. N.**  
Ceramic heat shields for lifting re-entry vehicles. [SAE PAPER 680643]  
03 p0453 A69-13457
- KRUSTALEV, B. A.**  
The photographic method for the study of spectral emissivity and spectral distribution of radiation intensity at high temperatures.  
23 p4238 A69-41330  
Absorptivity of a tubular nonisothermal radiator.  
23 p4238 A69-41332
- KRUSZEWSKI, A.**  
Changes in polarization of the R Coronae Borealis star by Sagittarii.  
09 p1603 A69-22265  
Wavelength dependence of polarization. XVII - Be-type stars.  
16 p2863 A69-32397
- KRUTIKOVA, T. I.**  
Effects observed in the F sub 2 -layer of the ionosphere following an SSC magnetic storm.  
03 p0423 A69-13531
- KRUTIKOVA, T. M.**  
Relation between E sub s and the vertical displacements of ionized formations /O sviazi E sub s s verikal'nymi peremeshcheniiami ionizirovannykh obrazovani/.  
14 p2437 A69-29074
- KRUTKO, P. D.**  
Determination of the parameters of discrete systems by the adjustable model method /Opredelenie parametrov diskretnykh sistem metodom podstraivaimoi modeli/.  
13 p2238 A69-27253
- KRUTOV, V. V.**  
Follow-up system for aiming optical equipment at the sun.  
03 p0427 A69-12980  
Preliminary results of investigations of solar X-ray emission by means of the satellite "Kosmos-166."  
07 p1210 A69-19614
- KRUTOVA, E. M.**  
Study of the effects of various work and rest schedules on subjects under conditions of relative isolation /Izucheniie vliianiia razlichnykh rezhimov truda i otdykha na ispytatelei, nakhodiaschchikhsia v usloviakh otosnel'no izoliatsii/.  
03 p0381 A69-14201
- KRUTZ, R.**  
Transmission of cardiovascular data from dogs.  
07 p1071 A69-19133
- KRUZHILIN, I. I.**  
The maximum efficiency of an injection laser /O prede'l'noi effektivnosti inzhektionsnogo lazera/.  
01 p0091 A69-10883  
The maximum efficiency of an injection laser.  
12 p2109 A69-26647
- KRUZHNIKOV, S. N.**  
Boundary-value problems for second-order degenerate elliptic equations /Kraevye zadachi dlia vyrozhdaiushchikhsia ellipticheskikh uravnenii vtorogo poriadka/.  
05 p0786 A69-16422
- KRYCHIKOV, E. E.**  
Optical oscillator with an injection GaAs diode and a closed cycle cooling system.  
05 p0777 A69-16793
- KRYDER, M. H.**  
A nanosecond Kerr magneto-optic camera.  
17 p2970 A69-32853  
Dynamic Kerr observations of high-speed flux reversal and relaxation processes in permalloy thin films.  
19 p3383 A69-36446
- KRYLOV, A. L.**  
Solution of the problem of eigenvalues for the Orr-Sommerfeld equation by a difference technique - Stability of a Poiseuille flow in a plane channel /Reshenie zadachi o sobstvennykh znacheniiakh dlia uravneniia Orra-Zommerfel'da raznostnym metodom - Ustoichivost' techeniia Puazeiila v ploskom kanale/.  
03 p0416 A69-13654
- KRYLOV, G. N.**  
Orientalational Control of Meteorological Satellites /Kontrol' Orientatsii Meteorologicheskikh Sputnikov/.  
04 p0666 A69-15012



## KRYLOV, IU. K.

Investigation of the dependence of the magnitude and direction of the output pulse on the angle of incidence of intense electromagnetic radiation /Issledovanie zavisimosti velichiny i napravleniya impul'sa ot dachi ot ugla padeniya intensivnogo elektromagnitnogo izlucheniya/.

06 p0935 A69-17686

## KRYLOV, IU. V.

Effects of certain space flight factors on auditory reactions in man.

02 p0197 A69-11500

Auditory function of man during exposure to low barometric pressure for several days /Slukhovaia funktsiia pri mnogodnevnom prebyvanii cheloveka v usloviakh ponizhennogo barometricheskogo davleniia/.

03 p0378 A69-14206

## KRYLOV, O. V.

Synthetic monosaccharides for nutrition of man in space.

15 p2557 A69-31471

## KRYLOV, V. A.

Automatic processing of electrocardiograms recorded during space flight /Avtomaticheskoi obrabotka elektrokardiogrammy, registriruemoi vo vremia kosmicheskogo poleta/.

05 p0715 A69-16524

Automatic processing of electrocardiograms recorded during cosmic flight.

18 p3098 A69-34743

## KRYLOVA, E. I.

A method of manufacturing aspherical surfaces which deviate only slightly from the sphere.

12 p2102 A69-26597

## KRYLOVA, S. N.

Isophotes of zodiacal light and its terrestrial component.

03 p0512 A69-13693

## KRYLOVA, V. S.

Traveling disturbances in the ionosphere.

03 p0423 A69-13538

## KRYMOVA, A. I.

Stimulated emission of dyes in the 720 to 920-nm region /Stimulirovanoe izluchenie krasitelei v oblasti 720-920 nm/.

04 p0612 A69-15373

Stimulated luminescence of dyes in the 720-920 nm region.

16 p2797 A69-32120

Mode locking in lasers employing polymethine dye solutions /Sinkhronizatsiia mod v lazerakh na rastvorakh polimetinovykh krasitelei/.

21 p3740 A69-39545

## KRYMSKII, G. F.

Density variation and anisotropy of cosmic rays /Variatsii plotnosti i anizotropiia kosmicheskikh lucheii/.

10 p1757 A69-22828

Characteristics of the interplanetary magnetic field according to data for semi-diurnal cosmic-ray variations /Kharakteristiki mezplanetnogo magnitnogo polia po dannym polusutochnykh variatsii kosmicheskikh lucheii/.

14 p2512 A69-29046

## KRYSTKOWIAK, S.

The effect of chloride contamination on cracking in titanium.

[SAE PAPER 680642]

03 p0444 A69-13458

Titanium corrosion cracking morphology.

13 p2282 A69-28165

## KRYTER, K. D.

Sonic booms from supersonic transport.

06 p0868 A69-17899

Sonic boom - Results of laboratory and field studies.

14 p2408 A69-29151

## KRYVORUKA, J. K.

Nonlinear aerodynamic characteristics of re-entry configurations with aerodynamic and mass asymmetries.

[AIAA PAPER 69-867]

21 p3823 A69-39393

## KRYZHANOVSKII, G. A.

Optimization of gyrostabilizer parameters /K optimizatsii parametrov girosbilizatorov/.

04 p0597 A69-14604

Optimal control in gyroscopic devices in the case of constrained phase coordinates /Optimal'noe upravlenie v giroskovicheskikh ustroistvakh pri ogranichennykh fazovykh koordinatakh/.

24 p4317 A69-43708

## KRZEMINSKI, W.

Binary stars among cataclysmic variables. X - Photoelectric observations of EM Cygni.

22 p4015 A69-40151

## KRZYWOBLOCKI, M. Z.

Clock paradox - Time for decisions and revisions.

10 p1772 A69-22865

Analytical aspects and controllability of instabilities of propagating medium in E.M. wave theory.

16 p2823 A69-32243

## KRZYWOBLOCKI, M. Z. V.

On the reduction of independent variables in computational problems of applied mathematics and engineering.

03 p0456 A69-13740

Controllability of deep space electromagnetic wave propagation in non-vacuum.

06 p0888 A69-17622

Relation between classical and relativistic shock wave theories by means of shock tube tests.

14 p2433 A69-29981

Three body problem reduced to the optimization problem.

15 p2652 A69-30448

Optimization in stellar hydrodynamics involving kinetic theory.

15 p2695 A69-31004

Mathematical aspects of re-entry supersonics of blunt bodies.

18 p3089 A69-35269

Similarity rule in the hydrodynamically transcritical regime in an ionized multi-fluid gas.

20 p3515 A69-37594

## KRZYWOBLOCKI, Z. M. V.

Application of optimization techniques to the design and operation of V-STOL aircraft.

05 p0701 A69-15570

## KSIENSKI, A.

A survey of signal processing arrays.

08 p1287 A69-20958

## KU, C. C.

Earth currents and magnetic field variations in the period range 10-200 s.

10 p1682 A69-23593

## KU, P. M.

A microscale deposition test for the evaluation of aircraft turbine engine lubricants.

[ASLE PAPER 68-LC-22]

07 p1140 A69-19309

## KU, S. Y.

Computing polynomial resultants - Bezout's determinant vs. Collins' reduced P.R.S. algorithm.

06 p0892 A69-17884

## KUBAREV, IU. V.

Low-frequency electrical resonance oscillations in a nonisothermal plasma flow /Nizkochastotnye rezonansnye elektricheskie kolebania v potoke neizotermicheskoi plazmy/.

04 p0638 A69-15174

Low-frequency resonant electrostatic oscillations in a streaming non isothermal plasma.

13 p3180 A69-34716

## KUBAREV, S. I.

Solution of the kinetic equation for semiconductors with a narrow conductivity band in a strong electric field.

12 p2144 A69-26673

## KUBASOV, V. N.

Orbital trajectories about a planet with reentry to the earth /Traektorii obleta planety s vozvrashcheniem k zemle/.

05 p0823 A69-16042

Trajectories of a flight around a planet with return to the earth.

20 p3606 A69-37951

## KUBIAK, E. J.

FM Lamb wave inspection system for thin sheet metals.

10 p1699 A69-23048

Heat finds fatigue cracks.

11 p1861 A69-24262

Dynamic infrared detection of fatigue cracks.

15 p2631 A69-31505

## KUBICKI, W. J.

Wideband PCM-FM bit error probability using discriminator detection.

07 p1082 A69-19106

## KUBINEC, J. J.

Will radiation wreck your IC design/ques/

07 p1113 A69-19779

## KUBO, S.

Relation of characteristics of MOS transistor to properties of the Si-SiO<sub>2</sub> sub 2 interface.

10 p1665 A69-24051

## KUBO, U.

Enhanced microwave scattering by plasma instability in a magnetic field.

06 p0967 A69-17717

Noise in He-Ne laser oscillators.

19 p3330 A69-35760

## KUBOKAWA, C. C.

Instant modular 3-D mockup for configuring control and display equipment.

02 p0202 A69-11953

Space tool state-of-the-art, and considerations for future space tool-equipment design.

[AAS PAPER 69-438]

24 p4319 A69-42802

## KUBOTA, H.

An experimental study of ablation near the region of stagnation point of blunt-nosed axially symmetric bodies at hypersonic speeds.

01 p0006 A69-10758

## KUBOTA, J.

The flash spectrum observed at the total eclipse of February 5, 1962.

24 p4388 A69-43636

## KUBOTA, T.

Transformation theory for the compressible turbulent boundary layer with arbitrary pressure gradient.

[AIAA PAPER 69-160]

06 p0912 A69-18073

Supersonic laminar boundary layer along a two-dimensional adiabatic curved ramp.

[AIAA PAPER 68-109]

09 p1430 A69-21949

Experimental investigation of a highly ionized, arched, supersonic freejet.

[AIAA PAPER 68-135]

16 p2772 A69-32153

## KUBOVICK, R. J.

Frictional losses in foam-damped flexible tubes.

04 p0608 A69-15331

## KUBYSHKINA, V. D.

Solution of elliptic equations on electric analogs /Reshenie ellipticheskikh uravnenii na elektricheskikh modeliakh/.

21 p3680 A69-39854

## KUCERA, J.

Concentration dependence of diffusion of cobalt in nickel-cobalt alloys.

08 p1334 A69-20577

## KUCHERENKO, V. P.

Nature of the changes of flow-parameter disturbances in a two-dimensional combustion zone /O kharaktere izmeneniia vozmushchenii parametrov potoka v dvukhmernoi zone goreniia/.

14 p2537 A69-28986

## KUCHEROV, R. IA.

Low voltage Knudsen arc in a cesium-argon mixture.

06 p0963 A69-16920

Kinetic theory of Knudsen arcs in the mixture of inert gases with cesium vapour.

14 p2491 A69-29245

Current oscillations and electromagnetic radiation in low-pressure thermal-emission converters.

14 p2402 A69-29246

Low-voltage arc in the cesium-barium mixture.

14 p2403 A69-29247

Low-voltage Knudsen arc in the cesium-inert gas mixture.

14 p2403 A69-29248

## KUCHMA, A. IA.

Temperature coefficient of the electrical resistance of titanium, zirconium, and niobium carbides /Temperaturnyi koeffitsient elektrosoprotivleniia karbidov titana, tsirkoniia i niobiia/.

15 p2641 A69-31047

## KUCHOWICZ, BR.

The fifth state of matter - On super-dense matter and neutron stars.

06 p1012 A69-18240

## KUCHTA, B. J.

Aerodynamic and flight characteristics of several variable geometry entry spacecraft during subsonic wing deployment and landing.

[AIAA PAPER 69-742]

18 p3084 A69-34407

## KUCHUBERIIA, I. KH.

Experimental investigation of a pulsed high-frequency plasma on the basis of laser light scattering /Eksperimental'noe issledovanie impul'snoi vysokochastotnoi plazmy po rasseianiiu izlucheniia lazera/.

14 p2451 A69-29781

- Laser facility for plasma diagnostics /Lazernaia apparatura dlia diagnostiki plazmy/.  
14 p2461 A69-29782
- KUCKES, A. F.**  
Closed expressions for the magnetic field in two-dimensional multipole configurations.  
06 p0965 A69-17518  
Synchrotron deceleration of electrons in a plasma and the generation of electromagnetic radiation.  
11 p1931 A69-25363  
Coherent synchrotron deceleration and the emission of type II and type III solar radio bursts.  
22 p4007 A69-40898
- KUDASOV, B. G.**  
Generator of intense current pulses using thyristors.  
03 p0404 A69-13262
- KUDELIN, G. M.**  
Statistical characteristics of continuous short-wave radio signals at frequencies above the MUF.  
03 p0394 A69-13522  
An automatic data processing system for ionospheric investigations /Sistema avtomaticheskoi obrabotki danykh pri issledovanii ionosfery/.  
13 p2225 A69-27610
- KUDIMOV, A. V.**  
Calculation of the spectral distribution of absorbed X-ray energy in the earth's atmosphere /Raschet spektral'nogo raspredeleniia pogloshchennoi energii rentgenovskogo izlucheniia v atmosfere zemli/.  
09 p1577 A69-21774
- KUDIN, V. F.**  
Synthesis of a nonlinear controller by dynamic programming.  
08 p1296 A69-20326  
Suboptimal control of a nonlinear system /Pro suboptimal'ne keruvannia odnieu nelineinuiu sistemoiu/.  
08 p1297 A69-20416
- KUDINENKO, A. V.**  
Nonlinear spatial oscillations of a satellite about a center of mass during its motion in a circular orbit /Nelineinye prostranstvennye kolebaniia sputnikia otosnitol'no tsentra mass pri dvizhenii ego po krugovoi orbite/.  
04 p0665 A69-14270
- KUDO, S.**  
Eleven year variations of cosmic ray intensity and heliolatitudes of sunspots.  
10 p1754 A69-22802
- KUDOJAROV, B. V.**  
The elongation of cavities in automatic inert gas-shielded welds in titanium alloys.  
05 p0767 A69-15972
- KUDRIASHEV, L. I.**  
Conjugate problem of heat transfer in the presence of radiant heat exchange at the surface of a plate /Sopriazhennaiia zadacha o teploobmene pri nalichii luchistogo teploobmena u poverkhnosti plastyiny/.  
18 p3230 A69-34984
- KUDRIASHEVA, L. V.**  
Densification of nonstoichiometric niobium-carbide phases.  
10 p1711 A69-23337
- KUDRIASHOV, E. I.**  
Quantitative laws of the postirradiation recovery of yeast cells after exposure to heavy high-energy C super 12 ions /Kolichestvennye zakonomernosti postirradiatsionnogo vosstanovleniia drozhzhevykh kletok pri deistvii vysokoenertichnykh tiazhelykh ionov C sub 12/.  
14 p2406 A69-28915
- KUDRIASHOVA, L. V.**  
A class of solutions to the problem of the motion of a body having a fixed point /Ob odnom klasse reshenii zadachi o dvizhenii tela, imeiushchego nepodvizhnyi točku/.  
11 p1918 A69-24785
- KUDRIAVTSEV, B. A.**  
Dynamic problem for a plane with a cut /Dinamicheskaia zadacha dlia ploskosti s razrezom/.  
15 p2703 A69-30050
- KUDRIAVTSEV, D. L.**  
The zirconium corner of the phase diagram and properties of alloys of the zirconium-aluminum-niobium system /Tsirkonievyy ugol diagrammy sostoiianiia i svoistva spлавov sistemy tsirkonii-aliuminii-niobii/.  
02 p0261 A69-11841  
The zirconium corner of the phase diagram and properties of alloys of the zirconium-vanadium-molybdenum system /Tsirkonievyy ugol diagrammy sostoiianiia i svoistva spлавov sistemy tsirkonii-vanadii-molibdena/.  
02 p0262 A69-11846
- The zirconium corner of the zirconium-copper-niobium phase diagram /Tsirkonievyy ugol diagrammy sostoiianiia tsirkonii-med'-niobii/.  
02 p0263 A69-11854
- The zirconium corner of the zirconium-molybdenum-titanium phase diagram /Tsirkonievyy ugol diagrammy sostoiianiia tsirkonii-molibden-titan/.  
02 p0264 A69-11859
- KUDRIAVTSEV, I. V.**  
Investigation of the fatigue strength of steels 22K and 16GNM under conditions of sharp cycle asymmetry and under the action of boiling water /Issledovanie ustalostnoi prochnosti stali 22K i 16GNM v usloviakh rezkoj asimetrii tsikla i pri vozdeistvii kipiashechi vody/.  
19 p3347 A69-36741
- KUDRIAVTSEV, R. A.**  
Transmission of newspaper pages in the "Orbit" system /Peredacha polos gazet v sisteme "Orbita"/.  
19 p3277 A69-36567
- KUDRIAVTSEV, S. D.**  
Elastoplastic strains in thin-walled beams under mobile loads /Uprugo-plasticheskie deformatsii tonkostennykh sterzhnei pri podvizhnykh nagruzkakh/.  
05 p0841 A69-16205  
Theoretical and experimental investigation of elastoplastic strains in thin-walled beams under mobile loads /Teoretiko-eksperimental'noe issledovanie uprugoplasticheskikh deformatsii tonkostennykh sterzhnei pri podvizhnoi nagruzke/.  
15 p2711 A69-30971
- KUDRIAVTSEV, V. B.**  
Precision "angle-code" type converters employing frequency sensors of quantum magnetometers /Pretsizionnye preobrazovateli tipa "ugol-kod" na chastotnykh datchikakh kvantovykh magnitometrov/.  
12 p2016 A69-25963  
Utilization of deep-freezing as a means of substantially improving the characteristics of nuclear-precession magnetometers /Ob ispol'zovanii glubokogo okhlazhdeniia dlia sushchestvennogo uluchsheniia kharakteristik iadernogo pretsessionnykh magnitometrov/.  
14 p2446 A69-29083
- KUDRIAVTSEV, V. N.**  
Investigation of a supersonic flow past two separating bodies /Issledovanie sverkhzvukovogo obtekaniiia dvukh razdeliaushchikhsia tel/.  
14 p2391 A69-29617
- KUDRIAVTSEVA, N. A.**  
Method of calculating the aerodynamic characteristics of wings of complex planar form with subsonic leading and trailing edges /Metod rascheta aerodinamicheskikh kharakteristik kryl'ev slozhnoi formy v plane s dozvukovymi perednimi i zadnimi kromkami/.  
14 p2391 A69-29624
- KUDRIAVTSEVA, V. I.**  
Study of the working capacity of a human operator during 64-hour wakefulness /Issledovanie rabotosposobnosti cheloveka-operatora pri 64-chasovom lishenii sna/.  
22 p3877 A69-40280
- KUDRIK, P. I.**  
A problem of optimal loading of shells /Pro odnu zadachu optimal'nogo navantazhennia obolonki/.  
12 p2181 A69-26610
- KUDRIN, L. P.**  
Dense-plasma diagnostics with the aid of gamma-ray resonance scattering /O diagnostike plotnoi plazmy pri pomoshchi rezonansnogo rasseianiia gamma-luchei/.  
02 p0291 A69-12481
- KUDRINA, L. P.**  
Stabilizing filter circuits in the microwave range for solid-state devices /Fil'trovyie stabiliziruiushchie tsepi SVCh diapazona dlia tverdotel'nykh priborov/.  
11 p1849 A69-24961
- KUDRITSKII, V. D.**  
Optimal extrapolation algorithm for multidimensional random processes /Algoritim optimal'noi ekstrapolatsii bagatovimirnykh vipadkovykh protsessiv/.  
19 p3287 A69-36663
- KUDSIA, C. M.**  
Transmission and reflection group delay of Butterworth, Chebyshev, and elliptic filters.  
21 p3686 A69-39139
- KUDZIN, A. IU.**  
Domain structure of barium titanate crystals /Domennaia struktura kristallov titanata barii/.  
21 p3783 A69-39559
- KUEBER, B.**  
Fabrication of large arched bottoms from aluminum alloys /Die Herstellung von grossen gewoelbten Boeden aus Aluminiumlegierungen/.  
02 p0254 A69-12678
- KUEBLER, M.**  
Thermal control in the Azur research satellite.  
17 p2903 A69-33427
- KUECHEMANN, D.**  
Developments in airfoil theory /Entwicklungen in der Tragfluegeltheorie/.  
04 p0543 A69-14802  
Aerodynamic design.  
09 p1433 A69-22774
- KUEGLER, E.**  
Measuring setup for simple adjustment of equalizers in carrier transmission systems.  
11 p1841 A69-25639
- KUEGLER, G. K.**  
Short term frequency stability measurements of the applications technology satellite no. 1 multiple access communication system.  
23 p4129 A69-42509
- KUEHL, S.**  
Aircraft engines and their oils /Flugmotoren und ihre Oele/.  
24 p4321 A69-43141
- KUEHN, G. D.**  
The facile isolation of a structural phospholipoprotein from *Hydrogenomonas facilis* and *Neurospora crassa*.  
22 p3871 A69-40049
- KUEHN, R. E.**  
Computer redundancy - Design, performance, and future.  
12 p2034 A69-26567
- KUENTZMANN, P.**  
Agglomeration of alumina particles in a nozzle flow of a metallized propellant /Agglomeration des particules d'alumine dans l'écoulement de tuyère d'un propergol metallisé/.  
22 p4001 A69-40929
- KUENZI, K.**  
A microwave scanning radiometer.  
02 p0221 A69-12457
- KUENZNER, H.**  
Properties of certain related unconventional two-axis gyroscopes /Eigenschaften einiger verwandter nightkonventioneller Zweiaachsen-Wendekreisel/.  
04 p0597 A69-14831
- KUERTI, G.**  
The interaction region in the boundary layer of a shock tube.  
22 p3932 A69-40894
- KUERZINGER, K.**  
Influence of slow protons on infectious DNA of bacteriophage phiX174 /Einwirkung von langsamen Protonen auf infektiöse dns des Bakteriophagen phiX174/.  
23 p4081 A69-41431
- KUGAENKO, B. V.**  
Evolution of almost-circular artificial earth satellite orbits under the influence of zonal harmonics.  
01 p0157 A69-11304
- KUGATH, D.**  
Remote manipulators in space.  
15 p2558 A69-30187  
Manipulator technology - Ready for space now.  
24 p4297 A69-43041
- KUGATH, D. A.**  
Satellite maintenance using remote manipulator spacecraft.  
19 p3430 A69-36001
- KUHFUSS, K. H.**  
Calculation of the characteristic of a Schmitt trigger /Berechnung der Kennlinie eines Schmitt-Triggers/.  
01 p0039 A69-10171
- KUHLBERG, J. F.**  
The dynamic simulation of turbine engine compressors. [AIAA PAPER 69-486]  
16 p2842 A69-32697
- KUHLMANN-WILSDORF, D.**  
Unified theory of stages II and III of work-hardening in pure fcc metal crystals.  
05 p0778 A69-15755
- KUHLTHAU, A. R.**  
Determination of the gravitational constant G.  
24 p4350 A69-42944



## KUHN, E.

## KUHN, E.

Analysis of changes in the pulse rate during exercise and recovery after sixty hours of complete fasting.  
21 p3655 A69-38910

## KUHN, L.

Wave mixing in a bounded magnetoplasma.  
03 p0475 A69-13146

## KUHN, M.

On the zero-bias anomaly in GaAs tunnel diodes.  
19 p3388 A69-36542

## KUHN, P.

Fracture design analysis for aircraft vehicles.  
17 p3060 A69-33563

## KUHN, P. M.

High altitude radiometric measurements of cirrus.  
09 p1536 A69-21641  
Infrared measurements of variations in stratospheric water vapour.  
20 p3535 A69-38261

## KUHN, R. E.

Factors influencing the choice of facilities and techniques for aeronautical development.  
05 p0741 A69-15572

## KUHN, W. R.

Infrared radiative cooling in the middle atmosphere /30-110 km/.  
12 p2064 A69-26008

## KUHNEL, W. C.

Terminal state error analysis using adjoint-generated sensitivities.  
13 p2296 A69-27940

## KUHNELL, P. H.

Data handling during ESRO satellite testing and launching.  
05 p0727 A69-16771

## KUHR, F.

Hall Generators- Properties and Applications /Hall-Generatoren- Eigenschaften und Anwendungen/.  
03 p0406 A69-13954

## KUIJK, K. E.

Generating the sum or difference of two signal frequencies.  
10 p1665 A69-24047

## KUIKEN, H. K.

An asymptotic solution for large Prandtl number free convection.  
07 p1239 A69-18266  
General series solution for free convection past a non-isothermal vertical flat plate.  
11 p2002 A69-25243  
Free convection at low Prandtl numbers.  
21 p3849 A69-38772  
Large-amplitude low-frequency oscillation of a slender wedge in inviscid hypersonic flow.  
24 p4248 A69-43582

## KUIPER, G. P.

Arizona-NASA atlas of infrared solar spectrum - A preliminary report.  
06 p1008 A69-17808  
Arizona-NASA atlas of infrared solar spectrum. II.  
06 p1008 A69-17809  
NASA atlas of infrared solar spectrum - Report III.  
06 p1008 A69-17810  
A high-resolution solar spectrometer for air-borne infrared observations.  
06 p0928 A69-17811  
Arizona-NASA atlas of infrared solar spectrum. IV.  
21 p3800 A69-38682  
Arizona-NASA atlas of infrared solar spectrum. VI.  
21 p3800 A69-38683

## KUIPER, R. A.

An interferometric study of the shock-reflection process in ionizing argon.  
16 p2771 A69-31918  
Interferometric study of the end-wall thermal layer in ionizing argon.  
[AIAA PAPER 69-694]  
17 p3074 A69-33477

## KUIUN, A. I.

Strain studies by means of a thermoelectric method /Issledovanie deformatsii s pomoshch'yu termoelektricheskogo metoda/.  
11 p1985 A69-25178

## KUIZENG, D. J.

Nonlinear optical properties of Ba sub 2 NaNb sub 5 O sub 15 in the tetragonal phase.  
09 p1515 A69-21354

Simple analytic expressions for AM and FM modulated pulses in homogeneous lasers.  
13 p2270 A69-27191

## KUJAWSKI, A.

A scalar representation of coherence properties of blackbody radiation.  
05 p0795 A69-16819

Coherence properties of plane electromagnetic waves.  
24 p4350 A69-42982

## KUKHARETS, V. P.

Turbulence in the atmospheric boundary layer above steppe and sea surfaces /Turbulentnost' v pograničnom sloe atmosfery nad stepnoi i morskoi poverkhnostiami/.  
03 p0458 A69-13270

Turbulence in the atmospheric boundary layer above steppe and sea surfaces.  
14 p2471 A69-28778

## KUKHARSKAIA, N. F.

Greenhouse effect in the Venusian atmosphere /Parnikovyi efekt v atmosfere Venerii/.  
13 p2345 A69-27690

## KUKHARSKII, R. I.

Stimulated emission of active fibrous filaments /Vynuzhdennoe izluchenie aktivnykh volokonnykh nitei/.  
05 p0761 A69-15657

The induced emission of active fibers.  
16 p2792 A69-32514

## KUKHTA, K. I. A.

Determination of the natural frequencies of a solid beam with variable parameters and concentrated masses /Viznachennia vlasnikh chastot nerozriznoi balki zmennikh parametriv iz zoseredzhenimi masami/.  
21 p3833 A69-38575

## KUKHTENKO, A. I.

A groups theory application while designing symmetrical dynamic systems.  
12 p2129 A69-26071

A compromise control in the hierarchical structure controlled members.  
12 p2050 A69-26089

Complex Control Systems /Slozhnye sistemy upravleniia/.  
19 p3285 A69-35888

Basic trends in the development of the theory of complex control systems /Osnovnye napravleniia razvitiia teorii upravleniia slozhnymi sistemami/.  
19 p3286 A69-35889

## KUKHTENKO, V. I.

A method of synthesis of self-adjusting systems for stabilization of dynamic characteristics.  
03 p0410 A69-13256

Stability of self-adjusting systems with stabilized frequency response.  
04 p0582 A69-14796

Experimental determination of the frequency characteristics of a system in the presence of noise /Eksperimental'noe opredelenie chastotnykh kharakteristik sistemy pri deistvii pomekh/.  
24 p4289 A69-42950

## KUKLIN, G. V.

Some regularities in the distribution of large-scale magnetic fields on the sun.  
08 p1394 A69-20610

A few notes on the sunspot activity in dependence on the phase of the 11-year cycle and on the heliographic latitude.  
08 p1379 A69-20611

On a more precise calculation of the electric conductivity in the photosphere and in sunspots.  
09 p1579 A69-22175

## KUKOLEVA, T. V.

Plasma Diagnostics. Number 2 /Diagnostika Plazmy. Number 2/.  
14 p2494 A69-29775

## KUKONIN, V. E.

Determination of the temperature pulsations in the cross section of a plasma jet /Opredelenie pul'satsii temperatury v poperechnom sechenii plazmennoi strui/.  
10 p1729 A69-23432

## KUKOTA, I. U. P.

Blowing of neutral gases as a means of protecting the electrodes of MHD devices /Primenenie vduva neutral'nykh gazov dlia zashchity elektrodov MGD-ustroistv/.  
11 p1826 A69-25232

## KUKS, I. A.

Algorithm concerning the problem of image recognition /Ob odnom algoritme v svyazi s problemoi radsoznaniia obrazov/.  
14 p2418 A69-29353

## KUKSENKO, B. V.

Theory of oscillatory relaxation of diatomic molecules /K teorii kolebatel'noi relaksatsii dvukhatomnykh molekul/.  
02 p0284 A69-12485

Excitation of oscillations and the decomposition of diatomic molecules during atom/molecule collisions in a high-temperature gas /Vozbuzhdenie kolebanii i raspad dvukhatomnykh molekul pri atom-molekuliarnykh stolknoveniakh v gase vysokoi temperatury/.  
13 p2302 A69-27797

## KUKSENKO, N. P.

Optimal spatial distribution of search power in the detection of several signals.  
05 p0723 A69-16786

## KUKULADZE, G. V.

The face effect in single crystals of gallium antimonide, grown according to the Czochralski method.  
09 p1558 A69-21870

## KUKUSH, V. D.

Incoming microwave power meter based on a directional coupler /Izmeritel' prokhodiashchei moshchnosti SVCh na osnove napravlenno otvetvitiia/.  
19 p3282 A69-35826

## KUKUSHKIN, S. F.

Thermal resistance of multilayer cylindrical elements in the thermionic converters.  
14 p2539 A69-29218

## KUKUSHKINA, R. S.

Dynamics of the region of polar auroras and the propagation of radio waves at high latitudes /Dinamika zony poliarnykh siiani i rasprostraneniye radiovoln v vysokikh shirotakh/.  
14 p2436 A69-29058

## KULA, E. B.

Segregation at interphase boundaries.  
03 p0450 A69-13883

## KULAENKO, V. S.

Determination of permittivity from the ratio between the amplitudes of the E-components of waves reflected and transmitted by the dielectric /Opredelenie dielektricheskoi pronsaemosti po otnosheniiu amplitud E-komponent otrazhennoi i proshedshei cherez dielektrik voln/.  
23 p4123 A69-41950

## KULAGIN, A. G.

Radiation effects of the American high-altitude thermonuclear satellite, "Star Fish," measured by the "Cosmos-6" satellite.  
20 p3532 A69-37960

Radioactivity of the Cosmos 6 satellite and the probable points of radioactive debris collection at altitudes from 300 to 350 km /Radioaktivnost' iz "Kosmos-6" i predpolagayemye mesta nabora radioaktivnykh oskolkov na vysote 300-350 km/.  
23 p4205 A69-41836

## KULAGIN, A. I.

Matching of a thermionic converter with a solar cell in a solar power array /K voprosu soglasovaniya termoeissionnogo preobrazovatelya s geliopriemnikom v solnechnoi energeticheskoi ustanovke/.  
13 p2209 A69-27970

## KULAGIN, V. S.

Computer calculation of the phase and polarization characteristics of the emission of a dipole situated on the edge of a wedge /Raschet na ETsVM fazovykh i polarizatsionnykh kharakteristik izlucheniia vibratora na rebre klina/.  
23 p4138 A69-41937

## KULAKOV, L. V.

Emission spectrum of a chemical laser using an H sub 2 plus F sub 2 mixture.  
23 p4172 A69-41493

## KULAKOVSKAIA, N. S.

Investigation of Plasmoids /Issledovanie plazmennykh sgustkov/.  
24 p4356 A69-43467

## KULANDER, J. L.

Curves of growth for non-equilibrium gases. II - Finite continuous opacity.  
01 p0121 A69-10959

## KULESHOV, A. I.

Automation of an analytic method for solving ordinary differential equations.  
04 p0622 A69-14624

KULESHOV, E. M.

Classification and principles of construction of fast-response microwave interferometers /Printspisly postroeniia i klassifikatsiia bystrodeistvuiushchikh mikrovolnovykh interferometrov/.  
09 p1496 A69-22028

Analysis of the errors in certain microwave interferometer circuits /Analiz pogreshnosti nekotorykh skhem mikrovolnovykh interferometrov/.  
09 p1496 A69-22029

KULESHOV, V. A.

Derivation of the equation of mechanical state for metals during the process of creep /K vyvodu uravneniia mekhanicheskogo sostoiianiia metallov v protsesse polzuchesti/.  
22 p4048 A69-41268

KULESKO, N. A.

Finite-parametric family of solutions to systems of differential equations with a deviating argument /O konechnoparametricheskoi semeitve reshenii sistem differentsial'nykh uravnenii s otkloniaiuschimsia argumentom/.  
06 p0948 A69-17500

KULESZO, H.

Application of the tape-recorder for simultaneous double-channel recording in electrophysiological investigations.  
07 p1131 A69-18640

KULEVSKII, L. A.

Q-switching of a ruby laser with the aid of an electrooptical LiNbO sub 3 shutter /Moduliatsiia dobrotnosti rubinovogo lazera pri pomoshchi elektroopticheskogo zatvora iz LiNbO sub 3/.  
19 p3336 A69-36346

KULGACHEV, A. G.

Signal-to-noise ratio in FM signal recordings /Otnoshenie signal/pomekha pri zapisi ChM signalov/.  
11 p1834 A69-24612

KULGEIN, N. G.

Electrical characteristics of equilibrium plasma sheaths. [AIAA PAPER 69-702]  
17 p3011 A69-33473

KULHANEK, J.

Classical dynamics in an expanding universe.  
11 p1920 A69-25561

KULI-ZADE, D. M.

A new solar curve of growth.  
02 p0314 A69-11637

Velocity of turbulent motions in the solar photosphere /O skorosti turbulentnykh dvizhenii v fotosfere solntsa/.  
05 p0823 A69-16014

KULICHENKO, A. K.

Investigation of the shape of nuclear cascade showers in lead and the energy spectrum of nuclear-active particles with the aid of a calorimeter with lead absorbers.  
13 p2303 A69-28399

The penetrating component of the cosmic rays at mountain altitudes and the hypothesis of a passive baryon state.  
13 p2331 A69-28400

Test of the hypothesis of the existence of a passive baryon state by means of the calorimeter telescope technique.  
13 p2331 A69-28401

On the magnitude of the lead-copper transition effect.  
13 p2304 A69-28417

KULIK, I. O.

Temperature dependence of the Josephson current in anisotropic superconductors.  
05 p0810 A69-16803

KULIK, V. A.

Wear and fatigue resistance of some titanium alloys after nitriding /Iznosostoikost' i ustalost' nekotorykh titanovykh spлавov posle azotirovaniia/.  
19 p3347 A69-36743

KULIKOV, E. I.

Certain properties of a signal at the output of an optimal receiver /O nekotorykh svoistvakh signala na vykhode optimal'nogo priemnika/.  
06 p0888 A69-17464

Recognition of orthogonal signals by resolving devices with limited sensitivity /Raspoznavanie ortogonal'nykh signalov reshaiushchimi ustroistvami s ogranichennoi chuvstvitel'nost'iu/.  
15 p2563 A69-30135

Some properties of the output signal of an optimal receiver.  
20 p3496 A69-37947

KULIKOV, F. R.

The use of oxygen-free fluxes for fusion welding titanium alloys.  
06 p0930 A69-17093

KULIKOV, G. V.

Study of the structure of extensive air showers at sea level with the modernized hodoscope system of the Moscow University installation.  
13 p2332 A69-28405

Phenomenological characteristics of extensive air showers at sea level.  
13 p2332 A69-28406

KULIKOV, N. D.

A magnetosensitive quartz element /Kvartsevyi magnito chuvstvitel'nyi element/.  
14 p2446 A69-29084

KULIKOV, N. K.

Some boundedness and unboundedness criteria for the solutions of ordinary linear differential equations /Nekotorye kriterii ogranichennosti i neogranichennosti reshenii obyknovennykh lineinykh differentsial'nykh uravnenii/.  
12 p2120 A69-26035

KULIKOV, O. F.

Angular and energy distribution of gamma quanta during a Compton effect at relativistic electrons /Uglovoe i energeticheskoe raspredeleniia gamma kvantov pri Kompton- effekte na relativistskikh elektronakh/.  
10 p1701 A69-23132

KULIKOV, V. V.

Modern Systems of Wireless Telecommunication /Sovremennye sistemy besprovodnoi dal'nei svyazi/.  
20 p3487 A69-37235

KULIKOVA, E. V.

Determination of the resistance of a metal-semiconductor contact /Opredelenie soprotivleniia kontakta metall-poluprovodnik/.  
21 p3780 A69-39046

KULIKOVSKII, A. G.

Gas velocity variation in ionizing shock waves - The problem of the conductive piston.  
11 p1935 A69-25740

Gas-ionizing shock waves in an arbitrarily oriented magnetic field.  
19 p3381 A69-36773

KULIKOWSKI, J. L.

Calculation of optimum linear filters on the basis of the Hodges-Lehmann criterion /Obliczanie filtrow liniowych optymalnych w sensie kryterium Hodgesa-Lehmana/.  
02 p0223 A69-11565

KULIKOWSKI, R.

On optimum control with integral and magnitude type of constraints.  
02 p0223 A69-11564

KULISHOV, A. A.

Plastic bending during the shaping of corrugated panels by the method of constrained bending /Plasticheskie izgib pri formoobrazovanii gofirovannykh panelei metodom stesnennogo izgiba/.  
19 p3324 A69-35833

KULIUPIN, I. U. O.

Investigation of luminescence and electron emission centers in dispersed gold films /Doslidzhennia tsentriv svitinnia ta elektronnoi emisii u dispergovaniikh zolotikh plivkakh/.  
14 p2504 A69-28992

KULKE, B.

Small-signal and saturation characteristics of an X-band cyclotron-resonance oscillator.  
09 p1470 A69-22786

KULLANDA, K. M.

Origin and functional effect of induced primary potentials of the cerebral cortex /O proiskhozhdenii i funktsional'nom znachenii pervichnykh vyzvannykh potentsialov gory golovnoho mozga/.  
22 p3886 A69-41067

KULLERUD, G.

Phase relations in the system Cr-Fe-S.  
19 p3359 A69-36123

KULLSTAM, P. A.

Design of millimeter wave communication systems.  
03 p0405 A69-13723

KULMAN, N. K.

Noise rejection in various types of pulse modulation during the transmission of a speech message /Pomekhoustoichivost' razlichnykh vidov impul'snoi modulatsii pri peredache rechevogo soobshcheniia/.  
14 p2413 A69-29464

KULP, J. L.

Scattering by two-component random distributions of spheres.  
04 p0555 A69-14282

KULSHRESHTHA, A. P.

Studies of ultraviolet irradiation effects in ZnO-type thermal control coating pigments. [AIAA PAPER 69-639]  
17 p2992 A69-33288

KULSRUD, R.

The effect of wave-particle interactions on the propagation of cosmic rays.  
15 p2675 A69-30761

KULSRUD, R. M.

Plasma instabilities.  
02 p0293 A69-12783

Application of the energy principle to Astron-type and other axisymmetric devices.  
16 p2821 A69-32035

KULYBIN, V. M.

Influence of a transverse magnetic field on the power and polarization of helium-neon laser emission at the wavelength lambda equals 3.39 mu /Vliianie poperechnogo magnitnogo polia na moshnost' i polarizatsiiu izlucheniia gelineonovogo OKG na dline volny lambda equals 3,39 mk/.  
02 p0260 A69-12844

KUMADA, M.

Studies on the convective heat transfer from a rotating disk. III - Heat and mass transfer in a laminar flow about a rotating disk with suction or injection in the axial stream.  
06 p1029 A69-17002

Studies on the convective heat transfer from a rotating disk. IV.  
06 p1029 A69-17003

KUMAGAI, N.

Surface waveguide consisting of inhomogeneous dielectric thin film.  
05 p0731 A69-16294

Interaction of plane electromagnetic waves with a moving compressible plasma fluid.  
08 p1360 A69-20097

Resonating and guiding systems for laser beams.  
09 p1518 A69-22125

Interaction of a plane electromagnetic wave with a moving conductive dielectric medium.  
18 p3105 A69-35486

Reflection and transmission of a plane electromagnetic wave by a moving isotropic plasma - A general solution.  
23 p4114 A69-41360

KUMAKHOV, M. A.

Spatial distribution of radiation defects in materials irradiated by monoenergetic particle beams /Prostranstvennoe raspredelenie radiatsionnykh defektov v materialakh, obлучennykh puchkami monoenergeticheskikh chastits/.  
06 p0981 A69-17878

Spatial distribution of radiation defects in materials irradiated with beams of monoenergetic particles.  
14 p2503 A69-28787

KUMANO-GO, H.

Pseudo differential operators and the uniqueness of the Cauchy problem.  
12 p2124 A69-26930

KUMAR CHAKRABARTI, S.

Plane thermal stress in a non-homogeneous transversely isotropic rotating circular disc.  
15 p2712 A69-31016

KUMAR CHAUDHURI, P.

Infinite strip in plane theory of elasticity.  
15 p2707 A69-30625

KUMAR GHOSH, P.

Bending under varying loads of an anisotropic elliptical plate.  
12 p2180 A69-26269

KUMAR MAHALANABIS, R.

A mixed boundary value problem of thermoelasticity.  
15 p2712 A69-31013

KUMAR SEN, S.

On an automatic computation of characteristic roots of a matrix.  
04 p0624 A69-14967

KUMAR, A.

Radiation from tapered dielectric rod aerials.  
09 p1464 A69-22097

Tapered dielectric rod aerials.  
21 p3681 A69-38444



## KUMAR, A. M.

Protein quality of the bacterium *hydrogenomonas eutropha*.  
10 p1644 A69-23306

## KUMAR, N.

A note on the role of zero-point energy in evolutionary cosmology.  
10 p1780 A69-23649

A transistorized tachometer for automotive engines.  
12 p2090 A69-26240

## KUMAR, R.

Magnetoelastic vibrations of a fluid-filled cylindrical cavity in an infinite solid medium.  
03 p0528 A69-13927

Axially symmetric vibrations of a fluid-filled spherical shell.  
13 p2363 A69-28185

## KUMAR, R. C.

S-band three port stripline circulator.  
03 p0404 A69-13472

S-band Y-junction stripline circulator with triangular ferrite.  
08 p1286 A69-20838

Current transport in isotype heterojunctions.  
11 p1938 A69-25115

## KUMAR, R. K.

Gas phase ignition theory, with feedback, of a homogeneous propellant under shock tube conditions. [AIAA PAPER 69-559]  
16 p2880 A69-32740

## KUMAR, R. N.

Theory of laminar flame propagation with non-normal diffusion.  
21 p3849 A69-38802

## KUMAR, S.

Rapid filling period of the left ventricle - Measurement by apexcardiography.  
03 p0376 A69-14081

Relationship of paper speed to precision of pulse wave measurements - A multiple observer study of left ventricular ejection time.  
19 p3258 A69-36449

## KUMAR, V.

Theoretical pressure distribution in self-acting hydrodynamic journal bearings without end flow considering turbulence.  
18 p3139 A69-34270

## KUMAR, V. R. J.

Latitude variation of times of maximum h'F and spread F occurrences.  
03 p0420 A69-13305

## KUMAR, Y.

Some studies of longwave propagation of Radio Tashkent 164 kc/s.  
10 p1659 A69-24065

## KUMBASAR, N.

Free transverse vibration of flat slabs. [ASCE PAPER 739]  
09 p1616 A69-24928

## KUME, S.

Possible existence of dense ferrimagnetic perovskite allotropic form of yttrium iron garnet.  
08 p1372 A69-20372

## KUMIROV, B. A.

Influence of cooling on the working fluid parameters in an air-cooled turbine stage /Vliianie okhlazhdeniia na parametry rabocheho tela v stupeni turbiny s vozdushnym okhlazhdeniem/.  
18 p3184 A69-34985

## KUMMER, W. H.

Relationship between cross-path winds and fading rates in microwave propagation beyond the horizon.  
01 p0030 A69-10566

A high-gain self-steering microwave array.  
04 p0573 A69-14330

A high-gain self-steering microwave repeater.  
11 p1839 A69-25294

## KUNCHEV, P.

Behaviour of the Cepheid variables in the colour-colour diagram.  
08 p1395 A69-20635

## KUNDA, W.

Controlling the properties of nickel powders produced by the hydrogen reduction of nickel ammine sulphate solutions.  
08 p1334 A69-21057

## KUNDT, W.

Recent progress in cosmology.  
04 p0661 A69-15157

Hyperbolic differential equations in two dimensions.  
06 p0948 A69-17786

## KUNDU, M. R.

Radio emission from supernova remnants /Review/.  
06 p1002 A69-17314

On the spectra of radio sources Cygnus Loop and IC443.  
06 p1003 A69-17322

Polarized brightness distributions of supernova remnants IC 443 and W44 at 6-cm wavelength.  
10 p1787 A69-24113

## KUNDU, P.

A temperature-stable RC transistor oscillator.  
12 p2036 A69-25919

## KUNII, D.

Heat transfer mechanisms between wall surface and fluidized bed.  
20 p3632 A69-37519

## KUNIN, V. IA.

Electrical conductivity of silicon monoxide thin films.  
10 p1745 A69-23324

Changes in the electrical conductivity and color of SrTiO sub 3 single crystals in a constant electric field /Izmenenie elektroprovodnosti i okraski monokristallov SrTiO sub 3 v postoiannom elektricheskom pole/.  
15 p2666 A69-30043

## KUNIO, T.

Behaviour of lowcycle fatigue at elevated temperatures.  
10 p1797 A69-23081

Investigation of low cycle fatigue at elevated temperatures.  
18 p3219 A69-34834

## KUNITA, M.

Magnetic-field dependence of Josephson current modified by self-field.  
04 p0640 A69-14437

## KUNKEL, W. E.

Two-color composite photographs of the Magellanic Clouds.  
12 p2152 A69-25801

Large flare on YZ Canis Minoris.  
17 p3043 A69-34165

## KUNO, H. J.

Push-pull operation of transferred-electron oscillators.  
15 p2574 A69-30168

## KUNTE, P. K.

Splash albedo measurements over Hyderabad /lambda equals 8 deg N. geo. mag./.  
06 p0989 A69-17278

Proposed experiments to measure the spectra and time variation of X-ray sources.  
06 p0992 A69-17312

Estimate of re-entrant albedo flux over Hyderabad from the observed directional asymmetries.  
22 p4005 A69-40519

## KUNTSEVICH, A. G.

Reduction of observations on a large-base radio interferometer /K reduksii nabludenii radiointerferometrom s bol'shoi bazoi/.  
08 p1314 A69-20434

## KUNTSEVICH, V. M.

Investigation of a multivariable pulse-frequency modulated control system by Liapunov's direct method /Issledovanie ustoiichivosti mnogomernoi sistemy upravleniia s chastotno-impul'snoi modulatsiei priamym metodom Liapunova/.  
01 p0050 A69-10207

The analysis of stability of multivariable control systems with pulse-frequency modulation by the Liapunov direct method.  
12 p2049 A69-26080

Investigating the stability of a multivariable control system with pulse-frequency modulation using the direct Lyapunov method.  
14 p2424 A69-28743

## KUNTZ, W.

A new sample-and-hold device and its application to the realization of digital filters.  
04 p0574 A69-14350

## KUNTZMANN, J.

Computer-aided design /CAD/ in the fields of electronics and logic systems /La conception assistee par ordinateur /CAO/ dans les domaines de l'electronique et des ensembles logiques/.  
08 p1278 A69-19970

## KUNZ, H. R.

Liquid transport properties of some heat pipe wicking materials. [ASME PAPER 69-HT-17]  
24 p4413 A69-43551

## KUNZE, H. J.

The laser as a tool for plasma diagnostics.  
08 p1326 A69-20471

## KUNZE, H.-J.

Collisionless shock waves and turbulent heating in high voltage theta pinches.  
17 p3013 A69-33825

## KUNZE, J. F.

Cavity reactor critical experiments.  
07 p1179 A69-18954

## KUNZE, U.

Cutting tool for preparing endless magnetic tapes /Schneidvorrichtung zum Anfertigen endloser Magnetbandschleifen/.  
08 p1321 A69-20876

## KUO-PETRAVIC, L. G.

The ion cyclotron drift loss-cone instability in mirror magnetic wells.  
02 p0288 A69-12169

## KUO, C. T.

On the final states of shallow arches on elastic foundations subjected to dynamical loads. [ASME PAPER 68-WA/APM-26]  
04 p0669 A69-14394

## KUO, H. L.

Motions of vortices and circulating cylinder in shear flow with friction.  
17 p2950 A69-33151

On a simplified radiative-conductive heat transfer equation.  
19 p3363 A69-36498

On the boundary layer of a maintained vortex.  
19 p3363 A69-36499

## KUPER, A. B.

Combined MOS and radiochemical analysis of impurities in SiO sub 2 on Si.  
07 p1072 A69-18272

## KUPER, C. G.

Do faster-than-light group velocities imply violation of causality/ques/.  
21 p3769 A69-38543

## KUPERUS, M.

Oscillatory phenomena in quiescent prominences.  
07 p1205 A69-19245

## KUPFER, M.

KA-26, a multi-purpose helicopter.  
07 p1053 A69-18969

## KUPIDONOV, S. S.

Theoretical and experimental study of the dynamics of cylindrical end-face milling of certain aircraft alloys /Teoreticheskoe i eksperimental'noe issledovanie dinamiki tortsevo-tsilindricheskogo frezerovaniia nekotorykh aviatsionnykh splavov/.  
21 p3731 A69-38877

## KUPPERMAN, R. H.

Mathematical Foundations of Systems Analysis. Volume 1.  
21 p3754 A69-38576

## KUPPERMANN, A.

Low-energy, high-angle electron-impact spectrometry.  
01 p0123 A69-10620

Angular dependence of low-energy electron-impact excitation cross section of the lowest triplet states of H sub 2.  
06 p0962 A69-17820

## KUPRADZE, V. D.

Boundary value problems of thermoelasticity /Granichnye zadachi termouprugosti/.  
12 p2182 A69-26726

## KUPRADZE, W. D.

Numerical techniques in potential and elasticity theory /Ueber numerische Verfahren der Potential- und der Elastizitaetstheorie/.  
10 p1801 A69-23687

## KUPREVIKH, N. F.

Experimental two-channel television telescope of the Pulkovo Observatory /Dvukhkanal'nyi eksperimental'nyi televizionnyi teleskop Pulkovskoi observatorii/.  
20 p3547 A69-38309

## KUPRIIANOV, S. E.

Formation of highly excited atoms in electron collisions with CO, O sub 2, and N sub 2.  
18 p3177 A69-35125

## KUPRIIANOVA, E. B.

Thermal radiation of nitrogen plasma in the region from 0.5 to 1.1 mu /Teplovoe izluchenie azotnoi plazmy v oblasti 0.5-1.1 mkm/.  
07 p1189 A69-18283

Electron forces of the 1 super plus system of N sub 2 bands of the Meinel system of N sub 2 super plus. II /Elektronnyye sily 1 super plus sistemy polos N sub 2 i sistemy Mainelia N sub 2 super plus. ii/.  
20 p3579 A69-37307

**KUPRIICHUK, P. F.**  
Determination of the carrying capacity of shallow shells of revolution of variable thickness /Opredelenie nesushchei sposobnosti pologikh obolochek vrashcheniia peremennoi tolshchiny/.  
18 p3225 A69-35370

**KUPRISHOV, V. F.**  
Emission of a polymethine dye employed in a neodmium glass laser /Generatsiia polimetinovogo krasitelia, primeniachogo v lazere na neodimovom stole- kle/.  
21 p3739 A69-39542

**KURAEV, A. A.**  
Theory of regenerative amplification in devices with nonretarded waves /K teorii regenerativnogo usileniia v priborakh s nezamedlennymi volnami/.  
02 p0214 A69-11610  
Regenerative amplification in unretarded wave devices.  
11 p1847 A69-24717  
Experimental investigation of the influence of the wall on the readings of a thermoanemometer /Eksperimental'noe issledovanie vliianiia stenki na pokazaniia termoanemometra/.  
19 p3308 A69-35857

**KURAHASHI, K.**  
The effects of temperature and ions on the refractive index of VLF radio waves in the lower ionosphere.  
18 p3102 A69-34971

**KURAKIN, G. M.**  
Investigation of the effect of uniaxial loading on the change of harmonic components of a pickup's signal.  
05 p0763 A69-15995  
Theoretical design of horseshoe-shaped magnetic sensors located above a ferromagnetic medium /O teoreticheskomo raschete podkovoobraznykh datchikov nad ferromagnitnoi sredoi/.  
12 p2094 A69-26719  
The higher harmonics method of inspecting welded joints.  
24 p4319 A69-42886

**KURAMSHIN, T. A.**  
A multibeam interferometer for studies on gas flows.  
08 p1314 A69-20385

**KURASHOV, V. N.**  
Information capacity of a quantum system with a limited maximum number of particles /Informatsionnaia emkost' kvantovoi sistemy pri ogranichennom maksimal'nom chisle chastits/.  
19 p3334 A69-35885

**KURASHVILI, A. E.**  
Functional relationship between semicircular canals and the otolithic apparatus /O funktsional'noi sviazi mezhdu polukruzhnymi kanalami i otolitovym apparatom/.  
20 p3471 A69-37257  
Electronystagmography and its prospects /Elektronistagmografiia i ee perspektivy/.  
20 p3481 A69-37273

**KURAT, G.**  
The formation of chondrules and chondrites and some observations on chondrules from the Tieschitz meteorite.  
19 p3409 A69-36089  
The Siena meteorite /Der meteorit von Siena/.  
20 p3602 A69-37534

**KURATA, T.**  
Dynamic stability tests of V/STOL model.  
06 p0866 A69-17091

**KURATANI, K.**  
Shock-wave study of vibrational energy exchange between diatomic molecules.  
13 p2301 A69-27361  
Static firing tests of the solid rocket motor in low pressure environment.  
22 p4000 A69-40593

**KURAZHEV, A. A.**  
The elongation of cavities in automatic inert gas-shielded welds in titanium alloys.  
05 p0767 A69-15972

**KURAZONO, S.**  
Surface waveguide consisting of inhomogeneous dielectric thin film.  
05 p0731 A69-16294

**KURBANGALINA, R. KH.**  
Some data on the detonatability of ammonium perchlorate.  
11 p1940 A69-24553

**KURBATKIN, G. P.**  
Influence of a horizontally inhomogeneous boundary layer on the dynamics of large-scale processes.  
02 p0273 A69-11435

**KURBATOV, L. N.**  
Investigation of the optical homogeneity of gallium arsenide.  
04 p0644 A69-15266  
Self-modulation of coherent radiation emitted by an indium arsenide laser.  
07 p1148 A69-18685  
Conductivity of CdS under the action of an intense electron beam /Provodimost' CdS pod deistviem intensivnogo puchka elektronov/.  
13 p2318 A69-27886  
Automodulation of coherent radiation from indium arsenide laser.  
19 p3338 A69-36537  
Coherent recombinational radiation of some semiconductors at high levels of excitation.  
19 p3387 A69-36539  
Radiative transitions between a deep acceptor and the valence band in gallium arsenide /Izluchatel'nye perekhody glubokoi akseptor- valentnaia zona v arse- nid galliia/.  
19 p3392 A69-36611

**KURCHAKOV, A. V.**  
Catalog of reflection nebulas /Katalog otrazhatel'- nykh tumannostei/.  
21 p3816 A69-39722  
BESM-3M computer simulation of radiation scattering in a spherical nebula with a central point source /Modelirovanie na vychislitel'noi mashine BESM-30M rasseianiia izlucheniia v sfericheskoi tumannosti s tsentral'nym tochechnym istochnikom/.  
21 p3816 A69-39723  
Photometric investigation of the NGC 7023 nebula /Fotometricheskie issledovaniia tumannosti NGC 7023/.  
21 p3816 A69-39724

**KURDGELAI DZE, D. F.**  
Determination of lie groups for an equation of motion. I /K opredeleniiu grupp Li uravneniia dvizheniia. I/.  
02 p0282 A69-12840  
Symmetry and asymmetry in a microworld and in cosmology /O simmetrii i asimmetrii v mikromire i v kosmologii/.  
14 p2516 A69-28866  
Remarks on quark stars.  
19 p3401 A69-35912

**KURDIUMOV, G. V.**  
Kinetic features of the martensitic transformation during thermomechanical treatment of nickel steels.  
02 p0267 A69-12190

**KURDIUMOV, S. P.**  
A finite-difference method for solving one- dimensional nonsteady-state problems of magnetohydrodynamics /Metod konechnykh raznostei dlia resheniia odnometrykh nestatsionarnykh zadach magnitnoi gidrodinamiki/.  
01 p0129 A69-10722

**KURDIUMOVA, G. G.**  
Influence of alloying elements on the dislocation structure of chromium /Vliianie legiruiushchikh elementov na dislokatsionnuu strukturu khroma/.  
18 p3160 A69-35452

**KURFESS, J. D.**  
Search for gamma radiation from Centaurus A.  
09 p1580 A69-22269

**KURGELAI DZE, D. F.**  
Determination of the Lie algebra of linear equations. II /K opredeleniiu algebr Li lineinykh uravnenii. II/.  
02 p0273 A69-12841

**KURIANOVA, A. N.**  
Tables of corrections for refraction during observation of objects in the earth's atmosphere /Tablitsy popravok za refraktsiiu pri nabludenii ob'ektov v zemnoi atmosfere/.  
15 p2646 A69-30160

**KURIAT, R. I.**  
Investigations of the thermal stability of heat-resistant materials in a gas flow /Issledovaniia termostoikosti ogneupornykh materialov v gazovom potoke/.  
20 p3565 A69-36979

Device for testing materials under thermal and mechanical cyclic loads.  
20 p3544 A69-37816

**KURIATOV, V. N.**  
Frequency characteristics of an annular laser on a vibrating support /Chastotnye kharakteristiki kol'tse- vogo lazera na koleblushcheisia podstavke/.  
07 p1147 A69-18523

**KURIDZE, R. V.**  
Investigation of the spectrum of ionization bursts produced by the penetrating component of extensive air showers.  
13 p2332 A69-28403  
Energy and angular distributions of 10 super 11 to 10 super 12 ev muons.  
13 p2332 A69-28420

**KURIGER, W. L.**  
Practical limitations to the ranging accuracy achievable with a modulated CW laser.  
21 p3739 A69-39457  
An application of pattern recognition theory to weather prediction using quantized radar data.  
21 p3678 A69-39458

**KURIHARA, Y.**  
The survey on the physiological function of the aged pilots of JASDF.  
06 p0876 A69-18028  
Relationships between flying safety and human factors from job-satisfaction in JASDF. I.  
06 p0884 A69-18035

**KURIK, M. V.**  
Parameters of the energy structure of ZnTe- CdTe and ZnSe-ZnTe crystals.  
03 p0492 A69-14173  
Effective masses of the electrons and holes in HgSe and HgTe /Efektivni masi elektroniv i dirok v HgSe i HgTe/.  
11 p1937 A69-24920  
Effect of impurities on the optical properties of CdTe. I - Group III and VI impurities /Vliianie primesei na opticheskie svostva CdTe. I - Primesi III i VI grupp/.  
24 p4362 A69-43735

**KURIKI, I.**  
Investigations of the transequatorial propagation mode in the VHF band.  
10 p1653 A69-23192

**KURIKSHA, A. A.**  
Optimal reception of quantum signals /Ob optimal'- nom prieme kvantovykh signalov/.  
02 p0206 A69-11607  
Optimum reception of quantized signals.  
11 p1835 A69-24714

**KURILCHIK, V. N.**  
Radio emission spectra of radio galaxies.  
04 p0661 A69-15234

**KURILIN, B. I.**  
Solution of the Riccati equation for an arbitrary inhomogeneous line /Reshenie uravneniia Rikkati dlia proizvol'noi neodnorodnoi lini/.  
15 p2582 A69-30124

**KURILKO, V. I.**  
Heating of plasma ions by an external stochastic field.  
09 p1553 A69-22527

**KURILOV, G. V.**  
Behavior of solid lubricating films on a molybdenum disulfide base during friction under high-vacuum conditions /Povedenie tverdykh smazochnykh pokrytii na osnove disul'fida molibdena pri trenii v usloviakh glubokogo vakuuma/.  
16 p2793 A69-31561

**KURILOV, V. A.**  
Certain geophysical effects observed in Noril'sk during polar aurorae /Nekotorye geofizicheskie iavleniia, nabludaemye v Noril'ske vo vremia poliarnykh sianii/.  
02 p0239 A69-11694  
Some geophysical phenomena observed at Noril'sk during auroral displays.  
13 p2258 A69-28725

**KURILOVA, IU. V.**  
The atmospheric heat sources and sinks as seen from space.  
06 p0949 A69-17048  
Certain characteristics of the outgoing radiation fields /Nekotorye kharakteristiki poloi ukhodiashechei radiatsii/.  
13 p2291 A69-27726  
Radiation fields of large-scale atmospheric disturbances /Radiatsionnye polia krupnomasshtabnykh atmosferynykh vozmushchenii/.  
13 p2291 A69-27727



- Evaluation of the use of radiative information from satellites in operative synoptic work /Opyt ispol'zovaniia radiatsionnoi informatsii so sputnikov v operativnoi sinopticheskoi rabote/.  
14 p2473 A69-29729
- KURITSYN, O. I.**  
Absolute photometry of artificial earth satellites in the ultraviolet spectral region /Absolutnaia fotometriia iskusstvennykh sputnikov zemli v ul'trafioletovoi oblasti spektra/.  
14 p2447 A69-29408
- KURITSYNA, E. F.**  
Certain dynamic effects in ferrites /Nekotorye dinamicheskie efekty v ferritakh/.  
13 p2319 A69-27993
- KURIYAMA, I.**  
Mechanical behavior of poly(ethylene terephthalate) at cryogenic temperatures.  
05 p0785 A69-16494
- KURKJIAN, R. G.**  
A computer-controlled flight line tester.  
11 p1864 A69-25060
- KURLANDZKI, J.**  
Reduction of the general mixed elliptic boundary problem to a finite system of algebraic equations.  
16 p2804 A69-32062
- KURLIAND, B. I.**  
Efficient GaP diode sources of red radiation.  
06 p0979 A69-16999
- KURMAKAEV, Z. KH.**  
Some periods in the gravitational field of a rotating body.  
11 p1952 A69-24250
- KURMIT, A. A.**  
Tests for recognizing malfunctions of a finite automaton with a given degree of detail /Testy dlia razpoznavaniia neispravnostei konechnogo avtomata s zadanoi podrobnost'iu/.  
13 p2239 A69-28536
- KURNOV, V. D.**  
Emission dynamics of semiconductor laser.  
19 p3337 A69-36534  
Photoelectric recording of ultrashort pulses of a semiconductor laser /Fotoelektricheskaia registratsiia ul'trakorotkikh impuls'ov poluprovodnikovogo kvantovogo generatsii/.  
24 p4329 A69-43740
- KURNOVA, L. V.**  
Use of helium at a supercritical pressure for cooling superconducting systems under spaceflight conditions.  
04 p0585 A69-15407  
Heavy nuclei in primary cosmic rays /Tiazhelye iadra v pervichnom kosmicheskom izluchении/.  
10 p1756 A69-22820
- KUROBE, T.**  
Fracture of polycarbonate resin.  
19 p3358 A69-35776
- KUROCHKA, L. N.**  
Hydrogen line contours due to the combined action of broadening factors /Kontury linii vodoroda, obuslovlennye summarnym deistviem ushiriaiushchikh faktorov/.  
04 p0651 A69-14373  
Analysis of the profiles of hydrogen lines broadened by the Stark and Doppler effects /Analiz konturov linii vodoroda, rasshirenykh efektami Shtarka i Dopplera/.  
11 p1955 A69-24389  
The ultimate resolvable line of the Balmer series /Predel'no razreshaemaia liniia serii Bal'mera/.  
13 p2351 A69-27865  
An analysis of hydrogen-line profiles broadened by the Stark and Doppler effects.  
24 p4390 A69-43779
- KUROCHKIN, A. P.**  
Optical modeling of microwave antennas.  
05 p0736 A69-16780  
Optical simulation of microwave antennas.  
09 p1469 A69-22625
- KUROCHKIN, S. S.**  
The gamma spectrometer on "Luna-10" for the study of the lunar rocks.  
01 p0084 A69-11314
- KUROCHKIN, V. A.**  
Mathematical modeling of temperature and humidity processes in sections of sealed spaceship cabins.  
02 p0200 A69-11489
- KURODA, I.**  
Relationships between flying safety and human factors from job-satisfaction in JASDF. I.  
06 p0884 A69-18035
- KURODA, P. K.**  
Plutonium-244 in the early solar system.  
08 p1397 A69-20695  
On the existence of plutonium-244 in the early solar system.  
08 p1401 A69-20900
- KUROKAWA, H.**  
The flash spectrum observed at the total eclipse of February 5, 1962.  
24 p4388 A69-43636
- KUROKAWA, K.**  
Quenched bulk GaAs oscillators with doping gradients.  
10 p1663 A69-23667
- KUOSAKI, A.**  
Numerical calculation of the structure of Ekman boundary layer.  
19 p3363 A69-36501
- KUROVA, I. A.**  
Current oscillations in GaAs, associated with the electroacoustic effect /Kolebaniia toka v GaAs, svyazannye s akusto-elektricheskim efektom/.  
13 p2318 A69-27892
- KURPEL, M. S.**  
Certain modifications of Chaplygin's method for the approximate integration of differential equations /Prodeiki modifikatsii metodu S.O. Chaplina nablizhenogo integriruvaniia differentsial'nykh ravnaniy/.  
15 p2644 A69-30656
- KURPEL, N. S.**  
Projective-iterative methods of solving operator equations /Proektsionno-Iterativnye Metody Resheniia Operatornykh Uravnenii/.  
16 p2805 A69-32366
- KURPIS, G. P.**  
Microwave transversal equalizers.  
07 p1102 A69-18671
- KURSETZ, E.**  
Development of hot extrusion of steel and special metals in the American semfinished product industry /Die Entwicklung des Warmstrangpressens von Stahl und Sondermetallen in der amerikanischen Halbzeugindustrie/.  
15 p2618 A69-30228
- KURSHIN, L. M.**  
Elasto-plastic problem for a sheet weakened by a doubly periodic system of circular holes.  
11 p1996 A69-25736  
Equilibrium states of a cylindrical shell with initial deflections under compression /Ravnovesnye sostoiianiia tsilindricheskoi obolochki s nachal'nyimi progibami pri szhatii/.  
18 p3224 A69-35319
- KURSKAIA, T. A.**  
Experimental determination of the heat conductivity of materials in vacuum under various loads and at low temperatures /Eksperimental'noe opredelenie teploprovodnosti materialov v vakuume pri razlichnykh nagruzkakh i nizkikh temperaturakh/.  
21 p3721 A69-38639
- KURT, V. G.**  
Diffuse X-radiation background in space.  
01 p0147 A69-11310  
Low-energy proton flux in the neighborhood of the moon on December 13, 1966 /Potok protonov malykh energii v okrestnosti Lunny 13 dekabria 1966 g./.  
09 p1577 A69-21773  
The atmosphere of Venus - A comparison of the results of astronomical observations and direct experiment.  
10 p1791 A69-24200  
Modern concepts regarding the Venusian atmosphere /Sovremennye predstavleniia ob atmosfere venery/.  
11 p1960 A69-24971  
Recombination of hydrogen in the hot model of the universe.  
15 p2690 A69-30734
- KURTE, ZH.**  
New observations of M 82 /Novye nabludeniia M 82/.  
12 p2171 A69-27067
- KURTMULLAEV, R. KH.**  
Collisionless shock waves in rarefied plasma.  
08 p1303 A69-19996  
Measurement of ultrarapid plasma perturbations in experiments with shock waves /Izmereniia sverkhbystrykh vozmushchenii plazmy v eksperimentakh s udarnymi volnami/.  
14 p2498 A69-29803
- Development of a collisionless shock wave program /Razvitiie programmy po udarnym volnam bez stolknovenii/.  
17 p3012 A69-33818  
Investigation of turbulent processes within a shock wavefront in a plasma /Issledovanie kharaktera turbulentnykh protsessov vo fronte udarnoi volny v plazme/.  
18 p3180 A69-35017
- KURTZ, C. N.**  
Holographic polarization recording with an encoded reference beam.  
10 p1690 A69-22951  
Guided waves in inhomogeneous focusing media. I - Formulation, solution for quadratic inhomogeneity.  
13 p2221 A69-28062  
Guided waves in inhomogeneous focusing media. II - Asymptotic solution for general weak inhomogeneity.  
17 p2921 A69-33673  
Guided waves in inhomogeneous focusing media. III - Wall effects, losses, and the transition from fast to slow waves.  
20 p3497 A69-38130
- KURTZ, J.**  
Advances in vacuum equipment.  
04 p0598 A69-14876
- KURTZ, S. K.**  
New nonlinear optical materials.  
[IEEE PAPER F-5]  
05 p0808 A69-16312
- KURUCZ, R. L.**  
A matrix method for calculating the source function, mean intensity, and flux in a model atmosphere.  
13 p2288 A69-27564
- KURUSHIN, E. P.**  
Temperature stability of the parameters of waveguide Y-circulators /K voprosu o temperaturnoi stabil'nosti parametrov volnovodnykh Y-tsirkulyatorov/.  
23 p4123 A69-41951
- KURYLEV, V. V.**  
Optical quantum amplifier based on a GaAs injection laser /Opticheskii kvantovyi usitel' na osnove inzhetsionnogo lazera iz GaAs/.  
19 p3336 A69-36348
- KURZ, L.**  
A noncoherent detector with improved immunity to fading.  
03 p0390 A69-13215  
Suboptimum, physically realizable detection procedures for a class of nonGaussian processes with dependent samples.  
03 p0392 A69-13248  
Two sequential nonparametric detection procedures.  
06 p0888 A69-17531  
A new representation theory and detection procedures for a class of non-Gaussian channels.  
[IEEE PAPER 69-TP-10-COM]  
19 p3277 A69-36488
- KURZHANSKII, A. B.**  
A contribution to the observability of time-lag systems.  
04 p0583 A69-15094
- KURZIUS, S. C.**  
Kinetics of the branching step in the hydrogen-oxygen reaction.  
02 p0353 A69-12319  
Determination of positive ion concentrations in high-velocity laminar flames.  
13 p2380 A69-28463
- KURZWEG, U. H.**  
A criterion for the stability of heterogeneous swirling flows.  
08 p1305 A69-20851
- KUSAKABE, H.**  
System and method to predict times of the closest approach and to identify satellites.  
15 p2569 A69-30800
- KUSAKAWA, H.**  
Temperature dependence of laser-induced damage in polyethylmethacrylate with Q-switching dye.  
06 p0936 A69-17777
- KUSCHEL, G.**  
Magnetohydrodynamic flow in a rotating torus /O magnitogidrodinamicheskom techenii vo vrashchaiushchemsia tore/.  
14 p2500 A69-29907
- KUSHAKEVICH, S. I.**  
Corrosion-resistant titanium alloy with 32 percent Mo /Korroziionnostoikii spлав titana s 32 percent Mo/.  
07 p1163 A69-18781

**KUSHCH, G. G.**  
High-frequency modulation of the spatial structure of a ruby laser field /Vysokochastotnaia modulatsiia prostranstvennoi struktury polia v OKG na rubine/.  
11 p1900 A69-25569

**KUSHIDA, R.**  
A basic study of ignition of hypergolic liquid propellants. [WSCIPAPER 68-43]  
06 p0983 A69-17792

**KUSHKO, V. L.**  
Some experiments on the use of the least- moduli method in processing orbital data.  
10 p1791 A69-24193

**KUSHNAREVA, N. P.**  
High-temperature internal friction in nickel- titanium alloys /Vysokotemperaturnoe vnutrennee trenie v splavakh nikel'-titan/.  
18 p3158 A69-35443

**KUSHNER, H. J.**  
Numerical methods for the solution of the degenerate nonlinear elliptic equations arising in optimal stochastic control theory.  
02 p0224 A69-11963  
On the optimal control of a system governed by a linear parabolic equation with white noise inputs.  
05 p0740 A69-16599  
On the numerical solution of degenerate linear and nonlinear elliptic boundary value problems.  
10 p1719 A69-23515  
On stochastic differential games - Sufficient conditions that a given strategy be a saddle point, and numerical procedure for the solution of the game.  
17 p2994 A69-32844  
Finite state stochastic games - Existence theorems and computational procedures.  
22 p3975 A69-41010

**KUSHNEREVSKII, IU. V.**  
Drifts in the F2 region in the IGY and IQSY periods /Dreify v oblasti F2 v periody MGG i MGSS/.  
14 p2443 A69-29866

**KUSHNIR, A. F.**  
Optimal rank algorithms for signal detection in noise /Optimal'nye rangovye algoritmy obnaruzheniia signalov v shumakh/.  
01 p0027 A69-10374

**KUSHNIR, V. S.**  
The effect of busbars on the interaction of the flow of an electrically conducting fluid with a traveling magnetic field.  
10 p1727 A69-23101

**KUSHPIL, V. I.**  
Daylight sky spectral radiance in the ruby laser range.  
21 p3734 A69-38397

**KUSHUL, M. IA.**  
Motion of a gyroscope with a flexible axis acted on by gravity and elastic constraints for small angles of nutation - The stability of its vertical rotation.  
14 p2445 A69-28798  
Almost-periodic vibrations of nonlinear systems with quasi-cyclic coordinates.  
16 p2813 A69-32286

**KUSIC, G. L.**  
Stability of difference methods for initial- value type partial differential equations.  
10 p1720 A69-23594

**KUSKOVA, T. V.**  
Difference schemes for the solution of the Navier-Stokes equations /Review/ /Raznostnye metody resheniia uravnenii Nav'e-Stoksa /obzor/.  
03 p0415 A69-13650  
Approximate boundary conditions for the curl in the calculation of the flow of a viscous incompressible fluid /O priblizhennykh granichnykh usloviakh dlia vikhria pri raschete techenii viazkoi neszhimamoi zhidkosti/.  
03 p0416 A69-13652

**KUSLITSKII, A. B.**  
Effect of nonmetallic inclusions on the mechanism of formation of fatigue cracks /O vlianii nemetallicheskih vkluchenii na mekhanizm vozniknoveniia treshchin ustalosti/.  
22 p4047 A69-41064

**KUSOFFSKY, U.**  
Possible effects of rotation in flares and prominences.  
06 p0994 A69-17434  
A suggested method to reduce the scattered light in sunspot photometry.  
08 p1389 A69-20251

**KUSSOY, M. I.**  
Hypersonic viscous interaction on slender cones. [AIAA PAPER 68-2]  
02 p0189 A69-12520  
Cone drag in rarefied hypersonic flow. [AIAA PAPER 69-140]  
06 p0865 A69-18184

**KUSTAAHEIMO, P. E.**  
Relativistic theories of gravitation.  
02 p0318 A69-12094

**KUSTOV, E. F.**  
Investigation of a high-frequency gas discharge.  
02 p0286 A69-11572

**KUSTOV, V. I.**  
Analysis of a two-antenna method of suppressing reflections from an underlying surface /Analiz dvukhantennogo metoda podavleniia otrazhenii ot podstlaiushchei poverkhnosti/.  
15 p2567 A69-30345

**KUSUBOV, A. S.**  
Dynamic yield strength of 2024-T4 aluminum at 313 kbar.  
10 p1712 A69-23665

**KUSUDA, T.**  
Wall streaming, creeping, and a new parade motion in Ni-Fe films excited by hard-axis pulses. [IEEE PAPER 11.8]  
01 p0138 A69-10717  
Bloch wall motion in ferromagnetic films excited by fast-rising hard-axis pulses.  
20 p3584 A69-38191

**KUSUKAWA, K.-I.**  
On the magnetohydrodynamical aligned flow of a compressible fluid past a slender body placed in a circular wind tunnel.  
06 p0861 A69-17719  
On the steady flow of a non-equilibrium ionized gas past a wall with sharp corners in the presence of a magnetic field.  
17 p3010 A69-32865

**KUSUMI, F.**  
Human metabolic responses to hyperthermia during mild to maximal exercise.  
22 p3891 A69-40215

**KUSZELL, A.**  
Kinetic description of plasma in an external field. I.  
05 p0805 A69-16700  
Kinetic description of an inhomogeneous plasma.  
07 p1193 A69-19034

**KUTATELADZE, S. S.**  
Radiative-convective heat transfer in a plane layer of an absorbing screen /Luchisto- konvektivnyi teploobmen v ploskom sloe pogloshchaiushchei zavesy/.  
07 p1242 A69-18991  
Calculation of the wall turbulence constant /Vychislenie konstanty pristennoi turbulentnosti/.  
15 p2590 A69-30048

**KUTIEV, I.**  
Nonequilibrium processes of homonuclear oxygen combinations in the lower ionosphere /Neravnovesni protsesi na khomonuklearnite s'edineniia na kisloroda v niskata ionosfera/.  
13 p2255 A69-28542

**KUTIKOV, A. I.**  
Influence of the shape of the elastic curve on the volume of a beam of uniform strength under combined longitudinal and transverse bending /Vlianie na ob'em vida uprugoi linii balki ravnogo soprotivleniia pri prodol'no- poperechnom izgibe/.  
23 p4225 A69-41421

**KUTIMSKAIA, M. A.**  
Calculation of geomagnetic field lines /Raschet silovykh linii magnitnogo polia zemli/.  
20 p3522 A69-37060  
Intensity of ion production above the F2 layer maximum /Intensivnost' ionoobrazovaniia vyshhe maksimuma sloia F2/.  
20 p3525 A69-37656

**KUTNER, G. L.**  
Metal matrix composites for propeller blade applications. [AIME PAPER S69-4]  
21 p3733 A69-39473

**KUTTER, G. S.**  
A mechanism for the production of planetary nebulae.  
08 p1396 A69-20649  
Evolution of initially pure super 12 C stars and the production of planetary nebulae.  
18 p3191 A69-34298

**KUTTRUFF, H.**  
Measurements of the pressure behavior in cavity-generated pressure pulses /Messungen des Druckverlaufs in kavitationserzeugten Druckimpulsen/.  
19 p3302 A69-36870

**KUTUZA, B. G.**  
Study of the radio emission and absorption in a cloudy atmosphere in the millimeter and centimeter wavelength ranges /Issledovanie radioizlucheniia i pogloshcheniia oblachnoi atmosfery v millimetrovom i santimetrovom diapazonakh voln/.  
06 p0954 A69-17998  
Specific features of the method of microwave radiometric sounding of the atmosphere from on board aircraft /Osobennosti metoda sverkhvysokochastotnogo radiometricheskogo zondirovaniia atmosfery s letatel'nykh apparatov/.  
06 p0954 A69-18001  
Investigations of the radio emission and absorption of a cloudy atmosphere at millimeter and centimeter wavelengths /Issledovaniia radioizlucheniia i pogloshcheniia oblachnoi atmosfery v millimetrovom i santimetrovom diapazonakh voln/.  
16 p2807 A69-32270

**KUTYNA, D. J.**  
The USAF aerospace research pilot school.  
06 p0882 A69-17670

**KUTZ, R. L.**  
Adaptive data compression for video signals.  
03 p0427 A69-12869

**KUWABARA, S.**  
Electrohydrodynamic flow over a wavy wall.  
19 p3297 A69-35837  
Electrohydrodynamic oscillating piston problem.  
19 p3297 A69-35838  
Electrohydrodynamic Rayleigh- and oscillating plate-problems.  
22 p3931 A69-40686

**KUYPERS, P.**  
Distribution of television by satellite with special reference to the size of the earth- station aerials.  
10 p1654 A69-23389

**KUZ, N. IA.**  
Signal resolution during reception with a discrete aperture /O razreshenii signalov pri prieme na diskretnoi aperture/.  
06 p0890 A69-17800

**KUZAY, T. M.**  
Reverse flow profiles in turbulent freejet mixing with streamwise pressure gradient.  
24 p4306 A69-43684

**KUZHEVSKII, B. M.**  
Nuclear reactions and the line spectrum of solar-flare gamma rays.  
11 p1945 A69-24241

**KUZIN, B. G.**  
Study of the dependence of surface purity on some design and technological factors in laser- beam working /Issledovanie zavisimosti chistoty poverkhnosti pri obrabotke luchom lazera ot diana konstruktivno- tekhnologicheskikh faktorov/.  
04 p0606 A69-14607

**KUZIN, P. A.**  
Effect of a local dynamic load on a freely supported rigid ideally plastic plate /O deistvii lokal'noi dinamicheskoi nagruzki na svobodno opertuiu zhestkoideal'no- plasticheskuiu plastinku/.  
18 p3217 A69-34593

**KUZINA, I. O.**  
Locking of tracking systems with a variable vector signal.  
11 p1861 A69-25716

**KUZINA, Z. N.**  
Effect of a local dynamic load on a freely supported rigid ideally plastic plate /O deistvii lokal'noi dinamicheskoi nagruzki na svobodno opertuiu zhestkoideal'no- plasticheskuiu plastinku/.  
18 p3217 A69-34593

**KUZJURINA, L. A.**  
A comparative evaluation of different methods for detection of extraterrestrial life.  
01 p0021 A69-11093

**KUZMA, D. C.**  
Theory of the mechanism of sealing with application to face seals. [ASLE FICFS PREPRINT 18]  
15 p2620 A69-30489



KUZMA, IU. B.

Phase equilibria in the systems vanadium- chromium-carbon, niobium-chromium-carbon, and tantalum-chromium-carbon.

09 p1523 A69-21872

Phase equilibria in the systems Zr-Re-B and W-Re-B.

10 p1711 A69-23332

Ternary system chromium-rhenium-boron /Troinaia sistema khrom-reni-bor/.

10 p1715 A69-24054

The systems niobium-iron-boron and niobium-cobalt-boron.

15 p2641 A69-31246

X-ray structural study of ternary systems V-Cr-B, Nb-Cr-B, and Mo-Cr-B /Rentgenostrukturnoe issledovanie troinykh sistem V-Cr-B, Nb-Cr-B i Mo-Cr-B/.

18 p3158 A69-35262

KUZMAK, G. E.

Effects of finite extent of the powered phases in the problem of optimum transfers between nearby near-circular noncoplanar orbits.

10 p1783 A69-23712

Approximate construction of optimal transfers in a small neighborhood of a circular orbit /Priblizhennoe postroyeniye optimal'nykh pereletov v maloi okrestnosti krugovoi orbity/.

19 p3427 A69-36612

KUZMANOV, IU. D.

Investigation of the minerals in the ablated crust of the Saratov meteorite /Issledovanie mineralov kory plavleniya meteorita Saratov/.

01 p0160 A69-11385

KUZMENKO, V. A.

Viscoelastic longitudinal oscillations of a rod with an end mass /Viazko-uprugie prodol'nye kolebaniia sterzhnia s massoi na kontse/.

12 p2177 A69-25995

KUZMIN, A. D.

A theory for the radio emission from Mercury.

03 p0512 A69-13688

"Venera-4" and interpretation of radioastronomical measurements of Venus.

10 p1791 A69-24202

Modern data on the planet Venus.

15 p2698 A69-31360

The constructive schemes of multisupport steerable parabolic antennas.

23 p4149 A69-42128

KUZMIN, A. E.

Possibility and advantages of mass-spectrometric analysis of lunar soil material from the ion component of the products of vaporization of the lunar soil by an electron beam /O vozmozhnosti i preimushchestvakh mass-spektrmetricheskogo analiza veshchestva grunta luny po ionnoi komponente produktov ispareniia grunta elektronnykh luchem/.

22 p4034 A69-41107

KUZMIN, A. F.

Possibility of determining lunar rock types by the mass spectrometric method /O vozmozhnosti opredeleniia tipa lunnykh porod mass-spektrmetricheskimi metodami/.

22 p4034 A69-41106

KUZMIN, A. I.

Characteristics of the interplanetary magnetic field according to data for semidiurnal cosmic-ray variations /Kharakteristiki mezhplanetnogo magnitnogo polia po dannym polusutochnykh variatsii kosmicheskikh luche/.

14 p2512 A69-29046

Cosmic Ray Variations and Solar Activity /Variatsii kosmicheskikh luche i solnechnaia aktivnost'.

16 p2849 A69-32052

KUZMIN, F. I.

Tables for the Analysis and Control of Reliability /Tablitsy dlia Analiza i Kontrolya Naдеzhnosti/.

04 p0608 A69-15540

KUZMIN, G. P.

Investigation of inversion in a CO sub 2 laser during pulsed pumping /Issledovanie inversii v CO sub 2 - lazere pri impul'snoi nakachke/.

09 p1519 A69-22289

Influence of the choice of the instant of Q-switching in pulsed pumping of a CO sub 2 laser on the intensity of the generated pulses.

10 p1703 A69-23619

Pulsed CO sub 2 laser with double modulation.

14 p2457 A69-28926

Influence of dissociation of the inversion on a CO sub 2 laser with pulsed pumping.

18 p3151 A69-34620

KUZMIN, I. A.

High-latitude geomagnetic disturbances in June 1965 /Geomagnitnye vozmushcheniia v vysokikh shirotakh v iune 1965 g./.

17 p2964 A69-33961

KUZMIN, M. G.

Observation of nonlinear absorption in certain organic substances /Nabludenie nelineinogo pogloshcheniia v nekotorykh organicheskikh veshchestvakh/.

03 p0439 A69-13055

KUZMIN, M. P.

Combined effect of two-month hypokinesia and acceleration on the cardiovascular system.

02 p0197 A69-11495

Influence of high-altitude mountain acclimatization on the tolerance of the organism to environmental effects /Vliianie vysokogornoi akklimatizatsii na ustoiichivost' organizma k vozdеistviu faktorov vneshnei sredy/.

13 p2212 A69-28623

KUZMIN, N. A.

Approximate boundary conditions in the electrodynamics of stratified tensor media.

21 p3675 A69-39282

KUZMIN, V. A.

Neutrino emission from massive stars and supernovae /Ob izlucheniі neutrino massivnykh zvezdami i sverkhnovymi/.

10 p1756 A69-22814

Structure of the sun and the neutrino emission /Struktura solntsa i neutrinoe izluchenie/.

13 p2333 A69-28434

Calculation of geomagnetic field lines /Raschet silovykh linii magnitnogo polia zemli/.

20 p3522 A69-37060

KUZMINA, R. P.

Application of methods of boundary layer theory in the problem of the motion of a gyroscope in a gimbal suspension /Primenenie metodov teorii pogranichnogo sloia v zadache o dvizhenii giroskopa v kardanovom podvese/.

18 p3135 A69-34559

KUZMINA, V. I.

Effect of additional alloying on the mechanical properties of an Al-Zn-Mg-Li alloy /Vliianie dopolnitel'nogo legirovaniia na mekhanicheskie svoistva splava Al-Zn-Mg-Li/.

11 p1901 A69-24270

KUZMINSKY, I.

A solid state S-band to VHF converter for 1970.

19 p3270 A69-36238

KUZMISHCHEV, L. I.

The use of the YuS-38M chronograph for testing high-speed, curtain-type shutters.

12 p2093 A69-26598

KUZNETS, E. I.

Man's thermal tolerance - A review of the literature.

10 p1645 A69-23494

KUZNETSOV, A. E.

Threshold conditions for laser pumping with the emission of a perfect black body /Porogovye usloviia nakachki OKG izlucheniem absolutno chernogo tela/.

03 p0442 A69-14220

KUZNETSOV, A. G.

Autonomic phenomena during motion sickness.

08 p1263 A69-19935

Motion sickness in dogs before and after intravenous administration of sodium hydrocarbonate /Bolezni' dvizheniia u sobak do i posle vnutrivennnogo vvedeniia gidrokarbonata natriia/.

20 p3473 A69-37269

New equipment for studying the vestibular analyzer /Novye ustanovki dlia issledovaniia vestibuliarnogo analizatora/.

20 p3481 A69-37274

KUZNETSOV, A. N.

A problem in the statics of thin elastic beams /Ob odnoi zadache statiki tonkikh gibkikh sterzhnei/.

12 p2181 A69-26572

KUZNETSOV, A. P.

Investigation of the earth's ozonosphere from satellites /Issledovaniia ozonofery zemli so sputnikov/.

12 p2064 A69-25952

Investigation of the planetary distribution of ozone on the basis of ultraviolet spectra measured by satellites /Issledovanie planetarnogo raspredeleniia ozona po ul'trafiolotovym spektram, izmerennym na sputnikakh/.

15 p2597 A69-30654

KUZNETSOV, B. G.

Numerical calculation of stationary problems of a viscous incompressible fluid /O chislennom raschete statsionarnykh zadach viazkoi neszchimaemoi zhidkosti/.

11 p1875 A69-25480

KUZNETSOV, B. I. N.

An investigation of the backscattering diagram of Venus at 40-cm wavelength.

02 p0314 A69-11639

KUZNETSOV, D. A.

Some results of the active regions magnetic field researches.

22 p4010 A69-39991

KUZNETSOV, E. I.

Transport coefficients of the plasma in the Tokamak TM-3 apparatus.

16 p2820 A69-31795

KUZNETSOV, I. L.

Survey of turbulent gas flows by an optical method.

06 p0926 A69-17540

KUZNETSOV, IU. A.

A theory of iterative processes /K teorii iteratsionnykh protsessov/.

10 p1718 A69-23208

Effect of sectionalizing on the electrical characteristics of an MHD generator at high magnetic Reynolds numbers.

11 p1824 A69-24224

Explosive magnetohydrodynamic generator with a superconducting magnetic system /Vzryvnoi magnitogidrodinamicheskii generator so sverkhprovodiashchei magnitnoi sistemoi/.

14 p2393 A69-28911

On the theory of iteration processes.

21 p3756 A69-39149

KUZNETSOV, IU. K.

Microwave emission from a plasma in an inhomogeneous magnetic field. I - Emission at harmonics of the electron cyclotron frequency.

08 p1370 A69-21019

Drift-dissipative instability in a PIG discharge.

08 p1370 A69-21020

Nonthermal microwave emission from a PIG discharge plasma /Neteplovoe mikrovolnovoe izluchenie iz plazmy otrazhatel'nogo razriada/.

09 p1549 A69-22018

Dissipative drift instability of a plasma from a discharge with oscillating electrodes /Dreifovodissipativnaia neustoiichivost' plazmy v razriade s ostsiliruiushchimi elektronami/.

09 p1550 A69-22019

Raman scattering of microwaves at plasma drift oscillations /Kombinatsionnoe rassaiianie mikrovoln na dreifovykh kolebaniiax plazmy/.

09 p1550 A69-22021

KUZNETSOV, K. A.

The durability of lens shutters.

12 p2094 A69-26600

KUZNETSOV, K. I.

Study of the effect of iron and silicon impurities on the properties and structure of duralumin type alloys during the fabrication of compacted semifinished products from granules /Issledovanie vliianiia primesei zheleza i kremniia na svoistva i strukturu spлавov tipa duralumin pri proizvodstve kompaktnykh polufabrikatov iz granul/.

03 p0452 A69-14120

KUZNETSOV, N. M.

Oscillatory relaxation of multiaxial gases and gas mixtures /K kolebatel'noi relaksatsii mnogoatomnykh gazov i gazovykh smesei/.

15 p2654 A69-30109

KUZNETSOV, O. A.

Structural characteristics of atmospheric turbulence in the surface layer over the open sea /Strukturnye kharakteristiki atmosfernoі turbulentnosti v privodnom sloe nad otkrytym okeanom/.

21 p3758 A69-39111

KUZNETSOV, O. M.

Discrete vortices in the wake of various profiles in a subsonic and supersonic two-dimensional gas flow /Diskretnye vikhri v slede za razlichnyimi profilami v dozvukovom i sverkhzvukovom ploskom potoke gaza/.

02 p0191 A69-12587

KUZNETSOV, O. N.

Experimenter observation factor in soundproof chamber tests.

02 p0200 A69-11516

The concept of the personality and environment in experimental space psychoneurology.

10 p1647 A69-23587

- KUZNETSOV, S. N.**  
Radial diffusion of electrons of energy greater than 100 kev in the outer radiation belt.  
06 p0919 A69-17720  
Particle fluxes in the outer geomagnetic field.  
12 p2150 A69-26744
- KUZNETSOV, S. O.**  
Investigation of the oxidative-catalytic method of mineralization of wastes in a closed ecological system.  
10 p1649 A69-23579
- KUZNETSOV, V. A.**  
Field emission and surface structure of the Mo-Re alloy in the regions of the alpha and sigma phases /Avtoelektronnaya emissiya i struktura poverkhnosti splava Mo-Re v oblasti alpha- i sigma-faz/.  
12 p2113 A69-26041
- KUZNETSOV, V. G.**  
Repolarization processes in barium titanate single crystals in sinusoidally variable fields /Protsepi perepoliarizatsii monokristaliv titanatu bariuu v sinusoidno zminnikh poliakh/.  
05 p0808 A69-16215
- KUZNETSOV, V. I.**  
Investigation of the interstellar absorption and distribution of stars in the region alpha sub 1950.0 equals 19 super h 22 super m, delta sub 1950.0 equals plus 17 deg /Issledovanie mezhzvezdnogo pogloshcheniya i raspredeleniya zvezd oblasti alpha sub 1950.0 equals 19 super h 22 super m, delta sub 1950.0 equals plus 17 deg/.  
15 p2683 A69-30513  
Structural characteristics of the Milky Way at longitudes between 338 and 22 deg /Strukturnye osobennosti Mlechnogo Puti v dolgotakh 338-22 deg/.  
15 p2683 A69-30514
- KUZNETSOV, V. M.**  
The Gunn effect and its applications /Effekt Ganna i ego primeneniya/.  
18 p3183 A69-35160
- KUZNETSOV, V. P.**  
Device for observing the developing fatigue cracks on rotating specimens.  
05 p0843 A69-16665  
Parametric fluctuations of a weakly nonlinear system /Parametricheskie kolebaniya slabo nelineinoi sistemy/.  
18 p3171 A69-34564
- KUZNETSOV, V. S.**  
Some peculiarities of the orienting reaction to the effect of sonic pressure pulses /Nekotorye osobennosti oriento-rovochnoi reaktsii pri vozdetsitvii zvukovykh impul'sov davlenniya/.  
03 p0378 A69-14210
- KUZNETSOV, V. Z.**  
Polarization reversal processes of barium titanate single crystals in sinusoidally varying fields.  
20 p3584 A69-37785
- KUZNETSOVA, E. M.**  
Automodulation of coherent radiation from indium arsenide laser.  
19 p3338 A69-36537
- KUZNETSOVA, F. A.**  
Radiative-conductive heat transfer in a plane layer of a gray heat-conducting medium /Luchisto-konduktyvnyi teploobmen v ploskom sloe seroi teploprovodnoi sredy/.  
09 p1621 A69-21433
- KUZNETSOVA, G. M.**  
A dynamic model of the F region of the ionosphere including temperature variations /Dinamicheskaya model' oblasti F ionosfery, vkluchaiushchaya temperaturnye izmeneniya/.  
23 p4156 A69-41843
- KUZNETSOVA, L. A.**  
Contribution to the theory of dielectric dispersion in inhomogeneous dielectrics and semiconductors /K teorii dielektricheskoi dispersii v neodnorodnykh dielektrikakh i poluprovodnikakh/.  
02 p0301 A69-12837
- KUZNETSOVA, M. A.**  
Determining the radiative heat flux in the lower layers of the atmosphere.  
10 p1682 A69-23327
- KUZNETSOVA, R. I.**  
Cosmic-radiation-induced radioactivity of the moon and meteorites and the origin of meteorites /Radioaktivnost' luny i meteoritov, vyzvannaya kosmicheskimi luchami, i proiskhozhdenie meteoritov/.  
19 p3410 A69-36092
- KUZNETSOVA, S. S.**  
Diurnal rhythms and ionizing radiation effects.  
15 p2557 A69-31458
- KUZNETSOVA, T. I.**  
Problem of light pulse narrowing in a laser with an inertialess bleachable filter /K voprosu o suzhenii svetovykh impul'sov v lazere s bezynerstionnym prosvetliaiushchimsia fil'trom/.  
03 p0440 A69-13716  
On the gas laser regime at high pressures.  
06 p0934 A69-17680  
Problem of recording ultrashort light pulses /K probleme registratsii sverkhkorotkikh svetovykh impul'sov/.  
09 p1516 A69-21575  
Interaction between electromagnetic fields and active media /O vzaimodeistvii elektromagnitnykh polei s aktivnymi sredami/.  
12 p2110 A69-26907  
Anomalous intensities of hydrogen lines in the spectrum of HD 152107 /Anomalia intensivnosti linii vodoroda v spektre HD 152107/.  
13 p2352 A69-27873
- KUZNETSOVA, V. F.**  
Calculation of wave processes in pipelines in the process of filling with a fluid /K raschetu volnovykh protsessov v truboprovodakh pri zapolnenii ikh zhidkost'iu/.  
24 p4300 A69-43075
- KUZNETSOVA, V. M.**  
Study of the influence of the temperature factor on the transition from a laminar to a turbulent flow regime in the boundary layer /Issledovanie vlianiia temperaturnogo faktora na perekhod ot laminarnogo k turbulentnomu rezhimu techeniya v pogranichnom sloe/.  
13 p2251 A69-28558
- KUZOVKOV, N. T.**  
Experimental investigation of self-adaptive systems with damping estimate based on the phase shift /Eksperimental'noe issledovanie samonastraiivaiushchikhsia sistem s otsenkoi dempfirovaniia po fazovomu sdvigu/.  
01 p0052 A69-10796
- KUZOVNIKOV, A. A.**  
Study of the complex admittance of a plasma in the low-frequency region /Issledovanie kompleksnoi provodimosti plazmy v oblasti nizkikh chastot/.  
03 p0477 A69-13713  
Study of space-charge layers by the plasma capacitor method /Issledovanie sloev prostanstvennogo zariada metodom plazmennogo kondensatora/.  
03 p0477 A69-13714
- KVASHA, L. K.**  
Principal characteristics of chondrules and chondrites /Glavnye osobennosti khondrit i khondritov/.  
07 p1212 A69-18548
- KVASIL, B.**  
Quantum Electronics /Kvantova Elektronika/.  
18 p3178 A69-35401  
Excitation of cavity resonators and waveguides by a system of active molecules /Buzeni dutinovykh rezonatoru a vlnovodu aktivnim souborem molekul/.  
18 p3178 A69-35404
- KVAVADZE, D. K.**  
Certain features of the sporadic E layer of the ionosphere /Nekotorye osobennosti sporadicheskogo sloia E ionosfery/.  
14 p2435 A69-29038  
Vertically traveling perturbations in the ionosphere /Vertikal'no peremeshchaiushchiesia vozmushchenosti v ionosfere/.  
17 p2969 A69-34000  
Seasonal and diurnal variations in radio wave absorption in the ionosphere over Tiflis /Sezonnye i sutochnye variatsii pogloshcheniya radiovoln v ionosfere nad Tbilisi/.  
20 p3491 A69-37677  
Frequency dependence of radio wave absorption in the ionosphere and the effect of deflecting absorption /Chastotnaya zavisimost' pogloshcheniya radiovoln v ionosfere i vlianie otkloniaiushchego pogloshcheniya/.  
20 p3491 A69-37680  
Ionospheric disturbances and short-period oscillations of the earth's electromagnetic field /Vozmushcheniya v ionosfere i KPK elektromagnitnogo polia zemli/.  
20 p3528 A69-37686
- KVIFTE, G.**  
Twilight observations.  
21 p3711 A69-38515
- KVIFTE, G. J.**  
Pulsating aurora.  
21 p3708 A69-38492  
Morphology of the pulsating aurora.  
24 p4308 A69-43004
- KVITKA, V. E.**  
Calculation of the noise characteristics of jet air-liners.  
09 p1435 A69-22637
- KVITKO, K. V.**  
Obtaining a Chlorella biomass with an enhanced content of sulphur-containing amino acids and its nutritive value /Polucheniye biomassy Khlorelli s povyshennym soderzhaniiem serosoderzhashchikh aminokislot i ee pishchevaia tsennost'/.  
13 p2216 A69-28620
- KVIZ, Z.**  
On the cometary, lunar and solar influences on the earth's atmosphere.  
11 p1965 A69-25420
- KWAN, R. K.**  
The effects of filtering and limiting a double- binary PSK signal.  
20 p3492 A69-37705
- KWAST, T.**  
Lines of galaxies /Linie galaktyk/.  
17 p3044 A69-34175
- KWASZCZYNSKA, K.**  
Analysis of compression of short cylinders of Coulomb material.  
08 p1410 A69-19890
- KWIATKOWSKI, M.**  
Shaping a honeycomb core by a bending method for curvilinear sandwich structures /Kszaltowanie rdzenia komorkowego metoda zginania dla krzywoliniowych konstrukcji przekladkowych/.  
16 p2794 A69-32006
- KWOK, C. C. K.**  
A theoretical study of vortex flow in a thin cylindrical chamber.  
10 p1679 A69-23557
- KYDONIEFS, A. D.**  
Finite axisymmetric deformations of an initially cylindrical elastic membrane.  
08 p1418 A69-21001
- KYKER, R. A.**  
The development of an improved method of conducting height-velocity testing on rotary wing aircraft. [AHS PAPER 353]  
17 p2900 A69-33524
- KYLE, H. L.**  
Electron-impact ionization of H/2s and H/2p/.  
06 p0961 A69-17138  
On a peaking approximation in scattering theory.  
08 p1355 A69-20206
- KYLE, R. G.**  
Description of a real-time digital full-scale CMG control system simulation for manned spacecraft. [AIAA PAPER 69-940]  
22 p3919 A69-40323
- KYLE, T. G.**  
A comparison between statistical model and line by line calculation with application to the 9.6-mu ozone and the 2.7-mu water vapor bands. [AFCLR-68-0505]  
01 p0124 A69-10919  
Detection of nitric acid in the earth's atmosphere.  
11 p1879 A69-25407  
Infrared solar spectrum as observed from balloons.  
13 p2341 A69-27589  
Presence of HNO sub 3 in the upper atmosphere.  
24 p4308 A69-42969
- KYNCL, M.**  
Visualization of temperature fields as isotherms /Sichtbarmachen der Temperaturfelder als isothermen/.  
20 p3539 A69-37437
- KYNER, W. T.**  
Rigorous and formal stability of orbits about an oblate planet.  
04 p0658 A69-14887
- KYRISS, C. L.**  
Theoretical evaluation of the simulation of radiative heating of planetary entry vehicles. [AIAA PAPER 69-634]  
17 p2891 A69-33281
- KYSILKA, J.**  
Selection and amplification of a single mode- locked optical pulse.  
03 p0441 A69-14185



- Use of the azimuthal distribution for the analysis of cosmic-ray jets. 16 p2849 A69-32045
- Transverse momentum of particles in jets and determination of fireball parameters in accelerators. 19 p3396 A69-36644
- LA FRANCE, R. C.**  
Sixteen earth-orbit film for the Apollo Mission Simulator. 16 p2792 A69-32787
- LA MACCHIA, J. T.**  
Stroboscopic holography with a mode-locked laser. 02 p0250 A69-12411
- LA ROSA, G.**  
Design selection criteria for an onboard aircraft computer /Criteres de choix de l'architecture d'un calculateur embarque sur avion/. 20 p3500 A69-37381
- LA TOISON, M.**  
Evolution of infrared heating - Emitters employing a quartz vessel /Evolution du chauffage par infrarouge - Les emetteurs a ampoule de quartz/. 03 p0411 A69-13548
- LA VALLE, L.**  
Experimental determination of the structural data of the equations of large atmospheric motions on the basis of harmonic analysis of waves in the zonal current /Determinazione sperimentale dei dati strutturali delle equazioni dei grandi moti atmosferici basata sull'analisi armonica delle onde nella corrente zonale/. 13 p2295 A69-28648  
Experimental determination of the main influence functions of dynamical meteorology. 19 p3364 A69-36504
- LAAKSO, C. W.**  
Scanning electron beam display of dislocation space charge. 02 p0301 A69-12661
- LAASONEN, P.**  
Theory of the discretization error in elliptic differential equations /Zur Theorie der Diskretisierungsfehler bei elliptischen Differentialgleichungen/. 03 p0457 A69-13741
- LAASPERE, T.**  
Observations of lower hybrid resonance phenomena on the OGO 2 spacecraft. 05 p0754 A69-16257  
An experiment to study electric and electromagnetic fields in the frequency range 10 Hz to 540 kHz on OGO-F. 19 p3284 A69-36677
- LAATS, A.**  
Apollo guidance and control system flight experience. [AIAA PAPER 69-891] 21 p3824 A69-39416
- LABBE, J.**  
Design of a device for inserting equipment into a space simulation chamber /Realisation d'un introducteur de materiels dans un caisson de simulation spatiale/. [ONERA-TP-676] 20 p3510 A69-37405
- LABES, M. M.**  
Influence of electric fields on the rate of growth of molecular solids. 01 p0135 A69-10140  
Relationship between electric field strength and helix pitch in induced cholesteric-nematic phase transitions. 04 p0555 A69-14964
- LABEYRIE, J.**  
Elementary particles and cosmic radiation /Particules elementaires et rayonnement cosmique/. 02 p0307 A69-11907  
The cometary origin of meteors deduced from the effect of solar cosmic radiation on meteorites and the significance of this origin /Origine cometaire des meteorites deduite de l'effet du rayonnement cosmique solaire dans les meteorites et la consequence de cette origine/. 08 p1406 A69-20930
- LABITZKE, K.**  
Midwinter warmings in the stratosphere and lower mesosphere. 05 p0753 A69-15800  
Developments in stratospheric and mesospheric analyses which dictate the need for additional upper air data. 08 p1345 A69-20134  
Midwinter warmings in the stratosphere and lower mesosphere and the behaviour of ionospheric absorption. 17 p2962 A69-33779
- LABOIS, E.**  
Recombination transients in argon-cesium discharges /Transitoire de recombinaison dans les decharges argon-cesium/. 10 p1733 A69-23445
- LABOMBARDA, P.**  
Definition of the guidance law for guided systems /Definizione della legge di guida per i sistemi autoguidati/. 10 p1723 A69-23701
- LABORDE, J. R.**  
Variable stars in IC 4499-V. 20 p3598 A69-37462
- LABORIE, P.**  
Tables of Effective Electron Cross Sections and Macroscopic Coefficients. Volume 1 - Hydrogen and Rare Gases /Tables de Sections Efficaces Electroniques et Coefficients Macroscopiques. Volume 1 - Hydrogene et Gaz Rares/. 09 p1541 A69-21579
- LABOURDETTE, R.**  
Study of servo-controls by the modal response /L'etude d'une servo-commande par le schema modal/. [ONERA-TP-668] 06 p0869 A69-17100
- LABRUM, N. R.**  
80 MHz heliograph observations of two type IV events on 4 and 6 May 1968. 09 p1582 A69-22749  
Movement and structure in a complex solar outburst at 80 MHz. 17 p3025 A69-33807
- LABUDZKI, J.**  
Nondestructive testing in commercial aviation /Badania nieniszczace w lotnictwie komunikacyjnym/. 07 p1143 A69-19702
- LABYNTSEV, V. A.**  
Unsteady thermal behavior of packaged micromodules /Nestatsionarnyi teplovoi rezhim paketirovannykh mikroblukov/. 23 p4136 A69-41558
- LACAZE, A.**  
Thermal and hydrodynamical study of a whirling layer of liquid hydrogen under high heat flux. 05 p0849 A69-16818
- LACEY, J. D.**  
Spectral flux densities of radio sources at 22.25 MHz. 16 p2860 A69-32231  
Large 22-MHz array for radio astronomy. 20 p3507 A69-37837
- LACHIVER, F.**  
Seasonal hormonal effect of states of depressed metabolism. 10 p1642 A69-23120
- LACHOWICZ, H.**  
Square wave generator for the power supply of a junction laser /Generator impulsow prostokatnych do zasilania lasera zlaczowego/. 13 p2274 A69-28643
- LACHS, G.**  
Information rates for photocount detection systems. 20 p3485 A69-36923
- LACKEY, W. W.**  
Preferential shifts in consumption of metabolic fuels following exposure to rocket fuel substances. 14 p2407 A69-29303
- LACKMAN, L. M.**  
Aircraft structures. 19 p3438 A69-36325
- LACKNER, D. R.**  
The solar flares of August 28 and 30, 1966. 07 p1205 A69-19247
- LACKNER, K.**  
Theoretical analysis of a coaxial Hall accelerator. 05 p0806 A69-16734  
Compressible turbulent magnetohydrodynamic boundary layers. 08 p1366 A69-20786
- LACLAVERIE, J. J.**  
Perturbation function and analytical representation of the motion of a satellite /Fonction perturbatrice et representation analytique du mouvement d'un satellite/. 22 p4030 A69-40906
- LACOMBE, C.**  
On some characteristic features of type IV bursts. III - Electron acceleration in a collisionless shock wave in the solar corona. 09 p1578 A69-22058
- LACOMBE, D.**  
Solid-state phased-array radar uses Gunn diodes, microwave IC's. 14 p2420 A69-29435
- LACOMBE, P.**  
Structural modifications of metals and alloys during creep, and their relation to different periods of the deformation-time curve at constant temperature /Les modifications de structure des metaux et alliages au cours du fluage et leur relation avec les divers stades de la courbe de deformation-temps a temperature constante/. 17 p2985 A69-32904  
New applications of autoradiographic methods in studies of diffusion and phase transformation in iron-chromium alloys /Nouvelles applications des methodes autoradiographiques dans les etudes de diffusion et de transformation de phase dans les alliages fer-chrome/. 20 p3561 A69-37416  
Demonstration, by radioisotopes, of the structural heredity of iron-nickel alloys with less than 20 percent nickel content in the course of transformations by cooling /Mise en evidence par les radio-isotopes de l'heredite structurale au cours des transformations au refroidissement des alliages fer-nickel de teneurs inferieures a 20 percent en nickel/. 20 p3562 A69-37781
- LACORRE, J.**  
Evolution of the noise spectrum as a function of temperature in field effect transistors /Evolution du spectre de bruit en fonction de la temperature dans les transistors a effet de champ/. 11 p1853 A69-25391
- LACOTTE, B.**  
Study and development of a counter-discounter of slow resolution time /Etude et realisation d'un compteur-decompteur a faible temps de resolution/. 05 p0735 A69-16702
- LACOUME, J.-L.**  
Study of the effect of passage through the lower ionosphere and of the earth-ionosphere waveguide on the polarization of radio whistlers relative to the ground /Etude de l'effet de la traversée de la basse ionosphere et du guide d'onde terre-ionosphere sur la polarisation des sifflements radio-electriques au sol/. 08 p1306 A69-20181
- LACOUR, J.**  
Computer-aided design /CAD/ in the fields of electronics and logic systems /La conception assistee par ordinateur /CAO/ dans les domaines de l'electronique et des ensembles logiques/. 08 p1278 A69-19970  
Evolution of the complexity of integrated circuits /Evolution de la complexite des circuits integres/. 15 p2625 A69-30825
- LACOURLY, S.**  
Successive development of electromagnetic /ULF and VLF/ and light emissions during magnetic substorms /Developpement successif des emissions electromagnetiques /U.B.F. et T.B.F./ et lumineuses au cours des sous-orages magnetiques/. 16 p2788 A69-32648
- LACY, C. C.**  
Major advancement in fabrication of large titanium aircraft structures. [ASM PAPER D8-26.1] 07 p1143 A69-19671  
SST propels titanium into production era. 09 p1504 A69-22063
- LACY, G. T.**  
All-electric nonlinear actuator steers advanced tactical missiles. 23 p4225 A69-42458
- LACZKOWSKI, R.**  
Method of calculating critical angular velocities of hinged rotors /Metoda obliczania krytycznych predkosci obrotowych wirnikow przewieszonych/. 09 p1567 A69-21384  
Natural torsional-flexural vibrations of bars with a single symmetry plane /Skretno-gietne drgania wlasne prętów o jednej płaszczyźnie symetrii/. 22 p4043 A69-40456
- LADD, A. C.**  
An introduction to the ARIEL III satellite project. 21 p3856 A69-39255
- LADERMAN, A. J.**  
Time-of-flight measurement of particle velocity. 13 p2263 A69-28243
- LADNORG, U.**  
Symphonie - The German-French communication satellite /Symphonie - Deutsch-franzoesischer Nachrichten-Satellit/. 16 p2868 A69-32055

- LADNOVA, L. A.**  
Nonequilibrium laminar heat transfer with a flow of dissociated gas.  
20 p3513 A69-37087
- LADYZHENSKAIA, O. A.**  
Linear and Quasilinear Elliptic Equations.  
02 p0273 A69-12566  
Example of nonuniqueness in the class of the weak solutions of Hopf for the Navier-Stokes equations /Primer neodniznennosti v klasse slablykh reshenii Khopfa dlia uravnenii Nav'e-Stoksa/.  
14 p2428 A69-28900
- LADYZHENSKII, M. D.**  
Hypersonic Gas Flow in Space /Prostranstvennye Giperzvukovye Tsecheniia Gaza/.  
02 p0230 A69-11775
- LADYZHINSKII, I. U. P.**  
Electron scattering on neutral acceptors in semiconductors /Rasseianie elektronov na neitral'nykh akseptorakh v poluprovodnikakh/.  
03 p0484 A69-13280  
Electron scattering by neutral acceptors in semiconductors.  
14 p2508 A69-29653
- LAEMMERZAH, P.**  
Mass spectrometer measurements of positive ions and neutral gas between 100 and 233 km above Andoya, Norway.  
21 p3702 A69-38354
- LAFFERTY, J. D.**  
Aerodynamic frequency response measurements of a wind anemometer.  
24 p4315 A69-43262
- LAFFINEUR, M.**  
The millimeter wave radio telescope of the Simeiz /USSR/ observatory /Le radiotelescope sur ondes millimetriques de l'observatoire de Simeiz /URSS/.  
10 p1674 A69-23805  
Weighted observation of the corona during the total solar eclipse of September 22, 1968.  
13 p2354 A69-28472  
A new type of coronal jet associated with chromospheric bursts and with "coronal bulbs" /Sur un type nouveau de jet coronal associe a des eruptions chromospheriques et a des "bulbes coronaux"/.  
22 p4028 A69-40716
- LAFLEUR, J. D., JR.**  
Applications and development of space nuclear electric power systems.  
[AAS PAPER 69-305] 24 p4364 A69-42865
- LAFLEUR, L. D.**  
Moessbauer investigation of shocked and unshocked iron meteorites and fayalite.  
03 p0517 A69-14231
- LAFLIN, S.**  
Positive ions in the topside ionosphere.  
03 p0424 A69-13806
- LAFON, J. P.**  
Infinite values of the power radiated by a dipole in an ionized medium - Reversible and irreversible power /Infinites de la puissance rayonnee par un dipole dans un milieu ionise - Puissance irreversible-puissance reversible/.  
02 p0293 A69-12745
- LAFONT, R.**  
Raman effect in glycerol - A 4880-angstrom units ionized argon laser /Effet Raman du glycerol - Laser a argon ionise 4880 angstrom units/.  
03 p0440 A69-13366
- LAFONTAINE, E.**  
Psychotherapeutic treatment of depressions and neuroses in aviation medicine.  
23 p4086 A69-41690
- LAFOUGERE, C.**  
Behavior of the Al ZFH sub 2 solar cell under irradiation /Comportement sous irradiation de la cellule solaire Al ZFH sub 2/.  
20 p3465 A69-37911
- LAFRAMBOISE, J. G.**  
Optimum discrete approximation of the Maxwell distribution.  
13 p2313 A69-28222
- LAFUENTE, J. M.**  
Ocam design on a graphics console.  
05 p0724 A69-16384
- LAGANELLI, A. L.**  
Mass transfer cooling on a porous flat plate in carbon-dioxide and air streams.  
03 p0413 A69-12996
- LAGARDE, A.**  
Surface ablation patterns - A phenomenology study.  
[AIAA PAPER 68-671] 23 p4059 A69-41891
- LAGARDE, J. B.**  
Longitudinal and transverse vibrations of viscoelastic rods excited by inertia with the aid of a linear oscillator subjected to a harmonic stress /Vibrations longitudinales et vibrations transversales de tiges viscoelastiques excitees par inertie a l'aide d'un oscillateur lineaire soumis a une sollicitation harmonique/.  
07 p1233 A69-19326
- LAGARDE, J. B.**  
Description of the international scientific satellite ERSO II/IRIS /Presentation du satellite international scientifique ERSO II/IRIS/.  
01 p0162 A69-11101
- LAGARKOV, A. N.**  
The optical properties of hot air. I - Basic processes and spectral properties /Opticheskie svoistva goriachego vozdukh. I - Osnovnye protsessy i spektral'nye kharakteristiki/.  
07 p1185 A69-19166  
The optical properties of hot air. II - Integral characteristics between 4000 and 20,000 K /Opticheskie svoistva goriachego vozdukh. II - Integral'nye kharakteristiki 4000-20 000 deg K/.  
07 p1185 A69-19167  
Heating due to hypersonic gas flow past blunt bodies, taking radiative transport into account /Obtekanie i nagrev zatuplennykh tel giperzvukovym potokom gaza s vchetom perenosa izlucheniia/.  
20 p3457 A69-36981
- LAGER, J. R.**  
Compressive strength of boron-epoxy composites.  
07 p1170 A69-18713
- LAGERQUIST, D. R.**  
Response of complex structures to turbulent boundary layers.  
[AIAA PAPER 69-20] 06 p0914 A69-18132  
Design using symbolic topological equations.  
17 p2933 A69-33709
- LAGNEBORG, R.**  
Recovery creep in materials hardened by a second phase.  
03 p0447 A69-13615
- LAGO, B.**  
Results of the treatment of laser measurements in semidynamic geodesy /Resultats du depouillement des mesures laser en geodesie semidynamique/.  
15 p2600 A69-31365
- LAGOS, C. P.**  
Note on the mechanism of the 5577 angstrom OI night glow emission at 100 km.  
21 p3713 A69-38526
- LAGOSIUK, G. S.**  
The An-24 Aircraft - Construction and Exploitation /Samolet An-24. Konstruktsiia i Ekspluatatsiia/.  
16 p2735 A69-32112
- LAGRONE, A. H.**  
Correlation of scattering cross sections of disturbed index of refraction and acceleration increment of a conventional aircraft due to clear-air turbulence.  
10 p1656 A69-23651  
Number density determination in the atmosphere of O sub 2, H sub 2 O, and CO sub 2 gas constituents by use of a high intensity laser beam.  
16 p2781 A69-32387
- LAGUS, P. L.**  
Tidal dissipation in the earth and planets.  
08 p1393 A69-20581
- LAGUTINSKAIA, L. P.**  
Some peculiarities of magnetotelluric curves with allowance for the sphericity of the earth /Nekotorye osobennosti krivyykh mtz s uchetom sferichnosti zemli/.  
02 p0240 A69-11699  
Some characteristics of MTS curves with allowance for the sphericity of the earth.  
13 p2258 A69-28730
- LAHARRAGUE, P.**  
Image intensifier tubes and slit-type electronic cameras with high-sensitivity multiple integral images - Applications /Tubes intensificateurs d'images et cameras electroniques et fentes et a images integrales multiples a haute sensibilite - Applications/.  
12 p2083 A69-26143
- LAHEY, F. J.**  
Variational principles for steady heat conduction with mixed boundary conditions.  
16 p2880 A69-32378
- LAHIRE, S.**  
Irreversible blunted respiratory sensitivity to hypoxia in high altitude natives.  
12 p2018 A69-26130  
Peripheral chemoreflexes in the regulation of breathing of high altitude natives.  
12 p2019 A69-26131
- LAHIRE, S. K.**  
Voltage and conductivity dependence of the frequency of an acoustoelectric oscillator.  
13 p2227 A69-27244
- LAHODAS, F.**  
Early diagnosis of posttraumatic complications of head-brain-trauma /particularly of epidural and subdural hematomas/ with the aid of ultrasound-echo-encephalography /Frueherkennung posttraumatischer Komplikationen des Schadel Hirn-Traumas /Insbesondere des epi- und subduralen Haematoms/ mit Hilfe der Ultraschall-Echo-Enzephalographie/.  
21 p3652 A69-38790
- LAHTI, G. P.**  
Resonance neutron capture in a thick slab of depleted uranium.  
18 p3177 A69-35179
- LAHTI, J. N.**  
A comparison of optical receivers for deep space communications.  
03 p0389 A69-13194
- LAI, J. S. Y.**  
Behavior of nonlinear viscoelastic material under simultaneous stress relaxation in tension and creep in torsion.  
[ASME PAPER 68-WA/APM-8] 05 p0839 A69-16186  
Behavior of nonlinear viscoelastic material under simultaneous stress relaxation in tension and creep in torsion.  
[ASME PAPER 68-WA/APM-8] 13 p2362 A69-28121
- LAI, W.**  
A criterion for thermal ignition of cellulosic materials.  
11 p1940 A69-24474
- LAIBOWITZ, R. B.**  
Tunneling in metal-glass-silicon structures.  
03 p0493 A69-14183
- LAIDLAW, W. R.**  
Fighter aircraft criteria.  
14 p2393 A69-29700
- LAIDLEY, R. A.**  
X-ray fluorescence of rock samples as applied to geological problems.  
01 p0082 A69-10890
- LAIKHTMAN, D. L.**  
Influence of a horizontally inhomogeneous boundary layer on the dynamics of large-scale processes.  
02 p0273 A69-11435  
Calculation of the integral characteristics of a planetary boundary layer /K voprosu o raschete integral'nykh kharakteristik planetarnogo pogranichnogo sloia/.  
12 p2126 A69-26578  
Structural characteristics of the surface wind for aviation needs /Strukturnye kharakteristiki prizemnogo vetra dlia nuzhd aviatsii/.  
13 p2293 A69-27844  
Means of studying the interaction between the ocean and the atmosphere /Puti izucheniia vzaimodeistviia okeana i atmosfery/.  
14 p2442 A69-29838
- LAILACH, G. E.**  
Absorption of pyrimidines, purines, and nucleosides by Li-, Na-, Mg-, and Ca-montmorillonite /clay-organic studies XII/.  
05 p0716 A69-15973  
Absorption of pyrimidines, purines, and nucleosides by Co-, Ni-, Cu-, and Fe/III/-montmorillonite /Clay Organic Studies XIII/.  
05 p0716 A69-15974
- LAINÉ, D. C.**  
Transients in an ammonia-maser oscillator.  
19 p3339 A69-36825
- LAINER, B. D.**  
Influence of stoichiometry of the melt on the crystallization of gallium arsenide /O vlianii stekhiometrii raspavya na kristallizatsiiu arsenida galliia/.  
12 p2144 A69-26586  
Crystallization of gallium arsenide /O kristallizatsii arsenida galliia/.  
23 p4199 A69-42469



## LAINER, D. I.

Influence of heat treatment on the properties of superconducting niobium-tantalum alloys /Vlianie termicheskoi obrabotki na svoistva sverkhprovodiashchikh spлавov niobii-tantal/.  
19 p3345 A69-36303

## LAING, L. M.

A digital computer solution of the Laplace equation using the dynamic relaxation method.  
05 p0697 A69-15713

## LAING, R. W.

A review of remote earth observation technology.  
21 p3720 A69-38624

## LAINIOTIS, D. G.

Application of state variable techniques to optimal feature extraction.  
05 p0740 A69-16577

Minimum mean square error approximation of unknown probability distribution functions.  
06 p0947 A69-17361

Optimal estimation in the presence of unknown parameters.  
06 p0901 A69-17362

Optimal estimation in the presence of unknown parameters.  
11 p1858 A69-24935

Sensitivity analysis of discrete Kalman filters.  
18 p3110 A69-34675

Recursive algorithm for the calculation of the adaptive Kalman filter weighting coefficients.  
20 p3509 A69-37142

Simplified parameter quantization procedure for adaptive estimation.  
21 p3687 A69-39463

## LAIR, C. L.

Human factors evaluation of aircraft engine instrument displays.  
[SAE PAPER 690328] 11 p1829 A69-24488

## LAIRD, A. R.

Nighttime variations of F-region electron density profiles at Puerto Rico. III.  
03 p0503 A69-14017

Vertical drift velocities of the ionospheric F-region during the eclipse of 12 November 1966.  
12 p2077 A69-27109

## LAIRD, C.

A theory of crack nucleation in high strain fatigue.  
05 p0780 A69-16430

## LAIRD, M. L.

Structure of the neutral sheet in the geomagnetic tail.  
05 p0753 A69-16256

## LAISTER, D.

Stacking-faults in tellurium-doped gallium arsenide.  
03 p0486 A69-13614

## LAITE, P. J.

Statistical analysis of position fixing in three dimensions.  
22 p3979 A69-41253

## LAJEUNESSE, F.

Integration of the ESRO 1 satellite /Integration du satellite ESRO I/.  
15 p2702 A69-31082

## LAKE, H.

Reliability of an 11 GHz communication system in a tropical environment.  
22 p3900 A69-40680

## LAKE, J. S. H.

Substructure strengthening in aluminum.  
08 p1330 A69-20011

## LAKE, W.

Solid-propellant flame zone radiation.  
24 p4415 A69-43595

## LAKH, V. I.

Phase equilibria in the systems Zr-Re-B and W-Re-B.  
10 p1711 A69-23332

## LAKHTIN, I. U. M.

Influence of nitriding on the heat resistance and transition temperature of molybdenum alloys /Vlianie azotirovaniia na zharoprochnost' i temperaturnyi porog khrupkosti molibdenovykh spлавov/.  
01 p0093 A69-10212

Effect of nitriding on heat resistance and cold-brittleness threshold of molybdenum alloys.  
15 p2637 A69-30268

Investigation of the diffusion saturation of molybdenum and its alloys by nitrogen /Issledovanie diffuzionnogo насыshcheniia molibdena i ego spлавov azotom/.  
18 p3158 A69-35288

Thermochemical treatment of steel and titanium in a medium consisting of the pyrolysis products of tetraethoxysilane /Khimiko- termicheskaiia obrabotka stali i titana v srede produktov piroliza tetraetoksilana/.  
19 p3328 A69-36161

## LAKIN, K. M.

100 MHz surface acoustoelectric amplifier exhibiting stable terminal gain with DC drift field.  
14 p2422 A69-29559

## LAKSHMANA GOWDA, B. H.

Friction coefficient for turbulent flow through smooth pipes.  
11 p1874 A69-25429

## LAKSHMI, D. R.

Response of the 1000-kilometer ionosphere to magnetic storms.  
23 p4161 A69-42438

## LAKSHMIKANTHAM, C.

Bending general instability of shallow-stiffened cylinders.  
06 p1022 A69-17369

## LAKSHMIKANTHAM, V.

Almost periodic systems and differential inequalities.  
09 p1532 A69-21612

Stability of controlled motion.  
11 p1910 A69-25412

## LAKSHMINARAYAN, H.

Evaluation of cases of head injuries in aircrew.  
10 p1649 A69-23378

## LAKSHMINARAYANA, G.

Bending of a circular plate into a general shell.  
21 p3836 A69-39005

## LAKTIONOV, A. G.

Some characteristics of cumulus cloud structure.  
09 p1536 A69-21866

## LAL, D.

On the flux of low-energy particles in the solar system during the last 10 million years.  
19 p3411 A69-36097

## LAL, D.

Techniques for proper revelation and viewing of etch-tracks in meteoritic and terrestrial minerals.  
02 p0245 A69-12569

Chemical composition of nuclei of Z greater than 22 in cosmic rays using meteoritic minerals as detectors.  
05 p0816 A69-16355

Nuclear effects due to solar cosmic rays in meteorites.  
06 p0989 A69-17282

On the energy spectrum of iron-group nuclei as deduced from fossil-track studies in meteoritic minerals.  
19 p3410 A69-36095

Observations on space irradiation of individual crystals of gas-rich meteorites.  
20 p3590 A69-37568

Composition and energy spectrum of prehistoric cosmic radiation.  
21 p3789 A69-38815

Collecting a sample of solar wind - An experimental study of its capture in metal films.  
23 p4205 A69-41539

## LAL, K.

Similar solution using group transforms.  
15 p2592 A69-31010

## LAL, S.

On the transient nature of the galactic halo.  
08 p1386 A69-20084

## LALA, P.

A program for computing satellite ephemerides /Programma dlia vychisleniia efemerid SZ/.  
12 p2159 A69-26448

## LALAIAN, E. A.

Effect of heat treatment and shot peening on the fine crystallographic structure and properties of the AL19 alloy /Vlianie termicheskoi obrabotki i drobestruinogo naklepa na tonkuiu kristallicheskuiu strukturu i svoistva splava AL19/.  
04 p0614 A69-14576

Effect of heat treatment and cold hardening by shot blasting on the fine structure and properties of alloy AL19.  
15 p2638 A69-30278

## LALITHA

Solutions of MHD boundary layer equations with transverse magnetic field and arbitrary pressure gradient.  
09 p1545 A69-21396

## LALLEMAND, A.

Photometry of faint stars /Photometrie des etoiles faibles/.  
17 p3031 A69-33099

## LALLI, B. S.

On boundedness of solutions of certain second-order differential equations.  
07 p1172 A69-18377

## LALLY, R.

Integrated-circuit piezoelectric /I.C.P./ systems.  
01 p0049 A69-11413

## LALLY, V. E.

Constant-level balloons for sounding systems.  
07 p1053 A69-18955

Results of the GHOST Balloon Project, 1968.  
15 p2551 A69-31361

## LALO-KOURILSKY, C.

The nature of the explosive process of the combustion of hydrogen at high pressures /Sur la nature du processus explosif de la combustion de l'hydrogene a hautes pressions/.  
05 p0849 A69-16615

## LALOOE, F.

Relations between the angular state of an atomic vapor subjected to optical pumping and its absorption and scattering properties. I /Relations entre l'etat angulaire d'une vapeur atomique soumise au pompage optique et ses proprietes d'absorption et de dispersion. I/.  
12 p2111 A69-27180

## LAM, S. H.

Collisionless flow of a plasma mixture.  
[AIAA PAPER 69-78] 06 p0971 A69-18128

## LAMACCHIA, J. T.

Holographic storage in lithium niobate.  
03 p0432 A69-14184

## LAMAR, W. E.

Military aircraft - Technology for the next generation.  
18 p3092 A69-35138

Military aircraft - Technology for the next generation. II.  
24 p4252 A69-43046

## LAMART, R. M.

Emulsified fuel and fuel control systems.  
[ASME PAPER 69-GT-40] 09 p1571 A69-22486

## LAMB, D. R.

The application of silicon nitride in the MIS system.  
02 p0299 A69-12244

## LAMB, G. L., JR.

Optical pulse propagation in an inhomogeneously broadened medium.  
08 p1324 A69-20083

Evaporation of mist by an intense light beam.  
09 p1539 A69-21346

## LAMB, J. P.

An integral analysis of turbulent reattachment applied to plane supersonic base flows.  
03 p0361 A69-12990

Some correlations of theory and experiment for developing turbulent free shear layers.  
[ASME PAPER 68-FE-9] 05 p0748 A69-16077

A theory for base pressures in multi-nozzle rocket configurations.  
[AIAA PAPER 69-570] 16 p2733 A69-32751

A model for large eddy contributions in incompressible turbulent boundary layers.  
17 p2951 A69-33255

## LAMB, L. E.

Circulatory problems in prolonged space flight.  
06 p0873 A69-17016

Physiological response to steady state hypoxia.  
23 p4085 A69-41673

## LAMB, R. C.

Elastic scattering of negative pions from deuterons at 2.01, 3.77, and 5.53 GeV/c.  
17 p3007 A69-32885

Pi super minus p elastic scattering at 2.51, 2.76, and 3.01 GeV/c near t approximately equal to minus 3 /GeV/c super 2.  
24 p4352 A69-43049

## LAMB, V. R.

Developing interactive graphics systems for aerospace applications.  
[AIAA PAPER 69-954] 22 p3905 A69-40336

## LAMB, W. E., JR.

Quantum theory of an optical maser. III - Theory of photoelectron counting statistics.  
15 p2635 A69-31238

- The photoelectric effect without photons.  
17 p3007 A69-32838
- Semiclassical theory of a high-intensity laser.  
19 p3335 A69-36048
- LAMBA, S. S.**  
Partial avoidance of jump resonance in feedback systems.  
01 p0051 A69-10442
- LAMBASE, J. M.**  
Residual stresses in welded titanium and their effects upon mechanical behavior.  
[ASM PAPER GG8-6.2] 07 p1169 A69-19674
- LAMBIDIN, F.**  
Fabrication of graphite fiber-reinforced graphite composites.  
[ASM PAPER W9-20.4] 21 p3730 A69-38671
- LAMBECK, K.**  
Comparisons and combinations of geodetic parameters estimated from dynamic and geometric satellite solutions and from Mariner flights.  
15 p2600 A69-31362  
A hypothetical application of the geometric method of satellite geodesy.  
18 p3132 A69-35499
- LAMBERSON, D. L.**  
Pressure and temperature dependence of the acoustic velocities in polymethylmethacrylate.  
16 p2825 A69-31695
- LAMBERT, B.**  
Determination of the unsteady pressure field of a free-moving airscrew /Bestimmung des instationaeren Druckfeldes einer freifahrenden Luftschraube/.  
02 p0192 A69-12827  
Determination of the Unsteady Pressure Field of a Freely Rotating Propeller /Bestimmung des instationaeren Druckfeldes einer freifahrenden Luftschraube/.  
17 p2889 A69-32994
- LAMBERT, D. L.**  
Forbidden sulphur I lines in the solar spectrum.  
07 p1217 A69-19237  
The dissociation equilibrium of H- in stellar atmospheres.  
07 p1223 A69-19635  
The abundances of the elements in the solar photosphere. VII.  
08 p1390 A69-20393  
Forbidden lines of Ca II in the photospheric spectrum.  
14 p2528 A69-29962  
Intrinsic reddening of Eta Carinae.  
21 p3815 A69-39616
- LAMBERT, H. R.**  
Characteristics of faults in MOS arrays.  
21 p3684 A69-39605
- LAMBERT, J. L.**  
The gettering of gold and copper from silicon.  
03 p0487 A69-13640
- LAMBERT, R. H.**  
Optical pumping at high temperatures.  
07 p1148 A69-18893
- LAMBERT, R. J.**  
Characteristics of solar cells at low temperatures.  
19 p3251 A69-35691
- LAMBERTY, D. R.**  
Deblurring of motion-blurred photographs using extended-range holographic Fourier-transform division.  
22 p3944 A69-40020
- LAMLA, E.**  
Mean energy distribution of quasi-stellar objects in the optical range /Mittlere Energieverteilung quasi-stellarer Objekte im optischen Bereich/.  
06 p0999 A69-16975
- LAMMERANT, J.**  
Coronary circulation response to hyperoxia after vagotomy and combined alpha and beta adrenergic receptors blockade in the anesthetized intact dog.  
23 p4096 A69-42088
- LAMMERS, U. H. W.**  
A troposcatter propagation experiment at 15.7 GHz over a 500 km path.  
01 p0043 A69-10560
- LAMONOV, V. M.**  
Investigation of the total radiation of a dense low-temperature argon plasma /Issledovanie snarymarnogo izlucheniia plotnoi nizkoterpaturnoi plazmy argona/.  
09 p1547 A69-21595
- LAMONT, G. B.**  
Comparisons of sensitivity improvement techniques for linear optimal control systems.  
13 p2238 A69-27936
- LAMOTHE, R.**  
Some parameters affecting Auger and photoelectron spectroscopy as an analytical technique.  
07 p1075 A69-19775
- LAMOUREUX-BRONSSSE, L.**  
Elastic solids in a static space-time of general relativity /Solides elastiques dans un espace-temps statique de la relativite generale/.  
12 p2130 A69-26283
- LAMOUREUX, B.**  
Micromachining with a laser beam /Micro- usinage par faisceau laser/.  
08 p1324 A69-19980
- LAMPARD, D. G.**  
Integrated frequency-selective amplifiers for radio frequencies.  
07 p1104 A69-18886
- LAMPE, M.**  
Thermal conduction by electrons in stellar matter.  
22 p4014 A69-40147
- LAMPEL, G.**  
Optical pumping in semiconductors.  
19 p3389 A69-36548
- LAMPIS, G.**  
Quenching of ion oscillations at the sheath-plasma resonance.  
03 p0476 A69-13323  
Harmonics of ion oscillations in a neutralized ion beam plasma.  
05 p0804 A69-16459  
Plasma ion oscillations in discharges produced by back diffusion plasma sources.  
13 p2304 A69-27301
- LAMPMAN, J. A.**  
Low cost ablative materials for solid rocket nozzles.  
19 p3357 A69-35537
- LANCASTER, J. E.**  
An asymptotic solution for a class of periodic orbits of the restricted three-body problem.  
04 p0663 A69-15382  
Rapid analysis of moon-to-earth trajectories.  
[AAS PAPER 68-089] 20 p3595 A69-37174
- LANCASTER, M. C.**  
Clinical significance of acquired complete right bundle branch block in 59 patients without overt cardiac disease.  
23 p4085 A69-41677
- LANCASTER, P. R.**  
Stress distribution around holes at the ends of a crack.  
08 p1412 A69-20257
- LANCE, R. H.**  
The yield point load of a conical shell.  
06 p1023 A69-17375  
A bounding principle in the theory of work-hardening plasticity.  
[ASME PAPER 69-APM-7] 18 p3213 A69-34385
- LANCKAU, E.**  
Application of Bergman integral operators to special differential equations of torsion theory /Eine Anwendung Bergmanscher Integraloperatoren auf spezielle Differentialgleichungen der Torsionstheorie/.  
03 p0527 A69-13742
- LAND, D. A.**  
Defining the hardware-software interface for a computerized test system.  
11 p1842 A69-25071
- LAND, N. S.**  
A feasibility study of a technique for sorting particles by shape.  
21 p3731 A69-38950
- LAND, W. H., JR.**  
Network support simulation and sensitivities analysis for the Saturn-Apollo missions.  
22 p4020 A69-40319
- LANDA, I.**  
On the measurement of low level turbulence using a pair of sensors.  
14 p2446 A69-29018
- LANDA, P. S.**  
Investigation of certain properties of an annular gas laser by electronic simulation /Issledovanie nekotorykh svoystv kol'tseвого gazovogo lazera pri pomoshchi elektronnoogo modelirovaniia/.  
05 p0770 A69-15645
- Frequency characteristics of an annular laser on a vibrating support /Chastotnye kharakteristiki kol'tseвого lazera na koleblushcheisya podstavke/.  
07 p1147 A69-18523
- Theory of the natural line width and amplitude fluctuations of a gas laser /K teorii estestvennoi shiriny linii i fluktuatsii amplitudy gazovogo lazera/.  
10 p1701 A69-23135
- A study of some properties of an annular gas laser by means of analog simulation.  
16 p2798 A69-32502
- LANDER, J. J.**  
Cesium plasma spectra in the system W /100/- Cs.  
12 p2132 A69-26116  
An electron diffraction study of cesium adsorption on tungsten.  
19 p3392 A69-36733
- LANDER, L. L., JR.**  
Effect of time at temperature on the mechanical properties of a fabric reinforced phenolic heat shield material.  
12 p2119 A69-26825
- LANDES, J. D.**  
The effect of D sub 2 O on fatigue-crack propagation in a high-strength aluminum alloy.  
15 p2640 A69-30815
- LANDGRAF, R. W.**  
Determination of the cyclic stress-strain curve.  
10 p1715 A69-23982  
Selecting materials to resist low cycle fatigue.  
[ASME PAPER 69-DE-59] 14 p2461 A69-28852
- LANDGREBE, A. J.**  
An analytical method for predicting rotor wake geometry.  
[AIAA PAPER 69-196] 07 p1051 A69-19553
- LANDINI, M.**  
The 44-60 angstrom units flux during the ascending period of the solar cycle no. 20 /1964-67/.  
04 p0650 A69-15530  
Coronal active regions observed by SOLRAD 8 during the eclipse of May 20, 1966.  
15 p2698 A69-31363  
X-ray fluxes from the Solrad 9 satellite /1968-17A/ from March 1968 to December 1968.  
20 p3588 A69-37473
- LANDIS, E. M.**  
Necessary and sufficient conditions for the regularity of a boundary point in the Dirichlet problem for the heat conduction equation /Neobkhodimye i dostatochnye usloviia reguliarnosti granichnoi tochki dlia zadachi Dirikhle dlia uravneniia teploprovodnosti/.  
15 p2716 A69-30047
- LANDIS, F.**  
The boundary-layer velocity distribution in turbulent swirling pipe flow.  
[ASME PAPER 69-FE-14] 20 p3516 A69-37990
- LANDISMAN, M.**  
Preliminary report on recent improvements in the analysis of surface waves.  
02 p0243 A69-12006  
Theoretical seismograms excited by a localized radial stress on the surface of a gravitating homogeneous mantle over a liquid core.  
02 p0243 A69-12010  
Recent improvements in the analysis of surface wave observations.  
16 p2784 A69-32576  
Recent improvements in the analysis of surface wave observations.  
16 p2784 A69-32577  
A technique for the analysis of transient seismic signals.  
22 p3934 A69-39872  
Progress report on recent improvements in the analysis of surface wave observations.  
23 p4157 A69-42018  
Theoretical seismograms of spheroidal type on the surface of a gravitating elastic sphere. III - Case of a homogeneous mantle with a liquid core.  
23 p4158 A69-42020
- LANDMARK, B.**  
Electron and positive ion density measurements during conditions of auroral absorption.  
03 p0421 A69-13327  
Results of rocket measurements in the lower auroral ionosphere.  
16 p2778 A69-32187
- LANDOLT, A. U.**  
UBV observations of long-period variable stars. VI.  
12 p2172 A69-27156



## LANDOVA, L. A.

Influence of transport processes in a shock wave on the hypersonic flow past a blunt body in the neighborhood of its stagnation point /Vliianie protsessov perenosov v udarnoi volne na giperzvukovoe obtekanie tuponosogo tela v okrestnosti ego kriticheskoi tochki/. 18 p3086 A69-34910

## LANDRAM, C. S.

Heat transfer in turbulent pipe flow with optically thin radiation. [ASME PAPER 68-WA/HT-17] 05 p0847 A69-16121

## LANDRY, C. J.

Acoustical transparencies for optical imaging and ultrasonic diffraction. 10 p1695 A69-23546

## LANDSBERG, H. E.

Advances in Geophysics. Volume 13. 22 p3940 A69-40534

## LANDSBERG, P. T.

Energy flux from the 3 deg K radiation. 04 p0649 A69-15150

## LANDSTORFER, F.

Admittance and current distribution in linear cylindrical antennas /Admittanz und Stromverteilung bei linearen zylindrischen Antennen/. 08 p1295 A69-21165

## LANDWEHR, G.

The Shubnikov-de Haas effect and quantum-limit phenomena in semiconductors. 16 p2827 A69-31826

## LANE, A. G.

Rough terrain demonstration of the OV-10A. [AIAA PAPER 69-316] 09 p1434 A69-22391

## LANE, C. H.

Stress at the Si-SiO<sub>2</sub> sub 2 interface and its relationship to interface states. 10 p1744 A69-23177

## LANE, J. A.

Simultaneous lidar and refractometer soundings of layer structure in the troposphere. 13 p2254 A69-28475

## LANE, M. H.

An improved analytical drag theory for the artificial satellite problem. [AIAA PAPER 69-925] 21 p3808 A69-39352

## LANE, N. F.

Electron cooling by vibrational excitation of O sub 2. 16 p2774 A69-31982

## LANE, R. D.

Terrain following/terrain avoidance flight with the AH-56A vehicle. [AHS PAPER 311] 17 p3002 A69-33544

## LANE, R. J.

Advances in engine technology. [RAES PAPER 20] 22 p4000 A69-40499

## LANES, T.

A hot wire anemometer for the measurement of the three orthogonal components of wind velocity, and also directly the wind direction, employing no moving parts. 06 p0923 A69-16926

## LANG, H.

Theory of back diffusion of rarefied gases in a narrow gap /Zur Theorie der Gegendiffusion von verdunnten Gasen in einem engen Spalt/. 10 p1677 A69-22903

## LANG, I. G.

Thermomagnetic effects in semiconductors with a "double" conduction band /Termomagnitnye efekty v poluprovodnikakh s "dvoynoi" zonoj provodimosti/. 21 p3783 A69-39558

## LANG, K. R.

Radio emission of normal galaxies. 08 p1398 A69-20777

Observations of the occultation of Sagittarius A by the moon. 11 p1958 A69-24592

## LANG, R. E.

Parallel operation of valve-controlled hydraulic servo motors. 24 p4256 A69-43310

## LANG, R. M.

An integrated circuit control system for the Pewee reactor. [IEEE PAPER 2B-6] 07 p1179 A69-19188

## LANG, R. P.

Operator-centered adaptive compensation of continuous manual control systems. 20 p3482 A69-37721

## LANG, S. B.

Pyroelectric thermometer for use at low temperatures. 09 p1493 A69-21423

## LANG, T.

Computer analysis of large structural systems. [AIAA PAPER 67-955] 21 p3839 A69-39216

## LANGDON, R. M.

Design of a large capacity holographic memory. 11 p1886 A69-25041

## LANGDON, T. G.

The use of grain strain measurements in studies of high-temperature creep. 06 p0943 A69-17231

## LANGE-HESSE, G.

Radio observations of the aurora by continuous wave transmissions. 21 p3709 A69-38498

## LANGE, B. O.

Minimum-fuel attitude control of a spacecraft by an extended method of steepest-descent. 03 p0522 A69-14100

## LANGE, F. F.

Interaction between overlapping parallel cracks - A photoelastic study. 05 p0842 A69-16435

## LANGE, G.

Step-up mixer for high performance in the microwave range /Aufwaerts-mischer fuer hohe Leistung im Mikrowellengebiet/. 11 p1854 A69-25615

## LANGE, G. D.

Objective measure of the dynamics of a visual movement illusion. 16 p2746 A69-31556

## LANGE, H.

Ionospheric conditions following the proton flare event of 7 July 1966 as measured at ground-based stations. II - F-region effects. 10 p1684 A69-23783

## LANGE, K. O.

Simulation of the stress environment of a rocket-borne animal centrifuge. 13 p2213 A69-28090

Selection of gravitational environment by locomotion in fields of acceleration. 19 p3263 A69-36457

Avoidance and escape behavior controlled by artificial gravity. 21 p3665 A69-39174

Stimulus generalization of gravity. 23 p4081 A69-41434

## LANGE, K. W.

Solubility of hydrogen in nickel-molybdenum and nickel-tungsten alloys /Wasserstoffloeslichkeit in Nickel-Molybdaen- und Nickel-Wolfram-Legierungen/. 08 p1333 A69-20448

## LANGE, R.

Today's technology - Tomorrow's transports. 10 p1634 A69-23598

## LANGE, W.-R.

Design of a serial BCD binary coder with the aid of Karnaugh's diagram /Entwurf eines seriellen BCD-Binaer-Codierers unter Anwendung des Karnaugh-Diagramms/. 09 p1467 A69-22579

## LANGEL, R. A.

OGO-2 magnetic field observations during the magnetic storm of March 13-15, 1966. 01 p0069 A69-11125

## LANGELIER, R. M.

Characterization and coding of DCSP satellite communication channels. 03 p0387 A69-13177

A high speed sequential decoder for satellite communications. 23 p4131 A69-42523

## LANGENBERG, D. N.

Precise comparison of the Josephson frequency-voltage relation at microwave and far-infrared frequencies. 20 p3583 A69-37418

## LANGENTHAL, I. M.

Coefficient sensitivity and generalized digital filter synthesis. 03 p0403 A69-13227

## LANGER, D. W.

Index of refraction of isopentane and mesitylene as a function of pressure. 01 p0123 A69-10685

## LANGER, G.

An automated aircraft instrumentation system for cloud nucleation studies. 01 p0080 A69-10542

## LANGER, J.

Experimental confirmation of general relativity /Experimentální overení obecné relativity/. 04 p0661 A69-15165

## LANGER, P.

Experimental study of the ionization of deuterium under the action of a short-pulse laser /Etude expérimentale de l'ionisation du deuterium sous l'action d'un laser à impulsion courte/. 02 p0255 A69-11545

Plasma production with the aid of steep-front laser pulses /Creation de plasma à l'aide d'impulsions laser à front de montée rapide/. 05 p0770 A69-15584

X rays from a laser created deuterium plasma. 06 p0964 A69-17479

## LANGERON, J.-P.

Surface precipitation of carbides during the cooling of molybdenum and tungsten /Sur la précipitation superficielle de carbures lors du refroidissement du molybdène et du tungstène/. 03 p0451 A69-14000

The chemisorption of carbon and oxygen on the surface of molybdenum /Sur la chimisorption du carbone et de l'oxygène à la surface du molybdène/. 20 p3562 A69-37782

## LANGFORD, J. C.

The value to the Southern Hemisphere of meteorological observations from satellites. [UN PAPER 68-95213] 01 p0109 A69-10513

## LANGFORD, W. R.

The intrinsic color indices of the RR Lyrae stars and the reddening near the galactic poles. 12 p2172 A69-27157

## LANGHAM, W. H.

Radiobiological factors in space conquest. 21 p3660 A69-39172

## LANGHEINRICH, W.

Nondestructive thickness measurement of thin films on microstructures. 03 p0430 A69-13634

## LANGHOFF, W.

Trajectories of high-energy cosmic rays in the galactic disk. 03 p0501 A69-13960

## LANGILL, A. W.

Final control elements for the direct digital control of test stands. 10 p1671 A69-23259

Analog computer control systems for the group testing of nuclear rocket engine components. 15 p2589 A69-31289

## LANGLEY, F. M.

Comparative evaluation of the thoracic impedance and isotope dilution methods for measuring cardiac output. 14 p2408 A69-29304

## LANGLOIS, M.

Bilinear covariant, symplectic transformations, and contact transformations /Covariant bilinéaire, transformations symplectiques et transformations de contact/. 16 p2804 A69-31623

## LANGPAPE, R.

Thermionic energy sources and their applications /Thermionische Energiequellen und Anwendungen/. 12 p0216 A69-25869

Design and characteristics of an actinium fueled thermionic generator. 14 p2399 A69-29192

Work functions of polycrystalline W and Re in an atmosphere of cesium and oxygen. 14 p2507 A69-29274

## LANGSETH, M. G.

The lunar heat flow experiment. [AAS PAPER 68-207] 02 p0313 A69-11482

- LANGSETH, M. G., JR.**  
The flow of heat from the earth and its global distribution at the surface.  
[AIAA PAPER 69-589] 17 p2961 A69-33284
- LANGSTON, C. E.**  
Distortion tolerance - By design instead of by accident.  
[ASME PAPER 69-GT-115] 09 p1572 A69-22525
- LANGSTON, L. S.**  
Liquid transport properties of some heat pipe wicking materials.  
[ASME PAPER 69-HT-17] 24 p4413 A69-43551
- LANGSTONE, P. F.**  
Improving the fatigue properties of butt welds in maraging steels.  
03 p0434 A69-13762
- LANGWORTHY, B. M.**  
Radio occultation measurements of planetary atmospheres and ionospheres from an orbiting pair.  
[AIAA PAPER 69-53] 06 p1011 A69-18104
- LANGWORTHY, J. W.**  
Seen through a hologram darkly.  
08 p1312 A69-19894
- LANIER, W. P.**  
Pulse-echo ultrasonic methods for nondestructive testing of C-5 adhesive-bonded aluminum composites.  
10 p1698 A69-23047
- LANKIN, I. U. N.**  
Device for programming the heat-resistance tension on brittle materials.  
10 p1696 A69-23845
- LANNING, W. C.**  
Digital transmission systems.  
11 p1834 A69-24545
- LANPHIER, E. H.**  
Histochemical studies in pulmonary oxygen toxicity.  
14 p2407 A69-29298
- LANSAC, L.**  
Study of the dielectric properties of unsaturated styrolex polyester copolymers - Effect of temperature /Etude des proprietes dielectriques des copolymeres polyesteres insatures styrolene - Influence de la temperature/.  
[ONERA-TP-662] 04 p0621 A69-15114
- LANSBERG, M. P.**  
Selective g-force application in the treatment of retinal detachment.  
24 p4268 A69-43405
- LANSFORD, T. G.**  
Dark adaptation - An interocular light-adaptation effect.  
16 p2745 A69-32448
- LANSKAIA, K. A.**  
Phase composition of heat-resistant ferritic and austenitic steels with intermetallic hardening /Fazovyi sostav zharoprochnykh ferritnykh i avstinitnykh staley s intermetallidnym uprochneniem/.  
13 p2283 A69-28487
- LANTOS, P.**  
A partial physical explanation of the relations between solar activity and cm-lambda emissions.  
13 p2327 A69-27721
- LANTWAARD, L. J.**  
X-ray heliography by means of a Fresnel-Soret type zoneplate camera.  
20 p3544 A69-37803
- LANTZ, E.**  
A nuclear thermionic space power concept using rod control and heat pipes.  
04 p0630 A69-14799
- LANTZ, P. A.**  
A 17-l dual band circularly polarized focused two-channel monopulse tracking system.  
23 p4120 A69-41752
- LANTZ, R. B.**  
Off-axis compressive properties of fiberglass/epoxy faced honeycomb sandwich structure.  
24 p4403 A69-43443
- LANUSSE, P.**  
Determination of impurities in titanium and some of its alloys by spark source mass spectroscopy /Dosage des impuretes dans le titane et certains alliages de titane par spectrographie de masse a etincelles/.  
[ONERA-TP-723] 18 p3155 A69-34638
- LANYI, J. K.**  
Studies of the electron transport chain of extremely halophilic bacteria. I - Spectrophotometric identification of the cytochromes of halobacterium cutirubrum.  
07 p1068 A69-19481  
Effect of salts and organic solvents on the activity of Halobacterium cutirubrum catalase.  
18 p3096 A69-35291  
Studies of the electron transport chain of extremely halophilic bacteria. II - Salt dependence of reduced diphosphopyridine nucleotide oxidase.  
20 p3484 A69-37101  
Studies of the electron transport chain of extremely halophilic bacteria. III - Mechanism of the effect of salt on menadiene reductase.  
22 p3886 A69-41077
- LANZANO, B. C.**  
MATS - The mission analysis and trajectory simulation program.  
[AIAA PAPER 69-939] 22 p3904 A69-40322
- LANZANO, P.**  
Analytic contributions to the Stoermer problem.  
03 p0504 A69-14127
- LANZEROTTI, L. J.**  
Outer zone electron fluxes during the February 5, 1965, solar proton event.  
01 p0146 A69-11124  
A satellite solar cosmic ray spectrometer with on-board particle identification.  
[IEEE PAPER 3C-3] 07 p1135 A69-19197  
Low-energy solar protons and alphas as probes of the interplanetary medium - The May 28, 1967, solar event.  
16 p2847 A69-31965  
Interaction between the boundary of the heliosphere and the magnetosphere of Jupiter.  
17 p3033 A69-33379  
Solar proton radiation damage of solar cells at synchronous altitudes.  
24 p4369 A69-43265
- LANZO, C. D.**  
Experimental transmittance and absorption cross sections of carbon particles suspended in a jet.  
06 p1034 A69-17804  
Coaxial-flow stabilization of an alternating-current plasma arc.  
[AIAA PAPER 68-706] 13 p2313 A69-28232  
Some recent gaseous reactor fluid mechanics experiments.  
[AIAA PAPER 69-477] 16 p2811 A69-32728  
A flow experiment on a curved-porous-wall gas-core reactor geometry.  
18 p3171 A69-35181
- LAPA, V. G.**  
Polyharmonic predictive filters /Poligarmonichni peredbachauchi fil'tri/.  
11 p1849 A69-24966  
Adaptive predicting filters /Adaptivni peredbachauchi fil'tri/.  
19 p3287 A69-36665
- LAPAEV, E. V.**  
Vestibular-vegetative reactions under the action of angular and Coriolis accelerations under conditions of weightlessness /O vestibulo-vegetativnykh reaktsiakh pri vozdeistvii uglovyykh i korolisovykh uskorenii v usloviakh nevesomosti/.  
07 p1062 A69-18587
- LAPAGE, B. F.**  
VHF antenna systems for spin-stabilized satellites.  
22 p3913 A69-40695
- LAPCHINSKII, V. G.**  
Static formations in the general theory of relativity and plankions /Staticheskie obrazovaniia v obshchei teorii otносitel'nosti i plankiony/.  
05 p0793 A69-15776  
Static formations in the general theory of relativity and Planckeons.  
18 p3173 A69-35029
- LAPEYRE, G. J.**  
Operational amplifier differentiator for photoemission studies - Origin and control of errors.  
06 p0897 A69-17700
- LAPEYRE, M.**  
Power supply of electronic circuits on board a space vehicle /Alimentation des circuits electroniques a bord d'un vehicule spatial/.  
07 p1225 A69-18251
- LAPIDUS, G.**  
A look into Apollo control systems.  
04 p0665 A69-14881
- LAPIDUS, L.**  
A guide to the generation of Liapunov functions.  
11 p1908 A69-24317
- LAPIN, I. U. D.**  
Some results of an experimental investigation of a cooled turbine.  
21 p3785 A69-39103
- LAPKIN, I. U. A.**  
Effect of space flight factors on the frequency of recessive lethal sex-related mutations in *Drosophila melanogaster* /Vliianie faktorov kosmicheskogo poleta na chastoty vozniknoveniia stepennnykh s polom retsessivnykh letal'nykh mutatsii u drosophila melanogaster/.  
07 p1063 A69-18598
- LAPORTE, O.**  
Construction of a shock tube for metallic vapors.  
18 p3116 A69-34453
- LAPPE, U. O.**  
Consideration of some gust spectrum analysis procedures including a comparison of several numerical filters.  
01 p0084 A69-11052  
A preliminary evaluation of a low-altitude turbulence model based on A6A gust data.  
01 p0056 A69-11053
- LAPRADE, G. L.**  
Elevations from radar imagery.  
13 p2263 A69-28198
- LAPSHIN, G. M.**  
Frequency characteristics of a helium-neon laser in a transverse magnetic field /Chastotnye kharakteristiki geli-neonovogo lazera v poperechnom magnitnom pole/.  
11 p1894 A69-24622  
Energy characteristics of a helium-neon laser in a transverse magnetic field /Energeticheskie kharakteristiki geli-neonovogo lazera v poperechnom magnitnom pole/.  
12 p2104 A69-26023
- LAPSHINA, N. A.**  
Application of high temperatures as a functional-diagnostic test /K voprosu o primeneniі vysokikh temperatur v kachestve funktsional'no-diagnosticheskoi proby/.  
05 p0710 A69-16523  
Use of high temperatures as provocative tests.  
18 p3096 A69-34742
- LAPTEV, A. I.**  
Some interpretations of the biological effects of chronic gamma irradiation.  
02 p0197 A69-11494
- LAPTEVA, N. Z.**  
Stress Concentration. Number 2 /Kontsentratsiia Napriazhenii. Number 2/.  
11 p1970 A69-24645
- LAPUSHINA, B. I.**  
Circular motion of a fluid with variable rheological characteristics between two coaxial cylindrical surfaces /Krugovoe dvizhenie zhidkosti s peremennymi reologicheskimi kharakteristikami mezhdu dvumia koaksial'nyimi tsilindricheskimi poverkhnostiami/.  
01 p0061 A69-10733
- LAPWORTH, A. J.**  
A new method for investigating the electric field regions of p-n junctions.  
22 p3994 A69-40752
- LAPWORTH, K. C.**  
A simple method for calculation of conditions behind shock waves.  
15 p2593 A69-31487
- LARANCE, Y.**  
The design and development of the D.2 satellite stabilization system /La conception et le developpement du systeme de stabilisation du satellite D.2/.  
17 p3046 A69-33223
- LARDNER, R. W.**  
The effect of crystal orientations on fatigue crack growth.  
01 p0168 A69-10344  
Plastic yield on inclined slip planes at the tip of a crack deformed in anti-plane strain.  
05 p0842 A69-16436  
Dislocation dynamics and the theory of the plasticity of single crystals.  
21 p3845 A69-39676
- LARDNER, T. J.**  
Exact solution of the equations for shallow shells of revolution.  
01 p0166 A69-10234



- Approximate solutions of combined conduction-radiation problems. 04 p0685 A69-14734
- Vibration of beams with exponentially varying properties. 05 p0835 A69-15873
- LAREN, F.**  
Incorporation of super 14 C-tryptophan into super 14 C-protein by cultured rat pineals - Stimulation by 1-norepinephrine. 22 p3871 A69-40054
- LARENZ, R. W.**  
Collective constituent of a plasma microfield /Zum kollektiven Anteil des Plasma-Mikrofeldes/. 02 p0287 A69-11871
- LARGE, J. B.**  
Jet noise suppression /A status report/. 15 p2671 A69-30372  
Development of engineering practices in jet and compressor noise. [AIAA PAPER 68-550] 17 p3022 A69-34019
- LARGE, M. I.**  
A pulsar supernova association/ques/. 01 p0149 A69-10268  
Pulsar search at the Molonglo radio observatory. 02 p0327 A69-12725  
Clustering of pulsars along the galactic plane. 05 p0825 A69-16356  
Revised spectra for 74 radio sources. 07 p1218 A69-19278  
Some further pulsar observations at the Molonglo Radio Observatory. 14 p2517 A69-29091  
Three new pulsars. 17 p3026 A69-32857
- LARI, C.**  
An upper limit to continuous emission of CP 1133 at various pulse intensity levels. 06 p1009 A69-17969
- LARICHEVA, V. V.**  
Optimal transfer flights from elliptic to parabolic orbits. 01 p0157 A69-11306  
On averaging a certain class of systems of nonlinear differential equations. 04 p0624 A69-15097  
Multivalued extremal solutions in optimal control problems. 06 p0903 A69-17539  
An analytical method for determining a separatrix analog in the motion of a body about its center of mass in the atmosphere /Analiticheskiy metod opredeleniya analoga separatsii pri dvizhenii tela okolo tsentra mass v atmosfere/. 09 p1595 A69-21762
- LARIECHEVA, K. A.**  
Studies of human adaptation to space flight effects under low-calorie diet conditions. 20 p3482 A69-7621
- LARIKOV, L. N.**  
Thermodynamic properties of solid solutions of tungsten in cobalt. 07 p1165 A69-18941  
Diffusion processes in the welding of metals /Review/ /Diffuzionnye protsessy pri svarke metallov /obzor/. 11 p1890 A69-24799  
Diffusion processes during annealing of irradiated metals /Review/ /Diffuzionnye protsessy pri otzhige oblučennykh metallov /obzor/. 11 p1891 A69-24800  
Study of volumetric changes in cobalt during multiple phase transformation /Issledovanie ob'emykh izmenenii v koval'te pri mnogokratnom fazovom perekhode/. 12 p2114 A69-26455  
Mechanism of secondary recrystallization in a molybdenum foil /Mekhanizm vtorichnoi rekristallizatsii v molibdenovoi fol'ge/. 18 p3157 A69-35253  
Influence of the geometry of plastic deformation on the mechanical properties of niobium single crystals /Vliianie geometrii plasticheskoi deformatsii na mekhanicheskie svoystva monokristallov niobia/. 18 p3160 A69-35454
- LARIMER, J. W.**  
Experimental studies on the system Fe-MgO-SiO sub 2 - O sub 2 and their bearing on the petrology of chondritic meteorites. 03 p0516 A69-14082
- LARIMORE, W. E.**  
Synthesis of digital phase-locked loops. 03 p0388 A69-13178
- LARIN, F.**  
A sensitive and specific isotopic assay for the estimation of tyrosine transaminase. 01 p0014 A69-10902  
Failure of brain norepinephrine depletion to extinguish the daily rhythm in hepatic tyrosine transaminase activity. 05 p0707 A69-15582  
Hepatic tyrosine transaminase rhythm - Interaction of environmental lighting, food consumption and dietary protein content. 17 p2910 A69-33755
- LARIN, L. K.**  
Automata with a sequential homogeneous structure /Avtomaty s posledovatel'noi odnorodnoi strukturoi/. 13 p2224 A69-27249
- LARIN, V. B.**  
Analysis of actual vibration processes /Ob analize real'nykh vibratsionnykh protsessov/. 18 p3109 A69-34584
- LARIONENKO, O. I.**  
Effect of the American "Starfish" explosion on the state of the ionosphere according to observations in Central Kazakhstan /Vliianie amerikanskogo vzryva "Starfish" na sostoianie ionosfery po nabludeniiam v isentral'nom Kazakhstane/. 22 p3942 A69-41097
- LARIONOV, G. S.**  
The averaging method in nonlinear mechanics /O metode usredneniia v nelineinoi mekhanike/. 20 p3576 A69-37440
- LARIONOV, V. A.**  
Indirect method of measurement of hardness of titanium alloys. 23 p4177 A69-41598
- LARIONOV, V. V.**  
Calculation of the limit of repeated static stress of internal-pressure vessels /Raschet na povtornostaticheskuiu prochnost' sudov vnutrennego davleniia/. 15 p2712 A69-30973
- LARIONTSEV, E. G.**  
Interaction of oppositely moving waves in an annular solid-state laser /Vzaimodeistvie vstrechnykh voln v kol'tsevom lazere na tverdom tele/. 02 p0259 A69-12648  
Investigation of certain properties of an annular gas laser by electronic simulation /Issledovanie nekotorykh svoystv kol'tseвого газового лазера pri pomoschi elektronnoho modelirovaniia/. 05 p0770 A69-15645  
Frequency characteristics of an annular laser on a vibrating support /Chastotnye kharakteristiki kol'tseвого лазера na koleblushcheisya podstavke/. 07 p1147 A69-18523  
A study of some properties of an annular gas laser by means of analog simulation. 16 p2798 A69-32502
- LARK, R. F.**  
Cryogenic positive expulsion bladders. 05 p0769 A69-16486
- LARKIN, A. I.**  
New high-resolution photographic layers and their study by the method of holographic resolution /Novye fotograficheskie sloi vysokogo razresheniia i ikh issledovanie metodom golograficheskoi resol'vometrii/. 15 p2606 A69-30052
- LARKIN, B. K.**  
The distribution of solar energy reflected from the earth by a scattering atmosphere. [AIAA PAPER 69-591] 17 p2961 A69-33292
- LARKIN, W.**  
Operational quality assurance in the deep space network. 07 p1078 A69-18831
- LARMORE, L.**  
Acoustical Holography. Volume 1 - Proceedings of the First International Symposium, Huntington Beach, Calif., December 14, 15, 1967. 10 p1694 A69-23540  
Acoustical holograms using phase information only. 23 p4166 A69-42180
- LARNER, D. A.**  
Miniature hydraulic controls. 22 p3870 A69-41243
- LAROCHE, J.**  
Medium-temperature fuel cells /Piles a combustibles a moyenne temperature/. 08 p1260 A69-21046
- Medium temperature fuel cells /Piles a combustibles a moyenne temperature/. 16 p2739 A69-32417
- LAROCK, B. E.**  
Jets from two-dimensional symmetric nozzles of arbitrary shape. 21 p3692 A69-38686
- LARRABEE, J. C.**  
Effect of absorption by atomic oxygen and atomic nitrogen lines on upper atmosphere composition measurements. 03 p0425 A69-14019
- LARRABEE, R. D.**  
High-efficiency series operation of Gunn devices. 09 p1463 A69-21684
- LARSEN-BADSE, J.**  
Abrasion resistance of some S.A.P.-type alloys at room temperature. 08 p1319 A69-19995
- LARSEN, A. B.**  
A heterodyne scanning system for hologram transmission. 24 p4283 A69-43333
- LARSEN, J.**  
Extended capability from existing nav aids. 07 p1177 A69-19210  
The integration of air navigation systems. 07 p1177 A69-19211  
Navigation record - Rockwell Polar Flight. 09 p1538 A69-21406
- LARSEN, P. S.**  
A thick gas model near boundaries. 16 p2769 A69-31871
- LARSEN, T. R.**  
The position and height of auroral absorption deduced from VLF phase measurements. 05 p0758 A69-16415
- LARSON, A. V.**  
Measurements of plasma flow in an MPD engine. [AIAA PAPER 69-233] 09 p1567 A69-21266
- LARSON, E. E.**  
Magnetic paleointensity studies on a recent basalt from Flagstaff, Arizona. 02 p0244 A69-12018
- LARSON, F. R.**  
Macrofractographic techniques. 04 p0619 A69-15394
- LARSON, H. K.**  
Unusual boundary-layer transition results on cones in hypersonic flow. [AIAA PAPER 68-40] 16 p2732 A69-31881
- LARSON, L. E.**  
A measurement of the effective recombination coefficient in the lower ionosphere. 14 p2511 A69-28960  
A sensitive radio receiver for ionospheric measurements. 17 p2936 A69-33062
- LARSON, M. B.**  
Variables affecting the dynamic response of thermocouples attached to thin-skinned models. 13 p2375 A69-27785
- LARSON, R. E.**  
State Increment Dynamic Programming. 04 p0563 A69-14652
- LARSON, R. H.**  
Performance and application of commercial vortex amplifiers. 09 p1443 A69-22741
- LARSON, V. H.**  
Some differential equations of probability theory in stochastic processes and control systems. 12 p2124 A69-27142
- LARSSON, B.**  
Radiological properties of beams of high-energy protons. 03 p0373 A69-13495
- LASALLE, J. P.**  
Optimality and strong stability of control systems. 07 p1115 A69-18514
- LASCH, S.**  
A case of artificial triggering of VLF magnetospheric noise during the drift of a whistler duct across magnetic shells. 11 p1878 A69-25154  
Unique features of VLF noise triggered in the magnetosphere by Morse-code dots from NAA. 11 p1878 A69-25155

- An effect of a transmitter frequency increase on the occurrence of VLF noise triggered near L equals 3 in the magnetosphere.  
11 p1878 A69-25156
- LASCHKA, B.**  
Unsteady aerodynamic forces on coplanar lifting surfaces in subsonic flow /wing- horizontal tail interference/.  
04 p0543 A69-14819  
Flutter induced by aerodynamic interference between wing and tail.  
11 p1991 A69-25517
- LASEK, A.**  
Detachment distance of the shock wave in front of spheres and cylinders placed in a hypersonic flow /Distance de detachement de l'onde de choc devant des spheres et des cylindres places dans un ecoulement hypersonique/.  
22 p3931 A69-40710
- LASHER, L. E.**  
Effect of shock precursor absorption on superorbital entry heating.  
02 p0354 A69-12528
- LASHINSKY, H.**  
Periodic pulling and turbulence in a bounded plasma.  
07 p1194 A69-19400
- LASHKAROV, V. E.**  
Investigation of the internal photoeffect in the excitation region of the absorption spectrum of CdS single crystals /Doslizhennia vnutrishn'ogo fotoefektu v eksitonnoi oblasti spektra poglannania monokristaliv CdS/.  
14 p2504 A69-28990
- LASHKO, N. F.**  
Certain problems in the interaction of titanium with fillers in diffusion brazing.  
06 p0945 A69-17896  
Variation of the quantity and composition of the beta-phase during heat treatment of the alloy VTZ-1 /Izmenenie kolichestva i sostava beta-fazy pri termicheskoi obrabotke splava VTZ-1/.  
07 p1163 A69-18777
- LASHKO, S. V.**  
Certain problems in the interaction of titanium with fillers in diffusion brazing.  
06 p0945 A69-17896
- LASHKOV, A. I.**  
Study of the zone behind a reflected shock wave using an electron gun.  
05 p0752 A69-16688
- LASHMORE-DAVIES, C. N.**  
Theory of high frequency electrostatic waves in a non-uniform plasma in the presence of a magnetic field.  
11 p1931 A69-25360
- LASMAN, L. L.**  
A precision azimuth reference system for gyrocompass evaluation.  
[AIAA PAPER 69-859] 21 p3725 A69-39387
- LASS, H.**  
Comparison of the Newtonian and general relativistic orbits of a point mass in an inverse-square law force field.  
[AAS PAPER 68-098] 20 p3595 A69-37176
- LASSAU, G.**  
Heat and mass transfers with catalytic reaction at the wall /Les transferts de chaleur et de masse avec reaction catalytique sur la paroi/.  
06 p1030 A69-17115  
Heat and mass transfer with catalytic reaction at the wall /Les transferts de chaleur et de masse avec reaction catalytique sur la paroi/.  
15 p2716 A69-30415  
Temperature profiles in a laminar boundary layer with an endothermal homogeneous chemical reaction /Profils de temperatures dans une couche limite laminaire avec reaction chimique homogene endothermique/.  
16 p2821 A69-31833
- LASSEN, K.**  
Polar cap emissions.  
21 p3707 A69-38487
- LASSETTRE, E. N.**  
Excitation by electron impact of vibrational transitions in water and carbon dioxide at kinetic energies between 30 and 60 ev.  
06 p0960 A69-17108
- LASSITER, W. S.**  
Striking characteristics and time lags of the magnetron gauge in helium from 1.9 x 10 super -7 torr to 7 x 10 super -10 torr.  
01 p0012 A69-10606
- In situ vacuum testing - A must for certain elastomeric materials.  
09 p1477 A69-22008  
Gauge comparison study of the magnetron, buried collector, bent-beam, and nude modulated Bayard-Alpert gauges.  
22 p3950 A69-41216
- LASSNER, E.**  
Diffusion of silicon in molybdenum /Die Diffusion von Silizium in Molybdaen/.  
05 p0780 A69-15990
- LASSUS, M.**  
Technology of integrated circuits - Comparison and future of different processes /Technologie des circuits integres - Comparaison et avenir des differents procèdes/.  
02 p0216 A69-12050
- LASTMAN, G. J.**  
Two formulations for optimization problems with state-variable inequality constraints.  
23 p4182 A69-41907
- LASTNIK, A. L.**  
Attenuation capabilities of impact energy.  
15 p2559 A69-30851
- LASZLO, D.**  
A laser boring and welding apparatus /Lezer furo, hegeszto berendezes/.  
03 p0434 A69-13720
- LASZLO, H.**  
Contemporary trends in the development of pneumatic elements /A pneumatikus automatika elemek korszerű fejlődési irányai/.  
02 p0197 A69-12795
- LASZLO, J.**  
The measurement of Y-circulators /Y- cirkulatorok mérése/.  
09 p1473 A69-22114
- LATAIKO, P. A.**  
Instantaneous and integral solar irradiance of the surface of an earth oriented satellite /Tekushchaia i integral'naia osveshchennost' solntsem poverkhnosti sputnika, orientirovannogo na zemliu/.  
19 p3432 A69-36629
- LATANISION, R. M.**  
Stress corrosion cracking of iron-nickel- chromium alloys.  
19 p3349 A69-36890
- LATEGOLA, M. T.**  
Rapid and frequent measurement of human systolic and diastolic blood pressures.  
01 p0079 A69-10296
- LATHAM, A. S.**  
Eight-color narrow-band photometry of 985 bright stars.  
02 p0313 A69-11487
- LATHAM, D. J.**  
Fluctuating radar echo - Modulation by vibrating drops.  
02 p0208 A69-12021
- LATHAM, G.**  
Lunar seismology - The beginning.  
19 p3315 A69-36765  
The Apollo passive seismic experiment.  
20 p3539 A69-37516
- LATHAM, G. V.**  
Post-Apollo passive seismic experiment.  
[AAS PAPER 68-204] 02 p0312 A69-11479  
Internal constitution of the moon - Is the lunar interior chemically homogeneous/ques/.  
19 p3425 A69-36421
- LATHAM, J.**  
Airborne studies of the electrical properties of large convective clouds.  
20 p3572 A69-37907  
Numerical computations of the dynamics of the disintegration of a drop situated in an electric field.  
23 p4151 A69-41694
- LATHAM, R. W.**  
A subtraction procedure in antenna theory.  
12 p2041 A69-26864
- LATHEM, W. C.**  
Ion accelerator designs for Kaufman thrusters.  
[AIAA PAPER 69-261] 09 p1567 A69-21261
- LATHI, B. P.**  
An introduction to random signals and communication theory.  
06 p0887 A69-17144
- LATHROP, B. L.**  
Effects of hypervelocity impact on honeycomb structures.  
[AIAA PAPER 68-314] 02 p0345 A69-12389
- LATIMER, I. D.**  
High power quasi-CW ultra-violet ion laser.  
06 p0936 A69-17900
- LATIMER, K. E.**  
Measurements of pressure-wave transmission in liquid-filled tubes used for intravascular blood-pressure recording.  
24 p4279 A69-43798
- LATIMER, R. D.**  
Measurements of pressure-wave transmission in liquid-filled tubes used for intravascular blood-pressure recording.  
24 p4279 A69-43798
- LATKA, J.**  
Photographic observations of satellites on a satellite station /Fotograficzne obserwacje SSZ na stacji satelitarnej/.  
01 p0027 A69-10224  
Analysis of some correction terms used for reducing the photographic observations of artificial earth satellites /Analiza niektórych wyrazow poprawkowych stosowanych przy redukcji obserwacji fotograficznych SSZ/.  
21 p3720 A69-38606
- LATNER, N.**  
State of charge measurement of nickel-cadmium batteries.  
09 p1435 A69-21425
- LATOVA, IU. V.**  
Studies of human adaptation to space flight effects under low-calorie diet conditions.  
20 p3482 A69-37621
- LATSH, V. V.**  
Oxygen diffusion parameters in beta-titanium /O parametrah diffuzii kisloroda v beta-titane/.  
07 p1163 A69-18783
- LATSINNIK, I. F.**  
Stressed state of open cylindrical shells of arbitrary profile /Napriazhennoe sostoiianie nezamknytykh tsilindricheskikh obolochek proizvol'nogo profilii/.  
18 p3225 A69-35372
- LATTA, J. N.**  
The bleaching of holographic diffraction gratings for maximum efficiency.  
04 p0596 A69-14284
- LATTES, R.**  
The method of Quasi-Reversibility- Applications to Partial Differential Equations.  
17 p2994 A69-33205
- LATYPOV, A. A.**  
An experiment in measuring the proper motions of stars with a UIM-21 microscope /Opyt izmereniia sobstvennykh dvizhenii zvezd na mikroskope UIM-21/.  
10 p1778 A69-23570
- LATYSH, V. G.**  
Optimal energy distribution for determining a random number of weak signals.  
14 p2410 A69-28817
- LATYSHEV, A. V.**  
Microwave instabilities in gallium arsenide /SVCh nestabil'nosti v arsenide galliia/.  
01 p0136 A69-10256  
Microwave instabilities in gallium arsenide.  
09 p1559 A69-22649
- LATYSHEV, V. M.**  
A frequency method for measuring the velocity of a fluid flow /O chastotnom metode izmereniia skorosti tekheniia zhidkosti/.  
04 p0598 A69-14995
- LATZ, N.**  
Contact boundary value problem in the theory of diffraction of electromagnetic waves at dielectric wedges /Ein Uebergangswertproblem aus der Beugungstheorie elektromagnetischer Wellen an dielektrischen Keilen/.  
21 p3673 A69-39012
- LAU, S. S.**  
Interstitial impurity effects on the mechanical properties of molybdenum single crystals.  
01 p0095 A69-10609
- LAU, Y. L.**  
A note on diffusion from a line source in a turbulent boundary layer.  
13 p2250 A69-28343
- LAUBACH, G. E.**  
Life support.  
19 p3262 A69-36318



## LAUCHNER, E. A.

Design and processing requirements to prevent stress corrosion in aluminum alloys.  
[ASM PAPER W9-14.4] 21 p3729 A69-38657

## LAUDANNA, M.

Approximate study of thermal shock /Studio approssimato dello shock termico/.  
06 p1025 A69-17779

Minimum-resistance ellipsoids of revolution at very low Reynolds numbers /Ellissoidi di rotazione di minima resistenza a bassissimi numeri di Reynolds/.  
06 p0911 A69-17780

## LAUDANSKI, L.

Certain remarks on the description of atmospheric turbulence as related to loads on gliders.  
12 p2127 A69-26931

## LAUE, E. G.

The calibration of multichannel radiometers for application in spacecraft and space simulation programs.  
06 p0926 A69-17620

## LAUE, H.

Infinites in the statistical theory of radiative processes in plasmas.  
22 p3991 A69-41055

## LAUER, R.

Energy distribution in the beam of an electron gun with a single-crystal spherical cathode /Die Energieverteilung im Strahlenbündel einer Elektronenkanone mit einkristalliner Kugelkathode/.  
09 p1464 A69-22396

## LAUFER, J.

Turbulent shear flows of variable density.  
[AIAA PAPER 68-41] 16 p2770 A69-31888

## LAUFER, T.

Takeoff and landing maneuvers of heliogyros /Start und Landevorgang der Heliogyros/.  
04 p0547 A69-14816

## LAUFFER, W. D.

Photothermoelastic investigation of stresses in a composite model.  
24 p4396 A69-42739

## LAUFMAN, P. N.

Exothermic bimetallic ignition system.  
[AIAA PAPER 69-425] 16 p2832 A69-32653

## LAUFS, P.

Compressible inviscid laminar flows with perturbed boundaries /Kompressible, reibungsfreie Fadenströmungen mit bewegten Raendern/.  
01 p0008 A69-11360

## LAUGHLIN, T. F., JR.

Safety elements of advanced aircraft design.  
22 p3867 A69-41132

## LAUGHREY, J. A.

Calculation of the performance of installed exhaust nozzles on supersonic aircraft.  
[AIAA PAPER 69-428] 16 p2733 A69-32731

## LAUMANIS, I. I.

Experimental discovery of the electromotive force along the external magnetic field induced by a flow of liquid metal /alpha-effect/.  
04 p0635 A69-14547

## LAUMANN, E. A.

Mariner limit cycles and self-disturbance torques.  
[AIAA PAPER 69-844] 21 p3822 A69-39374

## LAUMBACH, D. D.

A point explosion in a cold exponential atmosphere.  
11 p1871 A69-25123

## LAUNDER, B. E.

An aspect of heat transfer in accelerating turbulent boundary layers.  
[ASME PAPER 68-WA/HT-13] 05 p0847 A69-16120

On the prediction of laminar-turbulent boundary layers.  
[ASME PAPER 69-HT-13] 24 p4303 A69-43556

A note on Bradshaw's hypothesis for laminarization.  
[ASME PAPER 69-HT-12] 24 p4304 A69-43557

## LAURA, P. A.

Complex variable theory and elastic stability problems.  
09 p1615 A69-21921

## LAURENCE, J. C.

Variable-voltage, direct-current power supplies for energizing cryogenically cooled and superconductive electromagnets.  
12 p2017 A69-26498

## LAURENSEN, L.

Degradation of lubricating fluids in a vacuum.  
[IME PAPER 11] 07 p1137 A69-18558

## LAURENT-ATTHALIN, G.

Ultrasonic inspection of soundness and penetration of corner welds for Zircaloy 2 casings /Contrôle par ultrasons de la compacité et de la pénétration des soudures d'angle de boîtiers en Zircaloy 2/.  
07 p1141 A69-19346

## LAURENT, A.

Magnetophonon oscillations of the transverse magnetoresistance of n-type epitaxial GaAs /Oscillations de magnetophonons de la magnetoresistance transverse du GaAs epitaxial de type n/.  
08 p1373 A69-20760

## LAURENT, B. E.

Gravitation without self-interaction.  
03 p0466 A69-13388  
A stationary model of the metagalaxy.  
08 p1389 A69-20263

## LAURENT, D.

The Soviet medium-range aircraft Tu-154 /Le moyen-courrier soviétique Tu-154/.  
16 p2735 A69-32073

## LAURENT, G.

Successive development of electromagnetic /ULF and VLF/ and light emissions during magnetic substorms /Developpement successif des émissions électromagnétiques /U.B.F. et T.B.F./ et lumineuses au cours des sous-orages magnétiques/.  
16 p2788 A69-32648

## LAURENT, J.

Onboard solid-neon cryostat /Cryostat embarquable a neon solide/.  
06 p0906 A69-17103

## LAURES, P.

Lasers - Principles and applications. I /Les lasers - Principes et applications. I/.  
01 p0092 A69-11068

Lasers. II - Principles and applications /Les lasers. II - Principes et applications/.  
07 p1143 A69-18250

Single-mode high-power helium-neon laser /Laser monomode de puissance a helium-neon/.  
22 p3962 A69-40473

## LAUREYNS, G. A.

System cost effectiveness analysis.  
19 p3254 A69-36012

## LAURINGSON, A. I.

Oculomotor control system /Survey/.  
09 p1447 A69-22675

## LAURITZEN, P. O.

Design and characterization of a step-recovery switching transistor.  
02 p0215 A69-11937

## LAURY, L.

Magnetic desaturation of inertia flywheels of a satellite in equatorial or slightly inclined orbit /Desaturation magnétique des volants d'inertie d'un satellite en orbite équatoriale ou faiblement inclinée/.  
13 p2357 A69-28476

## LAUSCHNER, E. A.

Work projects which are currently under way at the Fuerstenfeldbruck Institute of Aeronautical Medicine and can lead to Franco-German cooperation /Projets de travaux actuellement en cours a l'Institut de Medecine Aeronautique de Fuerstenfeldbruck et pouvant se preter a une collaboration franco-allemande/.  
05 p0850 A69-16629

Medical aspects of future mass air transport /Medizinische Aspekte des Massenflugverkehrs von Morgen/.  
15 p2556 A69-31225

## LAUSSADE, J. P.

Observation of mode locking and ultrashort optical pulses induced by anisotropic molecular liquids.  
02 p0259 A69-12655

## LAUSSADE, J.-P.

Analysis of mode locking and ultrashort laser pulses with a nonlinear refractive index.  
23 p4171 A69-41389

Optical communication through random atmospheric turbulence.  
23 p4125 A69-42186

## LAUSSERMAIR, F.

Problems of fiber-reinforced structures in space propulsion systems /Probleme faserverstaerkter Strukturen in Raumfahrttriebssystemen/.  
12 p2176 A69-25860

Developmental work on modern apogee engines /Entwicklungsarbeiten an modernen Apogaeumsmotoren/.  
15 p2671 A69-31051

## LAUSTSEN, S.

Meridian observations made in Brorfelde /Copenhagen University Observatory/, 1964-1967.  
02 p0315 A69-11815

## LAUTA, A. D.

Changes in the adrenocortical function during variations in the functional state of the hypothalamus /Zmena funktsii kori nadnirkovikh zaloz pri rizinomu funktsional'nomu stani gipotalamusa/.  
22 p3888 A69-41272

## LAUTER, E. A.

Ionospheric conditions following the proton flare event of 7 July 1966 as measured at ground-based stations. I - Low-energy particle effects in the lower ionosphere at medium latitudes.  
10 p1684 A69-23782

Space research activities in the German Democratic Republic.  
15 p2724 A69-31453

Comparison of A3-absorption measurements at L.F. and rocket measured D-region profiles.  
16 p2778 A69-32188

The duration of the ionospheric winter anomaly in the height range of the mesopause region /Zur Dauer der ionosphaerischen Winteranomalie im Hoehenbereich der Mesopausenregion/.  
16 p2782 A69-32456

## LAUTERBORN, D.

The formation of white dwarfs through mass exchange - Numerical calculations of the development of a binary star system in which the primary star sustains mass loss only upon termination of central helium combustion and then evolves into a white dwarf similar to Sirius B /Zur Entstehung von weissen Zwergen durch Massenaustausch - Numerische Rechnungen ueber die Entwicklung eines Doppelsternsystems, in dem der Primaerster erst nach Beendigung des zentralen Heliumbrennens Massenverlust erleidet und sich dann zu einem weissen Zwerg entwickelt, der Sirius B sehr aehnlich ist/.  
22 p4021 A69-40421

## LAUTERWALD, B.

Investigation of tungsten inert gas spot welding of AlMgSiF32 /Untersuchungen ueber das Wipunktverschweissen von Al Mg Si F32/.  
05 p0769 A69-16538

## LAVAKARE, P. J.

Onboard calibration system for gamma-ray spectrometers in space satellites.  
[IEEE PAPER 3A-6] 07 p1134 A69-19193

Cosmic Ray Studies in Relation to Recent Developments in Astronomy and Astrophysics, Tata Institute of Fundamental Research, Colloquium, Bombay, India, November 11-16, 1968, Proceedings.  
21 p3788 A69-38811

## LAVAL, G.

Disintegration of a Langmuir wave - Instability criterion and growth rate /Desintegration d'une onde de Langmuir - Criterie d'instabilite et taux de croissance/.  
03 p0480 A69-14057

Disintegration of a Langmuir wave - Conditions of resonance and parametric amplification /Desintegration d'une onde de Langmuir - Conditions de resonance et amplification parametrique/.  
03 p0480 A69-14113

Adiabatic theory of the motion of charged particles in an electromagnetic field /Theorie adiabatique du mouvement des particules chargees dans un champ electromagnetique/.  
11 p1948 A69-24857

Calculation of the B, L coordinates by a perturbation method /Calcul des coordonnees B, L par une methode de perturbations/.  
11 p1949 A69-24861

## LAVAL, P.

Construction of an exact and explicit second-order difference scheme for calculation of a plane or rotational compressible flow /Construction d'un schema aux differences explicite et precis au second ordre pour le calcul d'un ecoulement compressible plan ou de revolution/.  
[ONERA-TP-652] 03 p0419 A69-14111

Pseudoviscosity method and the problem of starting a nozzle /Methode de pseudo-viscosite et probleme de l'amorçage d'une tuyere/.  
22 p3860 A69-40926

## LAVAN, Z.

Measurements of the decay of swirl in turbulent flow.  
16 p2772 A69-32170

Analytical investigations of incompressible turbulent swirling flow in stationary ducts.  
[ASME PAPER 69-APM-19] 18 p3120 A69-34394

- Separation and flow reversal in swirling flows in circular ducts.  
24 p4301 A69-43355
- LAVDOVSKII, V. V.**  
Accurate positions of Pluto during the years from 1930 to 1965 according to photographic observations at Pulkovo /Tochnye polozheniia Plutona za 1930-1965 gg. po fotograficheskim nabludeniam v Pulkove/.  
22 p4025 A69-40612
- LAVENDEL, E. E.**  
Problems of Dynamics and Strength. Number 15 /Voprosy Dinamiki i Prochnosti. Number 15/.  
01 p0086 A69-10826  
Selection of displacement functions in calculating a rubber-metal valve /O vybore funktsii peremeshchenii pri raschete rezino-metallichesko klapana/.  
01 p0087 A69-10829
- LAVENGOOD, R. E.**  
Matrix properties controlling torsional fatigue life of fiber reinforced composites.  
08 p1339 A69-20495  
Tensile characteristics of discontinuous "unidirectional" glass-epoxy composites.  
08 p1339 A69-20496
- LAVENIR, J.-C.**  
Temporary storage unit with a cycle time of 500 nsec /Memoire temporaire a temps de cycle de 500 ns/.  
04 p0564 A69-15222
- LAVERNHE, J.**  
Incidence of cardiovascular diseases among the flight deck personnel of an airline.  
06 p0875 A69-17848  
Statistical data on grounding of crew members in an airline due to psychic disorders.  
21 p3665 A69-39181  
Incidence of cardiovascular illnesses among flight personnel of an airline /Incidence des maladies cardiovasculaires parmi le personnel navigant technique d'une compagnie aerienn/.  
21 p3661 A69-39271  
Comments on ICAO recommendations concerning hearing requirements for flight personnel /A propos des recommandations de l'O.A.C.I. sur les normes auditives du personnel navigant technique/.  
24 p4277 A69-43377
- LAVERRE, J.**  
Large-scale tests of Concorde air intakes /Essais a grande echelle des entrees d'air de Concorde/.  
03 p0361 A69-12879
- LAVI, A.**  
Stability of difference methods for initial-value type partial differential equations.  
10 p1720 A69-23594
- LAVI, R.**  
Experimental investigations of ground-jet suppression fences for VTOL aircraft prepared sites. [AIAA PAPER 68-639]  
17 p2902 A69-34028
- LAVIK, M. T.**  
Detection of impurities in synthetic solid lubricants.  
01 p0102 A69-10909
- LAVINE, J. M.**  
Nonuniform emission characteristics of electron-beam-pumped dislocation-free GaAs lasers.  
22 p3963 A69-40565
- LAVIRON, A.**  
Synthesis and realization of adjustable active VLF circuits /Synthese et realisation de circuits actifs reglables en T.B.F./.  
11 p1859 A69-25392
- LAVIRON, E.**  
Integral image camera with a 1-nsec exposure time /Camera a image integrale de 1 nsec de duree d'ouverture/.  
12 p2084 A69-26147
- LAVOIE, F. J.**  
Signature analysis - Product early-warning system.  
06 p0932 A69-17875  
Laser welding - A state-of-the-art report.  
08 p1319 A69-20203  
Explosive welding.  
18 p3151 A69-35479  
Nondestructive testing.  
23 p4169 A69-41529
- LAVOISARD, J.-L.**  
The telemetry system of the Aurorae/ESRO 1 satellite /Le systeme de telemesure du satellite Aurorae ESRO I/.  
15 p2702 A69-31085
- LAVRENTEV, I. V.**  
End effects in MHD channels with nonconducting vanes /Kontsevyie efekty v MGD-kanalakh s neprovodiashchimi peregorodkami/.  
13 p2306 A69-27497  
Experimental investigation of liquid-metal MHD generators /Eksperimental'nye issledovaniia zhid-kometallicheskiikh MGD-generatorov/.  
13 p2208 A69-27512
- LAVRENTEVA, L. G.**  
Electrical and photoelectrical properties of heterojunctions prepared by germanium epitaxy on gallium arsenide bases /Elektricheskie i fotoelektricheskie svoista geteroperekhodov, poluchennykh epitaksiei germaniia na podlozhkakh arsenida galliia/.  
15 p2667 A69-30078
- LAVRINOV, G. A.**  
Quasi-periodic variations of the intensity of solar radiation emission at the 3.3-cm wavelength /Kvaziperiodicheskie izmeneniia intensivnosti radioizlucheniia solntsa na volne 3,3 cm/.  
07 p1211 A69-18516
- LAVROV, A. N.**  
Some properties of the reliability resource.  
10 p1662 A69-23319
- LAVROVA, E. V.**  
Variation of N/h/ profiles during a positive perturbation /Izmenenie N/h/-profiliei vo vremia polozhitel'nogo vozmushcheniia/.  
17 p2967 A69-33986
- LAVROVSKII, E. K.**  
Determination of the parameters of rotation and orientation of a satellite from the results of qualitative analysis.  
07 p1230 A69-19604
- LAVRUKHINA, A. K.**  
Determination of preatmospheric meteorite sizes from the effects of nuclear reactions produced by cosmic rays /Opredelenie doatmosfernykh razmerov meteoritov po efektam iadernykh reaktsii, vyzvannykh kosmicheskimi luchami/.  
01 p0159 A69-11375  
Study of the distribution of Sc, Ce, and Eu in various phases of meteorite material /Izuchenie raspredeleniia Sc, Ce i Eu mezhdu razlichnymi fazami meteoritnogo veshchestva/.  
01 p0026 A69-11376  
Determination of uranium in iron meteorites by recording fission fragment tracks /Opredelenie urana v zheleznykh meteoritakh metodom registratsii trekov oskolkov delenii/.  
01 p0026 A69-11377  
Radioactivity caused by cosmic rays of galactic and solar origin in bodies of the solar system /Radioaktivnost', vyzvannaia kosmicheskimi luchami galakticheskogo i solnechnogo proiskhozhdeniia v telakh solnechnoi sistemy/.  
10 p1756 A69-22813  
Radioactivity of the moon and meteorites /Radioaktivnost' luny i meteoritov/.  
10 p1756 A69-22817  
Cosmic-radiation-induced radioactivity of the moon and meteorites and the origin of meteorites /Radioaktivnost' luny i meteoritov, vyzvannaia kosmicheskimi luchami, i proiskhozhdenie meteoritov/.  
19 p3410 A69-36092
- LAVRUSHIN, B. M.**  
Temperature dependence of laser threshold current density and emission spectra in electron-beam pumped gallium arsenide lasers.  
02 p0260 A69-12683  
Output power and efficiency of a gallium arsenide semiconductor laser excited with an electron beam.  
06 p0933 A69-16994  
Power, efficiency and temperature dependence of emission spectra and threshold current density in electron-beam pumped gallium arsenide laser.  
19 p3338 A69-36538
- LAVY, S.**  
The influence of high oxygen pressure on the electrical activity of the brain.  
21 p3656 A69-38977
- LAW, S. E.**  
Measurements of Venus and Jupiter near 1-cm wavelength.  
09 p1600 A69-22206
- LAWDEN, M. D.**  
Problems associated with overlay analysis of F1-region ionograms.  
05 p0757 A69-16403  
The lunar variations in the F2-region of the ionosphere at low latitudes.  
16 p2776 A69-32090
- LAWLESS, E. W.**  
Inorganic High-energy Oxidizers- Synthesis, Structure, and Properties.  
12 p2146 A69-25824
- LAWLEY, A.**  
Work-hardening characteristics of Ta and Ta-base alloys.  
05 p0778 A69-15758  
Microstrain behavior of metal-matrix composites.  
06 p0939 A69-16945
- LAWLOR, E. A.**  
Design, simulation and flight performance of the Radio Astronomy Explorer-A satellite.  
07 p1226 A69-18328
- LAWN, B. R.**  
A simulated crack experiment illustrating the energy balance criterion.  
05 p0842 A69-16438
- LAWN, C. J.**  
Turbulent heat transfer at low Reynolds numbers. [ASME PAPER 69-HT-H]  
24 p4303 A69-43523
- LAWRENCE, D. S.**  
The potentialities of VTOL transportation systems in the Northeast corridor. [SAE PAPER 690417]  
23 p4147 A69-41642
- LAWRENCE, E. G.**  
Rigid inclusions in an elastic plate.  
23 p4235 A69-42465
- LAWRENCE, G. M.**  
H sub 2 Lyman-band oscillator strengths.  
06 p0962 A69-17818  
Ultrashort-period stellar oscillations. III. Power-spectrum analysis of photometric observations of white dwarfs.  
10 p1788 A69-24124
- LAWRENCE, J. C.**  
Effect of pulsed microwaves at X-band on skin metabolism.  
24 p4270 A69-42575  
Effect of ruby laser on white guinea-pig skin in tissue culture.  
24 p4270 A69-42578
- LAWRENCE, J. D., JR.**  
Mic total and differential backscattering cross sections at laser wavelengths for Junge aerosol models.  
04 p0609 A69-14290  
Optical radar studies of the atmosphere.  
12 p2033 A69-27001
- LAWRENCE, J. H.**  
Radiobiological studies with heavy particles as related to therapy.  
03 p0374 A69-13499
- LAWRENCE, R. M.**  
SCID-operated aircraft seat ejection systems.  
06 p0877 A69-16957
- LAWRENCE, R. S.**  
Saturation of laser-beam scintillation under conditions of strong atmospheric turbulence.  
09 p1517 A69-22079  
Ionospheric electron content at midlatitudes near the minimum of the solar cycle.  
22 p3939 A69-40505
- LAWRENCE, T. R.**  
Application of laser Doppler velocity instrumentation to the measurement of jet turbulence. [SAE PAPER 690266]  
09 p1494 A69-21555  
Steady-state assumption and the dissociation of Br sub 2 in shock waves.  
18 p3176 A69-34465
- LAWRENCE, W. N.**  
Electromagnetic forming - Design and application. [ASTME PAPER MR68-418]  
02 p0252 A69-11798
- LAWRENCE, W. T.**  
A thermal method for measuring wall thickness and detection of incomplete core removal in investment castings.  
24 p4312 A69-42754
- LAWRIE, J. A.**  
Hydromagnetic waves and the lower ionosphere.  
12 p2074 A69-26960
- LAWS, A.**  
Data handling equipment for British satellites.  
05 p0726 A69-16769
- LAWSON, D. D.**  
Estimation of solubility parameters from refractive index data.  
21 p3751 A69-38552



## LAWSON, D. W. R.

Developing, qualifying and operating business jet thrust reversers.  
[SAE PAPER 690311] 11 p1941 A69-24512

## LAWSON, K. S.

The influence of the engine on aircraft design.  
17 p2897 A69-33212

The influence of the airport, its facilities and environment on aircraft design and operating economics.  
17 p2948 A69-34210

The influence of the engine on aircraft design.  
22 p3862 A69-39961

## LAWSON, M. V.

Problems of helicopter noise estimation and reduction.  
[AIAA PAPER 69-195] 07 p1055 A69-19563

## LAWTON, J.

Rates of charging of small thermionic particles in a space charge.  
06 p1035 A69-17928

## LAX, B.

Quantum effects in cyclotron resonance using a CW hydrogen-cyanide laser.  
[IEEE PAPER C-6] 07 p1150 A69-19051

## LAX, P. D.

Integrals of nonlinear equations of evolution and solitary waves.  
03 p0468 A69-13825

Nonlinear partial differential equations and computing.  
20 p3569 A69-38212

## LAXPATI, S. R.

A log-periodic antenna with vertically polarized omnidirectional radiation.  
08 p1281 A69-20033

## LAYDEN, L. M.

Pulsed-power welding has out-of-position capability.  
18 p3150 A69-35418

## LAYMON, R. S.

An experimental comparison of two map display modes.  
06 p0924 A69-17212

## LAYTON, J. P.

Nuclear propulsion for exploration of the solar system.  
[AAS PAPER 69-330] 24 p4349 A69-42871

## LAYZER, D.

A theory of mid-latitude sporadic E.  
01 p0073 A69-11177

Vapor trails and turbulence in the lower thermosphere.  
15 p2602 A69-31393

Annual Review of Astronomy and Astrophysics. Volume 7.  
21 p3810 A69-39501

New theory of mid-latitude sporadic E.  
24 p4311 A69-4743

## LAZAR, J.

Review of the NASA program in electric propulsion.  
[AIAA PAPER 69-248] 09 p1561 A69-21216

## LAZAREV, B. G.

Properties of indium arsenide film Hall transducers in strong constant magnetic fields at liquid helium temperatures.  
10 p1696 A69-23717

## LAZAREV, E. M.

Creep in a multicomponent niobium alloy /Pol-zuchest' mnogokomponentnogo splava niobia/.  
22 p3969 A69-40073

## LAZAREV, E. V.

Current-voltage characteristic of a p-n-p-n structure in the switched-on state /Vol't-ampernaia kharakteristika p-n-p-n-struktury vo vkluchennom sostoianii/.  
10 p1742 A69-22997

Current-voltage characteristic of four-layer structures in diode switching /Vol't-ampernaia kharakteristika chetyrehslonnykh struktur v diodnom vkluchении/.  
13 p2236 A69-28531

## LAZAREV, I. U. F.

Azimuthal drift of the rotor axis of a directional gyroscope mounted on a sloping base /Ob azimuthal'nom ukhode osi rotora giroskopa napravleniia, ustanovlennogo na naklonnom osnovanii/.  
09 p1502 A69-22702

## LAZAREV, I. U. N.

Ballistic deviations of a gyropendulum vertical damped by an astatic gyroscope /Ballisticheskie deviat-

sii giromaiatsnikovoi vertikali, dempfiruemoi astaticheskimi giroskopom/.  
06 p0927 A69-17687

## LAZAREV, V. I.

Corpuscular fluxes and electron gas heating at E region altitudes /Korpuskuliarnye potoki i razogrev elektronno gaza na vysokotakh oblasti E/.  
09 p1490 A69-21772

## LAZAREVA, E. V.

Structure of a supersonic flow of a conducting gas in a transverse magnetic field when drawing the induced EMF and investigation of the current-voltage characteristics /Struktura sverkhzvukovogo potoka provodiashchego gaza v poperechnom magnitnom pole pri s'eme induktirovannoi EDS i issledovanie vol'tampernykh kharakteristik/.  
10 p1737 A69-23469

## LAZAREVA, L. S.

Properties of indium arsenide film Hall transducers in strong constant magnetic fields at liquid helium temperatures.  
10 p1696 A69-23717

## LAZAREVSKII, V. S.

Reduction of observations on a large-base radio interferometer /K reduktzii nabludenii radiointerferometrom s bol'shoi bazoi/.  
08 p1314 A69-20434

## LAZARUS, A. J.

Observations of the interplanetary plasma subsequent to the 7 July 1966 proton flare.  
10 p1783 A69-23775

Simultaneous plasma and magnetic-field measurements of probable tangential discontinuities in the solar wind.  
11 p1946 A69-24430

An east-west asymmetry in the solar wind velocity.  
11 p1950 A69-25148

## LAZARUS, A. K.

Synthetic lubricants.  
18 p3163 A69-35481

## LAZDINIS, S. S.

Direct analysis of the properties of molecular oxygen in hypervelocity flows.  
13 p2302 A69-28265

## LAZEREVA, M. P.

Titanium in structural steel /Titan v konstruktsionnoi stali/.  
15 p2640 A69-30633

## LAZKO, S. G.

Effect of the introduction of high-polymer DNA on the nucleic acid content in irradiation sickness dynamics /Vliianie vvedeniia vysokopolimernoi DNK na sodержanie nukleinovyykh kislot v dinamike luchevoi bolezni/.  
21 p3657 A69-39050

## LAZOVSKAIA, O. V.

Antifriction properties of hard lubricating coatings in an inert gas atmosphere and in a vacuum /Antifrictionnyye svoystva tverdykh smazochnykh pokrytii v atmosfere inertnogo gaza i v vakume/.  
13 p2269 A69-28053

## LAZUTIN, L. L.

High-latitude geomagnetic disturbances in June 1965 /Geomagnitnye vozmushcheniia v vysokikh shirotakh v iunie 1965 g./.  
17 p2964 A69-33961

## LAZZARINO, L.

Critical survey of the present state of development of problems of air flight and space mechanics /Rassegna critica dell'attuale stato di sviluppo dei problemi della meccanica del volo aereo e spaziale/.  
11 p1824 A69-25672

Present status of flight and space mechanics.  
17 p3076 A69-33041

## LAZZERI, L.

The application of fracture mechanics to the assessment of failure of cylindrical pressure vessels under yielding conditions.  
19 p3439 A69-36439

## LAZZERONI, F. A.

Problems associated with wind tunnel tests of high disk loading systems at low forward speeds.  
18 p3119 A69-35230

## LE BER, J.

Incidence of unitary sorting on the reliability of planar transistors subjected to irradiation recovery cycles /Incidence d'un tri unitaire sur la fiabilite de transistors planars soumis a des cycles irradiation-restauration/.  
15 p2626 A69-30834

Aid rendered by CAD in choosing components with a view to circuit optimization /Aide apportee par le CAO pour le choix des composants en vue de l'optimisation des circuits/.  
15 p2628 A69-30849

## LE BOT, Y.

Study of the wave configurations in supersonic compressors by hydraulic analogy /Etude par analogie hydraulique de la configuration d'ondes dans les compresseurs supersoniques/.  
[ONERA-TP-598] 02 p0187 A69-11621

Contribution to the study of supersonic compressors - Wave configurations obtained by hydraulic analogy /Contribution a l'etude des compresseurs supersoniques - Configurations d'ondes obtenues par analogie hydraulique/.  
[ONERA-TP-669] 05 p0699 A69-16340

## LE BOUCHER, F.

Preliminary data on a limitation of the use of an oxygen-hydrogen mixture for deep submersion to the saturation point /Premieres donnees sur une limitation de l'utilisation du melange oxygene-hydrogene pour la plongee profonde a saturation/.  
24 p4262 A69-43025

## LE BRONEC, J.

Experimental results of MHD conversion using a rare gas /Resultats d'experiences de conversion MHD a gaz rare/.  
10 p1738 A69-23475

## LE CARVENNEC, F.

Meshless shutter tube with nine images - Double deflection capability.  
12 p2083 A69-26144

## LE CHARPENTIER, Y.

Hemorrhages of the dental pulp of the rat following acute hypoxia /Hemorragies de la pulpe dentaire du rat consecutives a des hypoxies aiguës/.  
21 p3661 A69-39276

## LE CHUITON, J.

Preliminary data on a limitation of the use of an oxygen-hydrogen mixture for deep submersion to the saturation point /Premieres donnees sur une limitation de l'utilisation du melange oxygene-hydrogene pour la plongee profonde a saturation/.  
24 p4262 A69-43025

## LE CROISSETTE, D. H.

The scientific instruments on Surveyor.  
[JPL-TR-32-1358] 08 p1312 A69-19850

## LE FUR, B.

Application of similitude in the mechanics of disperse media.  
19 p3300 A69-36775

## LE GOFF, C.

Wall flow at M sub infinity equals 7, around a cone at incidence /Ecoulement parietal autour d'un cone en incidence a M sub infinity equals 7/.  
19 p3241 A69-36759

## LE GOFF, D.

A subnanosecond risetime electro-optic shutter for use in a laser system.  
09 p1493 A69-21422

## LE GOFF, P.

Mechanism of decomposition of low-pressure ethylene on a high-temperature tungsten ribbon surface /Mecanisme de la decomposition de l'ethylene a basse pression a la surface de rubans de tungstene a haute temperature/.  
19 p3265 A69-36729

Mechanism of decomposition of low-pressure ethylene on a high-temperature rhenium ribbon surface /Mecanisme de la decomposition de l'ethylene a basse pression a la surface de rubans de rhenium a haute temperature/.  
19 p3266 A69-36730

Influence of oxygen on the decomposition of low-pressure ethylene at the surface of high-temperature tungsten and rhenium /Influence de l'oxygene sur la decomposition de l'ethylene a basse pression a la surface du tungstene et du rhenium a haute temperature/.  
19 p3266 A69-36732

## LE GRIVES, E.

Mixing regimes of two flows with different total enthalpies /Regimes de melange de deux d'enthalpies d'arret differentes/.  
[ONERA-TP-599] 02 p0187 A69-11619

French research on electric propulsion - Present status and prospects for development.  
[AIAA PAPER 67-740] 03 p0496 A69-13995

Various mixing regimes of two flows with different stagnation enthalpies /Divers regimes de melange de deux flux d'enthalpies d'arret differentes/.  
13 p2251 A69-28499

Present state of development and applications of ion propulsion / Perspectives actuelles de developpement et d'applications de la propulsion ionique/.  
17 p3020 A69-33354

**LE LETTY, L.**  
Two methods of calculating the minimum time-optimal controls of multivariable linear systems - Application to a specific problem / Deux methodes de calcul des commandes optimales en temps minimum des systemes lineaires multivariables - Application a un probleme concret/.  
12 p2050 A69-26090

**LE MEN, J.-F.**  
Fluctuation voltage at the terminals of a polar-dielectric capacitor / Tension de fluctuations aux bornes d'un condensateur a dielectrique polaire/.  
08 p1295 A69-21151

**LE MOIGNE, Y.**  
Automatic control of the leaktightness of the components of hydraulic brakes / Controle automatique de l'etancheite des organes de freins hydrauliques/.  
17 p2978 A69-33377

**LE POOLE, J. B.**  
X-ray heliography by means of a Fresnel-Soret type zoneplate camera.  
20 p3544 A69-37803

**LE SQUEREN, A. M.**  
Dimensions, temperature and electron density of the quiet corona.  
08 p1393 A69-20573

**LE TRAON, J.-Y.**  
Study of the electrical conductivity and the Hall effect in thin bismuth films between 4.2 and 300 K / Etude de la conductivite electrique et de l'effet Hall dans des couches minces de bismuth entre 4,2 et 300 deg K/.  
09 p1557 A69-21692

**LEA, R. H.**  
Economic factors of space transportation.  
21 p3857 A69-39687

**LEA, W. A.**  
The impact of speech communication with computer.  
18 p3107 A69-35099

**LEACH, C. E.**  
The radioisotope energized Stirling engine for spacecraft auxiliary electric power in the 250 to 500 W/e/ power range.  
23 p4190 A69-42281

**LEADON, R.**  
Recombination lifetimes in high-purity silicon at low temperatures.  
19 p3383 A69-36447

**LEAK, J.**  
Fundamentals of Aerospace Instrumentation, Instrument Society of America, International Aerospace Instrumentation Symposium, 14th, Boston, Mass., June 3-5, 1968, Tutorial Proceedings, Volume 1.  
10 p1690 A69-23224  
Instrumentation in the Aerospace Industry, Volume 14 - Instrument Society of America, International Aerospace Instrumentation Symposium, 14th, Boston, Mass., June 3-5, 1968, Proceedings.  
10 p1670 A69-23245

**LEAK, J. S.**  
Aircraft accident investigation - Organization and procedures of the National Transportation Safety Board.  
12 p2191 A69-25844

**LEAKE, R. J.**  
Transfer functions of a DDA program.  
12 p2053 A69-26509

**LEAMER, P. C.**  
A qualitative investigation of secondary flows in a confined viscous vortex.  
19 p3296 A69-35756

**LEAN, E. G.**  
Efficiencies and bandwidths of intracavity acoustooptic devices.  
10 p1697 A69-23871

**LEAR, C. W.**  
Electron bombardment thruster technology. [AIAA PAPER 69-301]  
09 p1568 A69-21730

**LEARN, A. J.**  
Reactive deposition of cubic silicon carbide.  
09 p1554 A69-21350  
Chemical processes in SiC formation by reactive deposition and chemical conversion.  
09 p1554 A69-21351

**LEARY, F.**  
Aeronautical service satellites.  
04 p0666 A69-15295  
Stations and bases.  
23 p4224 A69-42456

**LEATH, P. L.**  
Displacement correlations and frequency spectra for mass-disordered lattices. II.  
03 p0493 A69-14241  
Frequency spectra in disordered alloys - An interpolation formula.  
20 p3583 A69-37279

**LEATON, B. R.**  
Amplitude error in the L vector from noisy data.  
12 p2033 A69-26956

**LEAVENS, W. M.**  
Normal mode representation of the high-frequency properties of an inhomogeneous plasma.  
11 p1929 A69-25269

**LEAVENWORTH, R. S.**  
Planning for flight system availability under uncertainty.  
18 p3210 A69-35083

**LEAVITT, J. A.**  
A power series method for solving nonlinear boundary value problems.  
14 p2430 A69-29362

**LEBAN, M.**  
Heats of adsorption of carbon dioxide on silver /I/ oxide and copper /II/ oxide as determined by gas chromatography.  
20 p3485 A69-38277

**LEBAS, J.**  
Application of a polycrystalline probe in plasma diagnostics / Utilisation d'une sonde polycristalline dans le diagnostic de plasma/.  
23 p4196 A69-41696

**LEBEAU, A.**  
Telecommunications / Les telecommunications/.  
02 p0207 A69-11910  
Calculation of Radiation Doses in Space, Centre d'Etudes et de Recherches en Technologie Spatiale, European Symposium, Toulouse, France, February 21-23, 1968, Reports / Calcul des Doses de Radiations dans l'Espace, Centre d'Etudes et de Recherches en Technologie Spatiale, Journees Europeennes, Toulouse, France, February 21-23, 1968, Comptes Rendus/.  
11 p1947 A69-24854

**LEBED, B. M.**  
Nonlinear effects accompanying the excitation of magnetoelastic waves in yttrium garnet / Nelineinye javleniia pri vzbuzhdenii magnitoupругikh voln v itrievom granate/.  
12 p2145 A69-26725  
Nonlinear phenomena arising during excitation of magnetoelastic waves in yttrium iron garnet.  
21 p3782 A69-39138

**LEBEDENKO, V. N.**  
Electron-ion recombination in the wake of an ionizing particle and the scintillation mechanism of noble gases / Elektron-ionnaia rekombinatsiia na slede ionizuushchei chastitsy i mekhanizm stsintillitsii blagorodnykh gazov/.  
15 p2655 A69-30961

**LEBEDEV, A. A.**  
Negative-resistance diodes made of cadmium-doped silicon / Diody s otritsatel'ny'm soprotivleniem iz kremniia, legirovannogo kadmiiem/.  
09 p1462 A69-21477  
Cadmium-doped silicon diodes with negative resistance.  
15 p2578 A69-30722  
Synthesis of an optimal orbit control system for a stable artificial earth satellite / Sintez optimal'noi sistemy upravleniia orbitoi statsionarnogo iskusstvennogo sputnika zemli/.  
21 p3767 A69-39652  
Resistance of materials to deformation and fracture in complex stress states / Soprotivlenie materialov deformirovaniu i razrusheniiu pri slozhnom napriazhenno sostoianii/.  
24 p4402 A69-43233

**LEBEDEV, B. I.**  
Pathomorphological peculiarities of radiation sickness in animals irradiated by high-energy protons / Osobennosti patologo-morfologicheskoi kartiny luchevoi bolezni pri obluchenii zhivotnykh protonami vysokikh energii/.  
05 p0708 A69-16509

**LEBEDEV, V. I.**  
Pathomorphological features of radiation sickness in animals irradiated with high-energy protons.  
18 p3095 A69-34728

**LEBEDEV, D. V.**  
Effect of stress concentrators on the mechanical properties of titanium and titanium alloys at low temperature.  
03 p0443 A69-13028

**LEBEDEV, E. A.**  
Basic parameters on switches based on glassy chalcogenide semiconductors - Parameters and physical principles of switches based on glassy chalcogenide semiconductors / Osnovnye parametry perekliuchatelei na osnove khal'kogenidnykh stekloobraznykh poluprovodnikov - Parametry i fizicheskie osnovy perekliuchatelei na osnove khal'kogenidnykh stekloobraznykh poluprovodnikov/.  
21 p3780 A69-39045

**LEBEDEV, E. F.**  
Explosive magnetohydrodynamic generator with a superconducting magnetic system / Vzryvnoi magnitogidrodinamicheskii generator so sverkhprovodiashchei magnitnoi sistemoi/.  
14 p2393 A69-28911

**LEBEDEV, I. V.**  
Magnetron amplifier with a stepped interaction space / Magnetrannyi usilitel' so stupenchatym prostranstvom vzaimodeistviia/.  
03 p0407 A69-13977

**LEBEDEV, K. A.**  
Influence of high oxygen concentrations on animal organisms / Vliianie povysennykh kontsentratsii kisloroda na organizm zhivotnykh/.  
05 p0709 A69-16512  
Effects of high oxygen concentrations on animals.  
18 p3095 A69-34731  
Effect of a local stress load on the differentiation of immunocompetent cells / Vliianie mestnogo stress-vozdeistviia na differentsirovku immunokompetentnykh kletok/.  
22 p3877 A69-40277

**LEBEDEV, M. G.**  
Approximate method of taking into account the effect of real properties of the gas during hypersonic flow past segmental bodies / Priblizhennyi metod ucheta vliianiia real'nosti gaza pri giperzvukovom otekanii segmental'nykh tel/.  
14 p2391 A69-29620  
Impact of a nonuniform supersonic gas flow on a plane obstacle / Udar neravnomernogo sverkhzvukovogo potoka gaza v ploskuiu pregradu/.  
19 p3239 A69-36397

**LEBEDEV, N. A.**  
Functions of a Complex Variable- Constructive Theory.  
01 p0104 A69-10616

**LEBEDEV, N. N.**  
Expansion of an arbitrary function into an integral in terms of associated spherical functions.  
11 p1910 A69-25731

**LEBEDEV, O. L.**  
Synchronization of ruby laser and neodymium-glass laser single pulses by means of a bleachable liquid switch / O sinkhronizatsii monoimpul'sov izlucheniia rubinovogo i neodimovogo lazervos s pomoshch'iu prosvetliaushchegosia zhidkostnogo zatvora/.  
07 p1147 A69-18530  
Stable passive Q-switch for a neodymium laser / Stabil'nyi passivnyi zatvor dlia neodimovogo lazera/.  
17 p2983 A69-33969

**LEBEDEV, S. V.**  
The possibility of using the "electrical explosion" of wires for investigation of metals at high temperatures.  
02 p0280 A69-11581

**LEBEDEV, V. G.**  
Liquid lasers / Opticheskie kvantovye generatory na zhidkostiakh/.  
11 p1893 A69-24353

**LEBEDEV, V. I.**  
Reactions of cosmonauts during parabolic aircraft flights / Reaktsii kosmonavtov vo vremia parabolicheskikh poletov na samoletakh/.  
07 p1061 A69-18580  
Certain physiological reactions in humans under conditions of brief weightlessness / Nekotorye fiziologicheskie reaktsii cheloveka v usloviakh kratkovremennoi nevesomosti/.  
07 p1061 A69-18581  
Physiological reactions of cosmonauts in unsupported space / Fiziologicheskie reaktsii kosmonavtov v bezopornom prostranstve/.  
07 p1061 A69-18582



- Vestibular reactions of cosmonauts during the flight on the Voskhod spacecraft /Vestibuliarnye reaktsii kosmonavtov pri Plete na korable "Voskhod"/.  
07 p1062 A69-18588
- Efficiency of man under conditions of reduced gravitation /K voprosu o rabotosposobnosti cheloveka v usloviakh ponizhennoi vesomosti/.  
07 p1063 A69-18596
- Time perception under conditions of brief weightlessness /O vospriiatii vremeni v usloviakh kratkovremennoi nevesomosti/.  
07 p1065 A69-18981
- The role of the vestibular analyzer in human space orientation during weightlessness in airplane flights.  
08 p1262 A69-19840
- Structural relaxation in simple fluids /K voprosu o strukturnoi relaksatsii v prostykh zhidkostiakh/.  
13 p2299 A69-28037
- The use of a generalized statistical description of a reflected radio signal for its automatic classification /Ob ispol'zovanii obobshchennogo statisticheskogo opisaniia otrazhennogo radioisignala dlia ego avtomaticheskoi klassifikatsii/.  
14 p2411 A69-28917
- Modeling human movements in weightlessness and in a water environment from the viewpoint of a biomechanical approach /O modelirovanii dvizhenii cheloveka v nevesomosti i v vodnoi srede s biomechanicheskikh pozitsii/.  
17 p2915 A69-33385
- Hypersonic gas flow past blunt bodies with allowance for selective energy emission and absorption /Obtekanie zatuplennykh tel giperzvukovym potokom gaza s uchedom selektivnogo izlucheniia i pogloshcheniia energii/.  
20 p3457 A69-36993
- Importance of parabolic flights, reproducing a brief weightlessness, in the vestibular professional selection of astronauts /K voprosu o znachenii parabolicheskikh poletov s vosproizvedeniem kratkovremennoi nevesomosti v vestibuliarnom profobore kosmonavtov/.  
20 p3481 A69-37276
- Perception of time during short-term weightlessness.  
20 p3480 A69-38229
- LEBEDEV, V. K.**  
Evaluation of the dynamic properties of supply sources in CO sub 2 - shielded welding.  
11 p1892 A69-25667
- LEBEDEV, V. L.**  
Radio Control of Rocket Missiles and Space Vehicles /Radioupravlenie reaktivnymi snariadami i kosmicheskimi apparatami/.  
20 p3574 A69-37232
- LEBEDEV, V. P.**  
Electron microscopic study of the nature of low-temperature strengthening and of its effect on high-temperature creep of nickel /Elektronomikroskopicheskoe issledovanie prirody nizkoterperaturnogo uprochneniia i ego vliianiia na vysokotemperaturnuiu polzuchest' nikelia/.  
18 p3157 A69-39254
- LEBEDEV, V. V.**  
Optimal value for the antenna spacing of a three antenna interferometer.  
16 p2758 A69-31730
- LEBEDEVA, E. K.**  
Possibility of Chlorella cultivation of solutions with mineralized human wastes.  
02 p0200 A69-11511
- Isolation of metabolic products from culture broths of Chlorella.  
08 p1262 A69-19833
- Stabilization of the concentration of mineral nutrients in the medium during prolonged Chlorella cultivation with recovery of the medium.  
10 p1646 A69-23578
- LEBEDEVA, E. V.**  
Conveyor growing of carrots by the aeroponic method /Konveiernoe vyrashchivanie morkovi sposobom aeroponiki/.  
17 p2912 A69-32943
- LEBEDEVA, I. G.**  
A class of selfsimulated motions of a relaxing gas.  
04 p0588 A69-14623
- LEBEDEVA, N. A.**  
High-speed ultrasonic instrument for on-line inspection of welded tube seams.  
18 p3136 A69-34778
- LEBEDEVA, O. M.**  
The spectra of discrete radio sources at decametric wavelengths. I, II.  
18 p3200 A69-35134
- LEBEDEVA, S. M.**  
Anomalies in the spectra of cosmic radioemission sources in the decameter band.  
06 p1004 A69-17538
- LEBEDEVA, V. V.**  
Use of a photographic exposure meter for measurements of laser power.  
04 p0602 A69-15405
- Fluctuations in the spectrum of an argon laser.  
08 p1327 A69-21023
- On the stability of a Gaussian beam in a nonuniformly amplifying medium.  
09 p1520 A69-22685
- Automatic frequency control of a laser and regenerative amplifier.  
15 p2633 A69-30238
- Effect of the spatial inhomogeneity of a laser field on the amplification saturation /Vliianie prostranstvennoi neodnorodnosti polia lazera na nasyshchenie usileniia/.  
21 p3740 A69-39549
- Experimental determination of the lifetimes of the lower operating levels of an argon laser /Eksperimental'noe opredelenie vremen zhizni nizhnikh radiobichkh urovnei argonovogo lazera/.  
22 p3965 A69-40965
- LEBEDEW, L.**  
The way to the first manned space station /Der Weg zur ersten bemannten Raumstation/.  
24 p4391 A69-42798
- LEBEDINETS, V. N.**  
Reflection of radio waves from meteor trails. I - Reflection coefficients.  
12 p2031 A69-26691
- Radar studies of the distribution of meteoric matter /Radiolokatsionnye issledovaniia raspredeleniia meteornogo veshchestva/.  
17 p3041 A69-33894
- Reflection of radio waves from meteor trails. II - Diffraction patterns /Otrazhenie radiovoln ot meteornykh sledov. II - Difraktsionnyye kartiny/.  
23 p4214 A69-41846
- LEBEDINSKII, A. I.**  
Angular and spectral distributions of infrared terrestrial radiation into space in the vicinity of the horizon according to satellite observations.  
03 p0422 A69-13506
- Latitudinal dependence of the spectral intensities of terrestrial radiation into space according to observations of Cosmos 45 and Cosmos 65 satellites.  
03 p0422 A69-13507
- Investigation of the earth's ozonosphere from satellites /Issledovaniia ozonosfery zemli so sputnikov/.  
12 p2064 A69-25952
- Estimation of corrections for nonuniformity of measurement to the correlation relationships between spectral densities of radiation from the earth /Otsenka popravok na neodnovremennost' izmereniia k korrrelatsionnym zavisimostiam mezhdu spektral'nymi intensivnostiami izlucheniia zemli/.  
14 p2435 A69-29043
- Investigation of the planetary distribution of ozone on the basis of ultraviolet spectra measured by satellites /Issledovanie planetarnogo raspredeleniia ozona po ul'trafioliovym spektram, izmerennym na sputnikakh/.  
15 p2597 A69-30654
- LEBEDINSKII, E. V.**  
Calculation of the probability distributions of signal amplitudes, concentrated noise, and the relation between them under conditions of Rayleigh and log-normal fading /Raschet raspredelenii veroiatnostei amplitud signalov, sosredotochennykh pomekh i ikh ot-nosheniia v usloviakh releevskikh i logaritmicheskoinormal'nykh zamiraniy/.  
11 p1833 A69-24440
- Diversity reception under conditions of random radio noise /O raznesennom prieme v usloviakh sluchainykh radiopomekh/.  
11 p1835 A69-24968
- LEBEL, P. J.**  
Entry vehicle instrumentation for heat shield ablation measurements.  
04 p0602 A69-15428
- LEBLANC, A. D.**  
Physiological response to steady state hypoxia.  
23 p4085 A69-41673
- LEBLANC, L. L.**  
A numerical experiment in predicting stratus clouds.  
15 p2649 A69-30893
- LEBLANC, M.**  
Utilization of very short pulse lasers for instantaneous measurement of deformations by the holographic method /Utilisation des lasers en impulsions tres courtes pour la mesure instantanee des deformations par methode holographique/.  
12 p2087 A69-26175
- LEBLANC, S.**  
Specialized hybrid machine making possible the solution by iteration of a system of parametric, homogeneous, and linear equations /Machine hybride specialisee permettant la resolution par iteration d'un systeme d'equations lineaire, homogene et parametrique/.  
15 p2572 A69-31089
- LEBLANC, Y.**  
Dimensions, temperature and electron density of the quiet corona.  
08 p1393 A69-20573
- The correlation between coronal enhancements observed at 5303 angstrom units and 6374 angstrom units and radio condensations at a frequency of 169 MHz.  
13 p2347 A69-27717
- LEBO, J. A.**  
Data compression using orthogonal functions.  
18 p3103 A69-35060
- LEBON, G.**  
On a variational description of magnetohydrodynamic systems including irreversible processes.  
07 p1188 A69-18267
- On a Lagrangian evolution criterion in magnetohydrodynamics.  
10 p1727 A69-22904
- LEBON, R. T.**  
The role of system safety in software. [AIAA PAPER 69-962]  
22 p3905 A69-40343
- LEBRUN, J.**  
Radiation effects on thin-film solar cells /Effets des rayonnements sur les cellules solaires en couches minces/.  
11 p1825 A69-24872
- LEBSKII, I. U. V.**  
Wideband superheterodyne radiometers of the millimeter wave range /Shirokopolosnye supereterodinye radiometri millimetrovogo diapazona voln/.  
07 p1131 A69-18517
- LECAR, M.**  
Numerical experimental check of Lynden-Bell statistics for a collisionless one-dimensional stellar system.  
16 p2862 A69-32376
- LECCE, B. A.**  
Attempted search for "analog types" representative of mean seasonal circulation /Tentativi di ricerca di "tipi analogici" rappresentativi della circolazione media stagionale/.  
13 p2295 A69-28652
- LECH, J.**  
A circulating-liquid laser system. [IEEE PAPER M-70]  
07 p1153 A69-19069
- LECHNER, T. J., JR.**  
Equivalent circuit for the transverse impact modulator.  
02 p0196 A69-12082
- LECKIE, F. A.**  
Plastic instability of a spherical shell.  
11 p1980 A69-24822
- LECKIE, G. G.**  
Attitude reference systems.  
09 p1609 A69-21618
- LECKIE, H. P.**  
A comparison of the stress corrosion behavior of some high strength steels.  
14 p2467 A69-29940
- LECKRONE, D.**  
Spectrophotometric studies of gaseous nebulae. XIV - The bright moderate-excitation planetary IC 5217.  
24 p4376 A69-42663
- LECLERC, P.**  
Bistable operation of a CW GaAs injection laser.  
01 p0090 A69-10565
- Gallium arsenide infrared emitters /Emetteurs infrarouges a l'arseniure de gallium/.  
06 p0894 A69-17248
- LECLERE, G.**  
First results of rain corrosion tests in the S3 intermittent wind tunnel of the O.N.E.R.A. Modane Test Center.  
07 p1117 A69-19534
- LECLERT, G.**  
Study of the ion population of a nitrogen plasma /Etude de la population ionique d'un plasma d'azote/.  
22 p3990 A69-40714

## LECROART, H.

Experimental work on inhomogeneous flows  
/Travaux experimentaux sur la veine inhomogene/.  
13 p2310 A69-28032

## LECROY, R. C.

The solution of temperature development in the entrance region of an MHD channel by the B. G. Galerkin method.  
[ASME PAPER 68-WA/HT-10]  
05 p0803 A69-16118

## LECUYER, J.

Studies in stellar evolution. VIII - The time scale for the diffusion of energy in the stellar interior.  
15 p2692 A69-30767

## LEDBETTER, D. L.

NERVA - Contributing today and tomorrow.  
18 p3170 A69-35075

## LEDBURY, K. J.

New fibre-filled thermoplastics.  
08 p1337 A69-20479

## LEDERBERG, J.

Relationship of planetary quarantine to biological search strategy.  
01 p0021 A69-11090  
Mechanization of inductive inference in organic chemistry.  
07 p1075 A69-19484  
Mars through a crystal ball.  
23 p4212 A69-41612

Applications of artificial intelligence for chemical inference. I - The number of possible organic compounds - Acyclic structures containing C, H, O, and N.  
23 p4114 A69-42214

## LEDERER, J.

Ideal safety system for accident prevention.  
06 p1040 A69-16836

## LEDERER, L. G.

Unscheduled landings for medical reasons - A five-year survey of the experience at American Airlines.  
24 p4278 A69-43393

## LEDERMAN, S.

Field tracing with electrostatic probes in low density slightly ionized flows.  
19 p3291 A69-35718  
Laboratory measurements of electron-density distributions in the near wake.  
[AIAA PAPER 68-161]  
24 p4248 A69-43643

## LEDERMAN, S. J.

Perception of interpolated position and orientation by vision and active touch.  
24 p4275 A69-43116

## LEDERMAN, W.

The fluidic vibrating string accelerometer.  
02 p0249 A69-12091

## LEDERSTEGER, K.

On the mass-functions of the earth, derived from orbital perturbations of artificial satellites.  
[UN PAPER 68-95385]  
01 p0064 A69-10460

## LEDINEGG, E.

Current distribution on a horizontal cylindrical antenna with rigorous allowance for ground reaction.  
09 p1467 A69-22581  
Effects of an idealized ionospheric disturbance on VLF signals - An iteration technique based on mode theory.  
17 p2920 A69-33418

## LEDLEY, B. G.

Propagation of the sudden commencement of July 8, 1966, to the magnetotail.  
01 p0075 A69-11226

## LEDNEVA, G. P.

Computation of the axial-mode frequencies and the optimal parameters of three- and four- mirror resonators for gas lasers /Raschet chastot oseyvkh mod i optimal'nye parametry trekh- i chetyrekhzernalnogo rezonatorov dlia gazovykh OKG/.  
22 p3964 A69-40796

## LEDoux, P.

Vibrational instability of massive stars and helium formation /Instabilite vibrationnelle des etoiles massives et formation d'helium/.  
08 p1401 A69-20895

## LEDU, J.

Flight testing results on a hypersonic re-entry nose cone.  
[AIAA PAPER 68-1145]  
03 p0521 A69-13668  
Flight testing results on a hypersonic re-entry nose cone.  
[AIAA PAPER 68-1145]  
24 p4394 A69-43250

## LEDUC, M.

Relations between the angular state of an atomic vapor subjected to optical pumping and its absorption and scattering properties. I /Relations entre l'etat angulaire d'une vapeur atomique soumise au pompage optique et ses proprietes d'absorption et de dispersion. I/.  
12 p2111 A69-27180

## LEDWELL, T. A.

A simple quasisteady model of the combustion of a fuel droplet with convection, including the effect of pressure.  
[AIAA PAPER 69-147]  
06 p1037 A69-18114

## LEE, A.

Crossed-beam studies of energy dependence of intermediate complex formation in an ion- molecule reaction.  
24 p4280 A69-43813  
Direct mechanism of reaction CH sub 3 super plus plus x CH sub 4 yields C sub 2 H sub 5 super plus plus H sub 2.  
24 p4280 A69-43814

## LEE, A. H.

Diurnal variation of cosmic-ray muon intensity near geomagnetic equator and the primary anisotropy.  
14 p2512 A69-28966

## LEE, B. G.

Guidance, navigation and control.  
19 p3370 A69-36316

## LEE, B. H. K.

Non-similar solutions for the propagation of imploding shock waves.  
10 p1678 A69-22931

## LEE, C. A.

Measurements of multiplication effects on noise in silicon avalanche diodes.  
04 p0573 A69-14332

## LEE, C. C.

A study of baffle effects on flow behavior under low-g conditions.  
21 p3696 A69-39232

## LEE, C. K.

Control forces in rocket nozzles produced by a secondary gas stream inclined at various angles to the nozzle axis.  
20 p3457 A69-37065

## LEE, C.-H.

The yield point load of a conical shell.  
06 p1023 A69-17375

## LEE, D. G.

Simulating the effects of gravitational field and atmosphere on behavior of granular media.  
[AIAA PAPER 69-1009]  
22 p3921 A69-40382

## LEE, D. H.

Noise and equivalent circuit of double injection.  
06 p0898 A69-17762

## LEE, D. N.

Theory of the stereoscopic shadow-caster - An instrument for the study of binocular kinetic space perception.  
22 p3893 A69-40839

## LEE, E. B.

Variational problems for systems having delay in the control action.  
11 p1860 A69-25447

## LEE, E. H.

Elastic-plastic deformation at finite strains.  
13 p2362 A69-28119  
On elastic filament reinforcement of a viscoelastic cylinder.  
[ASME PAPER 69-APMW-23]  
24 p4401 A69-43096  
Wave-front analysis in composite materials.  
[ASME PAPER 69-APMW-11]  
24 p4401 A69-43103

## LEE, E. P.

Dynamical friction in the post-Newtonian approximation of general relativity.  
08 p1386 A69-20072

## LEE, E. S.

Dynamic programming, quasilinearization and the dimensionality difficulty.  
21 p3754 A69-38751

## LEE, F. H.

Dielectrically isolated saturating circuits.  
02 p0221 A69-12470

## LEE, G.

Effects of mass addition of various gases on the heat transfer and surface pressures on a blunt cone in hypersonic flow.  
[AIAA PAPER 69-716]  
17 p2891 A69-33463  
An application of non-linear filter theory to PCM bit synchronization.  
19 p3270 A69-36245  
Ablation effects on the Apollo afterbody heat transfer.  
24 p4415 A69-43680

## LEE, G. C.

Derivation of stiffness matrices for problems in plane elasticity by Galerkin's method.  
20 p3619 A69-36951

## LEE, G. M.

Radar waveform synthesis by mean-square optimization techniques.  
20 p3492 A69-37708

## LEE, H. C.

Microwave power transistors.  
09 p1462 A69-21407

## LEE, H. J.

New state of ferromagnetism in degenerate electron gas and magnetic fields in collapsed bodies.  
21 p3798 A69-38600

## LEE, H. L.

Mounting optical components with adhesives.  
24 p4326 A69-43465

## LEE, H. R.

Runway roughness effects on new aircraft types.  
01 p0057 A69-11274

## LEE, H. S.

Radiation effects on silicon avalanche /IMPATT/ diodes.  
06 p0976 A69-16874

Winter D-region electron concentration and collision frequency features obtained with high-power interaction measurements.  
09 p1489 A69-21702

Comparison of two groundbased D-region experiments.  
15 p2606 A69-31537

Changes in electron density and collision frequency at University Park, Pennsylvania during the stratospheric warming of 1967/68.  
21 p3714 A69-38556

## LEE, H.-C.

Stress concentrations around elliptical perforations in shrunk plates with bonded boundaries.  
02 p0345 A69-12391

Stresses in a perforated ribbed cylindrical shell subjected to internal pressure.  
16 p2876 A69-32784

Stress distribution in a stator vane under bending.  
22 p4042 A69-40310

## LEE, J. G. K.

CLIP - An interactive multi-computer system for processing ionospheric data.  
[AIAA PAPER 69-952]  
22 p3904 A69-40334

## LEE, J. H.

Laser spark ignition of chemically reactive gases.  
[AIAA PAPER 68-146]  
09 p1622 A69-21951  
Higher-order perturbation solutions for blast waves.  
16 p2770 A69-31900  
Collapsing shock waves in a detonating gas.  
19 p3449 A69-36354  
Current views on gaseous detonation.  
19 p3452 A69-36370  
Initial propagation of impulsively generated converging cylindrical and spherical shock waves.  
21 p3692 A69-38688

## LEE, J. K. S.

Analysis of the strengths of aluminum repair welds.  
15 p2631 A69-31509

## LEE, J. S.

The two-input ERF correlator.  
03 p0403 A69-13253

The influence of variable thermal conductivity and variable electrical resistivity on thermoelectric generator performance.  
22 p3868 A69-40131

## LEE, J. T.

Discontinuous injection of inert gases into the nonequilibrium laminar boundary layer.  
06 p0860 A69-17635  
Thunderstorm turbulence and its relationship to weather radar echoes.  
24 p4347 A69-43720



## LEE, K. F.

## LEE, K. F.

Modified ordinary mode in magnetized plasmas with relative streaming. 01 p0134 A69-11247

Electrostatic waves in inhomogeneous and magnetized plasmas. 06 p0967 A69-17761

A note on electromagnetic mode in confined plasma waveguides. 09 p1545 A69-21348

## LEE, K. S. H.

Radiation from an oscillating source moving through a dispersive medium with particular reference to the complex Doppler effect. 03 p0396 A69-13630

A subtraction procedure in antenna theory. 12 p2041 A69-26864

## LEE, L. L.

A simple formula for the shock polar. 16 p2772 A69-32178

## LEE, L. M.

Some dynamic mechanical properties of distended carbons. 12 p2119 A69-26847

## LEE, L. S.-S.

Approximate solutions for impulsively loaded elastic-plastic beams. [ASME PAPER 68-WA/APM-23] 05 p0840 A69-16188

## LEE, L.-H.

Strength-composition relationships of random short glass fiber-thermoplastics composites. 17 p2991 A69-32960

## LEE, M. J. G.

Electron-ion interaction and the Fermi surfaces of the alkali metals. 13 p2304 A69-28681

## LEE, P.

Spectrophotometric studies of gaseous nebulae. XII. 10 p1787 A69-24117

Internal motions in the Orion Nebula. 22 p4029 A69-40769

## LEE, P. H.

Single-mode power from a 6328 angstrom units laser incorporating neon absorption. 07 p1149 A69-18901

Strong mode coupling induced in a gas laser by an intracavity saturable absorbing medium. 08 p1324 A69-20166

## LEE, R. E.

An experimental investigation of the compressible turbulent boundary layer with a favorable pressure gradient. [AIAA PAPER 69-685] 17 p2956 A69-33489

An experimental investigation of the Preston probe including effects of heat transfer, compressibility and favorable pressure gradient. [AIAA PAPER 69-648] 17 p2893 A69-33496

## LEE, R. H. C.

Binary scaling of air ionization on slender cones at small yaw. 09 p1430 A69-21965

## LEE, R. L.

An iterative method for non-planar radiative transfer problems. 08 p1420 A69-20152

## LEE, R. Q.

F-111D computer complex. [AIAA PAPER 68-837] 24 p4285 A69-43719

## LEE, R. S.

The yielding of truncated solid cones under quasi-static and dynamic loading. 04 p0682 A69-15301

On the outer-edge problem of a hypersonic boundary layer. 22 p3860 A69-40896

## LEE, R. W.

Weak scattering in random media, with applications to remote probing. 14 p2414 A69-29511

On a limitation of multifrequency atmospheric probing. 14 p2449 A69-29535

## LEE, R.-L.

Buckling of a stiffened cylindrical shell with transverse shear load. 16 p2872 A69-31912

## LEE, S. C.

Some characteristics of an electric discharge in a supersonic gas stream. [AIAA PAPER 68-713] 13 p2249 A69-28231

The use of turbulent kinetic energy in free mixing studies. [AIAA PAPER 69-683] 17 p2956 A69-33492

## LEE, S. L.

Vibratory motion of a body on an elastic half plane. [ASME PAPER 68-WA/APM-12] 04 p0668 A69-14393

Mises limit load for simply supported conical sandwich shells under internal pressure. 08 p1416 A69-20702

## LEE, S. M.

Sterilization and decontamination. I. 08 p1283 A69-20266

Sterilization and decontamination. II. 08 p1284 A69-20267

Organizational identification of scientists. 21 p3855 A69-38765

## LEE, S. S.

On the final states of shallow arches on elastic foundations subjected to dynamical loads. [ASME PAPER 68-WA/APM-26] 04 p0669 A69-14394

## LEE, S. W.

Radiation from dielectric-loaded arrays of parallel-plate waveguides. 02 p0218 A69-12326

Cylindrical antenna in uniaxial resonant plasmas. 07 p1107 A69-19227

Some aspects of numerical solution of boundary value problems. 17 p2929 A69-33882

Admittance of a solid cylindrical antenna. 23 p4142 A69-42336

## LEE, S. Y.

Fluid Control - Components and Systems. 08 p1256 A69-20948

## LEE, S.-Y.

Pure fluid amplifying and logic elements. [AGARDOGRAPH-118] 08 p1257 A69-20951

## LEE, T. A.

Infrared photometry of a helium star, HD 30353. 18 p3203 A69-35348

Infrared excess of RY Sgr. 23 p4220 A69-42377

## LEE, T. H.

Plasma physics and the interruption of an electric circuit. 12 p2133 A69-25905

## LEE, T. J.

Measurements of the work function and desorption energy of cesium and potassium on 100/tungsten. 09 p1558 A69-21808

The effect of temperature on the work function minimum of cesiated tungsten surfaces. 09 p1558 A69-21809

## LEE, T. P.

A 50-GHz silicon IMPATT diode oscillator and amplifier. 05 p0733 A69-16560

Frequency modulation of a millimeter-wave IMPATT diode oscillator and related harmonic generation effects. 07 p1106 A69-19146

## LEE, T. S.

Hydromagnetic interplanetary shock waves. 04 p0660 A69-15126

Invariant-strength propagation of a spherical shock in inhomogeneous media. 10 p1778 A69-23405

## LEE, V. A.

Trajectory and mission analysis aspects of Jupiter flyby probes. 06 p1007 A69-17598

## LEE, W. H. K.

Heat flow in oceanic regions. 21 p3718 A69-39733

## LEEB, W.

Signal conversion by multiple modulation in optical communication systems. 07 p1075 A69-18472

## LEECH, J. W.

Numerical calculation technique for large elastic-plastic transient deformations of thin shells. 02 p0347 A69-12518

## LEEDOM, D. A.

Low-pass quasi-optical filters for oversized or focused-beam waveguide applications. 13 p2229 A69-27675

## LEEDS, S. E.

The cardiac lymphatics in experimental chronic congestive heart failure. 23 p4078 A69-41364

## LEEF, C. R.

Development of a nonrecirculating wind-tunnel configuration insensitive to external winds. [AIAA PAPER 68-398] 17 p2947 A69-34024

## LEELA, S.

Almost periodic systems and differential inequalities. 09 p1532 A69-21612

Stability of controlled motion. 11 p1910 A69-25412

## LEELAVATHI, K.

Pressure distribution in inviscid transonic flow past axisymmetric bodies/M sub infinity equals 1/. 23 p4059 A69-41899

## LEENDERTZ, J. A.

A method for reducing movement in holographic emulsions. 06 p0923 A69-16930

## LEES, L.

An experimental study of the near wake of a two-dimensional hypersonic blunt body with mass addition. [AIAA PAPER 69-67] 06 p0862 A69-18044

Theory of laminar viscous-inviscid interactions in supersonic flow. [AIAA PAPER 69-7] 06 p0913 A69-18095

Effect of finite plate length on supersonic turbulent boundary layer with large distributed surface injection. [AIAA PAPER 69-162] 06 p0864 A69-18138

Surface mass injection at supersonic and hypersonic speeds as a problem in turbulent mixing. I. [AIAA PAPER 68-130] 16 p2770 A69-31883

Experimental investigation of "a highly ionized, arched, supersonic freejet. [AIAA PAPER 68-135] 16 p2772 A69-32153

## LEES, R. J.

The systems approach to avionics. [RAES PAPER 6] 22 p3946 A69-40487

## LEET, J. R.

The effect of constraints on optimum approach and departure paths for VTOL terminal operations. [AIAA PAPER 69-209] 07 p1178 A69-19570

## LEFEBVRE, A. H.

Design considerations in advanced gas turbine combustion chambers. 09 p1573 A69-22612

Factors controlling gas turbine combustion performance at high pressure. 09 p1625 A69-22620

The design of tubular gas turbine combustion chambers for optimum mixing performance. [IME PAPER 15] 12 p2147 A69-25793

## LEFEBVRE, M.

Comparative analysis of different results on the European datum from spatial geodesy. 15 p2601 A69-31369

## LEFEVRE, C.

Energy stability criteria. 03 p0410 A69-13683

## LEFEVRE, M. E.

Calibration of Clark oxygen electrode for use in aqueous solutions. 23 p4101 A69-41451

## LEFF, A. D.

Nonexistence of axisymmetric separated flow. 23 p4060 A69-41905

## LEFFERT, C. B.

Fission fragment generated plasmas for thermionic diodes - An assessment. 09 p1440 A69-21829

## LEFIELL, C. K.

Tubular metal parts. 03 p0435 A69-13918

## LEFTIN, M.

Numerical maps of foEs for solar cycle minimum and maximum. 01 p0070 A69-11160

Note on new numerical maps of f sub 0 E sub s for solar cycle minimum and maximum. 10 p1682 A69-23418

## LEFTLEY, A. C.

Aspects of conversion. 20 p3461 A69-36919

- LEGAT, W. H.**  
Air-gap isolated microcircuits - Beam-lead devices.  
02 p0221 A69-12469
- LEGAULT, R. R.**  
Discrimination introduction.  
19 p3373 A69-36054  
Spatial discrimination.  
19 p3373 A69-36055  
Spectral discrimination.  
19 p3373 A69-36056  
Temporal discrimination.  
19 p3373 A69-36057  
Signal processing in tracking systems.  
19 p3268 A69-36058
- LEGENDE, R.**  
Calculation of a subsonic or transonic airfoil /Calcul d'un profil d'aile subsonique ou transsonique/.  
[ONERA-TP-645] 03 p0361 A69-12873  
Aerodynamic damping of two-mode blade vibrations.  
[ONERA-TP-678] 16 p2733 A69-32333
- LEGENKA, A. D.**  
Estimates of the loss coefficients and of the rates of ion-molecule reactions in the nighttime F-region of the ionosphere from n sub e /h, t/ profiles at Moscow.  
06 p0919 A69-17724  
Distribution of the electron concentration in the outer portion of the F2 region under quiet and perturbed conditions /K raspredeleliu elektronnoi kontsentratsii vo vnesheii chasti oblasti F2 v spokoinykh i vozmushchennykh usloviyakh/.  
23 p4156 A69-41856
- LEGEWIE, H.**  
Telemetric EEG studies during high-performance situations /Telemetrische EEG-Untersuchungen in Leistungssituationen/.  
15 p2560 A69-31232
- LEGG, A. J.**  
Trans-Pacific interferometer measurements at 2,300 MHz.  
15 p2701 A69-31530
- LEGG, K.**  
Is there a future for British air transport/ques/- Brief general survey of the Edwards inquiry report into civil air transport.  
18 p3231 A69-34311
- LEGG, T. H.**  
Observations of intense radio sources with a 1.5-minute fan beam.  
04 p0663 A69-15379
- LEGGE, C. G.**  
Direct-sensitivity method of solving boundary-value problems in optimal control studies.  
08 p1296 A69-20297
- LEGKII, V. M.**  
Heat transfer at a plate under the conditions of a hydrodynamically stabilized turbulent boundary layer flow /Teploobmen plastyin v usloviyakh gidrodinamicheskoi stabilizirovannogo turbulentnogo techeniya pogranichnogo sloia/.  
10 p1809 A69-23427
- LEGKODUKH, A. M.**  
Certain features of martensitic transformation in Ti-Al-Mo alloys /Nekotorye osobennosti martensitnogo prevrashcheniya v splavakh Ti-Al-Mo/.  
04 p0617 A69-14940
- LEGO, J.**  
An impulse induction MHD generator having a magnetic field with a radial component.  
10 p1638 A69-23484
- LEGOSTAEV, V. P.**  
Control system of the automatic station "Luna-9".  
10 p1792 A69-24197
- LEGRAND, J. P.**  
Auroral-zone X-ray measurements obtained by simultaneous balloon flights in Northern Scandinavia in 1967.  
05 p0813 A69-15822  
Balloon measurements of solar protons in Northern Scandinavia on 7 July 1966.  
10 p1767 A69-23763
- LEGRAND, L. F.**  
The next generation of French helicopters.  
19 p3248 A69-36848
- LEGRAND, M. F.**  
Study of structural solutions to solve vibration problems of the SA 330 /Recherche de solutions structurales pour resoudre les problemes de vibration du SA 330/.  
01 p0009 A69-10158
- LEGRIS, J.**  
Further details concerning complex-revolution vessels and multilobed structures /Complements sur les recipients de revolution complexes et les structures multilobees/.  
02 p0339 A69-11894
- LEGUAY, G.**  
Frequency of urinary lithiasis among aircrews /Lithiase urinaire et personnel navigant/.  
24 p4267 A69-43388  
Effects of hyperventilation on flight personnel /L'hypermventilation dans le personnel navigant/.  
24 p4269 A69-43410
- LEHANE, J. A.**  
Hydromagnetic waves in a nonuniform hydrogen plasma.  
08 p1367 A69-20794
- LEHEMBRE, P. Y.**  
Graphic visualization in computer-aided design /La visualisation graphique dans la conception assistee par ordinateur/.  
10 p1660 A69-23795
- LEHENY, R. F.**  
Wave mixing in a bounded magnetoplasma.  
03 p0475 A69-13146
- LEHMAN, E.**  
Asymptotic behavior of the curvature tensor and the conformal curvature tensor on an asymptotically flat space-time /Comportement asymptotique du tenseur de courbure et du tenseur de courbure conforme sur un espace-temps asymptotiquement plat/.  
01 p0116 A69-10393
- LEHMAN, G. M.**  
Fundamentals of joint design for composite airframes.  
[ASM PAPER W9-23.1] 14 p2535 A69-29448
- LEHMAN, G. W.**  
Diffraction of electromagnetic waves by a right-angle dielectric wedge.  
22 p3903 A69-41258
- LEHMANN, B.**  
Velocity measurement by the laser Doppler method /Geschwindigkeitsmessung mit Laser-Dopplerverfahren/.  
11 p1893 A69-24333  
An optical method for measuring local particle velocities in two-phase flows.  
13 p2260 A69-27476
- LEHMANN, H.-R.**  
The variations of the geomagnetic field in middle and high latitudes during the proton flare event of July 1966.  
10 p1683 A69-23780
- LEHMANN, M.**  
A rocket for the flight to Mars - The nuclear-powered rocket /Eine Rakete fuer den Marsflug - Die mit Kernenergie betriebene Rakete/.  
08 p1410 A69-21029  
Experiments in long-distance holographic imagery.  
23 p4167 A69-42184
- LEHNER, G.**  
On the relaxation of anisotropic plasmas with dynamic helixing.  
01 p0134 A69-11419
- LEHNERT, B.**  
Screening of a high-density plasma from neutral gas penetration.  
02 p0288 A69-12170  
On the balance of a magnetized plasma.  
11 p1928 A69-25248
- LEHNHOFF, T. F.**  
Influence of transverse shear on the small displacement theory of circular plates.  
24 p4405 A69-43655
- LEHOVEC, K.**  
Temperature dependence of the saturation current of MOST's.  
10 p1743 A69-23175
- LEHR, C. G.**  
Laser ranging to satellites.  
15 p2571 A69-31337
- LEHR, K. R.**  
Fatigue crack propagation and strain cycling properties.  
15 p2710 A69-30812
- LEHR, P.**  
Contribution to the study of certain metastable phases of the binary zirconium-niobium system /Contribution a l'etude de certaines phases metastables du systeme binaire zirconium-niobium/.  
05 p0781 A69-16614
- LEHRKE, H.-P.**  
Analog differential equations for minimal surface shells, using helical shells as examples /Analoge Differentialgleichungen fuer Minimalflaechen-Schalen mit der Wendelflaechen-Schale als Beispiel/.  
10 p1793 A69-22886
- LEHTINEN, F. K. B.**  
Development of a fluidic digital optimizer.  
15 p2583 A69-31296
- LEIBA, E.**  
Optical heterodyning with a pyroelectric detector /Heterodynage optique avec un detecteur pyroelectrique/.  
07 p1156 A69-19332
- LEIBACHER, J.**  
On the five-minute oscillation of the solar atmosphere.  
13 p2343 A69-27627
- LEIBBRAND, R.**  
MOS technique. I - Introduction and review /Die MOS-Technik. I - Einfuehrung und Uebersicht/.  
07 p1099 A69-18494  
MOS technology - Introduction and survey. II /Die MOS-Technik - Einfuehrung und Uebersicht. II/.  
08 p1286 A69-20833
- LEIBENZON, Z. L.**  
A mathematical model of purposeful behavior /Matematicheskaiia model' tselestremennogo povedeniia/.  
19 p3260 A69-35895
- LEIBER, C. O.**  
Estimation of impact pressures during collisions between two bodies /Abschaetzung von Stossdrucken beim Zusammenschlagen zweier Koerper/.  
21 p3836 A69-38943
- LEIBOVICH, S.**  
Stability of density stratified rotating flows.  
04 p0588 A69-14740  
Wave motion and vortex breakdown.  
[AIAA PAPER 69-645] 17 p2892 A69-33478  
Evolution of nonlinear waves in rotating fluids.  
18 p3120 A69-34441
- LEBOVITZ, C.**  
An exact solution for a static spherical shell of matter in vacuum.  
07 p1182 A69-19453
- LEIBOWITZ, E. M.**  
Polarization of the continuum background in planetary nebulae.  
13 p2339 A69-27567
- LEIBOWITZ, L.**  
The enthalpy of solid tungsten from 2800 deg K to its melting point.  
17 p2987 A69-33075
- LEICESTER, R. H.**  
Finite deformations of shallow shells.  
04 p0674 A69-14591
- LEIDERMAN, A. IU.**  
Solar pumping of semiconductor lasers and luminescent devices /Solnechnaia nakachka poluprovodnikovyykh lazerov i liuminescentnykh ustroystv/.  
13 p2272 A69-27969  
Effect of capture centers on the current-voltage characteristic of a p-i-n diode /O vliianii tsentrov prilipaniia na vol't-ampernuiu kharakteristiku p-i-n dioda/.  
13 p2236 A69-28525
- LEIGH, D. C.**  
Asymptotic constitutive approximations for rapid deformations of viscoelastic materials.  
03 p0523 A69-13020  
Surface geometry of three-dimensional inviscid hypersonic flows.  
04 p0542 A69-14718  
On the restriction of processes by the Clausius-Duhem inequality.  
13 p2371 A69-27319
- LEIGH, P. G.**  
Use of the angular accelerometer for stabilization and control.  
10 p1633 A69-23273
- LEIGHOU, R.**  
A custom tailored airborne digital guidance and control system for a large booster.  
[AIAA PAPER 69-988] 22 p3978 A69-40368



## LEIGHTON, H. N.

An optimized gain-control configuration using the field-effect transistor.

07 p1115 A69-18889

## LEIGHTON, R. B.

A magneto-kinematic model of the solar cycle.

13 p2337 A69-27548

Infrared and optical measurements of the Crab pulsar NP 0532.

18 p3191 A69-34318

Mariner 6 television pictures - First report.

21 p3803 A69-38981

Mariner 7 television pictures - First report.

21 p3806 A69-39330

Mariner 6 and 7 television pictures - Preliminary analysis.

24 p4384 A69-43195

## LEIGHTON, W. H., JR.

Selecting matched diodes from a diode array for monolithic balanced mixers.

13 p2233 A69-28071

## LEIGHTY, R. D.

Remote sensing for engineering investigation of terrain - Radar systems.

12 p2098 A69-27005

## LEIKIN, A. IA.

Use of glass corrugations and cold cathodes in laser discharge tubes.

03 p0435 A69-12981

## LEIKINA, E. M.

Activation of the synthesis of protein and RNA in the cerebrum as a factor of adaptation to high-altitude hypoxia /Aktivatsiia sinteza belka i RNK v golovnom mozge kak faktor adaptatsii k vysokoi gipoksii/.

22 p3886 A69-41122

## LEIKO, G. A.

Elementary processes involved in the change in the charge states during interactions between protons and hydrogen molecules /Elementarnye protsessy izmeneniia zariadovyykh sostoianii pro vzaimodeistvii protonov s molekulami vodoroda/.

15 p2655 A69-30963

## LEIMDORFER, M.

Calculations of the radiation hazard due to exposure of supersonic aircraft to solar-flare protons.

11 p1949 A69-24864

## LEIMKUHLE, F. F.

A nondemographic factor V/STOL prediction model.

07 p1244 A69-18967

## LEIN, M. A.

A method, readily adaptable to a computer, for deriving the equations of electronic circuits with linear and nonlinear elements /Ob odnom sposobe sostavleniya uravnenii elektronnykh skhem s lineinymi i nelineinymi elementami, udobnom dlia realizatsii na ETSVM/.

09 p1472 A69-21779

## LEINERT, C.

The zodiacal light experiment of the solar probe /Das Zodiakallichtexperiment der Sonnensonde/.

15 p2694 A69-30879

## LEININGER, G. G.

The determination of digital simulation models for continuous systems by direct-search minimization.

01 p0036 A69-10706

## LEIPER, A. C.

The free wake analysis - A method for the prediction of helicopter rotor hovering performance.

[AHS PAPER 321] 17 p2895 A69-33538

## LEIPHOLZ, H.

Grammel's method with a neighboring Green's function and the corresponding generalization of Galerkin's method /Ueber das Verfahren von Grammel mit "benachbarter" Greenscher Funktion und die entsprechende Verallgemeinerung des Verfahrens von Galerkin/.

06 p1020 A69-17132

## LEIPUNSKII, O. I.

Measurement of the radiation from flames on a microcalorimeter /Izmerenie izlucheniia plamen mikrokalorimetrami/.

02 p0355 A69-12671

Effect of aluminum on the combustion of ammonium perchlorate and polyformaldehyde /Vliianie aluminium na gorenie perkhlorata ammoniia s poliformaldegidom/.

08 p1375 A69-20338

## LEIS, H.

Fracture toughness and crack propagation in titanium alloys /Bruchzuehigkeit und Rissfortschritt von Titan-Legierungen/.

23 p4177 A69-42165

## LEISS, F.

Technological possibilities of active magnetic attitude control for spin-stable satellites /Technische Moeglichkeiten einer aktiven magnetischen Lageregelung fuer spinstabilisierte Satelliten/.

03 p0521 A69-13644

Control of earth satellites and space vehicles /Regelung von Erdsatelliten und Raumfahrzeugen/.

13 p2356 A69-27919

## LEISSA, A. W.

Free vibrations of elastic plates.

[AIAA PAPER 69-24] 06 p1027 A69-18061

Analysis of a simply-supported laminated anisotropic rectangular plate.

12 p2184 A69-26808

A comparison of approximate methods for the solution of plate bending problems.

[AIAA PAPER 68-296] 16 p2874 A69-32160

Analysis of heterogeneous anisotropic plates.

[ASME PAPER 69-APM-15] 18 p3213 A69-34390

## LEIST, T. H.

Practical methods to obtain improved machine tool dynamic performance.

22 p3928 A69-40672

## LEITE, R. C. C.

Resonant surface Raman scattering in direct-gap semiconductors.

06 p0936 A69-17882

## LEITE, R. J.

A sweeping neutral and positive ion mass spectrometer for atmospheric composition at satellite altitudes.

19 p3314 A69-36681

## LEITEZEN, L. G.

The photoelectron multiplier FEU-77 for recording light pulses from optical quantum generators /lasers/ in the 700-nm range.

03 p0440 A69-13264

## LEITER, D. J.

How important is steady state cosmology to classical and quantum electrodynamics/ques/

23 p4215 A69-42116

## LEITERER, U.

Development of an optical system for cosine-corrected radiation measurement /Entwicklung einer optischen Einrichtung fuer cosinusgerechte spektrale Strahlungsmessungen/.

20 p3538 A69-37429

## LEITH, E. N.

Optical processing techniques for simultaneous pulse compression and beam sharpening.

04 p0562 A69-15475

Modern holography.

11 p1882 A69-24676

Optical processing of radar data.

20 p3489 A69-37636

Holography.

20 p3540 A69-37637

## LEITINGER, R.

Observations of the radio rangefinder satellite Explorer 22 /Beobachtungen des funkmeßsatelliten Explorer 22/.

22 p3935 A69-39977

## LEITMANN, G.

On a class of differential games.

19 p3359 A69-35665

## LEITNER, M. I.

An analytical approach to the determination of particle trajectories in an S-bend duct with experimental verification.

[AHS PAPER 211] 01 p0006 A69-10409

Development of the engine inlet air filtration system for the AH-56A.

01 p0143 A69-11054

## LEJEUNE, C.

Study of energy spectra of charged particles emitted by a duoplasmatron-type discharge /Etude des spectres d'energie des particules charges emises par une discharge du type duoplasmatron/.

14 p2501 A69-29955

## LEJEUNE, G.

A study of the daytime electron temperature.

15 p2603 A69-31402

## LEJEUNE, M.

Ram recovery of a flush intake for air cushion vehicles.

01 p0005 A69-10026

Study of the fixed-point support of a new type of air-cushion vehicle with two pressure stages /Etude de la sustentation au point fixe d'un type nouveau de vehicule a coussin d'air a deux etages de pression/.

06 p0857 A69-16820

## LEKHT, E. E.

Radio emission spectra of radio galaxies.

04 p0661 A69-15234

## LEKO, T.

On the membrane analogy for flexure of prismatical beams with longitudinal cavities.

15 p2704 A69-30288

Does the center of flexure depend on Poisson's ratio/ques/

20 p3622 A69-37213

## LELAKOWSKA, K.

Calculation of the drift velocity of a fully ionized gas in a magnetic field /Obliczenie predkosci dryfowania całkowicie zjonizowanego gazu w polu magnetycznym/.

15 p2659 A69-30707

## LELAND, T. W.

Relation of the catalytic activity of MgO to its electron energy states.

07 p1073 A69-18374

## LELCHUK, V. L.

Method for the investigation of heat transfer from wall to gas at high wall temperatures.

18 p3229 A69-34712

## LELE, M. M.

Minimum fuel lateral turns at constant altitude.

13 p2203 A69-28245

A transformation technique for optimal control problems with a state variable inequality constraint.

24 p4291 A69-43270

## LELE, S. G.

Transport of noise fluctuations in convergent flow crossed-field electron guns.

15 p2572 A69-30031

## LELIAKOV, I. P.

Reaction-boom attitude control systems.

[AIAA PAPER 69-834] 21 p3822 A69-39365

## LELION, R.

Psychotherapeutic treatment of depressions and neuroses in aviation medicine.

23 p4086 A69-41690

## LELORD, G.

Changes in cortical and thalamic evoked activities during sensory conditioning. I, II /Modifications des activites evoquees corticales et thalamiques au cours d'un conditionnement sensoriel. I, II/.

22 p3872 A69-40160

## LELOUP, C.

Interaction between plasma flow and a magnetic barrier - Shock formation.

06 p0966 A69-17524

## LEMAIRE, A.

Transport coefficients in the chromosphere and coronal gas. II.

15 p2694 A69-30788

## LEMAIRE, J.

Transport coefficients in the chromosphere and coronal gas. I - Viscosity.

09 p1602 A69-22217

## LEMAIRE, P.

High resolution balloon spectra of the sun in the Mg II doublet lines. II.

11 p1958 A69-24591

## LEMAIRE, R.

Combination of thermal factors from the point of view of testing /Conjugaison des facteurs thermiques du point de vue de l'essai/.

13 p2215 A69-28594

## LEMAISTRE, J.

Component policy for space equipment /Politique des composants pour un equipement spatial/.

15 p2624 A69-30818

## LEMAITRE

Motors using catalytic decomposition of hydrazine /Les moteurs a decomposition catalytique de l'-hydrazine/.

17 p3019 A69-33340

- LEMAITRE, J.**  
Influence of the temperature velocity parameter on the behavior of elastoviscoplastic solids /Influence du parametre vitesse de temperature sur le comportement des solides elasto-visco-plastiques/. [ONERA-TP-644] 01 p0164 A69-10036  
Principle of a method for obtaining long-term creep characteristics from short-duration relaxation tests /Principe d'une methode d'obtention des caracteristiques de fluage a long terme a partir d'essais de relaxation de courte duree/. [ONERA-TP-639] 02 p0337 A69-11626  
A tension-torsion-compression testing machine /Une machine d'essais en traction-torsion-compression/. [ONERA-TP-596] 17 p2945 A69-33065
- LEMAITRE, M. P.**  
The second TACITE test /Der zweite Tacite- Versuch/. 11 p1887 A69-25213
- LEMAITRE, M.-P.**  
Experimental profiles of the infrared horizon of the earth - Tacite 2 experiment /Profils experimentaux de l'horizon infrarouge de la terre - Experience Tacite 2/. [ONERA-TP-709] 15 p2601 A69-31370
- LEMANOV, V. V.**  
Excitation and propagation of longitudinal elastic waves with frequencies from 200 to 2000 MHz in lithium niobate crystals. 03 p0487 A69-13729  
Thermal properties of lithium niobate crystals. 03 p0487 A69-13730  
Temperature dependence of elastic wave attenuation in lithium niobate crystals /Temperaturnaya zavisimost' zatukhaniia uprugikh voln v kristallakh niobata litii/. 15 p2665 A69-30040
- LEMARCHAND, A.**  
Attitude control principle of the PAS satellite /Principe du controle en attitude du satellite P.A.S./. 17 p3048 A69-33238
- LEMARQUAND, A.**  
Rayleigh-Taylor instabilities in magnetohydrodynamics /Instabilites de Rayleigh-Taylor en magnetohydrodynamique/. 13 p2310 A69-28033
- LEMASSON, P.**  
Contribution to the study of the conduction mode in single-crystal tungsten oxide /WO sub 3/ /Contribution a l'etude du mode de conduction dans l'oxyde de tungstene WO sub 3 monocristallin/. 16 p2825 A69-31609
- LEMESHKO, A. M.**  
Increasing the wear resistance of light alloys. 10 p1711 A69-23339
- LEMIEUX, P. F.**  
The laminar two-dimensional free jet of an incompressible pseudoplastic fluid. 04 p0586 A69-14406
- LEMKE, D.**  
A balloon telescope for measuring nightglow /Ein Ballon-Teleskop zur Messung der Nachthimmelsheelligkeit/. 06 p0999 A69-16972
- LEMKE, D. J.**  
Readiness testing for a real time telemetry system. 10 p1660 A69-23270
- LEMKEY, F. D.**  
Structure and properties of Ni sub 3 Al /gamma'/ eutectic alloys produced by unidirectional solidification. 13 p2277 A69-27407
- LEMMON, F. B.**  
Flight data recorders. 10 p1691 A69-23247  
Airborne integrated data systems. 10 p1660 A69-23264
- LEMON, J. R.**  
Practical methods to obtain improved machine tool dynamic performance. 22 p3928 A69-40672
- LEMONDS, G. J.**  
Explosive fabrication of aircraft components. [SAE PAPER 690316] 11 p1890 A69-24510
- LEMPER, A. A.**  
Poly /2,4-perfluoroalkylene-6- perfluoroalkyl-triazine/ s - New high temperature elastomers. 19 p3264 A69-35535
- LEMPICKI, A.**  
Q-switching and mode locking of Nd super 3 plus-SeOCl sub 2 liquid laser. 06 p0935 A69-17776
- A circulating-liquid laser system. [IEEE PAPER M-70] 07 p1153 A69-19069  
Output properties of the Nd super plus super 3 - SeOCl sub 2 liquid laser. [IEEE PAPER M-8] 07 p1153 A69-19070
- LENA, P.**  
Far infrared observation of a sunspot. 17 p3029 A69-33050
- LENA, P. J.**  
New far infrared observations of atmospheric molecular lines. 04 p0628 A69-15146
- LENANDER, C. J.**  
Fundamental approach to high-frequency breakdown of gases. 08 p1357 A69-20810
- LENCHKE, A. M.**  
Are cosmic electrons anisotropic/ques/. 20 p3593 A69-38145
- LENEL, F. V.**  
Estimate of the temperature rise of micron-sized silver particles in the electron microscope due to electron-beam heating. 04 p0640 A69-14449  
The plastic deformation of internally oxidized silver-magnesium single crystals. 07 p1159 A69-18627
- LENEMAN, O. A. Z.**  
On a new approach to the analysis of stationary inventory problems. 12 p2192 A69-26750
- LENFANT, C.**  
Effect of chronic hypoxic hypoxia on the O sub 2-Hb dissociation curve and respiratory gas transport in man. 21 p3650 A69-38383
- LENELLE, G.**  
Simplified model for effect of solid heterogeneity on oscillatory combustion. 09 p1622 A69-22085
- LENGYEL, L. L.**  
Two-dimensional current distributions in Faraday type MHD energy converters operating in the nonequilibrium conduction mode. 11 p1826 A69-25397  
On the numerical simulation of ionization instability. 12 p2134 A69-26095  
Fields and flow in MHD channels. 21 p3777 A69-39480
- LENHERR, F. K.**  
Correlations of turbine blade total-pressure-loss coefficients derived from achievable stage efficiency data. [ASME PAPER 68-WA/GT-5] 05 p0812 A69-16140
- LENIN, A. S.**  
Intensity measurements of gamma-rays with energies from 0.3 to 3 Mev at various depths of the atmosphere /Izmerenie intensivnosti gamma-luchei s energiei ot 0,3 do 3 Mev na razlichnykh glubinakh atmosfery/. 10 p1770 A69-23924
- LENKOV, V. F.**  
Axisymmetrical deformations of materials with different moduli /Osesimmetrichnye deformatsii raznomodul'nykh materialov/. 12 p2178 A69-26003
- LENN, P.**  
Handbook of Solar Simulation for Thermal Vacuum Testing. 21 p3690 A69-38894
- LENNARD, D.**  
Design features of the CF6 engine thrust reverser and spoiler. [SAE PAPER 690411] 23 p4200 A69-41639
- LENNEMANN, E.**  
Unsteady flow phenomena in rotating centrifugal impeller passages. [ASME PAPER 69-GT-35] 09 p1432 A69-22489
- LENNERS, D.**  
Data processing at the Adolf Schmidt Observatory in Niemegk /Zum Stand der Datenverarbeitung am Adolf-Schmidt-Observatorium in Niemegk/. 16 p2767 A69-32463
- LENNIE, J. C.**  
Clear-air turbulence over the North Atlantic - Some notably turbulent periods. 08 p1345 A69-19885
- LENNON, H.**  
Advanced secondary power sources for aircraft application. 17 p2905 A69-34113
- LENNON, H. J.**  
High rate battery charger system. 10 p1640 A69-23994
- LENNON, J. F.**  
Electrochemical oxidation of multicomponent hydrocarbon fuels. II - Long-term performance studies with n-octane based fuels containing aromatic, olefinic, and naphthenic components. [ACS PAPER 94] 05 p0716 A69-16235
- LENNOX, S. G.**  
Operational research aspects of airline helicopters. 11 p1822 A69-24377
- LENOBLE, J.**  
Notes on the radiation scattered by a thick planetary atmosphere according to the Rayleigh law /Remarques sur le rayonnement diffuse par une atmosphere planetaire epaisse suivant la loi de Rayleigh/. 23 p4213 A69-41698
- LENOE, E. M.**  
Micromechanics of boron filament reinforced aluminum composites. 06 p0940 A69-16948  
Experimental studies of the elastic stability of three dimensionally reinforced composite shells. [AIAA PAPER 69-122] 06 p1029 A69-18216
- LENOIR, G.**  
Electron microprobe study of diffusion layers on refractory alloys - Tantalum /Etude au microanalyseur a sonde electronique de couches obtenues par diffusion dans quelques alliages refractaires - Cas du tantale/. [ONERA-TP-665] 06 p0941 A69-17097
- LENOIR, J.**  
Direct electrochemical conversion of the energy of a radioactive element /Conversion electrochimique directe de l'energie d'un radioelement/. 08 p1269 A69-21054  
Direct electrochemical conversion of the energy of a radioelement /Conversion electrochimique directe de l'energie d'un radioelement/. 16 p2740 A69-32425
- LENOTRE, M.**  
The explosive characteristics of primer explosives /Les caracteristiques explosives des explosifs d'amorcade/. 10 p1750 A69-23010
- LENSKII, V. S.**  
Simplified variants of plasticity theory /Uproshchennye varianty teorii plastichnosti/. 14 p2532 A69-28978
- LENT, J. D.**  
Some observations on the use of multiband spectral reconnaissance for the inventory of wildland resources. 15 p2609 A69-30458
- LENZ, C. E.**  
A phantom-disk technique for arc-second digital position transducers. 05 p0766 A69-16748
- LENZO, C. S.**  
A theory for base pressures in multi-nozzle rocket configurations. [AIAA PAPER 69-570] 16 p2733 A69-32751
- LEON, H. I.**  
Theoretical analyses of electrothermal thrusters with supersonic heat addition. [AIAA PAPER 69-286] 09 p1567 A69-21267
- LEONARD, B. P.**  
Electron temperature effects in fast magnetohydrodynamic shock waves. 24 p4356 A69-43361
- LEONARD, D. G.**  
Heavy press extrusions of light metals. 04 p0604 A69-14526
- LEONARD, J. A.**  
SNAP-27 program review. 23 p4187 A69-42249
- LEONARD, J. J.**  
Acute and prolonged effects of G suit inflation on cardiovascular dynamics. 06 p0883 A69-17843
- LEONARD, J. W.**  
Dynamic response of initially-stressed membrane shells. 24 p4399 A69-42990



## LEONARD, R. B.

## LEONARD, R. B.

Thermal stability Hastelloy alloy C-276.  
14 p2466 A69-29930

Thermal stability of Hastelloy alloy C-276.  
16 p2799 A69-31719

## LEONARD, R. F.

Alpha-gamma angular correlations in super 120 Sn.  
03 p0469 A69-13098

Alpha-gamma angular correlations on super 58 Ni.  
03 p0470 A69-13100

Elastic scattering of 21-Mev protons from nitrogen-14, oxygen-16, argon-40, nickel-58, and tin-116.  
18 p3179 A69-35489

## LEONARD, R. W.

Embrittlement of type 347 stainless steel weldments by sigma phase.  
18 p3150 A69-35429

## LEONARD, S.

Analysis of the strengths of aluminum repair welds.  
15 p2631 A69-31509

## LEONARD, W. D.

Qualitative V-STOL air traffic control requirements. [AIAA PAPER 69-211]  
07 p1177 A69-19552

## LEONARD, W. F.

Differential ion pumping for vacuum deposition.  
06 p0907 A69-17709

## LEONARDO, E. S.

Elevations from radar imagery.  
13 p2263 A69-28198

## LEONAS, V. B.

Collision integrals for components of dissociating air.  
02 p0283 A69-11586

## LEONDES, C. T.

Two-level optimization techniques for dynamic systems.  
01 p0051 A69-10440

Advances in Control Systems- Theory and Applications. Volume 6.  
04 p0581 A69-14567

Sensitivity in multivariable control systems. [ASME PAPER 68-WA/AUT-9]  
05 p0738 A69-16179

Some recent results in aerospace vehicle trajectory optimization techniques.  
06 p1006 A69-17569

Computational results for extensions in quasilinearization techniques for optimal control.  
09 p1590 A69-21414

Constraint theory. I - Fundamentals.  
11 p1858 A69-24936

Optimization of three-dimensional reentry trajectories.  
13 p2352 A69-27960

## LEONE, J. E.

Thermal radiative characteristics of low density charring ablators for planetary studies. [AIAA PAPER 69-61]  
06 p0947 A69-18148

## LEONENKO, G. K.

Facility for investigating the energy dissipation in refractory metals during fatigue tests /Ustanovka dlia issledovaniia rasseianiia energii v tugoplavkikh metalakh v protsesse ispytaniia na ustalost'/.  
17 p2947 A69-33926

## LEONG, G. F.

Intermediary metabolism in hypothermic rat livers.  
10 p1642 A69-23119

## LEONG, T. K.

Probabilistic model for transfer problem in an externally illuminated spherical shell atmosphere with a perfectly absorbing core.  
02 p0328 A69-12751

Probabilistic model for radiative transfer problems for spherical shell medium.  
24 p4415 A69-43637

## LEONOV, A. A.

Space perception in outer space /Vospriatie prostanstva v kosmose/. [UN PAPER 68-95717]  
06 p1000 A69-17049

## LEONOV, M. IA.

Influence of the decompaction of a material on the stress distribution /O vlianii razrykheniia materiala na raspredelenie napriazhenii/.  
11 p1972 A69-24656

## LEONOV, N. N.

Elementary extremal systems of the self-oscillatory type with an inertial controlled element.  
07 p1115 A69-19757

Dynamics of extremal single-channel relay systems of differential type /Dinamika odnokanal'nykh releinykh ekstremal'nykh sistem raznostnogo tipa/.  
12 p2052 A69-26278

The tracking process in extremal differential-type systems /O protsesse slezheniia v ekstremal'nykh sistemakh raznostnogo tipa/.  
12 p2052 A69-26279

## LEONOV, V. V.

Luminosity of novae during the premaximum stage /Svechenie novykh v predmaksimal'nyi period/.  
19 p3426 A69-36574

## LEONOVA, G. M.

Some results of an investigation into heat transfer from a liquid to a highly overheated wall.  
11 p1996 A69-24228

## LEONOVA, N. I.

Thin-foil electron microscope structure studies of certain titanium alloys.  
05 p0782 A69-16807

## LEONTEV, A. I.

Turbulent boundary layer in the inlet section of a tube under conditions of nonisothermicity and injection /Turbulentnyi pogranichnyi sloi v nachal'nom uchastke truby v usloviakh neizoternichnosti i vduva/.  
15 p2592 A69-30986

## LEONTEV, N. I.

Measurements of the resistivity of semiconductor materials /Ob izmereniiakh udel'nogo soprotivleniia poluprovodnikovykh materialov/.  
04 p0642 A69-14853

Microwave cavity measurements of resistivity of semiconductor materials.  
15 p2667 A69-30245

## LEONTEVA, N. V.

Vibrational-dissociative relaxation behind a shock front.  
03 p0418 A69-13835

## LEOPOLD, H. S.

Capacitance-voltage relationships for the initiation of PETN by exploding wires.  
01 p0141 A69-10679

## LEOPOLD, P. M.

Elastic-plastic stress distribution in a compressed ring.  
05 p0837 A69-16063

## LEORAT, F.

Rolling and longitudinal stabilization of a satellite stabilized by a flywheel /Pointage en roulis et en tangage d'un satellite stabilise par roue d'inertie/.  
17 p3048 A69-33240

## LEORAT, F. J. L.

Controllability of stationary linear multivariable systems using a frequency-domain criterion.  
12 p2054 A69-26519

## LEOTIN, J.

Magnetophonon oscillations of the transverse magnetoresistance of n-type epitaxial GaAs /Oscillations de magnetophonons de la magnetoresistance transverse du GaAs epitaxial de type n/.  
08 p1373 A69-20760

## LEOVY, C.

Energetics of the middle atmosphere.  
22 p3940 A69-40537

## LEOVY, C. B.

Atmospheric ozone - An analytic model for photochemistry in the presence of water vapor.  
06 p0916 A69-17004

Mariner 6 television pictures - First report.  
21 p3803 A69-38981

Mariner 7 television pictures - First report.  
21 p3806 A69-39330

Mars - Theoretical aspects of meteorology.  
23 p4212 A69-41614

Mariner 6 and 7 television pictures - Preliminary analysis.  
24 p4384 A69-43195

## LEPECHINSKY, D.

Stabilization of dissipative drift instability by a high-frequency field /Stabilisation par un champ de haute frequence de l'instabilite de derive dissipative/.  
13 p2308 A69-27979

## LEPIE, A. H.

Forced vibration tester in tension and torsion for plastic materials under tensile strain.  
21 p3720 A69-38591

## LEPIK, IU. R.

Dynamics of circular and annular plates made from a rigid-plastic rate-sensitive material /Dinamika kruglykh

i kol'tsevykh plastin iz zhestko-plasticheskogo materiala, chuvstvitel'nogo k skorosti deformirovaniia/.  
12 p2177 A69-25994

## LEPINE, J. P.

Atmospheric ozone production by silent discharges /Production d'ozone atmosferique par les decharges silencieuses/.  
16 p2785 A69-32623

## LEPOR, M.

Noise, you can get used to it.  
11 p1830 A69-24797

## LEPORE, J. A.

Dynamic stability of thin circular plates subjected to purely stochastic radial excitation.  
11 p1990 A69-25507

## LEPSCHY, A.

Upper bounds for the variation of sampled signals.  
11 p1834 A69-24551

## LEPSELTTER, M. P.

Metal-semiconductor IMPATT diode.  
08 p1286 A69-20862

## LEPSKII, A. A.

Feeding of experimental animals in space flights.  
08 p1265 A69-19829

## LEQUEUX, J.

Stars and interstellar environment /Etoiles et milieu interstellaire/.  
02 p0316 A69-11906

Radiation in Plasmas /Rayonnement dans les plasmas/.  
03 p0483 A69-14237

Balloon observations of the far-infrared spectrum and brightness temperature of the sun.  
04 p0652 A69-14419

Radio-emission features of radio galaxies /Radioosobennosti radiogalaktik/.  
12 p2165 A69-27031

A measurement of the galactic magnetic field using the pulsating radio source PSR 0833-45.  
13 p2335 A69-27311

Structure and Evolution of Galaxies.  
24 p4384 A69-43167

## LERAY, J. P.

Gamma rays and high-energy electrons in cosmic radiation /Rayons gamma et electrons de grande energie dans le rayonnement cosmique/.  
05 p0817 A69-16712

## LERCHE, I.

The dynamical state of the interstellar gas and field. VI - Instability and enhanced diffusion in a twisted field.  
02 p0326 A69-12707

Enhanced bremsstrahlung from supraluminous, and subluminescent, waves in an isotropic, homogeneous plasma.  
03 p0507 A69-13150

Instability of transverse waves in a relativistic plasma.  
07 p1193 A69-19032

Landau poles, branch cuts and supra-luminous waves in a one-dimensional plasma.  
21 p3778 A69-39579

Interstellar polarization of starlight and the turbulent structure of the Galaxy.  
22 p4030 A69-40771

Faraday rotation, dispersion in pulsar signals, and the turbulent structure of the Galaxy.  
24 p4375 A69-42659

## LERCHENTHAL, C. H.

On decay of elastic properties in a viscoelastic material under tensile stress.  
20 p3625 A69-37600

## LERFALD, G. M.

Multisensor detection of ionospheric phenomena.  
14 p2448 A69-29526

## LERINMAN, R. M.

Different conditions of ageing and recovery in aluminium-magnesium alloys.  
05 p0783 A69-16811

Effect of the initial state on the dislocation structure and mechanical properties of cold-worked beta-titanium alloy TS6 /Vlianie iskhodnogo sostoiianiia na dislokatsionnuu strukturu i mekhanicheskie svoistva naklepannogo beta-titanovogo splava TS6/.  
14 p2463 A69-29313

Electron microscopic analysis of the plastic deformation of quenched titanium alloys with a thermally unstable beta-phase.  
21 p3746 A69-39161

- LERMAN, R. A.**  
Nonlinear differential equations and the terrestrial brachistochrone.  
20 p3575 A69-37205
- LERNER, S.**  
Electrical characteristics of a sealed nickel-cadmium battery having a bipolar construction.  
23 p4072 A69-42283
- LEROI, G. E.**  
Raman spectra of solid CO sub 2, N sub 2 O, N sub 2, and CO.  
23 p4194 A69-42205  
Raman studies of molecular motion in condensed oxygen.  
24 p4353 A69-43808
- LEROY, C. W.**  
MITOL - Machine independent telemetry oriented language.  
22 p3905 A69-40340
- LEROY, J.-L.**  
Observation of proton flares - The event of July 7, 1966 - Photometry of the 5303- and 6374-angstrom units coronal lines /Observation des eruptions a protons - L'evenement du 7 juillet 1966 - Photometrie des raies coronales 5303 angstrom units et 6374 angstrom units/.  
10 p1763 A69-23731  
H alpha, H beta, and D sub 3 photography of the active prominence of July 9, 1966 /Photographie en H alpha, H beta et D sub 3 de la protuberance active du 9 juillet 1966/.  
10 p1764 A69-23738  
Comparative photometry of hydrogen and helium emissions in the outer regions of prominences /Photometries comparees des emissions de l'hydrogene et de l'hélium dans les regions externes des protuberances/.  
17 p3029 A69-33051
- LEROY, R. J.**  
Dissociation energy and vibrational terms of ground-state /X super 1 sigma sub g super plus/ hydrogen.  
05 p0796 A69-15908
- LEROY, R. L.**  
Nozzle beam technique for mapping low density gas flows.  
07 p1136 A69-19467
- LEROY, V.**  
Structural stability of MAR-M 509, a cobalt-base superalloy.  
05 p0781 A69-16448
- LESBRE, D.**  
Behavior of the Al ZFH sub 2 solar cell under irradiation /Comportement sous irradiation de la cellule solaire Al ZFH sub 2/.  
20 p3465 A69-37911
- LESBRE, M. D.**  
The behavior of the solar cell Al.ZF.H sub 2 under irradiation /Comportement sous irradiation de la cellule solaire Al.ZF.H sub 2/.  
11 p1825 A69-24871
- LESCHIUTTA, M. R.**  
Study for the determination of transonic flow around airfoils with constant curvature in a uniform asymptotic stream, at zero incidence, at Mach numbers less than 1. I /Studio per la determinazione del flusso transonico attorno a profili alari a curvatura costante, in corrente asintotica uniforme, senza incidenza, con numero di Mach less than 1. I/.  
09 p1429 A69-21605  
Study for the determination of transonic flow around airfoils with constant curvature in a uniform asymptotic stream, at zero incidence, at Mach numbers less than 1. II /Studio per la determinazione del flusso transonico attorno a profili alari a curvatura costante, in corrente asintotica uniforme, senza incidenza, con numero di Mach less than 1. II/.  
09 p1429 A69-21606
- LESCHIUTTA, S.**  
Tests with a commercial cesium resonator /Esperienze con un risonatore al cesio di tipo commerciale/.  
04 p0600 A69-15068
- LESEM, L. B.**  
The kinoform - A new wavefront reconstruction device.  
10 p1697 A69-23867
- LESENSKY, L.**  
Ferromagnetic composite materials for microwave shielding.  
09 p1510 A69-22352
- LESH, J. R.**  
Internal motions in the associations II Per and I Lac.  
23 p4221 A69-42385
- LESHCHENKO, V. A.**  
The Hydraulic Servo Drive /Gidravlicheskii Slediaschii Privod/.  
18 p3093 A69-34356
- LESHCHINIUK, I. I.**  
Microelectrode study of the vestibular neurons of the mesencephalon /Mikroelektroodnoe issledovanie vestibuliarnykh neuronov srednego mozga/.  
20 p3471 A69-37254
- LESHCHINSKAIA, L. P.**  
The change of the belts and details on Jupiter in the years 1962 to 1965.  
03 p0512 A69-13696
- LESHER, R. L.**  
The Government role in technology utilization programs. [UN PAPER 68-95313]  
01 p0179 A69-10512
- LESKIEWICZ, H. J.**  
Pressure gain fields in fluidics with free interacting jets.  
02 p0195 A69-12076
- LESKOV, N. M.**  
Experimental studies of slow amplitude and phase variations of 10-centimeter radio waves on near-ground paths /Eksperimental'nye issledovaniia medlen'nykh variatsii amplitudy i fazy 10-santimetrovykh radiovoln na prizemnykh trassakh/.  
08 p1275 A69-20424
- LESNIAK, S. A.**  
Interaction of a shock wave with a viscous fluid film /Vzaimodeistvie udarnoi volny s plenkoi viazkoi zhidkosti/.  
08 p1303 A69-20326
- LESNIEWSKI, R. J.**  
A complementary MOS spacecraft data handling system.  
23 p4133 A69-41739
- LESPE, J.-P.**  
Systematic analysis of the density variations of the upper atmosphere with respect to reference models /Analyse systematique des ecartes des densites de la haute atmosphere par rapport a des modeles de reference/.  
08 p1397 A69-20761
- LESSEN, M.**  
Low Reynolds number instability of an incompressible half-jet.  
11 p1874 A69-25280  
Stability of three-dimensional laminar and turbulent shear layers.  
22 p3932 A69-40893
- LESTER, H. C.**  
A dynamic stability study of a centrifuge-equipped space station. [AIAA PAPER 68-142]  
02 p0334 A69-12373
- LESTER, J. D.**  
Performance characteristics of a 300-GHz radiometer and some atmospheric attenuation measurements.  
02 p0209 A69-12336
- LESTEV, A. M.**  
Capacitance sensor of the vertical employing a flexible electrode /Emkostnyi datchik vertikal'sy uprugim elektrodom/.  
23 p4163 A69-41550
- LETCHER, J. S., JR.**  
On boundary layers in the theory of heat conduction in solids.  
20 p3633 A69-38213
- LETJUS, V.**  
An iono-index about the hard emission of the solar active regions.  
12 p2148 A69-26107  
The radio observations during the partial solar eclipse on May 20, 1966.  
22 p4010 A69-39986  
Tables for computing dielectric recombination rates from Burgess' general formula.  
23 p4207 A69-41281
- LETIUK, L. M.**  
Aging of some ferrites with a spinel structure /O starenii nekotorykh ferritov so strukturoi shpineli/.  
13 p2320 A69-27997
- LETOKHOV, V. S.**  
Emission of ultrashort light pulses in a laser with a nonlinear absorber /Generatsiia ul'trakorotkikh impul'sov sveta v lazere s nelineinym poglotitelem/.  
01 p0090 A69-10791
- Generation and amplification of ultrashort optical pulses. [IEEE PAPER H-12]  
05 p0774 A69-16317  
Generation and amplification of high-intensity light pulses in neodymium glass.  
08 p1323 A69-19946  
Ultrashort fluctuating light pulses in a laser /Fluktuatsionnye ul'trakorotkie impul'sy sveta v lazere/.  
08 p1326 A69-20548  
Frequency effects in a laser with nonlinearly absorbing gas.  
09 p1520 A69-22661  
Nonlinear amplification of a light pulse. III - Ultrashort durations /Nelineinoe usilenie impul'sa sveta. III - Ul'trakorotkie dlitel'nosti/.  
10 p1702 A69-23139  
Optical frequency standards /Opticheskie standarty chastoty/.  
10 p1702 A69-23299  
Dynamics of generation of a pulsed mode-locking laser.  
10 p1703 A69-23624  
Frequency stability of a He-Xe laser with nonresonant feedback.  
12 p2105 A69-26049  
Dynamics of a laser with instantaneous Q-switching /Dinamika opticheskogo kvantovogo generatora s mgnovennym vklucheniem dobrotnosti/.  
12 p2110 A69-26909  
Generation of ultrashort light pulses in a laser with a nonlinear absorber.  
20 p3555 A69-38009  
Theory of the effects of inhomogeneous excitation of semiconductor lasers using electron beam pumping /Teoriia effektivov neodnorodnosti vzbuzhdeniia poluprovodnikovyykh lazerev s nakachkoi elektronnykh puchkom/.  
21 p3737 A69-39041  
Two-level gas laser with coherent optical pumping.  
24 p4327 A69-43067
- LETOURNEAUX, P. J.**  
Improving quality of aerial color prints.  
09 p1494 A69-21634
- LETTAU, H.**  
Shortwave radiation climatology.  
15 p2648 A69-30222
- LETTAU, K.**  
Shortwave radiation climatology.  
15 p2648 A69-30222
- LEUCHS, R. A.**  
An analysis of the effect of integral and sigma pulse frequency modulation on white noise.  
01 p0034 A69-11221
- LEUCHTER, O.**  
An experimental method for studying air-hydrogen supersonic combustion. [AIAA PAPER 69-339]  
13 p2378 A69-28275
- LEUCHTMANN, C.**  
Reliability evaluation of an electronic system used in civil aviation /Etude de fiabilite sur un ensemble electronique en exploitation dans l'aviation civile/.  
01 p0011 A69-11069
- LEUNBERGER, D. G.**  
Optimization by Vector Space Methods.  
07 p1172 A69-18409
- LEUNG, K.-C.**  
On the relation between the amplitude of light and radial velocity variations of beta Canis Majoris stars.  
03 p0517 A69-14126
- LEUNG, S.**  
Clinical toxicologic studies on Freon R FE 1301.  
18 p3098 A69-35061
- LEUS, N. F.**  
Oxidative phosphorylation and the thiamine pyrophosphate level in the liver due to the action of X-ray irradiation /Oksidativnoe fosforilirovanie i uroven' tiaminpirofosfata v pečeni pri deistvii rentgenovskogo obлучeniia/.  
21 p3658 A69-39056
- LEUTHOLD, P.**  
The sampling theorem as an aid to lucid description of single-sideband modulation /Das Abtasttheorem als Hilfsmittel zur anschaulichen Darstellung der Theorie der Einseitenbandmodulation/.  
09 p1456 A69-22290
- LEVALLOIS, J. J.**  
The French program of space geodesy /Le programme francais de geodesie spatiale/. [UN PAPER 68-95834]  
06 p0917 A69-17071



## LEVALLOIS, J.-J.

French geodetic studies made with the help of artificial satellites /Les études géodésiques françaises effectuées à l'aide des satellites artificiels/.  
02 p0228 A69-11913

## LEVANOV, V. YA.

Peculiarities of the response of the acoustic analyzer of man during prolonged noise effect in a year-long medico-engineering experiment.  
24 p4278 A69-43408

## LEVART, E.

Study of electrochemical oxidation of hydrocarbons on platinum /Etude de l'oxydation électrochimique des hydrocarbures sur le platine/.  
08 p1268 A69-21052

Study of electrochemical oxidation of hydrocarbons on platinum /Etude de l'oxydation électrochimique des hydrocarbures sur le platine/.  
16 p2740 A69-32423

## LEVASHOV, M. M.

Evaluation of the rapid component of nystagmus in nystagmographic studies /Otsenka bystrogo komponenta nistagma v nistagmograficheskikh issledovaniakh/.  
20 p3481 A69-37272

## LEVCHENKO, E. G.

Investigation of symmetrical slow-wave structures of the type of coupled resonator chains /Issledovanie simmetrichnykh zamedliaushchik sistem tipa tsepochet svyazannykh rezonatorov/.  
22 p3916 A69-40958

## LEVCHENKO, IU. Z.

Ionization of gases by fast N super plus and N super 2 super plus ions /Ionizatsiia gazov bystryimi ionami N super plus i N super 2 super plus/.  
13 p2304 A69-28440

## LEVCHIK, V. L.

Use of interference to produce nonpolarized and single-frequency gas laser radiation /Isopol'zovanie interferentsii dlia polucheniia nepoliarizovannogo i odnochastotnogo izlucheniia gazovogo lazera/.  
07 p1149 A69-18936

## LEVE, G.

Measurement of dielectric constants in the Ku band /Mesure de constantes diélectriques en bande Ku/.  
07 p1112 A69-19544

## LEVE, H. L.

Designing stable dual wheel gears.  
[AIAA PAPER 69-769] 19 p3245 A69-35654

## LEVEN, M. M.

Photoelasticity - The Selected Scientific Papers of M. M. Frocht.  
08 p1410 A69-20116

## LEVEN, R.

A nonlinear theory of beam-plasma interaction. I /Zur nichtlinearen Theorie der Strahl-Plasma-Wechsel-Wirkung. I/.  
14 p2493 A69-29692

## LEVENS, J. A.

Flexural fatigue of glass-reinforced thermoplastics.  
08 p1337 A69-20481

## LEVENSON, M. E.

A numerical determination of ultra-subharmonic response for the Duffing equation second derivative  $x$  plus  $\alpha x$  plus  $\beta x$  super 3 equals  $F \cos \omega t$  / $\alpha$  greater than 0/.  
01 p0104 A69-10235

## LEVENSON, M. M.

A simple antenna with good circular polarization.  
23 p4137 A69-41590

## LEVENSPIEL, O.

Heat transfer mechanisms between wall surface and fluidized bed.  
20 p3632 A69-37519

## LEVENTHAL, A.

Spacecraft failure rates - Where are we/ques/  
18 p3207 A69-34519

## LEVENTHAL, J.

Collecting a sample of solar wind - An experimental study of its capture in metal films.  
23 p4205 A69-41539

## LEVENTHALL, H. G.

General method for the evaluation of natural frequencies of transverse beam vibration according to the Timoshenko theory.  
11 p1970 A69-24581

Variation of initial strains with impact velocity for central transverse impacts on free-free beams.  
23 p4235 A69-42455

## LEVERANT, G. R.

The effect of dispersed hard particles on the high-strain fatigue behavior of nickel at room temperature.  
03 p0443 A69-13121

The effect of temperature on fatigue fracture in a directionally-solidified nickel-base superalloy.  
10 p1709 A69-23073

The elevated temperature fatigue of a nickel-base superalloy, MAR-M200, in conventionally-cast and directionally-solidified forms.  
19 p3342 A69-35919

## LEVERETT, S. D.

Psychomotor and physiologic changes during accelerations of 5, 7, and 9 plus G sub x.  
01 p0019 A69-11340

## LEVERETT, S. D., JR.

Measurement of endogenous carbon monoxide production to determine the effect of high plus g sub x acceleration on the destruction rate of red cells.  
17 p2908 A69-33176

## LEVERTON, J. W.

Helicopter rotor noise generation.  
18 p3088 A69-35222

## LEVI-DONATI, G. R.

The Bur-Gheluai meteorite - Mineralogy, structure and metamorphism.  
03 p0507 A69-13095

## LEVI, E.

The semi-empirical parameters used in the dividing streamline and the momentum integral analyses for separated flows.  
14 p2389 A69-29028

## LEVIALDI, A.

Surface states and pinch-off effect in CdS crystals.  
03 p0488 A69-13757

## LEVICH, E. V.

Bose condensation and shock waves in a photon spectrum /Boze-kondensatsiia i udarnye volny v spektre fotonov/.  
09 p1546 A69-21574

## LEVIKOV, S. I.

Quasi-CW lasers with pyrotechnic excitation /Kvazinepreryvnye OKG s pirotekhnicheskimi vzbuzhdeniem/.  
13 p2272 A69-28116

## LEVIN, A. D.

Experimental aerodynamics of a rotor entry vehicle.  
[AIAA PAPER 68-950] 20 p3458 A69-37155

## LEVIN, B. E.

Aging of some ferrites with a spinel structure /O starenii nekotorykh ferritov so strukturoi shpineli/.  
13 p2320 A69-27997

## LEVIN, B. IA.

High-strength polymer fibers /Vysokoprochnye polimernye volokna/.  
19 p3358 A69-35984

## LEVIN, B. IU.

Four unsolved problems of planetary cosmogony /Chetyre nereshennye problemy planetnoi kosmogonii/.  
18 p3205 A69-35437

Diameter and density of Neptune /Diametr i plotnost' Neptuna/.  
18 p3205 A69-35438

Origin of meteorites and planetary cosmogony.  
19 p3406 A69-36075

Meteorite radiants and orbits.  
19 p3414 A69-36116

## LEVIN, B. M.

Evaporographic converter for examination of striations in materials used in the infrared.  
08 p1314 A69-20384

## LEVIN, B. R.

Optimal rank algorithms for signal detection in noise /Optimal'nye rangovye algoritmy obnaruzheniia signalov v shumakh/.  
01 p0027 A69-10374

## LEVIN, E. M.

Phase Diagrams for Ceramists - 1969 Supplement.  
22 p3971 A69-40782

## LEVIN, G. A.

Stability of thin cylindrical shells /K voprosu ustoiichivosti tonkikh tsilindricheskikh obolochek/.  
05 p0840 A69-16199

## LEVIN, G. IA.

Single-circuit partially split magnetron with electron retuning of the frequency /Odnokonturnyi chastichno

razrezannyi magnetron s elektronnoi perestroikoi chastoty/.  
21 p3682 A69-39128

## LEVIN, G. V.

Automated microbial metabolism laboratory.  
17 p2912 A69-32969

## LEVIN, I. M.

Observation of objects illuminated by a narrow light beam in a scattering medium /O nabludenii ob'ektov, osveshchennykh uzkim svetovym puchkom, v ras-seivaiushchei srede/.  
10 p1725 A69-23971

Observation of objects illuminated by a narrow light beam in a scattering medium.  
21 p3772 A69-39657

## LEVIN, I. W.

Infrared matrix spectra of lithium fluoride.  
02 p0205 A69-12465

## LEVIN, I. I.

Effect of natural aging of an alloy of the Al-Zn-Mg system on subsequent artificial aging at different temperatures /Vlianie estestvennogo starenia splava sistemy Al-Zn-Mg na posleduiushchee iskusstvennoe starenie pri razlichnykh temperaturakh/.  
11 p1905 A69-24921

## LEVIN, L. M.

Stimulating the growth of air-mass cumulus clouds.  
03 p0461 A69-13409

## LEVIN, R. R.

Ion acoustic wave dispersion in a highly ionized argon plasma in a magnetic field.  
01 p0133 A69-11216

## LEVIN, S.

The Light Intratheater Transport.  
01 p0008 A69-10146

## LEVIN, S. A.

Nonlinear boundary problems for a quasilinear parabolic equation.  
07 p1173 A69-18728

## LEVIN, S. M.

Why the swing-wing/ques/  
03 p0367 A69-13677

Building blocks for the next subsonics.  
15 p2550 A69-30590

## LEVIN, V. A.

One-dimensional unsteady flows of a combustible gas mixture, taking into account the finite rates of chemical reactions /Odnomernye nestatsionarnye techeniia goruchei smesi gazov s uchedom konechnoi skorosti khimicheskikh reakttsii/.  
06 p0909 A69-17325

## LEVIN, V. I.

Generalization of the asymptotic analysis of homogeneous finite automata /Obobshchenie asimptoticheskogo analiza odnorodnykh konechnykh avtomatov/.  
13 p2239 A69-28535

## LEVIN, V. IA.

Investigation of the interaction between liquid oxides and refractory metals /Issledovanie vzaimodeistviia zhidkikh oksidov s tugoplavkimi metallami/.  
02 p0265 A69-11884

Investigation of the process of spreading of liquid titanium- and zirconium-base alloys on graphite /Issledovanie protsessa rastekaniia po grafitu zhidkikh splavov na osnove titana i tsirkoniia/.  
03 p0446 A69-13573

Interaction between liquid oxides and high-melting metals.  
18 p3156 A69-35044

## LEVINA, E. I.

Experimental application of a universal program of the Leningrad State University Computer Center for calculating axisymmetrically deformed shells of revolution /Opyt ekspluatatsii universal'noi programmy VTs LGU dlia rascheta obolochek vrashcheniia pri osemimetricnoi deformatsii/.  
06 p1026 A69-18019

## LEVINE, A. K.

Lasers. Volume 2.  
05 p0772 A69-16225

## LEVINE, A. N.

Simulation of the Saturn V boost-phase environment on major Apollo spacecraft stages.  
15 p2588 A69-30405

## LEVINE, D. S.

Computer aided design of linear and saturating servomechanisms.  
18 p3110 A69-34672

- Economic factors of space transportation.  
21 p3857 A69-39687
- LEVINE, H.**  
High-temperature adhesion.  
14 p2469 A69-29346
- LEVINE, H. B.**  
Dielectric constant of simple gases.  
04 p0632 A69-14865
- LEVINE, H. H.**  
High temperature thermoplastic adhesives.  
19 p3357 A69-35560
- LEVINE, H. S.**  
Correlation between conservation of metal and luminosity of a zirconium droplet during free-fall combustion in oxygen.  
[WSCI PAPER 69-1] 16 p2830 A69-32342
- LEVINE, J. N.**  
Transonic flow in small throat radius of curvature nozzles.  
23 p4060 A69-41906
- LEVINE, J. S.**  
Observation of hyperfine level crossing in stimulated emission.  
07 p1156 A69-19398  
The ashen light - An auroral phenomenon on Venus.  
16 p2861 A69-32300
- LEVINE, L. E.**  
Two-dimensional, unsteady motion of a medium with a linear pressure-density relationship.  
20 p3512 A69-36916
- LEVINE, L. S.**  
Normal and transverse ionizing shock studies.  
18 p3180 A69-34454
- LEVINE, M.**  
A state of the art airborne electronic converter.  
14 p2405 A69-29687
- LEVINE, M. A.**  
An "electrical equation of state" of metals determined by an exploding wire technique.  
01 p0117 A69-10659  
Evaluation of the driver chamber efficiency for an arc driven shock tube.  
18 p3116 A69-34456
- LEVINE, M. B.**  
Space simulation qualification of a spin stabilized synchronous orbit communications satellite.  
15 p2587 A69-30391
- LEVINE, O. R.**  
Interstitial pressure of the lung.  
24 p4257 A69-42627
- LEVINE, P.**  
A small satellite concept for lower-atmosphere measurements.  
09 p1610 A69-22009
- LEVINE, R. D.**  
Phenomenological analysis of reactive scattering.  
04 p0554 A69-14859  
Role of potential curve crossing in subexcitation molecular collisions - Exact two-state/ computations vs decoupling approximations for resonance positions.  
12 p2131 A69-25983
- LEVINE, R. S.**  
Secondary non destructive instability in medium size liquid fuel rocket engines.  
16 p2836 A69-32001
- LEVINE, S. A.**  
Orbit estimation using manual space navigation sensors.  
19 p3369 A69-35793  
Effect of deflections of the vertical on the performance of a terrestrial inertial navigation system.  
[AIAA PAPER 68-847] 24 p4348 A69-43240
- LEVINE, S. H.**  
Color and B and W negatives for PL.  
08 p1311 A69-19820  
Brightness discrimination in reflected laser light.  
24 p4276 A69-43323
- LEVINE, S. N.**  
Advances in Biomedical Engineering and Medical Physics. Volume I.  
22 p3893 A69-40784
- LEVINE, W. S.**  
On the design of optimal linear systems using only output-variable feedback.  
06 p0903 A69-17406
- LEVINSHTEIN, M. E.**  
Magnetic field influence on the low-frequency oscillations of Gunn diodes.  
02 p0222 A69-12684  
Magnetic field influence on the Gunn effect.  
18 p3183 A69-35267
- LEVINSKAIA, M. KH.**  
Investigation of nitrogen diffusion in titanium /Issledovanie diffuzii azota v titane/.  
09 p1523 A69-21736  
Investigation of the diffusion of nitrogen in titanium.  
20 p3564 A69-38214
- LEVINSKII, IU. V.**  
Investigation of nitrogen diffusion in titanium /Issledovanie diffuzii azota v titane/.  
09 p1523 A69-21736  
Modulus of elasticity of some refractory compounds.  
09 p1529 A69-21871  
Investigation of the diffusion of nitrogen in titanium.  
20 p3564 A69-38214
- LEVINSON, G. R.**  
Measurement of the lifetime of a system of 00 deg v vibrational levels of CO sub 2 molecules /Izmerenie vremen zhizni sistemy kolebatel'nykh urovnei 00 deg v molekul CO sub 2/.  
13 p2273 A69-28579  
Measurement of the 00 super 0 1 level population of CO sub 2 molecules /Izmerenie naselennosti urovnia 00 super 0 1 molekul CO sub 2/.  
13 p2274 A69-28580  
Study of a CO sub 2 pulsed laser /Issledovanie lazera na CO sub 2 v impul'snom rezhime/.  
14 p2458 A69-29162
- LEVINSON, I. B.**  
Cutoff of dissipative effects in multivalley semiconductors.  
02 p0298 A69-12098  
Application of the variational principle to an admittance matrix of electromagnetically coupled cavities and a method of compound equivalent circuits.  
05 p0736 A69-16785  
Wave instability in a drifting plasma /Neustoiichivost' voln v dreifuishchei plazme/.  
24 p4355 A69-42923
- LEVINSON, M.**  
Stability of a compressed neo-Hookean rectangular parallelepiped.  
04 p0682 A69-15303
- LEVINSTEIN, M. E.**  
Computer calculations of the efficiency of the Gunn generator.  
01 p0042 A69-10319  
Computer model of the Gunn diode.  
07 p1097 A69-18449
- LEVINTHAL, E. C.**  
Relationship of planetary quarantine to biological search strategy.  
01 p0021 A69-11090  
Variable time-lapse videoescintoscope - A modification of the scintillation camera designed for rapid flow studies.  
18 p3134 A69-34541
- LEVINZON, D. I.**  
Effect of laminar inhomogeneity on the results of measuring the resistivity and Hall effect in semiconductors.  
04 p0642 A69-14534
- LEVITAN, J.**  
A dual reference electrode system for molten carbonate cells with immobilized electrolyte.  
05 p0706 A69-16237
- LEVITIN, E. S.**  
Constrained minimization methods.  
03 p0456 A69-13403  
A general method of minimization for nonsmooth extremal problems /Ob odnom obshchem metode unimizatsii dlia negladkikh ekstremal'nykh zadach/.  
23 p4181 A69-41524
- LEVITIN, V. F.**  
General problems in guidance theory /Obshchie voprosy teorii navedeniia/.  
21 p3687 A69-39643
- LEVITON, R.**  
General concepts in Rawin systems.  
07 p1057 A69-19581
- LEVITSKII, S. M.**  
Experimental study of microwave oscillations generated by the interaction of an electron beam with a plasma.  
07 p1189 A69-18504
- Nonlinear phenomena in a plasma waveguide.  
07 p1196 A69-19750
- Interaction of microwave and low-frequency oscillations in a plasma-beam system /Vzaimodeistvie sverkh-vysokochastotnykh i nizkochastotnykh kolebaniy v sisteme plazma-puchok/.  
13 p2312 A69-28111
- LEVITT, I. M.**  
The Grand Tour of the planets.  
24 p4384 A69-43137
- LEVITT, K. N.**  
A survey of progress in coding theory in the Soviet Union.  
09 p1460 A69-21393
- LEVKOE, I. I.**  
Stimulated emission of dyes in the 720 to 920-nm region /Stimulirovanoe izluchenie krasitelei v oblasti 720-920 nm/.  
04 p0612 A69-15373  
Stimulated luminescence of dyes in the 720-920 nm region.  
16 p2797 A69-32120  
Study of the effectiveness of various types of polymethine dyes used in passive Q-switches of neodymium lasers /Issledovanie effektivnosti razlichnykh tipov polimetinovykh krasitelei, primeniamykh v passivnykh zatvorakh neodimovykh OKG/.  
17 p2983 A69-33968
- LEVKOVSKII, P. T.**  
Angular dependences of EPR line widths of Cr super 3 super plus in ZnWO sub 4 /Uglovye zavisimosti shirin linii EPR Cr super 3 super plus v ZnWO sub 4/.  
10 p1743 A69-23131
- LEVONI, S.**  
Integration of the thermoelasticity equations of incompressible solids /Sull'integrazione delle equazioni della termoelasticita di solidi incompressibili/.  
02 p0340 A69-12033
- LEVSHIN, V. L.**  
Characteristics of suboptimal spatial filters /Kharakteristiki podoptimal'nykh prostranstvennykh fil'trov/.  
01 p0052 A69-10799
- LEVSHUK, L. A.**  
Electron gun with a plasma cathode /Elektronnaia pushka s plazmennym katodom/.  
04 p0598 A69-14857  
Semiautomatic instrument for investigating gas-discharge plasma in a magnetic field.  
15 p2658 A69-30237
- LEVSKII, L. K.**  
The age of elements and the r-process in the solar system /Vozrast elementov i r-protsess v solnechnoi sisteme/.  
11 p1955 A69-24393  
The age of the elements and the r-process in the solar system.  
24 p4390 A69-43783
- LEVY-LEBLOND, J.-M.**  
Nonsaturation of gravitational forces.  
17 p3028 A69-32900
- LEVY, A.**  
Relativistic generalization, for the Sommerfeld rosette, of the Fourier series expansions given by Lagrange /1770/ and Bessel /1824/ for classical Keplerian elliptical motion /Generalisation relativiste, pour la rosette de Sommerfeld, des developpements en serie de Fourier donnees par Lagrange /1770/ et Bessel /1824/ pour le mouvement elliptique keplerien classique/.  
16 p2811 A69-31607
- LEVY, C. M.**  
Arithmetic correctness as the discriminandum in classical and differential eyelid conditioning.  
07 p1064 A69-18637
- LEVY, D. J.**  
Spray deposition of low emittance gold thermal control coatings.  
15 p2618 A69-30310
- LEVY, E. K.**  
Theoretical investigation of heat pipes operating at low vapor pressures.  
03 p0531 A69-12989  
Heat pipe studies at Thermo Electron Corporation.  
09 p1440 A69-21833
- LEVY, G. S.**  
The ultra cone - An ultra-low-noise space communication ground radio-frequency system.  
[JPL-TR-32-1340] 02 p0220 A69-12429  
Pioneer VI Faraday-rotation solar-occultation experiment.  
15 p2700 A69-31419



## LEVY, H.

Structure of the atmosphere of Venus derived from Mariner V S-band measurements.  
21 p3794 A69-38380

## LEVY, H.

Gravitational induction.  
04 p0661 A69-15190

## LEVY, H., II

H-H interaction potentials.  
11 p1921 A69-24416

## LEVY, H., JR.

Simple analytic expression for general two-center Coulomb integrals.  
14 p2471 A69-29926

## LEVY, J.

Genetic background of circadian rhythms.  
04 p0553 A69-15152

## LEVY, L. L., JR.

Influence of drag on the mission performance of hypersonic aircraft.  
20 p3461 A69-37154

## LEVY, M.

Mechanisms of protection and failure of multilayered electrodeposits on TZ molybdenum in high temperature oxidizing environments.  
14 p2466 A69-29934

## LEVY, M. E.

Photochemical ignition of low pressure fuel-oxidizer mixtures.  
[WSCI PAPER 68-42] 06 p1034 A69-17791  
Ignition of subatmospheric gaseous fuel-oxidant mixtures by ultraviolet irradiation.  
[AIAA PAPER 69-88] 06 p0983 A69-18118

## LEVY, P. W.

Dependence of the thermal decomposition induction period on prior gamma- and X-ray irradiation.  
[WSCI PAPER 69-21] 16 p2832 A69-32359

## LEVY, R.

Analysis and synthesis of waveguide multiperture directional couplers.  
13 p2228 A69-27669

## LEVY, S.

G-limiting attachment for equipment.  
[ASME PAPER 69-VIBR-23] 10 p1806 A69-24170

## LEVY, T.

Steady magnetodynamic flow around a nonconducting wedge in the case of crossed fields /Ecoulement magnetodynamique stationnaire autour d'un dièdre non conducteur dans le cas de champs croisés/.  
06 p0964 A69-17244

## LEVY, V.

Migration and precipitation of vacancies in quenched magnesium.  
02 p0267 A69-12187

## LEW, S. K.

On the dynamic response of the thermosphere at low altitudes to geomagnetic disturbances.  
24 p4310 A69-43180

## LEWAK, G. J.

More uniform perturbation theory of the Vlasov equation.  
16 p2817 A69-31642

Higher order resonances in a magnetoplasma.  
22 p4023 A69-40516

Higher order resonances in a plasma.  
23 p4197 A69-42418

## LEWALLEN, J. M.

Trajectory optimization using regularized variables.  
[AAS PAPER 68-099] 20 p3595 A69-37173  
Coordinate system influence on the regularized trajectory optimization problem.  
[AIAA PAPER 69-903] 21 p3798 A69-38546  
Recurrent nature of Lagrange multipliers for optimal low-thrust earth-Jupiter transfers.  
23 p4215 A69-41896

## LEWANDOWSKI, R.

Longitudinal stability of an unguided rocket in ballistic flight. II /Stateczność podłużna rakiety nie kierowanej w locie balistycznym. II/.  
07 p1230 A69-19701

Influence of disturbing factors on the motion of an unguided meteorological rocket /Wpływ czynników zakłócających na ruch niekierowanej rakiety meteorologicznej/.  
08 p1409 A69-20457

## LEWANDOWSKI, S.

Current opinions on fatigue failure. I, II /Współczesne poglądy na zniszczenie zmęczeniowe. I, II/.  
24 p4395 A69-42559

## LEWELLEN, W. S.

Transonic swirling flow.  
[AIAA PAPER 68-693] 23 p4151 A69-41887

## LEWIN, G.

Reduction of the outgassing of thick stainless-steel sheets in ultrahigh vacuum by high-temperature vacuum treatment.  
22 p3958 A69-41217

## LEWIN, L.

Wedge-diffraction functions and their use in quasi-optics.  
05 p0720 A69-16344

Theoretical performance of the overmoded right-angle corner.  
13 p2234 A69-28426

Stability of bulk negative-resistance material.  
15 p2575 A69-30172

## LEWIN, W. H. G.

Search for X-rays from the large and small Magellanic clouds.  
01 p0150 A69-10370

High energy X-ray study of M-87.  
20 p3588 A69-37488

Balloon observations of high energy X-ray sources in the region of the galactic centre.  
23 p4206 A69-42114

## LEWINE, R. N.

Exponential approximation with piecewise linear error criteria.  
01 p0107 A69-11415

## LEWIS, B. R.

Experimental oscillator strengths for the Schumann-Runge band system in oxygen.  
02 p0284 A69-12832

## LEWIS, C. E.

Application of the point-matching method in determining the reflection and transmission coefficients in linearly tapered waveguides.  
01 p0044 A69-10629

## LEWIS, C. E., JR.

Flight research program. XIV - Landing performance in jet aircraft after the loss of binocular vision.  
23 p4102 A69-41675

## LEWIS, C. F.

Superior analyses of iron meteorites.  
19 p3417 A69-36130

## LEWIS, C. H.

Effects of chemical nonequilibrium, mass transfer, and viscous interaction on spherically blunted cones at hypersonic conditions.  
[AIAA PAPER 69-168] 06 p0862 A69-18047  
Time-of-flight measurement of particle velocity.  
13 p2263 A69-28243

Binary boundary layers on sharp cones in low-density supersonic and hypersonic flow.  
[AIAA PAPER 68-66] 16 p2732 A69-31887

Analysis of boundary layers in low density hypersonic axisymmetric nozzles, including the effects of displacement, first-order transverse curvature, velocity slip, and temperature jump.  
[AIAA PAPER 69-653] 17 p2954 A69-33458

## LEWIS, D.

On the fidelity of high-speed photographic systems for dynamic photoelasticity.  
22 p3945 A69-40077

## LEWIS, D. V.

Heat transfer at the interface of stainless steel and aluminum - The influence of surface conditions on the directional effect.  
01 p0177 A69-11406

## LEWIS, D. W.

Thermal scale modeling - Why and why not/ques/  
[AIAA PAPER 69-1010] 22 p3922 A69-40383

## LEWIS, E.

The solution of a MHD problem using a numerical method devised by Raetz.  
03 p0477 A69-13794

## LEWIS, E. A.

Calculation of phase errors in the frequency components of a VLF/pulse using measured noise amplitude distributions.  
03 p0396 A69-13629

## LEWIS, E. T.

Charge storage model for variable threshold FET memory element.  
10 p1742 A69-22947

## LEWIS, F.

Numerical experiments pertinent to the design of optimum aerological networks.  
19 p3364 A69-36505

## LEWIS, F. D.

Proposed method for instrument landing of aircraft using combined radio and inertial guidance.  
01 p0114 A69-11012

C-5A modular valve program.  
20 p3466 A69-38178

## LEWIS, G. G. E.

The scientific and engineering applications of pyrotechnics in the Skylark upper atmosphere sounding rocket.  
10 p1792 A69-23029

## LEWIS, J.

On the interaction of inclusions with migrating grain boundaries.  
03 p0449 A69-13880

## LEWIS, J. E.

Transformation theory for the compressible turbulent boundary layer with arbitrary pressure gradient.  
[AIAA PAPER 69-160] 06 p0912 A69-18073

Properties of dielectric-tube waveguides.  
08 p1284 A69-20296

Anomalous electrical properties of solution-grown, p-type GaP.  
09 p1557 A69-21750

Fluctuation measurements in the near wake of a wedge with and without base injection.  
[AIAA PAPER 68-100] 16 p2732 A69-31882

Mean properties of the turbulent near wake of a slender body with and without base injection.  
16 p2733 A69-32147

A Poisson integral formula for solutions of parabolic partial differential equations.  
17 p2994 A69-32842

## LEWIS, J. H.

Development of the high bypass turbofan.  
05 p0811 A69-15552

## LEWIS, J. S.

The effect of local fuel concentration on reheat jet pipe vibrations.  
09 p1573 A69-22616

## LEWIS, J. W. L.

Vibrational temperature measurements using the electron beam.  
20 p3579 A69-37222

## LEWIS, M. B.

The Boltzmann and Fokker-Planck equations.  
23 p4195 A69-41516

## LEWIS, M. F.

Color signals and general aviation.  
17 p2914 A69-33185

## LEWIS, M. J.

Production of free sodium atoms for the spectrum-line reversal technique.  
24 p4297 A69-43589

## LEWIS, M. K.

Non-Newtonian effects in flows of some elasticoviscous liquids in curved channels.  
02 p0234 A69-12608

Non-Newtonian effects in axially symmetric rotational flows of some elasto-viscous liquids.  
07 p1180 A69-18815

## LEWIS, M. R.

Radiative lifetimes of excited electronic states in ionic-species of oxygen.  
13 p2301 A69-27452

## LEWIS, R. B.

Wear of polyimide resin.  
[ASLE PREPRINT 69AM 5C-2] 15 p2619 A69-30473

## LEWIS, R. B., II

Using the remote terminal computer to enhance design capability for rotary wing aircraft.  
07 p1052 A69-18868

## LEWIS, R. D.

Instruments for motion measurement using laser Doppler heterodyning techniques.  
15 p2614 A69-31276

Instruments for motion measurement using laser Doppler heterodyning techniques.  
20 p3552 A69-37004

## LEWIS, R. E.

Texture strengthening of heat-treated alpha-beta titanium alloys.  
21 p3729 A69-38662

LEWIS, R. I.  
Flow disturbances due to blade thickness in turbomachines.  
20 p3457 A69-37084

LEWIS, R. M.  
Asymptotic theory of electromagnetic wave propagation in an inhomogeneous anisotropic plasma.  
17 p2925 A69-33840

LEWIS, S. D.  
Buckling tests on space frame radome.  
23 p4232 A69-42143

LEWIS, W. G. E.  
Design and development of an air intake for a supersonic transport aircraft.  
[AIAA PAPER 67-752] 01 p0006 A69-11014  
Digital control of aircraft powerplants.  
03 p0496 A69-14091

LEWITOWICZ, J.  
Testing of aircraft tire wear by an isotope method /Badanie zuzycia opon lotniczych metoda izotopowa/.  
07 p1143 A69-19703

LEX, J.  
Progress report on the HEOS-A satellite /Statusbericht des HEOS-A Satelliten/.  
18 p3207 A69-34628

LEYER, J. C.  
Interaction between combustion and gas motion in the case of flames propagating in tubes.  
19 p3450 A69-36357

LEYER, J.-C.  
Influence of the nature of the walls on the combustion at constant volume of propane-air mixtures /Influence de la nature des parois sur la combustion a volume constant de melanges propane-air/.  
13 p2379 A69-28363

LEYGONIE, J.  
Pressing problems in the utilization of rotating-mirror streak cameras in the study of extreme compressions by shock waves /Probleme actuels d'Utilisation des cameras a fente a miroir tournant dans l'etude des compressions extremes par ondes de choc/.  
12 p2084 A69-26151

LEYNAERT, J.  
Some transonic flow problems for engine nacelles of airbus type aircraft /Quelques problemes transsoniques du fuselage moteur d'un avion du type "Airbus"/.  
[ONERA-TP-629] 02 p0187 A69-11622  
Air intakes for flight at Mach 7 /Prises d'air pour le vol a Mach 7/.  
[ONERA-TP-658] 07 p1203 A69-18418

LEYSIEFFER, H. G.  
Aeronautical satellite systems for air traffic control and communications in the European environment.  
13 p2296 A69-27831

LEZAUD, J. M.  
Study of the structure of detonation waves in solid explosives /Etude de la structure des ondes de detonation dans les explosifs solides/.  
02 p0349 A69-11526  
Study of the generation of a detonation in a granular explosive subjected to a shock wave /Etude de la generation de la detonation dans un explosif granulaire soumis a une onde de choc/.  
02 p0349 A69-11527

LEZBERG, E. A.  
Expansion of simulated storable propellants in a supersonic nozzle.  
[AIAA PAPER 68-635] 20 p3631 A69-37188

LEZIN, V. I.  
Design and optimization of the static characteristics for one type of pneumatic element.  
14 p2393 A69-28746

LEZNIAK, J.  
Observations of fluorine nuclei in the primary cosmic radiation made on the Pioneer 8 spacecraft.  
15 p2676 A69-30886

LEZNIAK, T. W.  
Experimental verification of drift-shell splitting in the distorted magnetosphere.  
22 p4005 A69-40508

LHUILIER, J. N.  
Study of the combustion instabilities in solid propellant rocket engines /Etude des instabilites de combustion dans les moteurs-fusee a propergol solide/.  
02 p0303 A69-11531

LI, C. C.  
A quadratic form representation of polynomials of several variables and its applications.  
07 p1173 A69-18641

LI, C.-Y.  
Kinetics of sub-critical crack growth in high strength materials.  
03 p0449 A69-13874

LI, P. Z.  
Glass-fibre laminates based on epoxy-organosilicon resins.  
19 p3358 A69-35903

LI, T. J.  
On feature selection in pattern recognition.  
06 p0892 A69-17396

LI, Y. T.  
Sectionalize your digital computer.  
05 p0739 A69-16386

LIAGUSHCHENKO, R. I.  
Investigation of the positive column of a neon discharge at medium gas pressures. I, II /Untersuchung der positiven Saule der Neonentladung bei mittleren Gasdrucken. I, II/.  
10 p1740 A69-23723

LIAKHOVITSKII, G. I. A.  
Approximate method of calculating the parameters of multipole linear antennas in terms of a power criterion /Priblizhennyy metod rascheta parametrov mnogovibratornykh lineinykh antenn po kriteriiu moshnosti/.  
11 p1849 A69-24969

LIAKHOVITSKII, F. M.  
Investigation of the physicomechanical properties of Artik tuff - An analog of lunar surface rock /Izuchenie fiziko-mekhanicheskikh svoystv artikskogo tufa - Analoga poverkhnostnykh lunnykh porod/.  
22 p4034 A69-41105

LIALIN, G. N.  
Two-photon excitation of luminescence in uranyl crystals by a ruby laser /Dvukhfotonnoe vozбудzhenie luminestsentsii kristallov uranila rubinovym lazerom/.  
19 p3334 A69-35982

LIAMSHEV, L. M.  
Analysis of sound radiation in boundary-layer suction.  
09 p1483 A69-22638  
Spectral characteristics of pressure pulsations near the wall during boundary-layer separation behind a bulge on a smooth wall /O spektral'nykh kharakteristikakh pristenochnykh pul'satsii davleniia pri otrывe pogranichnogo sloia za vystupom na gladkoi stenke/.  
13 p2246 A69-27535  
The spectrum and the correlation of near-wall pressure pulsations for flow over a rough wall /O spektre i korreliatsii pristenochnykh pul'satsii davleniia pri obtekanii shirokhoverstoei stenki/.  
13 p2246 A69-27537  
Spectral characteristics of the wall pressure fluctuations associated with boundary layer separation behind a projection on a smooth wall.  
20 p3518 A69-38202  
Spectrum and correlation of wall pressure fluctuations in flow past a rough wall.  
20 p3518 A69-38203

LIANG, C. S.  
A multipole-field study for the multiarm log-spiral antennas.  
08 p1281 A69-20018

LIANIS, G.  
Relativistic kinematics of deformable continua. I.  
08 p1416 A69-20693  
Relativistic kinematics of deformable continua. II.  
12 p2189 A69-27116

LIANNOI, B. E.  
Field calculations for long-range short-wave paths /O raschete polia na KV-trassakh bol'shoi protiazhenosti/.  
20 p3520 A69-37035

LIAPUNOV, V. T.  
Isolation of flexural waves in plates by an arbitrary obstacle /Izoliatsiia izgibnykh voln v plastinakh proizvol'nym prepiatstviem/.  
04 p0678 A69-14902  
Passage of flexural waves through an elastic insert located in a joint between two plates /Prokhozhdenie izgibnykh voln cherez upruguiu prokladku, raspolozhennuiu na styke plastin/.  
04 p0679 A69-14906  
Insulation of flexural waves in plates by an arbitrary obstacle.  
12 p2182 A69-26655  
Transmission of flexural waves across an elastic spacer at a plate junction.  
12 p2182 A69-26659

LIARD, F.  
Stress measurements in the gear teeth and fatigue strength of highly loaded gears.  
[AHS PAPER 371] 17 p3060 A69-33517

LIASHCHENKO, A. B.  
Characteristic temperature, Young's modulus, and mean square atomic displacement in the lattices of titanium, zirconium, and chromium nitrides /Kharakteristichna temperatura, modul' iunga ta seredne kvadratichne zmishchennia atomiv u grattsitridiv titanu, tsirkoniiu ta khromu/.  
06 p0938 A69-16830  
The characteristic temperature, the Young modulus, and the RMS displacement of the atoms in the lattices of titanium, vanadium, chromium, iron, cobalt, and zirconium borides /Kharakteristichna temperatura, modul' iunga i seredne kvadratichne zmishchennia atomiv u grattsit boridiv titanu, vanadiuu, khromu, zaliza, kobal'tu i tsirkoniiu/.  
12 p2115 A69-26615

LIASHCHENKO, G. A.  
Zone structure of Si-SiO sub 2 /O zonoii strukture Si-SiO sub 2/.  
09 p1555 A69-21478  
Band structure of Si-SiO sub 2.  
15 p2669 A69-30723

LIASHCHENKO, N. IA.  
Numerical solution of a system of nonlinear integral equations with variable upper bounds and of the Goursat problem for a nonlinear hyperbolic partial differential equation /O chislennom reshenii sistemy nelineinykh integral'nykh uravnenii s peremennymi verkhnimi predelami i zadachi gursa dlia nelineinogo uravneniia s chastnymi proizvodnymi giperbolicheskogo tipa/.  
20 p3569 A69-38293

LIASHENKO, B. A.  
Bonding strength of plasma coatings with the substrate /Prochnost' sstepeniia plazmennyykh pokrytii s osnovoi/.  
15 p2630 A69-31189  
Methods of high-temperature mechanical tests of inorganic heat-resistant coatings /Metody vysokotemperaturnykh mekhanicheskikh ispytanii neorganicheskikh zharostoikiikh pokrytii/.  
20 p3538 A69-37360

LIASHENKO, I. N.  
Some variational theorems on the eigenvalues of the Laplace finite difference operator and their application /Nekotorye variatsionnye teoremy o sobstvennykh znacheniiakh konechnoraznostnogo operatora Laplasa i ikh primenenii/.  
03 p0457 A69-14230  
Natural oscillations of loaded strings, membranes, and volumes /O sobstvennykh kolebaniiax nagruzhenykh strun, membran i ob'omov/.  
20 p3578 A69-38292

LIASHENKO, N. I.  
Temperature dependence of the spontaneous radiation of gadolinium ferrite.  
03 p0487 A69-13731

LIASHENKO, V. I.  
Field effect in compensated p-type gallium arsenide.  
07 p1199 A69-18686  
Study of the inhomogeneity of the surface of gallium arsenide /Doslidzhennia neodnorodnosti poverkhni arsenidu galiu/.  
12 p2142 A69-25980

LIASOVSKA, M. O.  
Algorithm for compensating for the zero drift of an automatic control circuit /Pro algoritm kompensatsii dreifu nulia kontura avtomaticheskogo reguluvannia/.  
14 p2425 A69-29140

LIASOVSKAIA, V. S.  
Effect of hydrogen on tensile strength and stress-rupture strength of alpha plus beta/-titanium alloys VTZ-1 and VT14 /Vliianie vodoroda na kratkovremennuiu i dlitel'nuiu prochnost' alpha plus beta-titanovykh splavov VTZ-1 i VY14/.  
11 p1905 A69-24962

LIATKHER, V. M.  
Turbulent fluctuations in the viscous sublayer.  
04 p0587 A69-14544

LIATSKAIA, A. M.  
Interpretation of Pc3,4 geomagnetic pulsations.  
06 p0921 A69-17737  
Possibility of the existence of stable beams of charged particles /O vozmozhnosti suchestvovaniia ustoiichivykh puchkov zariazhennykh chastic/.  
23 p4206 A69-41851



## LIATSKII, V. B.

Interpretation of Pc3,4 geomagnetic pulsations.  
06 p0921 A69-17737

Possibility of the existence of stable beams of charged particles /O vozmozhnosti sushchestvovaniia ustoiichivyykh puchkov zariazhennykh chastits/.  
23 p4206 A69-41851

## LIAW, B.-D.

A bending theory for multi-layer anisotropic conical shells.  
11 p1984 A69-25141

## LIBATSKII, L. L.

Limiting equilibrium of a circular disk with diametral cracks /Granichna rinovaga z diametral'nimi trishchinami/.  
15 p2708 A69-30663

## LIBBY, C. C.

Sonic riveting of aircraft aluminum alloys.  
24 p4320 A69-43060

## LIBBY, D. R.

Velocities of neutral and ionic species in an MPD flow.  
[AIAA PAPER 69-109] 06 p0971 A69-18116

## LIBBY, L. M.

Stars that do not twinkle outside the earth's atmosphere.  
12 p2173 A69-27172

Solar energy without neutrinos - Fusion catalysis by quarks.  
18 p3186 A69-34643

Day-night variation of Alouette II secondary resonances.  
20 p3496 A69-37889

## LIBBY, P. A.

Three-dimensional boundary layer with uniform mass transfer.  
11 p1874 A69-25281

Temperature distribution in a porous surface.  
20 p3514 A69-37225

Heat transfer to cylinders in nitrogen-helium and nitrogen-neon mixtures.  
21 p3848 A69-38706

## LIBBY, W. F.

Fifth source of Jupiter decametric radiation.  
05 p0813 A69-15604

Europa and the decametric radiation from Jupiter.  
05 p0813 A69-15605

Ozone in the atmosphere of Venus.  
08 p1382 A69-19887

Day-night variation of Alouette II secondary resonances.  
20 p3496 A69-37889

Collecting a sample of solar wind - An experimental study of its capture in metal films.  
23 p4205 A69-41539

## LIBENSON, M. N.

Temperature dependence of the optical constants of a metal in heating by laser radiation.  
06 p0932 A69-16915

## LIBER, T.

The effect of airflow on the behavior of foam as a dynamic element in shock and vibrations.  
[ASME PAPER 69-VIBR-46] 10 p1803 A69-24144

## LIBERMAN, I. U. M.

Accuracy of an analysis of the geopotential field over the Northern and Southern Hemispheres /O tochnosti analiza polia geopotentsiala nad Severnym i luzhnym polushariami/.  
04 p0627 A69-15031

## LIBERTINY, G. Z.

The use of short life fatigue data in design.  
17 p3052 A69-32978

## LIBIN, I. U. V.

Pulse ruby lasers with mercury pumping sources /Impul'snye opticheskie generatory na rubine s rutnymi istochnikami nakachki/.  
19 p3336 A69-36347

## LIBOFF, R. L.

Introduction to the Theory of Kinetic Equations.  
07 p1180 A69-18411

The stability of continually created mass against gravitational decay.  
09 p1601 A69-22212

## LIBOIS, C.

Examples of electrohydraulic servosystems /Exemple d'asservissement de nature electro-hydraulique/.  
04 p0551 A69-15185

## LIBOV, L. D.

Efficient GaP diode sources of red radiation.  
06 p0979 A69-16999

## LIBRESCU, L.

The equations of the linear theory of anisotropic elastic plates /Sur les equations de la theorie lineaire des plaques elastiques anisotropes/.  
01 p0168 A69-10387

Supersonic flutter of circular cylindrical heterogeneous orthotropic thin panels of finite length.  
08 p1413 A69-20404

Statics and Dynamics of Anisotropic and Heterogeneous Elastic Structures /Statika si Dinamica Structurilor Elastice Anizotrope si Eterogene/.  
11 p1986 A69-25236

A theory of bending of anisotropic three-layered elastic plates with fillers.  
12 p2182 A69-26678

Bending theory of elastic anisotropic sandwich plates.  
15 p2713 A69-31025

Stability of elastic nonlinear panels placed in a stream of supersonic gas /Stabilitatea panourilor elastice-nelineiare plasate intr-un curent de gaz supersonic/.  
11 p1875 A69-25466

On the stability of gasdynamic discontinuities associated with chemical reactions - The case of a spherical flame.  
19 p3450 A69-36358

## LIBROVICH, V. B.

Kinetics of the deformation and breakup of a liquid droplet in a gas flow /K kinetike deformatsii i drobleniia zhidkoi kapli v gazovom potoke/.  
11 p1875 A69-25466

On the stability of gasdynamic discontinuities associated with chemical reactions - The case of a spherical flame.  
19 p3450 A69-36358

## LICARI, G. R.

Proterozoic eucaryotes from Eastern California.  
22 p3935 A69-40052

A new Chroococcacean alga from the Proterozoic of Queensland.  
22 p3936 A69-40059

## LICHNEROWICZ, A.

Shock waves and compressibility hypotheses in relativistic magnetohydrodynamics /Ondes de choc et hypotheses de compressibilite en magnetohydrodynamique relativiste/.  
11 p1928 A69-25246

## LICHT, L.

Foil bearings.  
15 p2618 A69-30327

An experimental study of high-speed rotors supported by air-lubricated foil bearings. I, II.  
22 p3955 A69-40405

## LICHTENBERG, A. J.

Phase-Space Dynamics of Particles.  
06 p0966 A69-17673

Non-adiabatic and stochastic mechanisms for cyclotron resonance trapping and heating in mirror geometries.  
08 p1364 A69-20518

Electron cyclotron interaction in a magnetic mirror compression experiment.  
08 p1364 A69-20519

## LICHTENSTEIN, N.

Effect of incidental modulation in systems employing pseudorandom codes.  
06 p0890 A69-17824

## LICHTENSTEIN, S.

A new approach to meteorite studies.  
24 p4382 A69-42934

## LICKER, M. D.

Early inhibition and excitation of the retinal ganglion cells.  
22 p3878 A69-40836

## LICKORISH, L. J.

Tourism.  
22 p4053 A69-40434

## LIDDELL, P.

System of treating descriptions in CASSANDRE applications to simulation /Systeme de traitement des descriptions en CASSANDRE applications a la simulation/.  
03 p0401 A69-14178

## LIDORENKO, N. S.

Electrogasdynamic generator.  
03 p0369 A69-14153

Hydrogen-oxygen fuel cells with hydrophobic type electrodes and an alkaline electrolyte /Piles a com-

bustible hydrogen-oxygen a electrodes d'un type hydrophobe a electrolyte alcalin/.  
08 p1261 A69-21055

Hydrogen-oxygen fuel batteries based on hydrophobic-type electrodes with an alkaline electrolyte /Toplivnye vodorodno-kislorodnye batarei na osnove elektrodov gidrofobnogo tipa s shchelochnym elektrolitom/.  
16 p2740 A69-32426

## LIDOV, M. L.

Secular effects in the evolution of orbits due to light pressure /Vekovye efekty evoliutsii orbit pod vlianiem svetovogo davlennia/.  
22 p4033 A69-41084

## LIE, H. P.

A satellite solar cosmic ray spectrometer with on-board particle identification.  
[IEEE PAPER 3C-3] 07 p1135 A69-19197

## LIE, T. N.

Current-sheet velocity in a coaxial plasma accelerator.  
[AIAA PAPER 69-265] 09 p1566 A69-21258

## LIEB, D.

Emission characteristics of a duplex vapor-deposited tungsten emitter.  
09 p1438 A69-21820

Thermal stability as a function of converter performance.  
09 p1441 A69-21838

Summary of applied research program in thermionic conversion during recent years.  
14 p2397 A69-29173

Electron scattering in thermionic converters by xenon, krypton and argon.  
14 p2403 A69-29251

## LIEBE, H. J.

Amplification at 258 GHz using a saturated gas resonance.  
04 p0557 A69-14754

Sideband amplification at 258 GHz using a saturated gas resonance.  
07 p1145 A69-18479

## LIEBECK, R. H.

Optimization of airfoils for maximum lift.  
[AIAA PAPER 69-739] 18 p3083 A69-34401

## LIEBELT, P. B.

Comparison of preflight and postflight error analyses of Lunar Orbiter missions.  
[AAS PAPER 68-108] 21 p3805 A69-39220

## LIEBER, P.

Categories of information.  
20 p3576 A69-37585

## LIEBERMAN, G. J.

The status and impact of reliability methodology.  
12 p2103 A69-26751

## LIEBERMAN, K. W.

Abundances of some volatile elements in meteorites.  
08 p1404 A69-20919

## LIEBERT, C. H.

Solar cell performance at Jupiter temperature and solar intensity.  
03 p0368 A69-13076

## LIEBES, S., JR.

Gravitational lens simulator.  
15 p2653 A69-31163

## LIEBHAFSKY, H. A.

Increased irreversibility caused by composition changes in fuel cells.  
18 p3093 A69-34781

## LIEBMAN, I.

Spherical flames of spark-ignited dust clouds.  
02 p0353 A69-12323

## LIEBOWITZ, H.

Fracture - An Advanced Treatise. Volume 2 - Mathematical Fundamentals.  
11 p1974 A69-24667

Mathematical theories of brittle fracture.  
11 p1974 A69-24669

Fracture - An Advanced Treatise. Volume 1 - Microscopic and Macroscopic Fundamentals.  
13 p2274 A69-27220

Fracture - An Advanced Treatise. Volume 6 - Fracture of Metals.  
17 p2988 A69-33550

Fracture - An Advanced Treatise. Volume 4 - Engineering Fracture Design.  
17 p2989 A69-33564

Structures Technology for Large Radio and Radar Telescope Systems, Proceedings of the International Symposium, Massachusetts Institute of Technology, Cambridge, Mass., October 18-20, 1967.  
23 p4147 A69-42120

**LIEDLER, R.**  
The vectormagnetograph of the Fraunhofer Institut.  
14 p2453 A69-29972

**LIEDTKE, A. J.**  
Effect of vibration on total vascular resistance in the forelimb of the dog.  
22 p3875 A69-40228

**LIELAUSIS, O. A.**  
Experimental discovery of the electromotive force along the external magnetic field induced by a flow of liquid metal /alpha-effect/.  
04 p0635 A69-14547

**LIEM, H. K.**  
A theory for the calculation of the linearized supersonic flow on rocket configurations at zero angle of attack, particularly at the points of contact of component parts /Eine Theorie zur Berechnung der linearisierten Uberschallstroemung an nicht angestellten Raketenformen insbesondere an den Uebergangen von zusammengesetzten Teilkoerpern/.  
11 p1817 A69-24637

**LIEMOHN, H. B.**  
Magnetspheric parameters determined from structured micropulsations.  
01 p0076 A69-11229  
Whistler dispersion and amplification in the magnetosphere.  
17 p2962 A69-33712

**LIEN, E. L.**  
New approach in the design of coupled-cavity extended-interaction output resonators for klystron amplifiers.  
07 p1095 A69-18431

**LIEN, H.**  
Re-entry vehicle launch restrictions considering damage to optical instruments by solar radiation.  
04 p0666 A69-15511

**LIENARD, J. C.**  
A new method for measurement of output impedances at ultrahigh frequencies /Une methode nouvelle pour la mesure des impedances de sortie en hyperfrequences/.  
14 p2422 A69-29583

**LIENARD, M.**  
Criteria for estimating the annoyance due to noise around airports /Criteres d'appréciation de la gêne due au bruit autour des aéroports/.  
13 p2214 A69-28588

**LIENHARD, J. H.**  
An induced-convection effect upon the peak-boiling heat flux.  
24 p4409 A69-43516

**LIEPINS, A. A.**  
Two-dimensional finite-difference equations for shallow spherical shells.  
16 p2871 A69-31897

**LIEPMANN, H. W.**  
The internal structure of shock waves.  
07 p1120 A69-18930

**LIESKE, H. A.**  
Motion of a vehicle in the transition region of the three-body problem.  
03 p0505 A69-13001

**LIESKE, J. H.**  
Icarus and the determination of astronomical constants.  
13 p2350 A69-27823

**LIETTI, A.**  
Lumped element line generators to produce pulsed sinusoidal oscillations of very large power.  
10 p1662 A69-23344

**LIETTI, B.**  
The second harmonic of the cosmic ray daily variation.  
02 p0305 A69-11422

**LIEURANCE, N. A.**  
O sub 3-CO sub 2-weather report.  
09 p1484 A69-21403  
The SST environment.  
22 p3867 A69-41141

**LIEW, W. M. S.**  
Systematic method of calculating the amplitude spectra of waveform sequences.  
12 p2030 A69-26389

**LIEWER, K. W.**  
Experiments using a 25 kw hollow cathode lithium vapor MPD arc jet.  
[AIAA PAPER 69-241] 09 p1561 A69-21222

**LIFE, J. S.**  
Role of the autonomic nervous system in the control of heart rate in acceleratively stressed monkeys.  
06 p0875 A69-17844

**LIFSHITS, E. V.**  
Measurement of the time-variation of the temperature in a plasma-beam discharge /Izmerenie vremennogo khoda temperatury v plazmenno-puchkovom razriade/.  
04 p0638 A69-15368  
Measurement of the correlation functions of the light emission intensity in a beam-plasma discharge /Izmerenie korrelyatsionnykh funktsii intensivnosti svetovogo izlucheniia v plazmenno-puchkovom razriade/.  
14 p2498 A69-29814  
Measurement of the time behavior of temperature in a plasma-beam discharge.  
16 p2822 A69-32115

**LIFSHITS, I. U. B.**  
Calculation of transonic flow past a symmetrical profile in a free jet /O raschete tranzvukovogo obtekanii simmetrichnogo profilja v svobodnoi strue/.  
11 p1820 A69-25469  
Transonic flow of an ideal gas past half-bodies /Ob otekaniu polutell zvukovym potokom ideal'nogo gaza/.  
14 p2390 A69-29476

**LIFSHITZ, J. M.**  
Determination of reinforcement unbonding of composites by a vibration technique.  
20 p3511 A69-37761

**LIFSITZ, J. R.**  
Anti-Stokes generation in trapped filaments of light.  
01 p0114 A69-10012  
Evidence for sinusoidal phase modulation in small self-trapped filaments.  
03 p0442 A69-14189  
Self-modulation, self-steepening, and spectral development of light in small-scale trapped filaments.  
08 p1352 A69-20745

**LIGHT, G. C.**  
High-temperature-air microwave breakdown.  
16 p2749 A69-31693

**LIGHT, J. C.**  
Rate coefficients, reaction cross sections and microscopical reversibility.  
23 p4113 A69-41519

**LIGUORI, M.**  
Forecast of the transit of a terrestrial satellite through an assigned coordinate /La previsione del transito di un satellite terrestre per una coordinata assegnata/.  
16 p2859 A69-32221

**LIHL, F.**  
Carbidothemic production of metals of groups IVa, Va, and VIa, and their alloys /Ueber die karbidothemiche Herstellung von Metallen der IVa-, Va- und VIa-Gruppe und deren Legierungen/.  
09 p1514 A69-22731  
The carbidothemic production of high-melting metal alloys, with special reference to titanium alloys /Ueber die karbidothemiche Herstellung von hochschmelzenden Legierungen, insbesondere Titanlegierungen/.  
16 p2800 A69-31777

**LIIVA, J.**  
Unsteady aerodynamic and stall effects on helicopter rotor blade airfoil sections.  
11 p1819 A69-25374  
Dynamic stall of airfoil sections for high-speed rotors.  
[AHS PAPER 206] 20 p3463 A69-37806

**LIKALTER, A. A.**  
Interaction of atoms with electrons and ions in a plasma /Vzaimodeistvie atomov s elektronami i ionami v plazme/.  
10 p1728 A69-23134

**LIKENESE, B. K.**  
Flotation technique for laboratory calibration of low-level accelerometers.  
[AIAA PAPER 68-874] 24 p4315 A69-43242

**LIKHACHEV, M. A.**  
Mean annual characteristic of the state of ionization of the F sub 2-layer.  
12 p2071 A69-26701

**LIKHACHEV, V. A.**  
Temperature after-effect in aluminium.  
04 p0615 A69-14638  
Breakdown in alkali-halide crystals caused by laser radiation.  
10 p1745 A69-23322

**LIKHACHEV, V. M.**  
Plasma diagnostics in a pinch-discharge laser /Diagnostika plazmy v lazere na pinch-razriade/.  
11 p1933 A69-25548

**LIKHAREV, K. K.**  
Parametric interactions during an unsteady Josephson effect /O parametricheskikh vzaimodeistviakh pri nestatsionarnom effekte Dzhozefsona/.  
02 p0293 A69-11464

**LIKHAREV, V. A.**  
Determining the mean number of false targets in the scanning sector.  
14 p2410 A69-28836  
Digital processing of pulse signals under conditions of correlated noise /Tsifrovaia obrabotka impul'snykh signalov v usloviakh vozdeistvia korrelirovannykh pomekh/.  
15 p2571 A69-30126  
Algorithms for processing binary-quantized echosignal packets /Algoritmy obrabotki pachki binarnokvantovannykh ekho-signalov/.  
15 p2571 A69-30331  
Investigation of the characteristics of a program transmitter of quasi-uniform pseudorandom numbers /Issledovanie svoistv programmnogo datchika kvaziravnomernykh psevdosluchainykh chisel/.  
15 p2572 A69-30336  
Effectiveness of a self-adaptive filter /Effektivnost' samonastraivaiushchegosia fil'tra/.  
15 p2576 A69-30344

**LIKHT, M. K.**  
On the calculation of functionals in the solutions of linear equations of the first kind.  
18 p3165 A69-35052

**LIKHTER, I. A. I.**  
Variation of the characteristics of atmospheric whistlers in the presence of a perturbed magnetic field in the magnetosphere /Izmenenie kharakteristik svistiaschikh atmosferykov pri vozmushchennom magnitnom pole magnitosfery/.  
02 p0238 A69-11671  
Bursts of VLF radiation.  
06 p0920 A69-17731  
Detection of perturbations in the geomagnetic field from the dynamic spectra of whistlers /Obnaruzhenie vozmushchenii geomagnitnogo polja v magnitosfere po dinamicheskim spektram svistiaschikh atmosferykov/.  
09 p1490 A69-21766  
Change in whistler characteristics in the disturbed magnetic field of the magnetosphere.  
13 p2257 A69-28702

**LIKINS, P. W.**  
Phase plane methods for toppling stability analysis of landing spacecraft.  
02 p0334 A69-12376  
Liapunov stability analysis of freely spinning systems.  
06 p1014 A69-17567  
A linearization tool for use with matrix formalisms of rotational dynamics.  
11 p1970 A69-24608  
The quadratic approximation in rotational dynamical equations.  
18 p3174 A69-35298  
The influence of gravity torque on dual-spin satellite attitude stability.  
19 p3429 A69-35917  
Bounds on the librations of parametrically resonant satellites.  
20 p3617 A69-37191

**LIKUSKI, R. K.**  
A laboratory water vapor laser.  
21 p3738 A69-39446

**LILEY, B. S.**  
The formal nonequilibrium theory of partially ionized and/or nonuniform gas mixtures.  
04 p0633 A69-15436

**LILHOLT, H.**  
Stress-strain curve of a fibre-reinforced composite.  
21 p3845 A69-39709

**LILIENTKAMP, H.**  
Development of the CV-2138 /XAN-1/ telemetry and MDI UHF down converter.  
23 p4137 A69-41778



## LILIENKAMP, R. H.

A computerized mass spectrometer system.  
[AIAA PAPER 69-1016] 22 p3922 A69-40388

## LILLER, W.

On the optical polarization of three quasi-stellar objects.  
10 p1790 A69-24139

## LILLER, W. L.

Measurement of the abundance of CO sub 2 in the Martian atmosphere.  
09 p1607 A69-22427

## LILLEY, A. E.

Determinations of helium abundance from radiofrequency recombination lines.  
18 p3190 A69-34293

## LILLICRAP, D. C.

Electron-beam rotational temperature measurements including the effect of secondary electrons.  
16 p2814 A69-32175

## LILLIE, C. F.

A search for diffuse galactic light in the spectral region  $\lambda_{\text{H}\alpha}$  2100-2800 angstrom units.  
18 p3202 A69-35210

## LILLIEQUIST, C. G.

A possible acceleration mechanism for a solar surge.  
03 p0516 A69-14044

## LILLY, D. K.

The Colorado lee wave program.  
17 p2999 A69-33738

## LILLY, J. Q.

Stagnation region heat transfer with nongray gas subjected to external radiation.  
24 p4415 A69-43590

## LILLYWHITE, M.

Handbook of Solar Simulation for Thermal Vacuum Testing.  
21 p3690 A69-38894

## LIM, A. J.

A solid state pulsed coagulating diathermy instrument - Preliminary report.  
18 p3134 A69-34537

## LIM, Y. K.

Cosmic-ray heavy-nucleus enders at various atmospheric depths.  
17 p3025 A69-34219

## LIMBERG, E. A.

Calculation of a circular cylindrical shell subjected to the action of a dynamic load /Raschet krugovoi tsilindricheskoi obolochki na deistvie dinamicheskoi nagruзки/.  
04 p0673 A69-14499

## LIMBERG, H.

Turbulent incident flow in weakly convergent channels /Turbulente Einlaufstroemungen in schwach konvergenten Kanaelen/.  
15 p2592 A69-31009

## LIMONOVA, M. E.

Theoretical and experimental investigation of fluidic elements.  
02 p0195 A69-12074

## LIMPERIS, T.

Detector theoretical limit.  
19 p3309 A69-36059

Electromagnetic field signatures in the optical spectrum.  
19 p3309 A69-36060

## LIN, C. C.

On the spiral structure of disk galaxies. III - Comparison with observations.  
10 p1786 A69-24109

Dynamics of self-gravitating systems - Structure of galaxies.  
21 p3803 A69-38924

## LIN, C. H.

Block wall motion in ferromagnetic films excited by fast-rising hard-axis pulses.  
20 p3584 A69-38191

## LIN, C.-C.

Radiative-lifetime measurements for nitrogen ions.  
17 p3009 A69-34154

## LIN, C.-H.

Wall streaming, creeping, and a new parade motion in Ni-Fe films excited by hard-axis pulses.  
[IEEE PAPER 11.8] 01 p0138 A69-10717

## LIN, D. N.

Investigation of the energy losses and effectiveness of the turbulent heating of a plasma by a current /Iss-

ledovanie energeticheskikh poter' i effektivnosti turbulentnogo nagreva plazmy tokom/.  
11 p1935 A69-25753

Scattering of electromagnetic waves by turbulent plasma fluctuations.  
15 p2659 A69-30728

## LIN, H.

Composite materials in aerospace applications.  
12 p2111 A69-25852

## LIN, J. L.

Radiation fields of the short-backfire antenna.  
02 p0219 A69-12339

## LIN, J. M.

Transverse properties of fibrous composites.  
20 p3623 A69-37354

## LIN, L. H.

Hyperstereoscopic- and hypostereoscopic- hologram images.  
02 p0249 A69-11931

## LIN, M. C.

Bimolecular reaction of N sub 2 O with CO and the recombination of O and CO as studied in a single-pulse shock tube.  
16 p2748 A69-32793

## LIN, M. S.

Buckling of spherical sandwich shells.  
24 p4396 A69-42734

## LIN, R. P.

The solar particle event of July 16-19, 1966 and its possible association with a flare on the invisible solar hemisphere.  
09 p1579 A69-22181

Spatial gradients of energetic protons and electrons observed after the 7 July 1966 solar flare.  
10 p1767 A69-23767

Observation of interplanetary field lines in the magnetotail.  
20 p3609 A69-38078

## LIN, S.

Subsonic heat front behind the shock wave in two-dimensional supersonic flows /Unterschallheizfront hinter Verdichtungsstoss in zweidimensionalen Ueberschallstroemungen/.  
08 p1252 A69-20691

Graphical methods for the solution of problems of subsonic reaction fronts in two-dimensional supersonic flows. II - Subsonic reaction front in an expansion flow around a corner /Graphische Verfahren zur Loesung der Unterschallheizfrontprobleme in zweidimensionalen Ueberschallstroemungen. II - Unterschallheizfront in einer Expansionstroemung um eine Ecke/.  
23 p4061 A69-42411

## LIN, S. P.

Finite-amplitude stability of a parallel flow with a free surface.  
11 p1869 A69-24891

## LIN, S. R.

Large inextensional deflection of thin cantilevered plates.  
[ASME PAPER 68-APM/BB] 04 p0670 A69-14401

## LIN, S. W.

The decomposition of oxy-containing organic compounds in a microwave discharge.  
22 p3895 A69-40103

## LIN, S.-C.

Temperature relaxation near the interface of two semi-infinite plasmas.  
11 p1923 A69-24296

## LIN, T. C.

Hypersonic interactions near sharp leading edges.  
24 p4248 A69-43579

## LIN, T. H.

Large inextensional deflection of thin cantilevered plates.  
[ASME PAPER 68-APM/BB] 04 p0670 A69-14401

Theory of Inelastic Structures.  
04 p0681 A69-15200

Fatigue crack nucleation in metals.  
22 p4041 A69-40053

## LIN, W.-C.

Dependence of vicinal coupling parameters in A sub 2 B sub 2 PMR spectra of 1,2-disubstituted ethanes on potential barrier to internal rotation.  
12 p2132 A69-25987

## LIN, Y. K.

Dynamics of beam-type periodic structures.  
[ASME PAPER 69-VIBR-17] 10 p1804 A69-24150

On first-excursion failure of randomly excited structures.  
11 p1990 A69-25505

Random processes.  
22 p3975 A69-40777

## LINARI, R.

Protonic compression radar.  
11 p1834 A69-24566

## LINCKE, E.

New Kodak machines and processes for color aerial photography.  
22 p3949 A69-40992

## LINCKE, R.

Vacuum ultraviolet spectroscopy.  
08 p1315 A69-20468

## LINCOLN, A. J.

An integrated nonvolatile read-write memory with addressing.  
17 p2942 A69-34120

## LINCOLN, J. V.

Morphology of solar and geophysical activity during February 1965 and March 1966.  
01 p0068 A69-11118

Solar and Geophysical Events 1960-1965 /Calendar Record/.  
02 p0321 A69-12165

## LIND, D. A.

Elastic scattering of 21-Mev protons from nitrogen-14, oxygen-16, argon-40, nickel-58, and tin-116.  
18 p3479 A69-35489

## LIND, L. F.

Synthesis of equally terminated low-pass lumped and distributed filters of even order.  
13 p2233 A69-28068

Synthesis of asymmetrical branch-guide directional coupler-impedance transformers.  
13 p2233 A69-28069

## LIND, N. C.

Canadian Congress of Applied Mechanics, 2nd, University of Waterloo, Waterloo, Ontario, Canada, May 20-23, 1969, Proceedings.  
19 p3374 A69-36655

A microstructure theory of photoelastic behavior in amorphous solids.  
22 p3972 A69-40081

## LINDALEN, H. R.

Measurement of medium-energy protons /Experiment 5.71C/.  
13 p2328 A69-27756

## LINDBERG, H. E.

Impulse buckling of an elastic-plastic cylinder containing an elastic core.  
04 p0671 A69-14414

## LINDBERG, R. A.

High-temperature magnetic test techniques and analyses.  
01 p0093 A69-10111

High-temperature capacitors from pyrolytic boron nitride.  
04 p0551 A69-15299

High-temperature magnetic test techniques and analyses.  
09 p1512 A69-22375

## LINDBERG, R. G.

Circadian rhythm in mammalian body temperature entrained by cyclic pressure changes.  
16 p2745 A69-32447

## LINDBERGH, C.

Finite, inelastic deformations of clamped shell membranes subjected to impulsive loadings.  
09 p1616 A69-21939

## LINDBERGH, J.

Experiments on decompression bubbles in the circulation using ultrasonic and electromagnetic flowmeters.  
21 p3663 A69-38914

## LINDBLAD, B. A.

Measurement of micrometeorite impacts from a sounding rocket during a noctilucent cloud display.  
21 p3793 A69-38348

## LINDBORG, U.

Micro-facets of crack surfaces in metals.  
01 p0098 A69-10763

## LINDE, R. K.

Shock waves in solids.  
13 p2360 A69-27341

## LINDENLAMB, J. C.

Adaptive receiver techniques for digital communication through selective fading channels.  
09 p1458 A69-22471

**LINDENLAUB, J. C.**  
Experimental results for phase-lock loop systems having a modified nth-order tanlock phase detector. [IEEE PAPER 67-TP-1178-COM] 10 p1663 A69-23531

**LINDENMEIER, H.**  
Some examples of low-noise transistorized reception antennas /Einige Beispiele rauscharmer transistorierter Empfangsantennen/. 21 p3683 A69-39264

**LINDER, B.**  
Phase-change coatings combine active and passive thermal control. 14 p2530 A69-29434

**LINDGREN, A. G.**  
Noise dynamics of the phase-locked loop with signal clipping. 08 p1270 A69-19857  
Noise dynamics of a phase-locked loop with non-linear signal processing. 17 p2931 A69-34115

**LINDGREN, S. T.**  
The solar particle events of May 23 and May 28, 1967. 03 p0516 A69-14046  
Cosmic-ray effects of atmospheric, geomagnetic and interplanetary origin. 04 p0649 A69-14683

**LINDH, D. V.**  
The influence of weld defects on performance. 11 p1892 A69-24932

**LINDHOLM, D. A.**  
Automatic electropolisher for copper. 21 p3720 A69-38597

**LINDHOLM, F. A.**  
Extensions of pn junction theory. 11 p1938 A69-25306

**LINDHOLM, I.**  
Behavior of hydrophilic porous oxygen electrodes with silver electrocatalyst. 20 p3484 A69-38071

**LINDHOLM, U. S.**  
Mechanical Behavior of Materials under Dynamic Loads, Proceedings of a Symposium, San Antonio, Tex., September 6-8, 1967. 02 p0342 A69-12277  
Some experiments in dynamic plasticity under combined stress. 02 p0343 A69-12282

**LINDINGER, R. J.**  
Quantitative metallography of microduplex structures after superplastic deformation. 13 p2278 A69-27411

**LINDLEY, B. K.**  
Transient pumping performance of a two speed, hydraulic turbine driven inducer system. [AIAA PAPER 69-551] 18 p3140 A69-34415

**LINDLEY, D.**  
A fresh look at classical venturi meter design. 11 p1880 A69-24468

**LINDLEY, W. T.**  
Epitaxially grown guard rings for GaAs diodes. 08 p1284 A69-20368  
GaAs Schottky barrier avalanche photodiodes. 13 p2226 A69-27195

**LINDMAYER, J.**  
Radiation resistant MOS devices. 02 p0221 A69-12468

**LINDNER, F.**  
Further investigations on low density Hall accelerators. [AIAA PAPER 69-281] 09 p1562 A69-21229

**LINDOFF, U.**  
The ages of open clusters. 08 p1388 A69-20237  
The colour-magnitude distribution of giant stars as a function of age. 08 p1388 A69-20238  
The open clusters NGC 2483 and NGC 2489. 08 p1388 A69-20239  
The open clusters NGC 2546, Pi 1, NGC 2579, and Cr 185. 08 p1388 A69-20240  
The open clusters NGC 2533, NGC 2567, NGC 2571, and Ru 58. 08 p1389 A69-20245  
Photoelectric sequences in Puppis. 08 p1389 A69-20249

The open clusters NGC 5617, Ly 2, and Tr 12. 08 p1389 A69-20253  
The open clusters Tr 22 and Ho 17. 08 p1389 A69-20254  
The open cluster NGC 559. 23 p4211 A69-41490

**LINDQUIST, C. S.**  
Uniform transmission line response to independent distributed sources. 01 p0043 A69-10562

**LINDQUIST, P. F.**  
Crystal structure of vapor-deposited boron filaments. 02 p0268 A69-12405  
Photovoltaic effect at copper sulfide-cadmium sulfide heterojunctions. 19 p3382 A69-35684

**LINDQVIST, L.**  
Flash spectroscopy by Q-switched laser excitation - Application to the study of naphthalene /Spectroscopie par éclair a excitation par laser declenché - Application a l'étude du naphthalène/. 02 p0254 A69-11544

**LINDSAY, I. R.**  
Acute somatic effects in primates of protons to 400 Mev. 03 p0374 A69-13497

**LINDSEY, W. C.**  
Digital-data transition tracking loops. 07 p1082 A69-19108  
Power allocation - Rapidly varying phase error. 09 p1456 A69-22459  
Block coding for space communications. 19 p3277 A69-36487

**LINDSLEY, D. B.**  
Electrophysiological correlates of visual perceptual masking in monkeys. 22 p3876 A69-40265

**LINDSTROM, E. E.**  
Effects of topical ophthalmic 2 percent pilocarpine on visual performance of normal subjects. 01 p0022 A69-11347

**LINDSTROM, R. M.**  
Cosmic-ray produced radionuclides and rare gases near the surface of Saint-Severin meteorite. 19 p3410 A69-36093

**LINDZEN, R. S.**  
A theory of the quasi-biennial oscillation. 03 p0461 A69-13342  
Data necessary for the detection and description of tides and gravity waves in the upper atmosphere. 10 p1685 A69-23833

**LINER, R. T., JR.**  
Moment and discrete ordinate methods in radiative transfer problems. 18 p3174 A69-35237

**LINETS, A. M.**  
Concerning an experimental verification of the equality of the inertial and gravitational masses. 14 p2486 A69-29647

**LINFOR, J. J.**  
The empirical and analytic modeling of the role of the propellant in ignition. [WSCI PAPER 68-34] 07 p1202 A69-18364

**LINFORD, G. J.**  
Effect of cross relaxation on the spectral flux and population inversion distributions in a CW laser oscillator. [IEEE PAPER T-2] 05 p0776 A69-16327

**LING, C. K.**  
Quasi-optimum design of an aircraft landing control system. 24 p4253 A69-43280

**LING, CH.**  
Critical comparison of the determination of vertical ozone distribution by the Umkehr method and by the electrochemical sonde. 16 p2786 A69-32630  
Simultaneous Umkehr observations with two instruments. 16 p2786 A69-32631  
1.1/2 years of routine observations of vertical ozone distribution near Zuerich, Switzerland. 16 p2787 A69-32635

**LING, F. F.**  
Boundary Lubrication- An Appraisal of World Literature. 11 p1891 A69-24925

Geometric optimization of concentrated contacts for minimum microslips. 15 p2629 A69-30903  
On temperature transients at sliding interface. 22 p3955 A69-40404

**LINGENFELTER, R. E.**  
Determination of the coronal magnetic field and the radio-emitting electron energy from a Type IV solar radio burst. 04 p0650 A69-15529  
Distribution of sinuous rilles and water on the moon. 05 p0818 A69-15606  
Cosmic-ray deuterium and helium-3 of secondary origin and the residual modulation of cosmic rays. 08 p1378 A69-20066  
Solar flare optical, neutron and gamma-ray emission. 22 p4003 A69-40296

**LINGUET, R.**  
Review of the fabrication techniques currently used or apt to be used for ceramic radomes /Revue des procedes de fabrication employes ou susceptibles d'etre employes actuellement pour les radomes ceramiques/. 07 p1142 A69-19527

**LINK, F.**  
The atmosphere of Neptune /Sur l'atmosphere de Neptune/. 04 p0660 A69-15061  
Occultations of stars by the earth as observed from the moon /Occultations d'etoiles par la terre observees de la lune/. 13 p2345 A69-27651  
Eclipse Phenomena in Astronomy. 19 p3425 A69-36379  
An optical model for the detection of cosmic dust in the upper atmosphere. 21 p3702 A69-38349  
Diameter, flattening, and optical properties of the upper atmosphere of Neptune as derived from the occultation of the star BD-17 deg 4388 /Diametre, aplatissement et proprietes optiques de la haute atmosphere de Neptune d'apres l'occultation de l'etoile BD-17 deg 4388/. 21 p3796 A69-38471

**LINK, F. J.**  
A complementary MOS spacecraft data handling system. 23 p4133 A69-41739

**LINK, G. L.**  
Measurement of dielectric properties of plastics. 13 p2285 A69-27984

**LINK, J. K.**  
Spectroscopy of K sub 2 using laser-induced fluorescence. 05 p0771 A69-15907

**LINK, J. M.**  
Visual detection probability of "sonar" targets as a function of retinal position and brightness contrast. 02 p0203 A69-12218

**LINKENBACH, H. J.**  
Diuresis during total immersion in a thermally neutral bath /Die Diuresis bei Immersion in ein thermoisothermes Vollbad/. 23 p4094 A69-42075  
Change of human plasma volume during immersion in a thermally neutral water bath /Aenderung des Plasmavolumens des Menschen bei Immersion in ein thermoisothermes Wasserbad/. 23 p4096 A69-42087

**LINKOVSKII, Z.**  
Zhukovskii's theorem in a linearized supersonic flow /Teorema zhukovskogo v linearnizirovannom sverkhzvukovom potoke/. 05 p0697 A69-16023  
Solution of the equations of motion of charged particles in a constant magnetic field and a variable electric field /O reshenii uravnenii dvizheniya zariazhennykh chastits v postoiannom magnitnom pole i peremennom elektricheskom pole/. 08 p1361 A69-20213

**LINLOR, W. I.**  
Some factors affecting electromagnetic detection of lunar subsurface water. 11 p1958 A69-24693

**LINN, J. W.**  
Continuously tunable picosecond-pulse organic-dye laser. 06 p0935 A69-17759



## LINNECAR, T. P. R.

High-powered microwave interactions in a pulsed electron beam-plasma klystron.  
07 p1095 A69-18433

## LINES, K. W.

The general problem of data return from deep space.  
14 p2517 A69-29096

## LINNIK, I. U. V.

Comments on equations associated with the source and sink method /Zamechaniia ob uravneniakh, svyazannykh s metodom istochnikov i stokov/.  
05 p0747 A69-16039

## LINSKER, R.

Homogeneous main sequence models with convective cores. II.  
05 p0829 A69-16777

## LINSON, L. M.

On the solution of Langmuir's spherical space-charge equation.  
07 p1115 A69-18864

Current-voltage characteristics of an electron-emitting satellite in the ionosphere.  
14 p2511 A69-28956

## LINTON, C.

Relative band strengths for the AIO blue-green system.  
07 p1184 A69-19163

## LINTON, R. C.

A radiometer for measuring solar flux variations.  
[AAS PAPER 69-254] 24 p4313 A69-42858

## LINZ, P.

Linear multistep methods for Volterra integro-differential equations.  
12 p2123 A69-26753

A method for solving nonlinear Volterra integral equations of the second kind.  
24 p4340 A69-43228

## LINZELL, L. E.

"Damaged" static and fatigue stress analysis of VTOL structures.  
[AIAA PAPER 69-214] 07 p1237 A69-19576

## LIOKUMOVICH, V. I.

Spectrum and power of a signal scattered by the ionosphere /K voprosu o spektre i moshchnosti rasseyannogo ionosferoi signala/.  
17 p2930 A69-33895

## LION, P. M.

Sufficient conditions for optimum fixed time impulsive trajectories.  
06 p1007 A69-17575

Spaceflight trajectory analysis at Princeton University.  
09 p1585 A69-21207

Analytical determination of the adjoint vector for optimum space trajectories.  
[AIAA PAPER 69-916] 21 p3808 A69-39345

## LIONS, J. L.

Optimal Control of Systems Governed by Partial Differential Equations /Contrôle Optimal de Systèmes Gouvernés par des Equations aux Dérivées Partielles/.  
09 p1471 A69-21580

## LIONS, J.-L.

The method of Quasi-Reversibility- Applications to Partial Differential Equations.  
17 p2994 A69-33205

## LIOTKO, L. I.

Dependence of the error in the equations of shell theory /in its various versions/ on the variability index of the stressed state /O zavisimosti pogreshnosti uravnenii teorii obolochek /v razlichnykh ee variantakh/ ot pokazatelya izmeniaemosti napriazhennogo sostoi-aniia/.  
04 p0680 A69-14927

## LIOU, M. L.

An approach to calculating interchannel distortion of linearly filtered angle-modulated signals using a hybrid computer.  
14 p2417 A69-29556

## LIPAEV, V. V.

Signal identification against a background of noise by a human operator and an automation /Otozhdest-venie signalov na fone shuma chelovekom-operatorom i avtomatom/.  
23 p4109 A69-41955

## LIPANA, J. G.

Effects of various respiratory maneuvers on the physiological response to angular acceleration.  
23 p4102 A69-41679

## LIPFERT, F.

An experimental study of the boundary layers on low temperature subliming ablaters.  
[AIAA PAPER 69-152] 06 p0929 A69-18098

## LIPINSKI, A.

Semiconductor detectors of radiation and their application to the investigation of cosmic space /Polprzewodnikowe detektory promieniowania i ich zastosowanie do badania przestrzeni kosmicznej/.  
10 p1662 A69-23294

Effect of cosmic radiation on the operation of electronic elements /Wplyw promieniowania kosmicznego na prace elementow elektronicznych/.  
17 p2937 A69-33583

## LIPINSKI, J.

Stress-strain state in a circular disk of constant thickness due to a thermal pulse on a delta alpha sector of the disk /Stan naprezen i przemieszczen w tarczy kolowej o stalej grubosci, wywolany impulsem cieplnym na wycinku tarczy delta alfa/.  
04 p0681 A69-15171

## LIPKEA, W. H.

Heat transfer through gases contained between two vertical cylinders at different temperatures.  
01 p0177 A69-11403

## LIPOVETSKII, V. A.

Absorbing matter in clusters of galaxies /O pogloshchaiushchem veshchestve v skopleniakh galaktik/.  
09 p1587 A69-21356

Absorbing material in clusters of galaxies.  
18 p3197 A69-34746

## LIPOVKA, N. M.

Radio emission of the A and B components of the 3C 273 quasar at the 3.9-cm wavelength /O radioizluchenii komponent A i B kvazara 3C 273 na volne 3.9 cm/.  
03 p0506 A69-13092

Variability of radio sources at the 6.6-cm wavelength /Peremennost' radioistochnikov na volne 6.6 cm/.  
11 p1954 A69-24382

Radio emission of components A and B of the quasar.  
14 p2516 A69-28774

Variability of radio sources at 6.6 cm wavelength.  
24 p4389 A69-43772

## LIPOVOI, G. S.

Nonstationary motion of a wing near a solid surface /Nestatsionarnii rukh krila poblizu tverdoi poverkhni/.  
02 p0188 A69-12134

## LIPOVSKII, D. E.

Parametric resonance of cylindrical shells with curved generating lines /Parametricheskii rezonans tsilindricheskikh obolochek s iskrivlennymi obrazuiushchimi/.  
18 p3223 A69-34979

## LIPOVTSEV, I. U. V.

Stability of viscoelastic and elastic shells in the presence of local stresses /K ustoiichivosti viazkoupругikh i uprugikh obolochek pri nalichii lokal'nykh napriazhenii/.  
04 p0680 A69-14928

Local stability of elastic shells of revolution /Lokal'naia ustoiichivost' uprugikh obolochek vrashcheniia/.  
07 p1237 A69-19686

On the creep buckling of shells.  
08 p1411 A69-20143

Local stability of viscoelastic shells of revolution /Lokal'naia ustoiichivost' viazko-uprugikh obolochek vrashcheniia/.  
18 p3216 A69-34573

## LIPPE, P.

The centrifuge as a therapeutic device.  
24 p4265 A69-43372

## LIPPINCOTT, E. R.

High-temperature equilibria from plasma sources. I - Carbon-hydrogen-oxygen systems.  
21 p3670 A69-39737

High-temperature equilibria from plasma sources. II - Hydrocarbon systems.  
21 p3670 A69-39738

## LIPPINCOTT, S. L.

Summary of 133 parallaxes determined with the 24-in. refractor of the Sproul Observatory.  
04 p0663 A69-15381

Astrometric study of BD plus 20 deg 2465 from photographs taken with the Sproul 24-inch refractor.  
13 p2348 A69-27810

## LIPPINCOTT, S. W.

Protein catabolism in young mice following whole-body X irradiation.  
23 p4099 A69-42151

## LIPPITT, A. H.

Electron beam welding in aircraft components.  
[SAE PAPER 690318] 15 p2617 A69-30089

## LIPKE, B. R.

Economic impact on domestic air traffic - An econometric approach.  
[AAS PAPER 69-329] 24 p4417 A69-42807

## LIPPMAN, S. A.

On the set of optimal policies in discrete dynamic programming.  
04 p0624 A69-14951

## LIPPMANN, H. G.

Electronic tensile stress meter /Elektronischer Zugspannungsmesser/.  
23 p4111 A69-42056

## LIPPMANN, H. J.

Hall Generators- Properties and Applications /Hall-Generatoren- Eigenschaften und Anwendungen/.  
03 p0406 A69-13954

## LIPPMANN, R.

Extrapolation and interpolation methods for data compression /Extrapolations- und Interpolationsverfahren zur Nachrichtenreduktion/.  
12 p2027 A69-25877

## LIPPROSS, H.

The effect of dynamic and static stretching on the spontaneous frequency of isolated pacemaker tissue of the heart /Der Effekt dynamischer und statischer Dehnung auf die Spontanfrequenz des isolierten Herzschrittmachers/.  
23 p4096 A69-42092

Mechanical coupling effects between respiration and heart rhythm /Mechanische Koppelungswirkungen der Atmung auf den Herzschlag/.  
23 p4097 A69-42093

## LIPSCHUTZ, M. E.

Implications of shock effects in iron meteorites.  
01 p0149 A69-10134

Shock-induced preferred disorder in solids.  
15 p2671 A69-31538

Shock histories of hexahedrites and Ga-Ge group III octahedrites.  
19 p3418 A69-36136

Vanadium isotopic composition in meteoritic and terrestrial matter.  
20 p3601 A69-37501

## LIPSICAS, M.

Nuclear spin-lattice relaxation in very dilute solutions of orthohydrogen in parahydrogen.  
06 p0961 A69-17141

## LIPSKII, I. U. N.

The nature of the bright rays on the moon.  
02 p0236 A69-11642

Cartographic tying-in of photographs of the Zond-3 automatic interstellar station by the method of rectifying according to the points of orientation /Kartograficheskaiia priviazka snimkov AMS "Zond 3" sposobom rektifitsirovaniia po orientiruushchim tochkam/.  
20 p3608 A69-38051

## LIPSON, S. G.

Do faster-than-light group velocities imply violation of causality/ques/.  
21 p3769 A69-38543

## LIRON, N.

Laminar flow in a pipe at low and moderate Reynolds numbers.  
05 p0743 A69-15578

## LIS, D.

Certain methods for measuring the impurity concentration distribution and the resistivity of epitaxial layers /O pewnykh metodakh pomiaru rozkladu koncentracji domieszek oraz opornosci wlasciwej warstw epitaksjalnych/.  
13 p2323 A69-28641

## LISAKOV, I. U. V.

Sensitivity of the roots of the characteristic equation of a linear system /Chuvstvitel'nost' kornei kharakteristicheskogo uravneniia lineinoi sistemy/.  
10 p1666 A69-23610

## LISENKER, B. S.

Epitaxial gallium arsenide films with a high electron mobility.  
03 p0492 A69-14172

## LISENKO, V. S.

Nature of recombination centers on a real germanium surface /Pro prirodu rekombinatsiiniikh tsentrov na real'noi poverkhni germaniia/.  
12 p2142 A69-25978

- LISEV, V. P.**  
Dual compensation of Markovian drift of the extremum in systems employing learning experiments.  
05 p0741 A69-16671
- LISICKI, A.**  
Vibration of rotating twisted blades /Drgania zwichrowanych lopatek wirujacych/.  
09 p1618 A69-22236
- LISIN, I. U. G.**  
Interaction between a shockwave and a blunt body in a supersonic gas flow /Vzaimodeistvie udarnoi volny s zatuplennymi telom, obtekaemymi sverkhzvukovym potokom gaza/.  
14 p2390 A69-29467
- LISINA, L. R.**  
Photometric method for studying lunar topography /Fotometricheskii metod izucheniia topografii luny/.  
11 p1959 A69-24724
- LISITSA, M. P.**  
Reflection of CdS sub x Se sub 1-x single crystals in the intrinsic absorption region /Otrazhenie monokristallov CdS sub x Se sub 1-x v oblasti sobstvennogo pogloschennia/.  
19 p3391 A69-36607
- LISITSKII, V. I.**  
Ignition of condensed materials in the presence of a phase transition in the heated layer /O zazhigani kondensirovannykh veshchestv pri nalichii fazovogo perekhoda v progretoe sloe/.  
11 p2000 A69-25189
- LISITSYN, B. M.**  
Application of the method of dominant states to the solution of the three-dimensional problem in elasticity theory /Prilozhenie metoda opredeliashchikh sostoi-anii k resheniiu prostranstvennoi zadachi teorii uprugosti/.  
23 p4229 A69-41998
- LISITSYN, L. M.**  
Shaping of laser pulses with the aid of two-photon absorption in GaAs.  
16 p2796 A69-31798
- LISITSYN, V. N.**  
Absorption saturation effects in a gas laser.  
04 p0611 A69-14550  
Selection and self-locking of modes in a He-Ne laser with nonlinear absorption. [IEEE PAPER G-13]  
07 p1151 A69-19059  
Stabilization of reproducibility of frequencies of He-Ne lasers at 0.63 mu. [IEEE PAPER P-4]  
07 p1153 A69-19073  
Tunable Fabry-Perot interferometer for photoelectric measurements /Perestriavaemyi interferometr Fabri-Perot dlia fotoelektricheskikh izmerenii/.  
10 p1698 A69-24212  
Selection and self-synchronization of oscillation modes in a laser with nonlinear absorption /Selektisia i samosinkhronizatsiia tipov kolebani v lazere s nelineinym pogloscheniem/.  
19 p3336 A69-36350  
Use of the Zeeman effect for stabilizing the frequency of a gas laser with nonlinear absorption /Ob ispol'zovanii efekta Zeemana dlia stabilizatsii chastoty gazovogo lazera s nelineinym pogloscheniem/.  
20 p3554 A69-37729
- LISKOVETS, O. A.**  
Incorrect problems and the stability of quasi-solutions /Nekorrektnye zadachi i ustoiichivost' kvazireshenii/.  
13 p2289 A69-28483
- LISKUNOV, V. A.**  
Polyfunctional additives to jet fuels /Polifunktsional'nye prisadki k reaktivnym toplivam/.  
16 p2828 A69-31562
- LISOVA, L. O.**  
Possibility of vacuum "restoration" in the laser deposition of a titanium-magnesium-oxide film absorber of the energy of ultrahigh-frequency oscillations /Pro mozhliivost' "vidnovlennii" vakuumu pri lazernom rozporoshenii plivki oksidnogo titanomagnitovogo poglinacha energii nadvisokochastotnykh kolivan'/.  
21 p3735 A69-38590
- LISOVSKAIA, N. B.**  
Low-temperature oxidation of hard-alloy mixtures /K voprosu nizkotemperaturnogo oksileniia tverdosplavnykh smesei/.  
13 p2275 A69-27345
- LISOVSKII, A. F.**  
Low-temperature oxidation of hard-alloy mixtures /K voprosu nizkotemperaturnogo oksileniia tverdosplavnykh smesei/.  
13 p2275 A69-27345
- LISOVSKII, G. M.**  
Experimental microbial life support system. I - Continuous cultivation of algae as a link of a closed ecosystem.  
01 p0020 A69-11077  
Experimental microbial life support system. II - Gas exchange between man and microalgae culture in a 30-day experiment.  
01 p0021 A69-11078
- LISOVSKII, I. U. L.**  
Selection of the optimal thickness of a photocell /Vybor optimal'noi tolshchiny fotoelementa/.  
09 p1443 A69-22719
- LISSAMAN, P. B. S.**  
Turbulent skin friction on compliant surfaces. [AIAA PAPER 69-164]  
06 p0914 A69-18163  
Analysis of thick, cambered jet flap airfoils in ground effect. [AIAA PAPER 69-738]  
18 p3083 A69-34404  
The jet flap diffuser - A new thrust augmenting device. [AIAA PAPER 69-777]  
19 p3393 A69-35645  
Turbulent skin friction on compliant surfaces. [AIAA PAPER 69-164]  
24 p4306 A69-43685
- LIST, E. J.**  
An exact solution for a diffusive flow in a porous medium.  
11 p1869 A69-24887
- LIST, R. J.**  
Are particulate radioactive tracers indicative of stratospheric motions/ques/.  
10 p1682 A69-23410
- LISTER, G. G.**  
Resistive instabilities and solar flares.  
09 p1583 A69-22757
- LISTROVA, I. U. P.**  
Limiting equilibrium of some shells of revolution made of a material with differing yield stress under tension and compression /Predel'noe ravновесие nekoto-rykh obolochek vrashcheniia, vypolnennykh iz materiala s raznymi predelami tekuchesti pri rastiazhenii i szhatii/.  
18 p3216 A69-34572
- LISTVIN, V. N.**  
A possible estimate of the impurity concentration in n-type InSb.  
02 p0294 A69-11631
- LISZKA, L.**  
On the dynamics of H alpha - structures in prominences.  
06 p0994 A69-17436  
On the amplitude distribution of scintillating radio signals from artificial satellites.  
23 p4115 A69-41486
- LITAUDON, D.**  
Phase centers and astigmatism of antennas /Centre de phase et astigmatisme des antennes/.  
10 p1664 A69-23798
- LITCHFORD, G. B.**  
Low-visibility landing. I.  
01 p0114 A69-11391  
SSR "listen-in" feature for proximity warning.  
03 p0464 A69-13247  
Low-visibility landing. II.  
03 p0465 A69-13853  
Realistic low visibility landing criteria for VSTOL aircraft.  
22 p3979 A69-40675
- LITOV, I. U. N.**  
Breakdown of polyfluoroethylene resin under uniaxial tension /O razrushenii ftoroplasta pri odnoosnom rastiazhenii/.  
13 p2286 A69-28321
- LITOVCHENKO, D. I.**  
Machine for high-temperature tensile testing in vacuum.  
07 p1117 A69-19319
- LITOVCHENKO, V. G.**  
Population inversion by means of the field effect /St-vorennaia inversnoi zaselenosti za dopomogoii efektu polia/.  
08 p1374 A69-21082  
Measurement of the composite field effect in semiconductors /Izmerenie kombinirovannogo efekta polia v poluprovodnikakh/.  
10 p1698 A69-24210  
Electrical conductivity in the surface layers of semiconductors with a many-valley energy spectrum of the current carriers /Elektroprovodnist' pri poverkh-
- nevikh shariv napivprovodnikov z bagatodolinnim energetichnim spektrom nosiv strumu/.  
11 p1937 A69-24915  
Nature of recombination centers on a real germanium surface /Pro prirodu rekombinatsiinykh tsentrov na real'noi poverkhni germaniiu/.  
12 p2142 A69-25978  
A criterion of "strong doping" for centers producing deep levels, and the nature of the spectrum of fast surface traps in silicon /O kriterii "sil'nogo legirovaniia" dlia tsentrov, daiushchikh glubokie urovni, i kharaktere spektra bystrykh poverkhnostnykh lovushek krennia/.  
22 p3992 A69-40604
- LITSKI, I. A.**  
Study of various methods of determining the plasma temperature in an MHD-generator duct /Issledovaniia razlichnykh metodov opredeleniia temperatury plazmy v kanale MGD-generatora/.  
13 p2309 A69-28023
- LITSOV, A. N.**  
Diurnal changes in some physiological functions and in the work-capacity of man in isolation.  
10 p1646 A69-23510
- LITSTER, J. D.**  
Divergences of the magnetic properties of CrBr sub 3 near the critical point.  
15 p2668 A69-30686
- LITTELL, D. E.**  
Energy cost of piloting fixed- and rotary-wing aircraft.  
22 p3891 A69-40218
- LITTLE, H. R.**  
Correlation of mass injection drag data for slender cones at hypersonic speeds.  
13 p2199 A69-28224
- LITTLE, J. C.**  
High bay clean rooms.  
10 p1673 A69-23354  
Environmental control for radiation testing of lunar rock samples.  
20 p3512 A69-38271
- LITTLE, J. W.**  
Human reaction to aircraft engine noise.  
02 p0204 A69-12766  
Sound duration and its effect on judged annoyance.  
18 p3097 A69-34324
- LITTLE, M. A.**  
Oxygen intake and body temperature of basal and sleeping Andean natives at high altitude.  
06 p0874 A69-17835
- LITTLE, P. F.**  
Noise in collision-free alkali metal plasmas.  
14 p2499 A69-29849
- LITTLE, R. E.**  
A note on the shear stress criterion for fatigue failure under combined stress.  
11 p1984 A69-25140
- LITTLE, S. J.**  
Astrophysical determination of f-values for TiII, CrII, FeII.  
03 p0508 A69-13175  
Dynamical stability in pre-main-sequence stars.  
07 p1220 A69-19388
- LITTLE, V. I.**  
Bragg reflection of laser light from a phase grating in a Q-switching liquid.  
05 p0771 A69-15811
- LITTLE, V. Z.**  
Psychomotor and physiologic changes during accelerations of 5, 7, and 9 plus G sub x.  
01 p0019 A69-11340
- LITTLE, W. A.**  
Correlation effects of pi electrons. III - Oscillator strength distribution.  
20 p3580 A69-37497
- LITTLEFIELD, E. B.**  
Ferromagnetic composite materials for microwave shielding.  
09 p1510 A69-22352
- LITTMAN, T.**  
NUSAT - First generation nuclear flight stage. [AIAA PAPER 69-534]  
16 p2810 A69-32707
- LITVAK-GORSKAIA, L. B.**  
Electrical conductivity of n-type InSb at 0.3-20 deg K.  
06 p0978 A69-16990



## LITVAK, A. G.

Self-focusing of electromagnetic waves in an isotropic plasma. 07 p1196 A69-19749

## LITVAK, A. K.

Analysis of magnetogasdynamic flow. 18 p3181 A69-35054

## LITVAK, M. M.

Infrared pumping of interstellar OH. 15 p2691 A69-30762

Conditions for microwave radiation from excited OH a-doublet states. 18 p3185 A69-34292

Hydroxyl and water masers in protostars. 22 p4018 A69-40267

Millimetre wave emission by interstellar dust. 23 p4215 A69-42115

## LITVIN-SEDOI, M. Z.

Engineering method of designing the most advantageous control for automatic control systems /Rabochii sposob postroeniia naivgodneishego upravleniia v sistemakh avtomatiki/. 01 p0052 A69-10794

A case of integrability of the equations of motion of a gyrost /Ob odnom sluchae integriruemosti uravnenii dvizheniia girostata/. 05 p0764 A69-16504

Reaction force of a fixed point in a mobile system of solid bodies /O sile reaktzii nepodvizhnoi tochki podvizhnoi sistemy tverdykh tel/. 18 p3172 A69-34590

Reactions in a system of interconnected bodies realizing a prescribed motion. 21 p3771 A69-39085

## LITVIN, O. N.

Solution to a class of boundary-value problems with mixed boundary conditions for regions of complex form /O reshenii odnogo klassa kraevykh zadach so smeshannymi granichnymi usloviyami dlia oblastei slozhnoi formy/. 05 p0787 A69-16455

## LITVINENKO, D. A.

Maraging steel with reduced cobalt. 04 p0616 A69-14650

## LITVINENKO, I. U. A.

Influence of temperature on the mechanical properties of fiberglass-reinforced textolites /Vliianie temperatury na mekhanicheskie svoystva steklostekstolitov/. 23 p4179 A69-41993

Mechanical properties of a fiberglass-reinforced textolite at normal temperature /Mekhanicheskie svoystva steklostekstolita pri normal'noi temperature/. 23 p4179 A69-41994

## LITVINOV, A. A.

An analytical method of determining the working life of the oil in an engine /Analiticheskii metod opredeleniia sroka sluzhby masla v dvigatele/. 04 p0604 A69-14500

## LITVINOV, A. N.

Limiting theorem for the densities of Markovian sums of random quantities /Predel'naia teorema dlia plotnostei markovskikh summ sluchainykh velichin/. 21 p3757 A69-39538

## LITVINOV, R. O.

Inhomogeneity of the surface charge and surface breakdown in silicon p-n junctions. 02 p0294 A69-11629

## LITVINOVA, T. I.

Composition and certain properties of the lower oxides of silicon. 15 p2643 A69-31245

## LITVINOVICH, G. V.

Kinetics of fine structural changes during aging of the El437B alloy /Kinetika tonkikh strukturnykh izmenenii pri starenii splava El437B/. 14 p2463 A69-29310

## LITZKENDORF, M.

Potential testing methods for corrosion-induced changes in the mechanical properties of materials /Pruefmoelichkeiten fuer die Aenderung des mechanischen Verhaltens von Werkstoffen durch Korrosion/. 10 p1713 A69-23822

## LIU, C. H.

Displacement of rays in a turbulent medium. 08 p1272 A69-20021

Thin airfoil in nonuniform parallel streams. 12 p2012 A69-26775

Effect of ion drag on propagation of acoustic-gravity waves in the atmospheric F region. 14 p2434 A69-28944

Diffusion of rays in random media. 17 p2926 A69-33854

Propagation of coherent magnetohydrodynamic waves. 22 p3990 A69-40529

## LIU, C. K.

An experimental study of turbulent natural convection boundary layers. [ASME PAPER 69-HT-D] 24 p4410 A69-43525

## LIU, C. S.

Dispersion-corrected three-wavelength laser heterodyne measurement of plasma densities. 09 p1544 A69-21331

Temperature gradient instabilities in axisymmetric systems. 21 p3776 A69-38711

## LIU, C. Y.

Turbulent skin-friction coefficient and momentum thickness in adverse pressure gradient. 11 p1819 A69-25385

Transient heat conduction with time dependent boundary conditions. [ASME PAPER 69-HT-50] 24 p4410 A69-43521

## LIU, C.-S.

Generalized series solutions of the boundary-layer equations. 20 p3514 A69-37211

## LIU, D. T.

Correlation of the vortex lattice method on rotor/wing configurations. 20 p3458 A69-37163

## LIU, H. W.

A mechanical model for fatigue crack propagation. 10 p1797 A69-23082

Fatigue crack propagation and strain cycling properties. 15 p2710 A69-30812

## LIU, I. D.

A high gain, time-resolving spectrograph for the diagnosis of laboratory simulated reentry. 24 p4317 A69-43759

## LIU, J. T. C.

Radiative transfer in the low Reynolds number, blunt-body stagnation region at hypersonic speeds. 23 p4059 A69-41885

Finite-amplitude instability of the compressible laminar wake - Weakly nonlinear theory. 24 p4245 A69-43357

## LIU, S. C.

The spectrum of a simple nonlinear system. 04 p0561 A69-15454

## LIU, S. G.

High-power punch-through avalanche-diode microwave oscillators. 02 p0216 A69-12145

Stacked high-power avalanche-diode oscillators. 14 p2421 A69-29543

## LIU, S. W.

Merged stagnation shock layer of nonequilibrium dissociating gas. 02 p0189 A69-12521

Onset of surface combustion in still atmosphere. 16 p2877 A69-31896

## LIU, T. H.

On the dynamic plastic response of finite bars. 11 p1991 A69-25512

## LIU, V. C.

Ionospheric gas dynamics of satellites and diagnostic probes. 18 p3132 A69-35409

Particle trapping and plasma oscillations in the satellite-disturbed ionosphere. 21 p3787 A69-38357

## LIU, Y. K.

Towards a stress criterion of injury - An example in caudocephalad acceleration. 17 p2913 A69-33008

## LIUBARSKII, I. M.

Friction in vacuum. 03 p0434 A69-13915

Behavior of solid lubricating films on a molybdenum disulfide base during friction under high-vacuum conditions /Povedenie tverdykh smazochnykh pokrytii na osnove disulfida molibdena pri trenii v usloviakh glubokogo vakuuma/. 16 p2793 A69-31561

## LIUBARSKII, K. A.

A hypothetical Martian biosphere /Gipoteticheskaia biosfera Marsa/. 22 p3876 A69-40271

## LIUBASHEVSKAIA, T. L.

Determination of the recombination parameters and depth of levels of a p-n junction in semiconductor photocells /Opredelenie rekombinatsionnykh parametrov i glubiny zaleganiia p-n-perekhoda v poluprovodnikovykh fotoelementakh/. 09 p1560 A69-22718

## LIUBCHENKO, A. V.

Determination of the parameters of recombination centers in copper-doped gallium arsenide. 02 p0294 A69-11627

## LIUBCHENKO, M. V.

Effect of alloying with aluminum on the nature of the decomposition of a copper-titanium alloy. II /O vlianii legirovaniia aluminium na prirodu raspada v splave med'-titan. II/. 11 p1905 A69-24922

## LIUBIMOV, A. N.

Certain effects in spatial supersonic gas flows near blunt bodies /O nekotorykh effekтах v prostranstvennykh sverkhzvukovykh techeniakh gaza okolo zatuplennykh tel/. 14 p2390 A69-29616

Three-dimensional Flow of Ideal Gases around Smooth Bodies. 16 p2771 A69-32003

## LIUBIMOV, A. V.

Ignition of fuel films behind shock waves in air and oxygen. 02 p0353 A69-12317

## LIUBIMOV, B. IA.

A Lagrangian description of the dynamics of turbulent motion /Lagranzhevo opisaniie dinamiki turbulentnogo dvizheniia/. 11 p1867 A69-24536

## LIUBIMOV, B. N.

The statistical theory of turbulence of an incompressible fluid at large Reynolds numbers. 20 p3517 A69-38007

## LIUBIMOV, G. A.

Calculation of magnetohydrodynamic flows in the channels of MHD devices /Raschet magnetogidrodinamicheskikh techenii v kanalakh MGD-ustroistv/. 06 p0969 A69-17913

Blowing of neutral gases as a means of protecting the electrodes of MHD devices /Primenenie vduva neutral'nykh gazov dlia zashchity elektrodov MGD-ustroistv/. 11 p1826 A69-25232

## LIUBIMOV, V. D.

Diffusion of carbon in alloys of niobium with titanium, zirconium, tungsten, and molybdenum /Diffuziia ugleroda v splavakh niobiia s titanom, tsirkoniem, vol'framom i molibdenom/. 18 p3157 A69-35250

## LIUBIMOVA, E. A.

Thermal Processes of the earth and the Moon /Termika Zemli i Luny/. 19 p3401 A69-35887

## LIULIK, V. P.

The magnetometric equipment on Luna 10 and Venera 4 space stations /Magnitometricheskaia apparatura kosmicheskikh stantsii "Luna-10," "Venera-4"/. 01 p0080 A69-10582

Magnetometer instruments of Luna-10 and Venera-4 space stations. 15 p2610 A69-30752

## LIULKA, V. A.

Entrainment of a solid body by a flow of a viscous incompressible fluid in a tube /Uvlechenie tverdogo tela v trube potokom vizkozi neszhimaimoi zhidkosti/. 10 p1678 A69-23366

## LIUSIN, I. U. B.

Determination of the position of a moving object with the aid of gyroscopes and apparent rate meters /Opredelenie mestopolozheniia dvizhushchegosia ob'ekta pri pomoshchi giroskopov i izmeritelei kazhushcheisia skorosti/. 18 p3134 A69-34556

## LIUTOVICH, A. S.

Some properties of tellurium-doped silicon. 04 p0644 A69-15267

## LIUTYI, V. M.

Optical variability of the nucleus of the Seyfert galaxy NGC 4151 /Opticheskaiia peremennost' iadra seifertovskoe galaktiki NGC 4151/. 15 p2686 A69-30536

UBV photometry of Seyfert galaxies /UBV-fotometriia galaktik Seiferta/. 15 p2686 A69-30537

LIVANOV, V. A.  
Study of the effect of iron and silicon impurities on the properties and structure of duraluminum type alloys during the fabrication of compacted semifinished products from granules /Issledovanie vlianiia primеси zheleza i kremniia na svoistva i strukturu splavov tipa duraliumin pri proizvodstve kompaktnykh polufabrikatov iz granul/.  
03 p0452 A69-14120  
Nature of hydrogen brittleness of titanium and its alloys /Priroda vodorodnoi khrupkosti titana i ego splavov/.  
07 p1162 A69-18772

LIVESEY, P. J.  
Particle-size determination by low-angle light scattering - New instrumentation and a rapid method of interpreting data.  
24 p4313 A69-42764

LIVINGSTON, C. L.  
Flying qualities considerations in the design and development of the Hueycobra. [AHS PAPER 217]  
07 p1053 A69-18871

LIVINGSTON, F.  
Planetary entry body heating rate measurements in air and Venus atmospheric gas up to T equal 15,000 deg K. [AIAA PAPER 69-635]  
17 p2890 A69-33272

LIVINGSTON, P. M.  
Coherent light propagation through a turbulent atmosphere - Measurements of the optical filter function.  
24 p4344 A69-43114

LIVINGSTON, W. C.  
A solar image or spectrum scanning technique.  
04 p0602 A69-15378  
Magnetograph observations of the quiet sun. I - Spatial description of the background fields.  
04 p0663 A69-15396  
Solar rotation, 1966-68 /Research note/.  
14 p2528 A69-29974

LIVSHITS, B. G.  
Damping capacity and resistance to resonance fatigue of steels and alloys based on titanium and aluminum.  
03 p0443 A69-13025  
Damping ability of EI961 chromium-nickel steel after various heat treatment regimes /Dempiruiushchaia sposobnost' khromo-nikelevoi stali EI961 posle razlichnykh rezhimov termooobrabotki/.  
17 p2990 A69-33933

LIVSHITS, B. L.  
"Traveling medium" laser /Lazer "begushchei sredy"/.  
21 p3735 A69-38438

LIVSHITS, G. L.  
Dynamics of a helicopter after the loss of a portion of the main rotor and tail rotor blades /Dinamika vertoleta pri otrывe chasti lopasti nesushchego i rulevogo vintov/.  
14 p2393 A69-29744

LIVSHITS, G. SH.  
Light Scattering in the Atmosphere. Part 2 /Rasseyaniye sveta v atmosfere. Part 2/.  
07 p1211 A69-18545  
Polarization of daytime skylight and the atmospheric aerosols /Polarizatsiia sveta dnevnogo neba i atmosferyniy aerazol'/.  
09 p1491 A69-22708

LIVSHITS, P. Z.  
Thermoelastic stresses in a long cylinder in the presence of heat transfer between the surface and an ambient medium with variable temperature /Termoprugie napriazheniia v dlinnom tsilindre pri teploobmene mezhdu poverkhnost'iu i vneshei sredoi s peremennoi temperaturoi/.  
15 p2714 A69-31178

LIWSHITZ, M.  
Venus - An isothermal lower atmosphere/ques/.  
16 p2852 A69-31553

LIZAREV, A. D.  
Stability of flexibly clamped annular plates /Ustoichivost' uprugoi zashchemlennykh kol'tsevykh plastin/.  
17 p3057 A69-33197

LIZKO, N. N.  
Effect of diet containing unicellular algae on the composition of enteric microflora in animals.  
02 p0197 A69-11490  
Changes in the intestinal microflora of rats caused by protein-free diets /Izmeneniia kishchnoi mikroflory pri bezbelkovom pitanii kryss/.  
05 p0709 A69-16516

Changes in the intestinal microflora of protein-starved rats.  
18 p3096 A69-34735

LIZOGUB, V. V.  
A directional short-wave antenna for meteor studies /Napravleniiaa korotkovolnovoi antenna dlia issledovaniia meteorov/.  
17 p2939 A69-33903

LIZUNOV, G. I.  
The effect of quench rate on the M sub s temperature and the structure of an Fe-C and an Fe-C-Ni steel.  
20 p3557 A69-36956

LJUNGSTROEM, O.  
Air cushion vehicles /ACV/ in water transport - A critical analysis of future possibilities and applications in Scandinavia.  
09 p1434 A69-22075

LLEWELLYN, E. J.  
Balloon observations of the temporal variation of the infrared atmospheric oxygen bands in the airglow.  
16 p2776 A69-32091

LLORENS, R. E.  
Finite deflections of an elastic circular plate with a central hole. [ASME PAPER 69-APM-20]  
18 p3214 A69-34395

LLORET, P.  
Inertial navigation for commercial aircraft /La navigation inertielle pour avions commerciaux/.  
02 p0278 A69-12239  
Inertial navigation /Navigation par inertie/.  
19 p3371 A69-36703

LLOYD, K. H.  
High altitude profiles of wind velocity, temperature and density.  
15 p2598 A69-31319  
Absorption of a grazing ray calculated by ray tracing.  
24 p4350 A69-43013

LLOYD, W. B.  
A hybrid simulation study of a satellite attitude controller using a torqued, 2-axis gimbaled boom as the actuator.  
07 p1227 A69-18335

LO, A. W.  
High-speed logic and memory - Past, present and future.  
04 p0569 A69-15366

LO, C. C.  
Elastic contact of rough cylinders.  
06 p1023 A69-17373

LO, C. F.  
A V/STOL wind tunnel wall interference study. [AIAA PAPER 69-171]  
06 p0908 A69-18203

LO, C.-F.  
Numerical solutions of the unsteady heat equation.  
16 p2879 A69-32171

LO, R.  
Advances in the development of high-energy hybrid propellant engines /Fortschritte in der Entwicklung hochenergetischer Lithergoltriebwerke/.  
11 p1943 A69-25428

LO, R. E.  
Technical feasibility of chemical propulsion systems with very high performance.  
06 p0983 A69-17627  
Problems of high-energy hybrid propulsion systems, represented by an example of the development of a FLOX/polyethylene propulsion system /Probleme hochenergetischer Lithergoltriebwerke, dargestellt am Beispiel der Entwicklung eines FLOX/polyaethylen-Trichwerkes/. [DGLR-69-017]  
23 p4202 A69-41930

LO, Y. T.  
A multipole-field study for the multiarm log-spiral antennas.  
08 p1281 A69-20018  
A probabilistic approach to large circular and spherical arrays.  
22 p3914 A69-40704

LOASBY, R. G.  
Materials problems in microelectronic circuits.  
24 p4333 A69-43212

LOB, G.  
Status of measurement techniques in the DVL-plasma wind tunnel PK 1 /Stand der Messtechnik am DVL-Plasmawindkanal PK 1/.  
04 p0584 A69-14823

LOB, W. H.  
R-meter correction for boxcar-ing and receiver noise in incoherent weather radars.  
04 p0557 A69-14915  
The distribution of FM-discriminator click widths.  
14 p2422 A69-29553

LOBACHIK, V. I.  
Changes in the calcium metabolism of rats under conditions of hypokinesia /Izmeneniye kal'tsievogo obmena u kryss v usloviakh gipokinezii/.  
13 p2212 A69-28618

LOBANOV, A. D.  
Retardation of a free nonsubmerged jet in a perpendicular magnetic field /Tormozheniye svobodnoi nezatoplennoi strui v perpendikuliarnom magnitnom pole/.  
14 p2501 A69-29910

LOBANOV, V. F.  
Investigation of the physical libration of the moon by an optical location method.  
01 p0158 A69-11311

LOBANOVA, V. IA.  
Characteristic of the structure of a climatic cloud field along a given direction /Kharakteristika struktury klimacheskogo polia oblachnosti 'vdol' zadannogo napravleniia/.  
12 p2127 A69-26899

LOBASTOV, IU. S.  
Shock Waves in Real Gases /Udarnye Volny v Real'nykh Gazakh/.  
04 p0589 A69-14937  
Microwave study of the relaxation phenomena in a shock-heated argon plasma /K voprosu o mikrovolnovom issledovanii relaksatsionnykh iavlenii v udarnonagretoj argonovoi plazme/.  
15 p2663 A69-30995

LOBB, R. K.  
Ballistics range studies of high enthalpy flows.  
06 p0860 A69-17632

LOBKO, A. S.  
Resonant heating of the electrons in a beam plasma discharge /Rezonansnyi nagrev elektronov v puchkovoplazmennom razriade/.  
09 p1549 A69-22016

LOBYSHEV, V. A.  
Computer calculation of the kinetic characteristics of the normal propagation of a flame /Vychisleniye kineticheskikh kharakteristik normal'nogo rasprostraneniia plameni na EVM/.  
17 p3069 A69-33138

LOBYTSYN, V. V.  
Optimal separation of plane waves by a linear antenna in the presence of phase errors /Optimal'noe razdeleniye ploskikh voln lineinoi antennoi pri nalichii fazovykh oshibok/.  
06 p0895 A69-17460  
Optimum separation of plane waves by a linear antenna in the presence of phase errors.  
20 p3508 A69-37943

LOBZIN, V. S.  
Some neurological problems of aerospace medicine.  
10 p1646 A69-23506

LOCASCIO, C.  
Photon-induced current changes in a CO sub 2 laser amplifier.  
23 p4172 A69-41398

LOCATELLI, A.  
On the existence of the optimal control for linear uncontrollable systems.  
10 p1666 A69-23887

LOCATI, L.  
Phenomena of deferred rupture and relevant tests /Fenomeni di rottura differita e prove relative/.  
24 p4407 A69-43801

LOCHAK, G.  
A general perturbation method in wave mechanics and its utilization in resonance problems /Sur une methode generale de perturbation en mecanique ondulatoire et son utilisation dans les problemes de resonance/.  
18 p3175 A69-35483

LOCHRIE, W. D.  
Nonlinear programming and recursive optimal estimation.  
06 p0902 A69-17403

LOCHTE-HOLTGREVEN, W.  
Exploding wires as a light source for quantitative spectroscopy.  
01 p0117 A69-10658



- Plasma Diagnostics. 08 p1363 A69-20462  
Evaluation of plasma parameters. 08 p1363 A69-20465  
Quantitative spectroscopy and spectral photometry. 08 p1315 A69-20467

LOCHTE, H. W.

- Role of impurities in the sensitization of ammonium nitrate /Rôle des impuretés dans la sensibilisation du nitrate d'ammonium/. 17 p3016 A69-32830

LOCK, M. H.

- Snapping and buckling under dynamic pulse load. [AIAA PAPER 69-22] 06 p1029 A69-18206

LOCKE, J. L.

- Rapid radio variations in BL Lac. 21 p3798 A69-38545  
Three radio sources with unusual intensity variations. 22 p4029 A69-40764

LOCKENOUR, J. L.

- Approach flying qualities - Another chapter. [AIAA PAPER 69-895] 21 p3648 A69-39419

LOCKER, R. J.

- A solid state X-ray fluorescence analyzer for use in hostile environments. [IEEE PAPER 3B-9] 07 p1135 A69-19201

LOCKETT, F. J.

- Stability in Couette flow of a viscoelastic fluid. I. 06 p0909 A69-17240

LOCKEY, G. W. A.

- Satellite measurement of upper atmospheric molecular oxygen densities. 20 p3523 A69-37413

LOCKMAN, W. K.

- Heat-transfer telemetry for models using thermocouple sensors. [AIAA PAPER 68-407] 04 p0604 A69-15514

LOCKWOOD, F. C.

- Equilibrium-turbulent boundary layer prediction for a proposed Prandtl mixing length distribution. 03 p0419 A69-13992  
An aspect of heat transfer in accelerating turbulent boundary layers. [ASME PAPER 68-WA/HT-13] 05 p0847 A69-16120

LOCKWOOD, G. E. K.

- A computer-aided system for scaling topside ionograms. 20 p3504 A69-37866  
On the prediction of F-layer penetration frequencies. 20 p3530 A69-37871

LOCKWOOD, G. W.

- Identification, structure, and variations of new TiO bands in the one-micron spectra of Mira variables. 20 p3611 A69-38158

LOCKWOOD, H. F.

- Acoustic paramagnetic resonance in arsenic-doped germanium. 02 p0296 A69-11835

LOCKWOOD, J. A.

- Cosmic-ray neutron flux measurements above the atmosphere. 01 p0146 A69-11223  
Cosmic ray neutron monitor for OGO-F. 19 p3314 A69-36678

LOCKWOOD, L. W.

- Apollo mission simulation with visual presentation. [SMPT PAPER 105-74] 12 p2055 A69-25768  
Very high resolution for visual simulation. [SMPT PAPER 105-73] 12 p2077 A69-25769

LOCQUENEUX, R.

- The quantum theory of electrical birefringence of diamagnetic molecules /Kerr effect/ - General formalism /Sur la théorie quantique de la birefringence électrique des molécules diamagnétiques /effet Kerr/ - Formalisme général/. 02 p0279 A69-11538

LODDING, A.

- The temperature dependence of isotope thermo-transport in liquid metals. 03 p0533 A69-13970

LODEN, L. O.

- Some methods for direct elimination of sky background in stellar photometry. 08 p1313 A69-20247

- Photometric standard sequences in Vela with an outline of a search for associations of intermediate-type stars. 08 p1389 A69-20248

- Some ideas on the distribution of interstellar dust. 10 p1785 A69-24050

- The new Stockholm spectral survey of the Southern Milky Way. 17 p3031 A69-33101

LODEN, W. A.

- Axisymmetric vibration of conical shells. 11 p1992 A69-25519

LODWIN, E.

- Design and performance of a mobile waste heat organic Rankine cycle system providing electric power and environmental control. 23 p4070 A69-42267

LOEB, H.

- The possibility of using RF ion sources in electrostatic thrusters /Die Verwendungsmöglichkeit der Hochfrequenzionenquelle in elektrostatischen Raketentriebwerken/. 09 p1568 A69-21489

- Electrostatic rocket propulsion systems /Die elektrostatischen Raketentriebwerke/. 13 p2325 A69-28253

- Basic considerations on nuclear rocket drives. 13 p2297 A69-28254

- Electric rocket propulsion systems /Elektrische Raketentriebwerke/. 13 p2325 A69-28255

- Design variables of HF ion engines for space tests /Auslegungsgroessen von HF-Ionentriebwerken fuer Raumtests/. 22 p3998 A69-39904

LOEB, H. W.

- Extraction and acceleration mechanism in RF-ion thrusters. [AIAA PAPER 69-284] 09 p1564 A69-21237  
State of the art and recent developments of the radio frequency ion motors. [AIAA PAPER 69-285] 09 p1565 A69-21247  
The radio frequency ion thrusters. 17 p3018 A69-33326

- Design parameters of HF engines in space tests /Auslegungsgroessen von HF-triebwerken bei raumtests/. [DGLR-69-022] 23 p4203 A69-41933

LOEB, L. B.

- The nature and properties of gaseous ions encountered in atmospheric studies. 22 p3940 A69-40538

LOEBER, J. F.

- Torsional vibration of an elastic solid containing a penny-shaped crack. 04 p0678 A69-14872  
Wave propagation in an elastic solid with a line of discontinuity or finite crack. 21 p3840 A69-39293

LOEBLICH, K. R.

- The stabilization of turbulent ammonia-air flames on flameholders. 21 p3849 A69-38808

LOEFFLER, A. L., JR.

- Experimental velocity profile determinations in MHD flow through a dielectric circular channel. 13 p2307 A69-27501

LOEFFLER, J.

- The FM 4000/70 receiving system for satellite ground stations /Das Empfangssystem FM 4000/70 fuer Satellitenbodenstationen/. 16 p2766 A69-31855

LOEFGREN, L.

- An axiomatic explanation of complete self-reproduction. 10 p1645 A69-23385

LOEHBERG, K.

- Behavior of the gamma'-phase of a nickel-aluminum-titanium alloy during creep testing /Das Verhalten der gamma'-Phase einer Nickel-Aluminium-Titan-Legierung unter Kriechbelastung/. 09 p1528 A69-22733

LOEHMAN, R. E.

- Crystallography and defect chemistry of solid solutions of vanadium and titanium oxides. 20 p3484 A69-37526

LOERINCZI, I.

- Determination of a space direction utilizing laser and optical observations of artificial satellites /Determina-

- tion d'une direction spatiale utilisant des observations optiques et laser des satellites artificiels/. 15 p2699 A69-31377

LOESER, H.

- A method of calculating the aerodynamic heating of rocket vehicles, its numerical application, and comparison with flight data obtained for the ELDO-A booster systems /Verfahren zum Berechnen der aerodynamischen Aufheizung von Raketenflugkoerpern, seine numerische Anwendung und Vergleich mit Flugmessungen an ELDO-Tragersystemen/. 11 p1966 A69-25433

LOEWE, W. E.

- Analysis of an out-of-core thermionic space power system. 08 p1256 A69-19856  
Out-of-core thermionic space power. 14 p2480 A69-29188

LOEWENBERG, L.

- The temperature dependence of isotope thermo-transport in liquid metals. 03 p0533 A69-13970

LOEWY, R. G.

- Review of rotary-wing V/STOL dynamic and aeroelastic problems. [AIAA PAPER 69-202] 08 p1419 A69-21031  
The importance of vortex shedding effects on helicopter rotor noise with and without blade slap. 18 p3088 A69-35223

LOFERSKI, J. J.

- The photovoltaic effect in the Cu-Cd-S system. 19 p3382 A69-35682  
Photoconductivity study of annealing of radiation defects in lithium-doped silicon. 19 p3382 A69-35696  
On the zero-bias anomaly in GaAs tunnel diodes. 19 p3388 A69-36542

LOFIEGO, L.

- Practical aspects of igniter design. [WSCI PAPER 68-32] 07 p1202 A69-18361

LOFTUS, B.

- Anomalous features of the electron density in the topside ionosphere. 21 p3716 A69-39257

LOGACHEV, I. I.

- Results of Soviet investigations of charged particles and magnetic fields in space /Rezultaty sovetskikh issledovaniy zariazhennykh chastits i magnitnykh polei v kosmicheskom prostranstve/. [UN PAPER 68-95768] 06 p0986 A69-17031  
Radial diffusion of electrons of energy greater than 100 kev in the outer radiation belt. 06 p0919 A69-17720  
Particle fluxes in the outer geomagnetic field. 12 p2150 A69-26744  
Radiation belts of the earth /Radiatsionnye poiasa zemli/. 13 p2326 A69-27350  
Cosmic rays /Kosmicheskie luchy/. 13 p2326 A69-27351

LOGACHEV, V. A.

- Characteristics of a molecular oscillator in a magnetic field /Kharakteristiki molekuliarnogo generatora v magnitnom pole/. 05 p0727 A69-15643  
Properties of a maser in a magnetic field. 16 p2762 A69-32500

LOGACHEV, V. I.

- Heavy nuclei in primary cosmic rays /Tiazhelye iadra v pervichnom kosmicheskom izluchении/. 10 p1756 A69-22820  
Showers initiated in lead by 600, 1000 and 1300 Mev electrons. 13 p2332 A69-28419

LOGAN, E. F.

- Hydrazine decomposition in glow discharge. 04 p0646 A69-14860

LOGAN, H. L.

- Studies of hot salt cracking of the titanium 8 percent Al-1 percent Mo-1 percent V alloy. 19 p3352 A69-36905

LOGAN, J. G., JR.

- Lifting entry concepts. 11 p1968 A69-25720

LOGAN, R. M.

- Classical theory for the interaction of gas atoms with solid surfaces. 04 p0632 A69-15008

- LOGCHER, R. D.**  
ICES STRUDL - An integrated approach to a structural computer system.  
23 p4134 A69-42146
- LOGGINI, P.**  
Hypergolic bipropellant-low thrust rocket motors - The problems of continuous mode operation.  
17 p3019 A69-33335
- LOGGINOV, A. S.**  
Optical quantum amplifier based on a GaAs injection laser /Opticheskii kvantovyi usitel' na osnove inzhetskionnogo lazera iz GaAs/.  
19 p3336 A69-36348
- LOGINOV, A. A.**  
Investigation of the total radiation of a dense low-temperature argon plasma /Issledovanie summarnogo izlucheniia plotnoi nizkoteraturnoi plazmy argona/.  
09 p1547 A69-21595
- LOGINOV, G. A.**  
Complex investigation of the polar ionosphere /Kompleksnoe issledovanie poliarnoi ionosfery/.  
17 p2963 A69-33950  
High-latitude geomagnetic disturbances in June 1965 /Geomagnitnye vozmushcheniia v vysokikh shirotakh v iunie 1965 g./.  
17 p2964 A69-33961  
Dynamics of magnetoionospheric disturbances in the auroral zone /Dinamika magnitno-ionosfernnykh vozmushchenii v zone poliarnykh shiarii/.  
17 p2964 A69-33962
- LOGINOV, I. M.**  
An experiment in magnetovariational sounding during the early phases of geomagnetic storms /Opyt magnetovariatsionnogo zondirovaniia po nachal'nym fazam geomagnitnykh bur'/.  
20 p3521 A69-37040
- LOGINOV, N. Z.**  
Investigation of the effect of stress concentration and surface hardening on the fatigue strength of the El617 alloy /Issledovanie vliianiia konsentratsii napriazhenii i uprochneniia poverkhnosti na ustalostnuiu prochnost' splava El617/.  
21 p3745 A69-38875  
Procedure for studying the development of failure by fatigue /Metodika izucheniia razvitiia ustalostnogo razrusheniia/.  
23 p4225 A69-41425
- LOGINOV, V. K.**  
Oscillations of nonlinear dissipative systems with two degrees of freedom /Kolebaniia nelineinykh dissipativnykh sistem s dvumia stepeniami svobody/.  
17 p3064 A69-33915
- LOGINOVA, E. V.**  
Possibility of using an artificial atmosphere with a variable gas composition in air-tight cabins /O vozmozhnosti ispol'zovaniia v germeticheskikh kabinakh iskusstvennoi atmosfery s nestatsionarnym gazovym sostavom/.  
22 p3892 A69-40284
- LOGINOVA, N. M.**  
Approximation of the current-voltage characteristics of tunnel diodes /K voprosu ob approksimatsii vol'tampernykh kharakteristik tunnel'nykh diodov/.  
02 p0214 A69-11613  
An approximation of the volt-ampere characteristic of tunnel diodes.  
11 p1847 A69-24721
- LOGINOVA, O. N.**  
Radiation from a conical surface /Izluchenie konicheskoi poverkhnosti/.  
13 p2223 A69-28569
- LOGINOW, A. W.**  
A comparison of the stress corrosion behavior of some high strength steels.  
14 p2467 A69-29940
- LOGSDON, J. M.**  
The lunar landing decision and American decision-making. [AAS PAPER 69-500]  
24 p4418 A69-42853
- LOGSDON, T. S.**  
Enhancing the Saturn V translunar payload capability. [AIAA PAPER 69-451]  
16 p2839 A69-32669
- LOGUNOV, A. I.**  
Comparison theorems for Volterra equations with a delayed argument.  
04 p0625 A69-15099
- LOGUNOV, V. F.**  
Determination of the velocity of vertical air motions in rain with the aid of a Doppler radar /Opredelenie skorosti vertikal'nykh dvizhenii vozdukh na dozhdiakh s pomoshch'iu dopplerovskogo radiolokatora/.  
18 p3104 A69-35342
- LOGUNOV, V. M.**  
Investigation of the spectrum of ionization bursts produced by the penetrating component of extensive air showers.  
13 p2332 A69-28403  
Energy and angular distributions of 10 super 11 to 10 super 12 ev muons.  
13 p2332 A69-28420
- LOGVINOV, V. V.**  
Quasi-linear approximation for a magnetoactive plasma with allowance for collisions - Cerenkov effect /Kvazilineinoe priblizhenie dlia magnitoaktivnoi plazmy s uchedom stolknovenii - Effekt Cherenkova/.  
08 p1365 A69-20550  
Quasi-linear approximation for low-frequency plasma waves in a steady electric field /Kvazilineinoe priblizhenie dlia nizkochastotnykh voln v plazme v postoiannom elektricheskom pole/.  
14 p2492 A69-29468
- LOGVINOVA, O. F.**  
Increasing the radiation sensitivity of the nervous system by enzyme poisons affecting the oxidation processes /O povyshenii radiochuvstvitel'nosti nervnoi sistemy fermentnymi iadami, narushaiushchimi oksislitel'nye protsessy/.  
21 p3658 A69-39053
- LOH, W. H. T.**  
Re-entry and Planetary Entry Physics and Technology. I - Dynamics, Physics, Radiation, Heat Transfer and Ablation.  
11 p1967 A69-25573  
Jet, Rocket, Nuclear, Ion and Electric Propulsion-Theory and Design.  
11 p1943 A69-25582  
Fundamentals of thermodynamics and aerothermodynamics.  
11 p1821 A69-25583  
Thermodynamic cycle analysis of gas turbines and air-breathing propulsion systems.  
11 p1943 A69-25584  
Aerodynamic design of axial flow compressors and turbines.  
11 p1821 A69-25585  
Re-entry and Planetary Entry Physics and Technology. II - Advanced Concepts, Experiments, Guidance-Control and Technology.  
11 p1967 A69-25718
- LOHMANN, A.**  
Holographic penetration of turbulence.  
09 p1494 A69-21559  
Holographic compensation of motion blur by shutter modulation.  
24 p4314 A69-42972  
Holographic penetration of an inhomogeneous medium.  
24 p4314 A69-42975
- LOHMANN, A. W.**  
Rayleigh scattering from circularly birefringent media.  
04 p0609 A69-14291  
Computer-generated binary holograms.  
10 p1697 A69-23869
- LOHMANN, W.**  
Astronomical Annual Report. Volume 67 - Literature for the Year 1967 /Astronomischer Jahresbericht. Volume 67 - Die Literatur des Jahres 1967/.  
09 p1602 A69-22223
- LOHS, M.**  
The influence of noise on the heart rate and the O sub 2 consumption under medium-to-hard physical loads /Zum Einfluss von Laerm auf die Herzfrequenz und den O sub 2 -Verbrauch bei mittelschwerer physischer Belastung/.  
21 p3654 A69-38908
- LOHSE, P.**  
Behavior of protective gas contacts under capacitive loads /Ueber das Verhalten von Schutzgaskontakten bei kapazitiver Belastung/.  
13 p2269 A69-28608
- LOIKO, M. M.**  
Generation of dye solutions by second harmonic excitation of a ruby laser /Generatsiia rastvorov krasitelei pri vzbuzhdenii vtoroi garmoniki rubinovogo lazera/.  
06 p0933 A69-17253
- LOISEAU, H.**  
Study of the small harmonic vibrations of a heated structure, in the vicinity of a loading state corresponding to a partial entry into the plastic domain /Etude des petites vibrations harmoniques d'une structure chauffee autour d'un etat de chargement correspondant a une entree partielle dans le domaine plastique/. [ICAS PAPER 68-38]  
17 p3061 A69-33589  
Remarks on the use of thermocouples subjected to a flow of radiated heat /Remarques sur l'utilisation des thermocouples soumis a un flux de chaleur rayonne/.  
17 p2975 A69-33596
- LOITSANSKII, L. G.**  
Generalized similar solutions to the boundary layer equations /Obobshchennno-podobnye resheniia uravnenii pogranichnogo sloia/.  
05 p0746 A69-16019  
Similarity parameters in the boundary layer theory.  
19 p3301 A69-36799
- LOJKO, M. S.**  
Infrared measurements of variations in stratospheric water vapour.  
20 p3535 A69-38261
- LOKAI, V. I.**  
Generalization of experimental data concerning heat transfer in the cooled portion of the air-gas flow area of high-temperature gas turbines /K voprosu obobshcheniia opytnykh dannykh po teploobmenu v okhlazhdaemoi protochnoi chasti vysokotemperaturnykh gazovykh turbin/.  
03 p0495 A69-12957  
Influence of rotation on heat exchange between the gas and the components of the air-gas flow area of a gas turbine /Vliianie vrashcheniia na teploobmen mezhdu gazom i elementami protochnoi chasti gazovoi turbiny/.  
03 p0531 A69-12959  
Study of the efficiency of air cooling gas turbine blades /Issledovanie effektivnosti vozdušnogo okhlazhdeniia lopatok gazovykh turbin/.  
11 p1942 A69-25337  
Influence of cooling on the working fluid parameters in an air-cooled turbine stage /Vliianie okhlazhdeniia na parametry rabocheho tela v stupeni turbiny s vozdushnym okhlazhdeniem/.  
18 p3184 A69-34985  
Investigation of the heat transfer between the gas and certain elements of the flow area of a turbine /Issledovanie teploobmena mezhdu gazom i nekotorymi elementami protochnoi chasti turbiny/.  
21 p3849 A69-38858  
Calculation of the temperature of turbine blades with effusion cooling /K raschetu temperatury turbinnnykh lopatok pri effuzionnom okhlazhdenii/.  
21 p3850 A69-38860  
Experimental investigation of the coefficients of heat transfer from the gas to the blades of a turbine cascade under rotation conditions and during unsteady operation /K voprosu ob eksperimental'nom issledovanii koefitsientov teplootdachi ot gaza k lopatkam turbinnnoi reshetki v usloviiaakh vrashcheniia i na nestatsionarnykh rezhimakh/.  
21 p3850 A69-38864
- LOKALOVA, N. S.**  
Short-period relaxation of stresses in heat-resistant alloys /Kratkovremennaia relaksatsiia napriazhenii v zharoprochnykh splavakh/.  
22 p3969 A69-40071
- LOKAN, K. H.**  
Experimental oscillator strengths for the Schumann-Runge band system in oxygen.  
02 p0284 A69-12832
- LOKOSHCHENKO, A. M.**  
Large deflections of a nonlinearly elastic ring under external pressure /Bol'shie progiby nelineino-uprugogo kol'tsa pod vneshnim davleniem/.  
17 p3062 A69-33715
- LOKSHIN, V. I.**  
Checking the coherence of laser radiation used in holography.  
21 p3734 A69-38398
- LOKSHINA, L. E.**  
Study of the high-temperature oxidation of the Sikhote-Alin iron meteorite /Issledovanie vysokotemperaturnogo okisleniia sikhote-alinskogo zheleznoogo meteorita/.  
01 p0025 A69-11373
- LOKUTSIEVSKII, O. V.**  
The theory of electron plasma non-linear oscillations.  
18 p3180 A69-34703



**LOLADZE, TS. D.**

Transport of matter by a wave and the associated instability of weakly ionized plasma / *Perenos veshchestva volnoi i svyazannaya s nim neustoiichivost' slaboionizirovannoi plazmy*/.  
10 p1741 A69-23945

**LOLLI, M. F.**

Relativistic mass distribution in the Galaxy.  
20 p3600 A69-37484

**LOMAKOVICH, A. M.**

Solution of Volterra integral equations by the Runge-Kutta-Felberg method / *Rozv'yazuvannia integral'nikh rivnianiya tipu Vol'terra metodom Runge-Kutta-Fel'berga*/.  
15 p2644 A69-30657

**LOMAKOVICH, A. N.**

Solution of Volterra integral equations by a Runge-Kutta type method / *Reshenie integral'nykh uravnenii tipa Vol'terra metodom vida Runge-Kutta*/.  
05 p0787 A69-16456  
Solution of a Volterra integro-differential equation by the Runge-Kutta-Fehlberg method / *Reshenie integro-differentsial'nykh uravnenii tipa Vol'terra metodom Runge-Kutta-Fel'berga*/.  
20 p3569 A69-38294

**LOMBARDI, A.**

Broadband light modulators design.  
11 p1897 A69-25039

**LOMBARDO, P.**

Low-noise receiver for satellite communication ground terminals.  
09 p1458 A69-22470

**LOMERSON, E. O., JR.**

Statistical method for evaluating penetrant sensitivity and reproducibility.  
10 p1700 A69-23374

**LOMINADZE, D. G.**

Energy losses of a charged particle in a slightly non-linear plasma / *Poteri energii zaryazhennoi chastitse v slabonelineinoi plazme*/.  
07 p1189 A69-18528

**LOMINO, N. S.**

A study of transverse plasma injection into a toroidal magnetic field.  
03 p0478 A69-13837  
Characteristics of a plasma trapped by a transverse magnetic field. II.  
06 p0963 A69-16907  
Longitudinal polarization of plasma stream in a transverse magnetic field.  
08 p1370 A69-21018

Plasma flow in a transverse inhomogeneous magnetic field / *Plazmennyy potok v neodnorodnom poperechnom magnitnom pole*/.  
12 p2137 A69-26528

Tangential injection of a plasma into a magnetic field of toroidal configuration / *Kasatel'naia inzhetsiia plazmy v magnitnoe pole toroidal'noi konfiguratsii*/.  
13 p2311 A69-28108

Study of the mechanism of capture of a moving plasma by a transverse magnetic field / *Issledovanie mekhanizma zakhvata dvizhushcheisya plazmy poperechnym magnitnym polem*/.  
24 p4357 A69-43469

Investigation of certain characteristics of a plasma captured by a transverse magnetic field / *Issledovanie nekotorykh kharakteristik plazmy, zakhvacheno poperechnym magnitnym polem*/.  
24 p4357 A69-43470

Longitudinal polarization of a plasma flux in a transverse magnetic field / *Prodol'naia polarizatsiia plazmennogo potoka v poperechnom magnitnom pole*/.  
24 p4358 A69-43471

**LOMMEN, P. W.**

Balloon measurement of proton and alpha particle fluxes from Palestine, Texas.  
14 p2511 A69-28951

**LOMONOSOV, E. G.**

Determination of clear-air turbulence zones by means of computers / *Opredelenie zon turbulentsosti v iasnom nebe s pomoshch'yu EVM*/.  
15 p2648 A69-30645

**LOMOVA, M. A.**

Certain physiological reactions in humans under conditions of brief weightlessness / *Nekotorye fiziologicheskie reaktsii cheloveka v usloviakh kratkovremennoi nevesomosti*/.  
07 p1061 A69-18581

**LONDEREE, B. R.**

Reticulocyte counts before and after exercise - Trained vs. sedentary.  
21 p3654 A69-38907

**LONDON, A.**

Design, fabrication and test of a boron wing structure.  
24 p4323 A69-43418

**LONDON, G. J.**

Deformation and fracture of beryllium bicrystals.  
06 p0942 A69-17225  
Deformation of beryllium single crystals under high pressure.  
13 p2279 A69-27760

**LONDON, J.**

Infrared radiative cooling in the middle atmosphere / *30-110 km*/.  
12 p2064 A69-26008  
Satellite observations of the vertical ozone distribution in the upper stratosphere.  
16 p2788 A69-32645

**LONDON, M. P.**

Aircraft flight testing.  
01 p0054 A69-10292  
VFX - The Navy's choice.  
03 p0367 A69-13675  
VSX - Sub hunting from the air.  
14 p2392 A69-29430

**LONDRILLO, P.**

The radio spectra of a homogeneous sample of 4C radiosources.  
21 p3797 A69-38480

**LONG, A. B.**

A thermodynamic study of homogeneous nucleation.  
22 p3938 A69-40448

**LONG, C. F.**

Frequency analysis of complete spherical shells.  
17 p3061 A69-33705

**LONG, G. L.**

D-lactate specific pyridine nucleotide lactate dehydrogenase in animals.  
01 p0018 A69-11198

**LONG, J. E.**

To the outer planets.  
16 p2854 A69-31630  
Reconnaissance missions to the outer planets. [AAS PAPER 69-291]  
24 p4381 A69-42864

**LONG, J. V.**

Beryllium - Brazing and welding. [SAE PAPER 680651]  
03 p0433 A69-13454  
High-efficiency materials.  
19 p3345 A69-36319

**LONG, L.**

A family of portable versatile aerosol particle analyzers.  
18 p3136 A69-34691

**LONG, L. L.**

Meteoroid perforation effects on space cabin design. [AIAA PAPER 69-365]  
13 p2357 A69-28297

**LONG, L. T.**

Simple flash holography.  
21 p3727 A69-39784

**LONG, R.**

The formation of soot and polycyclic aromatic hydrocarbons in diffusion flames. III.  
02 p0205 A69-12318

**LONG, R. K.**

Water vapor continuum absorption of carbon dioxide laser radiation near 10  $\mu$ .  
23 p4173 A69-41631

**LONG, R. L., JR.**

Electron impact excitation of hydrogen Lyman-alpha radiation.  
02 p0283 A69-12466

**LONG, R. R.**

A theory of clear-air turbulence.  
17 p2998 A69-33733  
Clear-air turbulence in the upper atmosphere. I.  
24 p4343 A69-42913

**LONG, S. I.**

Solution regrowth epitaxial gallium arsenide for Gunn, hybrid and LSA devices.  
07 p1197 A69-18451

**LONGAIR, M. S.**

Evolutionary cosmologies - A survey.  
08 p1388 A69-20223  
Fluctuations in the microwave background radiation.  
21 p3815 A69-39611

**LONDON, L. W.**

Prediction of arbitrary electromagnetic fields from measured data.  
17 p2929 A69-33881

**LONGFELLOW, J.**

The application of the CO sub 2 laser to cutting ceramic substrates.  
10 p1699 A69-23302

**LONGINOV, A. V.**

Plasma heating by a fast magnetosonic wave of large amplitude.  
14 p2493 A69-29641

**LONGLEY, S. R.**

A low noise wideband parametric amplifier for satellite communications.  
07 p1099 A69-18461

**LONGMAN, R. W.**

The equilibria of orbiting gyrostats with internal angular momenta along principal axes.  
07 p1227 A69-18336

**LONGMUIR, A. G.**

Second-variation methods in dynamic optimization.  
15 p2645 A69-31235

**LONGMUIR, I. S.**

Effect of xenon, krypton, nitrogen and nitrous oxide on oxygen consumption of rat liver slices.  
03 p0375 A69-14069

**LONGO, G.**

Signal propagation and statistical mechanics / *Propagazione dei segnali e meccanica statistica*/.  
16 p2753 A69-32437

**LONGO, L.**

The choice of military piloting as a neurotic compensatory motivational factor / *La scelta del pilotaggio aereo militare quale fattore motivazionale a carattere nevrotico-compensatorio*/.  
12 p2023 A69-26492

**LONGO, T. A.**

IC processing - Healthy, still growing.  
01 p0045 A69-10650

**LONGWORTH, J. W.**

Ultraviolet-induced excited states in deoxyribonucleic acid.  
03 p0372 A69-13488

**LONNGREN, K.**

Transient plasma sheath - Discovered by ion-acoustic waves.  
11 p1929 A69-25272

**LOOMER, E. I.**

The effect of the solar cycle on magnetic activity at high latitudes.  
15 p2598 A69-31207

**LOOMIS, A. A.**

Strategy for scientific exploration of the terrestrial planets.  
22 p4022 A69-40449

**LOOMIS, H. G.**

Brightness variations of the white light corona during the years 1964-67.  
18 p3205 A69-35394

**LOOMIS, T. C.**

Diode array camera tubes and X-ray imaging.  
09 p1463 A69-21845

**LOONEY, J. C.**

Linear metal-oxide-semiconductor integrated circuits.  
15 p2577 A69-30594

**LOOS, H. G.**

Factorizability of Einstein's field equations.  
03 p0468 A69-13759

**LOPASOV, V. P.**

Second harmonic generation by a ruby laser with a diffused reflector / *Generirovanie VG rubinovym OKG s diffuznym otrazhatelem*/.  
20 p3552 A69-36970

Generation of the second harmonic by a neodymium laser with lenses in the cavity / *Generirovanie vtoroi garmoniki neodimovym lazerom s linzami vnutri rezonatora*/.  
21 p3740 A69-39544

Generation of the second harmonic by a ruby laser with a dielectric surface scatterer / *Generirovanie vtoroi garmoniki rubinovym lazerom s dielektricheskimi poverkhnostnymi rasseivatelyami*/.  
24 p4328 A69-43164

**LOPATEK, Z.**

Influence of a constant inclination of the takeoff runway on the takeoff length of jet aircraft / *Wplyw stalego pochylenia niwelety drogi startowej na dlugosc startu samolotow odrzutowych*/.  
19 p3296 A69-36874

**LOPATIN, A. I.**  
Investigation of the outflow of evaporation products during the electrical explosion of a wire cone /Issledovanie istecheniia produktov ispareniia pri elektricheskom vzryve provolnogo konusa/.  
19 p3372 A69-35823

**LOPATINA, G. B.**  
Radial diffusion of electrons of energy greater than 100 kev in the outer radiation belt.  
06 p0919 A69-17720  
Relationship between the north-south asymmetry of the critical frequencies of the F sub 2 -region of the ionosphere and the angle of inclination of the geomagnetic axis.  
13 p2256 A69-28693  
Relation between high-latitude geomagnetic disturbances and electron fluxes at the boundary of the outer radiation belt /Sviaz' vysokoshirotnykh geomagnitnykh vozmushchenii s potokami elektronov na granitse vneshnego radiatsionnogo poiasa/.  
14 p2438 A69-29079

**LOPATITA, G. B.**  
Relation between the north-south asymmetry of the critical frequencies of the F2 region of the ionosphere and the angle of inclination of the geomagnetic axis /Sviaz' severno-juzhnoi asimmetrii kriticheskikh chastot oblasti F2 ionosfery s uglom naklona geomagnitnoi osi/.  
02 p0237 A69-11662

**LOPATSKII, G. S.**  
Electrophysical and radiative properties of a nonequilibrium argon-potassium plasma as a possible working fluid for an MHD generator /Elektrofizicheskie i radiatsionnye svoista neravnovesnoi argon-kalievoy plazmy-vozmozhnogo rabochego tela MGD-generatora/.  
10 p1732 A69-23441

**LOPENAGUE, M.**  
Influence of the electric field on the characteristics of epitaxial field effect transistors /Influence du champ electrique sur les caracteristiques des transistors a effet de champ epitaxiaux/.  
02 p0294 A69-11541

**LOPEZ, E. L.**  
Techniques for improving the thermal performance of low-density fibrous insulation. [AIAA PAPER 69-606]  
17 p3072 A69-33279

**LOPEZ, M. D.**  
Radiation plan for the Apollo lunar mission. [AIAA PAPER 69-19]  
06 p0996 A69-18113

**LOPINA, S. V.**  
Q switching of a laser based on the triplet-triplet transitions of organic molecules.  
09 p1520 A69-22682

**LOPUKHIN, V. M.**  
A possibility for reducing the noise factor of a parametric electron-beam amplifier /Ob odnoi vozmozhnosti umen'sheniia koeffitsienta shuma elektronno-luchevogo parametricheskogo usilitelia/.  
05 p0728 A69-15654  
Analysis of a double-beam parametric electron amplifier /Analiz dvukhluchevogo elektronnoho parametricheskogo usilitelia/.  
13 p2237 A69-28578  
Feasibility of decreasing the noise figure of an electron-beam parametric amplifier.  
16 p2762 A69-32511

**LORAN, J.**  
Relationship between irregular geomagnetic field pulsations and the pulsations of auroras and of VLF emission.  
16 p2783 A69-32531

**LORAN, ZH.**  
Relation between the irregular pulsations of the geomagnetic field and the pulsations of polar auroras and ULF radiation /O sviazi ireguliarnykh pul'satsii geomagnitnogo polia s pul'satsiiami poliarnykh siiani i UNCH-izlucheniem/.  
09 p1485 A69-21536

**LORAUD, J. C.**  
Contribution to the study of the hypersonic flow of a nonequilibrium gas around a wedge /Contribution a l'etude de l'ecoulement hypersonique d'un gaz hors d'equilibre vibratoire autour d'un diedre/.  
01 p0005 A69-10161

**LORD, H. C., III**  
Possible solar primordial hydrogen in the Pesyanoe meteorite.  
24 p4384 A69-43213

**LORD, R. E.**  
A priority interrupt oriented by hybrid executive.  
04 p0567 A69-15350

**LORD, W. T.**  
An electric arc in a transverse magnetic field - A theory for low power gradient.  
11 p1933 A69-25556

**LORDI, J. A.**  
Measurement of electron temperature and number density in shock-tunnel flows. I - Development of free-molecular Langmuir probes.  
24 p4317 A69-43648

**LORENS, C. S.**  
Extrapolation of tracking data.  
22 p4032 A69-41015

**LORENTS, A. A.**  
Problems of the reducibility of finite probabilistic automata /Voprosy svodimosti konechnykh veroiatnostnykh avtomatov/.  
13 p2239 A69-28534

**LORENTS, D. C.**  
Differential scattering of Li super plus ions by He, N sub 2 and O sub 2 in the range 3-400 ev.  
24 p4354 A69-43817

**LORENZ, A.**  
The importance and realization of launch profile simulation in space chambers.  
13 p2240 A69-28077

**LORENZ, D.**  
The effect of an intermediate air layer on meteorological surface-temperature measurements with radiometers /Der Einfluss einer Luft-wischenschicht auf meteorologische Oberflaechentemperaturmessungen mit Radiometern/.  
09 p1536 A69-22166

**LORENZ, E. N.**  
On the range of atmospheric predictability.  
08 p1346 A69-20600  
The future of weather forecasting.  
16 p2808 A69-32385  
The predictability of a flow which possesses many scales of motion.  
19 p3303 A69-36404  
Atmospheric predictability as revealed by naturally occurring analogues.  
20 p3573 A69-38057  
How much better can weather prediction become/ques/.  
21 p3757 A69-38324

**LORENZ, G. C.**  
A test technique for simulating the erosive effects of multiple particle impacts in hypersonic flow. [AIAA PAPER 69-341]  
13 p2243 A69-28277

**LORENZ, J.**  
Effect of boron, zirconium, and titanium on the austenite transformation of CrMo steels in the bainite and martensite ranges /Einfluss von Bor, Zirkon und Titan auf die Austenitumwandlung von CrMo-Staehlen in Zwischenstufe und Martensitstufe/.  
11 p1903 A69-24634  
Developmental work on modern apogee engines /Entwicklungsarbeiten an modernen Apogaeumsmotoren/.  
15 p2671 A69-31051  
Frequency condition for stochastic stability of one-dimensional discrete control systems /Czestotliwosciowy warunek stochastycznej stabilnosci jednowymiarowych dyskretnych ukladow regulacji/.  
24 p4288 A69-42670

**LORENZ, M. R.**  
Electrical and optical properties of vapor-grown GaP.  
04 p0640 A69-14438

**LORENZ, P.**  
The survival of terrestrial microorganisms in space at orbital altitudes during Gemini satellite experiments.  
01 p0018 A69-11087  
Corrosion testing of materials in liquid propellant systems.  
21 p3748 A69-39485

**LORENZ, P. M.**  
Effect of pressurized hydrogen upon Inconel 718 and 2219 aluminum.  
21 p3730 A69-38666

**LORENZ, P. R.**  
The biological effectiveness of solar electromagnetic radiation in space.  
01 p0017 A69-11086  
Survival of micro-organisms in space.  
11 p1828 A69-25457

**LORENZ, W.**  
Lack of adaptation after aircraft-noise induced stress as a criterion of harmfulness /Der Adaptation-srueckstand nach Fluglaermbelastung als Schaedlichkeitskriterium/.  
23 p4110 A69-42051

**LORENZEN, E. D.**  
Software/hardware interface testing of a real-time system.  
22 p3908 A69-40364

**LORENZETTI, R. C.**  
Computerized design of optimal direct lift controller.  
12 p2014 A69-26765  
Direct lift control for approach and landing.  
17 p2902 A69-34027

**LORENZO, C. F.**  
Digital simulation stability criterion.  
17 p2944 A69-32899

**LORES, M. E.**  
Transonic buffet characteristics of a 60 degree swept wing with design variations. [AIAA PAPER 69-793]  
19 p3238 A69-36297

**LORIN, J. C.**  
Techniques for proper revelation and viewing of etch-tracks in meteoritic and terrestrial minerals.  
02 p0245 A69-12569  
On the energy spectrum of iron-group nuclei as deduced from fossil-track studies in meteoritic minerals.  
19 p3410 A69-36095  
On the flux of low-energy particles in the solar system during the last 10 million years.  
19 p3411 A69-36097  
Primitive low-energy particle irradiation of meteoritic crystals.  
20 p3590 A69-37569

**LORIOU, B.**  
Transistorized receiver for satellite telecommunications /Recepteur transistorise pour telecommunications par satellites/.  
05 p0734 A69-16594

**LORQUET, P.**  
Optimization of a discrete linear system with a quadratic performance index /Optimisation d'un systeme lineaire discret avec critere quadratique/.  
12 p2050 A69-26091

**LORTIE, J.**  
Computer evaluation of total ozone observations.  
16 p2787 A69-32644

**LORTZ, D.**  
Exact solutions of the hydromagnetic dynamo problem.  
03 p0476 A69-13380  
Stability of axisymmetric MHD equilibria without stagnation point.  
06 p0972 A69-18230  
On the stability of two-dimensional convection.  
11 p2003 A69-25657

**LOS, B. P.**  
Latitudinal dependence of ionospheric parameters /O shirotnoi izmenchivosti ionosfernnykh parametrov/.  
17 p2964 A69-33963

**LOS, J.**  
Angular dependence of collision-induced excitation of H sub 2 plus ions.  
05 p0798 A69-16698  
Ionization cross sections of alkalis on diatomic halogens in the ev-region.  
19 p3378 A69-36187

**LOSADA, M.**  
Mechanism of nitrate reduction in Chlorella.  
24 p4263 A69-43136

**LOSCO, L.**  
Particular solutions associated with an invariant manifold defined by equations in involution /Solutions particulieres associees a une variete invariante definie par des equations en involution/.  
09 p1596 A69-22049  
Study of conditional stability associated with a first integral /Etude d'une stabilite conditionnelle liee a une integrale premiere/.  
16 p2853 A69-31622

**LOSEV, A. I.**  
Influence of cumulative random phase errors on the uncertainty function of linearly frequency-modulated signals /Vliianie nakaplivaushchikhsia sluchainykh fazovykh oshibok na funktsiiu neopredelennosti lineino-chastotno modulirovannykh signalov/.  
06 p0889 A69-17798



## LOSEV, S. A.

Theory of oscillatory relaxation of diatomic molecules /K teorii kolebatel'noi relaksatsii dvukhatomnykh molekul/.  
02 p0284 A69-12485

Radiation mechanism of nitrogen in the nonequilibrium region behind a shock wave.  
05 p0745 A69-15890

Effective cross sections of absorption of ultraviolet radiation by molecular oxygen at temperatures from 3000 to 10,000 K /Efektivnyye szecheniya pogloscheniya ul'trafioletovogo izlucheniya molekulyarnym kislorodom pri temperaturakh ot 3000 do 10,000 deg K/.  
11 p1921 A69-24617

On the length of the ionization relaxation zone behind a strong shock front in air.  
12 p2062 A69-26674

Excitation of oscillations and the decomposition of diatomic molecules during atom/molecule collisions in a high-temperature gas /Vozbuzhdenie kolebaniy i raspad dvukhatomnykh molekul pri atom-molekulyarnykh stolknoveniyakh v gase vysokoi temperatury/.  
13 p2302 A69-27797

Effect of vibrational relaxation of molecules on the characteristics of the dissociating air behind a strong shock wavefront /Vlianie kolebatel'noi relaksatsii molekul na kharakteristiki dissotsiiruushchego vozdukh na frontom sil'noi udarnoi volny/.  
24 p4302 A69-43486

## LOSIKOVA, M. A.

Reduction of titanium tetrachloride to titanium by magnesium /Vosstanovlenie titana iz tetrakhlorda magniym/.  
07 p1163 A69-18784

## LOSOVSKII, B. IA.

Measurements of the phase dependence of the 0.8-cm radio emission of Mercury, and some properties of its surface layer.  
02 p0314 A69-11640

Observations of the polarization of lunar radio radiation at the wavelength of 0.8 cm with high resolving power.  
15 p2697 A69-31251

## LOSTIS, P.

Theoretical study of spatial and kinetic distributions of molecules reflected by a surface /Etude theorique des distributions cinetiques et spatiales des molecules reflechies par une surface/.  
01 p0122 A69-10041

## LOTH, D.

Effect of prolonged iterative accelerations and decelerations on the vestibular apparatus /Effet des accelerations et decelerations iteratives prolongees sur l'appareil vestibulaire/.  
13 p2211 A69-28592

## LOTKOVA, E. N.

Dissociation of CO sub 2 in a CO sub 2 laser gas discharge plasma /Dissotsiatsiia CO sub 2 v plazme gazovogo razriada OKG na CO sub 2/.  
12 p2107 A69-26540

## LOTOVA, N. A.

The nature of the irregular structure of the interplanetary plasma.  
02 p0314 A69-11638

Small-scale fluctuations of the magnetic field of interplanetary plasma /O melkomasshtabnykh fluktuatsiiakh magnitnogo polia mezplanetnoi plazmy/.  
14 p2517 A69-29064

Radioastronomical investigations of the inhomogeneous structure of the near-solar plasma.  
20 p3606 A69-38017

## LOTSCH, H. K. V.

On the transverse-mode dependence of the laser spiking behavior.  
12 p2104 A69-25928

## LOTT, D. R.

Accelerated UV degradation to solar cell coatings.  
19 p3253 A69-35703

## LOTT, S. K.

Hydrocarbon formation under exploding wire conditions.  
01 p0120 A69-10675

Apparatus with electronic crowbar for chemical investigations of exploding wire phenomena.  
01 p0081 A69-10680

## LOTTI, F.

A class of digital filters with application to the processing of signals transmitted from space vehicles /Una classe di filtri numerici con applicazioni all'elaborazione di segnali trasmessi da veicoli spaziali/.  
01 p0038 A69-10071

Radar-signal matched-filtering through digital processing.  
05 p0722 A69-16733

Performance of some linear codes for digital communications with space vehicles.  
08 p1276 A69-20597

## LOTUS, J. W.

A high-power CO sub 2 laser radar transmitter. [IEEE PAPER J-1]  
07 p1152 A69-19064

## LOTZ, M.

Blade oscillations in one-stage axial turbomachinery. [ASME PAPER 68-FE-7]  
05 p0837 A69-16069

## LOTZ, R.

Biological experiments in interplanetary space /Biologische Experimente im interplanetaren Raum/.  
02 p0199 A69-11828

An electrolysis cell for use in weightless space /Eine Elektrolyse-Zelle fuer den Einsatz im Schwerelosigen Raum/.  
17 p2903 A69-33039

## LOTZ, R. G. A.

A life support system for satellite experiments over one year.  
01 p0021 A69-11080

The problem of sterilizing a life-support system in biosatellite experiments over one year.  
20 p3477 A69-37624

Oxygen supply and carbon dioxide absorption in long-term life-support systems.  
20 p3477 A69-37625

Basic studies on Hirudo medicinalis for a space experiment. I.  
24 p4268 A69-43402

Basic studies on Hirudo medicinalis for a space experiment. II.  
24 p4268 A69-43403

## LOTZ, W.

Electron-impact ionization cross-sections and ionization rate coefficients for atoms and ions from hydrogen to calcium.  
01 p0125 A69-10992

## LOU, C.-L.

On the improvement of approximate solutions for large deflections of plates.  
12 p2185 A69-26822

## LOUPAPRE, M. E.

A high-efficiency electronically scanned K-band phased array for spaceborne radiometric applications.  
04 p0572 A69-14328

Microwave radiometric capabilities and techniques.  
12 p2033 A69-26976

Phased arrays for spaceborne microwave sensors.  
12 p2044 A69-26977

## LOUBET, L. B.

A unique vacuum facility for the testing of optical satellites. [AIAA PAPER 69-1026]  
22 p3924 A69-40396

## LOUBIERE, R.

Visceral lesions observed in mice and rats exposed to ultrashort waves /Lesions viscerales observees chez des souris et des rats exposes aux ondes ultracourtes/. [AGARDOGRAPH-111]  
08 p1266 A69-20679

## LOUD, W. S.

Nonsymmetric periodic solutions of certain second order nonlinear differential equations.  
10 p1721 A69-23641

## LOUGHBOROUGH, C. S.

Numerical application of Szego's method for constructing Liapunov functions.  
12 p2122 A69-26520

## LOUGHHEAD, R. E.

High-resolution photography of the solar chromosphere. V.  
04 p0664 A69-15526

## LOUIS, J. F.

High Hall coefficient experiments in a large disc generator.  
10 p1637 A69-23473

## LOUISE, R.

Electron temperatures in H II regions /Sur la temperature electronique des regions H II/.  
08 p1392 A69-20566

## LOUP, J. P.

Thermal, electrical, and thermoelectronic properties of various refractory oxide materials /Proprietes thermiques, electriques et thermoelectroniques de divers materiaux d'oxydes refractaires/.  
13 p2316 A69-27470

## LOUPERE

Damping of high-rigidity structures /Amortissement des structures de raideur elevee/.  
13 p2370 A69-28601

## LOURENS, J. V. B.

Observations of the minor planet 1566-Icarus.  
01 p0150 A69-10373

## LOUTHAN, M. R., JR.

The role of moisture and hydrogen in hot-salt cracking of titanium alloys.  
19 p3352 A69-36904

## LOVASS-NAGY, V.

Reduction of functions of some partitioned matrices.  
18 p3163 A69-34330

## LOVBERG, R.

Properties of the rotating spoke in an unstable pulsed MPD arc. [AIAA PAPER 69-234]  
09 p1561 A69-21219

## LOVE, C. H.

Normal mode representation of the high-frequency properties of an inhomogeneous plasma.  
11 p1929 A69-25269

## LOVE, E. S.

Some topics in hypersonic body shaping. [AIAA PAPER 69-181]  
06 p0863 A69-18052

Toward efficient shuttle service to earth orbit.  
21 p3827 A69-39695

## LOVE, T. J.

Directional emittance from emitting, absorbing, and scattering media. [AIAA PAPER 69-625]  
17 p3005 A69-33301

## LOVE, T. S.

Experimental study of the stability of composite plates.  
13 p2287 A69-28669

## LOVE, W. L.

An experiment on the MHD-driven flow for a gas core nuclear rocket. [AIAA PAPER 69-727]  
17 p3004 A69-33483

## LOVELACE, R. V. E.

Intensity variations of the pulsar CP 1919.  
03 p0513 A69-13770

Crab Nebula pulsar NP 0532.  
09 p1592 A69-21462

Digital search methods for pulsars.  
12 p2172 A69-27169

## LOVELAND, W.

Use of a time-sharing computer in nuclear chemistry.  
05 p0725 A69-16584

Aluminum abundances in stony meteorites.  
11 p1952 A69-24334

## LOVELL, B.

Observation of prolonged radio emission from a red dwarf star.  
17 p3043 A69-34164

## LOVELL, D. R.

High modulus reinforcing carbon.  
08 p1338 A69-20488

## LOVELL, E. G.

Dynamic response of finite-length cylindrical shells to nearly uniform radial impulse. [AIAA PAPER 68-144]  
02 p0347 A69-12517

Nonlinear response of a cylindrical shell to an impulsive pressure. [ASME PAPER 69-APM-26]  
18 p3214 A69-34399

## LOVELOCK, J. E.

Planetary atmospheres - Compositional and other changes associated with the presence of life.  
18 p3193 A69-34361

## LOVERA, G.

Quasiperiodic 13-day variation in the intensity of cosmic radiation /from 1938 to 1954/ /Sulla variazione quasiperiodica di 13 giorni nell'intensita della radiazione cosmica /1938-1954/.  
01 p0145 A69-11031

## LOVERING, J. F.

Abundances of some volatile elements in meteorites.  
08 p1404 A69-20919

Apparent K-Ar dates on cores and excess Ar in flanges of australites.  
23 p4209 A69-41343

## LOVETTE, G. H.

Some effects of interference of three-dimensional bodies on the wake geometry of a hovering rotor. [AIAA PAPER 69-228]  
07 p1051 A69-19551

- LOVINE, R. L.**  
Ignition problems in solid-propellant rockets.  
16 p2829 A69-31997
- LOVINGOOD, J. A.**  
A special class of dynamical polysystems.  
22 p3975 A69-40573
- LOW, A.**  
Hypoxia resistance test at 7,500 m /24,600 ft/ in the low-pressure chamber before and after combined ergometer and altitude training.  
23 p4086 A69-41788
- LOW, C.**  
High altitude profiles of wind velocity, temperature and density.  
15 p2598 A69-31319
- LOW, F. J.**  
Contribution of infrared galaxies to the cosmic background.  
02 p0308 A69-12128  
Stellar spectra from 2.8 to 14 microns.  
02 p0327 A69-12713  
Infrared astronomy.  
05 p0821 A69-15842  
A far infrared sky survey.  
13 p2342 A69-27599  
Infrared astrophysics.  
14 p2516 A69-28868  
The 2.8-14-micron spectrum of Jupiter.  
22 p4028 A69-40662  
The infrared spectrum, diameter, and polarization of the galactic nucleus.  
22 p4029 A69-40767
- LOW, M. D.**  
Further observations of psychological factors involved in CNV genesis.  
01 p0015 A69-10904
- LOW, W.**  
Evidence for re-reflected shock waves behind taper sections.  
18 p3085 A69-34474
- LOWE, D. S.**  
Line scan devices and why use them.  
12 p2096 A69-26979  
Multispectral survey in the Alaskan Arctic.  
12 p2075 A69-26996  
Sensitivity considerations.  
19 p3310 A69-36061  
Non-image forming systems.  
19 p3310 A69-36062  
Tracking systems.  
19 p3310 A69-36063  
Image forming devices.  
19 p3310 A69-36064  
Design example.  
19 p3310 A69-36065  
Multispectral remote sensing.  
19 p3310 A69-36066  
Non-photographic detectors.  
20 p3540 A69-37736  
Multispectral imaging system.  
20 p3540 A69-37737  
Image forming devices.  
20 p3540 A69-37738
- LOWE, G. C.**  
The selection of an analogue-digital converter.  
05 p0726 A69-16760
- LOWE, H. H. N., JR.**  
Extraterrestrial construction.  
[AAS PAPER 69-208] 24 p4296 A69-42875
- LOWE, J.**  
Production of self-acting gas bearings.  
[ASME PAPER 68-WA/LUB-4] 05 p0768 A69-16130  
Mass producing self-acting gas bearings for gyros.  
[ASME PAPER 68-WA/LUB-4] 24 p4320 A69-43035
- LOWE, J. N.**  
Beryllium technology.  
24 p4332 A69-43208
- LOWE, M. A.**  
The use of holography to measure the position and velocity of rapidly moving objects.  
12 p2087 A69-26174
- LOWE, R. P.**  
Interferometric spectra of the earth's airglow /1.2 to 1.6  $\mu$ m/.  
13 p2252 A69-27587
- LOWE, T. A.**  
Development of improved corrosion resistant claddings for high strength aluminum alloys.  
19 p3322 A69-35571
- LOWELL, S. C.**  
Finite amplitude longitudinal waves in lattices.  
06 p1022 A69-17367
- LOWENHAR, H.**  
TV distribution from space.  
11 p1833 A69-24529  
The airport hangup.  
15 p2589 A69-30589
- LOWENSCHUSS, O.**  
Efficient partitioning for the batch-fabricated fourth generation computer.  
04 p0567 A69-15355  
Digital radar systems.  
05 p0718 A69-15748
- LOWENTHAL, S.**  
Holographic recordings in spatially incoherent light /Enregistrement d'hologrammes en lumiere spatialement incoherente/.  
12 p2090 A69-26293
- LOWERY, E. E.**  
Maintainability- Principles and Practices.  
21 p3734 A69-39815
- LOWERY, J. F.**  
Metallurgical and process considerations in welding high strength steels.  
[SBAC PAPER 8] 20 p3549 A69-37447
- LOWES, F. B.**  
Autonomous navigation in long-duration, highly eccentric orbits about Mars.  
[AIAA PAPER 69-880] 21 p3763 A69-39406
- LOWKE, J. J.**  
Calculation of temperature profiles of high pressure electric arcs using the diffusion approximation for radiation transfer.  
08 p1420 A69-20148
- LOWMAN, C. E.**  
The magnetic tape recorder/reproducer and concept of systems used for recording and reproducing FM analog test data.  
10 p1691 A69-23233
- LOWMAN, P. D., JR.**  
Composition of the lunar highlands - Possible implications for evolution of the earth's crust.  
06 p1000 A69-17006  
The moon's resources.  
13 p2352 A69-27907  
Geologic orbital photography - Experience from the Gemini program.  
18 p3131 A69-35274
- LOWNDES, R. P.**  
Far infrared electronic and vibronic transitions of Nd super 3 super plus in the tysonite lanthanide fluorides.  
13 p2316 A69-27628  
Optical phonons and symmetry of tysonite lanthanide fluorides.  
22 p3993 A69-40729
- LOWNE, C. M.**  
Proper motions on the system of the FK4. I.  
15 p2696 A69-31221
- LOWRY, D. A.**  
Experiments in the use of statistics as related to a dynamical prediction model.  
08 p1345 A69-20298
- LOWRY, R. A.**  
Determination of the gravitational constant G.  
24 p4350 A69-42944
- LOWSON, M. V.**  
A theoretical study of helicopter rotor noise.  
18 p3090 A69-34322
- LOY, B.**  
Electron optical techniques of failure investigation.  
24 p4313 A69-42768
- LOYD, D. H.**  
Charge-exchange collisions between hydrogen ions and cesium vapor in the energy range 0.5-20 kev.  
08 p1356 A69-20737
- LOYD, J. M., JR.**  
Dynamic properties of metal powder-epoxy resin composites.  
07 p1159 A69-18721
- LOYOLA, P. R.**  
Determinations of the right ascensions of the fundamental bright stars in the declination range from -90 deg A to plus 40 deg with Zeiss transit instrument No. 18818 /Determinaciones de ascensiones rectas de de estrellas fundamentales brillantes en la zona -90 deg A plus 40 deg de declinacion con el instrumento de pasajes Zeiss No. 18818/.  
10 p1777 A69-23388
- LOYSEN, P.**  
Instrumentation for reliability in stratospheric air sampling.  
05 p0766 A69-16751
- LOYTTY, E. Y.**  
Ultralightweight mirror blanks.  
13 p2261 A69-27953
- LOZANSKII, E. D.**  
A qualitative streamer theory /Kachestvennaia teoriia strimera/.  
11 p1935 A69-25759
- LOZHKIN, O. V.**  
Nuclear Interactions in Spacecraft Shielding /Iadernye Vzaimodeistviia v Zashchite Kosmicheskikh Korablei/.  
14 p2481 A69-29817
- LOZHKIN, V. M.**  
Construction of a boundary-layer type solution in the three-dimensional plate bending problem /Pobudova roz'yazku tipu pogrannichnogo sharu v prostorovii zadachi zginu plit/.  
15 p2708 A69-30662
- LOZHKIN, V. N.**  
Bending of a plate with a curvilinear hole /Izghib plity s krivolineinym otverstiem/.  
11 p1973 A69-24657  
Refinement of the applied theory in the problem of stress concentrations arising in the bending of a perforated plate /Ob utochnenii prikladnoi teorii v zadache o kontsentratsii napriazhenii pri izgibe plity s otverstiami/.  
11 p1976 A69-24784
- LOZINA-LOZINSKII, L. K.**  
Resistance of organisms to extreme influences in relation to some exobiological problems.  
01 p0017 A69-11083  
Resistance of the protozoan Colpoda maupasi to Martian conditions of atmospheric pressure and low partial pressure of oxygen.  
20 p3478 A69-37627
- LOZINSKAIA, T. A.**  
Spectrophotometry of relics of supernovae IC 443 and NGC 6888 /Spektrofotometriia ostatkov vspyshek sverkhnovykh IC 443 i NGC 6888/.  
09 p1587 A69-21357  
Observations of the filamentary nebula IC 443 in the H alpha line by means of a Fabry-Perot etalon /Nabliudeniia voloknistoi tumannosti IC 443 v linii H alpha s etalonom Fabry-Pero/.  
15 p2686 A69-30538  
Spectrophotometry of the supernova remnants IC 443 and NGC 6888.  
18 p3197 A69-34747
- LOZINSKII, M. G.**  
Quantitative estimation of intergranular deformation of a nickel-titanium alloy during tension at a constant rate, within a wide range of temperatures /Kolichestvennaia otsenka mezherennoi deformatsii nikel'-titanovogo splava pri rastiazhenii s pastoiannoi skorost'iu v shirokom intervale temperatur/.  
12 p2113 A69-26044
- LOZITSKII, V. G.**  
Observations of the dichotomy of Venus /O nabliudeniakh dikhotomii Venery/.  
18 p3203 A69-35336
- LOZOVSKII, S. N.**  
Drift instability of a collisionless plasma in the high-frequency field of an E wave /Dreifoivaia neustoiichivost' besstolknovitel'noi plazmy v vysokochastotnom pole E-volny/.  
09 p1546 A69-21564
- LU, P. K.**  
Proper motion of the blue star in the field of pulsar CP 1919.  
01 p0149 A69-10270
- LU, T. C.**  
HSD map transformation mechanization.  
[AIAA PAPER 69-987] 22 p3908 A69-40367
- LU, T.-H.**  
Dynamic stress concentration at a cylindrical inclusion in an elastic medium with an arbitrarily stiff bond.  
21 p3840 A69-39300



## LUBECK, L.

## LUBECK, L.

On board data processing system for the first Swedish satellite project. 20 p3501 A69-37386

## LUBELFELD, J.

Metal-oxide-semiconductor circuits of higher orders of complementarity. 07 p1104 A69-18887

## LUBIMOVA, E. A.

Thermal history of the earth. 21 p3718 A69-39732

## LUBIN, B. T.

Surface deformations in a draining liquid. 09 p1483 A69-21999

## LUBONSKI, J.

A hypothesis concerning the non-stationary temperature-jump conditions at the gas-solid interface. 17 p2949 A69-33023

## LUBOWE, A. G.

Path length variation in a synchronous satellite communications link. 04 p0561 A69-15448

A satellite association procedure. 18 p3103 A69-35098

How critical is the critical inclination/ques/ 19 p3397 A69-35607

Stationkeeping and synchronous satellite orbit determination. 20 p3595 A69-37218

Calculation of oblateness perturbations using Hansen's method. 21 p3807 A69-39341

## LUBOWITZ, H. R.

Glass reinforced p13n polyimide laminates having improved processing characteristics. 19 p3353 A69-35505

## LUCAS, E. D., JR.

High reliability tape recorders for satellite, aircraft drone applications. 07 p1133 A69-19104

## LUCAS, J.

The measurement of ionization coefficients in hydrogen and nitrogen. 16 p2815 A69-32574

## LUCAS, J. W.

Principal science results from Surveyor 5. 02 p0321 A69-12224

Lunar surface temperatures and thermal characteristics - Surveyor 5 science results. 02 p0321 A69-12227

Revised lunar surface thermal characteristics obtained from the Surveyor V spacecraft. 17 p3033 A69-33287

## LUCAS, L.-D.

The role of surface phenomena in the elimination of solid inclusions from a metal bath /Role des phenomenes de surface dans l'elimination d'inclusions solides d'un bain metallique/. 07 p1167 A69-19342

## LUCAS, M. S. P.

The effects of surface layers on the conductivity of gold films. 02 p0300 A69-12625

## LUCAS, P.

An accumulator chip. 12 p2037 A69-25942

## LUCAS, R. A.

A quasi-static thermoelastic analysis of a propagating crack. 08 p1412 A69-20144

## LUCCHIN, F.

About some consequences of an explosive origin of spiral arms. 20 p3599 A69-37468

## LUCE, R. G.

The quieted aircraft as a military tool. 19 p3243 A69-35637

## LUCHI, R. J.

Reduced cardiac myosin adenosinetriphosphatase activity in dogs with spontaneously occurring heart failure. 24 p4258 A69-42630

## LUCHININ, A. G.

Propagation of a sinusoidally modulated light beam in a scattering medium /O rasprostraneni sinusoidal'no modulirovannogo svetovogo puchka v rasseivaiushchei srede/. 10 p1658 A69-23951

## LUCHKA, A. IU.

Sufficient conditions for the convergence of the Bubnov-Galerkin method /Pro dostatni umovi zbizhnosti metodu Bubnova-Gal'orkina/. 12 p2123 A69-26607

## LUCHKOV, B. I.

Study of cosmic-ray electrons and gamma quanta at altitudes up to 27.5 km /Issledovanie elektronov i gamma-kvantov kosmicheskikh luchej na vysotakh do 27,5 km/. 10 p1758 A69-22830

Variations in the electron and gamma quanta intensities in the atmosphere /Ob izmeneniakh intensivnosti elektronov i gamma-kvantov v atmosfere/. 20 p3587 A69-37046

A device for recording electrons with energies from 0.1 to 1.5 Gev in cosmic radiation /Pribor dlia registratsii elektronov s energiei 0,1 to 1,5 Gev v kosmicheskom izluchении/. 21 p3724 A69-39074

## LUCHTER, S.

Rankine cycle working fluid selection and specification rationale. [SAE PAPER 690063] 07 p1057 A69-18308

## LUCKE, O.

The theory of atmospheric turbulence /Zur Theorie der atmosphärischen Turbulenz/. 12 p2125 A69-25894

The statistical theory of turbulence and the turbulent diffusion of impurities in the atmosphere /Die statistische Theorie der Turbulenz und der turbulenten Diffusion von Beimengungen in der Atmosphäre/. 20 p3570 A69-37426

## LUCQUIN, M.

Analogy between gas phase and liquid phase oxidation of hydrocarbons in the final stages of the reaction 'Pic d'arret' and 'oxygen cut-off'. 21 p3669 A69-38805

## LUCY, M. H.

Effects of acceleration upon solid-rocket performance. [AIAA PAPER 68-530] 21 p3786 A69-39217

## LUCY, R. F.

Optical communications experiments at 6328 angstrom units and 10.6 mu. 16 p2748 A69-31564

## LUCZYWEK, E.

Shape of the bow shock wave in rectilinear flight with acceleration /Kształt czołowej fali uderzeniowej w locie prostoliniowym z przyspieszeniem/. 09 p1433 A69-21386

Shape of the bow shock wave in rectilinear flight with acceleration. II - Flight with varying acceleration /Kształt czołowej fali uderzeniowej w locie prostoliniowym z przyspieszeniem. II - Lot ze zmiennym przyspieszeniem/. 16 p2734 A69-32005

## LUDLOFF, A.

The analog video processor in omnidirectional radar systems for flight safety /Der analoge Videoprozessor in Rundsicht-Radaranlagen der Flugsicherung/. 08 p1276 A69-20605

## LUDLOFF, H. F.

Application of laser radar return to meteorological problems. 06 p0888 A69-17483

## LUDTKE, N. F.

An integrated sensor controller for missile directional control. [AIAA PAPER 69-837] 21 p3761 A69-39368

## LUDTKE, P. R.

Slush hydrogen flow characteristics and solid fraction upgrading. [NAS-NRC PAPER F-5] 22 p3998 A69-40626

## LUDWICK, E. E., JR.

Space oceanography - Applications and benefits. 18 p3210 A69-35091

## LUDWIG, A. C.

Computation of radiation patterns involving numerical double integration. 08 p1282 A69-20042

## LUDWIG, E.

Improved horn exciter with two wave modes for shallow paraboloid antennas /Verbesserte Horner-Reger mit zwei Wellentypen fuer flache Parabolantennen/. 12 p2044 A69-27093

## LUDWIG, G.

The gravitational analog of the Mariot-Robinson theorem /Sur l'analogie gravitationnel du theoreme de Mariot-Robinson/. 11 p1919 A69-25097

## LUDWIG, L.

Configurations for gas turbine compressor end seals. [ASLE PREPRINT 68AM 4B-4] 13 p2267 A69-27366

## LUDWIG, L. P.

Shaft face seal with self-acting lift augmentation for advanced gas turbine engines. [ASLE FICFS PREPRINT 27] 15 p2621 A69-30492

## LUDWIG, W.

Influence of point defects on elastic constants. 02 p0267 A69-12186

Design, fabrication and test of a boron wing structure. 24 p4323 A69-43418

## LUE, P. K.

Optical variations of 3C454.3. 08 p1397 A69-20701

Positions of twenty-one quasi-stellar objects. 13 p2334 A69-27308

Accurate positions of quasistellar objects determined by the plate overlap method. 16 p2859 A69-32229

## LUEBBERS, S. S.

Oxygen effects in tantalum thermionic emitters. 09 p1437 A69-21812

## LUECKE, E. J.

Performance of optimum and suboptimum synchronizers. 21 p3673 A69-38923

## LUEDKE, E. E.

High-temperature reflectance measurements with the paraboloid reflectometer. [AIAA PAPER 68-25] 04 p0604 A69-15512

Effects of simulated degrading environment on temperature control surfaces. [AIAA PAPER 69-1024] 22 p3923 A69-40394

## LUEHR, L. H.

Dynamic behavior of thrust-balance systems. 04 p0647 A69-15521

## LUENBERGER, D. G.

Differential games with imperfect state information. 12 p2053 A69-26505

## LUENOW, W.

The non-linear interaction of a steady-state circularly polarized electromagnetic wave with a cold plasma in a constant longitudinal magnetic field. 03 p0476 A69-13381

## LUEST, R.

Artificial plasma clouds in space. 01 p0151 A69-10533

Introduction to plasma physics. 02 p0293 A69-12781

Electromagnetic fields in space /Elektromagnetische Felder im Weltraum/. 04 p0657 A69-14810

Experiments with artificial plasma clouds /Experimente mit kuenstlichen Plasmawolken/. 06 p0999 A69-16973

Artificial clouds - A means of space research /Kuenstliche Wolken - Ein Mittel der Weltraumforschung/. 09 p1492 A69-22800

Highly irregular artificial plasma clouds in the auroral zone. 21 p3710 A69-38507

## LUEST, RH.

The influence of the solar corona on the tail of comet Ikeya-Seki 1965 VIII. 06 p1000 A69-16982

## LUEUCKEL, J.

Suboptimal control of second-order plants with time-varying coefficients. 21 p3825 A69-39634

## LUFT, G. M.

Structural hysteresis in some designs of membrane devices /Konstruktsionnyi gisterizis v nekotorykh konstruktssiakh membrannykh ustroystv/. 01 p0087 A69-10828

## LUFT, U. C.

Effects of altitude climates on human performance - A review. 11 p1827 A69-24924

## LUFT, W.

Temperature and humidity effects on silicon solar cells. 19 p3253 A69-35706

Temperature cycling effects on solar panels. 23 p4070 A69-42274

## LUGANOV, E. M.

Sensitivity of the vestibular analyzer and sensory reactions of man during short-term weightlessness /Chuvstvitel'nost' vestibuliarnogo analizatora i sensornye reaktsii cheloveka pri kratkovremennoi nevesomosti/.  
07 p1062 A69-18586

Bioelectric activity of skeletal muscles under conditions of alternating periods of acceleration and weightlessness /Bioelektricheskaya aktivnost' skeletnoi muskulatury v usloviakh peremzhaiushchegosia deistviia peregruzok i nevesomosti/.  
07 p1062 A69-18591

## LUGANSKAIA, I. B.

Moments of high rank in a weakly rarefied gas.  
04 p0587 A69-14542

## LUGINA, A. S.

Mixing of ruby laser radiation with radiation excited by this laser in a liquid laser based on complex molecular solutions /Smeshenie izlucheniia rubinovogo i voz-buzhdeniia im izlucheniia zhidkostnogo OKG na osnove rastvorov slozhnykh molekul/.  
04 p0610 A69-14424

## LUGOVENKO, V. N.

Energy spectrum of the anomalous magnetic field /Energeticheskii spektr anomal'nogo magnitnogo polia/.  
09 p1487 A69-21554

Energy spectrum of the anomalous magnetic field.  
16 p2784 A69-32549

Aeromagnetic determinations of the secular variation of the total-vector modulus /Ob aeromagnitnykh opredeleniakh vekovogo khoda modul'ia polnogo vektora/.  
20 p3522 A69-37061

## LUGOVOI, V. N.

Self-focusing of ultrashort laser pulses.  
24 p4328 A69-43068

## LUGOVSKOI, V. V.

Peaked electron emission from a nickel surface under the action of laser radiation /Pichkovaia elektronnaia emissiia s poverkhnosti nikelia pod deistviem lazernogo izlucheniia/.  
10 p1703 A69-23572

## LUH, J. Y. S.

Trajectory sensitivity of a large launch booster control system.  
09 p1473 A69-22439

Suboptimal controls that maximize the probability of entering a target manifold.  
11 p1860 A69-25443

Feedback signal design by optimum control and dynamic programming technique.  
12 p2046 A69-26060

Minimum trajectory sensitivity of a large launch booster control system.  
13 p2261 A69-27943

Construction of the minimal time control for processes with bounded control amplitudes and rates.  
20 p3509 A69-37139

Suboptimal closed-loop controller design for minimum probability of inequality constraints violation.  
24 p4292 A69-43285

An approximate minimal time closed-loop controller for processes with bounded control amplitudes and rates.  
24 p4293 A69-43304

## LUIK, R.

Multiple configuration analysis of structures.  
01 p0169 A69-10639

## LUIKOV, A. V.

Polytetrafluoro-ethylene ablation in high-temperature jets of different chemical compositions.  
20 p3632 A69-37522

Application of irreversible thermodynamics to heat and mass transfer in gas suspension.  
[ASME PAPER 69-HT-34] 24 p4410 A69-43528

## LUISE, J. A.

SOS brings new life to read-only units.  
07 p1113 A69-19767

## LUKACS, E.

Stochastic Convergence.  
08 p1343 A69-20443

## LUKANOW, H.

The multiframe camera as a ballistic phototheodolite /Eine Bildreihenkamera als ballistischer Phototheodolit/.  
12 p2084 A69-26153

## LUKAS, M. P.

Suboptimal closed-loop controller design for minimum probability of inequality constraints violation.  
24 p4292 A69-43285

## LUKAS, P.

Dislocation substructure associated with propagating fatigue crack.  
10 p1797 A69-23079

The OGO-V plasma wave detector - Instrumentation and in-flight operation.  
19 p3315 A69-36683

## LUKASHENKO, L. I.

Structure and magnetic properties of "supercritical" films /Struktura i magnitnye svoistva "zakriticheskikh" plenok/.  
12 p2143 A69-26458

## LUKASHENKO, V. I.

Phenomena during plasma decay at high pressure in helium and argon with a cesium vapor admixture or in pure cesium vapor /lavishcha pri rozpadi plazmy v geliu ta argoni pri pdvishchenomu tisku z domishkoiu pari tseziu i v chistiy parakh tseziu/.  
03 p0480 A69-14052

Phenomena during plasma decay at high pressure in helium and argon with cesium vapor admixtures and in pure cesium vapor /lavleniia pri raspade plazmy v geliu i argone pri povyshennom davlenii s primes'iu parov tseziu i v chistyykh parakh tseziu/.  
10 p1733 A69-23448

Some luminosity characteristics of a decaying discharge plasma in cesium vapor /Deiaki osoblivosti visichuvannia rozpadnoi rozriadnoi plazmy u pari tseziu/.  
14 p2490 A69-28996

Phenomena during plasma decay in helium and argon at high pressure with cesium vapor impurity and in pure cesium vapor.  
18 p3181 A69-35045

## LUKASHCHEVICH, E. L.

Intermediate orbits of natural satellites of planets.  
11 p1952 A69-24253

## LUKASHKIN, N. D.

Fatigue resistance of bimetallic sheets.  
21 p3835 A69-38773

## LUKASIEWICZ, J.

Atmospheric entry test facilities - Limitations of current techniques and proposal for a new type facility.  
[AIAA PAPER 69-166] 06 p0907 A69-18189

## LUKASIEWICZ, S.

On the optimum design of shells loaded by concentrated forces.  
11 p1799 A69-24812

Concentrated loads in shells /Obciazenia skupione w powlokach/.  
18 p3219 A69-34832

## LUKE, R. H.

Airframe integrity - The effects of time in service.  
20 p3461 A69-36920

## LUKE, S. K.

The radio-frequency spectrum of H sub 2 super plus.  
15 p2693 A69-30784

## LUKE, Y. L.

The Special Functions and their Approximations. Volume 1.  
10 p1717 A69-22801

## LUKENS, S. C.

Sterilizable liquid propulsion system.  
[AIAA PAPER 68-631] 21 p3785 A69-39025

## LUKES, D. L.

Optimal regulation of nonlinear dynamical systems.  
21 p3685 A69-38433

## LUKES, F.

Ellipsometric method for the determination of all the optical parameters of the system of an isotropic nonabsorbing film on an isotropic absorbing substrate - Optical constants of silicon.  
07 p1201 A69-19648

Ellipsometric liquid immersion method for the determination of all the optical parameters of the system - Nonabsorbing film on an absorbing substrate.  
24 p4316 A69-43321

## LUKHANIN, V. IA.

Study of the resistance of certain invertebrate species to explosive decompression and low end pressure /Doslidzhennia rezistentnosti deiakikh vidiv bezkhrabbitnikh tvarin do vibukhovoi dekompresii ta niz'kogo kintsevoogo tisku/.  
07 p1059 A69-18537

## LUKIANCHIKOVA, N. B.

Applicability of the fluctuation-dissipation theorem to a description of nonequilibrium noise of semiconductor diodes.  
07 p1113 A69-19596

## LUKIANENKO, L. V.

The dielectric constant of liquid hydrogen.  
14 p2487 A69-29668

## LUKIANETS, V. S.

Under what conditions does the hypothesis of a macroscopic nature of space and time have sense/ques/Pri kakikh usloviakh gipoteza o makroskopicheskoi prirode prostranstva i vremeni imeet smysl/ques/.  
14 p2484 A69-28864

## LUKIANOV, A. T.

Simulation of implicit difference schemes /Modelirovanie neiaivnykh raznostnykh skhem/.  
03 p0410 A69-13300

Numerical solution of the problem of unsteady heating of a fuel mixture in a container /Chisslennoe reshenie zadachi o nestatsionarnom nagreve goriuchei smesi v sosude/.  
11 p2001 A69-25192

Modeling of thermoelasticity problems /Modelirovanie zadach termoprugosti/.  
21 p3680 A69-39851

Steady-state digital-analog integrator for solving nonlinear equations of the heat-conduction type /Statsicheskii tsifro-analogovyi integrator dlia resheniia nelineinykh uravnenii tipa teploprovodnosti/.  
21 p3680 A69-39852

Numerical solution to the problem of natural convection in a closed cavity /Chisslennoe reshenie zadachi ob estestvennoi konveksii v zamknuoi polosti/.  
21 p3855 A69-39853

Solution of elliptic equations on electric analogs /Reshenie ellipticheskikh uravnenii na elektricheskikh modeliakh/.  
21 p3680 A69-39854

Calculation of temperature fields in multilayer cylindrical bodies /Raschet temperaturnykh polei v mnogosloinykh tsilindricheskikh telakh/.  
21 p3855 A69-39855

## LUKIANOV, G. A.

Possibility of using a plasma jet for radiation amplification /O vozmozhnosti ispol'zovaniia plazmennoi strui dlia usileniia izlucheniia/.  
02 p0292 A69-12557

The discharge of a gas into a vacuum /Ob itechenii gaza v vakuum/.  
02 p0234 A69-12583

Stationary supersonic nonequilibrium-plasma source /Statsionarnyi sverkhzvukovoi istochnik neravnovesnoi plazmy/.  
07 p1191 A69-18986

Use of a plasma jet to amplify radiation.  
15 p2658 A69-30254

## LUKIANOV, L. G.

Influence of a perturbing body on the motion near the triangular Lagrangian solutions of the restricted elliptical three-body problem /Vliianie voz-mushchaiushchego tela na dvizhenie vblizi treugol'nykh lagranzhevyykh reshenii ogranichennoi ellipticheskoi zadachi trekh tel/.  
10 p1779 A69-23612

First-approximation stability of triangular Lagrange solutions of the restricted elliptical three-body problem /Ob ustoiichivosti v pervom priblizhenii treugol'nykh lagranzhevyykh reshenii ogranichennoi ellipticheskoi zadachi trekh tel/.  
20 p3575 A69-37318

## LUKIANOV, N. A.

Calculation of mixed sub- and supersonic gas flow in a plane pressure nozzle.  
07 p1050 A69-18739

## LUKIANOV, V. M.

Structure and phase composition of silicide layers in niobium.  
20 p3563 A69-37820

## LUKIANOV, V. V.

High-strength maraging steel N18K9M5T /MS 200/.  
04 p0615 A69-14645

## LUKIANOVA, L. N.

Influence of inhomogeneities on the thermoelectric properties of 80 mol. and Bi sub 2 Te sub 3 plus 20 mol. and Bi sub 2 Se sub 3 alloy.  
04 p0644 A69-15265

## LUKIANOVA, R. G.

Self-similar solution of the Navier-Stokes equations for a completely ionized plasma - Problem of a plane piston /Avtomodel'noe reshenie uravnenii nav'e-Stoksa



## LUKIN, A. V.

dlia polnost'iu ionizovannoi vodorodnoi plazmy -  
Zadacha o ploskom porshne/. 22 p3991 A69-41021

## LUKIN, A. V.

Transparency characteristics of phototropic switches  
and their influence on laser parameters /Kharakteristiki  
prosvetlenia fototropnykh zatvorov i ikh vliianie na  
parametry lazera/. 04 p0610 A69-14385

Characteristics of the optical transmission of  
phototropic shutters and their effect on laser param-  
eters. 14 p2456 A69-28758

## LUKIN, B. V.

High-melting-point oxide and carbide materials for  
electrode walls of MHD generators /Tugoplavkie  
okisnye i karbidnye materialy v elektrodnykh stenkakh  
MGD-generatorov/. 13 p2284 A69-27471

## LUKIN, D. S.

Numerical method for determining the Doppler ef-  
fect and reduced Doppler frequency difference for  
radiowaves radiated coherently from an artificial earth  
satellite. 07 p1087 A69-19610

Field intensity of short radio waves emitted by an ar-  
tificial earth satellite in an inhomogeneous ionosphere  
/Napriazhennost' polia korotkikh radiovoln, izlucha-  
emykh iskusstvennym sputnikom zemli v neodnorodnoi  
ionosfere/. 20 p3491 A69-37689

## LUKIN, I. I.

Energy characteristics of the interaction of cosmic-  
ray particles with carbon nuclei. 13 p2330 A69-28379

## LUKIN, I. T.

An apparatus for studying inelastic interactions at  
energies of 10 super 12 eV /Ustanovka dlia izucheniia  
neuprugikh vzaimodeistvii pri energiakh 10 super 12  
eV/. 12 p2093 A69-26583

Study of four-momentum transfers in high-energy in-  
teractions of cosmic ray particles. 13 p2330 A69-28375

On measuring the energy spectrum of nuclear- active  
particles with an ionization calorimeter having a small  
absorber thickness. 13 p2331 A69-28392

Energy dependence of some characteristics of elec-  
tron-photon cascades in lead. 13 p2304 A69-28418

## LUKIN, L.

Energy levels of human body segments during level  
walking. 15 p2558 A69-30587

## LUKIN, V. S.

Reliability of Semiconductor Radio Devices of Flight  
Vehicles /Nadezhnost' poluprovodnikovyykh radiosus-  
troystv letatel'nykh apparatov/. 18 p3108 A69-34350

## LUKINA, L. V.

Polar auroras at the minimum and maximum of the  
solar activity cycle /Poliarnye sianiiia v minimume i  
maksimume tsikla solnechnoi aktivnosti/. 17 p2963 A69-33955

## LUKOVNIKOV, A. I.

A shielded high-frequency flame discharge  
/Ekranirovannyi vysokochastotnyi fakel'nyi razriad/. 12 p2140 A69-27128

Certain problems of matching high-frequency oscil-  
lators to a load in the form of a flame discharge /Neko-  
torye voprosy soglasovaniia vysokochastotnykh  
generatorov s nagruzkoj v vide fakel'nogo razriada/. 12 p2140 A69-27129

## LUKOVNIKOV, V. F.

Experimental investigation of the damping charac-  
teristics of foam plastic fillers /Eksperimental'noe iss-  
ledovanie dempfirovushchikh svoystv penoplastovykh  
zapornitelei/. 17 p2993 A69-33942

## LUKOVSKII, I. O.

Construction of a solution to the nonlinear problem  
of the free oscillations of a liquid in vessels of arbitrary  
geometry /Do pobudovy rozy'iazku nelineinnoi zadachi  
pro vli'ni kolivaniia ridiny v posudinakh dovil'noi  
geometrichnoi formi/. 14 p2428 A69-28969

## LUKSCH, H.

TL 4002 satellite traveling-wave tubes for the  
Symphonie communication satellite /Die Satelliten-  
wanderfeldroehre TL 4002 fuer den Nachrichtensatel-  
liten "Symphonie"/. 07 p1095 A69-18429

## LUKSHA, E.

Electrochemical oxidation of multicomponent  
hydrocarbon fuels. I - Studies with n-octane based fuels  
containing aromatic, olefinic, and naphthenic com-  
ponents. [ACS PAPER 93] 05 p0716 A69-16234

Electrochemical oxidation of multicomponent  
hydrocarbon fuels. II - Long-term performance studies  
with n-octane based fuels containing aromatic, olefinic,  
and naphthenic components. [ACS PAPER 94] 05 p0716 A69-16235

## LUKSO, R. J.

Advanced concept for airborne inverters /digital in-  
verter/. [SAE PAPER 690339] 11 p1824 A69-24495

## LUMB, D. R.

Test and preliminary flight results on the sequential  
decoding of convolutional encoded data from Pioneer  
IX. 23 p4131 A69-42522

## LUMLEY, R. M.

Lasers in industry. 09 p1521 A69-22783

## LUMSDAINE, E.

Heat transfer for flow in a cone. 13 p2375 A69-27788

## LUNACHARSKII, N. N.

Recirculator with a variable feedback coefficient  
/Retsirkuliator s peremennym koeffitsientom obratnoi  
svyazi/. 04 p0575 A69-14464

## LUNC, M.

Introduction in the Molecular Gasdynamics. 01 p0060 A69-10711

International Astronautical Federation, International  
Astronautical Congress, 18th, Belgrade, Yugoslavia,  
September 24-30, 1967, Proceedings. Volume 1 - As-  
trodynamics, Guidance and Control, Miscellaneous. 06 p1004 A69-17560

International Astronautical Federation, International  
Astronautical Congress, 18th, Belgrade, Yugoslavia,  
September 24-30, 1967, Proceedings. Volume 2 -  
Spacecraft Systems, Education. 06 p1015 A69-17596

International Astronautical Federation, International  
Astronautical Congress, 18th, Belgrade, Yugoslavia,  
September 24-30, 1967, Proceedings. Volume 3 -  
Propulsion and Re-entry. 06 p0859 A69-17625

International Astronautical Federation, International  
Astronautical Congress, 18th, Belgrade, Yugoslavia,  
September 24-30, 1967, Proceedings. Volume 4 - Life  
in Spacecraft. 06 p0881 A69-17642

## LUND, I. A.

Relationships between insolation and other surface  
weather observations at Blue Hill, Massachusetts. 01 p0066 A69-10862

## LUND, J. A.

The deformation of wrought Zn-Ni-Ti alloy. 08 p1329 A69-20002

## LUND, R. E.

The production and loss of N sub 2 super plus ions in  
the nitrogen afterglow. 07 p1184 A69-19141

## LUND, W.

ATS-III resistojet thruster system performance. [AIAA PAPER 68-553] 21 p3786 A69-39754

## LUNDBAK, A.

Solar X-rays and related phenomena. 01 p0146 A69-11119

## LUNDE, A. R.

The procurement of the Boeing A-7000 /7 module/  
solar simulator. 15 p2588 A69-30403

## LUNDELL, J. H.

Comparison of the performance of a charring ablator  
under transient and constant combined convective and  
radiative heating. [AIAA PAPER 69-151] 06 p1036 A69-18055  
Effects of pyrolysis-gas chemical reactions on sur-  
face recession of charring ablators. [AIAA PAPER 68-302] 09 p1622 A69-21982  
The development of polybenzimidazole composites  
as ablative heat shields. 23 p4179 A69-41715

## LUNDERSTAEDT, R.

Optimal controls for active nutation damping of spin-  
stabilized bodies /Optimale Steuerungen zur aktiven  
Nutationsdaempfung von drallstabilisierten Flugkoer-  
pern/. 18 p3208 A69-34774

## LUNDGREN, T. S.

Trimodal solutions for shock structure in a gas of  
spherocylinders. 03 p0414 A69-13136

Model equation for nonhomogeneous turbulence. 15 p2591 A69-30906

## LUNDHOLM, L.

A comparative study of some cardiovascular effects  
of sotalol /MJ 1999/ and propranolol. 23 p4080 A69-41403

## LUNDIEN, J. R.

Radar scatterometer data analysis techniques. 12 p2099 A69-27010

## LUNDIN, C. D.

Very-short-time, very-high-temperature creep rup-  
ture of type 347 stainless steel and correlation of data.  
[ASME PAPER 68-WA/MET-2] 14 p2464 A69-29439

## LUNDIN, L.

Mean lives of some doubly excited levels in lithium.  
I. 13 p2301 A69-27454  
Mean lives of some excited levels of Li I and Li II. 18 p3177 A69-35012

## LUNDQUIST, C. A.

Photometry from Apollo tracking. 15 p2571 A69-31338

## LUNDQUIST, G. E.

Testing at the Arnold Engineering Development  
Center. 08 p1302 A69-20883

## LUNDQUIST, J. T., JR.

Concentration changes in operating fuel cells.  
[ECS PAPER 335] 20 p3466 A69-38069

## LUNDQUIST, L.

Digital PM spectra by transform techniques. 09 p1455 A69-21847

## LUNDGAARD-HANSEN, P.

Combined adrenergic blockade in experimental  
hemorrhagic hypotension. 23 p4098 A69-42102

## LUNDSTEN, R. H.

A fluxgate sensor of high stability for low field mag-  
netometry. [IEEE PAPER 10.2] 01 p0081 A69-10715

## LUNDSTROM, E. A.

On the influence of non-steadiness on the thickness  
of the detonation wave. 17 p2952 A69-33403

## LUNEV, E. I.

Ionization state of cesium thermionic converter  
plasma. 14 p2491 A69-29243

## LUNEV, V. M.

Vacuum system of the Sirius stellarator. 03 p0412 A69-13839

## LUNEV, V. V.

The method of curved bodies in unsteady hypersonic  
flow problems involving slender bodies /Metod is-  
krivlennykh tel v zadachakh nestatsionarnogo giperz-  
vukovogo obtekaniiia tonkikh tel/. 02 p0191 A69-12576

Hypersonic Flow Past Truncated Cones with Al-  
lowance for Physicochemical Equilibrium Transforma-  
tions /Giperzvukovoe obtekanie prituplennykh  
konusov s uchetoм равновесных fizikokhimicheskikh  
prevrashchenii/. 03 p0362 A69-13633

Effect of the shape of the nose on hypersonic flow  
past thin blunt bodies at an angle of attack /Vlianie  
formy noska na giperzvukovoe obtekanie tonkikh  
prituplennykh tel pod uglom ataki/. 19 p3239 A69-36402

## LUNIN, I. N.

Determination of clear-air turbulence zones by  
means of computers /Opredelenie zon turbulentsnosti v  
iasnom nebe s pomoshch'iu EVM/. 15 p2648 A69-30645

## LUNKIN, I. U. P.

Vibrational-dissociative relaxation behind a shock  
front. 03 p0418 A69-13835

## LUNKIN, S. P.

Aluminocalcium glasses, transparent in the near-in-  
frared. 08 p1336 A69-20386

- LUNS福德, J. H.**  
Surface interactions of NaY and decaionated Y zeolites with nitric oxide as determined by electron paramagnetic resonance spectroscopy.  
02 p0205 A69-11900
- LUNTER, S. G.**  
Study of the effect of the degree of bond covalence in glasses on the splitting of the electron levels of activator ions /Issledovanie vliianiia stepeni kovalentnosti svyazei v steklakh na rasscheplenie elektronnykh urovnei ionov aktivatora/.  
11 p1907 A69-25031
- LUPICHEV, L. N.**  
Discrete control system simulation method for spacecraft.  
20 p3502 A69-37393
- LUPPI, R.**  
The electrical conductivity of metals at very high temperatures.  
01 p0119 A69-10673
- LUPPOV, A. N.**  
Theoretical study of transient thermal conditions during the start-up of a thermionic converter.  
14 p2400 A69-29226
- LUQUET, P.**  
Application of ionic propulsion to attitude correction of geostationary satellites. I /Application de la propulsion ionique aux corrections de position des satellites geostationnaires. I/.  
10 p1753 A69-23841  
Application of ion propulsion to attitude control of geostationary satellites. II /Application de la propulsion ionique aux corrections de position des satellites geostationnaires. II/.  
16 p2837 A69-32068
- LURE, K. A.**  
Minimization of the thickness of an inhomogeneous layer for a given reflection coefficient of a monochromatic wave /Minimizatsiia tolshchiny neodnorodnogo sloia pri zadannom koeffitsiente otrazheniia monokhromaticheskoi volny/.  
13 p2297 A69-27381
- LURE, M. V.**  
Lame problems in gradient elasticity theory.  
11 p1970 A69-24632
- LURIE, M.**  
A verification of holographic measurement of vibration.  
01 p0082 A69-10853
- LUSH, P. A.**  
A theoretical and experimental investigation of the switching mechanism in a wall attachment fluid amplifier.  
02 p0195 A69-12073
- LUSH, P. E.**  
The convergence of Rayleigh-Ritz approximations.  
03 p0361 A69-12846
- LUSHBAUGH, C. C.**  
Clinical studies of radiation effects in man - A preliminary report of a retrospective search for dose-relationships in the prodromal syndrome.  
03 p0374 A69-13503  
Power spectrum of the impedance pneumograph - A data reduction system producing an analytical parameter of potential clinical usefulness.  
12 p2024 A69-26558
- LUSHCHIK, CH. B.**  
Photosimulation of the electron-hole and exciton mechanisms of NaI-Tl and KI-Tl single-crystal scintillations /Fotomodelirovanie elektronno-dyrochnogo i eksitononogo mekhanizmov stsintiliatsii v kristallakh NaI-Tl i KI-Tl/.  
12 p2144 A69-26722  
Selective photon modeling of both the electron/hole-induced and the exciton-induced scintillation mechanisms in NaI-Tl and KI-Tl crystals.  
21 p3781 A69-39135
- LUSIGNAN, B.**  
Sensing the earth's atmosphere with occultation satellites.  
14 p2447 A69-29517
- LUSIGNAN, B. B.**  
University projects in space system engineering and their potential benefits for developing countries. [UN PAPER 68-95870]  
01 p0178 A69-10485  
Television satellites for educational purposes /Fernseh-satelliten fuer Unterrichtszwecke/.  
02 p0335 A69-12747  
Density measurement with radio wave occultation techniques.  
21 p3705 A69-38375
- LUSTIG, C. D.**  
Observation of electroacoustic resonance in a reentry sheath.  
17 p3010 A69-32915
- LUSZTIG, G.**  
Cohomology of elliptic complexes /Coomologia complexelor eliptice/.  
09 p1532 A69-21733
- LUTHER, G. G.**  
Locking a laser frequency to the time standard.  
05 p0773 A69-16291
- LUTON, M. J.**  
Dynamic recrystallization in nickel and nickel-iron alloys during high temperature deformation.  
19 p3344 A69-36147
- LUTSENKO, V. N.**  
Low-energy proton flux in the neighborhood of the moon on December 13, 1966 /Potok protonov mal'kikh energii v okrestnosti Luny 13 dekabria 1966 g./.  
09 p1577 A69-21773
- LUTSET, M. O.**  
Boundary conditions for the moment equations of a rarefied gas /O granichnykh usloviyakh dlia momentnykh uravnenii razrezhnogo gaza/.  
13 p2250 A69-28320
- LUTSKII, V.**  
Aeroelasticity of a supersonic aircraft /Aerouprugost' sverkhzvukovogo samoleta/.  
22 p3862 A69-40003
- LUTSYSHIN, R. M.**  
The second basic problem of anisotropic plates with a circular isotropic inclusion /Vtoraia osnovnaia zadacha dlia anizotropnoi plastinki s krugovym izotropnym vklucheniem/.  
04 p0667 A69-14264  
The stress of an anisotropic plate with a soldered in isotropic nucleus in the presence of notches at the seam /Napriazhennoe sostoiianie anizotropnoi plastinki s vpaianym izotropnym iadrom pri nalichii razrezov na spae/.  
18 p3218 A69-34602
- LUTTE, N. P.**  
Design of an accurate sampled-data simulator using field-effect transistors.  
03 p0405 A69-13600
- LUTTERS, S. F.**  
Development of adhesive-bonded joints for glass resin composite sandwich structures.  
24 p4403 A69-43462
- LUTZ, B. L.**  
Radiative lifetimes for n II ultraviolet multiplets.  
02 p0280 A69-11928  
Pressure-induced alpha super 1 sigma sub g super plus-X super 1 sigma sub g super plus absorption in the vacuum ultraviolet spectrum of molecular nitrogen.  
22 p3986 A69-40723
- LUTZ, H.**  
Experiments on deoxidation of sintered molybdenum with carbon, boron, and silicon /Versuche zur Desoxidation von Sintermolybdaen mit Kohlenstoff, Bor und Silizium/.  
02 p0265 A69-12002
- LUTZ, O. P.**  
A semiautomatic test set for in-circuit testing of diodes.  
12 p2035 A69-25835
- LUTZ, S. G.**  
Economic factors influencing the break-even relations between satellite and terrestrial point-to-point communication.  
19 p3456 A69-36822
- LUTZ, T. E.**  
Stellar radial velocities derived from microphotometer measurements.  
12 p2153 A69-25810
- LUTZE, F. H., JR.**  
Rotational locks for near-symmetric satellites.  
19 p3397 A69-35609
- LUUD, I. S.**  
Spectroscopic study of P Cygni.  
16 p2864 A69-32595
- LUXMOORE, A.**  
Applications of the telecentric principle in optical strain measurements.  
21 p3844 A69-39322
- LUXMOORE, A. R.**  
The moire effect applied to experimental stress analysis.  
22 p4042 A69-40315
- LUYTEN, W. J.**  
On the nature of faint blue objects in high galactic latitudes. II - Summary of photometric results for 301 objects in seven survey fields.  
10 p1788 A69-24123
- LUZ, E.**  
Contribution to the phenomenological description of the damping properties of solids with applications to vibrating continua /Beitrag zur phanomenologischen Beschreibung der Daempfungseigenschaften fester Stoffe mit Anwendungen auf schwingende Continua/.  
11 p1970 A69-24605
- LUZANOVA, I. A.**  
Influence of the variability of the elastic characteristics of the hydraulic drive on the dynamics of the hydraulic actuator /Vliianie peremennosti uprugikh svoystv gidroprivoda na dinamiku gidrodvigatelia/.  
14 p2405 A69-29423
- LUZHNIKOV, L. P.**  
Effect of tin and zirconium on transformations during heat treatment of the Ti-10 percent Cr alloy /Vliianie olova i tsirkoniia na prevrashcheniia pri termicheskoi obrabotke splava Ti plus 10 percent Cr/.  
07 p1162 A69-18775
- LUZHNKOVA, M. A.**  
Kinetics of the evaporation of metal particles in an arc plasma /Kinetika ispareniia chastits metallov v dugovoi plazme/.  
15 p2663 A69-30990
- LUZOV, A. A.**  
Spectrographic method of analyzing the variations in cosmic-ray intensity /Spektrograficheskii metod analiza variatsii intensivnosti kosmicheskikh luche/.  
10 p1759 A69-22836
- LUZZI, T. E.**  
Electromagnetic wave scattering from a finite volume turbulent plasma.  
23 p4116 A69-41587
- LVOV, B. S.**  
Selection of the optimal structure of fiberglass products. I /K vyboru optimal'noi struktury steklovloknitov. I/.  
08 p1335 A69-20332  
The choice of an optimal structure of fiberglass-reinforced materials. II /K vyboru optimal'noi struktury steklovloknitov. II/.  
18 p3162 A69-35356
- LVOV, B. V.**  
Integral method of measuring atomic absorption in a flame /Integral'nyi metod izmereniia atomnoi absorptsii v plameni/.  
20 p3539 A69-37605
- LVOV, E. L.**  
Analysis of linear automatic control systems with periodically varying parameters by the modulated harmonics method /Analiz lineinykh sistem avtomaticheskogo regulirovaniia s periodicheskii izmer-niaushchimiia parametrami metodom modulirovannykh garmonik/.  
12 p2054 A69-26720
- LVOVA, A. A.**  
Estimation of the dust component of the upper atmosphere by the twilight method /Otsenka pylevoi sostavliaushchei verkhnei atmosfery sumernym metodom/.  
01 p0075 A69-11191
- LVOVA, G. G.**  
Effect of boron on the friction of porous nickel at high velocities and temperatures /Vliianie bora na protsess treniia poristogo nikelia pri povyshennykh skorostiakh i temperaturakh/.  
15 p2641 A69-31187
- LYDIARD, W. G.**  
Aircraft auxiliary power systems and their influence on power plant design. B.  
17 p3018 A69-33217
- LYE, R. G.**  
Surfaces and interfaces in materials technology.  
03 p0434 A69-13868
- LYKODIS, P. S.**  
Magnetofluid-mechanic laminar natural convection - An experiment.  
01 p0134 A69-11407  
Magnetofluid-mechanic pipe flow in a transverse magnetic field with and without heat transfer. [AIAA PAPER 69-723]  
17 p3012 A69-33497
- LYKOV, A. V.**  
Occurrence of convection in cavities with a variable wall temperature /O vozniknovenii konveksii v polostiakh s peremennoi temperaturoi stenok/.  
07 p1241 A69-18921



- Analytical Heat Diffusion Theory.  
08 p1421 A69-20647
- Certain analytical methods for solving the problems of unsteady heat conduction /Brief survey/ /Nekotorye analiticheskie metody resheniya zadach nestatsionarnoi teploprovodnosti /kratkii obzor/.  
14 p2539 A69-29456
- Weakly damped transverse and thermal waves in a fluid /Slabozatukhaiushchie poperechnye i teplovye volny v zhidkosti/.  
15 p2718 A69-31168
- Heat convection waves in viscoelastic fluids /Termokonvektivnye volny v viazko-uprugikh zhidkostiakh/.  
16 p2878 A69-31952
- LYLE, G. C.  
Line by line calculation of spectra from diatomic molecules and atoms assuming a Voigt line profile.  
18 p3177 A69-35239
- LYMAN, F. A.  
Analysis of temperature distributions in heat pipe wicks.  
[ASME PAPER 69-HT-23] 24 p4412 A69-43545
- LYMAN, J. T.  
Mutation-induction and nuclear inactivation in *Neurospora crassa* using radiations with different rates of energy loss.  
03 p0373 A69-13490
- LYMER, A.  
An engineering approach to the selection and application of mechanical seals.  
[ASLE FICFS PREPRINT 25] 15 p2620 A69-30488
- LYNAM, C.  
The plasmopause, the plasma sheet, and energetic trapped electrons in the earth's magnetosphere.  
12 p2151 A69-26953
- LYNCH, C. T.  
The technical potential for metal matrix composites.  
06 p0939 A69-16941
- LYNCH, D. D.  
A digital modified discrete Fourier transform Doppler radar processor.  
03 p0389 A69-13196
- LYNCH, J. H.  
Gamma heating in thin heavy-element absorbers.  
07 p1178 A69-18825
- Measured thermal-neutron-flux perturbations in cylinders in a test reactor.  
20 p3575 A69-38274
- LYNCH, R.  
A fluid damper for spacecraft nutation.  
16 p2868 A69-32561
- LYNCH, R. A.  
The launch-cost bottleneck.  
18 p3210 A69-35087
- LYNCH, U. H. D.  
Capabilities of the TOLA simulation.  
[AIAA PAPER 69-810] 19 p3289 A69-35630
- LYNCH, W. T.  
Elimination of the guard ring in uniform avalanche photodiodes.  
05 p0733 A69-16559
- LYNCHAK, K. A.  
Certain properties of praseodymium germanides /Nekotorye svoystva germanidov prazeydima/.  
23 p4199 A69-42467
- LYNDEN-BELL, D.  
The Schroedinger operator criterion for the stability of galaxies and gas spheres.  
16 p2862 A69-32374
- Galactic nuclei as collapsed old quasars.  
21 p3815 A69-39610
- The Hartree-Fock exchange operator and the stability of galaxies.  
22 p4022 A69-40468
- LYNDS, C. R.  
Line identifications in quasi-stellar objects.  
03 p0508 A69-13173
- Spectroscopic characteristics of quasi-stellar sources /Spektroskopicheskie kharakteristiki kvazizvezdnykh istochnikov/.  
12 p2168 A69-27048
- Interpretation of the law of optical radiation for quasi-stellar sources /Ob interpretatsii zakona opticheskogo izlucheniia dlia kvazizvezdnykh istochnikov/.  
12 p2168 A69-27052
- Spectroscopic characteristics of the quasi-stellar objects, 1966.  
24 p4375 A69-42551
- On the interpretation of the optical radiation law for quasi-stellar sources.  
24 p4375 A69-42552
- LYNDS, R.  
Optical identification and observations of the pulsar NP 0532.  
09 p1592 A69-21458
- Photometric selection of quasi-stellar objects.  
09 p1604 A69-22272
- Spectroscopic observations of the pulsar NP 0532.  
21 p3799 A69-38646
- LYNE, A. G.  
Linear polarization in pulsating radio sources.  
17 p3036 A69-33635
- Further impulsive emission from CP 0950.  
17 p3036 A69-33638
- LYNESS, J. N.  
Quadrature methods based on complex function values.  
24 p4341 A69-43229
- LYNGA, G.  
Crab and Vela pulsars.  
13 p2354 A69-28470
- The occultation of BD -17 deg 4388 by Neptune. II.  
17 p3041 A69-33815
- The occultation of BD -17 deg 4388 by Neptune. III.  
17 p3041 A69-33816
- A catalogue of faint OB stars between Carina and Centaurus.  
23 p4211 A69-41488
- LYNN, J. J.  
Short arc optical survey of the GEOS North American network.  
15 p2599 A69-31342
- LYNN, K. J. W.  
Multisite observations of the VLF transequatorial propagation anomaly.  
10 p1655 A69-23416
- LYNN, M.  
Synthesis and evaluation of curing agents.  
[AIAA PAPER 69-436] 16 p2747 A69-32777
- LYNN, P. P.  
Free transverse vibration of flat slabs.  
[ASCE PAPER 739] 09 p1616 A69-21928
- LYNN, R. R.  
Tail rotor design. II - Structural dynamics.  
[AHS PAPER 342] 17 p3059 A69-33504
- Tail rotor design. I - Aerodynamics.  
[AHS PAPER 300] 17 p2895 A69-33549
- Future aerodynamics research.  
23 p4058 A69-41374
- LYNNWORTH, L. C.  
Ultrasonic thermometry for nuclear reactors.  
[IEEE PAPER IC-4] 07 p1134 A69-19186
- Use of ultrasonics for high-temperature measurements.  
10 p1694 A69-23373
- Ultrasonic testing of solids at elevated temperatures.  
15 p2632 A69-31514
- LYON, A. J.  
North-south ionospheric drifts near the magnetic equator.  
01 p0062 A69-10138
- LYON, C. J.  
Wheat seedling growth in the absence of gravitational force.  
01 p0015 A69-10932
- Gravity and the upright plant.  
15 p2555 A69-30470
- LYON, E. F.  
Experimental evidence for a detached lunar compression wave.  
05 p0824 A69-16251
- LYON, G. F.  
Irregularities in the lower ionosphere deduced from beacon satellite observations.  
05 p0757 A69-16405
- Acoustic waves in the ionosphere.  
[AFRL-69-0291] 12 p2065 A69-26104
- An isolated field-aligned irregularity.  
20 p3497 A69-38108
- LYON, J. A. M.  
The reduction of coupling between antennas on an aerospace vehicle.  
05 p0729 A69-15977
- LYON, T. J.  
Radome boresight measurement systems.  
07 p1109 A69-19517
- LYON, W. D.  
Comment on approximate molecular orbitals. III.  
01 p0123 A69-10547
- LYONS, L. R.  
Equatorial anomaly during a period of declining solar activity.  
23 p4161 A69-42436
- LYONS, M. G.  
A simple momentum control system for satellite maneuvering.  
18 p3207 A69-34684
- Reaction-boom attitude control systems.  
[AIAA PAPER 69-834] 21 p3822 A69-39365
- LYONS, W. C.  
Failure mechanisms in materials-structures subjected to short-time loadings.  
15 p2639 A69-30364
- LYSENKO, A. P.  
Precision "angle-code" type converters employing frequency sensors of quantum magnetometers /Precizionnye preobrazovateli tipa "ugol-kod" na chastotnykh datchikakh kvantovykh magnetometrov/.  
12 p2016 A69-25963
- Utilization of deep-freezing as a means of substantially improving the characteristics of nuclear-precision magnetometers /Ob ispol'zovanii glubokogo okhlazhdeniia dlia sushchestvennogo uluchsheniia kharakteristik iadernykh pretsessionnykh magnetometrov/.  
14 p2446 A69-29083
- LYSENKO, S. V.  
Effect of high vacuum on oxidative processes in bacteria as well as on activity of certain enzymes.  
15 p2557 A69-31354
- LYSENKO, V. G.  
Holography without a reference beam for three-dimensional holograms.  
23 p4166 A69-41969
- LYSENKO, V. S.  
Optical characteristics of metallic blacks /Opticheskie kharakteristiki metallicheskh chernei/.  
17 p3075 A69-33976
- LYSOV, B. S.  
Fundamentals of electroplating titanium, vanadium, and their alloys from molten salts /Osnovy polucheniia pokrytii iz titana, vanadiia i ikh splavov elektrolizom rasplavlennykh solei/.  
03 p0446 A69-13574
- LYSOV, M. I.  
Investigation of the shot-impact shaping of parts made of monolithic panels /Issledovanie protessa drobeudarnogo formoobrazovaniia detalei iz monolitnykh panelei/.  
03 p0433 A69-12963
- Elastoplastic torsion of thick-walled closed shells of variable thickness /Uprugo-plasticheskoe kruchenie zamknutykh tolstostennykh obolochek s peremennoi tolshchinoi/.  
21 p3835 A69-38882
- LYTLE, D. W.  
Convergence criteria for transversal equalizers.  
01 p0027 A69-10251
- LYTLE, F. W.  
X-ray integrated reflection coefficient of lithium fluoride.  
20 p3582 A69-37137
- LYTLE, R. J.  
Prolate spheroidal antennas in isotropic plasma media.  
22 p3914 A69-40702
- LYTLE, W. J.  
Effective failure analysis and corrective action techniques for integrated circuit applications.  
15 p2580 A69-31132
- LYTTLETON, R. A.  
On the theory of the structure of Mars.  
08 p1387 A69-20092
- The origin of the moon.  
13 p2352 A69-27902

M

- MA, C. Y.  
Differential boundary-layer separation effects in the flow over a rotating cylinder.  
17 p2958 A69-34213

- MA, L. N.**  
Synthesis of high data rate coherent telemetry systems.  
07 p1083 A69-19123
- MAAG, B.**  
Technological possibilities of active magnetic attitude control for spin-stable satellites / Technische Möglichkeiten einer aktiven magnetischen Lageregelung fuer spinstabilisierte Satelliten/.  
03 p0521 A69-13644
- MAAG, C. R.**  
Thermal radiative characteristics of low density charring ablators for planetary studies.  
[AIAA PAPER 69-61] 06 p0947 A69-18148
- MAAK, W.**  
Dirichlet series with a functional equation /Dirichletreihen mit Funktionalgleichung/.  
05 p0786 A69-15882
- MAAS, D. E.**  
Spacecraft spin axis motion with active internal devices.  
02 p0332 A69-11739
- MAASBERG, W.**  
Hybrid diagnostic techniques.  
04 p0568 A69-15360
- MAASS, D.**  
Ring Airfoil Theory in the Case of Nonuniform Incidence /Zur Theorie des Ringflügels bei ungleichförmiger Anströmung/.  
17 p2889 A69-32995
- MAASS, K.**  
Controlled voltage converter systems for onboard electric power supplies in spacecraft /Geregelte Spannungs-konverter-Systeme fuer elektrische Bordnetze von Raumflugkoerpern/.  
12 p2015 A69-25867
- MABE, R. C.**  
Stored program decommutation techniques.  
23 p4133 A69-41749
- MABLEKOS, E. E.**  
Nonlinear analysis of transistor networks by Kron's mesh approach.  
09 p1471 A69-21632
- MABRY, J. E.**  
Human reaction to aircraft engine noise.  
02 p0204 A69-12766  
Sound duration and its effect on judged annoyance.  
18 p3097 A69-34324
- MABSON, W. E.**  
Study of man during a 56-day exposure to an oxygen-helium atmosphere at 258 mm. Hg total pressure. XIV - Communications.  
07 p1066 A69-19420
- MABUCHI, H.**  
The cometary origin of meteors deduced from the effect of solar cosmic radiation on meteorites and the significance of this origin /Origine cometaire des meteorites deduite de l'effet du rayonnement cosmique solaire dans les meteorites et la consequence de cette origine/.  
08 p1406 A69-20930
- MABUCHI, I.**  
Studies on the convective heat transfer from a rotating disk. III - Heat and mass transfer in a laminar flow about a rotating disk with suction or injection in the axial stream.  
06 p1029 A69-17002  
Studies on the convective heat transfer from a rotating disk. IV.  
06 p1029 A69-17003
- MACARIO, R. C. V.**  
High-Q N-path filter using diode bridges.  
07 p1089 A69-18249  
Systematic method of calculating the amplitude spectra of waveform sequences.  
12 p2030 A69-26389
- MACAVEL, F.**  
Analysis of jointed three-dimensional structures by transfer matrices /Rezolvarea structurilor spatiale articulate prin matrici de transfer/.  
23 p4236 A69-42485
- MACCALLUM, M. A. H.**  
A class of homogeneous cosmological models.  
11 p1919 A69-25245
- MACCALLUM, N. R. L.**  
Flame stabilization on rectangular burners.  
02 p0353 A69-12320
- MACCALOUS, J. W.**  
Methods of fabricating super insulation blankets.  
09 p1507 A69-22330
- MACČAMY, R. C.**  
Approximate boundary controllability for the heat equation.  
01 p0173 A69-10008
- MACCLINTOCK, C.**  
Paleontological evidence of variations in length of synodic month since late Cambrian.  
02 p0241 A69-11807
- MACCORMACK, R. W.**  
The effect of viscosity in hypervelocity impact cratering.  
[AIAA PAPER 69-354] 13 p2366 A69-28288
- MACCREADY, P. B., JR.**  
The aircraft measuring platform.  
[AIAA PAPER 69-157] 06 p0869 A69-18153
- MACDERMOTT, W. N.**  
Theoretical and experimental nonequilibrium expansions of partially-dissociated air.  
[AIAA PAPER 69-328] 13 p2200 A69-28263
- MACDONALD, A. D.**  
Electron loss processes in air afterglows.  
22 p4006 A69-40527
- MACDONALD, B. A.**  
Experimental methods of X-ray stress analysis.  
24 p4331 A69-42736
- MACDONALD, B. W.**  
Thrust transient prediction and control of solid rocket engines.  
[WSCJ PAPER 68-33] 07 p1203 A69-18365
- MACDONALD, G. J. F.**  
Geophysics of the moon.  
13 p2352 A69-27903
- MACDONALD, H. C.**  
Geoscience applications of radar sensors.  
11 p1835 A69-24692  
The potential of radar in geological exploration.  
12 p2099 A69-27009
- MACDONALD, J. R.**  
Review of some experimental and analytical equations of state.  
14 p2486 A69-29470
- MACDONALD, N. C.**  
Probing of Gunn effect domains with a scanning electron microscope.  
08 p1283 A69-20162
- MACDONALD, N. J.**  
Estimating the motion and mechanics of a planetary atmosphere.  
16 p2780 A69-32306
- MACDONALD, R.**  
Spectrum of the night airglow between 3 and 4 microns.  
03 p0426 A69-14251
- MACDONALD, R. W.**  
Metal-semiconductor IMPATT diode.  
08 p1286 A69-20862
- MACDONALD, V. H.**  
Optimum passive bearing estimation in a spatially incoherent noise environment.  
20 p3576 A69-37322
- MACDONALD, W. M.**  
Penetration of auroral electrons into the atmosphere.  
07 p1128 A69-19368
- MACDOUGALL, H. R.**  
Nonlinear analysis of shells of revolution by the matrix displacement method.  
02 p0346 A69-12511
- MACDOUGALL, J. W.**  
The equatorial ionospheric anomaly and the equatorial electrojet.  
23 p4160 A69-42432
- MACDOWALL, J.**  
Airborne geophysical remote sensors for mineral and water resources exploration.  
[RAES PAPER 8] 22 p3946 A69-40481  
The development and tests of an airborne correlation spectrometer for air pollution survey.  
[RAES PAPER 7] 22 p3896 A69-40488
- MACDUFF, J. N.**  
Transient testing of man.  
23 p4101 A69-41494
- MACE, J.**  
Certain aerothermodynamic problems of thrust inverters in rocket thrusters /Quelques problemes aerothermodynamiques des inverseurs de poussee des propulseurs d'engins/.  
17 p3018 A69-33327
- MACEK, A.**  
Combustion of boron particles at atmospheric pressure.  
[AIAA PAPER 69-562] 16 p2880 A69-32741
- MACELROY, R. D.**  
Characterization of ribulose diphosphate carboxylase and phosphoribulokinase from *Thiobacillus thio-parus* and *Thiobacillus neapolitanus*.  
02 p0199 A69-11866  
Control of ATP-dependent CO sub 2 fixation in extracts of *Hydrogenomonas facilis* - NADH regulation of phosphoribulokinase.  
15 p2554 A69-30036
- MACEY, R. A.**  
Differentiating circuits with nonlinear resistance and capacitance.  
08 p1295 A69-19910
- MACFARLANE, M.**  
Optical pulsations in the Crab Nebula pulsar.  
08 p1394 A69-20623  
Further observations of the Crab Nebula optical pulsar.  
12 p2172 A69-27170  
X-ray and optical observations of the pulsar NP 0532 in the Crab Nebula.  
15 p2679 A69-31529
- MACFARLANE, M. J.**  
Isophotal wavelengths of the U, B, V, R systems.  
08 p1408 A69-21134
- MACGREGOR, G. A.**  
Mobile telescope for examining vertical intensity of cosmic ray fluxes.  
09 p1493 A69-21420
- MACGREGOR, R. K.**  
Free convection through vertical plane layers - Moderate and high Prandtl number fluids.  
[ASME PAPER 68-WA/HT-4] 05 p0846 A69-16115
- MACHABELI, G. Z.**  
Quasi-linear approximation for a magnetoactive plasma with allowance for collisions - Cerenkov effect /Kvazilineinoe priblizhenie dlia magnitoaktivnoi plazmy s uchetom stolknoventii - Effekt Cherenkova/.  
08 p1365 A69-20550  
Nonlinear excitation of low-frequency plasma waves.  
12 p2138 A69-26709
- MACHAVARIANI, S. K.**  
Test of the hypothesis of the existence of a passive baryon state by means of the calorimeter telescope technique.  
13 p2331 A69-28401
- MACHEK, J.**  
The determination of the real shape of the time correlation function computed from partially averaged data.  
05 p0786 A69-15924
- MACHENHAUER, B.**  
On the observed large-scale atmospheric wave motions.  
15 p2647 A69-30216
- MACHEVARIANI, M. M.**  
Minimization of the thickness of an inhomogeneous layer for a given reflection coefficient of a monochromatic wave /Minimizatsiia tolshchiny neodnorodnogo sloia pri zadannom koeffitsiente otrazheniia monokhromaticheskoi volny/.  
13 p2297 A69-27381
- MACHIDA, S.**  
Plastic deformation and rupture of thin circular plate under lateral pressure. I - Studies on rupture disc.  
06 p1020 A69-17129  
Rupture of thin circular plate under statical and pulsating lateral pressure - Studies on rupture disc - the second report.  
19 p3434 A69-35773
- MACHIN, K. E.**  
Accuracy of compensation methods in photoelastic fringe-order measurements.  
22 p3945 A69-40082
- MACHINSKII, G. V.**  
Influence of prolonged hypokinesia on the altitude tolerance of white rats.  
08 p1262 A69-19929



## MACHLIN, E. S.

- F.I.M. imaging of solute atoms in dilute binary alloys.  
01 p0092 A69-10055
- A field ion microscope investigation of the effect of rhenium on the lattice solid solubility of oxygen in tungsten.  
08 p1329 A69-20007

## MACHLIN, I.

- Refractory Metal Alloys- Metallurgy and Technology. Proceedings of a Symposium on Metallurgy and Technology of Refractory Metals, Washington, D.C., April 25, 26, 1968.  
07 p1164 A69-18790
- Ductility and mechanical properties of alloyed chromium composites.  
23 p4177 A69-41672

## MACHNE, G.

- Equations for a gradually changing motion and Coriolis coefficients /Sulle equazioni del moto gradualmente vario e sui coefficienti di Coriolis/.  
15 p2593 A69-31489

## MACHUEV, V. I.

- Heat conductivity of gallium telluride /Teploprovodnost' tellurida gallia/.  
16 p2824 A69-31572

## MACIAG, R.

- Impurity-dislocation interaction and repeated yielding in a commercial Al alloy.  
04 p0613 A69-14440

## MACIAG, R. J.

- The effect of strain rate and temperature on the flow stress of 7075 aluminum.  
03 p0443 A69-13120

## MACIE, T.

- Electric propulsion system performance evaluation. [AIAA PAPER 69-236]  
09 p1560 A69-21213

## MACIE, T. W.

- Solar electric propulsion system evaluation. [AIAA PAPER 69-498]  
16 p2843 A69-32708

## MACINANTE, J. A.

- The dynamic behaviour of a large steerable radio telescope.  
03 p0412 A69-14093

## MACINNES, W.

- Crack propagation and initiation in low cycle strain controlled fatigue.  
12 p2188 A69-26914

## MACIOCE, E.

- Generalized investigation of turbojet performance data. I /Disamina generalizzata delle prestazioni del turboreattore. I/.  
21 p3786 A69-39858

## MACIULAITIS, A.

- Experimental velocity profile determinations in MHD flow through a dielectric circular channel.  
13 p2307 A69-27501

## MACK, M. E.

- Picosecond laser pulses.  
07 p1148 A69-18856
- Mode locking the ruby laser.  
10 p1705 A69-23813

## MACK, R. B.

- Arrays of cylindrical dipoles.  
04 p0574 A69-14353

## MACKAY, C. D.

- Accurate positions of CP 0950 and CP 1133.  
17 p3036 A69-33639

## MACKAY, J. S.

- Space mission analysis.  
04 p0652 A69-14519

## MACKAY, T. L.

- Stress corrosion susceptibility of titanium alloys in aqueous environment.  
21 p3743 A69-38663

## MACKEN, D.

- A method for detecting and measuring frequency of surface vibrations using a helium-neon laser.  
09 p1515 A69-21430

## MACKENROTH, E.

- Determination of the flow field of an ideal axisymmetric impinging jet. [AICHE PAPER 31F]  
08 p1302 A69-19847

## MACKENZIE, A. C.

- Generalized stress/strain rate relations for creep of thin shells - A comparison of "exact" and approximate relations.  
22 p4041 A69-40013

## MACKENZIE, J. D.

- Hardness and low-temperature deformation of silica glass.  
03 p0453 A69-13616
- Recent advances in glass science and technology.  
08 p1341 A69-21126
- Some unique mechanical properties of glass.  
12 p2119 A69-26831

## MACKENZIE, K. E.

- Magnetic suspension and guidance for high speed rockets by superconducting magnets.  
17 p2946 A69-33789

## MACKENZIE, K. R.

- Synthesized plasma generator.  
06 p0927 A69-17707

## MACKKEY, E. F.

- OGO-IV ultraviolet airglow spectrometer.  
19 p3315 A69-36682

## MACKKEY, M. C.

- Public policy for air transportation.  
06 p1040 A69-16835

## MACKIE, A. G.

- Two-dimensional quasi-stationary flows in gas dynamics.  
04 p0590 A69-15191
- The water entry problem.  
08 p1305 A69-20995

- Two-dimensional, unsteady motion of a medium with a linear pressure-density relationship.  
20 p3512 A69-36916
- A cavitation model in one-dimensional unsteady motion.  
21 p3693 A69-38752

## MACKINNEY, H. W.

- Comparison of sunlight and carbon arc exposure of polyesters by resulting chemical activity.  
10 p1716 A69-23978

## MACKINNON, D.

- Terminal phase navigation.  
07 p1177 A69-19213
- Quasi-optimization of a localizer acquisition system.  
24 p4348 A69-43312

## MACKINNON, D. J.

- The effect of hygroscopic particles on the backscattered power from a laser beam.  
17 p2981 A69-33160

## MACKINNON, J. D.

- Data system for turbine engine development.  
10 p1660 A69-23284

## MACKINNON, R. F.

- Atmospheric vertical energy flux due to a ground disturbance.  
10 p1685 A69-23856

## MACKINTOSH, I. W.

- Repetitive Q-switching of a continuously pumped Nd/YAG laser using a Fabry-Perot interferometer.  
06 p0938 A69-18229

## MACKISON, D. L.

- Gravity-gradient stabilization of synchronous orbiting satellites.  
03 p0504 A69-12857

- Magnetic sample-and-hold damping of a gravity-gradient stabilized satellite.  
07 p1227 A69-18337

- On the motion and stability of a dual spin satellite with nutation damping. [AIAA PAPER 69-857]  
21 p3823 A69-39385

## MACKLIN, B. A.

- The chemical vapor deposition of iridium.  
01 p0097 A69-10643

- Commercial chemical vapor deposition of refractory materials.  
01 p0097 A69-10645

## MACKLIN, R. L.

- Neutron capture cross-sections and the s- process.  
08 p1357 A69-20896

## MACKO, D.

- Structuring of multilevel systems.  
12 p2049 A69-26082

## MACLEAN, M. A.

- The design of swept-frequency topside sounders.  
20 p3507 A69-37859

## MACLEOD, C. J.

- Drift elimination in system identification using binary m-sequences.  
11 p1834 A69-24547

## MACLEOD, J. K.

- Determination of the structures of the ions produced in the single and double McLafferty rearrangements by ion cyclotron resonance spectroscopy.  
19 p3265 A69-36288

## MACLEOD, J. M.

- Observations of four H II regions at a wavelength of 2.8 centimeters.  
09 p1598 A69-22186

- Rapid radio variations in BL Lac.  
21 p3798 A69-38545

- Flux densities of radio sources at a wavelength of 2.8 cm.  
22 p4014 A69-40127

## MACLEOD, M. A.

- E-region vertical neutral winds.  
21 p3703 A69-38363

## MACLEOD, N. H.

- ATP assay of terrestrial soils - A test of an exobiological experiment.  
20 p3473 A69-37567

## MACMILLER, C. J.

- Investigation of subsonic duct distortion. [AIAA PAPER 69-449]  
16 p2843 A69-32700

## MACNAIR, D.

- Study of electron emitters for use in gas lasers.  
23 p4172 A69-41394

## MACNAMARA, W. D.

- Study of the effect of cabin environment on insensible water loss.  
17 p2914 A69-33182

- Responsiveness of the cortex and visual pathway during transient hypotension.  
22 p3878 A69-40779

## MACNEAL, R. H.

- The heliogyro, an interplanetary flying machine.  
06 p1015 A69-17591

## MACOUREK, M. N.

- Boundary layer acoustic measurements in transitional and turbulent flow at M infinity equals 4.0. [AIAA PAPER 69-344]  
13 p2249 A69-28279

## MACOVSKI, A.

- Efficient holography using temporal modulation.  
13 p2258 A69-27201

## MACPHERSON, A. K.

- The three-dimensional detonation polar and an application to spinning detonation.  
11 p2002 A69-25353

- On the structure of single headed spin detonation.  
19 p3451 A69-36368

## MACPHERSON, B. M.

- Effects of Minor Elements on the Weldability of High-Nickel Alloys, American Welding Society, National Fall Meeting, Houston, Tex., October 3, 1967, Symposium Proceedings.  
22 p3966 A69-39878

## MACPHERSON, D.

- Mission analysis technology.  
09 p1585 A69-21209

- Spacecraft design for multipurpose solar electric propulsion missions. [AIAA PAPER 69-252]  
09 p1568 A69-21729

## MACPHIE, R. H.

- Spatial frequency analysis of random arrays.  
17 p2929 A69-33873

## MACQUEEN, R. M.

- Space observations of the solar corona. [AAS PAPER 68-217]  
02 p0313 A69-11483

- New far infrared observations of atmospheric molecular lines.  
04 p0628 A69-15146

- Infrared observations of the outer solar corona.  
09 p1600 A69-22205

- Infrared scattering observations in the upper atmosphere.  
18 p3126 A69-34281

## MACRAE, A. U.

- An electron diffraction study of cesium adsorption on tungsten.  
19 p3392 A69-36733

## MACRIS, C. J.

- A remarkable eruptive prominence on the solar disk on January 29, 1968.  
03 p0516 A69-14043

## MACRIS, G. J.

- Forecasting of minimum temperature by measurement of the balance of thermal terrestrial radiation.  
23 p4184 A69-42211

## MACROWIAK, E.

Equivalent circuit of the MOS transistor for use in the IMAG I program /Schema equivalent du transistor MOS utilisable dans le programme "IMAG I"/.  
08 p1280 A69-19978

## MADAGAN, A. N.

Free-flight investigation of the aerodynamic characteristics of a 10-deg semiangle cone at Mach numbers from 6 to 16.  
[AIAA PAPER 69-133] 06 p0862 A69-18050

## MADAS, I.

The consideration of catastrophic failures in logic circuit and system design.  
08 p1299 A69-21107

## MADAYAG, A. F.

Metal Fatigue- Theory and Design.  
06 p1024 A69-17525

## MADDALON, D. V.

Influence of measured free-stream disturbances on hypersonic boundary-layer transition.  
[AIAA PAPER 69-704] 17 p2953 A69-33453

## MADDEN, O. H.

The effect of oxidizer particle size and binder type on nonacoustic instability.  
[AIAA PAPER 69-175] 06 p0983 A69-18152

## MADDEN, R.

Stress waves resulting from hypervelocity impact.  
[AIAA PAPER 69-355] 13 p2365 A69-28287

Equations for the comparison of the ballistic limit of single and double wall structures.  
[AIAA PAPER 69-370] 13 p2367 A69-28302

## MADDIX, H. S.

Harmonic generation in TR tubes.  
15 p2573 A69-30032

## MADEJSKI, J.

Thermodynamics of ideal multiatomic gases in local non-equilibrium.  
02 p0350 A69-11552

## MADER, J. J.

State of development of electric space propulsion systems in the Federal Republic of Germany /Stand der Entwicklung von elektrischen Raumfahrtantriebssystemen in der Bundesrepublik Deutschland/.  
03 p0496 A69-13996

## MADER, W.

Identification of phases existing in technical cemented carbides by means of microprobe and temper etch /Identifizierung der in technischen Hartmetallen auftretenden Phasen mit Hilfe der Mikrosonde und durch Anlasssetzung/.  
05 p0780 A69-15989

## MADEV, R.

The attenuation of space protons by thin cylindrical shell and slab disk shields.  
10 p1723 A69-23165

## MADHUSUDAN

Intrinsic equations of steady diabatic gas flows.  
21 p3695 A69-39007

## MADIER, P.

Stable balloon systems for long-duration stratospheric flights /Systemes stables de ballons pour vols stratospheriques de longue duree/.  
15 p2551 A69-30703

## MADIGAN, R. J.

Flight test report of experiments in inertial navigation system updating.  
[AIAA PAPER 69-842] 21 p3765 A69-39429

Flight evaluation of radar-inertial systems.  
[AAS PAPER 69-401] 24 p4252 A69-42831

## MADINA, F. SH.

Some boundedness and unboundedness criteria for the solutions of ordinary linear differential equations /Nekotorye kriterii ogranichenosti i neogranichenosti reshenii obyknovennykh lineynykh differentsial'nykh uravnenii/.  
12 p2120 A69-26035

## MADIX, R. J.

Reactive scattering from solid surfaces - Atom beam reactions of oxygen with heated germanium and silicon single-crystals.  
19 p3377 A69-36178

## MADONNA, M. A.

Investigation of environmental effects on pure fluid amplifiers.  
[ASME PAPER 68-WA/FE-31] 05 p0705 A69-16104

## MADSEN, E.

Green's function theory of parametric amplification in a magnetic system.  
15 p2668 A69-30685

## MADSEN, J.

An ATS-E solar cell space radiator utilizing heat pipes.  
[AIAA PAPER 69-630] 17 p3072 A69-33277

## MADSEN, M. M.

Measurement of medium-energy protons /Experiment S.71C/.  
13 p2328 A69-27756

## MADSEN, R. A.

Analytical approaches for the design of orbital refueling systems  
[AIAA PAPER 69-567] 16 p2868 A69-32721

## MADUEV, V. L.

Low-energy proton flux in the neighborhood of the moon on December 13, 1966 /Potok protonov malykh energii v okrestnosti Luny 13 dekabria 1966 g./.  
09 p1577 A69-21773

Device for investigating cosmic rays at altitudes from 200 to 400 km /Pribor dlia issledovaniia kosmicheskikh izluchenii na vysotakh 200-400 km/.  
23 p4165 A69-41732

## MAEDA, H.

On the steady-state error of nonlinear control systems.  
13 p2237 A69-27188

Pitching characteristics of peripheral jet ground effect machines.  
22 p3866 A69-40818

## MAEDA, K.

On the 40 cm Goettingen type wind tunnel. II.  
03 p0420 A69-14238

## MAEDA, K. I.

Small Rocket Instrumentation Techniques, COSPAR, Plenary Meeting, 11th, Symposium, Tokyo, Japan, May 17, 18, 1968, Proceedings.  
20 p3541 A69-37790

## MAEDA, K.-I.

Ionospheric irregularities and the cross-field plasma instability. I.  
01 p0073 A69-11178

Mid-latitude electron density profile as revealed by rocket experiments.  
23 p4155 A69-41563

## MAEDA, R.

Anomalous X-rays observed on Explorer 30.  
21 p3792 A69-39808

## MAEDA, S.

Turbulent heat transfer from a surface having stepwise discontinuities on the wall temperature.  
18 p3229 A69-34836

## MAEDA, T.

Fundamental studies of turbulent boundary layers with injection or suction through porous wall. I.  
11 p1871 A69-25027

Optimum design dimensions of an elliptical waveguide.  
12 p2044 A69-27070

Design and performance of aluminum elliptical waveguide.  
15 p2578 A69-30798

## MAEDER, A.

Position of binary stars in a number of photometric diagrams made at the Geneva Observatory /Positions des etoiles binaires dans quelques diagrammes de la photometrie de l'observatoire de geneve/.  
03 p0517 A69-14094

## MAEDER, G.

Influence of cumulative thermal cycling on the progressive disappearance of the martensitic transformation of 18 percent-nickel maraging steels /Influence de cyclages theramiques cumules sur la disparition progressive de la transformation martensitique des aciers "maraging" a 18 percent de nickel/.  
18 p3155 A69-34650

## MAEHLUM, B. N.

On the high latitude, universal time controlled F-layer.  
12 p2065 A69-26103

## MAEJIMA, Y.

Experimental studies of the harmonic radiation in a microwave gas discharge at 34 GHz frequency.  
08 p1283 A69-20177

## MAENPAA, J. H.

Fault isolation in conventional linear systems - A progress report.  
12 p2040 A69-26568

## MAERGOIZ, I. D.

Penetration of aperiodic electromagnetic waves into a ferromagnetic conducting medium /O proniknovenii

aperiodicheskikh elektromagnitnykh voln v ferromagnitnuu provodishchuiu sredu/.  
21 p3771 A69-39109

## MAES, W. J.

Acquisition of data for the Apollo applications program crew motion experiment.  
02 p0201 A69-11759

## MAEVA, S. V.

The thermal history of the terrestrial planets.  
20 p3597 A69-37333

## MAEVSKII, O. A.

Three-phase symmetrically regulated AC-to-DC converters with double switching in of the rectifiers /Trekhnaznye simmetrichno upravliaemye ventili'nye preobrazovateli s dvukratnym vklucheniem ventilei/.  
24 p4254 A69-42570

## MAEVSKII, V. M.

Interband transitions in molybdenum.  
03 p0442 A69-12986

## MAFFEI, P.

Infrared object in the region of IC 1805.  
04 p0655 A69-14665

Investigations of T associations. IV - Comparative study of Orion variables /Ricerche sulle associazioni t. IV - Studio comparativo delle variabili di Orione/.  
06 p1002 A69-17264

On some problems concerning the irregular eruptive variables.  
06 p0996 A69-17448

Observation of the FG Sagittae peculiar variable /Osservazioni della variabile peculiare FG Sagittae/.  
20 p3599 A69-37474

## MAFFETT, A. L.

Scattering matrices.  
03 p0384 A69-12904

RCS calculation of simple shapes - Monostatic.  
03 p0384 A69-12905

RCS calculation of complex shapes - Methods.  
03 p0384 A69-12910

RCS calculation of complex shapes - Examples.  
03 p0384 A69-12911

The interpretation of data.  
03 p0385 A69-12913

## MAGARSHACK, J.

Gunn oscillator as a frequency memory device.  
13 p2229 A69-27677

## MAGDALENO, R. E.

A neuromuscular actuation system model.  
02 p0202 A69-11952

## MAGDICH, L. N.

Time characteristics of the emission of a laser with modulated resonator parameters /Vremennye kharakteristiki izlucheniia lazera s moduliruemyimi parametrami rezonatora/.  
13 p2272 A69-28114

Control of gas-laser emission /Ob upravlenii izlucheniem gazovogo lazera/.  
13 p2273 A69-28432

## MAGEE, J. L.

On the nature of ion-molecule collisions.  
05 p0797 A69-16428

Computer-made movies and plotting descriptions of ion-molecule collisions with polar targets.  
24 p4352 A69-43124

## MAGEE, J. P.

The design and performance prediction of propeller/rotors for VTOL applications.  
[AHS PAPER 325] 17 p2894 A69-33534

## MAGEEAN, J. V.

Space storable propellant performance with the coaxial injector.  
[AIAA PAPER 69-507] 16 p2829 A69-31848

Space storable propellant performance with the coaxial injector.  
[AIAA PAPER 69-507] 16 p2835 A69-32772

## MAGEL, J. R.

Telemetered heart rate response to selected competitive swimming events.  
23 p4100 A69-41444

## MAGER, A.

Sudden acceleration of a laminar boundary layer by a moving belt.  
[AIAA PAPER 69-40] 06 p0912 A69-18049

## MAGGIN, B.

NASA space program possibilities and upper stage implications.  
[AAS PAPER 69-359] 24 p4418 A69-42828



## MAGGS, J. E.

Conjugacy of visual auroras during magnetically quiet periods.  
05 p0753 A69-16247

## MAGID, M.

Precision determination of the dielectric properties of nonmagnetic high-loss microwave materials.  
12 p2079 A69-26047

## MAGIROS, D. G.

The stability of the helicoidal precession in the sense of Liapounov, Poincare, and Lagrange /La stabilite de la precession helicoidale dans le sens de Liapounov, Poincare et Lagrange/.  
12 p2130 A69-26286

## MAGNAN, C.

Emission lines in moving atmospheres.  
06 p1009 A69-17965  
Satellite components of lines formed in a differentially rotating disk /Composantes satellites de raies formees dans un disque en rotation differentielle/.  
07 p1219 A69-19336

## MAGNANTE, P. C.

Efficient second-harmonic generation with diffraction-limited and high-spectral-radiance Nd-glass lasers.  
09 p1514 A69-21333

## MAGNUSHEVSKII, V. R.

Mismatch error in measuring small losses in circulators and reciprocal quadrupoles /O pogreshnosti ras-slogaslozhenii pri izmerenii mal'kikh poter' v tsirkulyatorakh i vzaimnykh chetyrekhpolusnikakh/.  
22 p3875 A69-40259

## MAGOMAEV, L. D.

Calculation of the vibrations of turbine blades by means of an analog computer /O raschete kolebaniy turbinnnykh lopatok na AVMI/.  
10 p1803 A69-24076

Oscillations of warped turbine blades with allowance for energy dissipation in the blade material /K zadache o kolebaniyakh zakruchennykh lopatok turbomashin s uchetoм rasseianiia energii v lopatochnom materiale/.  
17 p3064 A69-33918

Functionals which take into account the energy dissipation in the material of a warped vibrating rod /O funktsionalakh, uchityvayushchikh rasseianie energii v materiale zakruchennogo sterzhnia pri kolebaniyakh/.  
17 p3065 A69-33924

## MAGOMEDOV, K. M.

Hypersonic Flow Past Truncated Cones with Allowance for Physicochemical Equilibrium Transformations /Giperzvukovoe obtekanie prituplennykh konusov s uchetoм равновесных физикохимических превращений/.  
03 p0362 A69-13633

Construction of difference schemes for hyperbolic-type equations on the basis of characteristic relations /O postroenii raznostnykh skhem dlia uravnenii giperbolicheskogo tipa na osnove kharakteristicheskikh sootnoshenii/.  
14 p2430 A69-29475

Effect of the shape of the nose on hypersonic flow past thin blunt bodies at an angle of attack /Vliianie formy noska na giperzvukovoe obtekanie tonkikh prituplennykh tel pod uglom ataki/.  
19 p3239 A69-36402

## MAGRAB, E. B.

Transient response of a case-bonded nonlinear viscoelastic cylinder.  
16 p2871 A69-31876

## MAGUIRAGA, M.

Trajectory sensitivity of a large launch booster control system.  
09 p1473 A69-22439

Minimum trajectory sensitivity of a large launch booster control system.  
13 p2261 A69-27943

## MAGUIRE, B. L.

Exhaust plume rarefaction.  
[AIAA PAPER 69-657] 17 p2892 A69-33465  
Quantitative visualization of low density flow fields using the electron beam excitation technique.  
19 p3292 A69-35723

## MAGUIRE, J. J.

Magnetic energy relationships in the magnetosphere.  
07 p1128 A69-19359  
Particle dynamics at the synchronous orbit.  
07 p1209 A69-19371

## MAGYAR, G.

Bragg reflection of laser light from a phase grating in a Q-switching liquid.  
05 p0771 A69-15811

## MAH, G. B. J.

Matrix method for linear response of structures.  
24 p4399 A69-42988  
Axisymmetric finite deflection of circular plates.  
24 p4399 A69-42989

## MAHADEVAN, P.

Mechanism for the auroral emission of OI /6300 angstrom units/.  
01 p0062 A69-10137

## MAHAFFEY, W. R.

Modeling plasma effects on radar cross section of reentry vehicles.  
20 p3485 A69-36925

## MAHAJAN, K. K.

Diurnal variation of the ion temperature.  
05 p0757 A69-16407  
Radar backscatter and rocket probe measurements of electron temperature above Arecibo.  
11 p1951 A69-25162  
Latitudinal observations of the thermal balance in the nighttime protonosphere.  
24 p4310 A69-43181

## MAHALANABIS, A. K.

On the stability of stochastic Lurie type systems.  
01 p0050 A69-10240

## MAHAN, A. I.

Ruby as a macroscopic fluorescing and laser material.  
07 p1201 A69-19646

## MAHAN, J. R.

Prediction of the onset of burnout in an electric arc with a transpiration-cooled anode.  
[AIAA PAPER 69-696] 17 p3011 A69-33451  
Equivalent capacitance derivation of space-charge-limited current from a filamentary cathode.  
05 p0734 A69-16567

## MAHER, R. T.

The effect of silane coupling agents in glass-filled polypropylene.  
08 p1337 A69-20482

## MAHESHWARI, A.

Finite-range gravitation.  
22 p4027 A69-40656

## MAHLOW, G.

Measurement of the radiation patterns of TV transmitter antennas of the German federal mails using a helicopter and Decca radar navigation /Messungen der Strahlungsdiagramme von Fernseh-Sendantennen der Deutschen Bundespost mit einem Hubschrauber und der Decca-Navigation als Hilfsmittel/.  
08 p1274 A69-20130

## MAHMOODI, P.

On the optimum design of a rotating disk of nonuniform thickness.  
[ASME PAPER 69-DE-36] 14 p2454 A69-28841

## MAHN, C.

Experimental studies of a hydrogen arc in an axially parallel magnetic field. I, II /Experimentelle Untersuchung an einem Wasserstoff-Lichtbogen im achsenparallelen Magnetfeld. I, II/.  
07 p1189 A69-18489

Measurement of the thermal conductivity in a magnetic field.  
12 p2133 A69-25765

## MAHO, C.

Changes in cortical and thalamic evoked activities during sensory conditioning. I, II /Modifications des activites evoquees corticales et thalamiques au cours d'un conditionnement sensoriel. I, II/.  
22 p3872 A69-40160

## MAHONEY, A. R.

Acoustic sounding - A new approach to the study of atmospheric structure.  
14 p2448 A69-29527

## MAHONEY, G.

Nonlinear programming is essential.  
01 p0035 A69-10067

## MAHONEY, J. A.

Responses of cultured Chinese hamster cells to ultraviolet light of different wavelengths.  
07 p1068 A69-19492  
Post-irradiation properties of cultured Chinese hamster cells exposed to ultraviolet light.  
19 p3257 A69-35975

## MAHONEY, J. B.

Stress solution for an infinite plate containing two arbitrary circular holes under equal biaxial stresses.  
[ASME PAPER 68-PVP-1] 03 p0523 A69-12998

## MAHONEY, J. F.

Focusing and deflection of heavy charged particle beams.  
[AIAA PAPER 69-283] 09 p1563 A69-21230  
Research and development of a charged-particle bipolar thruster.  
[AIAA PAPER 67-728] 13 p2325 A69-28220

## MAHONEY, J. H.

Air cargo growth.  
22 p4052 A69-40426

## MAHONEY, M. J.

Distances to pulsars.  
01 p0149 A69-10271

## MAHR, H.

Is there another addition theorem for Bessel functions/ques/ /Gibt es ein weiteres Additionstheorem fuer Besselsche Funktionen/ques//.  
19 p3266 A69-35767

## MAHR, O.

Design evolution of mechanically despun antennas from ATS to Intelsat.  
03 p0403 A69-13239  
ATS mechanically despun communications satellite antenna.  
22 p3913 A69-40692

## MAHROUS, S.

The stability and reflection gain of subcritically doped Gunn diodes.  
01 p0038 A69-10121  
Gunn-effect domain formation controlled by a complex load.  
06 p0981 A69-18217

## MAI, V. K.

Study of the compaction kinetics during hot pressing of metal powders /Issledovanie kinetiki uplotneniia pri goriamem pressovanii metalicheskikh poroshkov/.  
04 p0618 A69-15389

## MAIATSKII, V. I.

Effect of the acoustic interaction of electroacoustic transducers on the directional properties of multibeam receiving antennas /K voprosu o vlianii akusticheskogo vzaimodeistviia elektroakusticheskikh preobrazovatelei na napravleniye svoystva priemnykh mnogoluchevykh anten//.  
13 p2227 A69-27536

## MAIDEN, C. J.

Prediction of elastic-plastic wave profiles in aluminum 1060-0 under uniaxial strain loading.  
02 p0344 A69-12289

## MAIDEN, E.

Temperature cycling effects on solar panels.  
23 p4070 A69-42274

## MAIER, E. J. R.

Sounding rocket measurements of ion composition and charged particle temperatures in the topside ionosphere.  
07 p1124 A69-18839  
Suprathermal electrons in the polar ionosphere.  
14 p2512 A69-28963  
Explorer XXXI total current monitor experiments.  
20 p3590 A69-37880

## MAIER, G.

Quadratic programming and theory of elastic-perfectly plastic structures.  
07 p1235 A69-19443  
Complementary plastic work theorems in piecewise-linear elastoplasticity.  
08 p1414 A69-20528  
Some theorems for plastic strain rates and plastic strains.  
13 p2370 A69-28629

## MAIER, J. W.

The case rotation gyro for precise gyrocompassing.  
17 p2977 A69-34081

## MAIER, P.

Investigation of Turbulent Isothermal Swirl-Free Jets and Turbulent Swirling Flames /Untersuchung turbulenter isothermer Drallfreistrahlen und turbulenter Drallflammen/.  
17 p3068 A69-32996

## MAIKAPAR, G. I.

Gasdynamic design considerations for hypersonic aircraft /Gazodinamicheskoe konstruirovaniye giperzvukovykh samoletov/.  
19 p3248 A69-36399

## MAILER, K.

Fluidic components /Fluidic-Bauelemente/.  
09 p1443 A69-22535  
Passive fluidic elements and fluidic circuits /Passive Fluid-Elemente und Fluidschaltungen/.  
11 p1825 A69-24542

**MAILLARD, J.-P.**  
Arresting barriers intended for commercial aviation /Les barrières d'arrêt destinées à l'aviation commerciale/.  
03 p0367 A69-14104

**MAILLARD, M.**  
Temperature measurements of the upper atmosphere in the northern polar zone.  
15 p2606 A69-31448

**MAILLET, W. G.**  
MAT-1 - A 700-channel time-division multiple-access system with demand-assignment features.  
23 p4129 A69-42511

**MAILLOUX, R.**  
Microwave radiometric capabilities and techniques.  
12 p2033 A69-26976

**MAILLOUX, R. J.**  
Radiation and near-field coupling between two collinear open-ended waveguides.  
11 p1850 A69-24984  
A simple antenna with good circular polarization.  
23 p4137 A69-41590

**MAILOV, G. M.**  
Measurements of the resistivity of semiconductor materials /Ob izmereniiakh udel'nogo soprotivleniia poluprovodnikovykh materialov/.  
04 p0642 A69-14853  
Microwave cavity measurements of resistivity of semiconductor materials.  
15 p2667 A69-30245

**MAINE, R.**  
A real time experiment in operational meteorological data processing.  
22 p3977 A69-40732

**MAINFRAY, G.**  
Multiphoton ionization of hydrogen and rare gases /Ionisation multiphotonique de l'hydrogene et des gaz rares/.  
02 p0283 A69-11701

**MAINS, R. C.**  
Changes in total leg volume during lower body negative pressure.  
17 p2908 A69-33171

**MAINWARING, F. J.**  
Laser interconnection of wires.  
15 p2617 A69-30097

**MAIO, D. A.**  
Biologic activity of noble gases.  
19 p3258 A69-36454  
Space-cabin and suit pressures for avoidance of decompression sickness and alleviation of fire hazard.  
22 p3890 A69-40212

**MAIOROV, A. K.**  
Determining the radiative heat flux in the lower layers of the atmosphere.  
10 p1682 A69-23327

**MAIOROV, A. V.**  
Measuring the electrical conductivity of high-resistance epitaxial semiconducting films by the three-probe method.  
04 p0597 A69-14538

**MAIR, W.**  
Histology of the surgical radiolesion in the human brain as produced by high-energy protons.  
03 p0374 A69-13501

**MAIR, W. A.**  
Blockage corrections for blunt-based bodies of revolution.  
05 p0699 A69-16395

**MAISE, G.**  
Electrostatic probe measurements in solid propellant rocket exhausts. [AIAA PAPER 69-573]  
16 p2840 A69-32677

**MAISEL, M. D.**  
The design and performance prediction of propeller/rotors for VTOL applications. [AHS PAPER 325]  
17 p2894 A69-33534

**MAISENHAELDER, F.**  
Some experiments on the "spoke" phenomenon in MPD operation.  
09 p1548 A69-21962  
Measurements of velocity profiles in plasma jets /Messungen von Geschwindigkeitsprofilen an Plasmatrählen/.  
13 p2307 A69-27611  
Measurements of radial velocity profiles in a plasma thruster /Messungen von radialen Geschwindigkeitsprofilen an einem Plasmatriebwerk/. [DGLR-69-024C]  
23 p4202 A69-41926

**MAISON, F. P.**  
Reconfiguration and self-repair of onboard satellite computers /Reconfiguration et auto-dépannage des calculateurs embarqués sur satellites/.  
20 p3503 A69-37399

**MAISTRENKO, A. S.**  
Parameters of slow recombination centers of heat-treated CdSe single crystals.  
09 p1560 A69-22664

**MAITA, J. P.**  
Superconductors with magnetic impurities in a singlet ground state.  
02 p0295 A69-11778

**MAITI, M. K.**  
Similar solutions of laminar boundary layer equations for power law fluids in three dimensions.  
10 p1678 A69-23235

**MAITI, S. R.**  
Thermal stresses in an infinite elastic plate having a pair of insulated circular holes.  
12 p2180 A69-26267

**MAIZELIS, M. IA.**  
Activation of the synthesis of protein and RNA in the cerebrum as a factor of adaptation to high-altitude hypoxia /Aktivatsiia sinteza belka i RNK v golovnom mozge kak faktor adaptatsii k vysotnoi gipoksii/.  
22 p3886 A69-41122

**MAJDIC, M.**  
Inconveniences with material experienced when extremely thin noble metal alloy wires are used in thermoelements /Werkstoffschwierigkeiten beim Einsatz extrem dünner Drahte aus Edelmetall-Legierungen fuer Thermoelemente/.  
07 p1130 A69-18258

**MAJERNIK, V.**  
Some nonlinear functional models of frequency discrimination of the human ear.  
18 p3097 A69-35440

**MAJETICH, J. C.**  
New steel has cryogenic potential.  
18 p3158 A69-35417  
High-strength austenitic stainless steel for cryogenic service.  
23 p4175 A69-41475

**MAJEWSKI, M.**  
Low-noise parametric amplifier for the L band cooled by liquid nitrogen /Niskoszumny wzmacniacz parametryczny na pasmo L chłodzony ciekłym azotem/.  
13 p2237 A69-28644  
Measurement of varactor diodes by a reflection method /Pomiary diod waraktorowych metoda odbiciowa/.  
13 p2237 A69-28645  
An S-band parametric amplifier cooled by liquid nitrogen /Wzmacniacz parametryczny na pasmo S - Chłodzony ciekłym azotem/.  
15 p2578 A69-30636

**MAJHEE, P. C.**  
Improved self-tuning filter for low frequencies.  
11 p1845 A69-24548

**MAJHI, S. N.**  
Differential rotation of a sphere in a viscous liquid.  
04 p0590 A69-15278

**MAJIMA, J.**  
Radiative heat input to satellites at low to medium altitude.  
22 p4006 A69-40589

**MAJUMDAR, B. C.**  
Analysis of capillary and orifice compensated externally pressurized simple pad rectangular thrust bearings.  
12 p2102 A69-26239  
Inertia effect on the fluid film pressure between two long parallel plates.  
12 p2102 A69-26241

**MAJUMDAR, S. C.**  
Characteristics of VHF propagation at 50 km beyond radio horizon.  
08 p1274 A69-20112

**MAK, A. A.**  
Effect of inverted-population distribution on transverse laser modes.  
06 p0932 A69-16913  
Peakless regime and mode width of a continuous laser.  
06 p0934 A69-17681

**Emission frequency stabilizing effect in a solid-state laser /Effekt stabilizatsii chastoty izlucheniia tverdotel'nogo OKG/.  
07 p1147 A69-18543  
A neodymium-doped glass pulsed laser with selected second harmonic radiation.  
12 p2108 A69-26594  
A fluorite - Samarium laser.  
14 p2458 A69-29328  
The width of the emission spectrum of solid-state lasers /Shirina spektra generatsii tverdotel'nykh lazerov/.  
14 p2459 A69-29389  
A laser with a resonator mirror transmittance which is variable over the cross section /OKG s peremennym po secheniiu propuskaniem zerkal rezonatora/.  
15 p2634 A69-30962  
Angular divergence and transverse modes of a neodymium glass laser with a spherical cavity /Uglovoe raskhozhdenie i poperechnye tipy kolebaniia lazera na neodimovom stekle so sfericheskimi rezonatorom/.  
20 p3554 A69-37725  
Frequency stabilization of the radiation from a solid-state laser.  
21 p3735 A69-38695**

**MAK, M.-K.**  
Laterally driven stochastic motions in the tropics.  
07 p1176 A69-19035

**MAKARCHUK, M. M.**  
Optimal compensation of nonlinear plants /Optimal'naia kompensatsiia nelineinykh ob'ektov/.  
21 p3688 A69-39862

**MAKARENKO, E. N.**  
The position of the layer of interstellar material in the galaxy M 31.  
12 p2159 A69-26664

**MAKARENKO, N. L.**  
Determination of figure of the moon.  
03 p0512 A69-13690

**MAKAREVICH, A. I.**  
Relative influence of A and E centers on changes in the electrical properties of silicon during irradiation.  
07 p1199 A69-18684

**MAKAREVICH, G. A.**  
Unsteady flow around models in an electromagnetic shock tube.  
07 p1119 A69-18744

**MAKAROV, A. M.**  
Interferometric study of heat transfer in turbulent jet flows /Interferometricheskoe issledovanie teploobmena v turbulentnykh struiynykh tekheniakh/.  
01 p0005 A69-10101  
Determination of the internal efficiency of a condensing injector in power plants with a closed cycle.  
02 p0194 A69-11582

**MAKAROV, B. P.**  
Correlation theory of precritical deformations of thin elastic shells.  
11 p1996 A69-25732

**MAKAROV, G. F.**  
Changes in the indices of external respiration, gas exchange, and energy expenditure in humans under conditions of weightlessness /Izmeneniia pokazatelei vneshnego dykhanii, gazoobmena i energotrat cheloveka v usloviakh nevesomosti/.  
12 p2020 A69-26563

**MAKAROV, G. I.**  
Diffraction of electromagnetic waves at an impedance sphere /Difraktsiia elektromagnitnykh voln na impedansnoi sfere/.  
16 p2751 A69-32028  
Characteristics of the propagation of the first two normal waves excited by a point source in a waveguide channel formed by the earth and an inhomogeneous anisotropic ionosphere /Kharakteristiki rasprostraneniia pervykh dvukh normal'nykh voln, vzbuzhdaemykh tochechnym istochnikom v volnovodnom kanale zemlia - neodnorodnaia anizotropnaia ionosfera/.  
16 p2751 A69-32032

**MAKAROV, I. S.**  
Turbulent submerged jets of real gases.  
07 p1049 A69-18398  
Representation of signals by impulse functions of linear channels /Predstavlenie signalov impul'snymi funktsiiami lineinykh kanalov/.  
09 p1454 A69-21723  
Transmission of continuous signals in discrete form /Peredacha nepreryvnykh signalov v diskretnoi forme/.  
11 p1835 A69-24953



- Signal representation by linear-channel impulse-response functions. 20 p3488 A69-37459
- Mixing of gas jets near a wall. 21 p3785 A69-39102
- MAKAROV, O. F.**
- Inclusion of singular sections into an optimal trajectory /O vklucheniui osobykh uchastkov v optimal'nuui traktorii/. 11 p1960 A69-24764
- Optimal thrust control for the plane motion of a point with a variable mass /Optimal'ne keruvannia tiagou pri ploskomu rusi tochi zminnoi masi/. 23 p4192 A69-42340
- MAKAROV, V. I.**
- Size and shape of sunspots in some regions of the continuous spectrum /Razmery i forma solnechnykh piatev v nekotorykh uchastkakh nepreryvnogo spektra/. 20 p3616 A69-38301
- MAKAROV, V. N.**
- Pulse ruby lasers with mercury pumping sources /Impul'snye opticheskie generatory na rubine s rtutnymi istochnikami nakachki/. 19 p3336 A69-36347
- MAKAROV, P. P.**
- Multielectron theory of excitons in semiconductors. 03 p0486 A69-13416
- MAKAROVA, E. A.**
- Mean absolute energy distribution in the solar spectrum from 1800 angstrom units to 4 mm, and the solar constant. 11 p1951 A69-24242
- MAKAROVA, T. B.**
- Investigation of the dynamics of single-loop non-linear sampled-data systems with an integrator /K issledovaniui dinamiki odnokonturnykh nelineinykh impul'snykh sistem s integriruiushchim zvenom/. 04 p0583 A69-15135
- MAKEEV, E. M.**
- Experimental study of the stability of a cylindrical shell subjected to local loading by external pressure /Eksperimental'noe issledovanie ustoiichivosti tsilindricheskoi obolochki pri lokal'nom nagruzhении vneshnim davleniem/. 15 p2715 A69-31204
- MAKER, P. D.**
- Nonlinear optics. 05 p0772 A69-16229
- MAKHANKOV, N. V.**
- A study of the effect of chemical treatment on the mechanical properties of titanium alloy tubes. 03 p0434 A69-13914
- MAKHANKOV, V. G.**
- Nonlinear theory of hydrodynamic beam instabilities. I. 03 p0480 A69-14137
- Electromagnetic wave scattering at hydrodynamic pulsations of a turbulent plasma /Rasseianie elektromagnitnykh voln na gidrodinamicheskikh pulsatsiakh turbulentnoi plazmy/. 08 p1275 A69-20435
- Nonlinear low-frequency oscillation spectra of an anisotropic plasma /O nelineinykh nizkochastotnykh spektrakh kolebaniui anizotropnoi plazmy/. 13 p2315 A69-28448
- MAKHJANI, A. B.**
- Further comparison of spread-F and backscatter sounder measurements. 18 p3129 A69-34958
- MAKHIN, N. A.**
- Calculation of flows past plane and axisymmetric bodies with a broken generatrix /O raschete obtekanii ploskikh i osimmetrichnykh tel s lomanoi obraziushchei/. 11 p1820 A69-25470
- MAKHIN, V. A.**
- Determining the natural frequencies of fluid oscillations in complex pipelines. 07 p1119 A69-18745
- Gas flow from a tube into a vacuum in the case of unsteady mass and energy input /Istechenie gazu iz trubyy v vakuum pri nestatsionarnom podvode massy i energii/. 24 p4408 A69-43489
- MAKHLIN, N. A.**
- Thermodynamic properties of zirconium-niobium alloys. 07 p1165 A69-18940

- MAKHMUODOV, B. M.**
- Device for investigating cosmic rays at altitudes from 200 to 400 km /Pribor dlia issledovaniia kosmicheskikh izlucheniui na vysotakh 200-400 km/. 23 p4165 A69-41732
- MAKHOTKIN, L. G.**
- Atmospheric Electricity /Atmosferaie Elektrichestvo/. 04 p0593 A69-15101
- Distribution of the sources of recorded atmospherics with respect to remoteness /for distances greater than 1000 km/ /O raspredelenii istochnikov registriruemyykh atmosferikov po udalennosti /dlia rasstoianii bol'she 1000 km/. 04 p0593 A69-15103
- General characteristics of the spectrum of near-earth atmospherics from an analysis of measurement data in the 2 to 30-kHz range /Obshchaya kharakteristika spektra blizkikh atmosferikov, osnovannaya na analize danykh izmerenii v diapazone 2-30 kGts/. 04 p0593 A69-15105
- MAKHOVNIKOV, V. I.**
- A new method of solving a certain dynamic problem in elasticity theory for a body of revolution /Novyi metod resheniia odnoi dinamicheskoi zadachi teorii uprugosti dlia tela vrashcheniia/. 19 p3436 A69-35845
- MAKHROV, V. F.**
- Low-frequency waves in a DC discharge plasma /Nizkochastotnye volny v plazme razriada postoiannogo toka/. 13 p2316 A69-28584
- Effect of discharge fluctuations on the laser radiation output /Vliianie fluktuatsii v razriade na vykhod lazernogo izlucheniia/. 19 p3338 A69-36605
- MAKHUTOV, N. A.**
- Calculation of the limit of repeated static stress of internal-pressure vessels /Raschet na povtornostatsicheskuiu prochnost' sudosov vnutrennego davleniia/. 15 p2712 A69-30973
- MAKI, H.**
- On the study of the flow through an impeller of mixed and inward-flow radial turbines. II - Experiments of turbines with a small number of blades and with edge-cut hub. 01 p0142 A69-10309
- MAKIMOTO, T.**
- Transmission-type Esaki-diode amplifier using dielectric loaded rectangular waveguide. 13 p2233 A69-28067
- Esaki-diode reflection amplifier using rectangular waveguide. 15 p2578 A69-30801
- MAKINSON, G. J.**
- Stable high order implicit methods for the numerical solution of systems of differential equations. 01 p0107 A69-11364
- MAKISHIMA, T.**
- Navigation using the altitude and azimuth of the artificial satellite. [UN PAPER 68-95247] 01 p0112 A69-10461
- MAKKAEEV, V. I.**
- Experimental study of the probability of loss of a pulse during the transmission of binary information in the optical wavelength range /Eksperimental'nye issledovaniia veroiatnosti propuska impul'sa pri peredache dvoichnoi informatsii v opticheskom diapazone voln/. 11 p1834 A69-24611
- MAKOGON, M. M.**
- Second harmonic generation by a ruby laser with a diffused reflector /Generirovanie VG rubinovym OKG s diffuznym otrazhatel'm/. 20 p3552 A69-36970
- Generation of the second harmonic by a neodymium laser with lenses in the cavity /Generirovanie vtoroi garmoniki neodimovym lazerom s linzami vnutri rezonatora/. 21 p3740 A69-39544
- Generation of the second harmonic by a ruby laser with a dielectric surface scatterer /Generirovanie vtoroi garmoniki rubinovym lazerom s dielektricheskimi poverkhnostnymi rassivatelem/. 24 p4328 A69-43164
- MAKOGONENKO, A. G.**
- Stratospheric humidity as determined from the absorption of solar radiation by a resolved spectral structure of water vapor. 09 p1536 A69-21864

- MAKOUS, W. L.**
- Vision and lasers - Human factors of laser displays. 05 p0760 A69-15591
- MAKOVER, S. G.**
- Improvement of the orbits of 42 minor planets /U-luchshenie orbit 42 mal'nykh planet/. 20 p3596 A69-37309
- MAKOVETSKAIA, L. A.**
- Magnetic susceptibility of an indium phosphide/gallium arsenide solid solution /Magnitnaia vosprimchivost' tverdogo rastvora fosfid indii-arsenid galliia/. 07 p1200 A69-19013
- Optical and electrical properties of quasi-binary solid solutions of some A super III B super V compounds. 19 p3390 A69-36554
- MAKSENKOV, V. G.**
- Thermoluminescence investigations of the dolomite from the Kaali meteorite craters /Termoluminescentnye issledovaniia dolomita iz meteoritnykh kraterov Kaali/. 01 p0159 A69-11371
- MAKSHIN, A. A.**
- Aerodynamic characteristics of delta wings for supersonic flow at large angles of attack /Aerodinamicheskie kharakteristiki treugol'nykh kryl'ev pri sverkhzvukovom obtekanii pri bol'shikh uglakh ataki/. 02 p0191 A69-12585
- MAKSIMENKE, V. P.**
- Calculation of cylindrical stringer-supported shells under longitudinal load /Raschet stringernykh tsilindricheskikh obolochek, nagruzhennykh prodol'nymi silami/. 01 p0164 A69-10083
- MAKSIMENKO, B. P.**
- Recording and energy analysis of low-energy H sub 1 super plus, H sub 2 super plus, He super plus ions with surface-barrier silicon counters /Registratsiia i energeticheskii analiz ionov H sub 1 super plus, H sub 2 super plus, He super plus nizkikh energii s pomoshch'iu poverkhnostno-bar'ernykh kremniennykh schetchikov/. 14 p2452 A69-29811
- MAKSIMENKO, E. O.**
- Application of X-ray diffraction topography to a study of deformed single-crystal structures /Zastosovniat' rentgenovskoi difraktsiinoi topografiui pri vivchenii deformirovannykh struktur u monokristal'akh/. 21 p3742 A69-38583
- MAKSIMENKO, L. O.**
- Approximate method of calculating a gas flow in a channel with broken generatrices /Nablizhenii metod rozrakhunku rukhu gazu v kanali zi zlomom tvornik/. 06 p0908 A69-16828
- MAKSIMENKO, V. M.**
- Angular dependences of EPR line widths of Cr super 3 super plus in ZnWO sub 4 /Uglovyye zavisimosti shirin linii EPR Cr super 3 super plus v ZnWO sub 4/. 10 p1743 A69-23131
- Concerning the role of isobar production processes in nuclear interactions of approximately 20 Gev protons. 13 p2303 A69-28373
- Comparison of experimental data on showers with energies of hundreds of Bev with characteristics of Monte-Carlo-simulated showers. 13 p2330 A69-28374
- MAKSIMOV, A. I.**
- Effect of oxidation of metals on their heat-resistant properties /Vliianie okisleniia metallov na ikh zharoprochnyye svoystva/. 10 p1708 A69-22998
- MAKSIMOV, A. M.**
- Calculation of nonequilibrium plasma ionization induced by a magnetic field. 11 p1922 A69-24225
- MAKSIMOV, D. G.**
- Changes in cardiac activity and respiration of cosmonauts during light physical exertion in an orbital flight on the spacecraft Voshkod /Izmeneniia serdechnoi deiatel'nosti i dykhanii u kosmonavtov pri legkoi fizicheskoi nagruzke vo vremia orbital'nogo poleta na kosmicheskoi korable "Voshkod". 03 p0377 A69-14196
- Certain data concerning the conditions of the cosmonauts during the flight of the first space expedition on the Voshkod spacecraft /Nekotorye dannyye o sostoianii kosmonavtov vo vremia poleta pervoi kosmicheskoi ekspeditsii na korable "Voshkod". 07 p1060 A69-18571

- Reactions of the cardiovascular and respiratory systems of cosmonauts under conditions of orbital flight on the Voskhod spacecraft /Reaktsii serdchnososudistoi i dykhatel'noi sistem kosmonavtov v usloviakh orbital'nogo poleta na kosmicheskom korabe "Voskhod"/.
- 07 p1061 A69-18584
- Certain reactions of the cardiovascular and respiratory systems of cosmonauts during orbital flight on the Voskhod 2 spacecraft /Nekotorye reaktsii serdchnososudistoi i dykhatel'noi sistem kosmonavtov v orbital'nom polete na kosmicheskom korabe "Voskhod 2"/.
- 07 p1062 A69-18585
- Oculomotor activity of cosmonauts during orbital flights /Glazodvigatel'naia aktivnost' u kosmonavtov vo vremia orbital'nykh poletov/.
- 07 p1063 A69-18594
- Possibility of using an artificial atmosphere with a variable gas composition in air-tight cabins /O vozmozhnosti ispol'zovaniia v germeticheskikh kabinakh iskusstvennoi atmosfery s nestatsionarnym gazovym sostavom/.
- 22 p3892 A69-40284
- MAKSIMOV, E. I.**
- Combustion theory for rapidly burning condensed materials /K teorii goreniiia bystrogoriashchikh kondensirovannykh veshchestv/.
- 02 p0355 A69-12672
- Combustion of condensed systems in a field of mass forces /Gorenii kondensirovannykh sistem v pole masovykh sil/.
- 11 p2001 A69-25195
- MAKSIMOV, G. I.**
- Certain problems related to the installation of a pencil-beam parabolic antenna on a spacecraft /Nekotorye zadachi, svyazannye s ustanovkoi na kosmicheskom apparate ostronapravlennoi parabolicheskoi anteny/.
- 01 p0030 A69-10581
- Certain problems related to mounting a sharply directional parabolic antenna on a space vehicle.
- 15 p2568 A69-30751
- MAKSIMOV, G. P.**
- Attenuation of a magnetosonic wave in a turbulent plasma.
- 16 p2820 A69-31794
- MAKSIMOV, I. V.**
- Evaporation under low atmospheric pressure conditions.
- 10 p1647 A69-23591
- MAKSIMOV, I. U. N.**
- Diffraction of a plane electromagnetic wave on an ideally conducting sphere situated in a nonhomogeneous medium /Difraktsiia ploskoi elektromagnitnoi volny na ideal'no provodiashchei sfere, nakhodiasheisia v neodnorodnoi sfere/.
- 19 p3275 A69-36340
- MAKSIMOV, I. U. S.**
- Semiconductor detectors for recording hydrogen ion fluxes with energies ranging from 1 to 15 keV /Poluprovodnikovye detektory dlia registratsii potokov vodorodnykh ionov s energiei 1-15 keV/.
- 14 p2452 A69-29810
- MAKSIMOV, S. B.**
- A year-long medical-technological experiment in a ground-based life-support system facility /Godovoi mediko-tehnicheskii eksperiment v nazemnom komplekse sistem zhizneobespecheniia/.
- 13 p2216 A69-28612
- MAKSIMOV, V. A.**
- Experimental study of the electron component of the thermal flux in the arc mode of operation of a thermoelectric converter /Eksperimental'noe issledovanie elektronnoi sostavliaiushchei teplovogo potoka v dugovom rezhime TEP/.
- 12 p2017 A69-26544
- MAKSIMOVA, N. K.**
- Surface-barrier gold/gallium arsenide junctions /Poverkhnostno-bar'ernye perekhody zoloto-arsenid galliia/.
- 01 p0138 A69-10432
- MAKSIMOVA, O. P.**
- Kinetic features of the martensitic transformation during thermomechanical treatment of nickel steels.
- 02 p0267 A69-12190
- MAKSIMOVICH, G. G.**
- Stability of the plastic and fatigue properties of steel 1Kh18N9T under longtime static loads in vacuum and in liquid lithium.
- 03 p0450 A69-13912
- MAKSIMOVSKII, S. N.**
- Investigation of the characteristics of a CdTe laser with electronic excitation /Issledovanie kharakteristik kvantovogo generatora na CdTe pri elektronnom vzbuzhdenii/.
- 13 p2272 A69-27896
- MAKSUTOVA, M. K.**
- Evaluation of Laval nozzle resistance /Ob otsenke soprotivleniia sopel Lavalia/.
- 03 p0361 A69-12967
- Results of experimental investigations of a turbine stage with theta equals 3 /Rezultaty eksperimental'nogo issledovaniia turbinnoi stupeni s theta equals 3/.
- 21 p3785 A69-38865
- MAKUSHIN, V. M.**
- Investigation of the stability of warped rods by a dynamic technique /Issledovanie ustoiichivosti skruchennykh sterzhnei dinamicheskimi metodami/.
- 17 p3057 A69-33196
- MAL, A. K.**
- Dynamic stress intensity factor for a non-axisymmetric loading of the penny shaped crack.
- 07 p1233 A69-19175
- Dynamic stress intensity factor for an axisymmetric loading of the penny shaped crack.
- 08 p1413 A69-20412
- MALACARA, D.**
- Construction of helium-neon lasers operating at 6328 angstrom units.
- 14 p2459 A69-29429
- MALACZYNSKI, G.**
- Theoretical and experimental study of the EGD power generator.
- 10 p1638 A69-23486
- Use of double electrostatic probes for flame diagnostics /Zastosowanie podwojnych sond elektrostatycznych do diagnostyki plomieni/.
- 18 p3137 A69-34932
- MALAFOSSE, J.**
- Production, handling, and storage of highly concentrated hydrogen peroxide /Production, manipulation et stockage du peroxyde d'hydrogene a haute concentration/.
- 17 p3017 A69-33353
- MALAIU, E.**
- Problems of optimal flight stabilization.
- 05 p0702 A69-16024
- Supersonic flutter of circular cylindrical heterogeneous orthotropic thin panels of finite length.
- 08 p1413 A69-20404
- MALAKHIVSKA, S. M.**
- Solution of the heat equation for a plate of finite thickness /Rozv'yazuvannia rivniannia teploprovodnosti dlia plativki skinchennai tovshchini/.
- 14 p2537 A69-28970
- MALAKHOV, A. A.**
- Origin and mineralogical composition of the "stone hail" /Sterilitamak/ /O proiskhozhdenii i mineral'nom sostave "kamnennogo grada" /Sterilitamak/.
- 01 p0160 A69-11387
- MALAKHOV, A. N.**
- Natural fluctuations of the amplitude and phase oscillations at the output of a regenerative frequency divider /Estestvennye fluktuatsii amplitudy i fazy kolebaniia na vykhode regenerativnogo delitelia chastoty/.
- 07 p1099 A69-18526
- Natural fluctuations in a semiconductor oscillator.
- 09 p1469 A69-22632
- Production tolerance fluctuations of a quartz oscillator /Tekhnicheskie fluktuatsii kvartsevoogo generatora/.
- 15 p2579 A69-30944
- MALAKHOVSKII, V. N.**
- Some interpretations of the biological effects of chronic gamma irradiation.
- 02 p0197 A69-11494
- MALAKIAN, I. U. P.**
- Averaged equations for electromagnetic wave intensity in a medium, with allowance for interference /Usrednennyye uravneniia dlia intensivnosti elektromagnitnykh voln v sfere, uchityvaiushchie interferentsii/.
- 22 p3966 A69-41172
- MALANIN, V. V.**
- Optimum stabilization of an axisymmetric satellite /Optimal'naia stabilizatsiia osesimmetrichnogo sputnika/.
- 04 p0666 A69-14921
- MALANOSKI, S. B.**
- Mean free path effect in spiral-grooved thrust bearings. [ASM PAPER 68-LUBS-17]
- MALBAKHOV, V. M.**
- A non-stationary problem of a mesoscale atmospheric vortex with vertical axis.
- 03 p0462 A69-13932
- MALBROUCK, R.**
- Spectroscopic study of the auroras of November 19, 1966, and February 4, 1967, in the visible and the near-ultraviolet range /Etude spectroscopique dans le domaine visible et ultra-violet proche des aurores du 19 novembre 1966 et 4 fevrier 1967/.
- 17 p2961 A69-33416
- MALBRUNOT, P.**
- Experimental determination of the density of nitrogen up to 4000 atm and 1000 deg C /Determination experimentale de la densite de l'azote jusqu' a 4000 atm et 1000 deg C/.
- 17 p3073 A69-33393
- MALCOLM, D. G.**
- Some aspects of turbulence measurement in liquid mercury using cylindrical quartz-insulated hot-film sensors.
- 21 p3722 A69-38769
- MALCOLM, R. C.**
- Extrapolation of creep-rupture data for aluminum alloys. [ASM PAPER D8-9.7]
- 07 p1169 A69-19665
- MALCOLME-LAWES, D. J.**
- Production of free sodium atoms for the spectrum-line reversal technique.
- 24 p4297 A69-43589
- MALCZEWSKI, J.**
- Motion of a droplet along a ballistic trajectory in a gas flow /Ruch kropli po torze balistycznym w strumieniu gazu/.
- 09 p1483 A69-22222
- MALDYBAEVA, E. IA.**
- Existence of conjugate points along lightlike geodesics in the general theory of relativity /O sushchestvovanii sopriazhennykh tochk v dol' svetopodobnykh geodezicheskikh v obshchei teorii otноситel'nosti/.
- 23 p4213 A69-41724
- MALECKI, I.**
- Quasi-phonon model of acoustic scattering on a real obstacle.
- 05 p0797 A69-16649
- MALENKOV, I. G.**
- Role of the gas phase in the mechanism of the boiling crisis in natural convection.
- 03 p0534 A69-14149
- Motion of large gas bubbles rising in a liquid /O dvizhenii bol'shikh puzryei gaza, vsplyvaiushchikh v zhidkosti/.
- 07 p1120 A69-18999
- MALIAREVSKII, N. M.**
- Comparative noise stability of a nonoptimal detection system for signals with noise and FM content /O sravnitel'noi pomekhoustoiichivosti neoptimal'noi sistemy obnaruzheniia pri signalakh s shumovym i ChM zapolnieniem/.
- 13 p2222 A69-28508
- MALIAVKIN, L. P.**
- Follow-up system for aiming optical equipment at the sun.
- 03 p0427 A69-12980
- MALIAVSKII, B. K.**
- Radio profilograph and its utilization in aerial radio leveling /Radioprofilograf i ego ispol'zovanie pri aeroradionivelirovaniu/.
- 07 p1132 A69-19006
- MALIK, C.**
- A proposed index for measuring ionospheric scintillations.
- 16 p2752 A69-32106
- MALIK, G. M.**
- A new analysis of the Hubble counts of galaxies. I - The galactic absorption function.
- 10 p1779 A69-23609
- MALIK, M. P.**
- Use of plasma metal spray coating in repairing aircraft components made from Al and Mg alloys /Die anwendung des Plasma-Metallspritzverfahrens bei der Reparatur von Flugzeugbauteilen aus Al- und Mg-Legierungen/.
- 21 p3728 A69-38462
- MALIK, S. K.**
- Ion flute mode with temperature gradients.
- 16 p2819 A69-31689



## MALIN, R. L.

Leak testing various seal configurations on a manned spacecraft.  
[AJAA PAPER 69-1030] 22 p3924 A69-40399

## MALIN, S. R. C.

Amplitude error in the L vector from noisy data.  
12 p2033 A69-26956

The effect of the sea on lunar variations of the vertical component of the geomagnetic field.  
12 p2161 A69-26957

Changes in geomagnetic multipole parameters 1942.5-1962.5.  
23 p4158 A69-42171

## MALIN, S. R. S.

Lunar-diurnal variations of the geomagnetic field at Irkutsk during the IGY /Lunno- sutochnye variatsii geomagnitnogo polia v Irkutsk'e v period MGG/.  
10 p1687 A69-23918

## MALINA, F. J.

The lunar laboratory.  
13 p2240 A69-27910

## MALININ, N. I.

Studies in the field of phenomenological rheology /Issledovaniia v oblasti fenomenologicheskoi reologii/.  
13 p2369 A69-28562

## MALININ, N. N.

Derivation of a theory of creep with anisotropic hardening /K postroeniui teorii polzuchesti s anizotropnym uprochneniem/.  
21 p3839 A69-39196

## MALINKA, A. B.

Duk-15TsLAM device for the automatic ultrasonic inspection of tube welds.  
18 p3137 A69-35111

## MALINKINA, T. I.

Weldability of aluminum alloy 01420 /Svarivaemost' aliuminievogo splava 01420/.  
11 p1891 A69-24896

## MALINKO, V. M.

Structure of the infrared absorption spectrum of n-CdTe /Pro strukturu v infrachervonomu spektri poglinaniia n-CdTe/.  
12 p2142 A69-25979

## MALINKO, V. N.

Reflection of CdS sub x Se sub 1-x single crystals in the intrinsic absorption region /Otrazhenie monokristallov CdS sub x Se sub 1-x v oblasti sobstvennogo pogloshchennii/.  
19 p3391 A69-36607

## MALINOV, A. V.

Numerical solution to the problem of natural convection in a closed cavity /Chislennoe reshenie zadachi ob estestvennoi konveksii v zamknutoi polosti/.  
21 p3855 A69-39853

## MALINOVSKAIA, S. A.

Plastic scintillators with increased transparency /Plastmassovye stintillatory s povyshennoi prozrachnost'iu/.  
21 p3724 A69-39073

## MALINOVSKI, A.

A method for dynamic determination of the dew /or frost/ point and its application to radiosonde humidity measurement.  
09 p1502 A69-22691

## MALINOVSKII, V. K.

Superfast optical methods for high-speed plasma processes.  
12 p2089 A69-26186

Application of Michelson interferometers with large interference fields to the investigation of plasma physics /O primenenii interferometrov Maikel'sona s bol'shimi poliami interferentsii v issledovaniakh po fizike plazmy/.  
14 p2496 A69-29776

Development of a collisionless shock wave program /Razvitiie programmy po udarnym volnam bez stolkovnenii/.  
17 p3012 A69-33818

## MALINOWSKI, J.

Thin-film cermet resistors used in microelectronic integrated circuits /Cienkowarstwowe oporniki cermetowe stosowane w mikroelektronicznych układach scalonych/.  
13 p2268 A69-27466

## MALINOWSKI, M.

An FMFB demodulator for satellite communications.  
09 p1457 A69-22464

## MALITSON, H. H.

The solar electromagnetic radiation environment.  
09 p1575 A69-21645

Type III radio bursts in the outer corona.  
22 p4003 A69-40300

## MALIUTA, D. D.

Measurement of diffusion cross sections of slow electrons in inert gases by a microwave method.  
03 p0481 A69-14143

Electrical conductivity and energy balance in a nonequilibrium plasma - Neon-cesium, krypton- cesium, xenon-cesium gas mixtures /Elektroprovodnost' i balans energii v neravnovesnoi plazme - Smesi neon-tsezi, krypton-tsezi, ksenon-tsezi/.  
10 p1731 A69-23439

## MALIUTENKO, V. K.

Characteristics of the photomagnetic effect in CdS single crystals.  
05 p0809 A69-16377

## MALIUTIN, A. A.

Laser measurement of electron density in a plasma.  
06 p0963 A69-16911

Investigation of the temporal structure of neodymium-laser emission in the mode self-locking regime.  
18 p3152 A69-35016

## MALIUTIN, A. I.

Investigation of turbulent processes within a shock wavefront in a plasma /Issledovanie kharaktera turbulentnykh protsessov vo fronte udarnoi volny v plazme/.  
18 p3180 A69-35017

## MALIUTIN, I. S.

Stability of a cylindrical shell reinforced by circular ribs under the action of external pressure and axial forces /Ob ustoiichivosti tsilindricheskoi obolochki, podkreplennoi kol'tsevyimi rebrami, pri deistvii vneshnego davleniia i osevykh sil/.  
07 p1238 A69-19687

## MALIVANCHUK, V. I.

Theoretical and experimental investigations of the "ring-rod" system /Teoreticheskie i eksperimental'nye issledovaniia po sisteme "kol'tso-sterzhen"/.  
23 p4139 A69-41944

## MALKES, L. IA.

Emission of solutions of organic molecules excited by harmonics of a neodymium laser /Generatsiia razvorov organicheskikh molekul pri vzbuzhdenii garmnikami neodimovogo lazera/.  
12 p2104 A69-26030

## MALKEVICH, M. S.

Scientific program and scientific equipment complex of the Cosmos 149 artificial earth satellite /Nauchnaia programma i kompleks nauchnoi apparatury ISZ "Kosmos-149"/.  
14 p2447 A69-29403

Equipment for measuring the earth's brightness from the Cosmos 149 satellite /Apparatura dlia izmereniia iarkosti zemli so sputnika "Kosmos-149"/.  
14 p2447 A69-29404

Determination of meteorological elements by means of satellites /Opredelenie meteorologicheskikh elementov s pomoshch'iu sputnikov/.  
14 p2477 A69-29828

Certain results of a study of the earth's brightness with the aid of the Cosmos 149 satellite /Nekotorye rezul'taty issledovaniia iarkosti zemli s pomoshch'iu ISZ "Kosmos-149"/.  
15 p2596 A69-30650

Procedure and certain results of the determination of the temperature of the underlying surface from the Cosmos 149 satellite /Metodika i nekotorye rezul'taty opredeleniia temperatury podstlaiushchei poverkhnosti so sputnika "Kosmos-149"/.  
15 p2596 A69-30651

Application of statistical regularization to the determination of the vertical temperature profile of the atmosphere /Primenenie statisticheskoi reguliarizatsii k opredeleniiu vertikal'nogo profilia temperatury atmosfery/.  
18 p3167 A69-35339

On application of the statistical method for determination of atmospheric temperature profiles from satellites.  
19 p3303 A69-36409

## MALKHASIAN, L. G.

Strobographic method of studying vibrations /Strobogolograficheskii metod izucheniia vibratsii/.  
02 p0251 A69-12561

Holographic strobe method for studying vibrations.  
15 p2608 A69-30258

## MALKIN, O. A.

Investigation of the current layer expansion in a direction opposite to that of the electrodynamic force /Issledovanie rasprostraneniia sloia toka protiv elektrodinamicheskoi sily/.  
12 p2141 A69-27130

## MALKIN, V. B.

Some effects developing during hypokinesia.  
02 p0198 A69-11502

Coordination of posture and motion of man under conditions of increased and decreased gravitation /Koordiniatsiia pozy i dvizheniia cheloveka v usloviakh povyshennoi i ponizhennoi gravitatsii/.  
07 p1063 A69-18593

Approaches to the optimization of an artificial atmosphere when P sub O sub 2 in the gaseous medium decreases irreversibly /O putiakh optimizatsii iskustvennoi atmosfery pri neobratimom snizhenii P sub O sub 2 v gazovoi srede/.  
10 p1650 A69-23898

Possibility of using an artificial atmosphere with a variable gas composition in air-tight cabins /O vozmozhnosti ispol'zovaniia v germicheskikh kabinakh iskustvennoi atmosfery s nestatsionarnym gazovym sostavom/.  
22 p3892 A69-40284

Activation of the synthesis of protein and RNA in the cerebrum as a factor of adaptation to high-altitude hypoxia /Aktivatsiia sinteza belka i RNK v golovnom mozge kak faktor adaptatsii k vysotnoi gipoksii/.  
22 p3886 A69-41122

## MALKINA, O. S.

Error in the determination of the stress concentration at a free hole by the methods of two-dimensional elasticity theory /O pogreshnosti v opredelenii konsentratsii napriazheniia na svobodnom otverstii metodami plaskoi teorii uprugosti/.  
09 p1614 A69-21885

## MALKOV, M. A.

Asymptotic study of the two-dimensional problem of elastic impact of bars.  
11 p1996 A69-25737

## MALKOVSKII, O. N.

Influence of vertical refraction on the propagation of gas-laser beams /O vliianii vertikal'noi refraktsii na rasprostranenie luchei gazovykh lazerov/.  
13 p2220 A69-27827

## MALLAIRE, F. R.

Evaluation of wear ring seals for high-speed, high-pressure turbopumps.  
[ASME PAPER 68-WA/LUB-1]  
05 p0768 A69-16129

## MALLARY, W. E.

The stored program data processor for post-Apollo applications.  
19 p3274 A69-36280

## MALLET, C.-A.

An analogy between certain solutions of problems, determination of stresses in a laterally loaded plate, and determination of the sagittas of a slab loaded perpendicularly /Sur une analogie entre certaines solutions des problemes, determination des contraintes dans une plaque chargee lateralement et determination des fleches d'une dalle chargee normalement/.  
15 p2704 A69-30295

## MALLETT, R. H.

Finite element analysis of nonlinear structures.  
01 p0171 A69-10964

Elastic-plastic analysis of flat plates by the finite element method.  
[ASME PAPER 68-WA/PVP-10]  
05 p0840 A69-16191

Automated large deflection and stability analysis of three-dimensional bar structures.  
23 p4232 A69-42141

## MALLEUS, G.

Use of an onboard computer for accomplishing "Project Roseau" experiments /Utilisation d'un calculateur embarque pour la realisation d'experiences scientifiques - "Projet Roseau"/.  
20 p3501 A69-37388

## MALLIA, E. A.

A study of weak molecular and atomic lines in the photospheric spectrum.  
03 p0515 A69-14035

Forbidden lines of Fe II in the photospheric spectrum.  
03 p0515 A69-14036

The abundances of the elements in the solar photosphere. VII.  
08 p1390 A69-20393

- Forbidden lines of Ca II in the photospheric spectrum.  
14 p2528 A69-29962
- MALLIANI, A.**  
Reflex activity of single preganglionic sympathetic fibres during coronary occlusion.  
23 p4084 A69-41460
- MALLIARIS, A. C.**  
Velocities of neutral and ionic species in an MPD flow.  
[AIAA PAPER 69-109] 06 p0971 A69-18116  
System requirements for application of a pulsed MPD arc jet to electrical propulsion.  
[AIAA PAPER 69-269] 09 p1560 A69-21215
- MALLICK, S.**  
Shearing interferometry by wavefront reconstruction using a single exposure.  
10 p1690 A69-22952
- MALLIN, J. R.**  
Quantitative visualization of low density flow fields using the electron beam excitation technique.  
19 p3292 A69-35723
- MALLING, L. R.**  
Instrumentation system evaluation with pseudo-noise.  
03 p0403 A69-13188
- MALLINSON, J. C.**  
A computer simulation of unbiased digital recording.  
[IEEE PAPER 3.3] 09 p1461 A69-22562
- MALLORY, P.**  
A maximum likelihood bit synchronizer.  
07 p1105 A69-19093  
Bit error rates in the presence of untracked time base fluctuation.  
07 p1083 A69-19121
- MALM, B. E.**  
A stationary model of the metagalaxy.  
08 p1389 A69-20263
- MALMBERG, J. H.**  
Microwave scattering from plasma waves.  
08 p1276 A69-20798  
Curve resolver for mixtures of damped sine waves.  
17 p2970 A69-32852
- MALMSTADT, H. V.**  
Digital Electronics for Scientists.  
18 p3112 A69-34915
- MALMUTH, N. D.**  
Asymptotic solutions for heat conduction in radiating shells subject to discontinuous solar flux.  
24 p4416 A69-43689
- MALNAR, L.**  
Atomic clock with sequential optical pumping /Horloge atomique a pompage optique sequentiel/.  
12 p2090 A69-26291
- MALNATI, R. J.**  
The Apollo communications network.  
18 p3100 A69-34267
- MALNEV, A. F.**  
Optical characteristics of metallic blacks /Opticheskie kharakteristiki metallicheskih chernei/.  
17 p3075 A69-33976
- MALOLEPSHII, G. A.**  
Transient processes in the transmission of discrete information by the phase modulation method /K voprosu o perekhodnykh protsessakh pri peredache diskretnoi informatsii metodom fazovoi moduliatsii/.  
19 p3277 A69-36571
- MALONE, D. W.**  
Transient dynamic response of linearly viscoelastic structures and continua.  
11 p1993 A69-25528
- MALONE, E. W.**  
Design and calibration of thin-foil heat flux sensors.  
04 p0602 A69-15426
- MALONEY, J. E.**  
Pressure-diameter relations of capillaries and small blood vessels in frog lung.  
22 p3885 A69-40974
- MALONEY, M. A.**  
System aspects of granulopoiesis and radiation effects.  
23 p4090 A69-41965
- MALONEY, P. G.**  
Impact of automatic test equipment on avionics hardware design.  
11 p1865 A69-25070
- MALONEY, W. T.**  
Acousto-optical approaches to radar information processing.  
10 p1694 A69-23539
- MALOTA, F.**  
Acoustooptical deflection of laser pulses /Akustooptische Ablenkung von Laserimpulsen/.  
11 p1840 A69-25423  
Energy measurements in a ruby laser with a moving crystal /Energiesmessungen an einem Rubinlaser mit bewegtem Kristall/.  
24 p4327 A69-42652
- MALPLAT, J. P.**  
Experimental work on inhomogeneous flows /Travaux experimentaux sur la veine inhomogene/.  
13 p2310 A69-28032
- MALTBÆK, J. C.**  
Torsional or longitudinal vibrations of a non-uniform bar with elastic end constraints.  
04 p0681 A69-15196
- MALTBY, P.**  
A spectroscopic study of the H alpha profile of moustaches.  
06 p0994 A69-17435  
The intensity of the penumbra of large sunspots.  
20 p3603 A69-37542  
A model for the penumbra of sunspots.  
22 p4019 A69-40290
- MALTBY, R. L.**  
The full-scale measurement of the drag and spray effects of slush and water on aircraft.  
01 p0011 A69-11048
- MALTE, P. C.**  
Turbulent transport in a combustor shear flow.  
[WSCI PAPER 68-27] 06 p1034 A69-17793
- MALTSEV, A. P.**  
Convergence and stability of Rothe's method when obtaining a periodic solution to a quasi-linear parabolic equation with nonlinear boundary conditions /O skhodimosti i ustoychivosti metoda Rote pri otyskanii periodicheskogo resheniya kvazilineinogo parabolicheskogo uravneniya s nelineinymi kraevymi usloviyami/.  
12 p2121 A69-26282
- MALTSEV, M. V.**  
Effect of hydro-extrusion on the mechanical properties of molybdenum.  
02 p0267 A69-12189
- MALTSEV, V. D.**  
Device for precision measurement of creep strain at high temperatures.  
20 p3544 A69-37815
- MALTSEV, V. M.**  
An optical method of measuring the burning-surface temperature of condensed systems.  
13 p2379 A69-28453
- MALTSEVA, N. F.**  
Certain characteristics of the relation between the intervals of oscillations with diminishing period and ionospheric disturbances /Nekotorye osobennosti svyazi intervalov kolebaniy ubyvaiushchego perioda s ionosfernymi vozmushchenniyami/.  
14 p2436 A69-29060
- MALTSEVA, O. A.**  
Possible application of correlation methods to E sub s analysis.  
03 p0423 A69-13537  
Possible interpretation of middle-latitude types of E.  
06 p0922 A69-17750  
Methods of calculating the ionograms for an ionosphere model with a nonmonotonic h/N distribution /Sposoby rascheta ionogramm dlia modeli ionosfery s nemonotonnykh h/N- raspredeleniem/.  
14 p2437 A69-29071
- MALTSEVA, V. S.**  
The nature of the excess phase in ferritic-austenitic stainless steels with titanium.  
04 p0615 A69-14641
- MALTZ, J.**  
The less common refractory metals /rhenium, technetium, hafnium, noble metals/.  
07 p1165 A69-18793
- MALUMIAN, V. G.**  
Low-frequency spectra of extragalactic radio sources /Nizkochastotnye spektry vnegalakticheskikh radioistchnikov/.  
13 p2351 A69-27867
- MALVERN, L. E.**  
Harmonic dispersion analysis of incremental waves in uniaxially prestressed plastic and viscoplastic bars, plates, and unbounded media.  
13 p2363 A69-28125  
Electromagnetic velocity-transducer studies of plastic waves in aluminum bars.  
15 p2709 A69-30677
- MALVICK, A. J.**  
Dynamic relaxation - A general method for determination of elastic deformation of mirrors.  
12 p1817 A69-26890
- MALVILLE, J. M.**  
Magnetic fields in flares and active prominences. I.  
09 p1579 A69-22179  
Profiles of the H and K lines of Ca II in disk flares.  
17 p3023 A69-33054
- MALY, R.**  
Evaluation of semiconducting collector surfaces in thermionic converters.  
14 p2506 A69-29269
- MALYEVAC, C. A.**  
Effect of neglected gravity coefficients on computed satellite orbits and geodetic parameters.  
22 p4023 A69-40556
- MALYI, V. I.**  
Generation of the second harmonic in media having a center of inversion /K voprosu o generatsii vtoroi garmoniki v sredakh s tsentrom inversii/.  
19 p3332 A69-35872
- MALYKH, L. IA.**  
Testing procedures for phase meters with frequency modulation /Metodika ispytaniya fazometrov s chastotnoi moduliatsiei/.  
14 p2497 A69-29797  
A two-frequency phase meter for plasma diagnostics /Dvukhchastotnyi fazometr dlia diagnostiki plazmy/.  
14 p2451 A69-29798  
A three-channel microwave phase meter /Trekhkanal'nyi SVCh-fazometr/.  
14 p2497 A69-29799
- MALYKH, N. I.**  
Testing procedures for phase meters with frequency modulation /Metodika ispytaniya fazometrov s chastotnoi moduliatsiei/.  
14 p2497 A69-29797  
A two-frequency phase meter for plasma diagnostics /Dvukhchastotnyi fazometr dlia diagnostiki plazmy/.  
14 p2451 A69-29798  
A three-channel microwave phase meter /Trekhkanal'nyi SVCh-fazometr/.  
14 p2497 A69-29799  
Microwave phase meters for plasma diagnostics /Sverkhvysokochastotnye fazometry dlia diagnostiki plazmy/.  
14 p2452 A69-29804
- MALYKH, V. A.**  
The cathode materials of the thermoemission converters research /TEC/.  
14 p2505 A69-29265
- MALYKHINA, I. D.**  
Solution of the problem of eigenvalues for the Orr-Sommerfeld equation by a difference technique - Stability of a Poiseuille flow in a plane channel /Reshenie zadachi o sobstvennykh znacheniakh dlia uravneniya Orra-Zommerfel'da raznostnym metodom - Ustoychivost' techeniya Puazeilia v ploskom kanale/.  
03 p0416 A69-13654
- MALYSHEV, A. P.**  
Wave processes in an elastic thin-walled cylindrical shell during a sudden application of a load on its end face /Volnovye protsessy v uprugoi tonkostennoi tsilindricheskoi obolochke pri vnezapnom prilozhenii sily k ee tortsu/.  
18 p3218 A69-34600
- MALYSHEV, B. N.**  
Liquid lasers /Opticheskie kvantovye generatory na zhidkostiakh/.  
11 p1893 A69-24353
- MALYSHEV, G. M.**  
Determination of the electron temperature and concentration in an arc in a magnetic field on the basis of the scattering of laser light at the electrons /Opredelenie temperatury i kontsentratsii elektronov v duge v magnitnom pole po rasseianiiu lazernogo izlucheniya na elektronakh/.  
14 p2496 A69-29780  
Study of an electrical discharge due to a laser spark /Issledovanie elektricheskogo razriada cherez lazernuiu iskru/.  
21 p3740 A69-39552



## MALYSHEV, K. A.

Aging of Fe-Ni-Ti alloys in the process of the reverse alpha-gamma martensitic transformation.

04 p0613 A69-14558

Effect of plastic deformation on structural changes and mechanical properties during aging of the austenitic Fe-Ni-Ti alloy /Vlianie plasticheskoi deformatsii na izmenenie struktury i mekhanicheskoi svoistva pri starenii austenitnogo splava Fe-Ni-Ti/.

04 p0618 A69-15177

Effect of plastic deformation on the physical and mechanical properties during aging of phase-hardened austenitic Fe-Ni-Ti alloy /Vlianie plasticheskoi deformatsii na fizicheskie i mekhanicheskie svoistva pri starenii fazonaklepannogo austenitnogo Fe-Ni-Ti splava/.

21 p3746 A69-38956

## MALYSHEV, V. A.

Analysis of the operation of quantum devices on the basis of the concepts of nonlinear radio engineering /Analiz raboty kvantovykh priborov na osnovie poniatii nelineinoi radiotekhniki/.

05 p0719 A69-16223

Transfer function of a distributed detector.

05 p0736 A69-16787

Approximation of the current-voltage characteristic of tunnel diodes by high even-degree polynomials of a voltage reckoned from the minimum voltage /Ob aproksimatsii vol't-ampernoii kharakteristiki tunnel'nykh diodov polinomami vysokikh chetnykh stepenei napriazheniia, otschityvaemogo ot napriazheniia minimuma/.

06 p0898 A69-17802

Effect of self-bias on the dynamic range of tunnel diode amplifiers.

09 p1469 A69-22633

Influence of the second harmonic on the operation of a traveling wave amplifier employing a distributed nonlinear active medium /O vlianii vtoroi garmoniki na rabotu usilitelia begushchei volny na raspredelennoi nelineinoi aktivnoi srede/.

22 p3916 A69-40963

## MALYSHEV, V. I.

Determination of the buildup time of a giant pulse in a laser with a passive shutter /Opredelenie vremeni razvitiia gigantskogo impul'sa v OKG s passivnym zatvorom/.

11 p1894 A69-24621

Kinetics of the free-emission spectrum of a ruby laser with elimination of mode discrimination /Kinetika spektra svobodnoi generatsii OKG na rubine pri iskluchanii diskriminatsii mod/.

11 p1900 A69-25547

Kinetics of free generation spectra of a solid-state laser in the traveling-wave regime with mode discrimination excluded.

13 p2271 A69-27655

Mode locking in lasers employing polymethine dye solutions /Sinkhronizatsiia mod v lazerakh na rastvorakh polimetinovykh krasitelei/.

21 p3740 A69-39545

## MALYSHEV, V. V.

Synthesis of an optimal orbit control system for a stable artificial earth satellite /Sintez optimal'noi sistemy upravleniia orbitoi statsionarnogo iskusstvennogo sputnika zemli/.

21 p3767 A69-39652

## MALYSHEVA, E. A.

Application of a kinematic theorem to the determination of the precession rate of gyroscopic devices in space /Primenenie kinematicheskoi teoremy dlia opredeleniia skorosti pretsessii giroskopicheskikh priborov v prostranstve/.

09 p1498 A69-22111

## MAMAEV, I. U.

Investigation, by the coincidence method, of the elementary processes involved in charged-state variations during an interaction between protons and inert gas atoms /Issledovanie metodom sovpadenii elementarnykh protsessov izmeneniia zariadovyykh sostoianii pri vzaimodeistvii protonov s atomami inertykh gazov/.

12 p2133 A69-26543

Elementary processes involved in the change in the charge states during interactions between protons and hydrogen molecules /Elementarnye protsessy izmeneniia zariadovyykh sostoianii pro vzaimodeistvii protonov s molekulami vodoroda/.

15 p2655 A69-30963

## MAMATKAZIN, D. A.

Some laws of spacecraft orbit control.

11 p1965 A69-25743

Certain control laws for space vehicle rendezvous /O nekotorykh zakonakh upravleniia sblizheniem kosmicheskikh letatel'nykh apparatov/.

22 p4036 A69-40115

## MAMATKULOV, P.

Calculation of the effect of "entrainment" on the acoustothermal effect in semiconductors /Raschet vlianiia efekta "uvlecheniia" na akustotermicheskii effekt v poluprovodnikakh/.

10 p1746 A69-23573

## MAMATKULOV, R.

Certain effects in semiconductors due to the action of intense light on current carriers /Nekotorye efekty v poluprovodnikakh, vyzvannye deistviem intensivnogo sveta na nositeli toka/.

01 p0139 A69-10895

## MAMEDOV, I. S.

Large deformations of a momentless orthotropic spherical shell of variable thickness /Bol'shie deformatsii bezmomentnoi ortotropnoi sfericheskoi obolochki peremennoi tolshchiny/.

22 p4039 A69-39916

## MAMEDOV, M. A.

Definitive orbit of Comet Arend-Roland 1957 III /Akonchatel'naia orbita komety 1957 iii arendrolana/.

20 p3596 A69-37311

## MAMEDOV, N. A.

Calculation of nonrectangular plates with free and supported corners /K raschetu nepriamougol'nykh platin so svobodnymi i podpertymi uglovymi tochkami/.

14 p2535 A69-29410

## MAMEDOV, S. G.

On three-dimensional information pictures of chromospheric spicules /Research note/.

07 p1217 A69-19241

## MAMIDZHANIAN, E. A.

Contribution to the study of the central regions of high-energy extensive air showers.

13 p2332 A69-28404

Energy spectrum of neutrons in the 10 super 11 to 10 super 12 eV energy range at sea level /K voprosu ob energeticheskoi spektre neutronov v oblasti energii 10 super 11-10 super 12 eV na urovne moria/.

23 p4205 A69-41701

## MAMIE, J.

Structures and materials for nozzle throats /Structures et materiaux pour cols de tuyeres/.

10 p1716 A69-23403

## MAMINOV, A. S.

Investigation of the fatigue strength of steels 22K and 16GNM under conditions of sharp cycle asymmetry and under the action of boiling water /Issledovanie ustalostnoi prochnosti stalei 22K i 16GNM v usloviakh rezkoj asimetrii tsikla i pri vozdeistvii kipiashechi vody/.

19 p3347 A69-36741

## MAMMANO, A.

The spectrum 1966-67 of MH alpha 328-116 equals V 1016 Cyg.

19 p3424 A69-36234

## MAMOLA, G.

Study of a variable-polarization tunnel-diode oscillator /Studio di un oscillatore a diodo tunnel a polarizzazione variabile/.

01 p0038 A69-10070

Oscillation frequency of a nonsinusoidal tunnel-diode oscillator as a function of polarization /Frequenza di oscillazione di un oscillatore non sinusoidale a diodo tunnel in funzione della polarizzazione/.

08 p1279 A69-19924

Some applications of the theory of tunnel diode oscillators /Alcune applicazioni della teoria degli oscillatori a diodo tunnel/.

19 p3285 A69-36738

## MAMONOV, S. K.

Degradation of neodymium glass parameters in operation /Ukhudshenie parametrov neodimovykh stekol v protsesse ekspluatatsii/.

03 p0442 A69-14219

Thermal mode of operation and thermomechanical stability of glass laser active elements /Teplovoi rezhim i termomekhanicheskai prochnost' stekliannykh aktivnykh elementov opticheskogo kvantovogo generatora/.

10 p1702 A69-23428

Experimental determination of the pumping energy absorbed by an active element of neodymium glass /Eksperimental'noe opredelenie energii nakachki, pogloshchaemoi v aktivnom elemente iz neodimovogo stekla/.

15 p2635 A69-31104

## MAMONOV, V. N.

Displacement in a turbulent boundary layer on a previous surface during supercritical injection /Ot-

tesnenie v turbulentnom pogranchnom sloe na pronitsaemoi poverkhnosti pri sverkhkriticheskom vduve/.

13 p2245 A69-27385

## MAMONTOV, E. V.

Theory of unsteady transonic flows /Teorii nestatsionarnykh okolozvukovykh techenii/.

15 p2590 A69-30049

## MAMOUN, M.

Effects of axial vibrations on frictional losses in gear systems.

[ASME PAPER 69-VIBR-15]

10 p1701 A69-24169

## MAMRUKOV, A. P.

Changes in the parameters of regular layers of an undisturbed ionosphere over Yakutsk during a half-cycle of solar activity /Izmeneniia parametrov reguliarnykh sloev nevozmutshchennoi ionosfery nad Yakutskom za polovinu tsikla solnechnoi aktivnosti/.

20 p3527 A69-37668

## MAMRUKOVA, V. P.

Spectrographic method of analyzing the variations in cosmic-ray intensity /Spektrograficheskii metod analiza variatsii intensivnosti kosmicheskikh lucheii/.

10 p1759 A69-22836

## MANABE, S.

An investigation of thermal tidal oscillations in the earth's atmosphere using a general circulation model.

03 p0457 A69-13030

## MANAGADZE, G. G.

Model of the earth's magnetic field.

06 p0919 A69-17550

Plasma flow around a two-dimensional magnetic dipole.

06 p0967 A69-17738

Modeling of the interaction of the solar wind with the geomagnetic field.

12 p2149 A69-26681

Interferometer employing a gas laser for measuring plasmoids /Interferometr na gazovom lazere dlia izmereniia sgustkov plazmy/.

14 p2451 A69-29778

Determination of plasmoid parameters on the basis of infrared radiation /Opredelenie parametrov sgustkov plazmy po infrakrasnomu izlucheniui/.

14 p2496 A69-29785

## MANATT, S. L.

Energy-level iterative NMR method for sets of magnetically nonequivalent, chemical-shift equivalent nuclei.

20 p3579 A69-37348

## MANCHANDA, R. K.

Proposed experiments to measure the spectra and time variation of X-ray sources.

06 p0992 A69-17312

## MANCHESTER, K. E.

Properties of ion-implanted GaAs diodes.

[ECS PAPER 172]

08 p1284 A69-20369

## MANCHESTER, R. N.

A new type of wideband 1665 MHz OH emission.

08 p1397 A69-20772

Detection of a change of state in the pulsar PSR 0833-45.

12 p2172 A69-27167

Accurate flux densities at 5009 MHz of 753 radio sources.

24 p4382 A69-42922

## MANCIANTI, M.

Effects of synchronization errors in a compression-line demodulator /Sugli effetti dell'errore di allineamento del sincronismo nel demodulatore a linea di compressione/.

08 p1271 A69-19920

## MANCO, R. J.

An exploding wire self-healing fuse.

01 p0120 A69-10677

## MANCUSO, R. L.

Analyzing and forecasting clear-air turbulence probabilities over the United States.

22 p3976 A69-39927

## MANCUSO, S.

Selective amplifier for recording time signals on Time Recorder 2 and measurement of the time lag introduced by the Philips 8RO 501 radio receiver /Amplificatore selettivo per registrazione su Time Recorder 2 di segnali orari e misura del ritardo introdotto dalla ricevente Philips 8RO 501/.

16 p2790 A69-32217

- MANCZAK, K.**  
Identification of extremal plants with the aid of factor analysis /Identyfikacja obiektów ekstremalnych na podstawie analizy czynnikowej/.  
05 p0737 A69-15888  
Optimization of quantization of continuous signals with a known probability distribution /Optymalizacja kwantowania sygnałów ciągłych o znanym rozkładzie prawdopodobieństwa/.  
24 p4288 A69-42671
- MANDAL, A. K.**  
Numerical computation method for the evaluation of the transition matrix.  
11 p1910 A69-25660
- MANDEL, A. D.**  
Current research on regenerative systems.  
20 p3477 A69-37623
- MANDEL, A. P.**  
Hybrid microelectronics modules designed using basic thermal design guidelines.  
22 p3910 A69-39952
- MANDEL, J.**  
Punching of a smooth-interface double-layer material in plane deformation /Poinçonnement d'un bicouche à interface lisse, en deformation plane/.  
09 p1617 A69-22048
- MANDEL, L.**  
Sixth order correlations of laser beam fluctuations near threshold.  
07 p1144 A69-18252
- MANDEL, R.**  
Natural orbitals for H sub 2.  
06 p0960 A69-17112
- MANDELBAUM, M.**  
Mathematical models for outgoing traffic flow in an airport terminal.  
09 p1476 A69-21439
- MANDELES, S.**  
Location of unique sequences in tobacco mosaic virus ribonucleic acid.  
03 p0370 A69-13461
- MANDELL, A. J.**  
Psychochemical research studies in man.  
04 p0553 A69-14976
- MANDELL, B.**  
Analysis of air backflow and pressurization characteristics in the nuclear exhaust system duct. [AIAA PAPER 69-325]  
09 p1479 A69-22390
- MANDELL, D. A.**  
Radiative transport quantities for a hydrogen plasma.  
20 p3581 A69-37306
- MANDELL, J. F.**  
An experimental study of the buckling of anisotropic plates.  
12 p2186 A69-26840
- MANDELSHTAM, S. L.**  
Diffuse X-radiation background in space.  
01 p0147 A69-11310  
Preliminary results of investigations of solar X-ray emission by means of the satellite "Kosmos-166".  
07 p1210 A69-19614  
Studies of the short-wave radiation of the sun /Issledovaniia korotkovolnovogo izlucheniia solntsa/.  
13 p2326 A69-27355
- MANDELSTAM, S.**  
Feynman rules for electromagnetic and Yang-Mills fields from the gauge-independent field-theoretic formalism.  
05 p0794 A69-16363  
Feynman rules for the gravitational field from the coordinate-independent field-theoretic formalism.  
05 p0794 A69-16364
- MANDICS, P. A.**  
On a limitation of multifrequency atmospheric probing.  
14 p2449 A69-29535
- MANDORF, V.**  
Boron nitride in aerospace.  
02 p0270 A69-11802
- MANDREKAR, V.**  
On the existence of optimal random controls.  
21 p3756 A69-39266
- MANDRITSKAIA, K. V.**  
Phenomenological characteristics of extensive air showers at sea level.  
13 p2332 A69-28406
- MANDROSOV, V. I.**  
Properties of surface off-axis holograms of a point object /Svoistva poverkhnostnykh vnoseykh hologramm tochechnogo ob'ekta/.  
17 p2981 A69-33115
- MANDYBURA, V. S.**  
Correction of automatic control systems by compensating for the nonlinear statistical characteristics /Korrektsiia avtomaticheskikh sistem kompensatsiei nelineinykh statisticheskikh kharakteristik/.  
01 p0053 A69-10801
- MANDZHAVIDZE, Z. SH.**  
Inelastic interaction cross section of  $7 \times 10$  super 10 to 10 super 12 ev nuclear-interacting particles in carbon and iron.  
13 p2330 A69-28383
- MANELIS, G. B.**  
Kinetics of the thermal decomposition of ammonium perchlorate at high temperatures /Kinetika termicheskogo raspada perkhlorata ammoniia pri vysokikh temperaturakh/.  
08 p1375 A69-20339  
Effect of ionizing radiation on the combustion of ammonium perchlorate and systems of mixtures containing it /Vliianie ioniziruiushchego izlucheniia na gorenie perkhlorata ammoniia i i smeseykh sistem na ego osnove/.  
11 p1941 A69-25194
- MANENC, J.**  
Structure and hardening of an austenitic alloy - Fe-30 percent Ni-5 percent Nb /Structure et durcissement d'un alliage austenitique - Fe-30 percent Ni-5 percent Nb/.  
01 p0095 A69-10603
- MANENKOV, A. A.**  
Optical homogeneity of ruby crystals and its relation to laser radiation divergence /Opticheskaia odnorodnost' kristallov rubina i ee svyaz' s rashodimost'iu izlucheniia opticheskikh kvantovykh generatorov/.  
01 p0139 A69-10831  
Optical homogeneity of ruby crystals and its relation to the radiation divergence of lasers.  
11 p1936 A69-24698  
Surface and volume scattering, surface-damage, and optical homogeneity studies of ruby crystals and their connection with laser-emission characteristics. [IEEE PAPER U-7]  
12 p2106 A69-26322
- MANER, A. W.**  
Construction practice for hot-mix bituminous pavements.  
01 p0057 A69-11276
- MANEUVRIER, J.**  
Configuration and displacement of nocturnal auroral electron showers /Configuration et déplacement des précipitations nocturnes d'électrons auroraux/.  
08 p1308 A69-20281
- MANEVICH, A. E.**  
Determination of the total error of a vertical gyroscope /Ob opredelenii polnoi oshibki girovertikali/.  
22 p3946 A69-40251
- MANEVICH, A. I.**  
Stability of a cantilever conical shell under tension /Ustoichivost' konsol'noi konicheskoi obolochki pri rastiazhenii/.  
18 p3216 A69-34574  
Experimental investigation of the stability of reinforced cylindrical shells under external pressure /Eksperimental'noe issledovanie ustoiichivosti podkreplennykh tsilindricheskikh obolochek pri vneshnem davlenii/.  
18 p3225 A69-35371
- MANEVICH, L. I.**  
Experimental investigation of the stability of smooth cylindrical shells of various scales under axial compression /Eksperimental'noe issledovanie ustoiichivosti gladkikh tsilindricheskikh obolochek razlichnykh mashtabov pri osevom szhatii/.  
04 p0680 A69-14929  
Investigation of the carrying capacity of reinforced cylindrical shells under complex loading with allowance for discrete positioning of the ribs /Issledovanie nesushchei sposobnosti podkreplennykh tsilindricheskikh obolochek pri kombinirovannom nagruzhении s uchetom diskretnogo raspolozheniia shpangoutov/.  
23 p4229 A69-41990  
Stability analysis of a cylindrical shell reinforced at the edges by elastic ribs /Issledovanie ustoiichivosti tsilindricheskoi obolochki, podkreplennoi po kraiam uprugimi shpangoutami/.  
23 p4229 A69-41992
- MANFREDI, M.**  
Positron annihilation in semiconductors.  
03 p0485 A69-13295  
Functional changes of somato-sensory system during deep sleep.  
22 p3872 A69-40161
- MANFREDI, P. F.**  
Systematic uncertainty of the switching delay in a triggering circuit driven by finite slope signals.  
11 p1858 A69-24568
- MANGALICK, M. C.**  
Dislocation damping due to extended dislocations.  
08 p1334 A69-20576
- MANGANARO, J. L.**  
Mass spectrometer leak testing by a calibrated enclosure method.  
04 p0598 A69-14974
- MANGANON, P., JR.**  
Structure and properties of dynamically strain aged Fe-Cr-C and Fe-Mo-C alloys.  
13 p2276 A69-27403
- MANGENEY, A.**  
On some characteristic features of type IV bursts. III - Electron acceleration in a collisionless shock wave in the solar corona.  
09 p1578 A69-22058
- MANGENEY, L.**  
Literal developments in the analytical theory of the moon /Développements littéraires dans la théorie analytique de la lune/.  
21 p3796 A69-38474
- MANGERON, D.**  
New equations of analytical mechanics and differential operators of higher order /Nuove equazioni della meccanica analitica ed operatori differenziali d'ordine superiore/.  
02 p0281 A69-12199  
General theory of successive approximations in gear and machine studies based on the new matrix tensor method with a view toward computerization. II - Kinematic study of spatial gears with nondeformable closed contours, using the matrix tensor method /Allgemeine Theorie der sukzessiven Näherungen beim getriebe- und maschinenstudium auf grund der neuen Matrix-Tensor-Methode, im Hinblick auf die Anwendung von Rechenautomaten. II - Kinematisches Studium der Raumgetriebe mit unverformbaren geschlossenen Konturen mittels der Matrix-Tensor-Methode/.  
15 p2713 A69-31020
- MANGIAPANE, J. A.**  
An investigation of the fatigue behavior of a boron-epoxy-reinforced titanium compressor disk.  
09 p1619 A69-22323  
Development of hollow turbine disks.  
09 p1509 A69-22345  
Development of metal-matrix composite blading for gas-turbine engines. [AIAA PAPER 68-1037]  
20 p3586 A69-37153
- MANGIONE, B. J.**  
Vortex shedding from circular cylinders in sheared flow.  
20 p3515 A69-37228
- MANGUS, J. D.**  
Optical design of a glancing incidence X-ray telescope.  
08 p1318 A69-21087
- MANHEIMER-TIMNAT, Y.**  
A study of axisymmetrical turbulent jet diffusion flames.  
13 p2379 A69-28455  
Carbon dioxide blue continuum emission at high temperatures.  
14 p2427 A69-29014  
Carbon dioxide dissociation relaxation times, measured in a shock tube.  
16 p2766 A69-31910
- MANHEIMER, W. M.**  
Weak turbulence theory of velocity space diffusion and the nonlinear Landau damping of waves.  
08 p1368 A69-20803  
Weak turbulence theory of velocity space diffusion in a magnetic field.  
16 p2819 A69-31683
- MANI, A.**  
Surface radiation balance measurements in India during the IQSY.  
02 p0307 A69-11820  
Variations in the vertical distribution of ozone over India.  
16 p2786 A69-32627



## MANI, R.

## MANI, R.

Discrete frequency noise generation from an axial flow fan blade row.  
[ASME PAPER 69-FE-12] 20 p3460 A69-37989

## MANIAN, V. S.

Heat transfer measurements in cylindrical wall jets.  
21 p3695 A69-38972

## MANIAR, G. N.

Microstructural stability of Pyromet 860 iron-nickel-base heat-resistant alloy.  
13 p2279 A69-27764

## MANIER, G.

Frequency distribution of wind velocity as a function of height, averaging time, and thermal stratification /Die Haeufigkeitsverteilung der Windgeschwindigkeit in Abhaengigkeit von Hoehe, Mittelbildungszeit und thermischer Schichtung/.  
04 p0628 A69-15088

## MANINGER, L.

Wideband receivers using varactor diode frequency upconverters.  
01 p0048 A69-11036

## MANIS, D.

The navigation system of the supersonic transport /Le systeme de navigation du transport supersonique/.  
02 p0278 A69-12238

## MANIUKOVA, L. G.

Melting points of covalent semiconductor compounds with stoichiometric vacancies /O temperaturakh plavleniya kovalentnykh poluprovodnikov so stekhiometricheskimi vakansiyami/.  
02 p0297 A69-11881

The melting points of covalent semiconductors with stoichiometric vacancies.  
18 p3182 A69-35041

## MANJOINE, M. J.

Fracture toughness of beryllium.  
23 p4178 A69-42450

## MANKA, C. K.

A study of charge transport in a high-pressure RF discharge.  
10 p1740 A69-23662

## MANKA, R. H.

A lunar-surface electric-field detector.  
03 p0429 A69-13221

## MANKIEWICZ, R. H.

Yearbook of Air and Space Law 1966.  
10 p1811 A69-23986

The Warsaw Convention and the law compared /La convention de Varsovie et le droit compare/.  
19 p3455 A69-36331

## MANKO, M. A.

Reduction of the oscillation threshold of an uncooled injection laser by uniaxial compression.  
03 p0441 A69-13848

Properties of emission band of a semiconductor laser /O wlasciwosciach pasma promieniowania lasera polprzewodnikowego/.  
17 p2984 A69-34161

About the threshold phenomena in the injection lasers.  
19 p3337 A69-36527

## MANKO, V. I.

The 1.6-cm radio emission of solar sources associated with sunspots and flocculi.  
04 p0649 A69-15241

## MANKOVSKII, V. A.

Theory of anisotropic hereditary elastic media /K teorii anizotropnykh uprugo-nasledstvennykh sred/.  
15 p2642 A69-30584

Contribution to the phenomenological creep theory for an anisotropic elastohereditary medium /K fenomenologicheskoi teorii poluchestii anizotropnoi uprugo-nasledstvennoi sredy/.  
18 p3226 A69-35373

## MANLEY, D. M. J. P.

Ultrasonic detection of gas bubbles in blood.  
18 p3098 A69-34821

## MANLEY, O. P.

Models of X-ray stars.  
20 p3593 A69-38154

## MANN, F. C.

The researcher and his working environment - Research findings and their application.  
08 p1423 A69-21124

## MANN, F. I.

Rapid analysis of moon-to-earth trajectories.  
[AAS PAPER 68-089] 20 p3595 A69-37174

## MANN, G. R.

Variations in the active region, McMath No. 8362 prior to the proton flare of 7 July 1966.  
10 p1765 A69-23747

## MANN, H. B.

Error Correcting Codes, U.S. Army Mathematics Research Center, Symposium, University of Wisconsin, Madison, Wis., May 6-8, 1968, Proceedings.  
06 p0890 A69-17861

## MANN, H. M.

Polarization of the nightglow - Line versus continuum.  
02 p0235 A69-11428

## MANN, J. D.

An in situ facility for the determination of the effects of a space environment on the solar absorptance of materials.  
[AIAA PAPER 69-1021] 22 p3923 A69-40392

## MANN, M. M.

Spectroscopic determination of local-field parameters.  
21 p3779 A69-38531

## MANN, R. W.

The formation of a shock wave in a blade passage of a partial admission turbine.  
[ASME PAPER 68-FE-25] 05 p0698 A69-16075

## MANNA, F.

Rotating discs of unconventional profile.  
07 p1235 A69-19444

## MANNELLA, G. G.

Aerospace sensor systems.  
03 p0431 A69-13851

Quenching of N sub 2 /A super 3 sigma sub u super plus/ in high vibrational levels by nitrogen atoms.  
19 p3379 A69-36424

## MANNERY, E. J.

Simultaneous observations of the optical and X-ray spectra of Sco XR-1.  
07 p1220 A69-19391

## MANNING, C. R., JR.

Wetting of binary aluminum alloys in contact with Be, B sub 4 C, and graphite.  
[ACS PAPER 15-C-68F] 12 p2114 A69-26301

## MANNING, J. E.

Analysis of vibratory energy distributions in composite structures.  
04 p0675 A69-14687

## MANNING, J. R.

Transient switching of fluidic bistable wall attachment amplifiers.  
17 p2904 A69-34068

## MANNING, L. A.

Investigation of an early flyby sequence for imaging of the planet Mercury.  
[AAS PAPER 69-258] 24 p4380 A69-42860

## MANO, K.

Nonlinearity of large-signal transient response of transistors in saturation region.  
09 p1464 A69-22117

Response of a pull-in oscillator for random noise coincident with synchronizing signal.  
12 p2044 A69-27101

## MANOCHA, S. L.

Enzyme histochemistry of the cerebral cortex of squirrel monkey and rat.  
12 p2018 A69-25773

Histochemical mapping of lactate dehydrogenase and monoamine oxidase in the medulla oblongata and cerebellum of squirrel monkey /Saimiri sciureus/.  
12 p2018 A69-25778

## MANOHAR, R.

Analysis of laminar-flow heat transfer in the entrance region of circular tubes.  
10 p1809 A69-23195

## MANOVTSSEV, G. A.

Study of the effects of various work and rest schedules on subjects under conditions of relative isolation /Izuchenie vlianiia razlichnykh rezhimov truda i otdykha na ispytatelei, nakhodiaschihsia v usloviakh otnositel'noi izoliatsii/.  
03 p0381 A69-14201

## MANRING, E. R.

Determination of self-broadening coefficients of CO, using CO sub 2 laser radiation at 10.6 mu.  
01 p0091 A69-10844

## MANRY, C. E.

Results of ground and flight tests of the Apollo optics.  
19 p3307 A69-35796

## MANSBACH, P.

Monte Carlo trajectory calculations of atomic excitation and ionization by thermal electrons.  
18 p3176 A69-34790

## MANSE, D.

Interaction of high-powered focused laser beam with exploding wire.  
01 p0090 A69-10666

## MANSFIELD, E. H.

On the stresses near a crack in an elastic sheet.  
19 p3440 A69-36638

On optimum fibre orientation in an annulus.  
19 p3447 A69-36851

## MANSFIELD, V.

An electron temperature distribution derived from optical and radio measurements of HII regions.  
11 p1950 A69-25110

## MANSHARAMANI, N.

A power supply for ruby laser.  
02 p0256 A69-12095

Q-switching techniques for solid state lasers operating at room temperature.  
10 p1706 A69-24018

## MANSON, A. H.

On the nature of the irregularities that produce partial reflections of radio waves from the lower ionosphere /70-100 km/.  
07 p1078 A69-18914

Seasonal variations of electron densities below 100 km at mid-latitudes. I.  
14 p2438 A69-29109

Seasonal variations of electron densities below 100 km at mid-latitudes. II.  
14 p2439 A69-29110

The relationship between the partial reflection of radio waves from the lower ionosphere and irregularities as measured by rocket probes.  
15 p2604 A69-31420

## MANSON, N.

Variation of the gas pressure behind detonation fronts in strictly propane-oxygen mixtures - Influence of the tube diameters and the initial pressure /Variation de la pression des gaz derriere le front des detonations dans les melanges stricts propane-oxygene - Influence du diametre des tubes et de la pression initiale/.  
08 p1421 A69-20757

Determination of thermodynamical characteristics of gas-mixture plasmas /Determination des caracteristiques thermodynamiques des plasmas de melange de gaz/.  
10 p1810 A69-23794

Influence of the nature of the walls on the combustion at constant volume of propane-air mixtures /Influence de la nature des parois sur la combustion a volume constant de melanges propane-air/.  
13 p2379 A69-28363

Variation of the detonation velocity in liquid nitromethane with initial pressure /Variation, avec la pression initiale, de la celerite de detonation dans le nitromethane liquide/.  
22 p4051 A69-40713

## MANSUR, G. F.

The Australian commercial satellite communication station.  
09 p1458 A69-22469

## MANSUROV, A. R.

Effect of "altitude" and acceleration factors on the human organism - An X-ray study /Vlianie na organizm cheloveka faktorov "vysoty" i uskorenii - Rentgenologicheskoe issledovanie/.  
03 p0378 A69-14208

Effect of hyperoxia on the thoracic organs of albino rats.  
10 p1646 A69-23577

## MANSUROV, S. M.

A special feature in the relation between the solar wind velocity and geomagnetic activity /Ob odnoi osobennosti svyazi mezhdru skorost'iu solnechnogo vetra i geomagnitnoi aktivnost'iu/.  
23 p4205 A69-41848

New evidence for a relation between the magnetic fields of outer space and earth /Novye dokazatel'stva svyazi mezhdru magnitnymi poliami kosmicheskogo prostranstva i zemli/.  
23 p4214 A69-41865

## MANSUROVA, L. G.

A special feature in the relation between the solar wind velocity and geomagnetic activity /Ob odnoi osobennosti svyazi mezhdru skorost'iu solnechnogo vetra i geomagnitnoi aktivnost'iu/.  
23 p4205 A69-41848

- MANTEL, T.**  
Acoustic wave generation by temperature modulation of a plasma.  
12 p2134 A69-26096
- MANTLE, P. J.**  
Some design aspects of air-cushion craft.  
05 p0701 A69-15567
- MANTSEV, E. I.**  
Peculiarities of the response of the acoustic analyzer of man during prolonged noise effect in a year-long medico-engineering experiment.  
24 p4278 A69-43408
- MANTZ, W.**  
Effect of aging and cold work hardening on deformability of an age-hardenable aluminum alloy / Der Einfluss von Aushärtung und Kaltverfestigung auf die Verformbarkeit einer aushärtbaren Aluminiumlegierung/.  
02 p0254 A69-12677
- MANUALI, B.**  
The Dioscures system for air control and navigation by satellites / Le système Dioscures de contrôle et de navigation aérienne par satellites/.  
[UN PAPER 68-95832] 06 p0954 A69-17063  
Project "Dioscures" - A system of telecommunications, air traffic control, and satellite navigation / Le projet "Dioscures" - Système de telecommunications, de contrôle du trafic aérien et de navigation par satellites/.  
08 p1347 A69-20779  
The Dioscures project.  
15 p2651 A69-30691  
The Dioscures project - System of telecommunications, air traffic control and navigation by satellites.  
16 p2749 A69-31601
- MANUILSKII, A. D.**  
Energy exchange between active centers in glass / Ob obmene energii mezhdu aktivnymi tsentrami v stekle/.  
15 p2632 A69-30053
- MANUKHIN, A. V.**  
Relations between some semiconductor and chemical properties of metal oxides / Sviaz' mezhdu nekotorymi poluprovodnikovymi i khimicheskimi svoystvami oksidov metallov/.  
03 p0445 A69-13570  
Study of the electrical resistivity of titanium carbide, titanium monoxide, and titanium-oxygen-carbon alloys / Issledovanie elektrosoprotivleniya karbida titana, monooksiida titana i splavov titan-kislorod-uglerod/.  
03 p0446 A69-13575
- MANUS, C.**  
Multiphoton ionization of hydrogen and rare gases / Ionisation multiphotonique de l'hydrogene et des gaz rares/.  
02 p0283 A69-11701  
Study of a synthesized plasma / Etude d'un plasma de synthese/.  
14 p2502 A69-29956
- MANUSHIN, E. A.**  
Some results of an experimental investigation of a cooled turbine.  
21 p3785 A69-39103
- MANVI, R.**  
Finite amplitude longitudinal waves in lattices.  
06 p1022 A69-17367
- MANWELL, T.**  
Error analysis for a chopper-modulated infrared detection system.  
14 p2450 A69-29639
- MANZA, V. P.**  
Investigation of stresses in a frame of variable rigidity reinforcing a cylindrical shell / Issledovanie napriazhenii v shpangoute peremennoi zhestkosti, podkrepliaushchem tsilindricheskuiu obolochku/.  
17 p3055 A69-33131  
Application of the method of straight lines to the solution of problems in photoelasticity / Prilozhenie metoda priamykh k resheniiu zadach fotouprugosti/.  
23 p4228 A69-41987
- MAO, S.**  
Millimeter-wave integrated circuits.  
01 p0040 A69-10197
- MAOPOLSKI, B. J.**  
Rotor dynamics of a single stowed rotor aircraft.  
[AIAA PAPER 69-207] 07 p1057 A69-19578
- MAPLES, H. E.**  
Engineering and operational experiences related to lunar-surface thermal-vacuum qualification of the Apollo extravehicular mobility unit.  
[AIAA PAPER 69-992] 22 p3893 A69-40370
- MAPPER, D.**  
A comparison of trace element distribution in the metal phase of chondrites and in iron meteorites.  
08 p1404 A69-20921
- MAPPES, G. W.**  
A mass spectrometric investigation of the low-pressure pyrolysis of borane carbonyl - The bond dissociation energy of diborane.  
14 p2410 A69-29282
- MAQUOI, R.**  
Application of Computers to the Calculation of Structures / Application des ordinateurs au calcul des structures/.  
07 p1233 A69-19349
- MAR, J.**  
Mechanical design and dynamics of the Alouette spacecraft.  
20 p3618 A69-37858
- MAR, J. W.**  
Structures Technology for Large Radio and Radar Telescope Systems, Proceedings of the International Symposium, Massachusetts Institute of Technology, Cambridge, Mass., October 18-20, 1967.  
23 p4147 A69-42120
- MAR, T.**  
Mode-locked lasers - Measurements of very fast radiative decay in fluorescent systems.  
12 p2105 A69-26310
- MARADUDIN, A. A.**  
Electric field induced infrared absorption and Raman scattering by optical phonons in centrosymmetric crystals.  
02 p0295 A69-11779
- MARAL, G.**  
Configuration and displacement of nocturnal auroral electron showers / Configuration et déplacement des précipitations nocturnes d'électrons auroraux/.  
08 p1308 A69-20281  
Demonstration of monoenergetic beams during auroral electron showers / Mise en évidence de faisceaux monoenergetiques lors de précipitations électroniques aurorales/.  
12 p2066 A69-26295  
Stability of stratospheric balloons and their gondolas / Stabilité des ballons stratospheriques et de leur nacelle/.  
19 p3248 A69-36689  
Recent results in the study of auroral X radiation / Resultats recents sur l'étude du rayonnement X auroral/.  
21 p3787 A69-38359
- MARAN, S. P.**  
Optical identification and observations of the pulsar NP 0532.  
09 p1592 A69-21458  
A search for periodic radiation from CP 1919 at 3.5 mm wavelength.  
14 p2529 A69-29978  
Progress report on pulsars.  
24 p4375 A69-42556
- MARANDINO, G. E.**  
Variability of the linear polarization of 3C 120 and 3C 279.  
02 p0325 A69-12592
- MARANGONI, R. D.**  
Effect of non-homogeneity on the transverse vibrational frequency of uniform beams.  
08 p1413 A69-20413
- MARANTZ, H.**  
The singly ionized krypton ion laser.  
12 p2109 A69-26638
- MARANTZ, L. B.**  
Phosphorus-containing resins and composites for environmental extremes.  
19 p3356 A69-33528
- MARATHAY, A. S.**  
Scattering of partially coherent radiation.  
16 p2797 A69-32050
- MARBLE, D. F.**  
Remote sensing of urban environments.  
12 p2193 A69-27012
- MARCAL, P. V.**  
Finite element analysis of nonlinear structures.  
01 p0171 A69-10964  
Elastic-plastic analysis of flat plates by the finite element method.  
[ASME PAPER 68-WA/PVP-10] 05 p0840 A69-16191
- MARCH, D. N.**  
Low data rate telemetry - A match for the meteor-burst channel.  
19 p3271 A69-36250
- MARCH, N. H.**  
High-pressure behaviour of solids.  
22 p3980 A69-40187
- MARCHAL, C.**  
Secularly stable figures of equilibrium of rotating heterogeneous fluid masses / Figures d'équilibre seculairement stables des masses fluides heterogenes en rotation/.  
03 p0513 A69-13780  
Summary of analytic results for optimal transfers between Keplerian orbits / arbitrary duration / Synthèse des résultats analytiques sur les transferts optimaux entre orbites kepleriennes / durée indifférente/.  
19 p3399 A69-35669  
Numerical study of the economical earth-Mars and earth-Venus transfers.  
[AAS PAPER 69-241] 24 p4380 A69-42855  
Optimum transfer between hyperbolic asymptotes about a planet of finite size.  
[AAS PAPER 69-242] 24 p4380 A69-42856
- MARCHAL, M.**  
Composite materials reinforced by fibers - The case of alumina whiskers / Les matériaux composites renforcés par des fibres - Cas des trichites d'alumine/.  
07 p1167 A69-19290
- MARCHAL, R.**  
Electromagnetic inertia / Sur l'inertie électromagnétique/.  
08 p1352 A69-20756  
The Marchal number in a Meyer-Prandtl flow / Sur le nombre de Marchal dans un écoulement de Meyer-Prandtl/.  
09 p1429 A69-21688  
Analysis of the power output of gas turbines / Analyse du rendement énergétique des turbines à gaz/.  
17 p3021 A69-33360
- MARCHALONIS, J. J.**  
Electron microscopy of a hemagglutinin from Limulus polyphemus.  
16 p2742 A69-31864
- MARCHAND, E. O.**  
Effects of chemical nonequilibrium, mass transfer, and viscous interaction on spherically blunted cones at hypersonic conditions.  
[AIAA PAPER 69-168] 06 p0862 A69-18047
- MARCHANT, A.**  
The use of glass reinforced plastics for hovercraft structures.  
13 p2201 A69-27542
- MARGEGAY, P.**  
Influence of the electric field on the characteristics of epitaxial field effect transistors / Influence du champ électrique sur les caractéristiques des transistors à effet de champ épitaxiaux/.  
02 p0294 A69-11541
- MARCHELLO, J. M.**  
Hydrazine decomposition in glow discharge.  
04 p0646 A69-14860  
Turbulent Schmidt numbers.  
21 p3852 A69-39432
- MARCHENKO, A. I.**  
Photocells with p-n heterojunctions based on compressed sintered cadmium selenide / Fotoelementy s p-n geteroperekhodami na osnovi spresovanogo spechenogo selenidu kadmii/.  
08 p1374 A69-21084
- MARCHENKO, G. A.**  
Oscillations of a cantilevered rectangular plate with reinforcing ribs in a gas flow / Kolebaniia konsol'noi priamougol'noi plastinki s rebrami zhestkosti v potoke gaza/.  
01 p0165 A69-10085



- Numerical Methods in the Applied Theory of Elasticity /Chislennyye metody v prikladnoi teorii uprugosti/. 18 p3211 A69-34331
- MARCHENKO, V. F.**  
Observation of nonlinear boundary effects at radio frequencies. 07 p1088 A69-19755
- MARCHENKO, V. M.**  
Spectrum of a laser employing electron- vibrational transitions in a CaF sub 2 -Sm super 2 super plus crystal /O spektre lazera na elektronno-kolebatelykh perekhodakh v kristalle CaF sub 2 -Sm super 2 super plus/. 08 p1326 A69-20544
- MARCHESE, J. F.**  
An FMFB demodulator for satellite communications. 09 p1457 A69-22464
- MARCHETTI, F.**  
Resonance absorption of microwave longitudinal phonons in transversally magnetised /100/Y.I.G. rods. 15 p2565 A69-30184
- MARCHETTI, G.**  
Use of rectangular signals in pulse-compression radar /Sull'impiego di segnali rettangolari nel radar a compressione di impulso/. 08 p1271 A69-19918  
Coronary sinus outflow and O sub 2 content in anterior cardiac vein blood at different levels of right ventricle performance. 23 p4098 A69-42105
- MARCHI, R. P.**  
Semiclassical theory of elastic perturbations. 22 p3987 A69-41005
- MARCHUK, G. I.**  
Prospects of development of weather-forecasting methods /Perspektivy razvitiia metodov prognoza pogody/. 01 p0108 A69-10398  
Solution of certain quasi-stable problems of dynamic meteorology /O reshenii nekotorykh kvazistatsionarnykh zadach dinamicheskoi meteorologii/. 14 p2476 A69-29821
- MARCIANO, M.**  
Mechanical properties of borsic aluminum composites. 19 p3344 A69-35926
- MARCILLAT, J.**  
Effect of angle of attack and Reynolds number on hypersonic flow past a circular cone /Effet de l'incidence et du nombre de Reynolds sur l'écoulement hypersonique autour d'un cone circulaire/. [ONERA-TP-692] 11 p1818 A69-24751  
Distribution functions of turbulent velocities in a boundary layer - Effects of the response of the hot-wire anemometer /Fonctions de repartition des vitesses turbulentes dans une couche limite - Effets, de la reponse de l'anemometre a fil chaud/. 13 p2250 A69-28336  
Wall flow at M sub infinity equals 7, around a cone at incidence /Ecoulement parietaux autour d'un cone en incidence a M sub infinity equals 7/. 19 p3241 A69-36759
- MARCINKOWSKI, M. J.**  
Martensitic behaviour in the equi-atomic Ni-Ti alloy. 02 p0265 A69-12024  
Deformation behavior in the near-equiatomic Ni-Ti alloys. 06 p0941 A69-17222
- MARCKWARDT, K.**  
Optimal design of free-running drag turbines for boundary layer suction in aircraft /Ueber die optimale Auslegung freifahrender Schlepperturbinen fuer die Grenzschichtabsaugung an Flugzeugen/. 12 p2011 A69-26117
- MARCONERO, R.**  
Low current measurement on board an artificial satellite. 04 p0602 A69-15399  
Regulated numerically programmable high-voltage converter for space applications. 04 p0602 A69-15400  
Wide-range current-to-frequency converter. 07 p1107 A69-19170
- MARCOS, F. A.**  
Atmospheric density measurements by research satellite OV1-15. 15 p2602 A69-31384  
Measurements by the low altitude density satellite OV1-16. 15 p2602 A69-31385

- MARCOV, N.**  
Flow of viscous, electrically conducting fluids in the presence of a flat plate at nonzero incidence /L'ecoulement des fluides visqueux, electroconducteurs, en presence d'une plaque plane a incidence non nulle/. 01 p0126 A69-10163  
Flow of viscous electrically conducting fluids around thin profiles in the special case sigma sub e mu sub e nu equals 1 /Miscarea fluidelor viscoase, electroconductoare, in jurul profilorilor subtiri, in cazul special sigma sub e mu sub e nu equals 1/. 18 p3124 A69-35285  
Flow of viscous electrically conducting fluids around a flat plate /Asupra miscarii fluidelor viscoase, electroconductoare in jurul unei placi plane/. 22 p3992 A69-41109
- MARCOVITZ, A. B.**  
An improved algorithm for the simplification of switching functions using unique identifiers on a Karnaugh map. 16 p2764 A69-31710
- MARCUS, A. H.**  
Application of a statistical surface model to planetary radar astronomy. 23 p4209 A69-41322
- MARCUS, H. L.**  
The mechanical properties of physical vapor deposited titanium. 03 p0443 A69-13117
- MARCUS, J. P.**  
Development of close-coupled accumulators for supersonic missile longitudinal oscillations /POGO/. [AIAA PAPER 69-547] 16 p2869 A69-32729
- MARCUS, R. A.**  
Analytical mechanics of chemical reactions. III, IV. 01 p0123 A69-10681
- MARCUVITZ, N.**  
On the formal theory of electromagnetic fields. 17 p2924 A69-33833
- MARZAK, T.**  
Capacitive dynamometer /Silomierz pojemnoscowy/. 11 p1887 A69-25207
- MARDER, A. R.**  
The morphology of iron-nickel massive martensite. 13 p2276 A69-27401  
A study of directionally transformed pearlite. 13 p2281 A69-28158  
Massive martensite in quenched Fe-Ni alloys. 13 p2282 A69-28166
- MARDER, J. M.**  
The morphology of iron-nickel massive martensite. 13 p2276 A69-27401  
Massive martensite in quenched Fe-Ni alloys. 13 p2282 A69-28166
- MAREC, J.-P.**  
Optimal impulse rendezvous of long duration between quasi-circular, coplanar or noncoplanar, close orbits /Rendez-vous impulsionsnels, optimaux, de longue duree, entre orbites quasi-circulaires, proches, coplanaires ou non/. 19 p3400 A69-35674  
Utilization of variational equations for the study of optimal space trajectories - Application to the singular reticent solutions /Utilisation des equations aux variations dans l'etude des trajectoires spatiales optimales - Application aux solutions singulieres reticentes/. [ONERA-TP-729] 20 p3604 A69-37752
- MARECHAL, J.**  
Certain longitudinal correlation lengths in a grid turbulence subjected to a plane deformation /Sur quelques longueurs de correlation longitudinales dans une turbulence de grille soumise a une deformation plane/. 02 p0192 A69-12626  
Certain Taylor scales in grid turbulence subjected to plane deformation /Sur certaines echelles de Taylor dans une turbulence de grille soumise a une deformation plane/. 04 p0590 A69-15054  
Anisotropy of the derivatives of the velocity fluctuations in a grid turbulence subjected to plane deformation /Anisotropie des derives des fluctuations de vitesse dans une turbulence de grille soumise a une deformation plane/. 19 p3299 A69-36647
- MAREEV, A. P.**  
Effect of tin and zirconium on transformations during heat treatment of the Ti-10 percent Cr alloy /Vlianie olova i tsirkoniia na prevrashcheniia pri termicheskoi obrabotke splava Ti plus 10 percent Cr/. 07 p1162 A69-18775

- MAREGA, G.**  
Solid propellant engine problems concerning ELDO programmes. 03 p0495 A69-12890
- MARENKO, V. V.**  
A noninteracting element for a quantum paramagnetic amplifier /Nevzaimnyi element dlia kvantovogo paramagnitnogo usilitelia/. 19 p3334 A69-35883
- MARENNIKOV, S. I.**  
Influence of the electro-optical effect on the frequency of a parametric laser with a KDP crystal. 20 p3555 A69-38003
- MARENYYI, A. M.**  
Quantitative laws of the postirradiation recovery of yeast cells after exposure to heavy high-energy C super 12 ions /Kolichestvennye zakonomernosti postirradiatsionnogo vosstanovleniia drozhzhevykh kletok pri deistvii vysokoenergetichnykh tiazhelykh ionov C sub 12/. 14 p2406 A69-28915
- MARES, E.**  
Recent measurements of cospectra for heat- flux and stress. 02 p0276 A69-12698
- MARESCA, C.**  
Condition of operation of a resonance tube supplied by a subsonic jet /Condition de fonctionnement d'un tube de resonance alimente par un jet subsonique/. 13 p2247 A69-27738  
Studies of resonance tubes excited by a subsonic jet /Recherches sur les tubes de resonance excites par un jet subsonique/. 13 p2370 A69-28630
- MARETS, M.**  
The TELEMO distributor of the CARINA data processing system of the CNES /Le repartiteur TELEMO de la chaine de traitement CARINA du CNES/. 20 p3511 A69-37914
- MARFAING, Y.**  
Transport of photocarriers in Cd sub x Hg sub 1-x Te graded-gap structures. 06 p0979 A69-17154  
Photovoltaic effects in graded-band-gap structures. 19 p3381 A69-35680
- MARFINA, L. L.**  
Specific features of the development and prolongation of artificial hypobiosis in rats /Osobennosti razvitiia i prolougirovaniia iskusstvennogo gipobiozia u kryss/. 22 p3877 A69-40278
- MARGARIA, R.**  
Energy utilization in intermittent exercise of supramaximal intensity. 23 p4100 A69-41443
- MARGAS, E. Z.**  
Application of dynamic programming and indeterminate Lagrange multipliers to multistage problems of optimal control /Zastosowanie programowania dynamicznego i nieoznaczonych mnoznikov Lagrange'a do wieloetapowych zadan sterowania optymalnego/. 05 p0737 A69-15886
- MARGEN, S.**  
Uric acid production of men fed graded amounts of egg protein and yeast nucleic acid. 05 p0708 A69-15968  
Energy metabolism. 06 p0872 A69-17014  
Regional and total body sweat composition of men fed controlled diets. 10 p1644 A69-23314  
Human intolerance to bacteria as food. 13 p2213 A69-27265
- MARGERISON, J. H.**  
The influence of end-tidal carbon dioxide tension on EEG changes during routine hyperventilation in different age groups. 22 p3872 A69-40162
- MARGERUM, J. D.**  
Hologram recording on photopolymer materials. 13 p2258 A69-27199
- MARGETTS, M. J.**  
Penetration of a high-velocity gas stream by a water jet. [AIAA PAPER 68-604] 04 p0591 A69-15516  
Water injection for rapid cooling of a flow of rocket exhaust gases. [AIAA PAPER 69-514] 19 p3372 A69-36301

## MARGGRAF, W. A.

Aircraft measurements and calculations of the total downward flux of solar radiation as a function of altitude.

17 p3023 A69-33158

## MARGOLIN, G. G.

Strain-energy theory of failure of oriented fiberglass-reinforced plastic laminates under biaxial compression /Energetichna teoriia ruinovannia orientovanih sharuvatikh skloplastikov pri dvovisnomu stisku/.

02 p0270 A69-12142

## MARGOLIS, D. L.

Small-amplitude frequency behavior of fluid lines with turbulent flow. [ASME PAPER 69-FE-11]

20 p3516 A69-37988

## MARGOLIS, J. S.

Infrared absorption spectrum of CH sub 4 at 9050 cm super - super 1.

01 p0023 A69-10289

Studies of methane absorption in the Jovian atmosphere. I.

22 p4028 A69-40663

## MARGONI, R.

Periods and magnitudes of four new variable stars of the M 2 cluster /NGC 7089/ /Periodi e magnitudini di quattro nuove stelle variabili dell'ammasso globulare M 2 /NGC 7089/.

20 p3599 A69-37477

## MARGOZZI, A. P.

Exploratory investigation on the measurement of skin friction by means of liquid crystals.

14 p2427 A69-29029

A dual-beam source of actinic light for photosynthesis research.

19 p3312 A69-36378

## MARGRAVE, T. E., JR.

Inhomogeneities in the solar photosphere.

07 p1217 A69-19238

Limb-darkening tables for 5040 deg K less than T eff less than 7200 deg K.

12 p2171 A69-27153

## MARGUET, R.

Qualification of space stage separations /Qualification des separations d'etages spatiaux/.

10 p1669 A69-23005

## MARGULIES, G.

Reaction-boom attitude control systems. [AIAA PAPER 69-834]

21 p3822 A69-39365

## MARIA-SUBE, R.

Study of jets in rotational incompressible plane flows by an electrical analog /Etude par une methode d'analogie electrique de jets en ecoulements plans incompressibles rotationnels/.

01 p0058 A69-10037

## MARIAMOV, A. N.

Calculation of the interaction between a supersonic jet and a counterflow of an ideal compressible fluid /Raschet vzaimodejstviia sverkhzvukovoi gazovoi strui i vstrechnogo potoka ideal'noi szhimaemoi zhidkosti/.

05 p0751 A69-16501

## MARIANI, G.

Influence of reliability on the operating costs of telecommunications systems in general and on satellite communications systems in particular /Influenza dell'affidamento sui costi operativi dei sistemi di telecomunicazioni in generale e sui sistemi di telecomunicazioni via satellite in particolare/.

08 p1276 A69-20586

## MARIE, P.

Focusing coherent light by means of a helicoidal guide - Extension to the continuous focusing of high-energy particles /Guidage de la lumiere coherent par un guide helicoidal - Extension a la focalisation continue des particules de haute energie/.

22 p3981 A69-40475

## MARIENFELD, H.

Flight simulation at the Institute of Control Engineering at the Darmstadt Technical University /Flugsimulation im Institut fuer Regelungstechnik der TH Darmstadt/.

01 p0057 A69-11300

Variable analog computer system with a gimballed and servocontrolled aircraft model for simulating various fixed-wing aircraft /Eine variable Analogrechnerschaltung mit einem kardanisch gelagerten, servogesteuerten Flugzeugmodell zur Simulation verschiedener Starrfluegler/.

04 p0585 A69-14829

## MARIETTI, P.

Applications of Fourier transform techniques in optics /Applicazioni delle tecniche delle trasformate di Fourier in ottica/.

19 p3374 A69-36737

## MARIK, M.

Generation of magnetohydrodynamic waves in sunspots and heating of the chromosphere above the spots /Generatsiia magnitogidrodinamicheskikh voln v solnechnykh piatnakh i nagrev khromosfery nad piatnam/.

22 p4010 A69-39992

## MARIKIAN, G. A.

Spectrum of ionization bursts in an ionization calorimeter beneath absorbers.

13 p2331 A69-28393

## MARILLEAU, J.

Ultrahigh-speed picture taking devices with exposure times ranging between 5 and 500 nsec /Dispositifs de prise de vues ultra-rapides a temps de pose compris entre 5 et 500 ns/.

12 p2083 A69-26146

## MARIMUTHU, K. M.

Radiobiological studies of plants orbited in Biosatellite II.

15 p2556 A69-31321

## MARIN, GH.

A gas bearing generating unit.

15 p2629 A69-31028

Experimental verification of an analytical method for calculating pressure-circular bearings /Verificarea experimentală a unei metode analitice de calcul a lagarelor circulare alimentate sub presiune/.

16 p2792 A69-31560

## MARIN, J.

Low-cycle fatigue of 7075-T651 aluminum alloy in biaxial bending.

01 p0093 A69-10116

## MARIN, N. I.

Static Endurance of the Aircraft Structural Elements /Staticheskaia vynoslivost' elementov aviatsionnykh konstruktov/.

07 p1231 A69-18554

## MARIN, O. E.

Effect of stresses on the orientation of laser damage cracks in transparent dielectrics.

10 p1703 A69-23621

## MARINA, L. I.

Efficient GaP diode sources of red radiation.

06 p0979 A69-16999

## MARINCHENKO, N. I.

Corrosive characteristics of jet fuels in the presence of condensing water /Korozionnye svoistva reaktivnykh topliv v usloviakh kondensirovaniia vody/.

01 p0142 A69-11099

## MARINESCU, A.

Tensiometric aerodynamic balances /Balante aerodinamice tensometrice/.

05 p0762 A69-15922

Experimental determination of the rotary derivatives of aerodynamic forces and moments in subsonic and supersonic flow /Determinarea experimentală a derivatelor de rotație a forțelor și momentelor aerodinamice în regim subsonic și supersonic/.

21 p3647 A69-38733

Generalization of a variational problem of the minimum-fuel orbital rendezvous maneuver /Sur la generalisation d'un probleme variationnel de la manoeuvre de rendez-vous sur orbites, avec minimum de combustible/.

22 p4028 A69-40754

## MARINESCU, AL.

Considerations regarding an optimum maneuver for space vehicles propelled by low-thrust jet engines /Consideratii asupra unor manevre optime ale aparatelor cosmice propulsate de motoare reactive de mica tractiune/.

05 p0829 A69-15879

Optimum rendezvous maneuver, with minimum fuel, for space vehicles in a circular orbit, considering the nonlinear equations of motion of the tracking equipment /Asupra manevrei optime de intilnire, cu minimum de combustibil, a aparatelor cosmice pe orbite circulare considerind ecuatile neliniare de miscare a aparatului urmaritor/.

05 p0823 A69-16036

Optimal maneuver for vehicle rendezvous in minimum-fuel circular orbits, taking into account nonlinear equations of motion for the pursuing vehicle /Sur la manoeuvre optimale pour le rendez-vous des engins sur des orbites circulaires a minimum de combustible,

compte tenu des equations non lineaires du mouvement de l'engin poursuivant/.

06 p1014 A69-17571

Study of an optimal rendezvous maneuver using minimum fuel in the approach stage in the case of elliptic and hyperbolic orbits /nonlinear theory/ /Studiul manevrei optime de intilnire cu minimum de combustibil in faza de apropiere pe orbite eliptice si hiperbolice /teoria neliniara/.

15 p2701 A69-31548

## MARINESCU, GH. A.

The orbital motion.

15 p2695 A69-31011

## MARINGER, R. E.

Microstrain characteristics of isostatically hot-pressed beryllium.

07 p1168 A69-19598

## MARININ, J.

Docking in space /Umsteigen im Kosmos/.

18 p3196 A69-34630

## MARININ, V. G.

Plasma instabilities produced by a beam plasma discharge in a mirror magnetic trap /Nestikiosti plazmi, stvorenoi v dzerkal'nomu magnitnomu ulovliuvachi puchkovo-plazmovim rozriadom/.

05 p0803 A69-16212

Plasma instabilities generated by a beam-plasma discharge in a magnetic mirror.

20 p3581 A69-37784

## MARINOV, IU. P.

Theory of n-circuit tunnel-diode LC oscillators /O teorii n-konturnykh LC- generatorov na tunel'nykh diodakh/.

16 p2764 A69-32256

## MARION, C.

Resistojet with ammonia /Resistojet a ammoniac/.

17 p3018 A69-33236

A miniaturized propulsion system using sublimable solid fuel /Micropropulseur a solide sublimable/.

17 p3021 A69-33359

Ammonia resistojet thruster.

23 p4203 A69-41931

## MARION, J. B.

Gamma-ray transitions involving isobaric-spin mixed states in Be super 8.

22 p3987 A69-41043

## MARJANIEMI, D. K.

Lunar surface experiments. [AAS PAPER 69-207]

24 p4381 A69-42874

## MARK, H.

Simultaneous observations of the optical and X-ray spectra of Sco XR-1.

07 p1220 A69-19391

Detection of X-rays from the Large Magellanic Cloud.

10 p1770 A69-24093

Further simultaneous observations of the optical and X-ray spectra of Sco X-1.

15 p2676 A69-30885

Thermal contact resistance measurements at ambient pressures of one atmosphere to 3 x 10 super minus super 12 mm Hg and comparison with theoretical predictions. [AIAA PAPER 69-629]

17 p3073 A69-33299

## MARK, H. F.

Polymers in material science.

20 p3566 A69-37598

## MARK, J. W-K.

Rapidly rotating stars. III - Massive main-sequence stars.

07 p1220 A69-19390

## MARK, M.

Temperature distribution in waveguide ferrite slabs.

02 p0215 A69-11877

Thermal resistance of bolted or screwed sheet metal joints in a vacuum.

12 p2191 A69-26803

## MARK, R.

The optical-rotation effect in photoelastic shell analysis.

04 p0683 A69-15495

## MARKARIAN, B. E.

Galaxies with an ultraviolet continuum.

12 p2159 A69-26663

Galaxies with an ultraviolet continuum /Galaktiki s ul'trafioletovym kontinuumom/.

12 p2164 A69-27025

The nature of the galaxies NGC 4402 and 4438 /O prirode galaktik NGC 4402 i 4438/.

12 p2169 A69-27058



## MARKARIAN, S. S.

Universal vestibulometric chair /UVC/.  
02 p0200 A69-11517

Vestibular reactions during rotation of humans in different planes /Vestibuliarnye reaktsii pri vrashchenii cheloveka v razlichnykh ploskostiakh/.  
12 p2020 A69-26564

Human sensorimotor reactions during rotation in an apparatus with a small radius /Sensomotornye reaktsii cheloveka pri vozdveistvii vrashchenii na ustanovke s malym radiusom/.  
20 p3471 A69-37258

## MARKEEV, A. P.

Stability of triangular libration points in a circular restricted three-body problem /Ob ustoychivosti treugol'nykh tochek libratsii v krugovoi ogranichennoi zadache trekh tel/.  
12 p2155 A69-25883

Stability of a canonical system with two degrees of freedom in the presence of resonance.  
14 p2482 A69-28813

## MARKEEV, B. M.

Oscillations of a weakly ionized collision plasma /O kolebaniakh slaboionizovannoi stolknovitel'noi plazmy/.  
13 p2311 A69-28104

## MARKELOV, B. A.

Experimental verification of the permissible radiation doses for extended space missions /"chronic experiments" with dogs/ /K eksperimental'nomu obosnovaniyu dopustimnykh doz radiatsii pri dliitel'nykh kosmicheskikh poletakh /provedenie khronicheskogo eksperimenta na sobakakh/.  
05 p0708 A69-16508

Occurrence of chromosome rearrangements in the corneal epithelium of mice during prolonged general gamma irradiation /Vozniknovenie khromosomnykh perestroek v epiteli rogovitsy myshiei pri obshchem prolongirovannom gamma-obluchении/.  
17 p2907 A69-32944

Experimental verification of permissible radiation doses during prolonged space flights - A "chronic experiment" on dogs.  
18 p3095 A69-34727

## MARKELOV, I. M.

Changes in the activity of lactodehydrogenase and its isoenzymes in the blood and tissues of rats as a result of training to hypoxia /Izmenenie aktivnosti laktatdegidrogenazy i ee izofermentov v krovi i tkaniakh krysa v rezul'tate trenirovani k gipoksii/.  
02 p0199 A69-11982

## MARKELOV, V. A.

Sensitivity of a receiver of the zero-crossing detector type /O chuvstvitel'nosti priemnika tipa schetchika chisla vybrosov/.  
03 p0405 A69-13717

## MARKELS, M., JR.

Aircraft fuel vent line sensitivity to lightning effects. [SAE PAPER 690434]  
23 p4062 A69-41651

## MARKER, W.

Precipitation-induced mesoscale wind perturbations in the melting layer.  
20 p3572 A69-37909

## MARKEY, S. P.

Acidic components of Green River shale identified by a gas chromatography-mass spectrometry-computer system.  
21 p3669 A69-38983

## MARKHAM, J.

The centrifuge as a therapeutic device.  
24 p4265 A69-43372

## MARKILOV, A. A.

New high-resolution photographic layers and their study by the method of holographic resolvometry /Novye fotograficheskie sloi vysokogo razresheniia i ikh issledovanie metodom golograficheskoi resoli'vometrii/.  
15 p2606 A69-30052

## MARKIN, A. S.

Determination of the buildup time of a giant pulse in a laser with a passive shutter /Opredelenie vremeni razvitiia gigantskogo impul'sa v OKG s passivnym zatvorom/.  
11 p1894 A69-24621

Kinetics of the free-emission spectrum of a ruby laser with elimination of mode discrimination /Kinetika spektra svobodnoi generatsii OKG na rubine pri iskluchении diskriminatsii mod/.  
11 p1900 A69-25547

Kinetics of free generation spectra of a solid-state laser in the traveling-wave regime with mode discrimination excluded.  
13 p2271 A69-27655

Mode locking in lasers employing polymethine dye solutions /Sinkhronizatsiia mod v lazerakh na rastvorakh polimetinovykh krasitelei/.  
21 p3740 A69-39545

## MARKIN, E. P.

Shift of light frequency in an accelerated rotating ring laser.  
02 p0257 A69-12417

Generation spectrum of a chemical laser using a mixture of H sub 2 and Cl sub 2.  
14 p2461 A69-29672

Emission spectrum of a chemical laser using an H sub 2 plus F sub 2 mixture.  
23 p4172 A69-41493

## MARKINA, A. K.

Statistics and nature of meteor flares /Statistika i priroda meteornykh vspyshek/.  
18 p3203 A69-35333

## MARKLAND, E.

The effect of inlet conditions on the performance of two annular diffusers. [ASME PAPER 68-WA/FE-38]  
05 p0698 A69-16110

## MARKLEY, R. P.

Magnitude estimation of perceived distance over various distance ranges.  
07 p1069 A69-19501

Distance discrimination in a simulated space environment.  
12 p2022 A69-26372

## MARKO, A.

Telemetry system for physiological evaluation of space suits.  
06 p0883 A69-17845

## MARKO, W.

Dynamic stability of high-drag planetary entry vehicles at transonic speeds. [AIAA PAPER 69-105]  
06 p1019 A69-18209

## MARKOV, B. I.

Influence of plasma screening on the energy spectrum of electrons localized at surface charges in a degenerate n-type semiconductor. I /Vliianie plazmennoi ekranirovki na energeticheskii spektr elektronov, lokalizovannykh u poverkhnostnykh zariadov v vyrozhdennom poluprovodnike n-tipa. I/.  
14 p2505 A69-29170

## MARKOV, E. P.

Experimental investigation of an injector model as a vaporizer for MHD systems /Eksperimental'noe issledovanie modeli inzhektora kak razgonnogo ustroistva dlia MGD-ustanovok/.  
06 p0871 A69-17918

## MARKOV, G. A.

Nonlinear interaction of a plane electromagnetic wave with an inhomogeneous plasma layer /Nelineinoe vzaimodeistvie ploskoi elektromagnitnoi volny s neodnorodnym plazmennym sloem/.  
17 p2922 A69-33693

## MARKOV, I. U. F.

Existence of a diamond-like semiconductor in a glassy state /O sushchestvovanii almazopodobnogo poluprovodnika v stekloobraznom sostoianii/.  
10 p1747 A69-23963

## MARKOV, M. G.

The juridical meaning of the term "peaceful" in the 1967 Space Treaty.  
20 p3635 A69-37105

Against the so-called "broader" interpretation of the term "peaceful" in international space law.  
20 p3636 A69-37112

## MARKOV, M. N.

Water vapor in the mesosphere /from measurement data obtained by geophysical rockets and the Cosmos 45 and Cosmos 65 satellites/ /Vodiani par v mezofere /po dannym izmerenii s geofizicheskikh raket i ISZ "Kosmos-45" i "Kosmos-65"//.  
13 p2253 A69-27694

Molecular radiation of the upper atmosphere in the 3-8-mu spectral region.  
21 p3792 A69-39772

## MARKOV, M. S.

Geological-morphological mapping of the moon and the peculiarities of the lunar surface structure /Geologo-morfologicheskoe kartirovanie lunny i osobennosti stroeniia lunnoi poverkhnosti/.  
03 p0505 A69-12898

Adsorption mechanism of the leakage of the lunar atmosphere /Adsorbtionnyi mekhanizm utechki lunnoi atmosfery/.  
05 p0824 A69-16062

Loss of the lunar atmosphere by an adsorptive mechanism.  
15 p2680 A69-30261

## MARKOVA, G. V.

Stroboscopic method of studying vibrations /Strobolograficheskii metod izucheniia vibratsii/.  
02 p0251 A69-12561

Holographic strobe method for studying vibrations.  
15 p2608 A69-30258

## MARKOVA, I. IU.

Contact fusion in a magnesium-nickel system.  
06 p0945 A69-17895

## MARKOVA, S. V.

Investigation of the current change in a CO sub 2 -N sub 2 -He discharge under the effect of emission /Issledovanie izmeneniia toka v razriade CO sub 2 -N sub 2 -He pod vlianiem generatsii/.  
14 p2458 A69-29161

## MARKOVIC-NIKOLIC, J.

Numerical experiments in eigenvalue problems /Numerische Experimente bei Eigenwertaufgaben/.  
02 p0271 A69-12057

## MARKOVICH, K. P.

Basic properties of the AT-3 titanium alloy and prospects of its application /Osnovnye svoistva titanovogo splava AT-3 i perspektivy ego primeneniia/.  
07 p1163 A69-18782

## MARKOVICH, M. Z.

Temperature of a cometary ice nucleus in the proximity of the sun /Temperatura ledianogo iadra komety vblizisolntsa/.  
14 p2523 A69-29706

The dust component of a comet atmosphere /K voprosu o pylevoi komponente kometnoi atmosfery/.  
15 p2685 A69-30528

Surface and bulk density in a cometary head /O poverkhnostnoi i ob'emnoi plotnosti v golove komety/.  
17 p3032 A69-33189

The dust component in the head of comet Arend-Roland /O pylevoi komponente v golove komety Arenda-Rolana/.  
21 p3804 A69-39080

## MARKOVSKII, E. A.

Effect of Nuclear Radiations on the Structure and Properties of Metals and Alloys /Vozdeistvie iadennykh izlucheni na strukturu i svoistva metallov i splavov/.  
12 p2114 A69-26469

## MARKOWITZ, W.

Time and frequency measurement - Atomic and astronomical.  
05 p0827 A69-16582

## MARKOWITZ, WM.

Time and frequency measurement, atomic and astronomical.  
15 p2615 A69-31285

## MARKS, A.

Measurements of the gamma radiation of the moon by the equipment of Luna 10 /Pomiary promieniowania gamma ksiezycza przez aparature Luny 10/.  
13 p2333 A69-28635

Devices for coupling space vehicles /Urzadzenia do laczenia pojazdow kosmicznych/.  
22 p4036 A69-40008

## MARKS, C. D.

Low cost orbital transportation - How big a step.  
21 p3857 A69-39696

## MARKS, P. A.

Economics of failure - Management influence.  
24 p4416 A69-42777

## MARKSTEIN, G. H.

Correlation between vaporizer temperature and collision efficiency of heterogeneous reaction in magnesium-oxygen-argon dilute diffusion flames.  
13 p2380 A69-28461

## MARKUS, J.

Scientific Society for Telecommunication, Symposium on Reliability in Electronics, 2nd, Budapest, Hungary, October 15-18, 1968, Proceedings. Volume A.  
08 p1321 A69-21098

Scientific Society for Telecommunication, Symposium on Reliability in Electronics, 2nd, Budapest, Hungary, October 15-18, 1968, Proceedings. Volume D.  
08 p1292 A69-21105

Scientific Society for Telecommunication, Symposium on Reliability in Electronics, 2nd, Budapest, Hungary, October 15-18, 1968, Proceedings. Volume B.  
08 p1293 A69-21111

Automatic testing system for transistor reliability evaluation.  
08 p1294 A69-21119

## MARKUS, L.

Capture and control in conservative dynamical systems.  
05 p0826 A69-16462

- MARKUS, M. P.**  
An approach to diagnostics for a digital data handling system.  
[AIAA PAPER 69-967] 22 p3906 A69-40348
- MARKUSHIN, E. M.**  
Approximate analytic design of controls for systems with time lag.  
03 p0408 A69-12973  
The convergence of the optimal control of a countable system of differential equations.  
04 p0583 A69-15095
- MARLBOROUGH, J. M.**  
Models for the envelopes of Be stars.  
13 p2338 A69-27559
- MARLEAU, R. S.**  
Analysis of periodically-responding nonlinear systems by methods stemming from the calculus of variations.  
09 p1474 A69-22448
- MARLOFF, R. H.**  
Three-dimensional photoelastic analysis of a fiber-reinforced composite model.  
12 p2189 A69-27162
- MARLOW, L. L.**  
A unique core memory system that satisfies severe environmental conditions.  
22 p3903 A69-39950
- MARMEY, R.**  
Influence of vibrational relaxation on the laminar boundary layer downstream of a moving shock wave /Influence de la relaxation de vibration sur la couche limite laminaire a l'aval d'une onde de choc mobile/.  
08 p1303 A69-20269
- MARMO, F. F.**  
On the presence of carbon atoms in the upper atmosphere of Venus.  
15 p2698 A69-31341
- MARMO, J. F.**  
Frictional losses in foam-damped flexible tubes.  
04 p0608 A69-15331
- MARMUZOV, G. V.**  
Analysis of the transient response of a distributed-gain amplifier employing m-derived filters /Analiz perekhodnykh kharakteristik usilitelia s raspredelenym usileniem na fil'trakh tipa m/.  
13 p2235 A69-28516
- MARNER, A. W.**  
Welding processes for high-strength steels.  
12 p2100 A69-25828
- MAROCHNIK, L. S.**  
The motion of a star in a gravitational field of interstellar condensing gas /O dvizhenii zvezdy v gravitatsionnom pole kondensiruiushchegosia mezhzvezdnogo gaza/.  
09 p1589 A69-21371  
Spiral structure of galaxies. I /O spiral'noi strukture galaktik. I/.  
15 p2688 A69-30550  
Stellar motion in the gravitational field of condensing interstellar gas.  
18 p3198 A69-34760  
Spiral structure of galaxies. II /O spiral'noi strukture galaktik. II/.  
20 p3607 A69-38036  
Hypothesis on the origin of the spiral structure of the galaxies.  
21 p3797 A69-38537
- MAROLI, C.**  
Effects of inelastic collisions in low-temperature, diffusion-dominated discharges.  
04 p0637 A69-15047  
Penetration of high-frequency electromagnetic waves into a slightly ionized plasma.  
17 p2932 A69-34220
- MAROM, E.**  
Ultrasonic holography via the ultrasonic camera.  
10 p1696 A69-23550  
Some problems associated with optical image formation from acoustic holograms.  
23 p4166 A69-42181  
Reduction of bandwidth required for high resolution hologram transmission.  
24 p4317 A69-43761
- MARON, V. I.**  
Displacement of a liquid from a horizontal circular tube by another liquid /Vytesnenie zhidkosti iz gorizonta'lnoi krugloi trubyy s pomoshch'iu drugoi zhidkosti/.  
14 p2431 A69-29607
- MARONCHUK, I. E.**  
Epitaxial gallium arsenide films with a high electron mobility.  
03 p0492 A69-14172
- MARONCHUK, IU. E.**  
Epitaxial gallium arsenide films with a high electron mobility.  
03 p0492 A69-14172
- MARONE, M.**  
Direct-reading device for measuring lifetimes on semiconductor single crystals /Un apparecchio a lettura diretta per la misura del tempo di vita su monocristalli semiconduttori/.  
01 p0078 A69-10073
- MAROV, M. IA.**  
Scientific results of a flight of the Lantar 1 automatic ionospheric laboratory /Nauchnye rezul'taty poleta avtomaticheskoi ionosfernoi laboratorii "Lantar'-1"/.  
05 p0830 A69-16056  
Scientific and practical aspects of a study of the structure and variation of the upper atmosphere of the earth /Nauchnye i prakticheskie aspekty issledovaniia struktury i variatsii verkhnei atmosfery zemli/.  
[UN PAPER 68-05755] 06 p0917 A69-17042  
Results of measurements of the parameters of the Venusian atmosphere on the Soviet Venera 4 automatic interplanetary station /Rezul'taty izmerenii parametrov atmosfery Venery na sovet'skoi AMS "Venera-4"/.  
13 p2345 A69-27689  
Density and temperature variations in the atmosphere at altitudes of 200-600 km.  
15 p2599 A69-31343  
On determination of atmosphere parameters from drag data of the satellite Proton-2, its orientation being taken into account.  
15 p2602 A69-31392  
Atmosphere of the planet Venus /Atmosfera planety Venera/.  
18 p3201 A69-35164  
Scientific and practical aspects of investigations into the structure and parameter variations of the upper earth's atmosphere /Nauchnye i prakticheskie aspekty issledovaniia struktury i variatsii parametrov verkhnei atmosfery zemli/.  
20 p3519 A69-36983  
Scientific results of the flight of the automatic ionospheric laboratory "Yantarr'-1".  
20 p3618 A69-37966  
Aerodynamic characteristics of a satellite with allowance for its position and orientation in the orbit /Aerodinamicheskie kharakteristiki sputnika s uchetom ego polozheniia i orientatsii na orbite/.  
22 p4037 A69-41102
- MAROVICH, E.**  
5577 angstrom units nightglow and atmospheric movements.  
16 p2778 A69-32185  
Alouette observations taken during a middle-latitude red arc.  
20 p3532 A69-37897
- MARQUES DOS SANTOS, P.**  
On the polarization and intensity distribution of solar bursts at 7 GHz.  
04 p0652 A69-14417  
Some peculiar tropospheric and ground effects on solar noise radio measurements at 7 GHz.  
07 p1215 A69-18819  
On the possible emission of polarized microwave radiation from the solar hemispheres.  
13 p2326 A69-27550
- MARQUET, D. W.**  
Launch period, targeting and error analysis for Mars direct and orbital missions.  
02 p0331 A69-12821
- MARQUET, M.**  
Holographic storage of three-dimensional measurement information - Application to scintigraphy /Stockage par holographie d'informations tridimensionnelles de mesures - Application a la scintigraphie/.  
13 p2260 A69-27739
- MARQUIS, A. D.**  
Temperature analysis of nonlinear DC circuits.  
18 p3108 A69-34525
- MARQUIS, D. G.**  
Effect of uncertainty on risk taking in individual and group decisions.  
23 p4091 A69-42016
- MARQUIS, M. L.**  
Heavy lift VTOL - Effect of weight and size on productivity.  
[SAWE PAPER 782] 18 p3091 A69-34905
- MARRA, F. G.**  
Juridical discipline of telecommunications by means of artificial satellites - Current problems /La disciplina giuridica delle telecomunicazioni mediante satelliti artificiali - Problematika attuale/.  
08 p1422 A69-20584
- MARRIAGE, D. O.**  
Surveyor - Hard trails to soft landings.  
19 p3430 A69-36016
- MARRIOTT, G.**  
Temperature distributions and thermal stresses in bimetallic I-beam structures.  
06 p1024 A69-17610
- MARRIS, A. W.**  
Vector fields and flows on developable surfaces.  
08 p1302 A69-19823  
Addendum to "vector fields of solenoidal vector-line rotation" - A class of permanent flows of solenoidal vector-line rotation.  
10 p1727 A69-22862
- MARROCCO, R. T.**  
On luminance additivity and related topics.  
22 p3880 A69-40849
- MARS, J. E.**  
Waste utilization for propulsion on manned space missions.  
[SAE PAPER 680717] 03 p0495 A69-13442
- MARSHALL, E.**  
Binary, gravity-flow film condensation.  
[ASME PAPER 68-WA/HT-21] 05 p0847 A69-16124
- MARSCHKA, F. D.**  
A sterilizable and ruggedized vidicon.  
13 p2234 A69-28262
- MARSDEN, A. M.**  
An elemental theory of induction.  
22 p3880 A69-40853
- MARSDEN, B. G.**  
Influence of a comet belt beyond Neptune on the motions of periodic comets.  
01 p0158 A69-11327  
The Gauss method for solving Kepler's equation in nearly parabolic orbits.  
12 p2171 A69-27154  
Comets and nongravitational forces. II.  
18 p3195 A69-34432
- MARSDEN, D. G. H.**  
Molecular beam experiments in the lunar environment.  
18 p3113 A69-34240
- MARSH, D.**  
The CSRO large astronomical satellite /LAS/ project - The observatory in orbit.  
18 p3208 A69-34793
- MARSH, H.**  
Recent developments in the aerodynamic design of axial flow compressors.  
12 p2147 A69-25792  
The stability of self-acting gas journal bearings with noncircular members and additional elements of flexibility.  
[ASME PAPER 68-LUBS-45] 13 p2266 A69-27277
- MARSH, K. J.**  
Designing to prevent fatigue failures in service.  
24 p4397 A69-42770
- MARSH, K. R.**  
Propeller V/STOL aircraft.  
05 p0701 A69-15564
- MARSH, L. E.**  
Induced stresses improve casting performance.  
13 p2269 A69-28184
- MARSH, O. J.**  
The presence of deep levels in ion implanted junctions.  
05 p0808 A69-16287
- MARSHALL, A. C.**  
Honeycomb materials and applications in advanced aircraft and aerospace structures.  
04 p0620 A69-14844
- MARSHALL, C. A.**  
Feasibility of algorithmic definition of solid propellant for functional selection.  
[AIAA PAPER 69-432] 16 p2828 A69-31845
- MARSHALL, E. E.**  
The role of aircraft in future transport systems.  
16 p2881 A69-31932



## MARSHALL, F. G.

A solid-state sampling circuit for use at low pulse repetition frequencies.  
11 p1849 A69-24900

## MARSHALL, G. F.

Head-up displays - Alignment and test by laser.  
12 p2091 A69-26304

## MARSHALL, J. C.

Theoretical and experimental nonequilibrium expansions of partially-dissociated air.  
[AIAA PAPER 69-328] 13 p2200 A69-28263

## MARSHALL, J. E.

Inflatable solar shields for cryogenic space vehicles.  
06 p1017 A69-17609

## MARSHALL, J. H., III

An electronics system for gamma-ray spectrometry in satellite applications.  
[IEEE PAPER 3A-7] 07 p1134 A69-19194

## MARSHALL, J. S.

Power-law relations in radar meteorology.  
09 p1536 A69-21643

## MARSHALL, K. J.

Hybrid films for aerospace applications.  
05 p0736 A69-16753

## MARSHALL, K. N.

Scale modeling of multilayer insulated spacecraft for use in preliminary design studies.  
[AIAA PAPER 69-613] 17 p3049 A69-33267

## MARSHALL, R. L.

Augmentation systems for turbofan engines.  
09 p1573 A69-22617

Luminous fog layer surrounding a zirconium droplet burning in an oxygen-containing atmosphere.  
13 p2380 A69-28462

Vapor-phase combustion phenomena when Zr droplets burn in oxygen.  
[WSCI PAPER 69-4] 16 p2830 A69-32345

## MARSHALL, S. B.

IF amplifier using C sub c compensated transistors.  
07 p1103 A69-18884

## MARSHALL, T. C.

Wave mixing in a bounded magnetoplasma.  
03 p0475 A69-13146

## MARSTON, C. H.

A high-density, high-velocity equilibrium freestream shock-tunnel concept.  
[AIAA PAPER 68-17] 16 p2766 A69-32167

## MARTEL, R.

Short term frequency stability measurements of the applications technology satellite no. 1 multiple access communication system.  
23 p4129 A69-42509

## MARTELLI, G.

Production of fast jets of ionized barium using explosive shaped charges.  
09 p1539 A69-21752

## MARTELLO, V.

The apogee motor for ELDO/PAS /Le moteur d'apogee pour ELDO/PAS/.  
17 p3022 A69-33604

## MARTELLUCCI, A.

Some shock/wind tunnel observations of interference effects in hypersonic wakes.  
15 p2588 A69-30475

Evaluation of several eddy viscosity models through comparison with measurements in hypersonic flows.  
[AIAA PAPER 69-688] 17 p2954 A69-33454

## MARTEN, A.

Diffuse reflection of electromagnetic waves by a rough random surface /Reflexion diffuse des ondes electromagnetiques par une surface rugueuse aleatoire/.  
07 p1075 A69-18280

## MARTENS, H. R.

The determination of digital simulation models for continuous systems by direct-search minimization.  
01 p0036 A69-10706

A comparative study of digital integration methods.  
10 p1661 A69-23854

## MARTHINSEN, H. F.

Another look at accelerate-stop criteria.  
[AIAA PAPER 69-772] 19 p3244 A69-35650

## MARTI, K.

Cosmic-ray produced radionuclides and rare gases near the surface of Saint-Severin meteorite.  
19 p3410 A69-36093

## MARTIENSSEN, W.

Introduction to holography and its applications.  
12 p2086 A69-26169

## MARTIN, A.

Satellite transmission of electrophysiological data for real-time analysis /Transmission de donnees electrophysiologiques par satellite pour analyse en temps reel/.  
16 p2746 A69-32070

## MARTIN, A. C.

Metropolitan airports for V/STOL aircraft.  
[SAE PAPER 690402] 23 p4147 A69-41660

## MARTIN, A. P.

Integrally-formed structures - A new stiffened panel concept.  
[AIAA PAPER 69-760] 19 p3434 A69-35660

## MARTIN, A. R.

A peak amplitude selector for electrophysiological data analysis.  
15 p2612 A69-31266

An oscillator having no reactive components for use as an integrated circuit biotelemetry.  
19 p3261 A69-36244

## MARTIN, B. G.

Effects of topical ophthalmic 2 percent pilocarpine on visual performance of normal subjects.  
01 p0022 A69-11347

Ultrasonic measurement of stress.  
10 p1794 A69-23052

## MARTIN, B. W.

The developing tangential velocity profile for axial flow in an annulus with a rotating inner cylinder.  
01 p0058 A69-10143

Effect of secondary injection on the characteristics of a supersonic parallel diffuser.  
03 p0365 A69-13991

Air Force Eastern Test Range UHF telemetry status report.  
14 p2410 A69-28878

## MARTIN, C. D.

Rainfall and the meteoroid influx to earth.  
20 p3609 A69-38062

## MARTIN, C. F.

Accuracy of satellite orbits obtainable by synchronous satellite tracking.  
15 p2698 A69-31340

## MARTIN, D. C.

Unusual welding processes for modern steels.  
12 p2100 A69-25830

Further studies of diffusion bonding below 1000 deg F.  
15 p2617 A69-30100

Effect of experimental 2219 and 2014 aluminum weld composition variations.  
22 p3956 A69-40461

## MARTIN, D. T.

An empirical simulation of the translunar injection burn for Apollo.  
[AAS PAPER 68-150] 21 p3820 A69-39225

## MARTIN, D. W.

Measurement of transport properties of ions in gases - Results for K super plus ions in N sub 2.  
13 p2306 A69-27457

Mobilities, diffusion coefficients, and reaction rates of mass-identified nitrogen ions in nitrogen.  
13 p2302 A69-27458

## MARTIN, F. F.

Applications of computer simulation in electronics.  
11 p1843 A69-25319

## MARTIN, F. L.

Statistical specification of the 500-mb height fields using smoothed medium-resolution radiometric fields of Nimbus II.  
24 p4343 A69-42896

## MARTIN, G.

A note on an electron theory concept of stress corrosion.  
19 p3349 A69-36889

## MARTIN, H.

Miniaturized transformers and inductors with high-permeability cores /Kleinuerbrertrager und Drosseln mit hochpermeablen Kernen/.  
13 p2237 A69-28586

## MARTIN, I. F.

Photoreactivation of manganese catalyst in photosynthetic oxygen evolution.  
13 p2210 A69-28257

## MARTIN, J.

The formation of carbon during the production of pure silicon /Zum Einbau von Kohlenstoff bei der Herstellung von Reinstsilicium/.  
03 p0486 A69-13635

## MARTIN, J. B.

Approximate solutions for impulsively loaded elastic-plastic beams.  
[ASME PAPER 68-WA/APM-23] 05 p0840 A69-16188

## MARTIN, J. H.

Integrated CdS solar cell array.  
19 p3254 A69-35710

## MARTIN, J. W.

The formation of ferrite and sigma-phase in some austenitic stainless steels.  
02 p0269 A69-12764

The formation and stability of group IVA carbides and nitrides in molybdenum.  
12 p2117 A69-27136

Nitride hardening of a molybdenum-titanium alloy by glow discharge.  
15 p2637 A69-30212

Carbide growth in a molybdenum TZC alloy.  
18 p3155 A69-34632

## MARTIN, K. S.

Production of fast jets of ionized barium using explosive shaped charges.  
09 p1539 A69-21752

## MARTIN, P.

In defence of private, business and aerial work flying.  
17 p3077 A69-34202

## MARTIN, P. E.

HF direction finding during multimode propagation conditions.  
21 p3677 A69-39456

## MARTIN, R. E.

Free vibrations of anisotropic conical shells.  
16 p2874 A69-32165

## MARTIN, R. R.

Plasma histamine levels and cardiovascular effects after compound 48/80.  
22 p3873 A69-40206

## MARTIN, R. W.

Area navigation.  
05 p0790 A69-16720

## MARTIN, T.

Pulsating flow in viscoelastic tubular systems /Pulsierende Stromung in visko-elastischen Leitungssystemen/.  
08 p1304 A69-20704

## MARTIN, W.

Liquid expulsion by direct pressurization of a spinning propellant tank.  
[AIAA PAPER 69-527] 16 p2838 A69-32651

## MARTIN, W. L.

Avoidance and escape behavior controlled by artificial gravity.  
21 p3665 A69-39174

## MARTINCHUK, E. L.

Phase diagram of the chromium-cerium system /Diagrama staniv sistemi khrom-terii/.  
15 p2640 A69-30666

## MARTINEAU, J.

Inertial magneto confinement of a plasma produced by the interaction of laser radiation with a solid deuterium granule /Confinement magneto inertiel d'un plasma cree par l'interaction du rayonnement laser avec un granule de deuterium solide/.  
05 p0798 A69-15585

Evaluation of a magnetically confined laser created plasma.  
09 p1545 A69-21493

## MARTINEAUD, J. P.

Cutaneous circulation during adaptation to high altitude /La circulation cutanee au cours de l'adaptation a l'altitude/.  
23 p4098 A69-42106

## MARTINEK, J.

A note on the mu-zeros of combinations of cross-product Bessel functions.  
05 p0836 A69-15874

## MARTINELLI, G.

Sensitivity to the variation of the components of resistance-terminated reactive two-port networks /Sensibilita alla variazione dei componenti di reti due-porte reattive chiuse su resistenze/.  
01 p0049 A69-10069

- Influence of the selection of controlled sources on the stability and frequency behavior of a gyrotor /Influenza della scelta delle sorgenti controllate sulla stabilità e sul comportamento in frequenza di un giratore/. 19 p3287 A69-36739
- MARTINENKO, V. S.**  
Calculation of the effect of static stresses on the energy dissipation in materials in the presence of free oscillations /Pro vrakhuvannya vplivu statichnikh napruzhen' na rozsiannia energii v materialy pri vil'nikh kolivanniakh/. 11 p1919 A69-25092
- MARTINET, L.**  
Kinematics of giant stars and stellar evolution /Cinématique des géantes et évolution stellaire/. 03 p0517 A69-14095  
A comparative study of motions for nearby stars of various luminosity in connection with problems of stellar evolution. 07 p1224 A69-19712  
Stellar populations in the Galaxy /Populations stellaires dans la galaxie/. 18 p3202 A69-35284
- MARTINEZ, A.**  
Thermal cures of defects created in silica films by ionizing radiation /Guerison thermique de défauts creés dans les couches de silice par des radiations ionisantes/. 15 p2625 A69-30828
- MARTINEZ, C.**  
Irreversible blunted respiratory sensitivity to hypoxia in high altitude natives. 12 p2018 A69-26130
- MARTINEZ, C. L.**  
Effects of nitrogen limitation on the growth and composition of unicellular algae in continuous culture. 24 p4263 A69-43201
- MARTINEZ, E.**  
Pressure ratio computer. 18 p3133 A69-34309
- MARTINEZ, J. E.**  
Dynamic buckling of clamped spherical caps under step pressure loadings. 20 p3622 A69-37229
- MARTINEZ, J. S.**  
Radioisotope propulsion. 11 p1914 A69-25591
- MARTINEZ, M. R.**  
Graphite ablation in high-pressure environments. [AIAA PAPER 68-1153] 04 p0686 A69-14873
- MARTINI, A.**  
On the spectroscopic variations of HD 4174 during the years 1966-68. 16 p2858 A69-32214  
The spectrum of WY Gem in the years 1967-68. 20 p3598 A69-37464  
Observation of the FG Sagittae peculiar variable /Osservazioni della variabile peculiare FG Sagittae/. 20 p3599 A69-37474
- MARTINICH, S. J.**  
Measurement of far-infrared laser power. 09 p1515 A69-21424
- MARTINIDES, H.**  
Cosmic ray cut-off energy at synchronous distance. 11 p1949 A69-24860
- MARTINIUK, A. A.**  
Concerning  $\lambda$ mbda, A, t sub 0, T, bot-norm/- stability of systems with delay /Pro  $\lambda$ mbda, A, t sub 0, T, bot-norm/-stiiikist' sistem iz zapiznenniam/. 11 p1919 A69-25093  
Contribution to Chetaev's /A, lambda/ estimates of approximate integrations /Do /A, lambda/ -otsinok M. G. Chetaeva nablzhenikh integrav'/. 15 p2644 A69-30664
- MARTINKOVIC, P. J.**  
Attitude control rocket exhaust plume effects on solar cells. 19 p3252 A69-35700
- MARTINO, E.**  
On some problems concerning the irregular eruptive variables. 06 p0996 A69-17448
- MARTINO, J. A.**  
Relationship between intrarenal hydrostatic pressure and hemodynamically induced changes in sodium excretion. 07 p1063 A69-18629  
Interrelationship of physical factors affecting sodium reabsorption in the dog. 13 p2210 A69-28482
- MARTINO, J. P.**  
Forecasting the progress of technology. 13 p2382 A69-28040
- MARTINOD, H.**  
Crystal growth and deformation-induced recrystallization /Croissance des cristaux et recristallisation induite par déformation/. [ONERA-TP-671] 07 p1167 A69-19340
- MARTINOT-LAGARDE, P.**  
Stabilized single-mode ionized argon laser /Laser argon ionisé a mode unique, stabilisé/. 07 p1145 A69-18475
- MARTINOT, H.**  
Effects of ionizing radiation on MOS devices. 08 p1373 A69-20864  
Study of the influence of surface properties on the reliability of planar bipolar transistors /Étude de l'influence des propriétés de surface sur la fiabilité des transistors bipolaires planars/. 15 p2625 A69-30826
- MARTINOV, N.**  
Statistical structure of non-isothermic electron-ion plasma. 02 p0286 A69-11706  
Statistical polarization of two-component Coulomb gas. 02 p0286 A69-11707  
On some characteristic magnitudes of a two-component non-isothermic plasma. 05 p0806 A69-16745
- MARTINSON, I.**  
Mean lives of the ip super 2 super 1 D level in F VI and O V. 17 p3009 A69-34188  
Mean lives of some excited levels of Li I and Li II. 18 p3177 A69-35012
- MARTINOT, L. K.**  
Interferometric study of heat transfer in turbulent jet flows /Interferometricheskoe issledovanie teploobmena v turbulentnykh struinykh techeniakh/. 01 p0005 A69-10101  
Determination of the internal efficiency of a condensing injector in power plants with a closed cycle. 02 p0194 A69-11582
- MARTO, P. J.**  
Nucleate pool boiling of nitrogen with different surface conditions. 02 p0352 A69-12207  
Effect of nucleate boiling on the operation of low temperature heat pipes. [ASME PAPER 69-HT-24] 24 p4412 A69-43544
- MARTON, L.**  
Advances in Electronics and Electron Physics. Volume 25. 09 p1469 A69-22696  
Electron Beam and Laser Beam Technology. 11 p1846 A69-24596  
Advances in Electronics and Electron Physics. Volume 26. 22 p3981 A69-40667
- MARTRES, M. J.**  
On the development and activity of the active region associated with the proton flare event of July 1966 - Summary of observations and conclusions. 10 p1766 A69-23760
- MARTRES, M.-J.**  
Solar activity - Synoptic charts of the chromosphere and sunspots /L'activité solaire - Cartes synoptiques de la chromosphère et des taches/. 08 p1379 A69-20378
- MARTS, D. L.**  
Simplified metallographic technique for beryllium. 13 p2281 A69-28161
- MARTSAFEI, V. V.**  
Measurement of antenna electrodynamic parameters by the synthesized aperture method /Ob izmerenii elektrodinamicheskikh parametrov antenn metodom sintetirovannykh apertur/. 06 p0894 A69-17452  
Measurement of electrodynamic antenna parameters by the method of synthesized apertures. 20 p3508 A69-37937  
Influence of amplitude and phase distortions of the array aperture field on the radiation field /O vliianii amplitudnykh i fazovykh iskazhenii polia raskryva reshetki na pole izlucheniia/. 23 p4138 A69-41940
- MARTSINOVSKII, A. M.**  
Low-voltage arc in thermionic converters - Comparison between theory and experiment. 06 p0963 A69-16910
- MARTSVALADZE, N. M.**  
Spatial distribution of the airglow H sub alpha emission /O prostranstvennom raspredelenii emissii H sub alpha svecheniia verkhnnei atmosfery/. 01 p0062 A69-10128
- MARTY, M.**  
Preparation of refractory alloys in powders, fibers, and sintered billets by a thermochemical method /Elaboration d'alliages réfractaires en poudres, en fibres et en billettes frittées par voie thermochimique/. [ONERA-TP-636] 02 p0251 A69-11625
- MARTYNEKO, L. G.**  
Determination of permittivity from the ratio between the amplitudes of the E-components of waves reflected and transmitted by the dielectric /Opredelenie dielektricheskoi prinitsaemosti po otnosheniiu amplitud E-komponent otrazhennoi i prosheidshei cherez dielektrik voln/. 23 p4123 A69-41950
- MARTYNIUK, A. A.**  
Theory of N. G. Chetaev concerning the stability of an unsteady motion during a given time interval /K teorii N. G. Chetaeva ob ustoiichivosti neustanovivshesgoiia dvizheniia na zadannom intervale vremeni/. 05 p0794 A69-16209  
Sufficient conditions of stability in the finite for time-lag systems /O dostatochnykh usloviakh ustoiichivosti v konechnom sistem s zapazdyvaniiami/. 17 p2995 A69-33616
- MARTYNIUK, D. I.**  
Periodic solutions to strongly nonlinear systems with a delay /Periodicheskie resheniia sil'no nelineinykh sistem s zapazdyvaniem/. 11 p1916 A69-24765
- MARTYNKEVICH, G. M.**  
Measurements of some neutral components of the Arctic thermosphere. 21 p3704 A69-38367
- MARTYNOV, D. IA.**  
More about the Venusian radius /Eshche raz o radiuse Veneri/. 18 p3203 A69-35331
- MARTYNOV, E. D.**  
Effect of hydro-extrusion on the mechanical properties of molybdenum. 02 p0267 A69-12189  
Mechanical properties of molybdenum after hydroextrusion. 16 p2803 A69-32491  
Mechanical properties of hydro-extruded molybdenum after annealing. 18 p3156 A69-34719  
Anomalous grain growth and the deformation of single crystals during annealing of hydraulically extruded molybdenum /Anomal'nyi rost zeren i obrazovanie monokristallov pri otzhige gidroekstrudirovannogo molibdena/. 21 p3745 A69-38953
- MARTYNOV, V. M.**  
Investigation of the wear resistance of briquetted lubricants on a molybdenum disulfide base /Issledovanie iznosostoiosti briketirovannykh smazok na osnove disul'fid molibdena/. 21 p3733 A69-39805
- MARTYNOV, V. N.**  
Effect of temperature on the photosensitivity spectrum of cadmium telluride thin films /Vliianie temperatury na spektr fotochuvstvitel'nosti tonkikh sloev tellurida kadmia/. 13 p2318 A69-27889
- MARTYNOVA, I. F.**  
X-ray investigation of finely dispersed titanium in various states /Rentgenovskoe issledovanie melkodispersnogo titana v razlichnom sostoianii/. 21 p3745 A69-38952
- MARTYNOVSKAIA, L. N.**  
Heats of formation of the barenes /karboranes/ B sub 10 H sub 12 C sub 2 /cryst./ - Determination of the heat of combustion of ortho-barene /Teploty obrazovaniia barenov /karboranov/ B sub 10 H sub 12 C sub 2 /krist./ - Opredelenie teploty sgoraniia orto-barena/. 21 p3670 A69-39625
- MARTZINOVSKII, A. M.**  
Theoretical and experimental investigation of low-voltage arc in thermionic converter. 14 p2404 A69-29254  
The probe and spectral investigations of dense plasma thermionic converters. 14 p2404 A69-29256



- MARU, Y.**  
On the thermal decomposition rate of molybdenum sesquisulphide /Mo sub 2 S sub 3/ in vacuum.  
14 p2467 A69-29287
- MARULIN, IU. V.**  
Pressure distribution over a sliding contact of cylindrical shape /O raspredelenii davlenii na skol'zhashchem kontakte tsilindricheskoi formy/.  
18 p3149 A69-35287
- MARUSCZYK, K.**  
Designs of induction flowmeters /Konstrukcje przeplywomierzy indukcyjnych/.  
11 p1887 A69-25208
- MARUSHCHAK, V. A.**  
Local oscillations and structure of copper impurity centers in gallium arsenide crystals /Lokal'nye kolebaniia i struktura primesnykh tsentrov medi v kristallakh arsenida galliia/.  
16 p2824 A69-31571
- MARUSHKO, I. A.**  
Generation of the second optical harmonic in the case of nonmonochromatic emission /Generatsiia vtoroi opticheskoi harmoniki v sluchae nemonokhromaticheskogo izlucheniia/.  
19 p3332 A69-35869  
Kinetics of parametric optical frequency conversion /Kinetika parametricheskogo preobrazovaniia opticheskikh chastot/.  
19 p3332 A69-35870
- MARUSKA, H. P.**  
The preparation and properties of vapor-deposited epitaxial InAs sub 1-x P sub x using arsine and phosphine.  
12 p2142 A69-25934
- MARUTIAN, N. A.**  
Investigation of nuclear interactions of high-energy particles by the controlled nuclear emulsion method.  
13 p2331 A69-28388
- MARUYAMA, M.**  
Preparation and properties of epitaxial gallium arsenide.  
[ECS PAPER 62] 08 p1373 A69-21067
- MARUYAMA, T.**  
Time sequence of power spectra of disturbances in the equatorial lower stratosphere in relation to the quasi-biennial oscillation.  
09 p1537 A69-22297  
Upward transport of westerly momentum due to large-scale disturbances in the equatorial lower stratosphere.  
09 p1537 A69-22299
- MARVIN, J. G.**  
A study of the nonsimilar nature of the laminar boundary layer in a region of adverse pressure gradient.  
[AIAA PAPER 69-35] 06 p0913 A69-18094  
Combined effects of mass addition and nose bluntness on boundary-layer transition.  
[AIAA PAPER 67-706] 17 p2955 A69-33476
- MARX, G.**  
Model study of requirements for high-speed interplanetary flights using advanced nuclear engines and refueling at destination /Eine Modelluntersuchung des erforderlichen Aufwandes fuer schnelle interplanetare Fluege bei Verwendung von fortschrittlichen kernenergetischen Triebwerken und Treibstoffergaenzung am Ziel/.  
09 p1586 A69-21298
- MARX, S.**  
Pulsars/pulsare/.  
20 p3597 A69-37335  
The tenth satellite of Saturn /Der zehnte Satellit des Saturn/.  
20 p3597 A69-37337
- MARX, S. H.**  
An integrated 3-axis gravity-gradient stabilization system.  
07 p1226 A69-18329
- MARX, W. R.**  
Ionization of argon-carbon-hydrogen-mixtures during a townsend discharge - Contribution to the determination of the lifetime of metastable argon atoms in the pressure range from 20 to 750 torr /Ionisation von Argon-Kohlen- Wasserstoffgemischen in einer Townsend-Entladung - Ein Beitrag zur Bestimmung der Lebensdauer Metastabiler Argonatome im Druckbereich von 20 bis 750 torr/.  
16 p2814 A69-31841
- MARXER, W. L.**  
Prescription of exercise for the hypokinetic airline pilot.  
23 p4106 A69-41800
- MARXMAN, G. A.**  
Nonlinear solid propellant burning rate behavior during abrupt pressure excursions.  
[AIAA PAPER 69-172] 06 p1036 A69-18046  
A simple regression rate model for the pressure-sensitive domain of hybrid combustion.  
[WSCI PAPER 68-22] 07 p1240 A69-18362  
Research on the combustion mechanism of hybrid rockets.  
16 p2879 A69-32002
- MARY, G.**  
Permanent toroidal memory /Memoire permanente a tores/.  
20 p3503 A69-37402
- MARYNIAK, J.**  
Simplified analysis of the lateral stability of a glider towed by a cable /Uproszczona analiza statecznosci bocznej szybowca holowanego na linie/.  
09 p1433 A69-21498
- MARZAT, C.**  
Formulas giving the reflection and transmission coefficients of a plasma for a plane electromagnetic wave, before and after cutoff, in the hypothesis of a trapezoidal electron density distribution /Formulas donnant les coefficients de reflexion et de transmission d'une onde electromagnetique plane par un plasma, avant la coupure et au-dela, dans l'hypothese d'une distribution de densite electronique trapezoideale/.  
05 p0805 A69-16608
- MAS, G.**  
Granularity of a scattering surface illuminated by coherent light - Observation in the focal plane /Granularite d'une plage diffusante eclairee en lumiere coherente - Observation dans le plan focal/.  
21 p3741 A69-39575
- MAS, L.**  
Study of empty space-times which admit a Kerr-type metric /Etude des espaces-temps vides qui admettent une metrique du type de Kerr/.  
09 p1540 A69-22050
- MASAKI, M.**  
Transitional boundary layer considerations for the heating analyses of lifting reentry vehicles.  
[AIAA PAPER 68-1155] 03 p0416 A69-13674  
Transitional boundary-layer considerations for the heating analyses of lifting re-entry vehicles.  
[CIAA PAPER 68-1155] 24 p4300 A69-43251
- MASALOV, S. A.**  
Theoretical and experimental investigation of the diffraction of a plane wave at a grid composed of squared beams /Teoreticheskoe i eksperimental'noe issledovaniia difraktsii ploskoi volny na reshetke iz brus'ev/.  
07 p1084 A69-19149
- MASARIK, V.**  
Electron-microscope study of carbide precipitation in stainless steels /Elektronenmikroskopische Untersuchung der Carbidausscheidungen in korrosionsbestaendigen Staehlen/.  
10 p1713 A69-23820
- MASATAKE, H.**  
Some stable and long-lived nuclides produced by spallation in meteoritic iron.  
19 p3411 A69-36099
- MASBERNAT, L.**  
Turbulent detachment in an incompressible fluid on thick bodies /Decollement turbulent en fluide incompressible sur des corps epais/.  
24 p4299 A69-42674
- MASCHER, D.**  
Two components of inward current in myocardial muscle fibers.  
23 p4095 A69-42080
- MASCITTI, V. R.**  
A closed-form solution to oblique shock-wave properties.  
11 p1819 A69-25378
- MASCRE, C.**  
Thermodynamic consequences of the Lindemann hypothesis concerning fusion /Consequences thermodynamiques de l'hypothese de Lindemann pour la fusion/.  
07 p1242 A69-19322
- MASCY, A. C.**  
Low-thrust mission simulation - Feedback to hardware definition.  
09 p1584 A69-21204
- MASEEV, L. M.**  
Occurrence of three-dimensional perturbations in a boundary layer /O vozniknovenii trekhmernykh vozmushchenii v pogranichnom sloe/.  
06 p0909 A69-17329
- MASEFIELD, P. G.**  
The modern airport and its future.  
09 p1479 A69-22582
- MASEK, T. D.**  
Plasma properties and performance of mercury ion thrusters.  
[AIAA PAPER 69-256] 09 p1560 A69-21214  
Thrust system technology for solar electric propulsion.  
19 p3394 A69-35941
- MASENTHIN, H. W.**  
Radar scatterometer data analysis techniques.  
12 p2099 A69-27010
- MASERJIAN, J.**  
Frequency response of thin-film thermal detectors.  
23 p4163 A69-41549
- MASEVICH, A. G.**  
Optical observations of artificial earth satellites and their role in geodesy and geophysics /Opticheskie nabludeniia iskusstvennykh sputnikov zemli i ikh rol' dlia geodezii i geofiziki/.  
13 p2219 A69-27357
- MASH, D. I.**  
Stimulated scattering and broadening of an intense pulse of laser emission in gases /Vynuzhdennoe raseianie i ushirenie spektra moshchnogo impul'sa lazernogo izlucheniia v gazakh/.  
09 p1516 A69-21562
- MASHBITS, L. M.**  
Analytical relations for determining a period of prescribed duration for a voltage varying in frequency /Analiticheskie sootnosheniia pri vydelenii perioda zarane zadannoi dlitel'nosti v meniaiushchemsia po chastote napriazhenii/.  
20 p3486 A69-37010
- MASHCHENKO, V. E.**  
Conductivity of CdS under the action of an intense electron beam /Provodimost' CdS pod deistviem intensivnogo puchka elektronov/.  
13 p2318 A69-27886  
Coherent recombinational radiation of some semiconductors at high levels of excitation.  
19 p3387 A69-36539  
Radiation-induced changes in CdS crystals in the process of stimulation of coherent emission in them /O radiatsionnykh izmeneniiakh kristallov CdS v protsesse vozbuzhdeniia v nikh kogherentnogo izlucheniia/.  
21 p3780 A69-39047
- MASHKEVICH, V. S.**  
Generation in a spectrally inhomogeneous semiconductor laser.  
18 p3152 A69-35023  
Generation of the second optical harmonic in the case of nonmonochromatic emission /Generatsiia vtoroi opticheskoi harmoniki v sluchae nemonokhromaticheskogo izlucheniia/.  
19 p3332 A69-35869  
Kinetics of parametric optical frequency conversion /Kinetika parametricheskogo preobrazovaniia opticheskikh chastot/.  
19 p3332 A69-35870  
Theory of laser radiation on indirect band-band transitions in semiconductors of different types /Teoriia lazernogo izlucheniia na nepriamnykh zonnnykh perekhodakh v poluprovodnikakh razlichnogo tipa/.  
19 p3332 A69-35873  
Kinetic theory of laser emission under quasi-equilibrium /Kineticheskaia teoriia lazernoi generatsii pri kvaziravnovesii/.  
19 p3332 A69-35874  
Kinetic theory of laser emission under disturbed quasi-equilibrium /Kineticheskaia teoriia lazernoi generatsii pri narushenii kvaziravnovesii/.  
19 p3333 A69-35875  
Laser emission during a disturbed quasi-equilibrium in spatially nonuniform systems /Lazernaia generatsiia pri narushenii kvaziravnovesii v prostranstvenno neodnorodnykh sistemakh/.  
19 p3333 A69-35876  
Laser emission during a disturbed quasi-equilibrium in a system of four-level centers with a nonuniformly broadened line /Lazernaia generatsiia pri narushenii kvaziravnovesii v sisteme chetyrehurovnevnykh tsentrov s neodnorodno ushirennoi liniei/.  
19 p3333 A69-35877  
Theory of laser emission by four-level centers of two types /Teoriia lazernoi generatsii chetyrehurovnevnykh tsentrami dvukh sortov/.  
19 p3333 A69-35878
- MASHKOVICH, S. A.**  
Hydrodynamic studies of the general circulation of the atmosphere - Some results and problems

- /Gidrodinamicheskie issledovaniia obshchei tsirkulatsii atmosfery - Nekotorye rezul'taty i problemy.  
13 p2253 A69-27849
- Hydrodynamic theory of general atmospheric circulation and numerical experiments /Gidrodinamicheskaia teoriia obshchei tsirkulatsii atmosfery i chislennyye eksperimenty/.  
14 p2476 A69-29819
- Processing of Operational Meteorological Information with the Aid of Computers /Obработка operativnoi meteorologicheskoi informatsii s pomoshch'yu elektronnykh vychislitel'nykh mashin/.  
18 p3105 A69-34332
- MASHKOVTSSEV, B. M.**  
Wave method of synthesizing single-loop directional stripline filters /Volnovoi metod sinteza odnoplevykh napravlennykh fil'trov na poloskovykh liniakh/.  
19 p3284 A69-36570
- MASHNAUSKAS, I.**  
Study of interstellar light absorption in the Milky Way region of Cepheus /Issledovanie mezhzvezdnogo pogloshcheniia sveta v ploshchadke Mlechnogo Puti v Tsefee/.  
07 p1216 A69-18855
- MASHOVETS, T. V.**  
Formation of radiation defects in indium antimonide at subthreshold radiation energies /Obrazovanie radiatsionnykh defektov v antimonide indii pri doporogovykh energiakh izlucheniia/.  
13 p2318 A69-27885  
Formation of radiation defects in indium antimonide at subthreshold radiation energy.  
21 p3782 A69-39144
- MASKREY, J. T.**  
Glow discharge electron beam welding.  
04 p0608 A69-15480
- MASLAND, R. H.**  
Visual motion perception - Experimental modification.  
21 p3661 A69-39332
- MASLEN, K. R.**  
Factors in the design of protective helmets.  
17 p2913 A69-33177
- MASLENKOV, S. B.**  
The nature of the excess phase in ferritic-austenitic stainless steels with titanium.  
04 p0615 A69-14641
- MASLENNIKOV, M. V.**  
Numerical experiments on flow of rarefied plasma around bodies of various shapes. I.  
01 p0134 A69-11307
- MASLENNIKOV, N. M.**  
Investigation of an MHD-generator model with an argon-potassium plasma /Issledovanie modeli MGD-generatora na argono-kalievoy plazme/.  
06 p0871 A69-17909  
Experimental study of an MHD generator model with a nonequilibrium plasma /Eksperimental'noe issledovanie modeli MGD-generatora s neravnovesnoi plazmoi/.  
10 p1637 A69-23480
- MASLEY, A. J.**  
Modeling of solar cosmic ray events based on recent observations. [AIAA PAPER 69-14]  
06 p0997 A69-18160  
The 7 July 1966 solar cosmic-ray event.  
10 p1768 A69-23771
- MASLICH, D. I.**  
The atmospheric refraction coefficient for IR radiation /in the 1-6  $\mu$  spectral range/.  
04 p0591 A69-14300
- MASLIEV, A. I.**  
Plasma multifrequency interferometry /Mnogochastotnaia interferometriia plazmy/.  
14 p2497 A69-29795
- MASLOV, A. I.**  
Generation of a dense plasma by injecting an electron beam into a magnetic trap /Utvorenniia schil'noi plazmi pri inzhetsii elektronnoy puchki v magnitnoi ulovliuvach/.  
22 p3990 A69-40791
- MASLOV, P. G.**  
On the thermodynamics of ions.  
03 p0473 A69-14156
- MASLOV, V. A.**  
Features of the emission of a p-n junction GaAs laser with a nonlinear passive element in the resonator /Osobennosti izlucheniia lazera na p-n-perekhode GaAs s nelineinym passivnym elementom v rezonatore/.  
09 p1515 A69-21474
- Observation of absorption by nonequilibrium carriers in a GaAs diode in the emission mode /Nabliudenie pogloshcheniia neravnovesnymi nositeliami v diode GaAs v rezhime generatsii/.  
13 p2272 A69-27893
- Characteristic features of the radiation of a p-n junction GaAs laser with a nonlinear passive element in the resonator.  
15 p2633 A69-30719
- MASLOV, V. N.**  
Some properties of the ternary compound GaAs sub 1-x P sub x alloyed with selenium /Nekotorye svoystva troinogo soedineniia GaAs sub 1-x P sub x, legirovanogo selenom/.  
13 p2317 A69-27875  
Preliminary results of a search for fractionally-charged particles in the cosmic rays at sea level.  
13 p2333 A69-28425  
Some properties of the ternary compound GaAs sub 1-x P sub x doped with selenium.  
21 p3782 A69-39141
- MASLOV, V. P.**  
Reflection of a flexural wave from a corner joint between plates /Otrazhenie izgibnoi volny ot uglovogo soedineniia plastin/.  
04 p0679 A69-14903  
Concerning the existence of a decreasing as t goes to infinity solution to Sobolev's equation for the small oscillations of a fluid rotating in a cylindrical region /O sushchestvovanii ubyvaiushchego pri t goes to infinity resheniia uravneniia Soboleva dlia malyykh kolebaniy vrashchaiushchiesia zhidkosti v tsilindricheskoi oblasti/.  
09 p1481 A69-21899  
Reflection of a flexural wave from an angular junction of plates.  
12 p2182 A69-26656  
On the existence of a solution, decreasing as t approaches infinity, of Sobolev's equation for small oscillations of a rotating fluid in a cylindrical domain.  
23 p4152 A69-41975
- MASLOV, V. S.**  
Possibility of using semiconductor diodes for measuring temperature /O vozmozhnosti primeneniia poluprovodnikovyykh diodov dlia izmereniia temperatury/.  
07 p1100 A69-18556
- MASLOVA, L. M.**  
Study of a filament with current, situated over an anisotropically conducting plane in a flat waveguide /Izluchenie niti s tokom nad anizotropno provodiashchei ploskost'yu v ploskom volnovode/.  
05 p0718 A69-15647  
Radiation from a current-carrying filament located above an anisotropic conducting plane in a semi-infinite waveguide.  
16 p2762 A69-32504
- MASLOWSKI, S.**  
Design of GaAs injection lasers for continuous-wave operation at high temperatures /Aufbau von GaAs-Injektionslasern fuer Dauerstrichbetrieb bei hohen Temperaturen/.  
02 p0255 A69-11710
- MASNOU, F.**  
Some problems about fine structure transitions in neutral hydrogen clouds.  
19 p3379 A69-36225
- MASON, B.**  
Chemical analyses with notes on one mesosiderite and seven chondrites.  
11 p1953 A69-24336  
Pecoraite, Ni sub 6 Si sub 4 O sub 10 /OH/ sub 8, nickel analog of clinochrysotile, formed in the Wolf Creek meteorite.  
18 p3199 A69-34824  
Composition of stony meteorites.  
22 p4012 A69-40084
- MASON, B. J.**  
The role of satellites in observing and forecasting the global behaviour of the atmosphere.  
06 p0916 A69-16854  
Some outstanding problems in cloud physics - The interaction of microphysical and dynamical processes.  
20 p3572 A69-37906
- MASON, C. C.**  
Particle size distribution of lunar surface material.  
12 p2158 A69-26371  
An empirically derived erosion law and its application to Lunar Module landing.  
23 p4211 A69-41388
- MASON, C. J.**  
A sweeping neutral and positive ion mass spectrometer for atmospheric composition at satellite altitudes.  
19 p3314 A69-36681
- MASON, D. R.**  
Paramagnetic resonance of erbium in CaWO sub 4.  
04 p0643 A69-15141
- MASON, D. W.**  
Binary collision losses in stellarators.  
08 p1364 A69-20520
- MASON, E. A.**  
Transport properties of almost-Lorentzian mixtures.  
11 p1997 A69-24286  
Scattering of high-velocity neutral particles. XVI - Ar-Ar, Ar-He, and Ar-H sub 2.  
22 p3988 A69-41187  
Transport in neutral gases.  
23 p4193 A69-41514
- MASON, H. P.**  
Mars - Water vapor in its atmosphere.  
22 p4018 A69-40268
- MASON, J. A.**  
Physical, chemical, and biological activities at the Lunar Receiving Laboratory.  
21 p3690 A69-38896
- MASON, J. D.**  
Disconnected optimal trajectories.  
17 p3026 A69-32837  
Secondary mission optimization. [AAS PAPER 68-138]  
21 p3819 A69-39210
- MASON, J. M.**  
General method for the evaluation of natural frequencies of transverse beam vibration according to the Timoshenko theory.  
11 p1970 A69-24581
- MASON, P. V.**  
Slow-wave structures utilizing superconducting thin-film transmission lines.  
17 p2938 A69-33785
- MASON, R. J.**  
Kinetic theory of weak shock generation by an impulsively started piston.  
08 p1304 A69-20783
- MASON, W. J.**  
Nonlinear first-order systems reducible to classical equations.  
02 p0273 A69-12541
- MASON, W. P.**  
Fatigue mechanism in fcc metals at ultrasonic frequencies.  
04 p0613 A69-14448
- MASOUD, M.**  
High-speed shock-wave investigation in rarefied gas.  
14 p2433 A69-29846
- MASRI, S. F.**  
Analytical and experimental studies of multiple-unit impact dampers.  
15 p2714 A69-31144
- MASRY, S. E.**  
Accuracy of rotation around an axis.  
04 p0599 A69-15017
- MASS, J.**  
Ionospheric electron content and scintillation studies at widely-spaced low-latitude stations.  
02 p0235 A69-11427
- MASSAM, T.**  
An underground search for leptonic quarks in the cosmic radiation.  
02 p0306 A69-11547
- MASSE, P.**  
Balloon measurements of solar protons in Northern Scandinavia on 7 July 1966.  
10 p1767 A69-23763
- MASSE, R.**  
Preliminary report on recent improvements in the analysis of surface waves.  
02 p0243 A69-12006
- MASSEL, G. A.**  
Diffusion of fast electrons in stochastic magnetic fields.  
08 p1368 A69-20807  
Calculations of transport coefficients in ionized gases.  
23 p4195 A69-41517
- MASSERINI, G. L.**  
Electromagnetic propagation in a resonant medium.  
21 p3769 A69-38382



**MASSEVICH, A. G.**

Some results of international co-operation in the field of optical tracking of artificial satellites for 10 years.

06 p1042 A69-17050

**MASSEY, B. S.**

Sound radiation from vibrating objects.

02 p0282 A69-12800

A note on the accuracy of similar solutions of the equations for laminar boundary layers on curved surfaces.

11 p1867 A69-24375

Laminar boundary layers over permeable curved surfaces.

23 p4153 A69-42399

**MASSEY, E. W.**

A quality assurance program for LSI MOS devices.

15 p2580 A69-31131

**MASSEY, G. A.**

Modified forms for Glan-Thompson and Rochon prisms.

02 p0280 A69-11924

Reflection and refraction of Gaussian light beams at tilted ellipsoidal surfaces.

10 p1725 A69-23309

**MASSEY, J. L.**

Trunk and tree searching properties of the Fano sequential decoding algorithm.

06 p0902 A69-17400

Some algebraic and distance properties of convolutional codes.

06 p0904 A69-17865

Shift-register synthesis and BCH decoding.

09 p1470 A69-21317

Invertibility of linear time-invariant dynamical systems.

20 p3509 A69-37138

**MASSEY, J. L., JR.**

Stagnation pressure losses of compressible fluids through abrupt area changes neglecting friction at the walls.

[ASME PAPER 68-WA/FE-46]

05 p0750 A69-16113

**MASSEY, N.**

Bias level reduction of incoherent holograms.

11 p1885 A69-24846

**MASSEY, N. G.**

Optical processing of planetary radar data - Preliminary results.

08 p1270 A69-19816

**MASSIE, L. D.**

Attitude control rocket exhaust plume effects on solar cells.

19 p3252 A69-35700

**MASSIER, P. F.**

Flow and heat-transfer measurements in subsonic air flow through a contraction section.

[JPL-TR-32-1348]

10 p1809 A69-23194

Heat transfer and laminar boundary-layer distributions in an internal subsonic gas stream at temperatures up to 13,900 deg R.

[ASME PAPER 68-HT-16]

13 p2374 A69-27776

Laminarization of a turbulent boundary layer in nozzle flow.

[JPL-TR-32-1407]

16 p2732 A69-31894

Transonic flowfield in a supersonic nozzle with small throat radius of curvature.

23 p4060 A69-41900

Laminarization of a turbulent boundary layer in nozzle flow - Boundary layer and heat transfer measurements with wall cooling.

[ASME PAPER 69-HT-56]

24 p4303 A69-43538

Laminar, transition, and turbulent boundary-layer heat-transfer measurements with wall cooling in turbulent airflow through a tube.

[ASME PAPER 69-HT-8]

24 p4414 A69-43560

**MASSING, G. K.**

Clinical significance of acquired complete right bundle branch block in 59 patients without overt cardiac disease.

23 p4085 A69-41677

**MASSON, B. S.**

Application of Godunov's method to blunt-body calculations.

16 p2732 A69-31886

Supersonic flow past a finite cone with large surface mass injection.

23 p4059 A69-41884

**MASSONE, C. A.**

Superradiant and laser spectroscopy in the second positive system of N sub 2.

04 p0609 A69-14285

On the interaction between the first and second positive laser systems in N sub 2.

11 p1893 A69-24346

**MASSONNET, C.**

Limiting state of a square plate subjected to shear and reinforced by a vertical stiffener /Etat limite d'une plaque carree, cisaillee, renforcee par un raidisseur vertical/.

24 p4399 A69-42967

**MASSONNET, CH.**

Application of Computers to the Calculation of Structures /Application des ordinateurs au calcul des structures/.

07 p1233 A69-19349

**MASSOPUST, L. C., JR.**

Differential color responses in the visual cortex of the squirrel monkey.

22 p3879 A69-40844

**MAST, L. T.**

Automatic checkout of space systems.

03 p0411 A69-13392

**MASTERS, A. I.**

FLOX/methane pump-fed engine systems.

[AIAA PAPER 69-510]

16 p2741 A69-32720

**MASTERS, D. J.**

HSD systems trainers.

05 p0742 A69-15884

**MASTRACCI, M. L.**

The ideal air cargo terminal.

13 p2239 A69-27337

**MASUDA, S.**

On the expansion and shrinkage of space-charge clouds.

06 p0959 A69-18219

**MASUDA, T.**

Some excitation temperature measurements of induction-coupled argon plasmas.

06 p0964 A69-17193

**MASUDA, Y.**

A finite difference scheme by making use of hexagonal mesh-points.

19 p3364 A69-36508

**MASUKAWA, S.**

Experimental determinations of the molar heat and entropy of adsorption and the activity coefficient of the adsorbed phase for the methane-ethane-silica gel system.

10 p1652 A69-23370

**MASUKO, Y.**

Radiative heat input to satellites at low to medium altitude.

22 p4006 A69-40589

**MASUR, E. F.**

Some general principles of dynamic instability of solid bodies.

05 p0844 A69-16742

**MASURE, B.**

Influence of a sharp pressure variation on a turbulent boundary layer and application to hypersonic air intakes /Action d'une variation brusque de pression sur une couche limite turbulente et application aux prises d'air hypersoniques/.

[ICAS PAPER 68-42]

17 p2895 A69-33587

**MASURSKY, H.**

Lunar-exploration targets.

06 p1001 A69-17161

**MASUTANI, K.**

A CO sub 2 Q-switched laser and its nonlinear amplification characteristics.

06 p0933 A69-17118

**MATALOVA, O. I.**

Investigation of the total radiation of a dense low-temperature argon plasma /Issledovanie summarnogo izlucheniia plotnoi nizkotemperaturnoi plazmy argona/.

09 p1547 A69-21595

**MATARE, H. F.**

Scanning electron beam display of dislocation space charge.

02 p0301 A69-12661

Semiconductor glasses.

06 p0980 A69-17714

Technological prospects for a solid-state radar /Technische Perspektiven des Festkoerper-Radars/.

13 p2230 A69-27928

Technical prospects of solid-state radar /Technische Perspektiven des Festkoerper-Radars/.

15 p2581 A69-31521

**MATAS, V.**

Generalization of Hill's surfaces in the case of a special restricted four-body problem.

04 p0660 A69-15038

**MATAYA, J. A.**

IF amplifier using C sub c compensated transistors.

07 p1103 A69-18884

**MATCHA, R. L.**

Comment on approximate molecular orbitals. III.

01 p0123 A69-10547

**MATCOVICH, T. J.**

Active device assembly techniques.

09 p1508 A69-22338

**MATEER, C. L.**

The effect of stratospheric dust on the color of the twilight sky.

02 p0243 A69-12014

**MATEER, G. G.**

Unusual boundary-layer transition results on cones in hypersonic flow.

[AIAA PAPER 68-40]

16 p2732 A69-31881

**MATESCU, D.**

Wing Theory in Supersonic Flow.

08 p1251 A69-20523

Cruciform wings and tails fitted with conical bodies in supersonic flow. I.

15 p2548 A69-31002

Cruciform wings and tails fitted with conical bodies in supersonic flow. II - High order conical flows.

15 p2548 A69-31023

**MATEL, P.**

Determination of the resisting forces produced by the transverse vibration of a disk rotating in a viscous fluid /Determination des forces resistantes, produites par la vibration transversale d'un disque qui tourne dans un fluide visqueux/.

02 p0232 A69-12257

**MATEL, A. F.**

Handbook of Solar Simulation for Thermal Vacuum Testing.

21 p3690 A69-38894

**MATESE, J. J.**

Effect of a constant magnetic field on the neutron beta decay rate and its astrophysical implications.

15 p2690 A69-30694

**MATEVOSIAN, K. A.**

Spectrum of ionization bursts in an ionization calorimeter beneath absorbers.

13 p2331 A69-28393

**MATHEJA, J.**

Molecular development of organic matrices capable of mineralization /Molekulare Entwicklung mineralisationsfaehiger organischer Matrizen/.

04 p0555 A69-14888

**MATHENY, W. G.**

A model for predicting man's control behavior in a man-machine system.

12 p2025 A69-27082

**MATHER, G. K.**

Evaluation of an infrared spectrometer as a clear air turbulence detector. II.

12 p2098 A69-27000

**MATHER, K. B.**

Conjugacy of visual auroras during magnetically quiet periods.

05 p0753 A69-16247

**MATHER, R. S.**

The free air geoid as a solution of the boundary value problem.

07 p1129 A69-19396

**MATHESON, W. E.**

Higher outputs and efficiencies for nuclear batteries.

20 p3464 A69-37288

**MATHEWS, C. S.**

Heats of formation of CHO super plus and C sub 3 H sub 3 super plus by photoionization.

22 p3896 A69-40727

**MATHEWS, C. W.**

Systems engineering, manned space flight.

06 p1016 A69-17602

**MATHEWS, E.**

DNA replication in vivo by a temperature-sensitive polynucleotide ligase mutant of T4.

10 p1647 A69-24188

- MATHEWS, H.**  
Observations of Love wave propagation at UHF frequencies.  
13 p2218 A69-27203
- MATHEWS, T.**  
Pronounced diurnal variation in cosmic-ray intensity.  
09 p1576 A69-21706
- MATHEWS, W. G.**  
Lyman-line decrements in low-density planetary nebulae.  
09 p1604 A69-22407  
Effects of self-absorption and internal dust on hydrogen-line intensities in gaseous nebulae.  
10 p1787 A69-24118  
Evolution of diffuse nebulae.  
21 p3810 A69-39504  
On the evolution of high-density, dust-filled H II regions.  
22 p4025 A69-40646
- MATHEWSON, G.**  
A computer model for the evaluation of helicopter fire control systems.  
[AHS PAPER 316]  
17 p2933 A69-33540
- MATHIEU, E.**  
Conditions for quasi Cerenkov radiation, generated by optical second harmonic polarisation in a nonlinear crystal.  
21 p3741 A69-39669
- MATHIEU, H.**  
Effect of a magnetic field on the stimulated emission of GaSb.  
19 p3387 A69-36530
- MATHIEU, J.**  
The mixing zone of a plane jet /Zone de melange d'un jet plan/.  
12 p2062 A69-26287  
Velocity fluctuations induced in the potential cone of a plane jet /Fluctuations de vitesse induites dans le cône d'un jet plan/.  
13 p2247 A69-27736  
Kinematic and thermal discontinuity on the boundaries of the mixing zone of a plane jet /Intermittence cinématique et thermique sur les frontières de la zone de melange d'un jet plan/.  
13 p2247 A69-27978  
Wall flows /Ecoulements parietaux/.  
13 p2251 A69-28633
- MATHIVAT, A.**  
Incidence of cardiovascular diseases among the flight deck personnel of an airline.  
06 p0875 A69-17848  
Incidence of cardiovascular illnesses among flight personnel of an airline /Incidence des maladies cardiovasculaires parmi le personnel navigant technique d'une compagnie aerienne/.  
21 p3661 A69-39271
- MATHUR, F. P.**  
Automatic maintenance of aerospace computers and spacecraft information and control systems.  
[AIAA PAPER 98-966]  
22 p3906 A69-40347
- MATHUR, L. S.**  
Progress of meteorological instrumentation in India.  
02 p0248 A69-11817
- MATHUR, M. C.**  
The static stability of a cone-cylinder flare and two cone-cylinder fin-flare combinations at supersonic speed.  
17 p2948 A69-34212
- MATHUR, N. C.**  
On the space-frequency equivalence of a correlator interferometer.  
07 p1132 A69-18917  
A pseudodynamic programming technique for the design of correlator supersynthesis arrays.  
10 p1663 A69-23420
- MATHUR, S. S.**  
Higher order elastic constants of some face-centered cubic metals.  
23 p4233 A69-42337
- MATIAGIN, V. S.**  
BESM-3M computer simulation of radiation scattering in a spherical nebula with a central point source /Modelirovanie na vychislitel'noi mashine BESM-30M rasseianiia izlucheniia v sfericheskoi tumannosti s tsentral'nym tochechnym istochnikom/.  
21 p3816 A69-39723
- MATIASH, A. A.**  
Some characteristics of reaction diffusion during vapor phase saturation of refractory metals with beryllium /O nekotorykh osobennostiakh reaktsionnoi diffuzii pri nasyshchenii tugoplavkikh metallov berillem iz parovoi fazy/.  
20 p3549 A69-37364
- MATIASH, I. V.**  
The dielectric constant of liquid hydrogen.  
14 p2487 A69-29668
- MATIICHUK, M. I.**  
Differentiability of fundamental solutions to elliptic equations /O differentsiruemosti fundamental'nykh reshenii ellipticheskikh uravnenii/.  
01 p0106 A69-10955
- MATILSKY, T. A.**  
Radiative lifetimes of ultraviolet transitions of argon II.  
15 p2656 A69-31034
- MATIN, L.**  
Variation of the magnitude of the horizontal-vertical illusion with retinal eccentricity.  
24 p4263 A69-43117
- MATIN, S. A.**  
Numerical iteration of an elliptic mixed boundary-value problem in a region with curved boundary.  
04 p0625 A69-15287
- MATINIAN, E. G.**  
Holographic recording of focused images and their reconstruction in white light /Golograficheskaia registratsiia sfokusirovannykh izobrazhenii i ikh vostanovlenie v belom svete/.  
21 p3725 A69-39543
- MATINIAN, S. G.**  
On the theory of multiple production at high energies.  
13 p2303 A69-28372
- MATITTI, T.**  
The electron cyclotron instability and high-frequency ionization in a beam-plasma experiment.  
05 p0798 A69-15612
- MATIUGOV, S. S.**  
Scattering of meter radio waves by the lunar surface.  
07 p1087 A69-19615
- MATIUKHIN, I. U. G.**  
Spectrographic method of analyzing the variations in cosmic-ray intensity /Spektrograficheskii metod analiza variatsii intensivnosti kosmicheskikh luchei/.  
10 p1759 A69-22836
- MATIUSHKIN, D. P.**  
Activity of the phase and tonic systems of the oculomotor apparatus in some vestibular reflexes and nystagmus /Aktivnost' faznoi i tonicheskoi sistem glazodvigatel'nogo apparata v nekotorykh vestibuliarnykh refleksakh i vestibuliarnom nistagme/.  
20 p3469 A69-37243
- MATIUSHKOV, V. E.**  
Certain method of compensating for the optical inhomogeneity of active laser elements /Ob odnom sposobe kompensatsii opticheskoi neodnorodnosti aktivnykh elementov OKG/.  
17 p2983 A69-33970
- MATKIN, J. H.**  
Aerosol size and velocity determination via holography.  
09 p1492 A69-21418
- MATKOVICH, V. I.**  
Single crystal flake reinforced composites.  
05 p0785 A69-16581
- MATKOWSKY, B. J.**  
On the validity of the geometrical theory of diffraction by convex cylinders.  
13 p2299 A69-28194
- MATLAK, V. M.**  
Parameters of the energy structure of ZnTe-CdTe and ZnSe-ZnTe crystals.  
03 p0492 A69-14173  
Effect of impurities on the optical properties of CdTe. I - Group III and VI impurities /Vliianie primesei na opticheskie svoistva CdTe. I - Primesi III i VI grupp/.  
24 p4362 A69-43735
- MATLOCK, H.**  
Finite-difference methods for plate vibration problems.  
11 p1983 A69-25020
- MATLOFF, G. L.**  
Extra-atmospheric silicon, S20 and S4 magnitudes of some bright stars.  
10 p1775 A69-23190
- Revised extra-atmospheric nominal S-4 magnitudes for some bright stars.  
11 p1960 A69-24853
- Star magnitude extinction - An approximate method for calculation experienced by astrotracker systems.  
18 p3168 A69-34814
- MATOSHKO, S. I.**  
Theory of elastoplastic bending of plates with a nonlinear stress-strain diagram /K teorii uprugoplasticheskogo izgiba plastin s nelineinoi diagrammoi deformirovaniia/.  
04 p0667 A69-14269  
Elastic-plastic bending of rectangular plates with an asymmetric plastic inhomogeneity /Uprugoplasticheskii izgib priamougol'nykh plastin s nesimmetrichnoi plasticheskoi neodnorodnost'iu/.  
14 p2533 A69-28984
- MATOUSEK, J.**  
Genetic background of circadian rhythms.  
04 p0553 A69-15152
- MATSAS, E. P.**  
The influence of metal impurities on electronic states of the real germanium surface.  
11 p1939 A69-25703
- MATSCH, F.**  
Practical terrestrial benefits derived from using outer space.  
[UN PAPER 68-11608]  
01 p0179 A69-10496
- MATSCHINSKY, W.**  
A simple approximate method for the determination of the free oscillation period of nonlinear oscillators with one degree of freedom /Einfaches Naecherungsverfahren zur Bestimmung der Eigenschwingungsdauer nichtlinearer Schwinger mit einem Freiheitsgrad/.  
19 p3373 A69-36310
- MATSEIKA, K. I. U.**  
Electric field distribution in circular spiral deflection systems of traveling-wave tubes /Raspreделение elektricheskogo polia v kruglykh spiral'nykh otkloniavshchikh sistemakh trubok begushchei volny/.  
13 p2237 A69-28582
- MATSKEVICH, A. V.**  
Creep in a thermoplastic cylindrical shell under conditions of axisymmetrical loading /Polzuchest' tsilindricheskoi obolochki iz termoplastov v usloviakh osesimmetrichnogo nagruzeniia/.  
22 p4045 A69-40750
- MATSKOV, A. A.**  
Influence of a change in the duration of discrete packets of phase-manipulated signals on the output response of a matched filter /Vliianie izmeneniia dlitel'nosti diskretnykh fazomanipulirovannogo signala na vykhodnoi otlik soglasovannogo fil'tra/.  
12 p2031 A69-26487
- MATSNEV, E. I.**  
Changes in functions of the nervous system and of some analyzers during the combined action of hypokinesia and radial accelerations.  
02 p0197 A69-11496  
Effect of prolonged slow rotation on hearing /Vliianie dlitel'nogo medlennogo vrashcheniia na slukh/.  
20 p3470 A69-37251
- MATSOUKAS, D.**  
Electron content measurements by beacon S-66 satellite during the May 20, 1966, solar eclipse.  
22 p4007 A69-40916
- MATSUBA, T.**  
An electronic tensile testing machine for automatic control of strain rate between the gage marks at elevated temperatures.  
21 p3727 A69-39811
- MATSUBARA, H.**  
Enzymatic digestion of C-terminal super 3 H-labeled peptides - Possible usefulness for the structural study of proteins.  
10 p1648 A69-24190  
Effect of proline residue on the hydrolysis of substrates by thermolysin.  
15 p2561 A69-30083  
The amino acid sequence of Scenedesmus ferredoxin.  
22 p3896 A69-40435  
Optimum thrust programming for a sounding rocket.  
22 p4037 A69-41050
- MATSUBARA, K.**  
Negative resistance in semiconductors /InSb/.  
02 p0294 A69-11722
- MATSUBARA, S.**  
Study on a semi-hot wall duct for MHD generators.  
13 p2372 A69-27473



## MATSUDA, H.

Some stable and long-lived nuclides produced by spallation in meteoritic iron.

19 p3411 A69-36099

Application of neutron activation method for super 53 Mn in meteoritic iron.

20 p3601 A69-37504

## MATSUDA, K.

Collision damping of longitudinal plasma waves.

18 p3179 A69-34439

## MATSUDA, T.

Formation of H sub 2 and galaxies in the hot universe.

15 p2680 A69-30205

## MATSUHARA, M.

Resonating and guiding systems for laser beams.

09 p1518 A69-22125

## MATSUI, H.

Measurements of the vibrational relaxation time and the dissociation rate constant of CO sub 2 in shock waves.

21 p3775 A69-39801

New hypersonic gun tunnel at Kyoto University.

22 p3927 A69-40587

Piston driven shock tube of Kyoto University.

22 p3928 A69-41046

## MATSUI, I.

Electron reflection by standing wave of giant pulse laser.

02 p0255 A69-11833

## MATSUMOTO, E.

Method of stress analysis for a plate with variable thickness subjected to concentrated load.

22 p4041 A69-40144

Thermal deformation of skew plates under radiant heating.

22 p4044 A69-40599

## MATSUMOTO, I.

Effect of abrupt deceleration on the heart rate in monkeys.

06 p0876 A69-18031

## MATSUMOTO, K.

Solvent effect in a sterically controlled synthesis of optically active alpha-amino acids from alpha-keto acids by hydrogenolytic asymmetric transamination.

12 p2026 A69-25779

Synthesis of optically active alanine from oxaloacetic acid by hydrogenolytic asymmetric transamination.

12 p2026 A69-25780

Holographic multiple-beam interferometry.

17 p2977 A69-34159

## MATSUMOTO, M.

Diffuse reflection and transmission of time-dependent collimated light by a finite inhomogeneous atmosphere.

18 p3132 A69-35345

## MATSUMOTO, R.

A study of combustion in simple combustion chamber.

18 p3230 A69-34837

## MATSUMOTO, S.

On the role of convective momentum exchange in the mesoscale gravity wave.

20 p3522 A69-37350

Objective analysis of the thermodynamic field consistent with the energy supply and the cumulus distribution.

20 p3523 A69-37351

## MATSUMOTO, T.

Propagation of Gaussian light beams in a random medium.

02 p0208 A69-12308

Input admittance of the Fabry-Perot resonator with infinitely long conic-section cylindrical reflectors.

05 p0731 A69-16295

On a curved gas lens with idealized medium.

13 p2270 A69-27181

## MATSUO, H.

Enzymatic digestion of C-terminal super 3 H- labeled peptides - Possible usefulness for the structural study of proteins.

10 p1648 A69-24190

## MATSUO, K.

Investigations of the aerodynamic characteristics of the shock tubes. I - The effects of tube diameter on the tube performance.

24 p4297 A69-43630

Investigations of the aerodynamic characteristics of the shock tubes. II - On the formation of shock waves.

24 p4305 A69-43631

## MATSUO, T.

Abnormal current changes of the junction field effect transistors.

01 p0038 A69-10122

## MATSUO, Y.

Stabilization of a composite-cavity single-frequency laser.

05 p0776 A69-16333

A composite-cavity tunable laser.

23 p4174 A69-41635

## MATSUOKA, H.

Practical optimum feedback controller.

15 p2582 A69-30071

## MATSUOKA, K.

An experimental study on the separation control of flow along a cylindrical wall by a jet.

09 p1431 A69-22277

Aerodynamic characteristics of propeller-wing-flap systems.

09 p1431 A69-22278

Characteristics of roll-damping of propeller-wing systems in transitional flight region.

22 p3863 A69-40145

A study on base pressure of ground effect machine in heaving motion.

22 p3866 A69-40817

## MATSUOKA, M.

Measurement of the absolute intensity of cosmic X-rays.

17 p3023 A69-33068

## MATSUSHIMA, S.

Radiative opacity in stellar atmospheres. I - Metal absorption coefficients.

07 p1220 A69-19392

Radiative opacity in stellar atmospheres. II - Effect of ultraviolet continuum on the photospheric radiation field.

07 p1221 A69-19393

Photometric evidence supporting the revised calibration of Vega by Hayes.

09 p1603 A69-22233

Radiative opacity in stellar atmospheres. III - Effect of the hydrogen-to-helium ratio on the atmospheric structure.

13 p2339 A69-27562

The structure of white-dwarf atmospheres. II - Masses and radii determined from atmospheric parameters of DA stars. III - The atmosphere of 40 Eridani B.

13 p2339 A69-27563

On the theoretical /U-B/- and /B-V/- colors.

15 p2694 A69-30786

## MATSUSHITA, S.

Morphological behavior of blanketing sporadic E at middle latitudes.

01 p0070 A69-11158

Time and latitude variations of blanketing sporadic E of different intensities.

01 p0070 A69-11159

Formation of sporadic E layer due to wind shear in the presence of electrostatic field.

01 p0072 A69-11174

Discussion on theories of movement of ionospheric irregularities.

05 p0758 A69-16416

Time and latitude variations of blanketing sporadic E of different intensities.

07 p1125 A69-18840

Rocket observations of electron densities in the night-time auroral E-region at Fort Churchill, Canada.

14 p2439 A69-29117

Ionospheric irregularities and the cross-field plasma instability.

16 p2773 A69-31972

A consideration on the tidal wave transmission through the ionized atmosphere.

23 p4155 A69-41561

Dynamo currents, winds, and electric fields.

23 p4160 A69-42427

## MATSUURA, A.

General review of Japan's space activities.

[UN PAPER 68-95563] 01 p0151 A69-10501

## MATSUURA, O. T.

On the polarization and intensity distribution of solar bursts at 7 GHz.

04 p0652 A69-14417

Polarization bursts in the sun observed at microwave frequencies.

05 p0813 A69-15761

Some peculiar tropospheric and ground effects on solar noise radio measurements at 7 GHz.

07 p1215 A69-18819

On the possible emission of polarized microwave radiation from the solar hemispheres.

13 p2326 A69-27550

## MATSUZAKI, R.

Some experimental data on luminous flow around bodies.

02 p0189 A69-12182

Shock detachment distance for flow around cylinders and spheres.

17 p2949 A69-32962

## MATSUZAKI, Y.

Experiments on supersonic panel flutter.

17 p3051 A69-32923

Influence of initial deflection and internal pressure on supersonic panel flutter of simply supported rectangular plates.

24 p4400 A69-43056

## MATSUZAWA, H.

Optimum design of elliptic-cylindrical chambers for optical pumping of solid-state lasers.

10 p1706 A69-24010

Optimum design of spherical and ellipsoidal pumping chambers for solid-state lasers.

24 p4327 A69-42986

## MATT, E.

First results of ignition tests on rocket engines in high vacuum /Erste Ergebnisse von Anfahrversuchen mit Raketentriebwerken im Hochvakuum/.

[DVL-831] 10 p1754 A69-24022

## MATTAUCH, R. J.

Comparison of exact and measured open circuit photoconductor voltages.

12 p2093 A69-26481

## MATTAJI, J. L.

Low-cycle fatigue behavior under biaxial strain distribution.

[ASME PAPER 68-WA/MET-8] 05 p0838 A69-16151

Low-cycle fatigue behavior under biaxial strain distribution.

[ASME PAPER 68-WA/MET-8] 14 p2535 A69-29438

Development and testing of intermetallic coated titanium alloy gears.

19 p3323 A69-35582

## MATTEI, G.

Wave propagation and instabilities in a rotating anisotropic plasma.

07 p1195 A69-19438

Cylindrical waves in the thermoelasticity of incompressible solids /Onde cilindriche nella termoelasticita di solidi incompressibili/.

15 p2707 A69-30626

## MATTHAEI, G. L.

Low-pass quasi-optical filters for oversized or focused-beam waveguide applications.

13 p2229 A69-27675

## MATTHEWS, B. J.

The investigation of liquid rocket combustion using pulsed laser holography.

[AIAA PAPER 69-471] 17 p3075 A69-34200

## MATTHEWS, H. E.

Effect of chemisorbed oxygen on the electrical conductivity of Zn-doped polycrystalline SnO sub 2.

07 p1201 A69-19478

## MATTHEWS, H. F.

The Pioneer mission to Jupiter.

[AAS PAPER 69-290] 24 p4381 A69-42863

## MATTHEWS, J. B.

Development program for a general purpose computer and strapdown inertial measurement unit.

[AIAA PAPER 69-850] 21 p3765 A69-39426

## MATTHEWS, P. A.

Periodic structure in solar radio bursts and its relation to burst energy.

12 p2157 A69-26234

Microwave polarisation measurements of four solar radio bursts.

18 p3188 A69-35213

## MATTHEWS, S. W.

Improved Centaur computer operating system.

[AIAA PAPER 69-943] 22 p3904 A69-40326

## MATTHIAS, B. T.

Superconductivity and the melting point /Supraleitung und Schmelzpunkt/.

02 p0283 A69-11785

Green flash from high altitude.

12 p2066 A69-26232

## MATTHIEU, P.

Investigations of intermittent plastic penetration and flattening processes /Untersuchungen ueber stossartige plastische Eindring- und Abplattvorgaenge/.  
02 p0337 A69-11615

## MATTIG, W.

A possible cosmological interpretation of the redshift in quasars /Eine moegliche kosmologische Deutung der Rotverschiebung der Quasars/.  
07 p1211 A69-18406

On the center-to-limb variation of sunspot brightness.  
11 p1946 A69-24426

The geometrical height-scale and the pressure equilibrium in the sunspot umbra.  
22 p4019 A69-40292

## MATTIN, R. B.

Inertial guidance for ELDO launchers.  
07 p1176 A69-18491

## MATTIOLI, L. E.

Comparison of the characteristics of waves in the zonal flows of the two hemispheres /Confronto tra le caratteristiche delle onde nella corrente zonale dei due emisferi/.  
17 p2997 A69-33392

## MATTIOLI, M.

Optical measurements on laser-produced plasmas.  
01 p0127 A69-10281

Study of the expansion of a lithium hydride microplasma in a vacuum /Etude de l'expansion dans le vide d'un microplasma d'hydrure de lithium/.  
02 p0286 A69-11704

## MATTIS, J. J.

The traffic cop of the skies - FAA enforcement actions.  
16 p2882 A69-32335

## MATTIS, T. J.

Tactical satellite communications requirements.  
20 p3497 A69-38315

## MATTISON, R. L.

UTEC - A universal test equipment compiler.  
11 p1842 A69-25066

## MATTRAW, H. C.

Physics of control of electronic devices.  
18 p3143 A69-34488

## MATULA, R. A.

Flame velocities of tetrafluorethylene-oxygen mixtures.  
11 p1940 A69-24485

## MATULIS, IU.

Bright Electrolytic Coatings /Blestiaschchie elektroliticheskie pokrytiia/.  
22 p3958 A69-41261

Physicochemical principles of the deposition of bright electrolytic coatings /Fiziko-khimicheskie osnovy osazhdeniia blestiaschchikh elektroliticheskikh pokrytii/.  
22 p3958 A69-41262

Bright chromium plating /Blestiaschchee kromirovanie/.  
22 p3958 A69-41263

## MATUSEVICH, L. A.

Gas laser with mirror-windows /Gazovyi lazer s oknami-zerkalami/.  
14 p2457 A69-29160

## MATUSZEWSKI, J. P.

Fluidic electro-pneumatic converter optimization.  
15 p2553 A69-31298

## MATUURA, N.

Analysis of the topside ionospheric data from Alouette II over Japan. I.  
01 p0065 A69-10548

The structure of the topside ionosphere deduced from Alouette data.  
20 p3532 A69-37895

Proton cyclotron echoes in the topside ionosphere.  
24 p4310 A69-43189

## MATVEENKO, IU. A.

Some properties of gallium arsenide with a nickel impurity /Nekotorye svoistva arsenida galliia s primes'iu nikelia/.  
09 p1555 A69-21475

Some properties of nickel-doped gallium arsenide.  
15 p2669 A69-30720

## MATVEENKO, L. I.

Variability of the flux densities of some radio emission sources at a frequency of 5760 MHz /Peremennost' plotnostei potokov nekotorykh istochnikov radioizlucheniia na chastote 5760 MGts/.  
09 p1588 A69-21361

Radio brightness distribution in the Crab Nebula at a wavelength of 32.5 cm /Raspreделение radioiarkosti v Krabovidnoi tumannosti na volne 32.5 cm/.  
15 p2687 A69-30539

Variability of flux densities of some radio sources at the frequency of 5760 MHz.  
18 p3197 A69-34751

Investigation of the Crab Nebula at wavelengths of 2.16 and 8.2 mm /Issledovaniia krabovidnoi tumannosti na volnakh 2,16 i 8,2 mm/.  
19 p3428 A69-36875

Measurement of the right ascension of the Crab Nebula at meter wavelengths /Izmerenie priamogo voshkhzhdeniia Krabovidnoi tumannosti na metrovykh volnakh/.  
20 p3607 A69-38040

## MATVEEV, A. A.

Universal vestibulometric chair /UVC/.  
02 p0200 A69-11517

## MATVEEV, A. D.

Methods of studying the vestibular function on a spacecraft /K voprosu o metodakh izucheniia vestibuliarnoi funktsii v kosmicheskoi korabe/.  
20 p3473 A69-37275

## MATVEEV, G. G.

Dynamic characteristics of ferrites in strong pulsed fields /Dinamicheskie kharakteristiki ferritov v sil'nykh impul'snykh poliax/.  
13 p2320 A69-27994

## MATVEEV, IU. G.

Noise characteristics of the Mi-8 and Mi-4 passenger helicopters.  
03 p0366 A69-13417

## MATVEEV, R. F.

Measurement of average combined losses of an H sub 01 wave in waveguide lines by a method of pulse sequences /Izmerenie srednikh summarnykh poter' volny H sub 01 v volnovodnykh liniakh metodom riada impul'sov/.  
23 p4123 A69-41949

## MATVEEV, S. K.

Unsteady heat transfer in ablation.  
20 p3631 A69-37088

## MATVEEV, V. B.

Threshold behavior of the cross section for the excitation of Cs II resonance lines in the process Cs super plus He.  
17 p3008 A69-33388

## MATVEEV, V. I.

Calculation of the output power of gas lasers /K raschetu vykhodnoi moshchnosti gazovykh OKG/.  
15 p2633 A69-30079

Use of superhigh-frequency radio waves for determination of the thickness of nonmetallic materials.  
18 p3138 A69-35116

## MATVEEV, V. M.

Study of heat storage cells for space solar power plants /Issledovanie teplovykh akkumulatorov dlia kosmicheskikh solnechnykh energoustanovok/.  
06 p0870 A69-17604

Effect of transverse receiver defocusing on the energy characteristics of paraboloidal solar devices.  
09 p1436 A69-21803

## MATVEEV, V. V.

Damping properties of certain materials for turbine blades at high temperatures /Dempfiiruushchie svoistva nekotorykh turbolopatochnykh materialov pri vysokikh temperaturakh/.  
17 p2990 A69-33932

Influence of static tension on energy dissipation in a material subjected to transverse vibrations /O vlianii staticheskogo rastiazheniia na rasseianie energii v materiale pri poperechnykh kolebaniiax/.  
17 p2991 A69-33934

Some results of a study of the damping properties of coatings for elements of aircraft structures /Nekotorye rezul'taty issledovaniia dempfiruushchikh svoistv pokrytii elementov samoletnykh konstruktsii/.  
17 p2993 A69-33941

## MATVEEVA, E. T.

Relation between changes in pearl type oscillations /PcI/ and solar activity during an 11-year cycle /O sviazi 11-letnikh tsiklicheskikh izmenenii kolebaniu tipa zhemchuzhin /PcI/ s solnechnoi aktivnost'iu/.  
02 p0239 A69-11696

Change in the frequency of Pc 1 micropulsations during a sudden deformation of the magnetosphere /Izmenenie chastoty mikropul'satsii Pc 1 pri vnezapnoi deformatsii magnitosfery/.  
02 p0240 A69-11697

Preliminary analysis of micropulsations of the electromagnetic field of the earth associated with the proton flare of July 7, 1966.  
06 p0996 A69-17754

Preliminary analysis of micropulsations of the earth's electromagnetic field in connection with the proton flare of 7 July 1966.  
10 p1683 A69-23779

Some aspects of the excitation of micropulsations during the solar activity cycle /Osobennosti vozbuzhdeniia mikropul'satsii v tsikle solnechnoi aktivnosti/.  
10 p1687 A69-23919

Relationship between 11-year cyclic variations in pulsations of the pearl type /PcI/ and solar activity.  
13 p2258 A69-28727

Change in the frequency of PcI micropulsations during a sudden deformation of the magnetosphere.  
13 p2258 A69-28728

## MATVEEVSKII, R. M.

Antifriction properties of hard lubricating coatings in an inert gas atmosphere and in a vacuum /Antifriktsionnye svoistva tverdykh smazochnykh pokrytii v atmosfere inertnogo gaza i v vakuume/.  
13 p2269 A69-28053

## MATVIENKO, B. V.

Sintered beryllium-base compositions. I.  
10 p1711 A69-23334

Sintered beryllium-base compositions. II - Corrosion properties and possibilities of raising corrosion resistance in humid atmospheres.  
10 p1711 A69-23338

## MATYSKOVA, K.

Computer calculation of reliability characteristics /Raschet kharakteristik nadezhnosti na elektronovykhislitel'noi mashine/.  
08 p1322 A69-21101

## MATZKE, H.

Applications of Electronic Computers in Construction, International Congress on Applications of Mathematics in Engineering Sciences, 4th, Weimar, East Germany, June 25-July 2, 1967, Reports. Volume 2 /Anwendungen Elektronischer Rechenanlagen im Bauwesen, Internationaler Kongress ueber Anwendungen der Mathematik in den Ingenieurwissenschaften, 4th, Weimar, East Germany, June 25-July 2, 1967, Berichte. Volume 2/.  
03 p0525 A69-13734

Applications of Electronic Computers in Construction, International Congress on Applications of Mathematics in the Engineering Sciences, 4th, Weimar, East Germany, June 25-July 2, 1967, Reports. Volume 1 /Anwendungen Elektronischer Rechenanlagen im Bauwesen, Internationaler Kongress ueber Anwendungen der Mathematik in den Ingenieurwissenschaften, 4th, Weimar, East Germany, June 25-July 2, 1967, Berichte. Volume 1/.  
21 p3831 A69-38413

## MATZNER, R. A.

Almost symmetric spaces and gravitational radiation.  
01 p0115 A69-10018

On the present temperature of primordial black-body gravitational radiation.  
09 p1601 A69-22210

## MAUDER, H.

The eclipsing variable chi super 2 Hya equals BV 722 /Der bedeckungsveraenderliche chi super 2 Hya equals BV 722/.  
08 p1392 A69-20565

## MAUDLIN, M. A.

The use of high strength, room temperature vulcanizing silicone rubber in tooling and fabrication of aircraft and missile components.  
09 p1507 A69-22331

## MAUER, R. E.

Two-dimensional transpiration cooling.  
[AIAA PAPER 69-96]  
06 p1039 A69-18212

## MAUERSBERGER, K.

Digital processing of data from rocket-mass spectrometers /Digitale verarbeitung der messwerte von raketen-massenspektrometern/.  
22 p3904 A69-40232

## MAUGHAN, S. E.

Mass discrimination in a time-of-flight mass spectrometer. I - Geometric mass discrimination at magnetic electron multiplier.  
04 p0599 A69-15014

## MAUGIS, D.

Thermodynamic study of the thermal metal-plasma junction - Contribution to the study of surface ionization /Etude thermodynamique de la jonction metal-plasma thermique - Contribution a l'etude de l'ionisation de surface/.  
06 p0979 A69-17249



## MAUGIS, H.

## MAUGIS, H.

Fabrication of alumina radomes at the Western Gold and Platinum /WESGO/ Company plant in Belmont, Calif. /U.S.A./ /La fabrication des radomes en alumine a l'usine de Western Gold and Platinum Company /WESGO/ Belmont, Calif. /U.S.A./.

07 p1142 A69-19529

## MAULARD, J.

Surface-temperature thermal fluxmeters for shock tubes /Les fluxmetres thermiques a temperature superficielle pour tubes a choc/.

[ONERA-TP-648] 03 p0427 A69-12876

Calibration method used at ONERA for hotshot and shock tube heat transfer transducers.

[ONERA-TP-683] 19 p3305 A69-35726

## MAUNDERS, E. A.

Spectral control of laser oscillators by secondary light sources.

[IEEE PAPER P-3] 05 p0775 A69-16324

## MAUNEY, D. A.

Explanation of the cleavage plane in stress corrosion cracking of alpha phase titanium- aluminum alloys.

13 p2283 A69-28189

## MAURAKH, M. A.

Interaction of liquid titanium and zirconium with graphite /Vzaimodeistvie zhidkikh titana i tsirkoniia s grafitom/.

03 p0446 A69-13572

Investigation of the process of spreading of liquid titanium- and zirconium-base alloys on graphite /Issledovanie protsessy rastekaniia po grafitu zhidkikh spлавov na osnove titana i tsirkoniia/.

03 p0446 A69-13573

Theory of coating deposition on high- temperature materials /K teorii naneseniia pokrytii na vysokotemperaturnye materialy/.

20 p3560 A69-37358

## MAURER, H.

The use of stereo height as a discriminating variable for crop classification on aerial photographs.

23 p4155 A69-41721

## MAURER, J. R.

Mean-square response of simple mechanical systems to nonstationary random excitation.

[ASME PAPER 69-APM-25] 18 p3214 A69-34398

## MAURER, K. L.

The effect of mechanical and ultrasonic vibrations on superpurity aluminum and an AlZnMg alloy /Wechselverformung und Ultraschallwechselverformung von Reinstaluminium und einer AlZnMg-Legierung/.

16 p2801 A69-31789

## MAURER, R. E.

Transverse waves in detonations. I - Spacing in the hydrogen-oxygen system.

09 p1622 A69-21953

## MAURETTE, M.

Recent fossil track studies bearing on extinct Pu super 244 in meteorites.

19 p3407 A69-36077

Fossil tracks in meteorites and the chemical abundance and energy spectrum of extremely heavy cosmic rays.

19 p3410 A69-36096

## MAURIES, J.

Gas adsorption on tungsten single crystals /Adsorption de gaz sur des monocristaux de tungstene/.

14 p2506 A69-29272

## MAURIN, E.

Influence of frequency and test temperature on the fatigue life of test pieces and assemblies of A-U2GN-T6 sheet /Influence de la frequence et de la temperature d'essai sur la duree en fatigue d'eprouvettes et d'assemblages en tôle A-U2GN-T6/.

12 p2180 A69-26359

## MAURIN, L. N.

Equilibrium of a liquid film on a rotating sphere /O ravnovesii zhidkoi plenki na vrashchaishechisla sfere/.

12 p2061 A69-25886

Equilibrium figures of a rotating liquid cylinder.

14 p2428 A69-28816

## MAURY, J. L.

Application of Hansen's method to the X super th satellite of Jupiter.

20 p3602 A69-37529

## MAURY, J.-L.

The design and development of the D.2 satellite stabilization system /La conception et le developpement du systeme de stabilisation du satellite D.2/.

17 p3046 A69-33223

## MAUSS, J.

Structure of the asymptotic solution in the vicinity of singular points, in a nonconvex domain, for an elliptic-type singular- perturbations problem /Structure de la solution asymptotique au voisinage des points singuliers, dans un domaine non convexe pour un probleme de perturbations singulieres de type elliptique/.

08 p1352 A69-20751

## MAUTER, H. A.

Polarization of emission lines in astronomy. VI.

09 p1600 A69-22204

## MAUTZ, J. R.

Radiation and scattering from bodies of revolution.

22 p3899 A69-40014

## MAVLONOV, SH. M.

Selenium distribution during oriented crystallization of gallium antimonide /O raspredelenii selena pri napravlennoi kristallizatsii antimonida gallia/.

23 p4198 A69-41725

## MAWDSLEY, J.

Mid-latitude radio-satellite scintillation - The morphology near sunspot minimum.

16 p2780 A69-32307

## MAXEY, W. A.

Fracture design practices for pressure piping.

17 p3060 A69-33562

## MAXIMOV, G.

Space stations of the future - A Soviet view.

19 p3431 A69-36465

## MAXON, B. S.

X-engine emergency cooldown system.

[AIAA PAPER 69-512] 16 p2810 A69-31846

## MAXUM, B. J.

Radar cross section of a long wire.

23 p4116 A69-41594

## MAXWELL, A.

Lunar occultations of the radio source Sagittarius A.

06 p1009 A69-17960

## MAXWELL, J. A.

The dissipation and dispersion of small waves in arteries and veins with viscoelastic wall properties.

02 p0204 A69-12602

## MAXWELL, J. C.

SST in the future.

[AAS PAPER 69-323] 24 p4252 A69-42869

## MAXWELL, J. R.

Fatty acids and hydrocarbons as evidence of life processes in ancient sediments and crude oils.

20 p3523 A69-37538

## MAXWELL, K. R.

Two-dimensional diffuse shock waves in carbon dioxide.

02 p0233 A69-12534

## MAXWELL, M.

Use of computers and programmable telemetry systems on scientific satellites.

23 p4132 A69-41735

## MAXWELL, R. L.

A qualitative investigation of secondary flows in a confined viscous vortex.

19 p3296 A69-35756

## MAXWELL, W. A.

The effects of high intensity visible and ultraviolet light on the death of microorganisms.

20 p3475 A69-37613

## MAXWORTHY, T.

Experimental studies in magneto-fluid dynamics - Flow over a sphere with a cylindrical afterbody.

11 p1873 A69-25136

Experiments on the flow around a sphere at high Reynolds numbers.

[ASME PAPER 69-APMW-26] 24 p4245 A69-43093

## MAY, A. D.

Depolarized Rayleigh scattering in gases as a new probe of intermolecular forces.

[IEEE PAPER B-11] 07 p1157 A69-19485

## MAY, C. A.

Epoxide adhesives.

14 p2468 A69-29339

## MAY, C. B.

The effectiveness of weightless simulators for obtaining maintainability criteria for space systems.

06 p0882 A69-17648

## MAY, L.

Moessbauer spectroscopy - Some views.

18 p3099 A69-34622

## MAY, L. E.

Permanent deformation of an axial rod subjected to dynamic loading.

24 p4406 A69-43699

## MAY, R. P.

Some dynamic mechanical properties of distended carbons.

12 p2119 A69-26847

## MAY, T. C.

A search for energetic gamma-ray emission from the supernova remnant Cassiopeia A.

15 p2675 A69-30760

## MAYAUD, P.-N.

Equatorial counter-electrojet and inverse Sq current layers /Contre-electrojet equatorial et nappes de courants Sq inverses/.

08 p1306 A69-19884

## MAYBEE, D. C.

Development of the Titan III transtage ACS hydrazine monopropellant rocket engine modules.

[AIAA PAPER 69-422] 19 p3394 A69-36300

## MAYBERRY, B. L.

Free vibrations of unsymmetrically laminated anisotropic plates with clamped edges.

13 p2371 A69-28673

## MAYCOCK, J. N.

Kinetics and mechanism of the thermal decomposition of nitronium perchlorate.

02 p0303 A69-11897

Thermal decomposition of LiAlH sub 4.

02 p0304 A69-11898

Effects of intentional impurities on the thermal stability of nitronium perchlorate.

02 p0304 A69-11899

Role of point defects in the thermal decomposition of ammonium perchlorate.

03 p0494 A69-12896

A photochemical microrocket for attitude control.

12 p2148 A69-26801

Lattice modification to control the burn rate of AP propellants.

[WSCI PAPER 69-17] 16 p2831 A69-32355

Role of impurities in the sensitization of ammonium nitrate /Role des impuretes dans la sensibilisation du nitrate d'ammonium/.

17 p3016 A69-32830

## MAYER, C. B.

Theoretical analysis of log-periodic circuits in microwave amplifiers.

05 p0739 A69-16554

## MAYER, C. H.

Spectra, variability, size, and polarization of H sub 2 O microwave emission sources in the Galaxy.

09 p1587 A69-21307

## MAYER, E. A.

Other fluidic devices and basic circuits.

05 p0705 A69-16005

Parametric analysis of vortex amplifiers.

10 p1639 A69-23558

## MAYER, G. M.

Vibration phase measurement by rotation-strobe holography.

20 p3546 A69-38123

## MAYER, H. M.

Experiments on the Fresnel dragging of 3 cm microwaves by a low-pressure discharge.

12 p2133 A69-25766

## MAYER, J. P.

Utilization of ground-based guidance systems to supplement onboard guidance of space vehicles.

06 p0955 A69-17580

## MAYER, J. W.

Ion implantation in semiconductors - Lattice disorder and electrical effects.

06 p0974 A69-16862

Lattice location of dopant elements implanted into Ge.

07 p1199 A69-18903

## MAYER, L. W.

What four new aluminum alloys have to offer.

13 p2282 A69-28180

## MAYER, M.

A method for determining the motion of vibrating parts /Eine Methode zur Bestimmung der Bewegung schwingender Teile/.

20 p3539 A69-37436

## MAYER, R.

Calculation of the radiation pattern and gain of a two-dimensional plane dipole arrangement /dipole

array antenna /Die Berechnung der Strahlungscharakteristik und des Gewinns einer zweidimensionalen ebenen Dipolanordnung /Dipol-Gruppen-Antenne/.  
01 p0046 A69-10737

Monopole and dipole omnidirectional antenna /Die Monopol- und Dipol-Rundstrahlantenne/.  
01 p0046 A69-10738

Unignited mode converter diagnostics with regard to emitter work function patches.  
14 p2490 A69-29240

A survey of electronic attitude measurement systems.  
20 p3574 A69-37703

MAYER, R. W.  
Space mechanism lubrication.  
02 p0252 A69-11766

MAYER, S. W.  
Estimation of activation energies for multivalent reactions by a bond-energy method.  
[WSCI PAPER 68-48] 07 p1239 A69-18321

Techniques for controlling exothermic decomposition of ammonium perchlorate.  
[WSCI PAPER 68-25] 07 p1202 A69-18363

Procedures for suppressing premature exothermic decomposition in ammonium perchlorate.  
[AIAA PAPER 69-503] 16 p2833 A69-32688

MAYER, U.  
Open multipliers in the soft X-ray region.  
17 p2972 A69-33082

MAYER, W.  
X-ray and optical observations of the pulsar NP 0532 in the Crab Nebula.  
15 p2679 A69-31529

Interstellar absorption of 10-angstrom X-rays.  
21 p3788 A69-38648

MAYERS, D. F.  
The calculation of stellar radiative opacity.  
07 p1222 A69-19589

MAYERS, J.  
The maximum strength of initially imperfect axially compressed circular cylindrical shells.  
[AIAA PAPER 69-91] 06 p1028 A69-18181

MAYERSON, C. D.  
Range requirements for airborne turbulence detectors.  
20 p3537 A69-37164

MAYES, J. F.  
Transonic buffet characteristics of a 60 degree swept wing with design variations.  
[AIAA PAPER 69-793] 19 p3238 A69-36297

MAYES, P. E.  
Log-periodic antennas with modulated impedance feeders.  
08 p1281 A69-20015

Continuously scaled transmission lines with applications to log-periodic antennas.  
11 p1850 A69-24977

MAYFIELD, E. B.  
A new solar observatory in California.  
11 p1862 A69-24792

MAYHAN, J. T.  
Interaction of intense RF fields with heated air.  
04 p0634 A69-14453

Bounds on the electric field outside a radiating system.  
08 p1273 A69-20026

A variational formulation specifying the breakdown criteria for plasmas subjected to spatially nonuniform electric fields.  
10 p1739 A69-23650

Complete electric field of the infinite slot antenna.  
11 p1851 A69-24994

Nonlinear microwave breakdown - A systems study.  
20 p3495 A69-37853

The near field of the loop antenna.  
21 p3683 A69-39281

MAYHAN, J. W.  
Antenna impedance in a reentry environment.  
02 p0218 A69-12333

MAYHAN, S. J.  
Dynamic electron microscopy of high temperature reactions.  
09 p1499 A69-22304

MAYNARD, C. P.  
Characteristics of graphite fiber/polyimide resin composites.  
24 p4337 A69-43446

MAYNARD, L. R.  
Software concepts for a minimum cost design launch vehicle system.  
[AIAA PAPER 69-978] 22 p4052 A69-40358

MAYNARD, M. D.  
Nucleate pool boiling of nitrogen with different surface conditions.  
02 p0352 A69-12207

MAYNE, A. W., JR.  
Binary boundary layers on sharp cones in low-density supersonic and hypersonic flow.  
[AIAA PAPER 68-66] 16 p2732 A69-31887

MAYNE, D. Q.  
Monte Carlo techniques to estimate the conditional expectation in multi-stage non-linear filtering.  
10 p1667 A69-24039

MAYO, A. M.  
Commercial Utilization of Space, American Astronautical Society, Annual Meeting, 13th, Dallas, Tex., May 1-3, 1967, Proceedings.  
17 p3041 A69-34043

MAYO, W. L.  
Lunar Orbiter mission design.  
[AIAA PAPER 68-47] 04 p0664 A69-15503

MAYOR, M.  
Kinematics of giant stars and stellar evolution /Cinematique des geantes et evolution stellaire/.  
03 p0517 A69-14095

A comparative study of motions for nearby stars of various luminosity in connection with problems of stellar evolution.  
07 p1224 A69-19712

MAYR, H. G.  
The plasmopause and its relation to the ion composition in the topside ionosphere.  
02 p0246 A69-12741

Measurements of electron cooling rates in the mid-latitude and auroral-zone thermosphere.  
05 p0755 A69-16267

Observations of hydrogen and helium ions during a period of rising solar activity.  
15 p2599 A69-31326

Implications for ionospheric chemistry and dynamics of a direct measurement of ion composition in the F 2 region.  
16 p2774 A69-31974

Electron measurements bearing on the energy and particle balance of the upper F region.  
16 p2848 A69-31975

MAYR, O.  
Influence of the Hall effect on high-current arcs /Ueber den Einfluss des Hall-Effektes auf stromstarke Lichtbogen/.  
05 p0803 A69-15999

MAYS, R. A.  
Inlet dynamics and compressor surge.  
[AIAA PAPER 69-484] 16 p2841 A69-32682

MAZAEV, V. V.  
Heat release during the boiling of a downward flowing liquid oxygen film /Teplotdacha pri kipenii zhidkogo kislороda, stekaiushchego plenoi/.  
04 p0687 A69-15161

MAZALOV, V. N.  
Dynamic behaviour of cylindrical shells strengthened with ring ribs. I - Infinitely long shell.  
21 p3837 A69-39156

MAZANEC, K.  
Study of the conditions of brittle fracture in very high strength steels /Studium podminek krehkeho poruseni oceli o velmi vysokych pevnostech/.  
07 p1158 A69-18402

A new method of material evaluation from the standpoint of its susceptibility to brittle failure. II /Novy zpusob hodnoceni materialu z hlediska nachylnosti ke krehkemu poruseni. II/.  
16 p2795 A69-32796

MAZARD, M.  
The laws of wear and the reliability of connectors /Les lois d'usure et la fiabilite des connecteurs/.  
04 p0579 A69-15320

MAZE, R.  
Origin of muon-poor extensive air showers.  
12 p2152 A69-27099

Lateral distribution of the muon component in the central region of extensive air showers.  
15 p2677 A69-31481

MAZELSKY, B.  
Large inextensional deflection of thin cantilevered plates.  
[ASME PAPER 68-APM/BB] 16 p2795 A69-32796

MAZER, L.  
A 500,000 sample per second digital recorder for the Ames electric arc shock tunnel.  
19 p3293 A69-35744

MAZESS, R. B.  
Oxygen intake and body temperature of basal and sleeping Andean natives at high altitude.  
06 p0874 A69-17835

MAZET, R.  
The elastoplastic parameters of a metallic material /Sur les parametres elasto-plastiques d'un materiau metallique/.  
[ONERA-TP-695] 11 p1975 A69-24754

MAZETS, E. P.  
Micrometeoritic investigations on the Cosmos 135 satellite /mikrometeornye issledovaniia na sputnike "Cosmos-135".  
01 p0152 A69-10578

Micrometeoroid investigations on the satellite "Cosmos-135".  
15 p2691 A69-30748

MAZIA, V. G.  
On the theory of simple and double-layer potentials for domains with irregular boundaries.  
07 p1173 A69-18496

On the modulus of continuity of the solution of the Dirichlet problem near an irregular boundary.  
07 p1173 A69-18498

Boundedness of the first derivatives of a solution to the Dirichlet problem in a region with a smooth irregular boundary /Ob ogranichenosti pervykh proizvodnykh resheniiia zadachi Dirikhe v oblasti s gladkoi nereguliarnoi granitse/.  
13 p2289 A69-28319

MAZILU, P.  
A plane problem of the theory of elasticity of heterogeneous media /Sur un probleme plan de la theorie de l'elasticite des milieux heterogenes/.  
13 p2362 A69-27977

MAZIN, A. N.  
Dynamics of the elimination of certain products of metabolism in humans kept in isolation.  
10 p1646 A69-23508

MAZIN, L. S.  
Influence of the errors in determining the inertial characteristics of a solid body on its damping system /Vliianie oshibok v opredelenii inertsionnykh kharakteristik tverdogo tela na sistemu ego amortizatsii/.  
18 p3171 A69-34562

MAZINA, L. G.  
Computer analysis of infrared cloud images obtained from the Cosmos 122 satellite /Mashinnyi analiz infrakrasnykh izobrazhenii oblachnosti, poluchennykh so sputnika "Kosmos-122"/.  
11 p1884 A69-24833

MAZING, G. IU.  
Principles of Solid-Propellant Rocket Design /Os-novy Proektirovaniia Raket na Tverdom Toplive/.  
12 p2175 A69-27077

MAZING, R. I.  
Ponderable annular region under the action of concentrated forces /Vesomaia kol'tsevaia oblast' pod deistviem sosredotochennykh sil/.  
18 p3216 A69-34577

MAZITOV, R. K.  
Nonlinear theory of the damping of electromagnetic waves in a plasma /K nelineinnoi teorii zatukhaniia elektromagnitnykh voln v plazme/.  
04 p0558 A69-14982

Evolution of waves in an inhomogeneous dispersive medium /Ob evoliutsii voln v neodnorodnoi disper-giruushchei srede/.  
07 p1181 A69-19001

MAZNICHENKO, A. F.  
Temperature dependence of the refractive index of CdS single crystals.  
04 p0644 A69-15268

MAZO, J. E.  
Quantizing noise and data transmission.  
01 p0027 A69-10250

MAZOND, M.  
Servovalves for the guidance of a missile by secondary liquid injection /Valves asservies pour le pilotage d'un engin par injection secondaire liquide/.  
07 p1230 A69-19293

MAZOR, E.  
Ages of calcium-rich achondrites. I - Eucrites.  
05 p0819 A69-15623

Ages of the Ca-rich achondrites.  
19 p3413 A69-36107



## MAZUMDAR, DZH.

An estimation of the error involved in the approximate solution of plate bending problems by the method of equal-deflection lines /Otsenka pogreshnosti priblizhennogo resheniia zadach ob izgibe plastinok metodom liniiavnogo progiba/.  
17 p3062 A69-33713

## MAZUR, P.

Anharmonic vibrations and specific heats at high temperatures.  
10 p1809 A69-23653

## MAZUR, R. M.

Anisotropy of external friction forces on textured surfaces of metals /Anizotropiia sil zovnishn'ogo tercia na teksturovanih poverkhniakh metaliv/.  
18 p3149 A69-35151

## MAZURENKO, M. M.

Diffusive reflection of light from a rough surface. III /O difuznom otzrazenii sveta ot sherokhovatoi poverkhnosti. III/.  
14 p2485 A69-29171

## MAZURKIEWICZ, S.

Dynamic tests of the mechanical properties of the polyamide Tarlon X-A /Dynamiczne badania wlasnosci mechanicznych poliamidu Tarlon X-A/.  
09 p1528 A69-21496

## MAZZUCCONI, F.

Considerations on the reliability of monthly averages of solar indices /Considerazioni sull'attendibilita delle medie mensili di indici solari/.  
04 p0657 A69-14700

The west-limb activity on 9, 10, 11 July 1966 as observed in the H alpha line.  
10 p1764 A69-23741

Correlation between flares and bursts as a function of spot type /Correlazione brillamenti-bursts in funzione del tipo di macchie/.  
16 p2850 A69-32213

## MCADAM, W. B.

Observations of emission from Saturn at 408 MHz.  
17 p3041 A69-33813

## MCADOO, S. F., JR.

Application of nuclear solid-core rockets to interplanetary orbital launch by multibit injection. [AIAA PAPER 69-535]  
16 p2810 A69-32660

## MCAFFEE, J. R.

Topside resonances as oblique echoes.  
07 p1124 A69-18837  
Radio wave reflections from large horizontal gradients in the topside ionosphere.  
14 p2415 A69-29521  
Topside-sounder resonances.  
20 p3531 A69-37884

## MCALEVY, R. F., III

Photochemical ignition of low pressure fuel-oxidizer mixtures. [WSCI PAPER 68-42]  
06 p1034 A69-17791  
Ignition of subatmospheric gaseous fuel-oxidant mixtures by ultraviolet irradiation. [AIAA PAPER 69-88]  
06 p0983 A69-18118  
Experimental studies bearing on mechanistic modeling of composite solid propellant combustion. [WSCI PAPER 69-16]  
16 p2831 A69-32354

Ammonium perchlorate decomposition by convective surface heating. [WSCI PAPER 69-23]  
16 p2832 A69-32361  
Ammonium perchlorate linear pyrolysis by convective surface heating. [AIAA PAPER 69-501]  
16 p2835 A69-32758

## MCALLISTER, B. D.

A seismic refraction system for lunar use.  
23 p4162 A69-41533

## MCALLISTER, D. F.

Simplified performance analysis of space and missile guidance. [AAS PAPER 69-404]  
24 p4347 A69-42836

## MCALLISTER, L. G.

Acoustic sounding - A new approach to the study of atmospheric structure.  
14 p2448 A69-29527

## MCALLUM, W. E.

Development of meteoroid protection for extravehicular-activity space suits. [AIAA-PAPER-69-366]  
13 p2213 A69-28298

## MCALPINE, G. A.

The spectrum of a high-index FM waveform - Woodward's theorem revisited. [IEEE PAPER 68-TP-74-COM]  
19 p3276 A69-36485

## MCARDLE, K. T.

Pumping requirements for a neutral particle nozzle beam source.  
04 p0600 A69-15026

## MCARDLE, W. D.

Telemetered heart rate response to selected competitive swimming events.  
23 p4100 A69-41444

## MCASSEY, E. V., JR.

Electron heat transfer and probe characteristic in a moving non-equilibrium plasma. [AIAA PAPER 69-699]  
17 p3011 A69-33475

## MCATEER, O. J.

Effective failure analysis and corrective action techniques for integrated circuit applications.  
15 p2580 A69-31132

## MCAVOY, B. R.

Study of inhomogeneities in GaAs using a scanning electron microscope.  
09 p1557 A69-21746

## MCAVOY, N.

Fluorescence spectra of homogeneous and mixed europium complexes.  
01 p0024 A69-10893  
10.6-micrometer laser communication system experiment for ATS-F and ATS-G.  
23 p4120 A69-41758

## MCBEE, L. S.

Effective braking - A key to air transportation progress. [SAE PAPER 690376]  
23 p4063 A69-41671

## MCBREEN, B.

Search for high energy gamma-rays from CP 1133.  
02 p0307 A69-11823

## MCBRIDE, A. L.

Optimum estimation of bit synchronization.  
14 p2413 A69-29496  
An application of nonlinear filter theory to binary processes in digital telemetry.  
19 p3274 A69-36281

## MCBRIDE, J. B.

Relativistic corrections to the conductivity of a collisional plasma in a magnetic field.  
14 p2503 A69-30000  
Collisional damping of plasma oscillations.  
16 p2818 A69-31674  
Collisional damping of transverse waves in a plasma.  
16 p2818 A69-31675

## MCBRYAR, H.

Fuel cell systems for manned spacecraft.  
08 p1259 A69-21035  
Fuel cell systems for manned spacecraft.  
16 p2737 A69-32406

## MCCAA, D. J.

A gas-cap radiation probe for the detection of driver gas in the test section of a hypersonic shock tunnel.  
19 p3294 A69-35753  
Emission spectra of atmospheric gases excited by an electron beam.  
24 p4353 A69-43698

## MCCABE, J. T.

Theory for finite-width high-speed self-acting gas-lubricated slider /and partial-arc/ bearings. [ASME PAPER 68-LUBS-15]  
13 p2265 A69-27268

## MCCABE, M. K.

Optical observations of the proton flare of 7 July 1966.  
10 p1765 A69-23749

## MCCAFFERTY, R. D.

Apollo mission simulation with visual presentation. [SMPTE PAPER 105-74]  
12 p2055 A69-25768

## MCCAIN, J. W.

A theory and tester measurement correlation about MoS sub 2 dry film lubricant wear.  
19 p3323 A69-35580  
A system for rating oxygen flammability of aerospace materials.  
24 p4336 A69-43423

## MCCALL, G. J. H.

Proof of volcano-tectonic origin of Mare terrain on the moon.  
20 p3604 A69-37570

## MCCALL, J. L.

Some metallographic observations on the Tishomingo, Oklahoma, meteorite.  
13 p2353 A69-28159

Quantitative metallography of dispersion-strengthened alloys from extraction replicas - Volume fraction and interparticle spacing.  
13 p2282 A69-28167

## MCCALLA, T. M., JR.

On the finite range Wiener-Hopf equation.  
23 p4181 A69-41608

## MCCALLION, H.

Improved deformation functions for the finite element analysis of beam systems.  
15 p2710 A69-30869

## MCCALLUM, R.

Electron optical techniques of failure investigation.  
24 p4313 A69-42768

## MCCALLY, M.

Hypodynamics and Hypogravics - The Physiology of Inactivity and Weightlessness.  
06 p0872 A69-17010  
Changes in acid-base balance induced by 100 percent gradient headward acceleration.  
09 p1444 A69-22540  
Measurement of muscle function in astronauts.  
23 p4103 A69-41684

## MCCAMMON, D.

Soft X-ray background flux.  
24 p4368 A69-43220

## MCCAMONT, J. W.

Electrical properties of titanium, zirconium, and hafnium films from 300 K to 1.3 K.  
13 p2321 A69-28010

## MCCANDLESS, L. C.

Commercial chemical vapor deposition of refractory materials.  
01 p0097 A69-10645

## MCCANN, P. H.

The effects of ambient noise on vigilance performance.  
17 p2911 A69-34009

## MCCARGO, M.

A study of environmental effects upon particulate radiation-induced absorption bands in spacecraft thermal control coating pigments. [AIAA PAPER 69-642]  
17 p2991 A69-33273

## MCCARROLL, R.

Influence of dielectronic recombination on the radio recombination lines of carbon.  
13 p2346 A69-27703  
Some problems about fine structure transitions in neutral hydrogen clouds.  
19 p3379 A69-36225

## MCCART, B. R.

Optimal design of structures with constraints on natural frequency.  
11 p1989 A69-25496

## MCCARTER, E. R.

Noise and equivalent circuit of double injection.  
06 p0898 A69-17762

## MCCARTHY, D.

The reflection and transmission of infrared materials. VI.  
01 p0139 A69-10840

## MCCARTHY, D. E.

Variable-angle reflectance measurements in the infrared.  
01 p0120 A69-10891

## MCCARTHY, D. J.

Operating characteristics of the Stratoscope. II balloon-borne telescope.  
13 p2261 A69-27956

## MCCARTHY, J. F., JR.

Selection and planning of research and development projects.  
03 p0535 A69-13552  
Zero g propulsion problems.  
11 p1944 A69-25599

Entry from lunar and planetary missions.  
11 p1968 A69-25721

## MCCARTHY, M. F.

Wave propagation in nonlinear magneto-thermoelasticity.  
16 p2873 A69-32060  
A photometric study of the open cluster IC 4665.  
23 p4215 A69-42008

## MCCARTY, J. R.

Tail tipping - Evacuation limits method. [SAWE PAPER 765]  
18 p3091 A69-34877  
An evaluation of the economics of CG position. [SAWE PAPER 806]  
18 p3091 A69-34902

- MCCARTY, M., JR.**  
Thermal decomposition of LiAlH sub 4.  
02 p0304 A69-11898
- MCCARTY, R. D.**  
Density dependence of experimental transport coefficients of gases.  
08 p1353 A69-21009
- MCCASKEY, S. D.**  
Communications.  
19 p3275 A69-36314
- MCCAUGHEY, W. A.**  
Holographic nondestructive testing /HNDT/ of aircraft materials.  
19 p3322 A69-35576
- MCCAUSLAND, I.**  
Introduction to Optimal Control.  
07 p1115 A69-19143
- MCCAWLEY, F. X.**  
Electrodeposition of molybdenum coatings.  
18 p3156 A69-35001  
Electrodeposition of titanium diboride coatings.  
22 p3970 A69-40735
- MCCLAIN, E. F.**  
Polarization of discrete sources at 21.2-cm wavelength, and galactic depolarization.  
18 p3190 A69-34287
- MCCLAIN, E. P.**  
Remote sensing of sea surface temperature.  
18 p3130 A69-35057
- MCCLAMROCH, N. H.**  
On the convergence of an improper integral evaluated along the solution of a differential equation.  
05 p0788 A69-16481  
Duality and bounds for the matrix Riccati equation.  
11 p1909 A69-24885  
Sensitivity of linear control systems to large parameter variations.  
21 p3685 A69-38726
- MCCLAREN, S. W.**  
Integrally-formed structures - A new stiffened panel concept.  
[AIAA PAPER 69-760] 19 p3434 A69-35660
- MCCLAY, J. F.**  
Physics of the Magnetosphere, Proceedings of the Conference, Boston College, Chestnut Hill, Mass., June 19-28, 1967.  
07 p1207 A69-19351
- MCCLELLAN, H. J.**  
Progress report on a launch vehicle cost breakthrough.  
21 p3857 A69-39692
- MCCLELLAN, R.**  
Intra-cavity laser diffraction gratings.  
01 p0092 A69-10897
- MCCLELLAND, C. C.**  
Rationale for a military aircraft engine development program.  
24 p4364 A69-43042
- MCCLINTOCK, F. A.**  
Local criteria for ductile fracture.  
01 p0169 A69-10764  
Fully plastic crack growth under monotonic and repeated bending.  
10 p1797 A69-23077
- MCCLINTOCK, J. E.**  
High energy X-ray study of M-87.  
20 p3588 A69-37488
- MCCLOSKEY, J. W.**  
The range resolver error - Its detection and elimination from radar tracks.  
15 p2649 A69-30897
- MCCLOY, D.**  
Flow hysteresis in spool valves.  
11 p1827 A69-25645  
Discharge characteristics of servo valve orifices.  
19 p3256 A69-36712
- MCCLUNG, F. J.**  
Hologram recording on photopolymer materials.  
13 p2258 A69-27199
- MCCLUNG, R. W.**  
Optical methods for studying ultrasonic propagation in transparent media.  
15 p2617 A69-31510
- MCCLURE, G. M.**  
Fracture design practices for pressure piping.  
17 p3060 A69-33562
- MCCLURE, J. P.**  
Diurnal variation of neutral and charged particle temperatures in the equatorial F region.  
05 p0755 A69-16270  
Conflicting electron temperature measurements in the upper F region.  
05 p0756 A69-16283  
Preliminary comparisons of middle and low latitude Thomson scatter data.  
15 p2604 A69-31418
- MCCLURE, P. T.**  
The effect of jet noise on the value of real estate.  
[AIAA PAPER 69-802] 19 p3288 A69-35594
- MCCLURE, R. D.**  
UBV observations of field galaxies.  
10 p1774 A69-22964  
Cyanogen absorption in the nuclei of galaxies.  
12 p2153 A69-25803
- MCCCLUSKEY, G. E., JR.**  
Curve-of-growth analysis for the close binary HR 5317.  
18 p3191 A69-34297
- MCCOLL, M.**  
Schottky barriers on GaAs.  
10 p1745 A69-23358
- MCCOLLOM, K. A.**  
Evaluation of instructional monographs in university and industrial use.  
18 p3236 A69-35078
- MCCOMBE, B. D.**  
Infrared studies of combined resonance in n- type InSb.  
19 p3385 A69-36520
- MCCONALOGUE, D. J.**  
Motion of a fluid in a curved tube.  
01 p0058 A69-10142
- MCCONKEY, J. W.**  
Absolute transition probability of the auroral green line.  
03 p0424 A69-13936  
Absolute cross sections for electron excitation of the second positive bands of nitrogen.  
08 p1355 A69-20208  
Absolute transition probability measurement for the electric quadrupole 5577 angstrom units auroral green line.  
16 p2781 A69-32319
- MCCONNELL, B. D.**  
Development of solid lubricant compacts for use in ball bearing separators.  
[ASLE PAPER 68-LC-16] 07 p1139 A69-18626
- MCCONNELL, D. G.**  
Combined radiation and conduction heat transfer - Application in design.  
[SAE PAPER 690197] 07 p1239 A69-18303
- MCCONNELL, D. R.**  
Technically based marketing decisions in aerospace R and D.  
17 p3077 A69-34127
- MCCONNELL, J. W.**  
A parametric frequency divider using hyperabrupt junction diode capacitance.  
02 p0217 A69-12152
- MCCONNELL, K. G.**  
Some implications of vibration testing of continuous systems for resonant frequencies.  
18 p3114 A69-34422
- MCCOOK, R. D.**  
Influence of rate of change in skin temperature on sweating.  
22 p3874 A69-40210
- MCCORD, T. B.**  
Spectral reflectivity of Mars.  
09 p1587 A69-21308  
Comparison of the reflectivity and color of bright and dark regions on the surface of Mars.  
13 p2338 A69-27553  
Time dependence of lunar differential color.  
13 p2349 A69-27819  
Color differences on the lunar surface.  
17 p3037 A69-33653  
Differences between proposed Apollo sites. I - Synthesis.  
21 p3815 A69-39585  
Differences between proposed Apollo sites. II - Visible and infrared reflectivity evidence.  
21 p3815 A69-39586
- Relative spectral reflectivity 0.4-1 mu of selected areas of the lunar surface.  
21 p3815 A69-39588  
Mars - Interpretation of spectral reflectivity of light and dark regions.  
23 p4209 A69-41319
- MCCORKELL, R. H.**  
A new octahedrite from South Africa.  
03 p0507 A69-13097  
Radioactive isotopes in Hoba West and other iron meteorites.  
22 p4021 A69-40411
- MCCORMAC, B. M.**  
Atmospheric Emissions, Proceedings of the NATO Advanced Study Institute, Agricultural College of Norway, As, Norway, July 29-August 9, 1968.  
21 p3705 A69-38482  
Consequences of very small planetary magnetic moments.  
24 p4385 A69-43224
- MCCORMACK, D. D.**  
Determining residual stresses rapidly.  
18 p3150 A69-35423
- MCCORMACK, F. J.**  
Kinetic equations for polyatomic gases - The 17-moment approximation.  
08 p1357 A69-20784
- MCCORMACK, P. D.**  
Vortex rings and the plate jet.  
[AIAA PAPER 68-132] 16 p2770 A69-31880  
Periodic vorticity and its effect on flow over a flat plate.  
22 p3929 A69-40015  
Taylor-Goertler vortices and their effect on heat transfer.  
[ASME PAPER 69-HT-3] 24 p4414 A69-43563
- MCCORMACK, W. F.**  
Damage experience.  
14 p2541 A69-29155
- MCCORMICK, C. W.**  
Application of the NASA general purpose structural analysis program to large radio telescopes.  
23 p4232 A69-42145
- MCCORMICK, G. P.**  
Selected Applications of Nonlinear Programming.  
04 p0621 A69-14362  
Nonlinear Programming- Sequential Unconstrained Minimization Techniques.  
04 p0563 A69-14421
- MCCORMICK, K. S.**  
A troposcatter propagation experiment at 15.7 GHz over a 500 km path.  
01 p0043 A69-10560
- MCCORMICK, M. M.**  
System simulation - An approach to the optimization of signal processing and coding for VLF channels.  
03 p0390 A69-13205
- MCCORMICK, M. P.**  
Mie total and differential backscattering cross sections at laser wavelengths for Junge aerosol models.  
04 p0609 A69-14290  
Optical radar studies of the atmosphere.  
12 p2033 A69-27001
- MCCORMICK, P. D.**  
Laser scatter measurements in the mesosphere and above.  
05 p0758 A69-16414  
Fluorescence as a source of noise in Q-switched ruby laser atmospheric backscattering experiments.  
16 p2777 A69-32183
- MCCORMICK, R. L.**  
Capabilities of in-flight thrust reversing.  
[AIAA PAPER 68-880] 17 p2902 A69-34031
- MCCORMICK, W. S.**  
The magnetic resonance flowmeter.  
15 p2616 A69-31290
- MCCOWEN, K. D.**  
Comparative evaluation of the thoracic impedance and isotope dilution methods for measuring cardiac output.  
14 p2408 A69-29304
- MCCOY, D. F.**  
Stimulus generalization of gravity.  
23 p4081 A69-41434
- MCCOY, H. E.**  
Mechanical behavior of CVD tungsten at elevated temperatures.  
01 p0097 A69-10647



- MCCOY, H. E., JR.**  
Electrical resistivity anomaly in nickel-base alloys.  
08 p1329 A69-20003
- MCCOY, H. V.**  
Manufacturer's responsibility.  
06 p1042 A69-16849
- MCCOY, J.**  
Design and control of the 747 exhaust reverser systems.  
[SAE PAPER 690409] 23 p4200 A69-41637
- MCCOY, J. E.**  
High-latitude ionization spikes observed by the POGO ion chamber experiment.  
14 p2511 A69-28950
- MCCOY, J. H.**  
Electron beam modulated reflectance of germanium.  
05 p0807 A69-15816  
Variable attenuator for CO sub 2 laser radiation.  
23 p4172 A69-41396  
Water vapor continuum absorption of carbon dioxide laser radiation near 10  $\mu$ m.  
23 p4173 A69-41631
- MCCOY, J. J.**  
An application of the method of moments to stochastic equations.  
07 p1174 A69-19472
- MCCOY, R. M.**  
Regional slopes with non-stereo radar.  
15 p2610 A69-30710
- MCCRACKEN, H. J.**  
Electron beam welding the Lunar Module descent engine.  
12 p2102 A69-26621
- MCCRACKEN, K. G.**  
Corotating Forbush decreases.  
09 p1582 A69-22752  
Pioneer 6 observations of the solar flare particle event of 7 July 1966.  
10 p1768 A69-23769  
High energy particle events associated with solar flares.  
24 p4372 A69-43617  
Measurement of cosmic ray anisotropy of solar origin by Explorer 34 satellite.  
24 p4373 A69-43619
- MCCRARY, L. E.**  
Aluminum coatings for aerospace fasteners.  
[ASM PAPER D8-5.2] 07 p1142 A69-19663  
A systematic approach to accelerated testing.  
[AIAA PAPER 69-1036] 22 p3925 A69-40403
- MCCRIVEN, C. C.**  
Temperature and humidity effects on silicon solar cells.  
19 p3253 A69-35706
- MCCRAY, R.**  
Non-thermal intergalactic bremsstrahlung and the diffuse X-ray background.  
11 p1947 A69-24595  
Synchrotron radiation losses in self-absorbed radio sources.  
13 p2327 A69-27572
- MCCREA, W. H.**  
The moon and Mars.  
20 p3604 A69-37563  
The microwave background radiation.  
21 p3790 A69-38821  
Quasars - Interpretative.  
21 p3802 A69-38825
- MCCREIGHT, L. R.**  
Boron carbide resists heat.  
09 p1529 A69-22070  
Ceramic Fibers and Fibrous Composite Materials.  
12 p2118 A69-26340  
Materials processing in space.  
19 p3324 A69-35589
- MCCRICKERD, J. T.**  
Scaling and resolution of scenic holographic stereograms.  
11 p1883 A69-24690
- MCCROSKY, R. E.**  
Photographic networks for firehalls.  
19 p3415 A69-36120
- MCCUE, J. J. G.**  
A millimeter-wave lunar radar.  
03 p0397 A69-13725
- MCCULLEY, G.**  
Ray tracing studies for the topside ionosphere.  
07 p1124 A69-18838
- MCCULLOCH, P. M.**  
Spectral fine structure in pulsar radiation.  
01 p0150 A69-10273
- MCCULLOCH, W. S.**  
A learning model of brain stem reticular formation.  
05 p0711 A69-15802  
A model of the vertebrate central command system.  
24 p4273 A69-42910
- MCCULLOCH, K. E.**  
Measurements of gaseous diffusion coefficients by a gas chromatographic technique.  
18 p3099 A69-34280
- MCCULLOUGH, E. C.**  
A low energy electron accelerator producing measurably small fluxes through utilization of the photoelectric effect.  
19 p3313 A69-36492
- MCCULLOUGH, R. H.**  
The binary regenerative channel.  
01 p0027 A69-10249
- MCCUMBER, D. E.**  
Eigenmodes of an asymmetric cylindrical confocal laser resonator with a single output-coupling aperture.  
21 p3741 A69-39564
- MCCURDY, T. E.**  
Additive processing techniques for printed-circuit boards.  
07 p1100 A69-18621
- MCCUSKER, C. B. A.**  
Rapporteur paper on extensive air showers.  
03 p0498 A69-12938  
Nuclear interactions and cosmic radiation at energies around 10 super 6 Gev.  
12 p2149 A69-26475  
Evidence of quarks in air-shower cores.  
24 p4383 A69-42945
- MCCUSKER, M. V.**  
Intense polarized electron beams from optically pumped helium discharges.  
12 p2130 A69-26312
- MCCUSKEY, S. W.**  
Giant M stars in the galactic anticenter.  
22 p4014 A69-40125
- MCDADE, J. J.**  
Techniques for the limitation of biological loading of spacecraft before sterilization.  
05 p0713 A69-15948  
Microbiological sampling of surfaces.  
05 p0715 A69-15982
- MCDANIEL, A. V., JR.**  
A low-noise class-C oscillator using a directional coupler.  
02 p0220 A69-12452
- MCDANIEL, E. W.**  
Measurement of transport properties of ions in gases - Results for K super plus ions in N sub 2.  
13 p2306 A69-27457  
Mobilities, diffusion coefficients, and reaction rates of mass-identified nitrogen ions in nitrogen.  
13 p2302 A69-27458
- MCDANIEL, J. D.**  
A low-energy channel-multiplier spectrometer for ATS-E.  
[IEEE PAPER 3C-5] 07 p1135 A69-19199
- MCDANIEL, T. J.**  
Dynamics of beam-type periodic structures.  
[ASME PAPER 69-VIBR-17] 10 p1804 A69-24150
- MCDANIEL, W. V.**  
Flexible circuitry techniques in high reliability spaceborne data processing equipment.  
22 p3903 A69-39951
- MCDERMOTT, C. E.**  
Spontaneous reignition analysis for solid restartable motors.  
[AIAA PAPER 69-444] 16 p2842 A69-32695
- MCDERMOTT, D. P. M.**  
Measurement of upper atmosphere winds and temperature from rocket-grenade-TMA experiments conducted from Sonmiani in spring and autumn of 1966-67.  
15 p2598 A69-31317
- MCDERMOTT, J.**  
Finally - A practical application for holography.  
07 p1137 A69-19777
- MCDERMOTT, J. M.**  
Designing for crashworthiness and survivability.  
[AHS PAPER 225] 01 p0009 A69-10408
- MCDEVITT, F. R.**  
A computer-aided measurement of SNR employing a time interval counter.  
11 p1839 A69-25299
- MCDEVITT, N. T.**  
Infrared lattice spectra of rare-earth aluminum, gallium, and iron garnets.  
24 p4360 A69-42974
- MCDIARMID, D. R.**  
A physical model of a radio aurora event.  
18 p3125 A69-34231
- MCDIARMID, I. B.**  
Dependence of the high latitude electron /E greater than 35 kev/ boundary on the orientation of the geomagnetic axis.  
03 p0502 A69-14003  
Morphology of outer radiation zone electron /E greater than 35 kev/ acceleration mechanisms.  
11 p1950 A69-25147  
Dawn-dusk asymmetries in the outer radiation zone at magnetically quiet times.  
18 p3128 A69-34942  
On the high-latitude limit of closed geomagnetic field lines.  
20 p3531 A69-37875  
Summary of rocket measurements of auroral particle precipitation.  
21 p3707 A69-38489
- MCDONALD, F. B.**  
Relativistic electrons from solar flares.  
04 p0650 A69-15528  
Relativistic solar electrons detected during the 7 July 1966 proton flare event.  
10 p1767 A69-23766  
IQSY observations of low-energy galactic and solar cosmic rays.  
15 p2673 A69-30014  
The chemical composition of galactic and solar cosmic rays.  
22 p4002 A69-40090  
Observations of cosmic-ray electrons between 2.7 and 21.5 Mev.  
24 p4365 A69-42667
- MCDONALD, H.**  
The effect of pressure gradient on the law of the wall in turbulent flow.  
11 p1872 A69-25131
- MCDONALD, J. A.**  
Seismic effects of sonic booms - Empirical results.  
14 p2393 A69-29880
- MCDONALD, J. K.**  
New observations on the substrate specificity of cathepsin C/dipeptidyl aminopeptidase I/ including the degradation of beta-corticotropin and other peptide hormones.  
20 p3473 A69-37577
- MCDONALD, J. P.**  
Manufacturing aspects of technology feasibility spacecraft sterilization and bioassay program.  
09 p1446 A69-22358
- MCDONALD, K. D.**  
A navigation satellite system for use with army tactical aircraft.  
08 p1349 A69-21193
- MCDONALD, P. H.**  
An approach to calculating interchannel distortion of linearly filtered angle-modulated signals using a hybrid computer.  
14 p2417 A69-29556
- MCDONALD, P. W.**  
Parametric study of sheath-boundary interactions.  
08 p1369 A69-20818  
New GE transmitter designs for I.F.F./A.T.C. transponder.  
09 p1462 A69-21411
- MCDONALD, T. W.**  
Heat transfer measurements in cylindrical wall jets.  
21 p3695 A69-38972
- MCDONALD, W. J.**  
Biaxial residual surface stresses from grinding and finish machining 304 stainless steel determined by a new dissection technique.  
[ASME PAPER 68-WA/MET-9] 14 p2455 A69-29437
- MCDONNELL, J. A. M.**  
Factors affecting the choice of foils for penetration experiments in space.  
15 p2641 A69-31339

- MCDONNELL, J. D.**  
An application of measurement methods to improve the quantitative nature of pilot rating scales.  
24 p4276 A69-43326
- MCDONOUGH, M. S.**  
Ultrasonic thermometry for nuclear reactors.  
[IEEE PAPER 1C-4] 07 p1134 A69-19186
- MCDUGALL, I.**  
Apparent K-Ar dates on cores and excess Ar in flanges of australites.  
23 p4209 A69-41343
- MCDOWELL, M. R. C.**  
Elastic scattering of slow electrons by two- electron ions.  
03 p0469 A69-12924  
Photo-ionization of lithium - A many-body calculation.  
06 p0961 A69-17134  
On a peaking approximation in scattering theory.  
08 p1355 A69-20206  
Continuous absorption by members of the Li isoelectronic sequence.  
11 p1922 A69-25260
- MCELHINNEY, D. M.**  
Carbon fibres take to the air.  
21 p3750 A69-38428
- MCELHINNY, M. W.**  
An investigation of the strength of the geomagnetic field in the early Precambrian.  
08 p1309 A69-20580
- MCELIGOT, D. M.**  
Thermal entry for low Reynolds number turbulent flow.  
[ASME PAPER 68-WA/FE-11] 05 p0748 A69-16090  
Velocity profiles and eddy diffusivities for fully developed, turbulent, low Reynolds number pipe flow.  
[ASME PAPER 68-WA/FE-34] 05 p0749 A69-16107  
Thermal entry for low Reynolds number turbulent flow.  
[ASME PAPER 68-WA/FE-11] 14 p2430 A69-29446  
Prediction of tube wall temperatures with axial variation of heating rate and gas property variation.  
18 p3227 A69-34315  
Numerical predictions for circular tube laminarization by heating.  
[ASME PAPER 69-HT-52] 24 p4409 A69-43520
- MCELLIGOTT, J. G.**  
The design and construction of a thermal system to measure small temperature changes in the brain.  
15 p2606 A69-30152  
A miniaturized telemetry device for the transmission of the electrical activity of single nerve cells in the brain.  
19 p3261 A69-36270
- MCELMURY, S. S.**  
Desorption rates of CO sub 2 -Ar mixtures from silica gel at various temperatures.  
21 p3848 A69-38707
- MCELROY, D. L.**  
Electrical resistivity anomaly in nickel-base alloys.  
08 p1329 A69-20003
- MCELROY, J. H.**  
10.6-micrometer laser communication system experiment for ATS-F and ATS-G.  
23 p4120 A69-41758
- MCELROY, J. T.**  
Ultrasonic search units.  
07 p1139 A69-18795
- MCELROY, M. B.**  
Interpretation of Venus Lyman-alpha emission as observed from Mariner V.  
[AAS PAPER 68-220] 02 p0313 A69-11486  
The Atmospheres of Venus and Mars.  
02 p0318 A69-12101  
Photoelectrons in planetary atmospheres.  
02 p0321 A69-12118  
The effect of oxygen cooling on ionospheric electron temperatures.  
02 p0245 A69-12739  
Structure of the Venus and Mars atmospheres.  
05 p0824 A69-16248  
Models for the nighttime Venus ionosphere.  
09 p1594 A69-21695  
The ratio of deuterium to hydrogen in the Venus atmosphere.  
11 p1962 A69-25145
- Electron impact excitation of the dayglow.  
20 p3591 A69-38061
- MCENARY, W.**  
Caterpillar powers NASA tracking stations for Apollo flight.  
07 p1117 A69-19632
- MCEVILY, A. J., JR.**  
The stress corrosion cracking of a non-age- hardenable aluminium alloy.  
10 p1709 A69-23055  
Fracture of high-strength materials.  
17 p2988 A69-33553
- MCEWEN, J.**  
Comparison of the calculated and observed resonances in the e-H elastic-scattering channel above 10.0 ev.  
15 p2657 A69-31265
- MCFADDEN, B. A.**  
The facile isolation of a structural phospholipoprotein from *Hydrogenomonas facilis* and *Neurospora crassa*.  
22 p3871 A69-40049
- MCFADDEN, P. W.**  
Evaluation of internal heat-transfer coefficients for impingement-cooled turbine airfoils.  
[AIAA PAPER 68-564] 17 p3022 A69-34021
- MC FALL, J. C., JR.**  
Some test results from the NASA planetary entry parachute program.  
[AIAA PAPER 68-934] 19 p3247 A69-35952  
Secondary experiment space available on balloon flights - 1969.  
22 p3865 A69-40807
- MC FALL, R. H.**  
Vortex amplifiers and circuits.  
10 p1639 A69-23556
- MC FARLAND, J. H.**  
The effect of visual context on perception of a form's parts as successive.  
22 p3882 A69-40868
- MC FARLAND, R. A.**  
The effects of altitude on pilot performance.  
23 p4106 A69-41794
- MC FARLAND, R. H.**  
Results of VOR path stability investigations.  
03 p0392 A69-13245  
A far-field, on-course monitor for the ILS glide path.  
17 p3003 A69-34105
- MC FARLANE, R. A.**  
High-power operation of pulsed water-vapor laser and precision wavelength measurement of the strongest component.  
19 p3337 A69-36416
- MC FEE, R.**  
An aircraft road system via a cockpit PPI display of ground radar data on transponder equipped aircraft broadcast in a 10 kc bandwidth digital code.  
03 p0464 A69-13244  
Broadcasting of a digitally coded list of transponder equipped aircraft scanned by FAA ground radars as a means of collision avoidance, navigation, air traffic structuring, and airfield approach.  
04 p0629 A69-15478
- MCGAHAN, L. C.**  
Energy propagation in the lower ionosphere and atmosphere produced by artificial disturbances. I.  
07 p1078 A69-18844  
Ultralow frequency waves generated by the Satrun F-1 engine.  
24 p4365 A69-43415
- MCGARRAH, R. E.**  
Let's internationalize defense marketing.  
14 p2540 A69-28933
- MCGARRY, F. J.**  
Crack propagation studies in crosslinked glassy polymers.  
08 p1338 A69-20492  
The fracture of polymers and fiber reinforced polymer composites.  
12 p2120 A69-26849
- MCGARVEY, J. H.**  
Higher harmonic pitch control.  
18 p3089 A69-35233
- MCGEAN, T. J.**  
Analysis of a belt-type heat transport device.  
22 p4050 A69-40554
- MCGEARY, F. L.**  
Atmospheric exposure of nonferrous metals and alloys - Aluminum- Seven-year data.  
01 p0101 A69-11354
- MCGEE, H. A., JR.**  
Perturbed Morse-oscillator approximation in reactive collisions. I.  
03 p0472 A69-13316  
Perturbed Morse oscillator approximation in reactive collisions. II - A repulsive potential.  
05 p0796 A69-15911
- MCGEE, J. D.**  
Photoelectronic image devices - A review.  
12 p2082 A69-26136
- MCGEE, K. E.**  
Mass discrimination in a time-of-flight mass spectrometer. I - Geometric mass discrimination at magnetic electron multiplier.  
04 p0599 A69-15014
- MCGEE, M.**  
A rocket borne scintillation spectrometer for observing cosmic X rays.  
14 p2449 A69-29566
- MCGEE, R. W.**  
Criterion for the stability of a fourth-order position control system.  
09 p1475 A69-22591
- MCGEE, W. F.**  
Telecommunications network for air traffic in Central America /Red de telecomunicaciones para el trafico aereo en Centro America/.  
03 p0399 A69-14182
- MCGHEE, R. B.**  
Optimal biased proportional navigation.  
02 p0278 A69-11973
- MCGIFFNEY, D. Z.**  
Application of retrodirective antenna systems to spacecraft.  
16 p2762 A69-32557
- MCGINNIS, F. K., III**  
Individual droplet heat-transfer rates for splattering on hot surfaces.  
10 p1809 A69-23196
- MCGIVERN, J. F.**  
Development and testing of intermetallic coated titanium alloy gears.  
19 p3323 A69-35582
- MCGOLRICK, J. E.**  
Launch vehicles for future automated space missions.  
[AIAA PAPER 68-447] 09 p1610 A69-21983
- MCGONAGLE, W. J.**  
Measurement of surface-residual stress by non-destructive methods.  
15 p2631 A69-31511
- MCGOVERN, W. E.**  
On the exospheric temperature of Venus.  
02 p0319 A69-12109  
Albedo measurements over the Antarctic.  
09 p1484 A69-21404  
Wind measurements in noctilucent clouds.  
13 p2294 A69-28466  
The primitive earth - Thermal models of the upper atmosphere for a methane-dominated environment.  
20 p3608 A69-38056
- MCGOWAN, J. W.**  
High-power Y-junction E-plane circulator.  
07 p1100 A69-18639  
A review of atomic and molecular excitation mechanisms in nonequilibrium gases up to 20000 deg K.  
08 p1354 A69-20146  
Comparison of the calculated and observed resonances in the e-H elastic-scattering channel above 10.0 ev.  
15 p2657 A69-31265  
Lyman-alpha radiation from electron collisions with simple hydrogen containing molecules.  
24 p4351 A69-43033
- MCGOWAN, M. T.**  
At 140,000 psi - Joints as strong as parent metal.  
01 p0088 A69-11399
- MCGOWAN, W. A.**  
Trailing vortex hazard.  
[SAE PAPER 680220] 04 p0549 A69-14930
- MCGRATH, D. C., JR.**  
City planning and noise.  
14 p2541 A69-29157
- MCGRAW, G. R.**  
Fully austenitic stainless steel welding electrodes for high-temperature applications.  
04 p0607 A69-15220



## MCGRAW, J. R., JR.

The free vibratory bending of damped laminated plates.  
[ASME PAPER 69-VIBR-68] 10 p1805 A69-24158

## MCGREGOR, J.

Stress distribution in a tension specimen notched on one edge. 19 p3447 A69-36859

Application of grids to plastics for the moire fringe method of strain measurement. 22 p4042 A69-40312

## MCGREGOR, R. W.

Parametric considerations in the design of a fluidic direct impact modulator.  
[ASME PAPER 69-FLCS-38] 20 p3465 A69-37983

## MCGREW, J.

Orthogonalization of measured modes and calculation of influence coefficients. 16 p2872 A69-31916

## MCGUIGAN, M. J.

A simplified empirical method for rotor component fatigue design.  
[AHS PAPER 372] 17 p3059 A69-33516

## MCGUIRE, D. W.

Hypoxia warning - A new technique. 07 p1071 A69-19430

## MCGUNIGAL, T. E.

10.6-micrometer laser communication system experiment for ATS-F and ATS-G. 23 p4120 A69-41758

## MCILRAITH, A. H.

Model for pulsed radio sources. 01 p0156 A69-10981

## MCILRATH, T. J.

Absorption from excited states in laser-pumped calcium. 21 p3775 A69-39740

## MCILROY, M. B.

Influence of respiration, stroke volume, and heart rate on pulmonary capillary pulsatility. 23 p4082 A69-41445

## MCINTOSH, B. A.

Mass distribution of meteoroids as determined by radar observations of underdense meteor trails. 06 p1003 A69-17493

The effect of wind shear on the decay constant of meteor echoes. 19 p3276 A69-36482

## MCINTOSH, C. B. G.

Relativistic cosmological models with both radiation and matter. 07 p1222 A69-19587

## MCINTOSH, F. J.

Programmed test patterns for multiterminal devices. 21 p3679 A69-39604

## MCINTOSH, P. S.

Birth and development of the sunspot group associated with the proton flare of July 1966. 10 p1763 A69-23730

Evolution of the sunspot group after the proton flare of 7 July 1966. 10 p1765 A69-23748

## MCINTOSH, R. E.

Harmonic generation inside a plasma column at resonance. 06 p0965 A69-17488

## MCINTURFF, R. M.

The diurnal temperature range of the middle stratosphere. 03 p0461 A69-13344

Atmospheric circulation and variability at proposed SST flight levels. 24 p4251 A69-42711

## MCISAAC, J. P.

Atmospheric density measurements by research satellite OV1-15. 15 p2602 A69-31384

## MCISAAC, P. R.

Spiraling electron beam interaction with fast wave circuits. 07 p1114 A69-18436

## MCIVER, R. G.

Function of the Bird respirator at high altitude. 14 p2406 A69-29290

## MCIVOR, I. K.

Dynamic response of finite-length cylindrical shells to nearly uniform radical impulse.  
[AIAA PAPER 68-144] 02 p0347 A69-12517

Nonlinear response of a cylindrical shell to an impulsive pressure.  
[ASME PAPER 69-APM-26] 18 p3214 A69-34399

## MCKAGUE, E. L., JR.

Graphite-filament epoxy matrix interface study. 15 p2642 A69-30312

## MCKAY, S. S., II

Rocket trajectory optimization by a second-order numerical technique. 16 p2857 A69-32154

## MCKAY, T. L.

Corrosion studies on forged beryllium. 21 p3749 A69-39493

## MCKEE, C.

Early supernova luminosity. 22 p4026 A69-40649

## MCKEE, D. W.

Electrocatalysts for hydrogen/carbon monoxide fuel cell anodes. IV. 12 p2026 A69-25937

## MCKEE, E. B.

Beta-adrenergic blockade - An aid in diagnosis. 17 p2909 A69-33184

## MCKEE, J. M.

Oxygen effects in a type-316 stainless-steel, Nb-1 percent Zr, liquid potassium system. 12 p2112 A69-25943

## MCKEE, R. B., JR.

A statistical model for the tensile fracture of parallel fiber composites.  
[ASME PAPER 68-WA/RP-7] 05 p0783 A69-16159

## MCKEE, W. P., JR.

Distributed communications for a global satellite network. 23 p4130 A69-42515

## MCKENNA, J.

The effects of strain on electromagnetic modes of anisotropic dielectric waveguides at p-n junctions. 03 p0406 A69-13830

## MCKENNA, J. M.

Antibody formation in hibernating ground squirrels (*Citellus tridecemlineatus*). 08 p1263 A69-20173

## MCKENNA, R. F.

Constant chamber pressure throttling of an expansion-deflection nozzle.  
[AIAA PAPER 69-435] 16 p2846 A69-32776

## MCKENNAN, J. R.

Night airglow observations during the IQSY. 15 p2594 A69-30019

## MCKENZIE, C. P.

Transition from laminar to turbulence in submerged and bounded jets. 14 p2428 A69-28876

## MCKENZIE, D. P.

The oscillations of a viscous gravitating sphere. 07 p1123 A69-18806

## MCKENZIE, J. F.

Interaction of linear waves with oblique shock waves. 03 p0414 A69-13137

Transmission of Alfvén waves through the earth's bow shock. 16 p2777 A69-32099

Interaction of magnetoacoustic and entropy waves with normal magnetohydrodynamic shock waves. 20 p3582 A69-38242

## MCKEOGH, J. D.

Hydraulic press forging of large parts.  
[ASM PAPER C7-5.4] 04 p0604 A69-14522

## MCKEOWN, D.

Gas-surface energy transfer experiment for OGO-F. 19 p3255 A69-36680

## MCKERN, R. A.

Real-time strapdown-attitude-package evaluations.  
[AIAA PAPER 69-849] 21 p3765 A69-39424

## MCKIBBIN, A. H.

Performance of the orifice-compensated hydrostatic face seal under pressure and thermal loading.  
[ASME PAPER 68-WA/LUB-6] 05 p0768 A69-16131

Aircraft gas turbine mainshaft face seals - Problems and promises.  
[ASLE FICFS PREPRINT 28] 15 p2620 A69-30487

## MCKIBBIN, D. D.

Review of Ames Research Center plasma-probe results from Pioneers 6 and 7. 07 p1128 A69-19364

Preliminary comparison of solar wind plasma observations in the geomagnetospheric wake at 1000 and 500 earth radii. 12 p2151 A69-26943

## MCKINLAY, W. H.

Pilot displays in avionic systems of the future. 22 p3946 A69-40486

## MCKINLEY, R. R.

MHz contour maps of the supernova remnants HB 9, Simeis 147, and IC 443. 09 p1604 A69-22408

## MCKINNEY, H. F.

A computerized mass spectrometer system.  
[AIAA PAPER 69-1016] 22 p3922 A69-40388

## MCKINNEY, J. M.

A survey of analytical time-sharing models. 19 p3279 A69-35600

## MCKINNEY, M. O.

Fan V/STOL aircraft. 05 p0701 A69-15565

## MCKINNEY, R.

Manufacturing aspects of technology feasibility spacecraft sterilization and bioassay program. 09 p1446 A69-22358

## MCKINNON, M. G.

A fluidic digital position sensor. 15 p2554 A69-31301

## MCKNIGHT, W. B.

Excitation mechanism in pulsed CO sub 2 lasers. 20 p3556 A69-38122

Considerations on high peak powers from CO sub 2 and CO sub 2-mixture lasers. 22 p3963 A69-40564

## MCLAREN, A. D.

Assay of urease activity using super 14 C-urea stored, geologically preserved, and in irradiated soils. 18 p3095 A69-34543

Steady state studies of nitrification in soil - Theoretical considerations. 19 p3264 A69-35606

## MCLAREN, R. W.

A learning controller model for on-line optimization of a class of stochastic control systems. 06 p0900 A69-17354

## MCLAREN, T. I.

Initial ionization rates and collision cross sections in shock-heated argon. 01 p0132 A69-11206

## MCLAUGHLIN, D. K.

Experimental investigation of the near wake of a magnetically suspended cone at M sub infinity equals 4.3. 06 p0863 A69-18068

## MCLAUGHLIN, E.

Theory of thermal conductivity of fluids. 23 p4237 A69-41324

## MCLAUGHLIN, J. F.

Mission support for lunar geoscience. 03 p0510 A69-13391

## MCLAUGHLIN, W. A.

The simulation of intercity travel demands.  
[AAS PAPER 69-382] 24 p4417 A69-42805

## MCLAY, R. W.

A special variational principle for the finite element method. 13 p2364 A69-28229

Generalized variational principles in the finite-element method.  
[AIAA PAPER 68-290] 23 p4227 A69-41882

## MCLEAN, D. J.

Type II solar radio bursts observed with the Culgoora radioheliograph during a flare on 17 June 1968. 09 p1582 A69-22750

Observations of motions in a solar storm centre. 17 p3024 A69-33805

## MCLEAN, E. A.

Interferometric observation of absorption induced index change associated with thermal blooming. 07 p1149 A69-18899

MCLEAN, F. B.  
The dynamic response of solids exposed to a pulsed-electron-beam.  
05 p0771 A69-15817

MCLEAN, J. D.  
Description of a controllable sonic flow orifice.  
10 p1693 A69-23343

MCLEAN, W. P.  
Testing as a team - The collaboration of Government and independent testing laboratories.  
15 p2720 A69-30398

MCLEARY, R.  
Band of dynamic pressure on a solid elastic cylinder.  
04 p0670 A69-14408

MCLELLAN, A., IV  
Internal acoustic gravity waves.  
02 p0242 A69-11868  
Local instabilities in acoustic-gravity waves with shear.  
21 p3772 A69-39241

MCLELLAN, R. B.  
The solubility of carbon in cobalt and nickel.  
01 p0092 A69-10060  
The variation with composition of the diffusivity of carbon in austenite.  
13 p2279 A69-27763  
Elastic calculation of the entropy and energy of formation of monovacancies in metals.  
24 p4360 A69-42649  
The solubility of carbon in solid gold, copper, and silver.  
24 p4334 A69-43413

MCLELLAN, W. H.  
How to calibrate pressure transducers at 7 deg K.  
01 p0080 A69-10300

MCLENNAN, C. J.  
A dynamic programming computational approach to optimization with state variable discontinuities.  
09 p1474 A69-22440

MCLENNAN, W. D.  
Electrical properties of vacuum deposited bismuth.  
02 p0296 A69-11878

MCLEOD, B. F.  
Digital communications.  
05 p0721 A69-16722

MCLEOD, J.  
Simulation- The Dynamic Modeling of Ideas and Systems with Computers.  
05 p0724 A69-16467

MCLEOD, J. B.  
The behaviour of similar solutions in a compressible boundary layer.  
03 p0413 A69-13013  
The existence of similar solutions for some laminar boundary layer problems.  
05 p0751 A69-16463  
Von Karman's swirling flow problem.  
14 p2432 A69-29676

MCLEOD, J. S.  
Expectations for satellite communications in the defense communications system.  
12 p2028 A69-25932

MCLEOD, M.  
Two probes for the measurement of the complete velocity vector in subsonic flow.  
05 p0764 A69-16398

MCMAHON, B. E.  
Magnetic paleointensity studies on a recent basalt from Flagstaff, Arizona.  
02 p0244 A69-12018

MCMAHON, D. H.  
Light beam deflection using holographic scanning techniques.  
11 p1885 A69-24847  
A means for externally polarizing He-Ne 6328 angstrom units lasers.  
14 p2459 A69-29569

MCMAHON, H. M.  
Experimental and analytical investigations of jets exhausting into a deflecting stream.  
[AIAA PAPER 69-223] 07 p1051 A69-19557

MCMAHON, J. F.  
The quasi-steady design of a compressor or pump stage for minimum fluctuating lift.  
[ASME PAPER 68-WA/FE-12] 05 p0698 A69-16092

The quasi-steady design of a compressor or pump stage for minimum fluctuating lift.  
[ASME PAPER 68-WA/FE-12] 19 p3240 A69-36419

MCMAHON, J. M.  
Pulse shapes and spatial modes in Raman lasers.  
12 p2108 A69-26634

MCMAHON, T. A.  
An algorithm for the induced velocity of curved vortex lines.  
20 p3458 A69-37169

MCMANAMON, P.  
An experimental comparison of nondiversity and dual frequency diversity for HF FSK modulation.  
10 p1636 A69-23536

MCMANUS, E. J., JR.  
Configuration sets - New technique for use in configuration management.  
08 p1322 A69-21154

MCMANUS, P. F.  
Nonuniform torsion of composite beams.  
18 p3211 A69-34343

MCMANUS, S. P.  
Diazomethane and deuteriodiazomethane by the base-catalyzed reaction of hydrazine with chloroform.  
06 p0885 A69-17885

MCMATH, H. G.  
The thermal dissociation of chlorine- trifluoride behind incident shock waves.  
[WSCI PAPER 68-40] 07 p1202 A69-18355  
The thermal dissociation of chlorine trifluoride behind incident shock waves.  
21 p3670 A69-39739

MCMENAMIN, D. L., JR.  
Measured and predicted air ionization in blunt body shock layers.  
[AIAA PAPER 69-81] 06 p0863 A69-18101

MCMENAMIN, J. C.  
Precise comparison of the Josephson frequency-voltage relation at microwave and far-infrared frequencies.  
20 p3583 A69-37418

MCMILLAN, P. W.  
Glass-ceramics for the coating and bonding of silicon semiconductor material.  
15 p2669 A69-31040

MCMILLEN, L. D.  
Vibrational relaxation of diatomic gases behind shock waves.  
01 p0061 A69-11204

MCMILLIN, B. E.  
Level and density control.  
22 p3870 A69-41241

MCMULLEN, C. W.  
Communication Theory Principles.  
09 p1454 A69-21801

MCMUNN, J. C.  
Multi-parameter optimum in linear dynamical systems.  
[ASME PAPER 69-VIBR-42] 10 p1807 A69-24180  
A hazards model for exploding solid propellant rockets.  
[AIAA PAPER 69-461] 16 p2869 A69-32749

MCMURDIE, H. F.  
Phase Diagrams for Ceramists- 1969 Supplement.  
22 p3971 A69-40782

MCNAB, I. R.  
Closed-cycle MPD experiments with applied electric and magnetic fields.  
10 p1738 A69-23479

MCNALL, J. F.  
A computer-controlled photometric telescope.  
04 p0602 A69-15380

MCNALL, P. E.  
Predicted and measured heat losses and thermal comfort conditions for human beings.  
06 p0880 A69-17087

MCNALLY, D.  
Interstellar molecules.  
04 p0653 A69-14613

MCNALLY, J.  
Properties of a fire-retardant, thermally- stable, electrical-grade thermoset.  
08 p1340 A69-20506

MCNALLY, J. R., JR.  
Further studies of excitation-heating of ions.  
01 p0126 A69-10276

MCNALLY, W. D.  
Programs for computation of velocities and streamlines on a blade-to-blade surface of a turbomachine.  
[ASME PAPER 69-GT-48] 09 p1432 A69-22495

MCNAMARA, A. G.  
A physical model of a radio aurora event.  
18 p3125 A69-34231  
Rocket measurements of plasma densities and temperatures in visual aurora.  
23 p4167 A69-42334

MCNAMARA, D. H.  
The intrinsic color index and absolute magnitude of Polaris.  
08 p1408 A69-21138  
The intrinsic color indices of the RR Lyrae stars and the reddening near the galactic poles.  
12 p2172 A69-27157  
Narrow-band and intermediate-band photometry of globular star clusters.  
24 p4387 A69-43352

MCNAMEE, L. P.  
Application of unilateral and graph techniques to analysis of linear circuits.  
01 p0036 A69-10708

MCNEAL, R. J.  
Ionization and excitation of nitrogen by protons and hydrogen atoms in the energy range 1-25 kev.  
24 p4368 A69-43177

MCNEILL, F. A.  
Experimental evidence of an amplifying mechanism in the magnetosphere.  
01 p0077 A69-11241

MCNEILL, J. D.  
Radiophase - A new system of conductivity mapping.  
12 p2075 A69-26982

MCNEILL, M. C.  
A low-noise amplifier for communications satellite ground stations.  
03 p0406 A69-13733

MCNESBY, J. R.  
The photochemistry of Jupiter above 1000 angstrom units.  
17 p3032 A69-33165

MCNICHOLS, J. L.  
Infrared absorption in neutron-irradiated GaAs.  
23 p4198 A69-41540

MCNICHOLS, R. J.  
Determination of the probability of completing a countdown when single malfunctions are encountered.  
10 p1792 A69-22979

MCNIFF, E. J. JR.,  
High-field studies of band ferromagnetism in Fe and Ni by Moessbauer and magnetic moment measurements.  
19 p3383 A69-36050

MCNITT, R. P.  
Some aspects of linear irreversible thermodynamics in the presence of electromagnetic fields.  
17 p3075 A69-34142  
Some aspects of linear irreversible thermodynamics and continuum mechanics in the presence of electromagnetic fields.  
21 p3851 A69-39289

MCNUTT, D. P.  
Rocket observations of bright celestial infrared sources in Ursa Major.  
09 p1603 A69-22230  
Rocket infrared astronomy - On the track of the "big bang."  
10 p1772 A69-22868  
Limb darkening on the earth's night side at wavelengths of 1-3 mu and 3-7.5 mu.  
17 p2960 A69-33167  
Far infrared nightglow emission from atomic oxygen.  
22 p3940 A69-40521

MCPHERSON, P. J.  
Reliability vs cost.  
13 p2231 A69-28044

MCPHERSON, W. B.  
Recent experience in high pressure gaseous hydrogen equipment operated at room temperature.  
[ASM PAPER D8-14.1] 07 p1143 A69-19666

MCPIKE, A. L.  
Evaluation of advances in engine noise technology.  
[RAES PAPER 13] 22 p3999 A69-40492

MCQUAID, B. L.  
Some communication system considerations for use of a libration point satellite to support an Apollo lunar far-side mission.  
03 p0388 A69-13180



## MCQUARRIE, D. A.

Dielectric constant of simple gases.  
04 p0632 A69-14865

## MCQUEEN, H. J.

Sulfidation of a complex nickel base alloy - Inconel 713C.  
12 p2115 A69-26617

## MCQUEEN, H. S.

Nuclear rocket propulsion.  
11 p1914 A69-25590

## MCQUEEN, J. C.

Integrally-formed structures - A new stiffened panel concept.  
[AIAA PAPER 69-760] 19 p3434 A69-35660

## MCQUEEN, R. D.

Attitude control of a highly accurate space stabilized platform and experimental package.  
06 p0955 A69-17587

## MCRAE, D. D.

Presampling filtering.  
07 p1083 A69-19129

## MCRAE, T. G., JR.

Spectroscopic temperature measurements of shock-heated helium.  
09 p1548 A69-21963

## MCRARY, J. W.

A simulation of airborne antenna designation functions.  
11 p1840 A69-25309

Detection of unmodeled errors in recursive trajectory estimation.  
24 p4387 A69-43585

## MCREE, D. I.

Switching in digital fluid amplifiers.  
[ASME PAPER 69-FLCS-31] 21 p3649 A69-38604

## MCREYNOLDS, S. R.

On optimal control problems with discontinuities.  
01 p0049 A69-10003

Translational forces on the Mariner V spacecraft stemming from the attitude control system.  
[AIAA PAPER 69-114] 06 p1018 A69-18108

A simplified approach for determining the information content of radio tracking data.  
[AAS PAPER 69-112] 19 p3402 A69-35935

Optimization of control systems with discontinuities and terminal constraints.  
22 p3918 A69-41009

Translational forces on Mariner V from the attitude control system.  
[AIAA PAPER 69-114] 24 p4394 A69-43256

Optimization of control systems with discontinuities and terminal constraints.  
24 p4294 A69-43306

## MCRUER, D.

Theory of manual vehicular control.  
24 p4274 A69-43021

## MCRUER, D. T.

A neuromuscular actuation system model.  
02 p0202 A69-11952

## MCSHERRY, J. W.

Further observations of psychological factors involved in CNV genesis.  
01 p0015 A69-10904

## MCTAGGART, W. G.

Measurement of sympathetic neurohormones in the plasma of race car drivers.  
07 p1067 A69-19424

## MCTIGUE, J. G.

Lifting-body research vehicles in a low-speed flight test program.  
05 p0702 A69-15571

## MCVEY, D. F.

Graphite temperature and ablation characteristics in various environments.  
[AIAA PAPER 69-148] 06 p0947 A69-18155

## MCVEY, E. S.

Control system for use in the measurement of ultrasmall torques.  
20 p3537 A69-37140

## MCVITTIE, G. C.

Number counts of extragalactic radio sources.  
08 p1390 A69-20388

A cosmologist looks at the hypothesis of a change in the gravitational constant.  
22 p4017 A69-40174

## MEABURN, G. M.

Photochemical reaction mechanisms for production of organic compounds in a primitive earth atmosphere.  
09 p1444 A69-21465

## MEABURN, J.

The variations of the electron density within M8.  
14 p2514 A69-29949

## MEAD, C. A.

The presence of deep levels in ion implanted junctions.  
05 p0808 A69-16287

The effect of trapping states on tunneling in metal-semiconductor junctions.  
09 p1557 A69-21748

Schottky barriers on GaAs.  
10 p1745 A69-23358

Origin of field-dependent collection efficiency in contact-limited photoconductors.  
20 p3583 A69-37732

## MEAD, D. J.

Noise and Acoustic Fatigue in Aeronautics.  
05 p0703 A69-16800

## MEAD, J.

Contribution of compliance of airways to frequency-dependent behavior of lungs.  
22 p3873 A69-40205

Static properties of lungs after oxygen exposure.  
22 p3873 A69-40208

## MEADE, D. M.

Lack of equilibrium due to magnetic guarding.  
03 p0475 A69-13157

Physical mechanism for the collisionless drift wave instability.  
16 p2820 A69-31691

## MEADE, M. L.

Frequency-modulation sensitivity of Gunn oscillators.  
15 p2577 A69-30614

## MEADOWS, A. J.

The initial development of solar flares.  
07 p1205 A69-19246

## MEADOWS, D. L.

Estimate accuracy and project selection models in industrial research.  
05 p0849 A69-15981

## MEADOWS, H. E.

Periodically switched lossless networks - System functions and power relations.  
18 p3111 A69-34682

Stability properties of shaping filters.  
21 p3688 A69-39661

## MEADOWS, P.

Reversion resistant urethanes.  
19 p3357 A69-35566

## MEADOWS, R. W.

The effect of the atmosphere on satellite communications.  
08 p1272 A69-19958

## MEANS, E. H.

Relationships among potential sorties, ground support, and aircraft reliability.  
05 p0743 A69-16238

## MEASEL, P. R.

Low dose ionization-induced failures in active bipolar transistors.  
06 p0977 A69-16880

## MEASURES, R. M.

The initial ionization of hydrogen in a strong shock wave.  
16 p2815 A69-31590

## MEAUDRE, R.

Differential capacity of single crystals of zinc oxide between asymmetrical contacts /Capacite differentielle d'un monocristal d'oxyde de zinc entre contacts non symetriques/.  
08 p1371 A69-19883

## MEAUEZ, G.

Some transonic flow problems for engine nacelles of airbus type aircraft /Quelques problemes transsoniques du fuselage moteur d'un avion du type "Airbus"/.  
[ONERA-TP-629] 02 p0187 A69-11622

## MEBOLD, U.

Distance estimates for pulsars.  
08 p1397 A69-20698

The spin temperature of the interstellar neutral hydrogen from 21-cm line spectra.  
15 p2681 A69-30411

Investigation of the structure of the interstellar neutral hydrogen in mean galactic latitudes /Untersuchungen zur Struktur des interstellaren neutralen Wasserstoffs in mittleren galaktischen Breiten/.  
17 p3039 A69-33766

## MECHTLY, E. A.

Coordinated rocket measurements on the D-region winter anomaly. I - Experimental results.  
05 p0758 A69-16411

Lower ionosphere electron densities measured during the solar eclipse of November 12, 1966.  
12 p2073 A69-26861

Latitude variation of the lower ionosphere.  
18 p3127 A69-34798

## MECK, H. R.

Three-dimensional deformation and buckling of a circular ring of arbitrary section.  
[ASME PAPER 68-WA/DE-4] 05 p0839 A69-16169

Instability of an angle section beam under an applied bending moment.  
08 p1410 A69-19892

Three-dimensional deformation and buckling of a circular ring of arbitrary section.  
[ASME PAPER 68-WA/DE-4] 13 p2360 A69-27420

## MECKELBURG, E.

Material and Design Problems Encountered in the Construction of High-performance Missiles, Rockets, and Spacecraft /Werkstoffe und Konstruktionsprobleme beim Bau von Hochleistungsflugkoernern, Raketen und Raumfahrzeugen/.  
01 p0084 A69-10021

## MECZYNSKA, H.

Electroluminescent devices /Urządzenia elektroluminescencyjne/.  
11 p1899 A69-25198

## MEDD, W. J.

Lack of phase variation of Venus.  
05 p0818 A69-15601

Rapid radio variations in BL Lac.  
21 p3798 A69-38545

Three radio sources with unusual intensity variations.  
22 p4029 A69-40764

## MEDGYESI-MITSCHANG, L. N.

An algorithmic approach to signal estimation useful in fetal electrocardiography.  
21 p3668 A69-39866

## MEDHURST, R. G.

Superdirective aerial array containing only one fed element.  
09 p1468 A69-22603

## MEDICH, D. L.

Equations for the bending of a cantilever plate in the form of a parallelogram in an oblique-angle coordinate system and construction of a function satisfying Poisson conditions at the contour /Jednachine savijanja konzolne ploche oblika paralelograma u kosougolom sistemu koordinata i odredjivanje funkcija koje na konturi zadovoljavaju uslove poissona-a/.  
15 p2710 A69-30861

## MEDIN, S. A.

Optimization problem of linear conduction-type MHD generators /Problema optimizatsii lineinykh konduksionnykh MGD-generatorov/.  
06 p0871 A69-17916

Analysis of a power source employing an MHD generator and a thermocompressor /Analiz skhemy energeticheskoi ustanovki s MGD-generatorom i termokompressorom/.  
09 p1435 A69-21592

## MEDITCH, J. S.

Minimum mean-square error stochastic linear control.  
01 p0051 A69-10439

Stochastic Optimal Linear Estimation and Control.  
20 p3509 A69-37143

## MEDLEY, S. S.

On the interpretation of laser interferometer fringe patterns.  
09 p1517 A69-21915

## MEDLIN, J. E.

The computer-evaluation of wild-point rejection for telemetry data compressors.  
19 p3273 A69-36263

## MEDLOCK, L. E.

Criteria governing the design of electro-explosive devices for extreme conditions.  
10 p1751 A69-23020

**MEDNIKOV, E. P.**  
Theory of acoustic streaming near very small spherical obstacles /Teoriia akusticheskikh techenii, voz-nikaiushchikh okolo ochen' mal'kikh sfericheskikh pre-piatvii/.  
04 p0631 A69-14904  
Theory of acoustic streaming about very small spher-ical obstacles.  
12 p2131 A69-26657  
**MEDOKS, A. G.**  
Design algorithm for a waveguide Y-circulator.  
10 p1661 A69-23108  
**MEDVEDEENKO, N. F.**  
Evaluation of the dynamic properties of supply sources in CO sub 2 -shielded welding.  
11 p1892 A69-25667  
**MEDVEDEV, A. A.**  
Investigation of optical breakdown in air by a laser operating in the mode-synchronization regime.  
06 p0934 A69-17546  
**MEDVEDEV, E. A.**  
High-strength maraging steel N18K9M5T /MS 200/.  
04 p0615 A69-14645  
**MEDVEDEV, E. M.**  
Influence of ultrasonic oscillations on the elements of electronic equipments /Vliianie uz-kolebanii na clem-enty radioelektronnoi apparatury/.  
23 p4138 A69-41873  
**MEDVEDEV, G. N.**  
Analysis of the steady resonance modes of operation of certain nonlinear oscillatory systems with a deviating argument /Analiz statsionarnykh rezonansnykh rezhimov nekotorykh nelineynykh kolebatel'nykh sistem s otkloniaiuschimsia argumentom/.  
19 p3374 A69-36469  
**MEDVEDEV, IU. A.**  
Radio echo from an explosion region.  
02 p0282 A69-12415  
Reflection of a pulsed electromagnetic signal from the plane boundary of an absorbing medium /Ob otraz-henii impul'snogo elektromagnitnogo signala ot ploskoi granitsy pogloschchaushchei sredy/.  
03 p0397 A69-13711  
Explosion in an external electric field.  
04 p0634 A69-14430  
Penetration of pulsed electromagnetic waves into the cavity of a conducting cylinder /Proniknovenie impul'-snykh elektromagnitnykh voln v polost provodiashchego tsilindra/.  
15 p2569 A69-30950  
**MEDVEDEV, IU. I.**  
Interaction of acoustic waves with the hot surface of solid fuels at high frequencies /O vzaimodeistvii akusticheskikh voln s gorishchei poverkhnost'iu tver-dykh topliv pri povyshennykh chastotakh/.  
13 p2371 A69-27383  
**MEDVEDEV, IU. V.**  
Theory of anomalous superconductors /K teorii anomal'nykh sverkhprovodnikov/.  
01 p0138 A69-10436  
**MEDVEDEV, K. I.**  
Separation of a three-dimensional boundary layer.  
07 p1050 A69-18736  
**MEDVEDEV, M. IU.**  
Cosmic-ray anisotropy and the sectorial structure of the interplanetary magnetic field /Anizotropiia kosmicheskikh luchei i sektornaia struktura mezh-planetnogo magnitnogo polia/.  
10 p1758 A69-22834  
**MEDVEDEV, M. Z.**  
Determination of the elastic moduli and tensile strength of oriented glassfiber-reinforced plastics based on nondestructive testing of their composition and structure parameters /Opredelenie modulei uprugosti i prochnosti pri raziazhenii orientoirvannykh stekloplastikov na osnove nerazrushaiushchego kon-trolia parametrov ikh sostava i strukturny/.  
18 p3162 A69-35359  
**MEDVEDEV, S. A.**  
Attenuation of supercompressed detonation waves having a finite reaction rate /Ob oslablenii peresz-haykhd detonatsionnykh voln s konechnoi skorost'iu reaktsii/.  
19 p3298 A69-36384  
**MEDVEDEV, S. P.**  
Effect of aromatic hydrocarbons on the combustion characteristics of jet fuel /O vlianii aromatcheskikh uglevodorodov na kharakteristiki sgoraniia reaktiv-nogo topliva/.  
18 p3184 A69-35382

**MEDVEDEV, V. P.**  
Determination of the optimum performance of Mar-kov extremal systems.  
11 p1861 A69-25712  
**MEDVEDEVA, N. G.**  
Mechanisms of interaction between visual and vestibular analysors /K voprosu o mekhanizmakh vzaimodeistviiia eritel'nogo i vestibuliarnogo analiza-torov/.  
20 p3470 A69-37249  
**MEDVEDEVA, Z. S.**  
Reflection spectra of indium arsenide.  
06 p0979 A69-16995  
**MEDVINSKII, M. D.**  
Device for automatic measurement of vibration decrements /Pribor dlia avtomaticheskogo izmereniia dekrementa kolebaniiia/.  
17 p2976 A69-33931  
**MEEHAN, J. P.**  
Transmission of cardiovascular data from dogs.  
07 p1071 A69-19133  
Central nervous, cardiovascular and metabolic data of a Macaca nemestrina during a 30-day experiment.  
24 p4260 A69-42703  
**MEEHAN, R. J.**  
Normal and transverse ionizing shock studies.  
18 p3180 A69-34454  
**MEEKER, T. R.**  
Ultrasonic dispersive delay lines - An approach to better radar systems.  
24 p4286 A69-42901  
**MEEKINS, J. F.**  
X-ray line and continuum spectra of solar flares from 0.5 to 8.5 angstroms.  
02 p0308 A69-12297  
Absence of pulsar characteristics in several X-ray sources.  
07 p1218 A69-19254  
On X-ray line emission from Scorpius XR-1.  
13 p2325 A69-27313  
X-ray pulsar in the Crab Nebula.  
13 p2354 A69-28465  
X-ray spectra of several discrete cosmic sources.  
20 p3593 A69-38152  
**MEEKS, M. L.**  
The pointing calibration of the Haystack antenna.  
08 p1281 A69-20032  
Water vapor - Observations of galactic sources.  
18 p3205 A69-35435  
**MEER, A.**  
Buckling of cylindrical panels under lateral pressure.  
09 p1621 A69-22782  
**MEEROV, M. V.**  
Some problems of synthesis of multivariable control systems.  
12 p2046 A69-26061  
**MEERSON, F. Z.**  
Activation of the synthesis of protein and RNA in the cerebrum as a factor of adaptation to high-altitude hypoxia /Aktivatsiia sinteza belka i RNR v golovnom mozge kak faktor adaptatsii k vysotnoi gipoksii/.  
22 p3886 A69-41122  
The myocardium in hyperfunction, hypertrophy and heart failure.  
24 p4259 A69-42637  
**MEERSON, G. A.**  
Preparation and study of some properties of NbC-WC and TaC-WC alloys.  
05 p0782 A69-16796  
**MEFED, A. E.**  
Relation between electron spin-spin interactions and the polarization and relaxation of ruby nuclei /Sviaz' elektronnykh spin-spinovykh vzaimodeistvii s polarizatsiei i relaksatsiei iader v rubine/.  
08 p1372 A69-20541  
**MEGAREFS, G. J.**  
Minimal design of sandwich axisymmetric cylindrical shells obeying Mises' criterion.  
12 p2189 A69-27117  
**MEGN, A. V.**  
The spectra of discrete radio sources at decametric wavelengths. I, II.  
18 p3200 A69-35134  
**MEDGE, G. H.**  
Distribution and origin of primordial helium, neon, and argon in the Fayetteville and Kapoeta meteorites.  
19 p3419 A69-36142

**MEHAL, E. W.**  
GaAs integrated microwave circuits.  
01 p0040 A69-10196  
**MEHAN, R. L.**  
Fabrication and evaluation of sapphire whisker rein-forced aluminum composites.  
06 p0939 A69-16942  
**MEHR, F. J.**  
Electron temperature dependence of recombination of O super plus sub 2 and N super plus sub 2 ions with electrons.  
18 p3176 A69-34789  
**MEHRA, R. K.**  
Linear smoothing using measurements containing correlated noise with an application to inertial naviga-tion.  
06 p0956 A69-17938  
On a limiting procedure in linear recursive estima-tion theory.  
11 p1859 A69-25408  
Digital simulation of multidimensional Gauss- Mar-kov random processes.  
12 p2122 A69-26523  
Conjugate gradient methods with an application to V/STOL flight-path optimization.  
12 p2013 A69-26763  
The separation computation of arcs for optimal flight paths with state variable inequality constraints.  
19 p3399 A69-35667  
**MEHTA, F. S.**  
Flow in a square to rectangular constant area transi-tion piece.  
02 p0189 A69-12412  
**MEHTA, K. N.**  
The fluctuating flow of a viscous incompressible con-ducting fluid past an infinite flat plate with time depen-dent suction in the presence of a transverse magnetic field.  
21 p3691 A69-38445  
**MEHTA, R. K.**  
Polymeric Schiff bases. XIII - The direct synthesis of cross-linked polymeric azomethines.  
08 p1269 A69-21059  
Polymeric Schiff bases. XV - The synthesis of cross-linked polymeric azomethines from amino aryl ketones.  
08 p1269 A69-21060  
Polymeric Schiff bases. XIV - The synthesis of cross-linked polymeric azomethines by exchange reactions.  
08 p1269 A69-21061  
**MEIER, G.**  
High-frequency interferometry as a basis for statisti-cal-numerical oscillation analyses of unsteady, plane transonic flow /Hochfrequenzinterferometrie als Grund-lage statistisch-numerischer Schwingungs-analyse bei insatationaeren, ebenen, transsonischen Stroemungen/.  
12 p2089 A69-26188  
**MEIER, H. U.**  
Measurements of turbulent boundary layers on a heat-insulated wall in the small supersonic wind tunnel of the AVA /Messungen von turbulenten Grenzschichten an einer waermeisolierten Wand im kleinen Ueberschallwindkanal der AVA/.  
10 p1680 A69-23643  
A combined temperature and pressure probe for compressible flow.  
13 p2242 A69-28226  
**MEIER, P. J.**  
S-band pin-diode switch for high CW power.  
23 p4143 A69-42518  
**MEIER, R. R.**  
The hydrogen Lyman-alpha airglow.  
15 p2595 A69-30191  
Temporal variations of solar Lyman-alpha.  
15 p2699 A69-31404  
Balmer alpha and Lyman beta in the hydrogen geocorona.  
18 p3128 A69-34943  
**MEIER, R. W.**  
Holographic recording materials.  
11 p1882 A69-24681  
Twin-image elimination in holography using single-sideband waves.  
12 p2090 A69-26253  
**MEIERJOHANN, B.**  
Collision-induced dissociation of H sub 2 super plus ions-energy and angular dependences /Stossdissozia-tion von H sub 2 super plus -Ionen-Energie- und Win-kelabhaengigkeit/.  
19 p3375 A69-35985



## MEIGHAN, I. G.

Recent fall of the Bovedy meteorite, Northern Ireland.  
18 p3200 A69-34993

## MEIGS, B. E.

Real-time compression and transmission of Apollo telemetry data.  
[AIAA PAPER 69-970] 22 p3906 A69-40350

## MEIJERS, P.

Doubly-periodic stress distributions in perforated plates.  
08 p1416 A69-20709

## MEIKLEM, P.

Airworthiness objectives for civil powered lift aircraft and an examination of some of the problems.  
17 p2897 A69-33211  
Airworthiness objectives for civil powered lift aircraft.  
22 p3862 A69-39962

## MEILING, R. L.

Aerospace medical programs in medical faculties in the USA.  
23 p4106 A69-41799

## MEINERT, J. A.

Special purpose automatic test set development techniques.  
11 p1851 A69-25063

## MEINHART, W. A.

Project management - An incentive contracting decision model.  
02 p0356 A69-12476

## MEINKE, H. H.

Aperiodic attenuators /Aperiodische Rohrspannungsteiler/.  
08 p1283 A69-20126

Wave mode conversion and eddy formation in wave fields /Wellentypwandlung und Wirbelbildung in Wellenfeldern/.  
11 p1841 A69-25619

Noise matching in transistorized receiving antennas /Rauschanpassung in transistorierten Empfangsantennen/.  
19 p3281 A69-35764

## MEIRON, J.

The performance of optical systems with quasi-monochromatic partially coherent illumination.  
08 p1353 A69-21096

## MEISEL, D. D.

Identification of a solar X-ray source using D layer ionization behavior during an eclipse.  
04 p0650 A69-15533

Frequency dependence of polarization of pulsar CP 0328.  
08 p1382 A69-19817

On the secular brightness decrease of periodic comets.  
08 p1408 A69-21137

Further investigations of solar X-ray sources using D-layer ionization behavior during eclipses.  
22 p4004 A69-40308

## MEISEL, W. S.

Least-square methods in abstract pattern recognition.  
20 p3504 A69-38285

## MEISNER, H.

Model analysis of a Doppler ultrasonic flowmeter /Modellanalyse eines Doppler- Ultraschallstromungsmessers/.  
23 p4166 A69-42085

## MEISNER, M.

Cannibalization in multicomponent systems and the theory of reliability.  
01 p0086 A69-10651

## MEISSINGER, H. F.

An analysis of continuous parameter identification methods.  
05 p0725 A69-16474

A multi-mission interplanetary probe using 3-kw solar electric propulsion.  
06 p0984 A69-17593

Mission analysis technology.  
09 p1584 A69-21203

Simplification of solar-electric propulsion missions by a new staging concept.  
[AIAA PAPER 69-251] 09 p1586 A69-21245

## MEISTER, D.

Use of a human reliability technique to select desirable design configurations.  
19 p3261 A69-36026

## MEISTER, E.

Subsonic flow through an oscillating grid in a flat channel /Unterschallstromung durch ein schwingendes Gitter in einem ebenen Kanal/.  
10 p1631 A69-22905

Theory of unsteady subsonic flows through an oscillating blade cascade in a wind tunnel /Theorie instationärer Unterschallströmungen durch ein schwingendes Gitter im Windkanal/.  
24 p4244 A69-42716

## MEISTER, R. P.

Narrow-gap welding - A process for all positions.  
11 p1891 A69-24930

## MEITZNER, C. F.

Effect of sheet steel composition on porosity in gas tungsten-arc welds.  
04 p0607 A69-15219

## MEIXNER, J.

Thermodynamics of the phenomena in simple fluid media and the characterization of thermodynamics of irreversible processes /Thermodynamik der Vorgänge in einfachen fluiden Medien und die Charakterisierung der Thermodynamik irreversibler Prozesse/.  
06 p0959 A69-18222

## MEJIA, M. J.

Metallurgical and structural aspects of diffusion bonded titanium honeycomb sandwich.  
24 p4324 A69-43434

## MEKLER, K. I.

Measurement of ultrarapid plasma perturbations in experiments with shock waves /Izmereniia sverkhbystrykh vozmushchenii plazmy v eksperimentakh s udarnymi volnami/.  
14 p2498 A69-29803

## MEKSYN, D.

The foundations of turbulent motion flow between parallel planes. III.  
01 p0061 A69-10993

## MELAMED, V. G.

Solution of a Stefan-type problem by the method of straight lines /Reshenie zadachi tipa Stefana metodom priamykh/.  
20 p3567 A69-36992

## MELANSON, L. L.

H.F. ionospheric radar ground-scatter map showing land-sea boundaries by a spectral-separation technique.  
09 p1454 A69-21681

## MELBOURNE, W. G.

The radius of Venus as determined by planetary radar and Mariner 5 radio tracking data.  
03 p0508 A69-13348

The determination of planetary masses from radio tracking of space probes and planetary radar.  
15 p2697 A69-31305

## MELCHER, J. R.

Electromechanical costreaming and counterstreaming instabilities.  
01 p0062 A69-11208

Dielectrophoretic orientation.  
04 p0591 A69-15504

Interfacial relaxation overinstability in a tangential electric field.  
08 p1353 A69-20792

Electromechanical stream-structure instabilities.  
11 p1923 A69-24289

Electrohydrodynamic charge relaxation and interfacial perpendicular-field instability.  
16 p2811 A69-31667

Electrohydrodynamics - A review of the role of interfacial shear stresses.  
18 p3123 A69-34919

Electrohydrodynamic Rayleigh-Taylor bulk instability.  
20 p3578 A69-38235

Dielectrophoretic liquid expulsion.  
24 p4300 A69-43237

## MELCHIOR, P.

From position astronomy to spatial geodesy and geodynamics /De l'astronomie de position à la géodésie spatiale et à la géodynamique/.  
08 p1306 A69-19992

Some comments on the paper Moments of inertia and gravity field of the moon' by C. L. Goudas.  
22 p4030 A69-40902

## MELCHIORRI, B.

Surface states and pinch-off effect in CdS crystals.  
03 p0488 A69-13757

Infra-red quenching, pinch-off effect, and mobility in CdS.  
16 p2827 A69-32044

## MELCHIORRI, F.

Surface states and pinch-off effect in CdS crystals.  
03 p0488 A69-13757

Infra-red quenching, pinch-off effect, and mobility in CdS.  
16 p2827 A69-32044

## MELESHKO, G. I.

Stabilization of the concentration of mineral nutrients in the medium during prolonged Chlorella cultivation with recovery of the medium.  
10 p1646 A69-23578

## MELFI, L. T., JR.

Buried collector gauge for measurements in the 10 super minus super 11 torr pressure range.  
16 p2791 A69-32324

## MELFI, S. H.

Optical radar studies of the atmosphere.  
12 p2033 A69-27001

## MELIK-ALAVERDIAN, I. U. K.

Function of radioluminosity of radiogalaxies /O funktsii radiosvetimosti radiogalaktik/.  
02 p0325 A69-12563

Radioemission of "normal" galaxies and brightness of the metagalactic radio background /O radioizlucheni "normal'nykh" galaktik i iarkosti metagalakticheskogo radiofona/.  
02 p0325 A69-12564

A possible interpretation of radio-source counts /O vozmozhnoi interpretatsii podschetov radioistochnikov/.  
05 p0826 A69-16426

Some properties of radio galaxies /O nekotorykh svoistvakh radiogalaktik/.  
13 p2352 A69-27874

Emission lines in the optical spectra of the nuclei of radio galaxies /Ob emissionnykh liniakh v opticheskikh spektrakh iader radiogalaktik/.  
22 p4034 A69-41174

## MELIK-PASHAEV, N. I.

Rocket Engines /Raketnye Dvigateli/.  
01 p0143 A69-11196

## MELIKIAN, A. O.

Averaged equations for electromagnetic wave intensity in a medium, with allowance for interference /Usrednennye uravneniia dlia intensivnosti elektromagnitnykh voln v srede, uchityvayushchie interferentsii/.  
22 p3966 A69-41172

## MELIN, L.

Application of solid propellants to apogee stages and to strap-on boosters /Application de la propulsion par poudre aux etages d'apogee et aux boosters adjoints/.  
03 p0494 A69-12891

The guidance of large solid-propellant motors /Le pilotage des gros propulseurs à poudre/.  
07 p1230 A69-19291

## MELIORANSKII, A. S.

A device for recording electrons with energies from 0.1 to 1.5 Gev in cosmic radiation /Pribor dlia registratsii elektronov s energiei 0,1 to 1,5 Gev v kosmicheskom izlucheni/.  
21 p3724 A69-39074

## MELIORAPSKII, A. S.

Study of cosmic-ray electrons and gamma quanta at altitudes up to 27.5 km /Issledovanie ekelectronov i gamma-kvantov kosmicheskikh lucheii na vysotakh do 27,5 km/.  
10 p1758 A69-22830

## MELITITSKII, V. A.

Mean number of zero crossings of the polarization-coefficient modulus /Srednee chislo vybrosov modulia polarizatsionnogo koeffitsienta/.  
05 p0720 A69-16445

## MELITSKII, V. A.

Mean number of axis crossings of the polarization coefficient modulus.  
16 p2753 A69-32478

## MELKAIA, I. IU.

A stationary model of a radiation-fog.  
02 p0274 A69-11442

## MELKONIAN, A. P.

On the stability of rectangular transverse isotropic plates.  
06 p1021 A69-17178

## MELKUMOV, T. M.

Rocket Engines /Raketnye Dvigateli/.  
01 p0143 A69-11196

**MELICK, P. J.**  
Orbital clues to the nature of meteorite parent bodies.  
19 p3414 A69-36117

**MELLINS, R. B.**  
Interstitial pressure of the lung.  
24 p4257 A69-42627

**MELLO, J. D.**  
Emulsified fuel and fuel control systems.  
[ASME PAPER 69-GT-40] 09 p1571 A69-22486

**MELLOR, A. M.**  
New method for estimating dimer bond energies.  
23 p4195 A69-42210

**MELLOR, D. J.**  
Temperature effects in glow-discharge tubes.  
09 p1468 A69-22602

**MELNICHUK, I. U. V.**  
Structure of horizontal wind pulsations in precipitations according to radar data /Struktura horizontal'nykh pul'satsii vetra v osadkakh po radiolokatsionnym dannym/.  
16 p2807 A69-32271  
A new method of measuring the rate of dissipation of turbulence in clouds and precipitations with the aid of a conventional radar station /O novom sposobe izmerenii skorosti dissipatsii turbulentnosti v oblakakh i osadkakh pri pomoshchi obychnoi radiolokatsionnoi stantsii/.  
16 p2807 A69-32273

**MELNICK, I.**  
Study and development of a wire-type space memory /Etude et realisation d'une memoire a fils spatiale/.  
20 p3503 A69-37403

**MELNIK, R. V.**  
Stability of fiberglass-reinforced plastic plates coupled to an elastic base /Ob ustoychivosti stekloplastikovyykh plastinok, svyazannykh s uprugim osnovaniem/.  
08 p1412 A69-20334

**MELNIKOV, A. A.**  
Observations of the polarization of cosmic radio emission near the galactic anticenter at wavelengths of 70, 60, and 40 cm /Nabliudeniia poliarizatsii kosmicheskogo radioizlucheniia vblizi antitsentra galaktiki na volnakh 70, 60 i 40 cm/.  
03 p0501 A69-13704

**MELNIKOV, A. I.**  
Noise generator employing avalanche transit-time diodes /Generator shuma na lavinno-proletnom diode/.  
07 p1107 A69-19156  
Concerning the determination of the mechanism of electric breakdown in semiconductors.  
13 p2317 A69-27660

**MELNIKOV, B. N.**  
Noise characteristics of the Mi-8 and Mi-4 passenger helicopters.  
03 p0366 A69-13417  
Calculation of the noise characteristics of jet airliners.  
09 p1435 A69-22637

**MELNIKOV, M. A.**  
Some energy characteristics of exploding wires.  
09 p1539 A69-21560

**MELNIKOV, V. I.**  
Electron-hole scattering in semiconductors at high injection levels /Elektronno-dyrochnoe rasseianie v poluprovodnikakh pri vysokikh urovniakh inzhetsii/.  
01 p0137 A69-10257  
Electron-hole scattering in semiconductors at high injection levels.  
09 p1559 A69-22650  
Resonance mixing of laser frequencies in a semiconductor /Rezonansnoe smeshivanie lazernykh chastot v poluprovodnike/.  
21 p3737 A69-38998

**MELNIKOV, V. P.**  
Investigation of the inhomogeneity of a rectangular waveguide filled semiinfinitely by a dielectric with different forms of the interface /Issledovanie neodnorodnosti v vide polubeskonechnogo zapolneniia priamougol'nogo volnovoda dielektrikom s razlichnymi formami granitsy razdela/.  
23 p4125 A69-42047

**MELNIKOVA, I. A.**  
Experimental study of the effect of the similarity factor on the radiating power /emissivity/ of metals.  
05 p0845 A69-15894

**MELNIKOVA, I. I.**  
Calculation of the integral characteristics of a planetary boundary layer /K voprosu o raschete integral'nykh kharakteristik planetarnogo pogranichnogo sloia/.  
12 p2126 A69-26578

**MELNIKOVA, L. M.**  
Vibration and stability of cylindrical shells in a gas flow.  
16 p2875 A69-32287

**MELNIKOVA, V. I.**  
Behavior of ordering alloys under various deformation conditions /Povedenie uporiadochivaushchikhsia splavov pri razlichnykh usloviyakh deformatsii/.  
11 p1904 A69-24706

**MELONE, T. G.**  
Laser interconnection of wires.  
15 p2617 A69-30097

**MELOSH, R.**  
Computer analysis of large structural systems.  
[AIAA PAPER 67-955] 21 p3839 A69-39216

**MELOSH, R. J.**  
Multiple configuration analysis of structures.  
01 p0169 A69-10639  
Prediction of nonlinear transient response of structures.  
11 p1993 A69-25526  
Efficient solution of load-deflection equations.  
13 p2358 A69-27208

**MELROSE, D. B.**  
The emission and absorption of waves by charged particles in magnetized plasmas.  
01 p0126 A69-10123  
The emissivity in the magneto-ionic modes.  
02 p0309 A69-12720  
Resonant interaction of hydromagnetic waves with charged particles.  
19 p3424 A69-36335  
Acceleration of ultrarelativistic electrons in the Crab Nebula.  
19 p3424 A69-36336

**MELSA, J. L.**  
Sensitivity reduction in specific optimal control by the use of a dynamical controller.  
01 p0051 A69-10441  
A dynamic programming computational approach to optimization with state variable discontinuities.  
09 p1474 A69-22440  
Sub-optimal closed-loop control of nonlinear systems using invariant imbedding techniques.  
18 p3111 A69-34678  
A study of state variable feedback in nonlinear systems.  
21 p3687 A69-39460

**MELTON, J. G.**  
Investigation of harmonic ion cyclotron wave propagation and damping in a plasma.  
21 p3777 A69-39455

**MELTON, R. D.**  
Propagation in the earth's atmosphere.  
11 p1837 A69-25003

**MELTS, I. O.**  
Constrained optimization of dynamical systems in function space using nonlinear programming.  
03 p0408 A69-12974  
Determination of influence functions for constructing improving variations of the control functions and parameters of dynamic systems with discontinuous righthand sides.  
04 p0582 A69-14795

**MELTSIN, A. L.**  
Method of measuring the beats between longitudinal modes in a CW laser.  
03 p0440 A69-13265

**MELTZER, J.**  
The systems effectiveness function - From a managerial point of view.  
19 p3454 A69-36006

**MELTZER, R. S.**  
Spectroscopic determination of the magnon density of states of GdCl sub 3, a ferromagnetic rare-earth salt.  
03 p0494 A69-14257

**MELUGIN, R. K.**  
A precision autocollimating solar sensor.  
[AIAA PAPER 69-858] 21 p3762 A69-39386

**MELVIN, A.**  
Flame propagation on thermal ignition.  
13 p2380 A69-28459

The development of cool flames in propane-oxygen mixtures.  
21 p3852 A69-39595

**MELVIN, W. W.**  
Effects of wind shear on approach with associated faults of approach couplers and flight directors.  
[AIAA PAPER 69-796] 19 p3367 A69-35634

**MEN, A. V.**  
Anomalies in the spectra of cosmic radioemission sources in the decimeter band.  
06 p1004 A69-17538  
Universal automatic device for measuring impedances and complex transmission factors at meter and decimeter wavelengths /Universal'nyi avtomaticheskii pribor dlia izmereniia impedansov i kompleksnykh koeffitsientov peredachi v diapazone metrovykh i dekametrovykh radiovoln/.  
13 p2235 A69-28520

**MENAHAM, M.**  
Notes on the theory of multidimensional systems - Matrix factorization /Notes sur la theorie des systemes multidimensionnels - La factorisation matricielle/.  
12 p2047 A69-26072

**MENAKER, M.**  
Biological clocks.  
21 p3653 A69-38895

**MENARD, W. A.**  
Shock tube measurements of radiation from a simulated Jupiter atmosphere.  
[AIAA PAPER 69-184] 06 p0908 A69-18207

**MENCARELLI, E.**  
Substitution of the crystallographic facets with slip zones in a fatigue fracture by a heavy precipitation of titanium carbide /Substitution, dans une cassure de fatigue, de facettes cristallographiques aux plages a stries, a la faveur d'une precipitation dense de carbure de titane/.  
03 p0447 A69-13605  
Microfractographic aspects associated with creep /Aspects microfractographiques associes au fluage/.  
17 p2986 A69-32910

**MEENDE, S. B.**  
A low light level slow scan TV camera for satellite application.  
12 p2079 A69-25904

**MEENDEL, J. M.**  
Performance cost functions for a reaction-jet controlled system during an on-off limit cycle.  
02 p0278 A69-11965  
The application of techniques of artificial intelligence to control system design.  
04 p0581 A69-14568  
A steady-state approach to the analysis and synthesis of controllers for a reaction-jet controlled vehicle.  
[AIAA PAPER 69-854] 21 p3822 A69-39382  
On-off limit-cycle controllers for reaction-jet controlled systems. I - Analysis and synthesis.  
24 p4291 A69-43271

**MEENDEL, R. B.**  
The latitude variation of fast and slow neutrons at aircraft altitudes during solar minimum.  
09 p1574 A69-21402

**MEENDELSON, L. I.**  
Preparation and properties of unsupported positive coefficient thin thermistor films.  
22 p3997 A69-41214

**MEENDELSON, R. A.**  
Structure and properties of porous ionizer materials.  
10 p1710 A69-23166  
Development of new materials of construction for fuel cells.  
23 p4075 A69-42299

**MEENDELSON, V. M.**  
Initial thermostructural stresses in two-dimensional media.  
17 p3058 A69-33316

**MEENDEHALL, M. R.**  
Review of methods for predicting the aerodynamic characteristics of paravangs.  
[AIAA PAPER 68-10] 01 p0007 A69-11027

**MEENDES, A. M.**  
A note on lower ionosphere equivalent height diurnal variation.  
05 p0752 A69-15666  
Polarization bursts in the sun observed at microwave frequencies.  
05 p0813 A69-15761  
Some comments in diurnal change of lower ionosphere equivalent height.  
15 p2595 A69-30224



## MENDIS, D. A.

## MENDIS, D. A.

- Dissociation-ionization fronts in interstellar gas clouds. II. 07 p1218 A69-19281
- Dissociation-ionization fronts in interstellar gas clouds. I. 07 p1221 A69-19584
- Dissociation-ionization fronts in interstellar gas clouds. III. 10 p1772 A69-22858
- High density condensations in H II regions. 11 p1963 A69-25258

## MENDITTO, G.

- Transverse vibrations of a thin rectangular plate of linear viscoelastic material resting on an elastic medium /Vibrazioni trasversali di una piastra rettangolare sottile di materiale a viscosità lineare su un mezzo elastico/. 18 p3223 A69-35171

## MENENDEZ, M. G.

- Interatomic potential model for ion-atom systems including a charge-exchange contribution. 16 p2815 A69-32464

## MENG, C.-I.

- A study of polar magnetic substorms. 05 p0755 A69-16271
- Non-uniform growth of the ring current belt. 14 p2513 A69-29123
- Dynamics of the aurora and associated phenomena. 15 p2595 A69-30214
- The auroral and polar magnetic substorms over Alaska. 15 p2595 A69-30215
- A study of polar magnetic substorms. II. 20 p3533 A69-38085

## MENGALI, U.

- An analysis of the performance of the oscillating limiter driven by FM signals corrupted by noise. 14 p2413 A69-29497

## MENGEL, C. E.

- Effect of in vivo hyperoxia on erythrocyte fatty acid composition. 03 p0375 A69-14070
- Hemolysis in mice exposed to varying levels of hyperoxia. 06 p0874 A69-17837
- Relationship between tocopherol status and in vivo hemolysis caused by hyperoxia. 07 p1066 A69-19422

## MENGERS, D.

- The Orbiting Astronomical Observatory thermal test program. [AIAA PAPER 69-995] 22 p3920 A69-40373

## MENGES, G.

- Aging behavior of glass-fiber-reinforced plastics. I, II /Beitrag zum Alterungsverhalten von glasfaserverstärkten Kunststoffen. I, II/. 03 p0454 A69-13823

## MENKE, H. H.

- Controlled voltage converter systems for onboard electric power supplies in spacecraft /Geregelte Spannungs-konverter-Systeme fuer elektrische Bordnetze von Raumflugkoerpern/. 12 p2015 A69-25867

## MENKES, E. G.

- Evaluation of aerothermoelasticity problems for unmanned Mars-entry vehicles. [AIAA PAPER 68-283] 09 p1610 A69-21991

## MENNELLA, R. A.

- Unusual 1 to 5 GHz solar radio emission of 29 October 1968. 16 p2865 A69-32811

## MENNESSIER, M. O.

- Study of certain statistical determinations based on proper motions and radial velocities /Etude sur certaines determinations statistiques basees sur les mouvements propres et les vitesses radiales/. 20 p3605 A69-37829

## MENNICKEN, R.

- Investigation of linear differential equations with sinusoidal coefficients /Untersuchungen ueber lineare Differentialgleichungen mit sinusfoermigen Koeffizienten/. 05 p0787 A69-16464

## MENNING, M. D.

- Interplanetary orbits for multiple swingby missions. [AIAA PAPER 69-931] 21 p3809 A69-39359

## MENON, M. V. G.

- A study of the gallium arsenide injection laser and an investigation of its application in a communication system. 14 p2459 A69-29349

## MENON, T. K.

- Observations of 28 hydrogen n alpha lines from the Orion Nebula. 08 p1398 A69-20776

## MENOUE, J.

- Studies of the nutritional component of fatigue in glider pilots /Recherches sur la composante nutritionnelle de la fatigue chez les pilotes de vol a voile/. 23 p4106 A69-41796

## MENOUD, C.

- Frequency stability and accuracy of hydrogen masers /Stabilität und Genauigkeit der Frequenz von Wasserstoff-Masern/. 21 p3741 A69-39685

## MENSHIKH, N. L.

- Unsteady temperature field in the plane skin of an aerodynamic body in the case of variable thermophysical characteristics of the material /Nestatsionarnoe temperaturnoe pole v ploskoi obshivke letatel'nykh apparatov v sluchae peremennykh teplofizicheskikh svoystv materiala/. 18 p3092 A69-34982

- Conjugate problem of heat transfer in the presence of radiant heat exchange at the surface of a plate /Sopriazhennaya zadacha o teploobmene pri nalichii luchistogo teploobmena u poverkhnosti plastiny/. 18 p3230 A69-34984

## MENSHIKH, O. F.

- Electron-optical multiply stable systems /Elektronno-opticheskie mnogoustoichivye ustroystva/. 03 p0441 A69-13982

## MENSHIKOV, V. M.

- Solutions to equations of two-dimensional gasdynamics of the simple-wave type /Reshenia uravnenii dvumernoi gazovoi dinamiki tipa prostykh voln/. 22 p3933 A69-41030

## MENSHIKOVA, G. V.

- Effect of titanium on the mechanical properties of N18K8MST maraging steel /Vliianie titana na mekhanicheskie svoystva martensito-stareishchei stali N180K80M50T/. 15 p2639 A69-30630

## MENTH, A.

- Magnetic and semiconducting properties of SmB<sub>6</sub>. 07 p1200 A69-19403

## MENTRE, P.

- Approximate calculation of boundary layers and heat transfers at the walls of shock tubes /Calcul approché des couches limites et des transferts de chaleur aux parois d'un tube a choc/. [ONERA-TP-647] 03 p0412 A69-12875

## MENTZER, W. C.

- The evolution of airline aircraft maintenance. 15 p2549 A69-30209

## MENTZONI, M. H.

- Dynamics of pulsed-microwave breakdown in a nonuniform field. 07 p1107 A69-19448
- Electron recombination and diffusion in CO at elevated temperature. 22 p3984 A69-40478

- Radiation patterns of a slot antenna in the presence of a breakdown sheath. 23 p4116 A69-41595

## MENZEL, D.

- Inelastic interactions of slow electrons with adsorbed particles - Dependence of the interaction cross sections on temperature. 12 p2132 A69-26114

## MENZEL, D. H.

- On the obliteration of strong Fraunhofer lines by electron scattering in the solar corona. 04 p0654 A69-14628

- Multicolor photoelectric photometry of the brighter planets. III - Observations from Boyden Observatory. 04 p0663 A69-15383

- The nature of solar flares. 06 p0995 A69-17443

- Temperature distribution of the moon. 13 p2341 A69-27583

- Radio emission from high-level transitions in hydrogen. 13 p2327 A69-27596

- Oscillator strengths, f, for high-level transitions in hydrogen. [AFCLR-69-0301] 22 p3983 A69-40149

## MENZEL, R.

- Recording fluid velocity fields holographically. 11 p1884 A69-24691

## MENZEL, R. W.

- Fundamentals of holographic velocimetry. 19 p3305 A69-35729
- Processing holographic velocimetry data. 19 p3305 A69-35730

## MENZL, R.

- Wind-gust simulation according to military specification MIL-A-8866 /ASG/ /Simulation von Boen nach der Military-Specification MIL-A-8866 /ASG//. 03 p0461 A69-13647

## MEO, A. R.

- Data transmission in deterministic networks /Sulla trasmissione dell'informazione nelle reti deterministiche/. 21 p3673 A69-38775

## MEPISTSVERIDZE, E. I.

- Uses of meteorological satellite information in long-range weather forecasts /Ob ispol'zovanii informatsii s meteorologicheskikh sputnikov dlia dolgosrochnykh prognozov pogody/. 20 p3569 A69-36987

## MERAYO, F. M.

- Bacterial activity in low ambient pressure. 24 p4267 A69-43397

## MERCER, C. A.

- On-line analysis with a digital computer. 05 p0726 A69-16761
- Use and application of a digital data analysis system. 21 p3843 A69-39315

## MERCER, G. N.

- Gas lasers for holography. 11 p1895 A69-24680
- CW operation of high ionization states in a xenon laser. 23 p4172 A69-41399

## MERCER, J. C.

- Reliability and maintainability of the FAA's ARTS-III terminal air traffic control system. 19 p3370 A69-36000

## MERCHES, I.

- The Bernoulli equation in relativistic magnetohydrodynamics. 03 p0476 A69-13385

## MERCIER, A.

- Results of questionnaire given to flight personnel concerning the lighting of instrument panels /Resultats d'une enquete aupres du personnel navigant concernant l'eclairage des tableaux de bord/. 05 p0715 A69-16622

- Efficiency of visual functions as a function of the color of the instrument panel lighting /L'efficacite des fonctions visuelles en fonction de la couleur de l'eclairage des instruments de bord/. 05 p0715 A69-16623

- Influence of illumination on the reading of navigation charts /Influence de l'eclairage sur la lecture des cartes de navigation/. 24 p4271 A69-42605

## MERCIER, C.

- Utilization of "Symphonie" satellites /L'utilisation des satellites Symphonie/. 06 p0886 A69-17072

## MERCKEL, G.

- Equivalent circuit of the MOS transistor for use in the IMAG I program /Schema equivalent du transistor MOS utilisable dans le programme "IMAG I"/. 08 p1280 A69-19978

## MEREK, E. L.

- Estimating the size and concentration of unicellular microorganisms by light scattering. 11 p1829 A69-25643

- Integration of experiments for the detection of biological activity in extraterrestrial exploration. 15 p2556 A69-31306

## MEREWETHER, D. E.

- The arbitrarily driven long cylindrical antenna. 08 p1282 A69-20043

## MERGENT, J.

- Consultation on Solar Physics and Hydromagnetics, 4th, Sopot, Poland, September 20-23, 1966, Proceedings. 22 p4009 A69-39982

- MERGENTALER, J.**  
A statistical investigation of sunspots and chromospheric flares.  
22 p4001 A69-39996
- MERGLER, H. W.**  
A programmable digital compensator for single loop high performance digital servomechanisms.  
21 p3688 A69-39704
- MERGUET, H.**  
Sensory-physiological bases of course-keeping during guidance by runway lighting /Sinnesphysiologische Grundlagen des Kurshalts bei Orientierung an der Startbahnbeleuchtung/.  
19 p3260 A69-35987
- MERIC, J.**  
A Monte Carlo method for calculating certain simple integrals /Sur une methode de Monte- Carlo pour le calcul de certaines integrales simples/.  
13 p2288 A69-27735
- MERIFIELD, P. M.**  
Interpretation of extraterrestrial imagery.  
15 p2690 A69-30711  
Satellite imagery of the earth.  
20 p3536 A69-36930
- MERIGOUX, J.**  
Experimental study of the discharge coefficient of orifices with sharp edges functioning in the sonic regime /Etude experimentale du coefficient de debit d'orifices a bords vifs fonctionnant en regime sonique/.  
01 p0006 A69-10362  
The influence of the compressibility in a radial laminar flow between two disks /Sur l'influence de la compressibilite dans un ecoulement radial laminaire entre deux disques/.  
07 p1121 A69-19321
- MERIKALLJO, R. A.**  
Simulation of a multiprocessing system using GPSS.  
02 p0213 A69-12492  
Simulation design of a multiprocessing system.  
04 p0629 A69-15365
- MERILEES, P. E.**  
On the transition from axisymmetric to non-axisymmetric flow in a rotating annulus.  
24 p4345 A69-43150
- MERKEL, J. J.**  
A telemetry channel frequency response correction technique.  
10 p1654 A69-23291
- MERKELIJN, J. K.**  
Accurate positions and identifications of 75 radio sources between declinations plus 20 deg and plus 27 deg.  
07 p1218 A69-19273  
Accurate positions and some optical identifications for 255 radio sources between declinations plus 20 deg and -33 deg.  
17 p3035 A69-33611
- MERKELO, H.**  
Vacuum ultraviolet perturbation spectroscopy on the argon ion laser.  
08 p1324 A69-20161  
Time behavior of exciton formation and laser emission in Cd/SeS/ platelets.  
10 p1703 A69-23512  
Mode-locked lasers - Measurements of very fast radiative decay in fluorescent systems.  
12 p2105 A69-26310
- MERKIN, J. H.**  
The effect of buoyancy forces on the boundary-layer flow over a semi-infinite vertical flat plate in a uniform free stream.  
11 p1874 A69-25352
- MERKLE, C. L.**  
Extinguishment of solid propellants by depressurization - Effects of propellant parameters.  
[AIAA PAPER 69-176] 06 p0983 A69-18102
- MERKLE, E. L.**  
Icing tunnel tests of icephobic coatings.  
01 p0056 A69-11047
- MERKULOV, A. P.**  
Vortex-flow cooled laser.  
21 p3734 A69-38399
- MERKULOV, L. G.**  
Piezoelectric matching transducer with sandwich damper.  
10 p1697 A69-24074
- MERKULOV, V. V.**  
Asymptotic estimation of radiation patterns of nonequidistant antenna arrays.  
04 p0576 A69-14772
- MERKWITZ, J.**  
Radiation sensitivity of bacteriophage DNA. I - Breaks and cross-links after irradiation in vitro /Strahlenempfindlichkeit von Bakteriophagen-DNS. I - Brueche und Vernetzungen nach Bestrahlung in Vitro/.  
23 p4079 A69-41402
- MERLO, D.**  
Multiple-access techniques in civil satellite communications systems.  
08 p1272 A69-19959
- MERLO, L.**  
Coronary sinus outflow and O sub 2 content in anterior cardiac vein blood at different levels of right ventricle performance.  
23 p4098 A69-42105
- MERMAGEN, W. H.**  
Miniature telemetry systems for gun-launched instrumentation.  
10 p1654 A69-23280
- MERMAN, G. A.**  
Doubly asymptotic solutions in a nonautonomous canonical system with one degree of freedom near resonance /Dvoikoasimptoticheskie resheniia v neavtonomnoi kanonicheskoi sisteme s odnoi stepen'iu svobody vblizi rezonansa/.  
17 p2996 A69-33619
- MERMET, J.**  
Formal description of the hardware-oriented language CASSANDRE /Description formelle d'un langage oriente vers le hardware CASSANDRE/.  
03 p0401 A69-14179
- MERMOLIA, W.**  
The problems of increasing microwave power by means of frequency multipliers /Probleme bei der Erzeugung groesserer Leistungen im Mikrowellendbereich mit Frequenzvervielfachern/.  
11 p1841 A69-25607
- MERMOZ, H.**  
Elimination of disturbances by an optimum treatment of the antenna /Elimination des brouilleurs par traitement optimal d'antenne/.  
24 p4287 A69-43140
- MERONEY, R. N.**  
Turbulent sublayer temperature distribution including wall injection and dissipation.  
01 p0178 A69-11410
- MERRICK, R. B.**  
A simplified Kalman estimator for an aircraft landing display.  
[AIAA PAPER 69-944] 22 p3978 A69-40327
- MERRIFIELD, R. B.**  
A historical note on the genesis of manned interplanetary flight.  
[AAS PAPER 69-501] 24 p4380 A69-42852
- MERRILL, E. W.**  
Yield stress of normal human blood as a function of endogenous fibrinogen.  
22 p3874 A69-40223
- MERRILL, O. S.**  
Correlation of fixed-spacing thermionic converter performance with variable-spacing test vehicle data.  
09 p1438 A69-21814
- MERRILL, R. D., JR.**  
Relating remote sensor signals to ground-truth information.  
14 p2416 A69-29534
- MERRILL, R. G.**  
Ionospheric electron content at midlatitudes near the minimum of the solar cycle.  
22 p3939 A69-40505
- MERRITT, E. S.**  
Cirrus cloud influence on 6.4-6.9 mu observations.  
12 p2075 A69-27003
- MERRITT, G. E.**  
Pitot probe measurements of mercury drop growth rates.  
24 p4316 A69-43583
- MERRITT, W. A.**  
Operation flight test results of an infrared air turbulence detector.  
[AIAA PAPER 69-799] 19 p3367 A69-35631
- MERRY, M. W. J.**  
The relationship between the partial reflection of radio waves from the lower ionosphere and irregularities as measured by rocket probes.  
15 p2604 A69-31420
- MERTE, H., JR.**  
Incipient and nucleate boiling of liquid hydrogen.  
[ASME PAPER 68-WA/PID-4] 05 p0848 A69-16165
- MERTENS-STRIJTHAGEN, J.**  
Coronary circulation response to hyperoxia after vagotomy and combined alpha and beta adrenergic receptors blockade in the anesthetized intact dog.  
23 p4096 A69-42088
- MERTENS, H.**  
Calculation of a viscoelastic adhesive bond /Berechnung einer viskoelastischen Klebeverbindung/.  
22 p4038 A69-39896
- MERZ, E. H.**  
High performance through combination of materials.  
18 p3161 A69-34608
- MERZ, K. W.**  
Optimum pre-emphasis for frequency modulation applications.  
18 p3103 A69-35088
- MERZ, M. D.**  
Preliminary toughness results on TRIP steel.  
08 p1330 A69-20012
- MERZAGORA, N.**  
Discharge characteristic and relaxation processes in a Cs-He thermal plasma.  
10 p1732 A69-23443
- MERZENICH, J. B.**  
Noninterference wind tunnel instrumentation.  
10 p1672 A69-23266
- MERZHANOV, A. G.**  
Thermal explosion in a viscous fluid flow /Teplovoi vzryv pri techenii viazkoi zhidkosti/.  
04 p0686 A69-14986  
Certain laws of the dynamic conditions of ignition /O nekotorykh zakonomernostiakh dinamicheskikh rezhimov zazhiganiia/.  
11 p2000 A69-25188  
Combustion of condensed systems in a field of mass forces /Gorenie kondensirovannykh sistem v pole masovykh sil/.  
11 p2001 A69-25195  
The theory of stable homogeneous combustion of condensed substances.  
13 p2379 A69-28454
- MERZKIRCH, W.**  
Interaction between a Mach wave and an anisotropic supersonic flowfield /Die Wechselwirkung einer Machschen Welle mit einem anisotropen Uberschallstromungsfeld/.  
10 p1631 A69-22906
- MERZKIRCH, W. F.**  
Effects of an isobaric, inhomogeneous atmosphere on sonic boom.  
24 p4254 A69-43728
- MESAROVIC, M. D.**  
Structuring of multilevel systems.  
12 p2049 A69-26082
- MESAVAGE, R. C.**  
A sampled data system for precise measurement of intrapulse characteristics.  
17 p2934 A69-34076
- MESCAM, F.**  
A new method for the quick analysis of transient phenomena.  
[ONERA-TP-684] 19 p3293 A69-35747
- MESCH, F.**  
Designing permanent magnets for attitude control of satellites with special consideration of environmental influences /Auslegung von Dauermagnetaeben fuer die Lageregelung von Satelliten mit besonderer Beruecksichtigung der Umwelteinfluesse/.  
16 p2868 A69-31936
- MESERVEY, R.**  
Measurements of the kinetic inductance of superconducting linear structures.  
17 p3016 A69-33783
- MESHKOVA, G. N.**  
Linear and quadratic recombination of photocurrent carriers in films of the intrinsic organic semiconductor rhodamine B /Lineinaia i kvadratchnaia rekombinatsii nositelei fototoka v sloiakh sobstvennogo organicheskogo poluprovodnika rodamina B/.  
03 p0489 A69-13890  
Linear and quadratic recombination of photocarriers in films of the intrinsic organic semiconductor rhodamine B.  
11 p1939 A69-25691



## MESHKOVA, R. F.

Position observations of Mars with application of the method of local desensitization of the photographic plate /Pozitsionnyye nabludeniya marsa s primeneniem metoda mestnoi desensibilizatsii fotoplastinki/.  
17 p3027 A69-32873

## MESHKOVSKII, K. A.

The formation of pseudorandom uniformly distributed numbers from noise-like signals /Formirovaniye psevdosluchainykh ravnomerno raspredelennykh chisel iz shumopodobnykh signalov/.  
13 p2218 A69-27248

## MESIATS, G. A.

Current and voltage of a spark during pulsed breakdown in a gas interspace in the nanosecond time range /Tok i napriazheniye iskry pri impul'snom probeye gazovogo promezhutka v nanosekundnom diapazone vremeni/.  
12 p2137 A69-26534

## MESKIN, S. S.

Controlling the spectral composition of the emission of GaP p-n structures /Ob upravlenii spektral'nym sostavom izlucheniya GaP p-n-struktur/.  
01 p0137 A69-10259

Control of the radiation spectrum of p-n GaP structures.  
09 p1559 A69-22652

## MESNARD, G.

Differential capacity of single crystals of zinc oxide between asymmetrical contacts /Capacite differentielle d'un monocristal d'oxyde de zinc entre contacts non symetriques/.  
08 p1371 A69-19883

Specialized hybrid machine making possible the solution by iteration of a system of parametric, homogeneous, and linear equations /Machine hybride specialisee permettant la resolution par iteration d'un systeme d'equations lineaire, homogene et parametrique/.  
15 p2572 A69-31089

Negative resistance converter using an operational amplifier /Convertisseur pour resistance negative utilisant un amplificateur operationnel/.  
15 p2580 A69-31091

## MESNARD, M. R.

Integrated systems testing for assurance of electromagnetic compatibility of unmanned spacecraft.  
21 p3683 A69-39438

## MESNIANKIN, I. U. G.

Kinetics of epoxy resin breakdown under the action of laser light pulses of 10 super-3 sec duration /Kinetyka razrusheniya epoksidnoi smoly svetovymi impul'sami lazera dliet'nost'iu 10 super-3 sek/.  
22 p3973 A69-40743

## MESROBIAN, R. B.

High performance through combination of materials.  
18 p3161 A69-34608

## MESSERLE, H. K.

Shock development in an electrothermal shock tube.  
14 p2427 A69-29768

## MESSIAEN, A. M.

Plasma properties and obtention of densities high above critical density in radio-frequency plasmas.  
01 p0131 A69-10818

## MESSIHA, S. A. S.

The magnetohydrodynamic oscillatory flow along an infinite plane porous wall with variable suction.  
09 p1547 A69-21607

## MESSITER, A. F.

Hypersonic laminar boundary layer approaching the base of a slender body. [AIAA PAPER 68-67]  
23 p4059 A69-41883

Membrane flutter paradox - An explanation by singular-perturbation methods.  
24 p4403 A69-43573

## MESSLER, R. W., JR.

The effect of quench rate on the M sub s temperature and the structure of an Fe-C and an Fe-C-Ni steel.  
20 p3557 A69-36956

## MESSMER, K.

Model analysis of a Doppler ultrasonic flowmeter /Modellanalyse eines Doppler- Ultraschallstromungsmessers/.  
23 p4166 A69-42085

## MESTEL, L.

The role of the magnetic field in star formation.  
24 p4378 A69-42699

## METAL, A.

A method of low-pass filter synthesis /O pewnej metodzie syntezy filtrow dolnoprzepustowych/.  
11 p1887 A69-25210

Certain problems of the scaling theory of measuring instruments /O pewnych problemach teorii podzialki przyzadow pomiarowych/.  
17 p2975 A69-33614

## METCALFE, A. G.

Current status of titanium-boron composites for gas turbines. [ASME PAPER 69-GT-1]  
09 p1527 A69-22510

## METCALFE, R.

The lunar surface and early history of the earth's satellite system.  
13 p2345 A69-27654

## METELSKII, V. I.

Transmission of random noise and signals through a multistage multiplier.  
04 p0557 A69-14777

## METHAIS, M.

Increase in the resolving power of an antenna by decomposition of the received field in orthogonal distributions /Augmentation du pouvoir separateur d'une antenne par decomposition du champ recu en distributions orthogonales/.  
08 p1288 A69-20961

Increase of the resolving power of an antenna - Multiple channels and statistical decision /Augmentation du pouvoir separateur d'une antenne - Voies multiples et decision statique/.  
10 p1664 A69-23797

## METHERELL, A. F.

Temporal reference holography.  
06 p0928 A69-17902

Acoustical Holography. Volume 1 - Proceedings of the First International Symposium, Huntington Beach, Calif., December 14, 15, 1967.  
10 p1694 A69-23540

The relative importance of phase and amplitude in acoustical holography.  
10 p1695 A69-23548

Supplementary bibliography.  
10 p1696 A69-23552

Acoustical holograms using phase information only.  
23 p4166 A69-42180

Temporal reference acoustical holography.  
23 p4166 A69-42182

Acoustical holography.  
23 p4167 A69-42199

## METHERELL, A. J. F.

Studies of segregation and the initial stages of precipitation at grain boundaries in an aluminium 7 wt. percent magnesium alloy with an energy analysing electron microscope.  
03 p0442 A69-12894

## METIK, L. P.

Color indices of Nova Delphini 1967 /HR Del/ in the UPRYZV system /Kolor-indeksy Novoi Del'fina 1967 /HR Del/ v sisteme UPRYZV/.  
19 p3426 A69-36564

## METREVELI, S. G.

Electrical properties of diffused p-n junctions in indium phosphide.  
02 p0294 A69-11628

## METRIKIN, V. S.

Influence of viscous friction on the stability of an impact vibrator /Vliianie viazkogo treniya na ustoiichivost' vibroudarnika/.  
18 p3172 A69-34588

## METSCHL, E. C.

Junction varactors, storage switching diodes, and storage varactors /Sperrschichtvaraktoren, Speicherschaltioden und Speichervaraktoren/.  
01 p0038 A69-10168

## METSKEER, G. S.

Checkout Test Language - An interpretive language designed for aerospace checkout tasks.  
04 p0569 A69-15364

## METTEY, R. L.

High altitude/cold weather operation of Hamilton Standard propellers. [SAE PAPER 690323]  
11 p1822 A69-24515

## METTLER, G. W.

Corrosion and corrosion control of aircraft integral fuel tanks.  
12 p2013 A69-25946

## METZDORFF, W.

Recent work in primary controls in aircraft /Neuere Arbeiten zur Flugzeug-Primaersteuerung am Institut fuer Flugfuehrung der DFL/.  
08 p1347 A69-20872

## METZGER, D. E.

Impingement cooling of concave surfaces with lines of circular air jets. [ASME PAPER 68-WA/GT-1]  
05 p0848 A69-16137

Surface heat transfer immediately downstream of flush, non-tangential injection holes and slots. [AIAA PAPER 69-523]  
16 p2843 A69-32703

## METZGER, E.

A TDMA/PCM experiment on applications technology satellites.  
23 p4129 A69-42510

## METZGER, E. H.

The case rotation gyro for precise gyrocompassing.  
17 p2977 A69-34081

## METZGER, G. E.

Welding of metal-matrix fiber-reinforced materials.  
22 p3956 A69-40480

## METZGER, S.

Some aspects of communications satellite systems.  
03 p0383 A69-12870

## METZNER, A. B.

Turbulence phenomena in drag reducing systems.  
15 p2590 A69-30003

## MEURERS, J.

The 60-in. reflector of the Leopold-Figl Observatory for Astrophysics at the University Observatory in Vienna /Der 60-zoll-spiegel des leopold-figl-observatoriums fuer astrophysik der universitaets-stermwarte wien/.  
24 p4314 A69-43000

## MEURZEC, J.-L.

Utilization of eigenvectors for the selection of essential couplings in flutter calculations /Utilisation des vecteurs propres pour la selection des couplages essentiels dans les calculs de flottement/. [ONERA-TP-650]  
03 p0522 A69-12878

Aerodynamic control surface/trim tab coupling coefficients in subsonic two-dimensional unsteady flow /Coefficients aerodynamiques de couplage gouverneta-b, en ecoulement subsonique bidimensionnel instationnaire/.  
17 p2895 A69-33597

## MEYER-HOFMEISTER, E.

A theoretical Hertzsprung-Russell diagram for the star cluster NGC 1866.  
17 p3038 A69-33720

## MEYER-PIENING, H.-R.

Calculation of postbuckling loads in thin-walled circular cylinders of finite length /Zur Berechnung von Nachbeullasten duennwandiger Kreiszyylinder endlicher Laenge/.  
04 p0677 A69-14837

## MEYER, A.

Legal problems of outer space. [UN PAPER 68-95475]  
01 p0179 A69-10511

Braze bond inspection of open face honeycomb seals using low viscosity liquid.  
07 p1140 A69-18797

Legal problems of outer space.  
07 p1244 A69-19233

The interpretation of the term "peaceful" in the light of the Space Treaty /Revised version/.  
07 p1244 A69-19234

Air piracy as a legal problem /Luftpiraterie als Rechtsproblem/.  
13 p2381 A69-27528

A V.L.F. particle rocket experiment at Kerguelen Islands, I.  
15 p2605 A69-31423

Interpretation of the term "peaceful" in the light of the Space Treaty.  
20 p3635 A69-37104

## MEYER, A. J.

Exploration of the moon.  
13 p2352 A69-27908

## MEYER, C.

Density variations in the upper atmosphere - Role of the "Eurobs" system /Variatsii plotnosti v verkhnai atmosfere - Rol' sistemy "Eurobs"/.  
12 p2069 A69-26437

## MEYER, C. F.

Electromagnetic effects of nuclear explosions on electronic systems.  
13 p2234 A69-28344

## MEYER, D. H.

Complementing VOR/DME with INS - An improved navigation system. [SAE PAPER 690338]  
11 p1914 A69-24499

- MEYER, F.**  
A model for the Evershed flow in sunspots.  
06 p0999 A69-16977  
Magnetically aligned flows between sunspots /Magnetically ausgerichtete Stromungen zwischen Sonnenflecken/.  
10 p1772 A69-22907
- MEYER, F. H., JR.**  
Development of improved corrosion resistant claddings for high strength aluminum alloys.  
19 p3322 A69-35571  
Corrosion testing of materials in liquid propellant systems.  
21 p3748 A69-39485  
Stress corrosion cracking of welded aluminum alloys.  
21 p3748 A69-39492
- MEYER, G.**  
The design of a large angle three-axis attitude servomechanism for spacecraft.  
06 p0955 A69-17589
- MEYER, G. H.**  
On solving nonlinear equations with a one-parameter operator imbedding.  
10 p1719 A69-23519
- MEYER, H.**  
Measurement and control devices for parachute testing /Mess- und Steuereinrichtungen fuer Fallschirmuntersuchungen/.  
08 p1317 A69-20875
- MEYER, J.**  
The development of the discharge plasma in a hydrogen spark at small PD values.  
08 p1360 A69-20100  
Nondestructive testing of brazed rocket engine components.  
10 p1699 A69-23054
- MEYER, J. A.**  
Nondestructive testing of brazed rocket engine components.  
01 p0085 A69-10534
- MEYER, J. F.**  
Comparison of the incidence of cardiac arrhythmias during plus G sub x acceleration, treadmill exercise and tilt table testing.  
06 p0874 A69-17834  
Blood glucose during high-performance aircraft flight.  
09 p1445 A69-22555  
Aeromedical aspects of the first nonstop transatlantic helicopter flight. II - Heart rate and ECG changes.  
19 p3263 A69-36451
- MEYER, J. P.**  
The isotope composition of cosmic radiation /La composition isotopique du rayonnement cosmique/.  
05 p0817 A69-16709
- MEYER, K. R.**  
On the convergence of the zeta function for flows and diffeomorphisms.  
10 p1720 A69-23639
- MEYER, M.**  
Metallurgical and production developments of cryogenic quenching.  
[SAE PAPER 690343]  
11 p1890 A69-24491
- MEYER, M. L.**  
Embedded strain gauges.  
21 p3725 A69-39327
- MEYER, O.**  
Type II radio bursts and the magnetic field of the corona over an active center /Radiobursts vom Typ II und das koronale Magnetfeld ueber einem aktiven Zentrum/.  
06 p0985 A69-16979
- MEYER, P.**  
Cosmic rays in the Galaxy.  
21 p3791 A69-39502  
The electron component of cosmic rays.  
22 p4002 A69-40091
- MEYER, R.**  
Protection of pilots against lasers.  
07 p1072 A69-19436  
Study of sintering and hot compression of titanium and zirconium diborides with an addition of transition metals, and of various properties of the alloys obtained /Etude du frittage et de la compression a chaud des diborures de titane et de zirconium avec addition de metaux de transition, et de quelques proprietes des alliages obtenus/.  
22 p3968 A69-39888
- MEYER, R. F.**  
Geologic analysis of a multispectrally processed Apollo space photograph.  
22 p3941 A69-40987
- MEYER, R. X.**  
Laboratory testing of the space-charge-sheath electric thruster concept.  
[AIAA PAPER 69-282]  
09 p1563 A69-21235  
Self-similar, hypersonic flow of a non-ideal gas.  
[AIAA PAPER 69-707]  
17 p2953 A69-33448
- MEYER, R.-L.**  
Study of the ion population of a nitrogen plasma /Etude de la population ionique d'un plasma d'azote/.  
22 p3990 A69-40714
- MEYERER, P.**  
Power traveling wave tubes in ground stations for the Intelsat 3 system /Leistungswandelfeldroehren fuer Bodenstationen fuer das Intelsat-III-System/.  
07 p1094 A69-18426
- MEYERHOFER, D.**  
Q-switching of the CO sub 2 laser.  
[IEEE PAPER G-2]  
07 p1150 A69-19054  
Measurement of the beam profile of a CO sub 2 laser.  
07 p1156 A69-19305
- MEYEROTT, R. E.**  
Coordinated measurements of particles, luminosity, and electron concentrations.  
21 p3707 A69-38491
- MEYERS, C. A.**  
The penetration and mixing of air jets directed perpendicular to a stream.  
[ASME PAPER 68-WA/GT-8]  
05 p0750 A69-16143
- MEYERS, C. L., JR.**  
Recovery behaviour of nickel strain-hardened by impulse loading.  
03 p0447 A69-13620  
Strain-hardening effects in bcc, fcc, and hcp metals loaded at very high rates.  
07 p1166 A69-19144
- MEYERS, F. R.**  
Polymeric Schiff bases. XVI.  
10 p1651 A69-23308
- MEYERS, H. B.**  
For Lockheed, everything's coming up Unk- Unks.  
20 p3640 A69-37355
- MEYERS, N.**  
A new cryogenic storage system for spacecraft.  
24 p4393 A69-43045
- MEYERS, W. M.**  
The development of hexagonal and nonhexagonal cell phenolic honeycomb as an energy-dissipating material.  
19 p3353 A69-35503
- MEYERSBURG, R. B.**  
Interface of VTOL, STOL, and CTOL traffic in busy terminal areas.  
[SAE PAPER 690422]  
23 p4185 A69-41646
- MEYERSON, M. R.**  
Localized microstructural changes and fatigue crack propagation.  
06 p0943 A69-17237
- MEYKAR, O. A.**  
A discussion on system effectiveness assurance elements.  
20 p3550 A69-37709
- MEYN, D. A.**  
Fractography and crystallography of subcritical crack propagation in high strength titanium alloys.  
19 p3343 A69-35922
- MEYN, E. H.**  
Variable-voltage, direct-current power supplies for energizing cryogenically cooled and superconductive electromagnets.  
12 p2017 A69-26498
- MEZGER, P. G.**  
Protostars as sources of anomalous OH emission.  
04 p0661 A69-15143  
Galactic H II regions. IV - 1.95-cm observations with high angular resolution and high positional accuracy.  
13 p2339 A69-27568  
Determinations of helium abundance from radiofrequency recombination lines.  
18 p3190 A69-34293  
A search at 15 GHz for compact H II regions in regions of possible star formation.  
22 p4024 A69-40576
- MEZHENNAIA, L. M.**  
Ultraviolet Radiation of the Sun and Sky /Ultravioletovaia radiatsiia solntsa i neba/.  
07 p1221 A69-19506
- MEZHIROV, I. I.**  
Some self-similar flows of a viscous gas in a channel /O nekotorykh avtomodel'nykh tekheniakh viazkogo gaza v kanale/.  
11 p1875 A69-25482
- MEZRICH, R. S.**  
Curie-point writing of magnetic holograms on MnBi.  
10 p1706 A69-24007
- MGRQUET, R.**  
Research of an optimum solution for a fixed geometry ramjet, in the Mach 3 - Mach 7 range, with successively subsonic and supersonic combustion.  
[ONERA-TP-656E]  
07 p1203 A69-18415
- MIACHENKOV, V. I.**  
Stability of cylindrical shells under concentrated annular loads /Ustoichivost' tsilindricheskikh obolochek pri sosredotochennykh kol'tsevykh nagruzkakh/.  
07 p1238 A69-19688
- MIAKININ, E. V.**  
Fluxes of fast neutrons in the atmosphere.  
03 p0501 A69-13528
- MIAMIDIAN, L. R.**  
Comments on "Jamming susceptibility."  
14 p2414 A69-29501
- MIASNIANKIN, I. U. M.**  
The relations on surfaces of stress discontinuity in three-dimensional perfectly rigid-plastic bodies.  
11 p1996 A69-25738
- MIASNIKOV, V. I.**  
Problem of the diurnal rhythm of physiological functions in man under conditions of isolation /K voprosu o sutochnom fiziologicheskikh funktsii u cheloveka v usloviakh izoliatsii/.  
03 p0377 A69-14203  
Study of human sleep under conditions of prolonged rotation /Issledovanie sna cheloveka v usloviakh dlitel'nogo vrashcheniia/.  
20 p3472 A69-37261
- MIASNIKOVA, L. N.**  
Multichannel amplitude analyzer for space research.  
01 p0084 A69-11315
- MIASKOWSKI, J.**  
Analysis of the memory effect of plastically prestrained material.  
02 p0336 A69-11551  
Plastic yielding of tensile V-notched elements with arbitrary intermediate shoulder ratios /Nosnosc graniczna rozciaganych pretow z karami katowymi o dowolnych wymiarach czesci nad karami/.  
09 p1612 A69-21499
- MIATT, B. B.**  
Pre-stressing effects in band-reinforced pressure vessels.  
20 p3621 A69-37064
- MICHA, D. A.**  
Optical potentials in molecular collisions.  
08 p1358 A69-21008
- MICHAEL, D. H.**  
Surface instability of a dielectric fluid in an electric field.  
04 p0638 A69-15193  
Electrohydrodynamic instability of a cylindrical viscous jet.  
12 p2136 A69-26403  
Electrohydrodynamic instability of a cylindrical viscous jet.  
16 p2773 A69-32570
- MICHAEL, G. A.**  
Spectrum of the 6 March 1968 solar radio burst.  
01 p0148 A69-10054  
Spectral considerations of microwave solar bursts.  
24 p4372 A69-43616
- MICHAEL, W. H., JR.**  
Results on the mass and the gravitational field of the moon as determined from dynamics of lunar satellites.  
15 p2699 A69-31405
- MICHAELSEN, O. E.**  
Aerodynamic research related to propeller driven V/STOL aircraft.  
23 p4062 A69-41375
- MICHAELSON, S. M.**  
Thermal regulation in X-irradiated dogs subjected to heat stress.  
09 p1445 A69-22548



- Microwave hazards evaluation - Concepts and criteria.  
[MPI PAPER DA-6] 22 p3889 A69-40104
- MICHARD, G.**  
Study of the distribution and abundance of transition elements in the earth's crust compared to the rare earths /Etude de la distribution et de l'abondance des elements de transition dans l'écorce terrestre, comparée à celles des terres rares/.  
08 p1310 A69-20943
- MICHAUD, A.**  
Preliminary data on a limitation of the use of an oxygen-hydrogen mixture for deep submersion to the saturation point /Premieres donnees sur une limitation de l'utilisation du melange oxygene-hydrogene pour la plongee profonde a saturation/.  
24 p4262 A69-43025
- MICHEEL, L. J.**  
Threshold logic for LSI.  
17 p2943 A69-34122
- MICHEL-LEVY, M. C.**  
Mineralogical study of the Lance chondrite C III /Etude mineralogique de la chondrite C III de lance/.  
19 p3413 A69-36110
- MICHEL, A. N.**  
Necessary conditions for a given mode of oscillations in delta modulated control systems.  
13 p2221 A69-27962
- MICHEL, E. L.**  
Carbon dioxide build-up characteristics in spacesuits.  
21 p3665 A69-39170
- MICHEL, F. C.**  
Lunar wake at large distances.  
03 p0514 A69-14007  
Analysis of the slowing-down rate of NP 0532.  
18 p3191 A69-34317  
Hydromagnetic plasma acceleration by rapidly rotating astrophysical objects.  
20 p3598 A69-37419  
Pulsar emission mechanism.  
20 p3604 A69-37572
- MICHEL, H.**  
Structure of the omega-phase of titanium-rich titanium/iron alloys quenched in water at 20 deg C and tempered /Structure de la phase omega des alliages titane-fer riches en titane trempes dans l'eau a 20 deg C et revenu/.  
03 p0451 A69-13999
- MICHEL, J.**  
Changes of the deformation process during the transition from dynamic to static loading /Zmeny deformacneho procesu pri prechode z dynamickeho na staticky sposob zatavovania/.  
22 p4047 A69-41081
- MICHEL, J.-M.**  
Similarity of ventilated-cavity flows /Similitude des écoulements a cavites ventilees/.  
10 p1680 A69-23788
- MICHEL, K. W.**  
Investigation of the flow relations in the comas of dust comets /Versuche zu den Stromungsverhaeltnissen in der Koma von Staubkometen/.  
06 p1000 A69-16984  
Simulation of cometary two-phase flow with evaporation.  
10 p1674 A69-23686
- MICHEL, P.**  
Investigation of the positive column of a neon discharge at medium gas pressures. I, II /Untersuchung der positiven Saule der Neonentladung bei mittleren Gasdruecken. I, II/.  
10 p1740 A69-23723
- MICHEL, R.**  
Turbulent boundary layer velocity distributions in a uniform or accelerated compressible flow /Distributions de vitesses des couches limites turbulentes en écoulement compressible, uniforme ou accelere/.  
[ONERA-TP-693] 11 p1867 A69-24752
- MICHEL, P. L.**  
The empirical and analytic modeling of the role of the propellant in ignition.  
[WSCIPAPER 68-34] 07 p1202 A69-18364
- MICHELINI, R.**  
Mathematical model of the attitude dynamics of a nonrigid gyroscopic satellite /Modele mathematique de la dynamique d'attitude d'un satellite gyroscopique non rigide/.  
17 p3048 A69-33239

- MICHELINI, R. C.**  
Optimum geometrical design of multipad externally pressurized journal bearings.  
07 p1141 A69-19439  
Design and dynamic characteristics investigation of a high performances spherical bearing.  
16 p2793 A69-31728  
A simplified analytical approach and analog simulation results for the attitude perturbed dynamics of a spinning satellite.  
20 p3618 A69-37912
- MICHELSON, I.**  
Fluidic jet impingement - Analytical solution and novel physical characteristic.  
21 p3691 A69-38551
- MICHIE, R. W.**  
The structure of dwarf elliptical galaxies of the local group.  
18 p3194 A69-34424
- MICHLIN, S. G.**  
Application of electronic computers to the solution of certain three-dimensional problems of elasticity theory /Anwendung elektronischer Rechenmaschinen zur Loesung einiger dreidimensionaler Aufgaben der Elastizitaetstheorie/.  
03 p0527 A69-13743
- MICHON, J. A.**  
A model of some temporal relations in human behavior.  
12 p2025 A69-27084
- MICHON, M.**  
A subnanosecond risetime electro-optic shutter for use in a laser system.  
09 p1493 A69-21422  
Passive transverse mode locking in a confocal Nd super 3 super plus glass laser.  
12 p2107 A69-26327
- MICKELSEN, W. R.**  
Theoretical analyses of electrothermal thrusters with supersonic heat addition.  
[AIAA PAPER 69-286] 09 p1567 A69-21267  
Status of electric propulsion.  
[AIAA PAPER 69-497] 16 p2838 A69-32655
- MICKELSON, J. C.**  
The electrodialysis of Anabaena flos-aquae A-37.  
23 p4079 A69-41387
- MICKELWAIT, A. B.**  
Development and management of the interplanetary Pioneer spacecraft.  
06 p1017 A69-17605
- MICKEY, W. V.**  
Seismic waves generated by sonic booms - A geoaoustical problem.  
01 p0077 A69-11281
- MICOCCHI, A. J.**  
Astronaut safety features for Apollo lunar surface experiments package.  
[SAE PAPER 680721] 03 p0433 A69-13448
- MICZKA, J.**  
Operational efficiency of a tridimensional diffuser in relation to its geometric parameters /Skuteczność działania dyfuzora trójwymiarowego w zależności od jego parametrów geometrycznych/.  
24 p4243 A69-42560
- MIDDLEBROOK, D. G.**  
Synthesis of an aeronautical service satellite system.  
03 p0464 A69-13235
- MIDDLETON, C. R.**  
Noise in collision-free alkali metal plasmas.  
14 p2499 A69-29849
- MIDGLEY, J. E.**  
Induced magnetosphere of Venus.  
21 p3794 A69-38381
- MIDGLEY, P.**  
The pre-straining of stainless steel En58b at room and cryogenic temperatures and the effect on tensile properties at these temperatures.  
01 p0099 A69-11151  
Structural materials for use at cryogenic temperatures.  
23 p4177 A69-42159
- MIDWINTER, J. E.**  
Parametric infrared image converters.  
[IEEE PAPER B-3] 07 p1150 A69-19048  
Note on up-converter noise performance.  
12 p2029 A69-26329

- MIDZUNO, Y.**  
Instability of a plasma drifting across a magnetic field.  
02 p0286 A69-11830
- MIECZYSLAW, W.**  
Haemodynamic and bioelectric disturbances in striated muscles of rats subjected to associated influence of acceleration forces and hypokinesia.  
24 p4268 A69-43409
- MIEDANER, T. L.**  
A computer-controlled photometric telescope.  
04 p0602 A69-15380
- MIELE, A.**  
Optimum transversal contour of a lifting body at hypersonic speeds.  
06 p0861 A69-17640  
On the theory of optimum aerodynamic shapes.  
08 p1253 A69-21127  
Maximum lift-to-drag ratio airfoils at moderate supersonic speeds.  
13 p2199 A69-28214  
The restoration of constraints in holonomic and non-holonomic problems.  
19 p3361 A69-36758  
Drag minimization as the extremization of products of powers of integrals.  
19 p3242 A69-36800
- MIENZ, K. D.**  
Gas lasers and conventional sources in interferometry.  
11 p1881 A69-24599
- MIES, F. H.**  
Resonant scattering theory of association reactions and unimolecular decomposition. I, II.  
22 p3986 A69-40724
- MIESCHER, E.**  
Absorption spectrum of the NO molecule. IX - The structure of the f complexes, the ionization potential of NO, and the quadrupole moment of NO super plus.  
22 p3984 A69-40477
- MIESZKUC, B. J.**  
Resistance to experimental bacterial pneumonia and influenza infection in space cabin environment.  
07 p1067 A69-19432  
Resistance to infection in space-cabin environment.  
23 p4108 A69-41832
- MIFFLIN, R.**  
Calculations of the effect of roughness on microwave emissivity with application to the moon and Venus.  
02 p0207 A69-12017
- MIGDAL, D.**  
Time-dependent calculations for transonic nozzle flow.  
09 p1431 A69-21974  
An experimental evaluation of exhaust nozzle/airframe interference.  
[AIAA PAPER 69-430] 16 p2733 A69-32730
- MIGNOT, L.**  
A new distribution system for television driving signals - The unique base signal /Un nouveau systeme de distribution des signaux de base en television - Le S.B.U./.  
24 p4282 A69-42745
- MIGULIN, A. V.**  
Determination of the temperature of the subjacent surface from airborne measurements of the outgoing radiation in the interval of 10 to 12 mu.  
03 p0424 A69-13933  
Thermal self-actions of laser beams.  
[IEEE PAPER E-12] 05 p0774 A69-16311
- MIGUNOV, V. M.**  
Measurement of the irregular component of the satellite-signal phase lead due to ionospheric inhomogeneities by the method of coherent frequencies /Izmerenie metodom kogerentnykh chastot nereguliarnoi sostavliashchei nabega fazy signalov ISZ za schet neodnorodnosti ionosfery/.  
06 p0890 A69-17799  
Measurement of effects arising in the ionosphere on the basis of radio waves propagating from satellites /Izmerenie effektiv, vznikaiushchikh v ionosfere pri rasprostraneni radiovoln ot iskusstvennykh sputnikov zemli/.  
20 p3486 A69-37027
- MIHAIL, A.**  
Note on the subject of icing of airframes /Note au sujet du givrage des aeronefs/.  
02 p0192 A69-11889  
Reliability in air and space travel /Die Zuverlaessigkeit in der Luft- und Raumfahrt/.  
04 p0606 A69-14803

- Reliability in aeronautics and astronautics. I /La fiabilité en aéronautique et en astronautique. I/.  
07 p1053 A69-19287
- Aeronautical and astronautical reliability. II /La fiabilité en aéronautique et en astronautique. II/.  
10 p1700 A69-23839
- MIHAILESCU, M.**  
The differential constitutive law in the case of plane waves.  
08 p1415 A69-20662
- MIHAILOV, V. P.**  
A boundary value problem for a system of Navier-Stokes equations.  
15 p2645 A69-31249
- MIHALAS, D.**  
Non-LTE model atmospheres. I - Radiative equilibrium models with Lyman-alpha.  
13 p2338 A69-27560
- Non-LTE model atmospheres. II - Effects of Balmer alpha.  
15 p2693 A69-30777
- MIHALISIN, J. R.**  
Sigma - Its occurrence, effect, and control in nickel-base superalloys.  
06 p0942 A69-17223
- Coherency strains in gamma hardened nickel alloys.  
20 p3558 A69-36963
- MIHALOV, J. D.**  
The cislunar geomagnetic tail gradient in 1967.  
01 p0077 A69-11237
- The geomagnetic tail - Topology, reconnection and interaction with the moon.  
07 p1128 A69-19365
- MHD Rankine-Hugoniot equations applied to earth's bow shock.  
23 p4222 A69-42417
- MIHUC, W. V.**  
An approach to diagnostics for a digital data handling system.  
[AIAA PAPER 69-967] 22 p3906 A69-40348
- MIIDA, Y.**  
A study of an ionizing shock wave into a transverse magnetic field.  
22 p3992 A69-41176
- MIKAELIAN, A. L.**  
Effects associated with generation of giant laser pulses /Effekty pri generatsii gigantskikh impul'sov v opticheskikh kvantovykh generatorakh/.  
01 p0091 A69-10792
- A case of accurate calculation of Q-switched lasers /Ob odnom sluchae strogogo rascheta opticheskogo generatsionnogo modulirovannoi dobrotnosti'iu/.  
01 p0092 A69-10888
- Transmission of highly coherent ruby-laser radiation through an optical amplifier /O prokhozhdennii vysokokogerentnogo izlucheniia rubinovogo lazera cherez opticheskii usilitel'/.  
02 p0255 A69-11608
- Realization of single-mode operation for a CO sub 2 laser /O realizatsii odnomodovogo rezhima v opticheskoi generatsionnoi CO sub 2/.  
07 p1156 A69-19157
- Feasibility of using holographic techniques for creating new types of storage devices /Vozmozhnosti primeneniia metodovologografii dlia sozdaniia novykh tipov zapominaushchikh ustroistv/.  
07 p1133 A69-19158
- Decrease in the divergence of a laser beam during passage through an optical amplifier /Ob umen'shenii rashodimosti lucha lazera pri prokhozhdennii cherez opticheskii usilitel'/.  
08 p1326 A69-20542
- Holograms on photochromic films.  
11 p1881 A69-24631
- Passage of highly coherent ruby laser radiation through an optical amplifier.  
11 p1895 A69-24715
- One case of a rigorous analysis of a modulated- Q laser.  
12 p2109 A69-26652
- Effects accompanying generation of giant laser pulses.  
20 p3555 A69-38010
- MIKAELIAN, G. Z.**  
Stability of laminar orthotropic cylindrical shells under the action of axisymmetric loads /Ustoichivost' sloistykh ortotropnykh tsilindricheskikh obolochek pod deistviem osesimmetrichnykh nagruzok/.  
09 p1613 A69-21685
- MIKAELIAN, H. H.**  
Adaptation to rearranged ear-hand coordination.  
21 p3663 A69-38899
- MIKAELIANE, A. L.**  
Holograms on photochromic films.  
[IEEE PAPER F-1] 07 p1133 A69-19053
- On the quasi-classical theory of a Q-switched TW-laser.  
[IEEE PAPER Q-5] 07 p1154 A69-19077
- MIKALKIVICHUS, M. P.**  
Photoconductivity of Sb sub 2 S sub 3 single crystals in the infrared spectral range /Fotoprovodimost' monokristallov Sb sub 2 S sub 3 v infrakrasnoi oblasti/.  
22 p3994 A69-41042
- MIKAMI, H.**  
Separation of gas mixture in an axisymmetric supersonic jet.  
06 p0911 A69-17553
- Two-dimensional supersonic jet near sonic nozzle exit.  
22 p3860 A69-40920
- MIKASHVIDZE, G. N.**  
Analysis of heuristic experiments concerning the planning and forecasting of scientific research /Analiz evristicheskikh eksperimentov po planirovaniu i prognozirovaniu nauchnykh issledovaniy/.  
15 p2720 A69-30969
- MIKATARIAN, R. R.**  
Effects of altitude on radar attenuation in nonequilibrium afterburning rocket exhaust plumes.  
04 p0685 A69-14730
- MIKELADZE, M. SH.**  
The purposes and problems of the technical theory of thin plastic shells.  
11 p1978 A69-24807
- Theory of thin brittle-plastic shells /K teorii tonkikh khrupko-plastichnykh obolochek/.  
18 p3224 A69-35327
- MIKELADZE, SH. E.**  
Numerical solution of parameter-dependent nonlinear differential equations /O chislennom reshenii nelineinykh differentsial'nykh uravnenii, zavisiaschikh ot parametrov/.  
10 p1718 A69-22846
- MIKELSON, A. E.**  
Study of electromagnetic methods for vibrational treatment of metals during the crystallization process /Issledovanie elektromagnitnykh metodov vibratsionnoi obrabotki metallov v protsesse kristallizatsii/.  
14 p2456 A69-29916
- MIKERINA, N. V.**  
Method of determining the S sub q variation and the system of S sub q currents in the ionosphere.  
03 p0424 A69-13541
- Velocity and width of interplanetary plasma flows at various meridional distances from the centers of active regions.  
12 p2149 A69-26698
- Tangential discontinuity in the solar wind and the ground magnetic disturbance /Tangentsial'nyi razryv v solnechnom vetre i nazemnoe magnitnoe voz-mushchenie/.  
14 p2512 A69-29041
- Characteristic features of the magnetic storm of September 14, 1966, according to observations in the tail of the magnetosphere and on the surface of the earth /Osobennosti magnitnoi buri 14.IX. 1966 g. po nabludeniiam v khvoste magnitosfery i na poverkhnosti zemli/.  
14 p2438 A69-29078
- Rate of magnetic field variations during very strong magnetic storms at middle and low latitudes /Skorost' variatsii magnitnogo polia vo vremia ochen' bol'shikh magnitnykh bur' v srednikh i nizkikh shirotakh/.  
20 p3520 A69-37037
- MIKAELIAN, B. M.**  
Free convection at a vertical wall at large Prandtl numbers /Svobodnaia konveksiia u vertikal'noi stenki pri bol'shikh chislakh Prandtlia/.  
21 p3854 A69-39843
- Distribution of an admixture substance in a nonisothermal semibounded jet /O raspredelenii primesi veshchestva v neizotermichesko polugranichennoi strue/.  
21 p3854 A69-39844
- MIKAELIAN, V. M.**  
Some properties of tellurium-doped silicon.  
04 p0644 A69-15267
- MIKHAIL, E. M.**  
Principles and applications of analytical mirror photogrammetry.  
01 p0077 A69-10025
- Horizontal aerotriangulation by independent models using horizon camera photography and B-8.  
06 p0925 A69-17468
- Use of relative control information in analytical extraterrestrial photography.  
18 p3133 A69-34335
- MIKHAIL, M. L.**  
Buckling of folded-plate structures.  
15 p2709 A69-30679
- MIKHAILENKO, L. I.**  
Measurement of the temperature of moving droplets /Izmerenie temperatury dvizhushchikhsia kapel'/.  
04 p0688 A69-15423
- MIKHAILOV, A. A.**  
Exploring the moon.  
05 p0820 A69-15835
- Studies of the moon /Issledovaniia lunny/.  
13 p2336 A69-27353
- MIKHAILOV, A. P.**  
Flutter of three-layer cylindrical shells.  
05 p0843 A69-16683
- MIKHAILOV, G. A.**  
A principle for optimizing calculations by the Monte Carlo method /Ob odnom printsipe optimizatsii raschetov po metodu Monte- Karlo/.  
01 p0105 A69-10726
- MIKHAILOV, G. S.**  
Possibility of vacuum "restoration" in the laser deposition of a titanium-magnesium-oxide film absorber of the energy of ultrahigh-frequency oscillations /Pro mozhliivost' "vidnovlenniia" vakuumu pri lazernomu rozporoshenni plivki oksidnogo titano-magniiovogo poglinacha energii nadvysokochastotnykh kolivan'/.  
21 p3735 A69-38590
- MIKHAILOV, I. D.**  
Solution of the kinetic equation for semiconductors with a narrow conductivity band in a strong electric field.  
12 p2144 A69-26673
- MIKHAILOV, I. U. A.**  
Heat- and mass exchange in the magnetic field /Tepl-o i massoobmen v magnitnom pole/.  
14 p2500 A69-29901
- MIKHAILOV, I. U. IA.**  
Stability of certain numerical schemes in the three-dimensional method of characteristics /K ustoiichivosti nekotorykh chislennykh skhem trekhmernogo metoda kharakteristik/.  
01 p0060 A69-10729
- MIKHAILOV, I. U. V.**  
Investigation of loads and cutting rates during the boring of 0Kh10N20T2 chromium nickel steel /Issledovanie sil i skorosti rezaniia pri rastachivanii khromonikelevoi stali 0Kh10N20T2/.  
21 p3731 A69-38878
- MIKHAILOV, L. N.**  
Investigations of the physical and mechanical properties of the moon's soil from Luna 13.  
18 p3113 A69-34239
- MIKHAILOV, N. N.**  
Use of helium at a supercritical pressure for cooling superconducting systems under spaceflight conditions.  
04 p0585 A69-15407
- Superconductivity of alloys of the system Nb sub 3 Al-Nb sub 3 Ge.  
13 p2316 A69-27659
- MIKHAILOV, N. V.**  
Stress fields of dead-end microcracks.  
04 p0674 A69-14548
- MIKHAILOV, S. M.**  
Thermionic emission of /100/ faces of tungsten, rhenium, tantalum, and molybdenum single crystals /Termoelektronnaia emissiia granei /100/ monokristallov splavov vol'frama, reniia, tantala i molibdena/.  
17 p3015 A69-36360
- MIKHAILOV, V. G.**  
Obtaining population inversion for molecules in a supersonic binary-gas flow in a Laval nozzle /Poluchenie invernoi naselennosti molekul v sverkhzvukovom potoke binarnogo gaza v sople Lavalia/.  
07 p1118 A69-18540
- Molecular population inversion in the supersonic flow of a binary gas in a Laval nozzle.  
21 p3693 A69-38692
- MIKHAILOV, V. I.**  
Some experiments on the use of the least- moduli method in processing orbital data.  
10 p1791 A69-24193
- MIKHAILOV, V. M.**  
The effect of hypokinesia on the human blood circulation.  
10 p1646 A69-23584



## MIKHAILOV, V. N.

Detection of coherent light fluxes /Registratsiia kogerentnykh svetovykh potokov/.  
09 p1515 A69-21438

Application of the Volterra method to the calculation of the interference between bodies of rotation and wings in supersonic flow /Primenenie metoda Vol'terra k raschetu interferentsii mezhdu telami vrashcheniia i kryl'iami v sverkhzvukovom potoke/.  
11 p1820 A69-25476

## MIKHAILOV, V. P.

Mixed boundary-value problem for a system of Navier-Stokes equations /O smeshannoi kraevoi zadache dlia sistemy uravnenii Nav'e-Stoksa/.  
02 p0272 A69-12223

A boundary-value problem for the system of Navier-Stokes equations /Ob odnoi granichnoi zadache dlia sistemy uravnenii Nav'e-Stoksa/.  
08 p1344 A69-21156

A mixed boundary-value problem for the Navier-Stokes equations.  
23 p4183 A69-41974

## MIKHAILOV, V. V.

Method of designing supersonic nozzles with allowance for the effect of viscosity /Metod rascheta sverkhzvukovykh sopel s ucheto vliianiia вязкости/.  
11 p1820 A69-25473

## MIKHAILOVA, E. D.

Specialized machine for expanding matrix determinants /Spetsializirovannai mashina dlia raskrytiia opredelitelei matrits/.  
09 p1460 A69-21782

## MIKHAILOVA, G. A.

Energy spectra of lightning discharges at superlow frequencies according to a harmonic analysis of atmospherics /Energeticheskie spektry molniyevykh razriadov na sverkhznizkikh chastotakh po dannym garmonicheskogo analiza atmosferikov/.  
14 p2437 A69-29076

## MIKHAILOVA, G. V.

Formation of gaseous products during laser action on polymethylmethacrylate /Obrazovanie gazoobraznykh produktov pri lazernom vozdetsii na polimetilmetakrilate/.  
02 p0270 A69-11980

## MIKHAILOVA, L. I.

Experimental determination of the pumping energy absorbed by an active element of neodymium glass /Eksperimental'noe opredelenie energii nakachki, pogloshchaemoi v aktivnom elemente iz neodimovogo stekla/.  
15 p2635 A69-31104

## MIKHAILOVA, T. N.

Two-photon excitation of luminescence in ruby crystals.  
15 p2634 A69-30731

## MIKHAILOVA, T. V.

Thermal contact resistance in cylindrical elements in thermionic energy converters.  
14 p2400 A69-29216

## MIKHAILOVSKII, E. I.

Separation of boundary conditions in linear shell theory.  
19 p3443 A69-36781

## MIKHAILOVSKII, G. A.

Dynamic processes accompanied by mass transfer. II.  
04 p0684 A69-14355

## MIKHAILOVSKII, G. P.

Combined effect of two-month hypokinesia and acceleration on the cardiovascular system.  
02 p0197 A69-11495

General resistance in 62-day periods of hypokinesia with exposure to acceleration.  
02 p0198 A69-11513

## MIKHAILOVSKII, I. M.

A study of the structure of the boundaries of grains in tungsten ion with field-emission microscope.  
08 p1329 A69-19943

## MIKHAILOVSKII, R. S.

Temperature field of a plate placed in a solidifying gas /O temperaturnom pole plastyiny, pomeschennoi v otverdevshii gaz/.  
16 p2878 A69-31957

Experimental determination of the heat conductivity of materials in vacuum under various loads and at low temperatures /Eksperimental'noe opredelenie teploprovodnosti materialov v vakuumе pri razlichnykh nagruzkakh i nizkikh temperaturakh/.  
21 p3721 A69-38639

## MIKHALEVSKII, V. D.

Measurement of CO sub 2 temperature and concentration behind a shock wave from the infrared bands /Izmerenie temperatury i kontsentratsii CO sub 2 za udarnoi volnoi po infrakrasnym polosam/.  
11 p1873 A69-25226

## MIKHATSKA, N. A.

The effect of plasma density on the measurement of electron temperature by the intensity ratio of helium spectral lines.  
05 p0804 A69-16376

## MIKHEEV, A. A.

Study of the properties of maraging steels with increased cobalt and molybdenum content /Issledovanie svoistv martensitno stareushchikh staley s povyshennym soderzhaniiem kobal'ta i molibdena/.  
01 p0098 A69-10731

## MIKHEEV, I. U. S.

Thermal contact resistance in cylindrical elements in thermionic energy converters.  
14 p2400 A69-29216

## MIKHEEV, R.

Method of flight investigation of statistical characteristics of time-variable stresses in helicopter structures.  
05 p0767 A69-16775

## MIKHEEV, S. P.

Preliminary results of a search for fractionally-charged particles in the cosmic rays at sea level.  
13 p2333 A69-28425

## MIKHEEV, V. A.

Investigation of the operational properties of esters of trimethylol propane as synthetic lubricating oils /Issledovanie ekspluatatsionnykh svoistv efirov trimetilol-propana v kachestve sinteticheskikh smazochnykh masel/.  
12 p2103 A69-27090

## MIKHEEV, V. S.

Basic properties of the AT-3 titanium alloy and prospects of its application /Osnovnye svoystva titanovogo splava AT-3 i perspektivy ego primeneniia/.  
07 p1163 A69-18782

## MIKHEEV, V. V.

Soil-density meter-penetrator of the automatic lunar station Luna-13.  
03 p0430 A69-13424

Investigations of the physical and mechanical properties of the moon's soil from Luna 13.  
18 p3113 A69-34239

## MIKHEEVA, I. V.

Investigation of the meteoric dust of the Tunguska meteorite /Issledovanie meteornoi pyli tungusskogo meteorita/.  
01 p0160 A69-11386

## MIKHEL, V. M.

Estimation of the errors of observations of pilot balloons from one point /K voprosu ob otsenke oshibok metoda sharov-pilotov, nabliudaiemykh s odnogo punkta/.  
20 p3572 A69-37699

## MIKHENKO, G. A.

Line shape and the through width of the gain curve of an He-Ne laser at the wavelength of 0.63 mu /Forma linii i shirina provala v krivoi usileniia He-Ne lazera na dline volny 0.63 mk/.  
13 p2272 A69-28115

## MIKHLIN, S. G.

On Cosserat functions.  
07 p1173 A69-18499

## MIKHENDO, G. A.

Effect of collisions on certain characteristics of the He-Ne laser.  
14 p2456 A69-28756

## MIKHENKO, G. A.

Influence of collisions on certain characteristics of a He-Ne laser /Vliianie soudarenii na nekotorye kharakteristiki He-Ne-lazera/.  
04 p0610 A69-14383

## MIKHNEVICH, V. V.

Scientific and practical aspects of a study of the structure and variation of the upper atmosphere of the earth /Nauchnye i prakticheskie aspekty issledovaniia struktury i variatsii verkhnei atmosfery zemli/.  
[UN PAPER 68-05755] 06 p0917 A69-17042

A model of the Venusian atmosphere based on the results of direct temperature and density measurements /Model' atmosfery Venery po rezul'tatam priamykh izmerenii temperatury i plotnosti/.  
13 p2345 A69-27688

Scientific and practical aspects of investigations into the structure and parameter variations of the upper earth's atmosphere /Nauchnye i prakticheskie aspekty issledovaniia struktury i variatsii parametrov verkhnei atmosfery zemli/.  
20 p3519 A69-36983

## MIKHNOV, S. A.

Effect of standing waves on the spectral and power characteristics of a laser with plane mirrors /Vliianie stoiachikh voln na spektral'nye i energeticheskie kharakteristiki lazera s ploskimi zerkalami/.  
07 p1148 A69-18800

Effect of stationary waves on spectral and energy characteristics of a laser with plane mirrors.  
21 p3736 A69-38945

## MIKI, C.

Diversity reception in VHF space communications.  
06 p0889 A69-17653

Diversity reception in VHF space communications.  
10 p1775 A69-23191

## MIKIC, B. B.

A new correlation of pool boiling data including the effect of heating surface characteristics. [ASME PAPER 68-WA/HT-22]  
05 p0847 A69-16125

Thermal contact conductance.  
13 p2378 A69-28338

## MIKIROV, A. E.

Estimation of the dust component of the upper atmosphere by the twilight method /Otsenka pylevoi sostavliashchei verkhnei atmosfery sumerechnym metodom/.  
01 p0075 A69-11191

## MIKISHEV, G. N.

Methods of investigating the dynamics of launch vehicles and space vehicles, and the possibilities of using these methods in other engineering fields /O metodakh issledovaniia dinamiki raket-nositeli i kosmicheskikh apparatov i vozmozhnosti ispol'zovaniia etikh metodov v drugih oblastiakh tekhniki/.  
[UN PAPER 68-95622] 06 p1013 A69-17051

Dynamics of a Solid Body with Cavities Partially Filled by Liquid /Dinamika tverdogo tela s polostiami, chastichno zapolnennymi zhidkost'iu/.  
14 p2530 A69-29815

## MIKITISHIN, S. I.

Long-time strength of polymethyl methacrylate.  
09 p1528 A69-21853

## MIKLOSI, L.

Microminiature five-point measuring head for measuring semiconductor films /Mikrominiaturne oetues meroeefe felvezetoe retegek meresere/.  
12 p2099 A69-27104

## MIKLOWITZ, J.

Transient non-axisymmetric wave propagation in an infinite isotropic elastic plate.  
06 p1024 A69-17509

Shadow-zone response in the diffraction of a plane compressional pulse by a circular cavity.  
13 p2368 A69-28347

## MIKOLAICHUK, A. G.

Production of epitaxial films of tin chalcogenides.  
02 p0298 A69-12049

## MIKOLAJCZAK, A. A.

Flow through cascades of slotted compressor blades. [ASME PAPER 69-GT-6]  
09 p1432 A69-22507

## MIKOLAS, M.

Use of recent operator methods in the engineering sciences /Ueber die Benutzung neuerer Operatormethoden in den Ingenieurwissenschaften/.  
03 p0457 A69-13744

## MIKOSHIBA, K.

Leaky waveguide - Te sub 01 circular waveguide with periodic array of circular apertures.  
13 p2233 A69-28063

Helix leaky waveguide.  
14 p2422 A69-29752

## MIKOSHIBA, N.

A criterion for acoustoelectric current oscillation in semiconductors.  
05 p0807 A69-15956

## MIKOTINA, N. F.

Surface alloying of ZhS6-K alloy by three elements /Poverkhnostnoe legirovanie splava ZhS6-K tremia elementami/.  
19 p3345 A69-36157

Heat resistance of ZhS6-K alloy subjected to multicomponent diffusion saturation /Zharostoikost' splava ZhS6-K posle mnogokomponentnogo diffuzionogo nasyshcheniia/.  
19 p3345 A69-36159

- MIKULA, J.**  
Signal flow graphs derived from matrix methods of circuit analysis /Grafy signalovych tokov odvodené z maticovych metod analyzy obvodov/.  
09 p1475 A69-22600
- MIKULAS, M. M., JR.**  
Development status of attached inflatable decelerators.  
[AIAA PAPER 68-929] 21 p3647 A69-39015
- MIKULASEK, Z.**  
Distribution of Wolf-Rayet stars in the Galaxy, and their evolution.  
23 p4208 A69-41288
- MIKULKA, S. W.**  
Electrical analogs for optical systems. I.  
24 p4286 A69-42619
- MIKUNI, Y.**  
Low-noise antenna.  
05 p0728 A69-15669
- MIKUSHKIN, G. K.**  
Circadian rhythms and their significance for space biology and medicine /Tsirkadnye ritmy i ikh znachenie dlia kosmicheskoi biologii i meditsiny/.  
13 p2211 A69-28614
- MILACEK, L. H.**  
Orientation dependence of pitting and blistering in proton-irradiated aluminum crystals.  
04 p0640 A69-14451
- MILANO, L.**  
Fluctuations of the dark current of an 1P21 photomultiplier cell /Sulle fluttuazioni della corrente di oscurita' di una cellula fotomoltiplicatrice 1P21/.  
20 p3599 A69-37470
- MILANTIEV, V. P.**  
On the viscosity of a collisionless plasma in a magnetic field.  
08 p1365 A69-20522
- MILDENBERGER, O.**  
A series-method for the calculation of the impulse response of time-varying linear systems /Eine Reihenmethode zur Berechnung der Impulsantwort linearer zeitvarianter Systeme/.  
09 p1459 A69-22580
- MILDER, D. M.**  
Stability of collisionless gravitating systems.  
02 p0323 A69-12275
- MILDER, N. L.**  
A survey and evaluation of research on the discharge chamber plasma of a Kaufman thruster.  
[AIAA PAPER 69-494] 16 p2845 A69-32735
- MILENIN, V. M.**  
On the Langmuir paradox.  
06 p0960 A69-16922
- MILES, D. O.**  
Liquid viscoelasticity under rare-gas infusion.  
05 p0796 A69-15912
- MILES, J. W.**  
The Cauchy-Poisson problem for a viscous liquid.  
03 p0414 A69-13015  
The lee-wave regime for a slender body in a rotating flow.  
13 p2248 A69-28170
- MILES, M. H.**  
Electrochemical oxidation of fuels in liquid ammonia.  
[ECS PAPER 212] 03 p0382 A69-13857
- MILES, P. A.**  
A high-power CO sub 2 laser radar transmitter.  
[IEEE PAPER J-1] 07 p1152 A69-19064
- MILEWSKI, J.**  
Experiments on a striated-flow induction synchronous MHD generator.  
10 p1638 A69-23487
- MILEWSKI, J. V.**  
"Whiskerizing" - A physical and chemical change to the interface of graphite fibers.  
08 p1341 A69-20511  
Processing of resin matrix composites of whiskerized graphite fiber.  
09 p1511 A69-22360
- MILEY, G. H.**  
Characteristics of a low-voltage helium-neon laser.  
10 p1704 A69-23652
- MILGRAM, J. H.**  
The motion of a fluid in a cylindrical container with a free surface following vertical impact.  
21 p3692 A69-38684
- MILHORN, H. T., JR.**  
A sampled-data regulator for maintaining a constant alveolar CO sub 2.  
07 p1072 A69-19480  
A theoretical study of pulmonary capillary gas exchange and venous admixture.  
07 p1068 A69-19482  
Steady-state analysis of the human respiratory system.  
24 p4276 A69-43272
- MILIUTIN, E. N.**  
Ionospheric Studies, Mezhdudomstvennyi Geofizicheskii Komitet, All-Union Conference, Alma-Ata, Kazakh SSR, September 21-28, 1965, Reports /Ionosfernye Issledovaniia, Mezhdudomstvennyi Geofizicheskii Komitet, Vsesoiuznoe Soveshchanie, Alma-Ata, Kazakh SSR, September 21-28, 1965, Doklady/.  
17 p2965 A69-33977
- MILJAN, I.**  
The Expanded Describing Function used in Non-linear Control Systems with Multiplication Points /Die erweiterte Beschreibungsfunktion angewandt auf nichtlineare Regelsysteme mit Multiplikationsstellen/.  
01 p0054 A69-11359
- MILKIE, R. W.**  
Analysis criteria for onboard test design requirements.  
[AIAA PAPER 69-306] 09 p1434 A69-22389
- MILL, T.**  
The photooxidation of t-butyl iodide at low temperatures.  
07 p1073 A69-18375
- MILLAR, R. F.**  
On the Rayleigh assumption in scattering by a periodic surface.  
15 p2652 A69-30673
- MILLARD, J. P.**  
Studies related to satellite thermal control - Measurements of earth-reflected sunlight and stability of thermal-control coatings.  
09 p1579 A69-22174  
A comparison of infrared-emittance measurements and measurement techniques.  
23 p4164 A69-41633
- MILLARD, W. A.**  
A thin strap support for the measurement of the dynamic stability characteristics of high fineness ratio wind tunnel models.  
[AIAA PAPER 69-350] 13 p2243 A69-28284
- MILLARD, W. W.**  
Variations of spinal alignment in egress systems and their effect.  
23 p4102 A69-41681
- MILLEA, M. F.**  
Schottky barriers on GaAs.  
10 p1745 A69-23358
- MILLER, A.**  
Measurements of the time-averaged potentials in low-pressure, RF discharges using an ion-beam probe.  
02 p0287 A69-11838
- MILLER, A. J.**  
On the interannual variability of the tropospheric energy cycle and the quasi-biennial oscillation.  
07 p1129 A69-19628  
A note on the variability of temperature as indicated by rocketsonde thermistors.  
09 p1494 A69-21644  
Proposed indices characterizing stratospheric circulation and temperature fields.  
22 p3977 A69-39929
- MILLER, B.**  
Normal and transverse ionizing shock studies.  
18 p3180 A69-34454
- MILLER, B. A.**  
A tunnel-diode harmonic-mode mixer.  
14 p2424 A69-29763
- MILLER, C. D.**  
Improvement of spectral baseline stability for a time-of-flight mass spectrometer operated at elevated pressures.  
10 p1693 A69-23345
- MILLER, C. E.**  
Nuclear spin-lattice relaxation in very dilute solutions of orthohydrogen in parahydrogen.  
06 p0961 A69-17141  
Filamentary conduction in semiconducting glass diodes.  
16 p2760 A69-32017
- MILLER, H.**  
Hyperfine spectrum of NaCl by molecular-beam electric resonance.  
16 p2815 A69-32794
- MILLER, C. H.**  
Development of initiating and igniferous materials for use in extreme conditions.  
10 p1750 A69-23015  
Active antenna impedance matching network.  
17 p2943 A69-34131
- MILLER, C. K.**  
An analog device for computing ten minute peak and average wind speed.  
19 p3312 A69-36278
- MILLER, C. O.**  
State of the art in air safety.  
06 p1040 A69-16837  
The bureau of Aviation Safety and the accident prevention system.  
22 p3867 A69-41140
- MILLER, D. E.**  
The Titan III remote multiplexed instrumentation system.  
19 p3274 A69-36279  
The measurement of ozone from a satellite.  
21 p3721 A69-38625
- MILLER, D. J.**  
Wide tuning range S-band maser.  
17 p2979 A69-32914
- MILLER, D. L.**  
Ray-tracing of the Z-mode in a tilted layer ionosphere.  
05 p0758 A69-16412
- MILLER, D. R.**  
The boundary layer on a paraboloid of revolution.  
07 p1120 A69-18812
- MILLER, E. A.**  
Thermal instability in power transistor structures.  
08 p1373 A69-20858
- MILLER, E. F., II**  
Motion sickness susceptibility under weightless and hypergravity conditions generated by parabolic flight.  
21 p3660 A69-39176
- MILLER, E. H.**  
An experimental evaluation of exhaust nozzle/airframe interference.  
[AIAA PAPER 69-430] 16 p2733 A69-32730  
The post attack command and control system - Airborne data automation /PACCS-ADA/, 481A.  
17 p2977 A69-34116
- MILLER, E. K.**  
Characteristic waves on an infinite cylindrical antenna in a plasma medium.  
04 p0578 A69-15215  
Infinite cylindrical antenna in a uniaxial compressible plasma.  
06 p0965 A69-17513  
Radar cross section of a long wire.  
23 p4116 A69-41594  
On ionospheric composition measurements with an R.F. impedance probe.  
24 p4308 A69-43008
- MILLER, F. D.**  
Comet Arend-Roland /1957 III/ on 5 May 1957. I - Development and kinematics of the type-I tail.  
13 p2349 A69-27816
- MILLER, G.**  
On three-dimensional laminar boundary layers with large cross-flow.  
[AIAA PAPER 69-710] 17 p2955 A69-33467
- MILLER, G. E.**  
Performance of a bandwidth limited PCM/PSK/PM telemetry system.  
07 p1081 A69-19098  
New longitudinal handling qualities data - Carrier approach.  
[AIAA PAPER 69-897] 21 p3648 A69-39421
- MILLER, G. H.**  
Energy and width measurements of the pionic 2p-1s transition in super 23 Na.  
01 p0122 A69-10035
- MILLER, G. L.**  
A satellite solar cosmic ray spectrometer with on-board particle identification.  
[IEEE PAPER 3C-3] 07 p1135 A69-19197
- MILLER, H.**  
Color centers and ruby laser output energy degradation.  
02 p0256 A69-12358



**MILLER, H. G.**

Color centers and ruby-laser output-energy degradation.  
16 p2795 A69-31697

**MILLER, H. G.**

Nonmesonic decay of hydrogen hyperfragments.  
12 p2133 A69-26298

**MILLER, J. A.**

Heat transfer in the oscillating turbulent boundary layer.  
[ASME PAPER 69-GT-34] 09 p1623 A69-22490  
Optimal estimation of rotation-coupled flexural oscillations.  
24 p4394 A69-43291

**MILLER, J. E.**

Apollo guidance and control system flight experience.  
[AIAA PAPER 69-891] 21 p3824 A69-39416

**MILLER, J. F.**

Aircraft noise abatement - The prospects for a quieter metropolitan environment.  
[AIAA PAPER 69-800] 19 p3453 A69-35593

**MILLER, J. G.**

Human factors in V/STOL aircraft operation.  
01 p0010 A69-10452  
Development of a V/STOL flight command computer.  
[AHS PAPER 313] 17 p3001 A69-33543

**MILLER, J. L.**

Advanced design modules for lunar surface solar array power systems.  
23 p4072 A69-42288

**MILLER, J. M.**

Thermoregulatory responses to deep and superficial cooling in spinal man.  
22 p3873 A69-40209

**MILLER, J. R.**

Photometric rocket measurements in hydrogen auroras.  
15 p2598 A69-31307  
Rocket measurements of H beta production in a hydrogen aurora.  
24 p4309 A69-43170

**MILLER, J. S.**

Further spectroscopic observations of the optical object identified with X-ray source Cygnus X-2.  
10 p1785 A69-24097  
Television detection of the Crab Nebula pulsar.  
11 p1962 A69-25251  
Simultaneous optical and radio observations of NP 0532.  
15 p2680 A69-30233  
Optical observations of the Crab Nebula pulsar.  
21 p3799 A69-38645  
Abundances in a halo planetary nebula.  
24 p4376 A69-42662

**MILLER, J. T.**

Sharp cone drag measurements in a rarefied hypersonic flow.  
13 p2199 A69-28244

**MILLER, L.**

Integrated hardware/software system for electronic module testing.  
11 p1864 A69-25065

**MILLER, L. K.**

Automatic inflators.  
06 p0877 A69-16955

**MILLER, M.**

The application of the image orthicon television system to rocket trajectory determination.  
12 p2033 A69-26965  
Atomic spectroscopy with the shock tube.  
18 p3176 A69-34446

**MILLER, M. A.**

Electromagnetic beams in anisotropic media.  
17 p2925 A69-33845

**MILLER, M. H.**

Relative transition probabilities for silicon.  
13 p2340 A69-27580  
A thermally insensitive technique for measuring atomic transition probabilities.  
22 p3983 A69-40100  
Measurements of the Stark broadening of H gamma.  
22 p3985 A69-40664

**MILLER, M. J.**

The occultation of BD -17 deg 4388 by Neptune. I.  
17 p3041 A69-33814  
The occultation of BD -17 deg 4388 by Neptune. II.  
17 p3041 A69-33815

**MILLER, M. M.**

Dynamics in the diagonal coherent-state representation.  
22 p3983 A69-41259

**MILLER, M. R.**

Stability of P.C.M.-oscillator synchronisation systems with sampled error signals.  
15 p2565 A69-30171

**MILLER, N. A.**

Some factors influencing the corrosion fatigue behaviour of a high-strength aluminum alloy. I, II.  
24 p4330 A69-42553

**MILLER, N. C.**

Further development of the STAR thermoelectric panel.  
23 p4188 A69-42261

**MILLER, P. A.**

Dynamics of optical mixing in a He-Ne laser.  
05 p0776 A69-16331  
Measurement of dispersion at 6328 and 6401 angstrom units due to the neon 1 sub 5 metastable atoms in a He-Ne discharge.  
23 p4172 A69-41397

**MILLER, R. B.**

Archetypes in man-computer problem solving.  
24 p4274 A69-43019

**MILLER, R. E.**

Influence of transverse shear on the small displacement theory of circular plates.  
24 p4405 A69-43655

**MILLER, R. G.**

A stochastic model for real-time on-demand weather predictions.  
08 p1345 A69-20299  
Maintenance/van loading.  
10 p1669 A69-22980

**MILLER, R. H.**

The potential contribution of subsonic aviation to short-haul transportation.  
05 p0701 A69-15559  
On the interpretation of the color-magnitude diagrams of M67 and NGC 188.  
10 p1789 A69-24128

**MILLER, R. K.**

A note on Volterra integral equations and topological dynamics.  
04 p0626 A69-15288  
A stability theorem for nonlinear mixed integral equations.  
08 p1343 A69-20355  
Perturbations of Volterra integral equations.  
11 p1909 A69-24886

**MILLER, R. M.**

Advances in solid-fuel propulsion systems for tactical rockets.  
16 p2836 A69-31998

**MILLER, R. N.**

Effects of polymeric film properties on the corrosion of metal.  
02 p0265 A69-11896  
Relationship between properties of polymeric films and the corrosion of metal substrates.  
14 p2466 A69-29938  
Computerized Markov system effectiveness models.  
18 p3195 A69-34527  
The frequency response of volume-terminated pneumatic lines with circular and rectangular cross sections.  
24 p4301 A69-43288

**MILLER, R. R.**

Nondestructive testing for void content in glass-filament-wound composites.  
17 p2979 A69-33656

**MILLER, S. B.**

Outage and replacement implications for operational satellite systems.  
02 p0333 A69-11805

**MILLER, S. C.**

Combustion development on the Rolls-Royce Spey engine.  
09 p1573 A69-22613

**MILLER, S. E.**

On solutions for two waves with periodic coupling.  
01 p0027 A69-10252  
Integrated optics - An introduction.  
24 p4328 A69-43327  
Improved relations describing directional control in electromagnetic wave guidance.  
24 p4288 A69-43331

**MILLER, S. J.**

The Mountbatten class hovercraft.  
06 p0867 A69-17664

**MILLER, U.**

Measurement of the modulation transfer function of the living human eye in reflected light /Zur Messung der Modulationsübertragungsfunktion des lebenden menschlichen Auges im reflektierten Licht/.  
22 p3884 A69-40888

**MILLER, W. D.**

Effects of simulated degrading environment on temperature control surfaces.  
[AIAA PAPER 69-1024] 22 p3923 A69-40394

**MILLER, W. H.**

Contemporary solid rocket motor performance prediction techniques.  
[AIAA PAPER 69-732] 16 p2840 A69-32674

**MILLER, W. J.**

Inhibition of low pressure flames.  
13 p2380 A69-28460  
Twelve variable stars in Lyra and Cygnus, VV 221-232.  
23 p4215 A69-42009  
Ten faint long period variable stars in the Cygnus cloud, VV 211-220.  
23 p4215 A69-42010

**MILLER, W. V.**

Experimental feasibility study of an analog electrical-to-fluidic transducer.  
24 p4315 A69-43026  
Fluidic sun sensor for solar-pointing fluidic attitude control.  
24 p4348 A69-43297

**MILLERS, F. H.**

Optimal state variable feedback with bounded gains.  
[ASME PAPER 68-WA/AUT-8] 05 p0738 A69-16180

**MILLET, CH.**

Development and study of a cesium jet /Realisation et etude d'un jet de césium/.  
19 p3376 A69-36174

**MILLET, J.**

Development and study of a cesium jet /Realisation et etude d'un jet de césium/.  
19 p3376 A69-36174

**MILLET, M. R.**

Measurement of microphonic noise.  
17 p2937 A69-33628

**MILLET, P.**

Effect of dispersed phases on cavitation of magnesium alloys by creep /Effet de phases dispersées sur la cavitation par fluage d'alliages de magnésium/.  
17 p2985 A69-32907

**MILLIGAN, C. W.**

A frequency assignment guide for tactical FM radios in the 30- to 76-MHz frequency band.  
23 p4126 A69-42229

**MILLIGAN, M. W.**

Predicting gas flow rates in vacuum systems.  
[ASME PAPER 68-WA/PID-5] 05 p0750 A69-16166  
Visco-type gas sealing.  
[ASLE FICFS PREPRINT 34] 15 p2621 A69-30494

**MILLIGAN, R. W.**

Bending general instability of shallow-stiffened cylinders.  
06 p1022 A69-17369

**MILLIKAN, A. G.**

Background density and the photographic detection of faint stars.  
12 p2153 A69-25811

**MILLIKEN, J. G.**

The transferability of aerospace management technology.  
02 p0355 A69-11754  
Management contributions of space technology - An analytical report.  
18 p3236 A69-35086

**MILLINGTON, G.**

Stokes phenomenon.  
07 p1174 A69-19220

**MILLION, B.**

Concentration dependence of diffusion of cobalt in nickel-cobalt alloys.  
08 p1334 A69-20577

**MILLIONSCHIKOV, M. D.**

Fifty years of the N. E. Zhukovskii Central Aerohydrodynamic Institute /Piat' desiat let Tsentral'-

- nogo Aerogidrodinamicheskogo Instituta im. N. E. Zhukovskogo/.  
06 p1043 A69-17390
- MILLIONSCHIKOV, V. M.**  
Metric theory of systems of linear differential equations /Metricheskaia teoriia lineinykh sistem differentsial'nykh uravnenii/.  
04 p0621 A69-14358
- Stability criterion for the probable spectrum of linear systems of differential equations with recursion coefficients and a criterion of the almost reducibility of systems with almost periodic coefficients /Kriterii ustoiichivosti veroiatnogo spektra lineinykh sistem differentsial'nykh uravnenii s rekurrentnymi koeffitsientami i kriterii pochti privodimosti sistem s pochti periodicheskimi koeffitsientami/.  
10 p1720 A69-23562
- MILLMAN, G. H.**  
Field-aligned ionization scatter geometry.  
07 p1125 A69-18850
- MILLMAN, M. H.**  
Perturbation theory of nonlinear boundary-value problems.  
09 p1540 A69-21894  
Perturbation theory of nonlinear electromagnetic wave propagation.  
21 p3677 A69-39465
- MILLMAN, P. M.**  
Meteor showers and interplanetary dust.  
15 p2697 A69-31308  
Meteorite Research, Proceedings of the Symposium, Vienna, Austria, August 7-13, 1968.  
19 p3403 A69-36072
- MILLMAN, P. N.**  
Astronomical information on meteorite orbits.  
19 p3414 A69-36115
- MILLS, A. A.**  
Boron in carbonaceous chondrites.  
04 p0661 A69-15147  
Boron in tektites.  
08 p1407 A69-20936
- MILLS, A. C.**  
Experiments on the buckling of simple-supported rectangular plates.  
19 p3447 A69-36854
- MILLS, B. Y.**  
A pulsar supernova association/ques/.  
01 p0149 A69-10268  
Pulsars.  
17 p3040 A69-33800
- MILLS, D. W., JR.**  
Effect of reflections from CO sub 2 cryopanel deposits on the thermal balance of a test model in a space simulation chamber. [AIAA PAPER 69-1012]  
22 p3922 A69-40385
- MILLS, G. A.**  
Absolute coordinates of lunar features. III.  
07 p1213 A69-18612
- MILLS, G. H.**  
Electron optical techniques of failure investigation.  
24 p4313 A69-42768
- MILLS, J. W.**  
Aerodynamic instrumentation for improving helicopter take-off and landing piloting performance.  
05 p0767 A69-16776
- MILLS, R. M.**  
Flame inhibition with electron attachment as the first step.  
06 p1034 A69-17926
- MILLS, T. B.**  
Designing smaller, lighter DC-to-DC converters.  
10 p1635 A69-22983
- MILLSTONE, S. D.**  
Application of statistical parameters in defining inlet airflow dynamics. [AIAA PAPER 68-649]  
17 p2896 A69-34020
- MILLWARD, H. R.**  
A printed wiring technique for use with strain gauge rosettes.  
02 p0250 A69-12231
- MILLY, G. H.**  
A numerical experiment on the spatial distribution of cloud seeding nuclei.  
09 p1535 A69-21639
- MILMAN, I. U. V.**  
Study of dislocation mobility in indium antimonide /Issledovanie podvizhnosti dislokatsii v antimonide indii/.  
12 p2143 A69-26453
- Change in the mechanical properties and in the dislocation structure of deformed molybdenum alloys during annealing /Izmenenie mekhanicheskikh svoistv i dislokatsionnoi struktury deformirovannykh molibdenovykh splavov pri otzhige/.  
14 p2463 A69-29312
- Influence of alloying elements on the dislocation structure of chromium /Vliianie legiruushchikh elementov na dislokatsionnuu strukturu khroma/.  
18 p3160 A69-35452
- MILNE-THOMSON, L. M.**  
Theoretical Hydrodynamics /5th Edition/.  
02 p0230 A69-11812  
The second circle theorem and uniform shear flow.  
20 p3518 A69-38316
- MILNE, C. R.**  
Navigational instruments - Progress during the last fifty years.  
01 p0112 A69-10311
- MILNE, D. K.**  
Radio emission from 16 possible supernova remnants.  
17 p3035 A69-33610
- MILNE, J. M.**  
Non-Hookean behaviour of strong carbon fibres.  
03 p0454 A69-13937
- MILNE, R. D.**  
An oblique matrix pseudoinverse.  
01 p0104 A69-10315
- MILNES, A. G.**  
The electrical characteristics of nZnSe-pGe heterodiodes.  
11 p1851 A69-25114  
Selecting matched diodes from a diode array for monolithic balanced mixers.  
13 p2233 A69-28071
- MILO, J. H.**  
Prevention of stress corrosion cracking by shot peening.  
14 p2466 A69-29937
- MILOKHIN, N. T.**  
Precision "angle-code" type converters employing frequency sensors of quantum magnetometers /Pretzionnye preobrazovateli tipa "ugol-kod" na chastotnykh datchikakh kvantovykh magnetometrov/.  
12 p2016 A69-25963
- MILOSAVLJEVIC, I.**  
Early brain atrophies.  
23 p4089 A69-41816
- MILOV, I. U. I.**  
Body weight and protein synthesis in animals during hypokinesia.  
08 p1262 A69-19928
- MILSTEIN, L. B.**  
Robust detection using extreme-value theory.  
17 p2944 A69-33624
- MILSTEIN, S.**  
Behavioral and physiological changes during prolonged immobilization plus perceptual deprivation.  
24 p4256 A69-42554
- MILSUM, J. H.**  
Optimization aspects in biological control theory.  
22 p3893 A69-40786
- MILTON, B. E.**  
Generation of implosions by area change in a shock tube.  
16 p2766 A69-31919
- MILTON, R. L.**  
Spectral classification of some A stars with large m sub 1 indices.  
09 p1602 A69-22215
- MILTSYN, A. M.**  
Experimental investigation of the stability of smooth cylindrical shells of various scales under axial compression /Eksperimental'noe issledovanie ustoiichivosti gladkikh tsilindricheskikh obolochek razlichnykh masshtabov pri osevom szhati/.  
04 p0680 A69-14929
- MILVIDSKII, M. G.**  
Doping effect observed during measurements of microhardness in GaSb and InSb /Effekt legirovaniia, nabliudaemyi pri izmerenii mikroverdstoi GaSb i InSb/.  
01 p0139 A69-10832
- Effect of alloying additions on the anisotropy of plastic deformation in GaAs single crystals /O vlianii legiruushchikh primesei na anizotropiiu plasticheskoi deformatsii monokristallov GaAs/.  
11 p1936 A69-24537
- Effect of doping, as observed in the measurements of the microhardness of GaSb and InSb.  
11 p1936 A69-24699
- Influence of stoichiometry of the melt on the crystallization of gallium arsenide /O vlianii stekhiometrii raspava na kristallizatsiiu arsenida galliia/.  
12 p2144 A69-26586
- The shape of the spectral band of n-GaAs edge emission /K voprosu o forme polosy spektra kraevogo izlucheniia n-GaAs/.  
19 p3392 A69-36610
- Crystallization of gallium arsenide /O kristallizatsii arsenida galliia/.  
23 p4199 A69-42469
- MILWARD, A.**  
The development and future of air cargo.  
03 p0536 A69-14088
- MIN, P. J.**  
On feature selection in pattern recognition.  
06 p0892 A69-17396
- MINAEV, P. F.**  
Increasing the radiation sensitivity of the nervous system by enzyme poisons affecting the oxidation processes /O povyshenii radiochuvstvitel'nosti nervnoi sistemy fermentnymi iadami, narushaiushchimi oksilitel'nye protsessy/.  
21 p3658 A69-39053
- Sensitivity and resistance of the nervous system to ionizing radiation /O chuvstvitel'nosti i ustoiichivosti nervnoi sistemy k ioniziruiushchei radiatsii/.  
21 p3659 A69-39061
- MINAEV, P. V.**  
Temperature on the axis of an electric arc in argon /O temperature na osi elektricheskoi dugi v argone/.  
15 p2662 A69-30977
- MINAEVA, A. A.**  
Broadening of hydrogen spectral lines by plasma electrons.  
04 p0638 A69-15239
- MINAEVA, S. A.**  
The phase diagram of the Ti-Ta-Cr system /Diagramma sostoiianiia sistemy Ti-Ta-Cr/.  
22 p3969 A69-40075
- MINAGAWA, S.**  
The influence of a pair of edge dislocations in slip planes perpendicular to each other on the workhardening and strain-ageing.  
07 p1238 A69-19695  
X-ray microtopographs of alpha alumina whiskers.  
16 p2802 A69-32341
- MINAILOS, A. N.**  
The non-symmetric flow round the front part of a body of revolution due to a supersonic stream of an ideal or real gas.  
18 p3086 A69-35051
- MINAKOV, V. N.**  
Structural changes and cold shortness of molybdenum subjected to deformation.  
04 p0615 A69-14637
- MINAKOVA, N. I.**  
Stability of a nonshallow spherical dome.  
04 p0684 A69-15539
- MINAKOVA, R. V.**  
Nature of the strength of tungsten-nickel-iron alloys. I - Precipitation-hardening characteristics of W-Ni-Fe alloys.  
05 p0782 A69-16798  
Nature of the strength of tungsten-nickel-iron alloys. II - Rupture mechanism of W-Ni-Fe alloys.  
10 p1711 A69-23333
- MINAMI, K.**  
A matching technique to inject microwave power into high-density plasmas.  
21 p3779 A69-39746
- MINAMI, Y.**  
Fatigue strength under varying load. I - Testing apparatus and preliminary tests.  
19 p3434 A69-35777
- MINASIAN, J. R.**  
The economics of airport use, congestion, and safety.  
15 p2723 A69-31241
- MINASIAN, R. S.**  
Plane steady heat flow in certain curvilinear bodies /O ploskom ustanovivshemsia techenii tepla v nekotorykh krivolineinykh telakh/.  
11 p2000 A69-24974  
A problem involving a periodic thermal flux in an infinite cylinder /Ob odnoi zadache periodicheskogo techeniia tepla v beskonечnom tsilindre/.  
15 p2717 A69-30575



## MINDEN, H. T.

Recent advances in gallium arsenide materials technology. 12 p2141 A69-25834

## MINDLIN, R. D.

Note on vibrations of prisms and polygonal plates. 19 p3444 A69-36801

## MINDROV, B. I.

Investigation of a model of a body of revolution using a novel type of balance and holders /Issledovaniia modeli tela vrashcheniia na vesakh s podveskoi novoi skhemy/. 24 p4297 A69-43084

## MINE, Y.

An experimental study on the liquid conditioning jackets. 06 p0883 A69-18027

How to reduce the weight of pressure garments. 06 p0884 A69-18037

## MINEHART, R. C.

Pion capture in super 6 Li and super 7 Li, the formation of super 4 H, a search for super 5 H. 12 p2132 A69-26296  
Search for an excited state of the triton. 12 p2132 A69-26297

## MINEL, L.

Interaction between point defects and magnesium atoms in aluminum irradiated by neutrons at 78 K - Influence of concentration /Interaction entre defauts ponctuels et atomes de magnesium dans l'aluminium irradie aux neutrons a 78 deg K - Influence de la concentration/. 05 p0781 A69-16613

The chemisorption of carbon and oxygen on the surface of molybdenum /Sur la chimisorption du carbone et de l'oxygene a la surface du molybdene/. 20 p3562 A69-37782

## MINELLI, R.

Regulation of leucine incorporation into cardiac protein by work loads. 23 p4083 A69-41456

## MINER, E.

Mariner 1969 - Preliminary results of the infrared radiometer experiment. 24 p4384 A69-43196

## MINER, W. E.

The Hamilton-Jacobi method applied to the low-thrust trajectory problem. 06 p1007 A69-17574

Optimal trajectory coordinate-multiplier systems with constant of the motion components. [AIAA PAPER 69-907] 21 p3807 A69-39339

## MINERNV, N. N.

Possibility of unequivocal experimental determination of the Faraday angle of rotation of the polarization plane of radio signals emitted by celestial bodies /O vozmozhnosti odnoznachnogo eksperimental'nogo opredeleniia faradeevskogo ugla povorota ploskosti polarizatsii radiosignalov, izluchaemykh s kosmicheskikh ob'ektov/. 01 p0030 A69-10574

Unambiguous experimental determination of the Faraday rotation of the plane of polarization of radio waves emitted by cosmic objects. 15 p2568 A69-30744

## MINERVIN, V. E.

Polarization studies of the structure of cumulonimbus clouds /Polarizatsionnye issledovaniia struktury kuchevo-dozhdevykh oblakov/. 16 p2806 A69-32266

## MINGES, J. V.

Welding of very thin foil. 17 p2977 A69-32854

## MINGLE, J. O.

Iterative methods for multiple slab transport models. 08 p1343 A69-20353

## MINGO, G. R.

Optical study of a fluidic temperature sensor. [ASME PAPER 68-WA/FE-29] 05 p0763 A69-16102

## MINGORI, D. L.

Effects of energy dissipation on the attitude stability of dual-spin satellites. 04 p0665 A69-14703

Liapunov stability analysis of freely spinning systems. 06 p1014 A69-17567

## MINGUZZI, P.

Relations between the angular state of an atomic vapor subjected to optical pumping and its absorption and scattering properties. I /Relations entre l'etat angu-

laire d'une vapeur atomique soumise au pompage optique et ses proprietes d'absorption et de dispersion. I/. 12 p2111 A69-27180

## MININ, I. N.

Time-dependent diffusion of radiation in an inhomogeneous medium. 16 p2813 A69-32591

## MININ, I. U. N.

Optimal energy distribution for determining a random number of weak signals. 14 p2410 A69-28817

## MININ, O. V.

Device for recording the moment of sample failure during thermal endurance tests /Ustroistvo dlia registratsii momenta razrusheniia obraztsov pri ispytaniakh na termostoikost'/. 06 p0927 A69-17690

## MININA, L. S.

Cellular cloud patterns according to data from meteorological earth satellites /lacheistye sistemy oblakov po dannym meteorologicheskikh sputnikov zemli/. 14 p2473 A69-29727

Cloud systems of the intertropical convergence zone according to data from meteorological earth satellites /Obilachnye sistemy vnutritropicheskoi zony konvergentsii po dannym meteorologicheskikh sputnikov zemli/. 14 p2473 A69-29728

## MINIUSHINA, L. S.

Characteristics of latitudinal and vertical variations in the six-month cyclicity of the zonal wind in the tropical stratosphere and lower mesosphere /Osobennosti izmeneniia shestimesiachnoi tsiklichnosti zonal'nogo vetra po shirote i vysote v tropicheskoi stratosfere i nizhnai mezosfere/. 13 p2294 A69-27854

## MINK, G. R.

Steam ingestion by aircraft gas turbine engines. II. 01 p0143 A69-11062

## MINK, J. W.

Experimental investigation with an iris beam waveguide. 13 p2233 A69-28070

## MINKO, I. A.

Spectroscopic study of the properties of a supersonic plasma stream. 07 p1190 A69-18695

Investigation of near-electrode plasma formations in a high-current pulsed discharge with separated flames at atmospheric pressure. II /Issledovanie prieklektroodnykh plazmoobrazovaniy sil'notochnogo impul'snogo razriada s razdelennymi fakelami pri atmosfernom davlenii. II/. 11 p1927 A69-25219

## MINKOV, G. M.

Magnetic field effect on GaAs injection laser emission. 19 p3387 A69-36529

## MINKOVICH, B. M.

Difference radiation patterns of a circular aperture with axisymmetric amplitude distributions /Raznostnye diagrammy napravlennosti kruglogo raskryva s osesimmetrichnymi amplitudnymi raspredeleniiami/. 05 p0717 A69-15636

Optimization of the slope of difference radiation patterns in antenna arrays /Optimizatsiia krutizny raznostnykh diagramm napravlennosti antenykh reshetok/. 06 p0895 A69-17461

Difference radiation patterns for a round aperture with axially symmetric amplitude distributions. 16 p2754 A69-32494

Optimization of the slope of difference directivity patterns of antenna arrays. 20 p3508 A69-37944

Antenna Synthesis Theory /Teoriia sinteza antenn/. 20 p3508 A69-38208

Optimal interpolation synthesis of aperture radiation patterns /Optimal'nyi interpolatsionnyi sintez aperturnykh diagramm napravlennosti/. 22 p3916 A69-40953

## MINKOVSKII, A. KH.

The acceleration-deceleration-tilt test - Its significance for functional investigation and training of the vestibular analyzer /Test UZN, ego znachenie dlia funktsional'nogo issledovaniia i trenirovki vestibuliarnogo analizatora/. 20 p3481 A69-37270

## MINKOWITZ, S.

Application of helium-neon laser for process dimensional control. 09 p1519 A69-22475

## MINKOWSKI, R.

Radio galaxies /Introductory paper/ /Radiogalakтики /vvodnyi doklad/. 12 p2165 A69-27032

## MINNETT, H. C.

Structural performance of the Parkes 210-ft paraboloid. 23 p4231 A69-42130

## MINOR, A.

Work functions of polycrystalline W and Re in an atmosphere of cesium and oxygen. 14 p2507 A69-29274

## MINOSTSEV, V. B.

Approximate method of taking into account the effect of real properties of the gas during hypersonic flow past segmental bodies /Priblizhennyy metod ucheta vlianiia real'nosti gaza pri giperzvukovom obtekanii segmental'nykh tel/. 14 p2391 A69-29620

Supersonic three-dimensional flow past blunt bodies. 19 p3242 A69-36783

## MINOTT, P. O.

Wavelength dependence of laser-beam scintillation. 07 p1157 A69-19641  
Scintillation in an earth-to-space propagation path. 15 p2570 A69-31309

## MINOVITCH, M.

Gravity thrust and interplanetary transportation networks. 03 p0511 A69-13402

## MINOWSKI, K.

Graphical method of processing observations of the "INTEROBS" type for the use of space geodesy. 15 p2594 A69-30029

## MINTROP, H.

A method of determining the cross section of a thin iron whisker /Ein Verfahren zur Ermittlung des Querschnittes von duennen Eisen-Whiskers/. 22 p3919 A69-40233

## MINTSBERG, B. L.

Pulsating flow of a conducting fluid in a plane channel /Pul'siruushchee techenie provodiashchei zhidkosti v ploskom kanale/. 14 p2501 A69-29909

## MINTZ, L. J.

The Goddard Experiment Package - An automated space telescope. 13 p2261 A69-27948

## MINTZER, D.

Electron distribution function in a slightly ionized moving gas. 18 p3179 A69-34438

## MINTZER, O. W.

Remote sensing for engineering investigation of terrain - Photographic systems. 12 p2098 A69-27006

## MIODUCHOWSKI, A.

Sand hill analogy for plastically twisted bars with discontinuous inhomogeneity /Sandhugelgleichnis fuer plastisch tordierte Staeb mit sprunghafter Inhomogenitaet/. 03 p0524 A69-13021

## MIQUEL, J.

Differences between radiation-induced life shortening and natural aging in *Drosophila melanogaster*. 15 p2555 A69-30444

Viruslike particles in the fat body, oenocytes, and central nervous tissue of *Drosophila melanogaster* imagoes. 23 p4091 A69-42021

## MIR, A.

Elevation angles of ground backscatter at 16 MHz and large-scale ionospheric tilts. 20 p3535 A69-38188

## MIRA, C.

Course in Nonlinear Servosystems /Cours de Systemes Asservis non Lineaires/. 12 p2054 A69-26966

Case where the stability region of an attractive limiting set of a second-order recurrence is not simply connected /Cas ou le domaine de stabilite d'un ensemble limite attractif d'une recurrence de deuxieme ordre n'est pas simplement connexe/. 19 p3287 A69-36651

## MIRANDA, M.

Regularity of the weak solutions of a class of quasilinear elliptic systems /Sulla regolarita delle soluzioni deboli di una classe di sistemi ellittici quasilineari/. 05 p0786 A69-15927

- MIRANDE, W.**  
Holography with partially coherent illumination.  
08 p1312 A69-20081
- MIRAT, G.**  
Computer-aided design /CAD/ in the fields of electronics and logic systems /La conception assistee par ordinateur /CAO/ dans les domaines de l'electronique et des ensembles logiques/.  
08 p1278 A69-19970
- MIRELS, H.**  
Axisymmetric hypersonic flow with strong viscous interaction.  
05 p0744 A69-15720  
Origin of striations on ablative materials.  
24 p4248 A69-43598
- MIRGALOVSKAIA, M. S.**  
The face effect in single crystals of gallium antimonide, grown according to the Czochralski method.  
09 p1558 A69-21870  
Extended electron-hole junctions in single crystals of gallium antimonide.  
10 p1745 A69-23329  
Morphological peculiarities and the distribution of impurities in single crystals of GaSb with extended junctions.  
10 p1745 A69-23330
- MIRIANASHVILI, M. M.**  
Magnetic properties of ferrites with a garnet structure /Magnitnye svoistva ferritov so strukturoi granata/.  
13 p2323 A69-28564
- MIRIANASHVILI, SH. M.**  
Current instability in high-resistivity compensated p-InSb /Neustoiichivost' toka v vysokomnom kompensirovannom p-InSb/.  
15 p2666 A69-30058
- MIRKIN, L. I.**  
Kinetics of epoxy resin breakdown under the action of laser light pulses of 10 super-3 sec duration /Kinetika razrusheniia epoksidnoi smoly svetovymi impul'sami lazera dlitel'nost'iu 10 super-3 sek/.  
22 p3973 A69-40743
- MIRKOTAN, S. F.**  
Effect of the frequency instability of a reference oscillator during phase measurements /Vliianie nestabil'nosti chastoty opornogo generatora pri fazovykh izmereniiax/.  
14 p2444 A69-29873  
Equipment for simultaneous three-point observations of field and amplitude fluctuations of an ionospheric signal /Apparatura dlia odnovremennykh trekhtochechnykh nabludenii za fluktuatsiiami polia i amplitudy ionosferного signala/.  
14 p2452 A69-29874  
Method of the phase height's measurements in the ionosphere.  
17 p2927 A69-33859  
Investigation of the ionospheric echoes by the coherent method.  
17 p2927 A69-33860  
Method of measuring absolute phase heights in the ionosphere /Metod izmereniia absolutnykh fazovykh vysot v ionosfere/.  
20 p3520 A69-37032
- MIRNOV, S. V.**  
Influence of the shape and magnitude of the discharge current pulse on plasma containment and heating in Tokamak-3.  
14 p2499 A69-29848
- MIRO, L.**  
Magnetic fields and biology /Champs magnetiques et biologie/.  
05 p0715 A69-16627  
Visceral lesions observed in mice and rats exposed to ultrashort waves /Lesions viscerales observees chez des souris et des rats exposes aux ondes ultracourtes/.  
[AGARDOGRAPH-111] 08 p1266 A69-20679  
Considerations relative to the calculation of radiation doses in view of the quantification of biological effects in the case of supersonic transport /Considerations relatives aux calculs des doses de radiations en vue de la quantification des effets biologiques dans le cas du transport supersonique/.  
11 p1830 A69-24865  
Biological action of low magnetic field environments /Action biologique des ambiances a faible champ magnetique/.  
13 p2211 A69-28596  
Necessity of using the direct correlations between the damages caused and the trajectories in the study of the biological effects of heavy ions in cosmic radiation /Necessite d'utiliser les correlations directes entre les dommages causes et les trajectoires dans l'etude des effets biologiques des ions lourds du rayonnement cosmique/.  
23 p4089 A69-41831
- MIROCHNIKOV, V. S.**  
Reduction of titanium tetrachloride to titanium by magnesium /Vosstanovlenie titana iz tetrakhlorida magniia/.  
07 p1163 A69-18784
- MIRONENKO, B. A.**  
Calculation of flameout conditions in the wake of a bluff body from the ignition time delay.  
21 p3851 A69-39092
- MIRONENKO, T. K.**  
Motion of a jet along a cylinder with suction and blowing through its surface /Dvizhenie strui vdol' tsilindra s otosom i vduvom cherez vego poverkhnost'/.  
21 p3698 A69-39845
- MIRONENKO, V. A.**  
Experimental investigation of flame stabilization in a high-temperature air jet at low pressure /Eksperimental'nye issledovaniia stabilizatsii plameni v vysokotemperaturnom vozduzhnom potoke pri ponizhennoi davlenii/.  
03 p0531 A69-12968  
The use of thermal ignition theory to determine general conditions for flame stabilization by means of a bluff body.  
16 p2879 A69-32141
- MIRONOV, B. P.**  
Displacement in a turbulent boundary layer on a previous surface during supercritical injection /Otesnenie v turbulentnom pogranichnom sloe na pronitsaemoi poverkhnosti pri sverkhkriticheskom vduve/.  
13 p2245 A69-27385
- MIRONOV, N. F.**  
Beryllium - A new structural metal /Berillii - Novyi konstruktivnyi metall/.  
11 p1904 A69-24897
- MIRONOV, O. S.**  
Section pressing from titanium alloys /Pressovanie profilov iz titanovykh splavov/.  
07 p1164 A69-18788
- MIRONOV, S. A.**  
Nonlinear effects accompanying the excitation of magnetoelastic waves in yttrium garnet /Nelineinye iavleniia pri vzbuzhdenii magnitoupругikh voln v itrievom granate/.  
12 p2145 A69-26725  
Nonlinear phenomena arising during excitation of magnetoelastic waves in yttrium iron garnet.  
21 p3782 A69-39138
- MIRONOV, V. I.**  
Stabilization of a nonlinear system with respect to an assigned trajectory.  
14 p2425 A69-28822
- MIRONOVA, A. P.**  
Increasing the radiation sensitivity of the nervous system by enzyme poisons affecting the oxidation processes /O povyshenii radiochuvstvitel'nosti nervnoi sistemy fermentnymi iadami, narushaiushchimi oksislitel'nye protsessy/.  
21 p3658 A69-39053
- MIRONOVA, M. N.**  
Structural characteristics of some craters on the far side of the moon /Strukturnye osobennosti nekotorykh kraterov obratnoi storony luny/.  
11 p1959 A69-24725  
Vertical profiles of 29 craters on the far side of the moon /Vysochnye profili 29 kraterov obratnoi storony luny/.  
11 p1959 A69-24726
- MIRONOVICH, R. IA.**  
Simplified formulas for the coefficients of turbulent exchange in fluid flows /Uproshchennye formuly dlia koefitsientov turbulentnogo obmena v potokakh zhidkosti/.  
11 p1873 A69-25228
- MIROSHNICHENKO, G. A.**  
Heating of plasma ions by an external stochastic field.  
09 p1553 A69-22527
- MIROSHNICHENKO, L. I.**  
Spectrum of the injection of solar-flare protons.  
06 p0996 A69-17741  
Solar cosmic ray flare on January 28, 1967 /Vspyshka solnechnykh kosmicheskikh luchei 28.i.1967 g./.  
14 p2513 A69-29066  
Diffusion of solar cosmic rays in the presence of a magnetic barrier in interplanetary space /Diffuziia solnechnykh kosmicheskikh luchei pri nalichii magnitnogo bar'era v mezplanetnom prostranstve/.  
14 p2513 A69-29067
- Cosmic rays and the earth's atmosphere /Kosmicheskie luchii i zemnaia atmosfera/.  
16 p2851 A69-32381**
- MIROSHNICHENKO, L. J.**  
Solar Cosmic Rays /Solnechnye Kosmicheskie Luchi/.  
14 p2514 A69-29816
- MIROSHNICHENKO, V. I.**  
Kinetic theory of the reflection of an electromagnetic wave from a moving plasma.  
07 p1196 A69-19748
- MIROSNICENKO, L. I.**  
The diffusion model and injection spectra of solar flare protons.  
08 p1379 A69-20613
- MIROVITSKII, D. I.**  
Relationships characterizing the radiation patterns of large-scale multielement antenna systems /O zakonomeernostiakh, kharakterizuiushchikh diagrammy napravlenosti mnogoelementnykh antennykh sistem bol'shikh razmerov/.  
11 p1844 A69-24451
- MIRSAGATOV, SH. A.**  
Long silicon carbide diodes /Dlinnye diody na karbide kremniia/.  
10 p1663 A69-23571
- MIRSALIMOV, V. M.**  
Effect of stiffening ribs on the development of a crack /O vozdeistvii reber zhestkosti na razvitiie treshchiny/.  
24 p4406 A69-43709
- MIRSKII, L. M.**  
Variation of the quantity and composition of the beta-phase during heat treatment of the alloy VTZ-1 /Izmenenie kolichestva i sostava beta-fazy pri termicheskoi obrabotke splava VTZ-1/.  
07 p1163 A69-18777  
Study of the diffusion mobility of nickel in the beta-phase of titanium and its alloys /Issledovanie diffuzionnoi podvizhnosti nikelia v beta-faze titana i ego splavov/.  
11 p1902 A69-24274
- MIRTOV, B. A.**  
Material of the lunar surface in the lunar atmosphere /Veshchestvo lunnoi poverkhnosti v lunnoi atmosfere/.  
10 p1783 A69-23921
- MIRUMIANTS, S. O.**  
Arrangement for studying atmospheric spectral transparency in the infrared spectral region /Ustanovka dlia issledovaniia spektral'noi prozrachnosti atmosfery v ik oblasti spektra/.  
05 p0759 A69-16639  
System for studying the spectral transparency of the atmosphere in the infrared spectral region.  
14 p2433 A69-28795  
Nomograms for calculating the spectral transparency of the atmosphere in the range from 2.8 to 5.6  $\mu$ m /Nomogrammy dlia rascheta spektral'noi prozrachnosti atmosfery v oblasti 2,8-5,6  $\mu$ m/.  
21 p3759 A69-39117
- MIRUTENKO, V. I.**  
Measurement of the X-ray radiation in microwave devices /Izmerenie rentgenovskogo izlucheniia v SVCh-ustanovkakh/.  
21 p3664 A69-39059
- MIRZA, I. M.**  
Measurements of the electron impact excitation cross section of N sub 2 super plus first negative bands.  
06 p0961 A69-17135
- MIRZOEV, B. M.**  
Effect of the sonic boom caused by supersonic aircraft on the corticosteroid level in human blood /Vliianie zvukovogo udara, sozdavaemogo sverkhzvukovym samoletom, na uroven' kortikosteroidov v krovi u cheloveka/.  
03 p0378 A69-14209
- MIRZOEV, I. M.**  
Calculation of a plane supersonic jet injected into a supersonic slipstream and incident on a given body /Raschet ploskoi sverkhzvukovoi strui, itekaiushchei v sputnyi sverkhzvukovoi potok i obtekaushchei zadanoe telo/.  
24 p4250 A69-43710
- MIRZOIAN, L. V.**  
Problems of Present-Day Cosmogony /Problemy Sovremennoi Kosmogonii/.  
21 p3813 A69-39525



## MIRZOYAN, L. V.

Spectrophotometric studies of non stable stars. I.  
13 p2351 A69-27868

## MISAWA, T.

Temperature and current distribution in an  
avalanching p-n junction.  
03 p0487 A69-13637

A 50-GHz silicon IMPATT diode oscillator and am-  
plifier.  
05 p0733 A69-16560

## MISELIUK, O. G.

Rotation of plane of polarization of electromagnetic  
waves in a semiconductor situated in a strong electric  
field.  
06 p0978 A69-16902

## MISELIUK, E. G.

Study of structural imperfections of CdSb crystals  
/Issledovanie strukturnykh nesovershenstv kristallov  
CdSb/.  
11 p1938 A69-25030

## MISEZHNIKOV, G. S.

Radiometer with a paramagnetic quantum amplifier  
for spectral measurements in the 8 mm range  
/Radiometr dlia spektral'nykh izmerenii v diapazone 8  
mm s kvantovym paramagnitnym usilitelem/.  
04 p0597 A69-14851

Radiometer for spectral measurements in the 8-mm  
range with a quantum paramagnetic amplifier.  
15 p2607 A69-30243

## MISGUICH, J.

Application of the Prigogine-Nicolis- Misguich  
theory of transport.  
04 p0589 A69-14863

## MISHCHENKO, L. G.

Characteristics of the interaction of pions and  
nucleons with nuclei.  
13 p2331 A69-28389

Reasons for the production of asymmetric showers in  
interactions of high-energy strong-interacting particles  
with nuclei.  
13 p2303 A69-28391

## MISHEV, D.

Capacitive changes in sintered CdS under pulse  
radiation /Kapatsitivni izmeneniia v sinterovan CdS pri  
impulsno osvetaivane/.  
05 p0806 A69-15694

## MISHIMA, Y.

The effect of minor impurities in water on corrosion  
of aluminum.  
04 p0617 A69-14932

## MISHIN, E. V.

Investigation of the effect of stress concentration and  
surface hardening on the fatigue strength of the El617  
alloy /Issledovanie vliianiia kontsentratsii napriazhenii i  
uprochneniia poverkhnosti na ustalostnuu prochnost'  
splava El617/.  
21 p3745 A69-38875

## MISHIN, V. E.

Thermal inertia of a thermistor acting as a tempera-  
ture sensing element /O teplovoy inertsii poluprovod-  
nikovogo termorezistora kak datchika temperatury/.  
21 p3723 A69-38888

Calculation of the thermal inertia index of a  
semiconductor thermistor with a one-dimensional tem-  
perature field /K raschetu pokazatelja teplovoy inertsii  
poluprovodnikovogo termorezistora s odnomernym  
temperaturnym polem/.  
23 p4163 A69-41556

## MISHIN, V. I.

Laser based on Raman scattering in liquid nitrogen.  
09 p1520 A69-22533

## MISHIN, V. M.

Filament structure of magnetospheric currents /O  
voloknistoi strukture tokov v magnitosfere/.  
05 p0753 A69-16049

Filamentary structure of currents in the magneto-  
sphere.  
20 p3532 A69-37958

## MISHKIN, M.

Penile erection evoked from forebrain structures in  
Macaca mulatta.  
12 p2018 A69-25775

## MISHLER, L. W.

The enthalpy of solid tungsten from 2800 deg K to its  
melting point.  
17 p2987 A69-33075

## MISHNEV, A. A.

Investigation of the switching-on process of germani-  
um p-n-p-m-structures.  
04 p0642 A69-14793

## MISHORY, J.

Interaction of ultrasound with Moessbauer gamma  
rays.  
10 p1724 A69-23088

## MISHRA, R. S.

On the curvature of magnetic lines behind a  
hydromagnetic shock in pseudo-stationary flows.  
04 p0658 A69-15092

## MISHRA, S. P.

Idealized slider bearings with Maxwell liquid as lubri-  
cant.  
02 p0253 A69-12413

## MISHUSTIN, B. A.

Synthesis of reactive multiport network on the basis  
of a given scattering matrix /Sintez reaktivnogo  
mnogopoliusnika po zadannoi matritse rasseianiia/.  
07 p1100 A69-18529

Theory of multibeam antenna arrays with interacting  
elements.  
09 p1469 A69-22627

Scattering matrix of an antenna array /Matritsa ras-  
seianiia antennoi reshetki/.  
15 p2579 A69-30951

## MISHUTIN, V. G.

A method for solving certain nonlinear equations in  
the theory of elasticity /O metode resheniia nekotorykh  
nelineinykh uravnenii teorii uprugosti/.  
04 p0668 A69-14273

## MISICU, M.

The generalized dual continuum in elasticity and  
dislocation theory.  
10 p1799 A69-23152

A theory of thin elastic shells with local structural ef-  
fects.  
11 p1978 A69-24809

## MISIURA, V. A.

Measurement of the parameters of the ionosphere by  
the method of "incoherent" scattering of radio waves  
/K izmereniam parametrov ionosfery metodom "in-  
nekogerentnogo" rasseianiia radiovoln/.  
01 p0065 A69-10575

Measurement of the irregular component of the  
satellite-signal phase lead due to ionospheric in-  
homogeneities by the method of coherent frequencies  
/Izmerenie metodom kogerentnykh chastot neregular-  
noi sostavliaiushchei nabega fazy signalov ISZ za schet  
neodnorodnostei ionosfery/.  
06 p0890 A69-17799

Ionospheric measurements by the method of in-  
coherent radio wave scattering /K ionosfernym iz-  
mereniam metodom nekogerentnogo rasseianiia  
radiovoln/.  
10 p1686 A69-23910

Measurements of the parameters of the ionosphere  
by the "incoherent" radiowave scattering method.  
15 p2597 A69-30745

Measurement of effects arising in the ionosphere on  
the basis of radio waves propagating from satellites /Iz-  
merenie effektiv, voznikaushchikh v ionosfere pri ras-  
prostraneni radiovoln ot iskusstvennykh sputnikov  
zemli/.  
20 p3486 A69-37027

Simultaneous ionospheric measurements by various  
radiophysical methods /Sovmestnye ionosfernye iz-  
mereniia razlichnymi radiofizicheskimi metodami/.  
20 p3486 A69-37028

## MISME, P.

Spectral density gradient of the temperature as a  
function of the altitude between zero and 1500 m  
/Pente de densite spectrale de la temperature en fon-  
ction de l'altitude, entre 0 et 1500 m/.  
24 p4342 A69-42677

## MISNER, C. W.

Mixmaster universe.  
15 p2680 A69-30200

A singularity-free empty universe.  
15 p2690 A69-30732

## MISNIK, V. A.

Control of the electric current in anisotropic  
semiconductors.  
06 p0978 A69-16991

## MISRA, B.

Analysis of air backflow and pressurization charac-  
teristics in the nuclear exhaust system duct.  
[AIAA PAPER 69-325] 09 p1479 A69-22390

## MISRA, P. K.

Photographic studies of explosive reactions.  
21 p3719 A69-38446

## MISSANA, M.

Relativistic mass distribution in the Galaxy.  
20 p3600 A69-37484

## MISSANA, N.

Study of the globular cluster omega Centauri /Studio  
sull'ammasso globulare omega Centauri/.  
16 p2859 A69-32220

## MISTA, L.

On P-representation for parametric amplifier and  
parametric frequency converter.  
16 p2761 A69-32363

## MISTRETTA, A. L.

Lithium spray structural cooling.  
[AIAA PAPER 68-358] 04 p0688 A69-15509  
Spray-cooled structures combine simplicity with high  
performance.  
11 p1966 A69-24532

## MISUGI, T.

Power dependence on repetition time of the Q-  
switched CO sub 2 laser.  
23 p4173 A69-41566

CO sub 2 gas laser.  
24 p4327 A69-42640

## MITAL, V.

The effect of plate temperature oscillations on the  
magnetohydrodynamic thermal boundary layer on a  
semi-infinite flat plate.  
02 p0288 A69-12143

## MITCHELL, B. J.

Ablative material tests under transient heating simul-  
ating ballistic reentry.  
[AIAA PAPER 69-150] 06 p0907 A69-18110

A general method for simultaneous measurement of  
thermal properties.  
[AIAA PAPER 69-602] 17 p3070 A69-33260

## MITCHELL, A. B.

The direct correlation of dislocation structures and  
surface deformation markings in fatigued aluminium.  
11 p1905 A69-25184

## MITCHELL, A. R.

High accuracy A.D.I. methods for parabolic equa-  
tions with variable coefficients.  
01 p0106 A69-10987

The equivalence of certain alternating direction and  
locally one-dimensional difference methods.  
21 p3754 A69-38745

## MITCHELL, C. E.

Stability limits for a liquid rocket engine using a  
droplet vaporization model.  
[AIAA PAPER 69-483] 16 p2841 A69-32689

Nonlinear oscillations in liquid rocket combustion  
chambers.  
19 p3449 A69-36352

## MITCHELL, D.

Stress distribution around holes at the ends of a  
crack.  
08 p1412 A69-20257

## MITCHELL, D. E.

The sensory stimulus for disjunctive eye movements.  
22 p3881 A69-40859

## MITCHELL, D. R.

The properties and transformation characteristics of  
welds in Ti-6Al-2Sn-4Zr-2Mo titanium alloy.  
08 p1318 A69-19965

## MITCHELL, E. E. L.

Quaternion parameters in the simulation of a  
spinning rigid body.  
05 p0724 A69-16469

## MITCHELL, F. A.

Meteorological analysis of clear air turbulence in the  
stratosphere.  
17 p2999 A69-33736

## MITCHELL, F. H., JR.

Modeling plasma effects on radar cross section of  
reentry vehicles.  
20 p3485 A69-36925

## MITCHELL, F. R. G.

A capacitance pressure transducer.  
11 p1885 A69-24902

## MITCHELL, H. A.

Deployment latchup dynamics of an erectable truss  
antenna.  
[AAS PAPER 69-336] 24 p4398 A69-42827

## MITCHELL, J. C.

The impact of computer aided design on mass pro-  
perty engineering.  
[SAWE PAPER 795] 18 p3107 A69-34863

Effect of highly polarizable ions on the strength re-  
tention of glass fibers.  
20 p3567 A69-37769

- MITCHELL, J. P.**  
Space storable regenerative cooling investigation.  
[AIAA PAPER 69-509] 16 p2844 A69-32718
- MITCHELL, L. A.**  
Self-lubricating composite materials for high-temperature applications.  
[IME PAPER 12] 07 p1137 A69-18560
- MITCHELL, M. W.**  
SPOT - A versatile navigation/traffic control satellite system for transoceanic aircraft and marine traffic.  
03 p0463 A69-13234  
A multi-function satellite system for transoceanic service.  
16 p2809 A69-32054
- MITCHELL, P. D.**  
The effect of the atmosphere on photographic images over a long range oblique path.  
01 p0107 A69-10223
- MITCHELL, R. A.**  
Nonlinear constrained optimization by a nonrandom complex method.  
06 p1022 A69-17366
- MITCHELL, R. C.**  
Selection of recombination rate constants for H-F-O reactions.  
04 p0646 A69-14743
- MITCHELL, R. F.**  
Electrode interactions in acoustic surface-wave transducers.  
24 p4312 A69-42615
- MITCHELL, R. I.**  
Eight-color narrow-band photometry of 985 bright stars.  
02 p0313 A69-11487  
Stellar spectroscopy, 1.2  $\mu$  to 2.6  $\mu$ .  
04 p0655 A69-14667  
Stellar photometric data for various photocathode materials.  
17 p2973 A69-33092  
Thirteen-color narrow-band photometry of one thousand bright stars.  
17 p3038 A69-33692  
Stellar photometric data for six different photocathode materials and the silicon detector.  
21 p3800 A69-38680
- MITCHELL, R. K.**  
A turbine-speed fuel pump for small gas-turbine engines.  
[ASME PAPER 69-GT-45] 09 p1513 A69-22485
- MITCHELL, R. L.**  
Design of zigzag FM signals.  
01 p0033 A69-11001  
Clutter suppression properties of weighted pulse trains.  
04 p0562 A69-15467  
Radar cross-section statistics of randomly oriented disks and rods.  
23 p4116 A69-41592
- MITCHELL, R. T.**  
UTEC - A universal test equipment compiler.  
11 p1842 A69-25066
- MITCHELL, S.**  
Selected risk factors in coronary disease.  
24 p4262 A69-43059
- MITCHELL, T. E.**  
Dislocation structures in deformed single crystals and work-hardening theories.  
05 p0778 A69-15754
- MITCHELL, T. W.**  
The application of the laser to the machine tool industry.  
[ASTME PAPER MR68-407] 02 p0252 A69-11797
- MITCHELL, W. E., JR.**  
The measurement of chromospheric heights.  
08 p1385 A69-20070  
The central intensities of Fraunhofer lines near solar minimum.  
08 p1386 A69-20075  
Revision of the ultraviolet solar spectrum in the range 3650-3000 angstrom units.  
22 p4014 A69-40146
- MITCHELL, W. F.**  
The design of the COMSAT thermal vacuum chamber.  
15 p2587 A69-30393
- MITCHNER, M.**  
The influence of boundary layers on spectroscopic temperature measurements in MHD channels.  
10 p1731 A69-23434  
Necessary conditions for the validity of the two-temperature plasma model.  
10 p1731 A69-23438  
Measurements in a two-temperature plasma boundary layer.  
[AIAA PAPER 69-692] 17 p3011 A69-33446
- MITH, T. M.**  
Experimental study of a spherical array of circularly polarized elements.  
04 p0573 A69-14331
- MITIAKOV, N. A.**  
Radio radiation intensity at 1.68 MHz as measured by "Kosmos-142."  
01 p0158 A69-11322  
Relation between sporadic radio emission, recorded by Elektron satellites, and geomagnetic activity /O sviazi sporadicheskogo radioizlucheniia, zaregistrirovannogo na sputnikakh "Elektron," s geomagnitnoi aktivnost'iu/.  
05 p0824 A69-16059  
Type 3 solar bursts recorded by the Elektron 4 artificial earth satellite /Solnechnye vspleski III, tipa, zaregistrirovannye na ISZ "Elektron-4"/.  
05 p0824 A69-16060  
Variations in the mean radio emission level at frequencies of 1.1 and 2.3 MHz according to measurements on the Elektron 4 artificial earth satellite /Variatsii srednego urovnia radioizlucheniia na chastotakh 1,1 i 2,3 MGts po izmereniiam na ISZ Elektron-4/.  
09 p1578 A69-21776  
Relation between geomagnetic activity and the sporadic radio emission recorded by the Elektron satellites.  
20 p3606 A69-37969  
Type-III solar bursts recorded by the Elektron-4 satellite.  
20 p3591 A69-37970
- MITIN, A. V.**  
Laser-stimulated gamma-optical transitions /Gamma-opticheskie perekhody, stimulirovannye lazerom/.  
08 p1328 A69-21185  
Gamma-optical transitions stimulated by a laser.  
18 p3152 A69-35154
- MITIN, B. S.**  
Investigation of the interaction between liquid oxides and refractory metals /Issledovanie vzaimodeistviia zhidkikh oksilov s tugoplavkimi metallami/.  
02 p0265 A69-11884  
Interaction between liquid oxides and high-melting metals.  
18 p3156 A69-35044
- MITIN, R. V.**  
Device for obtaining and investigating long high-current high-pressure arcs /Ustanovka dlia polucheniia i issledovaniia sil'notochnykh dlennykh dug vysokogo davleniia/.  
09 p1547 A69-21593
- MITIN, V. V.**  
Photoconductivity of a many-valley semiconductor /Fotoprovodnist' bagatodolinnogo napivprovodnika/.  
11 p1937 A69-24913
- MITIUREV, V. K.**  
Solid solutions in InAs-CdS and InAs-CdSe systems /Tverdye rastvory v sistemakh InAs-CdS i InAs-CdSe/.  
02 p0297 A69-11882  
Certain properties of solid solutions of the GaAs-ZnGa sub 2 Se sub 4 system /Nekotorye svoistva tverdykh rastvorov sistemy GaAs-ZnGa sub 2 Se sub 4/.  
15 p2670 A69-31050  
Solid solutions in the InAs-CdS and systems.  
18 p3182 A69-35042
- MITIURINA, V. E.**  
Stability of self-adjusting systems with stabilized frequency response.  
04 p0582 A69-14796
- MITIUROV, V. K.**  
Electrical properties of n-CdSnAs sub 2 over a broad range of temperatures and impurity concentrations.  
05 p0809 A69-16375
- MITNIK, L. M.**  
Influence of the variations in the mean height profiles of meteorological parameters on the radio brightness temperature of the atmosphere /O vliianii variatsii srednikh vysotnykh profiliev meteoparametrov na radioiarkostnuiu temperaturu atmosfery/.  
19 p3275 A69-36339
- MITOFF, S. P.**  
Cathode materials and performance in high-temperature zirconia electrolyte fuel cells.  
22 p3869 A69-40734
- MITOIAN, S. V.**  
Investigation of nuclear interactions of high-energy particles by the controlled nuclear emulsion method.  
13 p2331 A69-28388
- MITRA, A. P.**  
Nitric oxide in the mesosphere and its variations.  
21 p3703 A69-38364  
Changes in electron density and collision frequency at University Park, Pennsylvania during the stratospheric warming of 1967/68.  
21 p3714 A69-38556
- MITRA, S. K.**  
Analysis and Synthesis of Linear Active Networks.  
08 p1298 A69-20885
- MITRA, V.**  
On the evolution of the solar system.  
05 p0826 A69-16389
- MITRIAEV, I. M.**  
Determination of the forces in the kinematic pairs of a landing-gear mechanism /Opredelenie usilii v kinematicheskikh parakh mekhanizma shassi/.  
23 p4062 A69-41415
- MITROFANOV, V. M.**  
Investigation of surface waves in radial spiral structures /Issledovanie poverkhnostnykh voln v radial'nykh spiral'nykh strukturakh/.  
22 p3916 A69-40951
- MITROFANOVA, R. S.**  
Nonuniform distribution of electrical properties in indium arsenide single crystals /Neodnorodnost' raspredeleniia elektricheskikh svoistv v monokrystallakh antimonida indii/.  
15 p2670 A69-31049
- MITROPAN, I. M.**  
Plasma heating in a two-stage theta pinch.  
05 p0804 A69-16549
- MITROPOLSKAIA, O. N.**  
Turbulent velocities in faculae and the photosphere.  
02 p0314 A69-11646
- MITROPOLSKII, I. A.**  
Principle of reduction in the theory of stability of linear differential equations /O printsipe svedeniia v teorii ustoiichivosti lineinykh differentsial'nykh uravnenii/.  
01 p0106 A69-10956  
Investigation of nonlinear oscillations in systems with distributed parameters and delay /Issledovanie nelineinykh kolebaniy v sistemakh s raspredelennymi parametrami i zapazyvaniem/.  
11 p1916 A69-24766  
Application of asymptotic methods to systems with distributed parameters and retardation /Primenenie asimptoticheskikh metodov k sistemam s raspredelennymi parametrami i zapazyvaniem/.  
15 p2653 A69-31192
- MITROSHIN, E. I.**  
Automatic optimization of space vehicle flight under maximum L/D ratio conditions /Avtomaticheskaiia optimizatsiia poleta kosmicheskogo apparata na rezhime maksimal'nogo aerodinamicheskogo kachestva/.  
05 p0830 A69-16045  
Problems of the optimization of spacecraft descent control in the atmosphere /Voprosy optimizatsii upravleniia spuskom kosmicheskogo apparata v atmosfere/.  
13 p2355 A69-27683  
Some problems of the control of spaceships.  
16 p2867 A69-31742  
Automatic optimization of the flight of a space vehicle for a regime corresponding to maximum aerodynamic performance.  
20 p3618 A69-37954  
Stochastic optimization of spacecraft descent control in the atmosphere /Stokhasticheskaiia optimizatsiia upravleniia spuskom kosmicheskogo apparata v atmosfere/.  
21 p3767 A69-39648
- MITSENKO, B. K.**  
A possibility for reducing the noise factor of a parametric electron-beam amplifier /Ob odnoi vozmozhnosti umen'sheniia koeffitsienta shumov elektronno-luchevogo parametricheskogo usilitelia/.  
05 p0728 A69-15654  
Feasibility of decreasing the noise figure of an electron-beam parametric amplifier.  
16 p2762 A69-32511



MITSENKO, I. D.

A generator of pulses modulated by high-frequency oscillation for semiconductor laser excitation /Generators impul'sov, zapolnennykh vysokochastotnym kolebaniem, dlia vzbuzhdeniia poluprovodnikovyykh O.K.G./.

18 p3153 A69-35256

Nanosecond pulse generators for semiconductor laser excitation /Generatory nanosekundnykh impul'sov dlia vzbuzhdeniia poluprovodnikovyykh O.K.G./.

18 p3153 A69-35257

MITSKEVICH, N. V.

Observed values in the general theory of relativity and the problem of energy /Nabludaemye velichiny v obshchei teorii otnositel'nosti i problema energii/.

14 p2483 A69-28858

MITSUDA, H.

A new method for obtaining protein isolates from Chlorella algae, torula yeasts, and other microbial cells.

21 p3662 A69-39712

MITSUHASHI, S.

Notch effect in low cycle fatigue. I.

24 p4404 A69-43627

MITSUHATA, T.

Surface effects on breakdown characteristics of GaAs bulk diodes.

05 p0733 A69-16561

MITSUISHI, N.

Laminar Newtonian flow heat transfer in vertical tubes with constant wall heat flux for variable physical properties.

11 p2000 A69-25164

MITSUK, V. E.

Lowering of the optical breakdown threshold in a laser focus by superimposing a microwave field.

03 p0441 A69-13997

MITSUOKA, T.

Analysis and design of wall attachment device by a jet model of unsymmetrical velocity profile.

02 p0231 A69-12072

MITSUTA, Y.

Sonic anemometer comparison and measurements in the atmospheric surface layer.

16 p2808 A69-32600

MITSUYA, A.

A study on base pressure of ground effect machine in heaving motion.

22 p3866 A69-40817

MITTERER, R. M.

Amino acid composition of organic matrix in calcareous oolites.

04 p0553 A69-14978

MITTLEMAN, M. H.

Critical assessment of the polarized-orbital method in atomic scattering.

02 p0284 A69-12702

Rotational excitation of polar molecules by electrons.

06 p0961 A69-17139

Positronium formation in positron-helium scattering.

24 p4353 A69-43815

MITTON, P.

Epichlorohydrin-ethylene oxide rubber in seals.

19 p3356 A69-35534

MITTRA, R.

Radiation from dielectric-loaded arrays of parallel-plate waveguides.

02 p0218 A69-12326

A factorization procedure for Wiener-Hopf kernels.

11 p1851 A69-24998

Wave propagation in an open, periodic, two-dimensional iris waveguide.

16 p2753 A69-32394

Some aspects of numerical solution of boundary value problems.

17 p2929 A69-33882

Quasi-optical theory of diffraction by a semi-infinite waveguide with applications to open resonators.

17 p2930 A69-33888

A modified residue-calculus technique for solving a class of boundary value problems. II.

20 p3505 A69-37298

Admittance of a solid cylindrical antenna.

23 p4142 A69-42336

MITZNER, K. M.

Effective boundary conditions for reflection and transmission by an absorbing shell of arbitrary shape.

08 p1273 A69-20025

MIUKHKIURIA, V. I.

Automatic planetary electrophotometer and some problems in its operational procedures /Avtomaticheskii planetnyi elektrofotometr i nekotorye voprosy metodiki raboty s nim/.

20 p3547 A69-38310

MIURA, T.

Nonlinearity of large-signal transient response of transistors in saturation region.

09 p1464 A69-22117

MIX, D. F.

Random Signal Analysis.

12 p2031 A69-26632

MIXON, L. C.

Multicomponent force transducer for use on rocket sleds. [ASME PAPER 69-VIBR-21]

10 p1698 A69-24168

MIYA, M.

Consideration on the long life of gas lasers.

07 p1145 A69-18474

MIYAI, Y.

A linearized theory of a thin jet-flapped aerofoil in proximity of the ground.

09 p1431 A69-22275

Two-dimensional jet penetration with free streamlines.

22 p3859 A69-40143

On a calculation of the lift of a tunnel type ram wing.

22 p3860 A69-40819

An approximate analysis for an aerofoil with a thin jet flap which hits the ground in a case of separation from its leading edge.

22 p3861 A69-41184

MIYAIRI, S.

Bidirectional AC-DC power converter.

13 p2209 A69-28178

MIYAJIMA, K.

Some considerations on pilot rating.

21 p3668 A69-39792

MIYAKE, K.

Mechanism of plastic deformation and dislocation damping of cemented carbides.

21 p3744 A69-38736

MIYAKE, M.

Diffusion of carbon in tantalum, niobium and vanadium.

11 p1906 A69-25575

Sonic anemometer comparison and measurements in the atmospheric surface layer.

16 p2808 A69-32600

MIYAKE, S.

Ion cyclotron resonance acceleration in a non-uniformly magnetized plasma.

08 p1360 A69-20079

MIYAKODA, K.

Experimental extended predictions with a nine-level hemispheric model.

07 p1175 A69-18895

MIYAMATSU, Y.

Theoretical flow-models for externally pressurized gas bearings. [ASME PAPER 68-LUBS-2]

13 p2267 A69-27285

MIYAMOTO, A. K.

The detection of optical asymmetry in biogenic molecules by gas chromatography for extraterrestrial space exploration - Sample processing studies.

15 p2556 A69-31315

MIYAMOTO, H.

Strain distribution at the base of cracks.

06 p1020 A69-17127

On the strain near the tip of a fatigue crack in notched steel plates.

06 p1022 A69-17198

MIYAMOTO, K.

Thermalization of the kinetic energy of a plasma flow by a magnetic mirror field in BSG-I experiments.

02 p0289 A69-12176

Measurements of slow theta pinch plasma by Mach-Zehnder interferometer with giant pulse ruby laser.

12 p2091 A69-26394

MIYAMOTO, M.

Magnetohydrodynamical models of a helical magnetic field in spiral arms.

24 p4388 A69-43640

MIYAMOTO, S.

Meteorological observations of Mars during the 1967 opposition.

05 p0825 A69-16302

Mantle convection and selenological histories.

05 p0825 A69-16303

Polar cap of Mars.

07 p1212 A69-18603

MIYAMOTO, T.

Experimental studies of the shock structures in expansion flows.

06 p0908 A69-17022

MIYASAKA, T.

An analysis for the calibration data of a direction finder.

06 p0897 A69-17533

MIYASUGI, T.

Heat transfer to fully developed turbulent flow in a circular tube with a nonsteady circumferential heat flux.

22 p4051 A69-40921

MIYATA, M.

The Toshiba blow-down MHD test facility, and experiments on non-equilibrium ionization.

10 p1673 A69-23477

MIYATA, T.

Plastic deformation and rupture of thin circular plate under lateral pressure. I - Studies on rupture disc.

06 p1020 A69-17129

Nonlinearity of large-signal transient response of transistors in saturation region.

09 p1464 A69-22117

Rupture of thin circular plate under statical and pulsating lateral pressure - Studies on rupture disc - the second report.

19 p3434 A69-35773

MIYATAKE, O.

Laminar Newtonian flow heat transfer in vertical tubes with constant wall heat flux for variable physical properties.

11 p2000 A69-25164

MIYAUCHI, K.

Deforming behaviors of sheet metals in punch-stretching and hydraulic bulging.

20 p3551 A69-38115

MIYAUCHI, S.

Electron beam exposure system for integrated circuits.

15 p2579 A69-31039

MIYAZAKI, S.

Ionospheric measuring probe. II.

01 p0065 A69-10549

Radio frequency characteristic of electrode immersed in magnetoplasma and its application to plasma diagnostic techniques. I.

01 p0029 A69-10550

Ionospheric measuring probe. III.

01 p0081 A69-10760

Rocket observations of the winter ionosphere by plasma probes.

15 p2606 A69-31446

MIYAZAKI, Y.

Composite heat transfer with thermal radiation in non-gray medium.

03 p0533 A69-13884

MIYAZAWA, K.

Radio observation of galactic HII regions at 4170 MHz. II.

06 p1008 A69-17696

MIYOSHI, S.

Application of carbon dioxide laser interferometer to measurement of plasma electron density.

12 p2100 A69-27177

MIZEL, V. J.

Approximate boundary controllability for the heat equation.

01 p0173 A69-10008

MIZERA, B.

Study of various methods of determining the plasma temperature in an MHD-generator duct /Issledovaniia razlichnykh metodov opredeleniia temperatury plazmy v kanale MGD-generatora/.

13 p2309 A69-28023

MIZETSKII, V. L.

Effect of nonmetallic inclusions on the mechanism of formation of fatigue cracks /O vlianii nemetallicheskiikh vklucheni na mekhanizm vozniknoveniia treshchin ustalosti/.

22 p4047 A69-41064

- MIZOBE, Y.**  
A note about the effect of exit slide walls on cascade performances. 19 p3241 A69-36753
- MIZOGUCHI, K.**  
Deformation and stress in a cylindrical shell under concentrated loading. I - Radial loading. 01 p0166 A69-10301  
Vibration of a cylindrical shell clamped at both ends. 09 p1618 A69-22274  
Deformation and strength of a pressure vessel with elliptical cross section. 11 p1983 A69-25023
- MIZOKAMI, Y.**  
New type Laddertron oscillators for 8mm band. 03 p0405 A69-13726
- MIZUKAGA, Y.**  
High-power transmitting tubes for satellite communication earth stations. 05 p0728 A69-15668
- MIZUN, IU. G.**  
Ionization drift in the auroral zone F-region during magnetic disturbances. 03 p0423 A69-13530  
State of the F region during passage of the earth through a solar corpuscular stream /O sostoianii oblasti F vo vremia prokhozhdeniia zemli v solnechnom korpuskuliarnom potoke/. 17 p2967 A69-33989
- MIZUNO, O.**  
Preparation and properties of epitaxial gallium arsenide. [ECS PAPER 62] 08 p1373 A69-21067
- MIZUNO, S.**  
On the structure of the outer solar convection zone. 24 p4387 A69-43634
- MIZUSHIMA, Y.**  
Observation on stress effect in Schottky barrier diodes. 16 p2758 A69-31619
- MIZUSHINA, S.**  
Tunnel-diode-pair unidirectional pulse regenerating circuits. 07 p1104 A69-18892
- MIZUSHINA, T.**  
Eddy diffusivities for heat in the region near the wall. 13 p2380 A69-28497
- MJOLNESS, R. C.**  
Solutions to the Vlasov equation for Newtonian cosmologies. 08 p1386 A69-20073
- MKHITARIAN, A. M.**  
The electrohydrodynamic flow between parallel dielectric plates /Elektrohidrodinamicheskoe techenie mezdu paralel'nymi dielektricheskimi plastinami/. 03 p0419 A69-13919  
Effect of various factors on the characteristics of a slope wind /O vliianii razlichnykh faktorov na kharakteristiki sklonovogo vetra/. 15 p2648 A69-30577
- MKHITARIAN, S. M.**  
Some plane contact problems in the theory of elasticity with allowance for cohesive forces, and related integral and differential equations /O nekotorykh ploskikh kontaktnykh zadachakh teorii uprugosti s uchedom sil stsepleniia i svyazannykh s nimi integral'nykh i differentsial'nykh uravneniakh/. 15 p2706 A69-30578  
Efficient solution of certain classes of linear integral equations of the first kind and their related differential equations /Ob effektivnom reshenii nekotorykh klassov lineinykh integral'nykh uravnenii pervogo roda i svyazannykh s nimi differentsial'nykh uravneniakh/. 19 p3360 A69-35780
- MKRTCHIAN, DZH. Z.**  
Calculation of a hollow cylinder made of material with a variable modulus /Raschet pologo tsilindra, izgotovlennogo iz raznomodul'nogo materiala/. 19 p3436 A69-35858
- MKRTCHIAN, R. E.**  
Problems of large elastic deformations in the symmetric expansion and inversion of a composite hollow shell /Zadachi bol'shikh uprugikh deformatsii dlia simmetrichnogo rasshireniia i vyvorachivaniia naiznanku sostavnoi poloi sfery/. 15 p2707 A69-30582  
Problem of large elastic deformations in the case of deflection of a composite parallelepiped composed of incompressible materials /Zadacha bol'shikh uprugikh deformatsii dlia izgiba sostavnogo parallelepipeda iz neszhimaemykh materialov/. 22 p4048 A69-41277
- MLAKAR, P. F.**  
Rotating pendulum under periodic disturbance. 21 p3771 A69-39004
- MLECHIN, V. V.**  
Stability of discrete circuits employing delay lines /Ustoichivost' diskrentnykh tsepei na liniakh zaderzhki/. 22 p3918 A69-40957
- MLOTKOWSKI, A.**  
Strength of a unilaterally ribbed circular plate subjected to antisymmetric bending /Wytzymalosc plytkolowej jednostronnie zginanej poddanej antysymetrycznemu zginaniu/. 04 p0681 A69-15172
- MNATSAKANIAN, A. KH.**  
Photodissociation and photoionization of diatomic molecules at high temperatures. 03 p0473 A69-14147  
Ionizational relaxation behind shock waves in air. 05 p0746 A69-15891  
The optical properties of hot air. I - Basic processes and spectral properties /Opticheskie svoystva goriachego vozdukh. I - Osnovnye protsessy i spektral'nye kharakteristiki/. 07 p1185 A69-19166  
The optical properties of hot air. II - Integral characteristics between 4000 and 20,000 K /Opticheskie svoystva goriachego vozdukh. II - Integral'nye kharakteristiki 4000-20 000 deg K/. 07 p1185 A69-19167
- MNATSAKANIAN, M. A.**  
The relativistic generalized theory of gravitation. I /K relativistskoi obobshchennoi teorii gravitatsii. I/. 13 p2351 A69-27864  
Polytropic models according to the nonrelativistic generalized theory of gravitation /Politropnye modeli po nerelativistskoi obobshchennoi teorii gravitatsii/. 13 p2352 A69-27872  
Generalized Newtonian theory of gravitation. 16 p2865 A69-32599
- MNUSKIN, V. E.**  
Resistance of a xenon plasma in a large flash lamp. 03 p0478 A69-13846
- MOBERG, D. A.**  
Evolution of reaction control engines for U.S. manned spacecraft. 16 p2867 A69-31746
- MOBERLY, J. W.**  
Compacting and pressureless sintering of beryllium powders. 14 p2465 A69-29681
- MOBERLY, R., JR.**  
Interpretation of the sources of the satellite-determined gravity field. 20 p3523 A69-37566
- MOCHALKIN, N. N.**  
Conductivity of CdS under the action of an intense electron beam /Provodimost' CdS pod deistviem intensivnogo puchka elektronov/. 13 p2318 A69-27886  
Coherent recombinational radiation of some semiconductors at high levels of excitation. 19 p3387 A69-36539  
Radiative transitions between a deep acceptor and the valence band in gallium arsenide /Izлучatel'nye perekhody glubokii akseptor- valentnaia zona v arsenuide galliia/. 19 p3392 A69-36611
- MOCHALKINA, O. R.**  
The Gunn effect and its applications /Effekt Ganna i ego primeneniia/. 18 p3183 A69-35160
- MOCHALOV, G. A.**  
Mechanical properties of molybdenum after hydroextrusion. 16 p2803 A69-32491  
Mechanical properties of hydro-extruded molybdenum after annealing. 18 p3156 A69-34719  
Anomalous grain growth and the deformation of single crystals during annealing of hydraulically extruded molybdenum /Anomal'nyi rost zeren i obrazovanie monokristallov pri ozhigie gidroekstrudirovannogo molibdena/. 21 p3745 A69-38953
- MOCHALOV, S. V.**  
Statistical classification of lunar and Martian annular structures according to their diameters /Statisticheskaiia klassifikatsiia kol'tsevykh struktur luny i Marsa po diametram/. 04 p0658 A69-14959  
Statistical classification of ring structures on the moon and Mars and their diameters. 18 p3197 A69-34722
- MOCHIZUKI, M.**  
A study on the oxygenation velocity factor of the red blood cell by use of the rapid flow method combined with a Pt-electrode as the oxygenation detector. 20 p3480 A69-38283
- MOCHIZUKI, T.**  
Reproducibility of the boiling point of oxygen and its pressure-temperature relation near 1 atmosphere. 14 p2540 A69-29888
- MOCK, E. A.**  
Design of vapor turbines including effects of super-saturation. 23 p4187 A69-42251
- MOCKER, H. W.**  
Rotational level competition in CO sub 2 lasers. [IEEE PAPER G-6] 07 p1151 A69-19055  
A 10.6-mu optical heterodyne communication system. 17 p2919 A69-33086
- MOCKROS, L. F.**  
Hemolytic effects of energy dissipation in flowing blood. 23 p4100 A69-42533  
Oxygen and carbon dioxide transfer in membrane oxygenators. 24 p4279 A69-43799
- MOCQUERY, M.**  
The boosters /Les lanceurs/. 02 p0334 A69-11919
- MODEL, M. S.**  
Study of the structure and properties of solid solutions of oxygen in titanium and zirconium /Issledovanie stroeniia i svoystv tverdykh rastvorov kisloroda v titane i tsirkonii/. 04 p0618 A69-15078  
Oxygen diffusion parameters in beta-titanium /O parametrah diffuzii kisloroda v beta-titane/. 07 p1163 A69-18783
- MODI, V. J.**  
Roll dynamics of a spinning axi-symmetric satellite in an elliptic orbit. 05 p0830 A69-16397  
The planar motion of a damped satellite. 10 p1791 A69-22935  
Unsteady aerodynamics of stationary elliptic cylinders in subcritical flow. [AIAA PAPER 69-745] 18 p3084 A69-34412  
Coupled librational motion of an axi-symmetric satellite in a circular orbit. 22 p4008 A69-39936  
Periodic solutions associated with the gravity-gradient-oriented system. I - Analytical and numerical determination. 23 p4224 A69-41876  
Periodic solutions associated with the gravity-gradient-oriented system. II - Stability analysis. 24 p4388 A69-43649
- MODICA, A. P.**  
Electronic oscillator strength of CF sub 2. 04 p0632 A69-14944  
COF sub 2 band intensities in the 2 point zero to 6 point zero micron region. 21 p3669 A69-38759
- MODISETTE, J. L.**  
Radiation plan for the Apollo lunar mission. [AIAA PAPER 69-19] 06 p0996 A69-18113
- MODLEN, G. F.**  
Re-orientation of fibres during mechanical working. 12 p2188 A69-26933
- MODLER, R.**  
The formation of 3,6-diphenylpyridazine and 2,5-diphenylpyrrole from alpha-styryl azide. 10 p1651 A69-23307
- MODRELL, G.**  
Sensing the earth's atmosphere with occultation satellites. 14 p2447 A69-29517
- MODYLEVSKAIA, K. D.**  
Determination of free carbon in the carbides of titanium, zirconium, and hafnium. 10 p1714 A69-23846



## MOE, H.

- MOE, H.  
Hydroxylamine complexes of some inorganic salts.  
17 p2917 A69-33657

- MOE, K.  
A review of atmospheric models in the altitude range 100 to 1000 km.  
[AIAA PAPER 69-50] 06 p1011 A69-18085  
Variation of geomagnetic disturbance with latitude.  
09 p1489 A69-21715  
The roles of kinetic theory and gas-surface interactions in measurements of upper-atmospheric density.  
16 p2776 A69-32089

- MOE, M. M.  
The roles of kinetic theory and gas-surface interactions in measurements of upper-atmospheric density.  
16 p2776 A69-32089

- MOE, O. K.  
A model for the penumbra of sunspots.  
22 p4019 A69-40290

- MOECKEL, W. E.  
Propulsion systems for manned exploration of the solar system.  
20 p3586 A69-38118

- MOEGLING, J. B.  
Sensible heat transfer in the Gemini and Apollo space suits.  
06 p0880 A69-17089

- MOEHRING, W.  
A New Class of Solutions of the Basic Equations for Unsteady Flows of Ideal Gases, with Applications to Hypersonic Flows /Ueber eine neue Klasse von Loesungen der Grundgleichungen fuer die instationaeren Stroemungen idealer Gase mit Anwendung auf Hyperschallstroemungen/.  
16 p2773 A69-32428

- MOEHRING, W. F.  
Sound generation by unsteady flow as a singular perturbation problem /Schallerzeugung durch instationaere Stroemung als singulaeres Stoerungsproblem/.  
13 p2299 A69-28187

- MOELLER, F.  
Problems of meteorological observations from satellites.  
09 p1537 A69-22690

- MOFFAT, A. J.  
Surveillance of air pollution from airborne and space platforms.  
12 p2096 A69-26981

- MOFFAT, R. J.  
The turbulent boundary layer on a porous plate - Experimental heat transfer with uniform blowing and suction.  
04 p0586 A69-14356

- The turbulent boundary layer on a porous plate - Experimental skin friction with variable injection and suction.  
21 p3696 A69-39431

- Heat transfer to the highly accelerated turbulent boundary layer with and without mass addition.  
[ASME PAPER 69-HT-53] 24 p4409 A69-43518

- MOFFATT, D. L.  
Impulse response waveforms of a perfectly conducting right circular cylinder.  
17 p2917 A69-32918

- The echo area of a perfectly conducting prolate spheroid.  
23 p4115 A69-41584

- MOFFATT, H. K.  
The degree of knottedness of tangled vortex lines.  
11 p1872 A69-25126

- MOFFET, A. T.  
Further observations of pulsating radio sources at 13 cm.  
02 p0328 A69-12726

- Wavelength dependence of the intensity variations of quasi-stellar radio sources /Zavisimost' izmenenii intensivnosti kvazizvezdnykh radioistochnikov ot dliny volny/.  
12 p2167 A69-27045

- A measurement of the galactic magnetic field using the pulsating radio source PSR 0833-45.  
13 p2335 A69-27311

- Trans-Pacific interferometer measurements at 2,300 MHz.  
15 p2701 A69-31530

- Detection of the pulsed radio source CP 1919 at 13 cm wavelength.  
17 p3036 A69-33637

- MOFFETT, J.  
Radar digital processing and display system for air traffic control.  
21 p3760 A69-38328

- MOFFETT, R. J.  
Response of a planetary thermosphere to heating by solar radiation.  
[AFCRL-69-0363] 04 p0649 A69-15130

- Solution of the coupled ion and neutral air equations of the mid-latitude ionospheric F2-layer.  
07 p1123 A69-18818

- Continuity of air motion in the mid-latitude thermosphere.  
21 p3714 A69-38553

- MOFFETT, R. L.  
Gas effects in attitude control systems.  
[AIAA PAPER 69-434] 16 p2870 A69-32765

- MOFFITT, B. R.  
An intermittent traversing gear for small wind tunnels.  
01 p0054 A69-10219

- MOFFITT, T. P.  
Some measurement problems encountered when determining the performance of certain turbine stator blades from total pressure surveys.  
[ASME PAPER 69-GT-103] 09 p1432 A69-22521

- Performance of a single-stage turbine as affected by variable stator area.  
[AIAA PAPER 69-525] 16 p2841 A69-32686

- MOGHE, S. R.  
Creep in anisotropic stress analysis.  
07 p1234 A69-19381

- MOGILEVSKAIA, L. IA.  
Synthesis of a tunnel-diode amplifier with series stabilization /Sintez tunnel'nogo usilitelia s posledovatel'noi stabilizatsiei/.  
13 p2236 A69-28575

- MOGILEVSKII, E. I.  
Magnetic field decay in the group 21034 during the proton flare period of July 1966.  
10 p1766 A69-23759

- MOHAN, C.  
Pulsational properties of a massive star in the helium burning phase. I.  
07 p1218 A69-19279

- Pulsational properties of a massive star in the helium burning phase. II.  
10 p1771 A69-22853

- Pulsational properties of a massive star in the helium burning phase. III.  
22 p4022 A69-40467

- MOHANDIS, M. G. S.  
The propagation of Alfvén waves in a viscous fluid of finite electrical conductivity. II.  
07 p1195 A69-19451

- MOHLER, O. C.  
Revision of the ultraviolet solar spectrum in the range 3650-3000 angstrom units.  
22 p4014 A69-40146

- MOHLER, R. R.  
Multivariable bilinear system control.  
12 p2049 A69-26083

- MOHLER, S. R.  
Alcohol question in aircraft accident investigation.  
01 p0022 A69-11345

- Circadian rhythms and the effects of long-distance flights.  
03 p0378 A69-14260

- Medical factors in U.S. general aviation accidents.  
07 p1067 A69-19433

- Drug and toxic hazards in general aviation.  
07 p1068 A69-19435

- Aviation pathology in aircraft accident investigation.  
12 p2021 A69-25841

- Aircraft accidents by older persons.  
14 p2541 A69-29308

- Medical factors in U.S. general aviation accidents.  
23 p4106 A69-41792

- MOHLKE, B. H.  
Radar analysis reveals satellite parameters.  
20 p3488 A69-37295

- Radar analysis of satellite rotation.  
22 p3900 A69-40682

- MOHN, E.  
Regular pulsing of gallium-arsenide-diode laser.  
17 p2982 A69-33421

- MOHR, C. B. O.  
Channel-coupling effects in elastic collisions of electrons with atoms.  
09 p1542 A69-21623

- MOHR, G.  
Effect of ultrahigh vacuum on the friction between metals and granular soils.  
13 p2298 A69-28014

- MOHR, G. C.  
Variations of spinal alignment in egress systems and their effect.  
23 p4102 A69-41681

- MOHR, R. J.  
Radiated interference and susceptibility characteristics of unshielded lines.  
23 p4141 A69-42225

- MOHRI, A.  
Application of microchemical analysis to diagnostics of lithium plasma.  
05 p0762 A69-15960

- A computational method for the quasi-optimal control from parameter sensitivity viewpoint.  
11 p1859 A69-25165

- MOHSEN, A.  
Higher order asymptotic terms of the two-dimensional diffraction by a small aperture.  
03 p0396 A69-13631

- MOHSEN, A. M.  
An experimental study of the separated flow of very thick incompressible turbulent boundary layers.  
[ASME PAPER 68-WA/FE-36] 05 p0750 A69-16109

- MOIR, L. E.  
In-flight ballistic range measurements with a ruggedized telemetry system.  
10 p1654 A69-23281

- MOIR, R. W.  
Warm plasma stabilization of the convective loss cone mode.  
09 p1551 A69-22040

- MOISE, J. C.  
Performance of various ablative materials in a large hydrogen/oxygen thrust chamber.  
[AIAA PAPER 69-442] 16 p2747 A69-32702

- MOISEENKO, A. K.  
Two-dimensional problem in thermoelasticity for physically nonlinear media /Ploskaia zadacha termouprugosti dlia fizicheski nelineinykh sred/.  
19 p3436 A69-35848

- MOISEEV, I. G.  
The new 22-meter parabolic reflector radio telescope of the Crimean Astrophysical Observatory of the USSR Academy of Sciences /Novyi radioteleskop Krymskoi Astrofizicheskoi Observatorii AN SSSR s 22-metrovym parabolicheskim reflektorom/.  
04 p0584 A69-14376

- A method of observing solar radio emission bursts with the aid of pencil-beam antennas /Metod nabliudeniia vspleskov radioizlucheniia solntsa ostronapravlennymi antennami/.  
04 p0651 A69-14377

- Radio emission of Venus and Jupiter at 2.25 and 8 mm wavelengths /Radioizluchenie Veneri i Iupitera na volnakh 2.25 i 8 mm/.  
11 p1956 A69-24396

- Observation of solar radio emission by the 22-m radio telescope at the Crimean Astrophysical Observatory at 2.25 mm and 8.15 mm wavelengths.  
22 p4020 A69-40295

- Radio emission of Venus and Jupiter at 2.25 and 8 mm.  
24 p4390 A69-43786

- MOISEEV, I. N.  
Variability of the intensity of corpuscular radiation in the upper atmosphere at mid-latitudes /Izmenchivost' intensivnosti korpuskularnogo izlucheniia v verkhnei atmosfere na srednikh shirotakh/.  
22 p4008 A69-41104

- MOISEEV, L. I.  
Investigation of the Crab Nebula at wavelengths of 2.16 and 8.2 mm /Issledovaniia krabovidnoi tumanosti na volnakh 2,16 i 8,2 mm/.  
19 p3428 A69-36875

- MOISEEV, N. N.  
Introduction to the Dynamics of Fluid-containing Bodies under Conditions of Weightlessness /Vvedenie v Dinamiku Tela s Zhidkost'iu v Usloviakh Nevесomosti/.  
03 p0417 A69-13808

- Asymptotic methods in the theory of optimum correction for systems with slowly varying parameters.  
15 p2583 A69-31234
- MOISEEV, S. S.**  
Hydrodynamic models as applied to the investigation of magnetic plasma stability.  
07 p1190 A69-18694  
Second harmonic generation by an electromagnetic wave incident on an inhomogeneous plasma /Generatsiya vtoroi harmoniki pri padenii elektromagnitnoi volny na neodnorodnuiu plazmu/.  
10 p1653 A69-23133  
Low-frequency hydrodynamic instabilities in an inhomogeneous current-carrying plasma /Nizkочастотные гидродинамические неустойчивости неоднородной плазмы с током/.  
11 p1932 A69-25537
- MOISEEV, U. N.**  
Corpuscular radiation intensity during geomagnetic disturbances.  
15 p2677 A69-31327
- MOISEEV, V. N.**  
Properties and heat treatment of Ti-Fe and Ti-Fe-Al alloys /Svoystva i termicheskaia obrabotka spлавov Ti-Fe i Ti-Fe-Al/.  
19 p3344 A69-36151
- MOISIA, R. I.**  
Statistical characteristics of the initial radii of ionized meteor trails /Statisticheskie kharakteristiki nachal'nykh radiusov ionizirovannykh meteornykh sledov/.  
10 p1783 A69-23917  
Evaluation of the exponent in the mass distribution law of meteoric bodies for the Leonids in 1967 /Otsenka pokazatelya stepeni v zakone raspredeleniia meteornykh tel po massam dlia potoka Leonid 1967 g./.  
18 p3203 A69-35334
- MOISIL, D.**  
Determination of ellipsometric dimensions in laser radiation /Asupra determinarii marimilor elipsometrice in radiatile laser/.  
15 p2636 A69-31474
- MOIZHES, B. IA.**  
Ionization combined with free electron Maxwellization in a plasma - Calculation of ionization for a cesium plasma /Ionizatsiia v plazme sovmensto s maksvelizatsiei svobodnykh elektronov - Raschet ionizatsii dlia tsezievoi plazmy/.  
02 p0292 A69-12559  
Comparison of the probe and optical methods of measuring the parameters of low-temperature cesium plasma.  
03 p0478 A69-13836  
Low-voltage arc in thermionic converters - Comparison between theory and experiment.  
06 p0963 A69-16910  
Current-voltage characteristics of a thermionic converter at a high current density - Ionization equilibrium in the plasma of a low-voltage arc /Vol'tampernye kharakteristiki termoeionnogo preobrazovatelya pri vysokoi plotnosti toka - Ionizatsionnoe ravновesie v plazme nizkovol'noi dугi/.  
11 p1933 A69-25554  
Calculation of the near-electrode layer in a low-temperature plasma /K raschetu priekletronnogo sloia v nizkotemperaturnoi plazme/.  
13 p2312 A69-28117  
Theoretical and experimental investigation of low-voltage arc in thermionic converter.  
14 p2404 A69-29254  
The electron energy distribution function and the rate of nonequilibrium ionization in the near-cathode layer of the thermionic converter.  
14 p2404 A69-29255  
The probe and spectral investigations of dense plasma thermionic converters.  
14 p2404 A69-29256  
On the plasma sheath theory.  
14 p2491 A69-29257  
Ionization in a cesium plasma and simultaneous free-electron Maxwellization in a plasma.  
15 p2658 A69-30256
- MOK, C.-H.**  
A cumulative damage concept in rain erosion study.  
12 p2187 A69-26848  
A cumulative damage concept in rain erosion study.  
16 p2794 A69-31904
- MOKEEV, O. K.**  
The Gunn effect and its applications /Effekt Ganna i ego primeneniia/.  
18 p3183 A69-35160
- MOKEROV, V. G.**  
Investigation of the reflection spectra of vanadium dioxide single crystals at the semiconductor-metal phase transition.  
02 p0298 A69-12100  
Optical properties and band structure of vanadium dioxide and pentoxide single crystals /Opticheskie svoystva i zonnaya struktura monokristallov dvooukisi i piatioukisi vanadiia/.  
12 p2145 A69-26724  
Optical properties and band structure of vanadium dioxide and pentoxide single crystals.  
21 p3781 A69-39137
- MOKHNACH, D. O.**  
Photodissociation of C sub 2 molecules in the atmosphere of comets.  
06 p1004 A69-17534  
Possible evaluation of the size and the mass of the ice nucleus of a comet.  
06 p1004 A69-17537  
Influence of solar ultraviolet radiation on the processes in the head of a comet /Vozdeistvie ul'trafiolietovogo izlucheniia solntsa na protsessy v golove komety/.  
14 p2525 A69-29717
- MOKRUSHIN, S. A.**  
Special characteristics of installations with magnetogasdynamic converters working on the Rankine cycle.  
03 p0369 A69-14154
- MOKSZYSZCZAK, M.**  
Monitoring turbine engines during their operation /Kontrola silnikow turbinowych w czasie ich eksploatacji/.  
19 p3329 A69-36873
- MOLBECH, S.**  
Endurance time in static work during partial curarization.  
22 p3890 A69-40213
- MOLCHANOV, A. G.**  
Two problems concerning the natural oscillations of elastic systems containing a liquid /Dve zadachi o sobstvennykh kolebaniiax uprugikh sistem s zhidkim napolneniem/.  
11 p1870 A69-24951  
Plane oscillations of a liquid in a rectangular elastic vessel /Ploskie kolebaniia zhidkosti v priamougol'nom uprugom sosude/.  
17 p2950 A69-33200
- MOLCHANOV, E. I.**  
Device for the thermal-fatigue testing of discs.  
15 p2583 A69-30208
- MOLCHANOV, O. A.**  
Structure of the magnetic field within the magnetosphere during the recovery phase of a magnetic storm /Struktura magnitnogo polia vnutri magnitosfery v vosstanovitel'nuu fazu magnitnoi buri/.  
02 p0237 A69-11666  
Variation of the characteristics of atmospheric whistlers in the presence of a perturbed magnetic field in the magnetosphere /Izmenenie kharakteristik sviastishchikh atmosferikov pri vozmushchenom magnitnom pole magnitosfery/.  
02 p0238 A69-11671  
Bursts of VLF radiation.  
06 p0920 A69-17731  
Detection of perturbations in the geomagnetic field from the dynamic spectra of whistlers /Obnaruzhenie vozmushchenii geomagnitnogo polia v magnitosfere po dinamicheskim spektram sviastishchikh atmosferikov/.  
09 p1490 A69-21766  
Structure of the magnetic field in the magnetosphere during the recovery phase of a magnetic storm.  
13 p2257 A69-28697  
Change in whistler characteristics in the disturbed magnetic field of the magnetosphere.  
13 p2257 A69-28702
- MOLCHANOV, V. F.**  
The motion of a viscous incompressible fluid in a rotating pipe with porous walls /Dvizhenie вязкой несжимаемой жидкости во вращающемся трубе с проницаемыми стенками/.  
11 p1875 A69-25481
- MOLCHANOV, V. I.**  
Investigation of ferroelectrics by a waveguide resonance technique at decimeter waves /Issledovanie segnetoelektrikov volnovodno-rezonansnym metodom na detsimetrovykh volnakh/.  
22 p3997 A69-41167
- MOLEND, P. J.**  
System partitioning for LSI.  
09 p1466 A69-22451
- MOLHO, R.**  
Mechanical properties of epoxy resins and glass/epoxy composites at cryogenic temperatures.  
05 p0785 A69-16491
- MOLIAVIN, IU. M.**  
Measurement of ultrarapid plasma perturbations in experiments with shock waves /Izmereniia sverkhbystrykh vozmushchenii plazmy v eksperimentakh s udarnymi volnami/.  
14 p2498 A69-29803
- MOLIAVKO, V. I.**  
In-phase waves in a two-dimensional periodic slow-wave structure of the type of two parallel "cellular" planes /Sinfaznye volny v dvumerno-periodicheskoi zamedliaushchei sisteme tipa dvukh parallel'nykh "iacheistykh" ploskostei/.  
03 p0407 A69-13981  
Dispersion properties and coupling impedance of a logarithmic spiral resting on an anisotropic magnetodielectric layer /Dispersionnye svoystva i soprotivlenie sviazi logarifmicheskoi spirali na sloe anizotropnogo magnitodielektrika/.  
13 p2235 A69-28512  
Investigation of surface waves in radial spiral structures /Issledovanie poverkhnostnykh voln v radial'nykh spiral'nykh strukturakh/.  
22 p3916 A69-40951  
Effect of geometry on the characteristics of two-dimensionally periodic resonator slow-wave structures /Vliianie geometrii na kharakteristiki rezonatornykh dvumerno-periodicheskikh zamedliaushchikh sistem/.  
23 p4140 A69-42048
- MOLIN, N.-E.**  
Measuring combination mode vibration patterns by hologram interferometry.  
18 p3135 A69-34635
- MOLINA, C. G.**  
Intrinsic equations of magnetohydrodynamics /Sulle equazioni intrinseche della magnetofluidodinamica/.  
14 p2492 A69-29593
- MOLINA, D.**  
Measurement of effective charge-exchange and stripping cross sections of incident ions and atoms /masses of 1, 2, and 3/ encountering a vapor target at energies ranging from 1 to 50 keV /Mesure des sections efficaces d'echange de charge et de "stripping" pour des ions et des atomes incidents /masses 1, 2, et 3/ d'energie comprise entre 1 et 50 keV rencontrant une cible de vapeur d'eau/.  
19 p3378 A69-36190
- MOLINARI, A. A., JR.**  
A microcircuit A-to-D converter for aerospace environment.  
10 p1636 A69-23282
- MOLINARI, E.**  
A Fortran IV program for the computation of equilibrium compositions of gas mixtures at high temperatures.  
08 p1278 A69-20154  
The behaviour of metal oxides injected into an argon induction plasma.  
13 p2315 A69-28458
- MOLINET, F.**  
Transformation of the Boltzmann equation for the electron component of a weakly ionized gas into an integral equation - Application to a homogeneous Lorentzian gas subjected to the action of an alternating electric field /Transformation de l'equation de Boltzmann pour la composante electronique d'un gaz faiblement ionise en une equation integrale - Application a un gaz de Lorentz homogene soumis a l'action d'un champ electrique alternatif/.  
05 p0795 A69-15619  
Existence and uniqueness of the solution of the Boltzmann equations for the electron distribution function of a homogeneously weakly ionized gas subjected to the action of an alternating electric field, when the particles are likened to inactive hard spheres /Existence et unicite de la solution de l'equation de Boltzmann pour la fonction de distribution electronique d'un gaz faiblement ionise, homogene et soumis a l'action d'un champ electrique alternatif, lorsqu'on assimile les particules a des spheres dures inactives/.  
05 p0797 A69-16604  
Electron distribution function of a Lorentzian plasma traversed by a transverse traveling wave /Fonction de distribution electronique d'un plasma Lorentzien traverse par une onde progressive transversale/.  
24 p4354 A69-42675
- MOLITOR, J. H.**  
Spacecraft design for multipurpose solar electric propulsion missions.  
[AIAA PAPER 69-252]  
09 p1568 A69-21729



- Electric propulsion design optimization methodology. [AIAA PAPER 69-254] 09 p1569 A69-21879
- MOLL, J. L.**  
Temperature dependence of hot electron drift velocity in silicon at high electric field. 01 p0135 A69-10120  
Emitter controlled negative resistance in GaAs. 22 p3911 A69-40010
- MOLL, W.**  
The influence of hemoglobin diffusion on oxygen uptake and release by red cells. 05 p0707 A69-15677  
Measurements of facilitated diffusion of oxygen in red blood cells at 37 deg C. 23 p4093 A69-42064
- MOLLE, R.**  
Fluidics and numerical control /Fluidique et commande numerique/. 04 p0550 A69-15082
- MOLLENAUER, L. F.**  
Electron-spin memory in the optical-pumping cycle of F centers in alkali halides and electron-spin resonance of the relaxed excited state. 23 p4198 A69-42419
- MOLLER, P. S.**  
Coanda flow over a circular cylinder with injection normal to the surface. 16 p2772 A69-32148
- MOLODENSKII, M. M.**  
Integral properties of force-free fields. 11 p1951 A69-24239  
Determination of the electron energy distribution from the electron synchrotron radiation spectrum /Onakhozhenii energeticheskogo raspredeleniia elektronov po spektru ikh sinkhrotronnogo izlucheniia/. 15 p2655 A69-30546
- MOLODTSOV, G. A.**  
Structural residual stresses in oriented fiberglass-reinforced plastics /Strukturnye ostatocnyye napriazheniia v orientirovannykh stekloplastikakh/. 08 p1335 A69-20333  
Effect of residual stresses on the strength of oriented glass-fiber reinforced plastics /Vliianie ostatocnykh napriazhenii na prochnost' orientirovannykh stekloplastikov/. 22 p3973 A69-40745
- MOLODYK, A. D.**  
Effect of alloying additives of aluminum on the corrosion resistance of tungsten disilicide /Vlianie legiruiushchikh dobavok aluminiuma na korroziionnuu stoikost' disilitsida vol'frama/. 20 p3561 A69-37376
- MOLOSTOV, E. A.**  
Reliability of Semiconductor Radio Devices of Flight Vehicles /Nadezhnost' poluprovodnikovyykh radioustroystv letatel'nykh apparatov/. 18 p3108 A69-34350
- MOLSEN, K.**  
Some thoughts on the propagation velocity of gravitation /Gedanken zur Ausbreitungsgeschwindigkeit der Gravitation/. 18 p3172 A69-34627
- MOLTER, G. E.**  
Material characterization results for a selected graphite fiber/epoxy composite. [ASME PAPER 69-GT-114] 09 p1531 A69-22520
- MOLZ, F. J.**  
A first approximation for flow through a porous tube. [ASME PAPER 69-FE-44] 20 p3517 A69-38000
- MOMA, IU. A.**  
Equipment for studying semiconductor optical quantum amplifiers /Apparatura dlia issledovaniia poluprovodnikovyykh opticheskikh kvantovykh usilitel'ev/. 18 p3153 A69-35258
- MOMYER, W. R.**  
Spray deposition of low emittance gold thermal control coatings. 15 p2618 A69-30310
- MON, G.**  
On a class of differential games. 19 p3359 A69-35665
- MONAHAN, M. A.**  
Vibration analysis by holographic interferometry. 04 p0598 A69-14871  
Complex spatial filtering by holographic Fourier subtraction. 10 p1690 A69-22953
- MONAHAN, M. H.**  
Modification of gas turbine component life predictions utilizing experience and the discrete formulation of Bayes theorem. 19 p3394 A69-36004
- MONAKHOV, N. M.**  
Hypersonic flow over conical bodies. 16 p2732 A69-32126
- MONCUR, N. K.**  
Pulse broadening in a MHD copper vapor laser. 07 p1149 A69-18904
- MOND, B.**  
On duality for real and complex programming problems. 04 p0623 A69-14947
- MONDLOCH, A. J.**  
Overwater propagation of millimeter waves. 11 p1836 A69-24989
- MONFILS, A.**  
Auroral spectra /Spectres auroraux/. 14 p2518 A69-29100
- MONFORTON, G. R.**  
Finite deflection discrete element analysis of sandwich plates and cylindrical shells with laminated faces. 12 p2185 A69-26821
- MONGIA, H. C.**  
Progressive acoustic and weak shock waves in Al, Be and B flames. [AIAA PAPER 69-540] 16 p2880 A69-32742
- MONGOLD, V. L.**  
Analysis of products evolved from selected thermal control coating materials during ultraviolet radiation in vacuum. [AIAA PAPER 69-640] 17 p2992 A69-33289
- MONICH, N. V.**  
Study of the effectiveness of various types of polymethine dyes used in passive Q-switches of neodymium lasers /Issledovanie effektivnosti razlichnykh tipov polimetinovykh krasitelei, primeniayemykh v passivnykh zatvorakh neodimovykh OKG/. 17 p2983 A69-33968
- MONIN, A. S.**  
Hydrodynamic theory of short-term weather forecasts /Gidrodinamicheskaya teoriia kratkosrochnykh prognozov pogody/. 03 p0459 A69-13332  
Predictability of synoptic processes /O predskazuemosti sinopticheskikh protsessov/. 12 p2126 A69-26576  
Spectra of micrometeorological, synoptic, and climatic oscillations of the meteorological fields /O spektrakh mikrometeorologicheskikh, sinopticheskikh i klimaticheskikh kolebaniy meteorologicheskikh polei/. 14 p2476 A69-29823  
On description of micro- and meso-scale phenomena in numerical models of the atmosphere. 19 p3363 A69-36500
- MONIN, IU. G.**  
The new 22-meter parabolic reflector radio telescope of the Crimean Astrophysical Observatory of the USSR Academy of Sciences /Novyi radioteleskop Krymskoi Astrofizicheskoi Observatorii AN SSSR s 22-metrovym parabolicheskim reflektorom/. 04 p0584 A69-14376
- MONNE, G. ZH.**  
New observations of M 82 /Novye nabludeniia M 82/. 12 p2171 A69-27067
- MONNERAT, E.**  
Code of space law /Code de droit spatial/. 20 p3639 A69-37135
- MONNERET, J.**  
Study of weak displacements of opaque objects and of the optical distortion in solid-state lasers by holographic interferometry /Etude des faibles deplacements d'objets opaques et de la distorsion optique dans les lasers a solide par interferometrie holographique/. 19 p3308 A69-35909
- MONNERET, M. B.**  
Flexible NiCd storage batteries for powering meteorological balloons /Batteries d'accumulateurs souples NiCd pour alimentation de ballons meteorologiques/. 16 p2736 A69-31745
- MONNET, G.**  
Electron temperatures in H II regions /Sur la temperature electronique des regions H II/. 08 p1392 A69-20566
- Kinematic study of ionized hydrogen in NGC 4449 /Etude cinematique de l'hydrogene ionise dans NGC 4449/. 13 p2347 A69-27714**
- Kinematic study of ionized hydrogen in M 51 /Etude cinematique de l'hydrogene ionise dans M 51/. 13 p2347 A69-27720**
- Kinematic study of ionized hydrogen in NGC 4631 /Etude cinematique de l'hydrogene ionise dans NGC 4631/. 16 p2854 A69-31647**
- MONNIN, C. F.**  
Molecular hydrogen inelastic electron impact cross sections - A semiclassical method. 09 p1542 A69-22249
- MONNOT, G.**  
Combustion in a heterogeneous system /La combustion en systeme heterogene/. 06 p1032 A69-17421
- MONOI, T.**  
Equipment for earth stations. 05 p0741 A69-15667
- MONOSHKOV, A. N.**  
Method of determining the impact hardness of materials. 10 p1801 A69-23850
- MONRO, P. E.**  
Minor atmospheric constituents and the ion composition of the E-region. 05 p0757 A69-16408
- MONROE, G. A.**  
Experimental verification of specular reflection computer program, SPREC. [AIAA PAPER 69-65] 06 p1040 A69-18215
- MONROE, J. W.**  
Experimental investigation of hybrid mode operation in oversized Gunn effect devices. 04 p0639 A69-14339
- MONROE, R. D.**  
All-weather landing flight director and fault warning display simulator studies. 01 p0010 A69-10455
- MONROE, R. E.**  
Electron beam welding of beryllium. II. 02 p0252 A69-11863  
The feasibility of resistance welding in hard vacuum. 12 p2103 A69-26622  
Further studies of diffusion bonding below 1000 deg F. 15 p2617 A69-30100  
Fabrication of ultrahigh-purity aluminum strip for use in cryogenic magnets. 19 p3318 A69-35541  
The feasibility of resistance welding in a hard vacuum. 19 p3319 A69-35554  
Effect of experimental 2219 and 2014 aluminum weld composition variations. 22 p3956 A69-40461
- MONROE, S. F.**  
Vacuum cured polyimide laminate properties. 24 p4335 A69-42933
- MONS, R.**  
Turbulent mixing - A review, reevaluation, and extension. [AIAA PAPER 69-31] 06 p0915 A69-18223
- MONS, R. F.**  
Chemical reactions in compressible turbulent mixing flows. [AIAA PAPER 69-537] 16 p2747 A69-32701  
The wall wake - Flow behind an obstacle on a flat surface. 18 p3083 A69-34403
- MONSEL**  
Damping of high-rigidity structures /Amortissement des structures de raideur elevee/. 13 p2370 A69-28601
- MONSIGNORI FOSSI, B. C.**  
The 44-60 angstrom units flux during the ascending period of the solar cycle no. 20 /1964-67/. 04 p0650 A69-15530
- MONTAGUE, P.**  
Elastic-plastic, axisymmetric analysis of a thin-walled cylindrical shell subjected to a radial pressure difference. [ASME PAPER 68-APM/AA] 04 p0670 A69-14404

- MONTALTO, M.**  
Richardson's number in the vertical tropospheric region of maximum wind in winter jet streams in Italy // numero di Richardson nello intorno troposferico verticale del vento massimo delle correnti a getto invernali, in Italia/. 13 p2295 A69-28656
- MONTALVO, R. A.**  
Index of refraction of isopentane and mesitylene as a function of pressure. 01 p0123 A69-10685
- MONTANUS, N. R.**  
General aviation - The airport problem. [AIAA PAPER 69-820] 19 p3453 A69-35595  
The airport problem. 22 p3925 A69-40428
- MONTE MASCARO, A. C.**  
On the polarization and intensity distribution of solar bursts at 7 GHz. 04 p0652 A69-14417  
Polarization bursts in the sun observed at microwave frequencies. 05 p0813 A69-15761
- MONTAGANI, F. J.**  
Underexpanded jet noise reduction using radial flow impingement. [AIAA PAPER 68-81] 13 p2248 A69-28212
- MONTEITH, L. K.**  
Some observations on charge buildup and release in silicon dioxide irradiated with low energy electrons. 10 p1743 A69-23172
- MONTGOMERY, D.**  
Particle acceleration by electrostatic waves with spatially varying phase velocities. 03 p0479 A69-14028  
Shock-like solutions of the electrostatic Vlasov equation. 08 p1359 A69-19982  
Numerical studies of turbulent heating. 08 p1368 A69-20806  
Transient plasma sheath - Discovered by ion-acoustic waves. 11 p1929 A69-25272  
Fluctuations in monatomic gases. 16 p2817 A69-31669  
Quenching of titanium 6Al-4V to aging temperatures. 21 p3730 A69-38667
- MONTGOMERY, D. B.**  
Solenoid Magnet Design- The Magnetic and Mechanical Aspects of Resistive and Superconducting Systems. 20 p3464 A69-37145
- MONTGOMERY, D. C.**  
Experimental strong turbulent heating. 17 p3014 A69-33827
- MONTGOMERY, E. F.**  
The infrared spectrum of Arcturus. 23 p4222 A69-42453
- MONTGOMERY, L. C.**  
Boron nitride in aerospace. 02 p0270 A69-11802  
Looking ahead - Unmanned spacecraft systems safety. [AAS PAPER 69-520] 24 p4392 A69-42849
- MONTGOMERY, M. D.**  
Vela satellite particle observations at 18 earth radii. 02 p0307 A69-11735  
Penetration of solar energetic protons into the magnetotail. 16 p2847 A69-31966
- MONTGOMERY, R. C.**  
Application of differential synthesis to design of multi-axis stability augmentation systems. [AIAA PAPER 68-834] 20 p3616 A69-37156
- MONTGOMERY, R. M.**  
Frequency conversion in the sheath capacitance of a glow discharge plasma. 04 p0634 A69-14456
- MONTGOMERY, W. D.**  
Basic duality in the algebraic formulation of electromagnetic diffraction. 18 p3172 A69-35010
- MONTI, R.**  
Similar solutions for the second approximation of the boundary layer /Soluzioni simili per la seconda approssimazione dello strato limite/. 10 p1632 A69-23700
- MONTROLL, E. W.**  
Some remarks on turbulence. 23 p4153 A69-42314
- MOODY, A. B.**  
The National plan for navigation. 08 p1348 A69-21192  
The national plan for navigation. 14 p2480 A69-29858  
Introduction to aircraft navigation. 18 p3168 A69-34844
- MOODY, H. L.**  
Prediction of nozzle material performance for NASA's 260 SL-3 motor. [AIAA PAPER 68-504] 12 p2118 A69-26784  
Corrosion behavior of materials in propellant exhaust gases. 21 p3784 A69-39489
- MOODY, R. H.**  
An automated approach to predicting RF signal margins for missile flight tests. 18 p3103 A69-35097
- MOOKHERJI, T.**  
Optical absorption in triphenylmethylarsonium tetracyanoquinodimethan single crystals. 01 p0140 A69-10934  
Studies of ultraviolet irradiation effects in ZnO-type thermal control coating pigments. [AIAA PAPER 69-639] 17 p2992 A69-33288  
Optical absorption in tetracyanoquinodimethan. 18 p3183 A69-35477
- MOON, D. P.**  
The Elevated-Temperature Properties of Selected Superalloys. 08 p1328 A69-19913
- MOON, F. C.**  
Vibration and dynamic instability of a beam-plate in a transverse magnetic field. [ASME PAPER 69-APM-B] 18 p3215 A69-34400
- MOONEY, M.**  
The postulates in the theory of superelasticity. 20 p3624 A69-37586
- MOORADIAN, A.**  
Transient and steady state thermal self-focusing. 10 p1706 A69-24009
- MOORE-SITTERLY, C.**  
Catalogs and identifications - Introductory report. 19 p3421 A69-36212
- MOORE, A. G.**  
Fluidic angular rate sensor - A replacement for rate gyroscopes/ques/. 21 p3722 A69-38766
- MOORE, A. R.**  
Direct observation of acoustoelectric domains. 02 p0258 A69-12618
- MOORE, B. C.**  
Causes and consequences of nonuniform gas distributions in vacuum systems. 13 p2299 A69-28019
- MOORE, C. B.**  
Nitrogen abundances in chondritic meteorites. 05 p0825 A69-16301  
Laser-excited vibrational fluorescence of HCl and the HCl-CO sub 2 laser. 07 p1144 A69-18289  
Space station logistics - Problems, analysis, and management decision-aids. 10 p1669 A69-22976  
Chromium and manganese in chondrites. 15 p2681 A69-30416  
Superior analyses of iron meteorites. 19 p3417 A69-36130
- MOORE, C. D.**  
Curve resolver for mixtures of damped sine waves. 17 p2970 A69-32852
- MOORE, C. J., JR.**  
Subject classification bibliography for thermal contact resistance studies. [ASME PAPER 68-WA/HT-18] 05 p0847 A69-16122
- MOORE, D. C.**  
The welding of titanium and its alloys. 02 p0253 A69-12064
- MOORE, D. F.**  
A history of research on surface texture effects. 23 p4170 A69-42359
- MOORE, D. J.**  
An ice detection and control system for fixed and rotary wing aircraft. 01 p0083 A69-11046
- MOORE, D. R.**  
Cybernetic Problems in Bionics, Proceedings of the Bionics Symposium, Dayton, Ohio, May 3-5, 1966. 07 p1069 A69-18380
- MOORE, D. W.**  
On the flow of gas from the galactic center. 09 p1599 A69-22189  
The structure of free vertical shear layers in a rotating fluid and the motion produced by a slowly rising body. 23 p4153 A69-42356
- MOORE, E. G.**  
Remote sensing of urban environments. 12 p2193 A69-27012
- MOORE, E. H.**  
A semi-Markov process model for secondary acquisition systems. 08 p1270 A69-19852
- MOORE, F. K.**  
Re-entry and Planetary Entry Physics and Technology. I - Dynamics, Physics, Radiation, Heat Transfer and Ablation. 11 p1967 A69-25573  
Choking of a subsonic gas flow by thermal radiation. 15 p2717 A69-30908
- MOORE, G. D.**  
Detection of impurities in synthetic solid lubricants. 01 p0102 A69-10909
- MOORE, G. P.**  
A neuromuscular actuation system model. 02 p0202 A69-11952
- MOORE, H. D.**  
Grease lubrication of ball bearings in helium. [IME PAPER 1] 07 p1137 A69-18559
- MOORE, H. D., JR.**  
The stress corrosion behavior of beryllium and Be-38 percent Al alloy in a salt water environment. 19 p3341 A69-35572
- MOORE, H. K.**  
Conference on the Exploding Wire Phenomenon, 4th, Boston, Mass., October 18-20, 1967, Proceedings. 01 p0116 A69-10654
- MOORE, J.**  
The adaptive filter - A component for use in pattern recognition and trainable systems. 17 p2942 A69-34093
- MOORE, J. A.**  
Discontinuous injection of inert gases into the nonequilibrium laminar boundary layer. 06 p0860 A69-17635
- MOORE, J. B.**  
Optimal state estimation in high noise. 04 p0582 A69-14877
- MOORE, J. H., JR.**  
Vibrational excitation in ion-molecule collisions - H super plus, H sub 2 super plus, He super plus, N super plus, Ne super plus, and electrons on N sub 2. 08 p1356 A69-20739
- MOORE, J. P.**  
Guidelines for using BWOs. 13 p2232 A69-28059
- MOORE, J. W.**  
Measurement of forces and moments from a thrust vector controlled rocket on a five component test stand. 21 p3691 A69-39631  
Computer system requirements for an autonomous Martian roving vehicle. [AIAA PAPER 69-980] 22 p3907 A69-40360
- MOORE, L.**  
The effects, measurement and analysis of flutter in instrumentation recorders. 07 p1133 A69-19118
- MOORE, M.**  
Characteristics of organic dye lasers as tunable frequency sources for nanosecond absorption spectroscopy. [IEEE PAPER A-3] 07 p1150 A69-19047  
Grooming a giant for flight. 10 p1634 A69-23599
- MOORE, P.**  
The magnitudes of Saturn's satellites. 08 p1394 A69-20619



## MOORE, P. B.

High pressure modification of Mg sub 2 SiO sub 4 crystal structure and crystallochemical and geophysical implications.

08 p1267 A69-19904

## MOORE, R. A.

Fast critical experiments in support of thermionic reactor physics.

09 p1441 A69-21835

Fast neutron spectrum for a subcritical section of a homogeneous super 235 U-polyethylene critical assembly.

18 p3170 A69-34313

## MOORE, R. C.

High-dispersion spectroscopic studies of Venus. II - The water vapor variations.

13 p2345 A69-27650

## MOORE, R. D.

Magneto-electrostatically contained plasma ion thruster. [AIAA PAPER 69-260]

09 p1567 A69-21262

Research and development of a charged-particle bipolar thruster. [AIAA PAPER 67-728]

13 p2325 A69-28220

## MOORE, R. E.

Evolution of the Pratt and Whitney aircraft JT9D engine oil system.

18 p3185 A69-35244

Evolution of the Pratt and Whitney aircraft JT9D engine oil system.

24 p4363 A69-42780

## MOORE, R. F.

Ways to meet the increasing pressure on R and D organizations.

12 p2192 A69-26732

## MOORE, R. K.

On the feasibility of imaging radar on small spacecraft.

11 p1835 A69-24695

Radar scatterometer data analysis techniques.

12 p2099 A69-27010

The radar radiometer.

14 p2421 A69-29528

Panchromatic and polypanchromatic radar.

14 p2416 A69-29529

Heights from simultaneous radar and infrared.

20 p3536 A69-36929

## MOORE, R. L.

The maturing of safety into an engineering discipline. [SAE PAPER 680676]

03 p0433 A69-13449

## MOORE, R. M.

An evaporated heterojunction diode strain sensor.

14 p2422 A69-29555

The feasibility of a heterode pressure transducer.

22 p3950 A69-41222

## MOORE, S. B.

A semiconductor strain gage balance for use in conventional wind tunnels.

10 p1672 A69-23265

## MOORE, W. J.

Proposed specification for error signals resulting from common mode voltage in passive signal handling equipment.

10 p1654 A69-23272

## MOORE, W. W.

Decreased antidiuretic activity measured in the blood of chronically centrifuged rats.

14 p2407 A69-29301

## MOORI, H.

An approximate analytical solution for dispersion of unguided rockets due to wind and its application to the calculation of wind compensation for launching.

22 p4037 A69-40815

## MOORJANI, K.

Fluorescence spectra of homogeneous and mixed europium complexes.

01 p0024 A69-10893

## MOOS, H. W.

Multiphonon orbit-lattice relaxation of excited states of rare-earth ions in crystals.

01 p0134 A69-10011

Effective density of phonon states for NdCl sub 3 from vibronic spectra and applications to ion-lattice interactions.

03 p0473 A69-13907

Spectroscopic determination of the magnon density of states of GdCl sub 3, a ferromagnetic rare-earth salt.

03 p0494 A69-14257

Multiphonon relaxation in laser materials and applications to the design of quantum electronic devices.

[IEEE PAPER I-9] 05 p0774 A69-16318

Rocket measurement of ultraviolet spectra of Venus and Jupiter between 1200 and 1800 angstrom units.

[JHU-TR-15] 10 p1788 A69-24121

Nighttime molecular oxygen densities in the 100-130-km region from Schumann-Runge absorption.

14 p2435 A69-28959

Spectroscopic observation of magnetic ordering in DyPO sub 4 using line intensity measurements.

21 p3773 A69-38331

## MOOSE, P. H.

A comparison of expected flight times for intercept and pure pursuit missiles.

20 p3618 A69-37716

## MOOSER, E.

Current carrier mobility in GaTe and SnSe sub 2 semiconducting stratified structures /Die Beweglichkeit der Ladungstraeger in halbleitenden Schichtstrukturen - GaTe und SnSe sub 2/.

02 p0295 A69-11777

## MOOTE, J. D.

Apollo entry aerodynamics. [AIAA PAPER 68-1008]

12 p2012 A69-26789

## MORA, N. A.

On the zero-bias anomaly in GaAs tunnel diodes.

19 p3388 A69-36542

## MORACHEVSKII, A. G.

The present state of studies on the thermodynamic properties of binary and ternary liquid metallic systems.

07 p1165 A69-18939

## MORACHEVSKII, N. V.

Study of gasdynamic processes occurring during the vaporization of a solid material under the action of laser emission /Issledovanie gazodinamicheskikh protsessov, voznikaushchikh pri isparenii tverdogo veshchestva pod deistviem izlucheniia lazera/.

21 p3740 A69-39551

## MORAN, E. F., JR.

Some limitations of shaft speed on close-clearance seals.

[ASLE PAPER 68-LC-13] 21 p3731 A69-38763

## MORAN, F. J.

Air bearing table mechanization and verification of a spacecraft wide angle attitude control system. [AIAA PAPER 69-856]

21 p3823 A69-39384

## MORAN, H. F.

Electron microscopy of a hemagglutinin from Limulus polyphemus.

16 p2742 A69-31864

## MORAN, J. M., JR.

Interstellar hydroxyl clouds.

19 p3427 A69-36659

## MORAN, J. P.

Diffraction of a plane shock by an analytic blunt body.

22 p3860 A69-40895

## MORAN, M. J.

A new systematic formalism for similarity analysis.

16 p2773 A69-32379

## MORAN, W. H., JR.

The role of visceral afferent pathways on vasopressin secretion and urinary excretory patterns during surgical stress.

05 p0708 A69-15970

## MORANA, S. J.

Effect of surface chemistry on the physical properties of pressure sintered beryllium metal.

24 p4332 A69-42963

## MORAND, H.

Temperature control below 5.2 deg K /Regulation de temperature au-dessous de 5.2 K/.

18 p3136 A69-34641

## MORATO DE ANDRADE, C. A.

Frequency-stable tunnel diode oscillators.

07 p1104 A69-18890

## MORAVEK, M.

Elimination of the reaction to hypoxia in human beings by repeated exposure to hypoxia /L'abolition de la reaction hypoxique par des expositions repetees a l'hypoxie chez l'homme/.

23 p4214 A69-41789

## MORCOCK, D. S.

Damage tolerance and logistic transport design. [ICAS PAPER 68-23]

24 p4254 A69-43717

## MORDCHELLES-REGNIER, G.

Stability criterion of a natural convection boundary layer on an isothermal vertical plane wall /Critere de stabilite d'une couche limite de convection naturelle sur une paroi plane verticale et isotherme/.

02 p0188 A69-12038

Influence of thermal and electric contact resistances on the output of thermoelectric-conversion generators /Influence des resistances thermiques et electriques de contact sur le rendement des generateurs a conversion thermo-electrique/.

12 p2016 A69-26364

## MORDELLET, R. L.

Concorde elevons - An exercise in eutectony.

24 p4403 A69-43425

## MORDOVSKAIA, L. G.

Man's thermal tolerance - A review of the literature.

10 p1645 A69-23494

## MORDUKHOVICH, M. I.

Acoustical thermometer-interferometer for temperature measurements in the stratosphere /Akusticheskiy termometr-interferometr dlia izmereniia temperatury v stratosfere/.

03 p0429 A69-13269

An acoustic thermometer-interferometer for measuring temperatures in the stratosphere.

14 p2445 A69-28777

Observation of the scintillation of a ground-based source from an aircraft /Issledovanie mertsaniiia nazemnogo istochnika s samoleta/.

19 p3279 A69-36881

## MOREAU, A.

Launching of four Belier rockets at the Guiana Space Center - Testing the operational qualities of the technical installations /Lancement de 4 fusées Belier au Centre Spatial Guyanais - Mise a l'épreuve des qualités opérationnelles des installations techniques/.

09 p1477 A69-22161

## MOREAU, R.

Review of general concepts concerning servosystems and control. I - Servosystems /Rapport des notions generales sur les asservissements et la regulation. I - Asservissements/.

04 p0550 A69-15179

Experiments in laser echo photography on satellites /Expériences de photographie d'échos laser sur satellites/.

21 p3671 A69-38335

## MOREHOUSE, D. S.

Foamed thermoplastic microspheres in reinforced polyesters.

14 p2467 A69-29285

## MOREHOUSE, L. E.

Prescription of exercise for the hypokinetic airline pilot.

23 p4106 A69-41800

## MOREL, CH.

Star identification system /Système d'identification stellaire/.

08 p1347 A69-20657

## MOREL, J.-P.

The jet flap diffuser - A new thrust augmenting device. [AIAA PAPER 69-777]

19 p3393 A69-35645

## MOREL, P.

EOLE constant level balloon flights in the troposphere.

21 p3646 A69-38373

## MOREL, P. J.

Parallax and mass ratio of the visual binary BD plus 4 deg 4510.

13 p2349 A69-27815

## MORELAND, J. D.

The distribution of dendritic domains of retinal neurons.

22 p3880 A69-40848

Retinal topography and the blue-arcs phenomenon.

22 p3882 A69-40872

## MORELAND, J. P.

Optical heterodyne detection of a randomly distorted signal beam.

07 p1087 A69-19642

## MORELLEC, J.

Multiphoton ionization of hydrogen and rare gases /Ionisation multiphotonique de l'hydrogene et des gaz rares/.

02 p0283 A69-11701

## MORELLI, C.

Gravimetry /Gravimetria/.

21 p3715 A69-39000

- MORELLI, G.**  
Preliminary investigation for a study of panel flutter in supersonic blow-down wind tunnels /Una indagine preliminare per lo studio del "flutter" dei pannelli nelle gallerie supersoniche intermittenti/.  
21 p3847 A69-39859
- MORENO-DIAZ, R.**  
An analytical model of the "bug detector" ganglion cell in the frog's retina.  
07 p1070 A69-18383
- MORENO, H.**  
A photometric investigation of the Scorpio-Centaurus association.  
06 p1001 A69-17195  
The atmospheric extinction at Cerro Tololo.  
10 p1777 A69-23386  
Spectrophotometric parameters of early type stars. I - Equivalent widths of hydrogen lines.  
10 p1777 A69-23387
- MORETTI, G.**  
The blunt body problem for a viscous rarefied gas flow. [AIAA PAPER 69-139]  
06 p0865 A69-18173  
Time-dependent calculations for transonic nozzle flow.  
09 p1431 A69-21974
- MORETTI, M.**  
Fundamentals of numerical weather forecasting at high and middle latitudes /I fondamenti della previsione numerica del tempo alle alte e medie latitudini/.  
23 p4183 A69-42024
- MOREY, T. F.**  
Mars lander thermal control system parametric studies. [AIAA PAPER 69-610]  
17 p3072 A69-33274  
Thermal design, analysis, and testing of a full-size planetary lander model. [AIAA PAPER 69-612]  
17 p3049 A69-33296
- MORGAN, A. H.**  
Worldwide clock synchronization using a synchronous satellite.  
12 p2080 A69-26053
- MORGAN, B. S., JR.**  
The application of the method of steepest ascent to a very high order optimization problem - The problem of developing evasion tactics for aircraft pursued by missiles.  
06 p0866 A69-17401
- MORGAN, C.**  
Properties of a fire-retardant, thermally-stable, electrical-grade thermoset.  
08 p1340 A69-20506
- MORGAN, C. G.**  
Lens aberration effects in optical-frequency breakdown of gases.  
15 p2634 A69-30878
- MORGAN, D. P.**  
Acoustic-surface-wave dispersive delay line.  
19 p3267 A69-35929
- MORGAN, D. T.**  
Organic Rankine cycle with reciprocating engine.  
23 p4067 A69-42237
- MORGAN, G. M.**  
A temperature change and fog forecasting diagram.  
03 p0462 A69-13965
- MORGAN, J. B.**  
Stainless-steel-clad metals.  
21 p3745 A69-38937
- MORGAN, J. E.**  
Experimental measurements of the diffusion coefficients of H atoms in H sub 2 and in H sub 2 -He and H sub 2 -Ar mixtures.  
07 p1185 A69-19300
- MORGAN, J. I.**  
Introduction to fluidics.  
10 p1636 A69-23401
- MORGAN, L. L.**  
Parametric studies of orbital fluid transfer. [AIAA PAPER 69-565]  
16 p2865 A69-32770
- MORGAN, M. G.**  
Observations of lower hybrid resonance phenomena on the OGO 2 spacecraft.  
05 p0754 A69-16257
- MORGAN, R. C.**  
On-line ground data processing system at Boscombe Down.  
05 p0725 A69-16757
- Some thoughts on power plants and auxiliary systems from the operator's point of view - The control of despatch reliability.  
17 p2898 A69-33213
- MORGAN, R. S.**  
Structure of ribosomes of chromatoid bodies - Three-dimensional Fourier synthesis at low resolution.  
07 p1074 A69-19394
- MORGAN, V. T.**  
A differential-capacitance transducer for measuring small displacements.  
22 p3946 A69-40439
- MORGAN, W. W.**  
On the classification of the forms and the stellar content of galaxies.  
16 p2862 A69-32395
- MORGANSTERN, M. D.**  
Monopole and conic antennas on spherical vehicles.  
22 p3908 A69-40699
- MORGENSHTERN, Z. L.**  
Effect of color centers on the Cr super 3 plus spectrum in ruby /Vliianie tse ntrov okraski na spektr Cr super 3 plus v rubine/.  
19 p3335 A69-36166
- MORGENSTERN, O.**  
Planning space activities in the 1970's. [AAS PAPER 69-113]  
24 p4418 A69-42878
- MORGENTHALER, F. R.**  
Magnetoelastic waves in time-varying magnetic fields. I - Theory. II - Experiments.  
10 p1746 A69-23655
- MORGENTHALER, G. W.**  
The impact of information transfer satellites on everyday living.  
07 p1244 A69-18678
- MORGENTHALER, J. H.**  
Turbulent transport coefficients in coflowing streams. [AIAA PAPER 69-682]  
17 p2952 A69-33434
- MORGULIS, N. D.**  
Phenomena during plasma decay at high pressure in helium and argon with cesium vapor admixtures and in pure cesium vapor /Iavlennia pri raspade plazmy v geli i argone pri povyshennom davenii s primes'ny parov tseziia i v chistykh parakh tseziia/.  
10 p1733 A69-23448  
Some luminosity characteristics of a decaying discharge plasma in cesium vapor /Deiaki osoblivosti visvichuvannia rozpadnoi rozriadnoi plazmi u pari tseziu/.  
14 p2490 A69-28996
- MORGUNOV, A. N.**  
Noise immunity of amplitude and phase information of a regular interference pattern of an electromagnetic field.  
04 p0557 A69-14775  
Structure of a reception indicator for amplitude radio interferometers /O strukture priemo-indikator-nogo ustroistva amplitudnykh radiointerferometrov/.  
20 p3504 A69-37009
- MORGUNOV, B. I.**  
Analysis of the steady resonance modes of operation of certain nonlinear oscillatory systems with a deviating argument /Analiz statsionarnykh rezonansnykh rezhimov nekotorykh nelineinykh kolebatel'nykh sistem s otkloniaushchimsia argumentom/.  
19 p3374 A69-36469
- MORGUNOV, S. P.**  
Polarization studies of the structure of cumulonimbus clouds /Polarizatsionnye issledovaniia struktury kuchevo-dozhdevykh oblakov/.  
16 p2806 A69-32266
- MORGUNOVA, N. N.**  
Mechanical properties of high-melting-point metals /Mekhanicheskie svoistva tugoplavkikh metallov/.  
09 p1525 A69-22138
- MORI, H.**  
Theoretical analysis of externally pressurized porous journal gas bearings. I.  
01 p0085 A69-10312  
Ionospheric measuring probe. II.  
01 p0065 A69-10549  
Ionospheric measuring probe. III.  
01 p0081 A69-10760  
Theoretical flow-models for externally pressurized gas bearings. [ASME PAPER 68-LUBS-2]  
13 p2267 A69-27285
- MORI, L.**  
Creep behavior of some industrially important aluminum alloys /Kriechverhalten einiger technisch bedeutsamer Aluminiumlegierungen/.  
16 p2800 A69-31781
- MORI, S.**  
Theoretical calculation of the cosmic-ray solar diurnal variation. I - Nucleonic component.  
03 p0501 A69-13751  
Theoretical calculation of the cosmic-ray solar diurnal variation. II - Meson component.  
03 p0501 A69-13752  
Sum and difference frequency generation in a plasma by two nonuniform electric fields in the presence of a static magnetic field.  
13 p2305 A69-27376
- MORI, Y.**  
On the study of the flow through an impeller of mixed and inward-flow radial turbines. II - Experiments of turbines with a small number of blades and with edge-cut hub.  
01 p0142 A69-10309  
Changes in the conductivity of the ionosphere at and near the dip equator during the solar eclipse of November 12, 1966.  
02 p0241 A69-11728  
A shock tube study of nonequilibrium MHD power generation.  
02 p0196 A69-12425
- MORIARTY, J. J.**  
Toroidal microwave discharge heating of gas. [IMPI PAPER A4]  
04 p0636 A69-14999
- MORIHISA, M.**  
Fundamental study of operational performance of a laser radar system employing A-scope representation.  
20 p3487 A69-37283  
Measurement of propagation characteristics of optical beams in the atmosphere and analyses of returned echo signals using a laser radar system with A-scope representation.  
20 p3487 A69-37284
- MORIJN, R. E.**  
The mechanism of welding with a sealed-off continuous CO sub 2 -gas laser.  
01 p0086 A69-10821  
A simple power-output meter specially designed for continuous laser beams.  
01 p0081 A69-10822
- MORIKAWA, M.**  
Transmission electron microstructures in the various heat-treated titanium alloys - On Ti-8 percent Mn alloy.  
11 p1906 A69-25578
- MORIKAWA, T.**  
Study on a semi-hot wall duct for MHD generators.  
13 p2372 A69-27473
- MORIMOTO, M.**  
5 GHz continuum radiation from Southern Hemisphere galactic HII regions.  
07 p1206 A69-19271  
Galactic background at 4 GHz.  
18 p3200 A69-34996  
Radio observations of four diffuse H II regions.  
24 p4388 A69-43641
- MORIN, G. R.**  
Flight test performance of an airborne Omega equipment set.  
08 p1348 A69-21191
- MORIN, R.**  
Resistojet with ammonia /Resistojet a ammoniac/.  
17 p3018 A69-33236  
Hybrid propulsion - Fragmentation of solid fuel /Propulsion hybride - Fragmentation du combustible solide/.  
17 p3021 A69-33358  
Ammonia resistojet thruster.  
23 p4203 A69-41931
- MORIN, S.**  
Wave coupling across a density discontinuity in a magnetized plasma.  
08 p1367 A69-20795
- MORINAGA, N.**  
Response of detectors for two noise-modulated waves and background noise.  
15 p2569 A69-30805
- MORINE, L. A.**  
A description of the CMG and its application to space vehicle control. [AIAA PAPER 67-589]  
12 p2129 A69-26777



## MORINO, L.

A perturbation method for treating nonlinear panel flutter problems. 13 p2364 A69-28204

## MORIOKA, S.

Magnetohydrodynamic shock waves in non-aligned flow. 08 p1360 A69-19988

## MORISADA, S.

Design and performance of aluminum elliptical waveguide. 15 p2578 A69-30798

## MORISSET, J.

The Mercure program /Le programme Mercure/. 15 p2550 A69-30317

Two conceptions of the future Europa III rocket are compared /Deux conceptions s'affrontent pour realiser la future fusée "europa-3"/. 17 p3045 A69-33095

## MORISSON, H.

Chemistry of tetrazole-based explosives /Chimie des derives explosifs des tetrazoles/. 10 p1651 A69-23013

## MORITA, N.

Scattering of a beam wave by a spherical object. 08 p1273 A69-20028

## MORITA, T.

Application of the cluster variation method to the s-d interaction Hamiltonian. 03 p0485 A69-13298

## MORITA, Y.

Influence of the atmospheric aerosols on the ion density profile up to 30 km altitude. 18 p3129 A69-34962

Balloon observation of small ion density and electric conductivity in the stratosphere. 18 p3130 A69-34970

## MORITZ, W. E.

Transmission characteristics of axial waves in blood vessels. [SESA PAPER 1350] 07 p1069 A69-19726

## MORIZUR, J. P.

Mass spectrometry in structural and stereochemical problems. CLXVI. 09 p1448 A69-22551

## MORKOVIN, M. V.

On the many faces of transition. 17 p2950 A69-33248

Application of a quasi-steady stability model to periodic boundary-layer flows. 23 p4152 A69-41888

## MORLA, R.

Solar eclipse - Temperature, wind, and ozone in the stratosphere. 06 p0916 A69-17008

## MORLAND, L. W.

Stress waves in a temperature-dependent viscoelastic half-space subjected to impulsive electromagnetic radiation. 04 p0676 A69-14705

Elastic-plastic wave generation by impulsive electromagnetic radiation. 12 p2179 A69-26215

Existence and uniqueness of solutions to uni-axial elastic-plastic wave interactions. 16 p2870 A69-31809

Plastic yield and reverse yield waves generated by impulsive electromagnetic radiation. 21 p3837 A69-39158

## MORLEY, L. S. D.

A modification of the Rayleigh-Ritz method for stress concentration problems in elastostatics. 11 p1969 A69-24413

## MORLEY, L. W.

The value of satellite techniques in the evaluation of natural resources of large areas. [UN PAPER 68-95529] 06 p0917 A69-17067

## MORLON, M.

Contribution to the technique of counterrotating antennas /Contribution a la technique des antennes counterrotatives/. 08 p1289 A69-20968

## MORNEAU, G. A.

Thermoplastic polyarylsulfone for use at 500 deg F. 19 p3355 A69-35527

## MORONI, P.

Psychopathology of airline stewardesses. 07 p1067 A69-19434

## MOROSANOV, I. S.

Practical methods of calculating the linearization coefficients for arbitrary nonlinearities /Prakticheskie metody vychisleniia koefitsientov linearizatsii proizvodykh nelineinosti/. 03 p0409 A69-13071

Practical methods for the calculation of the linearization factors for arbitrary nonlinearities. 14 p2424 A69-28753

## MOROSOW, G.

A method for digital computation of spacecraft response in the docking maneuver. 11 p1967 A69-25501

## MOROWITZ, H. J.

Prebiological membranes - Synthesis and properties. 11 p1828 A69-25462

## MOROZ, E. M.

Acceleration of a plasma by its own radiation. 07 p1195 A69-19595

## MOROZ, G. V.

Investigation of the vibration of stellar images on the basis of observations of traces in 1963 by the AZT-7 telescope /Issledovanie drozhaniiia izobrazhenii zvezd po nabludeniiam sledov v 1963 g. na teleskope AZT-7/. 15 p2647 A69-30163

Dependence of stellar image vibration on meteorological conditions /Zavisimost' drozhaniiia izobrazhenii zvezd ot meteorologicheskikh uslovii/. 15 p2647 A69-30164

## MOROZ, T. A.

Investigation of the air cooling systems of the turbine rotors of AI-20 engines /Issledovanie sistem vozdušnogo okhlazhdeniia rotorov turbin dvigatelei AI-20/. 24 p4364 A69-43081

## MOROZ, V. I.

The atmosphere of Venus - A comparison of the results of astronomical observations and direct experiment. 10 p1791 A69-24200

Photometric and spectral observations of planets in the range from 8 to 14 mu /Fotometricheskie i spektral'nye nabludeniiia planet v diapazone 8-14 mk/. 11 p1956 A69-24395

Problems of general circulation in planetary atmospheres /Problemy obshchei tsirkulatsii v atmosferakh planet/. 14 p2526 A69-29841

Photometric and spectroscopic observations of planets in the 8-14 mu range. 24 p4390 A69-43785

## MOROZAN, T.

Stability of differential systems with random parameters. 05 p0788 A69-16484

Stability of Systems with Random Parameters /Stabilitatea sistemelor cu parametri aleatori/. 23 p4181 A69-41510

## MOROZHENKO, A. V.

The nature of the Martian polar caps /O prirode poliarnykh shapok Marsa/. 11 p1959 A69-24728

## MOROZHENKO, N. N.

Active prominences of 9 and 11 July 1966. 10 p1764 A69-23739

Spectral emission of active prominences /Spektral'noe izuchenie aktivnykh protuberantsev/. 15 p2674 A69-30510

## MOROZKIN, V. V.

Long silicon carbide diodes /Dlinnye diody na karbide kremniia/. 10 p1663 A69-23571

## MOROZOV, A. A.

Measurement of the lunar surface density by the automatic station "Luna-13." 03 p0430 A69-13425

## MOROZOV, A. E.

Thermodynamic analysis of new liquid-metal MHD-generator cycles /Termodinamicheskii analiz novykh tsiklov s zhidkometallicheskim MGD-generatorom/. 13 p2372 A69-27489

Concerning the accuracy of ionization calorimeter energy measurements. 13 p2331 A69-28394

## MOROZOV, A. I.

Distribution of potential in a quasistationary coaxial plasma injector. 03 p0478 A69-13838

Evolutionarity of the equations of magnetohydrodynamics with allowance for the Hall effect /Ob evoliutsionnosti uravnenii magnitnoi gidrodinamiki s uchedom effekta Kholla/. 05 p0801 A69-15788

Effect of finite conductivity on stationary self-contracting plasma flows. 06 p0966 A69-17548

Two-dimensional steady flow of highly conducting plasma in a coaxial system. 07 p1190 A69-18757

Focusing of ion beams by a plasma lens. 13 p2307 A69-27658

On the evolutionarity of equations of magnetohydrodynamics taking the Hall effect into account. 18 p3181 A69-35039

## MOROZOV, E. M.

Justification of the Irwin criterion at the end of a crack /Ob odnom obosnovanii kriteriia Irvina na kontse treshchiny/. 07 p1238 A69-19689

The variational principle in the mechanics of failure /Variatsionnyi printsip v mekhanike razrusheniia/. 13 p2359 A69-27290

Energy condition of crack growth in elastoplastic materials /Energeticheskoe uslovie rosta treshchin v uprugoplasticheskikh telakh/. 22 p4046 A69-41060

Conditions in a crack tip /Ob uslovii v kontse treshchiny/. 22 p4047 A69-41123

## MOROZOV, E. P.

Energy spectrum of silicon-doped gallium arsenide /Energeticheskii spektr arsenida galliia, legirovannogo kremniem/. 01 p0139 A69-10833

Photoluminescence of n-type epitaxial gallium arsenide films /Fotoluminesentsiia epitsial'nykh sloev arsenida galliia n-tipa/. 03 p0488 A69-13887

The energy spectrum of gallium arsenide doped with silicon. 11 p1936 A69-24700

Photoluminescence of epitaxial n-type gallium arsenide films. 11 p1939 A69-25688

Radiative recombination in gallium arsenide p-n structures with a germanium-doped p region /Izluchatel'naia rekombinatsiia v arsenidgallievykh p-n-strukturakh s p-oblast'iu, legirovannoiu germaniim/. 21 p3780 A69-39044

Diagonal tunneling and radiation polarization in Al sub x Ga sub 1-x As-GaAs heterojunctions and in p-n junctions in GaAs /Diagonal'noe tunnelirovanie i polarizatsiia izlucheniia v geteroperekhodakh Al sub x Ga sub 1-x As-GaAs i p-n-perekhodakh v GaAs/. 24 p4362 A69-43737

## MOROZOV, I. A.

Residual stresses during plasma spray coating /Ostatocnyye napriazheniia pri plazmennom napylenii/. 20 p3548 A69-37328

## MOROZOV, I. P.

Laminar boundary layer at the spreading line of a flow on ellipsoids of revolution /Laminarnyi pogranichnyi sloi na linii rastekaniia ellipsoidov vrashcheniia/. 06 p0858 A69-17331

## MOROZOV, N. A.

The electrical discharge machining of heat-resisting alloys. 18 p3147 A69-34547

## MOROZOV, N. F.

The existence of a smooth solution to the problem of the non-linear vibrations of a thin plate. 02 p0337 A69-11654

## MOROZOV, S. A.

Measurement of plasma electron temperature from the bremsstrahlung spectrum in the X-ray region /Izmerenie temperatury elektronov plazmy po spektru tormoznogo izlucheniia v rentgenovskoi oblasti/. 14 p2496 A69-29783

## MOROZOV, S. F.

Application of the method of straight lines to the solution of the transport equation for an unsteady radiation field /Primenenie metoda priamykh dlia resheniia uravneniia perenosa nestatsionarnogo polia izlucheniia/. 13 p2350 A69-27858

## MOROZOV, V. M.

Stability of the relative equilibrium of a satellite under the action of gravitational and aerodynamic mo-

- ments /Ob ustoichivosti otositel'nogo ravnovesiia sputnika pri deistvii gravitatsionnogo i aerodinamicheskogo momentov/.  
05 p0830 A69-16503
- Stability of the relative equilibrium of a satellite under the action of gravitational, magnetic, and aerodynamic moments /Ob ustoichivosti otositel'nogo ravnovesiia sputnika pri deistvii gravitatsionnogo, magnitnogo i aerodinamicheskogo momentov/.  
19 p3432 A69-36620
- MOROZOV, V. N.**  
Characteristics of a molecular oscillator in a magnetic field /Kharakteristiki molekuliarnogo generatora v magnitnom pole/.  
05 p0727 A69-15643
- Hysteresis of radiation power of gallium-arsenide injection lasers.  
07 p1157 A69-19593
- Synchronization of laser spikes.  
07 p1158 A69-19752
- Investigation of injection lasers with nonuniform excitation /Issledovanie inzhetsionnykh lazerov s neodnorodnym возбуждением/.  
08 p1326 A69-20539
- MOROZOV, V. V.**  
Generation of ruby laser giant pulse of high power in a narrow spectral interval.  
03 p0435 A69-12982
- Stimulated scattering and broadening of an intense pulse of laser emission in gases /Vynuzhdennoe rasseyanie i ushirenie spektra moshchnogo impul'sa lazernogo izlucheniia v gazakh/.  
09 p1516 A69-21562
- MOROZOVA, E. M.**  
Stimulation of growth in certain biological objects subjected to vertical vibrations /Stimulatsiia rosta u nekotorykh biologicheskikh ob'ektov pod vozeistviem vertikal'noi vibratsii/.  
01 p0014 A69-10584
- The effect of space flight on *Tridescantia paludosa*.  
01 p0018 A69-11317
- Growth stimulation of certain biological specimens subjected to vertical vibrations.  
15 p2555 A69-30754
- MOROZOVA, I. M.**  
The age of elements and the r-process in the solar system /Vozrast elementov i r-protsess v solnechnoi sisteme/.  
11 p1955 A69-24393
- The age of the elements and the r-process in the solar system.  
24 p4390 A69-43783
- MOROZOVA, N. I.**  
Statistical characteristics of mechanical vibrations reproducible on a vibrostand /O statisticheskikh kharakteristikakh mekhanicheskikh kolebani, vosproizvodimykh na vibrostende/.  
14 p2536 A69-29743
- MOROZOVA, N. M.**  
The effect of busbars on the interaction of the flow of an electrically conducting fluid with a traveling magnetic field.  
10 p1727 A69-23101
- MOROZOVA, N. N.**  
Certain problems connected with the use of the transition matrix in calculating the vibrational characteristics of laminated plates /Nekotorye voprosy primeneniia matritsy perekhoda dlia rascheta kolebatel'nykh kharakteristik sloistykh plastin/.  
04 p0679 A69-14907
- Aspects of the transformation matrix in calculating the vibrational characteristics of laminated plates.  
12 p2182 A69-26660
- MOROZOVA, T. I.**  
Techniques for preparing numerical radar information charts /Metodika sostavleniia tsifrovyykh kart radiolokatsionnoi informatsii/.  
03 p0459 A69-13287
- MOROZOVSKAIA, N. N.**  
Determination of the primary frequency of the oscillations of an ideal liquid in a cylindrical vessel in a weak gravitational field /Opredelenie pervoi chastoty kolebaniia ideal'noi zhidkosti v tsilindricheskom sosude v slabom gravitatsionnom pole/.  
03 p0418 A69-13812
- MOROZUMI, H. M.**  
System simulation - An approach to the optimization of signal processing and coding for VLF channels.  
03 p0390 A69-13205
- MORRAL, F. R.**  
Microstructure of cobalt-base high-temperature alloys.  
14 p2465 A69-29890
- Corrosion of cobalt and cobalt alloys.  
20 p3562 A69-37751
- Cobalt-base alloys in aerospace.  
24 p4334 A69-43427
- MORREAL, J. A.**  
A wavelength-selective, repetitively pulsed CO sub 2 laser.  
08 p1327 A69-21088
- MORRELL, F. R.**  
Precise attitude stabilization of a large orbiting telescope coupled to a crew compartment.  
13 p2261 A69-27952
- MORRIS, B. M.**  
Variational solution of the chemical-kinetic Boltzmann equation.  
07 p1185 A69-19301
- MORRIS, D.**  
Evidence in support of a rotational model for the pulsar PSR 0833-45.  
09 p1592 A69-21461
- Jovian linear polarization at 6-cm wavelength.  
13 p2343 A69-27623
- The linear polarization of radio sources between 11 and 20 cm wavelength. I - Observations.  
14 p2526 A69-29770
- MORRIS, D. G.**  
Initiation of convective clouds due to static firing of the Saturn V first stage.  
03 p0462 A69-14125
- MORRIS, E. E.**  
Filament-wound composites in perspective.  
21 p3753 A69-39496
- MORRIS, G. A., JR.**  
Average pulsar energies at centimetre wavelengths.  
18 p3196 A69-34644
- MORRIS, J. C.**  
Bremsstrahlung and recombination radiation of neutral and ionized nitrogen.  
16 p2823 A69-32466
- MORRIS, J. E.**  
Circulation in the arctic mesosphere in summer.  
06 p0949 A69-17005
- Digital-reflection-type microwave phase shifters.  
15 p2580 A69-31076
- MORRIS, J. F.**  
Reflections of electron beams in thermionic diodes.  
06 p0898 A69-17773
- Isothermal diode '68.  
09 p1439 A69-21827
- MORRIS, J. G.**  
The deformational instability of aluminum alloys.  
03 p0447 A69-13818
- Measurement of elevation angles of H.F. waves.  
08 p1275 A69-20293
- MORRIS, J. M.**  
Scanning electron mirror microscopy and scanning electron microscopy of integrated circuits.  
17 p2971 A69-32891
- MORRIS, M. G.**  
False signal rejection in optical-infrared collision warning systems.  
12 p2129 A69-26772
- MORRIS, N. M.**  
Control Engineering.  
12 p2051 A69-26244
- MORRIS, R. E.**  
System cost effectiveness analysis.  
19 p3254 A69-36012
- MORRIS, R. G.**  
The ballistic missile early warning system.  
07 p1111 A69-19537
- MORRIS, S. C.**  
Photoelectric scanner observations of CH Cygni for August 3, 1967.  
13 p2338 A69-27557
- MORRIS, S. M.**  
SALEM - A programming system for the simulation of systems described by partial differential equations.  
04 p0565 A69-15340
- MORRIS, T. W.**  
Electrocardiogram R-wave amplitude detector.  
21 p3667 A69-39443
- MORRISSETTE, E. L.**  
Boundary-layer tripping with emphasis on hypersonic flows.  
17 p2950 A69-33249
- MORRISEY, D. C.**  
Development of the Titan III transtage ACS hydrazine monopropellant rocket engine modules. [AIAA PAPER 69-422]  
19 p3394 A69-36300
- MORRISEY, E. J.**  
Fire retardant epoxy systems for the wet filament winding process.  
08 p1340 A69-20507
- MORRISON, A.**  
Sensing the earth's atmosphere with occultation satellites.  
14 p2447 A69-29517
- MORRISON, C. F., JR.**  
Vacuum gauge calibration today.  
23 p4162 A69-41530
- MORRISON, D.**  
The planet Mercury.  
03 p0509 A69-13368
- Venus - Absence of a phase effect at a 2-centimeter wavelength.  
08 p1382 A69-19818
- MORRISON, E.**  
Lunar Module thermal-vacuum simulation utilizing conformational heater thermal control. [AIAA PAPER 69-312]  
09 p1479 A69-22386
- MORRISON, F.**  
Advances in rapid orbit prediction and applications to satellite visibility studies.  
15 p2697 A69-31310
- MORRISON, F. A., JR.**  
A unified treatment of the thermodynamics of sinusoidal steady-state energy conversion.  
11 p1826 A69-25396
- MORRISON, G. H.**  
Distribution of trace elements in Smithonia iron meteorite by spark source mass spectrometry.  
08 p1404 A69-20922
- MORRISON, J.**  
Cesium plasma spectra in the system W /100/- Cs.  
12 p2132 A69-26116
- An electron diffraction study of cesium adsorption on tungsten.  
19 p3392 A69-36733
- MORRISON, J. A.**  
The effects of strain on electromagnetic modes of anisotropic dielectric waveguides at p-n junctions.  
03 p0406 A69-13830
- Stationary resonant pitching motions of a controlled satellite.  
20 p3616 A69-37177
- MORRISON, L. V.**  
An analysis of lunar occultations 1960-66.  
20 p3601 A69-37494
- MORRISON, M. E.**  
Spectral characteristics of hydrocarbon-air flames containing aluminium, magnesium and boron.  
11 p1940 A69-24483
- The effect of burning velocity inhibitors on the ignition of hydrocarbon-oxygen-nitrogen mixtures. [WSCI PAPER 69-14]  
16 p2831 A69-32352
- MORRISON, P.**  
Arc quasi-stellar radio sources giant pulsars/ques/.  
22 p4029 A69-40762
- Diffuse radiation in the high-energy region.  
23 p4207 A69-42319
- Leakage electrons from normal galaxies - The diffuse cosmic X-ray source.  
24 p4368 A69-43202
- MORRISON, R.**  
Signal conditioning amplifiers - A brief review.  
10 p1691 A69-23230
- MORRISON, S. L.**  
Telescope fine guidance.  
08 p1317 A69-21072
- MORRISON, S. R.**  
Electron capture by ions at the ZnO/solution interface.  
19 p3392 A69-36731
- MORRISON, T. J.**  
The influence of minor elements on Alloy 718 weld microfissuring.  
22 p3967 A69-39883



## MORRONE, T.

Time harmonic, spherical harmonic, and power series expansion of the Boltzmann equation.  
08 p1353 A69-20793

## MORROW, D. L.

Motion measurement by laser Doppler techniques.  
09 p1492 A69-21398  
Flow measurements with Doppler shifted laser light.  
15 p2616 A69-31291

## MORROW, J.

Cyclic stress-strain and fatigue behavior of representative aircraft metals.  
10 p1714 A69-23981  
Determination of the cyclic stress-strain curve.  
10 p1715 A69-23982  
Cumulative fatigue damage under cyclic strain control.  
10 p1715 A69-23983  
Neuber's rule applied to fatigue of notched specimens.  
10 p1715 A69-23984

## MORROW, J. B.

Potting of structural sandwich - A new approach with new materials.  
24 p4326 A69-43466

## MORROW, R.

Investigation of the plasma produced by a normal ionizing shock wave using polychromator techniques.  
14 p2494 A69-29767

## MORSBACH, M.

Conditions for a vortex street buildup behind circular cylinders /Ueber die Bedingungen fuer eine Wirbelstrassenbildung hinter Kreiszyllindern/.  
08 p1252 A69-20713

## MORSE, C. P.

Advanced pressurization system for liquid rockets.  
02 p0305 A69-12386

## MORSE, D. L.

Observation of velocity-space instability.  
09 p1552 A69-22041

## MORSE, E.

Thermal design of an airborne, one kilowatt HF power amplifier.  
22 p3909 A69-39942

## MORSE, H. L.

Development of a laser-Doppler particle sensor for the measurement of velocities in rocket exhausts. [AIAA PAPER 68-723]  
12 p2094 A69-26783

## MORSE, R. L.

Collisionless tearing mode instabilities in a high-beta theta pinch.  
16 p2819 A69-31681

## MORSE, S. P.

Computer storage of contour-map data.  
01 p0036 A69-10704  
A multilevel modeling structure for interactive graphic design.  
05 p0724 A69-16381  
Concepts of use in contour map processing.  
09 p1461 A69-22599

## MORSE, T. F.

Kinetic description of the propagation of plane sound waves in a diatomic gas.  
11 p1920 A69-24287

## MORSKOI, G. I.

Problems of Satellite Meteorology /Voprosy Sputnikovoi Meteorologii/.  
19 p3365 A69-36667  
Analysis of studies of large-scale vertical motions in the atmosphere /Analiz issledovaniy krupnomasshtabnykh vertikal'nykh dvizhenii v atmosfere/.  
19 p3366 A69-36673

## MORTELL, M. P.

Traveling load on a cylindrical shell.  
06 p1021 A69-17148  
Waves on a spherical shell.  
07 p1236 A69-19460

## MORTIKOV, V. D.

Softening mechanism of heat-resisting alloys during cyclic heating /Mekhanizm razuprochneniia zharoprochnykh splavov pri tsiklicheskiikh nagrevakh/.  
21 p3746 A69-38957

## MORTIMER, R.

Induction of different classes of genetic effects in yeast using heavy ions.  
03 p0373 A69-13491

## MORTON, A. S.

The development of a semi-automatic computer for torsional systems.  
01 p0035 A69-10596

## MORTON, B. R.

The strength of vortex and swirling core flows.  
24 p4298 A69-42598

## MORTON, D. C.

Rocket observations of Orion stars with an all-reflective ultraviolet spectrograph.  
02 p0327 A69-12712  
Rocket observations of mass loss from hot stars.  
08 p1395 A69-20641  
Far-ultraviolet spectra of zeta Puppis and gamma super 2 Velorum.  
10 p1788 A69-24120  
Model atmospheres for O-type stars with ultraviolet line blanketing.  
15 p2693 A69-30778  
Rocket spectra of Venus and Jupiter from 2000 to 3000 angstroms.  
22 p4028 A69-40661

## MORUZZI, J. L.

Negative-ion-molecule reactions in N sub 2 O.  
06 p0960 A69-17106

## MOSCA, E.

Angle estimation in amplitude comparison monopulse systems.  
13 p2220 A69-27942

## MOSCO, F.

Automation of the analysis of meteorological fields /Automazione dell'analisi dei campi meteorologici/.  
07 p1175 A69-18677

## MOSELEY, J. T.

Measurement of transport properties of ions in gases - Results for K super plus ions in N sub 2.  
13 p2306 A69-27457  
Mobilities, diffusion coefficients, and reaction rates of mass-identified nitrogen ions in nitrogen.  
13 p2302 A69-27458

## MOSELEY, P. E.

Helmholtz oscillations in pulsating-combustion chambers.  
17 p3074 A69-33410

## MOSER, R., JR.

Spatial disorientation as a factor in accidents in an operational command.  
07 p1072 A69-19431

## MOSES, H. L.

Switching in digital fluid amplifiers. [ASME PAPER 69-FLCS-31]  
21 p3649 A69-38604

## MOSES, J. A.

Optical shape factor data processing through computer graphics.  
18 p3134 A69-34373

## MOSES, R.

Hyperventilation-induced hemolysis in the dog.  
22 p3887 A69-41192

## MOSEVITSKII, I. S.

Methods of calculation and optimization of thermionic electrogenerating elements.  
14 p2400 A69-29224

## MOSHEEV, V. TS.

A case of variation of the transfer function of an invariant servo drive /Sluchai izmeneniia peredatochnoi funktsii invariantnogo slediashchego privoda/.  
04 p0584 A69-15418

## MOSHER, D. K.

Experimental and analytical investigations of jets exhausting into a deflecting stream. [AIAA PAPER 69-223]  
07 p1051 A69-19557

## MOSHKOVICH, F. B.

Ignition of diacetylene /Vosplamnenie diatsetilena/.  
02 p0351 A69-11981

## MOSHNIKOV, N. V.

Measurement of the parameters of the ionosphere by the method of "incoherent" scattering of radio waves /K izmereniiam parametrov ionosfery metodom "nekogerentnogo" rasscianiia radiovoln/.  
01 p0065 A69-10575  
Measurements of the parameters of the ionosphere by the "incoherent" radiowave scattering method.  
15 p2597 A69-30745

## MOSIER, S. R.

VLF electric and magnetic fields observed in the auroral zone with the Javelin 8.46 sounding rocket.  
20 p3533 A69-38080

Ionospheric observation of VLF electrostatic noise related to harmonics of the proton gyrofrequency.  
21 p3714 A69-38550

Initial observations of VLF electric and magnetic fields with the Injun 5 satellite.  
22 p3938 A69-40503

## MOSIN, A. F.

Aerodynamic characteristics of delta wings for supersonic flow at large angles of attack /Aerodinamicheskie kharakteristiki treugol'nykh kryl'ev pri sverkhzvukovom obtekanii pri bol'shikh uglakh ataki/.  
02 p0191 A69-12585

## MOSINSKIS, G.

Calculation of compressible adiabatic turbulent boundary layers. [AIAA PAPER 69-687]  
17 p2955 A69-33470  
Laminar boundary layers on slender paraboloids.  
23 p4152 A69-41904

Solution of the incompressible turbulent boundary-layer equations with heat transfer. [ASME PAPER 69-HT-7]  
24 p4304 A69-43561

## MOSKAL, D. M.

Study of the inhomogeneity of the surface of gallium arsenide /Doslidzhennia neodnorodnosti poverkhni arsenidu galiu/.  
12 p2142 A69-25980

## MOSKALENKO, A. I.

A class of optimum control problems /Ob odnom klasse zadach optimal'nogo regulirovaniia/.  
10 p1666 A69-23363

## MOSKALENKO, E. P.

Influence of the second harmonic on the operation of a traveling wave amplifier employing a distributed nonlinear active medium /O vlianii vtoroj garmoniki na rabotu usilitelia begushchei volny na raspredelennoi nelineinoi aktivnoi srede/.  
22 p3916 A69-40963

## MOSKALENKO, I. U. E.

Possible mechanisms of the influence of changing gravitation conditions on blood circulation in the brain /Vozmozhnye mekhanizmy vlianiia uslovii izmennoi gravitatsii na sistemu mozgovoogo krovoobrashcheniia/.  
06 p0874 A69-17646

## MOSKALENKO, N. I.

Spectral transmission functions in the H sub 2 O and CO sub 2 bands.  
02 p0236 A69-11451

Measurement and calculation of spectral transmission in the N sub 2 O bands in the near-infrared region.  
02 p0236 A69-11452

## MOSKALENKO, S. A.

Photoionization of large-radius excitons with transfer of one of the current carriers into a second zone /Fotoionizatsiia eksitonov bol'shogo radiusa s perebrosom odnogo iz nositelei toka v druguiu zonu/.  
15 p2632 A69-30057

## MOSKALENKO, V. A.

Plastic deformation of alpha-titanium alloys at low temperatures /Plasticheskaia deformatsiia alfa-titanovykh splavov pri nizkikh temperaturakh/.  
18 p3158 A69-35444

## MOSKALENKO, V. N.

Random temperature fields in plates and shells /Sluchainye polia temperatur v plastinakh i obolochkakh/.  
01 p0173 A69-10077

Stability of the combustion process in elastic combustion chambers /Ob ustoiichivosti protsessa goreniia v uprugikh kamerakh sgoraniia/.  
07 p1242 A69-18993

Calculation of the macroscopic constants of highly isotropic composite materials /K raschetu makroskopicheskikh postoiannykh sil'no izotropnykh kompozitnykh materialov/.  
21 p3752 A69-39193

## MOSKALEV, I. I.

The cathode materials of the thermoemission converters research /TEC/.  
14 p2505 A69-29265

Biological action of 120-Mev protons in a wide range of doses /O biologicheskoi deistvii protonov energiei 120 Mev v shirokom diapazone doz/.  
21 p3658 A69-39058

## MOSKALEV, N. D.

Investigation of the influence of vibrations on the strength of two types of structural plastic /Issledovanie vlianiia vibratsii na prochnost' dvukh vidov konstrukt-sionnykh plastmass/.  
15 p2643 A69-30972

- Machine for testing the stability of polymer materials during vibrations. 17 p2972 A69-33043
- MOSKALEVA, A. N.**  
The cathode materials of the thermoemission converters research /TEC/. 14 p2505 A69-29265
- MOSKOVKIN, V. M.**  
Problems in the Theory of Space, Time, and Matter /Problemy Teorii Prostranstva, Vremeni i Materii/. 16 p2812 A69-32110
- MOSKOWITZ, S.**  
An approach to autonomous orbital navigation. 01 p0114 A69-11005  
Guidance and control parameters of a planetary cartographic probe. [AIAA PAPER 69-879] 21 p3763 A69-39405
- MOSKOWITZ, S. L.**  
Design and test of a small turbine at 2500F with transpiration cooled blading. [SAE PAPER 690035] 07 p1203 A69-18310
- MOSKVIN, I. U. V.**  
Emissivity of some gases at high temperatures of 6000-/2000/-12,000 deg K. 02 p0285 A69-11567
- MOSS, B.**  
A study of the spatial structure of turbulent flow by intensity-fluctuation spectroscopy. 09 p1493 A69-21491
- MOSS, D. L.**  
The influence of inhibition of convection on premain sequence stellar evolution. 08 p1386 A69-20088
- MOSS, M.**  
Mechanical properties of dispersion- strengthened spray-quenched Al-V alloys. 13 p2277 A69-27409
- MOSS, M. K.**  
Further consideration of energy and momentum in general relativity. 01 p0121 A69-11286
- MOSS, R. W.**  
Error reduction in HF loop DF systems. 14 p2413 A69-29493  
Interference predictions - Philosophies, objectives, and future directions. 23 p4126 A69-42223
- MOSS, S. J.**  
NASA laser systems accuracy in satellite tracking. 15 p2571 A69-31312
- MOSS, T. A.**  
Study of a 300 kWe Rankine cycle advanced nuclear-electric space power system. 23 p4189 A69-42266
- MOSS, T. S.**  
Beats produced by "negative" Faraday effect in infrared ring lasers. 01 p0088 A69-10028  
Measurement of Fresnel drag produced by electron motion in semiconductors. 05 p0807 A69-16026  
The systems approach to avionics. [RAES PAPER 6] 22 p3946 A69-40487
- MOSS, W. L.**  
Stress intensity magnification factors for surface-flawed tension plate and notched round tension bar. 10 p1797 A69-23080
- MOSS, W. W.**  
The application of self-contained navigation systems in worldwide long range navigation. 15 p2651 A69-31544  
Overall world statistics. 22 p4054 A69-41130
- MOSSAKOVSKII, V. I.**  
Experimental investigation of the stability of smooth cylindrical shells of various scales under axial compression /Eksperimental'noe issledovanie ustoiichivosti gladkikh tsilindricheskikh obolochek razlichnykh masshtabov pri osevom szhati/. 04 p0680 A69-14929  
Approximate method of determining the stress-strain state of ribs reinforcing a cantilever shell /Priblizhennyi metod opredeleniia napriazhenno-deformirovannogo sostoianiia shpangoutov, podkrepliaushchikh konsol'nuu obolochku/. 18 p3223 A69-34980  
Rational distribution of material in a set of longitudinal shell elements /O ratsional'nom raspredelenii materiala v elementakh prodol'nogo nabora obolochki/. 23 p4228 A69-41988
- MOSSAKOWSKA, Z.**  
On the dynamic model of a dislocation in an elastic medium. 17 p3053 A69-33020
- MOSSEL, D. A. A.**  
Prevention of food-born diseases in civil aviation. 24 p4278 A69-43392
- MOSSEY, P. W.**  
Experimental pyrometer for turbine blade temperature measurement. [SAE PAPER 690431] 23 p4165 A69-41649
- MOST, W. J.**  
Thrust transient prediction and control of solid rocket engines. [WSCI PAPER 68-33] 07 p1203 A69-18365
- MOSTELLER, W. L.**  
Effect of nucleate boiling on the operation of low temperature heat pipes. [ASME PAPER 69-HT-24] 24 p4412 A69-43544
- MOSTINSKII, I. L.**  
Reduction of temperature in an open-cycle MGD power plant owing to injected additives. 03 p0369 A69-14162  
Mass transfer during the condensation of cesium vapors from a moving mixture containing argon /Mas-soobmen pri kondensatsii parov tseziia iz dvizhushchei-smesi s argonom/. 15 p2718 A69-30998
- MOSTOVLIANSKII, N. S.**  
Heat absorption and release in transistors /O pogloshchenii i vydelenii tepla v tranzistorakh/. 12 p2042 A69-26880
- MOSTOVNIKOV, V. A.**  
Generation of dye solutions by second harmonic excitation of a ruby laser /Generatsiia rastvorov kraskitelei pri vozbuzhdenii vtoroi garmoniki rubinovogo lazera/. 06 p0933 A69-17255
- MOSZYNSKI, J. R.**  
Electrical end losses in liquid-metal MHD generators with variable conductivity. 13 p2206 A69-27493
- MOTA, A. C.**  
Thermal contact to the mixing chamber of a dilution refrigerator. 09 p1493 A69-21429
- MOTAVKIN, A. V.**  
Selection of the optimal structure of fiberglass products. I /K vyboru optimal'noi struktury steklovloknitov. I/. 08 p1335 A69-20332  
The choice of an optimal structure of fiberglass-reinforced materials. II /K vyboru optimal'noi struktury steklovloknitov. II/. 18 p3162 A69-35356
- MOTE, C. D., JR.**  
Thermally induced natural-frequency variations in a thin disk. 04 p0682 A69-15494
- MOTILLA-MARTIN, A.**  
Analog procedure for obtaining deformation in structures due to load creep /Un procedimiento analogico para obtener la deformacion en estructuras debido al arrastre de las cargas/. 20 p3628 A69-37915
- MOTLEY, R. W.**  
Measurement of plasma end losses in a Q machine. 08 p1358 A69-19810  
Improved plasma confinement in a Q machine with symmetrically heated end plates. 11 p1925 A69-24314
- MOTOKI, T.**  
Fatigue properties of fiberglass reinforced plastics - Effects of stress direction and mean stress. 06 p0945 A69-17124
- MOTT, J. E.**  
Stability of parallel flow between concentric cylinders. 01 p0061 A69-11201
- MOTT, N. F.**  
Metal-insulator transition. 03 p0489 A69-13922  
Conduction and switching in non-crystalline materials. 11 p1938 A69-25239
- MOTTIER, F. M.**  
Holography of randomly moving objects. 21 p3726 A69-39741
- MOTTRAM, A.**  
Efficiency peaking in red-light-emitting gallium-phosphide diodes. 15 p2575 A69-30174
- MOTYLINSKA, M.**  
Photographic photometry of galaxies. 10 p1775 A69-23204
- MOTYLINSKII, I. P.**  
Generalization of experimental data concerning the limits of flame stabilization by means of jets /Obobshchenie eksperimental'nykh dannykh po predelam stabilizatsii plameni na struiakh/. 03 p0531 A69-12956
- MOTYLKOV, L. A.**  
Relative motion of an astatic vertical gyro under the action of external moments /Otnositel'noe dvizhenie astaticheskoi girovertikali pod vozeistviem momentov vneshnikh sil/. 19 p3311 A69-36194  
Gyroscope suspension error with allowance for the action of external-force moments /O kardannoi osibke giroskopa s uchetom deistviia momentov vneshnikh sil/. 24 p4317 A69-43707
- MOTZ, L.**  
Homogeneous main sequence models with convective cores. II. 05 p0829 A69-16777
- MOUCHART, J. M.**  
The determination of transfer orbits /La determination des orbites de transfert/. 07 p1211 A69-18503
- MOUCKA**  
Observation of some circulatory reactions after cumulation of vegetative stimuli. 24 p4266 A69-43375
- MOULDEN, T. H.**  
A discussion of the shock-wave in mixed flow. [AIAA PAPER 69-43] 06 p0915 A69-18180
- MOULE, D. J.**  
Laser machining of photolithographic masks in thin metallic films. 22 p3954 A69-40236
- MOULIN, L.**  
Influence of the atmosphere and alloying elements on caschardening by gas carburization /Influence de l'atmosphère et des éléments d'alliage sur la carburation superficielle par cementation gazeuse/. 07 0 A69-19344
- MOULIN, TH.**  
On the boundary between aeronautics and astronautics - The aircraft satellite launcher /A la frontière de l'aéronautique et de l'astronautique - L'avion lanceur de satellites/. 24 p4250 A69-42562
- MOULSON, J. A.**  
Nucleate pool boiling of nitrogen with different surface conditions. 02 p0352 A69-12207
- MOULTON, L. J.**  
Integration of control and fuel system components today and tomorrow. [ASME PAPER 69-GT-49] 09 p1571 A69-22483
- MOUNT, J. S.**  
Developing, qualifying and operating business jet thrust reversers. [SAE PAPER 690311] 11 p1941 A69-24512
- MOURAD, A. G.**  
Satellite geodesy. 01 p0067 A69-10951  
Space tracking in the Soviet Union. 01 p0032 A69-10952
- MOURAD, S. A.**  
On solutions of an equation of transfer for a planetary atmosphere. 08 p1385 A69-20063
- MOURITZEN, G.**  
The optimization of vehicle propulsion. 11 p1941 A69-24462
- MOUTAUD, G.**  
New method of measurement of filament diameters and particularly carbon of filaments. 08 p1316 A69-20499



## MOUTINHO, A.

Ionization cross sections of alkalis on diatomic halogens in the cv-region.

19 p3378 A69-36187

## MOUTSOULAS, M.

The longest baseline.

19 p3339 A69-36766

## MOUW, R. B.

A broad-band hybrid junction and application to the star modulator.

06 p0896 A69-17485

Broadband double balanced mixer/modulators. I.

10 p1665 A69-23876

Broadband double balanced mixer/modulators. II.

15 p2580 A69-31077

## MOVCHAN, B. A.

Investigation of the physical parameters of high-temperature creep and of the delayed rupture of certain creep-resistant alloys under high stresses.

10 p1712 A69-23719

Increase in plasticity of cast and recrystallized molybdenum alloys during precipitation of a second phase at high temperatures /Povyshenie plastichnosti li-tykh i rekristallizovannykh spлавov molibdena pri vydelenii vysokotemperaturnoi vtoroi fazy/.

11 p1906 A69-25685

## MOVSESIAN, L. A.

On the theory of one-dimensional unsteady motions of an ideal compressible fluid.

07 p1119 A69-18750

An invariant transformation of the equations for plane steady motion of a perfect gas.

10 p1680 A69-23709

## MOVSISIAN, L. A.

Oscillations of a cylindrical shell of arbitrary cross section /Kolebaniia tsilindricheskoi obolochki proizvol'nogo sечeniia/.

15 p2707 A69-30581

Vibration of a semi-infinite beam of variable length.

16 p2876 A69-32298

Stability of the moment state of a cylindrical shell /Ob ustoychivosti momentnogo sostoiianiia tsilindricheskoi obolochki/.

21 p3835 A69-38724

## MOWASSAGHI, A.

Venomotor reactions induced by changes of intrapulmonary pressure during positive and negative pressure breathing /Venomotorische Reaktionen bei Veranderungen des intrapulmonalen Druckes durch Ueber- und Unterdruckatmung/.

23 p4093 A69-42068

## MOWBRAY, D. F.

Free vibrations of an infinite plate based on the linear coupled theory of thermoelasticity.

11 p1976 A69-24793

## MOWBRAY, G. H.

Visual transient phenomenon- Its polarity and a paradox.

21 p3650 A69-38320

## MOYAT, E. A.

An electrolysis cell for use in weightless space /Eine Elektrolyse-Zelle fuer den Einsatz im Schwerelosn Raum/.

17 p2903 A69-33039

## MOYAT, P. E. A.

Basic studies on Hirudo medicinalis for a space experiment. I.

24 p4268 A69-43402

## MOYER, H. G.

Integrals for impulsive orbit transfer from Noether's theorem.

23 p4214 A69-41878

## MOYER, W. R.

Neutron radiative capture and transmission measurements of W and Zr isotopes in the kev region.

18 p3175 A69-34314

## MOYLE, L. D. T.

Use of a pulsed laser tracking system for tracking satellites.

13 p2222 A69-28192

## MOZAK, W. J., JR.

Airborne integrated data system.

10 p1660 A69-23262

## MOZALEVSKAIA, G. V.

A class of solutions to the problem of the motion of a body having a fixed point /Ob odnom klasse reshenii zadachi o dvizhenii tela, imeiushchego nepodvizhnuu tockhu/.

11 p1918 A69-24785

Stability of the uniform rotations of a body having a fixed point /Ob ustoychivosti ravnomernykh vrashchenii tela, imeiushchego nepodvizhnuu tockhu/.

11 p1918 A69-24786

Investigation of Steklov's solution to the equations of motion of a body having a fixed point /Issledovanie resheniia V. A. Steklova uravnenii dvizheniia tela, imeiushchego nepodvizhnuu tockhu/.

11 p1918 A69-24791

## MOZER, F. S.

Magnetospheric electric field measurements with balloons.

22 p3939 A69-40514

## MOZER, M.

Open multipliers in the soft X-ray region.

17 p2972 A69-33082

## MOZGOVAIA, L. A.

Electromechanical effect in cadmium sulfide /Ob elektromekhanicheskom effekte v sul'fide kadmiiia/.

21 p3781 A69-39072

## MOZHAEV, G. V.

Geometric method for determining vehicle motion parameters in a Newtonian force field.

05 p0765 A69-16686

## MOZHIN, V. N.

Investigation of the influence of vibrations on the strength of two types of structural plastic /Issledovanie vliianiia vibratsii na prochnost' dvukh vidov konstrukt-sionnykh plastmass/.

15 p2643 A69-30972

Machine for testing the stability of polymer materials during vibrations.

17 p2972 A69-33043

## MOZZHUKHIN, E. I.

Thermodynamic evaluation of the interaction between solid metals and dispersed inclusions of high-melting-point oxides /Termodinamicheskaia otsenka vzaimodeistviia dispersnykh vkluchenii tugoplavkikh okislov s tverdymi metallami/.

03 p0446 A69-13571

Temperature dependence of internal friction in molybdenum wire in the moderate and high temperature range /Temperaturnaiia zavisimost' vnutrennego treniia molibdenovoi provoloki v oblasti umerennykh i vysokikh temperatur/.

03 p0446 A69-13576

## MOZZI, R. L.

Nonuniform emission characteristics of electron-beam-pumped dislocation-free GaAs lasers.

22 p3963 A69-40565

## MRASS, H.

Measurements of the vertical and latitudinal distribution of ionospheric inhomogeneities with the aid of Explorer 22 /S 66/ signals /Messungen der Hoehen- und Breitenverteilung von Inhomogenitaeten in der Ionosphaere mit Hilfe der Signale von Explorer 22 /S 66//.

01 p0064 A69-10446

## MRAZ, L.

Chemical composition and bulk density of mol-davites.

23 p4210 A69-41348

## MRAZEK, W. A.

The various stages of development of astronautics in the U.S. - Technological and economic aspects /Die verschiedenen Entwicklungsniveaus der Raumfahrt in den USA - Technische und wirtschaftliche Gesichtspunkte/.

05 p0849 A69-15576

## MROZ, Z.

Analysis of compression of short cylinders of Coulomb material.

08 p1410 A69-19890

## MSHVELIDZE, G. G.

Stimulated emission of active fibrous filaments /Vynuzhdennoe izluchenie aktivnykh volokonnykh nitei/.

05 p0761 A69-15657

The induced emission of active fibers.

16 p2792 A69-32514

## MUCHNIK, G. F.

Electrogasdynamics generator.

03 p0369 A69-14153

Modified nonstationary method of determining the absorptivity of materials /Modifitsirovannyi nestat-sionarnyi metod opredeleniia pogloschatel'noi sposobnosti materialov/.

09 p1528 A69-22720

Method of determining the integral hemispheric radiative capacity of materials in the temperature range from -100 to 1000 deg C.

18 p3156 A69-34698

## MUCKENFUSS, C.

Role of diffusion in conduction in dielectric fluids.

03 p0415 A69-13140

## MUDD, S.

Assessment of the fidelity of dynamic flight simulators.

02 p0203 A69-12215

## MUDD, S. A.

The treatment of handling-qualities rating data.

21 p3664 A69-38968

## MUDGWAY, D. J.

The general problem of data return from deep space.

14 p2517 A69-29096

## MUDITA REDDY, B.

Low noise front end amplifier for wideband receivers.

02 p0216 A69-12028

## MUDRAK, A. D.

The parameters of a transistor as a charge-controlled device /Parametry transistora kak pribora, upravliaemogo zariadom/.

01 p0046 A69-10748

## MUDROV, V. I.

Some experiments on the use of the least-moduli method in processing orbital data.

10 p1791 A69-24193

## MUEHE, C. E.

A high-power waveguide tuner.

04 p0576 A69-14759

## MUEHLDOERF, E. I.

Self-steered retrodirective arrays with amplification.

11 p1850 A69-24983

## MUEHLEISEN, R.

Atmospheric electric measurements on the sea - Results of the 1965 Atlantic expedition of the research vessel "Meteor." /Luftelektrische Messungen auf dem Meer - Ergebnisse von der Atlantik-Fahrt des Forschungsschiffes "Meteor" 1965. /.

04 p0594 A69-15159

## MUEHLENFELD, E.

Vibratorot gyroscope for measuring angular velocity /Rotor-Schwingkreis zur Messung der Winkelgeschwindigkeit/.

18 p3139 A69-35299

## MUELLER, A.

Measurement of the surface energy anisotropy of pure tungsten with a field ion microscope /Eine Messung der Anisotropie der Oberflaechenenergie von reinem Wolfram mit dem Feldionenmikroskop/.

08 p1330 A69-20139

## MUELLER, B.

Destructible meteorological rocket sonde "Dart." [UN PAPER 68-95467]

01 p0161 A69-10510

The flight data recorder as an airborne integrated data system.

17 p2974 A69-33429

## MUELLER, CH.

Suppression of frequency noises in Gunn diode oscillators by means of an external cavity /Unterdrueckung des Frequenzrauschens von Gunn-Dioden-Oszillatoren mit Hilfe eines aeuusseren Resonators/.

11 p1853 A69-25608

## MUELLER, D.

Measurement of the absorption oscillation strengths of S I and S II lines in the range from 1100 to 2000 angstrom units /Messung der Absorptionsoszillatorenstaerken von S I- und S II-Linien im Bereich zwischen 1100 und 2000 angstrom units/.

03 p0479 A69-13968

A mass spectrometric investigation of the lower thermosphere above Fort Churchill with special emphasis on the helium content.

09 p1489 A69-21712

## MUELLER, E.

Solar cells and their use in space flight /Solarzellen und ihre Anwendung in der Raumfahrt/.

12 p2015 A69-25865

Time dependence of "transverse breakdown" and instabilities in indium-antimonide.

19 p3389 A69-36546

## MUELLER, E. A.

Lithium observations in the sun.

05 p0821 A69-15849

The solar abundances.

08 p1402 A69-20905

## MUELLER, E.-A.

Sound generation by unsteady flow as a singular perturbation problem /Schallerzeugung durch instationaere Stroemung als singulaeres Stoerungsproblem/.

13 p2299 A69-28187

- MUELLER, G.**  
Initiation of detonation by incident shock waves in hydrogen-oxygen-argon mixtures.  
02 p0304 A69-12313  
The cosmo-petrological significance of the coalescence of microchondrules with the decrease of volatiles in chondrites.  
17 p3030 A69-33067  
Plasma-cyclotron interaction in a symmetrical double beam system.  
17 p3015 A69-33831  
Genetical interrelations between ureilites and carbonaceous chondrites.  
19 p3413 A69-36112
- MUELLER, G. E.**  
Manned space flight - The future.  
02 p0326 A69-12680  
Contributions and results of manned space flight programs.  
06 p1001 A69-17074  
The new future for manned spacecraft developments.  
10 p1791 A69-22866  
Commercial exploitation of space technology.  
17 p3043 A69-34044  
Apollo and beyond.  
23 p4211 A69-41477
- MUELLER, H. A.**  
Some biological effects of laser radiation.  
[AGARDOGRAPH-111] 08 p1266 A69-20676
- MUELLER, H. G.**  
Measurement of standard visibility using scattered-light recorder during the 1965 Atlantic expedition aboard the "Meteor" /Messungen der Normsichtweite mit einem Streulichschreiber waehrend der Atlantischen Expedition 1965 "Meteor".  
04 p0628 A69-15158
- MUELLER, H. W.**  
Rare gases in stony meteorites.  
05 p0826 A69-16440
- MUELLER, I.**  
On diffusion and thermal diffusion in a mixture of Maxwellian gases.  
05 p0849 A69-16461  
Toward relativistic thermodynamics.  
22 p4050 A69-40451
- MUELLER, I. I.**  
Interpolation of the vertical deflection from horizontal gravity gradients.  
02 p0243 A69-12012
- MUELLER, J.**  
Resistance, capacitance, and inductance in hydraulic circuits /Odpor, kapacita a indukcnost v hydraulickych obvodech/.  
15 p2552 A69-31060
- MUELLER, J. N.**  
Lightweight, high-thermal-capacity force models for use in arc tunnels.  
12 p2059 A69-26796
- MUELLER, K.**  
An electron diffraction study of cesium adsorption on tungsten.  
19 p3392 A69-36733
- MUELLER, K. F.**  
Identification of phases existing in technical cemented carbides by means of microprobe and temper etch /Identifizierung der in technischen Hartmetallen auftretenden Phasen mit Hilfe der Mikrosonde und durch Anlassetzung/.  
05 p0780 A69-15989
- MUELLER, K. H.**  
Frequency compensation by monolithic operational amplifiers /Frequenzkompensierung bei monolithischen Operationsverstärkern/.  
01 p0039 A69-10169  
Dimensioning of notch filters /Dimensionierung von Notch-Filtern/.  
08 p1284 A69-20379
- MUELLER, K. R.**  
The economic aspect of assessing the reliability and the quality of semiconductor-fitted products.  
08 p1292 A69-21102
- MUELLER, L. J.**  
Stability augmentation for the Galaxy.  
20 p3461 A69-36927
- MUELLER, M. R.**  
Solar flutter of a thin-walled open-section boom.  
07 p1227 A69-18333
- MUELLER, O.**  
Large-signal S-parameter measurements of class C operated transistors.  
02 p0214 A69-11600  
The stony meteorite Kraehenberg - Its chemical composition and the Rb-Sr age of the light and dark portions.  
05 p0826 A69-16439  
Thermal feedback /entrainment effect/ producing 1/f-flicker noise in transistors /Thermische Rueckkopplung /Mitlaueffekt/ als Ursache fuer das 1/f-Funkelrauschen in Transistoren/.  
08 p1283 A69-20129
- MUELLER, P. A.**  
Control analysis of an ion thruster with programmed thrust.  
[AIAA PAPER 69-239] 09 p1564 A69-21240
- MUELLER, P. R.**  
In situ angular distribution measurements of visible and near IR radiation reflected from CO sub 2 cryodeposits formed on IN sub 2- cooled surfaces within a vacuum.  
[AIAA PAPER 69-63] 06 p0959 A69-18131
- MUELLER, R.**  
Lasers /Laser/.  
06 p0936 A69-18002  
Modulation methods /Modulationsverfahren/.  
06 p0937 A69-18010  
Applications /Anwendungen/.  
06 p0938 A69-18012  
Note on the ballistic equations.  
23 p4183 A69-42482
- MUELLER, R. A.**  
Conductivity testing at the McDonnell Company.  
12 p2114 A69-26307
- MUELLER, R. F.**  
Planetary probe - Origin of atmosphere of Venus.  
10 p1775 A69-23183
- MUELLER, R. K.**  
The liquid-gas interface as a recording medium for acoustical holography.  
10 p1695 A69-23542  
Ultrasonic holography via the ultrasonic camera.  
10 p1696 A69-23550  
Detection of strain by coherent optical techniques.  
12 p2180 A69-26305  
Some problems associated with optical image formation from acoustic holograms.  
23 p4166 A69-42181
- MUELLER, R. S.**  
Propagation in ferrite-filled coaxial transmission lines.  
04 p0575 A69-14751  
Electromagnetic wave propagation along a ferrite loaded wire.  
14 p2417 A69-29755
- MUELLER, T. J.**  
Condensation and probe interference effects on planar expansion-deflection nozzle experiments.  
[AIAA PAPER 69-170] 06 p0863 A69-18059  
Supersonic wake flow visualization.  
[AIAA PAPER 69-346] 13 p2200 A69-28281  
Condensation and probe interference effects on planar expansion-deflection nozzle experiments.  
[AIAA PAPER 69-170] 21 p3645 A69-39769
- MUELLER, U.**  
Stability behavior of a plane Couette flow in a heated nonlinear viscous fluid /Das Stabilitaetsverhalten einer ebenen Couette- Stromung in einer geheizten nicht-linear viskosen Flussigkeit/.  
02 p0235 A69-12828
- MUELLER, W.**  
The significance of swingby techniques to be used on the planet Jupiter for interplanetary missions /Bedeutung der Swingby-Technik am Planeten Jupiter fuer interplanetare Missionen/.  
02 p0326 A69-12663  
Considerations concerning the proof of the existence of periodic motions of simple nonlinear oscillators with velocity discontinuities /Ueberlegungen zum Existenzbeweis fuer periodische Bewegungen einfacher nicht-linearer Schwinger mit Geschwindigkeitsspruengen/.  
21 p3771 A69-39009
- MUELLER, W. F.**  
Deformation microstructures in shock-loaded olive.  
05 p0818 A69-15607
- MUENCH, G.**  
Mariner 1969 - Preliminary results of the infrared radiometer experiment.  
24 p4384 A69-43196
- MUENCH, H.**  
Relationship of paper speed to precision of pulse wave measurements - A multiple observer study of left ventricular ejection time.  
19 p3258 A69-36449
- MUENCH, H. S.**  
Large-scale disturbances in the summertime stratosphere.  
03 p0461 A69-13343
- MUENCH, J.**  
Statistical frequency analysis of geomagnetic pulsations /Statistische Frequenzanalyse von erdmagnetischen Pulsationen/.  
07 p1122 A69-18297
- MUENCH, W. V.**  
Silicon and gallium arsenide field-effect transistors with Schottky-barrier gate.  
08 p1286 A69-20863
- MUENKER, A. H.**  
Synthesis and evaluation of curing agents.  
[AIAA PAPER 69-436] 16 p2747 A69-32777
- MUENSTER, A.**  
Statistical foundations of thermodynamics. I.  
09 p1623 A69-22395  
Statistical foundations of thermodynamics. II - Equivalence problem - Stability conditions.  
12 p2191 A69-27148
- MUENTHER, C.**  
Observation of satellite signal scintillations at 40 MHz /Szintillationsbeobachtungen an Satellitensignalen auf 40 MHz/.  
12 p2034 A69-27094
- MUENTHER, CH.**  
Comparison of five different methods for determining a scintillation index.  
16 p2751 A69-32105
- MUENTHER, CHR.**  
Phase measurements of satellite transmissions and their ionospheric interpretation.  
04 p0592 A69-14766
- MUENZBERG, H. G.**  
The thermal-chemical rocket /Die thermisch-chemische Rakete/.  
03 p0496 A69-13666
- MUFTI, I. H.**  
On the observability of decoupled systems.  
12 p2053 A69-26514
- MUGANLINSKII, S. G.**  
A method for determining the fatigue life of aircraft structures /Ob odnom metode opredeleniia ustalostnoi dolgovechnosti samoletnykh konstruktsii/.  
11 p1987 A69-25345
- MUGGLETON, L. M.**  
Relation between sunspot number and the ionospheric index IF2.  
03 p0424 A69-13632
- MUGHRABI, H.**  
A compact device for low temperature neutron irradiation of deformed specimens under a defined tensile stress.  
11 p1862 A69-24901
- MUGLER, J. P., JR.**  
In situ vacuum testing - A must for certain elastomeric materials.  
09 p1477 A69-22008
- MUHLEMAN, D. O.**  
Measurements of the electron content of the interplanetary medium between earth and Venus.  
09 p1594 A69-21697  
Microwave opacity of the Venus atmosphere.  
12 p2153 A69-25805  
On the radio method of determining the astronomical unit.  
22 p4022 A69-40464
- MUIR, A. H.**  
Methods of feasibility and economic analysis of remote sensing applications.  
12 p2193 A69-27013
- MUIR, R. W.**  
ACV technology programs at Aerojet-General.  
13 p2202 A69-27547
- MUIRHEAD, K. J.**  
Free oscillations of the earth and the D layer.  
23 p4158 A69-42117



- MUIS, W.**  
Hue shift and brightness enhancement of flickering light.  
22 p3882 A69-40871
- MUKAIHATA, T.**  
Applications and analysis of noise generation in cascaded mismatched two-port networks.  
02 p0211 A69-12445
- MUKAIYAMA, T.**  
Ultimate strength of curved beams.  
20 p3629 A69-38031
- MUKASEEV, A. A.**  
Modulus of elasticity of some refractory compounds.  
09 p1529 A69-21871
- MUKHAEV, V. V.**  
Texture of cold-rolled alloyed titanium /Tekstura kholodnoi prokatki legirovannogo titana/.  
04 p0617 A69-15077
- MUKHAMEDOVA, D. A.**  
Negative dispersion of light in a CaWO sub 4 -Nd super 3 super plus crystal /Otritsatel'naia dispersiia sveta v kristalle CaWO sub 4 -Nd super 3 super plus/.  
15 p2632 A69-30051
- MUKHAMEDZHANOV, A. K.**  
Diameter distribution functions for fragments from powerful explosions.  
03 p0512 A69-13691  
Analysis of statistical data concerning the crater and stone distribution on the surface of the moon /K analizu statisticheskikh dannykh po raspredeleniiu kraterov i kamnei na poverkhnosti lunyi/.  
12 p2154 A69-25816
- MUKHAMEDZHANOV, I. A.**  
Sufficient conditions for the absolute stability and dissipativity of nonlinear controlled systems in the presence of continuously acting and parametric disturbances /Dostatochnyye uslovia absoliutnoi ustoiichivosti i dissipativnosti nelineinykh reguliruemyykh sistem pri postoianno deistvuiushchikh i parametricheskikh vozmushcheniiakh/.  
09 p1476 A69-22717  
Sufficient conditions for the absolute stability and dissipativity of nonlinear controlled systems subject to constant action and parametric disturbances.  
16 p2765 A69-32550
- MUKHARLIAMOV, R. G.**  
Construction of a set of systems of differential equations of steady motion from an integral manifold /O postroenii mnozhestva sistem differentsial'nykh uravnenii ustoiichivogo dvizheniia po integral'nomu mnogoobraziui/.  
15 p2654 A69-31260
- MUKHERJEE, A. K.**  
The speed of ductile-crack propagation and the dynamics of flow in metals.  
02 p0343 A69-12283  
A dual range multivibrator.  
06 p0896 A69-17474
- MUKHERJEE, B.**  
Growth of part-through and through-thickness fatigue cracks in sheet glassy plastics.  
[SESA PAPER 1348] 09 p1617 A69-22013
- MUKHERJEE, K.**  
The effect of strain rate and temperature on the flow stress of 7075 aluminum.  
03 p0443 A69-13120  
Impurity-dislocation interaction and repeated yielding in a commercial Al alloy.  
04 p0613 A69-14440
- MUKHERJEE, S.**  
Note on the extensional vibration of a thin non-homogeneous circular plate with a central hole.  
15 p2713 A69-31026
- MUKHIBI, G. S.**  
Study of high-energy muons in extensive air showers.  
13 p2332 A69-28409
- MUKHIN, M.**  
A comparative evaluation of different methods for detection of extraterrestrial life.  
01 p0021 A69-11093
- MUKHIN, N. M.**  
Some problems involved in the experimental procedure for studying the scale factor on the basis of the method of allowing for energy dissipation during oscillations /O nekotorykh voprosakh metodiki eksperimental'nogo izucheniia masshtabnogo faktora metodom ucheta rasseianiia energii pri kolebaniiax/.  
17 p3065 A69-33927
- MUKHINA, L. G.**  
Heat treatment of beta-titanium alloys /Termicheskaia obrabotka beta-titanovykh splavov/.  
01 p0093 A69-10213  
Heat treatment of beta-titanium alloys.  
15 p2637 A69-30269
- MUKHOPADHYAY, A. K.**  
Effect of trajectory, guidance, and environmental parameters and uncertainties on the design optimization of a planetary landing vehicle.  
[AIAA PAPER 69-128] 06 p1018 A69-18107
- MUKHOPADHYAY, D.**  
Microwave incremental conductivity of InSb at 77 deg K in the presence of high steady electric field.  
07 p1200 A69-19447
- MUKHOPADHYAY, N.**  
A theoretical study of pulsating combustion.  
09 p1625 A69-22694
- MUKI, R.**  
On the diffusion of load from a transverse tension bar into a semi-infinite elastic sheet.  
[ASME PAPER 68-WA/APM-15] 04 p0669 A69-14396
- MUKOED, A. P.**  
Determination of the stressed state of laminar spherical shells /Pro viznachennia napruzhenogo stanu v sharuvatkikh sferichnikh obolonkakh/.  
12 p2181 A69-26611  
Forced oscillations of a laminar orthotropic cylindrical shell /Vynuzhennyye kolebaniia sloisto-ortotropnoi tsilindricheskoi obolochki/.  
15 p2715 A69-31202
- MUKUNDA RAO, M.**  
Rocket observations of electron densities in the night-time auroral E-region at Fort Churchill, Canada.  
14 p2439 A69-29117  
Latitude variation of the lower ionosphere.  
18 p3127 A69-34798
- MULAS, P.**  
Degradation of the time characteristics of surface barrier detectors with fission fragment dose.  
10 p1694 A69-23348
- MULCAHY, M. J.**  
Controlled factorial experiments on high voltage vacuum breakdown.  
05 p0731 A69-16244
- MULCHENKO, B. F.**  
Determination of the spatial distribution of plasma density from the phase shift as measured by microwave multichannel probes /Opredelenie prostranstvennogo raspredeleniia plotnosti plazmy po fazovomu sdvigu pri mnogokanal'nom mikrovolnovom zondirovanii/.  
14 p2497 A69-29792
- MULDOON, R. A.**  
Design of the Haystack antenna and radome.  
23 p4149 A69-42131
- MULDOWNEY, J. S.**  
Bounds for solutions of nonlinear integrodifferential equations.  
01 p0103 A69-10001
- MULDREW, D. B.**  
Preliminary results of ISIS A concerning electron-density variations, ionospheric resonances and Cerenkov radiation.  
15 p2604 A69-31416  
Nonvertical propagation and delayed-echo generation observed by the topside sounders.  
20 p3495 A69-37885  
Properties of high-latitude ionospheric ducts deduced from Alouette II two-hop echoes.  
20 p3531 A69-37890
- MULHERIN, J. H.**  
Tensile-ligament instability and the growth of stress-corrosion cracks in high-strength alloys.  
13 p2277 A69-27404
- MULHERN, J. F.**  
Cylindrically symmetric deformations of a fibre-reinforced material.  
08 p1418 A69-21002
- MULHOLLAND, J. D.**  
Numerical studies of lunar motion.  
20 p3603 A69-37560
- MULIAKAEV, L. M.**  
Application of the salt CrCl sub 2 for chromium gas deposition on steel in an argon atmosphere /Primenenie soli CrCl sub 2 pri gazovom khromirovanii stali v atmosfere argona/.  
04 p0605 A69-14577
- MULIKOV, V. F.**  
Stimulated combination scattering of neodymium laser radiation in liquid nitrogen /Vynuzhennoe kombinatsionnoe rasseianie izlucheniia neodimovogo lazera v zhidkom azote/.  
11 p1900 A69-25751
- MULLAKHMETOV, R. KH.**  
Determination of heat fluxes with allowance for the calorimeter heat losses /K opredeleniiu teplovogo potoka s uchetom poter' tepla kalorimetrom/.  
24 p4407 A69-42589
- MULLALY, R. F.**  
The heights of solar radio sources at 1424 MHz and 696 MHz.  
17 p3040 A69-33808  
Solar radio bursts at 21 cm wavelength observed with high angular resolution.  
17 p3040 A69-33809
- MULLANEY, G. J.**  
Fog dissipation using a CO sub 2 laser.  
02 p0258 A69-12622  
A study of fog clearing using a CO sub 2 laser.  
[AIAA PAPER 69-670] 17 p2945 A69-33449  
Energy transfer mechanism in shock-tube arc-heated drivers.  
23 p4147 A69-41895
- MULLEN, C. R.**  
Analytical and experimental investigations of a jet exhausting into an oncoming supersonic stream.  
[AIAA PAPER 69-69] 06 p0864 A69-18164  
Saturn V/S-IC stage model and flight test base thermal environment.  
[AIAA PAPER 69-318] 09 p1611 A69-22383
- MULLEN, J. P.**  
Latitudinal movements in the auroral ionosphere as shown by scintillation measurements.  
01 p0069 A69-11127  
The scintillation boundary.  
07 p1125 A69-18846
- MULLEN, L. O.**  
Fabrication of tunnel junctions on niobium films.  
17 p3016 A69-33788
- MULLER, A. F.**  
Viscous flow-induced vibrations of a flat plate suspended in a narrow channel.  
11 p1991 A69-25515
- MULLER, C. H.**  
The development of supersonic axial compressor boost stages for small gas turbines.  
[ASME PAPER 69-GT-44] 09 p1570 A69-22478
- MULLER, I. A. N.**  
Calculation of the principal parameters of a magnetron-type cascade amplifier /K raschetu osnovnykh parametrov kaskadnogo usilitelia magnetronnogo tipa/.  
03 p0407 A69-13978
- MULLER, J.**  
The Eole program /Le programme Eole/.  
[UN PAPER 68-95831] 06 p0950 A69-17073
- MULLER, J. F.**  
Synthesis of a guidance system for a short-range infantry missile.  
12 p2129 A69-26791
- MULLER, J. L.**  
Assessment of aircraft noise disturbance.  
16 p2735 A69-32021
- MULLER, P.**  
Utilization of a new technique with the French "Antares" streak camera /Primenenie novoi tekhniki s frantsuzskoi slediashchei kameroy "Antares"/.  
12 p2092 A69-26451  
Photography of laser echoes on satellites /Photographie des echos laser sur satellites/.  
15 p2570 A69-31311  
Photoelectric photometry of artificial satellites in France /Photometrie photoelectrique des satellites artificiels en France/.  
15 p2616 A69-31391  
Experiments in laser echo photography on satellites /Experiences de photographie d'echos laser sur satellites/.  
21 p3671 A69-38335  
Dispersion of the positions of GEOS flashes - Study of the causes /Dispersion des positions des eclairs de GEOS - Etude des causes/.  
21 p3793 A69-38339
- MULLER, P. M.**  
Lunar gravimetrics.  
15 p2697 A69-31313

- Lunar gravimetrics. 18 p3194 A69-34413
- Consistency of Lunar Orbiter residuals with trajectory and local gravity effects. [AAS PAPER 68-131] 21 p3828 A69-39766
- Lunar gravimetry and mascons. 24 p4379 A69-42785
- MULLER, R.**  
Application of Computers to the Calculation of Structures / Application des ordinateurs au calcul des structures/. 07 p1233 A69-19349
- MULLER, R. M.**  
On-board processor. I - Philosophy, design and operation. 20 p3500 A69-37384
- Coding - An engineering tool for the digital telemetry link. 23 p4119 A69-41745
- MULLER, R. S.**  
Oriented Te thin films. 08 p1373 A69-20891
- IGFET analysis through numerical solution of Poisson's equation. 10 p1662 A69-23170
- MULLEY, W. G.**  
An airborne video tape navigational display. 03 p0464 A69-13246
- MULLIGAN, J. C.**  
Downstream cooling effectiveness of massive upstream transpiration from a slender cone. 24 p4248 A69-43588
- MULLIN, F. J.**  
Synchronous satellites as part of a complex tracking network. [AIAA PAPER 68-449] 21 p3674 A69-39019
- A technique for the analysis of Monte Carlo results. 21 p3804 A69-39036
- MULLINEAUX, J. L.**  
Development of high temperature capacitance strain gages. 15 p2614 A69-31278
- Development of high-temperature capacitance strain gages. 20 p3537 A69-37006
- MULLINGER, D. E.**  
The ESRO-1/Aurora project. 13 p2356 A69-27747
- MULLINS, J. A.**  
The polar exosphere near solar maximum. 15 p2600 A69-31351
- MULLINS, P. L.**  
Capital budgeting for research and development. 14 p2541 A69-29281
- MULOCK, R. B.**  
Software reliability. 18 p3105 A69-34524
- MULOKWA, W.**  
An investigation of the total electron content in the equatorial anomaly of East Africa. 23 p4160 A69-42434
- MULSER, P.**  
Numerical calculations of the dynamics of laser produced plasmas. 02 p0256 A69-11935
- MUMAU, G. R.**  
Importance of a relationship between dendrite formation and solidification in highly alloyed materials. 01 p0098 A69-10899
- MUMFORD, G. S.**  
Further photometry of EX Hydrae. 13 p2338 A69-27558
- Binary stars among cataclysmic variables. X - Photoelectric observations of EM Cygni. 22 p4015 A69-40151
- MUMINOV, R. A.**  
Coherent emission from injection plasma in InSb without magnetic field. 19 p3387 A69-36532
- MUMLADZE, V. V.**  
Holography on crystals /Golografiia na kristallakh/. 04 p0598 A69-14855
- Stimulated emission of active fibrous filaments /Vynuzhdennoe izluchenie aktivnykh volokonnykh nitei/. 05 p0761 A69-15657
- Crystal holography. 15 p2608 A69-30247
- The induced emission of active fibers. 16 p2792 A69-32514
- MUMOLA, P. B.**  
Characteristics of unstable waves in a weakly ionized high-frequency magnetoplasma. 13 p2312 A69-28197
- MUNCH, G.**  
Physical state of the interstellar gas in the nucleus of Messier 31 /Fizicheskoe sostoianie mezhzvezdnogo gaza v iadre Mes'31/. 12 p2163 A69-27020
- MUND, K.**  
Electrodialytic regeneration of alkaline electrolytes in fuel cells. 08 p1260 A69-21043
- Electrodialytic regeneration of alkaline electrolytes in fuel cells. 16 p2738 A69-32414
- MUNDAY, C.**  
Synthesis of acyclic isoprenoids by the gamma-irradiation of isoprene. 24 p4269 A69-43750
- MUNDAY, V. A.**  
Interstellar clouds. 10 p1779 A69-23608
- MUNDEL, A. B.**  
Cell design optimization. 10 p1639 A69-23992
- MUNDIE, J. R.**  
New perspectives in electronic information processing suggested from observations of living systems. 17 p2911 A69-34092
- MUNDING, G.**  
A family of bipropellant propulsion systems with thrusts ranging from 40 kp to 1 kp - Their technology and their application possibilities in the Symphonie experimental telecommunications satellite /Une famille de propulseurs bi-ergols d'une pousse allant de 40 kp a 1 kp - Leur technologie et leurs possibilites d'application dans le satellite de telecommunications experimental Symphonie/. 16 p2828 A69-31733
- The Vernier motor for the third stage of the Europa 1 rocket /Moteur vernier pour le 3eme etage de la fusée Europa 1/. 17 p3018 A69-33328
- MUNDT, W.**  
A geomagnetic normal field of the vertical component in Central Europe. 16 p2782 A69-32461
- MUNGER, H. P.**  
High-strength 9 percent Ni to 4 percent Co steels and their applications. 23 p4175 A69-41299
- MUNIN, A. G.**  
Calculation of the noise characteristics of jet airliners. 09 p1435 A69-22637
- MUNNS, G. E.**  
Digital control of aircraft powerplants. 03 p0496 A69-14091
- Aspects of digital engine control. 17 p3022 A69-33603
- MUNOZ, J.**  
Shock spectra - Examples of practical applications /Les spectres de choc - Exemples d'applications pratiques/. 13 p2369 A69-28600
- MUNRO, H. G.**  
Techniques for the recording and measurement of crack growth during fatigue and fracture toughness testing. 15 p2713 A69-31109
- MUNSON, H. E.**  
Evaluation of lubricants for anti-friction bearings in a thrust reversing actuator drive. [SAWE PAPER 68-LC-1] 18 p3148 A69-35003
- MUNSON, W. O.**  
Combustion bomb tests of an extinguishable fluorocarbon propellant. [WSCIPAPER 69-9] 16 p2831 A69-32349
- Effect of additives, introduced by spray drying on ammonium perchlorate decomposition. [AIAA PAPER 69-502] 16 p2834 A69-32752
- MUNT, R.**  
On the propagation of ionization waves. 22 p3990 A69-40758
- MUNTEAN, I.**  
Harmonic oscillations for some systems of two differential equations. 05 p0788 A69-16479
- MUNTZ, E. P.**  
Some shock/wind tunnel observations of interference effects in hypersonic wakes. 15 p2588 A69-30475
- Exhaust plume rarefaction. [AIAA PAPER 69-657] 17 p2892 A69-33465
- Quantitative visualization of low density flow fields using the electron beam excitation technique. 19 p3292 A69-35723
- MURA, T.**  
Generalized stress-strain laws developed by dislocation theory. 05 p0834 A69-15756
- The continuum theory of dislocations. 06 p0944 A69-17502
- Mises limit load for simply supported conical sandwich shells under internal pressure. 08 p1416 A69-20702
- Continuum theory of dislocations and plasticity. 10 p1799 A69-23154
- MURAD, E.**  
Dissociation energy and ionization potential of silicon monoxide. 22 p3896 A69-40725
- MURADOV, A.**  
Planetary distribution of drifts in the F sub 2 region of the ionosphere, excited by neutral gas motions. 03 p0422 A69-13513
- Estimates of the vertical transport rate of charged particles in the outer portion of the F2 region of the ionosphere /Otsenki skorosti vertikal'nogo perenosazariazhennykh chastits vo vnesnei chasti oblasti F2 ionosfery/. 09 p1485 A69-21529
- Estimates of the vertical transport velocity of charged particles in the topside ionosphere. 16 p2783 A69-32524
- The problem of neutral gas motion in the F region of the ionosphere /K voprosu o dvizhenii neutral'nogo gaza v oblasti F- ionosfery/. 20 p3519 A69-36972
- Temperature dependence of photoionization rates in the upper atmosphere /K temperaturnoi zavisimosti skorosti fotoionizatsii v verkhnei atmosfere/. 23 p4157 A69-41857
- MURAI, A.**  
Duration of the HCN laser by pulsed discharge in seal-off tube. 12 p2107 A69-26391
- MURAI, Y.**  
Study on a semi-hot wall duct for MHD generators. 13 p2372 A69-27473
- MURAKAMI, J.**  
Ultra-low-noise preamplifiers in satellite communication earth terminal installations - Traveling-wave maser and cooled parametric amplifier. 05 p0728 A69-15670
- MURAKAMI, S.**  
Study on the axisymmetric elasto-plastic deformation of thin plates. 22 p4041 A69-40064
- MURAKAWA, S.-I.**  
A dye-solution laser pumped by a dye laser. 02 p0258 A69-12620
- Organic dye solution laser. 11 p1900 A69-25580
- MURAKHOVSKII, K. I.**  
Biomechanics of the respiratory act under long-term accelerations - An X-ray study /Biomekhanika dykhatel'nogo akta pri dlitel'no deistviushchikh uskoreniakh - Rentgenologicheskoe issledovanie/. 05 p0710 A69-16522
- Changes in the enzymatic activity of cellular and sub-cellular structures in response to accelerations. 10 p1645 A69-23496
- Mechanics of the respiratory act during prolonged exposure to accelerations /radiological study/. 18 p3096 A69-34741
- MURAKHVER, N. P.**  
Unsteady jet flow of a viscous fluid /O nestatsionarnom struinoi dvizhenii viazkoi zhidkosti/. 14 p2432 A69-29608
- MURAKOSHI, A.**  
Real time, real temperature, jet V/STOL test facility. [AIAA PAPER 69-310] 09 p1479 A69-22388



## MURAL, V. V.

Mechanism of the influence of molybdenum on the processes of reversible temper brittleness of steel /Mekhanizm vlianiia molibdena na protsessy obratimoi otpusknoi khрупkosti stali/.  
13 p2283 A69-28491

## MURALIDHAR, D.

Yaw probe used as Preston tube.  
05 p0751 A69-16396

## MURALI, A. V.

Techniques for proper revelation and viewing of etch-tracks in meteoritic and terrestrial minerals.  
02 p0245 A69-12569

## MURAMOTO, H.

Eddy diffusivities for heat in the region near the wall.  
13 p2380 A69-28497

## MURANDI, S.

Radome testing for thermokinetic and rain-induced erosion /Essais de radomes a l'erosion thermocinetique et a la pluvio-erosion/.  
07 p1054 A69-19541

## MURAO, R.

On the improvement of air cushion vehicle performance by the recirculation of air curtain.  
22 p3866 A69-40816

## MURAOKA, K.

Operating characteristics of DC arc plasma torch. I.  
02 p0291 A69-12424  
Shock-wave structure in a single component monatomic gas.  
18 p3124 A69-35170

## MURASAKI, T.

On a stochastic approach to the pulsating phenomena in the two-phase flow.  
24 p4305 A69-43633

## MURASHOV, I. I.

Towards the theory of controlling laminated products using superposed detectors.  
24 p4296 A69-42653

## MURATA, H.

Thermal excitation of diurnal atmospheric oscillation in the lower mesosphere.  
14 p2441 A69-29379

## MURATA, K.

Diversity reception in VHF space communications.  
06 p0889 A69-17653  
Diversity reception in VHF space communications.  
10 p1775 A69-23191

## MURATOV, V. I.

Plasma oscillation intensities at combination frequencies /Ob intensivnosti kolebaniy plazmy na kombinatsionnykh chastotakh/.  
09 p1550 A69-22024

## MURAVEV, B. N.

The question of the attainable signal compression coefficient /K voprosu o dostizhimom koeffitsiente szhatiia signala/.  
17 p2931 A69-33907

## MURAVEV, I. I.

Study of the discharge conditions in a hollow cathode for obtaining lasing at lambda equals 1.15 mu of neon /Issledovanie usloviy razriada v polom katode dia polucheniia generatsii na lambda 1,15 mk neona/.  
09 p1516 A69-21507

## MURAYAMA, S.

Ultrahigh-frequency discharge in atmospheric-pressure gas.  
04 p0634 A69-14442

## MURAYAMA, T.

Dynamic behavior of textile fibers and assemblies.  
04 p0619 A69-14686

## MURCRAY, D. G.

Detection of nitric acid in the earth's atmosphere.  
11 p1879 A69-25407  
Infrared solar spectrum as observed from balloons.  
13 p2341 A69-27589  
Presence of HNO sub 3 in the upper atmosphere.  
24 p4308 A69-42969

## MURCRAY, F. H.

Detection of nitric acid in the earth's atmosphere.  
11 p1879 A69-25407  
Infrared solar spectrum as observed from balloons.  
13 p2341 A69-27589  
Presence of HNO sub 3 in the upper atmosphere.  
24 p4308 A69-42969

## MURCRAY, W. B.

The ratio rho/5577//rho/N sub 2 super plus first negative/ in the aurora.  
05 p0756 A69-16360  
The ratio rho/5577// rho/N sub 2 super plus first negative/ in the aurora.  
09 p1491 A69-22607  
Intensity ratio of the 6300 angstrom units and 5577 angstrom units OI emissions in quiet aurora.  
18 p3201 A69-35192

## MURDIN, P.

Radial velocities of the gas in H II regions and their associated stars.  
20 p3611 A69-38150

## MURDOCH, H. S.

Revised spectra for 74 radio sources.  
07 p1218 A69-19278

## MURET, G.

The duration of the hot flow and the structure of the contact surface in a classical shock tube /Sur la duree de l'ecoulement chaud et la structure de la surface de contact dans un tube a chocs classique/.  
15 p2590 A69-30297

## MURGA, O. K.

Optimum averaging of controls of discontinuous stochastic systems /K zadache optimal'nogo osredneniia upravlenii razryvnykh stokhasticheskikh sistem/.  
11 p1966 A69-25329  
Orbital transfer problem /K zadache o mezhorbital'nom perelete/.  
21 p3803 A69-38848  
Problem of correction of the motions of discontinuous stochastic systems /K zadache korrektsii dvizhenii razryvnykh stokhasticheskikh sistem/.  
21 p3770 A69-38853

## MURGATROYD, D.

Skin temperature and cutaneous pain during warm water immersion.  
08 p1267 A69-20683

## MURGATROYD, R. J.

Estimations from geostrophic trajectories of horizontal diffusivity in the mid-latitude troposphere and lower stratosphere.  
08 p1308 A69-20310  
A note on the contributions of mean and eddy terms to the momentum and heat balances of the troposphere and lower stratosphere.  
08 p1308 A69-20318

## MURGULESCU, E.

A problem of H. Villat /Asupra unei probleme a lui H. Villat/.  
04 p0590 A69-15221

## MURINA, T. M.

Continuous-wave lasers based on composite crystals of the yttrifluorite type /Opticheskie kvantovye generatory neperynogo deistviia na osnove smeshannykh kristallov tipa yttrifluorita/.  
13 p2273 A69-28316

## MURINSON, H. A.

Thermal resistance of multilayer cylindrical elements in the thermionic converters.  
14 p2539 A69-29218  
Theoretical study of transient thermal conditions during the start-up of a thermionic converter.  
14 p2400 A69-29226

## MURMAN, E. M.

Experimental studies of a laminar hypersonic cone wake.  
24 p4247 A69-43576

## MURMUZHEV, B. A.

Study of instability in single-crystal disks of yttrium iron garnet /Issledovanie nestabil'nosti v monokristallicheskikh diskakh zhelezo-itrrievogo granata/.  
21 p3783 A69-39561

## MUROTA, T.

Improvement of moire and grid methods of plastic strain analysis and their application to extrusion.  
13 p2359 A69-27256

## MUROTSU, Y.

The optimization of an airplane gust-alleviation system. II.  
09 p1434 A69-22279  
Synthesis of automatic flight control systems using optimal control theory.  
22 p3864 A69-40588

## MUROZOV, V. N.

Properties of a maser in a magnetic field.  
16 p2762 A69-32500

## MURPHREE, D. L.

A closed form solution to the magnetogasdynamic shock layer.  
[AIAA PAPER 69-722] 17 p3012 A69-33494  
Low-pressure arc discharge motion between concentric cylindrical electrodes in a transverse magnetic field.  
[AIAA PAPER 68-708] 24 p4359 A69-43644

## MURPHY, A. H.

"Good" probability assessors.  
01 p0110 A69-10690

## MURPHY, A. M.

A unique vacuum facility for the testing of optical satellites.  
[AIAA PAPER 69-1026] 22 p3924 A69-40396

## MURPHY, B. L.

Formation of a collisionless magnetohydrodynamic shock wave.  
14 p2502 A69-29958

## MURPHY, C. L.

Synthesis of an aeronautical service satellite system.  
03 p0464 A69-13235

## MURPHY, E. A.

Wintertime density variability in the upper atmosphere obtained from rocket measurements at White Sands, New Mexico.  
15 p2601 A69-31374

## MURPHY, E. B.

Radome panels "structurally sound" after 7-year exposure.  
08 p1414 A69-20485

## MURPHY, E. L.

Intestinal hydrogen and methane of men fed space diet.  
20 p3482 A69-37622

## MURPHY, G. J.

A new approach to the solution of linear optimal control problems.  
[ASME PAPER 68-WA/AUT-17] 05 p0738 A69-16175

## MURPHY, G. L.

Saturn V longitudinal oscillation /POGO/ solution.  
[AIAA PAPER 69-548] 16 p2868 A69-32658

## MURPHY, J. C.

Electric effect in ruby.  
03 p0485 A69-13320

## MURPHY, J. O.

Nonlinear adiabatic pulsations of massive stars.  
01 p0149 A69-10266

## MURPHY, M. C.

On the fracture energy of uni-directional laminates.  
08 p1414 A69-20493

## MURPHY, M. R.

Flying qualities considerations in the design and development of the Hueycobra.  
[AHS PAPER 217] 07 p1053 A69-18871

## MURPHY, R. C.

Acidic components of Green River shale identified by a gas chromatography-mass spectrometry-computer system.  
21 p3669 A69-38983

## MURPHY, R. D.

Design of helicopter stabilization systems using optimal control theory.  
12 p2014 A69-26764

## MURPHY, T. M.

Respiratory gas exchange in exercise during helium-oxygen breathing.  
17 p2910 A69-33751  
Respiratory gas exchange in exercise during helium-oxygen breathing.  
22 p3891 A69-40221

## MURPHY, W. J.

Optimal stochastic control of discrete linear systems with unknown gain.  
02 p0224 A69-11962

## MURRAY-LASSO, M. A.

Computer-aided circuit design by singular imbedding.  
07 p1115 A69-19148

## MURRAY, A.

A sky-scan for discrete sources of gamma-rays in the energy region 240 to 1000 kev.  
11 p1946 A69-24593  
Attempt to detect X-ray pulses from the Crab Nebula.  
12 p2149 A69-26226

- MURRAY, B. C.**  
 Mariner 6 television pictures - First report.  
 21 p3803 A69-38981  
 Mariner 7 television pictures - First report.  
 21 p3806 A69-39330  
 Differences between proposed Apollo sites. I -  
 Synthesis.  
 21 p3815 A69-39585  
 Mariner 6 and 7 television pictures - Preliminary  
 analysis.  
 24 p4384 A69-43195
- MURRAY, C. A.**  
 Optical positions of radio sources.  
 11 p1958 A69-24465  
 A galactic cluster in the direction of the Large  
 Magellanic Cloud.  
 17 p3034 A69-33411
- MURRAY, D. W.**  
 Finite-element large deflection analysis of plates.  
 09 p1615 A69-21924
- MURRAY, F. T.**  
 Spring-restrained, momentum-wheel orientation and  
 stabilization system for exoatmospheric vehicles.  
 21 p3819 A69-39214
- MURRAY, G. W.**  
 Correlation between decreases in brain gamma -  
 aminobutyric acid levels and susceptibility to convul-  
 sions induced by hyperbaric oxygen.  
 19 p3257 A69-35972
- MURRAY, J. A.**  
 Human metabolic responses to hyperthermia during  
 mild to maximal exercise.  
 22 p3891 A69-40215  
 Human cardiovascular adjustments to rapid changes  
 in skin temperature during exercise.  
 24 p4258 A69-42633
- MURRAY, J. B.**  
 Nature and origin of Tsiolkovsky crater, lunar far-  
 side.  
 06 p1003 A69-17386
- MURRAY, J. D.**  
 Fluidization on the moon/ques/.  
 23 p4221 A69-42392
- MURRAY, J. E.**  
 Single-cavity noncollinear optical parametric oscilla-  
 tion.  
 14 p2460 A69-29605
- MURRAY, J. F.**  
 Pumps for fluid power. III.  
 06 p0931 A69-17188
- MURRAY, L. A.**  
 Concorde crew seats.  
 15 p2553 A69-31167
- MURRAY, M. J.**  
 A high temperature anelastic effect in some single  
 crystals of molybdenum.  
 24 p4332 A69-43031
- MURRAY, R.**  
 Some computations of meridional flow, angular mo-  
 mentum and energy in the atmosphere based on IGY  
 data for latitude 30 deg N.  
 08 p1346 A69-20312
- MURRAY, R. H.**  
 Cardiovascular effects of brief intense thermal pulses  
 in man.  
 08 p1264 A69-20668  
 Ventricular performance during graded hypovolemia  
 induced by lower body negative pressure.  
 22 p3874 A69-40225
- MURRAY, R. T.**  
 Circuit for liquid level measurements using carbon  
 resistors.  
 04 p0577 A69-15025
- MURRAY, S. F.**  
 Nonmetallic bearing materials.  
 14 p2454 A69-28851
- MURRAY, W. A.**  
 What parts lessons from Lunar Orbiter/ques/.  
 18 p3207 A69-34520
- MURRAY, W. E.**  
 Integration of large power systems into manned  
 space stations.  
 13 p2209 A69-27939
- MURRELL, J. D.**  
 Power systems for the Apollo Applications Program.  
 23 p4069 A69-42244
- MURRI, S. A.**  
 A method for carrying out ephemeris calculations  
 and processing position observations of lunar craters  
 /Metodika efemeridnykh vychislenii i obrabotki pozit-  
 sionnykh nabludeniia lunnykh kraterov/.  
 22 p4024 A69-40610
- MURRISH, C. H.**  
 Acquisition of data for the Apollo applications pro-  
 gram crew motion experiment.  
 02 p0201 A69-11759
- MURROW, H. N.**  
 Some test results from the NASA planetary entry  
 parachute program.  
 [AIAA PAPER 68-934] 19 p3247 A69-35952
- MURRY, G.**  
 Study of the influence of additive elements on the  
 properties of 9 percent nickel steel /Etude de l'in-  
 fluence d'elements d'addition sur les proprietes de l'a-  
 cier a 9 percent de nickel/.  
 11 p1904 A69-24642
- MURTAGH, T. B.**  
 Optimum interplanetary midcourse velocity- cor-  
 rection schedules.  
 21 p3766 A69-39646
- MURTHY, B. R. N.**  
 Optimum transmission of digital data by pulse code  
 modulation.  
 19 p3274 A69-36282
- MURTHY, G. T.**  
 Current air shower investigations /Invited talk/.  
 06 p0990 A69-17298  
 Studies in extensive air showers at Ootacamund.  
 06 p0990 A69-17299  
 The Kolar gold fields extensive air shower experi-  
 ment.  
 06 p0990 A69-17300  
 Calculation of some characteristics of extensive air  
 showers using different models of high energy nuclear  
 interactions.  
 06 p0990 A69-17301
- MURTHY, M. V. V.**  
 Stresses around an elliptic hole in a cylindrical shell.  
 [NAL-TN-13] 13 p2362 A69-28123  
 Stresses at the intersection of two cylindrical shells of  
 equal diameter.  
 22 p4040 A69-39978
- MURTHY, S. N. B.**  
 Progressive acoustic and weak shock waves in Al, Be  
 and B flames.  
 [AIAA PAPER 69-540] 16 p2880 A69-32742  
 Isotherms in nonconstant area tube arcs.  
 20 p3632 A69-37219
- MURTHY, V. R. K.**  
 Turbulent flow of non-Newtonian suspensions in  
 pipes.  
 09 p1481 A69-21929
- MURTHY, V. S.**  
 Laminar boundary layer control by combined blow-  
 ing and suction in the presence of roughness.  
 [AIAA PAPER 69-387] 15 p2591 A69-30477  
 Laminar boundary-layer control by combined blow-  
 ing and suction in the presence of surface roughness.  
 [AIAA PAPER 68-641] 17 p2957 A69-34015
- MURTI, V. G. K.**  
 Enumeration of all circuits of a graph.  
 14 p2421 A69-29541
- MURTIN, F. R. C.**  
 A new method for phase analysis.  
 05 p0722 A69-16766
- MURTUZA, S.**  
 On the design of specific optimal controllers.  
 09 p1474 A69-22443
- MURTY, A. S. R.**  
 Effect of root-fixture conditions on the damping  
 characteristics of cantilever beams.  
 10 p1800 A69-23244
- MURTY, D. S.**  
 Photographic studies of explosive reactions.  
 21 p3719 A69-38446
- MURTY, I. S. N.**  
 Method of variation of parameters for overdamped  
 non-linear systems.  
 08 p1297 A69-20356
- MURTY, S. S. R.**  
 On the temperature-vorticity analogy in laminar  
 boundary layers.  
 22 p3929 A69-39892
- Electron temperature distribution across a shock  
 wave in a partially ionized gas.  
 24 p4356 A69-43362
- MURTY, V. S. N.**  
 Spatial disorientation in a jet fighter pilot /A case re-  
 port/.  
 10 p1649 A69-23382
- MURYGIN, V. I.**  
 Some properties of gallium arsenide with a nickel im-  
 purity /Nekotorye svoistva arsenida galliia s primes'iu  
 nikelia/.  
 09 p1555 A69-21475  
 Some properties of nickel-doped gallium arsenide.  
 15 p2669 A69-30720  
 Selective and lasing properties of S-diodes based on  
 nickel-doped gallium arsenide /Izbitatel'nye i generat-  
 sionnye svoistva S-diodov iz arsenida galliia s primes'iu  
 nikelia/.  
 22 p3912 A69-40606  
 Some investigations of the electrophysical properties  
 and injection conductivity of high- resistivity gallium  
 arsenide with a nickel impurity /Nekotorye iss-  
 ledovaniia elektrofizicheskikh svoistv i inzhetsionnoi  
 provodimosti vysokoonnogo arsenida galliia s  
 primes'iu nikelia/.  
 24 p4362 A69-43734  
 Electroluminescence in gallium arsenide S-diodes  
 with iron and nickel impurities /Elektroluminescent-  
 siia v S-diodakh iz arsenida galliia s primes'iu zheleza i  
 nikelia/.  
 24 p4288 A69-43739
- MURZAEVA, G. V.**  
 Effect of the initial state on the dislocation structure  
 and mechanical properties of cold- worked beta-titanium  
 alloy TS6 /Vliianie iskhodnogo sostoiianiia na  
 dislokatsionnuu strukturu i mekhanicheskie svoistva  
 naklepannogo beta-titanovogo splava TS6/.  
 14 p2463 A69-29313  
 Electron microscopic analysis of the plastic deformation  
 of quenched titanium alloys with a thermally un-  
 stable beta-phase.  
 21 p3746 A69-39161
- MURZIN, V. S.**  
 Characteristics of the interaction of pions and  
 nucleons with nuclei.  
 13 p2331 A69-28389  
 Concerning investigation of the angular distribution  
 of particles in jets.  
 13 p2303 A69-28390  
 Reasons for the production of asymmetric showers in  
 interactions of high-energy strong- interacting particles  
 with nuclei.  
 13 p2303 A69-28391
- MURZINOV, I. N.**  
 Laminar boundary layer on a sphere in hypersonic  
 flow of equilibrium dissociating air.  
 07 p1050 A69-18756
- MUSA, G.**  
 Pulse investigation on thermionic converters.  
 14 p2403 A69-29252
- MUSABAEV, M.**  
 Cosmic ray anisotropy and Forbush effects during a  
 solar activity minimum /Anizotropiia kosmicheskikh  
 luchei i efekty Forbusha v minimume solnechnoi ak-  
 tivnosti/.  
 10 p1758 A69-22835
- MUSACCHIA, X. J.**  
 Antibody formation in hibernating ground squirrels  
 /Citellus tridecemlineatus/.  
 08 p1263 A69-20173  
 Study of the synergistic effects of heat exposure and  
 ionizing irradiation in the hamster.  
 08 p1263 A69-20174  
 Depressed Metabolism, Proceedings of the First In-  
 ternational Conference, Washington, D.C., August 22,  
 23, 1968.  
 10 p1641 A69-23116  
 Comparative aspects of radio-resistance with  
 depressed metabolism.  
 10 p1643 A69-23126  
 Responses of hamsters to He-O sub 2 at low and high  
 temperatures - Induction of hypothermia.  
 10 p1646 A69-23564
- MUSAEALIAN, SH. A.**  
 Satellites and planetary circulation of atmosphere.  
 [UN PAPER 68-95654] 06 p0949 A69-17052  
 Climatological data concerning the earth's cloud  
 cover and the prospects of using them in solving the  
 problems of satellite meteorology /Klimaticheskie dan-  
 nye ob oblachnom pokrove zemli i perspektivy ikh  
 ispol'zovaniia pri reshenii zadach sputnikovoi  
 meteorologii/.  
 13 p2292 A69-27731



- Combined use of satellite data and data from a thin network of aerological stations in reconstructing the fields of meteorological elements /O sovmetnom ispol'zovanii dannykh nabludenii so sputnikov i redkoi seti aerologicheskikh stantsii dlia vosstanovleniia polei meteorologicheskikh elementov/.  
13 p2292 A69-27732
- Reconstruction of the fields of meteorological elements from data of satellite observations /O vosstanovlenii polei meteorologicheskikh elementov po dannym nabludenii so sputnikov/.  
13 p2292 A69-27733
- MUSAEV, KH. I.**  
Solution of the equilibrium equation for arbitrary nonshallow cylindrical shells by the small-parameter method /Reshenie uravneniia ravnovesiia nepologikh proizvol'nykh tsilindricheskikh obolochek metodom malogo parametra/.  
02 p0339 A69-11960
- Basic equations of nonshallow cylindrical shells of an arbitrarily assigned profile /Osnovnye uravneniia nepologikh tsilindricheskikh obolochek proizvol'no zadannogo ochertaniia/.  
19 p3439 A69-36581
- MUSAL, H. M., JR.**  
Focused interferometers for plasma diagnostics.  
07 p1132 A69-18865
- MUSATOV, A. A.**  
Soil-density meter-penetrometer of the automatic lunar station Luna-13.  
03 p0430 A69-13424
- Investigations of the physical and mechanical properties of the moon's soil from Luna 13.  
18 p3113 A69-34239
- MUSATOV, L. S.**  
Plasma measurements in the vicinity of Venus by the space vehicle "Venus-4".  
07 p1222 A69-19613
- MUSATOV, M. I.**  
Solubility of hydrogen in solid and liquid titanium /Rastvorimost' vodoroda v tverdom i zhidkom titane/.  
11 p1905 A69-24963
- MUSATOVA, G. S.**  
Thermionic emission and expansion of a plasma formed by focused single-pulse laser radiation on a solid target.  
03 p0441 A69-14141
- Stimulated emission in a laser having an active medium of arbitrary shape.  
12 p2109 A69-26715
- MUSEN, P.**  
Investigations in Hansen's planetary theory.  
03 p0514 A69-13781
- Application of Hansen's method to the X super th satellite of Jupiter.  
20 p3602 A69-37529
- MUSER, C. J.**  
Forming of large parts by diffusion bonding. [ASM PAPER C7-2.3]  
04 p0604 A69-14525
- MUSFELDT, H.**  
UHF high power klystrons for DESY.  
07 p1096 A69-18434
- MUSGRAVE, F. S.**  
Changes in total leg volume during lower body negative pressure.  
17 p2908 A69-33171
- MUSGRAVE, P. W.**  
Infectious disease hazards in space flight.  
20 p3479 A69-37973
- MUSHIAKE, Y.**  
Impedance of an antenna in anisotropic plasma.  
12 p2044 A69-27071
- Radio wave propagation in longitudinally inhomogeneous anisotropic medium.  
13 p2218 A69-27182
- Propagation of the electromagnetic pulse in inhomogeneous ionized media.  
20 p3496 A69-38030
- Beam wave propagation in a circular hollow cylinder.  
24 p4282 A69-42987
- MUSHII, R. IA.**  
Ignition of diacetylene /Vosplamneniie diatsetilena/.  
02 p0351 A69-11981
- MUSHOVIC, J. N.**  
Precipitation hardening of a Mg-Th-Zr alloy.  
07 p1167 A69-19265
- Precipitation processes in a Mg-Th-Zr alloy.  
21 p3743 A69-38735
- MUSHTARI, KH. M.**  
Problem of the fundamentals of the theory of thin shallow shells /K voprosu obosnovaniia teorii tonkikh pologikh obolochek/.  
12 p2178 A69-26001
- MUSIASHCHIKOVA, S. S.**  
Participation of the ventral posterolateral thalamus nucleus of cats in the transmission of afferent visceral signals /Uchastie ventral'nogo zadne-lateral'nogo iadra talamusa koshki v peredache afferentnykh vistseral'nykh signalov/.  
12 p2020 A69-26562
- MUSIOL, K.**  
Holographic method for measuring temperature distribution /Holograficzna metoda pomiaru rozkladu temperatury/.  
11 p1887 A69-25197
- MUSMAN, S.**  
The effect of finite resolution on solar granulation.  
17 p3029 A69-33046
- MUSMANN, H. G.**  
Applied methods of data compression /Angewandte Verfahren der Nachrichtenreduktion/.  
01 p0031 A69-10735
- Introduction to the field of information reduction /data compression/ /Einfuehrung in das Gebiet der Nachrichtenreduktion /Data Compression//.  
12 p2027 A69-25876
- MUSSER, C. W.**  
Nondestructive testing of Saturn V-S-1C booster welds.  
07 p1140 A69-18798
- NDT systems for establishing weld.  
07 p1117 A69-19699
- MUSSER, J. M.**  
Determination of D-region electron densities from multifrequency absorption measurements.  
18 p3127 A69-34799
- MUSSON-GENON, R.**  
Stratospheric balloons and space research.  
03 p0366 A69-13589
- MUSTAFAEV, T. G.**  
Some problems associated with stress relaxation in structural elements /Nekotorye zadachi o relaksatsii usilii v elementakh konstruktsii/.  
07 p1237 A69-19683
- MUSTEL, E. R.**  
Origin of the solar wind and its astrophysical aspects.  
15 p2673 A69-30009
- Internal modulation of a gas laser in an asynchronous regime /Vnutrenniaia moduliatsiia gazovogo lazera v nesinkhronnom rezhime/.  
19 p3335 A69-36341
- MUSTER, D.**  
An analytic solution for whirl in a finite journal bearing with a continuous lubricating film. [ASME PAPER 69-VIBR-55]  
10 p1700 A69-24147
- Balancing criteria and their relationship to current American practice. [ASME PAPER 69-VIBR-60]  
10 p1804 A69-24149
- Free vibrations of ring- and stringer-stiffened conical shells.  
17 p3051 A69-32955
- MUSZYNSKA, A.**  
An analysis of the motion of a shaft with non-linear characteristic of elasticity and damping.  
01 p0168 A69-10329
- Some problems associated with the modeling of mechanical systems /O pewnykh zagadnieniach zwiazanych z modelowaniem ukladow mechanicznych/.  
16 p2875 A69-32246
- MUSZYNSKI, J.**  
Existence of unbounded solutions to a certain linear differential equation /O sushchestvovanii neogranichennykh reshenii nekotorigo lineinogo differentsial'nogo uravneniia/.  
16 p2804 A69-32251
- Simultaneous behavior of solutions to certain sets of equations /O sovmetnom povedenii reshenii nekotorykh mnozhestv uravnenii/.  
16 p2804 A69-32252
- MUTHIALU, N.**  
Vibration in an infinite isotropic elastic plate due to a vertical harmonic load.  
17 p3058 A69-33408
- MUTHUSWAMY, V. P.**  
Fracture of rotating hollow shafts.  
15 p2712 A69-31017
- MUTLOW, J. B.**  
A scientific approach to pneumatic control circuits.  
19 p3256 A69-36714
- MUTO, T.**  
Study on the self-sustained oscillation of a piston-type valving system. II - Analysis of a valving system with a capacity and some experiments.  
01 p0012 A69-10310
- MUYERS, K.**  
Improvement of body plethysmographic measurements by means of an analog computer /Verbesserung ganzkoerperplethysmographischer Untersuchungen durch Einsatz eines Analogrechners/.  
23 p4111 A69-42081
- MUZ, E.**  
A critical experiment on the nature of adsorbed cesium films.  
14 p2507 A69-29275
- MUZAFAROV, I. I.**  
Buckling of compressed beams under conditions of creep /Vypuchivanie szhatykh sterzhnei v usloviakh polzuchesti/.  
22 p4039 A69-39917
- A problem for compressed beams under conditions of creep /Ob odnoi zadache szhatykh sterzhnei v usloviakh polzuchesti/.  
22 p4039 A69-39918
- MUZALESKII, IU. S.**  
Correlation-spectral analysis of the periodicities of solar activity /Korrelatsionno-spektral'nyi analiz periodichnostei aktivnosti solntsa/.  
20 p3607 A69-38045
- MUZHDAVA, V. M.**  
Effective mass of electrons in cadmium arsenide /Efektivnaia massa elektronov v arsenide kadmia/.  
13 p2318 A69-27897
- Electron and lattice heat conductivity of n-Cd sub 3 As sub 2 at low temperatures /Elektronnaia i reshetchnaia teploprovodnost' n-Cd sub 3 As sub 2 pri nizkikh temperaturakh/.  
16 p2824 A69-31568
- MUZII, L.**  
Interferometric study of phase fluctuations of a laser beam through the turbulent atmosphere.  
01 p0091 A69-10845
- On the possibility of measuring optical visibility by using a ruby laser.  
08 p1327 A69-21089
- Phase fluctuations of laser beam propagating in turbulent atmosphere.  
17 p2927 A69-33855
- MUZYCHKO, I. V.**  
Transmission of Discrete Signals by Means of Frequency Modulation /Peredacha diskretnykh signalov s pomoshch'iu chastotnoi moduliatsii/.  
12 p2033 A69-26866
- MUZYKA, D. R.**  
Microstructural stability of Pyromet 860 iron-nickel-base heat-resistant alloy.  
13 p2279 A69-27764
- Short-term tests predict long-term creep-rupture data.  
18 p3150 A69-35422
- MUZZIO, J. L. R.**  
Ion cutoff whistlers.  
03 p0426 A69-14029
- MUZZY, R. J.**  
Linear and nonlinear pressure coupled combustion instability of solid propellants. [AIAA PAPER 69-479]  
16 p2834 A69-32725
- MYDOSH, J. A.**  
Effect of ferromagnetic ordering on the thermoelectric power of GdAl sub 2.  
03 p0485 A69-13322
- MYERS, D. A.**  
An approach for the improvement of EVA/IVA fluid umbilical characteristics. [AAS PAPER 69-470]  
24 p4272 A69-42847
- MYERS, F. A.**  
Pulsed J band /12.4-18 GHz/ Gunn-effect oscillators.  
09 p1468 A69-22594
- MYERS, G. A.**  
Engineering calculations of momentum, heat and mass transfer through laminar boundaries.  
16 p2879 A69-32203
- MYERS, H.**  
Analysis of electron swarm experiments in oxygen.  
11 p1921 A69-24419

- MYERS, J. R.**  
Metallographic technique for filament-reinforced, metal-matrix composites. 01 p0103 A69-11269  
Technical note - Effect of applied current on stress corrosion of beryllium. 21 p3747 A69-39436
- MYERS, K. A.**  
Gravity-assisted trajectories for solar-probe missions in the ecliptic plane. 21 p3804 A69-39022
- MYERS, R. D.**  
Cerebrospinal fluid production during temperature stress and feeding in the conscious monkey. 23 p4084 A69-41469  
Evoked release of 5-HT and NEFA from the hypothalamus of the conscious monkey during thermoregulation. 23 p4084 A69-41472
- MYERS, R. E.**  
How meaningful are reliability predictions/ques/ 18 p3147 A69-34517
- MYERS, S. J.**  
Measurement of muscle function in astronauts. 23 p4103 A69-41684
- MYERSCOUGH, C. J.**  
A modified truncation procedure for the BBGKY hierarchy. 08 p1360 A69-19990
- MYERSON, A. L.**  
Exposure-dependent surface recombination efficiencies of atomic oxygen. 10 p1726 A69-23526  
Atom formation rates behind shock waves in oxygen. 23 p4194 A69-42209
- MYINT-U, T.**  
Post buckling behavior of axially compressed core-filled cylinders. 22 p4038 A69-39895
- MYKITIUK, IU. I.**  
Vibrations of a circular cylinder whose thickness changes in time /Kolebaniia krugovogo tsilindra, tolshchina kotorogo izmeniaetsia vo vremeni/. 14 p2533 A69-28985
- MYKLAND, N.**  
The intensity of the penumbra of large sunspots. 20 p3603 A69-37542
- MYLES, D. J.**  
The influence of plenum chamber obstructions on the performance of a hovercraft lift fan. 13 p2202 A69-27546
- MYLES, W. S.**  
The effect of hyperbaric oxygen on metabolism of the GABA shunt. 22 p3877 A69-40776
- MYLNIKOV, G. D.**  
Turbulent heating of a plasma in a toroidal system with current /Turbulentnyi nagrev plazmy v toroidal'noi sisteme s tokom/. 11 p1935 A69-25752
- MYNATT, F. R.**  
High-energy /less than 400-Mev/ neutron transport using the method of discrete ordinates. 14 p2481 A69-29592
- MYOHL, P.**  
Semiconductor properties of tellurides. XIV - Solid solution formation in the system In sub 2 Te sub 3-x Se sub x /zero less than or equal to x less than or equal to 3/ /Halbleitereigenschaften von Telluriden. XIV - Mischkristallbildung der festen Loesung in sub 2 Te sub 3-x Se sub x /zero less than or equal to x less than or equal to 3/. 21 p3779 A69-38579
- MYRICK, C. C.**  
Microelectronic filters for frequency division multiplex. 09 p1466 A69-22452
- MYRUP, L. O.**  
Turbulence spectra in stable and convective layers in the free atmosphere. 19 p3362 A69-36406
- MYSHKIN, V. G.**  
Radiation of a "vertical" dipole positioned on the boundary of a flat semiinfinite impedance system /Izluichenie "vertikal'nogo" dipolia, raspolozhennogo na granitse ploskoi polubeskonечноi impedansnoi sistemy/. 13 p2236 A69-28546
- MYSHKIS, A. D.**  
Stability margin in problems of continuum mechanics /O poniatii zapasa ustoichivosti v zadachakh mekhaniki sploshnoi sredy/. 03 p0418 A69-13816  
Hydrodynamics in weak fields of force - The small oscillations of a viscous liquid in a potential field of force. 04 p0587 A69-14620  
Free oscillations of a self-gravitating fluid sphere taking the viscous and capillary forces into account /O svobodnykh kolebaniyakh zhidkogo samogravitiruyushchego shara s uchetom viazkikh i kapillarnykh sil/. 09 p1481 A69-21790
- MYSOVSKAIA, R. M.**  
The stress concentration in an isotropic medium weakened by curvilinear holes /K voprosu o kontsentratsii napriazhenii v izotropnoi srede, oslablennoi krivolineinymi otverstiiami/. 11 p1972 A69-24655
- MYSOVSKII, IU. V.**  
The stress concentration in an isotropic medium weakened by curvilinear holes /K voprosu o kontsentratsii napriazhenii v izotropnoi srede, oslablennoi krivolineinymi otverstiiami/. 11 p1972 A69-24655
- MYZENKOVA, L. F.**  
Physical Metallurgy of Superconducting Materials /Metallovedenie sverkhprovodiashchikh materialov/. 16 p2802 A69-32051
- MZYK, E.**  
The effect of wall curvature on the hydrodynamic stability of a laminar boundary layer. 19 p3299 A69-36587

## N

- N-NAGY, F. L.**  
General control-system analysis by digital computer using operational-array technique. 22 p3909 A69-41255
- N-NAGY, F.-L.**  
Application of operational array techniques for analysis of multivariable control systems by digital computer. 12 p2046 A69-26064
- NA, T. Y.**  
A method for the solution of conduction heat transfer with non-linear heat generation. 10 p1809 A69-23689  
Laminar boundary layers on slender paraboloids. 23 p4152 A69-41904
- NABATOV, V. V.**  
Pyroelectric response of a triglycine sulfate crystal to laser pulse action /Piroelektricheskii otklik kristalla triglitsinsul'fata na deistvie impul'sa OKG/. 03 p0438 A69-13050  
Destruction of a group of alkali halide crystals by laser radiation and an estimation of their optical strength /Razrushenie riada shchelochnogaloidnykh kristallov izlucheniem OKG i otsenka ikh opticheskoi prochnosti/. 08 p1328 A69-21188  
Decomposition of several alkali-halide crystals by laser radiation and evaluation of their optical stability. 18 p3152 A69-35157
- NABER, J. A.**  
Recombination lifetimes in high-purity silicon at low temperatures. 19 p3383 A69-36447  
Application of microwave reflection technique to the measurement of transient and quiescent electrical conductivity of silicon. 22 p3997 A69-41226
- NABOIKIN, IU. V.**  
Optical generation in organic luminophor solutions in the 400 to 650-nm range /Opticheskaiia generatsiia na rastvorakh organicheskikh luminoforov v diapazone 400-650 nm/. 04 p0612 A69-15374  
The question of using light converters for optical pumping. 05 p0777 A69-16373  
Xanthene dye series laser excited by second-harmonic radiation from a neodymium laser. 06 p0932 A69-16914
- Q switching of a laser based on the triplet-triplet transitions of organic molecules. 09 p1520 A69-22682**  
Emission of solutions of organic molecules excited by harmonics of a neodymium laser /Generatsiia rastvorov organicheskikh molekul pri vzbuzhdenii garmonikami neodimovogo lazera/. 12 p2104 A69-26030  
Laser action in solutions of organic luminophors in the 400-650 nm range. 16 p2797 A69-32121  
Stability of lead oxide and cryolite dielectric coatings to laser radiation /Ustoichivost' dielektricheskikh pokrytii iz oksii svintsia i kriolita k izlucheniui OKG/. 19 p3334 A69-35886
- NABOKO, I. M.**  
Experimental studies of the parameters of the flow behind a shock wave moving in relaxing gas. 19 p3298 A69-36362
- NACHBAR, W.**  
Optimum critical impulse for snap-through in systems of one degree of freedom. 02 p0346 A69-12508  
Finite deformation of membranes and shells under localized loading. 11 p1979 A69-24813  
Steady linear burning of a monopropellant with a general surface condition. 16 p2830 A69-32347  
Optimization of a viscoelastic structure - The seat-belt problem. 24 p4275 A69-43094  
Deflagration limits in an adiabatic model for steady linear burning of a monopropellant. 24 p4415 A69-43670
- NACHLINGER, R. R.**  
On approximate constitutive equations in nonlinear viscoelasticity. 21 p3840 A69-39288
- NACHMAN, M.**  
Melting of particles injected into a plasma jet. 17 p3009 A69-32825
- NACOZY, P. E.**  
Hansen's method of partial anomalies - An application. 16 p2863 A69-32400
- NADENENKO, B. S.**  
Antenna for a tropospheric radio relay communications link /Antenna troposfernoi radioreleinoi linii svyazi/. 17 p2937 A69-33147
- NADEZHIN, A. D.**  
Nonequilibrium radiation of a strong shock wave /O neravnovesnom izlucheniui sil'noi udarnoi volny/. 13 p2245 A69-27380
- NADEZHIN, D. K.**  
Why do supernovas explode/ques/ /Pocemu vzyryvaiutsia sverkhnovyye zvezdy/ques//. 03 p0509 A69-13356  
A self-similar solution for collapse under the action of energy losses due to neutrino emission /Avtomodel'noe reshenie dlia kollapsa pod deistviem poter' energii neitrinnym izlucheniem/. 09 p1587 A69-21359  
Neutrino emission by the URCA process at high temperatures /Neitrinnoe izluchenie URCA- protsessom pri vysokikh temperaturakh/. 15 p2674 A69-30542  
A similarity solution for collapse through energy losses by neutrino radiation. 18 p3197 A69-34749
- NADLER, M. A.**  
Boron/epoxy support strut for non-integral cryogenic tankage. 19 p3354 A69-35516
- NADON, D. J.**  
The adaptive filter - A component for use in pattern recognition and trainable systems. 17 p2942 A69-34093
- NAEMURA, A.**  
Dynamic viscoelasticity of plasticized epoxy resins. 06 p0946 A69-17125
- NAG, B. R.**  
Microwave incremental conductivity of InSb at 77 deg K in the presence of high steady electric field. 07 p1200 A69-19447  
Voltage and conductivity dependence of the frequency of an acoustoelectric oscillator. 13 p2227 A69-27244



- Electron velocity distribution and the interpretation of crossmodulation experiments. 16 p2850 A69-32190
- NAGAEV, E. L.**  
Localized plasmons and plasma-exciton resonance. 09 p1548 A69-21674
- NAGAEV, R. F.**  
Synchronization of generators of finite-dimensional "forces" /Sinkhronizatsiia generatorov konechnomernykh "sil"/. 05 p0793 A69-15779  
Quasi-plastic impact /O kvaziplasticheskom udare/. 18 p3215 A69-34568  
Synchronization of finite-dimensional "force" generators. 18 p3173 A69-35031
- NAGAEVA, D. M.**  
Matching of a thermionic converter with a solar cell in a solar power array /K voprosu soglasovaniia termioemissionnogo preobrazovatel'ia s geliopriemnikom v solnechnoi energeticheskoi ustanovke/. 13 p2209 A69-27970
- NAGAI, C. K.**  
Rocket performance optimization for the space storable FLOX/LPG propellant system. [AIAA PAPER 69-506] 16 p2846 A69-32778
- NAGAI, F.**  
Influence of boss on burst of high speed rotor. 01 p0142 A69-10306
- NAGAI, J.**  
Test result of bottom pressure distribution of STOL seaplane model. 22 p3864 A69-40586
- NAGAI, K.**  
An analysis of antenna arrays including random excitation error. 21 p3681 A69-38742
- NAGAI, M.**  
Investigations of the aerodynamic characteristics of the shock tubes. II - On the formation of shock waves. 24 p4305 A69-43631
- NAGAI, O.**  
Theory of temperature-dependent magnon energies in antiferromagnets. 15 p2668 A69-30684
- NAGAI, T.**  
Ultralow-noise preamplifiers in satellite communication earth terminal installations - Traveling-wave maser and cooled parametric amplifier. 05 p0728 A69-15670  
UHF-band, low-noise receiver using parametric amplifiers uncooled. 05 p0728 A69-15672  
Test result of bottom pressure distribution of STOL seaplane model. 22 p3864 A69-40586
- NAGAMATSU, H. T.**  
Circumferential nonuniform heating during transition on a slender cone at hypersonic Mach numbers. 18 p3085 A69-34435
- NAGANO, M.**  
Semiconductor lasers. 09 p1518 A69-22122
- NAGARAJA RAO, C. R.**  
Balloon measurements of the polarization of light diffusely reflected by the earth's atmosphere. 16 p2781 A69-32320
- NAGARAJA, K. S.**  
On the application of Luke's weight coefficients for evaluating the linearized Rayleigh problem in a rarefied gas flow. 10 p1679 A69-23596
- NAGARAJAN, M. S.**  
Satellite television - A system proposal for India. [UN PAPER 68-95750] 01 p0028 A69-10495
- NAGASAKI, K.**  
Hydrogen embrittlement of 18Cr-8Ni stainless steel and its correspondence to corrosion cracking. 19 p3358 A69-35774
- NAGASAWA, Y.**  
Experimental study on reading efficiency of round and vertical type displays in aircraft. 06 p0883 A69-18025  
Hearing problems in air communication using words in radio telephone procedure. 06 p0891 A69-18034
- NAGASE, F.**  
Sudden increase in high energy gamma-ray intensity observed at balloon altitude. 24 p4371 A69-43612
- NAGASHIMA, N.**  
Precipitation hardening and recrystallization of Al-0.3 wt percent Zr alloys of various grades. 04 p0617 A69-14931
- NAGATA, R.**  
Application of a Fraunhofer hologram to correlation operation. 09 p1499 A69-22276
- NAGATA, T.**  
Constitution of polar magnetic disturbances. 02 p0240 A69-11723  
Rocket observations of visible and ultraviolet dayglow features. 12 p2076 A69-27108
- NAGAYAMA, M.**  
Ducted echoes on topside ionograms and whistlers at middle latitude. 01 p0029 A69-10551
- NAGELBERG, E. R.**  
Radiating properties of dielectric covered apertures. 04 p0579 A69-15450
- NAGENDRA, H. R.**  
Free convection heat transfer from vertical isothermal cylinders with transverse curvature effect. [ASME PAPER 69-HT-G] 24 p4410 A69-43522
- NAGHDI, A. K.**  
Bending of a simply supported circular cylindrical shell subjected to uniform line load along a generator. 02 p0349 A69-12797
- NAGHDI, P. M.**  
A note on simple dipolar stresses. 06 p1022 A69-17239  
The Cosserat surface. 10 p1798 A69-23147  
Shells in the light of generalized continua. 11 p1978 A69-24805
- NAGIBAROV, V. R.**  
Combined superemission signals in multilevel systems with an equidistant spectrum /Kombinirovannye sverkhizluchatel'nye signaly v mnogorovnevnykh sistemakh s ekvidistantnym spektrom/. 21 p3737 A69-39068
- NAGIBIN, L. N.**  
Stresses in an anisotropic plate with two nonidentical circular holes. 05 p0843 A69-16680
- NAGIRNER, D. I.**  
Asymptotic formulas for the X and Y functions in the theory of multiple scattering of radiation within a line. 16 p2813 A69-32588
- NAGIRNYI, S. V.**  
Stability of the plastic and fatigue properties of steel 1Kh18N9T under longtime static loads in vacuum and in liquid lithium. 03 p0450 A69-13912
- NAGLE, H. T., JR.**  
Organizing a special-purpose computer to realize digital filters for sampled-data systems. 04 p0569 A69-15462
- NAGLER, K. M.**  
Two tropical storms viewed by Apollo 7. 10 p1722 A69-22944
- NAGNIBEDA, E. A.**  
Solution of equations for a nonequilibrium gas /Reshenie uravnenii neravnovesnogo gaza/. 18 p3122 A69-34911
- NAGORNAIA, N. I.**  
Spectroscopic study of the properties of a supersonic plasma stream. 07 p1190 A69-18695
- NAGORNYI, L. IA.**  
Digital-computer analysis of electronic circuits represented in the form of autonomous multiport networks /K analizu elektronnykh skhem, predstavlennykh v vide avtonomnogo mnogopriemnika na TsVM/. 09 p1472 A69-21786
- NAGORSKII, P. M.**  
Corpuscular heating of the polar ionosphere /O korpuskuliarnom nagreve poliarnoi ionosfery/. 02 p0237 A69-11664  
Corpuscular heating of the polar ionosphere. 13 p2257 A69-28695
- NAGRAJ, D.**  
Unsteady rotational motion of a viscoelastic liquid contained between two concentric spheres. 02 p0230 A69-11563
- NAGY, A. F.**  
Interferometric measurements of the 6300 A Doppler temperature during a magnetic storm. 20 p3546 A69-38099  
Ionospheric electron temperature calculations including protonospheric and conjugate effects. 22 p3939 A69-40506
- NAGY, A. R., JR.**  
Inclusion of time constraints and redundant access on spacecraft return probabilities by the concept of Borel set. 21 p3819 A69-39017
- NAGY, B.**  
Organic geochemical investigations in relation to the analyses of returned lunar rock samples. 20 p3476 A69-37616  
Early pre-Cambrian Onverwacht microstructures - Possibly the oldest fossils on earth/ques/. 24 p4263 A69-43221
- NAGY, G.**  
Symmetric 3 sigma weight and C.G. program. [SAWE PAPER 734] 18 p3221 A69-34892
- NAGY, L. A.**  
Early pre-Cambrian Onverwacht microstructures - Possibly the oldest fossils on earth/ques/. 24 p4263 A69-43221
- NAHI, N. E.**  
On the absolute stability of a dynamic system with a nonlinear element function of two state variables. 06 p0905 A69-17948  
Estimation Theory and Applications. 16 p2764 A69-32386  
Optimal recursive estimation with uncertain observation. 20 p3485 A69-36922  
Absolute stability of dynamic system containing nonlinear functions of several state variables. 23 p4145 A69-42445  
Optimal inputs for parameter estimation in dynamic systems with white observation noise. 24 p4293 A69-43294
- NAHINSKY, I. D.**  
A group interaction stochastic model based on balance theoretical considerations. 23 p4110 A69-42017
- NAHON, F.**  
Stability of steady motions in systems with hidden variables /Sur la stabilite des mouvements stationnaires dans les systemes a variables cachees/. 16 p2804 A69-31621
- NAHVI, M. J.**  
Firing patterns induced by sound in single units of the cerebellar cortex. 22 p3876 A69-40264
- NAIB, S. K. A.**  
Spreading and development of the parallel wall jet. 04 p0591 A69-15487
- NAIBORODENKO, IU. S.**  
Exothermal effects during sintering of a nickel-aluminum powder mixture. II /Ekzotermicheskie efekty pri spekanii smesi poroshkov nikelia i aluminiuma. II/. 02 p0269 A69-12843
- NAIBORODENLEO, IU. S.**  
Exothermal effects during sintering of a nickel-aluminum powder mixture. I /Ekzotermicheskie efekty pri spekanii smesi poroshkov nikelia i aluminiuma. I/. 02 p0269 A69-12838
- NAIDA, IU. I.**  
Calculation and design of sprayers for spraying liquid metals /Raschet i konstruirovaniye forsunok dlia raspyleniia zhidkikh metallov/. 21 p3728 A69-38613
- NAIDA, O. N.**  
Propagation of electromagnetic waves in an anisotropic inhomogeneous spherically symmetrical medium /O rasprostraneniie elektromagnitnykh voln v anizotropnoi neodnorodnoi srede so sfericheskoi simmetriiei/. 15 p2569 A69-30949  
Observable effects in the relativistic tensor theories of gravitation in a flat space /Nabludaemye efekty v relativisticheskikh tenzornykh teoriakh gravitatsii v ploskom prostranstve/. 19 p3373 A69-36204

## NAIDENOV, V. O.

Analysis of the chemical composition of lunar surface by direct methods.  
11 p1832 A69-24629

## NAIDENOVA, N. IA.

Decomposition of the diurnal variation of  $f_{\text{sub zero}}$  F into natural uncorrelated components /O razlozhenii sutochnogo khoda  $f_{\text{sub zero}}$  F2 na estestvennyye nekorrelirovannye sostavlyushchie/.  
20 p3521 A69-37051

Relation between ionospheric and magnetic disturbances at midlatitudes /O svyazi ionosfernykh i magnitnykh vozmushchenii na srednikh shirotakh/.  
20 p3527 A69-37673

## NAIR, K. G.

Some effects of metal flanges on radiation patterns of H-plane sectoral horns.  
02 p0216 A69-12027

A theoretical study of the asymmetric excitation of conducting flanges by a primary aperture antenna and the consequent radiation pattern.  
02 p0217 A69-12246

A study of the effect of the relative position of metal flanges on the radiation patterns of H-plane sectoral horn radiators.  
08 p1285 A69-20554

An experimental investigation of the effect of conducting flanges on the H-plane radiation patterns of E-plane sectoral horns.  
10 p1665 A69-24063

Sharpening of E-plane radiation patterns of E-plane sectoral horns by metallic grills.  
11 p1836 A69-24992

Effect of asymmetry in amplitude of excitation of secondary sources by a primary aperture antenna.  
11 p1852 A69-25117

Experimental confirmation of the effect of asymmetric flanges on radiation patterns of aperture antennae.  
24 p4288 A69-43765

## NAIR, K. N.

Variational coefficients for vertical and inclined meson telescopes with application to the daily variation for Trivandrum.  
06 p0924 A69-17293

Experimental determination of temperature effect on mu mesons recorded at Trivandrum.  
06 p0924 A69-17294

Daily variation of the geomagnetic field and the deformation of the magnetosphere.  
21 p3714 A69-38549

Geomagnetic plasma probe for solar wind.  
24 p4308 A69-42968

## NAIR, S. C. S.

Determination of heat susceptibility and heat tolerance - A new index.  
10 p1644 A69-23376

Blood pressure fluctuation in a case of multiple extra-systoles as observed in tilt table studies /A case report/.  
10 p1645 A69-23379

## NAISH, J. M.

Human factors in the all-weather approach.  
23 p4109 A69-41871

## NAISHUL, A. B.

Synthesis of optimum guidance control in solving the problem of satellite rendezvous in orbit /Sintez optimal'nogo upravleniia vyvedeniem pri reshenii zadachi vstrechi sputnikov na orbite/.  
13 p2356 A69-27684

## NAITO, M.

A three-phase shunt-commutatorless motor.  
01 p0012 A69-10064

## NAITOH, P.

Psychological, psychophysiological, and biochemical correlates of prolonged sleep deprivation.  
23 p4099 A69-42195

## NAJAR, J.

Simple waves in plane flow of a perfectly plastic material.  
02 p0337 A69-11560

## NAJJAR, H. F.

Air-ground, ground-air communications using pseudonoise through a satellite.  
01 p0033 A69-11009

Multiplexing asynchronous signals using bit stuffing and retiming techniques.  
20 p3493 A69-37715

## NAKABAYASHI, K.

On the flow between eccentric rotating cylinders when the outer cylinder rotates.  
01 p0059 A69-10307

## NAKADA, M. P.

A study of the composition of the lower solar corona.  
17 p3030 A69-33059

## NAKADAN, Y.

Anomalous responses of the GM counter on Explorer 30.  
14 p2514 A69-29383

Location of temporary radiation zones caused by geomagnetic storms.  
14 p2514 A69-29384

## NAKAGAWA, K.

The optimization of an airplane gust-alleviation system. II.  
09 p1434 A69-22279

Synthesis of automatic flight control systems using optimal control theory.  
22 p3864 A69-40588

## NAKAGAWA, T.

Plastic fatigue life of steel subjected to a multiple repeated stress under rotary bending.  
02 p0346 A69-12421

## NAKAGAWA, Y.

A possible acceleration mechanism for a solar surge.  
03 p0516 A69-14044

The topology of an axisymmetric magnetic field of a differentially rotating sun.  
09 p1606 A69-22425

An axisymmetric magnetic field with differential rotations in a spherical fluid shell. II.  
22 p4027 A69-40658

Plane blast wave produced by "dense plasma focus."  
24 p4359 A69-43647

## NAKAHARA, K.

The survey on the physiological function of the aged pilots of JASDF.  
06 p0876 A69-18028

## NAKAHARA, M.

Anomalous enhancement of substrate terminal current beyond pinch-off in silicon n-channel MOS transistors and its related phenomena.  
04 p0574 A69-14348

## NAKAHASHI, N.

Supplements to a multimode direction tracking system - Simultaneous usage with a polarization tracker.  
06 p0888 A69-17652

Error probability and power spectrum of PCM/PM signals with small phase deviation.  
06 p0889 A69-17656

## NAKAI, S.

Induction of different classes of genetic effects in yeast using heavy ions.  
03 p0373 A69-13491

Tandem amplifier system of glass and SeOCl sub 2 liquid lasers doped with neodymium.  
07 p1147 A69-18487

The relaxation phenomena in an ionized shock front.  
10 p1726 A69-23685

Experiments on collisionless shock waves in plasmas.  
17 p3013 A69-33822

Experiments on collisionless shock waves in plasmas.  
19 p3379 A69-35759

## NAKAI, T.

Measurement of the amplitude-probability distribution and the three moments for atmospheric noise.  
18 p3102 A69-34960

## NAKAJIMA, T.

Diurnal field strength and phase variations on VLF /NWC signals/ transmissions over a transequatorial path. I.  
06 p0889 A69-17654

Sunrise and sunset effects on VLF /18.6 kHz/ transmissions over a long path.  
06 p0889 A69-17655

Radio observation of galactic HII regions at 4170 MHz. II.  
06 p1008 A69-17696

## NAKAJIMA, Y.

Histological and histochemical studies on the subfornical organ of the squirrel monkey.  
20 p3478 A69-37934

## NAKAMARU, K.

Test of a cesium contact ion engine in a vacuum tank.  
22 p4000 A69-40592

## NAKAMURA, H.

A new method for obtaining protein isolates from Chlorella algae, torula yeasts, and other microbial cells.  
21 p3662 A69-39712

## NAKAMURA, J.

Ionospheric wind and diffusion detected by the sodium cloud method.  
20 p3529 A69-37796

## NAKAMURA, S.

Semiconductor lasers.  
09 p1518 A69-22122

On the improvement of air cushion vehicle performance by the recirculation of air curtain.  
22 p3866 A69-40816

## NAKAMURA, T.

Diffusion of boron in silicon.  
02 p0297 A69-11994

Flight test measurements of boundary layer transition on a non-ablating 22 deg cone.  
[AIAA PAPER 68-1152] 03 p0362 A69-13648

## NAKAMURA, Y.

Internal constitution of the moon - Is the lunar interior chemically homogeneous/ques/.  
19 p3425 A69-36421

High-wattage xenon short-arc lamps with seals and improved liquid-cooled electrodes.  
[AIAA PAPER 69-998] 22 p3920 A69-40376

Space environmental testing of ceramic-sealed Ni-Cd secondary batteries.  
22 p3869 A69-40591

Test of a cesium contact ion engine in a vacuum tank.  
22 p4000 A69-40592

## NAKANISHI, Y.

Scattering of a beam wave by a spherical object.  
08 p1273 A69-20028

## NAKANO, G. H.

Low-altitude trapped protons during solar minimum period, 1962-1966.  
18 p3187 A69-34944

## NAKANO, H.

Improvement of energy resolution in Hughes-McMillen 127 deg electrostatic energy selector.  
14 p2450 A69-29572

Collision cross-section and reciprocity relation on the collision process in the kinetic theory of gases.  
14 p2488 A69-29993

## NAKANO, S.

Negative resistance in semiconductors /InSb/.  
02 p0294 A69-11722

## NAKANO, T.

Collapse and flare-up of protostars.  
15 p2680 A69-30206

## NAKANO, Y.

Experimental study of penetration of a high-velocity plasma into a cusped field.  
05 p0805 A69-16655

## NAKAO, K.

Ionization in detonation waves /Ionisation in Detonationswellen/.  
21 p3853 A69-39745

## NAKAO, Y.

Weldability of nickel-base heat resisting superalloy - Effect of aluminum content on the weld crackings in Inconel 713C.  
11 p1906 A69-25577

## NAKAPKIN, O. A.

Effect of rocking on the functional state of the system hypophysis-adrenal cortex /Vliianie ukachivaniia na funktsional'noe sostoianie sistemy gipofiz-kora nadpochechnikov/.  
20 p3473 A69-37268

## NAKASHIMA, M.

Erosion of bearing alloys in oil film.  
01 p0094 A69-10313

## NAKATA, I.

Hydromagnetic stability of free flows at large Reynolds numbers. II - Two-dimensional jet.  
22 p3931 A69-40687

## NAKATA, Y.

Simple method of receiving picture signals from a satellite.  
06 p0888 A69-17651

## NAKAYAMA, H.

Space environmental testing of ceramic-sealed Ni-Cd secondary batteries.  
22 p3869 A69-40591

## NAKAYAMA, N.

Ceramic CdS solar cell.  
14 p2508 A69-29886

CO sub 2 gas laser.  
24 p4327 A69-42640



NAKAYAMA, R.

Some excitation temperature measurements of induction-coupled argon plasmas.  
06 p0964 A69-17193

NAKAYAMA, T.

The effect of minor impurities in water on corrosion of aluminum.  
04 p0617 A69-14932

NAKAYAMA, W.

Thermal instability in plane Poiseuille flow.  
[ASME PAPER 69-HT-37] 24 p4411 A69-43533

NAKAZATO, H.

Ceramic rod array scanned with ferrite phase shifters.  
04 p0572 A69-14327

NAKHAMKIN, L. A.

Quasi-plastic impact /O kvaziplasticheskom udare/.  
18 p3215 A69-34568

NAKHILNITSKAIA, Z. N.

Analysis of early disturbances in ion migration in irradiated erythrocytes /K analizu rannikh narushenii transporta ionov v obluchennykh eritrotsitakh/.  
10 p1647 A69-23966

NAKHODKIN, N. G.

Electrical conductivity of thin gold films of different thicknesses /Elektroprovodnost' tonkikh plenok zolota raznoi tolshchiny/.  
12 p2143 A69-26459

Influence of gases on the electrical conductivity of chromium, beryllium, nickel, gold, and germanium films of different thicknesses /Vliianie gazov na elektroprovodnost' plenok khroma, berillia, nikelia, zolota i germania razlichnoi tolshchiny/.  
12 p2143 A69-26460

NAKHUSHEV, A. M.

Certain boundary value problems for hyperbolic equations and equations of mixed type /O nekotorykh kraevykh zadachakh dlia giperbolicheskikh uravnenii i uravnenii smeshannogo tipa/.  
12 p2123 A69-26727

NAKRA, B. C.

Forced vibrations of a two layered beam arrangement.  
10 p1800 A69-23241  
Vibration response of a sandwich beam with nonlinear viscoelastic core.  
20 p3619 A69-36910

NALBANDIAN, A. G.

Detection of HO sub 2 radicals in a rarefied hydrogen flame /Obvuzhenie radikalov HO sub 2 v razrezhenom plameni vodoroda/.  
15 p2716 A69-30054

NALECZ, M.

Measurements of mechanical displacements of the order of 10 angstroms using the Hall generator.  
17 p2971 A69-33022

NAM, R. A.

Investigation of the shape of nuclear cascade showers in lead and the energy spectrum of nuclear-active particles with the aid of a calorimeter with lead absorbers.  
13 p2303 A69-28399

Test of the hypothesis of the existence of a passive baryon state by means of the calorimeter telescope technique.  
13 p2331 A69-28401

Dependence of the energy of an electron-photon cascade, produced by collision of a nuclear-active cosmic-ray particle with a lead nucleus, on the energy of the interacting particle.  
17 p3008 A69-33387

NAMBA, M.

Lifting-surface theory for cascade of blades in subsonic shear flow.  
16 p2731 A69-31592

Theory of transonic shear flow past a thin aerofoil  
16 p2731 A69-31593

NAMBA, O.

Continuum location and total line absorption in the solar spectrum from 2988 to 4087 angstrom units.  
05 p0828 A69-16611

A morphological study of the solar granulation.  
17 p3029 A69-33045

NAMEKAWA, T.

Response of detectors for two noise-modulated waves and background noise.  
15 p2569 A69-30805

NAMGALADZE, A. A.

Relation between the periods of toroidal oscillations and the plasma concentration in a nondipole magnetosphere /Sviaz' periodov toroidal'nykh kolebaniy s kontsentratsiei plazmy v nedipol'noi magnitosfere/.  
20 p3521 A69-37043

Natural periods of toroidal oscillations of the magnetosphere /Sobstvennyye periody toroidal'nykh kolebaniy magnitosfery/.  
23 p4157 A69-41863

NAMICHEISHVILI, O. M.

Some properties of the reliability resource.  
10 p1662 A69-23319

NAMIKAWA, T.

Magnetic field oscillations near the earth's bow shock front.  
02 p0241 A69-11729

NAMUR, R.

Creep behavior of a Ni-Cr-Mo alloy /Udimet 500/- Study of the stress- temperature-time correlation /Comportement au fluage d'un alliage au Ni-Cr-Mo /Udimet 500/- Etude de la correlation contraintes- temperatures-temps/.  
05 p0781 A69-16500

NAMY, X.

The satellites /Les satellites/.  
02 p0333 A69-11917  
Communications between satellite and balloons for the Eole mission.  
07 p1084 A69-19134

NAN, N.

Plane waves due to combined compressive and shear stresses in a half space.  
[ASME PAPER 69-APM-12]  
18 p3213 A69-34388

NAVAVATI, R. P.

On thermal and excess currents in GaSb tunnel diodes.  
05 p0734 A69-16570

NANBU, M.

On the initiation and propagation of fatigue crack.  
17 p3052 A69-32981

NANDA, V. P.

Liability for space activities.  
[AAS PAPER 69-042]  
24 p4418 A69-42826

NANDEKAR, D. P.

Investigation of the damped oscillations in plasma.  
03 p0479 A69-14050

Energy density and velocity of energy transport of a R.F. wave in plasma when the wave frequency approaches the frequency of damped oscillations. I, II.  
08 p1365 A69-20553

Analysis and detection of backward waves in plasma in the region of anomalous dispersion.  
11 p1927 A69-25116

Analysis of absorption of a R.F. wave in plasma in the region of anomalous dispersion.  
23 p4195 A69-41385

NANDI, B. C.

Durgapur cosmic ray magnetic spectrograph.  
06 p0925 A69-17302

NANDY, K.

Muscle and the weightlessness state.  
06 p0873 A69-17018

Galactic discontinuity near I super II equals 140 deg.  
10 p1776 A69-23215

Electronographic study of the interstellar 4430 band.  
10 p1781 A69-23676

Defects in interstellar grains.  
22 p4023 A69-40472

NANDY, K. N.

Image tube observations of the lambda 4430 interstellar band.  
11 p1965 A69-25658

NANI, R. KH.

Facility for automatic recording of the spectral distribution of the photoconductivity of high-resistance semiconductors /Ustanovka dlia avtomaticheskoi registratsii spektral'nogo raspredeleniia fotoprovodimosti vysokoomnykh poluprovodnikov/.  
14 p2447 A69-29409

NANIA, A.

Preliminaries for a regional investigation of clear air turbulence /CAT/ /Preliminari per uno studio regionale della turbolenza in atmosfera chiara/.  
03 p0462 A69-13966

NANIS, L.

Potential-wetting effects of platinum electrodes.  
08 p1268 A69-20362

NANJO, M.

A new sampling technique of multi-coincidence method of photon counting for optical tracking system of satellite.  
11 p1841 A69-25579

NANNICHI, Y.

Properties of GaP Schottky barrier diodes at elevated temperatures.  
16 p2757 A69-31613

Gallium phosphide devices for use at high temperatures.  
19 p3381 A69-35681

NANOBASHVILI, D. I.

Current instability in high-resistivity compensated p-InSb /Neustoiichivost' toka v vysokoomnom kompensirovannom p-InSb/.  
15 p2666 A69-30058

NAPIER, W. MCD.

The photometric reflection effect in close binaries.  
10 p1776 A69-23218

NAPOLITANO, L. G.

On a new set of thermodynamic characteristic speeds for reacting mixtures.  
19 p3452 A69-36802

NAQVI, I. M.

Measurements of multiplication effects on noise in silicon avalanche diodes.  
04 p0573 A69-14332

NARAHARI RAO, K.

Infrared emission from a V-shaped metal groove compared with that from a flat surface of the same metal.  
19 p3313 A69-36491

NARANAN, S.

The Kolar gold fields extensive air shower experiment.  
06 p0990 A69-17300

Low-energy X-ray spectra of SCO X-1 and four Sagittarius sources.  
09 p1574 A69-21460

NARASIMHA, R.

Asymptotic solutions for the distribution function in non-equilibrium flows. I - The weak shock.  
01 p0059 A69-10330

Approximate solutions for the structure of shock waves.  
12 p2063 A69-27112

A model for the Reynolds stress in turbulent shear flows.  
14 p2428 A69-29000

The Boltzmann collision integrals for a combination of Maxwellians.  
14 p2431 A69-29578

Minimum error solutions of the Boltzmann equation for shock structure.  
14 p2431 A69-29579

NARASINGA RAO, B. C.

Photoelectron flux in the topside ionosphere measured by retarding potential analyzers.  
11 p1950 A69-25144

Ion, electron, and neutral temperatures derived from ion composition distribution.  
16 p2849 A69-31990

NARAYAN, S. Y.

High-bias-voltage operation of GaAs transferred electron oscillators.  
03 p0402 A69-12854

NARAYAN, V.

Total and spectral emittance of cobalt.  
05 p0716 A69-16447

NARAYANA MOORTHY, A. M.

A transistorized frequency detector.  
06 p0896 A69-17478

NARAYANA RAO, N.

Bearing deviation in HF transionospheric propagation. I, II.  
04 p0559 A69-15209

Bearing deviation in high-frequency transionospheric propagation. III - Ray tracing investigation of the magnetoionic effect.  
07 p1086 A69-19224

Synthesis of oblique ionograms for a quasi-linear ionospheric model and spherical earth-ionosphere geometry.  
08 p1274 A69-20044

Direction of arrival of HF radio waves deduced from ionospheric electron content gradients.  
11 p1837 A69-25004

Acoustic waves in the ionosphere.  
[AFRL-69-0291]  
12 p2065 A69-26104

## NARBEKOV, A. I.

Application of a laser as a light source in the investigation of temperature fields and concentrations in fluids by interference techniques /Primenenie opticheskogo kvantovogo generatora v kachestve istochnika sveta pri issledovanii polei temperatur i kontsentratsii v zhidkostiakh interferentsionnym metodom/.  
10 p1702 A69-23431

## NARDI, M.

Use of the image orthicon tube for detecting low intensity pulsed light signals.  
08 p1317 A69-21085

## NARDINI, R.

General considerations of magnetothermoelasticity /Considerazioni generali sulla magnetothermoelasticita/.  
15 p2715 A69-31215

## NARDIZZI, L. R.

Synthesizing optimal controls for modulated discrete-time systems.  
02 p0226 A69-12732

## NARDUCCI, L. M.

Short-pulse propagation in a laser amplifier with saturable losses.  
16 p2797 A69-32043

## NARENDRA, K. S.

An off-axis circle criterion for the stability of feedback systems with a monotonic nonlinearity.  
02 p0225 A69-11969

Stability of nonlinear time-varying feedback systems.  
04 p0583 A69-15110

Stability analysis of nonlinear and time-varying discrete systems.  
05 p0740 A69-16600

Conjugate direction methods for nonlinear optimization problems.  
09 p1474 A69-22442

Design of helicopter stabilization systems using optimal control theory.  
12 p2014 A69-26764

## NARIAI, H.

The Lagrangian approach to the gravitational instability in an expanding universe.  
15 p2652 A69-30203

## NARIAI, K.

Mass loss from coronae and its effect upon stellar rotation.  
08 p1396 A69-20644

Coronae around helium stars and X-ray sources.  
08 p1380 A69-20645

Infrared photometry of a helium star, HD 30353.  
18 p3203 A69-35348

Mass loss from coronae and its effect upon stellar rotation.  
21 p3813 A69-39521

Coronae around helium stars and X-ray sources.  
21 p3813 A69-39522

## NARIBOLI, G. A.

Growth of weak discontinuities in arbitrarily moving gas.  
04 p0630 A69-14532

Wave propagation in magnetogasdynamics.  
09 p1547 A69-21613

## NARITA, S.

Collapse and flare-up of protostars.  
15 p2680 A69-30206

## NARLIKAR, J.

Pulsed radio sources.  
17 p3037 A69-33640

## NARLIKAR, J. V.

Cosmology and electrodynamics.  
03 p0468 A69-13773

On the general correspondence between field theories and the theories of direct interparticle action.  
04 p0631 A69-15189

Recent developments in cosmology.  
07 p1210 A69-18390

Electrodynamics of direct interparticle action. I - The quantum mechanical response of the universe.  
22 p3980 A69-40169

## NARODNY, L. H.

Atmospheres and telescopes.  
03 p0510 A69-13393

The establishment of an optical workshop and repair facility on the moon.  
18 p3113 A69-34243

## NAROVLIANSKII, G. IA.

Aeronautical Climatology /Aviatsionnaia Klimatologiya/.  
04 p0627 A69-14935

## NAROZHNYI, N. B.

Propagation of plane electromagnetic waves in a constant field.  
18 p3103 A69-35128

## NARTOVA, T. T.

Certain patterns in the changes in the heat resistance of titanium-base ternary systems /Nekotorye zakonomernosti izmeneniia zharoprochnosti v troinykh sistemakh na osnove titana/.  
02 p0268 A69-12357

Investigation of the equilibrium and characteristics of alloys of the Ti sub 3 Sn/Ti plus 5 percent Zr/ cross section of the Ti-Zr-Sn system /Issledovanie ravnovesiia i svoystv splavov razreza Ti sub 3 Sn/Ti plus 5 percent Zr/ sistemy Ti-Zr-Sn/.  
07 p1162 A69-18770

Study of the phase equilibrium and properties of alloys pertaining to the titanium corner of the Ti-Zr-Al system /Issledovanie fazovogo ravnovesiia i svoystv splavov titanovogo ugla sistemy Ti-Zr-Al/.  
07 p1162 A69-18771

Certain problems of the physicochemical theory of heat resistance and new heat-resistant titanium alloys ST-1, ST-3, ST-4, and ST-5 /Nekotorye voprosy fiziko-khimicheskoi teorii zharoprochnosti i novye zharoprochnye titanovye splavy ST-1, ST-3, ST-4, i ST-5/.  
07 p1163 A69-18780

A physicochemical heat-resistance theory and new heat-resistant titanium alloys /Fiziko-khimicheskaiia teoriia zharoprochnosti i novye zharoprochnye titanovye splavy/.  
09 p1525 A69-22140

## NARUD, J. A.

Advanced developments in sub-nanosecond integrated logic circuits.  
20 p3505 A69-37342

## NARUSE, Y.

Search for quarks.  
15 p2674 A69-30308

## NARVA, V. K.

Preparation and properties of titanium carbide based cermets with an alloy-steel binder /Poluchenie i svoystva kermetov na osnove karbida titana so svyazkoi iz legirovannoi stali/.  
22 p3971 A69-40919

## NARZULLAEV, B. N.

The influence of supersonic plasma jets on polymer films /Deistvie sverkhzvukovykh plazmennyykh strui na polimernye plenki/.  
21 p3752 A69-39081

## NASH-WEBBER, J. L.

Incompressible flow through an asymmetric two-dimensional contraction.  
13 p2249 A69-28235

## NASH, C. P.

Kerr-cell time-resolved spectra of an exploding wire.  
01 p0118 A69-10665

## NASH, J. F.

The calculation of three-dimensional turbulent boundary layers in incompressible flow.  
21 p3693 A69-38767

## NASHELSKII, A. IA.

Dependence of the effective mass of electrons on their concentration in indium phosphide crystals /Zavisimost' effektivnoi massy elektronov ot ikh kontsentratsii v kristallakh fosfida indii/.  
03 p0489 A69-13889

Efficient GaP diode sources of red radiation.  
06 p0979 A69-16999

Dependence of the effective mass of electrons on their density in indium phosphide crystals.  
11 p1939 A69-25690

## NASHIF, A. D.

A resonant beam tuned damping device. [ASME PAPER 68-WA/GT-2]  
05 p0837 A69-16138

## NASIBOV, A. S.

Semiconductor laser with an external resonator /Poluprovodnikoviy kvantoviy generator s vneshnim rezonatorom/.  
08 p1326 A69-20543

## NASIROV, IA. N.

Thermoelectric properties of the GeTe-GaTe system /Termoelektricheskie svoystva sistemy GeTe-GaTe/.  
01 p0138 A69-10404

## NASLEDOV, D. N.

Electrical properties of diffused p-n junctions in indium phosphide.  
02 p0294 A69-11628

Magnetic field influence on the low-frequency oscillations of Gunn diodes.  
02 p0222 A69-12684

Dependence of the effective mass of electrons on their concentration in indium phosphide crystals /Zavisimost' effektivnoi massy elektronov ot ikh kontsentratsii v kristallakh fosfida indii/.  
03 p0489 A69-13889

Short-wavelength radiation of a GaAs diode laser.  
03 p0441 A69-14165

Photoluminescence of epitaxial n-type GaAs prepared from p-type GaAs.  
03 p0492 A69-14167

Phenomena in solid solutions.  
04 p0641 A69-14505

Impurity photoconductivity of indium antimonide at low temperatures.  
04 p0644 A69-15270

Thermal EMF in p-type indium antimonide /Termoeds v antimonide indii p-tipa/.  
06 p0981 A69-17881

Computer model of the Gunn diode.  
07 p1097 A69-18449

Dependence of the effective mass of electrons on their density in indium phosphide crystals.  
11 p1939 A69-25690

Thermoelectric power of p-type indium antimonide.  
14 p2503 A69-28790

Certain properties of long indium antimonide diodes with a negative resistance section /Nekotorye svoystva dlinnykh diodov iz antimonida indii s uchastkom otritsatel' nogo soprotivleniia/.  
15 p2581 A69-31149

Magnetic field influence on the Gunn effect.  
18 p3183 A69-35267

Radiative recombination in GaAs.  
19 p3386 A69-36525

## NASLIN, P.

Dynamics of Linear and Nonlinear Systems. Mathematical Methods for Treating these Systems /Dynamik Linearer und Nichtlinearer Systeme- Mathematische Methoden zu ihrer Behandlung/.  
02 p0225 A69-12228

Essentials of Optimal Control.  
12 p2054 A69-26919

## NASR, IU.

Cold standby with restoration.  
09 p1513 A69-22676

## NASTASE, A.

Wing Theory in Supersonic Flow.  
08 p1251 A69-20523

On the minimum drag problem of the trapezoidal wing of symmetrical thickness in supersonic flow.  
15 p2548 A69-31022

Minimum drag delta wing in a moderate hypersonic flow /Aripla delta de rezistenta minima in curent hipersonic moderat/.  
16 p2731 A69-31559

Optimal aerodynamic shapes by means of the variational method /Forme aerodinamice optime prin metoda variationala/.  
21 p3644 A69-39667

## NASTENKO, V. T.

The problem of engineering psychology /K voprosu ob inzhenernoi psikhologii/.  
19 p3259 A69-35834

## NASTOIASHCHII, A. F.

Probe studies of a Knudsen arc in argon /Zondovye issledovaniia Knudsenovskoi dugi v argone/.  
12 p2137 A69-26536

On the development of a low voltage arc in a thermionic diode with extended electrodes.  
14 p2402 A69-29244

Kinetic theory of Knudsen arcs in the mixture of inert gases with cesium vapour.  
14 p2491 A69-29245

## NASTRO, V.

Some considerations on the determination of the position of an aircraft by hyperbolic loci /Alcune considerazioni sulla determinazione della posizione di un aereo con luoghi iperbolici/.  
23 p4180 A69-42026

Determination of geographical coordinates by measuring differences between distances /Determinazione delle coordinate geografiche con misure di differenze di distanze/.  
23 p4186 A69-42027

## NASYROV, M. K.

Determination of the economic effectiveness of commercial transport aircraft designs /Opredelenie



ekonomicheskoi effektivnosti transportnykh grazhdanskikh samoletov pri proektirovaniy.  
21 p3855 A69-38873

Determination of the economic effectiveness of design and technology changes in commercial transport aircraft /K voprosu ob opredelenii ekonomicheskoi effektivnosti konstruktivno-tekhnologicheskikh izmenenii transportnykh grazhdanskikh samoletov/.  
21 p3855 A69-38874

## NATALI, F. D.

Interference rejection in a phase-locked loop with decision feedback.  
03 p0409 A69-13201

Accurate digital detection of angle-modulated signals.  
03 p0391 A69-13230

Phase-locked-loop detection of binary PSK signals utilizing decision feedback.  
08 p1270 A69-19859

## NATANZON, M. S.

Experimental investigations of forced discontinuous vibrations of a liquid in a conduit /Eksperimental'nye issledovaniya vynuzhennykh razryvnykh kolebaniy zhidkosti v truboprovode/.  
11 p1875 A69-25485

Influence of the natural oscillation frequency of a liquid in the fuel supply line on the longitudinal stability of the rocket body /Vliianie sobstvennoi chastoty kolebaniy zhidkosti v toplivopodavushchem trakte na prodol'nuiu ustoychivost' korpusa rakety/.  
20 p3617 A69-37604

## NATH DAS, R.

The effect of couple stresses on stress distribution in a thin plate due to the pressure of a rivet on one side of a circular hole.  
08 p1319 A69-20201

## NATH, B.

An analogue technique for determining torsion and flexure functions of uniform beams.  
11 p1995 A69-25649

An experimental study of the flexure of some triangular sections.  
17 p3066 A69-34050

## NATH, R.

He-Ne laser communication.  
19 p3279 A69-36756

## NATHAN, A.

Extended gradient relations with reference to EM waves in moving simple media.  
04 p0557 A69-14760

Radar altimetry from a spacecraft and its potential applications to geodesy.  
15 p2609 A69-30460

Oceanographic applications of radar altimetry from a spacecraft.  
15 p2609 A69-30461

## NATHAN, J. B., JR.

A program to evaluate materials for underground exposure in extreme environments.  
19 p3321 A69-35568

## NATHAN, R.

Digital video-data handling.  
02 p0213 A69-12155

## NATHANSON, D. M.

Pulsed plasma microthruster propulsion system for synchronous orbit satellite. [AIAA PAPER 69-298]  
09 p1562 A69-21227

## NATHER, R. E.

Optical pulsations in the Crab Nebula pulsar.  
08 p1394 A69-20623

Wavelength independence of the velocity of light in space.  
12 p2157 A69-26233

Further observations of the Crab Nebula optical pulsar.  
12 p2172 A69-27170

Search for optical pulsations from the Vela pulsar.  
12 p2173 A69-27173

X-ray and optical observations of the pulsar NP 0532 in the Crab Nebula.  
15 p2679 A69-31529

Synchronous photometry of DQ Herculis.  
16 p2862 A69-32373

## NATHIE, J.

Analysis of in-flight illnesses observed in the French Air Force from 1961 to 1967 /Analyse des malaises en vol constatés dans l'Armée de l'Air Française de 1961 à 1967/.  
21 p3666 A69-39270

In-flight medical disorders in the French Air Force - Analytical study from 1961 to 1968 /Les malaises en vol dans l'Armée de l'Air Française - Etude analytique de 1961 à 1968/.  
24 p4277 A69-43383

## NATION, J. A.

Variation of the R.F. response of a Langmuir probe with amplitude and frequency.  
21 p3723 A69-38939

## NATSUI, T.

Respiratory response to hypoxia with hypocapnia or normocapnia and to CO sub 2 in hypothermic dogs.  
22 p3885 A69-40977

## NATSVLISHVILI, G. I.

Some ultrastructural indices of the state of myocardial cells during general hypoxia of the organism /Nekotorye ul'trastrukturnye pokazateli sostoiianiia miokardial'nykh kletok pri obshchei gipoksii organizma/.  
21 p3651 A69-38412

## NATSVLISHVILI, N. V.

Frequency dependence of radio wave absorption in the ionosphere and the effect of deflecting absorption /Chastotnaia zavisimost' pogloshcheniia radiovoln v ionosfere i vliianie otkloniaushchego pogloshcheniia/.  
20 p3491 A69-37680

## NATTERER, F.

Enclosures for large eigenvalues of ordinary second- and fourth-order differential equations /Einschliessungen fuer die grossen Eigenwerte gewoehnlicher Differentialgleichungen zweiter und vierter Ordnung/.  
12 p2124 A69-26892

## NATUSHKIN, V. F.

Stability of a compressed cylindrical shell on the basis of an analysis of the stability of an axisymmetric equilibrium form /Ustoychivost' szhatoi tsilindricheskoi obolochki na osnove analiza ustoychivosti osesimmetrichnoi formy ravnovesiia/.  
04 p0667 A69-14265

Stability and vibration of truncated orthotropic conical shells.  
16 p2873 A69-32133

Influence of small distortions of the shape of the middle surface of a cylindrical shell on the shell carrying capacity under axial compression /Vliianie mal'kh vozmushchenii v forme sredinnoi poverkhnosti tsilindricheskoi obolochki na ee nesushchiui sposobnost' pri osevom szhatii/.  
23 p4228 A69-41989

## NAU, B. S.

Centripetal flow in face seals.  
13 p2267 A69-27365

## NAUGHTON, J. J.

Developments in volcanic gas research in Hawaii.  
02 p0236 A69-11466

## NAUMANN, H. D.

Nuclear reactors in space flight technology /Kernreaktoren in der Raumfahrttechnik/.  
07 p1179 A69-19739

## NAUMENKO, V. G.

Conductivity and carrier density distributions in silicon doped by ion bombardment.  
04 p0643 A69-15254

High-frequency planar silicon transistor based on a p-n-p structure obtained by an ion doping technique /Kremniyevyi vysokochastotnyi planarnyi tranzistor na osnove p-n-p-struktury, poluchennoi metodom ionnogo legirovaniia/.  
22 p3916 A69-40960

## NAUMENKOV, P. A.

Measurement of the absorption coefficient of a plasma with the aid of a laser /Izmerenie koeffitsienta pogloshcheniia plazmy s pomoshch'iu OKG/.  
03 p0442 A69-14218

Determination of the absorption coefficients of a plasma using a gas optical quantum generator.  
05 p0762 A69-15900

Study of an optically dense plasma consisting of one element /Issledovanie opticheski plotnoi plazmy odnoelementnogo sostava/.  
06 p0964 A69-17251

## NAUMOV, A. I.

Wideband superheterodyne radiometers of the millimeter wave range /Shirokopolosnye supereterodinye radiometry millimetrovogo diapazona voln/.  
07 p1131 A69-18517

Radio emission of Venus and Jupiter at 2.25 and 8 mm wavelengths /Radioizluchenie Veneri i Iupitera na volnakh 2.25 i 8 mm/.  
11 p1956 A69-24396

Investigation of the Crab Nebula at wavelengths of 2.16 and 8.2 mm /Issledovaniia krabovidnoi tumanosti na volnakh 2,16 i 8,2 mm/.  
19 p3428 A69-36875

Observation of solar radio emission by the 22-m radio telescope at the Crimean Astrophysical Observatory at 2.25 mm and 8.15 mm wavelengths.  
22 p4020 A69-40295

Radio emission of Venus and Jupiter at 2.25 and 8 mm.  
24 p4390 A69-43786

## NAUMOV, A. P.

A method of determining the atmospheric moisture content from measurements of radio-wave absorption near lambda equals 1.35 cm.  
02 p0274 A69-11438

Radio wave absorption by water vapor in the Venusian and Martian atmospheres /O pogloshchenii radiovoln vodianymi parami v atmosferakh Veneri i Marsa/.  
15 p2569 A69-30952

## NAUMOV, A. V.

Optical oscillator with an injection GaAs diode and a closed cycle cooling system.  
05 p0777 A69-16793

## NAUMOV, S. L.

High-frequency inductive analyzer of concentrations of solutions and mixtures.  
05 p0763 A69-15994

Theoretical design of horseshoe-shaped magnetic sensors located above a ferromagnetic medium /O teoreticheskom raschete podkovobraznykh datchikov nad ferromagnitnoi sredoi/.  
12 p2094 A69-26719

## NAUMOV, S. M.

Feasibility of using holographic techniques for creating new types of storage devices /Vozможnosti primeneniia metodov golografii dlia sozdaniia novykh tipov zapominaushchikh ustroistv/.  
07 p1133 A69-19158

## NAUMOVA, L. V.

Realization of single-mode operation for a CO sub 2 laser /O realizatsii odnomodovogo rezhima v opticheskom generatore na CO sub 2/.  
07 p1156 A69-19157

## NAUMOVICH, A. F.

Approximation of functional matrices /Ob approksimatsii funktsional'nykh matrits/.  
06 p0948 A69-17495

## NAUSTVIK, E.

The position and height of auroral absorption deduced from VLF phase measurements.  
05 p0758 A69-16415

## NAVA, D.

Superior analyses of iron meteorites.  
19 p3417 A69-36130

## NAVARA, P.

Use of lasers for measuring the positions of earth satellites /Pouziti laseru pro mereni polohy umelych družic zeme/.  
12 p2110 A69-27149

The use of lasers for distance measurements /Pouziti laseru pro mereni vzdalenosti/.  
22 p3959 A69-39901

## NAVARRA, G.

On delays of particles in extensive air showers.  
22 p4007 A69-41054

## NAVARRO, R. A.

A deterministic model for cost-effectiveness analysis of avionics support programs. [AIAA PAPER 69-305]  
09 p1478 A69-22377

## NAVEAU, J.

The measurement of drag forces in low density flows using a modulation technique.  
06 p0861 A69-17638

## NAVIKOV, V. V.

Stratovolcanoes and mesorelifs of the moon /O stratovulkanakh v mezoreliefe luny/.  
03 p0507 A69-13093

## NAVON, D.

Thermal instability in power transistor structures.  
08 p1373 A69-20858

## NAYDAN, B. N.

A state of the art airborne electronic converter.  
14 p2405 A69-29687

## NAYFEH, A. H.

On liquid driver shock tubes.  
19 p3295 A69-36471

Stability of a liquid film over a rotating cylinder.  
24 p4305 A69-43597

## NAYLOR, M. D. T.

Some uncertainties in Population II stellar models near the main sequence.

09 p1601 A69-22214

## NAZARCHUK, G. K.

Diffusion model of a cometary tail /Diffuzionnaia model' khvosta komety/.

14 p2523 A69-29705

Analysis of the surface brightness distribution in the tail of comet 1956 h /Analiz raspredeleniia poverkhnostnoi iarkosti v khvoste komety 1956 h/.

15 p2684 A69-30519

## NAZARCHUK, M. M.

Surface friction accompanying adiabatic compressible gas flows through pipes /Poverkhnostnoe trenie pri adiabatom techenii szhimaemogo gaza v trubakh/.

16 p2771 A69-31956

## NAZARENKO, A. I.

Some problems associated with optimum processing of measurements of satellite orbits /Nekotorye voprosy optimizatsii obrabotki orbital'nykh izmerenii iskusstvennykh sputnikov zemli/.

01 p0151 A69-10570

Certain problems in optimizing the handling of orbital measurements of artificial earth satellites.

15 p2691 A69-30740

## NAZARENKO, G. T.

Reduction of the fatigue limit of deformed steel.

03 p0450 A69-13916

## NAZARENKO, P. V.

Effect of liquid media on the change in weight, hardness, volume, and deformation of polyurethane /Vlianie zhidkikh sred na izmenenie vesa, tverdsti, ob'ema i deformatsii poliuretana/.

18 p3162 A69-35360

Investigation of the deformation and sliding friction of polyurethane in the presence of lubrication /Issledovanie deformatsii i treniia skol zheniia poliuretana v prisutstvii smazki/.

18 p3149 A69-35362

Dependence of the friction coefficient on normal pressure during friction at surface films /Zalezhnist' koefitsienta treniia vid normal'nogo navantazheniia pri terti z poverkhnivimi plivkami/.

23 p4170 A69-42343

## NAZARENKO, V. I.

Application of a resonance circuit to harmonic analysis on an analog computer /Primenenie rezonansnogo kontura dlia harmonicheskogo analiza na AVM/.

12 p2123 A69-26718

## NAZARENKO, V. V.

Study of contact carburization of molybdenum and niobium castings /Issledovanie kontaktного насыщения углеродом отливок из молибдена и ниобия/.

04 p0619 A69-15391

Contact carbon impregnation of molybdenum and niobium castings.

18 p3156 A69-35019

## NAZAROV, M. A.

Interaction of a shock wave with a viscous fluid film /Vzaimodeistvie udarnoi volny s plenкой вязкой zhidkosti/.

08 p1303 A69-20326

## NAZAROV, N. I.

Heat removal in multilayer superconducting devices /Teplotovod v mnogosloynnykh sverkhprovodiaschikh ustroystvakh/.

03 p0493 A69-14225

Resonant heating of the electrons in a beam plasma discharge /Rezonansnyi nagrev elektronov v puchkovoplazmennom razriade/.

09 p1549 A69-22016

## NAZAROV, V. I.

Study of the structure of extensive air showers at sea level with the modernized hodoscope system of the Moscow University installation.

13 p2332 A69-28405

## NAZAROVA, T. N.

Recording meteorite particles by means of piezoelectric transducers /O registratsii meteornykh chastits p'ezodatchikami/.

01 p0152 A69-10587

Piezoprobe detection of meteoritic particles.

15 p2691 A69-30757

## NAZARYCHEV, A. P.

Automation of the process of producing holes in extended parts and units /K voprosu avtomatizatsii protsessa obrazovaniia otverstii v dlinnomernykh detal'nykh izlakh/.

21 p3731 A69-38881

## NAZIROV, M.

Method of relating satellite photographs to a locality /K metodike priviazki sputnikovykh fotografii k mestnosti/.

18 p3128 A69-34818

Shadows on satellite photographs as a source of information on the vertical extent of clouds /Ten' na sputnikovykh fotografiakh kak istochnik informatsii o vertikal'noi protiazhenosti oblakov/.

19 p3366 A69-36670

## NEADLE, R. S.

Recovery rate and capacitance measurements on irradiated lithium-containing solar cells.

06 p0974 A69-16867

## NEAL, C. B.

Identification of sampling intervals in sampled-data models of human operators.

10 p1650 A69-23881

Estimation of the parameters of sampled-data systems by means of stochastic approximation.

24 p4295 A69-43319

## NEAL, J. T.

Satellite imagery of the earth.

20 p3536 A69-36930

## NEAL, J. W.

Space storable regenerative cooling investigation. [AIAA PAPER 69-509]

16 p2844 A69-32718

## NEAL, R. R.

A closed form solution to the magnetogasdynamic shock layer. [AIAA PAPER 69-722]

17 p3012 A69-33494

## NEALE, M. C.

Aerodynamic problems of power plant installation.

17 p2898 A69-33215

## NEATHAMMER, R.

An improved all-equipments reliability tests plan.

24 p4321 A69-43203

## NEATHAMMER, R. D.

MIL-STD-781B reliability tests - Exponential distribution.

20 p3551 A69-38289

## NEAU, J. C.

Automatic plotting of the characteristic of a probe in a plasma /Releve automatique de la caracteristique d'une sonde dans un plasma/.

15 p2664 A69-31094

## NEBBELING, C.

Determination of the position of a shock wave from pitot tube experiments.

16 p2771 A69-31927

## NEBELSON, M. B.

Criterion for the existence of an optimal control for a class of linear stochastic systems /Kriterii sushchestvovaniia optimal'nogo upravleniia dlia odnogo klassa lineynykh stokhasticheskikh sistem/.

22 p3917 A69-40116

## NEBERGALL, D.

Variation of geomagnetic disturbance with latitude.

09 p1489 A69-21715

## NEBOLIUBOV, E. IU.

Analysis of circuits with arbitrary magnetic couplings on a digital computer /Analiz tsepei s proizvol'nymi magnitnymi svyaziami s pomoshch'iu ETsVM/.

01 p0036 A69-10745

## NECHAI, E. P.

Theory of hydrogen embrittlement of metals.

09 p1523 A69-21849

## NECHEPORENKO, N. A.

Construction of harmonic and biharmonic functions in the solution of a three-dimensional problem in elasticity theory /Postroenie harmonicheskikh i bigarmonicheskikh funktsii pri reshenii prostranstvennoi zadachi teorii uprugosti/.

11 p1976 A69-24777

## NECHIN, IU. A.

Phenomenological characteristics of extensive air showers at sea level.

13 p2332 A69-28406

Study of high-energy muons in extensive air showers.

13 p2332 A69-28409

## NECHIPORENKO, E. P.

Influence of silicide coatings on the mechanical properties of molybdenum /Vlianie silitsidnykh pokrytii na molibdene na ego mekhanicheskie svoistva/.

02 p0264 A69-11883

Effect of silicide coatings on the mechanical properties of molybdenum.

18 p3156 A69-35043

Diffusion-kinetic range of the process of thermal decomposition of carbonyls of metals /O diffuzionno-kineticheskoj oblasti protsessa termicheskogo razlozheniia karbonilov metallov/.

20 p3558 A69-37015

Effect of an electrical field on deposition growth during pyrolysis of molybdenum carbonyl /Vlianie elektricheskogo polia na rost osadkov pri pirolize karbonila molibdena/.

20 p3559 A69-37016

Influence of the conditions of formation of silicide layers on molybdenum on some of their properties /Vlianie uslovii polucheniia silitsidnykh sloev na molibdene na nekotorye ikh svoistva/.

20 p3560 A69-37361

Low-temperature breakdown by oxidation of high melting point compounds /Nizkotemperaturnoe okislitel'noe razrushenie tugoplavkikh soedinenii/.

20 p3561 A69-37375

Effect of alloying additives of aluminum on the corrosion resistance of tungsten disilicide /Vlianie legiruiushchikh dobavok aluminia na korrozionnuiu stoikost' disilitsida vol'frama/.

20 p3561 A69-37376

## NECHIPORUK, E. I.

The topological principles of self-correction.

03 p0410 A69-13421

## NECHITAIENKO, V. A.

A meteor station recorder with a high effective sensitivity /Registrator meteornoj stantsii vysokoi effektivnoi chuvstvitel'nosti/.

17 p2976 A69-33898

A radar wind patrol /Vetrovoi radiolokatsionnyi patrol/.

17 p2939 A69-33901

## NEDA, T.

Ionization in detonation waves /Ionisation in Detonationswellen/.

21 p3853 A69-39745

## NEDIALKOV, A. P.

Method for determining electron velocity distribution function in gaseous plasma.

13 p2313 A69-28327

## NEDIALKOV, I.

Properties of the solutions of a variational problem in elastic stability theory /V'rkhu svoistvata na reshenieto na edna variatsionna zadacha ot teoriata na elastichnata ustoiichivost'/.

05 p0832 A69-15688

Determination of the center of gravity of gravitating bodies by the gravitational anomaly technique /Opredeliane tsent'ra na tezhesta na tela po tekhnite gravitatsionni anomalii/.

05 p0792 A69-15696

## NEDIUKHA, I. M.

Study of contact carburization of molybdenum and niobium castings /Issledovanie kontaktного насыщения углеродом отливок из молибдена и ниобия/.

04 p0619 A69-15391

Contact carbon impregnation of molybdenum and niobium castings.

18 p3156 A69-35019

## NEDOMA, P.

On a method of experimental searching for the optimal decision function.

21 p3756 A69-39265

## NEDOREZOV, P. F.

Effect of moment stresses on the stress concentration during bending of plates with a hole of common type /O vlianii momentnykh napriazhenii na konsentratsiiu napriazhenii pri izgibe plit s otverstiem obshchego vida/.

11 p1971 A69-24646

## NEDOSPASOV, A. V.

Parameters of MHD generators taking account of the ionization instability of the plasma /Parametry MGD-generatorov s ucheto ionizatsionnoi neustoiichivosti plazmy/.

06 p0871 A69-17912

Rate of propagation of the ionization front in a magnetic field /Skorost' rasprostraneniia fronta ionizatsii v magnetnom pole/.

10 p1733 A69-23447

Cesium-doped mercury as a working fluid for studying the specific features of MHD generators based on a Rankine cycle /Rtut' s tseziem kak rabochee veshchestvo dlia izucheniia osobennostei MGD-generatorov, rabotaiushchikh na tsikle Renkina/.

10 p1636 A69-23458

Current distribution in an E x H-discharge with split electrodes in a plasma with nonequilibrium conductivity /Raspredelenie toka v E x H-razriade s sekt-



- sionirovannymi elektrodami pri neravnovesnoi provodimosti plazmy/. 15 p2663 A69-30980
- NEDYALKOV, I.**  
Analog device for determining the velocity distribution function in electron plasma. 21 p3776 A69-38565
- NEE, V. W.**  
Simple phenomenological theory of turbulent shear flows. 15 p2591 A69-30905
- NEEBE, F. C.**  
Command augmentation - Digital flight control evaluation. 17 p2934 A69-34075
- NEEL, C. B.**  
Studies related to satellite thermal control - Measurements of earth-reflected sunlight and stability of thermal-control coatings. 09 p1579 A69-22174
- NEEL, F.**  
Satellite transmission of electrophysiological data for real-time analysis /Transmission de donnees electrophysiologiques par satellite pour analyse en temps reel/. 16 p2746 A69-32070
- NEEL, S. H.**  
Helicopter evacuation - A prime solution. 23 p4107 A69-41809
- NEELAND, J. K.**  
Motion picture holography. 10 p1697 A69-24002  
A continuously pumped repetitively Q-switched ruby laser and applications to frequency-conversion experiments. 17 p2980 A69-33027
- NEELEY, V. I.**  
Source scanning holography. 06 p0930 A69-18228
- NEELY, J. E.**  
Hardness and low-temperature deformation of silica glass. 03 p0453 A69-13616
- NEFEDOV, IU. G.**  
Life in the spacecraft and planetary station. 01 p0020 A69-11075  
Biotechnological problems concerning the habitability of spacecraft and planetary stations /Biologotekhnicheskie voprosy obitaemosti kosmicheskikh korabelei i planetnykh stantsii/. [UN PAPER 68-95778] 06 p0879 A69-17040  
Theoretical aspects of the selection of the physiological parameter complex for medical control during space flights /Teoreticheskie aspekty vybora kompleksa fiziologicheskikh parametrov dlia meditsinskogo kontrolya v kosmicheskikh poletakh/. 07 p1071 A69-18978  
Some results of the biomedical experiment on the biosatellite "Kosmos-110." 08 p1261 A69-19827  
Quantitative evaluation of the activity of animal cardiovascular systems during prolonged orbital flight. 08 p1261 A69-19828  
Tolerance of humans to physical stress during a four month stay in a closed space. 08 p1263 A69-19933  
Principles of medical supervision on long space flights. 10 p1649 A69-23505  
A year-long medical-technological experiment in a ground-based life-support system facility /Godovoi mediko-tehnicheskii eksperiment v nazemnom komplekse sistem zhiznecobespecheniya/. 13 p2216 A69-28612  
Theoretical approach to the selection of physiological parameters for the medical monitoring of space flights. 20 p3483 A69-38226
- NEFEDOV, IU. I.**  
Investigation of subthreshold phenomena in excited elements on an analog model /Issledovanie podporogovykh iavlenii v vzbudimyykh elementakh na analogovoi modeli/. 23 p4109 A69-41980
- NEFEDOVA, I. D.**  
Corrosion-resistant titanium alloy with 32 percent Mo /Korroziionostoikiy splav titana s 32 percent Mo/. 07 p1163 A69-18781
- NEFIODOV, IU. G.**  
Studies of human adaptation to space flight effects under low-calorie diet conditions. 20 p3482 A69-37621
- NEGASHEV, S. A.**  
Magnetic field effect on GaAs injection laser emission. 19 p3387 A69-36529
- NEGISHI, N.**  
A study on probe measurements of flowing partially-ionized high-density gases. 06 p0964 A69-17196
- NEGODENKO, O. N.**  
Five-layer thin-film rejection filters. 05 p0729 A69-16088
- NEGRESKUL, V.**  
Photoluminescence of epitaxial n-type GaAs prepared from p-type GaAs. 03 p0492 A69-14167
- NEGRESKUL, V. V.**  
The shape of the spectral band of n-GaAs edge emission /K voprosu o forme polisy spektra kraevogo izlucheniia n-GaAs/. 19 p3392 A69-36610
- NEGRO, A.**  
Niobium-hydrogen and tantalum-hydrogen systems /Sui sistemi niobio-idrogeno e tantalio-idrogeno/. 09 p1448 A69-21599
- NEGUS DE WYS, J.**  
Surveyor 6 magnet experiment. 02 p0317 A69-12015
- NEHARI, Z.**  
A nonlinear oscillation problem. 14 p2471 A69-29950  
Inequalities for the coefficients of univalent functions. 22 p3975 A69-40453
- NEIBURGER, M.**  
On the hydrodynamics of pairs of spheres falling along their line of centres in a viscous medium. 05 p0788 A69-15725
- NEIDIGH, R. V.**  
Experimental strong turbulent heating. 17 p3014 A69-33827
- NEIGHBORS, T. H., III**  
Isoperimetric solutions related to the thermodynamics of plasmas. 12 p2138 A69-26603
- NEILAND, V. I. A.**  
Laminar boundary layer near a corner point on a body /Laminarnyi pogranichnyi sloi vblizi uglovoi tochki tela/. 06 p0861 A69-17641  
Problems associated with radiant heat transfer in hypersonic aerodynamics /Problemy luchistogo teploobmena v giperzvukovoi aerodinamike/. 11 p2002 A69-25233  
Theory of the separation of a laminar boundary layer in a supersonic flow /K teorii otrывa laminarnogo pogranichnogo sloia v sverkhzvukovom poteke/. 24 p4246 A69-43482
- NEILSON, G.**  
Lunar Module thermal-vacuum simulation utilizing conformal heater thermal control. [AIAA PAPER 69-312] 09 p1479 A69-22386
- NEILSON, J. E.**  
Roll dynamics of a spinning axis-symmetric satellite in an elliptic orbit. 05 p0830 A69-16397
- NEILSON, J. H.**  
An analytical and experimental investigation of the trajectories of particles entrained by the gas flow in nozzles. 11 p1818 A69-25355  
Control forces in rocket nozzles produced by a secondary gas stream inclined at various angles to the nozzle axis. 20 p3457 A69-37065
- NEIMAN, V. G.**  
Influence of the variability of the elastic characteristics of the hydraulic drive on the dynamics of the hydraulic actuator /Vliianie peremennosti uprugikh svoystv gidroprivoda na dinamiku gidrodvigatelia/. 14 p2405 A69-29423
- NEIMAN, V. I.**  
Optimal structure and control of nonblocking switching networks /Structure et commande optimales de reseaux de connexion sans blocage/. 24 p4289 A69-43138
- NEIMARK, B. E.**  
Thermal conductivity, electrical resistivity, and integral degree of blackness of refractory metals at high temperatures /Teploprovodnost', udel'noe elektroprotivlenie i integral'naia stepen' chernoty tupo-plavkikh metallov pri vysokikh temperaturakh/. 09 p1522 A69-21589
- NEIMARK, IU. I.**  
Dynamic systems with impulsive interactions in the theory of nonlinear oscillations. 16 p2875 A69-32295
- NEIMOTIN, L. I.**  
Heat problem for a semibounded jet propagating along a porous surface /Teplovaia zadacha dlia polugoranchennoi strui vdol' poristoi poverkhnosti/. 21 p3854 A69-39846
- NEIRINCK, P. E. L.**  
The decay of Cosmos 253 rocket. 05 p0830 A69-16656
- NEIRYNCK, J. J.**  
Polynomial Chebyshev approximations of the ideal filter. 08 p1299 A69-21168
- NEISSER, J.**  
Study of the atmospheric fine structure by means of propagation measurements in the microwave range /Untersuchungen der atmosphärischen Feinstruktur mit Hilfe von Ausbreitungsmessungen im Mikrowellenbereich/. 04 p0628 A69-15306  
Investigations of fading in the DM waveband and its relation to atmospheric structure /Fadinguntersuchungen im DM-Wellenbereich und ihre Beziehungen zur atmosphärischen Struktur/. 12 p2028 A69-25897
- NEJIB, U. R.**  
On the theory of transverse wave-beam interaction in a finite, homogeneous magnetostatic field. 21 p3672 A69-38435
- NEKRASHEVICH, I. G.**  
Effect of the polarity of indium antimonide on the external photoeffect in the X-ray spectral region /Efekt polarnosti antimonida indiya vo vnesnem fotoeffekte v rentgenovskoi oblasti spektra/. 15 p2667 A69-30076
- NEKRASOV, M. M.**  
Investigation of ferroelectrics by a waveguide resonance technique at decimeter waves /Issledovanie segnetoelektrikov volnovodno-rezonansnym metodom na detsimetrovyykh volnakh/. 22 p3997 A69-41167
- NELEN, J.**  
The LL-group chondrites. 08 p1406 A69-20931  
The Siena meteorite /Der meteorit von Siena/. 20 p3602 A69-37534
- NELMS, G. L.**  
Ionospheric conditions following the proton flare of 7 July 1966 as deduced from topside soundings. 10 p1684 A69-23781  
The interpretation of topside sounder ionograms. 20 p3529 A69-37863  
Electron densities less than 100 electron cm super 33 in the topside ionosphere. 20 p3532 A69-37899
- NELSEN, G. L.**  
Computerized design of optimal direct lift controller. 12 p2014 A69-26765  
Direct lift control for approach and landing. 17 p2902 A69-34027
- NELSON, A.**  
NASA space program possibilities and upper stage implications. [AAS PAPER 69-359] 24 p4418 A69-42828
- NELSON, D.**  
Excitation, dissipative, and emissive mechanisms in biochemicals. 03 p0372 A69-13487
- NELSON, D. J.**  
Resistance of the magnetosphere. 09 p1489 A69-21710
- NELSON, D. L.**  
Radiation hardness of ovonic devices. 06 p0978 A69-16891
- NELSON, E.**  
Variables affecting the dynamic response of thermocouples attached to thin-skinned models. 13 p2375 A69-27785

- NELSON, E. A.**  
Quantization sidelobes of a phased array with a triangular element arrangement.  
23 p1437 A69-41591
- NELSON, F. G.**  
Fracture toughness of aluminum alloys.  
23 p3513 A69-41476
- NELSON, G. F.**  
Radiating gas flows under conditions of reentry into planetary atmospheres /Techeniia izluchaiushchego gaza v usloviakh vkhoda v atmosfery planet/.  
20 p3513 A69-36982
- NELSON, G. J.**  
Solar radio bursts at 21 cm wavelength observed with high angular resolution.  
17 p3040 A69-33809
- NELSON, H.**  
Close-confinement gallium arsenide pn junction lasers with reduced optical loss at room temperature.  
14 p2457 A69-28893
- NELSON, H. F.**  
Structure of shock waves with nonequilibrium radiation and ionization.  
22 p4006 A69-40526
- NELSON, J.**  
The current state of the art of plastic balloons.  
22 p3865 A69-40812
- NELSON, J. A.**  
Modular packaging of spacecraft integration electronics.  
22 p3910 A69-39949
- NELSON, K. R.**  
Irradiation softening and hardening of Ni sub 3 Al.  
01 p0095 A69-10608
- NELSON, L. A.**  
Handbook of Solar Simulation for Thermal Vacuum Testing.  
21 p3690 A69-38894  
Facility for simulation of rocket plumes in a space environment.  
22 p3928 A69-40731
- NELSON, L. H.**  
Evaluation of wear ring seals for high-speed, high-pressure turbopumps.  
[ASME PAPER 68-WA/LUB-1]  
05 p0768 A69-16129
- NELSON, L. S.**  
Luminous fog layer surrounding a zirconium droplet burning in an oxygen-containing atmosphere.  
13 p2380 A69-28462  
Correlation between conservation of metal and luminosity of a zirconium droplet during free-fall combustion in oxygen.  
[WSCI PAPER 69-1]  
16 p2830 A69-32342
- NELSON, R. E.**  
Rapid access digital data acquisition system.  
[AIAA PAPER 69-323]  
09 p1478 A69-22381
- NELSON, R. N.**  
Use of multiple outlets for reducing the stratification-induced propellant supply temperature rise.  
[AAS PAPER 69-395]  
24 p4363 A69-42830
- NELSON, R. R.**  
Big technology, the technology gap, and a dangerous policy pitfall.  
17 p3076 A69-34040
- NELSON, W.**  
Rat body composition - Sensor implantation and lighting effects.  
12 p2020 A69-26557  
Hazard plot analysis of incomplete failure data.  
18 p3147 A69-34515  
Hazard plotting for incomplete failure data.  
20 p3567 A69-38288
- NEMAK, A. K.**  
Investigation of symmetrical slow-wave structures of the type of coupled resonator chains /Issledovanie simmetrichnykh zamedliaushchik sistem tipa tsepochet svyazannykh rezonatorov/.  
22 p3916 A69-40958
- NEMASHKALO, L. P.**  
Use of a scanning Fabry-Perot interferometer with a piezoceramic element for ultralow modulation frequency /Ispol'zovanie skaniruiushchego interferometra Fabry-Pero s p'ezokeramikoi na infranizkoi chastote moduliatsii/.  
15 p2611 A69-31107
- NEMAT-NASSER, S.**  
On circulatory force fields and their adjoints.  
04 p0671 A69-14415
- Effect of warping rigidity on stability of a bar under eccentric follower force.  
12 p2179 A69-26212
- NEMCHINOV, I. V.**  
Self-similar motions of a gas heated by nonequilibrium continuum radiation /Avtomodel'nye dvizheniia gaza, nagrevaemogo neravnovesnym izlucheniem sploshnogo spektra/.  
04 p0686 A69-14985  
Self-similar motions of a gas heated by radiation behind the front of a shock wave initiating absorption /Avtomodel'nye dvizheniia nagrevaemogo izlucheniem gaza za frontom udarnoi volny, initsiiroiushchei pogloshchenie/.  
12 p2061 A69-25880  
Phenomenon of a sudden increase in laser radiation absorption and the gasdynamic effects associated with it /Iavlennie vspyshki pogloshcheniia izlucheniia OKG i svyazannye s nim gazodinamicheskie efekty/.  
21 p3736 A69-38962
- NEMCHINOV, V. M.**  
Influence of the substrate potential on the current-voltage characteristics of unitoron with a metal-dielectric-semiconductor (MDS) structure /Vliianie potentsiala podlozki na vol'tampnyye kharakteristiki unitorona so strukturoi metall-dielektrik-poluprovodnik /MDP//.  
19 p3284 A69-36592
- NEMCHINSKII, V. A.**  
Ionization combined with free electron Maxwellization in a plasma - Calculation of ionization for a cesium plasma /Ionizatsiia v plazme sovместno s maksvelizatsiei svobodnykh elektronov - Raschet ionizatsii dlia tsezievoi plazmy/.  
02 p0292 A69-12559  
Calculation of the near-electrode layer in a low-temperature plasma /K raschetu prielektrodnogo sloia v nizkotemperaturnoi plazme/.  
13 p2312 A69-28117  
On the plasma sheath theory.  
14 p2491 A69-29257  
Ionization in a cesium plasma and simultaneous free-electron Maxwellization in a plasma.  
15 p2658 A69-30256
- NEMCHINSKII, Y. A.**  
The electron energy distribution function and the rate of nonequilibrium ionization in the near-cathode layer of the thermionic converter.  
14 p2404 A69-29255
- NEMECEK, J.**  
Influence of the properties of explosives upon the metal sheet velocity in explosive welding /Einfluss der Sprengstoffeigenschaften auf die Blechgeschwindigkeit beim Explosivschweißen/.  
18 p3149 A69-35279
- NEMEREVEY, W. J.**  
ATC of the future.  
19 p3371 A69-36866
- NEMES, G.**  
Laser effect in neodymium glass.  
17 p2979 A69-32828
- NEMETH, E. M.**  
Differential elastic scattering of low-energy protons by argon atoms.  
20 p3580 A69-37499
- NEMETH, J.**  
Relative proton number in neutron star matter.  
08 p1381 A69-19785
- NEMETI, L.**  
Application of graph theory to nomography /Eine Anwendung der Theorie der Graphen in der Nomographie/.  
08 p1343 A69-20663
- NEMIROVSKII, A. S.**  
Long-range Tropospheric Communications /Dal'naiia Troposfernaia Radiosv'az/.  
04 p0558 A69-14919
- NEMIROVSKII, I. A.**  
Influence of undissolved air on the elastodynamic characteristics of working fluids in aircraft hydraulic actuators /Vliianie nerastvorennoho vozdukh na na upravodimicheskie kharakteristiki rabochikh zhidkostei aviatsionnykh gidroprivodov/.  
24 p4255 A69-43076
- NEMIROVSKII, IU. V.**  
Dynamic behaviour of cylindrical shells strengthened with ring ribs. I - Infinitely long shell.  
21 p3837 A69-39156
- NEMIROVSKII, M. S.**  
Noise resistance of one class of period synchronization systems /Pomekhoustoichivost' odnogo klassa sistem taktovoi sinkhronizatsii/.  
01 p0031 A69-10881
- The noise immunity of a class of clock-pulse synchronization systems.  
12 p0231 A69-26645
- NEMIROVSKII, V. V.**  
Kinetic features of the martensitic transformation during thermomechanical treatment of nickel steels.  
02 p0267 A69-12190
- NEMISH, IU. N.**  
Stressed state of a Cosserat medium weakened by a curvilinear hole /O napriazhenom sostoianii sredy kossiera, oslablennoi krivolineinym otverstiem/.  
01 p0164 A69-10081  
Studies of stress concentration in the moment theory of elasticity /A review/ /Issledovanie po kontsentratsii napriazhenii v momentnoi teorii uprugosti /obzor//.  
08 p1419 A69-21177  
Analogy between the Timoshenko theory of bending of plates and the plane problem of the moment theory of elasticity /Ob analogii mezdu teoriei izgiba plastin tipa S. P. Timoshenko i ploskoi zadachei momentnoi teorii uprugosti/.  
15 p2715 A69-31205
- NEMKOV, N. A.**  
Cementation of Al and V by metallic titanium in titanium-containing concentrated chloride melts /Tsementatsiia Al i V metallicheskim titanom v titanosoderzhashchikh kontsentrirrovannykh khlordnykh rasplavakh/.  
22 p3957 A69-40918
- NEMKOV, R. G.**  
Shock Waves in Real Gases /Udarnye Volny v Real'nykh Gazakh/.  
04 p0589 A69-14937  
Experimental studies of the parameters of the flow behind a shock wave moving in relaxing gas.  
19 p3298 A69-36362
- NEMNONOV, S. A.**  
X-ray spectrum investigation of Ti-Al alloys /Rentgenospektral'noe issledovanie Ti-Al splavov/.  
21 p3749 A69-39787
- NEMOLOCHNOV, A. N.**  
Cosmic ray anisotropy and Forbush effects during a solar activity minimum /Anizotropiia kosmicheskikh luchi i efekty Forbusha v minimume solnechnoi aktivnosti/.  
10 p1758 A69-22835
- NEMOSHKALENKO, V. V.**  
X-ray spectral study of the niobium-aluminum system.  
14 p2508 A69-29664
- NEMOTO, S.**  
Similarity between natural local wind in the atmosphere and model wind in a wind tunnel.  
07 p1176 A69-18964
- NEMOTO, T.**  
Measurement of the noise temperature of a mismatched noise source.  
02 p0210 A69-12441  
Microwave circuit analysis using the equivalent generator concept.  
04 p0582 A69-14755
- NEMOV, V. V.**  
Contribution to the theory of magnetic pumping of an inhomogeneous collisional plasma.  
02 p0288 A69-12167
- NEMSADZE, N. K.**  
Coding of states of a finite automaton /O kodirovani sostoianii konechnogo avtomata/.  
13 p2239 A69-28554
- NEMTSOV, V. B.**  
Statistical determination of the viscosity-coefficient tensor /Statisticheskoe opredelenie tenzora koefitsientov вязкости/.  
05 p0794 A69-15785  
Statistical determination of the tensor of viscosity coefficients.  
18 p3173 A69-35037
- NENAKHOVA, E. M.**  
Comparison of the vertical-circle systems used at Pulkovo and Goloseevo /Sravnenie sistem pulkovskogo i goloseevskogo vertikal'nykh krugov/.  
17 p3027 A69-32872
- NENCIARINI, G.**  
Distribution of carriers in a quasi-intrinsic bar of germanium subjected to an electric field up to several kilovolts per centimeter /Repartition des porteurs dans un barreau de germanium quasi intrinseque, soumis a un champ électrique jusqu'a quelques kilovolts par centimetre/.  
08 p1372 A69-20277



NENOFF, L.

Operational effectiveness of antenna tracking/ communication system drives. 18 p3100 A69-34522

NENRY, R. C.

X-ray pulsar in the Crab Nebula. 13 p2354 A69-28465

NEO, Y. P.

An identification of twilight helium 10,830 angstrom units emission with increased resolution and preliminary photometric measurements. [AFGL-69-0294] 14 p2440 A69-29124

NEPOGODIN, I. A.

Transmission and detection of optical pulses. 14 p2412 A69-29324

NEPOMNIASHCHII, E. F.

Correlation between calculated and experimental estimates of friction surface wear /Korrelatsiia raschetnykh otsenok iznosa poverkhnosti treniia s eksperimentom/. 15 p2618 A69-30106

NEPORENT, B. S.

Stratospheric humidity as determined from the absorption of solar radiation by a resolved spectral structure of water vapor. 09 p1536 A69-21864

NEPTUNE, E. M., JR.

Influence of gas environment on catabolic activities and on reoxidation of reduced nicotinamide adenine dinucleotide phosphate in Chlamydia. 16 p2747 A69-31865

NERBER, P. O.

Warranty cost estimates for avionic subsystems. 18 p3232 A69-34506

NEREM, R. M.

An analysis of reentry flight measurements of shock layer microwave radiation. [AIAA PAPER 69-183] 06 p0865 A69-18201

NERNCHENKO, V. F.

Temperature dependence of the electrical resistance and thermal EMF of carbide alloys of niobium and titanium in the homogeneity range /Temperaturnaia zavisimost' elektrosoprotivleniia i termo - E.D.S. karbidnykh splavov niobia i titana v oblasti ikh gomogenosti/. 20 p3558 A69-36976

NEROVNIA, L. K.

Ionospheric Studies /Ionosfernye Issledovaniia/. 14 p2443 A69-29861

Results of an investigation of the parameters of small-scale inhomogeneities of the ionosphere in Antarctica /Rezultaty issledovaniia parametrov melkomasshtabnykh neodnorodnostei ionosfery v Antarktike/. 14 p2444 A69-29867

Equipment for studying the drift of small-scale ionospheric inhomogeneities /Apparatura dlia issledovaniia drefa melkomasshtabnykh neodnorodnostei ionosfery/. 14 p2452 A69-29875

NERSESIAN, A. B.

Cauchy problem for a one-dimensional hyperbolic equation of arbitrary order with data on the degeneracy line /Zadacha Koshi dlia odnomernogo giperbolicheskogo uravneniia proizvol'nogo poriadka s dannymi na linii vyrozhdeniia/. 01 p0104 A69-10699

NERUBAILO, B. V.

Determination of the stresses in a cylindrical shell subjected to local heating /Opredelenie napriazhenii v tsilindricheskoi obolochke pri lokal'nom nagreve/. 03 p0523 A69-12952

NERURKAR, B. Y.

Satellite television - A system proposal for India. [UN PAPER 68-95750] 01 p0028 A69-10495

NERURKAR, N. W.

On the rigidity spectra of total primary cosmic radiation. 06 p0989 A69-17279

Multiplicity spectrum of a IGY neutron monitor at Gulmarg. 06 p0925 A69-17297

Balloon observations of cosmic X rays in the energy range 20-200 kev. 24 p4368 A69-43185

NESANELIS, M. Z.

Spectrographic determination of microimpurities in aluminum-yttrium garnets. 10 p1747 A69-23843

NESBITT, T. H. E.

Possibilities and problems of future U.S.- European cooperation in the space field. 03 p0535 A69-13588

NESHEIM, D. A.

A solution of the EMC problem. 17 p2947 A69-34136

NESHUMAEVA, T. A.

Influence of the parameters of rib-reinforced cylindrical shells on their stress-strain state /O vlianii parametrov rebristykh tsilindricheskikh obolochek na ikh napriazhenno-deformirovannoe sostoianie/. 23 p4229 A69-42001

NESMEIANOV, A. S.

Study of the scale factor on samples of like size /Ob izuchenii masshtabnogo faktora na obraztsakh odnogo razmera/. 23 p4225 A69-41422

NESMELOV, E.

Antireflection by means of a three-layer symmetric coating /Prosvetlenie trekhslainym simmetrichnym pokrytiem/. 18 p3173 A69-35147

NESS, N. F.

Measurements of the perturbed-interplanetary magnetic field in the lunar wake. 01 p0157 A69-11228

Particle shadowing by the moon. 05 p0824 A69-16252

Satellite studies of the earth's magnetic tail. 07 p1208 A69-19363

Observations of the interplanetary magnetic field, 4-12 July 1966. 10 p1783 A69-23773

A model of interplanetary and coronal magnetic fields. 11 p1958 A69-24429

The geomagnetic tail. 12 p2072 A69-26739

Direct measurements of interplanetary magnetic fields and plasmas. 15 p2679 A69-30010

The electrical conductivity and internal temperature of the moon. 15 p2700 A69-31442

Power spectra of the interplanetary magnetic field. 20 p3603 A69-37554

Dependence of the lunar wake on solar wind plasma characteristics. 20 p3609 A69-38095

Lunar Explorer 35. 21 p3794 A69-38379

NESS, W. G.

Aircraft reliability growth characteristics. 18 p3090 A69-34521

NESTER, W. H.

A generalized class of signal processing arrays. 08 p1287 A69-20959

NESTERENKO, O. P.

Motion of an electrically charged satellite in the earth's magnetic field under the action of a Lorentz force /Dvizhenie elektricheskoi zariazhennogo sputnikn v magnitnom pole zemli pod deistviem sily Lorentsa/. 19 p3431 A69-36615

NESTERENKO, P. S.

Space-charge-limited currents in SbSI single crystals /Toki, ogranichennye prostranstvennym zariadom, v monokristallakh SbSI/. 01 p0137 A69-10258

Space-charge-limited currents in SbSI single crystals. 09 p1559 A69-22651

NESTERIKHIN, I. U. E.

Collisionless shock waves in rarefied plasma. 08 p1303 A69-19996

Nanosecond image converter framing camera types. 12 p2083 A69-26141

Multiframe image converter registration of the process of ruby laser giant pulse formation. 12 p2083 A69-26142

Superfast optical methods for high-speed plasma processes. 12 p2089 A69-26186

Averaged cross sections of the ionization of neutral particle beams by electrons with a Maxwellian velocity distribution /Usrednennye sечeniia ionizatsii puchkov neutral'nykh chastits elektronami, imeiushchimi maksvellovskoe raspredelenie skorosti/. 12 p2138 A69-26542

Millimicrosecond photographic recording of processes in a low-density theta-pinch /Millimikrosekundnaia fotoregistratsiia protsessov v theta-pinch nizkoi plotnosti/. 14 p2496 A69-29787

Facility for plasma diagnostics by a multicomponent beam of fast neutral particles /Ustanovka dlia diagnostiki plazmy mnogokomponentnym puchkom bystrykh neutral'nykh chastits/. 14 p2452 A69-29812

Development of a collisionless shock wave program /Razvitiie programmy po udarnym volnam bez stolknovenii/. 17 p3012 A69-33818

NESTEROV, S. V.

Excitation of finite amplitude waves by a moving pressure system /Vozbuzhdenie voln konechnoi amplitudy begushchei sistemoi davlenii/. 03 p0466 A69-13277

Excitation of finite-amplitude waves by a traveling pressure system. 14 p2482 A69-28785

NESTEROV, V. A.

Formation of a self-sustained discharge in a moving gas /Vozniknovenie samostoiatel'nogo razriada v dvizhushchemsia gaze/. 11 p1933 A69-25545

NESTEROV, V. E.

The study of the high energy cosmic ray particles with the "Proton" satellites. 03 p0499 A69-12944

NESTERUK, V. F.

Calculation of the optimal shape of modulation for a light emission flux /Raschet optimal'noi formy moduliatsii potoka svetovogo izlucheniia/. 04 p0560 A69-15376

Calculation of the optimum shape of light flux modulation. 16 p2752 A69-32123

NESTLER, D. E.

Surface ablation patterns - A phenomenology study. [AIAA PAPER 68-671] 23 p4059 A69-41891

Heat transfer to steps and cavities in hypersonic turbulent flow. [AIAA PAPER 68-673] 23 p4060 A69-41902

NESTOR, O. H.

The effects of solute additions on the stacking fault energy of a nickel-base superalloy. 19 p3343 A69-35925

NESTOROV, G.

The D region at sunrise and small solar heights /Oblastta d pri izgreve i malka visochina na sl'nsete/. 01 p0066 A69-10597

Ionospheric effects of X-ray emission from an active region with a proton flare /30 June-11 July 1966/. 10 p1764 A69-23744

An iono-index about the hard emission of the solar active regions. 12 p2148 A69-26107

Ion kinetics of the lower ionosphere /Ionnaia kinetika nizhnei ionosfery/. 13 p2255 A69-28540

NESTOROV, G. T.

Sunrise effects in the lower D-region by solar eclipse. 02 p0246 A69-12767

On the narrowing of the ionospheric absorption anomaly by solar eclipses. 02 p0246 A69-12770

The cosmic layer in the lower ionosphere at midlatitudes and the effect of modulation and generation processes on it /Kosmicheskii sloi v nizhnei ionosfere na srednikh shirotakh i vliianie na nego moduliatsionnykh i generatsionnykh effektov/. 10 p1759 A69-22840

NESTRIZHENKO, I. U. A.

Laser for photolocation of the moon. 14 p2460 A69-29660

Polarizer of the Lummer-Gehrcke plate type for a neodymium glass laser /Polarizator tipa platiny Lummera-Gerke dlia lazera na stekle s neodimom/. 21 p3739 A69-39541

NETANYAHU, E.

The minimal distance of the image boundary from the origin and the second coefficient of a univalent function in  $z/\ell$  less than 1. 10 p1718 A69-22860

NETSVETILOV, E. M.

Investigation of the characteristics of a multiple-electrode probe in a rarefied plasma flow /Issledovanie kharakteristik mnogielektrodnogo zonda v usloviakh potoka razrezhnoii plazmy/. 19 p3314 A69-36622

- NEU, H.**  
A heat pipe thermionic reactor concept.  
14 p2480 A69-29187
- NEU, H.-J.**  
Investigations of intermittent plastic penetration and flattening processes /Untersuchungen ueber stossartige plastische Eindring- und Abplattvorgaenge/.  
02 p0337 A69-11615
- NEU, J. T.**  
Theoretical and practical implication of the bidirectional reflectance of spacecraft surfaces. [AIAA PAPER 68-26]  
13 p2222 A69-28216  
Refractive index of several glasses as a function of wavelength and temperature.  
17 p3007 A69-34158
- NEUBAUER, H. G.**  
Terrain slopes and their influence on position errors of differential corrections /Die Gelaendeneigungen und ihr Einfluss auf die Lagefehler der differentiellen Entzerrung/.  
22 p3951 A69-41245
- NEUBER, H.**  
The fundamental equations of linear stationary thermoelasticity in Cosserat continua.  
02 p0336 A69-11557  
On the effect of stress concentration in Cosserat continua.  
10 p1799 A69-23150  
Optimal cross-sectional change in a flat bar under tensile stress /Der zugbeanspruchte Flachstab mit optimalem Querschnittsuebergang/.  
11 p1986 A69-25203  
Allowance for stress concentration in strength calculations /Ueber die Beruecksichtigung der Spannungs-konzentration bei Festigkeitsberechnungen/.  
15 p2706 A69-30447
- NEUGEBAUER, G.**  
On the nature of Ryle and Bailey's candidate star for the pulsating radio source CP 1919.  
09 p1591 A69-21455  
A study of visual and infrared observations of SCO XR-1.  
09 p1604 A69-22401  
Spectrophotometry and infrared photometry of BL Lacertae.  
13 p2335 A69-27315  
Infrared observations of eta Carinae to 20 microns.  
13 p2335 A69-27316  
Infrared and optical measurements of the Crab pulsar NP 0532.  
18 p3191 A69-34318  
UBVRIHKL photometry of the central region of M31.  
20 p3610 A69-38141  
1.65-19.5-micron observations of the galactic center.  
21 p3799 A69-38650  
Mariner 1969 - Preliminary results of the infrared radiometer experiment.  
24 p4384 A69-43196
- NEUHAUSER, W. E.**  
Friction and wear characteristics of hot pressed MoS sub 2 -Ni composites in a face seal configuration. [ASLE FICFS PREPRINT 23]  
15 p2620 A69-30491
- NEUKIRCH, P. H.**  
Technological forecasting - How can it affect aerospace planning/ques/. [AAS PAPER 69-105]  
24 p4417 A69-42819
- NEUMAN, W. F.**  
Calcium metabolism in space flight.  
15 p2557 A69-31468
- NEUMANN, B.**  
The design of single-stage rocket vehicles for global air transportation /Zur Auslegung einstufiger Raketen-flugzeuge fuer den globalen Flugverkehr/.  
09 p1433 A69-21303
- NEUMANN, C. J.**  
Frequency and duration of thunderstorms in the Cape Kennedy area.  
18 p3167 A69-35100
- NEUMANN, D. B.**  
Moving object holography with unblurred images of normal brightness.  
11 p1883 A69-24685  
Holographic technique for determining the phase of vibrating objects.  
17 p2974 A69-33324
- NEUMANN, E. G.**  
The electrical field on a curved dielectric waveguide /Das elektrische Feld an einer gekruemmten dielektrischen Leitung/.  
11 p1856 A69-25633
- NEUMANN, G.**  
Radar altimetry from a spacecraft and its potential applications to geodesy.  
15 p2609 A69-30460  
Oceanographic applications of radar altimetry from a spacecraft.  
15 p2609 A69-30461
- NEUMANN, H.**  
Nonlinear effects of field emission from semiconductors /Nichtlineare Effekte bei der Feldemission aus Halbleitern/.  
05 p0806 A69-15630
- NEUMANN, J. P.**  
The high-temperature stability of thoria-strengthened nickel-chromium alloys.  
14 p2465 A69-29682
- NEUMANN, K.-H.**  
Report of the observation of the total solar eclipse of September 22, 1968 /Bericht ueber die Beobachtung der totalen Sonnenfinsternis vom 22. September 1968/.  
10 p1782 A69-23696
- NEUMANN, P.**  
Graphical representation of stress distributions and of the forces on dislocations.  
03 p0529 A69-13973  
Strain bursts and coarse slip during cyclic deformation.  
05 p0779 A69-15905
- NEUMYVAKIN, I. P.**  
Changes in the indices of external respiration, gas exchange, and energy expenditure in humans under conditions of weightlessness /Izmeneniia pokazatelei vneshnego dykhanii, gazoobmena i energotrat cheloveka v usloviakh nevesomosti/.  
12 p2020 A69-26563
- NEUNZERT, H.**  
Investigations concerning the Boltzmann equation /Untersuchungen zur Boltzmann-Gleichung/.  
10 p1724 A69-22908
- NEUPERT, W. M.**  
X-ray and extreme ultraviolet /1-400 angstrom units/ spectroscopy of the sun, from OSO-III.  
09 p1578 A69-22169  
X rays from the sun.  
21 p3791 A69-39506  
Observations of the solar flare soft X-ray spectrum and comparison with centimetric radio bursts.  
24 p4371 A69-43609
- NEUREUTHER, A. R.**  
Numerical solutions of electromagnetic boundary value problems by means of the asymptotic anticipation method.  
04 p0560 A69-15214  
Numerical methods for the analysis of scattering from nonplanar periodic structures.  
17 p2929 A69-33880  
Radar cross section of a long wire.  
23 p4116 A69-41594
- NEURINGER, J. L.**  
Derivation of the spectral density function of the energy scattered from an underdense turbulent wake.  
16 p2732 A69-31893
- NEUSCHAEFER, R. W.**  
Assuring Saturn quality through nondestructive testing.  
10 p1699 A69-23050  
Assuring Saturn quality through nondestructive testing.  
19 p3431 A69-36329
- NEUSTADT, L. W.**  
A general theory of extremals.  
10 p1721 A69-23864
- NEVSTRUEV, V. B.**  
Effect of color centers on the Cr super 3 plus spectrum in ruby /Vliianie tsentrov okraske na spektr Cr super 3 plus v rubine/.  
19 p3335 A69-36166
- NEUVY, J.**  
Formula making possible the determination of the range of a radar on any target /Formule permettant la determination de la portee d'un radar sur une cible quelconque/.  
04 p0560 A69-15227
- A special slide rule making possible the practical determination of the range of radars /Une regle a calcul speciale permettant la determination pratique de la portee des radars/.  
04 p0560 A69-15230
- The Aida II onboard radar /Le radar de bord Aida II/.  
19 p3278 A69-36701
- NEVALAINEN, T. J.**  
Direct epoxy embedding for vertical sectioning of cells grown as a monolayer on Millipore filter.  
10 p1649 A69-23404
- NEVAREZ, J. R.**  
Phase-lock plots for injection-locked oscillators.  
07 p1100 A69-18645  
Output power and loss analysis of 2 super n injection-locked oscillators combined through an ideal and symmetric hybrid combiner.  
13 p2232 A69-28061
- NEVELEV, A. IA.**  
Cadmium sulfide thin-film hypersonic transducers.  
15 p2575 A69-30236
- NEVERAUSKAS, A. V.**  
Analysis of the transient response of a transistor with allowance for the switching- pulse parameters /Analiz perekhodnykh protsessov v tranzistore s uchedom parametrov perekliuchaiushchego impul'sa/.  
12 p2043 A69-26884
- NEVEROV, I. V.**  
Solution of nonlinear problems of the theory of shallow shells by means of variational iterations /Reshenie nelineinykh zadach teorii pologikh obolochek putem variatsionnykh iteratsii/.  
21 p3838 A69-39185
- NEVILL, G. E., JR.**  
Dynamic properties of metal powder-epoxy resin composites.  
07 p1159 A69-18721  
A correction technique for structural impact modeling using dissimilar materials.  
24 p4406 A69-43692
- NEVILLE, E. D.**  
In vivo utilization of acetate-1-C super 14 in centrifuged rats.  
07 p1067 A69-19429  
Conversion of acetate-2-super 14 C to super 14 CO sub 2 and super 14 C-fatty acids in the partially hepatectomized rat /33627/.  
19 p3257 A69-35976  
Effects of hyperoxia and hypoxia on mitosis in the normal and regenerating rat liver.  
24 p4269 A69-43565
- NEVILLE, J. R.**  
Biologic activity of noble gases.  
19 p3258 A69-36454
- NEVILLE, R. W.**  
The CX-84 tilt-wing VSTOL military evaluation program. [AHS PAPER 351]  
17 p2900 A69-33526
- NEVINS, R. G.**  
Predicted and measured heat losses and thermal comfort conditions for human beings.  
06 p0880 A69-17087
- NEVOLKO, M. P.**  
Methods of determining the parameters of motion of artificial earth satellites from a selection of a complete or increasing volume of measurements using second-order derivatives /Metody opredeleniia parametrov dvizheniia ISZ po vyborke izmerenii polnogo i narastaiushchego ob'emov s ispol'zovaniem proizvodnykh vtorgoro poriadka/.  
22 p4033 A69-41088
- NEVSKAIA, G. F.**  
Radiobiological evidence on the importance of local protection of the astronaut.  
08 p1263 A69-19939
- NEVSKII, A. S.**  
Effect of macroscopic roughness on the character of the emission from a surface.  
18 p3229 A69-34711
- NEVSKII, M. V.**  
Equipment for studying semiconductor optical quantum amplifiers /Apparatura dlia issledovaniia poluprovodnikovykh opticheskikh kvantovykh usilitelei/.  
18 p3153 A69-35258
- NEVSTRUEVA, V. S.**  
Changes in the corticosteroid and catecholamine metabolism during a sharp limitation of the motor activity of the organism /Izmeneniia kortikosteroidnogo i



- katekholaminovogo obmena pri rezkom ogranichenii dvigatel'noi aktivnosti organizma/,  
12 p2021 A69-26973
- NEVZGLIADOV, V. G.**  
Inertial motion of a uniform deformation body /Ob inertionnom dvizhenii tela odnorodnoi deformatsii/,  
21 p3772 A69-39620
- NEVZOROV, I. I.**  
Influence of a lubrication film on the axial rigidity of a high-speed radially resistant ball bearing /Vliianie maslianoi plenki na oseuiu zhestkost' bystrovrashchaishegosia sharikopodshpnika/,  
23 p4169 A69-41555
- NEW, G. H. C.**  
Subpicosecond structure in Nd-glass laser relaxation oscillations.  
06 p0938 A69-18231
- NEW, N. D.**  
Birds and aircraft - The problems.  
17 p2899 A69-33363
- NEWBERRY, A. R.**  
The output characteristics of a slowly Q-switched neodymium in calcium tungstate laser.  
04 p0612 A69-15206  
The production of two controlled Q-switched pulses from an electro-optically Q-switched laser.  
11 p1899 A69-25052
- NEWBOLD, P. M.**  
Detection of changes in the characteristics of a Gauss-Markov process.  
01 p0083 A69-11002
- NEWBURY, B. C.**  
Surveillance of air pollution from airborne and space platforms.  
12 p2096 A69-26981
- NEWELL, E. B.**  
The blue horizontal-branch stars of NGC 6397.  
15 p2692 A69-30770
- NEWELL, H. E.**  
Contributions and results of space science programs.  
01 p0151 A69-10498  
Current program and considerations of the future for earth resources survey.  
12 p2192 A69-26978
- NEWELL, P. H., JR.**  
Analysis of combined free and forced convection for fully developed laminar flow in horizontal tubes.  
24 p4409 A69-43519
- NEWELL, R. E.**  
Measurements of the afternoon radio aurora at 1295 MHz.  
05 p0754 A69-16265  
Exchange of atmospheric angular momentum between the hemispheres.  
07 p1127 A69-19258  
Observational studies of the general circulation of the tropics - Long term mean values.  
18 p3165 A69-34418
- NEWHEY, C. W. A.**  
The mechanical behaviour of an iron-11 at percent molybdenum alloy in the temperature range 295 to 1100 deg K.  
12 p2116 A69-26925
- NEWKIRK, G., JR.**  
Coronal electron densities during the period of the July 1966 proton flare.  
10 p1763 A69-23733
- NEWKIRK, L. L.**  
Radial diffusion coefficient for electrons at 1.76 less than L less than 5.  
03 p0502 A69-14002
- NEWMAN, B. G.**  
The turbulent wall jet in an arbitrary pressure gradient.  
11 p1873 A69-25139
- NEWMAN, D. J.**  
Hybrid assumed mode solution of non-linear partial differential equations.  
04 p0566 A69-15345
- NEWMAN, D. R.**  
Aircraft design as determined by airport facilities and the environment.  
17 p2948 A69-34209
- NEWMAN, E. T.**  
Hyperbolic differential equations in two dimensions.  
06 p0948 A69-17786

- NEWMAN, H. J.**  
Design of a nuclear furnace reactor.  
[AIAA PAPER 69-513] 16 p2810 A69-32656
- NEWMAN, R. C.**  
The effect of transverse-variation of solar wind speed on cosmic rays.  
16 p2849 A69-32088
- NEWMAN, R. J.**  
RCS calculation of simple shapes - Bistatic.  
03 p0384 A69-12906  
Radar cross-section of dielectric bodies.  
03 p0384 A69-12907  
RCS enhancement devices.  
03 p0384 A69-12909  
The interpretation of data.  
03 p0385 A69-12913
- NEWMAN, T. G.**  
On the concept of a p-q generalized inverse of a matrix.  
24 p4342 A69-43703
- NEWNAM, B. E.**  
High-temperature reflectance measurements with the paraboloid reflectometer.  
[AIAA PAPER 68-25] 04 p0604 A69-15512  
Electrostatic rocket exhaust effects on solar-electric spacecraft subsystems.  
[AIAA PAPER 69-271] 09 p1569 A69-21874
- NEWNES, C. R.**  
The performance of STOL aircraft.  
13 p2203 A69-28356
- NEWNHAM, J. A.**  
Effect of die surface composition on friction and adhesion in deformation processing.  
15 p2629 A69-30902
- NEWNS, D. M.**  
Fermi-Thomas response of a metal surface to an external point charge.  
20 p3583 A69-37498
- NEWSOM, B. D.**  
Optokinetic reflex responses to cross-coupled gyroscopic stimuli.  
14 p2409 A69-29300  
A lurain simulator for metabolic studies.  
17 p2914 A69-33187  
The space research centrifuge design and evolution of experiments.  
18 p3114 A69-34368  
Relevance of a space-research centrifuge to future space-flight programs.  
23 p4108 A69-41833
- NEWSOM, G. H.**  
Oscillator strengths of the red auto-ionizing lines of calcium.  
09 p1601 A69-22208
- NEWSOM, W. A.**  
Fan V/STOL aircraft.  
05 p0701 A69-15565  
The danger of contact lenses at altitude.  
23 p4106 A69-41806
- NEWSTEAD, R. A.**  
Solar limb brightening and enhancement measurements at 1.2 mm.  
07 p1217 A69-19243  
Submillimetre solar radiation at sea level.  
13 p2327 A69-27590  
Millimetre and submillimetre astronomy.  
13 p2343 A69-27603
- NEWTON, A. S.**  
Metastable species produced by electron excitation of N sub 2, H sub 2, N sub 2 O, and CO sub 2.  
13 p2301 A69-27362
- NEWTON, B. H.**  
Self-pumped Gunn-effect parametric amplifier.  
07 p1107 A69-19450
- NEWTON, C. O.**  
Theoretical analysis of domain propagation in Gunn diodes with annular geometry.  
09 p1464 A69-22159
- NEWTON, D. A.**  
Boundary value problems in thin shallow shells of arbitrary plan form.  
01 p0171 A69-11071
- NEWTON, E.**  
Aircraft damaged or destroyed by deliberate detonation of explosives /sabotage/.  
04 p0549 A69-14943

- NEWTON, G. P.**  
Direct in situ measurements of wave propagation in the neutral thermosphere.  
05 p0754 A69-16261  
Midlatitude neutral thermosphere density and temperature measurements.  
05 p0755 A69-16268  
Latitudinal variations in the neutral atmospheric density.  
20 p3535 A69-38100
- NEWTON, J. F.**  
Observables testing of ablative materials.  
02 p0229 A69-12502
- NEWTON, J. K.**  
Dynamics of a libration-damped discretized cruciform structure.  
11 p1989 A69-25502  
Continuous and discrete RAE structural models.  
[AAS PAPER 68-126] 21 p3819 A69-39211  
Optimal estimation of rotation-coupled flexural oscillations.  
24 p4394 A69-43291
- NEWTON, J. S.**  
Research and Development for economic growth.  
17 p3077 A69-34126
- NEWTON, R. E.**  
Plate buckling analysis using a fully compatible finite element.  
13 p2364 A69-28225  
Depth distortions in binocular fields.  
21 p3653 A69-38900
- NEWTON, W. H.**  
An experimental investigation of the velocity distribution in a confined vortex.  
01 p0060 A69-10413
- NEY, E. P.**  
OSO-B2 satellite observations of zodiacal light.  
02 p0245 A69-12718  
Circumstellar infrared emission from cool stars.  
10 p1786 A69-24102  
The infrared sources in the Trapezium region of M42.  
10 p1786 A69-24105  
Lunar thermal anomalies - Infrared observations.  
12 p2171 A69-27092
- NEYHART, P. L.**  
Living with reliability test specifications.  
22 p3952 A69-40025
- NEYLAND, H. M.**  
Color orthophotography.  
22 p3949 A69-40998
- NEYRET, R.**  
Certain factors acting on the mechanical characteristics of alloy-steel castings - Comparison with steel forgings /Quelques facteurs intervenant sur les caracteristiques mecaniques des pieces moulees en aciers allies - Parallele avec l'acier forge/.  
11 p1904 A69-24644
- NEZOVIBATKO, I. U. N.**  
Alfven oscillations in an inhomogeneous plasma from a pulsed discharge with oscillating electrodes /Al'fvenovskie kolebaniia neodnorodnoi plazmy v impul'snom razriade s ostilsiliriushchimi elektronami/.  
09 p1550 A69-22020
- NEZVAL, E. I.**  
Ultraviolet Radiation of the Sun and Sky /Ultravioletovaiia radiatsiia solntsa i neba/.  
07 p1221 A69-19506
- NG, C. C. W.**  
Performance of the orifice-compensated hydrostatic face seal under pressure and thermal loading.  
[ASME PAPER 68-WA/LUB-6] 05 p0768 A69-16131
- NG, E. W.**  
A table of integrals of the error functions.  
12 p2121 A69-26395  
Chebyshev polynomial expansion of Bose-Einstein functions of orders 1 to 10.  
24 p4341 A69-43231  
A table of integrals of the exponential integral.  
24 p4341 A69-43324
- NG, K. C.**  
Influence of the self-induced magnetic field on the stability of a plasma column in a longitudinal magnetic field.  
24 p4356 A69-43366

- NGAI, K. L.**  
Interaction of AC Josephson currents with surface plasmons in thin superconducting films.  
22 p3992 A69-40420
- NGUEN-FUK-NIN**  
Oscillations of a cantilevered rectangular plate with reinforcing ribs in a gas flow /Kolebaniia konsol'noi priamougol'noi plastinki s rebriami zhestkosti v potoke gaza/.  
01 p0165 A69-10085
- NGUYEN DUC, X.**  
Thermal radiation of potassium in gases used in magneto-hydrodynamics /Rayonnement thermique du potassium dans les gaz utilises en magneto-hydrodynamique/.  
13 p2308 A69-28022  
Rayleigh-Taylor instabilities in magneto-hydrodynamics /Instabilites de Rayleigh-Taylor en magneto-hydrodynamique/.  
13 p2310 A69-28033
- NGUYEN-HOE**  
Stark-broadening of hydrogen Balmer lines in the presence of strong magnetic fields in plasmas.  
09 p1542 A69-22248
- NGUYEN-QUANG-RIEU**  
Estimation of errors on the characteristics of a radio-signal.  
07 p1088 A69-19722
- NGUYEN, D. T.**  
Linear antennas in a warm plasma driven from a coaxial air-filled transmission line.  
02 p0215 A69-11942  
Input admittance of an insulated antenna in a plasma medium.  
04 p0580 A69-15490  
Contributions to cadmium sulfide-copper sulfide solar cell studies.  
19 p3250 A69-35685
- NGUYEN, H. P.**  
Coupled antennas in a dissipative medium.  
02 p0215 A69-11946
- NICASTRO, J.**  
Similitude for shock-wave initiated flux compression.  
16 p2768 A69-31665
- NICHIPORENKO, O. S.**  
Calculation and design of sprayers for spraying liquid metals /Raschet i konstruirovaniye forsunkov dlia raspyleniia zhidkikh metallov/.  
21 p3728 A69-38613
- NICHOLAS, J. E.**  
A flash photolytic study of the explosive reaction between hydrogen and oxygen sensitized by nitrogen dioxide, chlorine and bromine.  
11 p1832 A69-24878
- NICHOLAS, J. W.**  
An engineering approach to hazard rate distribution functions.  
20 p3548 A69-37158
- NICHOLAS, M.**  
The strength of metal/alumina interfaces.  
03 p0447 A69-13612
- NICHOLL, J.**  
Flight performance analysis.  
22 p3868 A69-41145
- NICHOLLS, J. A.**  
Observed structure of spray detonations.  
03 p0415 A69-13139  
Aerodynamic shattering of liquid drops.  
[AIAA PAPER 68-83] 09 p1482 A69-21947  
Cavities formed on liquid surfaces by impinging gaseous jets.  
11 p1869 A69-24888  
Two-phase detonation of a liquid layer.  
16 p2879 A69-32151
- NICHOLLS, J. I.**  
Two examples of linear programming in optimal structural-weight design.  
12 p2181 A69-26566
- NICHOLLS, R. W.**  
Franck-Condon factors for ionizing transitions of O sub 2, CO, NO and H sub 2 and for the NO super plus /A super 1 sigma - X super 1 sigma/ band system.  
05 p0795 A69-15664  
Relative band strengths for the AIO blue-green system.  
07 p1184 A69-19163  
Pink afterglow of nitrogen.  
24 p4353 A69-43749
- NICHOLS, B. H.**  
The use of process control data in acceptance procedures for high reliability components.  
08 p1293 A69-21110
- NICHOLS, C. D.**  
Microelectronic data and control transmission system for dynamic wind-tunnel testing.  
10 p1672 A69-23283
- NICHOLS, C. R.**  
Automatic controls for facilities and Mercury ion thrusters in durability testing.  
[AIAA PAPER 68-576] 02 p0229 A69-12385
- NICHOLS, D. E. T.**  
Active aeriels for aircraft communications.  
08 p1289 A69-20972
- NICHOLS, D. J.**  
Changes induced in stabilized image visibility by experimental alteration of the ongoing Eeg.  
22 p3871 A69-40159
- NICHOLS, E. R.**  
Q switching of the carbon monoxide laser.  
21 p3742 A69-39742
- NICHOLS, F. H.**  
The Ames combined heating facility.  
[AIAA PAPER 69-342] 13 p2243 A69-28278
- NICHOLS, G. E.**  
Observation of trans-iron nuclei in the primary cosmic radiation.  
21 p3787 A69-38327
- NICHOLS, H. H.**  
Evaluation of some large area silicon junction detectors for cryogenic applications.  
20 p3546 A69-38275
- NICHOLS, L. L.**  
Measurement of the super 10 B/n, alpha/ super 7 Li, super 7 Li/ relative cross sections in the kev region.  
17 p3008 A69-33753
- NICHOLS, M. H.**  
Cause and effect of time base errors in coherent demodulation of a suppressed carrier AM multiplex.  
07 p1082 A69-19119
- NICHOLS, R. J.**  
Thermal and ablative lag induced by a periodic heat input.  
[AIAA PAPER 67-336] 04 p0685 A69-14720
- NICHOLS, R. W.**  
Fracture mechanics considerations in the Charpy impact test.  
05 p0780 A69-16431
- NICHOLSON, A. N.**  
Neuropathological correlates of neurological impairment following prolonged decompression.  
07 p1067 A69-19426  
Study of the effect of cabin environment on insensible water loss.  
17 p2914 A69-33182  
Neurological study of simulated decompression in supersonic transport aircraft.  
21 p3665 A69-39171  
Responsiveness of the cortex and visual pathway during transient hypotension.  
22 p3878 A69-40779
- NICHOLSON, L. F.**  
Operational research in the RAF.  
01 p0180 A69-10863
- NICHOLSON, R. B.**  
Studies of segregation and the initial stages of precipitation at grain boundaries in an aluminium 7 wt. percent magnesium alloy with an energy analysing electron microscope.  
03 p0442 A69-12894
- NICHOLSON, W. Q.**  
Computers in maintenance control.  
17 p2979 A69-33649
- NICKELL, R. E.**  
Stress wave propagation using the extended Ritz method.  
11 p1993 A69-25527
- NICKERSON, R. S.**  
Man-computer interaction - A challenge for human factors research.  
24 p4274 A69-43016
- NICKLAS, W. J.**  
Compartmentation of glutamic acid metabolism in brain slices.  
18 p3096 A69-35172
- NICODEMI, W.**  
Considerations on the different fatigue behaviors of maraging and conventional steels in rotational bending /Considerazioni sul differente comportamento alla fatica a flessione rotante degli acciai maraging e di quelli tradizionali/.  
24 p4335 A69-43802
- NICOL, S. W.**  
Parametric analysis of some requirements for life support systems applied to earth orbital missions.  
[SAE PAPER 680746] 03 p0379 A69-13438  
Parametric thermal control requirements for future spacecraft.  
[AIAA PAPER 69-621] 17 p2914 A69-33305
- NICOLAIDES, J. D.**  
An investigation of the non-linear flight dynamics of ordnance weapons.  
[AIAA PAPER 69-135] 06 p0863 A69-18120  
Nonlinear aerodynamic characteristics of re-entry configurations with aerodynamic and mass asymmetries.  
[AIAA PAPER 69-867] 21 p3823 A69-39393
- NICOLAS, G.**  
IFF/SIF secondary radar system /Systeme IFF/SIF radar secondaire/.  
19 p3278 A69-36702  
Study and development of a wire-type space memory /Etude et realisation d'une memoire a fils spatiale/.  
20 p3503 A69-37403
- NICOLAS, J.-J.**  
Contribution to the study of the ablation of some materials based on phenolic resins.  
11 p1999 A69-24908
- NICOLAS, M.**  
Rapid scanning by signal processing /Balayage rapide par traitement du signal/.  
10 p1657 A69-23801
- NICOLESCU, B.**  
On the S-matrix theory of electromagnetic interactions.  
08 p1351 A69-20211
- NICOLET, M.**  
Ends and means of space research /Fins et moyens de la recherche spatiale/.  
04 p0658 A69-14882  
Absorption in the spectral range of the Schumann-Runge bands.  
06 p0960 A69-17090
- NICOLET, M.-A.**  
Noise and equivalent circuit of double injection.  
06 p0898 A69-17762
- NICOLETTA, C. A.**  
An in situ facility for the determination of the effects of a space environment on the solar absorptance of materials.  
[AIAA PAPER 69-1021] 22 p3923 A69-40392
- NICOLIS, G.**  
Application of the Prigogine-Nicolis-Misguich theory of transport.  
04 p0589 A69-14863
- NICOLIS, J. S.**  
The behavior of the first normal modes and the lateral wave in a weak dielectric layer.  
01 p0033 A69-10975
- NICOLL, F. H.**  
An experimental pulsed CdS laser cathode-ray tube.  
01 p0039 A69-10175
- NICOLL, W. B.**  
A modified entrainment theory for the prediction of turbulent boundary layer growth in adverse pressure gradients.  
[ASME PAPER 69-FE-16] 20 p3517 A69-37991
- NICOLOFF, D. M.**  
Hypoxia and edema of the perfused isolated canine lung.  
22 p3887 A69-41189
- NICOLSON, A. M.**  
Broad-band microwave transmission characteristics from a single measurement of the transient response.  
12 p2038 A69-26056
- NICOT, J.**  
Temporary storage unit with a cycle time of 500 nsec /Memoire temporaire a temps de cycle de 500 ns/.  
04 p0564 A69-15222
- NIEBANCK, C. F.**  
A comparison of dynamically scaled model rotor test data with discrete azimuth aeroelastic stability theory.  
[AHS PAPER 341] 17 p3059 A69-33506



## NIEBERLEIN, V. A.

Deposition of silicon carbide from liquid compounds. 02 p0252 A69-11804

## NIEDERMEYER, H.

Investigation of energy dissipation in collisionless shock waves. 17 p3013 A69-33820

## NIEDERSTADT, G.

Development of a light passenger aircraft made of glass-fiber-reinforced plastic /Entwicklung eines leichten Reiseflugzeuges aus Glasfaser-Kunststoff/. 03 p0454 A69-13822

Temperature-stable composites /Temperaturbeständige Verbundwerkstoffe/. 12 p2117 A69-25855

## NIEDRA, J. M.

A passive isolating transformer of repeated positive or negative voltage pulses. 01 p0043 A69-10564

## NIEDZIALEK, B.

Design and calibration of measuring probes for studies of jet engine combustion chambers /Konstrukcja i wzorcowanie sond pomiarowych do badan komor spalania silnikow przeplywowych/. 17 p2945 A69-32947

## NIEDZIOŁKA, E.

Electrical conductivity of the earth's mantle /Przewodnictwo elektryczne płaszcza ziemi/. 08 p1306 A69-19825

## NIEDZWIEDZ, S.

On the precipitation of Ni sub 3 Nb. 24 p4331 A69-42903

## NIEHOFF, J. C.

Jupiter gravity-assisted trajectories. [AAS PAPER 68-116] 21 p3805 A69-39224

## NIEKE, H.

Semiconductor properties of tellurides. XV - Hall effect and conductivity of crystals in the system In sub 2 Te sub 3-Sb sub 2 Te sub 3 /Halbleitereigenschaften von Telluriden. XV - Halleffekt und Leitfähigkeit von Kristallen des Systems In sub 2 Te sub 3-Sb sub 2 Te sub 3/. 21 p3779 A69-38580

## NIELL, A. E.

Declination measurements of selected 4C sources using the Arecibo 1000-ft reflector. 22 p4014 A69-40128

## NIELSEN, E. D.

Scattering by a cylindrical post of complex permittivity in a waveguide. 16 p2756 A69-31578

## NIELSEN, H.

Long-term tests of the creep characteristics of AlMg alloys at elevated temperatures /Langzeitversuche zum Zeitstandverhalten von AlMg-Legierungen bei erhöhten Temperaturen/. 16 p2801 A69-31782

Separation and flow reversal in swirling flows in circular ducts. 24 p4301 A69-43355

## NIELSEN, J. N.

Review of methods for predicting the aerodynamic characteristics of parawings. [AIAA PAPER 68-10] 01 p0007 A69-11027

## NIELSEN, L. E.

Electrical slippings for space simulation testing. [AIAA PAPER 69-1035] 22 p3925 A69-40402

## NIELSEN, N. A.

Electron microfractography of stress-corrosion cracking. 19 p3350 A69-36891

## NIELSEN, P.

Continuous supersonic plasma wind tunnel. 15 p2589 A69-30909

## NIEMANN, H.

A theory for the quantitative description and recognition of patterns /Eine Theorie zur quantitativen Beschreibung und Erkennung von Mustern/. 09 p1461 A69-22292

## NIEMANN, R. A.

Some recent results in aerospace vehicle trajectory optimization techniques. 06 p1006 A69-17569

## NIEMEYER, M.

Tunnel diode amplifiers for communication satellites in the 5.5 to 6.5-GHz range /Tunneldiodenverstärker

fuer Nachrichtensatelliten im Bereich von 5,5 - 6,5 GHz/. 07 p1099 A69-18464

Theory and development of integrated tunnel diode amplifiers /Theorie und Entwicklung von integrierten Tunneldiodenverstärkern/. 11 p1854 A69-25611

## NIEMYSKI, T.

P-n junctions formed during growth of gallium phosphide crystals /Zlaczna p-n powstające w czasie wzrostu krystalow fosforu galu/. 13 p3233 A69-28642

## NIENDORF, L. R.

SNAP-21 10-watt thermoelectric power system. 23 p4069 A69-42248

## NIEHOW, R. B.

Putting R and D on a profit-making basis. 14 p2541 A69-29280

## NIER, A. O.

A study of day-night variations in the neutral composition of the lower thermosphere. 01 p0076 A69-11231

Mass spectrometric studies of the composition of the lower thermosphere during summer 1967. 03 p0425 A69-14009

## NIEROSKI, J. S.

Economics of commercial space stations. 06 p1007 A69-17599

## NIESLEY, J. E., SR.

Launch vehicle weight growth cost effects as determined using a market analysis program /MAP/. [SAWE PAPER 776] 18 p3208 A69-34872

## NIESYTTO, J.

Supersonic linearized non-isentropic /with internal heat sources/ flow of viscous and heat conducting gas past a deformable cylindrical shell of finite length. 18 p3089 A69-35460

## NIETO, M.

Human physiopathology in face of radiation and hibernation. 06 p0874 A69-17645

## NIEUWENHUIZEN, H.

On the Doppler frequency shift of light using rotating mirrors. 24 p4351 A69-43806

## NIFANTEVA, F. P.

Passage of a quasi-harmonic signal through a parametric limiter /Prokhozhdenie kvazigarmonicheskogo signala cherez parametricheskii ogranicitel/. 13 p2236 A69-28573

## NIFONTOV, I. U. A.

Digital processing of pulse signals under conditions of correlated noise /Tsifrovaia obrabotka impul'snykh signalov v usloviakh vozdeistviia korrelirovannykh pomekh/. 15 p2571 A69-30126

## NIGAM, G. D.

Flow of a fluid in a spherical container in presence of rotating magnetic field. 23 p4196 A69-41609

## NIGAM, S. D.

Differential rotation of a sphere in a viscous liquid. 04 p0590 A69-15278

## NIGGEMANN, R. E.

Zirconium hydride reactor - Organic Rankine power systems. 23 p4189 A69-42265

## NIGHAN, W. L.

Electrical conductivity of partially ionized noble gases. 11 p1923 A69-24295

Electron energy distribution functions and vibrational excitation rates in CO sub 2 laser mixtures. 14 p2460 A69-29603

## NIGHTINGALE, J. M.

Symbolic functions and first-order operators. 13 p2287 A69-27242

## NIGUL, U.

On the application of methods of three-dimensional analysis to problems of propagation of transient plane bending waves in elastic plates. I. 03 p0525 A69-13606

Regions of effective application of the methods of three-dimensional and two-dimensional analysis of transient stress waves in shells and plates. 16 p2876 A69-32785

## NIGUL, U. K.

Theory of wave processes in the axisymmetric deformation of a spherical shell. 16 p2875 A69-32288

Comparison of the results of an analysis of the transient wave processes in shells and plates, based on the theory of elasticity and approximate theories /Sopostavlenie rezul'tatov analiza perekhodnykh volnovykh protsessov v obolochkakh i plastinakh po teorii uprugosti i priblizhennym teoriim/. 18 p3224 A69-35321

## NIHEI, F.

Interaction of plane electromagnetic waves with a moving compressible plasma fluid. 08 p1360 A69-20097

Interaction of a plane electromagnetic wave with a moving conductive dielectric medium. 18 p3105 A69-35486

## NIHOUL, J.

The recovery of cold-worked molybdenum. 15 p2636 A69-30082

## NIHOUL, J. C. J.

On a Canonical form of the Navier-Stokes equations. 08 p1303 A69-20125

Tentative Lagrangian for the determination of the mean velocity profile in turbulent channel flow by a Hamiltonian principle. 10 p1678 A69-22909

On a principle of "minimum Reynolds number" and the Malkus theory of turbulent channel flow. 17 p2957 A69-33764

## NIIAZOVA, O. R.

Radiation-induced changes in CdS crystals in the process of stimulation of coherent emission in them /O radiatsionnykh izmeneniyakh kristallov CdS v protsesse vzbuzhdeniia v nikh kogherentnogo izlucheniia/. 21 p3780 A69-39047

## NIILSK, KH. IU.

The computation of mean atmospheric downward radiation fluxes for large territories. 03 p0422 A69-13410

## NIIMI, H.

Two dimensional steady MHD jet under the influence of thermal radiation. 02 p0287 A69-11831

Effect of differential rotation on the gravitational instability of a stellar system. 24 p4388 A69-43639

## NIIIMURA, Y.

Plastic deformation and rupture of thin circular plate under lateral pressure. I - Studies on rupture disc. 06 p1020 A69-17129

## NIIISAWA, J.

Torsional buckling of orthotropic circular cylindrical shells under internal pressure. 22 p4042 A69-40171

## NIJSING, R.

Predictions on momentum, heat and mass transfer in turbulent channel flow with the aid of a boundary layer growth-breakdown model. 24 p4407 A69-42914

## NIKANDROV, V. IA.

Physics of Clouds and Cloud Modification /Fizika Oblakov i Aktivnykh Vozdeistvi/. 03 p0459 A69-13285

## NIKANOROV, M. A.

Influence of purity of the charge materials on the properties of beta titanium alloys /Vliianie chistoty shikhtovykh materialov na svoistva beta-titanovykh splavov/. 01 p0094 A69-10216

Effect of charge material purity on the properties of beta-titanium alloys. 15 p2638 A69-30272

## NIKI, E.

Mechanical properties of glass and graphite fibers for FRP. 21 p3753 A69-39799

## NIKIFOROVA, E. N.

The possibility of using hydrogen peroxide mixed with a detergent to reduce microbial contamination. 05 p0713 A69-15943

## NIKIFORUK, P. N.

The application of parametric sensitivity coefficient vectors to the design of parameter tracking and self-adaptive multivariable control systems. 06 p0900 A69-17352

**NIKISHANOVA, T. I.**  
Possibility of using sweet potatoes as the basic source of carbohydrates in the diet of man during a space flight /O vozmozhnosti ispol'zovaniia batata v kachestve osnovnogo istochnika uglevodov v pitanii cheloveka vo vremia kosmicheskogo poleta/.  
13 p2216 A69-28619

**NIKITCHENKO, V. V.**  
Effect of laser radiation on the electrical conductivity of the animal liver /Vpliv viprominiuvannia optichnogo kvantovogo generatora /lazera/ na elektroprovodnist' pechinki tvarin/.  
23 p4111 A69-42344

**NIKITENKO, A. F.**  
An equation of creep for hardened materials /Ob uravnenii polzuchesti materialov s uprochneniem/.  
22 p3971 A69-41033

**NIKITENKO, N. I.**  
Mechanism of heat transfer in a solid body /K voprosu o mekhanizme teploperenosa v tverdom tele/.  
09 p1621 A69-21587

**NIKITENKO, V. I.**  
Possibility of direct investigation of the influence of dislocations on the processes of magnetization of yttrium iron garnet crystals.  
09 p1559 A69-22532

**NIKITIN, A. E.**  
Sodium thermal reduction of titanium tetrachloride to titanium /Natrietricheskoe vosstanovlenie titana iz tetrakhlorida/.  
07 p1164 A69-18785

**NIKITIN, A. I.**  
Influence of surface contamination of the storage flask on the operation of a hydrogen quantum oscillator /Vliianie zagriazneniia poverkhnosti nakopitel'noi kolby na rahuotu vodorodnogo kvantovogo generatora/.  
15 p2634 A69-30942

Emission spectrum of a chemical laser using an H sub 2 plus F sub 2 mixture.  
23 p4172 A69-41493

**NIKITIN, E. A.**  
Errors of floating devices with hydrostatic unloading of the bearings /Pogreshnosti poplavkovykh priborov s gidrostaticheskoi razgruzkoi opor/.  
09 p1497 A69-22103

Magnetic centering of the floating system of an integrating gyroscope /Magnitnoe tsentrirovanie poplavkovogo uzla integriruiushchego giruskopa/.  
09 p1497 A69-22104

**NIKITIN, E. N.**  
Lattice heat conductivity of Mg sub 2 Si- Mg sub 2 Sn, Mg sub 2 Ge-Mg sub 2 Sn, and Mg sub 2 Si-Mg sub 2 Ge solid solutions /Reshetochnaia teploprovodnost' tverdykh rastvorov Mg sub 2 Si-Mg sub 2 Sn, Mg sub 2 Ge-Mg sub 2 Sn i Mg sub 2 Si- Mg sub 2 Ge/.  
16 p2824 A69-31567

**NIKITIN, G. A.**  
Influence of Fluid Contamination on the Operational Reliability of Aircraft Hydraulic Systems /Vliianie zagriaznenosti zhidkosti na nadezhnost' raboty gidrosistem letatel'nykh apparatov/.  
21 p3649 A69-39530

**NIKITIN, I. U. M.**  
Design of Component and Subsystem Elements of Aircraft Engines /Konstruirovaniye Elementov Detalei i Uzlou Aviadvigatel' /2nd Edition/.  
05 p0812 A69-15864

**NIKITIN, K. A.**  
Investigation concerning the deposition of a niobium coating on graphite from the vapor-gas phase /Issledovaniia po naneseniiu niobievogo pokrytiia na grafit iz parogazovoi fazy/.  
15 p2629 A69-30992

**NIKITIN, L. V.**  
Mechanics of brittle failure /Mekhanika khрупkogo razrusheniia/.  
21 p3839 A69-39194

**NIKITIN, N. N.**  
Theoretical calculation of the regions of the flow regime at the surface of a flight vehicle /Teoreticheskii raschet oblasti rezhima tekheniia vbliz i poverkhnosti letatel'nogo apparata/.  
21 p3645 A69-39827

**NIKITIN, P. V.**  
Turbulent boundary layer in the inlet section of a tube under conditions of nonisothermicity and injection /Turbulentnyi pogranichnyi sloi v nachal'nom uchastke trubyy v usloviakh neizotermichnosti i vduva/.  
15 p2592 A69-30986

**NIKITIN, S.**  
The way to the first manned space station /Der Weg zur ersten bemannten Raumstation/.  
24 p4391 A69-42798

**NIKITIN, S. A.**  
Application of the method of generalized parameters to a study of maneuvers in a homogeneous gravitational field /Primenenie metoda obobshchennykh parametrov dlia issledovaniia manevrov v odnorodnom gravitatsionnom pole/.  
13 p2356 A69-27685

**NIKITIN, V. E.**  
Scientific results of a flight of the lantar 1 automatic ionospheric laboratory /Nauchnye rezul'taty poleta avtomaticheskoi ionosfernoi laboratorii "lantar-1"/.  
05 p0830 A69-16056

Scientific results of the flight of the automatic ionospheric laboratory "Yantarr"-1".  
20 p3618 A69-37966

**NIKITIN, V. V.**  
Bistable operation of a GaAs semiconductor laser.  
03 p0441 A69-14175

Multivibrator for electrical and optical oscillations based on an injection semiconductor laser and a photodiode.  
07 p1148 A69-18688

Hysteresis of radiation power of gallium-arsenide injection lasers.  
07 p1157 A69-19593

Investigation of injection lasers with nonuniform excitation /Issledovanie inzhetsionnykh lazerov s neodnorodnym vzbuzhdeniem/.  
08 p1326 A69-20539

Some energy characteristics of exploding wires.  
09 p1539 A69-21560

Investigation of ultrashort light pulses employing time-base image converter tube.  
12 p2083 A69-26139

Dynamics of the emission of injection semiconductor lasers /Dinamika izlucheniia inzhetsionnykh poluprovodnikovyykh lazerov/.  
16 p2796 A69-31949

Investigation of the radiation pulsations of a CW GaAs injection laser.  
18 p3154 A69-35495

Investigation of spike regime operation of the injection laser on gallium arsenide.  
19 p3337 A69-36535

Investigation of the performance of a GaAs semiconductor injection laser in the pulsed mode of operation /Issledovaniia raboty inzhetsionnogo PKG na GaAs v rezhime pul'satsii izlucheniia/.  
22 p3963 A69-40603

**NIKITINA, E. A.**  
Laboratory study of the statistical characteristics of the initial stage of wave development /Laboratornoe issledovanie statisticheskikh kharakteristik nachal'noi stadii razvivaiushchegosia volneniia/.  
18 p3167 A69-35341

**NIKITINA, I. I.**  
Isothermal and athermal martensite transformations in an Fe-NiMo alloy /Izotermicheskoe i atermicheskoe martensitnoe prevrashchenie v splave Fe-Ni-Mo/.  
19 p3344 A69-35983

**NIKITINA, I. V.**  
Changes in the radiation effect on plants under the influence of space flight factors /K voprosu ob izmenenii radiatsionnogo effekta u rastenii pod vlianiem faktorov kosmicheskogo poleta/.  
05 p0708 A69-16510

Radiosensitivity of potatoes to gamma-ray and proton irradiation applied to whole tubers and to isolated eyes before planting /Radiochuvstvitel'nost' kartofelia k gamma- lucham i protonam pri predposadachnom obлучenii tselykh klubnei i izolirovannykh glazkov/.  
05 p0709 A69-16511

Change in the nature of the radioprotective effect of propyl gallate during proton and gamma irradiation of potatoes.  
08 p1262 A69-19927

Changes in content of dry material, sugars, and ascorbic acid in plants after action of cosmic flight factors on the seeds of these plants.  
10 p1645 A69-23495

On the problem of changes in effect of radiation on plants subjected to cosmic flight factors.  
18 p3095 A69-34729

Radiosensitivity of potatoes to gamma and proton irradiation applied to whole tubers and isolated eyes before planting.  
18 p3095 A69-34730

**NIKITINA, T. F.**  
Effect of temperature on the emission spectrum of semiconductor lasers /Vlianie temperatury na spektr izlucheniia poluprovodnikovyykh kvantovyykh generatorov/.  
13 p2271 A69-27888

Effect of temperature on the emission spectra of semiconductor lasers.  
21 p3738 A69-39146

**NIKITUSHEV, I. U. M.**  
Calculation of the spectra and absorbed doses behind a shield due to electrons of the earth's radiation belt /K raschetu spektrov i pogloshchennykh doz za zashchitoy, obuslovlennykh elektronami radiatsionnogo poisa zemli/.  
08 p1377 A69-19843

**NIKKANEN, J. P.**  
Flow through cascades of slotted compressor blades. [ASME PAPER 69-GT-6]  
09 p1432 A69-22507

**NIKLAS, L.**  
A proven method of selection and standardization of ultrasonic probes.  
15 p2617 A69-31517

**NIKOLAENIA, A. Z.**  
Effect of the polarity of indium antimonide on the external photoeffect in the X-ray spectral region /Efekt poliarosti antimonida indiya vo vneshnem fotoeffekte v rentgenovskoi oblasti spektra/.  
15 p2667 A69-30076

**NIKOLAENKO, A. P.**  
Diurnal variations of the natural frequencies of the earth - ionosphere resonator in relation to the eccentricity of the geomagnetic field.  
03 p0422 A69-13512

Excitation of the earth-ionosphere waveguide by lightning discharges and the influence of geomagnetic field on the ELF noise spectrum.  
17 p2928 A69-33865

**NIKOLAENKO, N. S.**  
N-type conductivity converter with internal compensation of parasitic effects /Konvertor otritsatel'noi provodimosti s vnutrennei kompensatsiei parazitnykh effektov/.  
05 p0727 A69-15641

Composite RC converter filters and delay lines /Sostavnye konvertornye RC-fil'try i linii zaderzhki/.  
07 p1113 A69-19677

**NIKOLAENKO, O. P.**  
Effect of the geomagnetic field on the spectrum of microwave noise in the earth-ionosphere resonator /Vpliv geomagnitnogo polia na spektr navisokochastotnykh shumiv u rezonatori zemlia-ionosfera/.  
17 p2918 A69-33034

**NIKOLAEV, A. V.**  
Study of the heating of solid particles in a plasmatron with colliding jets /Issledovanie nagreva tverdykh chastits v plazmotrone so vstrechnymi struiami/.  
05 p0802 A69-15975

**NIKOLAEV, B. I.**  
Mass-spectrometer investigation of ions formed by interaction between laser radiation and matter.  
06 p0932 A69-16921

**NIKOLAEV, G. N.**  
Experimental determination of the recombination rate constants for oxygen and nitrogen under conditions of dissociated gas flow in nozzles /Eksperimental'noe opredelenie konstant skorosti rekombinatsii kisloroda i azota v usloviakh tekheniia dissotsirovannykh gazov v soplakh/.  
06 p1030 A69-17349

DC plasmatron for heating argon with potassium additions /Plazmatron postoiannogo toka dlia nagreva argona s prisadkoi kalia/.  
09 p1547 A69-21596

**NIKOLAEV, I. N.**  
Angular distribution of a material vaporized by a laser beam /Uglovoye raspredelenie neshchestva, isparennogo luchom OKG/.  
21 p3737 A69-38992

**NIKOLAEV, I. V.**  
Electrooptical effect in GaAs crystals at lambda equals 10.6 mu /Elektroopticheskii effekt v kristallakh GaAs na lambda equals 10.6 mk/.  
06 p0934 A69-17466

The electro-optic effect in GaAs crystals at r equals 10.6 um.  
20 p3555 A69-37949

**NIKOLAEV, I. U. M.**  
Transformation of the electric field associated with the propagation of an acoustic wave and its conversion into plasma waves /O transformatsii elektricheskogo



polia pri rasprostraneni i perekhode akusticheskoi volny v plazmennye volny/.  
09 p1484 A69-21528

Interaction of cosmic protons with interplanetary plasma /Vzaimodeistvie kosmicheskikh protonov s mezhplanetnoi plazmoy/.  
10 p1760 A69-23617

Transformation of the electric field during the propagation and transition of an acoustic wave into plasma waves.  
16 p2783 A69-32523

NIKOLAEV, R. M.

Vacuum system of the Sirius stellarator.  
03 p0412 A69-13839

NIKOLAEV, S. I.

Investigation of the impossibility of libration points of a gravitating ellipsoid /Issledovanie neosushchestvosti tochek libratsii gravitiruiushchego ellipsoida/.  
01 p0155 A69-10957

NIKOLAEV, S. O.

Some results of the biomedical experiment on the biosatellite "Kosmos-110".  
08 p1261 A69-19827

Quantitative evaluation of the activity of animal cardiovascular systems during prolonged orbital flight.  
08 p1261 A69-19828

NIKOLAEV, S. V.

Noise stability of the reception of a binary frequency-modulated signal with the aid of an ordinary frequency detector /K voprosu o pomekhoustoichivosti priema dvoichnogo chastotno-modulirovannogo signala s pomoshch'yu obychnogo chastotnogo detektora/.  
15 p2564 A69-30145

NIKOLAEV, V. G.

Initial dynamics of the EKG during an electrical defibrillation of the heart /Pochatkovaya dinamika EKG pri elektrichnoi defibrilatsii sertsia/.  
19 p3257 A69-36168

NIKOLAEV, V. M.

Intensity of the emission continuum of a negative nitrogen ion /Ob intensivnosti kontinuumu izlucheniia otritsatel'nogo iona azota/.  
04 p0639 A69-15370

Optical properties of a plasma from an electrodeless discharge in an airstream /Opticheskie svoistva plazmy bezelektrodnogo razriada v vozdukhnom poteke/.  
07 p1191 A69-18995

Problems associated with radiant heat transfer in hypersonic aerodynamics /Problemy luchistogo teploobmena v giperzvukovoi aerodinamike/.  
11 p2002 A69-25233

NIKOLAEV, V. P.

Experimental investigation of the shear modulus of fiberglass-reinforced plastics /Eksperimental'noe opredelenie moduli sdviga stekloplastikov/.  
17 p3058 A69-33204

NIKOLAEV, V. S.

Simulation of the radiation effect of a space medium on spacecraft elements /Modelirovanie radiatsionnogo vozdeistviia kosmicheskoi sredy na elementy kosmicheskikh apparatov/.  
06 p0906 A69-17612

Aerodynamic characteristics of a plate at an angle of attack in a viscous hypersonic flow /Aerodinamicheskie kharakteristiki platiny pod uglom ataki v viazkom giperzvukovom poteke/.  
11 p1820 A69-25471

Correction of the control signal in microwave ferrite modulators /Korreksiia upravliaiushchego signala v SVCh ferritovykh modulatorakh/.  
13 p2226 A69-27216

NIKOLAEVA, V. A.

High-melting-point oxide and carbide materials for electrode walls of MHD generators /Tugoplavkie oksidy i karbidnye materialy v elektrodnykh stenkakh MGD-generatorov/.  
13 p2284 A69-27471

Integral normal emissivity of tantalum and hafnium carbides at temperatures ranging from 1300 to 3000 deg K /Integral'naya normal'naya izluchatel'naya sposobnost' karbidov tantala i gafniia v interval'e temperatur 1300-3000 deg K/.  
15 p2640 A69-30984

NIKOLAEVSKII, I. F.

Influence of the base width on the transistor parameters in the microampere current range /O vliianii shiriny bazy na parametry tranzistora v mikroampernom diapazone tokov/.  
12 p2042 A69-26879

NIKOLAEVSKII, V. N.

Asymmetric mechanics of continua and mean description of turbulent flows /Asimmetrichnaia mekhanika kontinuumov i osrednennoe opisaniie turbulentnykh techenii/.  
13 p2297 A69-27289

On some examples of media with microstructure of continuous particles.  
19 p3446 A69-36833

NIKOLASHIN, G. F.

New equipment for studying the vestibular analyzer /Novye ustanovki dlia issledovaniia vestibuliarnogo analizatora/.  
20 p3481 A69-37274

NIKOLEAEV, V. M.

On the intensity of emission continuum of the negative nitrogen atom.  
16 p2822 A69-32117

NIKOLIC, Z. J.

Stochastic approximation algorithms for system identification, estimation, and decomposition of mixtures.  
11 p1842 A69-24934

NIKOLOV, N.

Statistical structure of non-isothermic electron-ion plasma.  
02 p0286 A69-11706

Statistical polarization of two-component Coulomb gas.  
02 p0286 A69-11707

On some characteristic magnitudes of a two-component non-isothermic plasma.  
05 p0806 A69-16745

Behaviour of the Cepheid variables in the colour-colour diagram.  
08 p1395 A69-20635

NIKOLSKAIA, M. I.

Relation between the functional tolerance of the vestibular analyzer and the state of arterial pressure during rocking /O vzaimosviazii funktsionalnoi vynoslivosti vestibuliarnogo analizatora i sostoianiia arterial'nogo davleniia pri ukachivanii/.  
20 p3472 A69-37264

NIKOLSKAIA, T. A.

Investigation of the laws governing high-temperature vaporization from an open surface in a vacuum of the monocarbide phases of the transition metals of the IV-V groups. I.  
02 p0260 A69-11583

NIKOLSKAIA, V. L.

The alpha goes to gamma transformation in maraging steel N18K9M5T.  
04 p0616 A69-14648

NIKOLSKII, A. A.

On a general class of uniform motions of continuous media and rarefied gases.  
05 p0751 A69-16677

Homogeneous deformations of space and the Cauchy problem for homogeneous free-molecular motions.  
19 p3444 A69-36803

NIKOLSKII, A. P.

Aging of some ferrites with a spinel structure /O starenii nekotorykh ferritov so strukturoi shpineli/.  
13 p2320 A69-27997

NIKOLSKII, G. A.

Aerosol structure of the troposphere and the stratosphere /Aerazol'naya struktura troposfery i stratosfery/.  
18 p3132 A69-35340

Allowance for radiation factors in simulating general circulation processes in the atmosphere /Ob uchete radiatsionnykh faktorov pri modelirovanii protsessov obshchei tsirkulatsii atmosfery/.  
23 p4184 A69-42487

NIKOLSKII, G. M.

The energy distribution in the solar EUV spectrum and abundance of elements in the solar atmosphere.  
11 p1958 A69-24425

NIKOLSKII, I. K.

Microwave emission of a plasma from an electrodeless inductive discharge at low pressures /Mikrovolnovoe izluchenie plazmy bezelektrodnogo induktsionnogo razriada pri nizkikh davleniiakh/.  
09 p1549 A69-22017

Alfven oscillations in an inhomogeneous plasma from a pulsed discharge with oscillating electrodes /Al'fvenovskie kolebaniia neodnorodnoi plazmy v impul'snom razriade s ostsliruiushchimi elektronami/.  
09 p1550 A69-22020

NIKOLSKII, S. I.

New data on high-energy muons and nuclear-interacting particles obtained with the Tyan'-Shan' installation for study of extensive air showers.  
13 p2331 A69-28395

Concerning the relation between primary particle energy and number of electrons in extensive air showers.  
13 p2331 A69-28396

Monte Carlo calculations of the nuclear cascade process in the atmosphere.  
13 p2331 A69-28397

A rare case of observation of genetically related electron-photon cascades with a total energy exceeding 10 super 14 ev.  
13 p2331 A69-28398

Investigation of the shape of nuclear cascade showers in lead and the energy spectrum of nuclear-active particles with the aid of a calorimeter with lead absorbers.  
13 p2303 A69-28399

Dependence of the energy of an electron-photon cascade, produced by collision of a nuclear-active cosmic-ray particle with a lead nucleus, on the energy of the interacting particle.  
17 p3008 A69-33387

NIKOLSKII, V. K.

Multiphoton excitation of luminescence and photoconductivity in KCl-Eu single crystals by ruby and neodymium lasers /Mnogofotonnoe vozbuзhdenie liuminesentsii i fotoprovodimosti monokristallov KCl-Eu rubinovym i neodimovym lazerami/.  
19 p3335 A69-36165

NIKOLSKII, V. V.

Calculation of the scattering matrix of a ferrite core waveguide transformer /Transverse magnetization /Raschet matritsy rasseianiia volnovodnogo transformatora s ferritom - Poperechnoe namagnichivanie/.  
06 p0895 A69-17455

NIKONOV, V. N.

Experimental study of the altitude dependence of atmospheric absorption at the 4.1 mm wavelength.  
02 p0206 A69-11450

A possibility of signal matching in a radio interferometer with autonomous receivers /Ob odnoi vozmozhnosti sovmeshcheniia signalov radiointerferometra s avtonomnymi priemnikami/.  
03 p0431 A69-13706

NIKONOVA, S. N.

Reaction of epoxy and polyester resins with glass fibre.  
19 p3358 A69-35902

NIKUEV, I. U. A.

Magnetic holding of an arc in a flow of gas with an admixture of alkaline metal vapor.  
02 p0286 A69-11585

NIKULIN, M. G.

Stabilization of a plasma filament with alternating current by a quadrupole magnetic field /Stabilizatsiia plazmennogo shnura s peremennym tokom kvadrupol'nym magnitnym polem/.  
07 p1191 A69-18987

NIKULINA, G. A.

Variation pulsograms and indices of respiratory function in acute hypoxia.  
10 p1647 A69-23592

NIKULINSKAIA, S. N.

The Gauss principle in the mechanics of continua /Printsip Gaussa v mekhanike sploshnoi sredy/.  
11 p1984 A69-25170

NIKULINSKII, G. N.

The An-24 Aircraft - Construction and Exploitation /Samolet An-24 - Konstruktsiia i Eksploatatsiia/.  
16 p2735 A69-32112

NIKULOVA, A. A.

Thermoluminescence investigations of the dolomite from the Kaali meteorite craters /Termoluminescentnye issledovaniia dolomita iz meteoritnykh kraterov Kaali/.  
01 p0159 A69-11371

NIKURADSE, A.

Study of the influence of the roughness of a solid surface on the reflection of molecular jets /Etudes sur l'influence de la rugosite d'une surface solide sur la reflexion de jets moleculaires/.  
19 p3377 A69-36180

NILOV, E. V.

A neodymium-doped glass pulsed laser with selected second harmonic radiation.  
12 p2108 A69-26594

## NILOVSKAIA, N. T.

Gas exchange in some vegetable plants in the presence of an increased oxygen content in the gas medium /Gazoobmen nekotorykh ovoshchnykh rastenii pri povyshennom soderzhanii kisloroda v gazovoi srede/.  
17 p2912 A69-32933

## NILSEN, R. N.

Hybrid simulation of a variable transport lag.  
10 p1661 A69-23852

## NILSSON, B.

Penning discharge in a strongly inhomogeneous magnetic mirror field.  
01 p0133 A69-11218

## NILSSON, N. J.

Adaptive pattern recognition - A survey.  
07 p1088 A69-18381

## NILSSON, N. R.

High-Speed Photography, Proceedings of the Eighth International Congress, Stockholm, Sweden, June 23-29, 1968.  
12 p2080 A69-26135

## NIMTZ, G.

Non-ohmic microwave conductivity in semiconductor posts.  
08 p1373 A69-20859

Current controlled negative differential resistivity of p-type tellurium.  
09 p1557 A69-21747

## NINERAILLES, J.

The "carpitron" transmitting tube for space communications stations.  
13 p2232 A69-28058

The Carpitron - The general characteristics of this microwave generator and its application to ground station transmitters.  
23 p4135 A69-41302

## NINOMIYA, I.

Summation of baroreceptor reflex effects on sympathetic nerve activities.  
20 p3479 A69-38073

## NINOMIYA, K.

On the role of convective momentum exchange in the mesoscale gravity wave.  
20 p3522 A69-37350

Objective analysis of the thermodynamic field consistent with the energy supply and the cumulus distribution.  
20 p3523 A69-37351

## NIOLET, M.

Transfer of energy from an exploding wire to a detonating gas.  
19 p3451 A69-36365

## NIORDSON, F. I.

Theory of Thin Shells, International Union of Theoretical and Applied Mechanics, Symposium, 2nd, Technical University of Denmark, Copenhagen, Denmark, September 5-9, 1967, Proceedings.  
11 p1977 A69-24801

## NISHIDA, A.

Thermal state and effective collision frequency in the solar wind plasma.  
24 p4368 A69-43187

## NISHIDA, K.

An experimental study on the diffusion characteristics of turbulent flow in a low speed wind tunnel.  
13 p2250 A69-28496

## NISHIDA, M.

On thermal and dynamical properties of protostars.  
04 p0651 A69-14366

Calculations of electron temperature across a shock wave of a partially ionized gas.  
21 p3698 A69-39791

On the structure of the outer solar convection zone.  
24 p4387 A69-43634

## NISHIDA, S.

High-power transmitting tubes for satellite communication earth stations.  
05 p0728 A69-15668

Design and performance of the X-band 10-kw CW traveling-wave tube.  
07 p1094 A69-18425

Helix leaky waveguide.  
14 p2422 A69-29752

## NISHIDA, Y.

Negative resistance in semiconductors /InSb/.  
02 p0294 A69-11722

## NISHIHARA, H.

Calculation of the effect of attenuators on TWT gain.  
12 p2044 A69-27102

A study on plasma diffusion in a uniform magnetic field.  
15 p2657 A69-30023

## NISHIKAWA, K.

Conductivity of a plasma with random and coherent fluctuations.  
14 p2502 A69-29990

Formulation of plasma wave echoes as an initial-value problem.  
15 p2661 A69-30926

Spatial ion-wave echoes.  
16 p2818 A69-31676

## NISHIKAWA, S.

Precipitation hardening and recrystallization of Al-0.3 wt percent Zr alloys of various grades.  
04 p0617 A69-14931

## NISHIKAWA, T.

Search for quarks.  
15 p2674 A69-30308

## NISHIKAWA, Y.

Optimum control of space-vehicle orbital elements.  
06 p0955 A69-17579

A method for stability investigation of a periodic dynamic system with many degrees of freedom.  
14 p2534 A69-29318

## NISHIMAKI, M.

A method of reducing the effects of anode aperture in high-perveance convergent electron guns.  
07 p1101 A69-18658

## NISHIMURA, M.

Stability of nonlinear multivariable control systems with time lags by Lyapunov's direct method.  
12 p2048 A69-26079

## NISHIMURA, S.

Fundamental investigations of fretting fatigue. I - On the relative slip amplitude of press-fitted axle assemblies.  
01 p0167 A69-10305

Cooling of interstellar clouds of neutral hydrogen and the abundance of molecular hydrogen.  
08 p1381 A69-19796

Variability of the metallic-line star 28 Andromedae.  
08 p1395 A69-20637

On the photodestruction rate of hydrogen molecules in HI regions.  
18 p3204 A69-35351

## NISHIMURA, T.

A new approach to estimation of initial conditions and smoothing problems.  
23 p4132 A69-42546

## NISHINO, M.

A new direction finding network for locating the sources of atmospheric.  
18 p3102 A69-34961

Occurrence of VLF emissions at Showa base.  
18 p3102 A69-34964

Polarization and arriving direction of VLF emissions at Showa base.  
18 p3102 A69-34965

## NISHIOKA, K.

Fundamental investigations of fretting fatigue. I - On the relative slip amplitude of press-fitted axle assemblies.  
01 p0167 A69-10305

Fundamental investigations of fretting fatigue. III - Some phenomena and mechanisms of surface cracks.  
20 p3563 A69-38110

Fundamental investigations of fretting fatigue. IV - The effect of mean stress.  
20 p3563 A69-38111

Fundamental investigations of fretting fatigue. V.  
24 p4404 A69-43628

## NISHIZAKI, R.

Analysis of the topside ionospheric data from Alouette II over Japan. I.  
01 p0065 A69-10548

Proton cyclotron echoes in the topside ionosphere.  
24 p4310 A69-43189

## NISHIZAWA, J.-I.

An optical waveguide with the optimum distribution of the refractive index with reference to waveform distortion.  
04 p0575 A69-14749

## NISNEVICH, M. Z.

Stress state of a zero-moment shell of revolution.  
05 p0843 A69-16690

## NISNEVICH, N. I.

Measurement of the parameters of the ionosphere by the method of "incoherent" scattering of radio waves /K izmereniiam parametrov ionosfery metodom "nekogerentnogo" rasseianiia radiovoln/.  
01 p0065 A69-10575

Ionospheric measurements by the method of incoherent radio wave scattering /K ionosfernym izmereniiam metodom nekogerentnogo rasseianiia radiovoln/.  
10 p1686 A69-23910

Measurements of the parameters of the ionosphere by the "incoherent" radiowave scattering method.  
15 p2597 A69-30745

## NISSEN, P. E.

Photoelectric observations of an index of the microturbulence in the atmospheres of F and G main sequence stars.  
15 p2695 A69-30999

## NISSIM, E.

On a specialized case of the Routh-Hurwitz stability criteria.  
05 p0833 A69-15710

## NITA, M. M.

Perturbations of stationary orbital vehicles in an arbitrary latitude owing to the triaxiality of the earth /Asupra perturbatiilor vehiculelor orbitale stationare la o latitudine arbitrara, datorite triaxialitatii pamintului/.  
05 p0823 A69-16037

Perturbations of stationary orbital spacecraft at an arbitrary latitude, due to the earth's triaxiality /Sur les perturbations des vaisseaux orbitaux stationnaires a une latitude arbitraire, dues a la triaxialite de la terre/.  
06 p1006 A69-17565

## NITADORI, K.

Derivation of optimum timing extraction systems in pulse code transmission.  
09 p1455 A69-22115

## NITECKI, D. E.

The synthesis of the pentapeptide related to the Gm/a antigen of human gamma G-globulin.  
24 p4279 A69-42712

## NITECKI, D. N.

Determination of steric purity and configuration of diketopiperazines by gas-liquid chromatography, thin-layer chromatography, and nuclear magnetic resonance spectrometry.  
07 p1075 A69-19498

## NITTA, T.

Finite difference approximations for the barotropic instability problem.  
09 p1537 A69-22298

A technique of objective analysis and initialization for the primitive forecast equations.  
24 p4344 A69-43065

## NITUSOV, V. V.

Calculation of the two-dimensional flow of an incompressible fluid past a cascade of arbitrary profiles vibrating with an arbitrary phase shift /Raschet obtekaniiia reshétki proizvol'nykh profilei, vibriurushchikh s proizvol'nym sdvigom faz, ploskim potokom neshizmaemoi zhidkosti/.  
02 p0190 A69-12574

## NITZAN, D.

A square-loop magnetic core model for computer-aided circuit transient analysis.  
06 p0899 A69-16888

Digital Magnetic Logic.  
20 p3498 A69-37144

## NITZSCHE, P.

The dependence of ionospheric absorption of radio waves on equivalent frequency, with special emphasis on the winter anomaly.  
17 p2918 A69-32927

## NIWA, K.

Experimental study on reading efficiency of round and vertical type displays in aircraft.  
06 p0883 A69-18025

Hearing problems in air communication using words in radio telephone procedure.  
06 p0891 A69-18034

## NIWA, S.

Comparison of performance characteristics between two types of multiple-access techniques, SSB-PM and PCM-PM-FT, for satellite communication systems.  
21 p3678 A69-39807

## NIX, G. H.

Pool boiling heat transfer from Teflon-coated stainless steel.  
[ASME PAPER 68-WA/HT-12]  
05 p0847 A69-16119



- NIX, N.**  
Enrichment method for atmospheric ions using an electrostatic lens /Anreicherungsverfahren fuer atmosphärische Ionen mittels elektrostatischer Linse/. 17 p2971 A69-32928
- NIX, W. D.**  
Measurements of Young's modulus of polycrystalline nickel-tungsten alloys at elevated temperatures. 06 p0943 A69-17232  
A dislocation model pertaining to the strength of elastically inhomogeneous materials. 08 p1333 A69-20557
- NIXDORF, J.**  
Microfilaments. 08 p1320 A69-20582  
Importance of whiskers and filaments for the production of fiber-reinforced materials /Die Bedeutung von Whiskern und Fasern fuer die Herstellung faser-verstaerkter Werkstoffe/. 12 p2111 A69-25856  
Inorganic fiber materials for heat-resistant fiber-reinforced materials. III - Methods of investigating fiber materials /Anorganische Fasermaterialien fuer temperaturbestaendige faserverstaerkte Werkstoffe. III - Untersuchungsmethoden von Faserwerkstoffen/. 16 p2803 A69-31804
- NIXDORFF, K.**  
Buckling of twisted bars as an example of the application of Schaefer's theory of two-parameter eigenvalue problems /Die Knickung verwundener Staebе als technisches Beispiel zur Schaefer'schen Theorie zweiparametriger Eigenwertprobleme/. 04 p0682 A69-15290
- NIXON, C. W.**  
Study of man during a 56-day exposure to an oxygen-helium atmosphere at 258 mm. Hg total pressure. XIV - Communications. 07 p1066 A69-19420  
Sonic boom - A community study. 14 p2541 A69-29153
- NIXON, D. D.**  
Attitude control of a manned earth orbiting space station. [AIAA PAPER 69-846] 21 p3822 A69-39376
- NIXON, F.**  
Techniques of improvement. 24 p4416 A69-42778
- NIXON, F. G.**  
The application of communication satellites for domestic telecommunications in Canada. [UN PAPER 68-95501] 06 p0887 A69-17075
- NIXON, J.**  
Emulsified fuel for aircraft. [ASME PAPER 68-GT-24] 06 p0982 A69-17190
- NJIO, L. K. F.**  
The relationship between some physiological and psychological variables. 24 p4268 A69-43406
- NOACK, G.**  
The first measurements at the Argas test loop. 10 p1673 A69-23478
- NOAK, M.**  
Some problems in the numerical solution of vortex motion equations. 23 p4150 A69-41376
- NOBE, K.**  
Anodic and cathodic behavior of maraging steel in acid solution. 13 p2282 A69-28188
- NOBLE, B.**  
A variational method for inclusion and indentation problems. 19 p3440 A69-36589
- NOBLE, G. A.**  
Electron paramagnetic resonance in irradiated Ag sub 2 CO sub 3. 05 p0716 A69-15915
- NOBLE, L. E.**  
The danger of contact lenses at altitude. 23 p4106 A69-41806
- NOBLE, M.**  
Rate and predictability in rate-tracking tasks. 11 p1829 A69-24737
- NOBLE, M. L.**  
Very high resolution for visual simulation. [SMPT PAPER 105-73] 12 p0277 A69-25769
- NOBLE, R. H.**  
Lightweight optics for secondaries. 12 p2058 A69-26420
- NOBLE, W. P., JR.**  
Radiation resistant MOS devices. 02 p0221 A69-12468
- NOBOKO, I. M.**  
Shock Waves in Real Gases /Udarnye Volny v Real'nykh Gazakh/. 04 p0589 A69-14937
- NOCENTINI, A.**  
Diocotron instability in presence of a cold plasma. 16 p2816 A69-31635  
Signal propagation and statistical mechanics /Propagazione dei segnali e meccanica statistica/. 16 p2753 A69-32437
- NOCI, G.**  
Modern problems of solar radio astronomy /Problemi moderni di radioastronomia solare/. 08 p1388 A69-20218  
Coronal active regions observed by SOLRAD 8 during the eclipse of May 20, 1966. 15 p2698 A69-31363
- NOCI, G. G.**  
Radio observation of the solar eclipse of May 20, 1966. 17 p3030 A69-33057
- NOCILLA, S.**  
Study for the determination of transonic flow around airfoils with constant curvature in a uniform asymptotic stream, at zero incidence, at Mach numbers less than 1. I /Studio per la determinazione del flusso transonico attorno a profili alari a curvatura costante, in corrente asintotica uniforme, senza incidenza, con numero di Mach less than 1. I/. 09 p1429 A69-21605
- NODA, M.**  
Hardware aspects of communications, instrumentation, and data handling for manned planetary missions. 13 p2219 A69-27666  
Communications, instrumentation, and data handling for manned planetary missions. 21 p3674 A69-39018
- NODWELL, R. A.**  
Enhanced plasma oscillations observed with scattered laser light. 13 p2307 A69-27629
- NOEL, J.**  
Complex synaptic configurations in planarian brain. 16 p2741 A69-31555
- NOEL, M.**  
A fluidic thrust reversal control system for a turbojet /Système fluïdique de commande d'inversion de pousse d'un turbo-reacteur/. 17 p3018 A69-33329
- NOEL, P.**  
Control of aircraft turbine engines /Regulation des turbomachines aeronautiques/. 05 p0812 A69-16528  
Electronic control and adjustment of the Olympus 593 /Commande et regulation electronique de l'Olympus 593/. 19 p3395 A69-36706
- NOEL, P. L.**  
Recent experimental work on silicon microstrip microwave transmission lines. 01 p0041 A69-10201
- NOEL, R. J.**  
Deformation processing of superalloy gas turbine components. [SAE PAPER 690101] 09 p1503 A69-21557
- NOERDLINGER, P. D.**  
Quasi-stellar objects and the density of intergalactic hydrogen. 18 p3190 A69-34288  
Universal cosmic rays and Harrison's inhomogeneity postulate. 21 p3810 A69-39469  
Low-frequency intergalactic radio absorption theory and an experimental upper limit. 22 p4025 A69-40640  
Growth rate of the relativistic fire-hose instability. 24 p4376 A69-42660
- NOESKE, H. O.**  
Derivation and discussion of electromagnetic thrust equations for the coaxial MPD accelerator with and without an externally applied magnetic field. [AIAA PAPER 69-108] 06 p0972 A69-18197
- NOFFKE, H.**  
Radiation effects on silicon avalanche /IMPATT/ diodes. 06 p0976 A69-16874
- NOGIN, V. N.**  
Passage of noise through a logarithmic detector at a small modulation depth /Prokhozhenie shumov cherez logarifmicheskii detektor pri maloi glubine moduliatsii/. 15 p2564 A69-30148
- NOGUCHI, A.**  
A new running test facility for the study of flight dynamics. 17 p2944 A69-32851
- NOGUCHI, T.**  
Continual photoelectric monitoring of the flare star UV Cet. 22 p4032 A69-40943  
Continual photoelectric monitoring of the flare star YZ CMi. 22 p4032 A69-40947
- NOGUCHI, Y.**  
Static and fatigue strength of end-closed filament-wound vessels under internal pressure. 21 p3846 A69-39797
- NOGUES, C.**  
Difficulties and findings of a medical inquiry after an aircraft accident /Difficultes et enseignements d'une enquete medicale apres accident aerien/. 05 p0715 A69-16628  
Morphological variations of the arterial pulse wave - Experimental and clinical correlations /Variations morphologiques de l'onde pulsatile arterielle - Correlations experimentales et cliniques/. 21 p3661 A69-39272
- NOGUES, P.**  
Servovalves for the guidance of a missile by secondary liquid injection /Valves asservies pour le pilotage d'un engin par injection secondaire liquide/. 07 p1230 A69-19293
- NOHEL, J. A.**  
A stability theorem for nonlinear mixed integral equations. 08 p1343 A69-20355  
Perturbations of Volterra integral equations. 11 p1909 A69-24886
- NOJIMA, M.**  
Ultralow-noise preamplifiers in satellite communication earth terminal installations - Traveling-wave maser and cooled parametric amplifier. 05 p0728 A69-15670
- NOLAN, C. J.**  
The effects of cold reduction by hydrostatic fluid extrusion on the mechanical properties of 18 percent nickel maraging steels. 13 p2278 A69-27414
- NOLAN, G. F.**  
Meteorological considerations for tethered and hovering free balloons. 22 p3864 A69-40804
- NOLDUS, E.**  
A frequency domain approach to the problem of the existence of periodic motion in autonomous nonlinear feedback systems. 13 p2238 A69-27923
- NOLIMOV, I. P.**  
Holographic recording of focused images and their reconstruction in white light /Golograficheskaya registratsiya sfokusirovannykh izobrazhenii i ikh vostanovlenie v belom svete/. 21 p3725 A69-39543
- NOLL, D. A.**  
Ceramic radomes, materials, design and manufacture. 07 p1142 A69-19526
- NOLL, R. B.**  
A survey of structural flexibility effects on spacecraft control systems. [AIAA PAPER 69-116] 06 p1019 A69-18187  
Minimizing spacecraft structure control-system interaction. 11 p1967 A69-25500
- NOLL, W.**  
Inhomogeneities in materially uniform simple bodies. 05 p0833 A69-15728  
A mathematical theory of the mechanical behavior of continuous media. 05 p0833 A69-15729  
Materially uniform simple bodies with inhomogeneities. 05 p0834 A69-15730

- NOLLE, E. L.**  
Investigation of the characteristics of a CdTe laser with electronic excitation /Issledovanie kharakteristik kvantovogo generatora na CdTe pri elektronnom voz-buzhdenii/. 13 p2272 A69-27896
- NOLLER, E. W.**  
Radio frequency voltage breakdown facility. [AIAA PAPER 69-1028] 22 p3924 A69-40397
- NOMURA, S.**  
Fundamentals of laser beam modulation and deflec-tion techniques. 09 p1518 A69-22128  
Characteristics and applications of the arc- heated wind tunnel at the National Aerospace Laboratory. 22 p3927 A69-40595  
Measurement of unsteady aerodynamic heating at stagnation region including surface reaction. 22 p3860 A69-40597
- NONO, T.**  
On the stored-energy function of a hyperelastic material - An application of the theory of Lie groups. 04 p0680 A69-14945
- NONWEILER, T. R. F.**  
The numerical evaluation of curvilinear integrals and areas. 01 p0106 A69-10867
- NOON, J. H.**  
Electron radiation temperature measurements in a CO sub 2 laser amplifier. 04 p0611 A69-14445
- NOONER, D. W.**  
Isoprenoids and other hydrocarbons in terrestrial graphite. 22 p3934 A69-39890
- NOORDERGRAAF, A.**  
Analog studies of the human systemic arterial tree. 17 p2908 A69-33007
- NORBURY, J. F.**  
The aero-thermodynamics of subsonic propulsion. 05 p0695 A69-15551
- NORCROSS, J. S.**  
Air Force Eastern Test Range UHF telemetry status report. 14 p2410 A69-28878
- NORDBERG, H.**  
A microfractographic investigation of fatigue crack propagation in a cast steel and some aluminium alloys. 12 p2116 A69-26916
- NORDBERG, W.**  
Atmospheric structure research for long-term forecasting. [UN PAPER 68-95397] 01 p0108 A69-10463  
Microwave observations of sea state from aircraft. 18 p3127 A69-34421
- NORDBY, G. M.**  
Buckling of cylindrical and conical sandwich shells with orthotropic facings. [AIAA PAPER 68-294] 09 p1616 A69-21942  
Local failure of plastic-foam core sandwich panels. 13 p2357 A69-27207
- NORDEMANN, D.**  
Reconstruction of the Saint-Severin meteorite in space /Reconstitution de la meteorite Saint-Severin dans l'espace/. 19 p3416 A69-36128
- NORDEN-OTT, A.**  
The temperature dependence of isotope thermo-transport in liquid metals. 03 p0533 A69-13970
- NORDEN, P. A.**  
Application of a laser as a light source in the in-vestigation of temperature fields and concentrations in fluids by interference techniques /Primenenie opticheskogo kvantovogo generatora v kachestve istochnika sveta pri issledovanii poli temperatur i kontsentratsii v zhidkostiakh interferentsionnym metodom/. 10 p1702 A69-23431
- NORDINE, L. R.**  
Grab one and jump. 19 p3255 A69-36146
- NORDMEYER, E. F.**  
An empirically derived erosion law and its applica-tion to Lunar Module landing. 23 p4211 A69-41388
- NORDO, J.**  
Spectral measurements and atmospheric stability. 17 p2960 A69-33157
- NOREIKA, A. J.**  
Dielectric properties of reactively sputtered films of aluminum nitride. 13 p2322 A69-28013
- NOREM, P.**  
Interstellar travel, a round trip propulsion system with relativistic velocity capabilities. [AAS PAPER 69-388] 24 p4363 A69-42829
- NORMAN, A.**  
Thermal spike effects in heavy-ion tracks. 03 p0371 A69-13479
- NORMAN, G. E.**  
Insufficiency of the classical description of a non-degenerate dense plasma. 05 p0802 A69-15892  
The optical properties of hot air. I - Basic processes and spectral properties /Opticheskie svoistva goriachego vozdukha. I - Osnovnye protsessy i spek-tral'nye kharakteristiki/. 07 p1185 A69-19166  
The optical properties of hot air. II - Integral char-acteristics between 4000 and 20,000 K /Opticheskie svoistva goriachego vozdukha. II - Integral'nye kharak-teristiki 4000-20 000 deg K/. 07 p1185 A69-19167  
Investigation of phase transitions by the Monte Carlo method /Issledovanie fazovykh perekhodov s pomoshch' shh'u metoda Monte-Karlo/. 15 p2655 A69-30981
- NORMAN, H. C.**  
Mission influence on the aerothermodynamic en-vironment for a Venus entry vehicle. 02 p0332 A69-12823
- NORMAN, K.**  
Rocket studies of sporadic-E ionisation. 16 p2780 A69-32310
- NORMAN, M.**  
A study of some palladium-indium, platinum-indium and platinum-tin alloys. 05 p0779 A69-15832
- NORMAN, P. E.**  
Out-of-this-world photogrammetry. 18 p3133 A69-34336  
Out-of-this-world photogrammetry. 20 p3536 A69-36931
- NORMAN, S. M.**  
Unmanned outer planet capture missions. [AAS PAPER 68-105] 21 p3805 A69-39221
- NORQUIST, L. W. S.**  
Development of close-coupled accumulators for sup-pressing missile longitudinal oscillations /POGO/. [AIAA PAPER 69-547] 16 p2869 A69-32729
- NORRIS, G. R., JR.**  
Integration of a digital computer with a vertical balancing system on a real-time basis. [SAWE PAPER 738] 18 p3220 A69-34888
- NORRIS, H. W.**  
The 1969 Mariner mission to Mars. 18 p3201 A69-35141
- NORRIS, K. S.**  
Lizard reflectivity change and its effect on light transmission through body wall. 07 p1059 A69-18373
- NORRIS, W. G.**  
Microwave spectrum of 2-methylfuran. 24 p4280 A69-43811
- NORRISH, R. G. W.**  
A flash photolytic study of the explosive reaction between hydrogen and oxygen sensitized by nitrogen dioxide, chlorine and bromine. 11 p1832 A69-24878
- NORSTER, E. R.**  
Subsonic flow flameholder studies using a low pres-sure simulation technique. 09 p1624 A69-22614  
The design of tubular gas turbine combustion cham-bers for optimum mixing performance. [IME PAPER 15] 12 p2147 A69-25793
- NORTH, H. Q.**  
Technological forecasting in planning for company growth. 06 p1044 A69-17871  
Technological forecasting to aid R and D planning. 20 p3639 A69-37353
- NORTH, J. A.**  
Truth and falsity of verbal statements as conditioned stimuli in classical and differential eyelid conditioning. 07 p1064 A69-18632
- Arithmetic correctness as the discriminandum in classical and differential eyelid conditioning. 07 p1064 A69-18637
- NORTH, N. B.**  
Uncertainties in electrical load analysis. 17 p2905 A69-34090
- NORTHAM, G. B.**  
Effects of acceleration upon solid-rocket per-formance. [AIAA PAPER 68-530] 21 p3786 A69-39217
- NORTHAN, B. J.**  
Aluminum corrosion - Possible mechanisms of in-hibition. 02 p0265 A69-11895  
Inhibition of corrosion of aluminum in ethylene glycol/water systems. 14 p2466 A69-29932
- NORTHOVER, F. H.**  
Sufficiency condition for the validity of the WKB ap-proximation. 14 p2471 A69-29454
- NORTHROP, D. P.**  
A combination work and photographic light for portable service in manned spacecraft. [IES PREPRINT 30] 18 p3138 A69-35173
- NORTHROP, T. G.**  
Charged particle diffusion by violation of the third adiabatic invariant. 07 p1209 A69-19375
- NORTON, C. L.**  
Optical requirements for photogrammetric instru-ments used with color materials. 22 p3949 A69-40996
- NORTON, C. L., JR.**  
Precision studies of ASTM thermal conductivity test for refractories. 22 p3956 A69-40671
- NORTON, D. A.**  
Airplane drag prediction. 05 p0695 A69-15543
- NORTON, D. J.**  
Heat-sterilizable capsule spin motors. [AIAA PAPER 69-823] 16 p2840 A69-32675
- NORTON, J. L.**  
Redesigning oil feed to jet engine bearing. 15 p2671 A69-30702
- NORTON, J. P.**  
Design of a practical hydrocarbon boiler. 23 p4068 A69-42239
- NORTON, R. B.**  
Radio wave reflections from large horizontal gradients in the topside ionosphere. 14 p2415 A69-29521  
The middle-latitude F region during some severe ionospheric storms. 20 p3532 A69-37894  
Alouette observations taken during a middle-latitude red arc. 20 p3532 A69-37897
- NORTON, R. H.**  
Principal science results from Surveyor 5. 02 p0321 A69-12224
- NORTON, T. R.**  
A 100 kHz system with automatic operation - The OMEGA IV telemetry processor. 07 p1105 A69-19103
- NORWOOD, A. F.**  
The navigation system of the supersonic transport /Le systeme de navigation du transport supersonique/. 02 p0278 A69-12238
- NORWOOD, F. R.**  
On thermal conductivities. 01 p0172 A69-11272  
Wave propagation in the generalized dynamical theory of thermoelasticity. 23 p4235 A69-42464
- NORWOOD, J., JR.**  
A variational approach to the dynamic stability of high-density plasmas in magnetic containment devices. 08 p1359 A69-19984
- NORWORTH, J. I.**  
A 100 kHz system with automatic operation - The OMEGA IV telemetry processor. 07 p1105 A69-19103
- NOSACHENKO, A. M.**  
Effect of vibration and elevated temperature on the strength of fiberglass-reinforced plastic /Vliianie



- vibratsii i povyshennoi temperatury na prochnost' stekloplastika/.  
15 p2643 A69-31203
- NOSACHEV, L. V.**  
The structure of the trail behind a spherical model in a stream of rarefied plasma.  
01 p0134 A69-11308  
Some results of an investigation of the perturbations produced by bodies in a rarefied plasma flow /Nekotorye rezul'taty issledovaniia vozmushchenii, vnosimyykh telami v potok razrezhennoi plazmy/.  
05 p0803 A69-16048  
Investigation of the characteristics of a multiple-electrode probe in a rarefied plasma flow /Issledovanie kharakteristik mnogoelektrodnogo zonda v usloviakh potoka razrezhennoi plazmy/.  
19 p3314 A69-36622  
Some results on disturbances introduced by extraneous bodies into a stream of rarefied plasma.  
20 p3581 A69-37957
- NOSEDA, V.**  
Coronary sinus outflow and O sub 2 content in anterior cardiac vein blood at different levels of right ventricle performance.  
23 p4098 A69-42105
- NOSEK, T. P.**  
The influence of short-term sun-moon disturbances on synchronous, equatorial satellites used for precision navigation.  
[AIAA PAPER 69-927]  
21 p3761 A69-39356
- NOSKOV, D. A.**  
Cutting of intricate-contour axisymmetric holes by electron beam method.  
08 p1321 A69-20727
- NOSKOVA, R. I.**  
Absolute spectrophotometry of some infrared lines in the spectra of planetary nebulae /Absolutsnaya spektrofotometriia nekotorykh infrakrasnykh liniy v spektrakh planetarnykh tumannostei/.  
09 p1590 A69-21380  
Absolute spectrophotometry of some infrared lines in planetary-nebula spectra.  
18 p3198 A69-34768  
The study of the forbidden lines in the planetary-nebula spectra.  
19 p3423 A69-36223
- NOSOV, V. R.**  
Mixed problem for a second-order hyperbolic equation /O smeshannoi zadache dlia giperbolicheskogo uravneniya vtorogo poriadka/.  
18 p3165 A69-35313
- NOSOV, V. V.**  
Systematic experimental data concerning the drag of sharp- and blunt-nosed cones at hypersonic velocities /Sistematicheskie eksperimental'nye dannye po soprotivleniiu ostrykh i zatuplennykh konusov pri giperzvukovykh skorostiakh/.  
19 p3239 A69-36401
- NOSOVA, G. I.**  
Mechanical properties of single crystals of the alloy nickel-chromium-titanium-aluminum /Nimonic/ in different structural states.  
02 p0268 A69-12192  
Certain regularities of the strengthening of nimonic alloy single crystals in the deformation process /Nekotorye zakonomernosti uprochneniia monokristallov splava nimonic v protsesse deformatsii/.  
12 p2112 A69-26038
- NOSOVA, G. N.**  
Electron density distribution in the polar region /Raspreделение elektronnoi plotnosti v pripolusnoi oblasti/.  
20 p3526 A69-37664
- NOTARO, F.**  
Super insulation - Thin, lightweight protection against re-entry heat.  
12 p2060 A69-26817  
Opacified fibrous insulations.  
[AIAA PAPER 69-605]  
17 p3072 A69-33282
- NOTNI, P.**  
Extragalactic research.  
15 p2681 A69-30436
- NOTVEST, R. A.**  
Microwave components for wide-band phased arrays.  
04 p0571 A69-14318
- NOUMOV, A. P.**  
Attenuation of millimeter and submillimeter radio waves in rains /Ob oslablenii millimetrovyykh i submillimetrovyykh radiovoln v dozhdiaakh/.  
10 p1657 A69-23943
- NOURISSAT, Y.**  
The "Calife" image analyzer /L'analyseur d'images "calife"/.  
24 p4286 A69-42744
- NOTARY, C. J.**  
Mass spectrometric study of the photoionization of some fluorocarbons and trifluoromethyl halides.  
02 p0205 A69-12464
- NOVAK**  
Observation of some circulatory reactions after cumulation of vegetative stimuli.  
24 p4266 A69-43375
- NOVAK, J.**  
Investigation of the temperature dependence of the dielectric constant of barium titanate single crystals doped with hydroxyl /Issledovanie temperaturnoi zavisimosti dielektricheskoi pronitsaemosti na monokristallakh titanata barii s dobavkoi gidroksila/.  
22 p3995 A69-41157  
Defect structure of ceramic barium titanate with chromium oxide additions /O defektnoi strukture keramicheskogo titanata barii s dobavkoi oksii khroma/.  
22 p3996 A69-41160
- NOVAK, J. R.**  
Laser photolysis and spectroscopy - A new technique for the study of rapid reactions in the nanosecond time range.  
05 p0772 A69-16025
- NOVAK, L.**  
Problems relating to the objective evaluation of the reactivity of the organism.  
06 p0874 A69-17595
- NOVAK, M.**  
Aeroelastic galloping of prismatic bodies.  
09 p1615 A69-21923
- NOVAK, R. A.**  
The aerodynamics of turbo-machinery.  
18 p3086 A69-34925
- NOVAK, R. C.**  
Theoretical and experimental bases for more precise elastic properties of epoxy.  
01 p0103 A69-11268  
Structural behavior of laminated graphite filament composites.  
08 p1337 A69-20483
- NOVATSKII, V. T.**  
Stability of a cyclically symmetrical system of cylindrical shells in an inviscid fluid flow /Ustoichivost' tsiklicheski-simmetrichnoi sistemy tsilindricheskikh obolochek v potoke nevizkozi zhidkosti/.  
21 p3834 A69-38719
- NOVELLO, J.**  
On-board spacecraft processor.  
22 p3903 A69-39921
- NOVGORODOV, M. A.**  
Investigation of an MHD-generator model with an argon-potassium plasma /Issledovanie modeli MGD-generatora na argono-kalievoy plazme/.  
06 p0871 A69-17909  
Experimental study of an MHD generator model with a nonequilibrium plasma /Eksperimental'noe issledovanie modeli MGD-generatora s neravnovesnoi plazmoi/.  
10 p1637 A69-23480
- NOVGORODOV, M. Z.**  
Electron energy distribution in discharges used for CO sub 2 lasers.  
08 p1323 A69-19801
- NOVICHENOK, L. N.**  
Thermophysical characteristics of heat sensitive paints.  
18 p3161 A69-34697
- NOVICHKOV, I. U. N.**  
Stability of the combustion process in elastic combustion chambers /Ob ustoychivosti protsessa goreniia v uprugikh kamerakh sgoraniia/.  
07 p1242 A69-18993  
Experimental investigation of the shear modulus of fiberglass-reinforced plastics /Eksperimental'noe opredelenie modulei sdviga stekloplastikov/.  
17 p3058 A69-33204
- NOVICK, D. T.**  
A field ion microscope investigation of the effect of rhenium on the lattice solid solubility of oxygen in tungsten.  
08 p1329 A69-20007
- NOVICK, G.**  
Photon-induced current changes in a CO sub 2 laser amplifier.  
23 p4172 A69-41398
- NOVICK, R.**  
Electron bombardment ion source for low energy beams.  
03 p0428 A69-13100  
Search for X-ray polarization in Sco X-1.  
12 p2149 A69-26313  
Spectrum of the two-photon emission from the metastable state of singly ionized helium.  
23 p4220 A69-42379
- NOVIK, F. T.**  
Relationship between electrical conductivity and epitaxial films of cadmium telluride /O svyazi elektricheskoi i strukturnoi epitaksial'nykh plenok tellurida kadmii/.  
10 p1742 A69-23001
- NOVIK, K. M.**  
Electron confinement region in electron cyclotron resonance in a magnetic mirror.  
03 p0478 A69-13849
- NOVIKOV, A. M.**  
Radiation bursts in the subpolar stratosphere.  
06 p0921 A69-17744  
Solar protons in the subpolar stratosphere during a solar activity minimum /Solnechnye protyny v subpolarnoi stratosfere v period minimuma solnechnoi aktivnosti/.  
20 p3587 A69-37044
- NOVIKOV, E. A.**  
Statistical distribution for turbulent flow.  
11 p1867 A69-24628
- NOVIKOV, I. D.**  
Neutrinos in anisotropic cosmological solutions.  
01 p0123 A69-10348  
Expected anisotropy of cosmological radio emission in homogeneous anisotropic models.  
04 p0662 A69-15238  
Relativistic Astrophysics /Relativistskaia Astrofizika/.  
07 p1216 A69-18960  
Anisotropy of the early stages of cosmological expansion and relic emission /Anizotropiia rannikh stadii kosmologicheskogo rasshireniia i reliktovoe izlucheniia/.  
09 p1593 A69-21568  
Hot cosmological model, formation of galaxies, inhomogeneities, and superdense bodies /Goriachaiia kosmologicheskaia model', obrazovanie galaktik s neodnorodnostei i sverkhplotnye tela/.  
12 p2167 A69-27047
- NOVIKOV, I. I.**  
C-curves of the decomposition of a supersaturated solid solution in duraluminum-type alloys /S-krivye raspada peresyshchennogo tverdogo rastvora v splavakh tipa duralumin/.  
01 p0094 A69-10396  
Nonuniform decomposition of the beta-phase in the VT15 titanium alloy /Neravnomernyi raspad beta-fazy v titanovom splave VT15/.  
11 p1902 A69-24275
- NOVIKOV, N. P.**  
Formation of gaseous products during laser action on polymethylmethacrylate /Obrazovanie gazobraznykh produktov pri lazernom vozdeistvii na polimetilmetakrilat/.  
02 p0270 A69-11980  
Damage in polymers under critical loads during the action of laser radiation /Razrushenie v polimerakh pri predel'nykh nagruzkakh pod vozdeistviem lazernogo izlucheniia/.  
08 p1328 A69-21190  
Laser radiation-induced breakdown processes in polymers at the load limit.  
18 p3152 A69-35159
- NOVIKOV, S. B.**  
Time variations of a chromospheric network /Vremennye izmeneniia khromosfernoi setki/.  
04 p0651 A69-14372
- NOVIKOV, S. S.**  
Current concepts of the mechanism of combustion of condensed systems /Review/ /Sovremennye predstavleniia o mekhanizme goreniia kondensirovannykh sistem /obzor/.  
11 p2000 A69-25187  
Passage of a combustion wave through an inert obstacle during propagation in gunpowder /Prokhozhenie rasprostraniiaushcheisya po porokhu volny goreniia skvoz' inertnuiu pregradu/.  
22 p4051 A69-41119
- NOVIKOV, V. A.**  
Gyroscope error caused by axial play of the inner gimbal of the Cardan mounting during circular vibrations of the base /Pogreshnosti giroskopa, porozhdia-

- mye liuftami v osi podvesa vnutrennei ramki Kardana pri krugovoi vibratsii osnovaniia/.  
09 p1498 A69-22110
- NOVIKOV, V. V.**  
Stratovolcanos in the lunar mesorelief.  
14 p2516 A69-28775  
Characteristics of the propagation of the first two normal waves excited by a point source in a waveguide channel formed by the earth and an inhomogeneous anisotropic ionosphere /Karakteristiki rasprostraneniia pervykh dvukh normal'nykh voln, vzbuzhdaemykh tochechnym istochnikom v volnovodnom kanale zemlia - neodnorodnaia anizotropnaia ionosfera/.  
16 p2751 A69-32032
- NOVIKOVA, A. V.**  
Effect of the alcohol-soluble fraction of a biomass of protozoa seaweeds on the organism of white rats /Vliianie spirtorastvorimoi fraktsii biomassy protokokovykh vodoroslei na organizm belykh krysi/.  
17 p2906 A69-32930
- NOVIKOVA, E. T.**  
Relative motion of two connected bodies in orbit /Ob otosniti nom dvizhenii svyazki dvukh tel na orbite/.  
19 p3427 A69-36618
- NOVIKOVA, N. R.**  
Measurement of the proton and neutron spectra on board satellites of the Cosmos series /Izmerenie spektrov protonov i neutronov na sputnikakh serii "Kosmos"/.  
05 p0814 A69-16051  
Measurement of the proton and neutron spectra in the "Cosmos" series satellites.  
20 p3591 A69-37961
- NOVIKOVA, S. P.**  
Numerical solution of the problem of the transformation of fields of meteorological elements /K voprosu o chislennom reshenii zadachi o transformatsii polei meteorologicheskikh elementov/.  
15 p2649 A69-30647
- NOVIKOVA, V. M.**  
Effect of tin and zirconium on transformations during heat treatment of the Ti-10 percent Cr alloy /Vliianie olova i tsirkonia na prevrashcheniia pri termicheskoi obrabotke splava Ti plus 10 percent Cr/.  
07 p1162 A69-18775
- NOVITSKII, L. A.**  
Methods and means of investigating the absorption of solar radiation by bodies.  
05 p0846 A69-15901  
Achievements in studies of properties of materials used for space objects and their use in industry.  
06 p0945 A69-17046
- NOVOBRATSKII, R. L.**  
Structure and mechanical properties of materials after hydroexplosive forming.  
09 p1503 A69-21851
- NOVOMEISKII, I. U. D.**  
Effect of complex alloying with niobium and chromium on the mechanical properties of G13L steel /Vliianie kompleksnogo legirovaniia niobiem i khromom na mekhanicheskie svoistva stali G13L/.  
04 p0614 A69-14579
- NOVOSAD, S. W.**  
An analysis of the telecommunications performance of a lunar relay satellite system.  
23 p4129 A69-42508
- NOVOSELETSKII, M. I. U.**  
Structure of the infrared absorption spectrum of n-CdTe /Pro strukturu v infrachernomom spektre poglinaniia n-CdTe/.  
12 p2142 A69-25979
- NOVOSELLER, D. E.**  
Precise comparison of the Josephson frequency-voltage relation at microwave and far-infrared frequencies.  
20 p3583 A69-37418
- NOVOSELOV, V. S.**  
Lagrange multipliers of the variational problem and isochronal derivatives in the field of attraction of an axisymmetric planet /Lagranzhevy mnozhiteli variatsionnoi zadachi i izokhronnye proizvodnye v pole pritiiazheniia osesimmetrichnoi planety/.  
05 p0823 A69-16015
- NOVOSELOVA, T. A.**  
Preliminary results of an investigation of motions at various levels in the ionosphere /Predvaritel'nye rezul'taty issledovaniia dvizhenii v ionosfere na razlichnykh vysoynykh urovniakh/.  
17 p2969 A69-33999
- NOVOSELTSEVA, ZH. A.**  
A priori information in problems of optimal filtering.  
05 p0740 A69-16668
- NOVOTNY, B.**  
Some remarks on the asymptotic integration of the three-dimensional equations of shells and plates.  
01 p0170 A69-10878
- NOVOTNY, J.**  
The exact static exterior and interior metric of a thick plane plate.  
15 p2654 A69-31477  
Conservation laws in general relativity.  
16 p2813 A69-32362
- NOVOZHILOV, B. V.**  
Burning of a powder under harmonically varying pressure.  
07 p1241 A69-18708
- NOVOZHILOV, I. V.**  
Stability of two-coordinate automatic tracking systems /Ob ustoiichivosti dvukhkoordinatnykh sistem avtomaticheskogo soprovozhdeniia/.  
01 p0053 A69-10803  
Automatic orientation of a solid body.  
01 p0122 A69-11302  
Application of methods of boundary layer theory in the problem of the motion of a gyroscope in a gimbal suspension /Primenenie metodov teorii pogranichnogo sloia v zadache o dvizhenii giroskopa v kardanovom podvese/.  
18 p3135 A69-34559
- NOVOZHILOV, N. I.**  
Optical edge of noctilucous clouds.  
15 p2598 A69-31254
- NOVOZHILOV, V. I.**  
Measurement of the parameters of the ionosphere by the method of "incoherent" scattering of radio waves /K izmereniiam parametrov ionosfery metodom "nekogerentnogo" rasseianiia radiovoln/.  
01 p0065 A69-10575  
Measurements of the parameters of the ionosphere by the "incoherent" radiowave scattering method.  
15 p2597 A69-30745
- NOVOZHILOV, V. V.**  
A necessary and sufficient criterion of brittle stability /O neobkhodimom i dostatochnom kriterii khрупkoi prochnosti/.  
18 p3224 A69-35314
- NOVOZHILOVA, L. V.**  
Shielding in a wide frequency range /Ekranirovanie v shirokom diapazone chastot/.  
15 p2562 A69-30120
- NOWACKI, R. A.**  
Computer-aided reliability techniques in electronic design.  
12 p2037 A69-25973
- NOWACKI, W.**  
On the completeness of stress functions in asymmetric elasticity.  
01 p0167 A69-10325  
Thermoelastic wave-motions in an infinite body.  
03 p0528 A69-13924  
Propagation of rotation waves in asymmetric elasticity.  
05 p0843 A69-16645  
Green functions for micropolar elasticity.  
09 p1618 A69-22261  
Green functions for micropolar thermoelasticity.  
09 p1618 A69-22262  
Propagation of monochromatic waves in an infinite micropolar elastic plate.  
11 p1995 A69-25605  
Propagation of elastic waves in a micropolar cylinder. I, II.  
11 p1995 A69-25606  
Generation of waves in an infinite micropolar elastic solid body. I.  
17 p3053 A69-33018  
Generation of waves in an infinite micropolar elastic solid body. II.  
17 p3053 A69-33019  
Couple stresses in thermoelasticity /Naprezienia momentowe w termosprezystosci/.  
18 p3211 A69-34262  
Green functions for micropolar elasticity.  
18 p3226 A69-35459  
On the completeness of potentials in micropolar elasticity.  
19 p3439 A69-36476
- Generalized Love's functions in micropolar elasticity.  
19 p3440 A69-36585  
Formulae for overall thermoelastic deformation in a micropolar body.  
19 p3440 A69-36586  
Thermoelastic waves in an unbounded medium.  
19 p3444 A69-36804  
The axially symmetrical Lamb's problem in a semi-infinite micropolar elastic solid.  
24 p4406 A69-43730  
The generation of waves in an infinite micropolar elastic solid.  
24 p4406 A69-43731
- NOWACKI, W. K.**  
Remarks on the solutions for some dynamic problems of thermo-viscoelasticity.  
02 p0336 A69-11554  
On certain closed form solution for the plane shear-pressure wave in elastic-plastic half-space.  
05 p0835 A69-15798  
Propagation of monochromatic waves in an infinite micropolar elastic plate.  
11 p1995 A69-25605  
Propagation of elastic waves in a micropolar cylinder. I, II.  
11 p1995 A69-25606  
Generation of waves in an infinite micropolar elastic solid body. I.  
17 p3053 A69-33018  
Generation of waves in an infinite micropolar elastic solid body. II.  
17 p3053 A69-33019  
The axially symmetrical Lamb's problem in a semi-infinite micropolar elastic solid.  
24 p4406 A69-43730  
The generation of waves in an infinite micropolar elastic solid.  
24 p4406 A69-43731
- NOWAK, M.**  
On certain properties of natural vibrations of an elastic free-free body.  
01 p0167 A69-10323  
Equations of motion of an elastic free-free body.  
11 p1994 A69-25604  
Equations of motion of a holonomic system of elastic bodies.  
19 p3374 A69-36584
- NOWAK, S.**  
Observations of the plumb line fluctuations at a 135 deg azimuth /Borowiec 1961/ /Die Lotschwankung-sbeobachtungen im Azimut 135 deg/Borowiec 1961//.  
08 p1306 A69-19824
- NOWAK, W.**  
A series method with quasi-static modified subfields for the calculation of inhomogeneously filled cavities and waveguide tubes /Reihenverfahren mit quasi-statisch modifizierten Teilfeldern zur Berechnung inhomogen ausgefuellter Hohlraume und Wellenleiter/.  
09 p1467 A69-22561
- NOWAK, W. J.**  
Honeycomb panel fabrication by salt bath brazing.  
19 p3320 A69-35557
- NOWAKOWSKI, J.**  
Bayesian optimal model-reference parametric-identification systems /Optymalne w sensie Bayesa układy identyfikacji parametrycznej z modelem/.  
02 p0223 A69-11566  
Image classification and iterative methods of plant identification /Iteracyjne metody identyfikacji obiektow a klasyfikacja obrazow/.  
24 p4284 A69-42672
- NOWATZKI, E. A.**  
Interpretation and application of photometric-polarimetric observations of planetary surfaces.  
03 p0421 A69-13394
- NOWICKI, M.**  
Measurement of the spectrum of laser emission by a Fabry-Perot interferometer /Zagadnienie pomiaru widma promieniowania laserowego interferometrem Fabry-Perot/.  
20 p3536 A69-36945
- NOWICKI, R.**  
Wire cone calorimeter for absolute laser continuous wave radiation-power measurements.  
01 p0078 A69-10029  
Calorimeter for absolute and accurate measurements of CW laser emission power /Kalorymetr do bezwzględnych i dokładnych pomiarów mocy promieniowania laserow o pracy ciągłej/.  
15 p2608 A69-30320



## O

## NOWIKOWSKI, J.

Review of research on hot plasma performed at the Department of Plasma Physics and Technology of the Institute of Nuclear Research.

06 p0964 A69-17174

## NOWINSKI, J. L.

Thermal waves in an elastic highly stretched cylindrical bar.

12 p2189 A69-27115

## NOWROOZI, A. A.

Torsional free periods of the earth observed at six stations around the earth.

02 p0243 A69-12007

## NOYES, J.

ESOC's participation in the Aurorae mission.

13 p2220 A69-27751

The centrifuge as a therapeutic device.

24 p4265 A69-43372

## NOYES, R. W.

The results and interpretation of some of the Harvard OSO-IV observations.

02 p0313 A69-11485

The solar continuum in the far-infrared and millimetre regions.

13 p2341 A69-27591

The differences between quiet and active regions measured by spectroheliograms in the neutral helium resonance lines.

23 p4222 A69-42405

## NOZIK, V. Z.

Statistical regularization of solutions to incorrect problems /Statisticheskaia regularizatsiia resheniia nekorrektnykh zadach/.

10 p1689 A69-23968

Statistical regularization of the solution of incorrectly posed problems.

21 p3680 A69-39654

## NUDD, G. R.

Analysis of the expected thrust misalignment of Kaufman thrusters.

[AIAA PAPER 69-303] 10 p1753 A69-23362

## NUDING, E.

An antenna switch for a wide-band radio frequency system with high broadcasting power /Eine Antennen-schweiche fuer ein Breitband- Richtfunksystem mit hoher Sendeleistung/.

11 p1854 A69-25617

A wideband frequency switch for utilizing an antenna system designed for two radio ranges /Eine breitbandige Frequenzschweiche zur Ausnutzung einer Antennenanlage fuer zwei Richtfunkbereiche/.

16 p2759 A69-31861

## NUNENKE, J. M.

Identity between the growth hormone degrading activity of the pituitary gland and plasmin.

06 p0873 A69-17105

## NUESE, C. J.

Optimization of electroluminescent efficiencies for vapor-grown GaAs sub 1-x P sub x diodes.

[ECS PAPER 103] 08 p1224 A69-20366

## NUGENT, S. T.

Self and forced oscillations in multivariable relay control systems.

12 p2049 A69-26084

## NULL, G. W.

Icarus and the determination of astronomical constants.

13 p2350 A69-27823

## NUNES, J.

Macrofractographic techniques.

04 p0619 A69-15394

## NUNNALLY, N. R.

Integrated landscape analysis with radar imagery.

15 p2608 A69-30454

## NUOTIO, V. S.

Relativistic theories of gravitation.

02 p0318 A69-12094

## NUR, A.

Granites - Relation of properties in situ to laboratory measurements.

02 p0241 A69-11806

## NURRE, G. S.

Application of gravity gradient stabilization to large manned space vehicles.

07 p1228 A69-18338

## NUSINOV, E. B.

Direct couplings of noisy quadrupoles /O regulirnykh soedineniia shumiashchikh chetyrekh-poliusnikov/.

01 p0043 A69-10591

## NUSSBAUMER, H.

Resonances in cross sections for excitation of forbidden lines in O super 2 super plus.

11 p1921 A69-24417

The internal structure of the sun's corona /Die innere Struktur der Sonnenkorona/.

11 p1961 A69-25103

## NUSSENZVEIG, H. M.

High-frequency scattering by a transparent sphere. I, II.

07 p1181 A69-19033

## NUSSMEIER, T. A.

Optical heterodyne communications experiments at 10.6 mu.

[IEEE PAPER J-5] 05 p0720 A69-16319

## NUSTROV, V. S.

Periodic solutions of nonlinear systems /O periodicheskikh resheniakh nelineinykh sistem/.

18 p3172 A69-34591

## NUTKU, Y.

The post-Newtonian equations of hydrodynamics in the Brans-Dicke theory.

10 p1789 A69-24130

## NUTT, A. B.

Testing torque - A quantitative R and D resources allocation system.

17 p3077 A69-34130

## NUTTALL-SMITH, P. B. N.

A camera with continuous access for 1/4 million frames per second.

12 p2085 A69-26157

## NUTTALL, A. H.

Minimum bandwidth of M signals with specified code or correlation matrix.

09 p1452 A69-21313

## NUTTER, D. O.

Ventilation, lung volumes, and gas exchange during lower body negative pressure.

22 p3891 A69-40222

Ventricular performance during graded hypovolemia induced by lower body negative pressure.

22 p3874 A69-40225

## NUZHIN, V. S.

Flare of long focus objectives.

12 p2093 A69-26590

## NYGAARD, K. J.

Electron-impact ionization cross section in cesium.

01 p0137 A69-10285

## NYGREN, S. F.

Zinc diffusion into gallium phosphide under high and low phosphorus overpressure.

13 p2322 A69-28136

## NYKERK, K. M.

Donor abilities of sulfoxides, sulfonamides, and thionylamides.

07 p1074 A69-18631

## NYMAN, A.

Format instructions for stabilization of manned space telescopes.

18 p3206 A69-34371

## NYMMIK, R. A.

Measurements with a large ionization calorimeter of the energies of nuclear-active particles in extensive air showers.

13 p2331 A69-28387

## NYQUIST, D. P.

Radiation fields of the short-backfire antenna.

02 p0219 A69-12339

## NYQUIST, L. E.

Short exposure ages of meteorites determined from the spallogenic super 36 Ar/super 38 Ar ratios.

19 p3418 A69-36138

Spallogenic rare gases in taenite separated from iron meteorites.

19 p3419 A69-36139

The thermal release of rare gases from separated minerals of the Mocs meteorite.

19 p3419 A69-36141

## NYSMITH, C. R.

An experimental impact investigation of aluminum double-sheet structures.

[AIAA PAPER 69-375] 13 p2367 A69-28305

## OAKS, A. E.

Microwave studies for determining re-entry heat shield bond integrity and thickness.

09 p1499 A69-22306

## OATES, G. C.

Incompressible flow through an asymmetric two-dimensional contraction.

13 p2249 A69-28235

## OATES, W. A.

The solubility of carbon in cobalt and nickel.

01 p0092 A69-10066

## OBABKOV, V. K.

Description of forced processes in continuous extremal control systems /K opisaniu forsirovannykh protsessov v nepreryvnykh sistemakh ekstremal'nogo regulirovaniia/.

01 p0052 A69-10798

## OBAYASHI, T.

Energy transfer across the magnetospheric boundary - A computer simulation of the cross-field heat transfer in a collisionless plasma.

[ISAS-429] 06 p0916 A69-17023

Plasma physics in space research.

[ISAS-431] 06 p1000 A69-17026

A modified plasma resonance observed by a rocket-borne gyro-plasma probe.

10 p1726 A69-22807

The electrical nature in planetary upper atmosphere.

12 p2076 A69-27105

Rocket observations of the winter ionosphere by plasma probes.

15 p2606 A69-31446

## OBEDEKOV, V. D.

Rotational and vibrational excitation of molecular ions by electrons.

10 p1726 A69-23627

## OBEJDEANU, C.

Dimensional and mass changes in water and oil immersion of a reinforced textolite-type plastic /Modificariile dimensionale si variatia masei la imersiunea in apa si in ulei a unor materiale plastice armate de tip textolit/.

15 p2643 A69-31550

## OBERBECK, V. R.

Genetic implications of lunar regolith thickness variations.

07 p1213 A69-18604

## OBERG, C. L.

Combustion stabilization with acoustic absorbers.

03 p0532 A69-13133

## OBERHOLZER, D. J.

The application of the CO sub 2 laser to cutting ceramic substrates.

10 p1699 A69-23302

## OBERLE, H. J.

Low cycle fatigue of Ti-6Al-4V alloy.

[ASM PAPER D8-24.4] 07 p1169 A69-19669

## OBERMAN, C.

On the kinetic theory of stable and weakly unstable plasma. II.

08 p1360 A69-19999

## OBERMEIER, F.

Interaction Between Flowfields and Sound Fields As a Singular Perturbation Problem /Die Wechselwirkung zwischen Stromungsfeldern und Schallfeldern als singulaeres Stoerungsproblem/.

17 p2949 A69-32998

## OBERMEIER, F. F.

Sound generation by unsteady flow as a singular perturbation problem /Schallerzeugung durch instationaere Stroemung als singulaeres Stoerungsproblem/.

13 p2299 A69-28187

## OBERST, J. F.

Performance of binary PSK communication systems.

07 p1082 A69-19109

Performance of self-synchronized PSK systems.

23 p4128 A69-42501

## OBERSTONE, J.

Design criteria for film cooling for small liquid-propellant rocket engines.

[AIAA PAPER 68-617] 09 p1570 A69-21978

## OBERTA, A. F.

An experiment to determine the effects of solid and liquid rocket engine combustion on the viability of microorganisms.

05 p0714 A69-15949

**OBERTO, P.**  
Modulation envelopes - Tables of profiles and harmonic components /Inviluppi di modulazione - Tavole dei profili e delle componenti armoniche/.  
21 p3673 A69-38778

**OBERTS, P.**  
The pitch angle distribution function of particles, taking into account the earth's gravitational field /Funktsiia raspredeleniia chasitits po pitch-uglam s uchetom gravitatsionnogo polia zemli/.  
12 p2067 A69-26354

**OBERTZ, P.**  
Study of the spatial characteristics of type Pc5 geomagnetic pulsations.  
06 p0921 A69-17736

**OBICHKIN, IU. G.**  
Reliability of Semiconductor Radio Devices of Flight Vehicles /Nadezhnost' poluprovodnikovyykh radioustroystv letatel'nykh apparatov/.  
18 p3108 A69-34350

**OBINATA, I.**  
Behavior of GP zones in aluminum alloys during the fatigue process.  
07 p1166 A69-18962  
Fatigue crack propagation in aluminum alloys.  
17 p3061 A69-33677

**OBLOY, S. J.**  
Automatic controls for facilities and Mercury ion thrusters in durability testing.  
[AIAA PAPER 68-576] 02 p0229 A69-12385

**OBMENIN, A. V.**  
Detonation capacity of mixtures with an ammonium perchlorate base /O detonatsionnoi sposobnosti smesi na osnove perkhlorata ammoniia/.  
02 p0305 A69-12674

**OBODAN, N. I.**  
Problems of the stability of a cylindrical shell of variable rigidity under external pressure /Zadachi ustoiichivosti tsilindricheskoi obolochki s peremennoi zhestkost'iu pri vneshnem davlenii/.  
08 p1419 A69-21180  
Stability of a cylindrical shell loaded by uniform external pressure along a part of its cross-sectional contour /Ustoiichivost' tsilindricheskoi obolochki, nagruzhennoi ravnomernym vneshnim davleniem po chasti kontura poperechnogo secheniia/.  
21 p3846 A69-39715

**OBOLENSKII, E. P.**  
Testing airframe panels for repeated static loads /Ispytaniia paneli planera samoleta na povtorno-staticheskie nagruzki/.  
24 p4400 A69-43086

**OBRASTSOVA, G. A.**  
Influence of the training of nervous processes on the brain weight and cholesterolase activity /Vliianie trenirovki nervnykh protsessov na ves mozga i aktivnost' kholinesterazy/.  
21 p3662 A69-39627

**OBRAZTSOV, A. I.**  
Influence of rare-earth element additions on the threshold properties of ferrites having garnet and spinel structures /Vliianie dobavok redkozemel'nykh elementov na porogovye svoystva ferritov so strukturami granata i shpineli/.  
13 p2320 A69-27999

**OBRECHT, B.**  
Thermistor thermometer with low energy dissipation intended for measurement in a flowing fluid - Principle of assembly /Thermometre a thermistance a faible dissipation d'energie destinee a la mesure dans un fluide en ecoulement - Principe du montage/.  
15 p2608 A69-30296

**OBREMSKI, H. J.**  
Application of a quasi-steady stability model to periodic boundary-layer flows.  
23 p4152 A69-41888

**OBREZKOV, G. V.**  
Tracking breakdown in nonlinear systems operating in an unsteady mode /Sryv slezheniia v nelineinykh sistemakh, rabotaushchikh v nestatsionarnom rezhime/.  
03 p0409 A69-13070  
The probability of reaching bounds in nonlinear automatic control systems.  
12 p2054 A69-26653  
Follow-up failure in nonlinear systems operating under unsteady conditions.  
14 p2424 A69-28752

**OBREZKOVA, E. I.**  
Level scale division of a Bamberg zenith telescope according to studies with two level triers /O tsene delenii urovnei zenit- teleskopa Bamberga po issledovaniiam na dvukh ekzamenatorakh/.  
17 p2970 A69-32882

**OBRIDKO, V.**  
On the energy release by magnetic field dissipation in the solar atmosphere.  
03 p0516 A69-14041  
Large-scale mutual relations of spot groups in proton complex.  
11 p1946 A69-24427

**OBRIDKO, V. N.**  
"Bartels' active longitudes" - Sector boundaries and flare activity.  
07 p1205 A69-19248  
Some comments on the long-term forecasts of proton flares.  
08 p1379 A69-20614  
Magnetic field decay in the group 21034 during the proton flare period of July 1966.  
10 p1766 A69-23759

**O'BRIEN, B. B., JR.**  
Non-linear interaction between electro-acoustic and TEM waves at micro-wave frequencies.  
01 p0127 A69-10282

**O'BRIEN, B. J.**  
Incoming lower energy particles and their association with airglow and aurorae.  
15 p2594 A69-30018

**O'BRIEN, K. G.**  
Determination of the relative efficiency of an equatorial-mounted solar-energy concentrator in the photoreduction of a solution of lead tetraacetate in acetic acid.  
16 p2736 A69-31814

**O'BRIEN, R. M.**  
Saturn V navigation update.  
[AIAA PAPER 69-883] 21 p3764 A69-39409

**O'BRIEN, R. T.**  
Detection of Escherichia coli by gas chromatography.  
03 p0382 A69-13550

**OBSHARSKY, P.**  
Region of Kalman filter convergence for several autonomous navigation modes.  
[AIAA PAPER 67-623] 16 p2809 A69-31875

**OBTEMPERANSKII, F. V.**  
Analysis of radiant transfer processes in cylindrical cavity-type receivers of solar installations /Analiz protsessov luchistogo obmena v tsilindricheskikh polostnykh priemnikakh gelioustanovok/.  
16 p2741 A69-32799

**OBUKHOV, A. M.**  
Estimates of the lower boundary and thickness of the cloud layer on Venus /Otsenki nizhnei granitsy i tolshchiny oblachnogo sloia na Venere/.  
01 p0152 A69-10580  
Dynamics of the descent of automatic stations into planetary atmospheres as a means of checking measurement data /Dinamika spуска avtomaticheskikh stantsii v atmosferakh planet kak sredstvo kontrolya dannykh izmerenii/.  
09 p1609 A69-21775  
Integral invariants in systems of hydrodynamic type /Ob integral'nykh invariantakh v sistemakh gidrodinamicheskogo tipa/.  
10 p1678 A69-23209  
Statistical description of general atmospheric circulation /O statisticheskom opisanii obshchei tsirkuliatsii atmosfery/.  
14 p2476 A69-29822  
Estimates of the lower boundary and thickness of the cloud layer on Venus.  
15 p2691 A69-30750

**OBYDENNOV, G. V.**  
Some characteristics of a laser using Rb super 87 vapor /O nekotorykh kharakteristikakh kvantovogo generatora na parakh Rb super 87/.  
17 p2983 A69-33694

**OCARROLL, M. J.**  
The convergence of Rayleigh-Ritz approximations.  
03 p0361 A69-12846

**OCCHIONERO, F.**  
Normal radial vibrations in dead-cold, fully degenerate stars and the general-relativistic dynamical instability.  
22 p4014 A69-40142

**OCH, F.**  
Use of fiberglass-reinforced plastic for bearing components in light aircraft construction /Anwendung von GFK fuer tragende Teile im Leichtflugzeugbau/.  
21 p3728 A69-38461

**OCHAR, D. R.**  
Corrosion of steel by iodine.  
03 p0444 A69-13310

**OCHELTREE, S. L.**  
Electron beam flow visualization in hypersonic helium flow.  
19 p3291 A69-35722

**OCHKIN, V. N.**  
Dissociation of CO sub 2 in a CO sub 2 laser gas discharge plasma /Dissotsiatsiia CO sub 2 v plazme gazovogo razriada OKG na CO sub 2/.  
12 p2107 A69-26540

**OCHS, G. R.**  
Saturation of laser-beam scintillation under conditions of strong atmospheric turbulence.  
09 p1517 A69-22079  
Laser-beam scintillation over horizontal paths from 5.5 to 145 kilometers.  
09 p1517 A69-22080

**OCHS, S. A.**  
A sterilizable and ruggedized vidicon.  
13 p2234 A69-28262

**O'CONNELL, E. P.**  
An introduction to MIL-STD-883 test methods and procedures for microelectronics.  
19 p3284 A69-36043

**O'CONNELL, R. F.**  
Effect of the anomalous magnetic moment of the electron on the nonlinear Lagrangian of the electromagnetic field.  
08 p1353 A69-19781  
Effect of a constant magnetic field on the neutron beta decay rate and its astrophysical implications.  
15 p2690 A69-30694  
Effect of the earth's quadrupole moment on the precession of a gyroscope.  
17 p2972 A69-33072  
Possible origin of the diffuse component of cosmic X rays.  
18 p3185 A69-34275

**O'CONNOR, B. J.**  
A description of the CMG and its application to space vehicle control.  
[AIAA PAPER 67-589] 12 p2129 A69-26777

**O'CONNOR, G. E., JR.**  
Suboptimal controls that maximize the probability of entering a target manifold.  
11 p1860 A69-25443

**O'CONNOR, J.**  
The potential of titanium castings in gas turbine engines.  
[ASME PAPER 69-GT-24] 09 p1513 A69-22494

**O'CONNOR, J. J.**  
Development of hollow turbine disks.  
09 p1509 A69-22345

**O'CONNOR, J. T.**  
Mineralogical investigations of Mars.  
23 p4212 A69-41619

**O'CONNOR, J. W.**  
The tensile properties and fracture characteristics of titanium diffusion welds.  
24 p4331 A69-42939

**O'CONNOR, P. J.**  
Medical wastage of military and civil aircrew in Great Britain 1963-68.  
24 p4277 A69-43391

**O'CONNOR, T. J.**  
Materials for re-entry vehicle antenna windows.  
07 p1090 A69-18400  
A split-flow enthalpy probe for measurement of enthalpy in highly heated subsonic streams.  
15 p2614 A69-31275

**O'CONNOR, W. M.**  
Test results of an on board weight and balance system.  
[SAWE PAPER 805] 18 p3091 A69-34901

**OCZKOWSKI, H. L.**  
Electroluminescent devices /Urzadzenia elektroluminescencyjne/.  
11 p1899 A69-25198

**ODA, J.**  
Problems on the finite hollow cylinders under the axially symmetrical deformations.  
11 p1983 A69-25022

**ODA, M.**  
Measurement of the absolute intensity of cosmic X-rays.  
17 p3023 A69-33068



## ODA, T.

Stratification of F region during solar minimum and its variation comparing with solar maximum s.  
17 p2959 A69-33005

## ODAKA, T.

Theoretical seismograms of spheroidal type on the surface of a gravitating elastic sphere. III - Case of a homogeneous mantle with a liquid core.  
23 p4158 A69-42020

## ODARICH, O. N.

Oscillatory properties of solutions to second-order nonlinear differential equations with a delayed argument /Ob ostsiillatorykh svoystvakh reshenii nelineinykh differentsial'nykh uravnenii vtorogo poriadka s zapazdyvaushchim argumentom/.  
11 p1908 A69-24767

## ODDSON, J. K.

On the rate of decay of solutions of parabolic differential equations.  
21 p3757 A69-39565

## ODELL, C. R.

Optical backscattering functions in the Pleiades.  
13 p2340 A69-27577  
Evolution of diffuse nebulae.  
21 p3810 A69-39504

## ODELL, F. W.

Composition of cosmic rays measured in Gemini XI.  
21 p3787 A69-38350

## ODELL, P. L.

On the concept of a p-q generalized inverse of a matrix.  
24 p4342 A69-43703

## ODELL, T. H.

Series operation of avalanche transistors.  
09 p1468 A69-22589

## ODEN, J. T.

Finite-element analysis of thin shells.  
04 p0674 A69-14588  
A general theory of finite elements. I - Topological considerations.  
15 p2711 A69-30874  
A general theory of finite elements. II - Applications.  
20 p3567 A69-36948

## ODENO, H.

Transient thermal stresses in discs with a temperature dependent yield stress.  
20 p3629 A69-37974  
Transient thermal stresses in elasto-plastic discs.  
20 p3629 A69-38028

## ODGERS, G. J.

Canadian 150-inch telescope.  
12 p2058 A69-26418

## ODGERS, J.

Factors influencing heat release in combustion chambers and consideration of the related materials and structures.  
09 p1625 A69-22619

## ODIER, M.

Holographic storage of three-dimensional measurement information - Application to scintigraphy /Stockage par holographie d'informations tridimensionnelles de mesures - Application a la scintigraphie/.  
13 p2260 A69-27739

## ODING, V. G.

Electrical properties of plastically deformed p-type indium antimonide.  
07 p1199 A69-18687

Effect of deep-level compensation on the electrical properties of p-type InSb /Vliianie kompensatsii glubokogo urovnia na elektricheskie svoystva p-InSb/.  
13 p2318 A69-27895

## ODINTSOV, A. I.

Use of a photographic exposure meter for measurements of laser power.  
04 p0602 A69-15405

Fluctuations in the spectrum of an argon laser.  
08 p1327 A69-21023

On the stability of a Gaussian beam in a nonuniformly amplifying medium.  
09 p1520 A69-22685

Automatic frequency control of a laser and regenerative amplifier.  
15 p2633 A69-30238

Effect of the spatial inhomogeneity of a laser field on the amplification saturation /Vliianie prostranstvennoi neodnorodnosti polia lazera na nasyshchenie usileniia/.  
21 p3740 A69-39549

Experimental determination of the lifetimes of the lower operating levels of an argon laser /Eksperimental'noe opredelenie vremen zhizni nizhnikh rabochikh urovnei argonovogo lazera/.  
22 p3965 A69-40965

## ODINTSOV, V. A.

Radio Navigation of Flight Vehicles /Radionavigatsiia Letatel'nykh Apparatov/.  
12 p2129 A69-27076

## ODINTSOV, V. I.

Effect of high-power laser radiation on photographic materials /O deistvii moshchnogo lazernogo izlucheniia na fotograficheskie materialy/.  
01 p0080 A69-10429

Power amplification of a laser pulse acting on a substance in the presence of induced Mandelstam-Brillouin backscattering.  
04 p0612 A69-15414

Measurement of the power of reflected and transmitted light when focusing a laser beam in a liquid /Izmerenie moshchnosti otrazhennogo i prokhodiashego sveta pri fokusirovke lazernogo lucha v zhidkosti/.  
14 p2459 A69-29392

## ODINTSOVA, G. A.

Determination of the electron concentration in plasma jets with the aid of a microwave Fabry-Perot interferometer and the Stark optical method /Opredelenie kontsentratsii elektronov v plazmennyykh struiakh s pomoshch'iu SVCh interferometra Fabri-Pero i opticheskogo shtarkovskogo metoda/.  
12 p2137 A69-26537

## ODINTSOVA, I. N.

Traveling disturbances in the ionosphere.  
03 p0423 A69-13538

## ODOM, P. R.

Mission profile requirements for close overflight of the sun's polar regions.  
19 p3401 A69-35915

## ODONNELL, C. C.

The resolution of system ILS problems by simulation.  
10 p1668 A69-22975

## ODONNELL, C. F.

Engineering for systems using large scale integration.  
04 p0568 A69-15356  
Technology and economics of microelectronics.  
[AGARDOGRAPH-114] 08 p1291 A69-20983

## ODONNELL, P. M.

The fluorination of metals.  
21 p3670 A69-39706

## ODONNELL, R. D.

Motion sickness susceptibility under weightless and hypergravity conditions generated by parabolic flight.  
21 p3660 A69-39176

## ODONOGHUE, J. P.

The elastohydrodynamic lubrication of high-pressure face seals.  
[ASLE FICFS PREPRINT 16] 15 p2621 A69-30493

## ODQVIST, F. K. G.

Influence of varying temperature on the body relations in solid mechanics.  
19 p3444 A69-36805  
Energy theorems for finite deformation of originally plane, plastic, strain-hardening membranes.  
20 p3624 A69-37588

## ODUM, R.

A study of Saturn AS-502 coupling longitudinal structural vibration and lateral bending response during boost.  
[AIAA PAPER 69-58] 06 p1019 A69-18204

## ODUM, W. E.

DDT residues absorbed from organic detritus by fiddler crabs.  
14 p2406 A69-28872

## OEGELMAN, H.

Discrete source interpretation of recent high energy cosmic gamma ray measurements.  
08 p1380 A69-20699  
Search for ultra-short light pulses from pulsars.  
18 p3200 A69-34994

## OEGELMAN, H. B.

A gamma ray telescope utilizing large area wire spark chambers.  
[IEEE PAPER 3A-5] 07 p1134 A69-19192

## OEHLMAN, Y.

Space observations of flare sprays and related surge phenomena.  
05 p0814 A69-15860

Mass Motions in Solar Flares and Related Phenomena, Proceedings of the Ninth Nobel Symposium, Anacapri, Italy, June 10-12, 1968.  
06 p0992 A69-17420

Possible effects of rotation in flares and prominences.  
06 p0994 A69-17434

A multiens spectroheliograph for non stabilized rockets.  
08 p1313 A69-20254

## OEHME, R. H.

Low temperature magnesium dip brazing.  
09 p1509 A69-22340

## OELCER, N. Y.

A general class of unsteady heat flow problems in a finite composite hollow circular cylinder.  
01 p0175 A69-10230

Unsteady heat conduction in finite hollow circular cylinders under time-dependent boundary conditions of the second kind.  
03 p0530 A69-12861

Unsteady response of thin elastic plates subjected to time-dependent loads and external damping.  
08 p1416 A69-20692

Unsteady temperature distribution in a sphere subjected to time-dependent surface heat flux and internal heat source.  
13 p2373 A69-27773

General solutions to a class of unsteady heat conduction problems in a rectangular parallelepiped.  
15 p2717 A69-30790

## OELS, W.-D.

Measurements of the Thermal EMF, the Electrical Conductivity, and the Peltier Effect in Refractory Oxides at High Temperatures /Die Messungen der Thermokraft, der elektrischen Leitfaehigkeit und des Peltier-Effektes an feuerfesten Oxiden bei hohen Temperaturen/.  
17 p3068 A69-32990

## OEPIK, E. J.

The cometary origin of meteorites.  
05 p0818 A69-15588

The lunar environment.  
13 p2352 A69-27904

Star chains around Eta Carinae.  
16 p2856 A69-31931

Stellar interiors - The source of life and death.  
24 p4379 A69-42782

## OERTEL, F. H.

Two-wavelength laser interferometry of hypersonic ionized flows.  
19 p3306 A69-35742

## OERTEL, G. K.

Tables for the calculation of radial multipole matrix elements by the Coulomb approximation.  
01 p0124 A69-10901

Electron-impact broadening of isolated lines of neutral atoms in a plasma. I.  
16 p2823 A69-32468

## OERY, H.

Introduction to the solution of dynamic structure problems in space technology /Einfuehrung in die Loesung dynamischer Strukturprobleme in der Raumfahrttechnik/.  
12 p2176 A69-25857

Static and dynamic considerations for the structure development of the AZUR satellite.  
12 p2187 A69-26876

## OESTREICHER, H. L.

Cybernetic Problems in Bionics, Proceedings of the Bionics Symposium, Dayton, Ohio, May 3-5, 1966.  
07 p1069 A69-18380

## OETTING, R. B.

Free-convection heat transfer from an inclined heated flat plate in air.  
13 p2375 A69-27794

## OETTINGER, P. E.

Plasma ionization enhancement by laser line radiation.  
[AIAA PAPER 69-47] 06 p0972 A69-18186

Stark broadening of the Na I 5882-88 angstrom units and 4978-82 angstrom units lines.  
15 p2656 A69-31155

## OETTL, H.

Monopulse antenna of the DVL ground station for satellite transmission /Monopuls-Antenne der Bodestation fuer Satellitenfunk der Deutschen Versuchsanstalt fuer Luft- und Raumfahrt e.v./.  
[DVL-856] 02 p0214 A69-11599

**OEZEMRE, K.**  
Spectral study of the star HD 217 050. II /L'etude spectrale de l'etoile HD 217 050. II/.  
08 p1387 A69-20121

**OEZIZMIR, E.**  
Transmission and reflection of electromagnetic waves at the boundary of a relativistic collisionless plasma.  
06 p0968 A69-17783

**OFELT, G. S.**  
Performance of ultraviolet gratings as affected by simulated space environment.  
08 p1318 A69-21097

**OFFENLOCH, K.**  
Evoked response correlates of psychophysical magnitude estimates for tactile stimulation in man.  
22 p3876 A69-40262

**OFFERMANN, D.**  
Neutral particle density ratios in the thermosphere as derived from mass spectrometric measurements above Sardinia.  
21 p3704 A69-38368

**OFFNER, A.**  
The performance of optical systems with quasi-monochromatically partially coherent illumination.  
08 p1353 A69-21096

**OGALLAGHER, J. J.**  
Analysis of changes in the modulated cosmic-ray spectrum near solar minimum.  
05 p0815 A69-16249

**OGANESIAN, E. IA.**  
The nature of the galaxies NGC 4402 and 4438 /O prirode galaktik NGC 4402 i 4438/.  
12 p2169 A69-27058

**OGANESIANTS, L. G.**  
On the upper boundary of the velocity of propagation of simple waves for the non-linear wave equation.  
04 p0630 A69-14553

**OGANEZOV, Z. A.**  
Current oscillations and electromagnetic radiation in low-pressure thermal-emission converters.  
14 p2402 A69-29246

**OGANOV, E. P.**  
Application of the collocation method to a solution of a contact thermoelasticity problem for a short cylinder /Primenenie metoda kollokatsii pri reshenii odnoi kontaktnoi zadachi termouprugosti dlia korotkogo tsilindra/.  
18 p3217 A69-34595  
Thermoelastic stresses in inhomogeneous cylinders and disks of constant thickness /Termouprugie napriazheniia v neodnorodnykh tsilindrakh i diskakh postoianno tolshchiny/.  
23 p4227 A69-41707

**OGASAWARA, M.**  
Sum and difference frequency generation in a plasma by two nonuniform electric fields in the presence of a static magnetic field.  
13 p2305 A69-27376  
Effects of temperature relaxations on waves in a homogeneous plasma.  
13 p2305 A69-27377

**OGATA, S.**  
Effect of abrupt deceleration on the heart rate in monkeys.  
06 p0876 A69-18031

**OGATA, T.**  
Diurnal field strength and phase variations on VLF /NWC signals/ transmissions over a transequatorial path. I.  
06 p0889 A69-17654  
Sunrise and sunset effects on VLF /18.6 kHz/ transmissions over a long path.  
06 p0889 A69-17655

**OGAWA, H.**  
On lower bounds and uniqueness for solutions of the Navier-Stokes equations.  
04 p0626 A69-15311

**OGAWA, H. S.**  
Operation of solar cell arrays in dilute streaming plasmas.  
[AIAA PAPER 69-262] 09 p1436 A69-21726  
Measurements of equilibration potential between a plasma "thrust" beam and a dilute "space" plasma.  
[AIAA PAPER 69-263] 09 p1568 A69-21728

**OGAWA, K.**  
Electrical DC conductivity of a turbulent plasma.  
13 p2305 A69-27302

**OGAWA, M.**  
Absorption coefficients of O sub 2 at the Lyman-alpha line and its vicinity.  
01 p0076 A69-11230  
Absorption spectrum of electrically excited oxygen molecules. II.  
20 p3581 A69-38276  
Forbidden absorption bands of O sub 2 in the argon continuum region.  
22 p3896 A69-40479

**OGAWA, T.**  
High-power transmitting tubes for satellite communication earth stations.  
05 p0728 A69-15668  
Rocket observations of visible and ultraviolet dayglow features.  
12 p2076 A69-27108  
Fatigue strength under varying load. I - Testing apparatus and preliminary tests.  
19 p3434 A69-35777  
Charge distribution in thunderstorm clouds.  
20 p3572 A69-37908  
Rocket observation of the ionosphere in twilight conditions.  
21 p3702 A69-38355  
Radiation fields of energetic electrons in helical orbits within a magnetoactive plasma.  
22 p4008 A69-39965

**OGAWARA, A.**  
Visual discrimination through scratched canopy.  
13 p2214 A69-28533

**OGAWARA, Y.**  
Measurement of the absolute intensity of cosmic X-rays.  
17 p3023 A69-33068

**OGDEN, E.**  
Dispersion and attenuation of small artificial pressure waves in the canine aorta.  
04 p0553 A69-14692  
Transmission characteristics of axial waves in blood vessels.  
[SESA PAPER 1350] 07 p1069 A69-19726

**OGIBALOV, P. M.**  
Estimate of the anisotropy of the short- and long-term strength of fiberglass-reinforced plastics /K voprosu ob otsenke anizotropii kratkovremennoi i dlitel'noi prochnosti stekloplastikov/.  
18 p3162 A69-35352  
Linearity range of the mechanical properties of reinforced plastics /Oblast' lineinosti mekhanicheskikh svoistv armirovannykh plastikov/.  
18 p3163 A69-35364

**OGIHARA, Y.**  
An experimental study on the liquid conditioning jackets.  
06 p0883 A69-18027

**OGILVIE, C. H.**  
A report on Firebee II.  
09 p1434 A69-21901

**OGILVIE, K. W.**  
Plasma observations on Explorer 34.  
01 p0076 A69-11234  
Microscale fluctuations in the interplanetary magnetic field.  
10 p1785 A69-24100  
Causes of sudden commencements and sudden impulses.  
16 p2847 A69-31963  
Dependence of the lunar wake on solar wind plasma characteristics.  
20 p3609 A69-38095  
Hydromagnetic shocks in the solar wind.  
22 p4020 A69-40304  
Helium abundance in the solar wind.  
22 p4004 A69-40305

**OGINO, F.**  
Eddy diffusivities for heat in the region near the wall.  
13 p2380 A69-28497

**OGINSKAIA, E. I.**  
Corrosion-resistant titanium alloy with 32 percent Mo /Korroziionostoikii splav titana s 32 percent Mo/.  
07 p1163 A69-18781  
Features of the production of ingots and semifinished products made from corrosion-resistant titanium alloys of type 4201 /Osobennosti tekhnologii proizvodstva slitkov i polufabrikatov iz korrozionostoikikh titanovykh splavov tipa 4201/.  
11 p1902 A69-24273

**OGIR, M. B.**  
Two types of chromospheric flares /O dvukh tipakh khromosfernykh vspyshek/.  
04 p0648 A69-14371

**OGISO, K.**  
Design technique for wideband tunnel diode amplifier.  
15 p2578 A69-30804

**OGIWARA, H.**  
The Toshiba blow-down MHD test facility, and experiments on non-equilibrium ionization.  
10 p1673 A69-23477  
Drop in the cathode potential of a cold electrode in an MHD generator /La chute de potentiel cathodique d'electrode froide du generateur M.H.D./.  
12 p2017 A69-27178

**OGLE, J. C.**  
Texture inhomogeneities in cold-rolled niobium /columbium/.  
21 p3744 A69-38737

**OGLESBEE, J. W.**  
A device for printing alphanumeric listings and digital data plots.  
17 p2932 A69-33108

**OGLETREE, B. F.**  
An experimental investigation of the velocity distribution in a confined vortex.  
01 p0060 A69-10413

**OGLOBLIN, B. G.**  
Thermal resistance of multilayer cylindrical elements in the thermionic converters.  
14 p2539 A69-29218  
Theoretical study of transient thermal conditions during the start-up of a thermionic converter.  
14 p2400 A69-29226

**OGLOBLINA, I. A.**  
Martensite phase with an fcc lattice in a titanium alloy with 5.9 percent iron /O martensitnoi faze s g. ts. k. reshetkoi v splave titana s 5,9 percent zhelezom/.  
15 p2636 A69-30105

**OGORKIEWICZ, R. M.**  
Deformation of thermoplastics under different types of tensile loading.  
10 p1716 A69-22942  
High mechanical performance - The engineering design problem.  
18 p3161 A69-34609

**OGORODNIK, A. D.**  
Negative resistance of In sub 2 Se crystals /Otritsatel'noe soprotivlenie kristallov In sub 2 Se/.  
22 p3992 A69-40602

**OGORODNIKOVA, V. I.**  
Trajectories of roots of two-channel systems with antisymmetric cross couplings /Traektorii kornei dvukhkanal'nykh sistem s antisimmetrichnymi perekrestnymi svyaziami/.  
21 p3686 A69-38886

**OGRADY, B. V.**  
Isotopic exchange between oxygen and carbon monoxide in shock waves.  
24 p4353 A69-43807

**OGRADY, J. J.**  
Airborne area navigational capability.  
07 p1178 A69-19763

**OGREN, P. J.**  
Pulse radiolysis of NO - Production of NO sub 2 and N sub 2 O sub 3 and the production and relaxation of vibrationally excited NO.  
14 p2410 A69-29928

**OGSTON, A. R.**  
Milestones in aviation fuels.  
[AIAA PAPER 69-779] 19 p3392 A69-35643

**OGURA, K.**  
Balloon-borne instrument for auroral X-ray measurements.  
23 p4166 A69-42011

**OGURA, T.**  
Studies on substructures around a fatigue crack in fcc metals and alloys.  
02 p0260 A69-11826  
The effects of substructure on fatigue crack propagation.  
12 p2188 A69-26915

**OGUREK, O. N.**  
Plastic bending during the shaping of corrugated panels by the method of constrained bending /Plasticheskie izgib pri formobrazovanii gofirovannykh panelei metodom stesnennogo izgiba/.  
19 p5324 A69-35833



## OGURTSOV, O. F.

Concerning the accuracy of ionization calorimeter energy measurements.

13 p2331 A69-28394

## OGURTSOV, S. V.

Reduction of titanium tetrachloride to titanium by magnesium /Vosstanovlenie titana iz tetrakhlorda magniem/.

07 p1163 A69-18784

Sodium thermal reduction of titanium tetrachloride to titanium /Natrietermicheskoe vosstanovlenie titana iz tetrakhlorda/.

07 p1164 A69-18785

## OGURTSOVA, L. A.

Optical generation in organic luminophor solutions in the 400 to 650-nm range /Opticheskaya generatsiya na rastvorakh organicheskikh luminoforov v diapazone 400-650 nm/.

04 p0612 A69-15374

Xanthene dye series laser excited by second-harmonic radiation from a neodymium laser.

06 p0932 A69-16914

Emission of solutions of organic molecules excited by harmonics of a neodymium laser /Generatsiya rastvorov organicheskikh molekul pri vozvuzhdenii garmioniki neodimovogo lazera/.

12 p2104 A69-26030

Laser action in solutions of organic luminophors in the 400-650 nm range.

16 p2797 A69-32121

## OGURTSOVA, L. O.

The question of using light converters for optical pumping.

05 p0777 A69-16373

## OGURTSOVA, N. N.

Dependence of the temperature and pressure of a capillary discharge plasma with a vaporizing wall on the geometry of the capillary and the discharge current.

02 p0286 A69-11573

Determination of the emissivity of air, N sub 2, and CO sub 2 at a temperature of approximately 10,000 K /Opredelenie izluchatel'noi sposobnosti vozdukh, N sub 2 i CO sub 2 pri temperature approximately 10,000 deg K/.

02 p0291 A69-12484

Decrease in the transparency of plexiglass during interaction with dense plasma /Umen'shenie prozrachnosti pleksiglasa pri vzaimodeistvii s plotnoi plazmoi/.

03 p0482 A69-14222

Coefficient of continuous absorption of a hydrogen-carbon plasma at a temperature of 40,000 deg K and a pressure of 70 atm /Koeffitsient nepreryvnogo pogloshcheniya vodorodno-uglerodnoi plazmy pri temperature 40 000 deg K i davlenii 70 atm/.

04 p0639 A69-15371

Investigation of gas protection of optical quartz from heating by a dense plasma /Issledovanie gazovoi zashchity opticheskogo kvartsa ot nagreva plotnoi plazmoi/.

11 p1926 A69-24616

Reversible opacity of an optical quartz occurring during contact with a dense plasma /Obratimaia neprozrachnost' opticheskogo kvartsa, voznikaiushchaia pri kontakte s plotnoi plazmoi/.

14 p2490 A69-29159

Method of determining the plasma energy luminosity from experimental data concerning the energy balance /Sposob opredeleniia energeticheskoi svetimosti plazmy iz eksperimental'nykh dannykh energeticheskogo balansa/.

15 p2662 A69-30978

Coefficient of continuous absorption of hydrogen-carbon plasma at 40,000 deg K and 70 atm.

16 p2822 A69-32118

## OGUTI, T.

Development and decay of minor polar geomagnetic disturbances.

02 p0240 A69-11724

Features of magnetic storms related to the solar-wind structure.

02 p0240 A69-11725

Hydromagnetic emissions associated with storm sudden commencements.

02 p0241 A69-11726

Polar chorus emission and worldwide geomagnetic variation.

10 p1681 A69-22803

Positive and negative correlations of geomagnetic fluctuations at conjugate-pair stations Syowa base and Reykjavik.

10 p1681 A69-22806

Solar flare effect on VLF chorus.

14 p2514 A69-29385

## OGUZOERELI, M. N.

A class of nonlinear integro-differential equations of parabolic type with a delayed argument.

02 p0273 A69-12249

A theorem concerned with generalized heat transfer phenomena. II - Stability of a nonlinear problem.

02 p0352 A69-12255

General theory of successive approximations in gear and machine studies based on the new matrix tensor method with a view toward computerization. II - Kinematic study of spatial gears with nondeformable closed contours, using the matrix tensor method /Allgemeine Theorie der sukzessiven Naehrungen beim getriebelund maschinenstudium auf grund der neuen Matrix-Tensor-Methode, im Hinblick auf die Anwendung von Rechenautomaten. II - Kinematisches Studium der Raumgetriebe mit unverformbaren geschlossenen Konturen mittels der Matrix-Tensor-Methode/.

15 p2713 A69-31020

Optimization in distributed parameter control systems - A dynamic programming approach. I.

15 p2645 A69-31024

## OGUZOERELI, M. N.

New equations of analytical mechanics and differential operators of higher order /Nuove equazioni della meccanica analitica ed operatori differenziali d'ordine superiore/.

02 p0281 A69-12199

## OH, B. K.

Theory of localized and non-localized adsorption.

06 p0980 A69-17387

## OH, S. K.

Approximate analysis of transient laminar boundary-layer development. [ASME PAPER 68-HT-10]

02 p0232 A69-12208

Non-gray radiation effects on mixing of non-similar gases.

08 p1253 A69-20844

## OHAGAN, M.

Television broadcasting by synchronous satellite.

13 p2220 A69-27830

## OHAGAN, P.

Ultrasonic paramagnetic resonance of Pr super 3 plus-CaF sub 2.

24 p4360 A69-42790

## OHANDLEY, D. A.

The radius of Venus as determined by planetary radar and Mariner 5 radio tracking data.

03 p0508 A69-13348

## OHANLON, J.

Internal energy and gravitation.

07 p1182 A69-19419

Scalar hydrodynamics and gravitation.

12 p2130 A69-26462

A covariant treatment of relativistic plasma oscillations in the presence of an external magnetic field.

16 p2816 A69-31633

Relativistic magnetohydrodynamics of a gravitating fluid.

22 p3992 A69-41056

## OHANLON, J. F.

Plasma anodization of germanium.

10 p1742 A69-24004

A high voltage thin-film transistor.

16 p2757 A69-31614

## OHARA, G. J.

Normal modes and natural frequencies of combined structures.

04 p0678 A69-14870

## OHARA, H.

The evaluation of definite integrals by interval subdivision.

20 p3498 A69-36947

## OHARA, N.

Dynamic stability tests of V/STOL model.

06 p0866 A69-17091

## OHARA, S.

Heat transfer by simultaneous conduction and radiation for two absorbing media in intimate contact.

13 p2378 A69-28340

## OHASHI, Y.

On the residual deformation of an elasto-plastically bent thin circular plate after perfect unloading.

19 p3438 A69-36306

Study on the axisymmetric elasto-plastic deformation of thin plates.

22 p4041 A69-40064

## OHEARNE, C. S.

Problems in the use of the expected number of exceedances in establishing design gust loads.

11 p1823 A69-25504

## OHERN, E. A.

HSD map transformation mechanization.

[AIAA PAPER 69-987] 22 p3908 A69-40367

## OHERREN, D. H.

Radar reflectivity plots - Digital method.

15 p2572 A69-31111

## OHISHI, F.

Classification of the fatigue behavior of plastics.

10 p1716 A69-23349

## OHJI, K.

The elastic analogue in creep stress analysis.

02 p0345 A69-12418

## OHJI, M.

Some excitation temperature measurements of induction-coupled argon plasmas.

06 p0964 A69-17193

## OHKAWA, T.

Plasma-current multipole experiments.

16 p2823 A69-32563

## OHKI, K.-I.

Directivity of solar hard X-ray bursts.

17 p3023 A69-33055

## OHKUBO, M.

Shock wave structure in expansion flows.

06 p0908 A69-17021

Radiation from an electric dipole in a column of anisotropic plasma.

12 p2034 A69-27103

Reflection of electromagnetic waves from the boundary of a semi-infinite plasma.

21 p3672 A69-38743

Electromagnetic wave reflection and transmission from the boundary of semi-infinite compressible anisotropic plasma.

24 p4282 A69-42978

## OHLENDORF, R. C.

A special-purpose navigation computer utilizing current integrators and step motors.

03 p0404 A69-13431

## OHLSEN, K.

A system for aircraft maintenance /System fuer Flugzeugwartung/.

17 p2979 A69-33703

## OHLSON, J. E.

Pioneer VI Faraday-rotation solar-occultation experiment.

15 p2700 A69-31419

## OHM, W.

The influence of portal blood pressure on diuresis in unanesthetized rats /Ueber den Einfluss des Druckes im Portalkreislauf auf die Diurese der wachen Ratte/.

23 p4094 A69-42074

## OHMAN, L. H.

A "square" flare - A second note.

02 p0190 A69-12544

## OHNAMI, M.

Thermal fatigue combined with static mean stress and reversed mechanical stress.

21 p3847 A69-39813

## OHNISHI, K.

Crack propagation of corrosion fatigue under service loads.

21 p3750 A69-39814

## OHNO, J. M.

Embrittlement and stress-corrosion cracking in titanium-aluminum base alloys.

17 p2987 A69-33372

## OHNUMA, T.

Decay of neutral waves into ion waves.

03 p0475 A69-13158

## OHR, S. M.

Dislocation channeling in neutron-irradiated niobium.

09 p1521 A69-21345

## OHRENSTEIN, S. B.

Terrain following/terrain avoidance flight with the AH-56A vehicle.

[AHS PAPER 311] 17 p3002 A69-33544

## OHSIO, M.

Anomalous spa phenomena and their interpretation.

17 p2959 A69-33006

## OHTA, K.

Experimental investigation of the propagation of ELF atmospherics.

23 p4114 A69-41362

**OHTMER, O.**  
Approximate conformal mapping of regions with corners and large curvatures of the boundary curves onto the unit circle /Zur angenaeherten konformen Abbildung von Gebieten mit ecken und starken Krue-mungen der Randkurven auf den Einheitskreis/.  
10 p1724 A69-22880

**OHTOMO, M.**  
Nucleation of high-field domains in n-GaAs.  
05 p0807 A69-15959

**OHTSU, J.**  
A new direction finding network for locating the sources of atmospherics.  
18 p3102 A69-34961  
Electromagnetic wave scattering by ionospheric regularities.  
18 p3102 A69-34963  
Ducted propagation of hydromagnetic whistlers in the magnetosphere.  
18 p3102 A69-34966  
Whistler propagation in magnetically disturbed periods at two lower latitudes.  
18 p3102 A69-34967  
Penetration of whistlers through the ionosphere.  
18 p3130 A69-34972

**OHTSUKA, Y.**  
A CO sub 2 Q-switched laser and its nonlinear am-plification characteristics.  
06 p0933 A69-17118

**OHYAMA, H.**  
Stratification of F region during solar minimum and its variation comparing with solar maximum's.  
17 p2959 A69-33005

**OIGENBLIK, A. A.**  
Thermodynamic analysis of the synthesis of boron nitride with the aid of certain gas-phase reactions.  
17 p2992 A69-33432

**OIKAWA, H.**  
Studies on substructures around a fatigue crack in fcc metals and alloys.  
02 p0260 A69-11826

**OJA, T.**  
Nuclear-magnetic-resonance studies of ferroelec-tricity in normal and irradiated Rochelle salt.  
09 p1559 A69-22283  
Super 11 B quadrupole coupling constants in solid boron halides.  
20 p3483 A69-36935

**OJIMA, T.**  
Radio observation of galactic HII regions at 4170 MHz. II.  
06 p1008 A69-17696  
Galactic background at 4 GHz.  
18 p3200 A69-34996

**OKA, S. N.**  
A possible form of the universal equations of a laminar boundary layer /Ob odnoi vozmozhnoi forme universal'nykh uravnenii laminarnogo pogranichnogo sloia/.  
11 p1876 A69-25490

**OKABAYASHI, K.**  
Influences of silicon content and grain size of pri-mary silicon crystals on the wear of high silicon aluminium alloys.  
09 p1526 A69-22281

**OKADA, M.**  
Study on application of maraging stainless steel to liquid rocket propellant tank.  
07 p1166 A69-19236

**OKADA, T.**  
Erosion of bearing alloys in oil film.  
01 p0094 A69-10313

**OKAMOTO, H.**  
Observation on stress effect in Schottky barrier diodes.  
16 p2758 A69-31619

**OKAMOTO, I.**  
On the stability of ionization fronts in the presence of a magnetic field.  
04 p0650 A69-14363  
On the stability of a plane vortex sheet in magnetic fields.  
08 p1358 A69-19797  
On the loss of angular momentum from the protosun and the formation of the solar system.  
18 p3203 A69-35346

**OKAMOTO, M.**  
An estimation of the heat flux and the water vapour flux by the bulk aerodynamic method.  
07 p1176 A69-18965

Parametric effects of an alternating field on in-homogeneous plasmas.  
13 p2304 A69-27298

**OKAMOTO, T.**  
An approximate solution of flow around blunt bodies with detached shock waves. II - Asymmetrical flow.  
22 p3861 A69-41179

**OKAMURA, S.**  
UHF-band, low-noise receiver using parametric am-plifiers uncooled.  
05 p0728 A69-15672

**OKAMURA, T. T.**  
The determination of spatial amplification factors and their application to predicting transition.  
[AIAA PAPER 69-10] 06 p0914 A69-18127  
Dependence of shock-tube boundary layers on shock strength.  
22 p3930 A69-40531

**OKAMURA, Y.**  
A finite-difference scheme for the primitive equation model with special emphasis on the suppression of the two-grid interval noise.  
19 p3364 A69-36507

**OKANO, H.**  
The influence of prestrain on subsequent yield sur-faces. I.  
01 p0166 A69-10303

**OKAPUU, U.**  
Cooled radial turbine for high power-to-weight ap-plications.  
[AIAA PAPER 69-524] 16 p2838 A69-32662

**OKAZAKI, T.**  
Stall-flutter in cascade. III - Arbitrary mode vibration of cascade blades as treated by semi-actuator disc method.  
11 p1818 A69-25028  
Evaporation and combustion of a fuel droplet.  
20 p3632 A69-37520

**OKE, J. B.**  
Abundances in two horizontal-branch A stars.  
08 p1385 A69-20061  
A multi-channel photoelectric spectrometer.  
08 p3138 A69-21131  
On the nature of Ryle and Bailey's candidate star for the pulsating radio source CP 1919.  
09 p1591 A69-21455  
A study of visual and infrared observations of SCO XR-1.  
09 p1604 A69-22401  
Investigation of the nucleus of the Seyfert galaxy NGC 4151 /Issledovanie iadra seifertovskoi galaktiki NGC 4151/.  
12 p2164 A69-27023  
Photoelectric spectrophotometry of quasi- stellar sources /Fotoelektricheskaiia spektrofotometriia kvazizvezdnykh istochnikov/.  
12 p2168 A69-27051  
Spectrophotometry and infrared photometry of BL Lacertae.  
13 p2335 A69-27315  
Photoelectric spectrophotometry of the Crab pulsat-ing radio source NP 0532.  
13 p2335 A69-27317

**OKEAN, H. C.**  
S-band integrated parametric amplifier having both flat-gain and linear phase response.  
13 p2230 A69-27678

**OKEEFE, J. A.**  
Isostasy on the moon.  
04 p0654 A69-14631  
Collapse theory of dimple craters.  
05 p0818 A69-15589  
Water on the moon and a new nondimensional number.  
07 p1218 A69-19262  
Origin of the moon.  
14 p2527 A69-29882  
Origin of tektites.  
22 p4012 A69-40086

**OKEEFE, R. F.**  
Fluidic decimal counter for digital control applica-tions.  
15 p2616 A69-31295

**OKEEFE, R.**  
Computer optimization of FM/FM telemetry systems.  
19 p3273 A69-36275

**OKERBLOM, T. I.**  
Experimental investigation of a vortex flow past a smooth body of revolution and past a body of revolu-tion with a wing and ribs at a Mach number of two /Ek-sperimental'noe issledovanie vikhrevogo techeniia okolo izolirovannogo tela vrashcheniia i tela vrashcheniia s krylom i rebrami pri chisle Makha, rav-nom dvum/.  
02 p0191 A69-12586  
Some experimental data concerning the influence of the Mach number on the pattern of a vortex flow past a delta wing and a circular cone /Nekotorye eksperimental'nye dannye o vlianii chisla Makha na kartinu vikh-revogo techeniia okolo treugol'nogo kryla i kruglogo konusa/.  
06 p0858 A69-17339

**OKHLOPKOV, V. P.**  
Modulation of galactic cosmic rays during minimum solar activity according to satellite measurements /Moduliatsiia galakticheskikh kosmicheskikh luchei v minimume solnechnoi aktivnosti po izmereniiam na sputnikakh zemli/.  
10 p1756 A69-22819  
Spectra of Forbush decreases in the low-energy re-gion according to earth satellite measurements in 1964 and 1965 /Spektry Forbush-ponizhenii v oblasti malyykh energii po izmereniiam na sputnikakh zemli v 1964-1965 gg./.   
10 p1758 A69-22829

**OKHOTSIMSKII, D. E.**  
Motion control during reentry into the atmosphere /Upravlenie dvizheniem pri vkhode v atmosferu/.  
13 p2355 A69-27682  
Motion control during entry into the atmosphere /Upravlenie dvizheniem pri vkhode v atmosferu/.  
21 p3767 A69-39649

**OKHREMENKO, N. M.**  
Optimal geometrical relations in a coaxial linear in-duction MHD generator /Optimal'nye geometricheskie sootnosheniia v koaksial'nom lineinom induktsionnom MGD-generatore/.  
13 p2207 A69-27507  
Principles of the Theory and Design of Linear Induc-tion Pumps for Liquid Metals /Osnovy Teorii i Proek-tirovaniia Lineinykh Induktsionnykh Nasosov dlia Zhidkikh Metallov/.  
13 p2209 A69-27926  
Experimental investigation of the shunting effect produced by the conducting channel walls of a plane induction MHD machine /Eksperimental'noe iss-leдование shuntiruiushchego efekta provodiashchikh stenok kanala v ploskoi induktsionnoi MGD- mashine/.  
14 p2405 A69-29912

**OKKES, R. W.**  
Performance of block-coding systems when trans-mitting through a N-ary discrete channel in the presence of white Gaussian noise.  
07 p1080 A69-19096  
Performance of partially coherent binary reception.  
23 p4122 A69-41772

**OKLADNIKOV, I. U. N.**  
Experimental biological life support system. I - Con- tinuous cultivation of algae as a link of a closed ecosystem.  
01 p0020 A69-11077  
Experimental biological life support system. II - Gas exchange between man and microalgae culture in a 30-day experiment.  
01 p0021 A69-11078

**OKLAND, H.**  
Experimental integration of a 4-level primitive equa-tion model of the atmosphere.  
19 p3303 A69-36408

**OKOLOWSKI, J. A.**  
Functional integration theory for incompressible fluid turbulence. II.  
12 p2062 A69-26602

**OKRAINETS, P. N.**  
Influence of annealing time after work hardening on the creep characteristics of nickel /Vliianie vremeni otzhiga posle kholodnoi deformatsii na kharakteristiki polzuchesti nikelia/.  
18 p3159 A69-35445  
Influence of preliminary deformation on the creep characteristics of a nimonik type alloy /Vliianie prevaritel'noi deformatsii na kharakteristiki pol-zuchesti сплава tipa nimonik/.  
18 p3159 A69-35446  
Influence of the temperature of preprogrammed deformation on the creep strength of nickel /Vliianie temperatury prevaritel'noi programmirovannoi defor-matsii na dolgovechnost' nikelia pri polzuchesti/.  
18 p3160 A69-35455

**OKROASHVILI, G. G.**  
Relations between radioactivity distributions in the atmosphere at different altitudes /O svyaziakh ras-



predelenia radioaktivnosti na razlichnykh vysotakh at-  
mosfery/. 11 p1945 A69-24320

OKSENGORN, B.

Demonstration of a polarization of the light from the  
stimulated Brillouin effect in compressed gaseous  
nitrogen /Mise en evidence d'une depolarization de la  
lumiere emise par effet Brillouin stimule dans l'azote  
gazeux comprime/. 09 p1516 A69-21691

OKSMAN, I. A.

Problem of the electroluminescence of GaAs single  
crystals. 04 p0644 A69-15271

OKSMAN, J.

Scintillation boundary in the auroral ionosphere.  
15 p2605 A69-31443

OKTEM, F.

On an extension of electromagnetic and gravitational  
tensors and of the Bel-Robinson tensor. 03 p0467 A69-13755

OKTIABRSKII, B. S.

Parameters of the energy structure of ZnTe- CdTe  
and ZnSe-ZnTe crystals. 03 p0492 A69-14173

OKU, T.

Semiconductor lasers. 09 p1518 A69-22122

OKUBO, H.

Electroplating method of stress analysis.  
19 p3441 A69-36751

OKUDA, H.

The galactic magnetic field derived from cosmic-ray  
electrons. 05 p0828 A69-16612  
Computer experiments on plasma instabilities due to  
anisotropic velocity distributions. 15 p2661 A69-30920

OKUDA, Y.

Fatigue properties of fiberglass reinforced plastics -  
Effects of stress direction and mean stress. 06 p0945 A69-17124

OKULOVA, I. L.

Experimental application of a universal program of  
the Leningrad State University Computer Center for  
calculating axisymmetrically deformed shells of revolution  
/Opyt ekspluatatsii universal'noi programmy VTs  
LGU dlia rascheta obolochek vrashcheniia pri osesim-  
metrichnoi deformatsii/. 06 p1026 A69-18019

OKUN, L. S.

Investigation of strongly-doped n-type indium an-  
timonide. 09 p1558 A69-21869

OKUNEV, I. U. B.

Ways of developing radio systems for transmission of  
discrete information /Puti razvitiia sistem radiosvazi  
dlia peredachi diskretnoi informatsii/. 01 p0031 A69-10778  
Development of digital data radio transmission  
systems. 10 p1653 A69-23107

OKUNEV, R. I.

Selection of longitudinal oscillation modes in gas  
lasers with annular cavities /Seleksiia prodol'nykh  
tipov kolebaniy v gazovykh OKG s kol'tsevyimi rezona-  
torami/. 21 p3740 A69-39553

OKUNO, G.

Application of a Fraunhofer hologram to correlation  
operation. 09 p1499 A69-22276

OKUZAWA, T.

Drift wave instability on the plasmopause with a  
slight modification due to the velocity shear. 15 p2595 A69-30096

OKWIT, S.

Noise considerations in broad-band traveling- wave  
masers. 02 p0257 A69-12428  
Low-noise receiver for satellite communication  
ground terminals. 09 p1458 A69-22470

OLANDER, D. R.

Dissociation of hydrogen on tantalum using a modu-  
lated molecular beam technique. 06 p0960 A69-17107  
Characterization of multichannel sources and their  
utilization in molecular beam systems. 19 p3376 A69-36175

OLANDER, R. R.

An analytical expression of microlayer thickness in  
nucleate boiling. 13 p2375 A69-27789

OLAUGHLIN, T. W.

Optokinetic reflex responses to cross-coupled gyro-  
scopic stimuli. 14 p2409 A69-29300

OLBERT, S.

Summary of experimental results from M.I.T. detec-  
tor on IMP-1. 07 p1129 A69-19374

Models of X-ray stars. 20 p3593 A69-38154

OLCOTT, E. L.

Pyrolytic graphite coated composite materials.  
19 p3357 A69-35539

OLCOTT, T. M.

Manned test of a regenerative life support system.  
07 p1071 A69-19427

OLD, J. G.

Nondestructive testing of beryllium.  
[SAE PAPER 680652] 03 p0444 A69-13546

OLDEKOP, W.

Conceptual study of satellites for direct-TV- broad-  
cast with incore-thermionic-reactor and electrical  
propulsion. 01 p0114 A69-10466  
[UN PAPER 68-95559]  
Calculation model for Hall type electromagnetic  
plasma accelerators /Ein Rechenmodell fuer elek-  
tromagnetische Plasmabeschleuniger vom Hall-Typ/.  
11 p1866 A69-25214  
Power requirements and power supply of spacecraft  
/Energiebedarf und Energieversorgung von Raumfahr-  
zeugen/. 12 p2015 A69-25863

OLDENBURGER, R.

Theory of distributed parameter systems /Theorie  
des systemes a parametres repartis/. 15 p2582 A69-30319

Theory of distributed systems.  
[ASME PAPER 69-FE-15] 20 p3568 A69-37999

OLDHAM, M. S.

A parametric study of low altitude orbital flight.  
21 p3798 A69-38626

OLDHAM, W. J. B., JR.

Excitation of the n super l S states of helium by  
proton impact. 06 p0960 A69-17027  
Temporal plasma echoes. 21 p3777 A69-38713

OLDRIEVE, R. E.

Protective coatings for chromium alloys.  
12 p2114 A69-26495

OLDYREV, P. P.

Investigation of the energy dissipation in fiberglass-  
reinforced plastics by the dynamic hysteresis loop  
method /Issledovanie rasseianiia energii v  
stekloplastikakh metodom dinamicheskoi petli  
gisterезisa/. 17 p2993 A69-33937

OLEAK, H.

Extragalactic research. 15 p2681 A69-30436

OLEAR, B. T.

The application of CRT contour analysis to general  
circulation experiments. 01 p0109 A69-10539

OLEARY, B. T.

Influence of lunar mascons on its dynamical figure.  
05 p0820 A69-15762  
The opposition effect of Mars and its implications.  
07 p1212 A69-18601  
Moon - Two new mascon basins. 16 p2864 A69-32446  
Lunar and planetary mass concentrations. 21 p3803 A69-38980

OLEARY, G. C.

A 10,000-1 pulse compression filter using a tapped  
delay line linear filter synthesis technique. 03 p0403 A69-13217

OLEFIRENKO, V. M.

Study of the properties of maraging steels with in-  
creased cobalt and molybdenum content /Issledovanie  
svoistv martensitno stareiushchikh stalei s povyshe-  
nym soderzhaniiem kobal'ta i molibdena/. 01 p0098 A69-10731

OLEHY, D. A.

Rare earth abundances in meteoritic chondrules.  
08 p1403 A69-20916

OLEINIK, A. M.

Dwell time in the excitation zone of particles injected  
into a spark discharge plasma /O vremeni prebyvaniia  
chastits, vduvaemykh v plazmu iskrovogo razriada, v  
zone vozbuzhdeniia/. 11 p1926 A69-24624

OLEINIK, O. A.

Mathematical problems of boundary layer theory.  
21 p3697 A69-39698  
Approximate solutions and asymptotic expansions  
for the problem of boundary-layer development during  
acceleration /Priblizhennye resheniia i asimp-  
toticheskie razlozheniia dlia zadachi o razviti-  
pogranichnogo sloia pri razgone/. 22 p3929 A69-40110

OLEINIK, V. P.

Two-quantum light absorption by conduction elec-  
trons in a semiconductor /Dvukhkvantovoe  
pogloschenie sveta elektronami provodimosti v  
poluprovodnike/. 03 p0437 A69-13041  
Dragging of electrons by an electromagnetic wave in  
a homogeneous magnetic field. 18 p3181 A69-35497

OLEINIKOV, S. I. U.

Symmetrical binary communications channel in the  
case of an unknown signal phase /Dvoichnyi sim-  
metrichnyi kanal svazi pri neopredelennoi faze  
signala/. 04 p0556 A69-14492

OLEKSIK, R. E.

An integrated nonvolatile read-write memory with  
addressing. 17 p2942 A69-34120

OLENDZENSKEI, P. A.

A circuit analysis program for educational use.  
18 p3111 A69-34680  
NASAP revisited - An educational tool. 21 p3856 A69-39662

OLENEVA, G. I.

A cuvette for recording combination light scattering  
spectra using a helium-neon laser as the excitation  
source /Kuveta dlia s'emki spektrov krs s ispol'-  
zovaniem geli-neonovogo lazera v kachestve  
istochnika vozbuzhdeniia/. 15 p2635 A69-31105

OLESIK, Z.

Plastic energy dissipation due to a penny- shaped  
crack. 10 p1803 A69-24030

OLESON, N. L.

Ion acoustic wave dispersion in a highly ionized  
argon plasma in a magnetic field. 01 p0133 A69-11216

OLEVINSKII, K. K.

Composition and thermodynamic functions of a  
reacting gaseous or heterogeneous system /Sostav i ter-  
modynamicheskie funktsii reagiruiushchei gazovoi ili  
heterogennoi sistemy/. 11 p2001 A69-25223  
Calculation of flow and thermodynamic variables of  
an argon-cesium mixture behind a normal shock. 23 p4150 A69-41335

OLEVSKAIA, S. M.

Application of the method of canonical correlations  
to an analysis of the geopotential field /Primenenie  
metoda kanonicheskikh korreliatsii k analizu polia  
geopotentsiala/. 05 p0789 A69-16637  
The use of the canonical-correlation method in  
analyzing the geopotential field. 14 p2472 A69-28793

OLFE, D. B.

Radiation and Reentry. 04 p0685 A69-14597  
An iterative method for non-planar radiative transfer  
problems. 08 p1420 A69-20152  
Accuracy of constant density and constant pressure  
assumptions for radiating shock waves. 13 p2249 A69-28240

Radiative equilibrium of a gray medium bounded by  
nonisothermal walls. 17 p3072 A69-33294  
[AIAA PAPER 69-633]

OLFS, P.

A mechanically and electronically tunable resonator  
for driving IMPATT and Gunn diodes /Ein mechanisch

und elektronisch abstimbarer Resonator zum Betrieb von IMPATTs und Gunn-Dioden/.  
07 p1097 A69-18455

Varactor tuning of E sub 010 resonators in the microwave range /Varaktorabstimmung von e sub 010-Resonatoren im Mikrowellenbereich/.  
11 p1854 A69-25610

**OLIANIUK, P. V.**  
An approach to a unified theory of the measurement of spacecraft parameters.  
07 p1087 A69-19609

**OLIEVSKII, M. I.**  
Behavior of zirconium and niobium carbides in a plasma /Povedenie v plazme karbidov tsirkoniia i niobiia/.  
07 p1165 A69-18933

Density of ceramic plasma coatings /Plotnost' keramicheskikh plazmennikh pokrytii/.  
12 p2118 A69-26258

**OLIINYK, P. A.**  
Sunspot models and the theoretical equivalent widths of the absorption lines /Modeli solnechnogo piazna i teoreticheskie ekvivalentnye shiriny linii pogloscheniia/.  
14 p2525 A69-29721

**OLINER, A. A.**  
Element pattern nulls in phased arrays and their relation to guided waves.  
04 p0570 A69-14310

Scattering by a multimode corrugated structure with application to p type wood anomalies.  
17 p2925 A69-33844

On blindness in large phased arrays.  
17 p2928 A69-33872

Role of the lateral wave in total reflection of light.  
23 p4191 A69-42148

**OLIVA, J. L.**  
Rotary actuators help train jet pilots.  
20 p3511 A69-38182

**OLIVA, R. D.**  
Energy utilization in intermittent exercise of supramaximal intensity.  
23 p4100 A69-41443

**OLIVAIN, J.**  
Instabilities related to the finite length of a plasma /Instabilites liees a la longueur finite d'un plasma/.  
12 p2141 A69-27179

Spatial harmonics of the harmonic-frequency instabilities of the electron cyclotron half-frequency /Harmoniques spatiaux des instabilites aux frequences harmoniques de la demi-frequence cyclotronique electronique/.  
13 p2314 A69-28364

**OLIVEI, A.**  
The chemical rate equation for a magnetoactive plasma in reactive nonequilibrium.  
07 p1193 A69-19142

**OLIVEIRA, R.**  
Convergence to the exact solution in the finite element method.  
03 p0527 A69-13745

**OLIVER, C. C.**  
Downstream radiation flux to blunt entry vehicles.  
02 p0354 A69-12547

Theoretical predictions of nongray radiant heat transfer in high-temperature nonisothermal CO sub 2 - N sub 2 mixtures. [AIAA PAPER 69-636]  
17 p3070 A69-33258

**OLIVER, J.**  
Inherent instability in systems of first order linear differential equations.  
05 p0786 A69-15926

An error estimation technique for the solution of ordinary differential equations in Chebyshev series.  
08 p1344 A69-20828

**OLIVER, J. P.**  
A spectroscopic study of the remarkable nebula NGC 6302.  
22 p4026 A69-40647

**OLIVER, J. R.**  
Rare-gas pumping efficiencies for neodymium lasers.  
17 p2980 A69-32958

**OLIVER, R. E., II**  
Slender channel approximation in low Reynolds number channel flow.  
09 p1482 A69-21976

**OLIVER, R. L.**  
Solar arrays utilizing large area silicon solar cells.  
19 p3253 A69-35708

**OLIVER, V. J.**  
The analysis and use of APT data. [UN PAPER 68-95300]  
01 p0108 A69-10462

**OLIVER, W.**  
Electron beam radiation curing of liquid mercaptan terminated butadiene-acrylonitrile copolymers.  
09 p1512 A69-22368

**OLIVIER, J.**  
Influence of illumination on metal-insulator-semiconductor systems - Photo MIS effect /Influence de l'illumination sur les systemes metal-isolant-semi-conducteur - Effet photo-MIS/.  
20 p3585 A69-38273

**OLIVIER, J. R.**  
A program plan for earth orbital space astronomy.  
13 p2240 A69-27947

**OLKHOV, IU. N.**  
Reduction of titanium tetrachloride to titanium by magnesium /Vosstanovlenie titana iz tetrakhlorida magniia/.  
07 p1163 A69-18784

**OLLENDORFF, F.**  
Propagation of electromagnetic step-function waves in the ionosphere /Ueber die Ausbreitung elektromagnetischer Sprungwellen in der Ionosphae/.  
12 p2034 A69-27132

On the protective action of hip safety belts in vehicles.  
20 p3482 A69-37595

**OLLERHEAD, J. B.**  
Problems of helicopter noise estimation and reduction. [AIAA PAPER 69-195]  
07 p1055 A69-19563

A theoretical study of helicopter rotor noise.  
18 p3090 A69-34322

**OLMR, J.**  
Relation of 1420 MHz radio emission to the distribution of photospheric magnetic fields, coronal emission and filaments.  
11 p1964 A69-25417

**OLMSTEAD, W. E.**  
Force relationships and integral representations for the viscous hydrodynamical equations.  
07 p1121 A69-19298

**OLONICHEV, I. S.**  
Calculation of the heat transfer and hydraulic resistance for the laminar flow of an equilibrium dissociating gas in a circular tube /Raschet teploobmena i gidravlicheskogo soprotivleniia pri laminarnom techenii ravnovesno dissociiruiushchego gaza v krugloi trube/.  
10 p1679 A69-23426

**OLSEN, E.**  
Potassium feldspar in Weckeroo Station, Kodaikanal, and Colomera iron meteorites.  
04 p0659 A69-14979

**OLSEN, J.**  
A note on the development of the Ekman layer at a leading edge.  
07 p1120 A69-19044

**OLSEN, J. L.**  
Mechanical effects in type II superconductors.  
02 p0294 A69-11776

**OLSEN, W. S.**  
Laser profilometer.  
21 p3739 A69-39461

**OLSON, C.**  
Transverse plasma-wave echoes.  
16 p2823 A69-32467

**OLSON, C. E., JR.**  
Some observations on photographic interpretation - What is photographic interpretation/ques/.  
20 p3540 A69-37739

**OLSON, E. C.**  
The detection and surface gravities of metallic-line early A stars.  
12 p2171 A69-27151

**OLSON, F. A.**  
YIG magnetoelastic two-ports for microwave pulse compression.  
02 p0217 A69-12149

**OLSON, J. V.**  
High-frequency magnetic fluctuations associated with the earth's bow shock.  
22 p3938 A69-40501

**OLSON, K. W.**  
Measured noise temperature versus theoretical electron temperature for gas discharge noise sources.  
02 p0210 A69-12437

Band transition noise measurements of gas discharge noise sources.  
02 p0212 A69-12461

**OLSON, L. W.**  
An automatic multichannel instrument for monitoring electrical transients on aircraft.  
17 p2947 A69-34135

**OLSON, M. D.**  
Some flutter solutions using finite elements.  
11 p1991 A69-25516

**OLSON, N. T.**  
Oxygen surface-density measurements based on characteristic X-ray production by 100-kev protons.  
04 p0631 A69-14446

**OLSON, R. E.**  
Inelastic transition probabilities and their role in the quenching of glory extrema in atom-diatom scattering.  
07 p1185 A69-19302

Expansion coefficients for analysis of molecular beam scattering data via the Buckingham-Corner intermolecular potential.  
13 p2301 A69-27206

**OLSON, R. H.**  
Solid state broadband R-F power amplifiers for airborne H-F radio.  
17 p2942 A69-34114

**OLSON, R. M.**  
Instantaneous peripheral vascular resistance changes rendered by critical closing phenomenon.  
22 p3873 A69-40202

**OLSSON, A. G.**  
The impact of spacecraft OCS on the design of ground support equipment and software. [AIAA PAPER 69-307]  
09 p1478 A69-22382

**OLSSON, G. R.**  
Hypersonic laminar boundary layer approaching the base of a slender body. [AIAA PAPER 68-67]  
23 p4059 A69-41883

**OLSSON, L.**  
A comparative study of some cardiovascular effects of sotalol /MJ 1999/ and propranolol.  
23 p4080 A69-41403

**OLSSON, P.-I.**  
An energy spectrum of primary cosmic ray helium nuclei determined by means of nuclear emulsions exposed in sounding rocket flights.  
08 p1378 A69-20264

**OLSTAD, W. B.**  
Correlations for stagnation-point radiative heat transfer.  
04 p0685 A69-14736

Nongray radiating flow about smooth symmetric bodies with large blowing. [AIAA PAPER 69-637]  
17 p2891 A69-33290

**OLSZAK, W.**  
Rheological states of geometrically nonlinear rotational membranes.  
11 p1980 A69-24821

Creep phenomena and failure of nonlinear rotational membranes.  
19 p3444 A69-36806

On certain cases of elastic non-homogeneity.  
20 p3624 A69-37589

**OLSZEWSKI, M.**  
Pressure gain fields in fluidics with free interacting jets.  
02 p0195 A69-12076

**OLSZOWKA, A. J.**  
A digital computer program for constructing ventilation-perfusion lines.  
22 p3875 A69-40230

**OLSZOWSKI, B.**  
Efficiency of the optimal shock isolation.  
15 p2713 A69-31019

**OLTMANS, D. A.**  
Precision insertion-loss calibrations at 90 GHz.  
16 p2760 A69-31945

**OMAN, R. A.**  
Drag of a small body in the wake of a large satellite.  
12 p2012 A69-26798

**OMBREDANE, E.**  
Automatic drawing of printed circuits with the aid of a computer /Trace automatique des circuits imprimes a l'aide d'un ordinateur/.  
08 p1296 A69-19979

**OMEARA, D. M.**  
Mechanical components of human eye movements.  
22 p3872 A69-40200



## OMELCHENKO, O. IA.

The absorption of an extraordinary wave near hybrid resonance in a weakly nonuniform plasma.  
18 p3180 A69-35025

## OMELCHENKO, V. A.

The resolving power of a compressed signal spectral analyzer taking into account the dynamic amplitude range /Razreshaiushchaia sposobnost' analizatora spektra szhatogo signala s uchetom dinamicheskogo diapazona amplitud/.  
17 p2939 A69-33906

The use of a weighted signal treatment in a spectral analyzer with an in-phase storage /Primenenie vesovoi obrabotki signala v spektroanalizatore s sinfaznym nakopleniem/.  
17 p2931 A69-33908

## OMELIANOVSKII, E. M.

Investigation of some properties of iron-doped gallium arsenide.  
04 p0643 A69-15263

Radiative transitions between a deep acceptor and the valence band in gallium arsenide /Izuchatel'nye perekhody glubokii akseptor- valentaia zona v arsenide gallia/.  
19 p3392 A69-36611

## OMELIK, A. I.

Flow mass measurement method for determining the gas stagnation temperature in an transition region /Raskhodnyi metod opredeleniia temperatury tormozheniia gaza v perekhodnoi oblasti/.  
24 p4408 A69-43492

## OMETSINSKAIA, E. B.

Motion of a cylindrical tank containing a liquid under the action of longitudinal forces /Dvizhenie tsilindricheskogo baka s zhidkost'iu pod deistviem prodol'nykh sil/.  
08 p1419 A69-21181

Generalized equations of plate dynamics /Obobshchennye uravneniia dinamiki plastin/.  
18 p3226 A69-35376

## OMHOLT, A.

The intensity ratio  $I_{4278}/I_{5577}$  in aurora.  
02 p0235 A69-11425

Measurement of absolute auroral luminosity /Experiment S.32/.  
13 p2253 A69-27752

Atmospheric Emissions, Proceedings of the NATO Advanced Study Institute, Agricultural College of Norway, As, Norway, July 29-August 9, 1968.  
21 p3705 A69-38482

Pulsating aurora.  
21 p3708 A69-38492

## OMIDVAR, K.

Electron-impact ionization of  $H/2s$  and  $H/2p$ .  
06 p0961 A69-17138

Behavior of the ionization cross section in collisions of high-energy electrons with hydrogenic atoms.  
08 p1356 A69-20738

## OMIDVARAN, C.

Analysis of ribbed plates.  
11 p1984 A69-25019

## OMNES, A.

Study of the stability of a sounding rocket as a function of the length of the nose and of its mass /Etude de la stabilite d'une fusée-sonde en fonction de la longueur de l'ogive et de sa masse/.  
19 p3432 A69-36761

## ONCHI, M.

Interactions of N sub 2 O, NO and CO sub 2 with /100/ nickel using combined LEED and mass spectrometer measurements.  
08 p1268 A69-20138

## ONDOH, T.

Analysis of the topside ionospheric data from Alouette II over Japan. I.  
01 p0065 A69-10548

Ducted echoes on topside ionograms and whistlers at middle latitude.  
01 p0029 A69-10551

Characteristics of low-latitude VLF emissions.  
03 p0398 A69-13900

The structure of the topside ionosphere deduced from Alouette data.  
20 p3532 A69-37895

## ONDREJCIN, R. S.

The role of moisture and hydrogen in hot-salt cracking of titanium alloys.  
19 p3352 A69-36904

## ONDRIA, J. G.

FM noise suppression of an injection phase-locked oscillator.  
02 p0220 A69-12450

A microwave system for measurements of AM and FM noise spectra.  
02 p0221 A69-12455

Noise-reduction techniques of high-frequency oscillator-high-order multipliers and avalanche-diode-type microwave sources.  
14 p2420 A69-29458

## ONEGINA, A. B.

Atmospheric dispersion and the magnitude equation for the 400-millimeter astrophotograph of the Main Astronomical Observatory of the Academy of Sciences of the Ukrainian SSR /Atmosferaia dispersiia i uravnenie bleska dlia 400-millimetrovogo astrografa GAO AN USSR/.  
15 p2646 A69-30162

## ONEIL, D. J.

Quantitative determination of polymer content by pyrolysis-gas chromatography.  
01 p0025 A69-11267

## ONEIL, E. J.

Merging of uniform shear flows at a trailing edge.  
13 p2248 A69-28223

## ONEIL, R.

Luminous efficiency of electron induced emission in nitrogen.  
21 p3774 A69-38521

## ONEIL, T. M.

Effect of Coulomb collisions and microturbulence on the plasma wave echo.  
03 p0474 A69-13144

## ONEILL, L. S.

ATLAS - A standard compiler input language for commercial airlines.  
11 p1842 A69-25064

## ONEILL, M.

Polynomial curve fitting when abscissas and ordinates are both subject to error.  
08 p1343 A69-20827

## ONEILL, M. E.

Electrohydrodynamic instability of a cylindrical viscous jet.  
12 p2136 A69-26403

Electrohydrodynamic instability of a cylindrical viscous jet.  
16 p2773 A69-32570

On the slow motion of two spheres in contact along their line of centres through a viscous fluid.  
24 p4299 A69-42747

## ONEILL, W. D.

Dynamic visco-elastic properties of the lens.  
22 p3883 A69-40875

## ONG, C. C.

Vibrations of thin cylindrical shells with initial stresses due to thermal loadings.  
[AIAA PAPER 69-59]  
06 p1028 A69-18143

## ONG, C.-C.

Vibrations of thin cylindrical shells under axisymmetric thermal stresses.  
04 p0675 A69-14704

## ONG, P. P.

Drift measurements of ion-molecule reactions.  
08 p1355 A69-20210

## ONG, R. S. B.

On the propagation of ionization waves.  
22 p3990 A69-40758

## ONGARATO, J. R.

Wind-tunnel wall interference studies at high subsonic speeds.  
[AIAA PAPER 68-360]  
12 p2059 A69-26766

## ONGCHIN, L.

Inhomogeneous deformation and yielding of glass-like high polymers.  
17 p2993 A69-34169

## ONICESCU, O.

Matter and expansion of the universe /Matiere et dilatation de l'univers/.  
15 p2654 A69-31214

## ONISHCHENKO, I. M.

Reflection of an electromagnetic wave from a magnetoactive plasma in the case of oblique incidence /Pro vidbittia elektromagnitnoi khvili vid magnitoaktivnoi plazmi pri pokhilomu padinni/.  
14 p2411 A69-28997

Penetration of the longitudinal field into a magnetoactive plasma.  
14 p2493 A69-29665

Reflection of an electromagnetic wave from a magnetoactive plasma in the case of oblique incidence. II /Pro vidbittia elektromagnitnok khvili vid magnitoaktivnoi plazmi pri pokhilomu padinni. II/.  
22 p3990 A69-40788

## ONISHCHENKO, I. N.

Excitation of ion-acoustic waves in the skin depth of a nonisothermal plasma.  
08 p1370 A69-21025

Kinetic theory of the passage of electromagnetic waves through a magnetoactive plasma layer /Kineticheskaia teoriia prokhozheniia elektromagnitnykh voln cherez magnitoaktivnyi sloi plazmy/.  
09 p1550 A69-22027

Kinetic theory of electromagnetic waves in a laminated plasma medium /K kineticheskoi teorii elektromagnitnykh voln v sloisto-plazmennoi srede/.  
09 p1550 A69-22023

The reflection of an obliquely incident electromagnetic wave from a magnetoactive plasma. I.  
14 p2417 A69-29661

Use of a variable magnetic field to obtain short-plasmods /Primenenie peremennogo magnitnogo polia dlia polucheniia korotkikh plazmennyykh gushtkov/.  
24 p4358 A69-43476

## ONISHCHENKO, S. M.

Stability of a nonspatial gyrocompass during a finite time interval /Pro stuit' neprostorovogo girokompasa na skhinennomu intervali chasu/.  
11 p1886 A69-25089

Application of the method of averages in the applied gyrocompass theory /K voprosu primeneniia metoda usredneniia v prikladnoi teorii girokompasov/.  
18 p3139 A69-35378

## ONISHCHENKO, V. M.

Power-pulse generators using p-n-p-n four-layer devices /Survey/.  
03 p0402 A69-12978

## ONISHI, Y.

High-wattage xenon short-arc lamps with seals and improved liquid-cooled electrodes.  
[AIAA PAPER 69-998]  
22 p3920 A69-40376

## ONO, H.

Weak non-linear hydromagnetic waves in a cold collision-free plasma.  
17 p3010 A69-32866

## ONO, K.

Irradiation softening and hardening of Ni sub 3 Al.  
01 p0095 A69-10608

Whirl instability of externally pressurized gas journal bearing.  
02 p0254 A69-12426

Elastic constants of Ni sub 3 Al between 80 deg and 600 deg K.  
08 p1332 A69-20288

Global communication satellite systems.  
20 p3497 A69-38189

## ONO, M.

Effects of Coriolis stimulus during mild centrifugal load upon stick performance.  
06 p0876 A69-18023

Alteration of manual performance during sustained acceleration exposure by means of hand-writing pressure measurement in man.  
06 p0884 A69-18030

Effect of abrupt deceleration on the heart rate in monkeys.  
06 p0876 A69-18031

## ONO, Y.

Propagation of shock waves in inhomogeneous gases. VI.  
15 p2680 A69-30202

Propagation of shock waves in inhomogeneous gases. VII.  
17 p2952 A69-33383

## ONODERA, Y.

Magnetic-field dependence of Josephson current modified by self-field.  
04 p0640 A69-14437

## ONOE, M.

Relationship between temperature behavior of resonant and antiresonant frequencies and electromechanical coupling factors of piezoelectric resonators.  
14 p2421 A69-29542

## ONSTEAD, E. W.

Launch constraints for a synchronous communications satellite mission.  
[AIAA PAPER 68-445]  
22 p4036 A69-40543

## ONUMA, N.

The abundances of arsenic, tin and antimony in chondritic meteorites.  
13 p2344 A69-27630

## OORT, A. H.

On the kinetic energy spectrum near the ground.  
24 p4343 A69-43063

OORT, J. H.  
A new phenomenon near the galactic center /O novom iavlenii vblizi galakticheskogo tsentra/.  
12 p2163 A69-27018

OOSTERVELD, W. J.  
Effect of gravity on vestibular nystagmus.  
12 p2020 A69-26551

OOTOMO, I.  
Center-frequency-tunable directional filter for millimeter waves.  
13 p2226 A69-27187

OPAL, C. B.  
Nighttime molecular oxygen densities in the 100-130-km region from Schumann-Runge absorption.  
14 p2435 A69-28959

OPARIN, A. I.  
Genesis and Evolutionary Development of Life.  
12 p2019 A69-26300  
Life, its Nature, Origin, and Evolution /Zhizn', ee Priroda, Proiskhozhdenie i Razvitiie/ /2nd enlarged Edition/.  
19 p3259 A69-36746

OPENSHAW, P. R.  
Electric propulsion systems for European use. [AIAA PAPER 69-274]  
09 p1565 A69-21250

OPFELL, J. B.  
Applications of capillary microscopy in exobiological research.  
01 p0021 A69-11092

OPIK, E. J.  
The moon's surface.  
21 p3811 A69-39514

OPLINGER, D. W.  
Experimental studies of the elastic stability of three dimensionally reinforced composite shells. [AIAA PAPER 69-122]  
06 p1029 A69-18216

OPOLSKI, A.  
Radii and absolute magnitudes of the cepheid variable stars.  
10 p1775 A69-23200

OPP, D. A.  
A model for polymer fatigue.  
10 p1717 A69-24217

OPP, F. L.  
Design of digital loaded-line phase-shift networks for microwave thin-film applications.  
01 p0040 A69-10198

OPPENGEIM, V. D.  
Determining the radiative heat flux in the lower layers of the atmosphere.  
10 p1682 A69-23327

OPPENHEIM, A. K.  
On the genesis of gaseous detonation.  
02 p0350 A69-11530  
Dynamics of an explosive hot spot. [WSCIPAPER 68-53]  
07 p1240 A69-18322  
Gasdynamics of explosions.  
11 p1876 A69-25595  
On the influence of non-steadiness on the thickness of the detonation wave.  
17 p2952 A69-33403  
Generation of a fissioning plasma in a shock tube.  
18 p3180 A69-34455  
Current views on gaseous detonation.  
19 p3452 A69-36370

OPPENHEIM, A. V.  
Digital Processing of Signals.  
20 p3487 A69-37146

OPPENHEIM, I.  
Introduction to the molecular-transport equations of dilute gases.  
23 p4193 A69-41512

OPPENHEIM, J. W.  
Redesign recommendations for space telemetry transmitters based on infrared studies.  
10 p1653 A69-23049

OPPENHEIM, U. P.  
Spectral emissivity of NO in the infrared.  
17 p3009 A69-34156

OPROIU, T.  
Determination of the variations in the period of the satellites 63171 /Cosmos 17/ and 64531 /Cosmos 44/ /Opredelenie izmenenii perioda iskusstvennykh sputnikov 63171 /Kosmos 17/ i 64531 /Kosmos 44//.  
12 p2173 A69-26439

ORAEVSKII, A. N.  
Chemical laser based on branched reactions /Khimicheskii kvantovyi generator na osnove razvetvlennykh reaktsii/.  
02 p0259 A69-12645  
Features of wave propagation in inertial-nonlinear media /Osobennosti rasprostraneniia voln v inertsionno-nelineinykh sredakh/.  
03 p0437 A69-13040  
A beam laser as a frequency standard /Puchkovyi opticheskii kvantovyi generator kak standart chastoty/.  
03 p0440 A69-13715  
Emission modes of a gas laser with a circular resonator.  
04 p0611 A69-14545  
Obtaining population inversion for molecules in a supersonic binary-gas flow in a Laval nozzle /Poluchenie inverсноi naselennosti molekul v sverkhzvukovom potoke binarnogo gaza v soople Lavalia/.  
07 p1118 A69-18540  
Synchronization of laser spikes.  
07 p1158 A69-19752  
Generation spectrum of a chemical laser using a mixture of H sub 2 and Cl sub 2.  
14 p2461 A69-29672  
Influence of constant electric and magnetic fields on the resonance radiation of molecules, and overlapping fields /Vliianie postoiannykh elektricheskikh i magnitnykh polii na rezonansnoe izluchenie molekul i perekryvaiushchiesia polia/.  
15 p2655 A69-30943  
The effect of coherence on the laser mode of operation /Vliianie kogherentnosti na rezhim raboty lazera/.  
17 p2983 A69-33695  
Molecular population inversion in the supersonic flow of a binary gas in a Laval nozzle.  
21 p3693 A69-38692  
Coherent effects in pulsed laser emission /Kogerentnye efekty v izluchении impul'snogo lazera/.  
21 p3737 A69-38999  
Emission spectrum of a chemical laser using an H sub 2 plus F sub 2 mixture.  
23 p4172 A69-41493

ORAEVSKII, V. M.  
Magnetohydrodynamic waves in a cylindrical plasma column.  
14 p2489 A69-28732  
Excitation of "red" and "violet" satellites in the instability of Alfvén waves.  
14 p2489 A69-28735  
Frequency characteristics of the sporadic E layer /O chastotnykh kharakteristikakh sporadicheskogo sloia E/.  
14 p2442 A69-29733

ORAEVSKII, V. N.  
Hydrodynamic models as applied to the investigation of magnetic plasma stability.  
07 p1190 A69-18694  
Nonlinear interaction of volume waves and surface waves in a bounded plasma.  
08 p1370 A69-21014  
Stability of a magnetoactive plasma with a monoenergetic component /Ustoichivost' magnitoaktivnoi plazmy s monoenergichnoi komponentoi/.  
09 p1546 A69-21566

ORAM, S.  
Incidence and management of supraventricular arrhythmias after acute myocardial infarction.  
24 p4262 A69-42729

ORAM, W. C.  
Maintenance practices for rigid pavement.  
01 p0057 A69-11277

ORAN, W. A.  
Flux and energy spectrum of cosmic-ray electrons at 42 deg north geomagnetic latitude in October 1967.  
05 p0815 A69-16250

ORANESCO, A.  
New forms of the equation of motion of machines /Nouvelles formes de l'equation du mouvement des machines/.  
01 p0115 A69-10165

ORAVETZ, A. S.  
Mathematical modeling of long term gyro drift rate.  
03 p0463 A69-13213  
Stationary and nonstationary characteristics of gyro drift rate. [AIAA PAPER 69-838]  
21 p3761 A69-39369

ORAZIO, F. O.  
From technology to systems in military aircraft.  
18 p3092 A69-35137

ORBECK, F.  
A theory of failure based on probability for fatigue of ductile materials.  
18 p3211 A69-34344

ORBOCK, D. H.  
Experiences with a large space environment simulation facility.  
15 p2586 A69-30386

ORCHARD-HAYS, W.  
Advanced Linear-Programming Computing Techniques.  
01 p0035 A69-10701

ORCHARD, H. J.  
Filter design using transformed variables.  
08 p1300 A69-21172

ORCUTT, D. M.  
Effects of nitrogen limitation on the growth and composition of unicellular algae in continuous culture.  
24 p4263 A69-43201

ORCUTT, F. K.  
An investigation of the operation and failure of mechanical face seals. [ASLE FICFS PREPRINT 22]  
15 p2620 A69-30486

ORDANIAN, S. S.  
The phase diagram of the ZrC-Re system /Diagramma sostoiianiia sistemy ZrC-Re/.  
04 p0617 A69-14900  
Densification of nonstoichiometric niobium-carbide phases.  
10 p1711 A69-23337  
Phase diagram of the system TiC-Re.  
15 p2641 A69-31247

ORDANOVICH, A. E.  
Relation between the stability parameters of the atmospheric boundary layer and the Rayleigh number /O svyazi parametrov ustoichivosti v pogranichnom sloe atmosfery s chislom Releia/.  
09 p1491 A69-22709  
Relation of the stability parameters in the atmospheric boundary layer to the Rayleigh number.  
16 p2808 A69-32488

ORDWAY, D. E.  
The renaissance of subsonic aerodynamics.  
05 p0696 A69-15561

OREKHOV, G. T.  
A residual stress gauge /RSG/ /Izmeritel' ostatochnykh napriazhenii /ON//.  
06 p0926 A69-17497

OREKHOVSKII, I. I.  
Stresses and strains in a spherical shell in elastoplastic equilibrium /Napriazheniia i deformatsii v sfericheskoi obolochke pri uprugoplasticheskom ravновесii/.  
21 p3834 A69-38717

ORESHKIN, I. G.  
Some interpretations of the biological effects of chronic gamma irradiation.  
02 p0197 A69-11494

ORESHKIN, P. T.  
Contribution to the theory of dielectric dispersion in inhomogeneous dielectrics and semiconductors /K teorii dielektricheskoi dispersii v neodnorodnykh dielektrikakh i poluprovodnikakh/.  
02 p0301 A69-12837

ORFANOV, I. V.  
Device for the measurement of plasma velocity by the Doppler effect with photoelectric recording /Ustanovka dlia izmereniia skorosti plazmy po Dopplereffektu s fotoelektricheskoi registratsiei/.  
12 p2079 A69-26021  
Use of a scanning Fabry-Perot interferometer with a piezoceramic element for ultralow modulation frequency /Ispol'zovanie skaniruushchego interferometra Fabri-Pero s piezokeramikoi na infranizkoi chastote moduliatsii/.  
15 p2611 A69-31107

ORHAUG, T.  
On the resolution of imaging systems.  
10 p1725 A69-24048

ORITO, S.  
Search for quarks.  
15 p2674 A69-30308

ORLEANSKAIA, E. V.  
Broadband device for rotating the plane of polarization.  
09 p1469 A69-22643



## ORLIANSKAIA, R. L.

Incorporation of super 32 P in proteins of blood serum, liver, and brain of rats irradiated with high-energy protons.  
02 p0198 A69-11507

## ORLIK, E. L.

Mathematical Physics /Matematicheskaya Fizika/.  
11 p1915 A69-24759  
Mathematical Physics /Matematicheskaya Fizika/.  
11 p1916 A69-24770

## ORLIK, F. W.

Test facility for simulation of system-environment interaction during Martian entry.  
15 p2587 A69-30390

## ORLIN, S. A.

Thermal contact resistance in cylindrical elements in thermionic energy converters.  
14 p2400 A69-29216

## ORLINOV, V.

Pulse investigation on thermionic converters.  
14 p2403 A69-29252

## ORLOB, G. B.

Survival of micro-organisms in space.  
11 p1828 A69-25457

## ORLOV, B. D.

Controlling seam welding of aluminium-magnesium alloys on the basis of electrode displacement.  
24 p4319 A69-42919

## ORLOV, E. I.

The question of organizing parallel information processing in computer systems /K voprosu organizatsii parallel'noi obrabotki informatsii v sistemakh evm/.  
13 p2224 A69-27426

## ORLOV, I. P.

Counting circuits with a tunnel diode chain /Schetnye skhemy s tsepkoi tunnel'nykh diodov/.  
14 p2419 A69-28921

## ORLOV, I. V.

Action of a centrifugal force on caloric nystagmus /O deistvii tseotropicheskoi sily na kaloricheskii nistagm/.  
20 p3471 A69-37252

## ORLOV, I. U. I.

Some singularities in the ray theory of the propagation of cylindrical and spherical waves in a weakly nonuniform plasma. II.  
07 p1195 A69-19747

## ORLOV, L. N.

Method of calculating the temperature dependence of the gain of a He-Ne laser /Metodika rascheta temperaturnoi zavisimosti koeffitsienta usileniya He-Ne-lazera/.  
06 p0934 A69-17260

Effect of pumping power on the temperature dependence of the amplification factor of a He-Ne laser /Vliianie moschnosti nakachki na zavisimost' koeffitsienta usileniya He-Ne-lazera ot temperatury/.  
07 p1149 A69-18935

Effect of reabsorption on gas-laser emission /O vlianii reabsorbsii na generatsiu gazovogo lazera/.  
12 p2104 A69-26028

Thermal state of a gas laser /O teplovom rezhime gazovogo lazera/.  
20 p3553 A69-37356

## ORLOV, P. P.

Investigation of throttling effects on the efficiency of a Rankine cycle with an MHD generator.  
11 p1824 A69-24222

Thermodynamic analysis of new liquid-metal MHD-generator cycles /Termodinamicheskii analiz novykh tsiklov s zhidkometallicheskim MGD-generatorom/.  
13 p2372 A69-27489

## ORLOV, S. S.

Construction of Green's function in terms of Green's function of lower dimension.  
11 p1996 A69-25730

## ORLOV, V. A.

Stability of self-adjusting systems with stabilized frequency response.  
04 p0582 A69-14796

## ORLOV, V. P.

Worldwide Isopore charts for the period from 1960 through 1965 /Mirovye karty izopor dlia perioda 1960-1965 gg/.  
10 p1687 A69-23920

Particles of lunar origin. I - Determination of the geocentric orbital elements of lunar particles in the three-dimensional case /Chastitsy lunnoy proiskhozhdeniya. I - Opredelenie elementov geotsentricheskikh orbit lunnykh chastits v prostranstvennom sluchae/.  
18 p3202 A69-35330

## ORLOV, V. V.

Application of a laser to the investigation of wall turbulence /Ispol'zovanie opticheskogo kvantovogo generatora dlia issledovaniia pristennoi turbulentnosti/.  
09 p1515 A69-21434

Generator of a train of bright light flashes for hydrodynamic and gas dynamic investigations.  
11 p1879 A69-24235

## ORLOVA, A.

Role of stacking fault energy in creep. II - Creep of aluminum, nickel, copper, and silver /Uloha energii vrstevne chyby pri treepu. II - Creep hliniku niklu, medi a sribra/.  
22 p3972 A69-41080

## ORLOVA, I. G.

Study of the effect of the formation of solid solutions on the creep kinetics of highly refractory oxides during sintering /Issledovanie vlianiia obrazovaniia tverdykh rastvorov na kinetiku polzuchesti vysokotemperaturnykh oksidov pri spekanii/.  
12 p2118 A69-26260

## ORLOVA, I. S.

Effect of tin and zirconium on transformations during heat treatment of the Ti-10 percent Cr alloy /Vliianie olova i tsirkoniia na prevrashcheniya pri termicheskoi obrabotke splava Ti plus 10 percent Cr/.  
07 p1162 A69-18775

## ORLOVA, L. M.

Formation of plasma coatings on the surface of steels and titanium alloys /O formirovaniil plazmennyykh pokrytii na poverkhnosti stalei i titanovykh splavov/.  
07 p1165 A69-18931

Formation of plasma coatings on steel and titanium-alloy surfaces.  
21 p3746 A69-39152

## ORLOVA, T. A.

Application of high temperatures as a functional-diagnostic test /K voprosu o primenении vysokikh temperatur v kachestve funktsional'no-diagnosticheskoi proby/.  
05 p0710 A69-16523

Biochemical indicators of the reaction of pilots to complex conditions of flight /Biokhimicheskie pokazateli reaktivnoi lechikov na slozhnye uslovia poleta/.  
05 p0710 A69-16525

Use of high temperatures as provocative tests.  
18 p3096 A69-34742

Biochemical indices of the response of fliers to complex conditions of flight.  
18 p3096 A69-34744

## ORLOVA, T. V.

Excitation sources of the H sub alpha line in the chromosphere /Istochniki vozbuзhdeniya khromosfernoi linii H sub alpha/.  
15 p2683 A69-30509

## ORLOWSKI, W.

Use of epitaxial GaAs diodes for switching purposes /Zastosowanie epitaksjalnych diod GaAs do celow przelaczania/.  
12 p2035 A69-25831

## ORMAN, P. R.

Search for high energy gamma-rays from CP 1133.  
02 p0307 A69-11823

## ORMANCEY, G.

Influence of the OH radical and of the stoichiometry of BaTiO sub 3 on the ferroelectric transition /Influence du radical OH et de la stoechiometrie de BaTiO sub 3 sur la transition ferroelectrique/.  
03 p0491 A69-14059

## ORMES, J. F.

The relative energy spectra of carbon and oxygen nuclei in the primary cosmic radiation.  
08 p1380 A69-20632

Measurements of cosmic-ray Li, Be and B nuclei in the energy range 100 Mev/nuc to greater than 22 Bev/nuc.  
08 p1380 A69-20638

## ORMONDE, S.

Comparison of the calculated and observed resonances in the c-H elastic-scattering channel above 10.0 ev.  
15 p2657 A69-31265

## ORMONT, A. B.

Radiative recombination in p-n junctions in indium phosphide.  
03 p0492 A69-14166

## ORMONT, N. N.

Current oscillations in GaAs, associated with the electroacoustic effect /Kolebaniia toka v GaAs, svyazannye s akusto-elektricheskimi efektom/.  
13 p2318 A69-27892

## ORMSBEE, A. I.

Optimization of airfoils for maximum lift.  
[AIAA PAPER 69-739] 18 p3083 A69-34401

## ORMSBY, B.

Creating a cargo carrier.  
18 p3092 A69-35467

## ORMSBY, J. F. A.

Radar calibration test satellite.  
20 p3617 A69-37714

## ORNATSKII, A. P.

Hydraulic resistance of uniformly and nonuniformly heated ducts.  
20 p3513 A69-37086

## ORNER, P. A.

Random signal testing of fluid amplifiers.  
05 p0705 A69-16010

Stochastic testing methods for fluid amplifiers.  
[ASME PAPER 68-WA/AUT-2] 05 p0706 A69-16184

Development of a fluidic digital optimizer.  
15 p2583 A69-31296

Analysis and modeling of the vortex amplifier.  
[ASME PAPER 69-FLCS-20] 20 p3465 A69-37980

Linear dynamic modelling of flowing fluid lines.  
[ASME PAPER 69-FLCS-18] 20 p3516 A69-37982

## ORO, J.

Analysis of organic matter on the moon by gas chromatography-mass spectrometry - A feasibility study.  
18 p3113 A69-34238

Gas-chromatographic mass-spectrometric studies on the isoprenoids and other isomeric alkanes in meteorites.  
19 p3414 A69-36113

Isoprenoids and other hydrocarbons in terrestrial graphite.  
22 p3934 A69-39890

## OROBCHENKO, E. V.

Thiodiglycol as hardening accelerator for epoxy resins.  
22 p3973 A69-40677

## OROWAN, E.

Density of the moon and nucleation of planets.  
16 p2865 A69-32808

## OROZCO, A.

Directions of approach of cosmic rays for high latitude stations.  
18 p3187 A69-34940

## ORR, D.

Geomagnetic micropulsations, pi2, at low latitudes.  
12 p2074 A69-26959

The variation of Pi 2 micropulsation waveform with time.  
23 p4161 A69-42440

## ORR, L. G.

Manufacturing technology in titanium.  
24 p4324 A69-43431

## ORRALL, F. Q.

Emission line spectrum of the solar corona.  
19 p3422 A69-36217

## ORSZAG, A.

Applications of laser measurements of the earth-moon distance /Les applications des mesures de distance terre-lune par laser/.  
16 p2788 A69-31622

## ORTEGA PEREZ, M. A.

General remarks concerning the matrix method of solution of structures /Generalidades sobre el metodo matricial de resolucion de estructuras/.  
07 p1239 A69-19776

## ORTH, E. D.

Preparation and properties of unsupported positive coefficient thin thermistor films.  
22 p3997 A69-41214

## ORTIZ-OLMEDO, A.

Comparative study of the differential luminance threshold and the spatial summation exponent for solid and annular objects with equal surfaces /Etude comparative du seuil differentiel de luminance et de l'exposant de sommation spatiale pour des objets pleins et pour des objets annulaires de memes surfaces/.  
22 p3883 A69-40877

## ORTIZ, N. G.

Nonlinear instability in MHD boundary layers /Inestabilidad no lineal en capas limites MHD/.  
10 p1734 A69-23452

## ORTLEPP, B.

Longitude without time.  
14 p2479 A69-29855

- ORTLOFF, C. R.**  
Steady-state flow of a subsonic inviscid stream through statistically roughened wall ducts.  
01 p0062 A69-11279  
Supersonic flow through statistically roughened wall ducts.  
15 p2593 A69-31148
- ORTON, G. F.**  
Effects of sterilization and decontamination on hydrazine propulsion systems.  
21 p3786 A69-39768
- ORUDZHEV, SH.**  
On three-dimensional information pictures of chromospheric spicules /Research note/.  
07 p1217 A69-19241
- ORVILLE, R. E.**  
Four-meter sparks in air.  
02 p0281 A69-12406
- ORVIS, D. B.**  
Beta irradiation of lithium doped solar cells.  
19 p3251 A69-35693
- ORVIS, D. D.**  
Nuclear properties of a reactor used for nuclear seeding of an MHD plasma.  
10 p1723 A69-23485  
Experiment and theory of the ionization and recombination kinetics in plasmas /super 3 He/ produced through neutron irradiation.  
10 p1738 A69-23488
- OSADCHUK, V. A.**  
Optimal parameters of a rib reinforcing an infinite cylindrical shell /Ob optimal'nykh parametrah shpan-gouta, podkreplaiushchego beskonechnui tsilindricheskui obolochku/.  
21 p3834 A69-38714
- OSATAKE, T.**  
A study of a parametric amplifier as a tracking filter.  
13 p2225 A69-27183  
An analog feedback system for digital information transmission.  
24 p4289 A69-42977
- OSAWA, K.**  
Occultation of BD -17 deg 4388 by Neptune on 7 April 1968. II - Observation at Okayama station and the scale height of Neptune.  
06 p1008 A69-17694  
Photoelectric observation of Sco X-1.  
06 p1008 A69-17695  
Continual photoelectric monitoring of the flare star UV Cet.  
22 p4032 A69-40945  
Continual photoelectric monitoring of the flare star YZ CMi.  
22 p4032 A69-40947
- OSBALDISTON, G.**  
Social entrainment of biorhythms in rhesus monkeys.  
24 p4260 A69-42704
- OSBORN, M.**  
The conversion of amber suppressors to ochre suppressors.  
07 p1068 A69-19493  
Nonsense suppression in a multiauxotrophic derivative of *Escherichia coli* 15T super minus - Identification and consequences of an amber triplet in the deoxyribomutase gene.  
07 p1069 A69-19503
- OSBORN, R. A.**  
Baeklund and generalized Legendre transformations in gasdynamics.  
21 p3695 A69-39001
- OSBORN, R. W.**  
Search for cosmic gamma radiation in the southern sky.  
08 p1377 A69-19787
- OSBORN, W.**  
A search for period changes by the variables in M13.  
12 p2154 A69-25814  
Investigation of a new long-period variable.  
18 p3195 A69-34431
- OSBORNE, M. R.**  
The numerical solution of a periodic parabolic problem subject to a nonlinear boundary condition. II.  
04 p0625 A69-15131  
An algorithm for minimax approximation in the nonlinear case.  
08 p1344 A69-20829  
On estimating best approximations of functions defined by differential equations.  
20 p3568 A69-37832
- On shooting methods for boundary value problems.  
21 p3755 A69-38753
- OSBORNE, P. W.**  
Expected number of spikes of phase locked loop demodulators.  
07 p1082 A69-19107
- OSBURN, J. O.**  
The nonsteady flow of fluids through expandable tubes.  
02 p0232 A69-12477
- OSEPCHUK, J. M.**  
Why tubes for microwave power generation in array systems/ques/.  
01 p0048 A69-11040  
Future microwave tube technology.  
11 p1847 A69-24745
- OSGERBY, I. T.**  
Supersonic combustion tests with a double-oblique-shock scramjet in a shock tunnel.  
[AIAA PAPER 69-827] 16 p2840 A69-32673
- OSGOOD, A. A.**  
Rheological characterization of non-Newtonian propellants for casting optimization.  
[AIAA PAPER 69-518] 16 p2833 A69-32665
- OSGOOD, C. C.**  
High-performance bolt materials.  
13 p2268 A69-27758
- OSGOOD, R. M., JR.**  
High power CO-N sub 2 -He laser.  
08 p1324 A69-20163  
Q switching of the carbon monoxide laser.  
21 p3742 A69-39742
- OSGOOD, W. R.**  
Optimization of three-dimensional reentry trajectories.  
13 p2352 A69-27960
- OSHAUGHNESSEY, J. J. B.**  
A study of the spatial structure of turbulent flow by intensity-fluctuation spectroscopy.  
09 p1493 A69-21491
- OSHE, E. K.**  
The effect of alloying on the electrochemical oxidation of alloys Ti-Nb and Ti-Ni /Vlianie legirovaniia na elektrokhimicheskoe okislenie splavov Ti-Nb i Ti-Ni/.  
13 p2275 A69-27292
- OSHEA, A. F. J.**  
F.E.T. sample and hold circuit using error-corrective feedback.  
08 p1298 A69-20837
- OSHER, S.**  
On systems of difference equations with wrong boundary conditions.  
24 p4340 A69-43227
- OSHEROV, R. S.**  
Surface and bulk density in a cometary head /O poverkhnostnoi i ob'emnoi plotnosti v golove komety/.  
17 p3032 A69-33189  
The dust component in the head of comet Arend-Roland /O pylevoi komponente v golove komety Arenda-Rolana/.  
21 p3804 A69-39080
- OSHIMA, H.**  
Optimal control theory due to parameter optimization method and its application to the design of optimal control equipment for aircraft.  
22 p3919 A69-41051
- OSHIMA, K.**  
Space simulation tests of the highly stable crystal oscillators for space use.  
22 p3927 A69-40590  
Space environmental testing of ceramic-sealed Ni-Cd secondary batteries.  
22 p3869 A69-40591  
An experimental investigation on rocket plumes expanding into vacuum.  
22 p4000 A69-40594
- OSHMANN, M. K.**  
Visible CW parametric oscillator.  
02 p0260 A69-12701
- OSIKINA, E. S.**  
The influence of biaxial orientation on the fracture kinetics of polymethyl methacrylate /K voprosu vlianiia dvukhosnoi orientatsii na kinetiku razrusheniia polimetilmetakrilata/.  
18 p3162 A69-35354
- OSIKO, V. V.**  
Continuous stimulated emission of an LaF sub 3 -Nd super 3 super plus laser at room temperature.  
08 p1323 A69-19945
- Continuous-wave lasers based on composite crystals of the yttrium fluoride type /Opticheskie kvantovye generatory nepreryvnogo deistviia na osnove smeshannykh kristallov tipa ittrofluorita/.  
13 p2273 A69-28316
- OSINSKI, Z.**  
Energy dissipation in nonlinear mechanical systems /Rozpraszanie energii w nieliniowych ukladach mechanicznych/.  
16 p2874 A69-32245
- OSINSKII, L. M.**  
Automata with a sequential homogeneous structure /Avtomaty s posledovatel'noi odnorodnoi strukturou/.  
13 p2224 A69-27249
- OSINSKII, V. I.**  
Behavior of the current-voltage characteristics of indium phosphide n-p junctions /Khod vol'tampernykh kharakteristik n-p-perekhodov na fosfide indii/.  
01 p0139 A69-10885  
Behavior of current-voltage characteristics of indium phosphide n-p junction.  
12 p2144 A69-26649  
Optical and electrical properties of quasi-binary solid solutions of some A super III B super V compounds.  
19 p3390 A69-36554
- OSSIPIAN, IU. A.**  
Effect of dislocations on the electric properties of indium antimonide.  
14 p2507 A69-29646
- OSSIPOV, A. A.**  
Solution of variational problems of gasdynamics for supersonic nonequilibrium flows /K resheniiu variatsionnykh zadach gazovoi dinamiki sverkhzvukovykh neravnovesnykh techenii/.  
11 p1820 A69-25475  
On the solution of variational problems of supersonic flows of gas with foreign particles.  
14 p2389 A69-28801
- OSSIPOV, A. D.**  
Influence of silicide coatings on the mechanical properties of molybdenum /Vlianie silitsidnykh pokrytii na molibdene na ego mekhanicheskie svoistva/.  
02 p0264 A69-11883  
Effect of silicide coatings on the mechanical properties of molybdenum.  
18 p3156 A69-35043  
Influence of the conditions of formation of silicide layers on molybdenum on some of their properties /Vlianie uslovii polucheniia silitsidnykh sloev na molibdene na nekotorye ikh svoistva/.  
20 p3560 A69-37361
- OSSIPOV, A. I.**  
Relaxation processes in gases. II - Establishment of an equilibrium with respect to rotational degrees of freedom /A Review/ /Relaksatsionnye protsessy v gazakh. II - Ustanovlenie ravnovesiia po vrashchatel'nom stepeniam svobody /obzor/.  
02 p0284 A69-12667
- OSSIPOV, E. E.**  
Determination of certain tunnel-diode parameters /Opredelenie nekotorykh parametrov tunnel'nogo dioda/.  
10 p1665 A69-24215
- OSSIPOV, G. F.**  
Translational-rotational motion of a celestial body in a generalized Hill version /Postupatel'no-vrashchatel'noe dvizhenie nebesnogo tela v obobshchennom variante Khilla/.  
11 p1956 A69-24399  
The translational-rotational motion of a celestial body in the generalized Hill problem.  
24 p4390 A69-43789
- OSSIPOV, IU. I.**  
On the inversion mechanism in the CW argon-ion laser.  
12 p2106 A69-26319
- OSSIPOV, N. IA.**  
Damper for suppressing blade vibrations /Dempfer dlia gasheniia vibratsii lopatok/.  
17 p3066 A69-33944
- OSSIPOV, N. K.**  
Determination of the parameters of electron fluxes in the polar regions by means of simultaneous photometric and riometric observations /Opredelenie parametrov elektronnykh potokov v poliarnykh oblastiakh s pomoshch'iu sinkhronnykh fotometricheskikh i riometricheskikh nabludenii/.  
09 p1485 A69-21530  
Determination of the parameters of ionized layers from ionospheric data /Opredelenie parametrov ionizirovannykh sloev po ionosfernym dannym/.  
10 p1686 A69-23912



- Determination of the parameters of electron fluxes from ionospheric data /K opredeleniiu parametrov elektronnykh potokov s pomoshch'iu ionosfernykh dannykh/.  
10 p1688 A69-23931
- Interaction between an electron flux and the atmosphere /Vzaimodeistvie elektronnoho potoka s atmosferoi/.  
14 p2513 A69-29069
- Electric fields in the auroral ionosphere /Elektricheskie polia v avral'noi ionosfere/.  
14 p2437 A69-29070
- Determination of the parameters of electron fluxes in polar regions from synchronous photometric and riometric observations.  
16 p2783 A69-32525
- OSIPOV, V. V.**  
Current-voltage characteristics of long diodes prepared from compensated semiconductor /Vol'tamp- pernye kharakteristiki dlinnykh diodov iz kompensirovannykh poluprovodnikov/.  
13 p2230 A69-27877
- Oxidation process of alloys of the system niobium-tantalum at 550-1050 deg.  
14 p2464 A69-29650
- Gradient-recombination current instability in semiconductors /Gradientno-rekombinatsionnaia neustoiichivost' toka v poluprovodnikakh/.  
15 p2663 A69-30041
- Plasticity of phases in the system titanium-oxygen in the interval from 20 to 1000 deg C /O plasticnosti faz v sisteme titan-kislorod v interval'e 20-1000 deg C/.  
21 p3746 A69-38959
- OSIPOVA, L. P.**  
Experimental determination of the coincidence error between a star image and a planet edge for various telescope parameters.  
08 p1314 A69-20383
- OSIS, I. A.**  
Class coding in diagnostics problems /Koduvannia klasiv u zadachakh diagnostiki/.  
14 p2417 A69-29144
- OSKAM, H. J.**  
The production and loss of N sub 2 super plus ions in the nitrogen afterglow.  
07 p1184 A69-19141
- Remarks concerning the theory of the segregation of gases in direct current discharges due to ion flow.  
08 p1361 A69-20145
- OSMER, P. S.**  
On the absorption spectrum of Ton 1530.  
13 p2334 A69-27306
- OSOKINA, I. I.**  
Different conditions of ageing and recovery in aluminium-magnesium alloys.  
05 p0783 A69-16811
- OSOVITSKII, E. M.**  
Some experiments on the use of the least-moduli method in processing orbital data.  
10 p1791 A69-24193
- OSOVSKII, L. M.**  
Identification of unidimensional nonlinear controlled plants by phase and amplitude characteristics.  
09 p1475 A69-22669
- OSSAKOW, S.**  
Low-beta plasma penetration across a magnetic field.  
15 p2661 A69-30923
- OSSAKOW, S. L.**  
Current decay in a streaming plasma due to weak turbulence.  
08 p1368 A69-20808
- Stability of electromagnetic waves propagating perpendicular to the magnetic field in a mirror configuration.  
08 p1369 A69-20820
- OSTACH, O. M.**  
Using the method of Green's functions to determine the earth's perturbing potential /Primenenie metoda funktsii Grina k opredeleniiu vozmushchaiushchego potentsiala zemli/.  
01 p0063 A69-10360
- OSTAPCHENKO, E. P.**  
Problem of mode competition in an ionized krypton laser /K voprosu o konkurentsi perekhodov v OKG na ionizirovannom kriptone/.  
15 p2635 A69-31106
- OSTAPCHUK, I. I.**  
Short-term strength of full-scale titanium alloy disks /O kratkovremennoi prochnosti naturnykh diskov iz titanovogo splava/.  
06 p1026 A69-18018
- Investigation of the stressed state of turbocompressor disks /Issledovanie napriazhennogo sostoiania diskov turbokompresora/.  
19 p3436 A69-35850
- OSTAPENKO, V. F.**  
Increasing the stability of scintillation spectrometers for X radiation /Povyshenie stabil'nosti tsintillatsionnykh spektrometrov rentgenovskogo izlucheniia/.  
21 p3727 A69-39856
- OSTAPENKO, V. M.**  
Solution of the heat equation for a plate of finite thickness /Rozv'iazuvannia rivianniia teploprovodnosti dlia plativki skinchennoi tovshchiny/.  
14 p2537 A69-28970
- OSTER, A.**  
Method and results of measurements of the spectrum of the mobilities, the ion density, and the conductivity in the upper troposphere and stratosphere /Methode und Ergebnisse der Messungen des Beweglichkeitsspektrums, der Ionendichte und der Leitfahigkeit in der oberen Troposphare und Stratosphaere/.  
11 p1877 A69-24636
- OSTER, I. I.**  
Mutational responses of insects in the Biosatellite II experiment.  
20 p3476 A69-37618
- OSTER, L.**  
Stimulated Compton effect and quasi-stellar objects.  
05 p0828 A69-16652
- Inverse Compton effect and universal 3 deg K radiation.  
08 p1381 A69-19786
- OSTERBROCK, D. E.**  
Expected infrared spectra of gaseous nebulae.  
13 p2342 A69-27595
- On the classification of the forms and the stellar content of galaxies.  
16 p2862 A69-32395
- Forbidden emission lines in galaxies and quasars.  
19 p3424 A69-36236
- Calculated /Fe X/ and /Fe XIV/ line strengths in a Seyfert galaxy model.  
22 p4024 A69-40581
- OSTERINK, L. M.**  
Index of refraction and expansion thermal coefficients of Nd-YAG.  
04 p0609 A69-14293
- OSTERLE, J. F.**  
Transient electro-osmosis in capillary tubes.  
04 p0555 A69-14862
- A unified treatment of the thermodynamics of sinusoidal steady-state energy conversion.  
11 p1826 A69-25396
- OSTERMANN, H.**  
Evaluation of fatigue life under special load sets by means of fatigue strength tests under unit load sets /Die Lebensdauerabschaetzung bei Sonderkollektiven nach Betriebsfestigkeitsversuchen mit Einheitskollektiven/.  
09 p1620 A69-22573
- OSTERNIK, E. S.**  
An optimal theory for calculating anisotropic laminar plates on a digital computer /Optimal'naia teoriia rascheta na ETsVM sloistykh anizotropnykh plit/.  
06 p1026 A69-18015
- OSTRACH, S.**  
Low temperature simulation of hypersonic melting ablation and the observed wave patterns.  
06 p0907 A69-18064
- OSTRENKO, V. I. A.**  
Production of pipes from titanium and its alloys /Proizvodstvo trub iz titana i ego splavov/.  
07 p1164 A69-18787
- OSTRIKER, J. P.**  
On the oscillations and stability of rotating stellar models. I - Mathematical techniques.  
07 p1220 A69-19389
- Magnetic dipole radiation from pulsars.  
09 p1592 A69-21463
- Ultrashort-period stellar oscillations. III. Power-spectrum analysis of photometric observations of white dwarfs.  
10 p1788 A69-24124
- On the oscillations and stability of rotating stellar models. II.  
10 p1789 A69-24129
- Acceleration of high-energy cosmic rays by pulsars.  
11 p1950 A69-24927
- On the nature of pulsars. I - Theory.  
24 p4377 A69-42666
- Do pulsars turn off/ques/  
24 p4389 A69-4377
- OSTROFSKY, B.**  
On the determination of group relative values for maintenance criteria.  
10 p1668 A69-22979
- OSTROMUKHOV, I. A. G.**  
Two-rotor gyroorbit theory /Teoriia dvukhrotornykh giroorbit/.  
21 p3765 A69-39633
- OSTROUMOV, V. I.**  
Measurement of the proton and neutron spectra of board satellites of the Cosmos series /Izmerenie spektrov protonov i neutronov na sputnikakh serii Kosmos"/.  
05 p0814 A69-16079
- Nuclear Interactions in Spacecraft Shielding /Iadernye Vzaimodeistvia v Zashchite Kosmicheskikh Korablei/.  
14 p2481 A69-29838
- Measurement of the proton and neutron spectra of the "Cosmos" series satellites.  
20 p3591 A69-37969
- OSTROVSKAIA, G. V.**  
Holograph investigation of laser sparks.  
08 p1317 A69-21023
- Plasma diagnostics by holography /Review/.  
12 p2094 A69-26707
- Optical investigations of a laser spark /Opticheskie issledovaniia lazernoi iskry/.  
14 p2461 A69-29777
- Determination of the electron temperature and concentration in an arc in a magnetic field on the basis of the scattering of laser light at the electron /Opredelenie temperatury i kontsentratsii elektronov v duge v magnitnom pole po rasseianiiu lazernogo izlucheniia na elektronakh/.  
14 p2496 A69-29783
- Two-wavelength holography of a laser spark.  
16 p2789 A69-31777
- OSTROVSKII, A. S.**  
Holography and image recognition /Golografiia i razpoznavaniia obraziv/.  
08 p1314 A69-20411
- Holographic recognition systems.  
09 p1495 A69-21857
- OSTROVSKII, I. U.**  
Holography and cine-holography of rapidly occurring processes /Holografie und Kinoholografie schnell ablaufender Prozesse/.  
12 p2087 A69-26177
- OSTROVSKII, I. I.**  
Stroboscopic method of studying vibrations /Strobo-golograficheskii metod izucheniia vibratsii/.  
02 p0251 A69-12567
- Plasma diagnostics by holography /Review/.  
12 p2094 A69-26707
- Optical investigations of a laser spark /Opticheskie issledovaniia lazernoi iskry/.  
14 p2461 A69-29777
- Holographic strobe method for studying vibrations.  
15 p2608 A69-30257
- OSTROVSKII, L. A.**  
Envelope shock waves.  
09 p1483 A69-22666
- Interaction between wave packets in a nonlinear medium /O vzaimodeistvii volnovykh paketov nelineinnoi srede/.  
10 p1658 A69-23955
- Pulsed parametric generation in distributed systems.  
16 p2758 A69-31796
- Nonresonance parametric phenomena in distributed systems.  
17 p2928 A69-33868
- The theory of "waves of envelopes" in nonlinear dispersive media.  
17 p2928 A69-33868
- OSTROVSKII, L. I.**  
Device for automatic measurement of vibration decrements /Pribor dlia avtomaticheskogo izmereniia dekrementa kolebaniia/.  
17 p2976 A69-33933
- OSTROW, S. M.**  
Numerical maps of foEs for solar cycle minimum and maximum.  
01 p0070 A69-11166
- Note on new numerical maps of f sub 0 E sub s for solar cycle minimum and maximum.  
10 p1682 A69-23418

**OSTROWSKI, M. A.**  
Impulse responses of the nervus opticus to excitation of the retina with acetylcholine /Impulsantworten des Nervus Opticus auf Reizung der Netzhaut mit Acetylcholin/.  
23 p4084 A69-41465

**OSULLIVAN, R. J.**  
Standing Alfven waves in the magnetosphere.  
07 p1124 A69-18835

**OSULLIVAN, S.**  
A photometric study of the open cluster IC 4665.  
23 p4215 A69-42008

**OSVENSII, V. B.**  
Doping effect observed during measurements of microhardness in GaSb and InSb /Effekt legirovaniia, nabliudaemyi pri izmerenii mikrotverdosti GaSb i InSb/.  
01 p0139 A69-10832  
Measurement of the diffusion coefficient of copper in gallium arsenide by an ultrasonic method /Izmerenie koefitsienta diffuzii medi v arsenide galliia ul'trazvukovym metodom/.  
09 p1555 A69-21471  
Effect of alloying additions on the anisotropy of plastic deformation in GaAs single crystals /O vlianii legiruushchikh primesei na anizotropiiu plasticheskoi deformatsii monokristallov GaAs/.  
11 p1936 A69-24537  
Effect of doping, as observed in the measurements of the microhardness of GaSb and InSb.  
11 p1936 A69-24699  
Measurement of the diffusion coefficient of copper in gallium arsenide by an ultrasonic method.  
15 p2669 A69-30716

**OSWALD, R. B., JR.**  
The dynamic response of solids exposed to a pulsed-electron-beam.  
05 p0771 A69-15817

**OSWALD, W. J.**  
Current status of microalgae from wastes.  
21 p3668 A69-39711

**OSWALT, J. W.**  
Future military applications of VTOL aircraft. [AIAA PAPER 69-326]  
07 p1055 A69-19556

**OSZCZAK, S.**  
Delays of the equipment recording the exposure moment for some satellite cameras of the NAFA type /Opoznienia aparatury rejestrujacej moment ekspozycji dla niektorych kamer satelitarnych typu NAFA/.  
11 p1880 A69-24365

**OTANI, Y.**  
Negative resistance in semiconductors /InSb/.  
02 p0294 A69-11722

**OTAZO, J. J.**  
The near field of the loop antenna.  
21 p3683 A69-39281

**OTERO, R. J.**  
Pulse interference effects in a phase-lock loop.  
23 p4145 A69-42230  
Radio spectrum utilization in aerospace communication systems.  
23 p4128 A69-42502

**OTMAKHOV, IU. A.**  
Unsteady processes in a traveling-wave laser with a bleachable-absorber filter /Nestatsionarnye protsessy v OKG begushchei volny s prosveliaushchimsia fil'trom/.  
10 p1705 A69-23949

**OTOSHI, T. Y.**  
The effect of mismatched components on microwave noise-temperature calibrations. [JPL-TR-32-1345]  
02 p0211 A69-12442

**OTPUSHCHENNIKOV, E. N.**  
Synchronization of high-speed streak camera operation with a process occurring in a shock tube /O sinkhronizatsii raboty ustanovki SFR s protsessom v aerodinamicheskoi udarnoi trube/.  
06 p0926 A69-17499

**OTSAP, B. A.**  
The vortex pressure amplifier characteristics.  
02 p0195 A69-12081  
Fluidics for ramjet control systems.  
14 p2508 A69-28875

**OTSUKA, S.**  
A note about the effect of exit slide walls on cascade performances.  
19 p3241 A69-36753  
A note about the surveying position of outlet flow in cascade experiments.  
22 p3859 A69-40065

**OTT, N.**  
Possibilities of the support of inertial navigation systems /Moeglichkeiten der Stuetzung von Traegheitsnavigationssystemen/.  
12 p2128 A69-25873

**OTT, W.**  
Time resolved beam distribution functions in a beam-plasma experiment.  
17 p3014 A69-33829

**OTT, W. R.**  
Sticking coefficients for atmospheric gases incident on metallic substrates.  
23 p4151 A69-41544

**OTTERMAN, J.**  
Problems in photometric analysis of imagery from satellites.  
21 p3721 A69-38627  
Considerations in choosing the orbit for an earth resources survey satellite.  
21 p3798 A69-38628

**OTTERSON, D. A.**  
Electrical resistivity versus deuterium concentration in palladium.  
10 p1745 A69-23357

**OTTERSTEN, H.**  
Radar investigations of atmospheric structure and CAT in the 3 to 20-km region.  
17 p2999 A69-33740  
Radar investigations of convective patterns in the clear atmosphere.  
20 p3573 A69-38059  
Simultaneous radar, aircraft and meteorological investigations of clear air turbulence.  
24 p4342 A69-42894

**OTTO, A.**  
Excitation by light of omega sub plus and omega sub minus surface plasma waves in thin metal layers.  
08 p1372 A69-20290

**OTTO, D. V.**  
Fourier transform method in cylindrical antenna theory.  
03 p0405 A69-13624  
Rigorous field expressions for piecewise-sinusoidal line sources.  
11 p1836 A69-24995  
A note on the induced EMF method for antenna impedance.  
11 p1851 A69-24997  
The admittance of infinite cylindrical antennas.  
20 p3507 A69-37846

**OTTO, H. E.**  
Shock hardening of aluminum alloys. [ASM PAPER W9-10.4]  
21 p3729 A69-38664

**UDIN, L.**  
Strioscopic methods for measuring mass volume in hypersonic wakes in a hot-shot tunnel /Methodes strioscopiques de mesure des masses volumiques dans les sillages hypersoniques en tunnel de tir/.  
19 p3293 A69-35740

**OUSTERHOUT, D. S.**  
Linear fluid amplifier design.  
15 p2553 A69-31299

**OUTSU, J.**  
Ducted echoes on topside ionograms and whistlers at middle latitude.  
01 p0029 A69-10551

**OUTWATER, J. O.**  
On the fracture energy of uni-directional laminates.  
08 p1414 A69-20493

**OVCHARENKO, N. V.**  
The spectral properties of tellurite glasses containing vanadium pentoxide.  
14 p2468 A69-29329

**OVCHARENKO, O. N.**  
Influence of heat treatment on the properties of superconducting niobium-tantalum alloys /Vlianie termicheskoi obrabotki na svoistva sverkhprovodiashchikh splavov niobii-tantal/.  
19 p3345 A69-36303

**OVCHARENKO, V. A.**  
Investigation of throttling effects on the efficiency of a Rankine cycle with an MHD generator.  
11 p1824 A69-24222

**OVCHARENKO, V. V.**  
Oscillations in a tunnel-diode oscillator in the presence of three points of intersection of the load line with the tunnel-diode characteristic /O kolebaniiax v tunnel'nom generatore pri nalichii trekh tochek peresecheniia nagruzochnoi priamoj s kharakteristikoi tunnel'nogo dioda/.  
06 p0898 A69-17801

**OVCHINNIKOV, A. A.**  
Optical quantum amplifier based on a GaAs injection laser /Opticheskii kvantovyi usitel' na osnove inzheksionnogo lazera iz GaAs/.  
19 p3336 A69-36348

**OVCHINNIKOV, L. V.**  
Relationship between the radiation power of a laser and the electron concentration in a He-Ne plasma /O sviazi moshchnosti izlucheniia lazera s kontsentratsiei elektronov v He-Ne plazme/.  
22 p3964 A69-40794

**OVCHINNIKOV, V. M.**  
Optical alignment of lasers with electrooptical Q-modulation.  
12 p2107 A69-26589  
A laser with an electrooptical quartz Q-modulator.  
12 p2108 A69-26591  
Emission spectrum of CdS crystals during two-photon excitation /Spektr generatsii kristallov CdS pri dvukhfotonnom vzbuzhdenii/.  
14 p2458 A69-29167  
Polarization of the radiation of glass activated by neodymium /Poliarizatsiia izlucheniia stekla, aktivirovannogo neodimom/.  
17 p2984 A69-33974  
Single-block shutter-reflector for operation with unpolarized radiation /Monoblochnyi zatvor-otrazhatel' dlia raboty s nepoliarizovannym izlucheniem/.  
20 p3554 A69-37611  
Vortex-flow cooled laser.  
21 p3734 A69-38399  
Shadow images of bodies obtained at hypersonic speeds by means of a single-pulse laser /Poluchenie teneykh izobrazhenii tel pri giperzvukovykh skorostiakh s pomoshchiu monoimpul'snogo opticheskogo kvantovogo generatora/.  
22 p3963 A69-40601

**OVCHINNIKOV, V. V.**  
Power spectrum of a signal scattered over a statically rough surface.  
09 p1459 A69-22635

**OVCHINNIKOV, W. M.**  
Optical quantum generator application for high-speed photography and holography in ballistic investigations.  
12 p2088 A69-26177

**OVCHINNIKOVA, S. N.**  
Calculation of the secondary steady flow between rotating cylinders /Raschet vtorichnogo stationarnogo tечения mezdu vrashchaiushchimisia tsilindrami/.  
05 p0745 A69-15780  
Analysis of secondary steady flow between rotating cylinders.  
18 p3123 A69-35032

**OVECHKIN, V. G.**  
The effect of sodium amylal and somatotropic hormone on mice subjected to prolonged hypokinesia.  
10 p1646 A69-23576

**OVERBECK, H. W.**  
Measurement of blood flow in the limb of man by cuvette densitometry.  
23 p4077 A69-41294

**OVERHOLSER, K. A.**  
An appraisal of the continuous explosion laser.  
19 p3336 A69-36360

**OVERSBY, V. M.**  
Lead isotope compositions and uranium decay series disequilibrium in recent volcanic rocks.  
04 p0593 A69-15011  
Lead isotopic analysis using a double spike.  
24 p4280 A69-42733

**OVERTON, C. B.**  
Reliability testing requirements, management, and test plans.  
22 p3953 A69-40027

**OVEZGELDYEV, O.**  
Frequency characteristics of the sporadic E layer /O chastotnykh kharakteristikakh sporadicheskogo sloia E/.  
14 p2442 A69-29733  
Sporadic E layer and nightglow emission at the lambda-da 5577-angstrom units wavelength /Sporadicheskie sloi E i emissiia nochnogo neba lambda 5577 angstrom units/.  
16 p2788 A69-32782

**OVSEENKO, IU. G.**  
Refined formulas for the drag moment of an ellipsoid of revolution and a circular disk rotating in an unbounded incompressible viscous fluid /Utochnennye formuly dlia momenta soprotivleniia ellipsoida



- vrashcheniia i kruglogo diska, vrashchaisushchikhsia v bezgranichnoi neszhimaemoi viazkoi zhidkosti/  
14 p2432 A69-29627
- OVSEPIAN, A. V.**  
Influence of neutron irradiation on the critical parameters of isothermal white dwarfs /Vliianie neutronizatsii na kriticheskie parametry izotermicheskikh belykh karlikov/.  
13 p2351 A69-27871
- OVSHINSKY, S. R.**  
Reversible electrical switching phenomena in disordered structures.  
01 p0140 A69-11248  
Radiation hardness of ovonic devices.  
06 p0978 A69-16891  
Simple band model for amorphous semiconducting alloys.  
15 p2667 A69-30199  
Amorphous semiconductors.  
19 p3392 A69-36660
- OVSIAKIN, M. A.**  
Radio-astronomical investigation of ionospheric inhomogeneities by the method of space-diversity reception /Radioastronomicheskoe issledovanie ionosfernykh neodnorodnostei metodom prostranstvennoraznesennogo priema/.  
02 p0237 A69-11665  
Radio astronomical investigation of ionospheric inhomogeneities by the spaced receiver method.  
13 p2257 A69-28696  
Radio astronomical investigations of the parameters of large-scale ionospheric inhomogeneities /Radioastronomicheskoe issledovanie parametrov krupnomasshtabnykh ionosfernykh neodnorodnostei/.  
14 p2436 A69-29053
- OVSIAKIN, B. M.**  
Effect of stress concentrators on the mechanical properties of titanium and titanium alloys at low temperature.  
03 p0443 A69-13028
- OVSIAKIN, G. D.**  
Stationary and dynamic properties of electrolytic vertical sensors /Statsicheskii i dinamicheskie svoystva elektroliticheskikh datchikov vertikal/.  
14 p2446 A69-28925
- OVSIAKIN, M. P.**  
Influence of blowing on a supersonic flow past a cone /O vlianii vduva na sverkhzvukovoe obtekanie konusa/.  
15 p2548 A69-31175
- OVSIAKIN, N. F.**  
A spectral analyzer /Analizator spektra/.  
17 p2939 A69-33909
- OVSIAKIN, V. A.**  
The effect of a transverse magnetic field on a toroidal discharge in the Tuman experiment.  
06 p0963 A69-16906
- OVSIAKIN, V. I.**  
Changes in the lumen of coronary vessels under oligemic hypotension.  
23 p4084 A69-41470
- OVSIAKIN, V. M.**  
Decomposition of an axisymmetric body of revolution made of a material of complex chemical composition in a partly ionized airstream /Razrushenie osesimmetrichnogo tela vrashcheniia iz materiala slozhnogo khimicheskogo sostava v potoke chastichno ionizovannogo vozdukh/.  
02 p0191 A69-12580
- OVSIAKINA, N. V.**  
Supplementary absorption in solid solutions of GaAs sub 1-x P sub x in the wavelength region from 1 to 4 mu /Dopolnitel'noe pogloschenie v tverdykh rastvorakh GaAs sub 1-x P sub x v oblasti dlin voln 1-4 mkml/.  
13 p2318 A69-27894
- OWCZARSKI, W. A.**  
Additional studies on the diffusion welding of titanium.  
01 p0086 A69-10535  
Studies of postweld heat-treatment cracking in nickel-base alloys.  
08 p1318 A69-19964  
Some minor element effects on weldability of heat resistant nickel-base superalloys.  
22 p3967 A69-39880  
The tensile properties and fracture characteristics of titanium diffusion welds.  
24 p4331 A69-42939
- OWEN, D. B.**  
An application of statistical techniques to estimate engineering man-hours on major aircraft programs.  
05 p0769 A69-16239
- OWEN, D. R.**  
On the concept of rate-independence.  
01 p0166 A69-10227  
Thermodynamics of materials with elastic range.  
03 p0529 A69-13955
- OWEN, F. K.**  
Transition experiments on a flat plate at subsonic and supersonic speeds.  
[AIAA PAPER 69-9]  
06 p0912 A69-18075
- OWEN, H. A., JR.**  
Linear voltage-amplitude to pulse-width conversion utilizing a controlled unijunction monostable multivibrator.  
02 p0217 A69-12151
- OWEN, H. P.**  
Development and use of molded shim for aircraft structure.  
19 p3319 A69-35551
- OWEN, M. J.**  
The progressive nature of fatigue damage in glass reinforced plastics.  
02 p0269 A69-11795
- OWEN, T.**  
On the atmospheric temperature of Jupiter derived from the 3 nu sub 3 methane band.  
01 p0153 A69-10856  
Chemical abundances in planetary atmospheres.  
08 p1406 A69-20934  
Wavelength dependence of polarization. XIV - Atmosphere of Jupiter.  
13 p2348 A69-27805  
Mars - Water vapor in its atmosphere.  
22 p4018 A69-40268
- OWENS, B.**  
Solid state batteries.  
10 p1640 A69-23998
- OWENS, B. B.**  
Solid state batteries.  
[AICHE PAPER 22D]  
08 p1256 A69-19848
- OWENS, J.**  
Stabilization and attitude control requirements of communication satellites beyond 1975.  
07 p1228 A69-18339
- OWENS, J. C.**  
Optical Doppler measurement of microscale wind velocity.  
14 p2448 A69-29523  
Recent progress in optical distance measurement - Lasers and atmospheric dispersion.  
18 p3152 A69-35198
- OWENS, J. S.**  
The applicability of a fracture mechanics- non-destructive testing design criterion for aerospace structures.  
21 p3689 A69-38656  
Definition of fatigue cracks through nondestructive testing.  
23 p4234 A69-42451
- OWENS, R. P.**  
Technique for the measurement of standing-wave ratios at low power level.  
17 p2918 A69-33031
- OWENS, W. L., JR.**  
Design aspects of subliming solid reaction control systems.  
[AIAA PAPER 68-516]  
04 p0552 A69-15322  
A semi-empirical correlation of characteristic velocity for Otto Fuel II.  
[AIAA PAPER 69-419]  
16 p2877 A69-31843
- OWNBY, M. L.**  
Life test of six high temperature resistojets.  
[AIAA PAPER 69-294]  
09 p1563 A69-21232
- OWSLEY, N. L.**  
The parametric sequential classification of spectral patterns with application to signal detection on extraction.  
03 p0393 A69-13252
- OWSTON, C. N.**  
Application of thermistors to optical pyrometry and temperature control.  
04 p0601 A69-15119
- OXBURGH, E. R.**  
Convection in a mantle with variable physical properties.  
10 p1682 A69-23412
- Implications of convection within the moon.  
20 p3603 A69-37564
- OXENREIDER, R. S.**  
Passive dampers for gravity gradient stabilization.  
07 p1229 A69-18344
- OYA, H.**  
Theoretical prediction on discrimination of modified and hybrid plasma resonances.  
02 p0241 A69-11776  
A modified plasma resonance observed by a rocket-borne gyro-plasma probe.  
10 p1726 A69-22800  
Rocket observations of the winter ionosphere by plasma probes.  
15 p2606 A69-31444  
Rocket observation of the ionosphere in twilight conditions.  
21 p3702 A69-38355
- OYAMA, V. I.**  
Automatic apparatus for sampling and preparing gases for mass spectral analysis in studies of carbon isotope fractionation during methane metabolism.  
02 p0205 A69-12600  
Differential thermal analysis of some biological specimens, proteins, and starches.  
15 p2555 A69-31000  
Integration of experiments for the detection of biological activity in extraterrestrial exploration.  
15 p2556 A69-31306  
The detection of optical asymmetry in biogenic molecules by gas chromatography for extraterrestrial space exploration - Sample processing studies.  
15 p2556 A69-31315  
Differential thermal analysis of some biological specimens, proteins, and starches.  
16 p2747 A69-31807
- OYINLOYE, J. O.**  
A comparison study of the occurrence of equatorial type E, and daytime blanketing E sub s in the magnetic equatorial zone.  
23 p4160 A69-42426  
Equatorial E sub s and daytime blanketing E sub s drifts at Ibadan.  
23 p4160 A69-42429
- OZAKI, H.**  
A criterion for acoustoelectric current oscillation in semiconductors.  
05 p0807 A69-15956
- OZAROWSKI, R. S.**  
Pressure gain fields in fluidics with free interacting jets.  
02 p0195 A69-12076
- OZERIANI, M. O.**  
Study of the stability of systems with periodic parameters by the frequency method.  
09 p1473 A69-21855
- OZERNOI, L. M.**  
Analysis of the nature of a quasar nucleus from statistical properties of its optical variability.  
04 p0662 A69-15235  
Hypothesis of "photon whirls" and the formation of protogalaxies. II /Gipoteza fotonnykh vikhrei i formirovanie protogalakтик. II/.  
09 p1587 A69-21355  
Coherent mechanism of radio emission in quasars and supernova remnants /O kogerentnom mekhanizme radioizlucheniia v kvazarakh i ostatkakh sverkhnovykh zvezd/.  
12 p2168 A69-27050  
The "photon eddy" hypothesis and the formation of protogalaxies. II.  
18 p3197 A69-34745
- OZERNOJ, L. M.**  
The magnetodynamic model of quasars.  
05 p0822 A69-15853
- OZERNOY, L. M.**  
The spectrum and polarization of a source of synchrotron emission with components flying apart at relativistic velocities.  
12 p2155 A69-26207  
Angular variations in the background radiation caused by macroscopic motions of the metagalactic medium.  
18 p3188 A69-35208
- OZEROV, I. V.**  
Study of cosmic-ray electrons and gamma quanta at altitudes up to 27.5 km /Issledovanie elektronov i gamma-kvantov kosmicheskikh luchej na vysokakh do 27.5 km/.  
10 p1758 A69-22830

- Variations in the electron and gamma quanta intensities in the atmosphere /Ob izmeneniakh intensivnosti elektronov i gamma-quantov v atmosfere/.  
20 p3587 A69-37046
- A device for recording electrons with energies from 0.1 to 1.5 Gev in cosmic radiation /Pribor dlia registratsii elektronov s energiei 0,1 to 1,5 Gev v kosmicheskoi izlucheni/.  
21 p3724 A69-39074
- OZHOGIN, V. I.**  
The study of the magnetic properties of several rare-earth niobates in strong pulsed fields.  
15 p2667 A69-30195
- OZNOBKIN, O. D.**  
Problem of the optimization of autonomous system parameters /K voprosu ob optimizatsii parametrov avtonomnykh sistem/.  
11 p1858 A69-24557
- ## P
- PAANANEN, R. A.**  
Iodine infrared laser.  
[IEEE PAPER T-5]  
07 p1154 A69-19082
- PAAT, A. A.**  
Influence of inhomogeneities on the thermoelectric properties of 80 mol. and Bi sub 2 Te sub 3 plus 20 mol. and Bi sub 2 Se sub 3 alloy.  
04 p0644 A69-15265
- PABBI, S. D.**  
Charge composition and energy spectra of cosmic ray nuclei with Z equals 10-28.  
06 p0988 A69-17274
- PABJANEK, A.**  
Dynamic loading of rigid-viscoplastic cylindrical shell.  
19 p3439 A69-36478
- PABST, D.**  
Digital telemetry equipment in space craft.  
03 p0393 A69-13290
- PABST, W. R., JR.**  
MIL-STD-781B reliability tests - Exponential distribution.  
20 p3551 A69-38289
- PACE, J. R.**  
Aperture blockage by a subreflector in a Cassegrain antenna system.  
03 p0401 A69-12853
- Asymptotic formulas for coupling between two antennas in the Fresnel region.  
23 p4136 A69-41582
- PACE, N.**  
Phase relationships between circadian rhythms and photoperiodism in the monkey.  
24 p4260 A69-42706
- PACHOMOV, S. V.**  
Technique of obtaining data about winds in the mesosphere by small meteorological rockets.  
20 p3529 A69-37797
- PACINI, F.**  
Rotating neutron stars and pulsar emission.  
08 p1383 A69-19895
- PACIOREK, L. J.**  
Stripline microwave integrated circuits.  
15 p2579 A69-31075
- PACK, J. L.**  
Retracting pedestal apparatus that presents a single solid target to a focused Q-switched laser beam.  
03 p0439 A69-13105
- Microwave diagnostics of laser produced aluminum plasmas.  
11 p1930 A69-25287
- PACK, R. T.**  
Separation of rotational coordinates from the n-electron diatomic Schroedinger equation.  
04 p0554 A69-14861
- PACKARD, J. R.**  
Standing waves and single-mode room-temperature laser emission from electron-beam-pumped cadmium sulfide.  
12 p2109 A69-26639
- PACKARD, R. D.**  
Mercury cadmium telluride as a 1-20 microns wavelength infrared detector for space applications.  
24 p4362 A69-43666
- PACKER, M. E.**  
Surface layer fracture of brittle materials by giant laser pulses.  
11 p1899 A69-25402
- PACKMAN, P. F.**  
The applicability of a fracture mechanics- non-destructive testing design criterion for aerospace structures.  
21 p3689 A69-38656
- Definition of fatigue cracks through nondestructive testing.  
23 p4234 A69-42451
- The accuracy and precision of ultrasonic shear wave flaw measurements as a function of stress of the flaw.  
24 p4397 A69-42756
- PACOVSKY, J.**  
Application of the maximum principle in systems with differentiation of the control variable /Uziti principu maxima u sostav s derivaci akni veliciny/.  
15 p2583 A69-31059
- PACZYNSKI, B.**  
On the mass outflow from stars.  
10 p1775 A69-23199
- Envelopes of red supergiants.  
12 p2156 A69-26218
- PADALKA, V. G.**  
A study of transverse plasma injection into a toroidal magnetic field.  
03 p0478 A69-13837
- Characteristics of a plasma trapped by a transverse magnetic field. II.  
06 p0963 A69-16907
- Longitudinal polarization of plasma stream in a transverse magnetic field.  
08 p1370 A69-21018
- Plasma flow in a transverse inhomogeneous magnetic field /Plazmenniy potok v neodnorodnom poperechnom magnitnom pole/.  
12 p2137 A69-26528
- Tangential injection of a plasma into a magnetic field of toroidal configuration /Kasatel'naia inzhetsiia plazmy v magnitnoe pole toroidal'noi konfiguratsii/.  
13 p2311 A69-28108
- Study of the mechanism of capture of a moving plasma by a transverse magnetic field /Issledovanie mekhanizma zakhvata dvizhushcheisia plazmy poperechnym magnitnym polem/.  
24 p4357 A69-43469
- Investigation of certain characteristics of a plasma captured by a transverse magnetic field /Issledovanie nekotorykh kharakteristik plazmy, zakhvachennoi poperechnym magnitnym polem/.  
24 p4357 A69-43470
- Longitudinal polarization of a plasma flux in a transverse magnetic field /Prodol'naia polarizatsiia plazmennogo potoka v poperechnom magnitnom pole/.  
24 p4358 A69-43471
- PADAWER, G.**  
The oxidation of LiF-coated refractory metals.  
19 p3341 A69-35573
- PADDACK, S. J.**  
Rotational bursting of small celestial bodies - Effects of radiation pressure.  
21 p3814 A69-39584
- PADERNO, IU. B.**  
Certain properties of praseodymium germanides /Nekotorye svoistva germanidov prazexodima/.  
23 p4199 A69-42467
- PADEVET, V.**  
The quantitative comparison of dynamical and photometrical data of a meteor.  
17 p3045 A69-34223
- PADEZHNOVA, E. M.**  
Nature of the phase interactions in magnesium alloys of the Mg-Nd-Al system /O kharaktere fazovykh vzaimodeistvii v magnievykh spлавakh sistemy Mg-Nd-Al/.  
11 p1902 A69-24271
- PADILLA, G. J.**  
Spatial interactions in identification and detection of compound visual stimuli.  
22 p3883 A69-40878
- PADILLA, V. E.**  
High reliability in fluid transmission systems through brazed joints.  
09 p1507 A69-22333
- Honeycomb panel fabrication by salt bath brazing.  
19 p3320 A69-35557
- PADLEY, P. J.**  
Temperature of metal oxide particles in flames.  
21 p3852 A69-39592
- PADOVANI, F. A.**  
The accuracy of the WKB approximation for tunneling in metal-semiconductor junctions.  
02 p0301 A69-12652
- The Richardson constant for thermionic emission in Schottky barrier diodes.  
08 p1286 A69-20865
- PADRIELLI, L.**  
Radioemission from planetary nebulae observed with the pencil beam of the "Northern- Cross" radiotelescope.  
01 p0157 A69-11291
- The radio spectra of a homogeneous sample of 4C radiosources.  
21 p3797 A69-38480
- PADRON, R. I.**  
Optical commutation.  
06 p0926 A69-17678
- PAETZOLD, K.**  
The measurement of complex admittances and impedances with the impedance bridge /Das messen von komplexen Leitwerten und Widerstaenden mit der Scheinwiderstands- Messbruecke/.  
09 p1501 A69-22578
- PAFFRATH, D.**  
Integration of time-dependent functions by means of glow-discharge tubes and an oscillator /Integration zeitabhaengiger Funktionen mittels Glimm-roehrenkippschwinger/.  
02 p0251 A69-12773
- PAGANI, C. D.**  
Influence of the accommodation coefficient on the heat transfer in a rarefied gas.  
01 p0177 A69-11405
- PAGANO, N. J.**  
The importance of signs of shear stress and shear strain in composites.  
07 p1170 A69-18720
- Exact solutions for composite laminates in cylindrical bending.  
20 p3626 A69-37760
- PAGE, D. E.**  
Scientific mission of the satellite ESRO II/IRIS.  
01 p0163 A69-11102
- PAGE, E. W.**  
Structure and properties of dynamically strain aged Fe-Cr-C and Fe-Mo-C alloys.  
13 p2276 A69-27403
- PAGE, G. R.**  
Liquid fluorine no-vent loading studies.  
[AIAA PAPER 69-579]  
16 p2767 A69-32715
- PAGE, J. L.**  
Magneto-optic light modulators.  
11 p1886 A69-25057
- PAGE, J. O.**  
Synthesized plasma generator.  
06 p0927 A69-17707
- PAGE, R. H.**  
Fluid mechanics of supersonic separation and reattachment.  
02 p0231 A69-12077
- Initial development of turbulent, compressible free shear layers.  
[ASME PAPER 68-WA/FE-21]  
05 p0749 A69-16097
- Heat and mass transfer in separated flows.  
13 p2377 A69-28145
- Initial development of turbulent, compressible free shear layers.  
[ASME PAPER 68-WA/FE-21]  
14 p2430 A69-29443
- Turbulent base flow on an axisymmetric body with a single exhaust jet.  
[AIAA PAPER 69-650]  
17 p2956 A69-33485
- Incompressible turbulent wake of a flat plate.  
23 p4060 A69-41912
- PAGE, R. J.**  
Life test of six high temperature resistojets.  
[AIAA PAPER 69-294]  
09 p1563 A69-21232
- PAGEL, B. E. J.**  
Intrinsic reddening of eta Carinae.  
07 p1217 A69-19253
- Observational tests for element synthesis in massive objects.  
07 p1219 A69-19296
- The dissociation equilibrium of H- in stellar atmospheres.  
07 p1223 A69-19635
- Chemical composition of old stars.  
08 p1402 A69-20909



- Role of forbidden transitions in the absorption spectra of the sun, normal stars and peculiar stars.  
19 p3422 A69-36215
- PAGEL, L. L.**  
Active cooling of a hydrogen-fueled scramjet engine.  
[AIAA PAPER 68-1091] 24 p4365 A69-43725
- PAGEL, R.**  
Developments and trends in aircraft simulation  
/Evolution et tendance de la simulation d'aeronefs/.  
19 p3296 A69-36707
- PAGNARD, J.**  
The TAPIR automatic pilot - Transition and piloted landing by inertia and radio /Le pilote automatique TAPIR - Transition et atterrissage pilotes par inertie et radio/.  
19 p3371 A69-36704
- PAGNIER, P.**  
Auroral-zone X-ray measurements obtained by simultaneous balloon flights in Northern Scandinavia in 1967.  
05 p0813 A69-15822
- PAGONES, M. J.**  
Gain factor of an offset-fed paraboloidal reflector.  
02 p0218 A69-12329
- PAHLS, J.**  
Secondary maxima of the ambiguity function of pulses with binary phase shift keying in the case of large Doppler shifts /Nebenmaxima der Ambiguitätsfunktion binärer Phasenshifttaster Impulse bei grossen Doppler verschiebungen/.  
07 p1086 A69-19488
- PAHUTA, P.**  
Study of the conditions of brittle fracture in very high strength steels /Studium podmínek křehkého porušení ocelí o velmi vysokých pevnostech/.  
07 p1158 A69-18402
- PAI, S. I.**  
Re-entry and Planetary Entry Physics and Technology. I - Dynamics, Physics, Radiation, Heat Transfer and Ablation.  
11 p1967 A69-25573  
Three-dimensional laminar jet mixing.  
16 p2768 A69-31687  
Linearized theory of three-dimensional jet mixing with and without walls.  
[ASME PAPER 69-FLCS-22] 20 p3516 A69-37976  
Unsteady boundary layer flows of a compressible fluid.  
20 p3518 A69-38318
- PAI, VERNEKER, V. R.**  
A photochemical microrocket for attitude control.  
12 p2148 A69-26801
- PAIDOUSSIS, M. P.**  
An experimental study of vibration of flexible cylinders induced by nominally axial flow.  
11 p1984 A69-25166
- PAIK, S. F.**  
Microwave-excited ionized argon laser.  
04 p0609 A69-14346
- PAINE, G.**  
Some recent results in aerospace vehicle trajectory optimization techniques.  
06 p1006 A69-17569  
Computational results for extensions in quasilinearization techniques for optimal control.  
09 p1590 A69-21414
- PAINTER, J. H.**  
Synthesis techniques for a class of SSB-AM-PM signals.  
14 p2413 A69-29489  
On filtering prior to limiting digital signals in strong noise.  
21 p3676 A69-39450
- PAINTER, W. D.**  
Design, development, and flight test experience with lifting body stability augmentation systems.  
[AIAA PAPER 69-887] 21 p3647 A69-39413
- PAISOV, A. I.**  
Effect of the rate of cooling from the homogenization temperature on the heat resistance of forgings of Khn77TiU alloy /Vliianie skorosti okhlazhdenia ot temperatury homogenizatsii na zharoprochnost' pokovok iz splava Khn77TiU/.  
02 p0266 A69-12125  
Properties of blanks made of granulated chromium bronze /Svoistva polufabrikatov iz granulirovannoi khromistoi bronzy/.  
02 p0266 A69-12127
- Study of the effect of iron and silicon impurities on the properties and structure of duralumin type alloys during the fabrication of compacted semifinished products from granules /Issledovanie vliianiia primesei zheleza i kremniia na svoistva i strukturu splavov tipa duralumin pri proizvodstve kompaktnykh polufabrikatov iz granul/.  
03 p0452 A69-14120
- Effect of the degree of cold deformation and subsequent annealing on the properties of semifinished SAP sheet products /Vliianie stepeni kholodnoi deformatsii i posleduiushchego otzhiga na svoistva listovykh polufabrikatov SAPa/.  
03 p0452 A69-14121
- Structure and properties of forgings of KhN73MB-TiU /El698/ alloy /Struktura i svoistva pokovok iz splava KhN73MBTiU /El698//.  
03 p0452 A69-14122
- PAK, B.-S.**  
On short-lived Forbush decreases.  
23 p4204 A69-41480  
Day-to-day variability of the daily variation of cosmic rays during the quiet period of the solar activity.  
23 p4204 A69-41484
- PAK, C. H.**  
On the existence of normal mode vibrations in nonlinear systems.  
01 p0166 A69-10232
- PAK, M. S.**  
Electrocatalysts for hydrogen/carbon monoxide fuel cell anodes. IV.  
12 p2026 A69-25937
- PAK, W. L.**  
Rapid photoresponses in the retina and their relevance to vision research.  
19 p3258 A69-36377
- PAKDEMIRLI, E.**  
Metal fibre reinforced thermoplastics and the role of adhesion efficiency.  
20 p3559 A69-37083
- PAKHOMOV, E. P.**  
Analysis of the temperature field in a cylindrically symmetrical column of an electric arc.  
03 p0481 A69-14155  
Experimental investigation of the transport properties of a partially ionized plasma /Eksperimental'noe issledovanie transportnykh svoistv chastichno ionizirovannoi plazmy/.  
06 p0969 A69-17907
- PAKHOMOV, I. A. D.**  
Beryllium - A new structural metal /Berillii - Novyi konstruktivnyi metall/.  
11 p1904 A69-24897
- PAKHOMOV, I. U. I.**  
Problem of shielding a radar receiver with a limiter from pulsed noise /K voprosu o zashchishchennosti radiolokatsionnogo priemnika s ogranicheniem ot impul'snykh pomekh/.  
15 p2563 A69-30137
- PAKHOMOV, S. V.**  
Radar wind measurements in the mesosphere /Radiolokatsionnye izmereniia vetra v mezosfere/.  
13 p2253 A69-27848
- PAKHOMOV, V. I.**  
Interaction of charged particles with surface waves in a plasma.  
03 p0480 A69-14135  
Glass-fibre laminates based on epoxy-organosilicon resins.  
19 p3358 A69-35903
- PAKHOMOV, V. I. A.**  
Influence of heat treatment on the properties of superconducting niobium-tantalum alloys /Vliianie termicheskoi obrabotki na svoistva sverkhprovodiashchikh splavov niobii-tantal/.  
19 p3345 A69-36303
- PAKHOMOVA, L. A.**  
Stability of cylindrical shells under concentrated annular loads /Ustoichivost' tsilindricheskikh obolochek pri sosedotochenykh kol'tsevykh nagruzkakh/.  
07 p1238 A69-19688
- PAKHOMOVA, N. L.**  
Investigation of iron-nickel and iron-nickel-cobalt ferrites /Issledovanie zhelezo-nikelevykh i zhelezo-nikel'-koba'ltovykh ferritov/.  
13 p2319 A69-27992
- PAKHUTSOV, B. K.**  
Averaged cross sections of the ionization of neutral particle beams by electrons with a Maxwellian velocity distribution /Usrednennye secheniia ionizatsii puchkov
- neutral'nykh chastits elektronami, imeiushchimi maksimal'skoe raspredelenie skorostei/.  
12 p2138 A69-26542
- Facility for plasma diagnostics by a multicomponent beam of fast neutral particles /Ustanovka dlia diagnostiki plazmy mnogokomponentnym puchkom bystrykh neutral'nykh chastits/.  
14 p2452 A69-29812
- PAKOS, P. E.**  
Use of the Loran-C system for time and frequency dissemination.  
23 p4116 A69-41601
- PAKULA, E. A.**  
Nonstationary generalized planar temperature field and thermal stress in a crystal plate.  
02 p0340 A69-12044  
Thermal stresses in heat-releasing anisotropic plates heated by heat sources /Temperaturnye napriazheniia v nagrevaemykh istochnikami tepla anizotropnykh plastinkakh s teplootdachei/.  
12 p2177 A69-25992
- PAL KALRA, S.**  
Enthalpy distribution in plasma tube arc-heater.  
09 p1553 A69-22538
- PAL, A.**  
Determination of the variations in the period of the satellites 63171 /Cosmos 17/ and 64531 /Cosmos 44/ /Opredelenie izmenenii perioda iskusstvennykh sputnikov 63171 /Kosmos 17/ i 64531 /Kosmos 44//.  
12 p2173 A69-26439
- PAL, D. K.**  
Confirmation of abnormally high electron density in a transient mercury-vapour plasma by laser-interferometer measurements.  
18 p3153 A69-35307
- PAL, M. C.**  
Large deflections of heated circular plates.  
23 p4234 A69-42412
- PAL, Y.**  
Lithium, beryllium, boron and fluorine nuclei in cosmic radiation.  
06 p0988 A69-17271  
Steady state spectra of proton and helium nuclei and their modulation.  
06 p0988 A69-17272  
Spectra of heavy and super heavy nuclei in steady state.  
06 p0988 A69-17273  
Rigidity spectrum of cosmic ray helium nuclei using a magnetic spectrograph.  
06 p0989 A69-17277  
Variation of electronic charge with cosmic time.  
06 p1003 A69-17323  
Possible origin of high-energy cosmic gamma rays/ques/.  
09 p1580 A69-22295  
On the propagation of cosmic rays.  
21 p3789 A69-38816
- PALAI, J. C.**  
The inductive iris double discontinuity.  
09 p1453 A69-21444
- PALARZ, B. G.**  
VTOL variable stability system development for the XV-4B.  
17 p2902 A69-34066
- PALATNIK, L. S.**  
Mechanism of epitaxial growth of PbTe on KCl.  
10 p1745 A69-23323  
Internal macrostresses in metallic vacuum condensates /Vnutrennie makronapriazheniia v metallicheskiikh vakuunnykh kondensatakh/.  
12 p2143 A69-26457  
Structure and magnetic properties of "supercritical" films /Struktura i magnitnye svoistva "zakriticheskikh" plenok/.  
12 p2143 A69-26458  
Substructural step-by-step transitions at the early stages of epitaxial growth of PbTe on NaCl.  
12 p2144 A69-26675  
Investigation of the law of reflection of molecular beams.  
20 p3580 A69-37814
- PALAU, C.**  
Some properties of whistlers at Roburent, North Italy.  
01 p0067 A69-11033
- PALCHEVSKII, A. S.**  
Minimum-weight cylindrical shells reinforced by closed-profile ribs /Tsilindricheskie obolochki

- minimal'nogo vesa, podkreplennye stringerami zamk-nutogo profilii/.  
21 p3835 A69-38723
- PALCHIKOV, V. E.**  
Some characteristics of rotating plasma behavior in a magnetic trap.  
10 p1740 A69-23716
- PALCZYNSKI, B.**  
Tunnel-diode DC-to-AC and DC-to-DC converters for supplying the electronic equipment of space vehicles. II - DC-to-DC converters /Przekształtniki i przet-wornice napiecia z diodami tunelowymi dla zasilania aparatury elektronicznej pojazdow kosmicznych. II - Przetwornice/.  
01 p0013 A69-10750  
Tunnel-diode DC-to-AC and DC-to-DC converters for supplying the electronic equipment of space vehicles. I - DC-to-AC converters /Przekształtniki i przet-wornice napiecia z diodami tunelowymi dla zasilania aparatury elektronicznej pojazdow kosmicznych. I - Przekształtniki/.  
01 p0046 A69-10755  
Selected problems of power electronics in spacecraft /Wybrane zagadnienia energoelektroniki pojazdow kosmicznych/.  
17 p2937 A69-33582
- PALEI, A. B.**  
An integrating microphotometer.  
11 p1879 A69-24256
- PALEICHIK, N. V.**  
Diffusion of a vortex in a viscous compressible fluid - Linear formulation /Diffuzia vikhria v viazkoi szhimaemoi zhidkosti - Lineinaia postanovka/.  
17 p2957 A69-33714
- PALEICHIK, V. V.**  
Rotation and pulsation of a gravitating gas cloud /Vrashchenie i pul'satsii gravitiruiushchego oblaka gaza/.  
02 p0317 A69-11955
- PALEKHOVA, O. E.**  
Practical representation of initial compositions in the study of the equilibrium of thermodynamic systems /O telesoobraznom predstavlenii iskhodnykh sostavov pri issledovanii ravnovesiia termodinamicheskikh sistem/.  
01 p0176 A69-10403
- PALEY, Z.**  
The heat treatment of 18 percent Ni maraging steel weld metal.  
18 p3151 A69-35430
- PALII, O. M.**  
Calculation of the forced oscillations of one-dimensional girder systems with allowance for nonlinear resisting forces /Raschet vyznuzhennykh kolebanií od-nomernykh balochnykh sistem s uchetom nelineinykh sil soprotivlenii/.  
17 p3064 A69-33917
- PALIUKH, B. M.**  
Resonance charge transfer of slow cesium ions.  
06 p0959 A69-16908  
Resonance charge transfer for slow potassium ions.  
06 p0959 A69-16909  
Mobility of Cs super plus and K super plus ions in their vapors.  
11 p1922 A69-24226  
Desorption of yttrium from tungsten in a strong electric field /Desorbtsiia itriia s vol'frama v sil'nom elektricheskomo pole/.  
17 p3015 A69-33631
- PALKA, F. M.**  
The measurement of oscillator noise at microwave frequencies.  
02 p0220 A69-12453
- PALKO, L. S.**  
Axisymmetric oscillations of two spherical shells in a compressible fluid /Osesimmetrichnye kolebaniia dvukh sfericheskikh obolochek v szhimaemoi zhidkosti/.  
11 p1875 A69-25467
- PALLADINO, G. J.**  
HF receiver interference reduction techniques.  
17 p2943 A69-34132  
Interference blanker for HF receivers.  
23 p4141 A69-42221
- PALLONE, A. J.**  
Nosetip cooling by discrete fluid injection.  
[AIAA PAPER 68-1141] 03 p0532 A69-13559
- PALLOTTINO, G. V.**  
Low current measurement on board an artificial satellite.  
04 p0602 A69-15399
- Wide-range current-to-frequency converter.  
07 p1107 A69-19170
- PALLOZZI, A. A.**  
"Thornel" composite fuselage section fabrication.  
09 p1509 A69-22341
- PALLUEL, P.**  
UHF high power klystrons for DESY.  
07 p1096 A69-18434
- PALM-LEIS, A.**  
On the propagation of turbulent flames.  
13 p2379 A69-28452
- PALM, A.**  
Potential constants of nitric acid.  
15 p2561 A69-30467  
The evolution of Venus' atmosphere.  
16 p2857 A69-32098
- PALMEIRA, R. A. R.**  
Measurement of cosmic ray anisotropy of solar origin by Explorer 34 satellite.  
24 p4373 A69-43619
- PALMER, A. C.**  
Limit analysis of cylindrical shells by dynamic programming.  
12 p2179 A69-26214
- PALMER, H. P.**  
Recent interferometric investigations of the angular dimensions of radio sources /O poslednikh interferometricheskikh rabotakh po uglovym razmeram radioistochnikov/.  
12 p2166 A69-27039
- PALMER, I.**  
Corotating Forbush decreases.  
09 p1582 A69-22752
- PALMER, J. D.**  
Striation formation during steady-state glow discharge.  
09 p1545 A69-21343
- PALMER, P.**  
Microwave detection of interstellar formaldehyde.  
10 p1786 A69-24108  
Detection of the super 2 pi 3/2, J equals 5/2 state of OH at 5-centimeter wavelength.  
13 p2335 A69-27312  
Determinations of helium abundance from radiofrequency recombination lines.  
18 p3190 A69-34293  
Detection of interstellar H sub 2 C super 13 O super 16.  
23 p4220 A69-42376
- PALMER, R. W.**  
Computer-made movies and plotting descriptions of ion-molecule collisions with polar targets.  
24 p4352 A69-43124
- PALMER, W.**  
OMEGA-inertial hybrid receiver.  
07 p1177 A69-19209
- PALMIERI, T. M.**  
Soft X-ray background flux.  
24 p4368 A69-43220
- PALMISANO, W. A.**  
The evaluation of laser hazards.  
02 p0204 A69-12497
- PALMONARI, F.**  
An underground search for leptonic quarks in the cosmic radiation.  
02 p0306 A69-11547
- PALMORE, J.**  
A new method for constructing periodic orbits in nonlinear dynamical systems.  
[AAS PAPER 68-085] 20 p3595 A69-37171
- PALMS, J. M.**  
Evaluation of some large area silicon junction detectors for cryogenic applications.  
20 p3546 A69-38275
- PALOUS, M.**  
Auroral-zone X-ray measurements obtained by simultaneous balloon flights in Northern Scandinavia in 1967.  
05 p0813 A69-15822  
Balloon measurements of solar protons in Northern Scandinavia on 7 July 1966.  
10 p1767 A69-23763
- PALSEDGE, J. A.**  
Stability of a rotating theta-pinch plasma.  
11 p1929 A69-25270
- PALTOV, I. P.**  
Correction of automatic control systems by compensating for the nonlinear statistical characteristics /Korrektisia avtomaticheskikh sistem kompensatsiei nelineinykh statisticheskikh kharakteristik/.  
01 p0053 A69-10801
- PALTSUN, N. V.**  
Critical stresses for a layer with two cracks /Kriticheskie napriazheniia dlia sloia s dvumia treshchinami/.  
17 p3055 A69-33127  
Plane problem for an infinite strip weakened by a slit /Ploskaia zadacha dlia beskonечноi polosy, oslablennoi shchel'iu/.  
24 p4395 A69-42592
- PALUDAN, C. T. N.**  
Potential contributions of orbital earth resources data to urban planning.  
[AAS PAPER 69-483] 24 p4307 A69-42837
- PALUMBO, G.**  
Precursor vacuum ultraviolet radiation in a T-type shock tube.  
20 p3511 A69-38239
- PALUSINSKI, O.**  
Comments on "An energy metric algorithm for the generation of Liapunov functions."  
12 p2122 A69-26521
- PALVANOV, V. CH.**  
Neutron distribution in the atmosphere with allowance for density variation.  
12 p2149 A69-26683
- PALYVOS, J. A.**  
Application of the Prigogine-Nicolis-Misguich theory of transport.  
04 p0589 A69-14863
- PALZ, W.**  
Contributions to cadmium sulfide-copper sulfide solar cell studies.  
19 p3250 A69-35685  
Study of the attenuation of the current induced by continuous electron bombardment in a cadmium sulfide crystal /Etude de l'attenuation du courant induit par bombardement electronique continu dans un cristal de sulfure de cadmium/.  
19 p3392 A69-36727
- PAN, A. C.**  
A learning controller model for on-line optimization of a class of stochastic control systems.  
06 p0900 A69-17354
- PAN, C. H. T.**  
Dynamic behavior of the spherical squeeze-film hybrid bearing.  
[ASME PAPER 68-LUBS-37] 13 p2267 A69-27281  
Analysis of pulsating flows in infinite and finite conical nozzles.  
[ASME PAPER 69-APM-16] 18 p3214 A69-34392
- PAN, H. H.**  
Axisymmetrical vibrations of a circular sandwich shell with a viscoelastic core layer.  
18 p3211 A69-34327
- PAN, S.**  
Electron-spin memory in the optical-pumping cycle of F centers in alkali halides and electron-spin resonance of the relaxed excited state.  
23 p4198 A69-42419
- PAN, W. Y.**  
Design considerations for an integrated 1.8-GHz parametric amplifier.  
01 p0040 A69-10193
- PAN, Y. S.**  
Propagation of an N wave across a nonuniform medium.  
16 p2812 A69-31924
- PANAGIA, N.**  
On the spectrum of a gaseous nebula of pure hydrogen. I.  
14 p2529 A69-29975
- PANARELLA, E.**  
The generation, propagation and structure of cylindrical converging shock waves. I.  
10 p1678 A69-22933
- PANASEVICH, L. L.**  
The electric field in an MHD duct with permeable electrodes when the Hall effect is present in the flow of the moving medium /Elektricheskoe pole v MGD-kanale s pronitsaemymi elektrodami pri nalichii efekta Kholla v potoke dvizhushcheisia sredy/.  
13 p2310 A69-28030



## PANASIUK, A. D.

Contact interactions of silicon and boron carbides and their alloys with liquid metals /Kontaktna vzaimodiia karbidiv kremniu i boru ta ikh spoluk z ridskimi metalami/.

18 p3156 A69-35153

## PANASIUK, V. V.

Limiting equilibrium of plates with pointed stress raisers /K voprosu o predel'nom ravnovesii plastin s ostriymi konsentratormi napriazhenii/.

11 p1973 A69-24658

Limiting equilibrium of an unbounded brittle body weakened by an external crack /O predel'nom ravnovesii neogranichennogo khrupkogo tela, oslablenno vneshnei treshchinoi/.

12 p2178 A69-25997

Limiting equilibrium of a three-dimensional brittle body with an internal plane crack of elliptical planform /O predel'nom ravnovesii trekhmernogo khrupkogo tela s vnutrennei ploskoi treshchinoi, imeiushchei v plane formu ovala/.

18 p3226 A69-35379

The limiting equilibrium state of an unbounded brittle body with an arbitrarily oriented elliptical crack /Predel'no-ravnovesnoe sostoianie neogranichennogo khrupkogo tela s proizvol'no orientirovannoi ellipchieskoi treshchinoi/.

19 p3441 A69-36745

## PANCHENKO, B. A.

Interaction between the radiators in multielement antenna arrays, taking into account edge effects /Vzaimodeistvie izluchatelei v mnogoelementnykh reshetkakh s uchedom kraevykh effektiv/.

05 p0727 A69-15638

Diffraction of an electromagnetic wave in the case of oblique incidence on a perforated screen /Difraktsiia elektromagnitnoi volny pri naklonnom padenii na perforirovannyi ekran/.

07 p1076 A69-18527

Interaction between the elements in circular antenna arrays /Vzaimodeistvie elementov v kol'tsevykh antennykh reshetkakh/.

13 p2234 A69-28505

Influence of mutual coupling between the radiating elements on the current distribution and radiation characteristics of linear antenna arrays /Vliianie vzaimnoi svyazi mezhdu izluchateliami na raspredelenie toka i kharakteristiki izlucheniia lineynykh antennykh reshetok/.

13 p2236 A69-28572

Interaction among radiators in multi-element arrays in the presence of fringe effects.

16 p2762 A69-32496

## PANCHENKO, N. I.

Nighttime latitude variations in observations with the Danjon astrolabe at Poltava /Kolebaniia shirot y techenie noch'i v nabludeniiakh na astrolibii Danzhona v Poltave/.

17 p2959 A69-32870

## PANCHENKO, V. I.

Measurement of gas streams with nonorientable five-channel adapters /Izmerenie gazovykh potokov neorientiruemyi piatikanal'nymi nasadkami/.

11 p1888 A69-25340

## PANCHENKO, V. N.

Surface friction accompanying adiabatic compressible gas flows through pipes /Poverkhnostnoe trenie pri adiabatom techenii szhimaemogo gaza v trubakh/.

16 p2771 A69-31956

## PANCHEV, S.

Kovaszny's spectral theory of turbulence.

16 p2768 A69-31686

Energy spectrum of isotropic turbulence at large wavenumbers.

21 p3694 A69-38834

On the spectrum of decaying turbulence at large-Reynolds' number.

21 p3694 A69-38835

## PANCHEV, ST.

Nonadiabatic rise of individual volumes of air in a stably stratified atmosphere.

02 p0274 A69-11441

## PANCZOWSKI, D.

Prestressed stringers of aircraft wings /Predvaritelno napregnati samoletni krilni nad'zhnitsi/.

05 p0832 A69-15690

## PANDA, S. P.

Irreducible Jordan form realization of a rational matrix.

12 p2122 A69-26511

## PANDE, M. C.

On the possible existence of SH in solar atmosphere.

06 p1002 A69-17317

Molecules in the solar photosphere.

14 p2528 A69-29963

The dependence of facula-photosphere contrast in molecular lines on dissociation energy.

18 p3204 A69-35391

## PANDIKOW, W.

Strategy and organization of multiradar observation /Strategie und Organisation der Multiradarbeobachtung/.

05 p0719 A69-15932

## PANDOLFI, M.

Three-dimensional flowfield of an incompressible fluid in conical ducts and turbomachines /Campo tridimensionale di moto di un fluido incompressibile in condotti e turbomacchine "conici"/.

09 p1480 A69-21597

A method for evaluating the off-design performance of a radial inflow turbine and comparison with experiments.

10 p1754 A69-23891

## PANEQUE, A.

Mechanism of nitrate reduction in Chlorella.

24 p4263 A69-43136

## PANFEROVA, N. E.

Effect of prolonged limitation of muscle activity on cardiac dynamics.

02 p0198 A69-11515

Arterial tonus in relation to restriction of muscular activity in man.

10 p1647 A69-23586

## PANFILOV, I. P.

Noise stability of wideband communication systems in the presence of linear distortions in the channel /O pomekhoustoichivosti shirokopolosnykh sistem svyazi pri lineynykh iskazheniiakh v kanale/.

15 p2564 A69-30146

## PANFILOV, V. E.

Man-operator under conditions of acceleration.

08 p1265 A69-19936

## PANHOLZER, R.

A digital integrated circuit radiosonde system.

17 p2937 A69-33675

## PANICALI, A. R.

A probabilistic approach to large circular and spherical arrays.

22 p3914 A69-40704

## PANICH, I. M.

Periods of rotation of the satellites 1965-11-4

12 p2069 A69-26440

## PANICH, O. I.

Equivalent regularization of boundary value problems by means of potentials /Ekivalentnaia reguliatsiia kraevykh zadach s pomoshchiu potentsialov/.

10 p1721 A69-23959

Equivalent regularization of boundary value problems by means of potentials.

21 p3756 A69-39150

## PANIN, B. D.

Automatic processing of infrared information transmitted by meteorological satellites /Avtomaticheskai obrabotka infrakrasnoi informatsii, postupaishchei ot meteorologicheskikh sputnikov/.

06 p0929 A69-17981

Determination of the radiating-surface temperature and total moisture content from radiation measurements on artificial earth satellites /Ob opredelenii temperatury izluchaiushchei poverkhnosti i obshchego vlagosoderzhanii po radiatsionnym izmereniam na ISZ/.

06 p0952 A69-17988

## PANISH, M. B.

Temperature dependence of the energy gap in GaAs and GaP.

09 p1553 A69-21330

## PANUSHEVA, Z. A.

Kinetics and mechanism of breakdown in graphite materials under intensive wear /Kinetika i mekhanizm razrusheniia grafitovykh materialov pri intensivnom iznashivani/.

14 p2467 A69-28912

## PANUSHKIN, A. V.

Apparatus for determining thermal-diffusion coefficients in gas mixtures.

04 p0688 A69-15410

## PANKEY, T.

Structural and optical evaluation of vacuum-deposited GaP films.

09 p1554 A69-21332

## PANKIEWICZ, J. C.

Electronic scanning.

01 p0049 A69-11348

## PANKO, S. V.

Invariant transformation of Euler equations for plane steady flows of a perfect compressible fluid.

11 p1877 A69-25739

## PANKOVA, J. I.

Lasing delay in GaAs sub 1-x P sub x injection lasers.

19 p3387 A69-36539

## PANKOVE, J. I.

Cathodoluminescence of n-type GaAs.

04 p0639 A69-14431

## PANKOW, M.

Discussion of the possibility of detecting the relativistic effect in the pericenter motion of comets and of natural satellites of planets /Dyskusia o mozliwosci wykrycia efektu relatywistycznego w ruchach pericentrow komet i naturalnych satelitow planet/.

17 p3044 A69-34174

## PANKRATOV, A. K.

Certain results of studies of the diurnal variation in the nucleon and hard components of cosmic rays /Nekotorye rezul'taty issledovanii sutochnoi variatsii v nuklonnoi i zhestkoi komponentakh kosmicheskikh luche/.

04 p0648 A69-14374

## PANKRATOV, A. M.

Electromagnetic fields in resonators with an oscillating boundary /one-dimensional case/ /Elektromagnitnye polia v rezonatorakh s koleblushchiesia granitsai /odnomernyi sluchai/.

16 p2751 A69-32030

## PANKRATOV, A. V.

Thermodynamic calculation of the dissociation equilibrium of tetrafluorohydrazine.

24 p4280 A69-42788

## PANKRATOV, V. G.

Analysis of magnetogasdynamic flow.

18 p3181 A69-35054

## PANNACI, E.

Maser oscillations with external gain.

04 p0611 A69-14443

## PANNEKOEK, L.

The relationship between some physiological and psychological variables.

24 p4268 A69-43406

Circadian rhythm and performance.

24 p4268 A69-43407

## PANNELLA, G.

Paleontological evidence of variations in length of synodic month since late Cambrian.

02 p0241 A69-11807

## PANNIER, R.

Our experience with asthma in military air crews /Notre experience de l'asthme dans le personnel navigant des forces armees/.

05 p0710 A69-16624

Clinical case - Epilepsy acquired by a fighter pilot /Cas clinique - Epilepsie acquise chez un pilote de chasse/.

09 p1446 A69-22728

Frequency of urinary lithiasis among aircrew /Lithiasie urinaire et personnel navigant/.

24 p4267 A69-43388

Effects of hyperventilation on flight personnel /L'hyperventilation dans le personnel navigant/.

24 p4269 A69-43410

## PANOFISKY, H. A.

Recent measurements of spectra for heat-flux and stress.

02 p0276 A69-12698

Energy dissipation near the tropopause.

19 p3303 A69-36407

## PANOV, A. G.

Some neurological problems of aerospace medicine.

10 p1646 A69-23506

## PANOV, D. N.

Radar digital ranging servosystems /Radiolokatsionnaia tsifrovaia slediashchaya sistema izmereniia dal'nosti/.

19 p3278 A69-36593

## PANOV, I. U. A.

Gas jet injection into a supersonic flow from orifices in the lateral surface of a body /Istechenie gazovykh strui v sverkhzvukovoi potok iz otverstii v bokovoi poverkhnosti tela/.

01 p0005 A69-10357

Shape of the separated-flow region caused by the incidence of a three-dimensional shock wave on a plate with a turbulent boundary layer /O forme oblasti otryvnogo tekhnennia, vyzvannoi padeniem trekhmernoi udarnoi volny na plastinu s turbulentnym pogranichnym sloem/.  
14 p2428 A69-28897

Theoretical study of separated flows /Teoreticheskie issledovaniia otryvnykh tekhnii/.  
17 p2949 A69-33124

Methods of calculating shock wave/boundary layer interaction /Metody rascheta vzaimodeistviia skachkov uplotneniia s pogranichnym sloem/.  
24 p4243 A69-42582

PANOV, J. A.  
An investigation of stream behind bodies in a supersonic flow.  
09 p1431 A69-22237

PANOV, M. N.  
Investigation, by the coincidence method, of the elementary processes involved in charged-state variations during an interaction between protons and inert gas atoms /Issledovanie metodom sovpadenii elementarnykh protsessov izmeneniia zariadovykh sostoianii pri vzaimodeistvii protonov s atomami inertnykh gazov/.  
12 p2133 A69-26543

Elementary processes involved in the change in the charge states during interactions between protons and hydrogen molecules /Elementarnye protsessy izmeneniia zariadovykh sostoianii pro vzaimodeistvii protonov s molekulami vodoroda/.  
15 p2655 A69-30963

PANOV, T. N.  
11-year cyclicity of geomagnetic activity according to data of the Sverdlovsk magnetic observatory for the years 1943 through 1966 /11-letniia tsiklichnost' geomagnitnoi aktivnosti po materialam Sverdlovskoi magnitnoi observatorii za 1943-1966 gg./.   
09 p1486 A69-21552

11-year geomagnetic activity cycle, according to the data of Sverdlovsk magnetic observatory for 1943-1966.  
16 p2784 A69-32547

PANOV, V. N.  
Micrometeorite investigations on the Cosmos 135 satellite /mikrometeornye issledovaniia na sputnike "Kosmos-135"/.  
01 p0152 A69-10578

Micrometeoroid investigations on the satellite "Cosmos-135".  
15 p2691 A69-30748

PANOV, V. S.  
Preparation and study of some properties of NbC-WC and TaC-WC alloys.  
05 p0782 A69-16796

PANOVA, E. M.  
Medicinal therapy and flight safety /Lekarstvennaia terapiia i bezopasnost' poletov/.  
01 p0014 A69-10583

Drug therapy and flight safety.  
15 p2555 A69-30753

PANOVKO, IA. G.  
Strength, Stability, Oscillations. Handbook. Volume 1 /Prochnost', Ustoichivost', Kolebaniia. Spravochnik. Volume 1/.  
04 p0683 A69-15499

Strength, Stability, Oscillations. Handbook. Volume 2 /Prochnost', Ustoichivost', Kolebaniia. Spravochnik. Volume 2/.  
04 p0683 A69-15500

Strength, Stability, and Vibrations Handbook. Volume 3 /Prochnost', Ustoichivost', Kolebaniia. Spravochnik. Volume 3/.  
12 p2182 A69-26755

PANOVKO, V. M.  
Mechanical properties of vacuum-arc melts of tungsten at 20-1100 deg C.  
15 p2637 A69-30267

PANSHINA, L. N.  
Ordering of atoms and its effect on the properties of alloys /Uporiadochenie Atomov i ego Vliianie na Svoistva Splavov/.  
11 p1936 A69-24701

Imperfections of Crystalline Structure /Nesovershenstva Kristallicheskogo Stroeniia/.  
12 p2142 A69-26452

Physics of Metallic Films, All-Union Symposium on the Physics of Magnetic Films, 3rd, Kiev, Ukrainian SSR, October 1966, Proceedings /Fizika Metallicheskh Plenok, Vsesoiuznyi Simpozium po Fizike Magnitnykh Plenok, 3rd, Kiev, Ukrainian SSR, October 1966, Proceedings/.  
12 p2143 A69-26456

Defects and Properties of a Crystalline Lattice /Defekty i Svoistva Kristallicheskoi Reshetki/.  
18 p3159 A69-35447

Physical Nature of Plastic Deformation and Failure of Metals /Fizicheskaia Priroda Plasticheskoi Deformatsii i Razrusheniia Metallov/.  
18 p3159 A69-35451

PANT, H. C.  
A study of the gallium arsenide injection laser and an investigation of its application in a communication system.  
14 p2459 A69-29349

PANT, J. C.  
Calculation of the curvatures of attached shock waves in presence of a transverse magnetic field.  
10 p1728 A69-23238

A note on the transition through two successive oblique hydromagnetic shocks.  
15 p2664 A69-31217

PANTANI, L.  
Passive generation and band inversion in pulse-compression radar /Generazione passiva ed inversione di banda nei radar a compressione di impulsi/.  
04 p0558 A69-15074

Radar-signal matched-filtering through digital processing.  
05 p0722 A69-16733

A simplified optical correlator for radar-signal processing.  
12 p2028 A69-25911

PANTAZOPOL, D.  
Plane supersonic flows separated by a jet having the shape of a thin film /Ecoulements plans supersoniques separees par un jet en forme de couche mince/.  
05 p0746 A69-16020

Supersonic combustion around a conical obstacle /La combustion supersonique autour d'un obstacle conique/.  
15 p2548 A69-31007

PANTELEEV, V. V.  
Spectrum-analytical characteristics of a plasma obtained by means of a laser in regular and quasi-stable regimes of emission /O spektral'no-analiticheskikh osobennostiakh plazmy, poluchennoi s pomoshch'iu OKG v reguliarnom i kvazistatsionarnom rezhimakh generatsii/.  
22 p3964 A69-40793

PANTELL, R. H.  
Stimulated photon-electron scattering. [IEEE PAPER S-9]  
07 p1154 A69-19081

PANTLE, A.  
Size-detecting mechanisms in human vision.  
03 p0369 A69-13359

Contrast response of human visual mechanisms sensitive to orientation and direction of motion.  
22 p3884 A69-40887

PANTON, R. L.  
Analysis of the boundary layer preceding an accelerating flame.  
19 p3450 A69-36359

PANUSKA, J. A.  
The persistence and acute loss of previously learned behavior during progressive hypothermia.  
10 p1643 A69-23124

PAO, H.-H.  
Clear Air Turbulence and its Detection, Boeing Company, Symposium, Seattle, Wash., August 14-16, 1968, Proceedings.  
17 p2998 A69-33732

PAO, Y. C.  
A generalized analysis of conically bent plates by large-deflection theory. [ASME PAPER 68-APM/Y]  
04 p0670 A69-14402

Optimization study of anticlastic curvature of cylindrically bent strips with variable thickness.  
06 p1023 A69-17374

PAO, Y.-H.  
Laminar flow of a stably stratified fluid past a flat plate.  
05 p0745 A69-15724

Inviscid flows of stably stratified fluids over barriers.  
08 p1346 A69-20313

Origin and structure of turbulence in stably stratified media.  
17 p2999 A69-33735

Vibration and dynamic instability of a beam-plate in a transverse magnetic field. [ASME PAPER 68-APM-B]  
18 p3215 A69-34400

PAO, Y.-P.  
Asymptotic theory of nearly free-molecular flows.  
11 p1818 A69-25283

PAOLANTONIO, A.  
Difference measurements in automatic photointerpretation of surveillance maps.  
12 p2090 A69-26302

PAOLI, T. L.  
Coupled longitudinal mode pulsing in semiconductor lasers.  
15 p2634 A69-30875

Resonant modes of GaAs junction lasers. II - High-injection level.  
19 p3338 A69-36691

Optical pulses from CW GaAs injection lasers.  
23 p4173 A69-41500

PAOLINI, E.  
System for measuring the input impedance of radiating asymmetrical antennas of arbitrary shape in the HF, VHF, and UHF ranges /Procedimento di misura di resistenza di ingresso di antenne radianti, dissimmetriche di forma qualsiasi, nelle gamme HF, VHF ed UHF/.  
14 p2420 A69-29394

PAOLINI, F. R.  
Bimodal diffusion in the earth's magnetosphere. II - On the electron belts.  
08 p1307 A69-20184

Acceleration of trapped electrons and protons through bimodal diffusion in the earth's radiation belts.  
09 p1576 A69-21708

The angular response of spherical plate electrostatic analyzers.  
14 p2449 A69-29560

The effects of magnetic storms on electrons and protons at L greater than 2.5.  
15 p2676 A69-31314

Bimodal diffusion in the earth's magnetosphere. IV - On the space and time dependence of trapped particle energy spectra.  
16 p2852 A69-32619

PAPADOPOULOS, J. G.  
A study of Saturn AS-502 coupling longitudinal structural vibration and lateral bending response during boost. [AIAA PAPER 69-58]  
06 p1019 A69-18204

PAPAGIANNIS, M. D.  
Ray-tracing of the Z-mode in a tilted layer ionosphere.  
05 p0758 A69-16412

Some difficulties with the oblique rotator model for pulsars.  
18 p3196 A69-34647

Measurement and interpretation of power spectrums of ionospheric scintillation at a sub-auroral location.  
20 p3534 A69-38093

PAPAILIOU, D. D.  
Magneto-fluid-mechanic laminar natural convection - An experiment.  
01 p0134 A69-11407

PAPANASTASSIOU, D. A.  
Initial strontium isotopic abundances and the resolution of small time differences in the formation of planetary objects.  
11 p1953 A69-24357

PAPAY, ZS.  
The satellite radio observation station of the Budapest Technical University - Reception of APT pictures /Sputnikovaia radionabludatel'naia stantsiia Tekhnicheskogo Universiteta v Budapeshte - Priem APT- Kartin/.  
12 p2059 A69-26449

PAPE, J. G.  
Fundamental research on a radial face seal.  
01 p0087 A69-10910

Viscoseal-pressure generation and friction loss under turbulent conditions. [ASLE PREPRINT 68AM 5B-1]  
01 p0087 A69-10911

PAPELL, S. S.  
Inlet effects on boiling and near critical hydrogen heat transfer. [ASME PAPER 69-HT-27]  
24 p4412 A69-43541

PAPET-LEPINE, J.  
Determination of the vertical profile of the ionosphere from measurements of the total electron content /Determination du profil vertical de l'ionosphere a partir de la mesure du contenu total d'electrons/.  
22 p3941 A69-40718

PAPIROV, I. I.  
Oxidation and Shielding of Beryllium /Okislenie i Zashchita Berillia/.  
13 p2280 A69-27927

Physical Metallurgy of Beryllium /Fizicheskoe Metallovedenie Berillia/.  
17 p2986 A69-32952



## PAPKE, W.

Universal data processing system for telemetry signals /Universelle Datenaufbereitungsanlage fuer Telemetriesignale/.  
11 p1840 A69-25426

## PAPKO, V. V.

Pulsed parametric generation in distributed systems.  
16 p2758 A69-31796

## PAPOIAN, V. V.

Newtonian theory of rotating configurations /K n'iu-tonovonoi teorii vrashchaisushchikhsia konfiguratsii/.  
05 p0826 A69-16427

Nonrelativistic theory of rotating configurations.  
12 p2159 A69-26662

Slow rotation of relativistic polytropes /Medlennoe vrashchenie relativistskikh politrop/.  
19 p3426 A69-36576

## PAPOULAR, R.

Optical measurements on laser-produced plasmas.  
01 p0127 A69-10281

A theory of the preionization of gases by a laser beam /Une theorie de la preionisation des gaz par un faisceau laser/.  
02 p0283 A69-11703

Study of the expansion of a lithium hydride microplasma in a vacuum /Etude de l'expansion dans le vide d'un microplasma d'hydru de lithium/.  
02 p0286 A69-11704

## PAPPAS, C. C.

Effects of mass addition of various gases on the heat transfer and surface pressures on a blunt cone in hypersonic flow.  
[AIAA PAPER 69-716] 17 p2891 A69-33463

## PAPPERT, R. A.

A parametric study of VLF modes below anisotropic ionospheres.  
10 p1655 A69-23417

## PAPPOVA, E.

Combined adrenergic blockade in experimental hemorrhagic hypotension.  
23 p4098 A69-42102

## PAPUSHINA, L. B.

Diurnal variations of fluctuations of the electron density in the ionosphere of the Northern Hemisphere /Sutochnye variatsii fluktuatsii elektronnoi plotnosti v ionosfere severnogo polushariia/.  
14 p2444 A69-29870

## PAPYRIN, A. N.

Dynamic characteristics of a straight turbulent discharge.  
07 p1195 A69-19592

Millimicrosecond photographic recording of processes in a low-density theta-pinch /Millimikrosekundnaia fotoregistratsiia protsessov v theta-pinche nizkoi plotnosti/.  
14 p2496 A69-29787

## PAQUET, J.-G.

On the hysteresis of on-off elements.  
12 p2053 A69-26506

## PAQUET, P.

The ballistics room of the Royal Belgian Observatory /La chambre balistique de l'Observatoire Royal de Belgique/.  
08 p1272 A69-19993

## PAQUIN, M. L.

MULTI-FOIL thermal insulation.  
19 p3341 A69-35540

## PARAMESWARA RAO, M.

Bending of a circular plate into a general shell.  
21 p3836 A69-39005

## PARAMESWARAIAH, R.

An electrical transducer and the associated instrumentation for fluid pressure measurement.  
03 p0427 A69-12914

## PARAMONOV, I. U. M.

The optimal use of service-test aircraft for determining aircraft service life.  
21 p3647 A69-39098

## PARAMJPE, B. V.

Influence of the self-induced magnetic field on the stability of a plasma column in a longitudinal magnetic field.  
24 p4356 A69-43366

## PARAMJPE, P. A.

Skin friction in compressible turbulent boundary layers.  
16 p2771 A69-31926

Laminar-sublayer thickness in compressible turbulent boundary layers.  
24 p4306 A69-43724

## PARASKOV, TS.

Natural longitudinal single-frequency oscillations of a system consisting of n material points with allowance for energy dissipation /Sobstvenni nadl'zhni ed-nochestotni trepteniia na sistemoi ot n materialni tochki s otchitane na razseivaniie na energiiata/.  
05 p0832 A69-15687

## PARAZZOLI, C.

Evaluation of dense gas phenomena in a free-piston hypersonic wind tunnel.  
[AIAA PAPER 69-169] 06 p0907 A69-18188

## PARC, J.

Preliminary data on a limitation of the use of an oxygen-hydrogen mixture for deep submersion to the saturation point /Premieres donnees sur une limitation de l'utilisation du melange oxygene-hydrogene pour la plongee profonde a saturation/.  
24 p4262 A69-43025

## PARCEL, R. W.

Reliability, the management of imperfection.  
18 p3146 A69-34513

## PARDOE, G. K. C.

Application satellites other than telecommunications. I.  
02 p0335 A69-12682

Application satellites other than telecommunications.  
03 p0520 A69-13587

Launching facilities and payload capabilities.  
06 p1012 A69-16857

Earth resource satellite systems.  
13 p2356 A69-27833

Earth resource satellites.  
16 p2881 A69-31763

A review of remote earth observation technology.  
21 p3720 A69-38624

## PARDOE, P. P.

Simulation of the attitude stabilization of the DODGE spacecraft with time-lag magnetic damping.  
06 p1014 A69-17584

## PARDY, M.

A remark on the clock paradox.  
11 p1915 A69-24345

## PARE, A. L. D.

Mechanism design.  
04 p0604 A69-14517

## PAREKH, H. B.

A study of state variable feedback in nonlinear systems.  
21 p3687 A69-39460

## PAREKH, P. C.

The influence of reaction kinetics between BB<sub>r</sub> sub 3 and O sub 2 on the uniformity of base diffusion.  
24 p4360 A69-42760

## PARENTE, R. B.

Stability of a magnetic suspension device.  
14 p2479 A69-29492

## PARETSKII, M. I.

Fatigue and corrosion fatigue properties of aluminum alloys 01420.  
03 p0443 A69-13027

## PARFENEV, R. V.

Thermomagnetic effects in semiconductors with a "double" conduction band /Termomagnitnye efekty v poluprovodnikakh s "dvoinoi" zonoj provodimosti/.  
21 p3783 A69-39558

## PARFENOV, G. P.

The effect of space flight on the frequency of microspores of Tradescantia paludosa.  
01 p0018 A69-11317

Results of biological experiments conducted under flight conditions on the Vostok spacecraft with the participation of cosmonauts A. G. Nikolaev, P. R. Popovich, and V. F. Bykovskii /Rezultaty biologicheskikh eksperimentov, provedennykh v usloviakh poleta na korabliakh "Vostok" s uchastiem kosmonavtov A. G. Nikolaeva, P. R. Popovicha i V. F. Bykovskogo/.  
07 p1063 A69-18597

Effect of space flight factors on the frequency of recessive lethal sex-related mutations in Drosophila melanogaster /Vliianie faktorov kosmicheskogo poleta na chastoty vozniknoveniia stseplennykh s polom retsessivnykh letal'nykh mutatsii u drosophila melanogaster/.  
07 p1063 A69-18598

## PARFENOVA, Z. N.

Use of a two-gas artificial atmosphere in manned spacecraft /O primeneniі dvukhgazovoi iskusstvennoi atmosfery v obitaemykh kosmicheskikh korabliakh/.  
17 p2912 A69-32940

## PARFIANOVICH, I. A.

Formation of F centers and electron recombination luminescence in alkali-halide crystals activated with Eu super 2 plus /Obrazovanie F-tsentrov i elektronnaia rekombinatsionnaia luminesentsiia v shchelochnogaloidnykh kristallakh, aktivirovannykh Eu super 2 plus/.  
19 p3383 A69-36164

## PARFITT, V. R.

Reflection of plane waves from the flat boundary of a micropolar elastic half-space.  
15 p2714 A69-31147

## PARIDA, J.

Thermal stresses in a hollow circular cylinder with smooth rigid insulating covers on the curved surfaces.  
12 p2180 A69-26268

Note on thermal stresses in a long isotropic hollow cylinder heated on the outer curved surface.  
21 p3838 A69-39166

## PARII, V. V.

A year-long medical-technological experiment in a ground-based life-support system facility /Godovoi mediko-tehnicheskii eksperiment v nazemnom komplekse sistem zhizneobespecheniia/.  
13 p2216 A69-28612

## PARIISKAIA, L. V.

Self-similar motion of a low-density plasma. II.  
08 p1359 A69-19951

## PARIISKII, I. U. N.

On the origin of the blackbody radiation of the universe.  
02 p0313 A69-11632

Observations of the polarized radio emission from Jupiter at a wavelength of 6.6 cm with the aid of the large Pulkovo telescope /Nabludeniia polarizovannogo radioizlucheniia Iupitera na volne 6,6 cm s pomoshchiu bol'shogo pulkovskogo radioteleskopa/.  
03 p0512 A69-13703

Sky noises and the sensitivity of ground-based radio telescopes /Shumy neba i chuvstvitel'nost' nazemnykh radioteleskopov/.  
07 p1099 A69-18515

Instability of the galactic nucleus /O nestabil'nosti iadra galaktiki/.  
12 p2171 A69-27068

Reflector radio telescope with a resolution of 15 arc seconds /Reflektornyi radioteleskop s razreshaiushchei sposobnost'iu 15 sekund dugi/.  
15 p2679 A69-30102

## PARIKH, P.

He-Ne laser communication.  
19 p3279 A69-36756

## PARIN, V. V.

Outlines of Space Physiology /Ocherki po Kosmicheskoi Fiziologii/.  
01 p0014 A69-10743

Man as the main component of the closed ecological system of the spacecraft or planetary station.  
01 p0020 A69-11076

Structural and functional disturbances in certain body systems on exposure to extreme stress factors - Animal experiments.  
02 p0197 A69-11488

Clinical aspects of interplanetary flights /Klinicheskie aspekty mezplanetykh poletov/.  
02 p0202 A69-12121

Possibilities of protective adaptation and adaptation limits under conditions of maximum accelerations and weightlessness /Vozmozhnosti zashchitnykh prispособlenii organizma i granitsy adaptatsii v usloviakh maksimal'nykh peregruzok i sostoiianiia nevesomosti/.  
03 p0376 A69-14192

Advances of human physiology in connection with space mastery /Dostizheniia fiziologii cheloveka v sviazi s osvoiniem kosmosa/.  
[UN PAPER 68-95729] 06 p0873 A69-17061

Preliminary data concerning physiological studies relating to manned space flight /Pervye dannye o fiziologicheskikh issledovaniakh pri polete cheloveka v kosmos/.  
07 p1060 A69-18569

Some results of the biomedical experiment on the biosatellite "Kosmos-110."  
08 p1261 A69-19827

Applying the principles of physiological modeling in space biology and medicine.  
09 p1444 A69-22541

Principles of medical supervision on long space flights.  
10 p1649 A69-23505

Changes in the corticosteroid and catecholamine metabolism during a sharp limitation of the motor activity of the organism /Izmeneniia kortikosteroidnogo i

- katekholaminovogo obmena pri rezkom ogranichenii dvigatel'noi aktivnosti organizma/  
12 p2021 A69-26973  
Problems of space pharmacology /Problemy kosmicheskoi farmakologii/.  
13 p2211 A69-28613  
Biomedical investigations performed in the USSR during 1968 and the beginning of 1969 according to a program of space study and mastery /Mediko-biologicheskie issledovaniia, provedennye v SSSR v techenie 1968 g. i nachala 1969 g. po programme issledovaniia i osvoeniia kosmicheskogo prostranstva/.  
15 p2557 A69-31344  
Physiology of the Vestibular analyzer /Fiziologiya vestibuliarnogo analizatora/.  
20 p3467 A69-37240  
Characteristics of biological effects of cosmic radiation, model investigations.  
20 p3478 A69-37628  
Some important problems of space physiology.  
23 p4086 A69-41686
- PARIS, A. A.**  
An application of aerospace technology and systems to commercial aviation.  
18 p3108 A69-35069
- PARIS, D. T.**  
A molecular resonance AFC system for millimeter oscillators.  
01 p0044 A69-10628
- PARISSE, R. F.**  
The dynamic response of cylindrical and conical panels.  
[ASME PAPER 69-APM-22]  
18 p3214 A69-34396
- PARIZOT, D.**  
Results of tests on a supersonic magnetoaerodynamic conversion rig /Resultats d'essais sur banc de conversion magnetoaerodynamique supersonique/.  
13 p2311 A69-28034
- PARK, A. B.**  
Aerospace applications in agriculture and forestry.  
[UN PAPER 68-95393]  
01 p0065 A69-10504  
Agricultural and forestry applications of balloons.  
22 p4053 A69-40805
- PARK, C.**  
Spectral line intensities in a nonequilibrium nitrogen plasma.  
01 p0124 A69-10960  
Theoretical population inversion in a decaying nitrogen plasma column.  
[AIAA PAPER 69-48]  
06 p0971 A69-18145  
An experiment on the MHD-driven flow for a gas core nuclear rocket.  
[AIAA PAPER 69-727]  
17 p3004 A69-33483  
A proposed low cost proximity warning device for aircraft.  
17 p2917 A69-34103  
Collisional ionization and recombination rates of atomic nitrogen.  
24 p4353 A69-43700
- PARK, C. G.**  
Multi-experiment detection of the plasmopause from EOGO satellites and antarctic ground stations.  
11 p1878 A69-25153
- PARK, J. D.**  
Recent advances in organic fluorine chemistry.  
08 p1269 A69-21129
- PARK, R. A.**  
A multi-mission interplanetary probe using 3-kw solar electric propulsion.  
06 p0984 A69-17593
- PARK, S. S.**  
Mechanical properties of the lung in experimental pulmonary emphysema.  
23 p4082 A69-41442
- PARKER, A. E.**  
Some computations of meridional flow, angular momentum and energy in the atmosphere based on IGY data for latitude 30 deg N.  
08 p1346 A69-20312
- PARKER, A. H.**  
Automatic test systems for production and maintenance.  
11 p1864 A69-25068
- PARKER, A. J., JR.**  
Thermal model of a 75 watt/E/ space power - Planar RTG system.  
23 p4070 A69-42254
- PARKER, D. C.**  
Remote sensing for engineering investigation of terrain - Infrared systems.  
12 p2098 A69-27007  
Thermal modeling and interpretation.  
20 p3541 A69-37740
- PARKER, D. E.**  
Studies of acoustical stimulation of the vestibular system.  
03 p0376 A69-14076
- PARKER, E. N.**  
The role of stochastic fields in admitting low-energy galactic cosmic rays to the solar system.  
01 p0147 A69-11238  
The dynamical state of the interstellar gas and field. VI - Instability and enhanced diffusion in a twisted field.  
02 p0326 A69-12707  
Cosmic magnetohydrodynamics.  
02 p0293 A69-12789  
Dynamical properties of the magnetosphere.  
07 p1127 A69-19352  
The dynamical state of the interstellar gas and fields. VII.  
09 p1599 A69-22190  
Stochastic aspects of magnetic lines of force with application to cosmic-ray propagation.  
10 p1770 A69-24111  
Cosmic-ray life and the stochastic nature of the galactic magnetic field.  
10 p1771 A69-24112  
Solar wind interaction with the geomagnetic field.  
12 p2072 A69-26735  
Theoretical studies of the solar wind phenomenon.  
17 p3023 A69-33370  
The dynamical behavior of the gaseous disk of the Galaxy.  
21 p3802 A69-38824  
Physical model of hydrodynamic turbulence.  
22 p3930 A69-40525  
Amplification of weak magnetic fields in turbulent flow.  
24 p4375 A69-42657  
Origin of the magnetic field of the Galaxy.  
24 p4375 A69-42658  
Dynamical properties and effects of cosmic rays in the Galaxy.  
24 p4366 A69-42695
- PARKER, E. R.**  
Dimensionless fracture-toughness parameters.  
05 p0780 A69-16080  
Interactions between crack growth and strain-induced transformation.  
10 p1709 A69-23074  
High strength steels - Present status and future prospects.  
12 p2115 A69-26829  
Structural modes of fracture.  
13 p2274 A69-27226
- PARKER, G. A.**  
Protection against hazards in fluidic adder and subtractor circuits.  
02 p0195 A69-12080
- PARKER, G. D.**  
Faraday effect on Jupiter's radio bursts.  
20 p3594 A69-38169
- PARKER, G. H.**  
The effect of trapping states on tunneling in metal-semiconductor junctions.  
09 p1557 A69-21748
- PARKER, G. L.**  
Techniques for autonomously pointing an antenna at earth for Mars.  
[AIAA PAPER 68-868]  
24 p4348 A69-43246
- PARKER, H. M.**  
Determination of the gravitational constant G.  
24 p4350 A69-42944
- PARKER, J. A.**  
Evaluation of a polyurethane foam for ablative protection at low heating rates.  
04 p0688 A69-15513  
Development of polyurethane for controlling fuel fires in aircraft structures.  
15 p2561 A69-30311  
Ablative thermal protection at low heating rates.  
19 p3357 A69-35536  
Experimental evaluation of polyurethane foam composites for low-heating-rate thermal protection.  
21 p3753 A69-39236
- The development of polybenzimidazole composites as ablative heat shields.  
23 p4179 A69-41715
- PARKER, J. D.**  
The effect of volume history on shunt flow in excised dog lungs.  
21 p3651 A69-38386
- PARKER, J. H.**  
UF sub 6 - H sub 2 hydrogen fluoride chemical laser - Operation and chemistry.  
05 p0771 A69-15906
- PARKER, L.**  
Survival, chromosome abnormalities, and recovery in heavy-ion- and X-irradiated mammalian cells.  
03 p0373 A69-13492  
Equivalence principle and motion of a gyroscope.  
05 p0764 A69-16367  
Quantized fields and particle creation in expanding universes. I.  
24 p4352 A69-43193
- PARKER, L. W.**  
Theory of an electron trap on a charged spacecraft.  
16 p2849 A69-31976
- PARKER, M. E.**  
Rocket propulsion.  
19 p3395 A69-36321
- PARKER, P. J.**  
Last of the OGO's.  
24 p4393 A69-43132
- PARKER, R.**  
An investigation of acoustic resonance effects in an axial flow compressor stage.  
01 p0142 A69-10058  
Pressure fluctuations due to interaction between blade rows in axial flow compressors.  
21 p3643 A69-38439
- PARKER, R. A. R.**  
The /O III/ temperature for one "filament" in the Cygnus Loop.  
09 p1607 A69-22430
- PARKER, R. H.**  
Spectrum and yield of electrons emitted when heavy ions pass through metal films.  
03 p0471 A69-13164
- PARKER, R. J.**  
Contact conformity effects on spinning torque and friction.  
[ASME PAPER 68-LUB-10]  
15 p2628 A69-30901  
Effect of oxygen concentration on synthetic paraffinic and advanced ester base lubricants in bearing tests at 400 deg and 450 deg F.  
18 p3149 A69-35177
- PARKER, R. R.**  
Normal modes in RLC networks.  
07 p1115 A69-18858
- PARKER, R. W.**  
Hydrogen geocorona and solar Lyman-alpha line. I.  
05 p0815 A69-16254
- PARKER, W. W.**  
The reduction of coupling between antennas on an aerospace vehicle.  
05 p0729 A69-15977
- PARKHOMENKO, A. S.**  
Some results of an investigation of the energy characteristics of electric-arc plasma devices /Nekotorye rezul'taty issledovaniia energeticheskikh kharakteristik elektrodugovykh plazmennyykh ustanovok/.  
15 p2664 A69-31177
- PARKHOMENKO, M. M.**  
A corollary of the reciprocity theorem in holography /Ob odnom sledstviu teoremy vzaimnosti v golografiil/.  
04 p0602 A69-15377  
On one consequence of the reciprocity theorem in holography.  
16 p2790 A69-32124
- PARKHOMOV, N. S.**  
Influence of the natural frequency spectrum of an open resonator on its resonance properties in the "reflection" mode /Vliianie spektra sobstvennykh chastot otkrytogo rezonatora na ego rezonansnye kachestva v rezhime "na otrazhenie"/.  
07 p1106 A69-19152
- PARKIN, C. W.**  
Plasma flux transport.  
11 p1925 A69-24311
- PARKIN, D. W.**  
Influx measurements of extraterrestrial material.  
03 p0511 A69-13467



- Airborne dust collections at remote sites.  
12 p2075 A69-26964
- PARKIN, R. E.**  
A state variable method of circuit analysis based on a nodal approach.  
03 p0410 A69-13831
- PARKINS, D. W.**  
Assessing unbalance effects in a small turbo-rotor.  
[ASME PAPER 69-DE-9] 14 p2453 A69-28839
- PARKINSON, A. G.**  
Linear analysis of transient vibration.  
18 p3211 A69-34326
- PARKINSON, D.**  
Landau damping of long wavelength ion acoustic waves in a collision-free plasma with a gravity field.  
08 p1359 A69-19983
- PARKINSON, F. L.**  
Titanium investment castings.  
24 p4324 A69-43433
- PARKINSON, G. J.**  
Time resolved measurements of electron number density and electron temperature using laser interferometry at 337-mu m wavelength.  
03 p0432 A69-14187
- PARKINSON, G. V.**  
A potential flow theory for airfoil spoilers.  
[AIAA PAPER 69-737] 18 p3083 A69-34402
- PARKINSON, J. S.**  
Corrosion resistance of reinforced plastics.  
[ASME PAPER 69-DE-60] 14 p2467 A69-28853
- PARKINSON, R. G.**  
Criterion for mode uncoupling in oblique incidence scattering from radially inhomogeneous cylinders.  
15 p2565 A69-30170
- PARKINSON, W. H.**  
The results and interpretation of some of the Harvard OSO-IV observations.  
[AAS PAPER 68-219] 02 p0313 A69-11485  
Absolute gf-values for Fe I and Fe II lines.  
18 p3175 A69-34304
- PARKS, A. J.**  
Performance of the orifice-compensated hydrostatic face seal under pressure and thermal loading.  
[ASME PAPER 68-WA/LUB-6] 05 p0768 A69-16131  
Aircraft gas turbine mainshaft face seals - Problems and promises.  
[ASLE FICES PREPRINT 28] 15 p2620 A69-30487
- PARKS, E. G., JR.**  
Evaluation of concepts for reuse of large booster nozzles.  
[AIAA PAPER 68-657] 19 p3394 A69-35944
- PARKS, G. K.**  
Sixteen-second periodic pulsations observed in the correlated microwave and energetic X-ray emission from a solar flare.  
09 p1574 A69-21457  
Simultaneous observations of 5- to 15-second period modulated energetic electron fluxes at the synchronous altitude and the auroral zone.  
20 p3592 A69-38082
- PARKS, J. A.**  
Simple flash holography.  
21 p3727 A69-39784
- PARKS, J. H.**  
A high-resolution study of the C super 3 pi sub 1 goes to B super 3 pi sub g /0,0/ stimulated transitions in N sub 2.  
02 p0284 A69-12621
- PARKS, J. T.**  
An automatic fabrication process for composite aircraft structures.  
09 p1507 A69-22329
- PARKS, V. J.**  
Stress concentrations around elliptical perforations in shrunk plates with bonded boundaries.  
02 p0345 A69-12391  
Moire-fringe interpolation and multiplication by fringe shifting.  
03 p0524 A69-13063  
Photoelastic study of high-frequency stress waves propagating in bars and plates.  
[ASME PAPER 68-WA/APM-27] 04 p0669 A69-14397  
Stress concentrations in a rectangular plate with circular perforations along its two bonded edges and subjected to restrained shrinkage.  
08 p1412 A69-20255
- Natural stress.  
13 p2359 A69-27259
- Stress and finite-strain analysis of a circular ring under diametral compression.  
14 p2531 A69-28884
- Stresses in a perforated ribbed cylindrical shell subjected to internal pressure.  
16 p2876 A69-32784
- The grid method.  
18 p3134 A69-34423
- Stress distribution in a stator vane under bending.  
22 p4042 A69-40310
- PARKUS, H.**  
Thermoelasticity.  
01 p0084 A69-10131
- Thermal effects in viscoelastic structures.  
19 p3440 A69-36657
- PARLANGE, F.**  
Suitable targets for the production of a deuterium plasma cloud in a vacuum environment with a laser pulse.  
01 p0090 A69-10222
- PARLEE, M. B.**  
Visual backward masking of a single line by a single line.  
22 p3879 A69-40843
- PARLIER, B.**  
Gamma rays and high-energy electrons in cosmic radiation /Rayons gamma et electrons de grande energie dans le rayonnement cosmique/.  
05 p0817 A69-16712  
East-west asymmetry and charge sign ratio of primary cosmic-ray electrons at 8.3 Gv rigidity cut-off.  
15 p2678 A69-31497
- PARMEE, A. C.**  
Material requirements for rocket nozzles, with particular reference to pyrolytic graphite.  
06 p0946 A69-17530  
Some applications of carbons and graphites in space technology.  
23 p4180 A69-42160
- PARMENTIER, J. C.**  
Automatic altitude transmission /Report automatique d'altitude/.  
19 p3371 A69-36700
- PARMLEY, W. W.**  
Effects of altered loading on contractile events in isolated cat papillary muscle.  
24 p4258 A69-42631
- PARNIAKOV, S. P.**  
Application of moire patterns for "angle-phase" transforms.  
14 p2447 A69-29327
- PARNIUK, V. A.**  
Generation in a spectrally inhomogeneous semiconductor laser.  
18 p3152 A69-35023  
Laser emission during a disturbed quasi-equilibrium in spatially nonuniform systems /Lazerniaia generatsiia pri narushenii kvaziravnovesiia v prostanstvenno neodnorodnykh sistemakh/.  
19 p3333 A69-35876
- PAROCZAI, A. J.**  
Solar flutter of a thin-walled open-section boom.  
07 p1227 A69-18333
- PARR, N. L.**  
A consideration of the possible use of refractory ceramic materials for advanced combustion chamber design.  
09 p1531 A69-22624
- PARRA, I. K.**  
Investigation of the tuning sensitivity of a two-stage amplifier with two differential feedbacks /Doslizhdeniia chutlivosti nastroivaniia dvokaskadnogo pidsilivachia z dvoma diferentsial'nimi zvorotnimi zv'iazkami/.  
14 p2426 A69-29147
- PARRIS, H. L.**  
Personnel subsystems impact on C-5 equipment and system design.  
19 p3261 A69-36024
- PARRISH, J. F.**  
Far infrared electronic and vibronic transitions of Nd super 3 super plus in the tysonite lanthanide fluorides.  
13 p2316 A69-27628  
Optical phonons and symmetry of tysonite lanthanide fluorides.  
22 p3993 A69-40729
- PARRY, D. J.**  
The structure of transverse waves in detonations.  
19 p3451 A69-36367
- PARRY, G. W.**  
The application of fracture mechanics to the assessment of failure of cylindrical pressure vessels under yielding conditions.  
19 p3439 A69-36439
- PARRY, J. S. C.**  
Cumulative damage in fatigue - A step towards its understanding.  
20 p3620 A69-36997
- PARSHIN, A. M.**  
Nature of negative creep in austenitic steels Kh18N22V2T2 and Kh12N20T3R /Priroda otritsatel'noi poluchestvi v avstenitnykh staliakh Kh18N22V2T2 i Kh12N20-T3R/.  
10 p1708 A69-22999
- PARSINAULT, D. R.**  
The effects of magnetic storms on electrons and protons at L greater than 2.5.  
15 p2676 A69-31314
- PARSONS, N. R.**  
An image intensifier-vidicon system for auroral cinematography.  
06 p0925 A69-17382  
Auroral pulsations and flaming - Some initial results of a cinematographic study using an image intensifier.  
16 p2780 A69-32305
- PARSONS, P. L.**  
A precision frequency measurement technique for a moving signal with a low signal-to-noise ratio.  
12 p2038 A69-26051
- PARSONS, R. J.**  
On shock-tunnel simulation of scramjet combustion chamber performance.  
[AIAA PAPER 69-84] 06 p0985 A69-18165
- PARSONS, S. B.**  
Model atmospheres for yellow supergiants.  
22 p4015 A69-40152
- PARSONS, S. P.**  
A new challenge for weight engineering at Boeing.  
[SAWE PAPER 730] 18 p3221 A69-34895
- PARTEL, G.**  
Use of explosive and pyrotechnical elements in the technology of hot-water rockets.  
10 p1753 A69-23028
- PARTEN, R. P.**  
Utilization of ground-based guidance systems to supplement onboard guidance of space vehicles.  
06 p0955 A69-17580
- PARTHAN, S.**  
Effects of inplane and rotary inertia on the frequencies of eccentrically stiffened cylindrical shells.  
11 p1992 A69-25520
- PARTHASARATHY, K.**  
A transistorized frequency detector.  
06 p0896 A69-17478  
Graphical methods, design considerations, practical circuits and test results of multi-input sine comparators.  
12 p2039 A69-26350
- PARTIN, R. D.**  
Effect of transverse curvature on skin friction and heat transfer in laminar flows past slender circular cylinders.  
02 p0232 A69-12210
- PARTLOW, W. D.**  
Multiphonon relaxation in laser materials and applications to the design of quantum electronic devices.  
[IEEE PAPER 1-9] 05 p0774 A69-16318
- PARTON, V. Z.**  
Justification of the Irwin criterion at the end of a crack /Ob odnom obosnovanii kriteriia Irvina na kontse treshchiny/.  
07 p1238 A69-19689  
Dynamic problem for a plane with a cut /Dinamicheskaia zadacha dlia ploskosti s razrezom/.  
15 p2703 A69-30050  
Conditions in a crack tip /Ob uslovii v kontse treshchiny/.  
22 p4047 A69-41123
- PARTOVI, S.**  
On the absolute stability of a dynamic system with a nonlinear element function of two state variables.  
06 p0905 A69-17948  
Absolute stability of dynamic system containing nonlinear functions of several state variables.  
23 p4145 A69-42445
- PARTRIDGE, G.**  
Glass-ceramics for the coating and bonding of silicon semiconductor material.  
15 p2669 A69-31040

## PARTRIDGE, P. G.

Effect of cyclic stresses on the microstructures of hexagonal close packed metals.  
12 p2116 A69-26912

## PARTRIDGE, R. B.

Mean free paths of cosmic rays through a far infrared radiation field.  
16 p2852 A69-32819

## PARUSIMOV, V. G.

Electrophotometer for weak light fluxes /Elektrofotometr slabых svetovykh potokov/.  
11 p1884 A69-24735  
Laser for photolocation of the moon.  
14 p2460 A69-29660

## PARYGIN, V. N.

Internal modulation of a gas laser in an asynchronous regime /Vnutrenniia moduliatsiia gazovogo lazera v nesinkhronnom rezhime/.  
19 p3335 A69-36341

## PARZONKA, W.

Description of laminar flow of non-Newtonian fluids by means of a rheological three- parameter model /Charakterystyka laminarnego plynicya cieczy nie-newtonowskich za pomoca modelu reologicznego o trzech parametrach/.  
05 p0744 A69-15678

## PASACHOFF, J. M.

On the obliteration of strong Fraunhofer lines by electron scattering in the solar corona.  
04 p0654 A69-14628

## PASALSKAIA, N. P.

Thiodiglycol as hardening accelerator for epoxy resins.  
22 p3973 A69-40677

## PASCAL, F. M.

Error evaluation in the approximate solution of a boundary problem for a parabolic-type equation /Evaluarea erorii in rezolvarea aproximativa a unor probleme la limita pentru ecuatia de tip parabolic/.  
22 p3976 A69-41110

## PASCARU, I.

E.S.R. spectra of some molybdenum /V/ polycrystalline complexes.  
22 p3897 A69-40971

## PASCHETAG, E. W.

Active antenna impedance matching network.  
17 p2943 A69-34131  
A technique for magnetic field susceptibility testing.  
17 p2947 A69-34133

## PASCOE, J. J.

Low-cycle fatigue in relation to design.  
10 p1797 A69-23083

## PASCOVER, J. S.

The transformation and structure of Fe-Ni-Ti alloys.  
13 p2279 A69-27765

## PASCUAL, L. H.

System of education via satellite for South America /Sistema de educacion via satelite para Sudamerica/.  
19 p3268 A69-36163

## PASCUZZI, B.

Development and test of pyrolyzed refractory laminates.  
15 p2618 A69-30313

## PASEKA, A. M.

Observations of the polarization of cosmic radio emission near the galactic anticenter at wavelengths of 70, 60, and 40 cm /Nabliudeniia polarizatsii kosmicheskogo radioizlucheniia vblizi antitsentra galaktiki na volnakh 70, 60 i 40 cm/.  
03 p0501 A69-13704

## PASHCHENKO, A. A.

Silicoorganic protective coatings /Kremneorganicheskie zashchitnye pokrytiia/.  
24 p4336 A69-43232

## PASHCHENKO, A. V.

Motion and polarization interaction of a plasma stream in a magnetic multipole.  
08 p1370 A69-21015

An investigation of the possibility of eliminating impurities in hydrogen plasmoids by injection across an outpole magnetic field.  
08 p1370 A69-21016

Investigation of the possibility of eliminating impurities from a hydrogen plasmoid by injecting it across an outpole magnetic field /Issledovanie vozmozhnosti oshchistki ot primesei vodorodnogo plazmennogo sgustka pri inzhetsii poperek okupol'nogo magnitnogo polia/.  
24 p4358 A69-43474

## PASHCHENKO, S. V.

Structure and properties of forgings of KhN73MB-Tlu /EI698/ alloy /Struktura i svoistva pokovok iz splava KhN73MBTlu /EI698//.  
03 p0452 A69-14122

## PASHCHENKO, V. P.

Plasma Thermionic Energy Conversion /Plazmennoe Termoemissionnoe Preobrazovanie Energii/.  
12 p2017 A69-26850

## PASHININ, P. P.

Characteristics of a mode-locked laser.  
06 p0934 A69-17549  
Investigation of breakdown in N sub 2 under the influence of a picosecond ruby-laser pulse.  
20 p3555 A69-38067

## PASHITSKIL, E. A.

Interaction of spatially inhomogeneous plasma streams in a magnetic field.  
06 p0963 A69-16903

A "plasma" superconductivity mechanism in degenerate semiconductors and semimetals. I/O "plazmonom" mekhanizme sverkhprovodimosti v vyrozhdennykh poluprovodnikakh i polumetalakh. I/.  
09 p1556 A69-21573

The nature of the high-frequency instability of a low-pressure discharge in a magnetic field /Pro prirodu visokochastotnoi nestiikosti rozriadu niz'kogo tisku v magnitnomu poli/.  
11 p1927 A69-24912

Contribution to the theory of the interaction of modulated charged-particle beams with a plasma in a magnetic field. I - Excitation of natural oscillations in a plasma by a modulated electron beam /K teorii vzaimodeistviia modulirovannykh puchkov zariazhennykh chastits s plazmoi v magnitnom pole. I - Vozbuzhdenie sobstvennykh kolebaniy plazmy modulirovannykh elektronnykh puchkom/.  
11 p1932 A69-25535

Contribution to the theory of the interaction of modulated charged-particle beams with a plasma in a magnetic field. II - Excitation of natural oscillations in a plasma by modulated ion beams /K teorii vzaimodeistviia modulirovannykh puchkov zariazhennykh chastits s plazmoi v magnitnom pole. II - Vozbuzhdenie sobstvennykh kolebaniy plazmy modulirovannykh ionnykh puchkami/.  
11 p1932 A69-25536

## PASHKOV, A. I.

Method and certain results of measurements of the earth's short- and long-wave emission fluxes on the Cosmos 149 satellite /Metod i nekotorye rezul'taty izmerenii potokov korotkovolnovogo i dlinnovolnovogo izlucheniia zemli na ISZ "Kosmos-149"/.  
15 p2597 A69-30652

## PASHKOV, V. A.

Two-photon excitation of luminescence in ruby crystals.  
15 p2634 A69-30731

## PASHKOVSKII, I. M.

Aircraft Flight Tests /Letnye Ispytaniia Samoletov/ /2nd Edition/.  
03 p0365 A69-12900

## PASHKOVSKII, M. V.

Effect of bivalent impurities on the electrical conductivity of CsI single crystals /Vliianie dvukhvalentnykh primesei na elektroprovodnost' monokristallov CsI/.  
16 p2824 A69-31573

## PASHKOVSKII, V. G.

Stress fields of dead-end microcracks.  
04 p0674 A69-14548

## PASICHNIK, I. U. A.

Infrared impurity photoconductivity at the surface of gold-doped silicon /Infrachernova domishkova fotoprovodnist' poverkhni kremniia, legovanoi zolotom/.  
08 p1373 A69-21073

## PASICHNIK, L. L.

The effect of plasma density on the measurement of electron temperature by the intensity ratio of helium spectral lines.  
05 p0804 A69-16376

The nature of the high-frequency instability of a low-pressure discharge in a magnetic field /Pro prirodu visokochastotnoi nestiikosti rozriadu niz'kogo tisku v magnitnomu poli/.  
11 p1927 A69-24912

## PASINETTI, L. E.

Zodiacal light - Cometary contribution and solar activity.  
05 p0826 A69-16391

The relation between apparent magnitude and diameter in stars of galactic clusters. II.  
16 p2858 A69-32210

Determination of non eclipsed area of Algol by means of the Balmer discontinuity.  
16 p2858 A69-32216

Radial velocities of Omicron Andromedae from 1961 to 1966.  
22 p4028 A69-40755

## PASK, G.

A cybernetic model for some types of learning and mentation.  
07 p1070 A69-18385

## PASKO, W.

Isotherms in nonconstant area tube arcs.  
20 p3632 A69-37219

## PASKONOV, V. M.

Computer Methods and Programming- Numerical Methods in Gasdynamics /Vychislitel'nye Metody i Programirovanie- Chislennye Metody v Gazovoi Dinamike/.  
03 p0362 A69-13649

Difference methods for calculating boundary layer flows /Survey/ /Raznostnye metody rascheta techenii v pogranichnom sloe /obzor//.  
03 p0416 A69-13655

Numerical solution of the unsteady boundary layer equations /Chislennoe reshenie nestatsionarnykh uravnenii pogranichnogo sloia/.  
03 p0416 A69-13656

Calculation of the flow of an ideal gas near the stagnation line for blunt bodies /Raschet techeniia ideal'nogo gaza v okrestnosti linii tormozheniia zatuplennykh tel/.  
03 p0364 A69-13660

Calculation of the unsteady flow of a conducting gas in an MHD generator duct /Raschet nestatsionarnogo techeniia provodiashchego gaza v kanale MGD-generatora/.  
13 p2309 A69-28027

## PASLAY, P. R.

A small-strain plasticity theory for planar slip materials.  
13 p2362 A69-28120

## PASMAN, H. J.

The removal of volatiles from propellants and the gas-chromatographical determination of these volatiles.  
02 p0302 A69-11522

## PASNAU, R. O.

Psychological, psychophysiological, and biochemical correlates of prolonged sleep deprivation.  
23 p4099 A69-42195

## PASQUET, J.

Incidence of cardiovascular diseases among the flight deck personnel of an airline.  
06 p0875 A69-17848

Statistical data on grounding of crew members in an airline due to psychic disorders.  
21 p3665 A69-39181

Incidence of cardiovascular illnesses among flight personnel of an airline /Incidence des maladies cardiovasculaires parmi le personnel navigant technique d'une compagnie aerienne/.  
21 p3661 A69-39271

Comments on ICAO recommendations concerning hearing requirements for flight personnel /A propos des recommandations de l'O.A.C.I. sur les normes auditives du personnel navigant technique/.  
24 p4277 A69-43377

## PASQUINO, L. N.

Achieving filter effectiveness and insuring reliability.  
23 p4142 A69-42233

## PASSEY, R. D. C.

The effect of mean stresses on fatigue strength.  
17 p3067 A69-34197

## PASSMAN, S. L.

Vector fields and flows on developable surfaces.  
08 p1302 A69-19823

## PASSOJA, D. E.

Estimation of electronic influences on vibrational entropy in dilute-solid-solution alloys.  
16 p2798 A69-31706

## PASTERNAK, G.

Analysis and synthesis of a digital phase- locked loop for FM demodulation.  
04 p0561 A69-15452

## PASTEUR, J.

Study of weak displacements of opaque objects and of the optical distortion in solid-state lasers by holo-



graphic interferometry /Etude des faibles déplacements d'objets opaques et de la distorsion optique dans les lasers a solide par interferometrie holographique/.  
19 p3308 A69-35909

## PASTIELS, R.

Measurement of solar UV radiation by stratospheric balloon /Mesure du rayonnement ultraviolet solaire par ballon stratospherique/.  
11 p1945 A69-24410

## PASTOR, H.

Study of sintering and hot compression of titanium and zirconium diborides with an addition of transition metals, and of various properties of the alloys obtained /Etude du frittage et de la compression a chaud des diborures de titane et de zirconium avec addition de metaux de transition, et de quelques proprietes des alliages obtenus/.  
22 p3968 A69-39888

## PASTORI, W. E.

Measuring microwave noise - A series of notes.  
11 p1840 A69-25301

## PASTUSHENKOV, L. V.

Protective action of antihypoxic preparations under gravitational accelerations /Zashchitnoe deistvie antipoksesicheskikh sredstv pri gravitatsionnykh peregruzkakh/.  
17 p2906 A69-32931

## PASTUSHKOV, R. S.

The effect on the wind field of vertical motion in thick convective clouds.  
02 p0274 A69-11446

The development of cumulus clouds in the atmosphere with vertical wind shear /O razviti kuchevykh oblakov v atmosfere s vertikal'nyim sdvigom vetra/.  
15 p2648 A69-30644

## PASTY, C.

The development of air freight transport /Le developpement du transport des marchandises par avion/.  
02 p0356 A69-11888

## PATANKAR, S. B.

Transistorised multichannel pulse height analyser and recording system for balloon borne cosmic ray telescope.  
06 p0924 A69-17284

## PATASHNICK, H.

Oscillating fiber microbalance.  
21 p3720 A69-38592

## PATCH, R. W.

Absorption coefficients for hydrogen. I.  
07 p1184 A69-19165

## PATE, S. R.

Errors in sonic nozzle mass flow measurements at high supply pressures and moderate temperatures due to real gas effects.  
[ASME PAPER 68-WA/FM-4]  
05 p0699 A69-16114

Radiated aerodynamic noise effects on boundary-layer transition in supersonic and hypersonic wind tunnels.  
[AIAA PAPER 68-375]  
13 p2241 A69-28211

Experiments on control of supersonic transitional flow separation using distributed suction.  
16 p2772 A69-32149

## PATEL, B. M.

Lunar variation of ionospheric absorption of radio waves at different frequencies.  
14 p2438 A69-29104

## PATEL, C. K. N.

Gas lasers.  
05 p0772 A69-16226

Absolute measurement of second order nonlinear coefficient for optical generation of millimeter wave difference frequencies in GaAs.  
06 p0928 A69-17903

Raman scattering by polaritons in presence of electron plasma in GaAs.  
07 p1200 A69-19401

Free-carrier magneto-optical effects in far-infrared difference-frequency generation in semiconductors.  
09 p1556 A69-21578

## PATEL, C. M.

Fading characteristics of the radio waves reflected from two different heights in the F-region of the ionosphere over Ahmedabad.  
03 p0385 A69-12915

## PATEL, D.

Anisotropies of galactic cosmic rays.  
06 p0990 A69-17289

## PATEL, D. J.

A device to test mechanical properties of tissues and transducers.  
22 p3890 A69-40204

## PATEL, P. D.

Interface conditions in heat-conduction problems with change of phase.  
02 p0354 A69-12548

## PATEL, S. A.

Creep stress concentration at a circular hole in an infinite plate  
[AIAA PAPER 68-175]  
04 p0676 A69-14708

## PATEL, V. C.

Reversion of turbulent to laminar flow.  
03 p0414 A69-13016

Some observations on skin friction and velocity profiles in fully developed pipe and channel flows.  
22 p3932 A69-40897

## PATEL, V. L.

Dependence of the micropulsation periods on the size of the magnetosphere.  
18 p3131 A69-35193

## PATERNO, L.

Synchronous three colour stellar photometer.  
16 p2790 A69-32209

## PATHAK, K. M.

Cerenkov radiation of high energy muons.  
06 p0991 A69-17306

## PATHAK, P. N.

27-day variations in cosmic ray intensity and its relation to longitudinal distribution of active regions in solar corona  
06 p0990 A69-17292

## PATHRIA, R. K.

Lambda-temperature depression in rotating liquid helium.  
23 p4192 A69-42335

## PATNAIK, S.

Feasibility of full stress design.  
16 p2872 A69-31915

## PATOU, C.

Measured anisotropies of the plasma focus neutron emission compared with proposed mechanisms.  
11 p1930 A69-25321

## PATRASHEV, A. N.

Elements of the general transient-response theory of liquid-metal conduction MHD generators /Elementy obshchei teorii perekhodnykh rezhimov raboty zhidkometallicheskh MGD-generatorov konduksionnogo tipa/.  
13 p2207 A69-27506

## PATRIARCA, P.

Introduction.  
22 p3967 A69-39879

## PATRICK, A. M.

Automation - The quiet revolution.  
18 p3168 A69-34805

## PATRICK, E. A.

Concepts of an estimation system, an adaptive system, and a network of adaptive estimation systems.  
11 p1858 A69-24937

Feedback signal design by optimum control and dynamic programming technique.  
12 p2046 A69-26060

## PATRICK, L. B.

Optimization of slowly-varying systems by minimization of the expected value of a quadratic performance index.  
18 p3111 A69-34688

## PATRICK, R. L.

Treatise on Adhesion and Adhesives. Volume 2 - Materials.  
14 p2468 A69-29338

## PATRICK, R. M.

Laboratory study of turbulence in collision-free shocks.  
11 p1930 A69-25276

## PATRICK, R. S.

Automated mission analysis-trajectory determination procedures.  
[AAS PAPER 68-148]  
19 p3402 A69-35951

## PATRUSHEV, B. I.

Cutoff of cyclotron harmonics and plasma instability /Otschekha tsiklotronnykh harmonik i neustoiichivost' plazmy/.  
10 p1728 A69-23130

## PATSAEVA, V. A.

Radar investigation of the structure of turbulent flow in subfrontal clouds and precipitation in the atmospheric boundary layer /Izucheniye struktury turbulentnogo potoka radiolokatsionnym metodom - prizemnom sloe v podrontal'nykh oblakakh i osadkakh/.  
16 p2807 A69-32273

## PATT, H. M.

System aspects of granulopoiesis and radiation effects.  
23 p4090 A69-41965

## PATTAN, B.

A K sub u -band mixer steering electronic scanning phased array system.  
04 p0572 A69-14322

## PATTEE, H. E.

Development of magnesium-lithium alloy honeycomb core.  
24 p4323 A69-43411

## PATTERSON, G. K.

Exploratory drag reduction studies in non-polar soap systems.  
17 p2951 A69-33255

## PATTERSON, G. N.

The dynamics of gases in the transition regime.  
19 p3300 A69-36658

## PATTERSON, H. T.

Fiber adhesion.  
14 p2455 A69-29343

## PATTERSON, J. H.

Chemical composition of the lunar surface in Mare Tranquillitatis.  
20 p3601 A69-37517

Chemical analysis of the lunar surface.  
22 p4012 A69-40088

## PATTERSON, J. R.

Experimental investigation of the stellar nuclear reaction super 12 C plus super 12 C at low energies.  
20 p3612 A69-38164

## PATTERSON, R. L.

Experimental observations of dislocations.  
13 p2316 A69-27223

Stochastic failure models based upon distributions of stress peaks.  
18 p3148 A69-35079

## PATTERSON, T. N. L.

The optimum addition of points to quadrature formulae.  
03 p0455 A69-13372

On some Gauss and Lobatto based integration formulae.  
03 p0455 A69-13374

Escape of atmospheric helium by nonthermal processes.  
07 p1125 A69-18946

Integration formulae involving derivatives.  
18 p3164 A69-34615

Deduction of ionospheric parameters from retarding potential analyzers.  
23 p3940 A69-40523

Distribution of redshifts of quasars.  
22 p4024 A69-40580

## PATTON, W.

Alcoholysis of the Merrifield-type peptide - Polymer bond with an anion exchange resin.  
24 p4279 A69-42713

Transesterification with an anion-exchange resin.  
24 p4280 A69-43513

## PATTON, W. T.

New technique for combining solid-state sources.  
02 p0217 A69-12148

## PATTY, R. R.

Determination of self-broadening coefficients of CO, using CO sub 2 laser radiation at 10.6 mu.  
01 p0091 A69-10844

Absorption of infrared radiant energy by CO sub 2 and H sub 2 O. IV.  
12 p2132 A69-26248

## PATWARDHAN, W. D.

Burning of platonised propellants.  
03 p0494 A69-12881

## PAUL, B.

Anisotropic InSb-NiSb as an infra-red detector.  
08 p1373 A69-20866

Macroscopic criteria for plastic flow and brittle fracture.  
11 p1975 A69-24671

- PAUL, B. E.**  
Ignition problems in solid-propellant rockets.  
16 p2829 A69-31997
- PAUL, F. W.**  
Fluid mechanics of the momentum fluoric diode.  
02 p0195 A69-12071  
Optical constants of some pump oils in the vacuum ultraviolet.  
10 p1725 A69-23647
- PAUL, G. W.**  
Correlation of interfacial free energy in binary and ternary systems.  
09 p1448 A69-21909
- PAUL, H.**  
Mutual influence of two different laser transitions with the same ground level. I - Theory /Gegenseitige Beeinflussung zweier verschiedener Laserübergänge mit dem gleichen Grundniveau. I - Theorie/.  
08 p1325 A69-20283  
Quantum mechanics calculations of the line width and the intensity correlation of laser radiation /Quantenmechanische Berechnung der Linienbreite und Intensitätskorrelation der Laserstrahlung/.  
17 p2980 A69-33012  
Quantum-mechanical treatment of a laser with non-resonant feedback. I - Calculation of the photon number and the amplitude fluctuations /Quantenmechanische Behandlung des Lasers mit nichtresonanter Rückkopplung. I - Berechnung von Photonenzahl und Amplitudenfluktuation/.  
21 p3735 A69-38581
- PAUL, H. S.**  
Vibration in an infinite isotropic elastic plate due to a vertical harmonic load.  
17 p3058 A69-33408
- PAUL, J.**  
East-west asymmetry and charge sign ratio of primary cosmic-ray electrons at 8.3 Gv rigidity cut-off.  
15 p2678 A69-31497
- PAUL, J. W. M.**  
Measurement of light scattered from density fluctuations within a collisionless shock.  
24 p4360 A69-43748
- PAUL, N. G.**  
Spectroscopic determination of high velocity flow field static temperatures.  
19 p3294 A69-35752
- PAUL, R. H.**  
A comparison of radar and radio interferometer refraction errors.  
13 p2221 A69-27961
- PAUL, R. J. A.**  
Direct-sensitivity method of solving boundary-value problems in optimal control studies.  
08 p1296 A69-20297
- PAUL, W.**  
Impurity levels associated with multi-conduction bands.  
19 p3385 A69-36514
- PAUL, W. F.**  
A self-excited rotor blade oscillation at high subsonic Mach numbers.  
07 p1053 A69-18870  
Constant envelope threshold detector.  
09 p1459 A69-22474  
Development and evaluation of the main rotor bifilar absorber.  
[AHS PAPER 354] 17 p2900 A69-33523
- PAULIKAS, G. A.**  
The particle environment at synchronous altitude.  
07 p1204 A69-18340  
Penetration of solar protons to synchronous altitude.  
14 p2509 A69-28935
- PAULINY-TOTH, I. I. K.**  
The spectra of opaque radio sources.  
09 p1591 A69-21447  
Measurements of the flux density and spectra of discrete radio sources at centimeter wavelengths. II - The observations at 5 GHz/6 cm/.  
10 p1773 A69-22958  
Observations of changes in the spectra of certain radio sources /Nabliudeniia izmenenii v spektrakh nekotorykh radioistochnikov/.  
12 p2167 A69-27043  
The spectra of radio sources in the revised 3C catalogue.  
20 p3609 A69-38138
- PAULK, R. A.**  
Turbulent transport properties in subsonic coaxial free mixing systems.  
[AIAA PAPER 69-681] 17 p2956 A69-33495
- PAULL, S.**  
The IMP-I computer experiment.  
19 p3280 A69-36265
- PAULLIN, R. L.**  
Sizing of departure lounges in airport buildings.  
16 p2766 A69-32330  
Aircraft noise abatement - The prospects for a quieter metropolitan environment.  
[AIAA PAPER 69-800] 19 p3453 A69-35593
- PAULON, J.**  
Verification of the coherence of vortex-flow measurements by means of a radial equilibrium condition /Verification par la condition d'équilibre radial de la cohérence des mesures dans les écoulements giratoires/.  
12 p2012 A69-26362  
ONERA cascade wind tunnel - First experimental results /La soufflerie de grilles d'aubes O.N.E.R.A. - Premiers résultats expérimentaux/.  
17 p2895 A69-33591
- PAULY, H.**  
Energy dependence of the elastic total collision cross section of identical molecules - super 4 He.  
19 p3378 A69-36186
- PAUTHIER-CAMIER**  
Holography - Its applications, particularly, those which pertain to stress analysis /L'holographie - Ses applications et plus particulièrement celles qui relèvent de l'analyse des contraintes/.  
04 p0601 A69-15186
- PAUTOV, A. N.**  
Application of the network method to an investigation of the stability of plates made of a physically nonlinear material /K issledovaniyu ustoiichivosti plastinok iz fizicheskii nelineinogo materiala metodom setok/.  
23 p4230 A69-42003
- PAVEL, D.**  
Determination of trailing edge velocity and stagnation points for several isolated airfoils and for airfoil lattices /Opredeleniye skorosti na vykhodnoi kromke i tochki zastoia dlia nekotorykh izolirovannykh profiliei ili v lineinnoi profil'noi reshetke/.  
05 p0697 A69-15880  
Certain visual feedback mechanisms in simulated high-altitude conditions /Certains mecanismes oculaires de feedback dans les conditions des grandes altitudes simulees/.  
06 p0882 A69-17647
- PAVELEV, B. A.**  
Selection of ferrite materials for waveguide devices.  
05 p0810 A69-16792
- PAVELEV, V. A.**  
Use of superhigh-frequency radio waves for determination of the thickness of nonmetallic materials.  
18 p3138 A69-35116
- PAVELEV, V. G.**  
Wavemeter employing an open resonator with spherical mirrors /Volnomer na otkrytom rezonatore so sfericheskimi zerkalami/.  
03 p0407 A69-13983
- PAVEY, N. A. D.**  
A broad-band multi-beam array.  
08 p1288 A69-20965
- PAVLENKO, A. I.**  
Certain problems of structural synthesis of spatial motion control systems for an orbital aircraft in the earth's atmosphere /Nekotorye voprosy sinteza struktural'noi sistemy upravleniia prostranstvennym dvizheniem orbital'nogo samoleta v atmosfere zemli/.  
21 p3766 A69-39645
- PAVLENKO, A. L.**  
Supersonic flow of a linearly elastic medium past a rigid wedge /Sverkhzvukovoe obtekaniye zhestkogo klina lineino-uprugoi sredoi/.  
20 p3515 A69-37439
- PAVLENKO, V. A.**  
A method for the construction of a pulse-width modulator /Ob odnom sposobe postroeniia shirotnoimpul'snogo moduliatora/.  
10 p1664 A69-23817
- PAVLENKO, V. E.**  
Liquid-metal MHD systems with laminar flow and electric power generation by the synchronous principle /Zhidkometallicheskie MGD-sistemy so sloistym potokom i otborom elektricheskoi moshchnosti po sinkhronnomu printsipu/.  
13 p2206 A69-27491
- PAVLENKO, V. P.**  
Excitation of "red" and "violet" satellites in the instability of Alfvén waves.  
14 p2489 A69-28735
- PAVLICHENKO, I. U. A.**  
Selection of a method for measuring the group delay time of communication channels /O vybere metoda izmereniia gruppovogo vremeni zamedleniia kanalov svyazi/.  
07 p1076 A69-18557
- PAVLICHENKO, O. S.**  
Microwave emission from a plasma in an inhomogeneous magnetic field. I - Emission at harmonics of the electron cyclotron frequency.  
08 p1370 A69-21019  
Drift-dissipative instability in a PIG discharge.  
08 p1370 A69-21020  
Microwave emission of a plasma from an electrodeless inductive discharge at low pressures /Mikrovolnovoe izlucheniye plazmy bezelektrodnogo induktsionnogo razriada pri nizkikh davleniakh/.  
09 p1549 A69-22017  
Nonthermal microwave emission from a PIG discharge plasma /Neteplovoye mikrovolnovoye izlucheniye iz plazmy otrazhatel'nogo razriada/.  
09 p1549 A69-22018  
Dissipative drift instability of a plasma from a discharge with oscillating electrodes /Dreifovodisipativnaia neustoiichivost' plazmy v razriade s ostiliruiushchimi elektrodami/.  
09 p1550 A69-22019  
Alfvén oscillations in an inhomogeneous plasma from a pulsed discharge with oscillating electrodes /Al'fvenovskie kolebaniia neodnorodnoi plazmy v impul'snom razriade s ostiliruiushchimi elektrodami/.  
09 p1550 A69-22020  
Raman scattering of microwaves at plasma drift oscillations /Kombinatsionnoe rasseianiye mikrovoln na dreifovykh kolebaniyakh plazmy/.  
09 p1550 A69-22021  
Study of a Plasma with the Aid of Lasers /Issledovanie Plazmy s Pomoshch'yu Lazerov/.  
12 p2139 A69-27075
- PAVLICHENKO, V. P.**  
Dependence of the energy of an electron-photon cascade, produced by collision of a nuclear-active cosmic-ray particle with a lead nucleus, on the energy of the interacting particle.  
17 p3008 A69-33387
- PAVLIN, C.**  
The curved wall amplifier - Operation characteristics and applications.  
02 p0196 A69-12083  
A theoretical and experimental investigation of a confined vortex oscillator.  
[ASME PAPER 69-FLCS-19] 20 p3465 A69-37981
- PAVLINOV, L. B.**  
Diffusion of metal impurities in zirconium and titanium.  
04 p0613 A69-14557
- PAVLINOV, L. V.**  
Diffusion of beryllium in zirconium and titanium /Diffuziia berillia v tsirkonii i titane/.  
18 p3157 A69-35251
- PAVLIUCHENKOV, G. F.**  
Azimuthal distribution of atmospherics /Azimutal'noe raspredeleniye atmosferikov/.  
04 p0593 A69-15102
- PAVLIUCHUK, V. A.**  
Higher spatial harmonics in closed delay structures with a multistep interaction space /Vysshie prostranstvennye harmoniki v zamknytykh zamedliaushchikh strukturakh s mnogostupenchatym prostranstvom vzaimodeistviia/.  
13 p2236 A69-28576
- PAVLIUK, E. I.**  
Influence of a bandpass filter on the envelope of a frequency-modulated signal /Vliianie polosovogo filtra na ogibaiushchiu chastotno-modulirovannogo signala/.  
07 p1100 A69-18555
- PAVLIUK, V. A.**  
An apparatus for studying diffraction effects on periodic structures in the millimeter wavelength range /Ustanovka dlia issledovaniia difraktsionnykh yavlenii na periodicheskikh strukturakh v millimetrovom diapazone voln/.  
04 p0598 A69-14852  
Diffraction of plane electromagnetic wave obliquely incident on a beveled grid.  
05 p0723 A69-16788



- Theoretical and experimental investigation of the diffraction of a plane wave at a grid composed of squared beams /Difraktsiia elektromagnitnoi volny pri kosom padenii na reshetku, sostavleniuiu iz brus'ev priamougol'nogo poperechnogo secheniia/.  
07 p1084 A69-19149
- Diffraction of an electromagnetic wave incident obliquely on an array of rods with a rectangular cross section /Difraktsiia elektromagnitnoi volny pri kosom padenii na reshetku, sostavleniuiu iz brus'ev priamougol'nogo poperechnogo secheniia/.  
08 p1275 A69-20433
- Instrument for investigating diffraction phenomena at periodic structures in the millimeter band.  
15 p2607 A69-30244
- Experimental substantiation of requirements imposed on measurements in the study of diffraction effects /Eksperimental'noe obosnovanie trebovaniy k izmereniyam pri issledovanii difraktsionnykh yavlenii/.  
23 p4139 A69-42042
- Experimental study of the diffraction of an H sub x prime polarized wave on a skewed array /Eksperimental'noe issledovanie difraktsii H sub x prime polarizovannoi volny na skoshennoi reshetke/.  
23 p4125 A69-42043
- PAVLOPOULOS, T. G.**  
The special theory of relativity and the problem of the universal constants.  
11 p1920 A69-25562
- PAVLOSKEY, J. E.**  
Apollo thermal-protection system development. [AIAA PAPER 68-1142]  
03 p0519 A69-13558
- PAVLOV, A. F.**  
Method of determining electron concentration in the lower ionosphere.  
03 p0423 A69-13535
- PAVLOV, A. V.**  
Aircraft Flight Tests /Letnye Ispytaniia Samoletov/ /2nd Edition/.  
03 p0365 A69-12900
- PAVLOV, B. M.**  
Numerical solution of the problem of the supersonic flow of a viscous gas past blunt bodies /Chislennoe reshenie zadachi o sverkhzvukovom vyzkome techenii gaza okolo zatuplennykh tel/.  
03 p0363 A69-13653
- PAVLOV, B. S.**  
Vibration of a spherical shell filled with a liquid.  
16 p2873 A69-32129
- PAVLOV, I. M.**  
Macrogeometry of fracture of tensile test specimens of titanium alloys /Makrogeometriia razrusheniia obratsov titanovykh splavov pri raztazhenii/.  
04 p0617 A69-15076
- Thermomechanical treatment of some titanium alloys /Termomekhanicheskaya obrabotka nekotorykh titanovykh splavov/.  
07 p1161 A69-18766
- Scientific fundamentals of plastic deformation of hard-to-deform heat-resistant alloys /Nauchnye osnovy plasticheskoi deformatsii trudnodetormiruemykh zharoprochnykh materialov/.  
09 p1504 A69-22145
- Ratio of yield strength to ultimate tensile strength for certain titanium alloys subjected to thermomechanical treatment /Otnoshenie predela tekuchesti k vremennomu soprotivleniiu nekotorykh titanovykh splavov posle termomekhanicheskoi obrabotki/.  
11 p1906 A69-25683
- PAVLOV, I. V.**  
Universal vestibulometric chair /UVC/.  
02 p0200 A69-11517
- Effect of dry-friction forces on the stability of the motion of a correctable astatic gyroscope /Vliianie sil sukhogo treniya na ustoiichivost' dvizheniya korrrektiruемого astaticeskogo giroskopa/.  
04 p0597 A69-14605
- PAVLOV, I. A.**  
Investigation of interaction processes between carbon and oxides of high-melting-point metals /Issledovanie protsessov vzaimodeistviia oksidov tugoplavkikh metallov s uglerodom/.  
03 p0445 A69-13568
- Interaction between metal oxides and carbon during spatial separation of the reagents /Vzaimodeistvie oksidov metallov s uglerodom pri prostranstvennom razdelenii reagentov/.  
03 p0445 A69-13569
- Relations between some semiconductor and chemical properties of metal oxides /Sviaz' mezhdu nekotorymi poluprovodnikovymi i khimicheskimi svoystvami oksidov metallov/.  
03 p0445 A69-13570

- Study of the electrical resistivity of titanium carbide, titanium monoxide, and titanium-oxygen-carbon alloys /Issledovanie elektrosoprotivleniya karbida titana, monooksiida titana i splavov titan-kislorod-uglerod/.  
03 p0446 A69-13575
- PAVLOV, I. I.**  
High-power single-mode ruby laser.  
05 p0770 A69-15700
- Investigation of a plasma blob obtained by means of focused laser radiation /Issledovanie sushchego plazmy, poluchaemoi pri fokusirovani laseronogo izlucheniia/.  
11 p1928 A69-25235
- Problem of completely filling the optical resonator by a single mode of oscillations in a ruby laser /K voprosu polnogo zapolneniia opticheskogo rezonatora odnim tipom kolebaniy v rubinovom OKG/.  
14 p2458 A69-29164
- PAVLOV, K. B.**  
Interferometric study of heat transfer in turbulent jet flows /Interferometricheskoe issledovanie teploobmena v turbulentnykh struiynykh techeniyakh/.  
01 p0005 A69-10101
- Determination of the internal efficiency of a condensing injector in power plants with a closed cycle.  
02 p0194 A69-11582
- PAVLOV, N. F.**  
Procedure and results of an experimental investigation of the polarization characteristics of meteorological targets /Metodika i rezul'taty eksperimental'nogo izucheniia polarizatsionnykh svoystv meteorologicheskikh tselei/.  
16 p2807 A69-32269
- PAVLOV, N. N.**  
Variation of the earth's rate of rotation, deformations of the earth's crust, and solar activity /Izmenenie skorosti vrashcheniya zemli, deformatsii zemnoi kory i solnechnaia aktivnost'/.  
22 p4024 A69-40609
- PAVLOV, O. V.**  
More accurate determination of the distribution of a diffusing substance in an axisymmetric turbulent flow /Utochnenie raspredeleniya diffundiruyushchey substansii v osesimmetrichnom turbulentnom potoke/.  
14 p2430 A69-29424
- PAVLOV, S. T.**  
Thermomagnetic effects in semiconductors with a "double" conduction band /Termomagnitnye efekty v poluprovodnikakh s "dvoynoi" zonoj provodimosti/.  
21 p3783 A69-39558
- PAVLOV, V. A.**  
Effect of plastic deformation and ageing on the structure of the alloy AlMg11.  
05 p0783 A69-16814
- PAVLOV, V. D.**  
Improving the efficiency of two methods of binary storage /Utochnenie effektivnosti dvukh sposobov dvoichnogo nakopleniya/.  
19 p3278 A69-36597
- PAVLOV, V. E.**  
Control of the stability of the optical properties of an atmosphere with small and large optical densities /O kontrole ustoiichivosti opticheskikh svoystv atmosfery pri mal'khi i bol'shikh opticheskikh tolschakh/.  
01 p0074 A69-11186
- Light Scattering in the Atmosphere. Part 2 /Rasseyaniye sveta v atmosfere. Part 2/.  
07 p1211 A69-18545
- Polarization of daytime skylight and the atmospheric aerosols /Polarizatsiya sveta dnevnogo neba i atmosferynyy aerol'/.  
09 p1491 A69-22708
- PAVLOV, V. G.**  
Hypersonic Flow Past Truncated Cones with Allowance for Physicochemical Equilibrium Transformations /Giperzvukovoe obtekanie prituplennykh konusov s uchetoм равновесных физикохимических превращений/.  
03 p0362 A69-13633
- PAVLOV, V. I. A.**  
Mechanism of crack formation in titanium alloys during thermal-fatigue tests /O mekhanizme obrazovaniya treshchiny pri ispytaniy titanovykh splavov na termicheskoi ustalosti/.  
01 p0094 A69-10215
- The mechanism of crack formation in thermal fatigue tests of titanium alloys.  
15 p2637 A69-30271
- PAVLOVA, K. N.**  
Reduction of titanium tetrachloride to titanium by magnesium /Vosstanovlenie titana iz tetrakhlorida magniia/.  
07 p1163 A69-18784

## PAVLOVA, O. I.

- Improvement of diffuse layers in the case of anomalous diffusion in GaAs single crystals /K voprosu o sovshenshtve diffuzionnykh sloev dlia sluchaia anomal'noi diffuzii v monokristallakh GaAs/.  
15 p2670 A69-31048

## PAVLOVETS, G. A.

- Effect of the air intake of a lifting engine on the aerodynamic characteristics of a wing /Vliianie vdukhazobornika pod'emnogo dvigatelya na aerodinamicheskie kharakteristiki kryla/.  
19 p3239 A69-36406

## PAVLOVIC, D. M.

- High-temperature magnetic test techniques and analyses.  
01 p0093 A69-10111
- High-temperature magnetic test techniques and analyses.  
09 p1512 A69-22375
- Effect of dispersoid parameters on high-temperature behavior of cobalt and iron plus 27 percent cobalt.  
15 p2669 A69-30689
- Special core material technologies for space power electronic applications.  
19 p3319 A69-35543

## PAVLOVSKAIA, A. A.

- Wind forecasting in the 12- to 24-km layer /O prognoze vetra v sloe 12-24 km/.  
12 p2126 A69-26581
- Nature of the relationship between air circulation in the troposphere and stratosphere of different regions of the Northern Hemisphere /Kharakter vzaimosvazi tsirkulatsii vozdukh v troposfere i stratosfere razlichnykh raionov severnogo polushariia/.  
14 p2477 A69-29829

## PAVLOVSKII, I. N.

- Entrainment of a solid body by a flow of a viscous incompressible fluid in a tube /Uvlechenie tverdogo tela v trube potokom вязкой neszhimaemoy zhidkosti/.  
10 p1678 A69-23366
- Self-similar problems of mixing of a viscous fluid.  
14 p2428 A69-28803

## PAVLOVSKII, M. A.

- Errors of a directional-gyroscope with interframe correction during the pitching and banking of the object /O pogreshnostiakh giroskopa napravleniya s mezhkadrochnoi korrrektsiei pri kachke i virazhe ob'ekta/.  
14 p2446 A69-28923

## PAVLOVSKII, R. A.

- Approximate solution of a steady-state problem with convective heat transfer conditions /Priblizhennoe reshenie odnoi statsionarnoi zadachi s usloviyami konvektivnogo teploobmena/.  
01 p0174 A69-10103

## PAVLOVSKII, V. E.

- Influence of short-term overloads on the buildup of defects in the case of programmed loading /Vliianie kratkovremennykh peregruzok na nakoplenie povrezhdenii pri programmnom nagruzeni/.  
11 p1985 A69-25180

## PAVLOVSKII, V. S.

- Investigation of the oscillations of a cylindrical shell containing a liquid /Issledovanie kolebaniy tsilindricheskoi obolochki, soderzhashchei zhidkost'/.  
21 p3834 A69-38718

## PAWEL, D.

- Observations on the initiation of detonation.  
19 p3451 A69-36364

## PAWEL, R. E.

- Stress generation during high-temperature oxidation. I - Oxygen solution effects. [ECS PAPER 87]  
15 p2641 A69-31541

## PAWLIK, E. V.

- Electric propulsion system performance evaluation. [AIAA PAPER 69-236]  
09 p1560 A69-21213
- Control analysis of an ion thruster with programmed thrust. [AIAA PAPER 69-239]  
09 p1564 A69-21240
- Solar electric propulsion system evaluation. [AIAA PAPER 69-498]  
16 p2843 A69-32708
- Thrust system technology for solar electric propulsion.  
19 p3394 A69-35941

## PAWLUCZYK, R.

- A microholographic system enabling to obtain holograms with no pseudoscopic real image.  
21 p3726 A69-39702

## PAXTON, H. W.

- Stress corrosion of aluminum alloy 7075-T651 in organic liquids.  
23 p4178 A69-42452

- PAXTON, R. R.**  
Carbon-graphite bearings for high loads.  
[SAWE PAPER 68-LC-9] 18 p3148 A69-35002
- PAYAN, R.**  
The absorption of thin-film cesium between 2300 and 11,000 angstrom units /Sur l'absorption du cesium en couches minces entre 2300 et 11000 angstrom units/.  
03 p0491 A69-14060
- Study of the optical absorption of thin films of rubidium prepared under high vacuum /Etude de l'absorption optique de couches minces de rubidium preparees sous ultra-vide/.  
03 p0491 A69-14114
- PAYNE, A. D.**  
The background radiation in isotropic world models.  
14 p2514 A69-29769
- PAYNE, B. W.**  
Application of power spectral methods to aircraft gust clearance.  
24 p4253 A69-43111
- PAYNE, C. E.**  
Effects arising from the application of electrostatic fields on the burning of solid propellants.  
[WSCIPAPER 68-24] 07 p1241 A69-18366
- Lattice modification to control the burn rate of AP propellants.  
[WSCIPAPER 69-17] 16 p2831 A69-32355
- PAYNE, J.**  
Observations of 28 hydrogen n alpha lines from the Orion Nebula.  
08 p1398 A69-20776
- PAYNE, J. B.**  
A wideband, digitally variable time delay technique for array antennas.  
08 p1290 A69-20974
- PAYNE, J. G.**  
A rapidly converging technique for vibration analysis of plates with a discrete mass distribution.  
04 p0682 A69-15293
- PAYNE, L. E.**  
Stability in linear elasticity.  
03 p0530 A69-14066
- Continuous data dependence for the equations of classical elastodynamics.  
24 p4397 A69-42750
- PAYNE, P. R.**  
Injury potential of ejection seat cushions.  
17 p2917 A69-34033
- PAYNTER, H. L.**  
Criteria for passive propellant control schemes.  
[AIAA PAPER 69-531] 16 p2833 A69-32691
- PAYNTER, J.**  
Electrocatalysts for the direct electrochemical oxidation of n-octane in fuel cells.  
[ECS PAPER 8] 03 p0368 A69-13856
- PAYTON, R. G.**  
Two dimensional wave front shape induced in a homogeneously strained elastic body by a point perturbing body force.  
11 p1969 A69-24338
- PAYZER, R. J.**  
Potential technology improvements for the CF6 turbofan.  
[SAE PAPER 680691] 03 p0496 A69-13446
- Potential technology improvements for the CF6 turbofan.  
08 p1377 A69-21163
- Development of the general electric CF6 turbofan.  
13 p2324 A69-27331
- Potential technology improvements for the CF6 turbofan.  
[SAE PAPER 680691] 16 p2837 A69-32367
- PAZMANY, L.**  
Potential structural materials and design concepts for light airplanes.  
[SAE PAPER 690341] 11 p1822 A69-24498
- PCHELINOV, V. P.**  
Construction of a mathematical model of human vision, taking into account adaptation to light /K postroenium matematicheskoi modeli zrenia cheloveka s uchetom tsvetovoi adaptatsii/.  
23 p4110 A69-41985
- PCHELKIN, I. M.**  
Investigation of two-phase Laval nozzles /Issledovanie dvukhfaznykh sopel Lavalia/.  
13 p2245 A69-27481
- PCHELKIN, V. F.**  
Determination of the space and frequency diversities between radio equipments generating mutual interference in the microwave range /Opredelenie prostranstvennogo i chastotnogo raznosov mezhdru dvumernykh tekhnologii ravnovesnogo i sovershennogo gaza metodom setok/.  
11 p1835 A69-24952
- PCHELKINA, L. V.**  
Calculation of two-dimensional flows of an equilibrium and perfect gas by the method of networks /Raschet dvumernykh tekhnologii ravnovesnogo i sovershennogo gaza metodom setok/.  
03 p0363 A69-13658
- PEABODY, R. R.**  
Corneal damage thresholds for CO sub 2 laser radiation.  
11 p1830 A69-24844
- PEACE, T. E.**  
Space station logistics - Problems, analysis, and management decision-aids.  
10 p1669 A69-22976
- PEACH, J. V.**  
Optical variations in quasi-stellar objects.  
13 p2354 A69-28468
- Low noise solar and laboratory spectroscopy. IV - A technique for relative oscillator strength measurement with applications to Fe I.  
22 p4022 A69-40466
- Brightest members of clusters of galaxies.  
23 p4215 A69-42113
- PEACHER, J. L.**  
Critical assessment of the polarized-orbital method in atomic scattering.  
02 p0284 A69-12702
- Rotational excitation of polar molecules by electrons.  
06 p0961 A69-17139
- PEACOCK, D. E.**  
Phase identification in modified Cb 132 alloys.  
13 p2282 A69-28162
- PEACOCK, D. S.**  
Zenith angle dependence of meteorological effects on muons observed at 60 m.w.e. underground.  
10 p1769 A69-23827
- PEAK, L. S.**  
Nuclear interactions and cosmic radiation at energies around 10 super 6 Gev.  
12 p2149 A69-26475
- PEAKE, D. J.**  
The flows about upswept rear fuselages of typical cargo aircraft.  
06 p0859 A69-17492
- PEAKE, H. J.**  
Difference between engineers and scientists.  
15 p2721 A69-31073
- PEAKER, A. R.**  
Efficiency peaking in red-light-emitting gallium-phosphide diodes.  
15 p2575 A69-30174
- PEALE, S. J.**  
Distribution of sinuous rilles and water on the moon.  
05 p0818 A69-15606
- Generalized Cassini's laws.  
16 p2861 A69-32239
- PEARCE, D.**  
Variation of the magnitude of the horizontal-vertical illusion with retinal eccentricity.  
24 p4263 A69-43117
- PEARCE, J. B.**  
Rocket measurement of nitric oxide between 60 and 96 kilometers.  
07 p1125 A69-18842
- Mariner 6 - Ultraviolet spectrum of Mars upper atmosphere.  
22 p4023 A69-40568
- PEARCE, R.**  
Some aspects of anisotropic plasticity in sheet metals.  
05 p0837 A69-16030
- PEARCE, W. P.**  
The effect of wave-particle interactions on the propagation of cosmic rays.  
15 p2675 A69-30761
- PEARL, J. C.**  
Detection of metastable atoms and molecules with continuous channel electron multipliers.  
22 p3917 A69-41235
- PEARLMAN, M. R.**  
Laser ranging to satellites.  
15 p2571 A69-31337
- PEARLSTEIN, F.**  
Electroless deposition of metals - Principles and applications.  
01 p0099 A69-11060
- PEARLSTEIN, L. D.**  
Dispersion of the upper hybrid mode in a spatially inhomogeneous plasma.  
11 p1924 A69-24302
- PEARS, C. D.**  
Strength-of-materials for brittle materials as a guide to testing and properties.  
24 p4333 A69-43341
- PEARSON, A. D.**  
Filamentary conduction in semiconducting glass diodes.  
16 p2760 A69-32017
- PEARSON, A. E.**  
Analysis of an adaptive control algorithm for linear systems.  
09 p1474 A69-22441
- PEARSON, C. D.**  
Liquid expulsion by direct pressurization of a spinning propellant tank.  
[AIAA PAPER 69-527] 16 p2838 A69-32651
- PEARSON, C. E.**  
On non-linear ordinary differential equations of boundary layer type.  
04 p0544 A69-14889
- PEARSON, E. D.**  
Saturn software configuration accounting and reporting system.  
18 p3105 A69-34269
- PEARSON, G. L.**  
Zinc diffusion into gallium phosphide under high and low phosphorus overpressure.  
13 p2322 A69-28136
- Properties of GaP Schottky barrier diodes at elevated temperatures.  
16 p2757 A69-31613
- Gallium phosphide devices for use at high temperatures.  
19 p3381 A69-35681
- PEARSON, G. S.**  
Catalyzed ignition of composite propellant fuels by gaseous oxygen.  
16 p2829 A69-31913
- The mechanism of thermal decomposition in ammonium perchlorate-copper chromite mixtures.  
21 p3783 A69-38810
- Mechanism of the decomposition of ammonium perchlorate.  
21 p3784 A69-39593
- PEARSON, H. S.**  
The applicability of a fracture mechanics- non-destructive testing design criterion for aerospace structures.  
21 p3689 A69-38656
- Definition of fatigue cracks through nondestructive testing.  
23 p4234 A69-42451
- The accuracy and precision of ultrasonic shear wave flaw measurements as a function of stress of the flaw.  
24 p4397 A69-42756
- PEARSON, O. L.**  
Manned test operations related to the Apollo lunar module in the simulated space environment.  
15 p2558 A69-30394
- PEARSON, P. M.**  
The simulation of intercity travel demands.  
[AAS PAPER 69-382] 24 p4417 A69-42805
- PEARSON, W. B.**  
On the problem of tabular reduction of crystal chemical information - Metals and semiconductors.  
02 p0295 A69-11786
- PEARSONS, K. S.**  
Judged noisiness of modulated and multiple tones in broad-band noise.  
11 p1830 A69-24796
- Laboratory studies on the effects of duration and spectral complexity on subjective ratings of noise.  
14 p2408 A69-29152
- PEASE, C. C.**  
Compatibility studies of capacitor discharge stud welding on titanium alloys.  
18 p3151 A69-35431



PEASE, G. E.

The radius of Venus as determined by planetary radar and Mariner 5 radio tracking data.  
03 p0508 A69-13348

PEASE, M. C.

Inversion of matrices by partitioning.  
12 p2123 A69-26754

PEASE, R. W.

Making color infrared film a more effective high-altitude remote sensor.  
15 p2609 A69-30457

PEASE, T. E.

Radar altimetry from a spacecraft and its potential applications to geodesy.  
15 p2609 A69-30460

Oceanographic applications of radar altimetry from a spacecraft.  
15 p2609 A69-30461

PEAVEY, B.

Performance characteristics and specification of PCM bit synchronizer/signal conditioners.  
07 p1106 A69-19120

PEAVEY, R. C.

Commercial Utilization of Space, American Astronautical Society, Annual Meeting, 13th, Dallas, Tex., May 1-3, 1967, Proceedings.  
17 p3041 A69-34043

PECCI, G.

Analytical and instrumental technique for determining traces of metals in some aeronautical products /Metodica analitico-strumentale per la determinazione delle tracce di metalli in alcuni prodotti aeronautici/.  
03 p0435 A69-14101

PECHENOV, A. N.

Semiconductor laser with an external resonator /Poluprovodnikovyy kvantovyy generator s vneshnim rezonatorom/.  
08 p1326 A69-20543

PECHMAN, V.

Contribution to the problem of the occurrence of light boundaries of former austenitic grains in Cr-Mo-W-V steels /Prispevek k otazke vyskytu "svetlych hranic" byvalych austeniticheskych zrn v Cr-Mo-W-V ocelich/.  
01 p0100 A69-11295

PECK, D. S.

Reliability of beam-lead sealed-junction devices.  
18 p3145 A69-34497

PECK, J. C.

Shadow-zone response in the diffraction of a plane compressional pulse by a circular cavity.  
13 p2368 A69-28347

Experiments on dispersive pulse propagation in laminated composites and comparison with theory. [ASME PAPER 69-APMW-22]  
24 p4401 A69-43097

Dispersive pulse propagation parallel to the interfaces of a laminated composite. [ASME PAPER 69-APMW-20]  
24 p4401 A69-43098

PECK, J. V.

Diffusion bonding Ti-6Al-4V for jet engine applications. [ASME PAPER 69-GT-46]  
09 p1513 A69-22484

PECK, R. E.

Diffusion of heat and mass in a porous medium with bulk flow. I, II.  
15 p2552 A69-31115

PECKER, J. C.

On the abundance determination in the solar chromosphere.  
16 p2855 A69-31657

PECKER, J. C.

Formation of emission lines in gaseous layers of finite optical thickness /La formation de raies d'émission dans des couches gazeuses d'épaisseur optique finie/.  
02 p0328 A69-12755

PECKHAM, C.

Air photography.  
08 p1314 A69-20307

PECKHAM, H. D.

Designing electro-explosive devices for space.  
10 p1752 A69-23022

PECKNOLD, D. A.

Finite-element analysis of skewed shallow shells.  
13 p2358 A69-27210

PECORA, W. T.

Geologic applications of earth orbital satellites. [UN PAPER 68-95441]  
01 p0065 A69-10509

Surveying the earth's resources from space.

22 p3936 A69-40170

PECORELLA, F.

The production of highly ionized, low density plasmas by means of strong ultraviolet radiation.  
08 p1360 A69-20080

PEDAN, G. A.

Effect of thermal conductivity of an arc cloud on radiation intensity /K voprosu o vlianii teploprovodnosti dugovogo oblaka na intensivnost' izlucheniya/.  
06 p0964 A69-17254

PEDEN, J. A.

Charge transfer of N sub 2 super plus, O sub 2 super plus, and NO super plus to sodium atoms at thermal energies.  
07 p1185 A69-19303

PEDERSEN, C. I.

Reports on Progress in Physics. Volume 31. Part 1.  
01 p0115 A69-10045

Reports on Progress in Physics. Volume 31. Part 2.  
08 p1350 A69-19867

PEDERSEN, N. F.

Transmission of helicon-waves through n-type Ge.  
02 p0295 A69-11787

PEDERSEN, R. J.

Why fluidic machine control/ques/.  
15 p2553 A69-31297

PEDERSEN, D. O.

Temperature sensitivity of frequency of integrated oscillators.  
07 p1103 A69-18882

PEDERSEN, R. E.

Prefailure analysis - Enhances product reliability.  
18 p3146 A69-34508

PEDLEY, T. J.

On the instability of viscous flow in a rapidly rotating pipe.  
11 p1871 A69-25125

PEEBLES, P. J. E.

Origin of the angular momentum of galaxies.  
08 p1383 A69-20050

Primeval element abundances.  
08 p1400 A69-20894

Origin of the globular star clusters.  
09 p1599 A69-22192

Dead galaxies/ques/.  
09 p1602 A69-22228

Cosmology.  
09 p1608 A69-22715

Statistical tests for the origin of absorption lines observed in quasi-stellar sources.  
13 p2334 A69-27307

Infrared astronomy and cosmology.  
13 p2342 A69-27601

Intergalactic hydrogen.  
20 p3610 A69-38140

PEEBLES, P. Z., JR.

Multiple-target monopulse radar processing techniques.  
04 p0562 A69-15470

Signal processors and accuracy of three-beam monopulse tracking radar.  
08 p1270 A69-19855

A computation of radar SEP and CEP.  
13 p2221 A69-27963

An automatic system for the control of multiple drone aircraft.  
14 p2392 A69-29495

PEEHS, M.

Deposition of tungsten-layers on molybdenum and interdiffusion.  
14 p2462 A69-29210

PEELE, E. L.

A simplified method of estimating the response of light aircraft to continuous atmospheric turbulence. [AIAA PAPER 69-766]  
19 p3433 A69-35657

PEELGREN, M.

Large cylindrical thermionic diode with rhenium emitter for diode kinetic experiments.  
09 p1438 A69-21818

PEFFLEY, W. M.

A strain gage dosimeter for pulsed radiation environment.  
06 p0922 A69-16892

PEGG, D. J.

Radiative mean-life measurements of some atomic-hydrogen excited states using beam-foil excitation.  
03 p0469 A69-12920

A study of hydrogen Lyman alpha radiation using the beam-foil excitation method.

03 p0471 A69-13164

PEGG, D. T.

Cosmology and electrodynamics.  
01 p0149 A69-10131

PEHLKE, R. D.

The equilibrium between aluminum and nitrogen in liquid 18 pct Cr-8 pct Ni stainless steel.  
06 p0942 A69-17222

Nitrogen solubility in liquid Fe-Cr-Ni alloys.  
06 p0942 A69-17222

The effect of alloying elements on the solubility of nitrogen in liquid iron-chromium-nickel alloys.  
06 p0943 A69-17223

PEIRCE, R. M.

Application of pulse techniques to sonic anemometry.  
10 p1692 A69-23259

PEIRSON, D. H.

Radiation dose and ionization from radioactive fallout.  
01 p0145 A69-10983

PEIRSON, R. C.

Time-domain analysis and measurement techniques for distributed RC structures. II - Impulse measurement techniques.  
09 p1471 A69-21328

PEJACK, E. R.

Electrically controlled heat transfer.  
02 p0353 A69-12324

PEJOVIC, ST.

Contribution to axisymmetric flow through turbomachines.  
10 p1631 A69-22910

PEKAR, S. I.

Chemical high-pressure lasers and light-stimulated chemical reactions /Khimicheskie lazery vysokogo davleniya i stimulirovannye svetom khimicheskie reaktsii/.  
22 p3965 A69-41177

PEKAREK, L.

Ionization waves /striations/ in a discharge plasma.  
10 p1740 A69-23694

PEKELIS, E. M.

Numerical method of calculating lee waves for an arbitrary distribution of the parameters of the main flow /plane linear problem/ /Chislennyy metod rascheta podvetrennykh voln pri proizvol'nom raspredelenii parametrov osnovnogo potoka /ploskaia lineinai zadacha/.  
10 p1722 A69-23967

A numerical method of calculating lee waves with an arbitrary distribution of the basic flow parameters /two-dimensional linear problem/.  
21 p3759 A69-39653

PEKOZ, T. B.

Torsional-flexural buckling of thin-walled sections under eccentric load.  
20 p3625 A69-37653

PELCHAT, M. G.

Frequency feed-forward - An open loop approach for extending the threshold and linearity of FM demodulators.  
07 p1106 A69-19122

PELECH, I.

Effects of curvature on laminar boundary layers in sink-type flows. [ASME PAPER 68-WA/FE-20]  
05 p0749 A69-16096

PELEKH, B. L.

Stability of fiberglass-reinforced plastic plates coupled to an elastic base /Ob ustoychivosti stekloplastikovykh platinok, svyazannykh s uprugim osnovaniem/.  
08 p1412 A69-20334

Analogy between the Timoshenko theory of bending of plates and the plane problem of the moment theory of elasticity /Ob analogii mezhdru teorii izgiba platin tipa S. P. Timoshenko i ploskoi zadachei momentnoi teorii uprugosti/.  
15 p2715 A69-31205

An asymmetric bending problem for transversely isotropic circular plates /Ob odnoi zadache nesimmetrichnogo izgiba transversal'no-izotropnykh kruglykh platin/.  
22 p0409 A69-41278

PELEN, J.

Methods of testing nonmagnetic environments /Moyens d'essais des ambiances magnetiques/.  
13 p2244 A69-28604

- The attitude correction magnetometer of the Aurorae satellite /Le magnetometre de restitution d'attitude du satellite Aurorae/.  
15 p2611 A69-31087
- PELEPEICHENKO, I. P.**  
Selection of structural dimensions for thermocouples in the measurement of unsteady temperatures in gases /Vybor konstruktivnykh razmerov termopar pri izmerenii nestatsionarnykh temperatur v gazakh/.  
19 p3311 A69-36197
- PELEPICHENKO, I. P.**  
Selection of the length of a resistance thermometer for measuring rapidly varying gas temperatures /O vybere dliny termometra soprotivleniia pri izmereniiakh bystromeniiaushcheisia temperatury gaza/.  
23 p4163 A69-41557
- PELETIER, L. A.**  
On Sobolev's first embedding theorem.  
01 p0103 A69-10005
- PELEVIN, O. V.**  
Possibility of constructing a high-speed switch from a gallium arsenide crystal doped with iron /O vozmozhnosti sozdaniia bystrodeistviushchego perekliuchatel'ia iz kristalla arsenida galliia legirovanogo zhelezom/.  
13 p2319 A69-27898
- PELIKAN, M.**  
The calculation of refraction angles by means of the refractive index and of the radii of the curvature of the refractive curve.  
18 p3174 A69-35201
- PELIUSHENKO, S. A.**  
Absolute temperature measurements of the cosmic radio emission of the sky at decimeter wavelengths /Absoliutnyie izmereniia temperatury kosmicheskogo radiolucheniia neba na volnakh detsimetrovogo diapazona/.  
15 p2687 A69-30544
- PELLANDINI, F.**  
Noise reduction by gradual memorization.  
02 p0212 A69-12606
- PELLAS, P.**  
Techniques for proper revelation and viewing of etch-tracks in meteoritic and terrestrial minerals.  
02 p0245 A69-12569  
Evaluation of the ablation rate of Saint-Severin amphotericite on the basis of a study of the tracks of heavy ions in the primary flux of cosmic radiation /Evaluation du taux d'ablation de l'amphotericite de Saint-Severin par l'etude des traces d'ions lourds du flux primaire du rayonnement cosmique/.  
08 p1406 A69-20933  
On the energy spectrum of iron-group nuclei as deduced from fossil-track studies in meteoritic minerals.  
19 p3410 A69-36095  
On the flux of low-energy particles in the solar system during the last 10 million years.  
19 p3411 A69-36097  
Reconstruction of the Saint-Severin meteorite in space /Reconstitution de la meteorite Saint-Severin dans l'espace/.  
19 p3416 A69-36128  
Primitive low-energy particle irradiation of meteoritic crystals.  
20 p3590 A69-37569
- PELLAT, R.**  
Disintegration of a Langmuir wave - Instability criterion and growth rate /Desintegration d'une onde de Langmuir - Critere d'instabilite et taux de croissance/.  
03 p0480 A69-14057  
Disintegration of a Langmuir wave - Conditions of resonance and parametric amplification /Desintegration d'une onde de Langmuir - Conditions de resonance et amplification parametrique/.  
03 p0480 A69-14113  
Adiabatic theory of the motion of charged particles in an electromagnetic field /Theorie adiabatique du mouvement des particules chargees dans un champ electromagnetique/.  
11 p1948 A69-24857  
Calculation of the B, L coordinates by a perturbation method /Calcul des coordonnees B, L. par une methode de perturbations/.  
11 p1949 A69-24861
- PELLE, A.**  
New observations of M 82 /Novye nabludeniia M 82/.  
12 p2171 A69-27067
- PELLEG, J.**  
Observations of etch pits and sub-boundaries in niobium by optical microscopy.  
07 p1169 A69-19603
- Diffusion of super 51 Cr into polycrystalline niobium.  
11 p1903 A69-24577
- PELLEGRINI, F.**  
Infrared measurements of the atmosphere.  
[UN PAPER 68-95471] 01 p0108 A69-10464  
Investigation of an optical device for measuring temperature changes with height in the upper atmosphere by means of rockets or satellites /Studio di un apparecchio ottico per la misura delle variazioni della temperatura con la quota, nell'alta atmosfera, a mezzo razzi o satelliti/.  
07 p1132 A69-18676
- PELLEGRINI, P. F.**  
Long-range propagation of HF signals in the equatorial zone observed by means of the San Marco 2 satellite /Propagazione a grande distanza di segnali hf nella zona equatoriale osservati a mezzo del satellite San Marco 2/.  
08 p1276 A69-20593
- PELLET, M.**  
The satellite ESRO II/IRIS in orbit.  
01 p0156 A69-11108  
The telecommunication system of the Aurorae satellite /Le systeme de telecommunication du satellite Aurorae/.  
15 p2702 A69-31084
- PELLETIER, G. A.**  
Yield stress of normal human blood as a function of endogenous fibrinogen.  
22 p3874 A69-40223
- PELLETT, G. L.**  
High temperature decomposition of ammonium perchlorate using CO sub 2 laser-mass spectrometry.  
[AIAA PAPER 69-143] 06 p0885 A69-18111  
Vapor-phase combustion phenomena when Zr droplets burn in oxygen.  
[WSCI PAPER 69-4] 16 p2830 A69-32345
- PELLICORI, S.**  
Gondola azimuth stabilization using a simple lunar tracker.  
20 p3538 A69-37300
- PELLICORI, S. F.**  
Polarization-albedo relationship for selected lunar regions.  
05 p0829 A69-16663  
Notes on liquid-filter cells.  
21 p3770 A69-38679
- PELLIGRA, R.**  
The centrifuge as a therapeutic device.  
24 p4265 A69-43372
- PELLIONISZ, P.**  
Radiation damage of junction and MOS transistors /Reteg-es MOS tranzistorok sugarkarosodasa/.  
13 p2227 A69-27514
- PELLMANN, R. R.**  
Power distribution characteristics for overload protection.  
17 p2904 A69-34088
- PELLOUX, R. M. N.**  
Corrosion-fatigue crack propagation.  
10 p1710 A69-23084  
Mechanisms of formation of ductile fatigue striations.  
13 p2278 A69-27415
- PELOUS, M. G.**  
Influence of operating conditions on the behavior of transistors under ionizing radiation /Influence des conditions de fonctionnement sur la tenue des transistors aux radiations ionisantes/.  
11 p1848 A69-24874
- PELPOR, D. S.**  
Designing Components of Gyroscopic Systems /Proektirovanie elementov giroskopicheskikh sistem/.  
09 p1497 A69-22101
- PELTON, E. L.**  
Application of a surface integration technique to parallel-plate waveguide radiation-pattern analysis.  
23 p4136 A69-41581
- PELZ, D. T.**  
Direct in situ measurements of wave propagation in the neutral thermosphere.  
05 p0754 A69-16261  
Midlatitude neutral thermosphere density and temperature measurements.  
05 p0755 A69-16268  
Latitudinal variations in the neutral atmospheric density.  
20 p3535 A69-38100
- PELZ, P.**  
A contribution to the solution of the distribution of charge in the channel of a MHD generator.  
15 p2664 A69-31055
- PEMEROV, E. C.**  
MSI 12 bit digital to analog converter.  
[AIAA PAPER 69-968] 22 p3906 A69-40349
- PENA, J. A.**  
Freezing of water droplets in equilibrium with different gases.  
12 p2126 A69-26018
- PENCHUK, A.**  
Digital autopilots for thrust vector control of the Apollo CSM and CSM/LM vehicles.  
[AIAA PAPER 69-847] 21 p3762 A69-39377
- PENCZER, R. E.**  
Radiation annealing and modification of the 35 deg and 65 deg K defects in germanium at low temperature.  
06 p0980 A69-17757
- PENDERED, J. W.**  
Linear analysis of transient vibration.  
18 p3211 A69-34326
- PENENGO, P.**  
Evidence for strongly interacting heavy shower particles at 70 m w.e. underground.  
02 p0310 A69-12831
- PENFIELD, H.**  
Detection of the super 2 pi 3/2, J equals 5/2 state of OH at 5-centimeter wavelength.  
13 p2335 A69-27312  
Time variations in galactic OH emission sources.  
14 p2517 A69-29085  
Determinations of helium abundance from radiofrequency recombination lines.  
18 p3190 A69-34293
- PENFIELD, P., JR.**  
Large-signal transient effect in avalanche diodes.  
01 p0043 A69-10559  
Force in a nonconducting electric fluid with viscosity and hysteresis as an example of the principle of virtual power.  
12 p2136 A69-26404
- PENGELLEY, C. D.**  
Natural frequency of longitudinal modes of liquid propellant space launch vehicles.  
[AIAA PAPER 68-289] 02 p0335 A69-12393
- PENIN, A. N.**  
Nonlinear absorption of ruby laser radiation in CdS, ZnS, and SiC /Nelineinoe pogloshchenie izlucheniia rubinovogo lazera v CdS, ZnS i SiC/.  
03 p0436 A69-13038
- PENIN, N. A.**  
Physics of Microwave Semiconductor Diodes.  
21 p3682 A69-38990
- PENKOV, A. P.**  
Problem of calculating the probability that continuous icing conditions of various durations will occur at an airport /K voprosu o raschete obespechennosti periodov razlichnoi nepreryvnoi prodolzhitel'nosti gololeda na aerodrome/.  
12 p2127 A69-26900
- PENNELL, W. T.**  
Laminarization of turbulent flow in a circular porous tube with uniform mass injection through the tube wall.  
[ASME PAPER 69-HT-57] 24 p4303 A69-43537
- PENNER, S. S.**  
Radiation and Reentry.  
04 p0685 A69-14597  
Approximate laboratory simulation of spectroscopic observations of Mars.  
08 p1354 A69-20151  
Desorption rates of CO sub 2 -Ar mixtures from silica gel at various temperatures.  
21 p3848 A69-38707
- PENNEY, C. M.**  
Light scattering in terms of oscillator strengths and refractive indices.  
07 p1183 A69-19645
- PENNEY, J.**  
X-ray diffraction studies of the effects of deformation on niobium alloys containing titanium, vanadium and zirconium.  
04 p0618 A69-15202
- PENNEY, N.**  
Safety aspects of HUD.  
03 p0379 A69-12885
- PENNING, R. L.**  
Exploiting computer programs for design data.  
21 p3732 A69-39304



## PENNOCK, A. P.

Engine health monitoring on the C-141.  
[AIAA PAPER 69-775] 19 p3244 A69-35646

## PENNTIUSH, E. V.

Charge motion in MOS-structures with a pyrolytic SiO<sub>2</sub> sub 2 film on germanium /Dvizhenie zariadov v MOS-strukturakh s piroliticheskoi plenkoj SiO<sub>2</sub> sub 2 na germanii/.  
07 p1200 A69-19010

## PENNY, R. K.

The deformations and stresses in a stretched thin plate containing a hole during stress redistribution caused by creep.  
06 p1022 A69-17368

A long narrow foil strain gauge for special purposes.  
08 p1314 A69-20258

The creep of pressurized cylindrical shells.  
17 p3067 A69-34211

## PENROSE, R.

On gravitational collapse.  
23 p4219 A69-42333

## PENSTON, M. J.

Interstellar clouds.  
10 p1779 A69-23608

## PENSTON, M. V.

Interstellar clouds.  
10 p1779 A69-23608

Hydrogen molecules and the Hayashi effect.  
13 p2342 A69-27594

The distribution of matter in the Bok globules in the Orion nebula.  
22 p4022 A69-40465

## PENT, M.

Considerations on the use of the analytic signal for investigating random signals /Considerazioni sull'uso del segnale analitico per lo studio di segnali casuali/.  
08 p1271 A69-19915

Waveform transmission with permutation modulation.  
12 p2030 A69-26386

## PENTON, A. P.

The effects of high intensity electrical currents on advanced materials.  
08 p1338 A69-20486

Advances in fiber reinforced carbon and graphite.  
19 p3354 A69-35519

## PENTZ, N. E.

A large-angle approximation for high-energy scattering.  
14 p2487 A69-29008

## PENZES, L. E.

Free vibrations of thin orthotropic oblate spheroidal shells.  
09 p1613 A69-21719

## PENZIAS, A. A.

Measurement of cosmic microwave background radiation.  
02 p0210 A69-12431

Efficient spacing of synchronous communication satellites.  
04 p0562 A69-15458

A search for periodic radiation from CP 1919 at 3.5 mm wavelength.  
14 p2529 A69-29978

Intergalactic H I emission at 21 centimeters.  
18 p3190 A69-34285

## PEPELIAEV, I. U. V.

Gas chromatographic determination of volatile oxygen-containing compounds in liquid biological media /Gazokhromatograficheskoe opredelenie letuchikh kislorodsoedzhazhchikh veshchestv v zhidkikh biologicheskikh sredakh/.  
13 p2216 A69-28627

## PEPELKO, W. E.

Adaptation of dogs to 60 and 90 mm. Hg CO sub 2 at a total pressure of 260 mm. Hg.  
03 p0375 A69-14071

## PEPER, K.

Two components of inward current in myocardial muscle fibers.  
23 p4095 A69-42080

## PEPIN, CH.

Optical correlation for signals coded by a pseudorandom phase law /Correlation optique pour signaux codes avec une loi de phase pseudo-alatoire/.  
24 p4282 A69-42742

## PEPIN, E.

Next steps in space law.  
20 p3638 A69-37126

## PEPIN, R. O.

Neon and xenon in carbonaceous chondrites.  
08 p1405 A69-20925

Trapped neon in meteorites. II.  
24 p4385 A69-43217

## PEPPER, H. W.

Modular hydraulic power systems for general aviation.  
[SAE PAPER 690329] 11 p1825 A69-24505

## PEPPER, S. V.

Enhanced photoemission by attenuated total reflection.  
23 p4191 A69-42194

## PEPPER, W. B.

A trailing camera technique for studying projectile penetration into earth materials.  
02 p0227 A69-11760

Recent flight-test results in deploying a 20-ft-diam ribbon parachute.  
11 p1823 A69-25383

Experimental research on parachute deployment load control by use of line ties.  
11 p1823 A69-25386

Parachute system to recover spinning shell subjected to 20,000 g's.  
[AIAA PAPER 68-937] 12 p2014 A69-26805

Development of a composite structure hypersonic parachute.  
[AIAA PAPER 68-963] 21 p3647 A69-39230

## PEPPERS, N. A.

Corneal damage thresholds for CO sub 2 laser radiation.  
11 p1830 A69-24844

Laser damage thresholds for ocular tissues.  
18 p3097 A69-34312

## PEPIATT, H. J.

A low-noise class-C oscillator using a directional coupler.  
02 p0220 A69-12452

## PERACCHIO, A. A.

Kinetic theory analysis for the flow field of a two-dimensional nozzle exhausting to vacuum.  
[AIAA PAPER 69-658] 17 p2893 A69-33490

## PERCEVAL, F.

Density measurements by means of the propagation of electron plasma waves in the presence of a strong magnetic field /Mesures de densites par propagation d'ondes plasma electroniques en presence d'un champ magnetique fort/.  
07 p1194 A69-19323

Spatial harmonics of the harmonic-frequency instabilities of the electron cyclotron half-frequency /Harmoniques spatiales des instabilites aux frequences harmoniques de la demi-frequence cyclotronique electronique/.  
13 p2314 A69-28364

## PERCIVAL, C. M.

Higher modes of longitudinal wave propagation in thin rods.  
04 p0678 A69-14869

Thermally generated stress waves in a dispersive elastic rod.  
09 p1617 A69-22010

## PERDANG, J.

Some remarks on the oscillations of cylinders and rings.  
01 p0148 A69-10124

## PERDRIEL, G.

Results of questionnaire given to flight personnel concerning the lighting of instrument panels /Resultats d'une enquete aupres du personnel navigant concernant l'eclairage des tableaux de bord/.  
05 p0715 A69-16622

Efficiency of visual functions as a function of the color of the instrument panel lighting /L'efficacite des fonctions visuelles en fonction de la couleur de l'eclairage des instruments de bord/.  
05 p0715 A69-16623

The corneal arc, a warning sign of atheromatosis in flight crews /L'arc corneen signe evocateur d'atheromatose chez les membres du personnel navigant/.  
05 p0711 A69-16631

The physiological effects of intermittent light /Les effets physiologiques de la lumiere intermittente/.  
13 p2211 A69-28595

Influence of illumination on the reading of navigation charts /Influence de l'eclairage sur la lecture des cartes de navigation/.  
24 p4271 A69-42605

## PERDRISAT, C. F.

Elastic scattering of 600 Mev protons from He sub 3.  
03 p0472 A69-13631

Polarization in proton-super 4 He scattering at 9 Mev.  
04 p0632 A69-14931

## PERDU, F.

Contribution to the study of the conduction model of single-crystal tungsten oxide /WO sub 3/ /Contribution a l'etude du mode de conduction dans l'oxyde de tungstene WO sub 3 monocristallin/.  
16 p2825 A69-31616

## PEREIRA, W.

Alcoholysis of the Merrifield-type peptide - Polymers with an anion exchange resin.  
24 p4279 A69-42719

Transesterification with an anion-exchange resin.  
24 p4280 A69-43359

## PEREK, L.

Highlights of Astronomy, International Astronomical Union, General Assembly, 13th, Prague, Czechoslovakia, August 22-31, 1967, Proceedings.  
05 p0820 A69-15838

## PEREL, J.

Alkali metal ion sources.  
[ECS PAPER 170B] 03 p0478 A69-13850

Focusing and deflection of heavy charged particle beams.  
[AIAA PAPER 69-283] 09 p1563 A69-21231

Research and development of a charged-particle bipolar thruster.  
[AIAA PAPER 67-728] 13 p2325 A69-28222

Hg super plus plus Cs charge transfer with commensurate ion engine neutralization.  
16 p2835 A69-31899

## PEREL, V. I.

Plasma diagnostics in a magnetic field with the aid of a thin cylindrical probe /O diagnostike plazmy v magnitnom pole s pomoshch'yu tonkogo tsilindricheskogo zonda/.  
02 p0292 A69-12551

Theory of lasers with an additional mirror. I /K teorii lazerov s dopolnitel'nym zerkalom. I/.  
04 p0612 A69-15373

Theory of a laser with an additional mirror. II /Teorii lazera s dopolnitel'nym zerkalom. II/.  
07 p1148 A69-18802

Stress tensor for a plasma in a high frequency electromagnetic field with account of collisions.  
14 p2493 A69-29644

Plasma diagnostics in a magnetic field using thin cylindrical probes.  
15 p2658 A69-30251

Theory of lasers with an ancillary mirror. I.  
16 p2797 A69-32114

On the theory of lasers with an additional mirror. II.  
21 p3736 A69-38944

Causes of the polarization of spontaneous recombination radiation in semiconductors of gallium arsenide type in an electric field /O prichinakh polarizatsii spontannogo rekombinatsionnogo izlucheniia poluprovodnikov tipa arsenida gallia v elektricheskom pole/.  
24 p4362 A69-43736

## PERELMAN, A. IA.

Solution of integral equations of the first kind with a product-type kernel.  
06 p0949 A69-17887

## PERELMAN, A. M.

Spectral density of a continuous random process at the output of a PAM system /Spektral'naya plotnost' nepreryvnogo sluchainogo protsessna na vykhode AIS/.  
01 p0050 A69-10211

Spectral density of a continuous random process at the output of a pulse-amplitude system.  
14 p2424 A69-28744

## PERELMAN, I. I.

Identification of a plant by stepwise approximation methods /Identifikatsiia ob'ekta metodami stupenchatoi approksimatsii/.  
03 p0409 A69-13072

## PERELMAN, T. L.

Realization of a numerical solution to a heat transfer problem /O realizatsii chislennogo resheniia odnoizmernoi zadachi perenosa tepla/.  
07 p1241 A69-18922

## PERELOMOV, A. M.

Quasiclassical approximation in ionization problems.  
09 p1543 A69-22653

- Relaxation of a quantum oscillator.  
18 p3152 A69-35126
- PERELYGIN, I. S.**  
Spectroscopic study of the thermodynamic dissociation constants of alkyl phenols /O vlianii elektrotritsatel'nykh zamestitelei na sposobnost' spirtov obrazovyyvat' mezhmolekuliarnye vodorodnye svyazi/.  
11 p1831 A69-24539
- PERELYGIN, V. P.**  
Investigation of the shape and drift of focusing ionospheric discontinuities /Issledovanie formy fokusiruiushchikh neodnorodnostei ionosfery i ikh dreifa/.  
14 p2436 A69-29054
- PEREPLIATNIK, P. A.**  
Reflex autodyne theory.  
16 p2761 A69-32477
- PEREPEL'KIN, N. F.**  
Testing procedures for phase meters with frequency modulation /Metodika ispytaniia fazometrov s chastotnoi modulatsiei/.  
14 p2497 A69-29797
- PEREPLETCHIKOVA, B. S.**  
Man's thermal tolerance - A review of the literature.  
10 p1645 A69-23494
- PEREPUKHOV, V. A.**  
Application of the Monte Carlo method to the calculation of the aerodynamic characteristics of bodies of complex form in a free molecular flow /Primenenie metoda Monte-Karlo k raschetu aerodinamicheskikh kharakteristik tel slozhnoi formy v svobodnomolekuliarnom poteke/.  
09 p1430 A69-21793  
Aerodynamic characteristics of a sphere and a blunt cone in a flow of highly rarefied gas.  
18 p3086 A69-34708
- PERES, A.**  
Renormalization of a finite matrix Hamiltonian.  
14 p2470 A69-29451
- PERESLAVTSEV, E. B.**  
Thermionic converter electrical characteristics with matrix circuit connections.  
14 p2400 A69-29225
- PERESSINI, E. R.**  
Effect of cross relaxation on the spectral flux and population inversion distributions in a CW laser oscillator. [IEEE PAPER T-2]  
05 p0776 A69-16327
- PERETZ, A.**  
A practical mathematical approach to the dendrite design of solid-propellant grains.  
22 p3997 A69-40553
- PERFILEV, O. V.**  
Sodium thermal reduction of titanium tetrachloride to titanium /Natrietermicheskoe vosstanovlenie titana iz tetrakhlorida/.  
07 p1164 A69-18785
- PERFILEV, V. A.**  
The Hamilton principle for a model of an inviscid compressible fluid in Euler coordinates /Printsip Gamil'tona dlia modeli neviazkoj szhimaemoi zhidkosti v eilerovykh koordinatakh/.  
11 p1875 A69-25483
- PERFILOVA, E. M.**  
Heat stress dynamics and limits of heat tolerance in man.  
08 p1263 A69-19940
- PERGAMENT, H. S.**  
Effects of altitude on radar attenuation in nonequilibrium afterburning rocket exhaust plumes.  
04 p0685 A69-14730
- PERGAMENT, M. I.**  
Fabry-Perot interferometer for studying the spatial distribution of the electron concentration in a plasma /Interferometr Fabri-Pero dlia issledovaniia prostanstvennogo raspredeleniia kontsentratsii elektronov v plazme/.  
14 p2451 A69-29777  
High-speed photography of plasmas in the region of soft X-radiation and ultraviolet radiation /Vysokoskorostnaia s'emka plazmy v oblasti miagkogo rentgenovskogo i ul'trafiioletovogo izlucheniia/.  
14 p2496 A69-29784  
Investigation of the broadening of plasmoids with the aid of quasi-optical microwave systems /Issledovanie rasshireniia plazmennyykh sgustkov pri pomoshchi kvaziophticheskikh SVCh-sistem/.  
14 p2497 A69-29793
- PERINA, J.**  
Theory of coherence.  
11 p1915 A69-24455
- Optical imaging with partially coherent non-thermal light. I - Propagation laws and generalized transfer functions.  
19 p3372 A69-35907
- Optical imaging with partially coherent non-thermal light. II - Reconstruction of object from its image and similarity between object and its image.  
19 p3372 A69-35908
- PERING, K.**  
Alicyclic hydrocarbons from an unusual deposit in Derbyshire, England - A study in possible diagenesis.  
17 p2917 A69-34184  
Synthesis of acyclic isoprenoids by the gamma-irradiation of isoprene.  
24 p4269 A69-43750
- PERINI, J.**  
An unusually simple technique for sidelobe reduction.  
12 p2040 A69-26473  
A time-sharing scheme to alleviate interference in collocated radio equipments.  
23 p4142 A69-42228
- PERINI, L. L.**  
One-dimensional combustor optimization. [AIAA PAPER 68-644]  
19 p3448 A69-35943
- PERINOTTO, M.**  
Observations of Comet Honda 1968c.  
20 p3614 A69-38252
- PERINOVA, V.**  
Optical imaging with partially coherent non-thermal light. II - Reconstruction of object from its image and similarity between object and its image.  
19 p3372 A69-35908
- PERKAS, M. D.**  
High-strength maraging steels.  
04 p0615 A69-14644  
High-strength maraging steel N18K9M5T/MS 200/.  
04 p0615 A69-14645  
High-strength maraging steel with a reduced cobalt concentration.  
04 p0616 A69-14649  
Structural changes during the martensitic ageing of a Fe-Ni-Ti alloy.  
05 p0783 A69-16813
- PERKINS, C. D.**  
The 1969 Louis H. Bauer Lecture-Beyond Apollo.  
21 p3856 A69-39167
- PERKINS, C. W.**  
Radiation effects in modified oxide insulators in MOS structures.  
06 p0976 A69-16876
- PERKINS, F. W.**  
Plasma-wave instabilities in the ionosphere over the aurora.  
01 p0075 A69-11222  
Drift instabilities in a uniformly rotating plasma cylinder.  
11 p1924 A69-24300  
Thomson scatter measurements of magnetic field effects on the Landau damping and excitation of plasma waves.  
16 p2818 A69-31678
- PERKINS, H. C.**  
Heat transfer at the interface of stainless steel and aluminum - The influence of surface conditions on the directional effect.  
01 p0177 A69-11406  
Transition from the turbulent to the laminar regime for internal convective flow with large property variations. [ASME PAPER 69-HT-9]  
24 p4304 A69-43559
- PERKINS, R. D.**  
High-velocity deformation properties of polyurethane foams.  
11 p1907 A69-25648
- PERKINS, R. W.**  
Cosmic-ray induced radioactivity in astronauts as a measure of radiation dose.  
11 p1831 A69-25463
- PERKINS, W. A.**  
Beam-injected and Lorentz-trapped hot electron plasma.  
15 p2661 A69-30925
- PERKO, L. M.**  
Large-amplitude motions of a liquid-vapour interface in an accelerating container.  
11 p1871 A69-25124
- PERL, W.**  
Input-output analysis for total input rate and total traced mass of body cholesterol in man.  
24 p4259 A69-42639
- PERLMAN, M.**  
Space applications of a minimization algorithm.  
23 p4146 A69-42535
- PERMINOV, M. D.**  
Method of determining the coefficients of external and internal energy dissipation during induced oscillations of a system of rods /Metod opredeleniia koefitsientov vnutrennego i vneshnego rassaiiania energii pri vyzhuzhdeniakh kolebaniikh sterzhnevoy sistemy/.  
14 p2537 A69-29748  
Theoretical and experimental investigation of the forced oscillations of truss elements with allowance for internal and external energy dissipation /Teoreticheskoe i eksperimental'noe issledovanie vyzhuzhdeniakh kolebaniikh sterzhnevyykh elementov s uchetom vnutrennego i vneshnego rassaiiania energii/.  
17 p3064 A69-33916
- PERMITIN, G. V.**  
Passage of electromagnetic waves through a plane gyrotropic layer - The case of multiple wave numbers /O prokhozhenii elektromagnitnykh voln cherez ploskii girotropnyi sloi - Sluchai kratnykh volnovnykh chisel/.  
03 p0397 A69-13709
- PERNICK, B. J.**  
An optical spectrum analyzer for power spectral density measurements.  
08 p1317 A69-21086
- PERNICKA, J.**  
Optical measurements through a rocket plume.  
02 p0248 A69-11765
- PERNOD, J.**  
Significance of external mechanograms in the interpretation of systolic murmurs when evaluating flight personnel /Interet des mecanogrammes externes dans l'interpretation des souffles systoliques lors de l'expertise du personnel navigant/.  
09 p1445 A69-22726  
Advantages of bloodless methods of measuring heart flow /Interet des methodes non sanglantes de mesure du debit cardiaque/.  
09 p1448 A69-22730  
Morphological variations of the arterial pulse wave - Experimental and clinical correlations /Variations morphologiques de l'onde pulsatile arterielle - Correlations experimentales et cliniques/.  
21 p3661 A69-39272  
Effects of inhalation of amyl nitrite on the carotidogram of a healthy subject /Action de l'inhalation de nitrite d'amyle sur le carotidogramme du sujet sain/.  
21 p3661 A69-39278  
Advantage of nonsurgical methods of measuring cardiac output in aerospace medicine /Interet des methodes non sanglantes de mesure du debit cardiaque en medecine aeronautique et spatiale/.  
23 p4088 A69-41813
- PERONA, G.**  
Internal gravity waves propagation across an exponentially decreasing magnetic field in a conducting fluid.  
11 p1877 A69-24564
- PERONA, G. E.**  
Cosmic rays diffusion in a cloud of outgoing scattering centers.  
09 p1575 A69-21598
- PEROV, B. V.**  
The influence of biaxial orientation on the fracture kinetics of polymethyl methacrylate /K voprosu vliianiia dvukhosnoi orientatsii na kinetiku razrusheniia polimetilmetakrilata/.  
18 p3162 A69-35354
- PEROV, S. P.**  
A technique for measuring the water vapour and atomic oxygen content in the upper atmosphere.  
20 p3543 A69-37798
- PEROVIC, L.**  
Effect of hypoxic hypoxia on the catecholamine content and some cytochemical changes in the hypothalamus of the cat.  
14 p2407 A69-29297  
The effect of supersonic flying on the urinary catecholamine excretion in pilots.  
24 p4265 A69-43370
- PERPER, F. A.**  
Structure and mechanical properties of materials after hydroexplosive forming.  
09 p1503 A69-21851
- PERREAULT, G. L.**  
Ground testing of inertial navigators to improve dynamic performance.  
14 p2479 A69-29490



## PERREAULT, P. D.

The geomagnetic and cosmic-ray storm of May 25/26, 1967. 22 p4004 A69-40307

## PERRET, L.-J.-M.

The French Jaguar navigation and sighting system /Le système français de navigation et de visée du Jaguar/. 16 p2809 A69-31760

## PERRI, E.

A new crucial experiment intended to prove the alleged validity of Einstein's second postulate regarding the modular invariability of the speed of light in vacuum /Una nuova esperienza cruciale intesa a comprovare l'asserita validità del 2° postulato di A. Einstein circa la invariabilità modulare della velocità della luce in vuoto/. 13 p2354 A69-28650

## PERRIMENT, A. D.

The effect of signal characteristics on reaction time using bisensory stimulation. 23 p4083 A69-41454

## PERRIN, B. J.

Space mechanism lubrication. 02 p0252 A69-11766

## PERRIN, J.

Analysis of the power output of gas turbines /Analyse du rendement énergétique des turbines à gaz/. 17 p3021 A69-33360

## PERROT, P.

Measurement of atmospheric pressure by rockets up to 95 km /Mesure de la pression atmosphérique jusqu'à 95 km par fusées/. 17 p2971 A69-33037

## PERROTE, A. I.

The principle of "heredity" in the theory of reliability. 08 p1319 A69-20346

## PERROUD, P.

Thermal and hydrodynamical study of a whirling layer of liquid hydrogen under high heat flux. 05 p0849 A69-16818  
Study of heat exchanges in cryogenic fluids /Etude des échanges thermiques dans les fluides cryogéniques/. 08 p1420 A69-19914

## PERRY, A. E.

Rough wall turbulent boundary layers. 18 p3125 A69-35387

## PERRY, A. H.

"Weather-type" frequencies and the recent temperature fluctuation. 13 p2222 A69-28474

## PERRY, C. C.

Plane-shear measurement with strain gages. 04 p0603 A69-15498

## PERRY, C. H.

Far infrared electronic and vibronic transitions of Nd super 3 super plus in the tysonite lanthanide fluorides. 13 p2316 A69-27628  
Optical phonons and symmetry of tysonite lanthanide fluorides. 22 p3993 A69-40729

## PERRY, C. L.

The galactic force law K sub z. 13 p2348 A69-27802  
A catalogue of four-color photometry of late F-type stars. 18 p3195 A69-34430

## PERRY, E. H.

T-burner data and combustion instability in solid propellant rockets. 20 p3586 A69-37224

## PERRY, J. H.

A miniature total temperature probe for boundary layer measurements in short running time hypersonic facilities. 19 p3293 A69-35751

## PERRY, J. L.

Cryostat design. 10 p1810 A69-24015

## PERRY, R. F.

The classification of partial differential equations in structural dynamics. 11 p1991 A69-25513

## PERSHIKOV, V. P.

Experimental investigation of the autocorrelation functions of meteor radio echoes /Eksperimental'noe

issledovanie avtokorrelatsionnykh funktsii meteor-nykh radioekho/. 02 p0207 A69-11690

Experimental investigation of autocorrelation functions of radio echoes from meteors. 13 p2224 A69-28721

## PERSHINA, V. P.

The effect of extreme cooling on globular and fibrillar proteins. 01 p0018 A69-11089

## PERSIDSKII, S. K.

Stability of a solution to linear systems of differential equations /K ustoiichivosti reshenii lineinykh sistem differentsial'nykh uravnenii/. 03 p0465 A69-13129

Certain theorems of Liapunov's second method /O nekotorykh teoremmakh vtorogo metoda Liapunova/. 15 p2654 A69-31259

Investigation of the stability of the solutions of differential equations in linear normalized spaces /K issledovaniyu ustoiichivosti reshenii differentsial'nykh uravnenii v lineinykh normirovannykh prostranstvakh/. 21 p3755 A69-39105

## PERSIANINOVA, N. R.

Investigation of nonpolar low-frequency latitude variations at several observatories /Issledovanie nepoliarnykh nizkochastotnykh variatsii shirot nekotorykh observatorii/. 11 p1956 A69-24401

An investigation of low-frequency nonpolar latitude variations at several observatories. 24 p4391 A69-43791

## PERSIN, S. M.

Equipment complex for automatically obtaining and processing meteorological radar data /Kompleks apparatury dlia avtomaticheskogo polucheniia i obrabotki radiolokatsionnykh meteorologicheskikh dannyykh/. 16 p2791 A69-32279

## PERSON, L. H., JR.

Flight test evaluation of a small one-man lunar flying device. [AIAA PAPER 68-240] 02 p0229 A69-12379

## PERSON, P.

The nature and significance of invertebrate cartilages. 15 p2555 A69-30412

## PERSON, S.

Calculated energy deposits from the decay of tritium and other radioisotopes incorporated into bacteria. 07 p1068 A69-19490

The mechanism of inactivation of T4 bacteriophage by tritium decay. 07 p1068 A69-19491

The conversion of amber suppressors to ochre suppressors. 07 p1068 A69-19493

Nonsense suppression in a multiautotrophic derivative of Escherichia coli 15T super minus - Identification and consequences of an amber triplet in the deoxyribomutase gene. 07 p1069 A69-19503

Evidence for a function for the UAA codon in vivo. 20 p3480 A69-38265

## PERSSON, H.

Penning discharge in a strongly inhomogeneous magnetic mirror field. 01 p0133 A69-11218

## PERSSON, L.

Hybrid motors in sounding rockets - Technical and economical advantages. 16 p2835 A69-31744

## PERT, G. J.

A simple model of the coaxial plasma gun with positive central electrode. 02 p0288 A69-12032

Observations of the flow in an electromagnetic shock tube. 06 p0968 A69-17764

## PERTSEV, A. N.

Determination of the temperature coefficient of box-type AMGK dynodes by the single-electron method /Opredelenie temperatur'nogo koefitsienta AMGK-korobchatykh dinodov odnoelektronnym metodom/. 11 p1846 A69-24626

## PERTSEV, A. V.

Unsteady thermal behavior of packaged micromodules /Nestatsionarnyi teplovoi rezhim pakirovannykh mikroblukov/. 23 p4136 A69-41558

## PERTUIS, J.

Substitution of the crystallographic facets with slip zones in a fatigue fracture by a heavy precipitation of titanium carbide /Substitution, dans une cassure due à la fatigue, de facettes cristallographiques aux plages à stries, à la faveur d'une précipitation dense de carbure de titane/. 03 p0447 A69-13600

## PERULLI, M.

Disintegration of a Langmuir wave - Instability criterion and growth rate /Desintegration d'une onde de Langmuir - Critere d'instabilité et taux de croissance/. 03 p0480 A69-14051

Disintegration of a Langmuir wave - Conditions of resonance and parametric amplification /Desintegration d'une onde de Langmuir - Conditions de résonance et amplification paramétrique/. 03 p0480 A69-14113

Spatial harmonics of the harmonic-frequency instabilities of the electron cyclotron half-frequency /Harmoniques spatiales des instabilités aux fréquences harmoniques de la demi-fréquence cyclotronique électronique/. 13 p2314 A69-28364

## PERVACHEV, S. V.

Radio Control of Rocket Missiles and Space Vehicles /Radioupravlenie reaktivnymi snaryadami i kosmicheskimi apparatami/. 20 p3574 A69-37232

## PERVAIA, T. I.

Selection of materials for the electrode surfaces in electrostatic analyzers /Vybor materialov dlia poverkhnostei elektrodov v elektrostatoicheskikh analizatorakh/. 14 p2446 A69-29048

## PERVOVA, L. IA.

Investigation of some properties of iron-doped gallium arsenide. 04 p0643 A69-15263

Possibility of constructing a high-speed switch from a gallium arsenide crystal doped with iron /O vozmozhnosti sozdaniia bystrodeistviushchego perekliuchatel'ia iz kristalla arsena galliia legirovannogo zhelezom/. 13 p2319 A69-27898

## PERVOZVANSKII, A. A.

Optimal selection of the scale factor in the case of a limited range of the measuring instrument /Optimal'nyi vybor masshtabnogo koefitsienta pri ogranichennoi diapazone izmeritel'nogo pribora/. 12 p2079 A69-25966

## PERVYSHIN, N. V.

Indirect method of determining the airflow rate through the inner contour and the gas temperature in front of the turbine of a ducted-fan engine /Kosvennyi metod opredeleniia rashkoda vozdukhha cherez vnutrennii kontur i temperaturu gaza pered turbinoi dvukhkonturnogo dvigatel'ia/. 18 p3086 A69-34986

## PERY, R.

Contribution to the study of ionized wakes in the free quasi-molecular regime /Contribution à l'étude des sillages ionisés dans le régime quasi-moléculaire libre/. 06 p0966 A69-17639

## PERZYNA, P.

On thermodynamic foundations of viscoplasticity. 02 p0343 A69-12281

Thermodynamics of a rate sensitive plastic material. 05 p0834 A69-15792

On thermodynamics of a rate sensitive plastic material. 11 p1994 A69-25601

## PESCHKA, W.

High-temperature energy systems with plasma reactors and inductive magnetoplasma dynamic converters. 10 p1738 A69-23489

Experimental work on inductive magnetoplasma dynamic converters. 10 p1638 A69-23490

The optimization of MHD induction converters. 13 p2207 A69-27504

Power supply and power converters in satellites and space vehicles /Energieversorgung und Energiewandler in Satelliten und Raumfahrzeugen/. 13 p2209 A69-27917

Recent results in the field of inductive magnetoplasma dynamic (MPD) converters /Ueber einige neuere Ergebnisse auf dem Gebiet der induktiven magnetoplasma dynamischen (MPD) Wandler/. 22 p3999 A69-39905

- PESHAK, G. M.**  
The influence of weld defects on performance.  
11 p1892 A69-24932
- PESHEKHONOV, V. D.**  
Effect of the method of surface treatment on the porosity of welds in VT5-1 titanium alloy.  
06 p0945 A69-17897
- PESHEKHONOV, V. G.**  
Statistical estimation of side radiation of a mirror antenna.  
04 p0577 A69-14787
- PESHTMALDZHIAN, D. V.**  
Bending of a transversely isotropic plate with a circular hole /Ob izgibe transversal'no-izotropnoi plastinki s krugovym otverstiem/.  
15 p2707 A69-30580
- PESIN, V. I.**  
A special case of motion of a solid body of variable mass, having cavities filled with an ideal fluid of variable mass, about a fixed point /O dvizhenii tverdogo tela peremennoi massy, imeiushchego polosti, zapolnennye ideal'noi zhidkost'iu peremennoi massy, okolo nepodvizhnoi tochki, v chastnom sluchae/.  
21 p3771 A69-39106
- PESKIN, R. L.**  
Ignition and extinction of liquid fuel drops - Numerical computations.  
13 p2379 A69-28456  
Stability of a plane fluid interface in the presence of a transverse electrostatic field.  
15 p2652 A69-30911
- PESKOV, B. E.**  
Relation between the spatial structure of radar echoes and the objective characteristics of fronts /Sviaz' prostranstvennoi struktury radiolokatsionnogo ekha s ob'ektivnymi kharakteristikami frontov/.  
14 p2474 A69-29738
- PESKOV, O. G.**  
Role of vacancies and substitutional impurities in the formation of the 1.7-ev luminescence band of gallium phosphide.  
04 p0643 A69-15258
- PESKOVATSKII, S. A.**  
Three-level andalusite paramagnetic amplifier for the 3 cm range.  
04 p0577 A69-14780  
Four-level andalusite paramagnetic amplifier for the 3 mm range.  
04 p0577 A69-14781  
Trivalent-iron-doped andalusite as crystal for microwave waves.  
[IEEE PAPER C-2] 07 p1150 A69-19049  
Paramagnetic amplification in the millimeter range /Paramagnitnoe usilenie v millimetrovom diapazone/.  
19 p3333 A69-35881
- PESQUIES, P.**  
Analysis of in-flight illnesses observed in the French Air Force from 1961 to 1967 /Analyse des malaises en vol constatés dans l'Armée de l'Air Française de 1961 à 1967/.  
21 p3666 A69-39270  
In-flight medical disorders in the French Air Force - Analytical study from 1961 to 1968 /Les malaises en vol dans l'Armée de l'Air Française - Etude analytique de 1961 à 1968/.  
24 p4277 A69-43383
- PESTOV, E. G.**  
Frequency characteristics of a helium-neon laser in a transverse magnetic field /Chastotnye kharakteristiki geli-neonovogo lazera v poperechnom magnitnom pole/.  
11 p1894 A69-24622  
Energy characteristics of a helium-neon laser in a transverse magnetic field /Energeticheskie kharakteristiki geli-neonovogo lazera v poperechnom magnitnom pole/.  
12 p2104 A69-26023  
Collision integral in the equation for the density matrix /Ob integrale stolkovenii v uravnenii dlia matritsy plotnosti/.  
14 p2458 A69-29169
- PESTOV, I. D.**  
Reactions of the cardiovascular and respiratory systems of cosmonauts under conditions of orbital flight on the Voskhod spacecraft /Reaktsii serdechnosudistoi i dykhatel'noi sistem kosmonavtov v usloviakh orbital'nogo poleta na kosmicheskom korabe "Voskhod"/.  
07 p1061 A69-18584
- Some problems of weightlessness in space medicine /Nekotorye problemy nevesomosti v kosmicheskoi meditsine/.  
17 p2909 A69-33384
- PESTRIKOV, V. B.**  
Locking of tracking systems with a variable vector signal.  
11 p1861 A69-25716  
Influence of synchronization inaccuracy on the signal-to-noise ratio during the reception of signals with pseudonoise modulation /Vliianie netochnosti sinkhronizatsii na otnoshenie signal/shum pri prieme signalov s psevdoshumovoi modulatsiei/.  
15 p2563 A69-30141
- PETCH, N. J.**  
Metallographic aspects of fracture.  
13 p2274 A69-27225
- PETCU, V.**  
Plastic calculation of continuous steel beams /Calculul plastic al grinzilor continue de otel/.  
05 p0837 A69-16035
- PETER, A. F.**  
Practical holographic mode shapes on turbine blades.  
[ASME PAPER 69-VIBR-32] 10 p1806 A69-24174  
Practical methods to obtain improved machine tool dynamic performance.  
22 p3928 A69-40672
- PETERKA, J. A.**  
Effects of sound on separated flows.  
18 p3124 A69-35384  
Natural convection from a horizontal cylinder at moderate Grashof numbers.  
21 p3851 A69-38975
- PETERMANN, K.**  
Data processing components for extraterrestrial experiments /Bausteine fuer die Datenaufbereitung bei extraterrestrischen Experimenten/.  
16 p2755 A69-31858
- PETERS, C. E.**  
Theoretical and experimental studies of ducted mixing and burning of coaxial streams.  
[AIAA PAPER 69-85] 06 p0984 A69-18082  
Turbulent transport properties in subsonic coaxial free mixing systems.  
[AIAA PAPER 69-681] 17 p2956 A69-33495
- PETERS, C. F.**  
Numerical regularization.  
02 p0322 A69-12268
- PETERS, C. J.**  
Legal responsibility of government for commercial air safety.  
06 p1042 A69-16848
- PETERS, D. H.**  
Unutilized ideas in university laboratories.  
15 p2720 A69-30596
- PETERS, D. W.**  
Forward transient characteristics of gold-doped silicon p super plus-n-n super plus diodes.  
07 p1101 A69-18652
- PETERS, E. T.**  
Diboride materials, candidates for aerospace applications.  
19 p3355 A69-35526
- PETERS, J. E.**  
Recent developments in rhenium and rhenium alloy powder metallurgy.  
20 p3562 A69-37749
- PETERS, J. T.**  
Development of an advanced space radiation system.  
23 p4190 A69-42304
- PETERS, L. E., JR.**  
Measured thermal-neutron-flux perturbations in cylinders in a test reactor.  
20 p3575 A69-38274
- PETERS, L., JR.**  
A Poynting vector approach to creeping-wave analysis of the sphere.  
08 p1274 A69-20046  
Analysis of aperture radiation from an axially slotted circular conducting cylinder using geometrical theory of diffraction.  
11 p1836 A69-24993  
Aperture radiation from an axially slotted elliptical conducting cylinder using geometrical theory of diffraction.  
22 p3914 A69-40703
- Evaluation of edge-diffracted fields including equivalent currents for the caustic regions.  
23 p4136 A69-41583  
Equatorial plane pattern of an axial-TEM slot on a finite size ground plane.  
23 p4116 A69-41588
- PETERS, O.**  
Problem of the operational reliability of the flight control systems and automatic piloting of aircraft /Zum Problem der technischen Zuverlässigkeit von Flugregelungssystemen sowie der Automatisierung der Flugführung von Luftfahrzeugen/.  
08 p1255 A69-20720
- PETERS, T.**  
Electric rocket propulsion systems /Elektrische Raketentriebe/.  
13 p2325 A69-28255
- PETERS, TH.**  
Activities in the field of MPD-propulsion in Germany.  
[AIAA PAPER 69-279] 09 p1564 A69-21238
- PETERS, W. L.**  
Motion of the sun with respect to the galaxies and the kinematics of the local supercluster.  
03 p0513 A69-13769  
Solar motion with respect to the high-velocity HI clouds and to the local group.  
22 p4035 A69-41209
- PETERSEN, C. F.**  
Shock wave data and the study of the earth.  
22 p3937 A69-40188
- PETERSEN, E. E.**  
Relationship between the limiting pressure and the solid temperature for the deflagration of ammonium perchlorate.  
13 p2324 A69-27364
- PETERSEN, E. W.**  
Infrared measurements of variations in stratospheric water vapour.  
20 p3535 A69-38261
- PETERSEN, F. B.**  
A bicycle ergometer for investigating the effect of eccentric exercise with arms and legs - A new modification of the Krogh's bicycle ergometer.  
21 p3663 A69-38902
- PETERSEN, N. J.**  
Release of microbial contamination from fractured solids.  
11 p1828 A69-25461  
Release of microbial contamination from fractured solids.  
20 p3475 A69-37614
- PETERSEN, R. E.**  
Effects arising from the application of electrostatic fields on the burning of solid propellants.  
[WSCI PAPER 68-24] 07 p1241 A69-18366
- PETERSON, A.**  
On estimating noisiness of aircraft sounds.  
13 p2216 A69-28660
- PETERSON, A. W.**  
The coronal brightness at 2.23 microns.  
10 p1789 A69-24131
- PETERSON, B.**  
Experiences with a large space environment simulation facility.  
15 p2586 A69-30386
- PETERSON, B. A.**  
Evidence of light variation in NGC 1275.  
14 p2517 A69-29086
- PETERSON, C. W.**  
An experimental study of laminar hypersonic blunt cone wakes.  
[AIAA PAPER 69-714] 17 p2894 A69-33500
- PETERSON, D. A.**  
Turbulent Hartmann flow /Turbulentnoe Gartmanovo techenie/.  
14 p2500 A69-29908
- PETERSON, D. M.**  
Departures from LTE in the hydrogen lines of late B stars.  
24 p4376 A69-42665
- PETERSON, D. W.**  
A proposed method for predicting the phase behavior of V.L.F. radio signals.  
07 p1123 A69-18816
- PETERSON, E.**  
Trace porphyrin complexes - Fluorescence detection by demetallation with methanesulfonic acid.  
24 p4279 A69-42557



## PETERSON, E. W.

Langmuir probe response in a turbulent plasma.  
[AIAA PAPER 69-698] 17 p3010 A69-33438

## PETERSON, F. C.

Elastic scattering of negative pions from deuterons at 2.01, 3.77, and 5.53 GeV/c. 17 p3007 A69-32885

Pi super minus p elastic scattering at 2.51, 2.76, and 3.01 GeV/c near t approximately equal to minus 3 /GeV/c super 2. 24 p4352 A69-43049

## PETERSON, J.

Adhesive joints for prestressing wood beams. 24 p4323 A69-43425

## PETERSON, J. H.

Friction welding of aerospace materials. 09 p1508 A69-22335

## PETERSON, J. M.

The dielectric constants of nonconducting suspensions. 13 p2287 A69-28677

## PETERSON, L. E.

The X-ray spectra of Cygnus XR-1 and the Crab Nebula. 05 p0813 A69-15846

Solar and cosmic X-rays above 7.7 kev. 09 p1578 A69-22171

Solar and cosmic X-rays above 7.7 kev. 09 p1579 A69-22173

The hard solar X-ray spectrum observed from the third orbiting solar observatory. 20 p3593 A69-38166

The time structure of solar X-ray bursts above 7.7 kev. 24 p4371 A69-43610

## PETERSON, L. R.

The relation between ionization yields, cross sections and loss functions. 05 p0795 A69-15660

Semi-empirical cross sections and the airglow and aurora. 21 p3713 A69-38527

## PETERSON, M. A.

Distribution of blackbody cavity radiation in a moving frame of reference. 08 p1380 A69-19784

## PETERSON, M. B.

Nonmetallic bearing materials. 14 p2454 A69-28851

Geometric optimization of concentrated contacts for minimum microslips. 15 p2629 A69-30903

Mechanical failure technology - A coordinated Government program. 18 p3144 A69-34492

## PETERSON, O. G.

Experimental measurement of the critical population inversion for the dye solution laser. [IEEE PAPER A-2] 05 p0777 A69-16307

## PETERSON, P. D.

Maser amplification of 9.5-gigahertz elastic waves in sapphire doped with divalent nickel impurity ions. 16 p2795 A69-31554

## PETERSON, P. O.

Detection of gas emboli associated with decompression using the Doppler flowmeter. 21 p3663 A69-38915

## PETERSON, R. E.

Design relations for the low-cycle notch effect and a chart of conditions for crack propagation. 07 p1235 A69-19383

## PETERSON, R. K.

Some applications of anamorphic holography. 17 p2976 A69-34062

## PETERSON, V. L.

Detailed maps of tropical 6300 angstrom units nightglow enhancements and their implications on the ionospheric F2 layer. 01 p0068 A69-11113

Aerodynamics of bodies of revolution in coning motion. [AIAA PAPER 68-20] 04 p0542 A69-14714

## PETHE, H.

The theory of atmospheric turbulence /Zur Theorie der atmosphärischen Turbulenz/. 12 p2125 A69-25894

The statistical theory of turbulence and the turbulent diffusion of impurities in the atmosphere /Die

statistische Theorie der Turbulenz und der turbulenten Diffusion von Beimengungen in der Atmosphäre/. 20 p3570 A69-37426

## PETIT, J. P.

Theoretical and experimental /shock tube/ study of the phenomena accompanying the loss of equilibrium in a closed-cycle MHD generator /Etude theorique et experimentale, en tube a choc, des phenomenes accompagnant la mise hors d'equilibre dans un generateur MHD en cycle ferme/. 10 p1737 A69-23468

## PETIT, J.-L.

A plane reaction cell unit for differential flux calorimetry /Bloc a cellules reactionnelles planes pour calorimetrie differentielle a flux/. 05 p0764 A69-16607

## PETIT, J.-P.

Study of validity of logarithmic temperature laws /Etude de la validite des lois logarithmiques de temperature/. 08 p1420 A69-19877

Electrical characteristics of a linear Faraday generator using a binary mixture of noble gases with nonequilibrium ionization /Caracteristiques electriques d'un generateur lineaire de Faraday utilisant un melange binaire de gaz rares, avec ionisation hors d'equilibre/. 08 p1359 A69-19880

The analogy between momentum and energy transfers in turbulent convection /Sur l'analogie des transferts de quantite de mouvement et d'energie en convection turbulente/. 09 p1480 A69-21687

Theoretical performances of a Faraday-time generator with nonequilibrium ionization in the conversion gas /Performances theoriques d'un generateur du type de Faraday avec ionisation hors d'equilibre dans le gaz de conversion/. 13 p2314 A69-28361

Regime instability in a Hall generator, with ionization outside equilibrium /Instabilite de regime dans un generateur de Hall, avec ionisation hors d'equilibre/. 15 p2658 A69-30298

## PETIT, M.

Behavior of narrow absorption lines of calcium in Nova Delphini 1967 /Comportement des raies d'absorption fines du calcium dans la nova delphini 1967/. 13 p2346 A69-27709

A study of the daytime electron temperature. 15 p2603 A69-31402

## PETIT, P.

Design of a double focalization in a hydrogen maser. 12 p2105 A69-26050

Efficiency of a single-hyperfine-state selector for hydrogen masers. 18 p3153 A69-35306

## PETIT, P. H.

A method of predicting the nonlinear behavior of laminated composites. 07 p1170 A69-18710

Primer on Composite Materials - Analysis. 12 p2179 A69-26238

## PETKOV, A. P.

Diagrams for high-temperature measurements. 03 p0481 A69-14146

## PETLEY, B. W.

The Josephson effects. 11 p1938 A69-25240

## PETO, J.

An analysis of sources of error in typical pressure measurements in a blowdown supersonic tunnel. 19 p3292 A69-35728

## PETON, A.

Spectroscopy and spectral classifications /Spectroscopie et classifications spectrales/. 12 p2155 A69-26122

B stars with emission lines - A mystery in the sky /Les etoiles B a raies d'emission - Un mystere dans le ciel/. 16 p2855 A69-31828

## PETRAKOVSKIL, G. A.

Magnetic crystallographic anisotropy of lithium-gallium ferrite single crystals /Magnitnaia kristallograficheskaia anizotropia monokristallov liti-galievyykh ferritov/. 12 p2144 A69-26721

Magnetocrystalline anisotropy of single crystals of lithium gallium ferrites. 21 p3781 A69-39134

## PETRAS, E.

Microbiological studies on the radiation environment of the ionosphere and stratosphere. 01 p0018 A69-11088

## PETRASEK, D. W.

Tungsten alloy fiber reinforced nickel base alloy composites for high temperature turbojet engine applications. 14 p2462 A69-29011

## PETRASH, G. G.

Effect of temperature on the properties of pulsed laser action on electron transitions in diatomic molecules. 09 p1520 A69-22657

Investigation of the current change in a CO sub 2 - He discharge under the effect of emission /Issledovanie izmeneniiaтока v razriade CO sub 2 - N sub 2 - He pod vlianiem generatsii/. 14 p2458 A69-29166

## PETRASHEIN, G. I.

Engineering equations of oscillations of nonideal elastic thin plates /Ob inzhenernykh uravneniakh kolebani neideal'no-uprugikh tonkikh plastin/. 19 p3437 A69-35988

## PETRAVIC, M.

The ion cyclotron drift loss-cone instability in mirror magnetic wells. 02 p0288 A69-12165

## PETRE, A.

The lateral buckling of oscillating beams, taking into account torsional stresses /Le flambage lateral des poutres oscillantes en tenant compte aussi des sollicitations de torsion/. 15 p2712 A69-31015

Acroelastic divergence on a lifting surface due to the combined effects of forward resistance and lift caused by wind /Divergenta aeroelastica la suprafete portanta datorita efectelor combinate de rezistenta la inaintare si portanta produse de vint/. 16 p2870 A69-31557

## PETRENKO, A. I.

Determination of an inverse Laplace transform without factorization of the circuit function /K opredeleniiu obratnogo preobrazovaniia Laplasa bez razlozheniia skhemnoi funktsii na mnozhiteli/. 09 p1472 A69-21785

## PETRENKO, I. U. I.

The modelling of irrational transfer functions. 09 p1476 A69-22677

## PETRENKO, L. M.

Changes in content of dry material, sugars, and ascorbic acid in plants after action of cosmic flight factors on the seeds of these plants. 10 p1645 A69-23495

## PETRENKO, M. P.

Natural oscillations of a liquid with a free surface and of an elastic bottom of a cylindrical cavity /Sobstvennye kolebaniia zhidkosti so svobodnoi poverkhnosti i u prugogo dnishcha tsilindricheskoi polosti/. 21 p3693 A69-38720

## PETRENKO, M. S.

Thermal expansion coefficients of a niobium-zirconium-titanium alloy and plexiglass at temperatures ranging from 10 to 300 K /Koefitsienti termicheskogo rozshireniiia splavu niobii-titaniia i orgskla v intervali temperatur 10-300 deg K/. 11 p1905 A69-24917

## PETRENKO, N. V.

Fundamentals of the construction of charts of vertical wind shear in jet streams /Osnovy postroeniia kart vertikal'nykh sdvigov vetra v struinykh techeniakh/. 14 p2473 A69-29730

## PETRENKO, V. G.

Application of a power series technique to the solution of a problem for a parabolic equation /Zastosuvaniia metodu stepenevikh riadiv do rozv'iazanniia odnei zadachi rinvnaniia parabolicheskogo tipu/. 09 p1532 A69-21628

Heat flux in a composite plate in the presence of a fixed point source /Potok tepla v sostavnoi plastine pri naichii napodvizhnogo tochechnogo istochnika/. 17 p3068 A69-33126

## PETRENKO, V. I.

Device for obtaining and investigating long high-current high-pressure arcs /Ustanovka dlia polucheniia i issledovaniia sil'notochnykh dlinnykh dug vysokogo davleniia/. 09 p1547 A69-21593

## PETREQUIN, P.

Study of creep mechanisms in beryllium between 300 and 800 deg C /Etude des mecanismes de fluage du beryllium entre 300 et 800 deg C/. 17 p2986 A69-32912

## PETRESKU, M.

Electrical properties of thin PbTe semiconductor films /Elektricheskie svoystva tonkikh poluprovodnikovyykh plенок PbTe/.

21 p3782 A69-39242

## PETRETIS, B. P.

Characteristics of a contact between gold and a polycrystalline cadmium selenide film /Svoystva kontakta zolota s polikristallicheskim sloem selenistogo kadmia/.

19 p3384 A69-36480

## PETRICEKS, J.

Thomson scatter measurements of magnetic field effects on the Landau damping and excitation of plasma waves.

16 p2818 A69-31678

## PETRICH, I. I.

Method of solving systems of equations for the equilibrium of gaseous combustion products with the aid of an analog model /Metod resheniya sistem uravnenii ravnovesiia gazovykh produktov sgoraniia pri pomoshchi analogovoi modeli/.

15 p2717 A69-30862

## PETRICK, M.

Analytical and experimental studies of liquid-metal Faraday generators.

13 p2205 A69-27485

Condensing injector experiments and analysis of performance with supersonic inlet vapour.

13 p2372 A69-27486

Direct current MHD generators with variable conductivity, velocity, and magnetic field.

21 p3649 A69-39027

## PETRIE, E. M.

High-temperature structural adhesives.

15 p2642 A69-30329

## PETRIE, L. E.

The high-latitude ionosphere.

20 p3530 A69-37868

On the prediction of F-layer penetration frequencies.

20 p3530 A69-37871

## PETRIE, S. L.

Direct analysis of the properties of molecular oxygen in hypervelocity flows.

13 p2302 A69-28265

## PETRINI, D.

The excitation cross-sections in Fe XIV.

08 p1392 A69-20563

## PETRISHCHEV, V. S.

Calculation of a secondary flow in a turbulent fluid flow /Raschet vtorichnogo techeniia v turbulentnom potoke zhidkosti/.

24 p4303 A69-43501

## PETRISHCHEVA, I. S.

Radiation effects of the American high-altitude thermonuclear explosion, "Star Fish," measured by the "Cosmos-6" satellite.

20 p3532 A69-37960

## PETROF, R. C.

Thermal stresses in a rotating cylinder heated by solar radiation.

16 p2871 A69-31901

## PETROSIAN, L. A.

Differential games and pursuit problems /Differentsialnye i Verfolgungsprobleme/.

05 p0788 A69-16536

## PETROSIAN, V.

Fine-structure transitions and the background microwave radiation.

09 p1590 A69-21445

The log N-log S relation and luminosity functions for radio sources in Friedmann universes.

10 p1789 A69-24134

## PETROSANTS, M. A.

Influence of orography on general atmospheric circulation /Vliianie orografii na obshchuiu tsirkulatsiiu atmosfery/.

14 p2478 A69-29835

## PETROSKI, H. J.

Controllable states of elastic heat conductors.

03 p0529 A69-13957

## PETROU, N.

Description of a time indicator /Description d'un marqueur temps/.

05 p0762 A69-15825

## PETROV, A. A.

A mathematical model of the oculomotor apparatus /Matematicheskaiia model' glazodvigatel'nogo apparata/.

20 p3470 A69-37245

## PETROV, A. G.

Energy transfer from a radiating sphere to a medium with molecular heat conduction /Perenos energii ot izluchaiushchei sfery v srede s molekuliarnoi teploprovodnost'iu/.

05 p0845 A69-15782

Energy transfer from a radiating sphere into a medium with molecular heat conduction.

18 p3230 A69-35034

Unsteady energy transport from a radiating sphere in a medium with molecular thermal conductivity /Nestatsionarnyi perenos energii ot izluchaiushchei sfery v srede s molekuliarnoi teploprovodnost'iu/.

18 p3231 A69-35325

## PETROV, A. I.

A method of synthesis of self-adjusting systems for stabilization of dynamic characteristics.

03 p0410 A69-13256

Mosaic block misorientation and the strengthening of aluminium by low-temperature predeformation.

20 p3562 A69-37819

## PETROV, A. N.

Detection of latent forms of motion sickness /K voprosu o vyivlenii skrytykh form ukachivaniia/.

20 p3472 A69-37263

## PETROV, A. S.

Thermodynamic analysis of the synthesis of boron nitride with the aid of certain gas-phase reactions.

17 p2992 A69-33432

## PETROV, A. Z.

Space and Time in Modern Physics, All-Union Symposium on the Philosophical Problems of Einstein's Theory of Gravitation and Relativistic Cosmology, 2nd, Kiev Ukrainian SSR, June 1-4, 1966, Transactions /Prostranstvo i Vremia v Sovremennoi Fizike, Vsesoiuznyi Simpozium po Filosofskim Problemam Teorii Tiagoteniia Einsteina i Relativistskoi Kosmologii, 2nd, Kiev, Ukrainian SSR, June 1-4, 1966, Materialy/.

14 p2482 A69-28856

Physical space-time and the theory of physical measurements /Fizicheskoe prostranstvo-vremia i teoriia fizicheskikh izmerenii/.

14 p2484 A69-28862

Simulation of the paths of test bodies in a gravitational field /O modelirovanii putei probnykh tel v pole gravitatsii/.

21 p3772 A69-39621

## PETROV, B. E.

Efficiency of varactor frequency multipliers with an open circuit tuned to the second harmonic /K.P.D. varaktornykh umnozhitel' chastoty s kholostym konturom, nastroennym na vtoruiu harmoniku/.

12 p2043 A69-26888

## PETROV, B. I.

Limiting amplitude of the output shaft of a servo drive /Predel'naia amplituda kolebaniia vykhodnogo vala slediashchego privoda/.

04 p0584 A69-15417

## PETROV, B. K.

Effect of a distributed base resistance on the emitter current density in drift transistors with a circular emitter /Vliianie raspredelennogo soprotivleniia bazy na plotnost' emiternogo toka v dreifovykh triodakh s krugovym emitterom/.

11 p1853 A69-25565

Dependence of current gain on the surface recombination rate in a nondrifting triode /Zavisimost' koefitsienta usileniia po toku ot skorosti poverkhnostnoi rekombinatsii v bezdreifovoi triode/.

13 p2236 A69-28547

## PETROV, B. M.

Calculation of passive magnetic arrays /Raschet passivnykh magnitnykh reshetok/.

13 p2235 A69-28513

Synthesis of passive antenna arrays arranged on a cylinder /Sintez passivnykh antennykh reshetok, raspolozhennykh na tsilindre/.

23 p4138 A69-41936

## PETROV, B. N.

Analysis and Synthesis of Automatic Control Systems /Analiz i Sintez Sistem Avtomaticheskogo Upravleniia/.

01 p0051 A69-10793

Co-operation of the USSR with other countries in the study and peaceful uses of outer space.

06 p1043 A69-17054

Space research in the USSR and the Venera 4 experiment.

12 p2160 A69-26921

Some problems of the control of spaceships.

16 p2867 A69-31742

Theory of branching systems /K teorii vetviashchikh-sia sistem/.

20 p3509 A69-37075

Certain problems of structural synthesis of spatial motion control systems for an orbital aircraft in the earth's atmosphere /Nekotorye voprosy sinteza strukturnykh sistem upravleniia prostranstvennykh dvizheniem orbital'nogo samoleta v atmosfere zemli/.

21 p3766 A69-39645

## PETROV, E. A.

Investigation of the dependences of combustion processes in a turbulent flow of a homogeneous mixture /Issledovanie zavisimosti protsessov goreniia v turbulentnom potoke odnorodnoi smesi/.

17 p3069 A69-33140

## PETROV, G. D.

Aperture distortions of the spectrum of radiation diffused by a plasma /Aperturnye iskazheniia spektra rassaiannogo plazmoi izlucheniia/.

22 p3982 A69-40799

## PETROV, G. I.

Soviet studies of the moon, the planets, and interplanetary space /Sovetskie issledovaniia luny, planet i mezplanetnogo prostranstva/.

[UN PAPER 68-95719] 06 p1000 A69-17055

Why should man subdue cosmic space/ques/ /Zachem chelovechestvu zavoevanie kosmicheskogo prostranstva/ques/.

14 p2527 A69-29895

Determination of the supersonic flow trailing shock wave position in the channels of an air-breathing jet engine.

16 p2768 A69-31743

Advances in space exploration /Razvitie kosmicheskikh issledovani/.

18 p3201 A69-35163

## PETROV, G. V.

Equivalent circuits for an approximate calculation of the transient characteristics in uniform and nonuniform distributed RC structures /Ekvivalentnye skhemy dlia priblizhennogo rascheta perekhodnykh kharakteristik v odnorodnykh i neodnorodnykh raspredelennykh RC-strukturakh/.

01 p0046 A69-10779

## PETROV, I. I.

An electron diffraction study of the semiconductor CuAsSe sub 2.

02 p0298 A69-12045

Electron-diffraction determination of the structures of Ge sub 2 Se sub 2 Te sub 5 and GeSb sub 4 Te sub 7.

02 p0298 A69-12046

## PETROV, I. U. B.

Zone structure of yttrium garnet ferrite crystals grown by the Czochralski method from an inductor crucible /O zonal'noi strukture kristallov itrievogo ferrito-granata, vyrashchennykh metodom Chokhral'skogo iz induktora-tigla/.

13 p3231 A69-28001

## PETROV, I. U. N.

Control of the frequency of a CO sub 2 laser by a boron trichloride filter.

08 p1323 A69-19804

## PETROV, I. U. P.

Variational Methods in Optimum Control Theory.

01 p0053 A69-11107

Stress analysis of an elastic noncircular orthotropic conical shell /K raschetu na prochnost' uprugoi nekrugovoi ortotropnoi konicheskoi obolochki/.

04 p0673 A69-14494

## PETROV, I. U. V.

Current oscillations in GaAs, associated with the electroacoustic effect /Kolebaniia toka v GaAs, sviazannye s akusto-elektricheskimi efektami/.

13 p2318 A69-27892

## PETROV, R. P.

Influence of dissociation of the inversion on a CO sub 2 laser with pulsed pumping.

18 p3151 A69-34620

## PETROV, V. A.

Formation energy of heat vacancies in molybdenum and their concentration.

02 p0266 A69-12184

Investigation of Gunn-effect pulse generators operating at decimeter wavelengths /Issledovanie impul'snykh generatorov Ganna detsimetrovogo diapazona voln/.

06 p0895 A69-17459

Utilization of presprayed subsidiary metals for preparing GaAs-Sn, GaAs-In, and GaAs-Pb ohmic contacts /Ispos'zovanie predvaritel'no napylennykh vspomagatel'nykh metallov dlia sozdaniia omicheskikh kontaktov GaAs-Sn, GaAs-In, GaAs-Pb/.

10 p1748 A69-24214



- Measuring procedure and experimental equipment for determining the integral normal emissivity of structural materials at temperatures ranging from 1200 to 3000 K /Metodika izmerenii i eksperimental'naia ustanovka dlia opredeleniia integral'noi normal'noi izluchatel'noi sposobnosti konstruktivnykh materialov v interval'e temperatur ot 1200 do 3000 deg K/. 11 p1888 A69-25230
- Analytical design of an optimal controller for stabilizing a bounded volume of liquid /Analiticheskoe konstruirovaniie optimal'nogo regulatora dlia stabilizatsii ogranichenennogo ob'ema zhidkosti/. 11 p1966 A69-25330
- High-melting-point oxide and carbide materials for electrode walls of MHD generators /Tugoplavkie oksinye i karbidnye materialy v elektrodnykh stenkakh MGD-generatorov/. 13 p2284 A69-27471
- Integral normal emissivity of tantalum and hafnium carbides at temperatures ranging from 1300 to 3000 deg K /Integral'naia normal'naia izluchatel'naia sposobnost' karbidov tantala i gafniia v interval'e temperatur 1300-3000 deg K/. 15 p2640 A69-30984
- Integral hemispherical emissivity of pyrolytic zirconium carbide /Integral'naia polusfericheskaia izluchatel'naia sposobnost' piroliticheskogo karbida tsirkonia/. 15 p2640 A69-30985
- Design of tests for self-diagnosable control digital computers. 20 p3502 A69-37394
- A study of decimeter-wave pulsed Gunn oscillators. 20 p3508 A69-37942
- Optimal control of the vibrations of a liquid in a cylindrical container /Ob optimal'nom upravlenii kolebaniiami zhidkosti v tsilindricheskom konteiner'e/. 21 p3694 A69-38849
- Optimal control of the vibrations of a liquid in a rectangular container. II /Ob optimal'nom upravlenii kolebaniiami zhidkosti v priamougol'nom konteiner'e. II/. 21 p3694 A69-38854
- Optimal control of the vibrations of a fluid in a rectangular container. I /Ob optimal'nom upravlenii kolebaniiami zhidkosti v priamougol'nom konteiner'e. I/. 21 p3695 A69-38892
- PETROV, V. B.**
- Investigation of the stability of warped rods by a dynamic technique /Issledovanie ustoiichivosti skruzhennykh sterzhnei dinamicheskimi metodami/. 17 p3057 A69-33196
- PETROV, V. I.**
- Dismountable thermionic converter. 02 p0194 A69-11587
- Flow deflection at the exit from the wheel of a centrifugal pump /Otklonenie potoka na vykhode koleasa tsentrobezhnogo nasosa/. 15 p2547 A69-30571
- Device for investigating thermionic energy converters. 18 p3136 A69-34700
- PETROV, V. M.**
- The solution of variational and boundary value problems by the method of local variations. 04 p0622 A69-14616
- Results of experimental investigations of dosimetry and shielding on board the Cosmos 110 artificial satellite /Rezultaty eksperimental'nykh issledovaniy po dozimetrii i zashchite na ISZ "Kosmos-110"/. 13 p2356 A69-27702
- Local-variation method for variational problems with nonadditive functionals /Metod lokal'nykh variatsii dlia variatsionnykh zadach s neadditivnymi funktsionalami/. 20 p3513 A69-36990
- Some results of neutron flux measurements on the Cosmos 53 artificial earth satellite /Nekotorye rezultaty izmerenii potokov neitronov na isskustvennom sputnike zemli "Kosmos-53"/. 22 p4003 A69-40274
- PETROV, V. V.**
- Asymptotic behavior of probabilities of large deviations /Asimptoticheskoe povedenie veroiatnostei bol'shikh uklonenii/. 01 p0104 A69-10264
- Asymptotic behavior of probabilities of large deviations. 19 p3360 A69-36199
- Solution of nonlinear problems of the theory of shallow shells by means of variational iterations /Reshenie nelineinykh zadach teorii polegikh obolochek putem variatsionnykh iteratsii/. 21 p3838 A69-39185
- PETROVA-DENEVA, A.**
- Designing an elliptical shell of revolution for cyclic edge loads /Presmiatane na rotatsionna eliptichna cherupka pri tsiklichni granichni usloviia/. 05 p0832 A69-15686
- PETROVA, E. M.**
- Compatibility of Fe, Co, and Ni powders with additions of zirconium, niobium, and molybdenum carbides /Ob uplotniaemosti poroshkov Fe, Co i Ni s dobavkami karbidov tsirkoniia, niobia i molibdena/. 22 p3970 A69-40634
- PETROVA, E. N.**
- Effect of the rate of deformation on the structure of aluminum alloys /Vliianie skorosti deformirovaniia na strukturu aluminievnykh splavov/. 21 p3746 A69-38958
- PETROVA, G. A.**
- On frequency dependence of abnormal ionospheric absorption in auroral zone. 01 p0063 A69-10425
- Complex investigation of the polar ionosphere /Kompleksnoe issledovanie poliarnoi ionosfery/. 17 p2963 A69-33950
- Frequency dependence of anomalous absorption of cosmic radio emission in the ionospheric auroral zone /Chastotnaia zavisimost' anomal'nogo pogloshcheniia kosmicheskogo radioizlucheniia v ionosfere v zone poliarnykh siiani/. 20 p3587 A69-37033
- PETROVA, L. A.**
- Metastable phases in alloys of titanium with beta-alloying metals /Metastabil'nye fazy v splavakh titana s beta-legiruushchimi metallami/. 07 p1162 A69-18773
- Martensite phase with an fcc lattice in a titanium alloy with 5.9 percent iron /O martensitnoi faze s g. ts. k. reshetkoi v splave titana s 5,9 procent zheleza/. 15 p2636 A69-30105
- Elastic properties of a titanium beta-alloy /IVT1/ /Uprugie svoystva beta-splava titana /IVT1/. 22 p3969 A69-40072
- PETROVA, L. F.**
- Daylight sky spectral radiance in the ruby laser range. 21 p3734 A69-38397
- PETROVA, L. V.**
- Some problems of the formation of the long-wave radiative influx during solid overcast /Nekotorye voprosy formirovaniia dlinnovolnogo radiatsionnogo pritoka pri sploshnoi oblachnosti/. 03 p0458 A69-13271
- Certain problems concerning the formation of the long-wave radiation flux in the presence of a solid cloud bank. 14 p2471 A69-28779
- Calculation of the long-wave influx in the case of low vertical resolution /Raschet dlinnovolnogo pritoka pri malom razreshenii po vertikalii/. 21 p3758 A69-39112
- PETROVA, T. A.**
- Combined effect of two-month hypokinesia and acceleration on the cardiovascular system. 02 p0197 A69-11495
- PETROVICH, I. K.**
- Biological action of 120-Mev protons in a wide range of doses /O biologicheskome deistvii protonov energiei 120 Mev v shirokom diapazone doz/. 21 p3658 A69-39058
- PETROVNIN, M. G.**
- Combined effect of Cosmos 110 space flight factors on plants /Kombinirovannoe deistvie faktorov kosmicheskogo poleta sputnika zemli "Kosmos-110" na rasteniia/. 07 p1064 A69-18972
- Characteristics of biological effects of cosmic radiation, model investigations. 20 p3478 A69-37628
- Combined effect of spaceflight factors on plants in the Kosmos-110 satellite. 20 p3479 A69-38220
- PETROVSKAIA, M. S.**
- Accuracy of representing the perturbation function by trigonometric polynomials /O tochnosti predstavleniia perturbatsionnoi funktsii trigonometricheskimi polinomami/. 20 p3596 A69-37315
- PETROVSKII, V. S.**
- Solution to the steady thermal problem of a gas turbine disk equipped with bandaged blades /Reshenie teplovoi statSIONARNOI zadachi diska gazovoi turbiny, osnashchennogo bandazhirovanymi lopatkami/. 18 p3184 A69-34992
- PETRUKHIN, A. A.**
- Effect of the nuclear form factor on the bremsstrahlung cross section of high-energy muons. 13 p2333 A69-28422
- PETRUKHIN, V. P.**
- Soil-density meter-penetrator of the automatic lunar station Luna-13. 03 p0430 A69-13422
- PETRUNCHEV, V. A.**
- Plasma synthesis of spherical particles of titanium carbide /Plazmennoe poluchenie sfericheskikh chastits karbida titana/. 05 p0767 A69-15972
- PETRUNIN, I. E.**
- Contact fusion in a magnesium-nickel system. 06 p0945 A69-17892
- PETRUNKIN, V. IU.**
- Longitudinal mode selection in the He-Ne laser. 03 p0441 A69-13844
- Selection of longitudinal oscillation modes in gas lasers with annular cavities /Seleksiia prodol'nykh tipov kolebaniy v gazovykh OKG s kol'tsevyimi rezonatorami/. 21 p3740 A69-39553
- PETRUSHEVSKII, V. A.**
- Facility and operational procedure for obtaining meteorological radar data on clouds, cloud systems, and dangerous phenomena /Apparatura i metod operativnogo polucheniiia radiolokatsionnoi meteorologicheskoi informatsii ob oblakakh, oblachnykh sistemakh i opasnykh iavleniiakh/. 16 p2808 A69-32278
- Equipment complex for automatically obtaining and processing meteorological radar data /Kompleks apparatury dlia avtomaticheskogo polucheniiia i obrabotki radiolokatsionnykh meteorologicheskikh dannykh/. 16 p2791 A69-32279
- PETRUSHIN, A. A.**
- Investigation of open resonators used in diffraction electronics /Issledovanie otkrytykh rezonatorov primeniaemykh v difraktsionnoi elektronike/. 23 p4139 A69-42045
- PETRZILKA, V. A.**
- The tensor of time-averaged stresses for plasma with an oscillating field. 02 p0286 A69-11588
- Some new results concerning the radiation pressure on the plasma-vacuum boundary. 08 p1361 A69-20200
- PETSCHEK, A. G.**
- Difference equation for two-dimensional elastic flow. 04 p0681 A69-15286
- PETSCHEK, H. E.**
- Magnetic turbulence in shocks. 07 p1194 A69-19366
- PETTENGILL, G. H.**
- Radar measurements of Martian topography. 16 p2860 A69-32238
- PETTERSEN, H.**
- Pulsating aurora. 21 p3708 A69-38492
- Morphology of the pulsating aurora. 24 p4308 A69-43004
- PETTIT, R. H.**
- A Bayes estimator in a decision-directed adaptive detection problem. 05 p0740 A69-16583
- PETTUS, W. W.**
- Performance analyses of two eddy current damping systems for gravity-gradient stabilized satellites. 07 p1228 A69-18341
- PETTY, D. G.**
- On the structure of a class of aerothermodynamic shocks. 18 p3089 A69-35386
- PETTY, P. G.**
- A solid state pulsed coagulating diathermy instrument - Preliminary report. 18 p3134 A69-34537
- PETTY, R. D.**
- Q switching of the carbon monoxide laser. 21 p3742 A69-39742
- PETUKHOV, B. N.**
- Effect of prolonged hypokinesia on the brain biopotentials of healthy men /Vliianie dlitel'noi gipokinezii na biopotentsialy golovnogo mozga zdorovykh liudei/. 05 p0710 A69-16520

- Neurological changes in healthy humans subjected to two months of hypokinesia.  
10 p1647 A69-23585  
Effect of protracted hypokinesia on brain bioelectric potentials of healthy persons.  
18 p3096 A69-34739
- PETUKHOV, B. S.**  
Heat transfer in tubes with viscous-gravity flow.  
07 p1243 A69-19733  
Heat transfer in a single-phase medium under supercritical conditions.  
11 p1997 A69-24230  
Experimental investigation of heat transfer in boiling dissociative liquid.  
[ASME PAPER 69-HT-58] 24 p4411 A69-43536
- PETUKHOV, I. V.**  
On a difference approximation scheme for the numerical solution of parabolic type equations.  
04 p0622 A69-14618
- PETUKHOV, L. S.**  
Development of a method for studying a boundary layer in a high-temperature gas /Razrabotka metoda issledovaniia pogranichnogo sloia v vysokotemperaturnom gaze/.  
02 p0233 A69-12489
- PETUKHOV, S. V.**  
Effect on the composition of the flight path measurements on the correction of the flight path of space vehicles.  
07 p1178 A69-19607
- PETUKHOV, V. A.**  
Dilatometer for measurements in the temperature range 100-1000 deg C at different pressures of the gaseous medium.  
03 p0432 A69-14151  
Physics, Mathematics, Mechanics, Moscow Conference of Young Scientists, 1st, Moscow, USSR, December 1964, Proceedings /Fizika, Matematika, Mekhanika, Moskovskaia Konferentsiia Molodykh Uchenykh, 1st, Moscow, USSR, December 1964, Trudy/.  
13 p2300 A69-28430
- PETUNIN, A. N.**  
Scientific results of a flight of the Lantar 1 automatic ionospheric laboratory /Nauchnye rezul'taty poleta avtomaticheskoi ionosfernoi laboratorii "Lantar-1"/.  
05 p0830 A69-16056  
Scientific results of the flight of the automatic ionospheric laboratory "Yantar-1".  
20 p3618 A69-37966
- PETUSHKOV, V. G.**  
An apparatus for testing materials under tension and impact loading.  
15 p2583 A69-30286  
Tensile test facility for high strain rates /Ustanovka dlia ispytaniia materialov na rastiazhenie s vysokimi skorostiami deformirovaniia/.  
23 p4147 A69-41710
- PETVISHVILI, V. I.**  
Self-focusing of an ion-acoustic wave in a plasma /Samofokusirovka ionno-zvukovoi volny v plazme/.  
01 p0131 A69-10788  
Instability of a periodic magnetoacoustic wave.  
12 p2138 A69-26708  
Self-focusing of the ion acoustic wave in a plasma.  
20 p3582 A69-38005
- PETYT, M.**  
The vibration characteristics of a tensioned plate containing a fatigue crack.  
08 p1413 A69-20399
- PEUBE, J.-L.**  
Similarity between flows past a stationary obstacle of thermodynamically perfect gases in or out of a gravitational field /Sur la similitude entre des écoulements autour d'un obstacle fixe de gaz thermodynamiquement parfaits, places ou non dans un champ de pesanteur/.  
09 p1429 A69-21686
- PEURE, J.-L.**  
The unsteady flow of an incompressible viscous fluid in an infinite cylindrical tube /Sur l'écoulement instationnaire d'un fluide visqueux incompressible dans un tube cylindrique infini/.  
16 p2769 A69-31831
- PEUREUX, J.-M.**  
Comparative study of a spherical high frequency probe and a Langmuir probe submerged in a cesium plasma in the collisional regime /Etude comparative d'une sonde haute fréquence sphérique et d'une sonde de Langmuir immergées dans un plasma de césium en régime collisionnel/.  
15 p2659 A69-30300
- PEYNERDJIEV, A.**  
On the properties and designing of aerial systems of the Cassegrain type for radio communication with objects in space.  
[UN PAPER 68-95280] 01 p0043 A69-10481
- PEYRARD, Y.**  
The carpitron - Transmitter tube for space telecommunications stations /Le carpitron - Tube émetteur pour stations de telecommunications spatiales/.  
07 p1096 A69-18437  
The "carpitron" transmitting tube for space communications stations.  
13 p2232 A69-28058
- PEYRELEVADE, J.**  
Mathematical methods applied to economic studies /Les methodes mathematiques appliquees aux etudes economiques/.  
03 p0536 A69-14105
- PEYRET, R.**  
Sub-Alfvenic duct flow with a nonuniform magnetic field.  
[JPL-TR-32-1376] 11 p1923 A69-24291
- PEYTURAUX, R.**  
The intensity of the solar continuum at lambda equals 20.15 mu - Absolute measurement of the brightness temperature of the center of the disk /Sur l'intensite du continuum solaire a lambda equals 20,15 mu - Mesure absolue de la temperature de brillance du centre du disque/.  
02 p0318 A69-12041
- PEZHEMSKAIA, M. D.**  
Characteristics of small scale inhomogeneities of E sub s and E over Irkutsk /Kharakteristika melkomasshtabnykh neodnorodnostei E sub s i E nad Irkutskom/.  
20 p3528 A69-37683
- PEZZIA, W.**  
Irreversible blunted respiratory sensitivity to hypoxia in high altitude natives.  
12 p2018 A69-26130
- PFAB, D.**  
Aperiodic attenuators /Aperiodische Rohrspannungsteiler/.  
08 p1283 A69-20126
- PFAHL, R. C., JR.**  
A general method for simultaneous measurement of thermal properties.  
[AIAA PAPER 69-602] 17 p3070 A69-33260
- PFANNER, G.**  
Compound contouring of titanium fuselage skins.  
09 p1512 A69-22374
- PFAU, B.**  
Model analysis of a Doppler ultrasonic flowmeter /Modellanalyse eines Doppler- Ultraschallstromungsmessers/.  
23 p4166 A69-42085
- PFAU, S.**  
A similarity law for ionization waves /Zum Aehnlichkeitsgesetz der Ionisationswellen/.  
05 p0799 A69-15633  
The production of continuous radiation in the plasma of a positive column of inert gas by the braking of electrons on gas atoms /Die Erzeugung kontinuierlicher Strahlung im Plasma der positiven Edelgassaeule durch Bremsung der Elektronen an Gasatomen/.  
05 p0800 A69-15741  
Mobility and diffusion coefficient of electrons. I - The transport coefficients of electrons in noble gases at average reduced electric field strengths /E/p sub 0 approximately equal to 0.1 to 10 v/cm-torr/ /Beweglichkeit und Diffusionskoeffizient der Elektronen. I - Die Transportkoeffizienten der Elektronen in den Edelgasen bei mittleren reduzierten elektrischen Feldstaerken /E/p sub 0 approximately equal to 0.1-10 v/cm torr/./.  
08 p1362 A69-20285
- PFEFFER, I.**  
Approach guidance to cruise orbits.  
[AIAA PAPER 69-986] 22 p3978 A69-40366
- PFEFFER, R. L.**  
Characteristics of amplitude vacillation in a rotating, differentially heated fluid determined by a multi-probe technique.  
07 p1126 A69-19040
- PFEIFER, H.-J.**  
Investigation of shock processes by means of a laser interferometer /Untersuchung von Stossvorgaengen mittels eines Laser-Interferometers/.  
02 p0282 A69-12607
- PFEIFFER, C.**  
A successive approximation technique for constructing a near-optimum guidance law.  
06 p0954 A69-17573
- PFEIFFER, C. G.**  
On the identification of observable orbit parameters, with application to lunar orbiter tracking.  
19 p3401 A69-35916
- PFEIFFER, F.**  
Theoretical study of propellant sloshing in rotationally symmetric rocket tanks with arbitrary internal boundaries /Theoretische Untersuchungen des Treibstoffschwappens in rotationsymmetrischen Raketenbehaltern bei Vorhandensein von beliebigen Innenbeurandungen/.  
04 p0665 A69-14840
- PFEIFFER, G. W.**  
Initial observations of VLF electric and magnetic fields with the Injun 5 satellite.  
22 p3938 A69-40503
- PFEIFFER, I.**  
Influence of structure on the superconductivity properties of NbTi 50 and NbTi 65 /Der Einfluss der Struktur auf die Supraleitungseigenschaften von NbTi 50 und NbTi 65/.  
02 p0269 A69-12763  
The microstructure of Al-Ni-Co alloys.  
23 p4175 A69-41298
- PFENDER, E.**  
Direct and indirect measurements of the anode fall in a coaxial arc configuration.  
24 p4256 A69-43695
- PFENNINGER, W.**  
Flow problems of swept low-drag suction wings of practical construction at high Reynolds numbers.  
05 p0696 A69-15557  
Development trends in aircraft engineering /Entwicklungsrichtungen in der Luftfahrttechnik/.  
15 p2550 A69-30322  
Amplified laminar boundary layer oscillations and transition at the front attachment line of a 45 deg swept flat-nosed wing with and without boundary layer suction.  
17 p2890 A69-33251
- PFIRSCH, D.**  
Comments on "Turbulent shock waves in plasmas."  
15 p2661 A69-30927
- PFISTER, A.**  
Visceral lesions observed in mice and rats exposed to ultrashort waves /Lesions viscerales observees chez des souris et des rats exposes aux ondes ultracourtes/.  
[AGARDOGRAPH-111] 08 p2266 A69-20679  
Considerations relative to the calculation of radiation doses in view of the quantification of biological effects in the case of supersonic transport /Considerations relatives aux calculs des doses de radiations en vue de la quantification des effets biologiques dans le cas du transport supersonique/.  
11 p1830 A69-24865  
Necessity of using the direct correlations between the damages caused and the trajectories in the study of the biological effects of heavy ions in cosmic radiation /Necessite d'utiliser les correlations directes entre les dommages causes et les trajectoires dans l'etude des effets biologiques des ions lourds du rayonnement cosmique/.  
23 p4089 A69-41831
- PFISTER, A. M.**  
Hemorrhages of the dental pulp of the rat following acute hypoxia /Hemorrhagies de la pulpe dentaire du rat consecutives a des hypoxies aigues/.  
21 p3661 A69-39276
- PFISTER, W.**  
The use of retarding potential analyzers for electric field measurements.  
20 p3542 A69-37793
- PFITZER, K. A.**  
Experimental verification of drift-shell splitting in the distorted magnetosphere.  
22 p4005 A69-40508  
Intensity correlations and substorm electron drift effects in the outer radiation belt measured with theOGO 3 and ATS 1 satellites.  
24 p4309 A69-43172
- PFLEIDERER, J.**  
Are quasar redshifts distance-dependent/ques/.  
13 p2344 A69-27635
- PFLEIDERER, K.**  
Development of a helicopter with a rigid rotor system /Die Entwicklung eines Hubschraubers mit gelenklosem Rotorsystem/.  
04 p0548 A69-14817



## PFLUG, I. J.

Some observations regarding factors important in dry heat sterilization.

05 p0712 A69-15938

Dry heat destruction rates for microorganisms on open surfaces, in mated surface areas and encapsulated in solids of spacecraft hardware.

15 p2560 A69-31444

## PFOTZER, G.

Auroral-zone X-ray measurements obtained by simultaneous balloon flights in Northern Scandinavia in 1967.

05 p0813 A69-15822

Balloon measurements of solar protons in Northern Scandinavia on 7 July 1966.

10 p1767 A69-23763

Measurements of auroral-zone X-rays with balloon borne instruments at Kiruna/Sweden in 1968.

21 p3791 A69-39252

## PFUND, E. T.

A case study in real-time ground control and data processing.

[AIAA PAPER 67-644] 04 p0586 A69-15502

## PFUND, G.

Contribution to the development of magneto-optical shutters with exposure times of about 10 super -7 sec /Ein Beitrag zur Entwicklung magneto-optischer Verschlüsse mit Öffnungszeiten um 10 super -7 s/.

12 p2084 A69-26149

## PHANEUF, R. J.

United Air Lines' evaluation of the Hughes pictorial navigation system.

[SAE PAPER 690393] 23 p4186 A69-41663

## PHARES, W. J.

Theoretical and experimental studies of ducted mixing and burning of coaxial streams.

[AIAA PAPER 69-85] 06 p0984 A69-18082

## PHARO, M. W., III

Evidence of contraction of the earth's thermal plasmasphere subsequent to the solar flare events of 7 and 9 July 1966.

10 p1683 A69-23777

Implications for ionospheric chemistry and dynamics of a direct measurement of ion composition in the F 2 region

16 p2774 A69-31974

## PHASOOK, S.

A theoretical and experimental investigation of a confined vortex oscillator.

[ASME PAPER 69-FLCS-19] 20 p3465 A69-37981

## PHATAK, A. V.

Model of the adaptive behavior of the human operator in response to a sudden change in the control situation.

24 p4276 A69-43325

## PHELAN, R. J., JR.

GaAs Schottky barrier avalanche photodiodes.

13 p2226 A69-27195

## PHELIZON, G.

Presentation of the ESRO 1/Aurora scientific satellite /Presentation du satellite scientifique ESRO 1 - Aurora/.

15 p2702 A69-31080

## PHELIZZON, G.

Management of ESRO 1 satellite program.

13 p2355 A69-27360

## PHELPS, A. V.

Decay of metastable helium molecules /super 3 sigma sub u super plus/ and atoms /super 3 S/ in an afterglow.

02 p0287 A69-11932

## PHELPS, J.

The effect of prolonged visual deprivation on various cutaneous and auditory measures.

13 p2210 A69-28313

## PHELPS, K.

Applications of the laser gyro.

02 p0248 A69-11741

## PHILIP, A. G. D.

Photometric photometry of A-type stars near the North Galactic Pole.

10 p1773 A69-22963

Possible horizontal-branch stars at high galactic latitudes. III.

13 p2348 A69-27807

A finding list of stars of spectral type A7 and earlier in regions at high galactic latitudes. II - South Galactic Pole.

22 p4021 A69-40436

## PHILIPPON, J.-P.

A program of dose calculation /Programme de calcul de dose/.

11 p1949 A69-24862

## PHILIPPOW, E.

Handbook of Electrical Engineering. Volume 3 - Communications Engineering /Taschenbuch Elektrotechnik. Volume 3 - Nachrichtentechnik/.

15 p2568 A69-30619

## PHILLIPS, A.

Electron fractographic techniques.

04 p0619 A69-15395

The effect of repeated loading on the yield surface.

05 p0836 A69-15876

Analyzing fracture characteristics by electron microscopy.

13 p2269 A69-28181

## PHILLIPS, B. G.

High transmittance long fiber optics.

06 p0958 A69-17677

## PHILLIPS, C. J. E.

A method of detection which simulates a circularly polarized waveguide mode.

07 p1105 A69-19046

## PHILLIPS, C. L.

A technique for correcting coefficient quantization errors in hybrid control systems.

18 p3111 A69-34687

A technique for optimizing the selection of quantized coefficients in digital controllers.

24 p4292 A69-43283

On the correction of coefficient quantization errors in hybrid control systems.

24 p4293 A69-43302

## PHILLIPS, C. M.

ATC and landing aids for V/STOL aircraft.

17 p2897 A69-33210

## PHILLIPS, D. H.

Doublet electronic states of the benzyl radical.

03 p0472 A69-13321

Luminescence from aromatic polymers, monomers, and dimers under high-energy electron excitation.

16 p2828 A69-32792

## PHILLIPS, E.

Wind structure from the amplitude fluctuations in persistent radio meteor echoes.

12 p2074 A69-26962

## PHILLIPS, E. C.

Determination of properties of capillary media useful in heat pipe design.

[ASME PAPER 69-HT-18] 24 p4412 A69-43548

## PHILLIPS, F. C.

The CX-84 tilt-wing VSTOL military evaluation program.

[AHS PAPER 351] 17 p2900 A69-33526

A review of the Canadair V/STOL program.

17 p3077 A69-34065

## PHILLIPS, G. J.

Technical requirements for sound and television broadcasting from satellites.

04 p0558 A69-15120

## PHILLIPS, J. G.

The gamma-system of the TiO molecule.

20 p3577 A69-38170

Annual Review of Astronomy and Astrophysics. Volume 7.

21 p3810 A69-39501

## PHILLIPS, K. F.

Adhesion of metals in hot oxidizing gases.

[IME PAPER 4] 07 p1139 A69-18567

Recent latitude measurements of features on Saturn.

08 p1394 A69-20618

Soft X-ray observations from OSO-4.

12 p2151 A69-26936

## PHILLIPS, L. D.

Probabilistic information processing systems - Design and evaluation.

01 p0037 A69-10954

## PHILLIPS, O. M.

Shear-flow turbulence.

18 p3123 A69-34922

## PHILLIPS, P. R.

New extension of the range of validity of Lorentz invariance.

18 p3176 A69-35007

## PHILLIPS, V. A.

A transmission electron microscopic study of some ion-nitrided binary iron alloys and steels.

06 p0942 A69-17222

## PHILLIPS, W. C.

X-ray determination of the electron momentum density in diamond, graphite, and carbon black.

06 p0982 A69-18233

Compton profile of LiH.

22 p3993 A69-40733

## PHILLIPS, W. P.

Recent studies on effects of runway grooving on air-plane operations.

[AIAA PAPER 69-773] 19 p3244 A69-35649

## PHILOFSKY, E. M.

On the measurement of the orientation distribution of lineal and areal arrays.

14 p2470 A69-29363

## PHILP, R. B.

Platelets as an etiological factor in experimental decompression sickness.

21 p3655 A69-38918

## PHILPOTT, D. E.

The nature and significance of invertebrate cartilages.

15 p2555 A69-30412

Viruslike particles in the fat body, oenocytes, and central nervous tissue of *Drosophila melanogaster* imagoes.

23 p4091 A69-42021

## PHILPOTTS, J. A.

Partition coefficients of rare-earth elements and barium between igneous matrix material and rock-forming-mineral phenocrysts. I.

08 p1310 A69-20944

Genesis of continental diabases and oceanic tholeiites considered in light of rare-earth and barium abundances and partition coefficients.

08 p1310 A69-20945

Genesis of the calcium-rich achondrites in light of rare-earth and barium concentrations.

19 p3409 A69-36091

Rubidium-strontium correlation study of moldavites and Ries Crater material.

23 p4154 A69-41344

## PHINNEY, R. E.

Slot-jet interaction studies at M sub infinity equals 4 and 5.

24 p4249 A69-43686

## PHIPPS, J. A.

Rotational temperature dependence of the total scattering cross section of N sub 2 on rare gases.

19 p3377 A69-36184

## PHIPPS, K. D.

Boron modifications produced in an induction-coupled argon plasma.

08 p1372 A69-20687

## PHUNG, P. V.

Burning rates of solid propellants by a variable pressure method.

06 p0982 A69-17505

## PHYTHIAN, R.

Self-consistent perturbation series for stationary homogeneous turbulence.

10 p1680 A69-23648

## PI, W. S.

Random acoustic response of a cylindrical shell.

11 p1990 A69-25506

## PIAGET, A.

Synoptic study of particular cases of horizontal and vertical distributions of atmospheric ozone /Etude synoptique de cas particuliers de la distribution horizontale et verticale de l'ozone atmosphérique/.

16 p2786 A69-32628

## PIALLI, G.

Dynamically deformed structures in some meteorites.

19 p3418 A69-36135

## PIAN, T. H. H.

Numerical calculation technique for large elastic-plastic transient deformations of thin shells.

02 p0347 A69-12518

A variational principle and the convergence of a finite-element method based on assumed stress distribution.

13 p2368 A69-28349

Basis of finite element methods for solid continua.

15 p2705 A69-30429

**PIANKO, M.**  
Criteria for estimating the annoyance due to noise around airports /Criteres d'appréciation de la gêne due au bruit autour des aéroports/.  
13 p2214 A69-28588

**PIARNPUU, A. A.**  
Theory of the interaction of a rarefied gas with a surface /K teorii vzaimodeistviia razrezhennogo gaza s poverkhnost'iu/.  
04 p0632 A69-14991

**PIASECKI, J.**  
The Lenz-Ising model /Model Lenza-Isinga/.  
03 p0488 A69-13785

**PIASKOVSKAIA-FESENKOVA, E. V.**  
Method of ridding a light scattering indicatrix of multiple light scattering and reflection from an underlying surface /O metode osvobozhdeniia indikatsiy rasscianiia sveta ot mnogokratnogo rasscianiia i otrazheniia sveta ot podstilaushchei poverkhnosti/.  
01 p0074 A69-11184  
Determination of the transmission factor and the degree of optical stability of the earth's atmosphere /Ob opredelenii koefitsienta prozrachnosti i stepeni opticheskoi ustoiichivosti zemnoi atmosfery/.  
01 p0075 A69-11193

**PIAT, W. J.**  
"Fire until touchdown" - A demonstration of the effects of impacting the LM descent engine upon the lunar surface.  
[AIAA PAPER 69-1020] 22 p3923 A69-40391

**PIATAK, A. I.**  
Excitation of electromagnetic oscillations in a magnetoactive plasma by a modulated beam.  
07 p1189 A69-18508  
Parametric instability during the interaction of a modulated beam with plasma in a magnetic field /Parametricheskaiia neustoiichivost' pri vzaimodeistvii modulirovannogo puchka s plazmoi v magnitnom pole/.  
10 p1741 A69-23947

**PIATKOWSKI, B.**  
Possibility of the use of business jet aircraft for training for air-transport pilots /Mozliwosc zastosowania odrzutowych samolotow dyspozycyjnych do szkolenia pilotow komunikacyjnych/.  
03 p0366 A69-13643

**PIATNITSKII, E. S.**  
New research on the absolute stability of automatic control systems /Review/.  
05 p0740 A69-16667

**PIATNITSKII, L. N.**  
Critical aperture in plasma diagnostics by the scattering method.  
02 p0251 A69-12416  
Spectrum of laser light scattered by atmospheric pressure plasma.  
11 p1922 A69-24233  
Effect of the aperture on the plasma parameters determined during diagnostics by the method of scattering /Vliianie apertury na opredeliayemye parametry plazmy pri diagnostike metodom rasscianiia/.  
15 p2664 A69-30996

**PIATNITSKII, V. N.**  
The zirconium corner of the phase diagram and the properties of alloys in the zirconium-copper-molybdenum system /Tsirkonievyy ugol diagrammy sostoi-aniia i svoystva spлавov sistemy tsirkonii-med'-molibden/.  
02 p0263 A69-11852  
Influence of iron, nickel, and chromium on the corrosion resistance and mechanical properties of zirconium-copper-molybdenum system alloys /Vliianie zheleza, nikelia i khroma na korrozionnuu stoikost' i mekhanicheskie svoystva spлавov sistemy tsirkonii-med'-molibden/.  
02 p0263 A69-11853

**PIATOVSKAIA, N. P.**  
Experience acquired in the use of data concerning the outgoing short-wave radiation field, as obtained from the Cosmos 122 artificial earth satellite /Opyt ispol'zovaniia dannykh o pole ukhodiashchei korotkovo volnovoi radiatsii, poluchennykh s ISZ "Kosmos-122"/.  
06 p0952 A69-17983

**PIATTI, G.**  
The creep behaviour of aluminium-alumina/SAP/ alloys.  
12 p2120 A69-26938

**PIAU, J.-M.**  
Stability of hydrostatic gas bearings /Stabilité des paliers a gaz hydrostatiques/.  
08 p1303 A69-20271

**PIAVCHENKO, T. A.**  
Radar digital ranging servosystems /Radiolokatsionnaia tsifrovaia slediashchaia sistema izmereniia dal'nosti/.  
19 p3278 A69-36593

**PIAZZA, P.**  
Observations of Uranus using the A. Danjon astrolabe of the Sao Paulo Observatory /Observations d'Uranus effectuees a l'astrolabe A. Danjon de l'observatoire de Sao Paulo/.  
22 p4031 A69-40912

**PICARDI, G.**  
Radar system anti-interference circuit using delay lines /Su un circuito anti-interferenza per sistemi radar realizzato con linee di ritardo/.  
08 p1271 A69-19919

**PICCARETTA, F.**  
Effects of damping on critical parameters in super-sonic aeroelasticity /Effetto degli smorzamenti sui parametri critici in aeroelasticita supersonica/.  
19 p3437 A69-36148

**PICCHI, P.**  
An interpretation of cosmic-ray data by SU sub 3 triplet particles.  
15 p2678 A69-31498

**PICCIANO, W. T.**  
Determination of the solar cell equation parameters, including series resistance, from empirical data.  
11 p1826 A69-25395

**PICCIOLO, G.**  
Production of adenosine triphosphate in normal cells and sporulation mutants of bacillus subtilis.  
22 p3886 A69-41076

**PICCIOTTO, R.**  
Diomedea - A pseudo-random ranging system using optical correlation.  
03 p0393 A69-13254

**PICCIRELLI, R. A.**  
Theory of the dynamics of simple fluids for large spatial gradients and long memory.  
03 p0413 A69-12921

**PICHAKHCHI, L. D.**  
The effect of busbars on the interaction of the flow of an electrically conducting fluid with a traveling magnetic field.  
10 p1727 A69-23101

**PICHKURENKO, V. P.**  
Conditions of invariance in steady and unsteady systems /Umovi invariantnosti u statsionarnykh i nestatsionarnykh sistemakh/.  
23 p4145 A69-42371

**PICHLER, H.**  
The orographic influence of the Alps on the wind-field at synoptic scale.  
15 p2650 A69-31445  
Persistence of solar and geomagnetic activity. I /Die Persistenz der solaren und geomagnetischen Aktivitaet. I/.  
20 p3601 A69-37508

**PICHLER, H. J.**  
Further findings of extraterrestrial vestibular research.  
[UN PAPER 68-95389] 01 p0014 A69-10508

**PICHOIR, R.**  
Influence of allotropy of molybdenum disilicide MoSi sub 2 on the siliciding of molybdenum and its alloys /Consequences de l'allotropie du disiliciure MoSi sub 2 pour la siliciuration du molybdene et de ses alliages/.  
[ONERA-TP-642] 08 p1335 A69-19967

**PICK, G. S.**  
Multi-channel pressure telemetry system for base pressure measurements on small models.  
19 p3305 A69-35727

**PICK, M.**  
The structure of the sources of stationary type IV bursts and noise-storm enhancements.  
02 p0328 A69-12753  
On the development and activity of the active region associated with the proton flare event of July 1966 - Summary of observations and conclusions.  
10 p1766 A69-23760

**PICKARD, R. H.**  
The S-band Telemetry, Tracking, and Command Experiment.  
23 p4121 A69-41759

**PICKERELL, D. J.**  
High speed VTOL transports - The powerplant designer's problems.  
17 p2897 A69-33208

**PICKERING, G. W.**  
Reflex regulation of arterial pressure during sleep in man - A quantitative method of assessing baroreflex sensitivity.  
24 p4257 A69-42626

**PICKERING, J. E.**  
Proton-irradiation effects in primates.  
03 p0373 A69-13496

**PICKERING, W. H.**  
The Mariners.  
02 p0334 A69-12302  
The opening decade of space exploration - The United States program.  
06 p1005 A69-17562  
The application of cybernetic theory to automatic spacecraft.  
08 p1409 A69-20583

**PICKERING, W. M.**  
Ambipolar diffusion and motion of ion clouds in the earth's magnetic field.  
12 p2074 A69-26961

**PICKETT, A. G.**  
Prediction of low-cycle fatigue life of specimens with fabrication flaws.  
[ASME PAPER 68-PVP-15] 03 p0523 A69-12997

**PICKETT, R. A.**  
Diurnal and seasonal variation of atmospheric ion composition, correlation with solar zenith angle.  
20 p3534 A69-38087

**PICKLES, J. M.**  
Hybrid ACV research at Adelaide University.  
08 p1254 A69-20115

**PICON-REATEGUI, E.**  
Oxygen intake and body temperature of basal and sleeping Andean natives at high altitude.  
06 p0874 A69-17835

**PICUS, G. S.**  
Superradiance and recombination radiation from cadmium telluride.  
19 p3389 A69-36550

**PIDDINGTON, J. H.**  
Pulsars and magnetic amplification.  
17 p3026 A69-32859

**PIDGEON, C. R.**  
Electroreflection study of inversion asymmetry and warping-induced interband magneto-optical transitions in InSb.  
19 p3386 A69-36521

**PIDWELL, D. W.**  
Essential criteria for low level navigation.  
17 p3002 A69-34080  
The effects of measurement errors and geometry on navigational accuracy.  
17 p3002 A69-34098

**PIECHOCKI, J. J.**  
Ballistic limit determination in impacts on multi-material laminated targets.  
[AIAA PAPER 69-356] 13 p2366 A69-28289

**PIECHOCKI, W.**  
On the nonlinear theory of thin elastic spherical shells.  
17 p3067 A69-34147

**PIECHOWICZ, T.**  
New priming explosives and their space applications /Les explosifs d'amorçage nouveaux et leurs applications spatiales/.  
10 p1750 A69-23011

**PIEMME, T. E.**  
Body fluid volume and renal relationships to gravity.  
06 p0873 A69-17015  
The clinical spectrum of postural hypotension.  
06 p0873 A69-17017

**PIERALLI, F.**  
A class of digital filters with application to the processing of signals transmitted from space vehicles /Una classe di filtri numerici con applicazioni all'elaborazione di segnali trasmessi da veicoli spaziali/.  
01 p0038 A69-10071

**PIERCE, A. D.**  
Spikes on sonic-boom pressure waveforms.  
01 p0011 A69-11280

**PIERCE, A. K.**  
Line identifications in the sun.  
03 p0507 A69-13170  
The chromospheric spectrum outside of eclipse, lambda lambda 3040 to 9266 angstrom units.  
16 p2861 A69-32257



## PIERCE, C. V.

## PIERCE, C. V.

An analytical and experimental study of the vibration of orthogonally stiffened cylindrical shells.  
[AIAA PAPER 68-349] 19 p3437 A69-35948

## PIERCE, E. T.

Progress in radio noise of terrestrial origin.  
19 p3276 A69-36434

## PIERCE, F. J.

Simultaneous lateral skewing in a three-dimensional turbulent boundary-layer flow.  
[ASME PAPER 69-FE-24] 20 p3517 A69-37998

## PIERCE, J. F.

Intrinsic transport theorem.  
24 p4350 A69-43368

## PIERCE, J. R.

The Beginnings of Satellite Communications.  
07 p1085 A69-19182

## PIEROTTI, T.

Radioprotective properties of some heterocyclic nitrogenous compounds against X-radiation injury to serum proteins in mice.  
23 p4077 A69-41300

## PIERRE, P. A.

Singular non-Gaussian measures in detection and estimation theory.  
12 p2029 A69-26203

## PIERROT, R.

Calculation of refraction errors /Calcul des erreurs de refraction/.  
07 p1110 A69-19520

## PIERSON, B. L.

A discrete-variable approximation to optimal flight paths.  
09 p1538 A69-22090

## PIERSON, H. O.

Development and properties of pyrolytic carbon felt composites.  
09 p1530 A69-22364

## PIERSON, W. J.

Radar altimetry from a spacecraft and its potential applications to geodesy.  
15 p2609 A69-30460

Oceanographic applications of radar altimetry from a spacecraft.  
15 p2609 A69-30461

## PIERSON, W. R.

Nomogram for estimating body fat, specific gravity and lean body weight from height and weight.  
07 p1067 A69-19428

## PIERUCCI, M.

Hypersonic interactions near sharp leading edges.  
24 p4248 A69-43579

## PIESIK, E. T.

A method to define low altitude exhaust characteristics and impingement effects.  
[AIAA PAPER 69-568] 16 p2842 A69-32693

## PIETERSE, J. D.

Numerical method for obtaining the scattering matrix of a microwave two-port from standing wave measurements.  
24 p4281 A69-42617

## PIETRASS, A.

Conversion of an aircraft into a flying simulator /Umruistung eines Flugzeugs zu einem fliegenden Simulator/.  
07 p1052 A69-18254

## PIETRZYK, Z. A.

Sound velocity in multi-temperature plasma.  
05 p0802 A69-15796

## PIETSCH, A.

Closed Brayton cycle power system applications.  
23 p4071 A69-42277

## PIFFL, V.

Electron heating by beam-plasma interaction in uniform magnetic field.  
05 p0804 A69-16458

Generation and heating of plasma by beam-plasma interaction.  
17 p3014 A69-33828

## PIGREVA, Z. D.

Influence of the training of nervous processes on the brain weight and cholesterolase activity /Vlianie trenirovki nervnykh protsessov na ves mozga i aktivnost' kholinesterazy/.  
21 p3662 A69-39627

## PIGFORD, R. L.

An equilibrium theory of the parametric pump.  
09 p1481 A69-21910

## PIGFORD, T. H.

Effect of diode geometry on saturated ion current.  
09 p1440 A69-21832

## PIGGOTT, M. R.

The feeling of dampness at low temperatures.  
23 p4109 A69-41870

## PIGGOTT, W. R.

The acquisition and use of ionospheric data for prediction and other practical applications.  
17 p2961 A69-33402

## PIGNERET, J.

Methods of simulating cosmic nuclear radiation on the ground - Validity of the simulation and the equivalence of the radiation effect /Moyens de simulation au sol des rayonnements nucleaires spatiaux - Validite de la simulation et equivalence de l'effet des rayonnements/.  
11 p1862 A69-24875

## PIGNEROL, H.

X rays from a laser created deuterium plasma.  
06 p0964 A69-17479

## PIGON, A.

Fissioning in planarians - Control by the brain.  
14 p2406 A69-28871

## PIGULEVSKII, D. A.

Relation between the functional tolerance of the vestibular analyzer and the state of arterial pressure during rocking /O vzaimosvizi funktsionalnoi vyнослиvosti vestibuliarnogo analizatora i sostoiianiia arterial'nogo davleniia pri ukachivani/.  
20 p3472 A69-37264

## PIGUZOV, I. U. V.

Internal friction due to interstitial atoms in molybdenum.  
04 p0615 A69-14640

## PIH, H.

Photoelastic analysis of anisotropic fiber reinforced composites.  
07 p1170 A69-18715

Experimental studies of vibration of axially excited circular cylindrical shells containing fluid.  
[ASME PAPER 69-VIBR-4] 10 p1805 A69-24162

## PIHAVSKII, S. A.

Application of the theory of optimum overlappings to the selection of a power plant for a low-thrust space vehicle /Primenenie teorii optimal'nykh pokrytii k vyboru dvigatel'noi ustanovki kosmicheskogo apparata maloi tiagi/.  
04 p0666 A69-14920

Application of the theory of optimal overlapping to problems of selecting the power of low-thrust engines /Primenenie teorii optimal'nykh pokrytii k zadacham vybora moshnosti dvigatel'noi tiagi/.  
18 p3184 A69-34583

## PIIPER, J.

Energy cost of isotonic tetanic contractions of varied force and duration in mammalian skeletal muscle.  
23 p4093 A69-42065

## PIKE, E. R.

Statistics of heterodyne detection of Gaussian light.  
07 p1182 A69-19416

Spectrum of clipped photon-counting fluctuations of Gaussian light.  
15 p2571 A69-31486

## PIKE, J.

The lift and drag of axisymmetric bodies in Newtonian flow.  
04 p0542 A69-14745

## PIKE, R. A.

Characteristics of graphite fiber/polyimide resin composites.  
24 p4337 A69-43446

## PIKE, R. W.

Nonequilibrium flow and the kinetics of chemical reactions in the char zone.  
24 p4409 A69-43512

## PIKELNER, S. B.

Interaction of stellar wind with diffuse nebulae.  
01 p0148 A69-10050

Spectra of a high-frequency turbulent plasma and the acceleration of subcosmic rays /Spektry vysokochastotnoi turbulentnosti plazmy i uskorenie subkosmicheskikh luchei/.  
01 p0145 A69-10790

Phase equilibrium and dynamics of a gas undergoing volume heating and cooling /Fazovoe ravновесie i dinamika gaza pri ob'emnom nagrevanii i okhlazhdenii/.  
10 p1760 A69-23136

Low-energy cosmic rays and plasma turbulence /Kosmicheskie luchy nizkoi energii i plazmennaiia turbulentnost'/.  
11 p1945 A69-24380

Mechanism of the formation of chromospheric spicules /Mekhanizm obrazovaniia khromosfernykh spikul/.  
15 p2675 A69-30551

High-frequency turbulence spectra of a plasma and acceleration of subcosmic rays.  
20 p3591 A69-38008

Low-energy cosmic rays and plasma turbulence.  
24 p4375 A69-43770

## PIKHTELEV, A. I.

Some characteristics of a laser using Rb super 87 vapor /O nekotorykh kharakteristikakh kvantovogo generatora na parakh Rb super 87/.  
17 p2983 A69-33694

## PIKOOS, C.

Multicolor photoelectric photometry of the brighter planets. III - Observations from Boyden Observatory.  
04 p0663 A69-15383

## PIKUS, G. E.

Comparison of the probe and optical methods of measuring the parameters of low-temperature cesium plasma.  
03 p0478 A69-13836

The probe and spectral investigations of dense plasma thermionic converters.  
14 p2404 A69-29256

## PILIAEVA, V. F.

New heat-resistant materials - Polyimides and polybenzimidazoles.  
19 p3358 A69-35901

## PILIANKEVICH, A. N.

Nature of the strength of tungsten-nickel-iron alloys. I - Precipitation-hardening characteristics of W-Ni-Fe alloys.  
05 p0782 A69-16798

Nature of the strength of tungsten-nickel-iron alloys. II - Rupture mechanism of W-Ni-Fe alloys.  
10 p1711 A69-23333

## PILIAVSKII, O. A.

Effect of prolonged hypokinesia on the resistance of the human organism to physical stress /Vlianie dlitel'noi gipokinezii na ustoiichivost' organizma cheloveka k fizicheskoi nagruzke/.  
17 p2907 A69-32939

## PILIE, R. J.

Fog modification with giant hygroscopic nuclei.  
01 p0111 A69-10696

## PILIIA, A. D.

Electron confinement region in electron cyclotron resonance in a magnetic mirror.  
03 p0478 A69-13849

Nonlinear cyclotron resonance in a plane wave propagating along a magnetic field.  
06 p0963 A69-16905

## PILIKINA, L. D.

High-strength maraging steel N18K9M5T /MS 200/.  
04 p0615 A69-14645

## PILIPETSKII, N. F.

Absorption of laser radiation in transparent substances under conditions of appearance of opacity.  
09 p1520 A69-22655

Effect of stresses on the orientation of laser damage cracks in transparent dielectrics.  
10 p1703 A69-23621

## PILIPOWSKYJ, S.

Investigation of the stratospheric aerosol by infrared and lidar techniques.  
04 p0592 A69-14654

## PILKEY, W. D.

The method of initial parameters.  
03 p0527 A69-13746

Optimum performance bounds and synthesis of dynamic systems.  
18 p3106 A69-34663

## PILKUNTING, T. C.

Computing inverse solutions for an on-off heart model.  
21 p3668 A69-39865

## PILKUN, M. H.

The quantum efficiency of injection lasers.  
19 p3337 A69-36528

## PILL, J.

Random signal testing of fluid amplifiers.  
05 p0705 A69-16010

- PILLER, H.**  
High temperature magneto-optical investigations of the galliumarsenide conduction bands with coherent radiation.  
19 p3386 A69-36522
- PILLER, U.**  
A DC amplifier with a 1-GHz bandwidth /Ein Gleichstromverstärker mit 1 GHz-Bandbreite/.  
11 p1854 A69-25612
- PILNIK, G. P.**  
Conversion of the coefficients of Woolard's theory of tidal irregularity of the earth's rotation to a new system of fundamental constants /Perevod na novuiu sistemu fundamental'nykh postoiannykh koefitsientov teorii priivnoi neravnomernosti vrashcheniia zemli E. Vular-da/.  
09 p1484 A69-21383  
Conversion to the new system of fundamental constants of the coefficients in Woolard's theory for the tidal nonuniformity in the earth's rotation.  
18 p3127 A69-34771
- PILSKII, V. I.**  
Measurement of ultrarapid plasma perturbations in experiments with shock waves /Izmereniia sverkhbystriykh volnmushchenii plazmy v eksperimentakh s udarnymi volnami/.  
14 p2498 A69-29803  
Development of a collisionless shock wave program /Razvitiie programmy po udarnym volnam bez stolknovenii/.  
17 p3012 A69-33818  
Investigation of turbulent processes within a shock wavefront in a plasma /Issledovanie kharaktera turbulentnykh protsessov vo fronte udarnoi volny v plazme/.  
18 p3180 A69-35017
- PIMENOV, I. A.**  
Effect of solar activity on the electromagnetic conditions in interplanetary space according to data concerning the modulation effects in cosmic rays /Vozdeistvie solnechnoi aktivnosti na elektromagnitnye uslovia v mezplanetnom prostranstve po dannym o moduliatsionnykh effekтах kosmicheskikh luchei/.  
10 p1759 A69-22841  
A standard algorithm for a cosmic ray station /Standartnyi algoritm dlia stantsii kosmicheskikh luchei/.  
10 p1770 A69-23906  
Processing of cosmic ray variation data with the aid of electronic computers /Obrabotka dannykh po variatsiiam kosmicheskikh luchei pri pomoshchi elektronnykh vychislitel'nykh mashin/.  
13 p2327 A69-27609  
An automatic data processing system for ionospheric investigations /Sistema avtomaticheskoi obrabotki dannykh pri issledovanii ionosfery/.  
13 p2225 A69-27610
- PIMENOV, I. U. G.**  
Statistical classification of lunar and Martian annular structures according to their diameters /Statisticheskaiia klassifikatsiia kol'tsevykh struktur luny i Marsa po diametram/.  
04 p0658 A69-14959  
Statistical classification of ring structures on the moon and Mars and their diameters.  
18 p3197 A69-34722
- PIMENOV, I. U. V.**  
Diffraction of a plane electromagnetic wave at an ideally conducting spherical segment /Difraktsiia ploskoi elektromagnitnoi volny na ideal'no provodiashchem sfericheskom segmente/.  
11 p1846 A69-24613
- PIMENTEL, G. C.**  
Rapid advances in rapid scan spectroscopy.  
01 p0082 A69-10836  
UF sub 6 -H sub 2 hydrogen fluoride chemical laser - Operation and chemistry.  
05 p0771 A69-15906
- PIMKIN, V. A.**  
Automatic charging device for storage capacitors /Avtomaticheskoe zariadnoe ustroistvo emkostnykh nakopitelei/.  
04 p0580 A69-14493  
Determination of the local values of plasma parameters from the energy absorption of a refracted microwave beam /Opredelenie lokal'nykh znachenii parametrov plazmy po pogloscheniiu energii refragiruushchego mikrovolnovnogo lucha/.  
13 p2312 A69-28112
- PINA, J. F.**  
Redesign recommendations for space telemetry transmitters based on infrared studies.  
10 p1653 A69-23049
- PINARD, P.**  
Description of an experimental device for studying laser-material interactions - Application to degassing surfaces placed under ultrahigh vacuum /Description d'un dispositif experimental destine a l'etude de l'interaction laser-matiere - Application au degazage des surfaces placees sous ultra-vide/.  
20 p3553 A69-37406
- PINCE, B. W.**  
Role of the autonomic nervous system in the control of heart rate in acceleratively stressed monkeys.  
06 p0875 A69-17844
- PINCHUK, V. G.**  
Transient processes in pulse diodes at low currents /Perekhodnye protsessy v impul'snykh diodakh pri mal'lykh tokakh/.  
14 p2419 A69-28918
- PINCOCK, G. D.**  
Cavity reactor critical experiments.  
07 p1179 A69-18954
- PINCURA, S. C.**  
Application of frequency domain and Liapunov instability criteria to the design of an attitude control system for a large booster. [AIAA PAPER 69-853]  
21 p3687 A69-39381
- PINCZUK, A.**  
Electric field induced infrared absorption and Raman scattering by optical phonons in centrosymmetric crystals.  
02 p0295 A69-11779
- PINDERA, J. T.**  
Linear limit stresses of some photoelastic and mechanical model materials.  
20 p3628 A69-37777
- PINELIS, R. G.**  
Theory of an aviation vertical gyroscope /K teorii aviatsionnoi girovertikali/.  
14 p2445 A69-28899
- PINENOV, I. U. P.**  
Measurement of the luminescence quantum yield in neodymium glass /Izmerenie kvantovogo vykhoda luminentsentsii v neodimovom stekle/.  
10 p1702 A69-23211
- PINES, B. IA.**  
Device for precision measurement of creep strain at high temperatures.  
20 p3544 A69-37815
- PINES, S.**  
A uniform closed solution of the variational equations for optimal trajectories during coast.  
19 p3399 A69-35671  
The fifth and sixth integrals for optimum rocket trajectories in a central field. [AIAA PAPER 69-904]  
21 p3806 A69-39336
- PINEVICH, V. V.**  
Obtaining a Chlorella biomass with an enhanced content of sulphur-containing amino acids and its nutritive value /Poluchenie biomassy Khlirelly s povyshenym soderzhaniiem serusoderzhashchikh aminokislot i ee pishchevaia tsennost'/.  
13 p2216 A69-28620
- PINGANNAUD, M.**  
Difficulties and findings of a medical inquiry after an aircraft accident /Difficultes et enseignements d'une enquete medicale apres accident aerien/.  
05 p0715 A69-16628  
Analysis of in-flight illnesses observed in the French Air Force from 1961 to 1967 /Analyse des malaises en vol constatés dans l'Armee de l'Air Francaise de 1961 a 1967/.  
21 p3666 A69-39270  
Morphological variations of the arterial pulse wave - Experimental and clinical correlations /Variations morphologiques de l'onde pulsatile arterielle - Correlations experimentales et cliniques/.  
21 p3661 A69-39272
- PINGANNAUD, P. M.**  
Experimental investigation of the metabolic relationships between hypoxia and hypoglycemia /Etude experimentale des relations metaboliques entre l'hypoxie et l'hypoglycemie/.  
09 p1445 A69-22727  
In-flight medical disorders in the French Air Force - Analytical study from 1961 to 1968 /Les malaises en vol dans l'Armee de l'Air Francaise - Etude analytique de 1961 a 1968/.  
24 p4277 A69-43383
- PINK, E.**  
Discontinuous stress relaxation in tantalum /Eine diskontinuierliche Spannungsrelaxation bei Tantal/.  
02 p0265 A69-12003
- PINKAU, K.**  
Problems in X-ray and gamma astronomy /Probleme der Roentgen- und Gamma-Astronomie/.  
06 p0998 A69-16969  
Experimental determination of the transition effect in electromagnetic cascade showers.  
22 p3987 A69-41003
- PINKER, R. A.**  
Mathematical formulation of the Noy tables.  
08 p1266 A69-20403
- PINKOS, R. F.**  
Noise dynamics of the phase-locked loop with signal clipping.  
08 p1270 A69-19857
- PINKUS, O.**  
Three-dimensional boundary layers on cones at small angles of attack. [ASME PAPER 68-WA/APM-24]  
04 p0541 A69-14389
- PINNEL, M. R.**  
Microstrain behavior of metal-matrix composites.  
06 p0939 A69-16945
- PINNINGTON, E. H.**  
Photoelectric observations of three W Ursae Majoris systems.  
16 p2863 A69-32399  
Radiative-lifetime measurements for nitrogen ions.  
17 p3009 A69-34154
- PINNOCK, P. R.**  
Anisotropy in oriented fibres from synthetic polymers.  
09 p1528 A69-21504
- PINSKER, I. Z.**  
About the threshold phenomena in the injection lasers.  
19 p3337 A69-36527
- PINSKER, M. S.**  
Error probability in the case of block transmission in a memoryless Gaussian channel with feedback /Veroiatnost' oshibki pri blokovoii peredache po gausovskomu kanalu bez pamiati s obratnoi svyaz'iu/.  
09 p1454 A69-21794
- PINSKER, Z. G.**  
Electron-diffraction determination of the structures of Ge sub 2 Sb sub 2 Te sub 5 and GeSb sub 4 Te sub 7.  
02 p0298 A69-12046
- PINSKII, IA. M.**  
Stress tensor for a plasma in a high frequency electromagnetic field with account of collisions.  
14 p2493 A69-29649
- PINSON, J.**  
Background and state of the art of vacuum pumping in large space-simulation chambers.  
13 p2241 A69-28078
- PINSON, W. H., JR.**  
Rubidium-strontium correlation study of moldavites and Ries Crater material.  
23 p4154 A69-41341
- PINTER, S.**  
The geomagnetic crochet of 7 July 1966.  
10 p1683 A69-23757  
Dynamic spectrum of solar X-ray bursts.  
11 p1951 A69-25419  
Flares with the ejection of subcosmic radiation in the region of N 27 deg, CMP May 25, 1967.  
17 p3025 A69-34226  
Some relations between 3 cm solar radio bursts, flares, X-rays and geomagnetic crochets.  
17 p3025 A69-34227  
Longitudinal distribution of X-bremsstrahlung on the solar disc.  
20 p3589 A69-37552  
Homology of X-ray bursts.  
20 p3589 A69-37553
- PINTILIE, I.**  
Certain visual feedback mechanisms in simulated high-altitude conditions /Certains mecanismes oculaires de feed back dans les conditions des grandes altitudes simulees/.  
06 p0882 A69-17647
- PINTO, J. G.**  
Large uniform torsion of a thin-walled open section of circular cross-section.  
10 p1794 A69-22930



## PINTO, N. P.

Beryllium.

04 p0614 A69-14586

## PINUS, N. Z.

The energy of atmospheric macro turbulence.

09 p1536 A69-21861

Energy sources of meso- and microscale turbulent motions in the free atmosphere /Ob istochnikakh energii mezo- i mikromasshtabnykh turbulentnykh dvizhenii v svobodnoi atmosfere/.

12 p2070 A69-26575

Turbulence in a Free Atmosphere /Turbulentnost' v Svobodnoi Atmosfere/.

18 p3165 A69-34351

## PIOCH, W.

Alcohol oxidation and functional disorders of the central nervous system produced by alcohol and drugs /Ueber Alkoholoxydation und zentralnervose Funktionsstorungen durch Alkohol und Pharmaka/.

21 p3652 A69-38791

## PIOLI, M. G.

Statistical analysis of solar radio emission at 327 MHz /Analisi statistica della radioemissione solare a 327 MHz/.

20 p3588 A69-37478

## PIONTKOVSKII, A. A.

Incorrect problems in optimal control theory /A Review/ /Nekorrektnye zadachi v teorii optimal'nogo upravleniia /Obzor/.

03 p0409 A69-13067

Analytical design of controllers for systems with a delay in the actuating mechanism /K analiticheskomu konstruirovaniu regulatorov dlia sistem s zapazdyvaniem v ispolnitel'nom mekhanizme/.

12 p2045 A69-25959

Incorrect problems in optimal control theory /survey/.

14 p2424 A69-28749

## PIPA, V. I.

Theory of the electrical conductivity of inhomogeneous semiconductors /Do teorii elektroprovodnosti neodnorodnykh napivprovodnikov/.

11 p1937 A69-24909

## PIPER, D. E.

Interpretation of quasar red-shifts.

09 p1597 A69-22151

## PIPER, H. P.

Hannover regional complex including airport.

16 p2882 A69-32329

## PIPER, J. E.

Space-storable propulsion systems comparison.

[AIAA PAPER 68-614] 09 p1570 A69-21981

## PIPES, L. A.

Matrix-Computer Methods in Engineering.

23 p4234 A69-42421

## PIPHER, J. L.

Reddening curves for planetary nebulae.

08 p1384 A69-20057

Paschen-line observations of the Orion Nebula.

08 p1384 A69-20058

Limb darkening on the earth's night side at wavelengths of 1-3  $\mu$  and 3-7.5  $\mu$ .

17 p2960 A69-33167

## PIPKIN, A. C.

A general theory of heat conduction with finite wave speeds.

03 p0533 A69-13956

## PIPPERT, H.

Comparison of measurements of relaxing combustion gases in a nozzle flow with chemical-kinetic calculations /Vergleich von Messungen an relaxierenden Feuergasen in einer Dusenstroemung mit chemisch-kinetischen Rechnungen/.

[DVL-896] 10 p1809 A69-23644

## PIRCHER, L.

In-flight telemetry of blood pressure /Die Telemetrie des Blutdruckes aus dem Flugzeug/.

15 p2559 A69-31229

Blood pressure response to positive acceleration in flight and on the centrifuge.

23 p4089 A69-41822

## PIRKLE, J. C., JR.

Perturbed Morse-oscillator approximation in reactive collisions. I.

03 p0472 A69-13316

Perturbed Morse oscillator approximation in reactive collisions. II - A repulsive potential.

05 p0796 A69-15911

## PIROGOV, I. M.

Temperature stresses near an elliptical hole in a cylindrical shell /Temperaturnye napriazheniia vozle ellipticheskogo otverstia v tsilindricheskoj obolochke/.

20 p3622 A69-37325

## PIROGOV, I. A.

Processes of formation of coatings deposited by the method of gas-flame spraying /Protsessy formirovaniia pokrytii, nanosimyykh metodom gazoplamnennogo napleniia/.

20 p3549 A69-37374

## PIROGOVSKII, V. V.

Study of the electrical conductivity of the plasma in coaxial-type MHD generator models /Issledovanie elektroprovodnosti plazmy v modeliakh MGD-generatorov koaksial'nogo tipa/.

10 p1735 A69-23463

## PIROLI, C.

Rapid scanning by signal processing /Balayage rapide par traitement du signal/.

10 p1657 A69-23801

## PIROTH, D.

RBE values for fast neutrons in connection with estimates of the radiation burden in space.

20 p3478 A69-37629

## PIRS, J.

Ultrasonic damping tests on light metals /Ultraschallschwaechungsmessungen an Leichtmetallen/.

16 p2800 A69-31778

## PISA, E. J.

Temporal reference acoustical holography.

23 p4166 A69-42182

## PISACANE, V. L.

Simulation of the attitude stabilization of the DODGE spacecraft with time-lag magnetic damping.

06 p1014 A69-17584

Attitude performance of the GEOS-II gravity-gradient spacecraft.

07 p1229 A69-18349

The capture and stability of the LIDOS gravity-gradient satellite in an eccentric orbit.

[AIAA PAPER 69-921] 21 p3821 A69-39351

The dynamic modeling of hysteresis and application to damping of spacecraft librations.

[AIAA PAPER 69-833] 21 p3821 A69-39364

## PISANI, U.

Errors due to directional couplers and to mismatches between the circuit elements of a measurement bench for determining scattering parameters of transistors /Errori dovuti agli accoppiatori direzionali e ai disadattamenti tra gli elementi del circuito in un banco di misura per i parametri di diffusione di transistori/.

04 p0582 A69-15067

Measurement of the parameters of the scatter matrix of transistors /La misura dei parametri della matrice di diffusione di transistori/.

14 p2420 A69-29393

Direct and indirect measurements of differential parameters of transistors /Misure dirette e indirette di parametri differenziali dei transistori/.

14 p2420 A69-29397

## PISANO, G.

Stress-strain analysis in viscoelastic flow in propellant grains /Analisi "stress-strain" in regime viscoelastico nei grani di propellente/.

10 p1801 A69-23702

## PISARENKO, G. S.

Procedure for the investigation of inelastic strains in metals during cyclic impact loading.

04 p0674 A69-14539

An equation for the contours of hysteresis loops characterizing the energy dissipation in a material during vibration /Upravnenie konturov petel' gisterezisa, kharakterizuiushchikh rasseianie energii v materiale pri vibratsii/.

11 p1985 A69-25176

Energy dissipation in a cyclically deformed material in the presence of static stresses /Pro rozsianniia energii v materiali, shcho tsikhichno deformuet'sia, pri naiavnosti v n'omu statichnikh napruzhen'/.

12 p2181 A69-26612

An apparatus for testing materials under tension and impact loading.

15 p2583 A69-30286

Energy Dissipation during Vibrations of Mechanical Systems /Rasseianie Energii pri Kolebaniiaakh Mekhanicheskikh Sistem/.

17 p3062 A69-33912

Axisymmetric oscillations of circular plates with allowance for energy dissipation in the material /Osesim-

metrichnye kolebaniia kruglykh plastin s ucheto m ras-seiania energii v materiale/.

17 p3064 A69-33919

Dynamic stability of a cylindrical shell /K voprosu o dinamicheskoi ustoiichivosti tsilindricheskoi obolochki/.

17 p3064 A69-33920

Facility for determining the true energy dissipation in a material subjected to cyclic strains over a wide range of temperatures /Ustanovka dlia opredeleniia istinnogo rasseiania energii v tsikhichski deformirovannom materiale v shirokom diapazone temperatur/.

17 p2946 A69-33925

Methods of high-temperature mechanical tests of inorganic heat-resistant coatings /Metody vysokotemperaturnykh mekhanicheskikh ispytani neorganicheskikh zharostoikikh pokrytii/.

20 p3538 A69-37360

Resistance of materials to deformation and fracture in complex stress states /Soprotivlenie materialov deformirovaniu i razrusheniiu pri slozhnom napriazhennom sostoianii/.

24 p4402 A69-43233

## PISARENKO, N. F.

Low-energy proton flux in the neighborhood of the moon on December 13, 1966 /Potok protonov mal'kikh energii v okrestnosti Luny 13 dekabria 1966 g./.

09 p1577 A69-21773

Device for investigating cosmic rays at altitudes from 200 to 400 km /Pribor dlia issledovaniia kosmicheskikh izluchenii na vysotakh 200-400 km/.

23 p4165 A69-41732

## PISARENKO, V. A.

Structural changes and mechanical properties of molybdenum on annealing.

02 p0268 A69-12191

## PISAREV, A.

Applied Mechanics. Yearbook of the Higher Technical Institutes of Learning. Volume 2. Number 1 /Prilozhna Mekhanika. Godishnik na Visshite Tekhnicheski Uchebni Zavedeniia. Volume 2. Number 1/.

05 p0831 A69-15685

## PISAREV, I. U.

The influence of the form of tangential vibrations of blades on their damping power /Vliianie form tangentsial'nykh kolebaniu lopatok na ikh dempfiiruushchuiu sposobnost'/.

17 p3065 A69-33935

## PISAREVA, T. K.

Polarimetric and photometric observations of comet Ikeya-Seki 1965 f /Poliarimetricheskie i fotometricheskie nabludeniiia komety Ikeia-Seki 1965 f/.

15 p2685 A69-30525

## PISAREVA, V. V.

Possibility of investigating the inhomogeneities of interstellar plasma by the method of discrete-source scintillation /O vozmozhnosti issledovaniia neodnorodnosti mezhzvezdnoi plazmy metodom mertsanii diskretnykh istochnikov/.

19 p3428 A69-36882

## PISAREVSKII, I. U.

Pyroelectric response of a triglycine sulfate crystal to laser pulse action /Piroelektricheskii otklik kristalla triglitsinsul'fata na deistvie impul'sa OKG/.

03 p0438 A69-13050

## PISER, J. W.

Problems and solutions for plastic insulation in electronics.

13 p2285 A69-27987

## PISHAROTY, P. R.

Space meteorological studies in India. [UN PAPER 68-95555]

01 p0109 A69-10502

## PISHCHAK, V. K.

Influence of annealing time after work hardening on the creep characteristics of nickel /Vliianie vremeni ozhiga posle kholodnoi deformatsii na kharakteristiki polzuchesti nikelia/.

18 p3159 A69-35445

Influence of preliminary deformation on the creep characteristics of a monimic type alloy /Vliianie predvaritel'noi deformatsii na kharakteristiki polzuchesti splava tipa monimik/.

18 p3159 A69-35446

## PISHMISH, P.

Interpretation of the wave nature of rotation curves in galaxies /Interpretatsiia volnovoi prirody krivyykh vrashcheniia v galaktikakh/.

12 p2170 A69-27062

## PISKARSKAS, A. S.

Tunable parametric generator employing a KDP crystal /Perestraivamyi parametricheskii generator sveta na kristalle KDP/.  
03 p0437 A69-13045

## PISKARSKOS, A. S.

Parametric interactions in optics and tunable light oscillators.  
[IEEE PAPER K-5]  
07 p1152 A69-19066

## PISKORSKI, M.

Use of epitaxial GaAs diodes for switching purposes /Zastosowanie epitaksjalnych diod GaAs do celow przelaczania/.  
12 p2035 A69-25831

## PISKOVOI, V. N.

Contribution to the theory of acoustoelectric waves in crystals with a high dielectric constant /K teorii akusto-elektricheskikh voln kristallakh s bol'shoi dielektricheskoi pronitsaemost'iu/.  
13 p2317 A69-27878

## PISKUNOVA, L. V.

Application of the method of straight lines to the solution of the transport equation for an unsteady radiation field /Primenenie metoda priamykh dlia reshenia uravnenia perenosu nestatsionarnogo polia izlucheniia/.  
13 p2350 A69-27858

## PISMENETSKII, V. A.

The resolving power of a compressed signal spectral analyzer taking into account the dynamic amplitude range /Razreshaiushchaia sposobnost' analizatora spektra szhatogo signala s uchetom dinamicheskogo diapazona amplitud/.  
17 p2939 A69-33906

The question of the attainable signal compression coefficient /K voprosu o dostizhimom koefitsiente szhatiia signala/.  
17 p2931 A69-33907

## PISMENNII, V. D.

Increase of CO sub 2 laser power under the influence of a beam of fast protons.  
08 p1323 A69-19802

## PISTINER, J. S.

Manual onboard computation procedures and devices for orbital navigation and guidance.  
08 p1348 A69-21184

## PISTORIUS, M.

Influence of point defects on elastic constants.  
02 p0267 A69-12186

## PISTOULET, B.

Effect of a magnetic field on the stimulated emission of GaSb.  
19 p3387 A69-36530

Study of the conduction band of GaSb-InSb compounds at low InSb concentrations.  
19 p3390 A69-36555

## PISTUNOVICH, V. I.

Interaction between an ion beam and a plasma target in the presence of charge exchange /Vzaimodeistvie ionnogo potoka s plazmoi misheni pri pereziadke/.  
03 p0481 A69-14200

## PITAEVSKII, L. P.

Self-similar motion of a low-density plasma. II.  
08 p1359 A69-19951

## PITKIN, E. T.

A general solution of the Lambert problem.  
03 p0518 A69-14250

Modified Newton-Raphson methods for preliminary orbit determination.  
19 p3397 A69-35613

Orbit determination for a thrust space vehicle.  
[AIAA PAPER 69-901]  
21 p3806 A69-39335

## PITLAK, R. T.

A handheld optical rangefinder for orbital rendezvous.  
02 p0250 A69-12366

## PITROLO, A. A.

SNAP-27 program review.  
23 p4187 A69-42249

## PITSUAGA, V. G.

The dielectric constant of liquid hydrogen.  
14 p2487 A69-29668

## PITT, J. F.

Three-week exposure of rodents to a neon enriched atmosphere.  
01 p0019 A69-11342

## PITT, J. M.

Additional features of an adaptive, multicategory pattern classification system.  
24 p4285 A69-43134

## PITTELKOW, W.

A recoverable and reusable sounding rocket.  
[UN PAPER 68-95445]  
01 p0161 A69-10465

## PITTEWAY, M. L. V.

Numerical solution of differential equations with slowly varying coefficients.  
17 p2996 A69-33879

## PITTICH, E. M.

The selection effects on the discoveries of new comets.  
17 p3045 A69-34221

## PITTINATO, G. F.

The reactivity of hydrogen with Ti-6Al-4V under fatigue cycling at ambient and cryogenic temperatures.  
20 p3557 A69-36960

## PITTMAN, C. U., JR.

Burning rate of composite propellants containing irradiated ammonium perchlorate.  
04 p0647 A69-15519

Location of action of burning-rate catalysts in composite propellant combustion.  
09 p1622 A69-21954

## PITTMAN, J. C.

Physiologic evaluation of sea survival equipment.  
12 p2020 A69-26550  
Prediction of the final volume of the human body exposed to a vacuum.  
19 p3258 A69-36456

## PITTMAN, M. A.

Performance of ultraviolet gratings as affected by simulated space environment.  
08 p1318 A69-21097

## PITTMAN, P. F.

Modularization of high-power inverters and converters.  
23 p4073 A69-42292

## PITTNER, E. V.

Creep buckling of simply supported moderately thin circular cylindrical shells.  
23 p4234 A69-42413

## PITTOCK, A. B.

Seasonal and year-to-year ozone variations from sounding over South-Eastern Australia.  
02 p0276 A69-12696

A statistical approach to the synoptic climatology of vertical ozone distributions.  
15 p2649 A69-30898

## PITTS, D. E.

A mathematical technique for programming automatic picture transmission tracking angles.  
04 p0558 A69-14917

## PITTS, G. C.

Rat body composition - Sensor implantation and lighting effects.  
12 p2020 A69-26557

## PITTS, L. D.

Designing electro-explosive devices for space.  
10 p1752 A69-23022

## PIVKO, S.

Effect of nonlinear terms in the expression for the pressure coefficient in slender body theory /Ueber den Einfluss der nichtlinearen Glieder der Beziehung fuer den Druckbeiwert in der Theorie der schlanken Koerper/.  
10 p1632 A69-22911

Method of estimating the aerodynamic properties of an airfoil with a hinged flap and a spoiler /O nachinu odredzivanja aerodinamicheskikh svojstva aeroprofila s oborenim zakritsem i spojlerom/.  
15 p2549 A69-31223

## PIVNEVA, V. T.

Cosmic ray anisotropy and Forbush effects during a solar activity minimum /Anizotropiia kosmicheskikh luchej i efekty Forbusha v minimume solnechnoi aktivnosti/.  
10 p1758 A69-22835

## PIVNICHNY, J. R.

A computer program for the synthesis of decoupled multivariable feedback systems.  
24 p4294 A69-43307

## PIVOVAR, L. I.

Ionization of gases by fast N super plus and N super 2 super plus ions /Ionizatsiia gazov bystryimi ionami N super plus i N super 2 super plus/.  
13 p2304 A69-28440

## PIVOVAR, V. T.

Selection and calculation of some parameters of digital frequency synthesizers /K vyboru rascheta nekotorykh parametrov tsifrovyykh sintezatorov chastot/.  
19 p3284 A69-36594

## PIVOVAROV, A. S.

The parameters of a transistor as a charge-controlled device /Parametry transistora kak pribora, upravliaemogo zariadom/.  
01 p0046 A69-10748

## PIVOVAROV, L. E.

Study of changes in the structure of WC-Co alloys during plastic deformation /Issledovanie izmenenii v strukture splavov WC-Co pri plasticheskoi deformatsii/.  
18 p3158 A69-35261

## PIVOVAROV, M. N.

Anomalous Hall effect in indium arsenide /Anomal'nyi effekt Kholla v arsenide indii/.  
09 p1555 A69-21472  
Anomalous Hall effect in indium arsenide.  
15 p2669 A69-30717

## PIVOVAROV, V. G.

Determination of the parameters of electron fluxes in the polar regions by means of simultaneous photometric and riometric observations /Opredelenie parametrov elektronnykh potokov v poliarnykh oblastiakh s pomoshch'iu sinkhronnykh fotometricheskikh i riometricheskikh nabludenii/.  
09 p1485 A69-21530

Determination of the parameters of electron fluxes from ionospheric data /K opredeleniiu parametrov elektronnykh potokov s pomoshch'iu ionosfernykh dannykh/.  
10 p1688 A69-23931

Interaction between an electron flux and the atmosphere /Vzaimodeistvie elektronnogo potoka s atmosferoi/.  
14 p2513 A69-29069

Electric fields in the auroral ionosphere /Elektricheskie polia v avroral'noi ionosfere/.  
14 p2437 A69-29070

Determination of the parameters of electron fluxes in polar regions from synchronous photometric and riometric observations.  
16 p2783 A69-32525

## PIVOVAROVA, L. N.

Application of moire patterns for "angle-phase" transforms.  
14 p2447 A69-29327

## PIVOVAROVA, N. B.

Determination of the parameters of thin sporadic layers of the E-region of the ionosphere.  
06 p0922 A69-17751

Determination of the parameters of electron fluxes in the polar regions by means of simultaneous photometric and riometric observations /Opredelenie parametrov elektronnykh potokov v poliarnykh oblastiakh s pomoshch'iu sinkhronnykh fotometricheskikh i riometricheskikh nabludenii/.  
09 p1485 A69-21530

Determination of the parameters of ionized layers from ionospheric data /Opredelenie parametrov ionizirovannykh sloev po ionosfernym dannym/.  
10 p1686 A69-23912

Determination of the parameters of electron fluxes from ionospheric data /K opredeleniiu parametrov elektronnykh potokov s pomoshch'iu ionosfernykh dannykh/.  
10 p1688 A69-23931

Interaction between an electron flux and the atmosphere /Vzaimodeistvie elektronnogo potoka s atmosferoi/.  
14 p2513 A69-29069

Determination of the parameters of electron fluxes in polar regions from synchronous photometric and riometric observations.  
16 p2783 A69-32525

## PIVTSOV, V. S.

Experimental study of the spectral, angular, and temporal characteristics of the emission of a traveling-wave ruby laser /Eksperimental'noe issledovanie spektral'nykh, uglovyykh i vremennykh kharakteristik izlucheniia OKG begushchei volny na rubine/.  
21 p3741 A69-39554

## PIZZELLA, G.

Measurement of the solar wind direction with the IMP 1 satellite.  
16 p2847 A69-31962

## PIZZO, L.

Stress-strain analysis in viscoelastic flow in propellant grains /Analisi "stress-strain" in regime viscoelastico nei grani di propellente/.  
10 p1801 A69-23702

## PJERROU, G. M.

Radar cross section of a long wire.  
23 p4116 A69-41594



## PKHALAGOV, I. A.

Experimental investigation of attenuation of infrared radiation in the transparency windows of the atmosphere in the 1-2.5  $\mu$ m region.

05 p0760 A69-16695

## PLAKHOTNYI, S. I.

Peculiarities of the distribution of the refractive index of light waves /Osobennosti raspredelenia pokazatelya prelomleniya svetovykh voln/.

09 p1536 A69-21917

## PLAKHOV, A. G.

High-temperature electron component in a beam plasma interaction.

09 p1553 A69-22657

## PLAKHOV, I. V.

Solution of the problem of motion of a particle in the gravity field of Saturn's ring.

03 p0508 A69-13260

## PLAKSIN, I. I.

Analysis of the steady-state operation of a transistorized circuit with nonlinear feedback through an inverted tunnel diode /Analiz staticheskogo rezhima tranzistornoi skhemy s nelineinoi obratnoi svyaz'iu cherez obrashchennyi tunnel'nyi diod/.

15 p2573 A69-30114

## PLANCK, P. V.

Avalanche diode superregenerative amplifier.

16 p2757 A69-31585

## PLANK, P. P.

Test evaluation of a 2500 deg F structural component.

12 p2103 A69-26837

## PLANT, H. T.

The effect of silane coupling agents in glass-filled polypropylene.

08 p1337 A69-20482

## PLANTZ, V. C.

The structures EMC engineer - Something new on the horizon.

23 p4063 A69-42234

## PLASS, G. N.

Radiative transfer in an atmosphere-ocean system.

11 p1877 A69-24851

## PLASTININ, I. A.

Intensity of the emission continuum of a negative nitrogen ion /Ob intensivnosti kontinuum izlucheniia otritsatel'nogo iona azota/.

04 p0639 A69-15370

Optical properties of a plasma from an electrodeless discharge in an airstream /Opticheskie svoystva plazmy bezelektrodnogo razriada v vozdushnom potoke/.

07 p1191 A69-18995

Problems associated with radiant heat transfer in hypersonic aerodynamics /Problemy luchistogo teploobmena v giperzvukovoi aerodinamike/.

11 p2002 A69-25233

On the intensity of emission continuum of the negative nitrogen atom.

16 p2822 A69-32117

Emissivities and spectral absorption coefficients of combustion products /Izluchatel'nye svoystva i spektral'nye koeffitsienty pogloshcheniya produktov sgoraniia/.

19 p3266 A69-36840

## PLATAKIS, N. S.

Preparation of vitreous materials in the form of well-defined hollow cylinders.

12 p2101 A69-25936

## PLATE, E. J.

Hot-wire measurements in non-isothermal flow.

11 p1886 A69-25088

## PLATONOV, V. A.

Investigation of the possibility of producing heteroepitaxial films in the system Ge-GaAs by condensation of germanium on GaAs from molecular beams in vacuum /Issledovanie vozmozhnosti polucheniia geteroepitaksial'nykh sloev v sisteme Ge-GaAs pri kondensatsii germaniya na GaAs iz molekulyarnykh puchkov v vakuumе/.

11 p1938 A69-25033

## PLATONOV, V. M.

Device for recording the moment of sample failure during thermal endurance tests /Ustroistvo dlia registratsii momenta razrusheniia obrabotkov pri ispytaniakh na termostoikost'/.

06 p0927 A69-17690

## PLATONOVA, L. M.

Parametric mechanism of losses in a ferroelectric ceramic in strong microwave fields /Parametricheskii

mekhanizm poter' v segnetokeramike v sil'nykh SVCh-poliakh/.

22 p3996 A69-41164

## PLATOV, I. V.

Evolution of high-temperature regions under space conditions /Ob evolutsii vysokotemperaturnykh oblastei v kosmicheskikh usloviakh/.

09 p1588 A69-21362

Evolution of high-temperature regions under cosmic conditions.

18 p3197 A69-34752

## PLATT, C. M. R.

A broad-band thermal radiometer at 1.2 mm using a Putley detector.

17 p2969 A69-32823

## PLATTNER, C. M.

F-111 shows interdiction capability.

07 p1052 A69-18550

## PLATUS, D. H.

Angle-of-attack convergence and windward-meridian rotation rate of rolling re-entry vehicles. [AIAA PAPER 69-100]

06 p1018 A69-18089

## PLATZ, E. F.

Solid logic technology computer circuits - Billion hour reliability data.

11 p1843 A69-24341

## PLATZ, P.

Shift of a mercury line by a high power laser pulse.

13 p2270 A69-27202

## PLATZ, W. F.

Development of a turbine inlet temperature sensor. [AIAA PAPER 69-544]

16 p2792 A69-32692

## PLATZBECKER, U.

The influence of noise on the heart rate and the O sub 2 consumption under medium-to-hard physical loads /Zum Einfluss von Laerm auf die Herzfrequenz und den O sub 2 -Verbrauch bei mittelschwerer physischer Belastung/.

21 p3654 A69-38908

## PLATZMAN, P. M.

Light scattering from a plasma in a magnetic field.

01 p0125 A69-10015

Experimental evidence for the correlation-produced magnetoplasma mode in potassium.

10 p1728 A69-23168

## PLAUT, R. H.

Stability of a column subjected to a time-dependent axial load.

16 p2872 A69-31911

## PLAVEC, M.

Mass exchange and evolution of close binaries.

04 p0653 A69-14614

Evolution of close binaries. III.

11 p1964 A69-25414

Models for main-sequence stars.

23 p4208 A69-41286

## PLEASANTS, W. H.

Satellite attitude control using a torqued, 2-axis-gimbaled boom as the actuator. [AIAA PAPER 68-857]

24 p4348 A69-43245

## PLECHKOV, V. M.

Preliminary results of determining the moisture content of the atmosphere from measurements of its thermal radio emission near lambda equals 1.35 cm.

02 p0274 A69-11439

Atmospheric absorption of radio waves in the region of the rotational resonance of water vapor, lambda approximately 1.35 cm /Atmosfernoe pogloshchenie radiovoln v oblasti vrashchatel'nogo rezonansa vodi-anogo para lambda approximately 1.35 cm/.

10 p1658 A69-23944

## PLEKIN, V. IA.

Study of the accuracy of velocity measurements by a suboptimal servosystem in the presence of correlated noise /Issledovanie tochnosti izmereniia skorosti v suboptimal'noi slediashechei sisteme pri nalichii korrelirovannogo shuma/.

15 p2567 A69-30341

Analysis of a tracking rate meter /for Doppler frequencies/ taking into account multiplicative noise /Analiz slediashego izmereniia skorosti /chastoty Dopplera/ pri uchete mul'tiplikativnogo shuma/.

15 p2576 A69-30350

## PLESHANOV, A. S.

General solutions in magnetohydrodynamic flow theory in a hypersonic approximation.

06 p0966 A69-17541

Conductivity of a charged plasma in a magnetic field /O provodimosti zariazhennoi plazmy v magnitnom pole/.

07 p1193 A69-19000

Some problems in the theory of wall turbulence in incompressible conducting fluid in a transverse magnetic field at Re sub m very much less than 1 /Nekotorye zadachi teorii pristenochnoi turbulentnosti v nestekannoi zhidkosti v poperechnom magnetnom pole pri Re sub m very much less than 1/.

13 p2246 A69-27446

## PLESHKOV, A. A.

Emission dynamics of semiconductor laser.

19 p3337 A69-36161

## PLET, A.

Holographic interferometry with a double-pulse laser /Interferometrie holographique avec un laser a double impulsion/.

05 p0761 A69-15640

## PLETCHER, R. H.

On a finite-difference solution for the constant-property turbulent boundary layer.

09 p1482 A69-21949

## PLETENSII, I. G.

Heat stress dynamics and limits of heat tolerance of man.

08 p1263 A69-19949

## PLETIN, M.

First results of rain erosion tests in the S3 intermittent wind tunnel of the O.N.E.R.A. Modane Test Center.

07 p1117 A69-19535

## PLETNEV, V. D.

Streams of quasi-trapped particles and their interaction with the geomagnetic field - Symmetrical approximation /Toki kvazizakhvachennykh chastits i ikh vzaimodeistvie s geomagnitnym polem - Simmetrichnoe priblizhenie/.

01 p0144 A69-10574

Angular anisotropy of corpuscular radiation in time-independent geomagnetic field.

07 p1210 A69-19616

Currents of quasi-trapped particles having discontinuities on the daytime and nighttime sides of the ear /Toki kvazizakhvachennykh chastits, imeiushchie razryvy na dnevnnoi i nochnoi storonakh zemli/.

09 p1577 A69-21747

Currents of quasicaptured particles and their interaction with the geomagnetic field /symmetric approximation/.

15 p2675 A69-30747

## PLETT, E. G.

Electromagnetic effect on flows behind gaseous detonations. [AIAA PAPER 69-44]

06 p0970 A69-18030

Electromagnetic effect on flow behind gaseous detonations.

20 p3514 A69-37194

Interaction of electromagnetically produced shocks with detonation waves.

20 p3631 A69-37202

## PLETTE, D. L.

The effects of improved power quality on utilization of equipment.

17 p2905 A69-34080

## PLIMMER, R. N. A.

The optimum attitude programme for a multistage satellite launch vehicle with impact restrictions.

07 p1229 A69-18494

## PLIUSHCH, G. V.

Integral method of measuring atomic absorption in flame /Integral'nyi metod izmereniia atomnoi absorptsii v plameni/.

20 p3539 A69-37606

Investigation of the regularities of extrusion compaction of hard-alloy mixtures /Issledovanie zakonomernosti mundstutchnogo pressovaniia tverdosplavnykh smesei/.

22 p3956 A69-40616

## PLOCK, L. F.

Resistance of titanium-base alloys to atmospheric corrosion.

01 p0100 A69-11333

Titanium for the chemical process industries.

14 p2466 A69-29949

Methods used to improve corrosion resistance of titanium.

16 p2802 A69-32446

## PLOIX, D.

Scientific program in Norway /Campagne scientifique en Norvege/.

09 p1498 A69-22148

- PLOTKIN, A.**  
A numerical solution for the laminar wake behind a finite flat plate.  
[ASME PAPER 68-WA/APM-20]  
04 p0541 A69-14387
- PLOTKIN, H. H.**  
NASA laser systems accuracy in satellite tracking.  
15 p2571 A69-31312
- PLOTKIN, V. V.**  
The method of partial reflections /O metode chastichnykh otrazhenii/.  
20 p3522 A69-37055
- PLOTKINA, G. Z.**  
Investigation of strongly-doped n-type indium antimonide.  
09 p1558 A69-21869
- PLOTNIKOV, I. U. P.**  
Stochastic problems of rocket dynamics /Stokhasticheskie zadachi raketodinamiki/.  
21 p3767 A69-39650
- PLOTNIKOV, P. K.**  
Possibility of fulfilling the Schuler conditions in a vertical gyro with integral position correction /O vozmozhnosti vypolneniia uslovii shulera v girovertikali s integral'no-pozitsionnoi korektsiei/.  
19 p3311 A69-36193
- PLOTNIKOV, V. A.**  
Inclusion of singular sections into an optimal trajectory /O vklucheniui osobykh uchastkov v optimal'nyiui traktoriiui/.  
11 p1960 A69-24764
- PLOTNIKOV, V. I.**  
Optimal linear fast responses with two groups of control parameters /Lineinye optimal'nye bystrodeistviia s dvumia gruppami upravliaiushchikh parametrov/.  
09 p1473 A69-21787
- PLOTNIKOV, V. N.**  
The use of a generalized statistical description of a reflected radio signal for its automatic classification /Ob ispol'zovanii obohshechennogo statisticheskogo opisania otrazhennogo radiosignala dlia ego avtomaticheskoi klassifikatsii/.  
14 p2411 A69-28917
- PLOTNIKOVA, L. I.**  
Machine for testing the creep and long-term strength of metallic specimens.  
04 p0584 A69-14537
- PLOTNIKOVA, N. P.**  
Diffusion processes during annealing of irradiated metals /Review/ /Diffuzionnye protsessy pri otzhibe obлучennykh metallov /obzor//.  
11 p1891 A69-24800
- PLOWIEC, R.**  
Acoustic methods of determining the rheological properties of liquids /Akustyczne metody wyznaczania reologicznych wlasciwosci cieczy/.  
11 p1887 A69-25206
- PLOWMAN, F.**  
A device to test mechanical properties of tissues and transducers.  
22 p3890 A69-40204
- PLUEDDEMANN, E. P.**  
A new theory of dynamic adhesion.  
24 p4326 A69-43458
- PLUHAR, J.**  
Heat-resistant alloy of Fe-Al type with 30 percent aluminum /Alliage refractaire du type Fe-Al a 30 percent d'aluminium/.  
07 p1168 A69-19345
- PLUMLEY, R. M.**  
Method of testing the plastic laminate phase of composite armor.  
09 p1507 A69-22319
- PLUMMER, W.**  
Venus clouds - Test for hydrocarbons.  
09 p1608 A69-22566
- PLUMMER, W. T.**  
Infrared reflectivity of frost and the Venus clouds.  
18 p3190 A69-34282
- PLUNKETT, R.**  
Multi-parameter optimum in linear dynamical systems.  
[ASME PAPER 69-VIBR-42]  
10 p1807 A69-24180
- PLURIEN, G.**  
Possible biological and physiopathological effects of the UHF electromagnetic radiation of radar antennas /Effets biologiques et physio-pathologiques eventuels des rayonnements electromagnetiques U.H.F. des "aeriens-radars"/.  
24 p4273 A69-42996
- PLUST, H. G.**  
Water- and heat-transport mechanism in the H sub 2 O-removal system for fuel-cell units /Ueber den Wasser- und Waermetransportmechanismus im H sub 2 O-Entzugssystem fuer Brennstoffzellen-Aggregate/.  
04 p0552 A69-15316  
Improved water- and heat-removal unit for H sub 2 /O sub 2 fuel cell systems.  
05 p0704 A69-15676
- PLUTA, M.**  
A microholographic system enabling to obtain holograms with no pseudoscopic real image.  
21 p3726 A69-39702
- PLUTALOVA, L. A.**  
Kinetics and mechanism of breakdown in graphite materials under intensive wear /Kinetika i mekhanizm razrusheniia grafitovykh materialov pri intensivnom iznashivaniui/.  
14 p2467 A69-28912
- PLYSHEVSKII, A. I.**  
Mechanical properties of diffused chromized layers.  
03 p0450 A69-13913
- PNEUMAN, G. W.**  
Coronal streamers. II - Open streamer configurations.  
09 p1598 A69-22177
- POBEDRIA, B. E.**  
Coupled problems of thermoviscoelasticity /Sviazanye zadachi termo-viazko-uprugosti/.  
22 p4044 A69-40741
- POBERAJ, S.**  
Correlation of light fluctuations in the positive column of an argon discharge.  
16 p2822 A69-32039
- POBEREZHSKII, L. P.**  
Procedure for measuring the electrical conductivity of a plasma with a high time resolution /Metodika izmereniia elektroprovodnosti plazmy s vysokim razresheniem vo vremeni/.  
09 p1546 A69-21585  
Determination of an electrical conductivity profile from changes in the circuit parameters /Opredelenie profilja elektroprovodnosti po izmeneniiu parametrov kontura/.  
11 p1928 A69-25221
- POBORCHAI, L. V.**  
Laboratory study of the statistical characteristics of the initial stage of wave development /Laboratornoe issledovanie statisticheskikh kharakteristik nachal'noi stadii razvivaiushchegosia volneniia/.  
18 p3167 A69-35341
- POBORIL, F.**  
Structural stability of the austenitic refractory steels of type Mn18Cr8Ti and Mn18Cr8MoV /Strukturnii stabilita austeniticheskikh zaropnykh oceli typu Mn18Cr8Ti a Mn18Cr8MoV/.  
01 p0100 A69-11294
- POCCI, G.**  
Thermomechanical transformations of two-dimensional continua /Trasformazioni termomeccaniche dei continui bidimensionali/.  
17 p2994 A69-33391
- POCH, W.**  
A prediction and selection system for radiation effects in planar transistors.  
06 p0976 A69-16879
- POCHARD, R.**  
Experimental work on inhomogeneous flows /Travaux experimentaux sur la veine inhomogene/.  
13 p2310 A69-28032
- POCHTAREV, V. I.**  
Utilization of deep-freezing as a means of substantially improving the characteristics of nuclear-precession magnetometers /Ob ispol'zovanii glubokogo okhlazhdeniia dlia sushchestvennogo uluchsheniia kharakteristik iaderno pretsessionnykh magnetometrov/.  
14 p2446 A69-29083  
Magnetic properties of meteorites in the Soviet collection /Magnitnye svoistva meteoritov kolektsii Sovetskogo Soiuza/.  
19 p3415 A69-36122
- POCHTMAN, I. U. M.**  
Application of the dynamic programming method to a study of large deflections in compressed rods /Primenenie metoda dinamicheskogo programirovaniia k issledovaniui bol'shikh progibov szhatykh sterzhnei/.  
14 p2533 A69-28988  
Electronic simulation of some problems associated with the dynamics and stability of plates /Elektronne
- modelirovaniia deiakikh zadach dinamiki ta stiiokosti plastin/.  
15 p2708 A69-30665
- POCIUS, C. F.**  
Mid-air.  
11 p1914 A69-25430
- PODCHERNIAIEVA, I. A.**  
Emissivity of high melting point compounds /Koef-fitsient izlucheniia tugoplavkikh soedinenii/.  
18 p3158 A69-35260
- PODGAETSKII, V. M.**  
Application of the Johns method to the calculation of the characteristics of an electrooptical Q-switch in a laser with Porro prisms as reflectors /Primenenie metoda Dzhonsa k raschetu kharakteristik elektroopticheskogo zatvora v lazere s otrazhateliimi prizmami Porro/.  
14 p2459 A69-29390
- PODGORETSKII, V. M.**  
Polarization of stimulated emission of neodymium ions in a glass base.  
10 p1703 A69-23618
- PODGORNOV, V. A.**  
Investigation of the heat transfer between the gas and certain elements of the flow area of a turbine /Issledovanie teploobmena mezhdu gazom i nekotoryimi elementami protochnoi chasti turbiny/.  
21 p3849 A69-38858
- PODGORNYI, A. N.**  
Investigation of the stressed state of turbocompressor disks /Issledovanie napriazhennogo sostoianiiia diskov turbokompressora/.  
19 p3436 A69-35850
- PODGORNYI, A. P.**  
Optical generation in organic luminophor solutions in the 400 to 650-nm range /Opticheskaja generatsiia na rastvorakh organicheskikh luminoforov v diapazone 400-650 nm/.  
04 p0612 A69-15374  
Xanthene dye series laser excited by second-harmonic radiation from a neodymium laser.  
06 p0932 A69-16914  
Emission of solutions of organic molecules excited by harmonics of a neodymium laser /Generatsiia rastvorov organicheskikh molekul pri vobuzhdenii garmnikami neodimovogo lazera/.  
12 p2104 A69-26030  
Laser action in solutions of organic luminophors in the 400-650 nm range.  
16 p2797 A69-32121
- PODGORNYI, I. M.**  
Lectures on Plasma Diagnostics /Lektsii po Diagnostike Plazmy/.  
01 p0132 A69-11199  
Model of the earth's magnetic field.  
06 p0919 A69-17550  
Plasma flow around a two-dimensional magnetic dipole.  
06 p0967 A69-17738  
Modeling of the interaction of the solar wind with the geomagnetic field.  
12 p2149 A69-26681  
Interferometer employing a gas laser for measuring plasmoids /Interferometr na gazovom lazere dlia izmereniia sgustkov plazmy/.  
14 p2451 A69-29778  
Determination of plasmoid parameters on the basis of infrared radiation /Opredelenie parametrov sgustkov plazmy po infrakrasnomu izlucheniui/.  
14 p2496 A69-29785  
Possibility of measuring the electron temperature on the basis of the line intensity ratio of beryllium-like ions /O vozmozhnosti izmereniia elektronnoi temperatury po otnosheniiu intensivnoei linii berillipodobnykh ionov/.  
14 p2496 A69-29789  
Interplanetary plasma physics and laboratory experiments /Fizika mezplanetnoi plazmy i laboratornye eksperimenty/.  
22 p4028 A69-40689
- PODGREBENKOV, A. L.**  
Causes of the occurrence of a spherical detonation in a closed volume /O prichinakh vozniknoveniia sfericheskoi detonatsii v zamknutom ob'eme/.  
10 p1810 A69-23897
- PODGURSKAIA, A. V.**  
Investigation of nuclear interactions of high-energy particles by the controlled nuclear emulsion method.  
13 p2331 A69-28388



PODILCHUK, IU. N.

Deformation of an elastic two-cavity hyperboloid of revolution /Deformatsiia uprugogo dvupolostnogo giperboloida vrashcheniia/.  
11 p1984 A69-25169

PODLESNYKH, V. G.

Controlling seam welding of aluminium-magnesium alloys on the basis of electrode displacement.  
24 p4319 A69-42919

PODMOSHENSKII, I. B.

Dependence of the temperature and pressure of a capillary discharge plasma with a vaporizing wall on the geometry of the capillary and the discharge current.  
02 p0286 A69-11573

PODMOSHENSKII, I. V.

Determination of the emissivity of air, N sub 2, and CO sub 2 at a temperature of approximately 10,000 K /Opredelenie izluchatel'noi sposobnosti vozdukh, N sub 2 i CO sub 2 pri temperature approximately 10,000 deg K/.  
02 p0291 A69-12484

Decrease in the transparency of plexiglass during interaction with dense plasma /Umen'shenie prozrachnosti pleksiglasa pri vzaimodeistvii s plotnoi plazmoi/.  
03 p0482 A69-14222

Relaxation method of determining the nature of a continuum in nonequilibrium arc discharges /Relaksatsionnyi metod opredeleniia prirody kontinuum a nernaravnesnykh dugovykh razriadakh/.  
04 p0639 A69-15369

Coefficient of continuous absorption of a hydrogen-carbon plasma at a temperature of 40,000 deg K and a pressure of 70 atm /Koeffitsient nepreryvnogo pogloscheniia vodorodno-uglerodnoi plazmy pri temperature 40 000 deg K i davlenii 70 atm/.  
04 p0639 A69-15371

Plasma production in a discharge compressed against a wall by a magnetic field /Poluchenie plazmy v razriade, prizhatom k stenke magnitnogo pole/.  
09 p1547 A69-21594

Study of the mechanism of spectral excitation in a helium arc plasma /Issledovanie mekhanizma vzbuzhdeniia spektra v plazme gelievoy dugi/.  
10 p1742 A69-24077

Investigation of gas protection of optical quartz from heating by a dense plasma /Issledovanie gazovoi zashchity opticheskogo kvartsa ot nagreva plotnoi plazmoi/.  
11 p1926 A69-24616

Spectroscopic studies of the plasma of a high-power H-compressed discharge /Spektroskopicheskie issledovaniia plazmy moschnogo H-prizhatogo razriada/.  
11 p1927 A69-25217

Measurement of CO sub 2 temperature and concentration behind a shock wave from the infrared bands /Izmerenie temperatury i kontsentratsii CO sub 2 za udarnoi volnoi po infrakrasnom polosam/.  
11 p1873 A69-25226

Reversible opacity of an optical quartz occurring during contact with a dense plasma /Obratimaya neprozrachnost' opticheskogo kvartsa, vyznikaiushchaya pri kontakte s plotnoi plazmoi/.  
14 p2490 A69-29159

Method of determining the plasma energy luminosity from experimental data concerning the energy balance /Sposob opredeleniia energeticheskoi svetimosti plazmy iz eksperimental'nykh dannykh energeticheskogo balans/.  
15 p2662 A69-30978

Relaxation method for determining the nature of continuum in nonequilibrium arc discharges.  
16 p2822 A69-32116

Coefficient of continuous absorption of hydrogen-carbon plasma at 40,000 deg K and 70 atm.  
16 p2822 A69-32118

PODNEY, W. N.

Generation of a fissioning plasma in a shock tube.  
18 p3180 A69-34455

PODOBIN, V. P.

Systematic experimental data concerning the drag of sharp- and blunt-nosed cones at hypersonic velocities /Sistematicheskie eksperimental'nye dannye po soprotivleniiu ostrykh i zatuplennykh konusov pri giperzvukovykh skorostiakh/.  
19 p3239 A69-36401

PODOBUEV, IU. S.

Theory and Design of Turbocompressors /Teoriia i raschet turbokompressorov/.  
20 p3459 A69-37238

PODRACZYK, E.

Stabilization and attitude control requirements of communication satellites beyond 1975.  
07 p1228 A69-18339

PODSOTSKAIA, N. K.

Theoretical and experimental investigation of the process of generation of optical harmonics in bounded beams /Teoreticheskoe i eksperimental'noe issledovanie protessa generatsii opticheskikh harmonik v ogranichennykh puchkakh/.  
03 p0439 A69-13057

Investigation of the angular structure of the second optical harmonic. II /Issledovanie uglovoi struktury vtoroi opticheskoi harmoniki. II/.  
17 p2981 A69-33110

Frequency discrimination in optical harmonic generators /Razlichenie chastoty v opticheskikh generatorakh harmonik/.  
22 p3965 A69-40964

PODSTRIGACH, IA. S.

Quasi-static problem in coupled thermoelasticity /Kvazistaticheskaiia zadacha vzaimosviazannoi termoprugosti/.  
12 p2177 A69-25993

Optimal parameters of a rib reinforcing an infinite cylindrical shell /Ob optimal'nykh parametrokh shpangouta, podkrepliaushchego beskonchnuiu tsilindricheskuiu obolochku/.  
21 p3834 A69-38714

A problem in the theory of nonlocal deformation of solid bodies /Ob odnoi zadache nelokal'noi teorii deformatsii tverdykh tel/.  
23 p4226 A69-41703

PODITYKAN, V. P.

Effect of an electrical field on deposition growth during pyrolysis of molybdenum carbonyl /Vliianie elektricheskogo polia na rost osadkov pri pirolize karbonila molibdena/.  
20 p3559 A69-37016

PODURETS, M. A.

Stability of quasi-stationary solutions for a system of gravitationally interacting masses in the general theory of relativity /Ob ustoiichivosti kvazistaticheskikh reshenii sistemy gravitatsionno-vzaimodeistviushchikh mass v obshchei teorii otноситel'nosti/.  
11 p1956 A69-24394

The stability of the quasistatic solutions for a system of gravitational interacting masses in general relativity theory.  
24 p4390 A69-43784

PODVALNIKH, G. S.

X-ray study of scandium-containing ferrites /Rentgeniv'ske vivcheniia ferritiv, shcho mistiat' skandii/.  
03 p0491 A69-14053

X-ray investigation of scandium-containing ferrites.  
18 p3182 A69-35046

PODVALNYI, L. D.

A numerical method of solving optimal control problems /Ob odnom chislennom metode resheniia zadach optimal'nogo upravleniia/.  
14 p2426 A69-29472

PODZEI, A. V.

Residual stresses during plasma spray coating /Ostatochnye napriazheniia pri plazmennom napylenii/.  
20 p3548 A69-37328

PODZOROV, B. N.

Obtaining titanium aluminum alloys by aluminothermal reduction of TiCl sub 4 /Poluchenie titano-aluminievyykh spлавov /ligatur/ aluminotermicheskim vosstanovleniem TiCl sub 4/.  
07 p1159 A69-18536

POEHL, K.

Power traveling wave tubes in ground stations for the Intelsat 3 system /Leistungswanderfeldroehren fuer Bodenstationen fuer das Intelsat-III-System/.  
07 p1094 A69-18426

Comparison of delay lines in high-power traveling-wave tubes /Vergleich von Verzögerungsleitungen fuer Hochleistungswanderfeldroehren/.  
07 p1095 A69-18428

POECHMUELLER, H.

TL 4002 satellite traveling-wave tubes for the Symphonie communication satellite /Die Satellitenwanderfeldroehre TL 4002 fuer den Nachrichtensatelliten "Symphonie"/.  
07 p1095 A69-18429

The YH 1160 - A modern traveling wave tube amplifier for radio technology /YH 1160 - Ein moderner Wanderfeldroehrenverstaerker fuer die Richtfunktechnik/.  
16 p2759 A69-31863

POEDOER, B.

Magnetoresistivity of n-type GaAs single crystals in the impurity scattering range.  
03 p0492 A69-14177

POEHLER, H. A.

Attenuation predictions from exhaust plume models.  
24 p4408 A69-43271

POEHLER, T. O.

Quantum effects in electron cyclotron resonance in InSb.  
13 p2270 A69-27271

POEHLMANN, H. C.

Vacuum weight-loss and contamination tests of some materials for space application.  
13 p2286 A69-28000

A new, sensitive, rapid materials contamination screening system.  
24 p4297 A69-42121

POEHL, V. J.

The Apollo lunar module landing radar.  
19 p3267 A69-35771

POEPEL, E.

Circadian rhythm in man under the effect of light-dark cycles of different periods /Circadiane Perioden des Menschen unter dem Einfluss von Licht-dunkel-Wechseln unterschiedlicher Periode/.  
23 p4094 A69-42000

POESCHEL, R. L.

The radial field Kaufman thruster. [AIAA PAPER 69-259]  
09 p1569 A69-21873

Study and optimization of 15 cm Kaufman thruster discharges. [AIAA PAPER 69-257]  
09 p1569 A69-21873

2-1/2 kw low specific impulse, hollow cathode mercury thruster. [AIAA PAPER 69-300]  
09 p1569 A69-21888

POETZL, H.

Magneto-plasma waves in semiconductors.  
07 p1197 A69-18406

POETZSCHKE, M.

High temperature lithium heat pipes.  
14 p2462 A69-29200

POEVERLEIN, H.

Propagation of hydromagnetic waves in current-carrying regions of the ionosphere and magnetosphere /parallel propagation/.  
01 p0067 A69-10977

POGACH, B.

Techniques for system calibration.  
10 p1691 A69-23222

POGADAIEV, K. N.

Induced photoconductivity and recombination luminescence in diamonds /Indutsirovannaya fotoprovodimost' i rekombinatsionnaya liuminesentsiia almazov/.  
19 p3383 A69-36166

POGARSKII, A. M.

Negative magnetoresistance of tellurium at low temperatures.  
06 p0978 A69-16988

POGGELLI, M.

Sensitivity to the variation of the components of resistance-terminated reactive two-port networks /Sensibilita alla variazione dei componenti di reti due-port reattive chiuse su resistenze/.  
01 p0049 A69-10006

POGORELII, O. M.

Dispersive resonators for laser frequency tuning.  
05 p0777 A69-16377

POGORELOV, A. V.

Supercritical elastic states of a closed spherical shell /Zakriticheskie uprugie sostoiianiia zamknutoi sfericheskoi obolochki/.  
07 p1232 A69-18932

Supercritical elastic states of strictly convex shells a temperature field /Zakriticheskie uprugie sostoiianiia strogo vypuklykh obolochek v temperaturnom pole/.  
09 p1617 A69-22007

Geometrical methods in the non-linear theory of shells.  
11 p1979 A69-24888

Critical elastic states of a strictly convex shell in temperature field.  
23 p4228 A69-41977

Supercritical elastic states of a closed spherical shell.  
23 p4228 A69-41977

POGORELOV, V. I.

Approximate method for determining the minimum admissible spacing between a nozzle and an obstacle /Priblizhennyi metod opredeleniia minimal'nogo dopustimogo rasstoiianiia mezhdu soplom i pregradoi/.  
03 p0361 A69-12977

- Phase characteristics of an electromagnetic field behind a statistical shield /Fazovyie kharakteristiki elektromagnitnogo polia za statisticheskimi ekranami/.  
14 p2435 A69-29049
- Characteristics of the expansion of a fan-shaped jet /Osobennosti rasprostraneniia sverkhzvukovoi veeranoi strui/.  
21 p3643 A69-38643
- POGRELOVA, E. V.**  
Nonlinear theory of an optically excited semiconductor laser /K nelineinnoi teorii poluprovodnikovogo lazera s opticheskimi vozbuзhdeniia/.  
23 p4174 A69-41733
- POGORETSKII, P. P.**  
Nonlinear influence of losses on stimulated emission processes /O nelineinom vliianii poter' na protsessy vyznuzhdenogo izlucheniia/.  
03 p0439 A69-13058
- Special features of generation self-cutoff in the spherical resonator of a ruby laser.  
18 p3152 A69-35026
- Mechanism of the self-disruption of ruby laser action /O mekhanizme avtosryva generatsii rubinovogo OKG/.  
19 p3331 A69-35863
- POGOSIAN, KH. P.**  
Wind forecasting in the 12- to 24-km layer /O prognoze vetra v sloe 12-24 km/.  
12 p2126 A69-26581
- Nature of the relationship between air circulation in the troposphere and stratosphere of different regions of the Northern Hemisphere /Kharakter vzaimosviazi tsirkulatsii vozdukh v troposfere i stratosfere razlichnykh raionov severnogo polushariia/.  
14 p2477 A69-29829
- POGREBNIK, V. P.**  
Segmentation of traveling wave tubes /O sektsionirovanii LBNV/.  
03 p0407 A69-13985
- POGREBNOI, V. N.**  
Certain specific features of the equatorial ionosphere according to observations on the schooner "Zaria" /Nekotorye osobennosti ekvatorial'noi ionosfery po nabludeniiam na shkhune "Zaria"/.  
09 p1486 A69-21548
- Variability of S sub q variations in the solar activity cycle /Ob izmenchivosti-S sub q variatsii v tsikle solnechnoi aktivnosti/.  
09 p1575 A69-21550
- Rocket-probe investigations of ionospheric currents at mid-latitudes and low latitudes /Raketnye issledovaniia ionosfernykh tokov na srednikh i nizkikh shirotakh/.  
10 p1686 A69-23909
- Some characteristics of the equatorial ionosphere observed on the Schooner Zarya.  
16 p2784 A69-32543
- Variability of S sub q variations in the solar activity cycle.  
16 p2851 A69-32545
- Electric fields in the lower ionosphere above the magnetic equator /Elektricheskie polia v nizhnei ionosfere nad magnitnym ekvatorom/.  
20 p3521 A69-37053
- POGULIAEV, V. V.**  
Electrical conductivity of silicon monoxide thin films.  
10 p1745 A69-23324
- POGUST, F. B.**  
Scanning beam landing systems for VTOL aircraft.  
07 p1178 A69-19631
- POHANKA, J.**  
Generation and heating of plasma by beam-plasma interaction.  
17 p3014 A69-33828
- POHER, C.**  
Cassiopee, the French high-accuracy multipurpose alignment device /Le systeme francais Cassiopee, un dispositif de pointage precis aux utilisations multiples/.  
03 p0462 A69-12850
- The Cassiopee attitude control device /Le dispositif de controle d'attitude Cassiopee/.  
19 p3432 A69-36686
- POHL, E.**  
Minima and new light-elements for eclipsing binaries.  
12 p2160 A69-26853
- POHL, F.**  
On the relaxation of anisotropic plasmas with dynamic shielding.  
01 p0134 A69-11419
- POHL, H.-C.**  
Thermodynamic functions of ideal gases for temperatures up to 6000 K /Thermodynamische Funktionen idealer Gase fuer Temperaturen bis 6000 deg K/.  
04 p0686 A69-15153
- POHL, R. A.**  
A midair-deployed buoyancy suspension system for the Briteye battlefield illumination flare.  
20 p3461 A69-37166
- POHL, S. A.**  
Changes in acid-base balance induced by 100 percent gradient headward acceleration.  
09 p1444 A69-22540
- Effect of lower body negative pressure upon pulmonary ventilation and perfusion as measured using xenon-133.  
17 p2909 A69-33180
- POHN, H. A.**  
The moon's photometric function near zero phase angle from Apollo 8 photography.  
23 p4220 A69-42380
- POHORECKY, L. A.**  
Enzymatic conversion of norepinephrine to epinephrine by the brain.  
10 p1644 A69-23303
- Olfactory bulb removal - Effects on brain norepinephrine.  
22 p3871 A69-40055
- POIGINA, M. I.**  
Theoretical and experimental investigations of the "ring-rod" system /Teoreticheskie i eksperimental'nye issledovaniia po sisteme "kol'tso-sterzhen"/.  
23 p4139 A69-41944
- POINTON, L.**  
The Jodrell Bank radio frequency digital autocorrelation spectrometer.  
17 p2970 A69-32856
- POIRIER, Y.**  
Approximate theoretical study of the entrainment, in the presence of a magnetic induction field, of an electrically conducting liquid evolving in a narrow duct of rectangular cross section, in the case where the mean of the induced currents in the right section of the flow assumes a nonzero value /Etude theorique approuvee de mouvements d'entrainement, en presence d'un champ d'induction magnetique, d'un liquide electroconducteur evoluant dans une conduite de section rectangulaire de faible epaisseur, dans le cas ou la moyenne des courants induits dans la section droite de l'ecoulement prend un valeur non nulle/.  
16 p2816 A69-31606
- POISSON-QUINTON, P.**  
Start slowly to travel fast - The future of intercity air transport /Decoller lentement pour aller vite - L'avenir du transport aerien entre villes/.  
24 p4416 A69-42561
- POISVERT, M.**  
Means of aerial evacuation at the disposal of a Paris hospital /Les moyens d'evacuations aeriens a la disposition d'un service hospitalier parisien/.  
23 p4105 A69-41785
- POIX, A.**  
Hazards in pneumatic fluidic circuits.  
[ASME PAPER 68-WA/AUT-18]  
05 p0706 A69-16174
- POKASOV, V. V.**  
Relation between the spatial coherence of laser radiation and the number of generated frequencies /O sviazi prostranstvennoi kogerentnosti izlucheniia lazera s chislom generiruemykh chastot/.  
07 p1148 A69-18803
- The relationship between the spatial coherence of laser radiation and the number of generated frequencies.  
21 p3736 A69-38948
- POKHIL, P. F.**  
Mechanism of the action of V sub 2 O sub 5 additions on the combustion rates of compositions based on ammonium perchlorate and metallic fuels /O mekhanizme deistviia dobavki V sub 2 O sub 5 na skorost' goreniiia sostavov na osnove perkhlorata ammoniia i metallicheskh goruchikh/.  
08 p1375 A69-20342
- Current concepts of the mechanism of combustion of condensed systems /Review/ /Sovremennye predstavleniia o mekhanizme goreniiia kondensirovannykh sistem /obzori/.  
11 p2000 A69-25187
- An optical method of measuring the burning-surface temperature of condensed systems.  
13 p2379 A69-28453
- Onset of turbulence in a boundary layer on a thermally decomposing surface /Vozniknovenie turbulentnosti v pogranichnom sloe na termicheskii razlagaiushcheisya poverkhnosti/.  
16 p2878 A69-31951
- POKHMURSKII, V. I.**  
Wear and fatigue resistance of some titanium alloys after nitriding /Iznosostoiost' i ustalost' nekotorykh titanovykh splavov posle azotirovaniia/.  
19 p3347 A69-36743
- POKHOZHAEV, S. I.**  
Nonlinear operators having a weakly closed region of values, and quasi-linear elliptic equations /O nelineinykh operatorakh, imeiushchikh slabo zamknutuiu oblast' znachenii, i kvazilineinykh ellipticheskikh uravneniakh/.  
10 p1720 A69-23563
- POKHUNKOV, A.**  
Preliminary results of mass spectrometric measurements of the diurnal variation of the composition of the neutral and ionized atmosphere between 100 and 400 km /Resultats preliminaires de mesure par spectrometrie de masse de la variation diurne de la composition de l'atmosphere neutre et ionisee entre 100 et 400 km d'altitude/.  
15 p2601 A69-31371
- POKORNY, J.**  
A contribution to the explanation of the Gunn diode sub-threshold behaviour.  
07 p1097 A69-18450
- POKORNY, M.**  
Influence of the Reynolds and Mach numbers on the magnitude of the loss coefficient at a straight airfoil lattice /Vliv Reynoldsova a Machova cisla na velikost' ztratoveho soucinitele u príme rizeho profilu/.  
03 p0364 A69-13788
- New device for measuring airfoil lattices in the high-speed circulating VZLU wind tunnel /Nove zarizeni pro mereni profilovych mriži ve vysokorychlostnim cirkulacnim tunelu VZLU/.  
03 p0412 A69-13789
- POKORNY, V.**  
Effect of the differential gearing of aileron deflections on the control forces /Vliv diferencovani vychylek kridelek na sily v rizeni/.  
03 p0367 A69-13786
- POKROVSKAIA, E. I.**  
Effect of a plant diet which includes a biomass of unicellular algae on excretion and balance of mineral elements.  
10 p1647 A69-23590
- POKROVSKAIA, F. S.**  
Optical generation in organic luminophor solutions in the 400 to 650-nm range /Opticheskaiia generatsiia na rastvorakh organicheskikh luminoforov v diapazone 400-650 nm/.  
04 p0612 A69-15374
- Emission of solutions of organic molecules excited by harmonics of a neodymium laser /Generatsiia rastvorov organicheskikh molekul pri vozbuзhdenii garmonikami neodimovogo lazera/.  
12 p2104 A69-26030
- Laser action in solutions of organic luminophors in the 400-650 nm range.  
16 p2797 A69-32121
- POKROVSKAIA, T. V.**  
Synoptic-Climatological and Heliogeophysical Long-term Weather Forecasts /Sinoptiko-Klimatologicheskie i Heliogeofizicheskie Dolgosrochnye Prognozy Pogody/.  
21 p3759 A69-39523
- POKROVSKAIA, V. B.**  
Mechanism of crack formation in titanium alloys during thermal-fatigue tests /O mekhanizme obrazovaniia treshchiny pri ispytanii titanovykh splavov na termicheskuii ustalost'/.  
01 p0094 A69-10215
- The mechanism of crack formation in thermal fatigue tests of titanium alloys.  
15 p2637 A69-30271
- POKROVSKII, A. A.**  
Problems of space nutrition of man.  
15 p2560 A69-31462
- POKROVSKII, A. G.**  
Comparison of calculated infrared spectra of H sub 2 O and CO sub 2 with data of laboratory measurements /Svrnenie raschetnykh infrakrasnykh spektrov H sub 2 O i CO sub 2 s dannymi laboratornykh izmerenii/.  
05 p0759 A69-16638
- The theoretical infrared spectra of H sub 2 O and CO sub 2 as compared with laboratory measurements.  
14 p2433 A69-28794



## POKROVSKII, G. B.

Distribution of the pulsation velocities of the wind in the meteor region of the atmosphere /O raspredelenii pul'satsionnykh skorosti vetra v meteornoi oblasti atmosfery/.

21 p3759 A69-39115

## POKRZYWNICKI, J.

Specific gravities of meteorites /Ciezary wlasciwe meteorytow/.

08 p1389 A69-20262

## POLA, I.

Mass sources of the gravitation.

02 p0243 A69-12008

## POLADICH, A. V.

Dispersion properties and coupling impedance of a logarithmic spiral resting on an anisotropic magnetodielectric layer /Dispersionnye svoistva i soprotivlenie svyazi logarifmicheskoi spirali na sloe anizotropnogo magnetodielektrika/.

13 p2235 A69-28512

## POLAERT, R.

A shutter tube for ultrahigh-speed photography /Tube obturateur pour photographie ultra-rapide/.

12 p2083 A69-26145

## POLAK, A.

Hypersonic turbulent boundary-layer separations at high Reynolds numbers.

22 p3930 A69-40557

## POLAK, L. F.

The design and performance of a versatile 25 solar constant simulator.

15 p2586 A69-30383

## POLAND, A. I.

Neutral helium lines and departures from LTE in hot stars.

21 p3801 A69-38761

## POLAND, W. B., JR.

Delta-T curves for measuring magnetic tape link jitter.

07 p1132 A69-18827

Why data system standards/ques/

23 p4133 A69-41769

## POLANYI, R. M.

Coast Guard's new HH-3F features many advances in electronic equipment.

10 p1662 A69-23222

## POLANYI, M.

Registration of intravascular pressure and sound by a fiberoptic catheter.

17 p2917 A69-34172

## POLANYI, T. G.

The frequency stabilization of gas lasers.

05 p0773 A69-16230

## POLE, R. V.

Electron beam writing of spatial filters.

10 p1697 A69-23870

## POLENOV, A. N.

Chemical relaxation in a viscous shock wave /Khimicheskaya relaksatsiya v viazkom skachke uplotneniya/.

24 p4302 A69-43487

## POLESIA, A. F.

Formation of supersaturated ternary solid solutions at large cooling rates of the melt /Obrazovanie peresyschennykh troinykh tverdykh rastvorov pri bol'shikh skorostiakh okhlazhdeniya rasplava/.

21 p3745 A69-38955

## POLETAVKIN, P. G.

Thermal cycle for a direct flow, supersonic, compressorless MHD generator.

18 p3093 A69-34714

## POLETO, G.

The 44-60 angstrom units flux during the ascending period of the solar cycle no. 20 /1964-67/.

04 p0650 A69-15530

On the activity of solar prominences.

05 p0816 A69-16390

X-ray fluxes from the Solrad 9 satellite /1968-17A/ from March 1968 to December 1968.

20 p3588 A69-37473

## POLHEMUS, W. L.

Vertical navigation requirements for S.S.T.

02 p0277 A69-11590

## POLIAK, B. T.

Constrained minimization methods.

03 p0456 A69-13403

## POLIAK, E. V.

Investigation of phase and structural transformations in two-phase industrial titanium alloys /Issledovanie fazovykh i strukturnykh prevrashchenii v dvukhfaznykh promyshlennnykh titanovykh splavakh/.

07 p1162 A69-18776

## POLIAK, S. M.

Structure and mechanical properties of materials after hydroexplosive forming.

09 p1503 A69-21851

## POLIAKOV, A. F.

Heat transfer in tubes with viscous-gravity flow.

07 p1243 A69-19733

## POLIAKOV, D. A.

Improving the reliability of welded titanium high pressure vessels.

11 p1892 A69-25670

## POLIAKOV, E. V.

Thermodynamic properties of nitrogen up to 10,000 atm and 400 deg C.

01 p0175 A69-10366

## POLIAKOV, I. U. A.

Investigation of the operation of a thin-film heat gauge with insulation for transient processes /K voprosu issledovaniia raboty plenochного termopriemnika s izolatsiei v kratkovremennykh protsessakh/.

11 p2002 A69-25231

Stagnation-point heat-transfer studies with a blunt body in a shock tube.

18 p3086 A69-35118

## POLIAKOV, N. I.

Influence of silicide coatings on the mechanical properties of molybdenum /Vliianie silitsidnykh pokrytii na molibdene na ego mekhanicheskoe svoistva/.

02 p0264 A69-11883

Effect of silicide coatings on the mechanical properties of molybdenum.

18 p3156 A69-35043

## POLIAKOV, O. A.

Identification of a plant by stepwise approximation methods /Identifikatsiya ob'ekta metodami stupenchatoi approksimatsii/.

03 p0409 A69-13072

## POLIAKOV, P. S.

Investigation of the carrying capacity of rib-reinforced cylindrical shells /Issledovanie nesushchei sposobnosti rebristyykh tsilindricheskikh obolochek/.

11 p1985 A69-25177

## POLIAKOV, V. A.

Fabrication of nichrome bars containing dispersed oxide inclusions /Poluchenie prutkov nikhroma, soderzhashchego dispersnye vklucheniia okislov/.

01 p0085 A69-10397

## POLIAKOV, V. M.

Measurement of Radio-Thermal and Plasma Radiation in the Microwave Range /Izmerenie Radioteplovyykh i Plazmennyykh Izlucheniiv v SVCh Diapazone/.

03 p0420 A69-12919

Contribution to the theory of the unperturbed F2 layer /K teorii nevozmutshchennogo sloia F2/.

17 p2966 A69-33978

Ionospheric Processes /Ionosfernye Protssesy/.

18 p3126 A69-34358

Effect of the diffusion of the electron-ion gas on regular variations in the electron density of the F2 layer /O vlianii diffuzii elektronno-ionnogo gaza na regulirnyie izmeneniia elektronnoi plotnosti v sloe F2/.

20 p3525 A69-37655

Intensity of ion production above the F2 layer maximum /Intensivnost' ionoobrazovaniia vyshie maksimuma sloia F2/.

20 p3525 A69-37656

A dynamic model of the F region of the ionosphere including temperature variations /Dinamicheskaya model' oblasti F ionosfery, vkluchaiushchaya temperaturnyie izmeneniia/.

23 p4156 A69-41843

## POLIAKOV, V. P.

Investigation of interaction processes between carbon and oxides of high-melting-point metals /Issledovanie protsessov vzaimodeistviia okislov tugooplavkikh metallov s uglerodom/.

03 p0445 A69-13568

Interaction of the magnetic sublattices in gadolinium ferrite-garnet /Vzaimodeistvie magnitnykh podreshetok v ferrite-granate gadolimiia/.

08 p1374 A69-21186

Interaction of magnetic sublattices in gadolinium iron garnet.

18 p3183 A69-35155

## POLIAKOVA, A. P.

Quantitative evaluation of the activity of animal cardiovascular systems during prolonged orbital flight.

08 p1261 A69-19828

## POLIAKOVA, L. L.

Glass-fibre laminates based on epoxy-organosilicic resins.

19 p3358 A69-35920

## POLIAKOVA, L. M.

Trajectories of roots of two-channel systems with antisymmetric cross couplings /Traektorii kornei dvukh kanal'nykh sistem s antisimmetrichnymi perekrestnyimi svyaziimi/.

21 p3686 A69-38881

## POLIAKOVA, N. V.

Determination of the absolute sensitivity of the UTA-3 photographic emulsion to vacuum ultraviolet.

07 p1136 A69-19622

## POLIAKOVA, T. A.

Polarimetric and photometric observations of comet Ikeya-Seki 1965 f /Poliarimetricheskie fotometricheskie nabludeniiia komety Ikeya-Seki 1965 f/.

15 p2685 A69-30522

## POLIAKOVA, T. G.

Angular and spectral distributions of infrared terrestrial radiation into space in the vicinity of the horizon according to satellite observations.

03 p0422 A69-13506

## POLIAKOVA, V. P.

Palladium Alloys.

10 p1712 A69-23633

## POLIANSKAIA, T. A.

Anisotropy of the conduction band in CdSnAs sub 2 /Anizotropiia zony provodimosti v CdSnAs sub 2/.

03 p0488 A69-13888

Anisotropy of the conduction band in CdSnAs sub 2

11 p1939 A69-25689

The problem of the structure of the conduction band in GaSb /K voprosu o strukture zony provodimosti v GaSb/.

13 p2319 A69-27894

Certain properties of sulfur-doped gallium antimonide /Nekotorye svoistva antimonida galliia, legirovanogo seroi/.

21 p3781 A69-39048

## POLIANSKII, A. F.

The laminar flow of a gas in channels of varying section.

20 p3457 A69-37089

## POLIANSKII, O. I. U.

A class of selfsimulated motions of a relaxing gas.

04 p0588 A69-14623

## POLIANSKII, V. A.

Investigation into unidimensional stationary flows in electrohydrodynamics.

12 p2135 A69-26398

Electrohydrodynamic equations and transfer coefficients in a strong electric field.

12 p2135 A69-26399

On the length of the ionization relaxation zone behind a strong shock front in air.

12 p2062 A69-26674

Study of electrohydrodynamic flows at large electric Reynolds numbers /Issledovanie elektrotidrodinamicheskikh techenii pri bol'shikh elektricheskikh chislakh Reinal'dsa/.

13 p2305 A69-27379

Equations of electrohydrodynamics and transfer coefficients in a strong electric field /Uraveneniia elektrotidrodinamiki i koeffitsienty perenosa v sil'nom elektricheskome pole/.

14 p2492 A69-29610

One-dimensional flows in electrohydrodynamics /Odnomernyye techeniia v elektrotidrodinamike/.

18 p3181 A69-35315

Effect of vibrational relaxation of molecules on the characteristics of the dissociating air behind a strong shock wavefront /Vliianie kolebatel'noi relaksatsii molekul na kharakteristiki dissiatsiiuzhshchego vozdukhazha za frontom sil'noi udarnoi volny/.

24 p4302 A69-43486

## POLIANSKII, V. K.

Characteristics of a hologram in an approximation of paraxial optics /Svoistva gologrammy v priblizhenii paraksial'noi optiki/.

19 p3308 A69-35868

## POLIANSKII, V. M.

Structural features of the titanium alloy VT15 in the quenched and aged states.

05 p0783 A69-16810

- POLICELLA, H.**  
Influence of the temperature velocity parameter on the behavior of elastoviscoplastic solids /Influence du parametre vitesse de temperature sur le comportement des solides elasto-visco-plastiques/.  
[ONERA-TP-644] 01 p0164 A69-10036
- A tension-torsion-compression testing machine /Une machine d'essais en traction-torsion-compression/.  
[ONERA-TP-596] 17 p2945 A69-33065
- POLIKOVSKII, V. I.**  
Flight vehicle take-off weight increase factor.  
16 p2735 A69-32144
- POLIS, B. D.**  
Effects of physical and psychic stress on phosphatidyl glycerol and related phospholipids in humans and animals.  
23 p4088 A69-41815
- POLIS, E.**  
Effects of physical and psychic stress on phosphatidyl glycerol and related phospholipids in humans and animals.  
23 p4088 A69-41815
- POLISHCHUK, A. A.**  
Effect of a space charge on the trigger current and reflector voltages of a reflex klystron /Vliianie ob'em-nogo zariada na puskovoi tok i napriazheniia otrazhatelia v otrazhatel'nom klistrone/.  
15 p2574 A69-30131
- POLISHCHUK, D. I.**  
Combustion of a system of liquid-fuel droplets /Gorenie sistemy kapel' zhidkogo topliva/.  
15 p2719 A69-31174
- POLISHCHUK, E. P.**  
Investigation of the ratio of total absorption to color excess /Doslizhennia vidnoshennia zagal'nogo poglennia do kolorekstsii/.  
18 p3199 A69-34914
- Radio Control of Rocket Missiles and Space Vehicles /Radioupravlenie reaktivnymi snariadami i kosmicheskimi apparatami/.  
20 p3574 A69-37232
- POLISHCHUK, I. U. M.**  
Antenna gain losses according to data obtained from difference-phase measurements in the 10-cm range /Poteri usilenia anten na dannym raznostno-fazovykh izmerenii v 10 cm diapazone/.  
02 p0214 A69-11612
- Experimental studies of slow amplitude and phase variations of 10-centimeter radio waves on near-ground paths /Eksperimental'nye issledovaniia medlen-nykh variatsii amplitudy i fazy 10-santimetrovnykh radiovoln na prizemnykh trassakh/.  
08 p1275 A69-20424
- Antenna gain losses determined by phase-difference measurements in the 10-cm region.  
11 p1847 A69-24719
- POLITZER, P. A.**  
Collisional drift waves - Identification, stabilization, and enhanced plasma transport.  
03 p0474 A69-13145
- POLIVANOV, I. U. N.**  
Influence of the electro-optical effect on the frequency of a parametric laser with a KDP crystal.  
20 p3555 A69-38003
- POLIZZI DI SORRENTINO, A.**  
Modern problems of aeronautical health services /Problemi moderni del servizio sanitario aeronautico/.  
12 p2023 A69-26490
- POLKIN, I. S.**  
Nonuniform decomposition of the beta-phase in the VT15 titanium alloy /Neravnomernyi raspad beta-fazy v titanovom splave VT15/.  
11 p1902 A69-24275
- POLLACK, J. B.**  
An analysis of Martian photometry and polarimetry.  
12 p2171 A69-27145
- On the structure of the Venus atmosphere.  
20 p3614 A69-38256
- Temperature structure on nongray planetary atmospheres.  
20 p3615 A69-38258
- A nongray CO sub 2 H sub 2 O greenhouse model of Venus.  
20 p3615 A69-38259
- Windblown dust on Mars.  
24 p4389 A69-43742
- POLLACK, M. A.**  
Methods for the measurement of frequency and stability of laser generators in the infrared.  
07 p1146 A69-18482
- The water-vapor laser.  
12 p2106 A69-26325
- POLLACK, S. A.**  
Experimental upper limit to the time of nonradiative relaxation between super 4 T sub 2 and super 2 E states in ruby.  
05 p0777 A69-16335
- POLLACK, S. R.**  
Superconductivity in beta-tungsten films.  
04 p0640 A69-14447
- POLLACK, S. S.**  
Disordered pyroxene in chondrites.  
03 p0516 A69-14083
- Enstatite - Disorder produced by a megabar shock event.  
21 p3792 A69-38321
- POLLAK, C.**  
Flight testing results on a hypersonic re-entry nose cone.  
[AIAA PAPER 68-1145] 03 p0521 A69-13668
- Flight testing results on a hypersonic re-entry nose cone.  
[AIAA PAPER 68-1145] 24 p4394 A69-43250
- POLLAK, F. H.**  
Electroreflectance in Ge - Si alloys.  
02 p0295 A69-11784
- Band structure and optical constants of InSb, InAs, and GaSb - The k-p method.  
19 p3385 A69-36515
- POLLARD, E. C.**  
Cellular effects of weightlessness.  
06 p0872 A69-17013
- Ionizing radiation-initiated degradation of deoxyribonucleic acid in bacteria - A possible role for defective prophage.  
07 p1068 A69-19494
- The degree of organization in the bacterial cell.  
07 p1069 A69-19505
- Inhibition of gamma-ray-induced degradation of E. coli B sub s-1 DNA by infection with T1, T2 and T4 bacteriophage.  
07 p1069 A69-19709
- The biological action of ionizing radiation.  
19 p3257 A69-35978
- POLLARD, F. B.**  
Motion-picture and television methods to aid the engineer in systems analysis and evaluation.  
[SMPT PAPER 104-17] 04 p0596 A69-14359
- POLLARD, J.**  
Installation principles of a production line for MOS components of high reliability /Concerto Program/ /Principes d'installation d'une chaine de fabrication de composants MOS de haute fiabilite /Programme Concerto//.  
15 p2627 A69-30841
- POLLARD, J. R.**  
Acoustic sounding - A new approach to the study of atmospheric structure.  
14 p2448 A69-29527
- POLLIAK, I. U. G.**  
Stability of results of smoothing by the method of least squares /Ustoichivost' rezul'tatov sglazhivaniia po metodu naimen'shikh kvadratov/.  
09 p1532 A69-21754
- POLLIN, I.**  
Limiting speed for a tracking hypersonic vehicle.  
07 p1086 A69-19509
- POLLIN, J. M.**  
Theoretical foundations for teleological systems.  
23 p4134 A69-42059
- POLLMANN, H.**  
RF triggering of self-sustaining Gunn oscillations.  
05 p0734 A69-16575
- The behavior of Gunn oscillators as a function of the load conditions /Das Verhalten von Gunn-Oszillatoren als Funktion der Lastbedingungen/.  
11 p1853 A69-25609
- Injection synchronization of Gunn oscillators /Injektionssynchronisierung von Gunn-Oszillatoren/.  
11 p1856 A69-25636
- POLLOCK, D. D.**  
The electron band structure of copper-nickel alloys.  
02 p0301 A69-12765
- POLLOCK, G. E.**  
The detection of optical asymmetry in biogenic molecules by gas chromatography for extraterrestrial space exploration - Sample processing studies.  
15 p2556 A69-31315
- POLLOCK, S. M.**  
A Bayesian reliability growth model.  
09 p1504 A69-21912
- POLLONI, R.**  
Optimum coupling for intracavity second harmonic generation.  
01 p0089 A69-10181
- Picosecond pulses, TEM sub 00 mode, mode-locked ruby laser.  
23 p4172 A69-41395
- POLMAN, J.**  
Cesium depletion in the positive column of Cs-Ar discharges.  
19 p3380 A69-36441
- POLONIS, D. H.**  
Intermediate compound Ni sub 8 Nb/Cb/ in nickel-rich nickel-niobium /columbium/ alloys.  
10 p1708 A69-22993
- The characteristics of spontaneous martensite in thin foils of Ti-Cr alloys.  
10 p1708 A69-22994
- The martensite transformation in Ti-Cr binary alloys.  
13 p2276 A69-27369
- POLONSKII, V. V.**  
Structure of the CO layer in the solar atmosphere /K voprosu o strukture sloia CO v solnechnoi atmosfere/.  
15 p2688 A69-30552
- POLOSKOV, S.**  
Preliminary results of mass spectrometric measurements of the diurnal variation of the composition of the neutral and ionized atmosphere between 100 and 400 km /Resultats preliminaires de mesure par spectrometrie de masse de la variation diurne de la composition de l'atmosphere neutre et ionisee entre 100 et 400 km d'altitude/.  
15 p2601 A69-31371
- POLOSKOV, S. M.**  
Rockets employed for weather forecasting.  
06 p1043 A69-17056
- Temperature measurements of the upper atmosphere in the northern polar zone.  
15 p2606 A69-31448
- POLOVIN, R. V.**  
Theory of magnetoplasticity.  
05 p0844 A69-16804
- Contribution to the thermodynamics of deformable media /Do termodinamiki deformovannykh seredivishch/.  
08 p1419 A69-21074
- Correctness of the problem of the structure of a shock wave in a plasma /Korrektnost' zadachi o strukture udarnoi volny v plazme/.  
09 p1551 A69-22032
- Stresses and waves in a magnetoplastic medium /Napriazheniia i volny v magnitoplasticheskoj srede/.  
09 p1551 A69-22033
- Existence of singular magnetohydrodynamic shock waves /O sushchestvovanii osobnykh magnitogidrodinamicheskikh udarnykh voln/.  
09 p1551 A69-22034
- Conditions for breakup of an oblique shock wave.  
09 p1483 A69-22665
- Magnetosonic waves.  
10 p1727 A69-23090
- Partial differential equations with stochastic characteristics /Upravneniia v chastnykh proizvodnykh so sluchainymi kharakteristikami/.  
12 p2121 A69-26366
- Matrix form of magnetohydrodynamic equations /Matrichnaia forma magnitogidrodinamicheskikh uravnenii/.  
14 p2500 A69-29902
- POLOVINKIN, O. I.**  
Methodical recommendations for the construction of computer algorithms in solving design and invention problems /Metodicheski rekomendatsii shchedo skladania algoritmov roz'yaznania na obshchislival'nikh mashinakh konstruktors'ko-vinakhidnits'kikh zadach/.  
19 p3280 A69-36666
- POLOVKO, A. M.**  
Fundamentals of reliability theory.  
03 p0433 A69-13009
- POLOVNIKOV, G. G.**  
An apparatus for studying diffraction effects on periodic structures in the millimeter wavelength range /Ustanovka dlia issledovaniia difraktsionnykh iavlenii na periodicheskikh strukturakh v milimetrovom diapazone voln/.  
04 p0598 A69-14852
- Diffraction of an electromagnetic wave incident obliquely on an array of rods with a rectangular cross section /Difraktsiia elektromagnitnoi volny pri kosom padenii na reshetku, sostavleniuiu iz brus'ev priamougol'nogo poperechnogo sечения/.  
08 p1275 A69-20433



## POLOWCZYK, M.

Instrument for investigating diffraction phenomena at periodic structures in the millimeter band.  
15 p2607 A69-30244

Experimental substantiation of requirements imposed on measurements in the study of diffraction effects /Eksperimental'noe obosnovanie trebovaniy k izmereniyam pri issledovanii difraktsionnykh iavlenii/.  
23 p4139 A69-42042

Experimental study of diffraction by two-element arrays /Eksperimental'noe issledovanie difraktsii na dvukhelementnykh reshetkakh/.  
23 p4139 A69-42044

## POLOWCZYK, M.

Dependence of the sensitivity of silicon resistance strain gauges on the way of cutting them from the single crystal /Zaleznost' chulosci krzemowych tensometrov oporowych od sposobu wyciecia ich z monokrystalu/.  
11 p1887 A69-25209

## POLOZHII, G. N.

Solution to a mixed boundary value problem in the theory of the axisymmetric potential for a three-dimensional layer /O reshenii smeshanoi kraevoi zadachi teorii osesimmetrichnogo potentsiala dlia prostranstvennogo sloia/.  
11 p1918 A69-24787

Integral representations of  $x$  super  $k$ -analytic functions and solutions of axisymmetric problems of the theory of elasticity /Ob integral'nykh predstavleniyakh  $x$  super  $k$ -analiticheskikh funktsii i reshenii osesimmetrichnykh zadach teorii uprugosti/.  
15 p2714 A69-31191

## POLOZOVA, N. G.

First-order theory of motion of the minor planet 11 Parthenope /Teoriya dvizheniya maloi planety 11 Parthenope pervogo poriadka/.  
20 p3596 A69-37316

## POLSKII, V. G.

X-ray stroboscope.  
18 p3138 A69-35114

## POLSON, J. H.

Performance of ultra-bandwidth YIG pulse compression networks.  
13 p2230 A69-27680

## POLSTORFF, W. K.

Dynamics of a rotating space station.  
05 p0827 A69-16476

## POLTAVTSEV, N. S.

Influence of the conditions of formation of silicide layers on molybdenum on some of their properties /Vliianie usloviy polucheniia silitsidnykh sloev na molibdene na nekotorye ikh svoistva/.  
20 p3560 A69-37361

## POLTEV, A. K.

Diurnal and seasonal variations in the intensity of phase-difference fluctuations or radio waves propagating in the atmospheric ground layer /Sutochnye i sezonnye variatsii intensivnosti fluktuatsii raznosti faz radiovoln, rasprostraneniushchikhsia v prizemnom sloe atmosfery/.  
20 p3485 A69-36971

## POLUBOIRINOVA, M. F.

Behavior of manganese in indium antimonide.  
04 p0643 A69-15257

## POLUEKTOV, I. A.

Coherent effects associated with the propagation of an ultrashort light pulse in a medium with two-photon resonance absorption /Kogerentnye efekty pri rasprostraneni ul'trakorotkogo impul'sa sveta v srede s dvukhfotonnym rezonansnym pogloshcheniem/.  
15 p2634 A69-30966

## POLUNIN, A. M.

Five problems concerning the effect of a solid screen on the apparent mass of floating cylindrical bodies during a vertical impact /Piat' zadach o vliianii tverdogo ekrana na prisoedineniuiu massu plavaiushchikh tsilindricheskikh tel pri vertikal'nom udare/.  
11 p1875 A69-25487

## POLUPAN, P. N.

Growth curves of the spectral lines of iron and titanium ions in a solar flare /Krivye rosta spektral'nykh liniy ionov zheleza i titana v solnechnoi vspyske/.  
14 p2514 A69-29720

## POLUSHINA, I. K.

Electrical properties of  $n$ -CdSnAs sub 2 over a broad range of temperatures and impurity concentrations.  
05 p0809 A69-16375

## POLUSHKIN, I. M.

Phenomena during plasma decay at high pressure in helium and argon with a cesium vapor admixture or in pure cesium vapor /Iavishcha pri raspade plazmy v geliu i argone pri povyshennom davlenii s primesiu parov tseziia i v chistykh parakh tseziia/.  
10 p1733 A69-23448

03 p0480 A69-14052

Phenomena during plasma decay in helium and argon at high pressure with cesium vapor impurity and in pure cesium vapor.  
18 p3181 A69-35045

## POLUSHKIN, I. N.

Phenomena during plasma decay at high pressure in helium and argon with cesium vapor admixtures and in pure cesium vapor /Iavleniia pri raspade plazmy v geliu i argone pri povyshennom davlenii s primesiu parov tseziia i v chistykh parakh tseziia/.  
10 p1733 A69-23448

## POLVERELLI, M.

Radioprotective properties of some heterocyclic nitrogenous compounds against X-radiation injury to serum proteins in mice.  
23 p4077 A69-41300

## POLYMERPOULOS, C. E.

Ignition and extinction of liquid fuel drops - Numerical computations.  
13 p2379 A69-28456

## POLZEN, K. P.

On-line simulation of the block-diagram systems.  
16 p2755 A69-31709

## POMALAZA, J.

Sensing the earth's atmosphere with occultation satellites.  
14 p2447 A69-29517

## POMANSKII, A. A.

More on cascade curves for superhigh energies.  
13 p2304 A69-28416

## POMERANTSEV, V. V.

Computer calculation of the kinetic characteristics of the normal propagation of a flame /Vychislenie kineticheskikh kharakteristik normal'nogo rasprostraneniia plameni na EVM/.  
17 p3069 A69-33138

## POMERANTZ, M. A.

Solar diurnal anisotropy of cosmic rays.  
21 p3788 A69-38547

## POMEY, G.

Fatigue damage of metals /L'endommagement par fatigue des metaux/.  
07 p1166 A69-19215

## POMRANING, G. C.

A variational characterization of the equation of transfer.  
09 p1541 A69-22253

An extension of the Eddington approximation.  
09 p1541 A69-22254

The effects of polarization on diffusion descriptions of radiative transfer.  
21 p3847 A69-38473

## POND, N. H.

High power broadband traveling-wave tubes.  
13 p2232 A69-28057

## POND, R. B.

Hypervelocity target dynamics as seen by three dimensional markers.  
[AIAA PAPER 69-368]  
13 p2367 A69-28300

## PONEC, V.

Preparation of ultraclean substrate surfaces.  
14 p2455 A69-29348

## PONKRATOV, V. S.

Detection of signal in noise by receivers with nonlinear fourpoles at the input.  
04 p0557 A69-14776

## PONNAMPERUMA, C.

Alicyclic hydrocarbons from an unusual deposit in Derbyshire, England - A study in possible diagenesis.  
17 p2917 A69-34184

Ion-molecule reactions in hydrogen cyanide.  
20 p3485 A69-38262

Synthesis of acyclic isoprenoids by the gamma-irradiation of isoprene.  
24 p4269 A69-43750

## PONOMAREKO, E. P.

Vacuum-diffused protective coatings of nickel alloys /Vakuumdiffuzionnye zashchitnye pokrytiia nikelovykh splavov/.  
10 p1715 A69-24013

## PONOMARENKO, A. G.

Dynamic characteristics of a straight turbulent discharge.  
07 p1195 A69-19592

Millimicrosecond photographic recording of processes in a low-density theta-pinch /Millimikrosekundnaia fotoregistratsiia protsessov v theta-pinch nizkoi plotnosti/.  
14 p2496 A69-29787

## PONOMARENKO, B. F.

Polarizational-optical investigation of the failure of transparent dielectrics by laser radiation.  
08 p1324 A69-19944

Method of studying dynamic stresses induced by laser radiation /Metod issledovaniia dinamicheskikh napriazhenii, vyzvannykh izlucheniem O.K.G./.  
10 p1707 A69-24244

## PONOMARENKO, E. P.

Mechanical properties of diffused chromized layers.  
03 p0450 A69-13914

Chromizing of steels by vacuum diffusion /Vakuumnaya diffuzionnoe khromirovanie stalei/.  
19 p3329 A69-36515

## PONOMARENKO, I. U. B.

Formation of turbulence in a conducting liquid /Vozniknoveniie turbulentnosti v provodiashchei zhidkosti/.  
11 p1955 A69-24394

On the stability of a plane Couette flow.  
14 p2428 A69-28800

Generation of stellar magnetic fields by convective motions of the surface layers /O generatsii magnitnykh polia zvezd konvektivnymi dvizheniyami poverkhnostnykh sloev/.  
15 p2688 A69-30555

The development of turbulence in a conducting fluid.  
24 p4390 A69-43783

## PONOMARENKO, N. E.

Effect of boron on the friction of porous nickel at high velocities and temperatures /Vliianie bora na protsess treniia poristogo nikelia pri povyshennykh skorostiakh i temperaturakh/.  
15 p2641 A69-31183

## PONOMARENKO, V. A.

Biochemical indicators of the reaction of pilots to complex conditions of flight /Biokhimicheskie pokazатели reaktsii letchikov na slozhnye usloviia poleta/.  
05 p0710 A69-16529

Biochemical indices of the response of fliers to complex conditions of flight.  
18 p3096 A69-34744

## PONOMARENKO, V. G.

Experimental investigation of the motion of individual charged particles in a mirror device.  
15 p2659 A69-30724

## PONOMARENKO, V. P.

Nonlinear phase-locked automatic frequency control system with a wide locking range /Nelineinaya sistema chastotno-fazovoi avtopodstroiki s shirokoi polosoi zakhvata/.  
04 p0559 A69-15137

## PONOMAREV, A. I.

Magnetoresistance oscillations in  $n$ -GaSb associated with  $1/111$  minima /Otsiliatsii magnetosoprotivleniia  $n$ -GaSb, svyazannye s minimumami  $1/111$ /.  
13 p2319 A69-27900

## PONOMAREV, A. N.

Effect of ionizing radiation on the combustion of ammonium perchlorate and systems of mixtures containing it /Vliianie ioniziruiushchego izlucheniia na gorenie perkhlorata ammoniia i i smeseykh sistem na ego osnove/.  
11 p1941 A69-25194

## PONOMAREV, D. A.

Radio Control of Rocket Missiles and Space Vehicles /Radioupravlenie reaktivnymi snaryadami i kosmicheskimi apparatami/.  
20 p3574 A69-37232

## PONOMAREV, V. M.

Optimum parametric laws of space vehicle descent control /Optimal'ne parametricheskie zakony upravleniia snizheniem kosmicheskogo apparata/.  
21 p3766 A69-39647

## PONOMAREV, V. N.

Measurement of the ion temperature in a rarefied multicomponent plasma /Izmerenie temperatury ionov v razrezhnoii mnogokomponentnoi plazme/.  
23 p4196 A69-41839

## PONOMAREVA, I. D.

A multilayer network with lateral couplings for distinguishing features in the recognition of visual patterns /Mnogosloinaya set' s lateral'nymi svyaziami dlia vydeleniia priznakov i opoznaniia zritel'nykh obrazov/.  
19 p3260 A69-35898

## PONOMAREVA, L. P.

Microtron with plasma injector.  
08 p1279 A69-19803

- PONS, J.**  
Evacuation of maxilla-facially wounded persons by air /L'evacuation du blessé maxillo-facial par voie aérienne/.  
24 p4270 A69-42603
- PONSONBY, J. E. B.**  
The Jodrell Bank radio frequency digital autocorrelation spectrometer.  
17 p2970 A69-32856
- PONT, D.**  
French air cushion vehicle technology /La technique française des aéroglosses/.  
08 p1254 A69-20198
- PONTANO, B. A.**  
Measurements of an ionizable constituent of the low ionosphere using a Lyman-alpha source and blunt probe.  
15 p2598 A69-31316
- PONTE, M. J. H.**  
Spatial communications.  
03 p0394 A69-13577
- PONTER, A. R. S.**  
An energy theorem for time dependent materials.  
11 p1969 A69-24412
- PONZI, U.**  
Activities and problems at the vibration- testing facility at Centro Ricerche Aerospaziali /Attività e problemi dell'impianto per le prove di vibrazione del centro ricerche aerospaziali/.  
08 p1301 A69-20159  
Preliminary investigation for a study of panel flutter in supersonic blow-down wind tunnels /Una indagine preliminare per lo studio del "flutter" dei pannelli nelle gallerie supersoniche intermittenti/.  
21 p3847 A69-39859
- POOL, M. J.**  
Thermodynamic analysis of dilute ternary systems. II - The Ag-Cu-Sn system.  
13 p2279 A69-27759  
Thermodynamic analysis of dilute ternary systems. III - The Au-Cu-Sn system.  
17 p2987 A69-33077
- POOL, P. E.**  
Increased myocardial oxygen consumption and contractile state associated with increased heart rate in dogs.  
24 p4258 A69-42634
- POOLE, W. E.**  
Designing lumped elements into microwave amplifiers.  
11 p1856 A69-25654
- POOLEY, G. G.**  
5C 3 - A radio continuum survey of M 31 and its neighbourhood.  
20 p3601 A69-37493  
Radio-frequency observations of the edge-on spiral galaxy NGC 4631.  
22 p4022 A69-40463
- POORMAN, R. M.**  
Plasma electron beam development for welding applications.  
19 p3320 A69-35555
- POP, GH. G.**  
Lorentzian plasma in an elliptic magnetic field /Sur un plasma Lorentzien dans un champ magnétique elliptique/.  
17 p3009 A69-32827
- POP, I.**  
An unsteady boundary layer in the vicinity of a rotating disk /Sur la couche limite non stationnaire au voisinage d'un disque tournant/.  
01 p0059 A69-10361  
Unsteady hydromagnetic flow with suction above a plane vertical porous wall /Miscarea hidromagnetică nestationară cu succiune deasupra unui perete poros plan vertical/.  
07 p1195 A69-19477  
Unsteady suction motion of a viscous incompressible fluid under the action of a rotating disk /Le mouvement instationnaire à succion d'un fluide visqueux incompressible sous l'action d'un disque tournant/.  
08 p1302 A69-19875  
The unsteady dynamic boundary layer on a rotating disk /Sur la couche limite dynamique non stationnaire sur un disque tournant/.  
19 p3300 A69-36720  
Natural unsteady convection on a vertical infinite plate /De la convection naturelle instationnaire sur une plaque verticale infinie/.  
21 p3853 A69-39681
- POPE, D. G.**  
Satellite television distribution - Service from geostationary satellites to community antennas in multiple-coverage areas.  
22 p3902 A69-41252
- POPE, D. L.**  
Parametric representation of ground antennas for communication systems studies.  
04 p0561 A69-15449
- POPE, R. A.**  
Ion and electron currents from hot filaments - Effect of alloying on electron emission.  
04 p0577 A69-14875  
Emission of high-energy electrons during alloy-evaporation processes on hot metal filaments.  
16 p2827 A69-32016
- POPE, R. B.**  
Evaluation of a polyurethane foam for ablative protection at low heating rates.  
04 p0688 A69-15513  
Ablative thermal protection at low heating rates.  
19 p3357 A69-35536  
Stagnation-point heat transfer in arc-heated helium and argon.  
20 p3631 A69-37198  
Experimental evaluation of polyurethane foam composites for low-heating-rate thermal protection.  
21 p3753 A69-39236
- POPE, T.**  
Improvement of coronal emission line photographs.  
20 p3539 A69-37547
- POPEA, A.**  
Transmission system with cascade phase modulation by dividing the baseband spectrum into subbands.  
12 p2030 A69-26385
- POPELAR, C. H.**  
Dynamic stability of the flexural vibrations of a thin-walled beam.  
13 p2369 A69-28353
- POPELKA, M. F., JR.**  
A precision azimuth reference system for gyrocompass evaluation.  
[AIAA PAPER 69-859] 21 p3725 A69-39387
- POPEREKOVA, L. M.**  
Investigation of nuclear interactions of high-energy particles by the controlled nuclear emulsion method.  
13 p2331 A69-28388
- POPESCU, D.**  
Absorption spectroscopy of excited cesium atoms /Absorptionsspektroskopie angeregter Caesiumatome/.  
22 p3984 A69-40418
- POPESCU, I.**  
Absorption spectroscopy of excited cesium atoms /Absorptionsspektroskopie angeregter Caesiumatome/.  
22 p3984 A69-40418
- POPESCU, M. P.**  
Certain visual feedback mechanisms in simulated high-altitude conditions /Certains mécanismes oculaires de feed back dans les conditions des grandes altitudes simulées/.  
06 p0882 A69-17647
- POPESCU, N. D.**  
The dynamic stability of thin plates - Their use in the construction of ship and aircraft decks /La stabilité dynamique des plaques minces - Leur utilisation dans la construction des ponts des vaisseaux et des avions/.  
08 p1415 A69-20665  
Dynamical stability of the rectangular plates acted upon by tangential forces.  
08 p1415 A69-20666
- POPKO, N. A.**  
Activation of the synthesis of protein and RNA in the cerebrum as a factor of adaptation to high-altitude hypoxia /Aktivatsiia sinteza belka i RNK v golovnom mozge kak faktor adaptatsii k vysotnoi gipoksii/.  
22 p3886 A69-41122
- POPLAVKO, IU. M.**  
Investigation of ferroelectrics at frequencies between 50 and 80 GHz /Issledovanie segnetoelektrikov na chastotakh 50-8 Ggts/.  
22 p3995 A69-41158  
Investigation of ferroelectrics by a waveguide resonance technique at decimeter waves /Issledovanie segnetoelektrikov volnovodno-rezonansnym metodom na detsimetrovnykh volnakh/.  
22 p3997 A69-41167
- POPLAVSKII, A. A.**  
Anisotropy of the stability of calcite /CaCO sub 3/ to laser radiation /Anizotropiia stoikosti kal'tsita /CaCO sub 3/ k lazernomu izlucheniiu/.  
11 p1900 A69-25553
- POPLAWSKI, J. V.**  
Skidding in lightly loaded high-speed ball thrust bearings.  
[ASME PAPER 69-LUBS-20] 18 p3140 A69-34377
- POPOV, A. I.**  
Change of the shape of the gain line in the saturation by the proper field in a 3.39 mu laser.  
08 p1323 A69-19942
- POPOV, A. K.**  
Possibility of using the graph method in electrophysiology /O vozmozhnosti primeneniia metoda grafov v elektrofiziologii/.  
11 p1829 A69-24540  
A semiclassical theory of the laser.  
16 p2798 A69-32480  
Biological principles for constructing a model of the sensor motor activity of a human operator /Biologicheskie printsipy postroeniia modeli sensomotornoi deiatel'nosti cheloveka-operatora/.  
22 p3892 A69-40281
- POPOV, A. M.**  
The use of heat treatment in an inert gas medium for the "improvement" of elastic foam polyurethane to reduce toxic outgasing.  
10 p1716 A69-23503
- POPOV, E. G.**  
Luminance of shock wave fronts in certain gases.  
03 p0415 A69-13411  
Spectral brightness of shock waves in air /Spektral'naia iarkost' udarnykh voln v vozdukh/.  
11 p1877 A69-25755  
Screening of shock-wave radiation by a gas not in thermodynamic equilibrium ahead of the front.  
14 p2493 A69-29673
- POPOV, E. P.**  
Layered beam systems with interlayer slip.  
01 p0169 A69-10638  
Buckling of spherical sandwich shells.  
24 p4396 A69-42734
- POPOV, G. IA.**  
Method of orthogonal polynomials in contact problems of elasticity theory /O metode ortogonal'nykh mnogochlenov v kontaktnykh zadachakh teorii uprugosti/.  
22 p4041 A69-40113
- POPOV, G. V.**  
Filament structure of magnetospheric currents /O voloknistoi strukture tokov v magnitosfere/.  
05 p0753 A69-16049  
Filamentary structure of currents in the magnetosphere.  
20 p3532 A69-37958
- POPOV, I. G.**  
Results of physiological-biochemical study of members of the crew of the spacecraft Voskhod /Rezultaty fiziologo-biokhimicheskogo obsledovaniia chlenov ekipazha kosmicheskogo korablia "Voskhod"/.  
03 p0377 A69-14195
- POPOV, IU. A.**  
Radiation from an isothermal sphere taking scattering into account /Izluchenie izotermicheskogo shara s uchedom rasseianiia/.  
01 p0174 A69-10106
- POPOV, IU. M.**  
Space-charge-limited currents in SbSI single crystals /Toki, ogranichennye prostranstvennym zariadom, v monokristallakh SbSI/.  
01 p0137 A69-10258  
Space-charge-limited currents in SbSI single crystals.  
09 p1559 A69-22651  
Effect of temperature on the emission spectrum of semiconductor lasers /Vliianie temperatury na spektr izlucheniia poluprovodnikovyykh kvantovykh generatorov/.  
13 p2271 A69-27888  
Influence of a frequency filter on the emission spectrum of semiconductor lasers /Vliianie chastotnogo filtra na spektr izlucheniia poluprovodnikovyykh generatorov/.  
15 p2635 A69-30967  
Effect of temperature on the emission spectra of semiconductor lasers.  
21 p3738 A69-39146



## POPOV, I. P.

Completely conservative difference schemes /Polnost'iu konservativnye raznostnye skhemy/.  
23 p4151 A69-41527

## POPOV, I. V.

Reflection spectra of indium arsenide.  
06 p0979 A69-16995  
Broadband intracavity SHF modulation of a He-Ne laser /Shirokopolosnaia vnutrizonatornaia SVCh moduliatsiia He-Ne-lazera/.  
17 p2981 A69-33112

## POPOV, K. N.

Systems for the Deflection of the Jet Stream of Turbojet Engines /Ustroistva dlia otleneniia Reaktivnoi Strui Turboreaktivnykh Dvigatel'/.  
04 p0647 A69-14934

## POPOV, K. V.

Theory of hydrogen embrittlement of metals.  
09 p1523 A69-21849

## POPOV, L. N.

A dynamic integrating element /Dinamicheskii integriruiushchii element/.  
13 p2224 A69-27427

## POPOV, M. M.

Resonators for lasers with unfolded directions of principal curvatures.  
09 p1520 A69-22680

## POPOV, M. V.

Absolute dimensions of certain variable eclipsing systems and problems of the evolution of stars /Absolutnye razmery nekotorykh zatmennykh peremennykh sistem i voprosy evoliutsii zvezd/.  
09 p1590 A69-21378

Eclipsing variables near the main sequence.  
11 p1952 A69-24248  
Absolute dimensions of 18 eclipsing binary systems and some evolutionary considerations.  
18 p3198 A69-34766

Utilization of aperiodic feedback in a satellite stabilization system /Ispol'zovanie aperiodeskoi obratnoi svyazi v sisteme stabilizatsii ISZ/.  
21 p3829 A69-39832  
Utilization of combined feedback in a satellite stabilization system /Ispol'zovanie kombinirovannoi obratnoi svyazi v sisteme stabilizatsii ISZ/.  
21 p3830 A69-39833

## POPOV, N. I.

Vestibular reactions of cosmonauts during the flight on the Voskhod spacecraft /Vestibuliarnye reaktsii kosmonavtov pri Plete na korabe "Voskhod"/.  
07 p1062 A69-18588

Vestibular training of test pilots by passive methods /Vestibuliarnaia trenirovka ispytatelei passivnymi metodami/.  
20 p3472 A69-37266

## POPOV, N. N.

Dislocation structure of niobium-titanium alloys.  
21 p3747 A69-39163  
Creep in a multicomponent niobium alloy /Polzuchest' mnogokomponentnogo сплава niobii/.  
22 p3969 A69-40073

## POPOV, N. I.

Asymptotic method for calculating the reliability of technological systems /Asimptoticheskiy metod rascheta nadezhnosti tekhnicheskikh sistem/.  
01 p0085 A69-10210  
Asymptotic method for calculating the reliability of engineering systems.  
14 p2453 A69-28747

## POPOV, S. G.

Discrete vortices in the wake of various profiles in a subsonic and supersonic two-dimensional gas flow /Diskretnye vikhri v slede za razlichnyimi profilami v dozvukovom i sverkhzvukovom ploskom potoke gaza/.  
02 p0191 A69-12587  
Preparation of a laboratory atmospheric electrical conductivity meter /K sozdaniyu laboratornogo izmeritel'ya elektroprovodnosti vozdukh/.  
04 p0600 A69-15106

Relation between Strouhal and Reynolds numbers for two-dimensional flow about a circular cylinder.  
07 p1119 A69-18749

## POPOV, V. A.

Probabilities of error, correct reception and cancellation in channels with absorption fading /Veroyatnost' oshibki, pravil'nogo priema i stiranii v kanalakh s absorbtionnymi zamiraniyami/.  
01 p0030 A69-10592  
Estimate of the error probability during the optimal detection of Gaussian random signals /K raschetu

veroyatnostei oshibok pri optimal'nom obnaruzhenii gaussovskikh sluchainykh signalov/.  
02 p0206 A69-11605

Structure of the optimal detector of a Gaussian signal against a background of Gaussian noise /O strukture optimal'nogo obnaruzhitelia gaussovskogo signala na fone gaussovskogo shuma/.  
02 p0206 A69-11606

Work activity of a cosmonaut during weightlessness and in unsupported space /Raboachaia deiatel'nost' kosmonavta v nevesomosti i bezopornom prostranstve/.  
02 p0203 A69-12123

Errors of aircraft computers /O pogreshnostiakh vychislitel'nykh ustroystv dlia letatel'nykh apparatov/.  
04 p0563 A69-14491

Experimental investigation of the influence of the combustion-product composition on the conductivity in the presence of a potassium additive /Eksperimental'noe issledovanie vliyaniia sostava produktov sgoraniia na provodimost' pri nalichii dobavki kalii/.  
06 p0870 A69-17908

Error, correct reception, and erasure probabilities in channels with absorption fading.  
10 p1653 A69-23106

Error probability at optimum detection of random Gaussian signals.  
11 p1835 A69-24712

Structure of an optimal detector of a Gaussian signal in Gaussian noise.  
11 p1835 A69-24713

Nearly optimal detector of a Gaussian signal against a background of Gaussian noise /O priblizhennoptimal'nom obnaruzhitеле gaussovskogo signala na fone gaussovoi pomekhi/.  
22 p3901 A69-40955

## POPOV, V. E.

Cadmium sulfide thin-film hypersonic transducers.  
15 p2575 A69-30236

## POPOV, V. I.

Experimental verification of the permissible radiation doses for extended space missions /"chronic experiments" with dogs/ /K eksperimental'nomu obosnovaniyu dopustimnykh doz radiatsii pri dlitel'nykh kosmicheskikh poletakh /provedenie khronicheskogo eksperimenta na sobakakh/.  
05 p0708 A69-16508

Coordination of posture and motion of man under conditions of increased and decreased gravitation /Koordinatsiia pozy i dvizheniia cheloveka v usloviakh povyshennoi i ponizhennoi gravitatsii/.  
07 p1063 A69-18593

Quantitative laws of the postirradiation recovery of yeast cells after exposure to heavy high-energy C super 12 ions /Kolichestvennye zakonomenosti postirradiatsionnogo vosstanovleniia drozhdzhevykh kletok pri deistvii vysokoenenergetichnykh tiazhelykh ionov C sub 12/.  
14 p2406 A69-28915

Thermal stability of a DC plasmatron arc /Temperaturnaia ustoychivost' dugi plazmatrona postoiannogo toka/.  
15 p2663 A69-30994

Experimental verification of permissible radiation doses during prolonged space flights - A "chronic experiment" on dogs.  
18 p3095 A69-34727

Characteristics of biological effects of cosmic radiation, model investigations.  
20 p3478 A69-37628

Investigation of the dynamics of the preliminary damping system of a gravity-gradient stabilized satellite with allowance for sensor limitations and stabilizer flexural vibrations /Issledovanie dinamiki sistema predvaritel'nogo uspokoeniia gravitatsionno-ustoychivogo sputnika s uchetoм ogranicenii datchikov i izgibnykh kolebaniy stabilizatora/.  
21 p3826 A69-39638

## POPOV, V. P.

Thermal expansion coefficients of a niobium-zirconium-titanium alloy and plexiglass at temperatures ranging from 10 to 300 K /Koefitsienty termichnogo rozshireniiia splavu niobii-tirkoniia-titan i orgskla v intervali temperatur 10-300 deg K/.  
11 p1905 A69-24917

## POPOV, V. S.

Quasiclassical approximation in ionization problems.  
09 p1543 A69-22658  
Relaxation of a quantum oscillator.  
18 p3152 A69-35126

## POPOV, V. V.

Electric arc source of a low-temperature plasma.  
05 p0802 A69-15902

## POPOVA, A. P.

Electron scattering on neutral acceptors in semiconductors /Rasseianie elektronov na neutral'nykh aktsip'torakh v poluprovodnikakh/.  
03 p0484 A69-132800

Electron scattering by neutral acceptors in semiconductors.  
14 p2508 A69-29653

## POPOVA, E. A.

Effect of the association of sulfur-organic compounds with aromatic hydrocarbons on the oxidation stability of oil /O vliyaniia assotsiatii seraorganicheskikh soedinenii s aromatcheskimi uglevododorodami na stabil'nost' masla protiv okisleniia/.  
03 p0494 A69-138000

## POPOVA, N. A.

Occurrence of chromosome rearrangements in the corneal epithelium of mice during prolonged general gamma irradiation /Voznikovenie khromosomnykh perestroek v epiteli rogovitsy myshei pri obshchemu prolougivannom gamma-oblucheni/.  
17 p2907 A69-32944

## POPOVA, N. M.

Phase equilibria in the systems vanadium-chromium-carbon, niobium-chromium-carbon, and tantalum-chromium-carbon.  
09 p1523 A69-21872

## POPOVA, T. G.

Effect of prolonged limitation of muscle activity on cardiac dynamics.  
02 p0198 A69-11515

## POPOVA, T. N.

Determination of the concentration of molecules in an excited state from absolute intensities /Opredelenie konsentratsii molekul v vobuzhdennom sostoianii po absolutnoi intensivnostiam/.  
15 p2654 A69-30080

## POPOVA, T. P.

Analysis of the air flowfields in cyclones according to television cloud images from the Cosmos 122 satellite /Analiz polia vozdushnykh techenii v tsiklonakh po televizionnyim izobrazheniyam oblachnosti so sputnika "Kosmos-122"/.  
11 p1912 A69-24825

Vertical air motions and clouds /Vertikal'nye dvizheniia vozdukh i oblachnost'/.  
13 p2291 A69-27724

Analysis of the state of the atmosphere over the globe from a picture obtained by the Zond 5 space station at an altitude of 90,000 km /Analiz sostoianii atmosfery nad zemnym шаром po snimku s vysoty 90,000 km, poluchennomu kosmicheskoi stantsiei Zond-5/.  
23 p4184 A69-42486

## POPOVIC, P.

Critical temperature for intracranial self-stimulation in white rats.  
03 p0375 A69-13897

Hypothermic cardiopulmonary bypass in white rats.  
05 p0708 A69-15971

A technique permitting evaluation of cardiovascular changes induced by long-term weightlessness.  
23 p4108 A69-41824

A miniaturized pump oxygenator for evaluation of peripheral circulatory changes induced by long-term weightlessness in rats.  
24 p4278 A69-43394

## POPOVIC, V.

A miniaturized pump oxygenator for evaluation of peripheral circulatory changes induced by long-term weightlessness in rats.  
24 p4278 A69-43394

## POPOVIC, V. P.

Critical temperature for intracranial self-stimulation in white rats.  
03 p0375 A69-13897

Hypothermic cardiopulmonary bypass in white rats.  
05 p0708 A69-15971

A technique permitting evaluation of cardiovascular changes induced by long-term weightlessness.  
23 p4108 A69-41824

## POPOVICH, B.

Satellite motion around an axisymmetric planet /Dvizhenie sputnika okolo osesimmetrichnoi planety/.  
06 p1005 A69-17563

## POPOVICH, D. I.

Physics of the Moon and Planets /Fizika Luny i Planet/.  
11 p1959 A69-24723

Problems of Astrophysics /Voprosy Astrofiziki/.  
15 p2682 A69-30505

- Physics of Comets /Fizika Komet/.  
15 p2683 A69-30515
- Problems of Astrometry /Voprosy Astrometrii/.  
17 p3026 A69-32867
- Strength and Plasticity of Metals and Alloys /Prochnost' i Plastichnost' Metallov i Splavov/.  
18 p3158 A69-35442
- POPOVICH, V. E.**  
Stability of nonuniformly heated rectangular plates of variable rigidity /Ustoichivost' neravnomeno nagretykh priamougol'nykh plastin peremennoi zhestkosti/.  
11 p1982 A69-24950
- Stability of nonuniformly heated plates reinforced by elastic ribs /Ustoichivost' neravnomeno nagretykh plastin, zakreplennykh na uprugikh rebrakh/.  
17 p3057 A69-33198
- POPOVICI, C.**  
The H alpha plage associated with the proton flare of July 1966.  
10 p1762 A69-23728
- POPOVKIN, V. I.**  
Optimization and systematization of solutions to antenna synthesis problems.  
02 p0217 A69-12260
- Optimal solutions to problems in antenna synthesis theory /Optimal'nye resheniya zadach teorii sinteza anten/.  
21 p3682 A69-39124
- Optimum antenna synthesis for limited deviations of the source distribution function from the prescribed function /Optimal'nyi sintez antenn pri ogranichenii otklonenii funktsii raspredeleniya istochnikov ot zadanoi/.  
22 p3916 A69-40952
- POPP, D. J.**  
Buffer considerations for data compression of non-stationary video data.  
19 p3272 A69-36260
- POPP, H.**  
Solid-state VOR - A new generation of VHF omnidirectional radio ranges /Solid-State- VOR - Eine neue Generation von UKW- Drehfunkfeuern/.  
16 p2827 A69-31938
- POPPELBAUM, T. L.**  
A technique for anticipating in-the-field performance of low light level television.  
07 p1132 A69-18948
- POPPER, P.**  
Special Ceramics 4, British Ceramic Research Association, Symposium, 4th, Stoke-on-Trent, Staffs., England, July 11-13, 1967, Proceedings.  
06 p0946 A69-17527
- POPPELTON, E. D.**  
A generalization of Zermelo's condition for the minimum-time flight path.  
21 p3647 A69-39006
- PORCELLO, L. J.**  
Optical processing of planetary radar data - Preliminary results.  
08 p1270 A69-19816
- Introduction to imaging radar.  
20 p3489 A69-37632
- Range-Doppler radar.  
20 p3490 A69-37641
- Atmospheric effects on terrain-imaging radars.  
20 p3490 A69-37647
- Applications of imaging radars.  
20 p3491 A69-37649
- Sensing with radar.  
20 p3493 A69-37741
- PORCH, H. E.**  
Communist China's civil aviation - 1950-1968.  
16 p2882 A69-32337
- POREH, M.**  
On the measurement of low level turbulence using a pair of sensors.  
14 p2446 A69-29018
- PORETSKAIA, L. V.**  
Semiconductor Compounds, their Production and Properties /Poluprovodnikovye Soedineniia, ikh Poluchenie i Svoistva/.  
01 p0137 A69-10353
- PORFIREV, L. F.**  
Analytic estimates of the accuracy of satellite coordinates and velocities deduced from the results of statistical processing of astronomical measurements.  
07 p1178 A69-19606
- PORFIREV, V. A.**  
Absolute measurements of radio-emission intensity of the discrete sources Cassiopeia-A and Cygnus-A at 30-60 cm wavelengths /Absoliutnye izmereniia intensivnosti radioizlucheniia diskretnykh istochnikov Kassiopeia-A i Lebed'-A na volnakh 30-60 cm/.  
19 p3428 A69-36876
- PORFIREV, V. V.**  
Thermal explosion in a degenerate gas /K voprosu o teplovom vzryve v vyrozhdennom gase/.  
15 p2682 A69-30507
- Theory of the rotation of stars /Teoriia vrashcheniia zvezd/.  
15 p2683 A69-30512
- Hydrodynamic theory of stellar rotation. I - Rotation of stars in the stage of gravitational contraction /Gidrodinamicheskaia teoriia vrashcheniia zvezd. I - Vrashchenie zvezd, nakhodiaschchikhsia na stadii gravitatsionnogo szhatiia/.  
20 p3607 A69-38041
- PORFIREVA, G. A.**  
The dependence of telluric-line parameters on the air mass and the height of the place of observation.  
03 p0512 A69-13695
- PORFIRIEV, V. V.**  
Toroidal stages in stellar evolution.  
12 p2173 A69-27174
- PORKHUN, L. M.**  
Random oscillations of elastic nonlinear systems with distributed parameters /Sluchainye kolebaniia uprugikh nelineinykh sistem s raspredelennymi parametrami/.  
11 p1918 A69-24781
- PORKOLAB, M.**  
Nonlinear decay instability and parametric amplification of cyclotron-harmonic plasma waves.  
12 p2135 A69-26314
- PORODNOV, B. T.**  
Plane flow of a Maxwellian gas /Ploskoe techenie maksvellovskogo gaza/.  
19 p3379 A69-36604
- POROS, D. J.**  
An improved model equatorial electrojet with a meridional current system.  
20 p3533 A69-38084
- PORRU, M.**  
Nose Fairings separation system explosive devices of the ELDO Europa I launcher.  
10 p1635 A69-23027
- PORSCH, H.**  
Project for a German-American solar probe /Projekt einer deutsch-amerikanischen Sonnensonde/.  
06 p1012 A69-16970
- PORTE, R.**  
Experimental work on inhomogeneous flows /Travaux experimentaux sur la veine inhomogene/.  
13 p2310 A69-28032
- PORTEOUS, P.**  
The variation of energy gap with composition in In sub x Ga sub 1-x P mixed crystals.  
19 p3390 A69-36553
- PORTER, A.**  
The process of adaptation and its implications for management. [AIAA PAPER 68-807]  
08 p1422 A69-20197
- PORTER, B.**  
Stability Criteria for Linear Dynamical Systems.  
02 p0281 A69-12276
- Synthesis of aircraft modal control systems having real or complex eigenvalues.  
09 p1435 A69-22779
- Synthesis of asymptotically stable discrete-time closed-loop linear systems.  
13 p2287 A69-27238
- Performance characteristics of multi-variable model-reference adaptive systems synthesized by Liapunov's direct method.  
22 p3919 A69-41201
- PORTER, G.**  
Nanosecond flash photolysis and the absorption spectra of excited singlet states.  
05 p0760 A69-15608
- PORTER, J. E.**  
Pressure drop accompanying isothermal laminar flow of a dielectric liquid through an annulus with a radial electric field.  
12 p2136 A69-26401
- PORTER, J. W.**  
Helmholtz oscillations in pulsating-combustion chambers.  
17 p3074 A69-33410
- PORTER, L. D.**  
Coupled radiation and conduction in free mixing.  
02 p0354 A69-12504
- PORTER, L. G.**  
Muon showers deep underground.  
15 p2678 A69-31485
- PORTER, R. P.**  
Image formation with arbitrary holographic type surfaces.  
14 p2450 A69-29582
- PORTER, R. W.**  
Aerodynamic configurations yielding lift without sonic boom.  
01 p0007 A69-11028
- U.S.-European cooperation in space activities - A U.S. viewpoint.  
03 p0535 A69-13586
- Meteorological research satellites - Nimbus D.  
13 p2356 A69-27832
- PORTER, W. A.**  
Orientation studies of the microwave emission from InSb.  
07 p1198 A69-18647
- PORTER, W. P.**  
Lizard reflectivity change and its effect on light transmission through body wall.  
07 p1059 A69-18373
- PORTERFIELD, J. D.**  
Measurement and evaluation of helicopter flight loads spectra data. [AHS PAPER 301]  
17 p2901 A69-33548
- PORTNIAGIN, I. I.**  
Experimental study of the ablation of meteorites.  
15 p2697 A69-31252
- PORTNOI, E. L.**  
Photoluminescence of n-type epitaxial gallium arsenide films /Fotoluminesentsiia epitaksial'nykh sloev arsenida galliia n-tipa/.  
03 p0488 A69-13887
- Coherent emission in epitaxial structures with heterojunctions in the AlAs-GaAs system /Kogerentnoe izluchenie v epitaksial'nykh strukturakh s geteroperekhodami v sisteme AlAs-GaAs/.  
03 p0489 A69-13896
- Injection properties of n-Al sub x Ga sub 1-x As-p-GaAs heterojunctions.  
06 p0979 A69-16993
- Photoluminescence of epitaxial n-type gallium arsenide films.  
11 p1939 A69-25688
- Coherent radiation of epitaxial heterojunction structures in the AlAs-GaAs system.  
11 p1939 A69-25697
- Recombination radiation in solid Al sub x Ga sub 1-x As solutions with a variable forbidden band width /Rekombinatsionnoe izluchenie v tverdykh rastvorakh Al sub x Ga sub 1-x As s peremennoi shirinoi zapreshchennoi zony/.  
19 p3391 A69-36606
- Spontaneous emission sources based on structures with heterojunctions in the AlAs-GaAs system /Istochniki spontannogo izlucheniia na osnove struktur s geteroperekhodami v sisteme AlAs-GaAs/.  
22 p3964 A69-40608
- Diagonal tunneling and radiation polarization in Al sub x Ga sub 1-x As-GaAs heterojunctions and in p-n junctions in GaAs /Diagonal'noe tunnelirovanie i polarizatsiia izlucheniia v geteroperekhodakh Al sub x Ga sub 1-x As-GaAs i p-n-perekhodakh v GaAs/.  
24 p4362 A69-43737
- PORTNOI, K. I.**  
Modulus of elasticity of some refractory compounds.  
09 p1529 A69-21871
- Phase diagram of the chromium-boron system /Diagramma sostoiianiia sistemy khrom-bor/.  
15 p2641 A69-31185
- PORTNOV, G. G.**  
Unfavorable characteristics of fiber-reinforced materials /O tritsatel'nye osobennosti materialov, armirovannykh voloknami/.  
11 p1907 A69-25680
- Initial stresses in glass-fiber reinforced plastic rings produced by winding /Nachal'nye napriazheniia v kol'tsakh iz stekloplastika, izgotovlennykh namotkoi/.  
22 p4045 A69-40749
- PORTNOVA, V. P.**  
Energy spectrum of the anomalous magnetic field /Energeticheskii spektr anomal'nogo magnitnogo polia/.  
09 p1487 A69-21554



- Energy spectrum of the anomalous magnetic field.  
16 p2784 A69-32549
- PORTNYKH, I. D.**  
Die-forging characteristics of certain high-melting-point metals /Shtampuemost' nekotorykh tugoplavkikh metallov/.  
03 p0452 A69-14124
- PORTUGALOV, V. V.**  
Cell and tissue cultures as subject of study in cosmic biology and medicine.  
02 p0198 A69-11501  
Some effects developing during hypokinesia.  
02 p0198 A69-11502  
Histological investigation of the internal organs of mice exposed for 20 days to an atmosphere with a high oxygen content /Gistologicheskoe issledovanie vnutrennykh organov myshei, nakhodivshikhsia 20 dnei v atmosfere s povyshennym soderzhaniiem kisloroda/.  
05 p0709 A69-16513  
Changes in the transversostriated muscle fibers of mice with restricted motor activity /Izmeneniia poperechnopolosatogo myshechnogo volokna pri ogranichenii dvigatel'noi aktivnosti myshei/.  
13 p2212 A69-28616  
Phagocytic activity and certain characteristics of the carbohydrate metabolism in neutrophils of men exposed to an atmosphere with increased oxygen content /Fagotsitarniia aktivnost' i nekotorye pokazateli uglevodnogo obmena neitrofilov u liudei, nakhodivshikhsia v atmosfere s povyshennym soderzhaniiem kisloroda/.  
17 p2907 A69-32942  
Histological examination of the internal organs of mice after twenty days in a hyperoxic atmosphere.  
18 p3096 A69-34732
- PORUBCAN, V.**  
On the grouping of meteors in meteor streams.  
01 p0154 A69-10873  
Separation of meteor showers from the sporadic background.  
04 p0659 A69-15034
- POSAKONY, G. J.**  
Ultrasonic testing of melt-through welds in small-diameter, thin-walled tubing couplers.  
02 p0252 A69-11810  
Ultrasonic inspection of weldments using the delta technique.  
15 p2631 A69-31508
- POSCH, R. E.**  
A coaxial, three-coil probe for measuring local values of electrical conductivity and velocity in plasma streams.  
[AIAA PAPER 69-327] 13 p2313 A69-28264
- POSGAY, R. G.**  
Definition of entry corridor thermal limits for Apollo spacecraft.  
[AIAA PAPER 68-1144] 03 p0521 A69-13673
- POSTMENTIER, E.**  
Infrasound at long range from Saturn V.  
03 p0509 A69-13358
- POSNER, E. C.**  
Combinatorial structures in planetary reconnaissance.  
06 p0890 A69-17862  
Power requirements for deep-space telecommunication links.  
10 p1652 A69-22984  
Data compression with bounded errors.  
23 p4134 A69-42526
- POSOKHIN, N. S.**  
Certain dynamic effects in ferrites /Nekotorye dinamicheskie efekty v ferritakh/.  
13 p2319 A69-27993
- POSPELOV, I. I.**  
Buckling of a rod under creep conditions.  
06 p1021 A69-17182
- POSPELOV, L. A.**  
Electron bunching in an inhomogeneous drift field /Gruppirovka elektronov v neodnorodnom pole dreifa/.  
05 p0799 A69-15646  
Focusing of electrons in the inhomogeneous drift field.  
16 p2823 A69-32503
- POSPELGELIS, M. M.**  
Measurement and computation of the instrumental Stokes vector.  
04 p0601 A69-15248

- Spectral measurement of four Stokes parameters for light scattered at natural objects /Spektral'nye izmereniia chetyrekh parametrov Stoksa dlia sveta, rasseyannogo prirodnymi ob'ektami/.  
09 p1588 A69-21367
- Spectroscopic measurements of the four Stokes parameters for light scattered by natural objects.  
18 p3198 A69-34756
- POST, D.**  
Moire fringe multiplication with non-homogeneous strain fields.  
21 p3845 A69-39328
- POST, R. E.**  
Modeling UHF transhorizon scatter propagation.  
02 p0209 A69-12350
- POSTMA, A. J.**  
Calculation of the momentum-transfer cross section of electrons in cesium vapour from drift-velocity measurements.  
21 p3773 A69-38396  
Measurements of the electron drift velocities in a cesium discharge.  
23 p4196 A69-42197
- POSTNIKOV, I. M.**  
Liquid-metal MHD systems with laminar flow and electric power generation by the synchronous principle /Zhidkometallicheskie MGD-sistemy so sloistym potokom i oborotom elektricheskoi moshnosti po sinkhronnomu printsipu/.  
13 p2206 A69-27491
- POSTNOV, L. M.**  
Change in the mechanical properties and in the dislocation structure of deformed molybdenum alloys during annealing /Izmenenie mekhanicheskikh svoistv i dislokatsionnoi struktury deformirovannykh molibdenovykh splavov pri otzhige/.  
14 p2463 A69-29312
- POSTOIEV, A.**  
Observations of Uranus using the A. Danjon astrolabe of the Sao Paulo Observatory /Observatsii d'Uranus effectuees a l'astrolabe A. Danjon de l'observatoire de Sao Paulo/.  
22 p4031 A69-40912
- POSTOLNIK, I. U. S.**  
Calculation of the temperature of a plate and cylinder heated simultaneously by radiation and convection /Temperaturnyi raschet plastinki i tsilindra, nagrevaemykh odnovremennno izlucheniem i konveksiei/.  
21 p3848 A69-38641
- POTAK, I. A. M.**  
Heat treatment of maraging steel 00N18K9M5T.  
04 p0615 A69-14646  
Mechanical properties of stainless maraging steels /Mekhanicheskie svoistva nerzhavieushchikh stalei so stareiushchim martensitom/.  
15 p2640 A69-30631
- POTAPENKO, A. E.**  
Possibility of determining a dispersed phase in pipelines by ultrasonic techniques /O vozmozhnosti opredeleniia dispersnoi fazy v truboprovodakh ul'trazvukovym sposobom/.  
04 p0596 A69-14489  
Measurement of the temperature of moving droplets /Izmerenie temperatury dvizhushchikhsia kapel'/.  
04 p0688 A69-15423  
Apparatus for determining the amount of dissolved gases in a liquid /Pribor dlia opredeleniia kolichestv rastvorenykh gazov v zhidkosti/.  
19 p3308 A69-35822
- POTAPOV, A. A.**  
Plotting of the envelope of nutational vibrations of a gyroscope under the influence of dissipative forces /Postroenie ogibaushchei nutatsionnykh kolebani pri deistvii na gioskop dissipativnykh sil/.  
21 p3723 A69-38889
- POTAPOV, A. V.**  
Cross-correlation function of two pulse trains.  
04 p0557 A69-14790  
Methods of separating weak periodic signals from noise /Review/ /Metody vydeleniia iz shumov slabyykh periodicheskikh signalov /obzort//.  
04 p0597 A69-14848  
Methods of separating weak periodic signals from noise /Review/.  
15 p2607 A69-30241
- POTAPOV, I. U. F.**  
Efficiency of tubular radiation emitters of cosmic apparatus provided with a meteoric shield.  
05 p0846 A69-15897

- Study of a radiating system with conical heat removing projections /Issledovanie izluchatel'noi sistemy s konicheskimi teplootvodiaschimi shipami/.  
06 p1033 A69-17603
- Radiating power of a screened tube in the presence of heat-conducting cross pieces between the tube and the screen.  
11 p1997 A69-24229
- POTAPOV, I. U. V.**  
Measurement of the proton and neutron spectra on board satellites of the Cosmos series /Izmerenie spektrov protonov i neutronov na sputnikakh serii "Kosmos"/.  
05 p0814 A69-16051  
Measurement of the proton and neutron spectra in the "Cosmos" series satellites.  
20 p3591 A69-37961
- POTAPOV, L. P.**  
Autoionic-microscopic study of defects in the crystalline structure of neutron-irradiated tungsten /Avtoionno-mikroskopicheskoe issledovanie defektov kristallicheskogo stroeniia v vol'frame, obluchennom neutronami/.  
21 p3749 A69-39623
- POTAPOV, V. N.**  
Limiting equilibrium of some shells of revolution made of a material with differing yield stress under tension and compression /Predel'noe ravновесie nekotorykh obolochek vrascheniia, vypolnennykh iz materiala s raznymi predelami tekuchesti pri raztiazhenii i szhatii/.  
18 p3216 A69-34572
- POTAPOVA, I. V.**  
Methods of increasing the volume depth in hologram photography /Sposoby uvelicheniia glubiny ob'ema pri s'emke gologramm/.  
05 p0761 A69-15651  
Methods of increasing the depth of holograms.  
16 p2791 A69-32508
- POTAPOVA, N. I.**  
Variability of n sub max F2 during the night hours, and the postsunset rise of the F2 layer in the equatorial region /Izmenchivost' n sub max F2 v nochnye chasy i poslezakhodnyi pod'em sloia F2 v ekvatorial'noi oblasti/.  
17 p2967 A69-33984
- POTASH, H.**  
Application of unilateral and graph techniques to analysis of linear circuits.  
01 p0036 A69-10708
- POTASHKIN, V. G.**  
Distribution functions of an estimate of the signal-to-noise ratio /Funktsii raspredeleniia otsenki otnosheniia signal/shum/.  
15 p2564 A69-30149
- POTEET, M. C.**  
Trajectory and mission analysis aspects of Jupiter flyby probes.  
06 p1007 A69-17598
- POTEKHIN, V. A.**  
Polarization selection of radar signals /K voprosu o polarizatsionnoi selektsii radiolokatsionnykh signalov/.  
11 p1833 A69-24442
- POTEMKIN, B. A.**  
Certain problems concerning the effect of machine vibrations on the performance of a human operator /Nekotorye problemy vozdetsviia vibratsii mashin na rabotu cheloveka-operatora/.  
14 p2409 A69-29742
- POTEMKIN, I. G.**  
Radar equation for precipitations and radar calibration in the measurement of multiple-target reflectivity /Upravlenie radiolokatsii osadkov i kalibrovka radiolokatora pri izmerenii otrazhaemosti mnozhestvennoi tseli/.  
16 p2806 A69-32264
- POTEMKINA, L. S.**  
Influence of transverse acceleration on the secretory activity of the canine gastrointestinal tract.  
10 p1645 A69-23498
- POTHS, W.**  
Designing of decision-oriented automatic data processing systems /Zur Frage der Gestaltung eines entscheidungsorientierten ADV-Systems/.  
08 p1423 A69-20733
- POTOK, M. H. N.**  
Narrow-band filters based on low- or high-pass prototype.  
04 p0574 A69-14345

- POTOSKII, V. K.**  
Automatic discriminator of disorted images /Ob odnom ustroistve avtomaticheskogo razlicheniia iskazheniykh izobrazhenii/.  
23 p4163 A69-41551
- POTSSELUEV, A. V.**  
Statistical synthesis of discrete nonlinear control systems.  
14 p2425 A69-28825
- POTTASCH, S. R.**  
On the abundances in the solar corona.  
08 p1402 A69-20907  
On the abundance determination in the solar chromosphere.  
16 p2855 A69-31657  
Forbidden line emission from the interstellar medium - Introductory report.  
19 p3424 A69-36235
- POTTER, A. E., JR.**  
Effect of bias light on the spectral response of Cu sub 2 S-CdS cells.  
05 p0808 A69-16358  
High photovoltages in cadmium sulfide films.  
06 p0980 A69-17772
- POTTER, J. E.**  
On the existence of stabilizing compensation.  
12 p2054 A69-26517
- POTTER, J. F.**  
Effect of cloud scattering on line formation in the atmosphere of Venus.  
17 p3032 A69-33161
- POTTER, KH. I.**  
Calculation of lunar coordinates by the BESM-2 electronic digital computer /O vychislenii koordinat luny na elektronnoi tsifrovoy mashine BESM-2/.  
22 p4024 A69-40611
- POTTER, M. C.**  
Stability of an unsymmetrical plane flow.  
08 p1304 A69-20812
- POTTER, R. D.**  
An introduction to the physics of materials at ultrahigh pressure.  
02 p0260 A69-11803
- POTTER, R. J.**  
The history and evolution of fiber optics.  
06 p0958 A69-17675
- POTTER, W. E.**  
Electric and magnetic field measurements near an auroral electrojet.  
24 p4310 A69-43188
- POTTHOFF, H.**  
Objectification of the observation of the passage of stars through the meridian /Zur Objektivierung der Beobachtung von Sterndurchgaengen durch den Meridian/.  
14 p2521 A69-29507
- POTTON, A.**  
Implementing an error-locating code.  
11 p1857 A69-24549
- POTTSEPP, L.**  
Asymptotic expansion of a hypervelocity atmospheric entry problem.  
09 p1430 A69-21964
- POUEY, M.**  
Some experiments on the scattering of ultraviolet radiation by rough surfaces. I /Quelques experiences de diffusion du rayonnement ultraviolet par des surfaces rugueuses. I/.  
21 p3770 A69-38796
- POUILLARD, E.**  
Influence of SO sub 3 super 2 super minus ions on pitting corrosion of stainless steels in sodium chloride solution /Influence des ions SO sub 3 super 2 super minus sur la corrosion par piqures des aciers inoxydables en solution de chlorure de sodium/.  
07 p1167 A69-19343
- POUJADE, A.-M.**  
Effect of doping on the diffusion of phonons in gallium antimonide at low temperature /Effet du dopage sur la diffusion des phonons dans l'antimoniure de gallium a basse temperature/.  
12 p2142 A69-26294
- POULANTZAS, N. M.**  
The Outer Space Treaty of January 27, 1967, and its aftermath.  
20 p3636 A69-37109
- POULARIKAS, A. D.**  
Resonance of a plane capacitor containing inhomogeneous and anisotropic plasma.  
13 p2304 A69-27240  
A note on the effects of the ionosphere on satellite orbital corrections in near-real time.  
23 p4132 A69-42549
- POULIZAC, M.-C.**  
Measurement of the lifetimes of excited states in CO sub 2 and N sub 2 O super plus molecules from accelerated molecular ion beams /Mesure des durees de vie d'etats excites dans les molecules CO sub 2 et N sub 2 O super plus a partir de faisceaux d'ions moleculaires accelerees/.  
22 p3985 A69-40715
- POULTER, R.**  
Pressure drop accompanying isothermal laminar flow of a dielectric liquid through an annulus with a radial electric field.  
12 p2136 A69-26401
- POULTNEY, S. K.**  
Laser scatter measurements in the mesosphere and above.  
05 p0758 A69-16414
- POULTON, E. C.**  
Bias in experimental comparisons between equipments due to the order of testing.  
24 p4275 A69-43023
- POUND, E. F.**  
Air density measurement.  
17 p2971 A69-32898  
Digital plasma frequency probe for fine scale ionospheric measurements.  
20 p3542 A69-37791
- POUNDS, K. A.**  
Rocket observations of Virgo XR-1.  
15 p2701 A69-31535
- POUPEAU, G.**  
Primitive low-energy particle irradiation of meteoritic crystals.  
20 p3590 A69-37569
- POURBAIX, M.**  
Recent applications of electrode potential measurements in the thermodynamics and kinetics of corrosion of metals.  
18 p3150 A69-35412
- POVARNIN, P. I.**  
Thermal conductivities and specific heats of fluids - Comparison of properties in the liquid state.  
23 p4238 A69-41336
- POVAROV, A. A.**  
Effect of amplitude fluctuations of the heterodyne EMF on the frequency-conversion process in a microwave crystal mixer.  
09 p1469 A69-22644
- POVEDA, A.**  
Standing waves on the moon.  
20 p3604 A69-37565
- POVINELLI, F. P.**  
Vortex enhancement of jet penetration in supersonic flow.  
[AIAA PAPER 69-664] 17 p2953 A69-33437
- POVINELLI, L. A.**  
Vortex enhancement of jet penetration in supersonic flow.  
[AIAA PAPER 69-664] 17 p2953 A69-33437
- POVLOV, IU. I.**  
A ruby laser generating a single mode /Rubinovyi lazer, generiruiushchii odnu modu/.  
20 p3553 A69-37607
- POVOLNY, J. H.**  
Stall and distortion investigation of a YTF30- P-1 turbofan engine.  
18 p3185 A69-35175
- POVOLOTSKII, D. IA.**  
Mechanism of the formation of nonmetallic inclusions during the reduction of iron by aluminum, zirconium, and titanium /Mekhanizm obrazovaniia nemetallicheskih vklucheni pri raskislenii zheleza aluminiiem, tsirkoniem i titanom/.  
22 p3969 A69-40069
- POWE, R. E.**  
Natural convective oscillatory flow in cylindrical annuli.  
09 p1481 A69-21902
- POWELL, B. D.**  
The ICRPG measurement uncertainty model.  
[AIAA PAPER 69-734] 16 p2846 A69-32781
- POWELL, B. N.**  
Petrology and chemistry of mesosiderites. I - Textures and composition of nickel-iron.  
20 p3602 A69-37536
- POWELL, C.**  
Pictorial displays for air navigation.  
13 p2296 A69-27335
- POWELL, C. G.**  
A fast digitalized scan laser.  
[IEEE PAPER R-2] 05 p0775 A69-16326  
Efficiencies and bandwidths of intracavity acoustooptic devices.  
10 p1697 A69-23871
- POWELL, D. B. B.**  
An improved solid state amplifier for the Dobson ozone spectrophotometer.  
16 p2792 A69-32641  
Some laboratory and field investigations of the accuracy of Brewer-Mast ozone sensors.  
16 p2792 A69-32642
- POWELL, D. T.**  
A fractographic study of the stress corrosion cracking of titanium and its alloys.  
10 p1710 A69-23085  
Metallographic studies of the stress corrosion cracking of titanium alloys in aqueous chloride solutions.  
19 p3352 A69-36903
- POWELL, E. A.**  
Solution of linear combustion instability problems using the Galerkin method.  
14 p2538 A69-29021
- POWELL, F. A.**  
An evaluation of stratospheric CAT forecasts for mid latitudes.  
06 p0950 A69-17789
- POWELL, F. D.**  
Predictive adaptive control.  
06 p0900 A69-17353
- POWELL, H. T.**  
Observation of the central tuning dip in N sub 2 O and CO sub 2 molecular lasers.  
19 p3339 A69-36698
- POWELL, J. L.**  
Hypersonic shapes of maximum drag for a given heat-transfer rate.  
24 p4244 A69-42960
- POWELL, J. R.**  
Structure of ball lightning.  
22 p3940 A69-40536
- POWELL, J. R., JR.**  
A liquid-metal MHD power generation scheme using intermittent vaporization.  
13 p2206 A69-27492
- POWELL, N. R.**  
Adaptive control of a reflective satellite communication system.  
06 p0887 A69-17356
- POWELL, R. J.**  
Outstanding solar radio burst at 4.2 mm.  
09 p1578 A69-22157
- POWELL, T. J.**  
Synthesis requirements for fault detection.  
06 p0892 A69-17408
- POWELL, W. B.**  
Current status of the ICRPG liquid propellant thrust chamber performance evaluation methodology.  
[AIAA PAPER 69-468] 16 p2838 A69-32657
- POWELL, W. R.**  
A note on yield curves in cyclic work softening.  
04 p0671 A69-14411
- POWER, G.**  
An analysis of two-dimensional aligned-field magnetodynamic flows.  
05 p0806 A69-16735  
Baecklund and generalized Legendre transformations in gasdynamics.  
21 p3695 A69-39001
- POWER, H. M.**  
Two applications of the matrix transformation A equals /B plus I/B - I/ super - I in dynamical system theory.  
02 p0281 A69-11943  
Solution of the Lyapunov matrix equation with a diagonal input matrix, obtained without matrix inversion.  
12 p2121 A69-26377



## POWER, J. K.

A survey of sonic boom simulation techniques and unmanned monitoring devices.  
15 p2585 A69-30371

## POWERS, B. G.

A comparison of Newton-Raphson and other methods for determining stability derivatives from flight data.  
[AIAA PAPER 69-315] 09 p1434 A69-22379

## POWERS, D. L.

Reduction of functions of some partitioned matrices.  
18 p3163 A69-34330

## POWERS, E. J.

Characteristics of unstable waves in a weakly ionized high-frequency magnetoplasma.  
13 p2312 A69-28197

## POWERS, J. O.

Airport noise - An environmental problem.  
15 p2585 A69-30373

## POWERS, S. A.

On the impingement of a supersonic jet on a flat plate.  
08 p1252 A69-20841

A method for determining the complete flow field around conical wings at supersonic/hypersonic speeds.  
[AIAA PAPER 69-646] 17 p2893 A69-33486

## POWERS, W. F.

A method for comparing trajectories in optimum linear perturbation guidance schemes.  
02 p0279 A69-12546

The Hamilton-Jacobi method applied to the low-thrust trajectory problem.  
06 p1007 A69-17574

Canonical transformation applications to optimal trajectory analysis.  
13 p2353 A69-28202

Optimal trajectory coordinate-multiplier systems with constant of the motion components.  
[AIAA PAPER 69-907] 21 p3807 A69-39339

Techniques for improved convergence in neighboring optimum guidance.  
[AIAA PAPER 69-888] 21 p3765 A69-39414

## POWERS, W. M.

Carbon microspheres - A new high-performance filler material for low-weight, high-temperature application.  
19 p3355 A69-35522

## POWIS, S.

The growth of radome design and manufacture at the British Aircraft Corporation Works, Stevenage, England.  
07 p1141 A69-19510

## POWLING, J.

The role of sublimation in the combustion of ammonium perchlorate propellants.  
11 p1940 A69-24481

## POWNALL, L. A.

A stored program data compression developmental system.  
03 p0400 A69-13220

## POWNER, E. T.

F.E.T. sample and hold circuit using error-corrective feedback.  
08 p1298 A69-20837

## POZDNIAKOV, V. G.

Recirculator with a variable feedback coefficient /Retsirkuliator s peremennym koeffitsientom obratnoi svyazi/.  
04 p0575 A69-14464

## POZDNIAKOVICH, E. V.

Two particular solutions of the problem of motion of a body with a fixed point.  
11 p1920 A69-25748

## POZHELA, I. U. K.

Dimensional resonances of helicon waves in an n-InSb waveguide /Razmerynye rezonansy gelikonnykh voln v n-InSb volnovode/.  
19 p3383 A69-36479

Wave instability in a drifting plasma /Neustoiichivost' voln v dreifuishchei plazme/.  
24 p4355 A69-42923

## POZZOLI, R.

Penetration of high-frequency electromagnetic waves into a slightly ionized plasma.  
17 p2932 A69-34220

## POZZOLO, V.

Errors due to directional couplers and to mismatches between the circuit elements of a measurement bench

for determining scattering parameters of transistors /Errori dovuti agli accoppiatori direzionali e ai disadattamenti tra gli elementi del circuito in un banco di misura per i parametri di diffusione di transistori/.  
04 p0582 A69-15067

Studies of self-focusing antennas for telecommunication satellites.  
08 p1289 A69-20970

Measurement of the parameters of the scatter matrix of transistors /La misura dei parametri della matrice di diffusione di transistori/.  
14 p2420 A69-29393

Direct and indirect measurements of differential parameters of transistors /Misure dirette e indirette di parametri differenziali dei transistori/.  
14 p2420 A69-29397

## PRABHAKARA, C.

Feasibility of determining atmospheric ozone from outgoing infrared energy.  
13 p2255 A69-28493

## PRABHAKARAN, K. R.

Vibrations of tapered cantilever beams and shafts.  
17 p3066 A69-34052

## PRABHU, S.

Some integrals involving the Euler and Bernoulli's numbers.  
04 p0624 A69-14969

## PRABHU, V. K.

On the problem of broadband signal and noise performance of direct detection optical receivers.  
04 p0556 A69-14283

Representation of noise sources in pumped nonlinear systems.  
05 p0720 A69-16345

Error rate considerations for coherent phase-shift keyed systems with co-channel interference.  
13 p2219 A69-27665

## PRACTH, W. E.

Computer simulation of fluids in motion.  
18 p3106 A69-34665

## PRADDAUDE, H. C.

An interpolation formula for GaAs p-n junction diode thermometer in the 1 to 100 K range.  
12 p2093 A69-26484

High-field studies of band ferromagnetism in Fe and Ni by Moessbauer and magnetic moment measurements.  
19 p3383 A69-36050

## PRADHAN, A. V.

Design and development of cryogenic pumps.  
01 p0087 A69-11149

## PRADO, M. E.

Fracture process in fluorocarbon laminate composites.  
02 p0270 A69-12368

## PRAGER, D. J.

A quadratic conduction gas lens.  
24 p4350 A69-43332

## PRAGER, W.

Recent developments in optimal structural design.  
01 p0170 A69-10814

Optimum critical impulse for snap-through in systems of one degree of freedom.  
[AIAA PAPER 68-143] 02 p0346 A69-12508

On Michell trusses.  
08 p1410 A69-19893

Optimal plastic design of circular and annular sandwich plates with piecewise constant cross section.  
08 p1417 A69-20823

On the formulation of constitutive equations for living soft tissues.  
14 p2535 A69-29366

Numerical treatment of mixed boundary value problems in two-dimensional elastostatics.  
15 p2706 A69-30432

Optimal design of sandwich beams for elastic deflection and load factor at plastic collapse.  
18 p3218 A69-34623

Optimal plastic design of rings.  
20 p3625 A69-37590

## PRAGLUSKI, W. J.

Lander-to-orbiter communication link geometry characteristics for highly elliptical orbits.  
[AAS PAPER 68-110] 21 p3805 A69-39223

## PRAKASA RAO, A. S.

Time variation of the optical intensity of the Sco X-1 X-ray source.  
16 p2852 A69-32805

## PRAKASARAO, A. S.

Anisotropies in Forbush decreases.  
06 p0990 A69-17290

Isotropic background cosmic X-rays and upper limits for solar X-ray flux.  
06 p0992 A69-17314

The 0.5 Mev gamma ray flux at balloon altitudes over 7.6 deg N geomagnetic latitude.  
06 p0992 A69-17314

X-ray flux from Centaurus X-2 in the energy range 2-20 keV.  
22 p4007 A69-40777

Energy spectrum and time variation of SCO X-1.  
22 p4030 A69-40774

## PRAKASH, S.

A study of the lower ionosphere over the geomagnetic equator at Thumba using a Langmuir and plasma noise probe.  
21 p3702 A69-38353

Irregularities in the equatorial E region over Thumba.  
23 p4160 A69-42430

## PRALLE, H.

Structural properties and stability of linear time-invariant multivariable systems /Struktureigenschaften und Stabilitaet linearer zeitinvarianter Mehrfachsysteme/.  
12 p2051 A69-26093

## PRANGERE, F.

Study of energy spectra of charged particles emitted by a duoplasmatron-type discharge /Etude des spectres d'energie des particules chargees emises par une charge du type duoplasmatron/.  
14 p2501 A69-29955

## PRANTSIAVICHUS, G. A.

Thermal stability of refractory ceramic materials in a high-temperature gas flow /Termostoiost' ognepornykh keramicheskikh materialov v vysokotemperaturnom gazovom potoke/.  
13 p2285 A69-27472

## PRASAD KOSTA, S.

Development of a circularly polarized L and S band antenna with omnidirectional pattern.  
03 p0404 A69-13471

Theoretical investigation on the centre-fed dipole antenna with feed-points displaced arbitrarily.  
12 p2039 A69-26352

## PRASAD, B.

Heating of the ionosphere and attenuation of the equatorial hydromagnetic waves.  
23 p4161 A69-42437

## PRASAD, C.

Pulsational properties of a massive star in the helium burning phase. I.  
07 p1218 A69-19279

Pulsational properties of a massive star in the helium burning phase. II.  
10 p1771 A69-22853

Pulsational properties of a massive star in the helium burning phase. III.  
22 p4022 A69-40467

## PRASAD, P.

A class of one-dimensional steady-state flows and the general shock-structure problem in radiation-gas dynamics /RGD/.  
23 p4240 A69-42466

## PRASAD, R. D.

Stochastic model for manufacturing cost estimating.  
20 p3633 A69-36924

## PRASAD, S. N.

Some theorems on stability of discrete circulatory systems.  
05 p0836 A69-15875

The usefulness of adjoint systems in solving nonconservative stability problems of elastic continua.  
19 p3446 A69-36835

## PRASAD, S. S.

Nighttime ionic composition and temperature over Arecibo.  
01 p0076 A69-11233

Semi-empirical cross sections and the airglow and aurora.  
21 p3713 A69-38527

Escaping photoelectron and dayglow.  
22 p3939 A69-40517

## PRASEK, L.

Calculation of stresses in a rotating disk during creep /Berechnung der Spannungen in rotierenden Scheiben beim Kriechen/.  
22 p4043 A69-40458

- PRASOLOV, R. S.**  
Free convective heat transfer of a cylinder in a rarefied gas.  
05 p0846 A69-15904
- PRASSER, M.**  
Aperiodic attenuators /Aperiodische Rohrspannungsteiler/.  
08 p1283 A69-20126
- PRATT, B.**  
An experiment to study electric and electromagnetic fields in the frequency range 10 Hz to 540 kHz on OGO-F.  
19 p3284 A69-36677
- PRATT, N. H.**  
A theoretical study of the interpretation of emission-absorption intensity ratio temperature measurements in the absence of thermal equilibrium.  
09 p1623 A69-22255  
Steady expansion of shock-heated gases for recombination studies.  
18 p3228 A69-34466
- PRATT, T.**  
Sectoral hoghorn - A new form of line feed for spherical reflector aerials.  
06 p0898 A69-17823
- PRATT, W. J.**  
Computer programming for electronic circuit analysis.  
10 p1659 A69-23143
- PRATT, W. K.**  
Television bandwidth reduction by encoding spatial frequencies.  
04 p0556 A69-14429  
Hadamard transform image coding.  
07 p1078 A69-18859  
Laser Communication Systems.  
08 p1277 A69-20884
- PRAVDIUK, L. M.**  
The Fraunhofer spectrum of the sun. I /Fraunhoferov spektr solntsa. I/.  
20 p3615 A69-38297
- PRAVETSKII, V. N.**  
Some results of the biomedical experiment on the biosatellite "Kosmos-110."  
08 p1261 A69-19827
- PREATER, R. W. T.**  
Stresses in compact end closures for cylindrical pressure vessels.  
19 p3447 A69-36861  
Cylindrical pressure vessels with flat-end closures.  
21 p3842 A69-39306
- PREDA, A.**  
Laser radiation in a hollow cathode glow discharge /Laser in descarcarea luminescenta cu catod tubular/.  
09 p1519 A69-22245
- PREDDEY, G. F.**  
Mid-latitude radio-satellite scintillation - The morphology near sunspot minimum.  
16 p2780 A69-32307  
Mid-latitude radio-satellite scintillation - The variation with latitude.  
22 p3899 A69-39972
- PREDMORE, R.**  
Sliding friction of copper alloys in vacuum.  
[ASLE PAPER 68-LC-5] 15 p2622 A69-30610
- PREDVODITELEV, A. S.**  
Theory of flameup of two-phase mixtures.  
18 p3231 A69-35123
- PREDVODITELEVA, O. A.**  
Shock Waves in Real Gases /Udarnye Volny v Real'nykh Gazakh/.  
04 p0589 A69-14937  
Mach reflection of shock waves in real gases.  
19 p3450 A69-36363
- PREGLA, R.**  
Method for synthesizing comb-line filters of narrow and wide bandwidth /Ein Syntheseverfahren fuer Kammfilter fuer kleine und grosse Bandbreiten/.  
07 p1108 A69-19487  
Microwave filters with waveguides and lumped elements /Mikrowellenfilter mit Leitungen und konzentrierten Elementen/.  
11 p1855 A69-25628
- PREIER, H.**  
Different mechanisms affecting the inversion layer transient response.  
10 p1744 A69-23176
- PREINHAELTER, J.**  
Transformation and absorption of waves in an inhomogeneous beam-plasma system.  
11 p1931 A69-25364  
Transformation of waves and electron heating in a radially inhomogeneous plasma.  
16 p2816 A69-31638  
Generation and heating of plasma by beam-plasma interaction.  
17 p3014 A69-33828
- PREININGEROVA, V.**  
A simple method for computing diffusion problems with periodically varying boundary conditions.  
15 p2592 A69-31057
- PREKUL, A. F.**  
Study of the dependence of the superconductivity properties on the structure of a titanium-47 wt percent niobium alloy /Issledovanie zavisimosti sverkhprovodiashchikh svoystv ot struktury splava titan-47 ves percent niobia/.  
07 p1158 A69-18532
- PRELEWICZ, D.**  
Mariner limit cycles and self-disturbance torques.  
[AIAA PAPER 69-844] 21 p3822 A69-39374
- PREM NARAIN**  
A mixed boundary value problem of elastostatics for an isotropic elastic cylinder containing a strip crack opened by internal pressure.  
01 p0167 A69-10317
- PREM, L. L.**  
High-frequency variable fluid and variable field velocity MHD generator.  
13 p2207 A69-27502
- PRENTICE, A. J. R.**  
HII regions and the distances to pulsars.  
17 p3026 A69-32858
- PRENTICE, J. L.**  
Combustion of pulse-heated single particles of aluminum and beryllium.  
[WSCI PAPER 69-2] 16 p2830 A69-32343
- PREOBRAZHENSKII, I. N.**  
Elastic stability of multilayer orthotropic conical shells /Uprugiaia ustoiichivost' mnogosloynnykh ortotropnykh konicheskikh obolochek/.  
05 p0840 A69-16198
- PREOBRAZHENSKII, N. G.**  
The quenching of laser action in an ion laser.  
06 p0934 A69-17682
- PREONAS, D. D.**  
Characterization of debris clouds behind impacted meteoroid bumper plates.  
[AIAA PAPER 69-380] 13 p2368 A69-28310
- PREPELITSA, B. V.**  
Influence of plasma screening on the energy spectrum of electrons localized at surface charges in a degenerate n-type semiconductor. I /Vliianie plazmennoi ekranirovki na energeticheskii spektr elektronov, lokalizovannykh u poverkhnostnykh zaryadov v vyrozhdennom poluprovodnike n-tipa. I/.  
14 p2505 A69-29170
- PRESCOTT, J. R.**  
International Conference on Cosmic Rays, 10th, Calgary, Canada, June 19-30, 1967, Proceedings. Part A - Invited and Rapporteur Papers.  
03 p0497 A69-12928
- PRESENT, R. D.**  
Variational solution of the chemical-kinetic Boltzmann equation.  
07 p1185 A69-19301
- PRESNIAKOV, I. N.**  
A shifted-pulse generator /Generator sdvinyutnykh impul'sov/.  
17 p2938 A69-33899  
A 100-channel information storage /100- Kanal'nyi nakopitel' informatsii/.  
17 p2939 A69-33900
- PRESNIAKOV, L. P.**  
Diffuse X-radiation background in space.  
01 p0147 A69-11310
- PRESNIAKOV, V. S.**  
Investigation of a liquid-metal jet MHD generator /Issledovanie zhidkometallicheskogo struinogo MGD-generatora/.  
13 p2208 A69-27511
- PRESS, F.**  
The best earth model after 1,000,000 random trials.  
02 p0243 A69-12009  
The suboceanic mantle.  
18 p3132 A69-35434
- The Apollo passive seismic experiment.  
20 p3539 A69-37516
- PRESTON, C.**  
Numerical maps of foEs for solar cycle minimum and maximum.  
01 p0070 A69-11160  
Note on new numerical maps of f sub 0 E sub s for solar cycle minimum and maximum.  
10 p1682 A69-23418
- PRESTON, G. W.**  
The light, magnetic, and radial-velocity variations of HD 10783.  
09 p1600 A69-22197  
The magnetic field and light variations of 17 Comae Berenices and chi Cancri.  
15 p2692 A69-30774  
Partial resolution of Zeeman patterns in the spectrum of 53 Camelopardalis.  
20 p3611 A69-38155
- PRESTON, R.**  
A search-theory basis for planetary exploration lander strategy.  
09 p1595 A69-21994
- PRESTON, W. M.**  
Time-intensity data in solar cosmic-ray events - Biological data relevant to their effects in man.  
03 p0374 A69-13500
- PRETE, M.**  
The effect of visual context on perception of a form's parts as successive.  
22 p3882 A69-40868
- PRETLOVE, A. J.**  
Acousto-elastic effects in the response of large windows to sonic bangs.  
21 p3836 A69-38988
- PRETVINSKAIA, E. I.**  
Measurement of the contact area of a cylinder and a plane by an optical technique and mathematical processing of the measurement results /Izmerenie ploschadki kontakta tsilindra s ploskost'yu opticheskim metodom i matematicheskaya obrabotka rezul'tatov izmerenii/.  
23 p4162 A69-41416
- PREUSS, L.**  
Investigation of low alpha sub s /epsilon- coatings in a simulated space environment.  
16 p2867 A69-31741
- PREUSSE, K. E.**  
Parametric charge studies for aerospace nickel-cadmium batteries.  
23 p4071 A69-42282
- PREVOT, M.**  
Attempt to determine the geomagnetic field intensity during a reversal of polarity /Essai de determination de l'intensite du champ magnetique terrestre au cours d'un renversement de polarite/.  
16 p2788 A69-32646
- PREW, H. E.**  
Navigation and flight control.  
19 p3370 A69-36317
- PREWER, B. E.**  
Spectral response of a point-contact diode in the sub-millimetre range.  
06 p0893 A69-16939
- PRIADKA, G. A.**  
Investigation of the regularities of extrusion compacting of hard-alloy mixtures /Issledovanie zakonomernostei mundshtuchnogo pressovaniia tverdosplovnykh smesei/.  
22 p3956 A69-40635
- PRIBYTKOVA, K. V.**  
Ignition of condensed materials in the presence of a phase transition in the heated layer /O zazhiganii kondensirovannykh veshchestv pri nalichii fazovogo perekhoda v progretom sloe/.  
11 p2000 A69-25189
- PRICE, A. T.**  
Sq currents in a three-dimensional ionosphere.  
12 p2074 A69-26955  
Daily variations of the geomagnetic field.  
12 p2077 A69-27143  
The air motions in the dynamo theory of Sq.  
16 p2782 A69-32460
- PRICE, C. F.**  
An indirect numerical method based on offset vectors for obtaining solutions to optimum control problems.  
06 p0903 A69-17577  
An analysis of the divergence problem in the Kalman filter.  
11 p1860 A69-25448



Conditions for asymptotic stability of the discrete minimum-variance linear estimator.  
11 p1860 A69-25449

## PRICE, D.

Shock sensitivity of solid explosives and propellants.  
02 p0302 A69-11520  
Infinite diameter detonation velocities of ammonium perchlorate.  
11 p1940 A69-24486

## PRICE, D. A., JR.

A new treatment of roll-pitch coupling for ballistic reentry vehicles.  
[AIAA PAPER 69-101] 06 p1018 A69-18156

## PRICE, D. C.

Testing of mechanisms with small sample sizes.  
18 p3117 A69-34528

## PRICE, D. J.

Comparative study of protective coatings for gas turbine engine components operating in marine environments.  
01 p0099 A69-11057

## PRICE, E. W.

Experimental studies relating to the combustion mechanism of composite propellants.  
03 p0532 A69-13002  
Relevance of analytical models for perturbation of combustion of solid propellants.  
04 p0685 A69-14726  
Review of the combustion instability characteristics of solid propellants.  
16 p2829 A69-31996

## PRICE, F. C.

Prediction of nozzle material performance for NASA's 260 SL-3 motor.  
[AIAA PAPER 68-504] 12 p2118 A69-26784

## PRICE, G. A.

The ORBIS-CAL satellite.  
07 p1226 A69-18323

## PRICE, H. L.

Effect of gamma radiation in vacuum on the tensile properties of polymer films.  
[ASME PAPER 68-WA/RP-6] 05 p0783 A69-16160  
Preparation and compression molding of salt-like intermediate Pyrrone /BTDA-EG-DAB/.  
14 p2469 A69-29415  
Radiation stability of unfilled pyrrone moldings.  
19 p3356 A69-35529

## PRICE, J. C.

Kinetic theory of inhomogeneous systems.  
15 p2660 A69-30913

## PRICE, J. F.

The phase space around L sub 4 in the case of an internal resonance of 1/3 /L'espace de phase autour de L sub 4 pour la resonance interne 1/3/.  
13 p2346 A69-27711

## PRICE, J. H.

Dynamic stress-strain release paths for aluminium and magnesium measured to 200 kb.  
08 p1330 A69-20102

## PRICE, L. K.

Thermionic reactor concepts.  
23 p4186 A69-42245

## PRICE, M. J.

A relaxation method for the computation of model stellar atmospheres.  
19 p3425 A69-36337

## PRICE, P. B.

The utilization of nuclear particle tracks in solids to study the distribution of certain elements in nature and in the cosmic radiation.  
08 p1401 A69-20899  
Observation of trans-iron nuclei in the primary cosmic radiation.  
21 p3787 A69-38327  
Ages of Darwin glass, Macedon glass, and Far Eastern tectites.  
23 p4210 A69-41344

## PRICE, R.

Non-radial pulsation of general-relativistic stellar models. II - Properties of the gravitational waves.  
09 p1605 A69-22417  
Detection of X-rays from the Large Magellanic Cloud.  
10 p1770 A69-24093

## PRICE, R. C.

Integration plus federation.  
17 p2976 A69-34057

## PRICE, R. E.

Further simultaneous observations of the optical and X-ray spectra of Sco X-1.  
15 p2676 A69-30885

## PRICE, R. J. W.

Evolutionary multiple access communications for tactical fighters.  
17 p2931 A69-34117

## PRICEMAN, S.

Oxidation resistant coatings for tantalum and tungsten.  
21 p3730 A69-38673

## PRIDANTSEV, M. V.

Heat-resistant age-hardenable alloys based on nickel and iron /Zharoprochnye stareushchie splavy na nikel'noi i zheleznoi osnovakh/.  
09 p1525 A69-22143  
Recrystallization diagrams of alloyed molybdenum /Diagrammy rekristallizatsii legirovannogo molibdena/.  
10 p1715 A69-24012  
Aging of niobium alloys alloyed with oxygen /Starenie niobievyykh splavov, legirovannykh kislorodom/.  
15 p2640 A69-30632

## PRIDDLE, E. K.

Effect of multiaxial stresses on the fracture strength of silicon carbide.  
20 p3565 A69-36939

## PRIEL, U.

Semiconductor arrays get bigger and denser.  
06 p0894 A69-17202

## PRIEMER, R.

Estimation in linear discrete systems with time delay.  
09 p1473 A69-22437

## PRIERSON, W. B.

Protection against toxic rocket fuels.  
02 p0204 A69-12498

## PRIEST, J. R.

Study of the Sc super 45 /alpha-ti /Ti super 46 reaction at 41 Mev.  
22 p3988 A69-41044

## PRIESTER, W.

On the semiannual variation of the upper atmosphere.  
12 p2064 A69-26012

## PRIESTLAND, P. B.

Theory of periodic electrostatic focusing of electron beams.  
07 p1102 A69-18659

## PRIGOGINE, I.

Non-equilibrium statistical mechanics and gravitational interactions.  
02 p0323 A69-12273  
Introduction to nonequilibrium statistical physics.  
05 p0793 A69-15769  
On the general theory of stability of thermodynamic equilibrium.  
19 p3452 A69-36789

## PRIIMACHEK, V. V.

Plasma heating in a two-stage theta pinch.  
05 p0804 A69-16549

## PRIKNER, K.

Pc pulsations with periods between 5 and 40 secs /lpc/ during geomagnetic storms.  
14 p2441 A69-29417

## PRIEZHAEV, D. S.

The width of the emission spectrum of solid-state lasers /Shirina spektra generatsii tverdotel'nykh lazerov/.  
14 p2459 A69-29389

## PRIEZHAeva, I. N.

The cathode materials of the thermoemission converters research /TEC/.  
14 p2505 A69-29265

## PRIEZHAeva, N. A.

Determination of the concentration of molecules in an excited state from absolute intensities /Opredelenie kontsentratsii molekul v vzbuzhdennom sostoianii po absolutnym intensivnostiam/.  
15 p2654 A69-30080

## PRILLIMAN, F. W.

A manned air-to-air combat simulator.  
[AIAA PAPER 68-253] 20 p3510 A69-37159

## PRILUTSKII, O.

Interaction of cosmic particles with radiation in an expanding universe /Vzaimodeistvie kosmicheskikh chastits s izlucheniem v rasshiriaushcheisya vselennoi/.  
20 p3591 A69-38034

## PRILUTSKII, V. P.

Formation of pores in fusion welds in titanium.  
24 p4319 A69-42885

## PRIMACHENKO, V. E.

The influence of metal impurities on electronic states of the real germanium surface.  
11 p1939 A69-25703

## PRINCE, J. E.

Histologic changes in rat skin after 13 Mev proton irradiation.  
14 p2407 A69-29299

## PRINCE, K. D.

Direct observation of the effect of particle size on dispersion hardening.  
10 p1714 A69-23980

## PRINCE, L. A.

Symmetric 3 sigma weight and C.G. program.  
[SAWE PAPER 734] 18 p3221 A69-34892

## PRINCE, R. N.

Evaluation of lithium peroxide for oxygen supply and carbon dioxide control.  
[AIAA PAPER 69-620] 17 p2914 A69-33303

## PRINGLE, R., JR.

Stability of the force-free motions of a dual-spin spacecraft.  
[AAS PAPER 68-125] 20 p3617 A69-37180

## PRINS, J.

Noise of VHF and MOS tetrodes.  
15 p2577 A69-30603

## PRINZLER, H.

Noise emission and Landau damping of Tonks-Dattner resonances.  
16 p2822 A69-32038

## PRIOKHOROV, A. M.

Investigation of optical breakdown in air by a laser operating in the mode-synchronization regime.  
06 p0934 A69-17546

## PRIOR, E. J.

The polar exosphere near solar maximum.  
15 p2600 A69-31351

## PRIOR, J. R.

Development of computer controlled radar programs.  
21 p3677 A69-39566

## PRISEKIN, V. L.

Equilibrium states of a cylindrical shell with initial deflections under compression /Ravnovesnye sostoi-aniia tsilindricheskoi obolochki s nachal'nymi progibami pri szhatii/.  
18 p3224 A69-35319

## PRISLIN, R. H.

Angle-of-attack motion of a spinning entry vehicle.  
04 p0666 A69-15522

## PRISNIAKOV, V. F.

Determining the natural frequencies of fluid oscillations in complex pipelines.  
07 p1119 A69-18745

## PRITCHARD, C.

Adhesion of metals in hot oxidizing gases.  
[IME PAPER 4] 07 p1139 A69-18567

## PRITCHARD, E. K.

Direct FM-tape-to-digital conversion.  
22 p3903 A69-39923

## PRITCHARD, R. E.

Base drag effects on maximum lift-to-drag ratio airfoils at moderate supersonic speeds.  
10 p1633 A69-24060

## PRITSKER, A. A. B.

Four GERT views of planning R and D projects.  
04 p0689 A69-15100

## PRIVALOV, V. E.

Optimum gas mixture in the He-Ne laser and the field distribution in the resonator.  
03 p0441 A69-13847

Optimal ratio between the mixture components in an annular He-Ne laser /Ob optimal'nom sootnoshenii komponent smesi v kol'tsevom He-Ne lazere/.  
04 p0612 A69-15176

Study of the properties of the He-Ne laser with a small discharge space.  
06 p0935 A69-17683

Dependence of He-Ne laser output power on the spark-gap cross section geometry /Zavisimost' moshchnosti izlucheniia He-Ne lazera ot geometrii secheniia razriadnogo promezhutka/.  
07 p1147 A69-18541

- Effect of the operating conditions of a hot cathode on the output power of a He-Ne laser.  
12 p2109 A69-26716
- The gas ring laser /Kol'tsevoi gazovyi lazer/.  
13 p2272 A69-28175
- Optimum composition ratio in a He-Ne ring laser.  
18 p3152 A69-34718
- Effect of plasma-tube cross section on the power output of He-Ne laser.  
21 p3735 A69-38693
- Relationship between the radiation power of a laser and the electron concentration in a He-Ne plasma /O svyazi moshechnosti izlucheniia lazera s kontsentratsiei elektronov v He-Ne plazme/.  
22 p3964 A69-40794
- PRIVALOVA, M. M.**  
The cathode materials of the thermoemission converters research /TEC/.  
14 p2505 A69-29265
- PRIVARNIKOV, A. K.**  
Application of the method of straight lines to the solution of problems in photoelasticity /Prilozhenie metoda priamykh k resheniiu zadach fotouprugosti/.  
23 p4228 A69-41987
- PRIVARNIKOV, O. A.**  
Approximate methods for calculating the vertical velocity distribution in the atmospheric braking of bodies /Priblizhennyye metody rascheta raspredeleniia skorosti po vysote pri tormozhenii tel v atmosfere/.  
04 p0541 A69-14485
- Determination of the roll rate on a passive trajectory section /K voprosu opredeleniia uglovoy skorosti krena na passivnom uchastke traktorii/.  
18 p3092 A69-34989
- PRIVETTE, C. A.**  
A subsatellite concept for Martian fields and particles measurements.  
21 p3805 A69-39215
- PRIVOZNIK, E. J.**  
Allison T63 regenerative engine program. [AHS PAPER 212]  
01 p0143 A69-10410
- PROBSTEIN, R. F.**  
A point explosion in a cold exponential atmosphere.  
11 p1871 A69-25123
- The dusty gasdynamics of comet heads.  
19 p3428 A69-36807
- PROCTER, R. P. M.**  
Stress corrosion of aluminum alloy 7075-T651 in organic liquids.  
23 p4178 A69-42452
- PROCTOR, C. L.**  
Planning for flight system availability under uncertainty.  
18 p3210 A69-35083
- PROCTOR, T. G.**  
Uniqueness and successive approximations for functional differential equations.  
24 p4341 A69-43236
- PRODI, F.**  
Atmospheric incoming long-wave radiation at high altitude.  
13 p2256 A69-28647
- PROELSS, J.**  
Microturbulence in 3 Centauri A.  
07 p1211 A69-18407
- PROFANT, D. D.**  
An investigation of the fatigue behavior of a boron-epoxy-reinforced titanium compressor disk.  
09 p1619 A69-22323
- PROFFIT, R. L.**  
Rocket stability monitoring by temporal radiometry. [AIAA PAPER 69-580]  
16 p2839 A69-32670
- PROK, G. M.**  
Molecular hydrogen inelastic electron impact cross sections - A semiclassical method.  
09 p1542 A69-22249
- PROKERT, F.**  
Electromechanical investigation of the surface layer of barium titanate /Elektromekhanicheskoe issledovanie poverkhnostnogo sloia titanata barii/.  
22 p3995 A69-41156
- PROKES, B.**  
Investigation of some methods for increasing the digestibility in vitro of microalgae.  
21 p3667 A69-39701
- PROKHORENKO, V. I.**  
Determination of the position angle of an artificial satellite from the data of the magnetic field.  
01 p0163 A69-11303
- PROKHOROV, A. M.**  
Optical homogeneity of ruby crystals and its relation to laser radiation divergence /Opticheskaiia odnorodnost' kristallov rubina i ee svyaz' s rashodimost'iu izlucheniia opticheskikh kvantovykh generatorov/.  
01 p0139 A69-10831
- Characteristics of a mode-locked laser.  
06 p0934 A69-17549
- Increase of CO sub 2 laser power under the influence of a beam of fast protons.  
08 p1323 A69-19802
- Spectrum of a laser employing electron- vibrational transitions in a CaF sub 2 -Sm super 2 super plus crystal /O spektre lazera na elektronno-kolebatel'nykh perekhodakh v kristalle CaF sub 2 -Sm super 2 super plus/.  
08 p1326 A69-20544
- Investigation of inversion in a CO sub 2 laser during pulsed pumping /Issledovanie inversii v CO sub 2 -lazere pri impul'snoi nakachke/.  
09 p1519 A69-22289
- Influence of the choice of the instant of Q-switching in pulsed pumping of a CO sub 2 laser on the intensity of the generated pulses.  
10 p1703 A69-23619
- Mechanism of optical generation in CaF sub 2 -Dy super 2 super plus /O mekhanizme opticheskoi generatsii CaF sub 2 -Dy super 2 super plus/.  
11 p1894 A69-24618
- Optical homogeneity of ruby crystals and its relation to the radiation divergence of lasers.  
11 p1936 A69-24698
- Surface and volume scattering, surface-damage, and optical homogeneity studies of ruby crystals and their connection with laser-emission characteristics. [IEEE PAPER U-7]  
12 p2106 A69-26322
- Pulsed CO sub 2 laser with double modulation.  
14 p2457 A69-28926
- Investigation of breakdown in N sub 2 under the influence of a picosecond ruby-laser pulse.  
20 p3555 A69-38067
- Laser spark in the "slow combustion" regime.  
23 p4172 A69-41492
- Self-focusing of ultrashort laser pulses.  
24 p4328 A69-43068
- PROKHOROV, E. D.**  
Investigation of Gunn-effect pulse generators operating at decimeter wavelengths /Issledovanie impul'snykh generatorov Ganna detsimetrovogo diapazona voln/.  
06 p0895 A69-17459
- Utilization of presprayed subsidiary metals for preparing GaAs-Sn, GaAs-In, and GaAs-Pb ohmic contacts /Ispol'zovanie predvaritel'no napylennykh vspomagatel'nykh metallov dlia sozdaniia omicheskikh kontaktov GaAs-Sn, GaAs-In, GaAs-Pb/.  
10 p1748 A69-24214
- GaAs oscillators with p-n junctions /GaAs-Generatory s p-n-Perekhodami/.  
15 p2666 A69-30065
- A study of decimeter-wave pulsed Gunn oscillators.  
20 p3508 A69-37942
- PROKHOROVICH, A. V.**  
Recombination radiation of GaAs alloy-type diodes /Rekombinatsiina viprominiuvannia splavnikh GaAs-diodiv/.  
05 p0729 A69-16210
- The electroluminescence of alloyed Si and GaAs diodes.  
06 p0893 A69-16898
- Electroluminescence of p-GaAs diodes /Elektroluminestsentsiia diodov iz p-GaAs/.  
13 p2230 A69-27887
- Recombination radiation of alloyed GaAs diodes.  
20 p3506 A69-37783
- Electroluminescence of p-type GaAs diodes.  
21 p3682 A69-39145
- PROKOFEV, A. I.**  
X-ray television equipment for industrial defectoscopy.  
18 p3138 A69-35113
- PROKOFEV, E.**  
On the lithium abundance in sunspots and the undisturbed solar atmosphere.  
05 p0821 A69-15850
- PROKOFEV, S. A.**  
Investigation of nitrogen diffusion in titanium /Issledovanie diffuzii azota v titane/.  
09 p1523 A69-21736
- Modulus of elasticity of some refractory compounds.  
09 p1529 A69-21871
- Investigation of the diffusion of nitrogen in titanium.  
20 p3564 A69-38214
- PROKOFEV, V. N.**  
Influence of the variability of the elastic characteristics of the hydraulic drive on the dynamics of the hydraulic actuator /Vliianie peremennosti uprugikh svoistv gidroprivoda na dinamiku gidrodvigatelia/.  
14 p2405 A69-29423
- Graph-analytical method of investigating the stability of hydraulic actuators with a nonlinear load /Grafcanaliticheskii sposob issledovaniia ustoiichivosti gidroprivodov s nelineinoi nagruzkoi/.  
21 p3650 A69-39716
- PROKOPALO, E. F.**  
Experimental investigation of the stability of smooth cylindrical shells of various scales under axial compression /Eksperimental'noe issledovanie ustoiichivosti gladiikh tsilindricheskikh obolochek razlichnykh masshtabov pri osevom szhatii/.  
04 p0680 A69-14929
- PROKOPALO, O. I.**  
Classification of barium titanate modifiers /Klassifikatsiia modifikatorov titanata barii/.  
22 p3996 A69-41161
- PROKOPIUK, M. F.**  
Dispersive resonators for laser frequency tuning.  
05 p0777 A69-16371
- PROKOSHIN, D. A.**  
Homologous diffusion law and heat-resistant alloying of metals /Gomologicheskii zakon diffuzii i zharoprochnoe legirovanie metallov/.  
09 p1525 A69-22144
- Dislocation structure of niobium-titanium alloys.  
21 p3747 A69-39163
- Creep in a multicomponent niobium alloy /Pol-zuchest' mnogokomponentnogo splava niobia/.  
22 p3969 A69-40073
- PROKOVSKAIA, F. S.**  
Xanthene dye series laser excited by second-harmonic radiation from a neodymium laser.  
06 p0932 A69-16914
- FROMMER, A.**  
The use of electronic tubes in space flight /Die Elektronenroehre in der Raumfahrt/.  
07 p1093 A69-18421
- Worldwide use of Siemens traveling-wave tubes in satellite earth stations.  
23 p4143 A69-42420
- PRONGAY, D. M.**  
Data systems and data analysis methods to support onboard in-flight operations. [AIAA PAPER 67-911]  
01 p0037 A69-11024
- PRONI, E.**  
FM demodulator employing an injection locked oscillator.  
11 p1845 A69-24565
- PRONIK, V. I.**  
Spectrophotometry of the nuclei of Seyfert galaxies /Spektrofotometriia iader seifertovskikh galaktik/.  
12 p2164 A69-27022
- Observations of the supernovae Chuadze and Wild /Nabludeniia sverkhnovykh Chuadze i Vilda/.  
20 p3607 A69-38038
- PRONIN, V. N.**  
Transmission spectra of gallium arsenide irradiated by protons with an energy of approximately 5 Mev /Spektry propuskaniia arsenida galliia, oblechennogo protonami s energiei approximately 5 Mev/.  
20 p3582 A69-36969
- PRONINA, I. T.**  
Surface-barrier gold/gallium arsenide junctions /Poverkhnostno-bar'ernye perekhody zoloto-arsenid galliia/.  
01 p0138 A69-10432
- PRONKO, V. G.**  
Some results of an investigation into heat transfer from a liquid to a highly overheated wall.  
11 p1996 A69-24228
- PROPER, R.**  
Preliminary impressions of cardiovascular function in the study of physiologic and psychologic aging in professional pilots.  
14 p2408 A69-29309
- PROPHET, D. T.**  
Meteorological analysis of clear air turbulence in the stratosphere.  
17 p2999 A69-33736
- PROSEN, M.**  
The double slit in stellar diameter measurements /Dvojnna reza pri meritvah zvezdnykh premerov/.  
13 p2334 A69-27305



## PROSHCHIN, A. V.

Kinetics of the thermal decomposition of ammonium perchlorate at high temperatures /Kinetika termicheskogo raspada perklorata ammoniya pri vysokikh temperaturakh/.  
08 p1375 A69-20339

## PROSHUTINSKII, V. I.

Theoretical and experimental study of the inversion coefficient in a ruby /Teoreticheskoe i eksperimental'noe issledovanie koeffitsienta inversii v rubine/.  
16 p2795 A69-31570

## PROSKURIAKOV, A. P.

The structure of the periodic solutions of a quasilinear self-contained system with several degrees of freedom in the case of differing, but partly noncommensurate frequencies.  
11 p1920 A69-25749

## PROSKURIAKOV, G. V.

Theoretical investigation of the process of obtaining profiles by drawing a metal strip through an instrumental draw plate with a continuously sliding application of the compressing force in the course of angle shaping /Teoreticheskoe issledovanie protsessa polucheniia profiliei pri protiaživanii cherez instrumental'nuu fil'eru metalicheskoi lentu s neprevyisim skol'zhashchimi prilozheniem szhimaushchego usiliia v protsesse formobrazovaniia ugla/.  
03 p0432 A69-12962

Calculation of friction losses in the blades of axial flow turbines /K raschetu poter' treniia v oblopachivaniu osevykh turbin/.  
15 p2547 A69-30074

## PROSKURIAKOVA, N. G.

Oculomotor control system /Survey/.  
09 p1447 A69-22675

## PROST, K. J.

Threshold logic for LSI.  
17 p2943 A69-34122

## PROSVIRIN, V. I.

Softening mechanism of heat-resisting alloys during cyclic heating /Mekhanizm razuprochneniia zharoprochnykh spлавov pri tsiklicheskikh nagrevakh/.  
21 p3746 A69-38957

## PROTASOV, A. T.

Effect of alloying with aluminum on the nature of the decomposition of a copper-titanium alloy. II /O vliianii legirovaniia aliuminiem na prirodu raspada v splave med'-titan. II/.  
11 p1905 A69-24922

## PROTASOV, I. I.

Energy spectrum of silicon-doped gallium arsenide /Energeticheskii spektr arsenida galliia, legirovannogo kremniem/.  
01 p0139 A69-10833

The energy spectrum of gallium arsenide doped with silicon.  
11 p1936 A69-24700

## PROTASOV, S. N.

Diurnal temperature variations in the surface layer of the sea and in the boundary layer of the atmosphere with variable turbulent heat exchange coefficients /O sutochnom khode temperatury v poverkhnostnom i privodnom sloiakh moria i atmosfery pri peremennykh koeffitsientakh turbulentnogo obmena tepla/.  
14 p2472 A69-29462

## PROTHERO, A.

The solution of the steady-state equations for an adiabatic stirred reactor.  
02 p0352 A69-12316

Computing with thermochemical data.  
21 p3670 A69-39591

## PROTONOTARIOS, E. N.

Pull-in performance of a piecewise linear phase-locked loop.  
14 p2413 A69-29482

## PROTOPOPOV, A. S.

Calculation of the duration of the output pulses of a compressing filter /O raschete dlitel'nosti vykhodnykh impul'sov szhimaushchego fil'tra/.  
11 p1844 A69-24445

## PROTOPOPOVA, L. M.

Magnetic crystallographic anisotropy of lithium-gallium ferrite single crystals /Magnitnaia kristallograficheskaiia anizotropiia monokristallov litii-galievyykh ferritov/.  
12 p2144 A69-26721

Magnetocrystalline anisotropy of single crystals of lithium gallium ferrites.  
21 p3781 A69-39134

## PROTSENKO, E. D.

Influence of collisions on certain characteristics of a He-Ne laser /Vliianie soudarenii na nekotorye kharakteristiki He-Ne-lazera/.  
04 p0610 A69-14383

Change of the shape of the gain line in the saturation by the proper field in a 3.39  $\mu$  laser.  
08 p1323 A69-19942

Line shape and the through width of the gain curve of an He-Ne laser at the wavelength of 0.63  $\mu$  /Forma linii i shirina provala v krivoi usileniia He-Ne lazera na dline volny 0.63  $\mu$ /.  
13 p2272 A69-28115

Effect of collisions on certain characteristics of the He-Ne laser.  
14 p2456 A69-28756

## PROUTEAU, F.

Study of the generation of a detonation in a granular explosive subjected to a shock wave /Etude de la generation de la detonation dans un explosif granulaire soumis a une onde de choc/.  
02 p0349 A69-11527

## PROUTIERE, A.

Construction of a Kerr effect apparatus /Construction d'un appareil d'effet Kerr/.  
01 p0078 A69-10039

## PROVALOV, A. V.

An apparatus for studying diffraction effects on periodic structures in the millimeter wavelength range /Ustanovka dlia issledovaniia difraktsionnykh iavlenii na periodicheskikh strukturakh v millimetrovom diapazone voln/.  
04 p0598 A69-14852

Instrument for investigating diffraction phenomena at periodic structures in the millimeter band.  
15 p2607 A69-30244

## PROVENZALE, G. E.

Experimental investigation of the effects of transpiration cooling on turbine stator blade aerodynamics. [ASME PAPER 69-GT-39]  
09 p1432 A69-22487

## PROVENZANO, G.

A Fortran IV program for the computation of equilibrium compositions of gas mixtures at high temperatures.  
08 p1278 A69-20154

## PROVERBIO, E.

Determination of the pitch of a micrometer screw by means of scalar pairs and study of the proper motions of the Washington zenith catalog /La determinazione del passo del micrometro mediante coppie scalari e studio dei moti propri del catalogo zenitale di Washington/.  
16 p2859 A69-32218

## PROVOST, J.

Comparative study of electric, electronic, and fluidic logic circuits /Etude comparative des circuits logiques electriques, electroniques et fluidiques/.  
04 p0583 A69-15083

A comparative detailed analysis of 22 Serpents, a high metallicity A2 star, and the standard F0 V-9 Aurigae.  
17 p3039 A69-33728

## PROVOTOROVA, E. V.

Investigation of the time variation of the dielectric constant and domain structure of a ferroelectric ceramic /Issledovanie izmeneniia dielektricheskoi pronitsaemosti i domennoi struktury segnetokeramiki vo vremeni/.  
22 p3996 A69-41166

## PROZOROV, O. N.

Photoelectric recording of ultrashort pulses of a semiconductor laser /Fotoelektricheskaiia registratsiia ultrakorotkikh impul'sov poluprovodnikovogo kvantovogo generatora/.  
24 p4329 A69-43740

## PROZOROVSKII, V. E.

Five-layer thin-film rejection filters.  
05 p0729 A69-16088

## PROZOVOSKII, V. D.

Cyclotron resonance of minority carriers in indium antimonide /Tsiklotronnyi rezonans neosnovnykh nositelei v antimonide indii/.  
15 p2667 A69-30068

## PRUCHKINA, N. M.

Thermal explosion in a viscous fluid flow /Teplovoi vzryv pri techenii viskozoi zhidkosti/.  
04 p0686 A69-14986

## PRUDENCE, M. B.

New developments in the Telford image converter camera.  
12 p2082 A69-26138

## PRUDENZIATI, M.

Thermal behaviour of avalanche transistor pulse circuits.  
11 p1845 A69-24575

## PRUDNIKOV, A. G.

Diffusion parameters of a turbulent jet.  
21 p3696 A69-39090

## PRUDNIKOV, N. E.

Principles of Solid-Propellant Rocket Design /Osnovy Proektirovaniia Raket na Tverdom Toplive/.  
12 p2175 A69-27070

## PRUDNIKOV, V. A.

Some ways of automating the technological conditions in single-pass electric-spark machining.  
23 p4168 A69-41340

## PRUPPACHER, H. R.

On the hydrodynamics of pairs of spheres falling along their line of centres in a viscous medium.  
05 p0788 A69-15722

## PRUSAKOV, A. P.

Finite deflections of elastic three-layer shells in the high-temperature domain /Konechnye progiby uprugikh trekhslonnykh obolochek v pole deistviia vysokikh temperatur/.  
05 p0840 A69-16193

Bending of three-layer plates with an asymmetric structure and a rigid filler /Ob izgibe trekhslonnykh plastin nesimmetrichnogo stroeniia s zhestkim zapolnitelem/.  
24 p4395 A69-42594

## PRUSCHECK, R.

Results of studies on various fast and thermal thermionic reactor systems.  
14 p2480 A69-29182

## PRUSCHKE, R.

Results of studies of thermionic reactor systems /Ergebnisse von Studien ueber Thermionikreaktorsysteme/.  
02 p0279 A69-12662

An improved out-of-core thermionic reactor for low power.  
09 p1441 A69-21836

## PRUSLIN, V. Z.

Signal to cross-modulation noise ratio during amplification of sinusoidal signals in a TWT /Ob otnošenii signal/perekrestnaia pomekha pri usilenii sinusoidal'nykh kolebani v LVB/.  
01 p0031 A69-10780

Signal-to-crosstalk ratio in amplifying sinusoidal oscillations in a TWT.  
10 p1653 A69-23109

## PRUSOV, I. A.

A solution to the basic problems of bending of isotropic plate for certain regions /Ob odnom reshenii osnovnykh zadach izgiba izotropnykh plit dlia nekotorykh oblastei/.  
21 p3834 A69-38721

## PRUSOV, I. O.

A solution to the basic problems of the theory of elasticity for an anisotropic half-plane and for an anisotropic plane with cuts /Pro odin rozv'yazok osnovnykh zadach teorii pruzhnosti dlia anizotropnoi ploschchiny i anizotropnoi ploschchiny s rozrizami/.  
06 p1020 A69-16827

## PRUSS, J.

Electrohydraulic amplifier RD-1 /Wzmacniacz elektrohydrauliczny RD-1/.  
08 p1256 A69-20459

## PRUSSING, J. E.

Optimal four-impulse fixed-time rendezvous in the vicinity of a circular orbit.  
16 p2857 A69-32161

Illustration of the primer vector in time-fixed, orbit transfer.  
20 p3595 A69-37202

A manual method for space rendezvous navigation and guidance. [AIAA PAPER 68-859]  
24 p4348 A69-43243

## PRUST, H. W., JR.

Some measurement problems encountered when determining the performance of certain turbine stator blades from total pressure surveys. [ASME PAPER 69-GT-103]  
09 p1432 A69-22521

## PRUTKIN, V. P.

Some properties of tellurium-doped silicon.  
04 p0644 A69-15267

## PRYDZ, R.

The vapor pressure of liquid fluorine. [NAS-NRC PAPER H-2]  
22 p3998 A69-40624

- PRZEDPELSKI, Z. J.**  
Lift fan design considerations.  
05 p0696 A69-15554
- PRZEMIENIECKI, J. S.**  
Discrete-element methods for stability analysis of complex structures.  
05 p0841 A69-16399
- PRZEDZIECKI, S.**  
Diffraction by a right-angled wedge with a side perpendicular to the distinguished axis of a uniaxially anisotropic medium.  
17 p2930 A69-33889
- PRZHEVUSKII, A. K.**  
Concentration-dependent line-shift in optical spectra of ruby.  
10 p1744 A69-23321
- PRZYBYL, E.**  
Accelerated reliability tests of electronic capacitors /Przyspieszone badania niezawodnosci kondensatorow radiotechnicznych/.  
09 p1464 A69-22244
- PSCHIED, G.**  
Stability analysis of nonlinear control systems on the digital computer.  
[IS-ERI-71]  
24 p4285 A69-42984
- PSHENAI-SEVERIN, S. V.**  
Transient processes in a model of a convective system /Perekhodnye protsessy v modeli konvektivnoi sistemy/.  
13 p2292 A69-27798
- PSHENICHNYI, B. N.**  
Rapid method of solving the problem of linear quick response /Uskorennyi metod resheniya zadachi lineinogo bystrodeistviia/.  
09 p1473 A69-21791
- PSKOVSKII, I. U. P.**  
Initial moment of an outburst and the ejected shell mass of a supernova /Nachal'nyi moment vspyski i massa vybroshennoi obolochki sverkhnovoi/.  
09 p1587 A69-21358  
The starting time of a supernova outburst and the mass of the ejected envelope.  
18 p3197 A69-34748
- PTAKHIN, E. A.**  
Approximate method of determining the stress-strain state of ribs reinforcing a cantilever shell /Priblizhennyy metod opredeleniya napriazhenno-deformirovannogo sostoiannya shpaguntov, podkrepliaushchikh konsol'nuu obolochku/.  
18 p3223 A69-34980
- PTUSHINSKII, I. U. G.**  
Investigation of the effect of adsorption of barium, oxygen, and barium oxide on the electrical conductivity of molybdenum and titanium thin films.  
06 p0978 A69-16900  
On the state of oxygen adsorbed on the surface of tungsten and molybdenum single crystals.  
12 p2026 A69-26115
- PU, S. L.**  
On the detachment of the ends of microfibers from the matrix due to tension in the composite.  
01 p0171 A69-11259
- PUCHALKA, T.**  
Elements and Circuits for Automatic Control.  
05 p0739 A69-16545
- PUCHKOV, V. V.**  
Statistical characteristics of signals from infrared scanning equipment /Statisticheskie kharakteristiki signalov skaniruiushchei infrakrasnoi apparatury/.  
06 p0929 A69-17980  
Possibility of detecting clouds and the underlying surface from signals of an IR system /Veroiatnost' obnaruzheniya oblachnosti i podstilaushchei poverkhnosti po signalam ik sistemy/.  
06 p0952 A69-17986
- PUCK, A.**  
The knee in the stress-strain diagram and crack formation in glass-fiber-reinforced plastic - Its importance for the GPF construction /Das "Knie" im Spannungs-Dehnungs-Diagramm und Rissbildung bei Glasfaser/Kunststoffen - Ihre Bedeutung fuer GFK-Konstruktionen/.  
03 p0453 A69-13820
- PUDOV, A. N.**  
Evaluating the possibility of mass spectrum analysis of lunar surface matter.  
10 p1698 A69-24207
- PUDOVEEV, A. P.**  
Diagram for optimal design of the system of shocks in axisymmetric supersonic diffusers with external compression.  
21 p3785 A69-39104
- Modeling of two-dimensional flows with stream separation /Modelirovanie ploskikh zadach obtekania so sryvom strui/.  
24 p4300 A69-43089
- PUDOVKIN**  
On the theory of polar substorms.  
16 p2852 A69-32620
- PUDOVKIN, I. M.**  
Representation of the geomagnetic field at the earth's surface and in outer space with the aid of dipole models /Predstavlenie geomagnitnogo polia na poverkhnosti zemli i vo vneshnem prostranstve s pomoshch'iu dipol'nykh modelei/.  
02 p0238 A69-11673  
Dipole model of the main geomagnetic field /based on an analysis of the Z sub ao field/.  
03 p0424 A69-13543  
Analytical modeling of the geomagnetic field.  
03 p0424 A69-13544  
Spatial structure of the residual Z sub ae field.  
06 p0922 A69-17755  
Dipole model of the geomagnetic field /on the basis of an analysis of the Z sub ae field/.  
12 p2071 A69-26695  
Representation of the geomagnetic field at the surface of the earth and in outer space by means of dipole models.  
13 p2257 A69-28704
- PUDOVKIN, M. I.**  
Polar storms and the development of DR currents /Poliarnye buri i razvitiye DR-tokov/.  
02 p0238 A69-11672  
Some problems concerning auroral absorption.  
03 p0423 A69-13520  
Theory of polar storms /K teorii poliarnykh bur'/.  
09 p1485 A69-21535  
Diurnal energy variation of auroral electrons /Sutocnyy khod energii avral'nykh elektronov/.  
10 p1687 A69-23915  
Development of a polar storm.  
12 p2071 A69-26694  
Polar storms and the development of DR- currents.  
13 p2257 A69-28703  
Dynamics of the region of polar auroras and the propagation of radio waves at high latitudes /Dinamika zony poliarnykh sianii i rasprostranenie radiovoln v vysokikh shirotakh/.  
14 p2436 A69-29058  
Contribution to the theory of polar storms.  
16 p2783 A69-32530  
Complex investigation of the polar ionosphere /Kompleksnoe issledovanie poliarnoi ionosfery/.  
17 p2963 A69-33950  
Energy balance of a magnetic storm /Energeticheskii balans magnitnoi buri/.  
17 p2964 A69-33959  
High-latitude geomagnetic disturbances in June 1965 /Geomagnitnye vozmushchenia v vysokikh shirotakh v iune 1965 g./.  
17 p2964 A69-33961  
Dynamics of magnetoionospheric disturbances in the auroral zone /Dinamika magnitno- ionosfernykh vozmushchenii v zone poliarnykh sianii/.  
17 p2964 A69-33962
- PUNTE, J. G.**  
A PCM-FDMA demand assigned satellite multiple access experiment.  
16 p2749 A69-31602
- PUESCHEL, R.**  
Diffusion of silicon in molybdenum /Die Diffusion von Silizium in Molybdaen/.  
05 p0780 A69-15990
- PUETZ, M.**  
Introduction to platform systems for inertial navigation /Einfuehrung in Plattformsysteme fuer Tragheitsnavigation/.  
12 p2078 A69-25872
- PUEYO, L.**  
Determination of the region of space accessible to a probe injected from the earth /Determinacion de la zona del espacio accesible a una sonda inyectada desde la tierra/.  
23 p4212 A69-41536
- PUFFER, D. W.**  
Stress corrosion behavior of titanium alloy 6-2-4-2 as related to engine operation.  
01 p0099 A69-11056
- PUGACHEV, N. S.**  
Some characteristics of reaction diffusion during vapor phase saturation of refractory metals with beryllium /O nekotorykh osobennostiakh reaktzionnoi diffu-
- zii pri nasyshchenii tugoplavkikh metallov beriliiem iz parovoi fazy/.  
20 p3549 A69-37364
- PUGH, E. N.**  
The role of brittle surface films in stress- corrosion phenomena.  
03 p0448 A69-13873  
On the propagation of stress-corrosion cracks in a magnesium-aluminum alloy.  
10 p1710 A69-23086  
Stress corrosion cracking of alpha titanium in nonaqueous environments.  
19 p3352 A69-36906
- PUGH, E. R.**  
Laboratory study of turbulence in collision- free shocks.  
11 p1930 A69-25276
- PUGH, H. L.**  
The Polaroid system for astronomical photography.  
08 p1316 A69-20617
- PUGH, P. G.**  
An analysis of sources of error in typical pressure measurements in a blowdown supersonic tunnel.  
19 p3292 A69-35728
- PUGIN, V. S.**  
Properties of electrolytic and reduced titanium powders and sinterability of porous compacts from such powders.  
05 p0782 A69-16795  
Mechanical properties of plasticizers /Mekhanicheskie svoystva plastifikatorov/.  
12 p2118 A69-26257
- PUGINA, L. I.**  
Effect of boron on the friction of porous nickel at high velocities and temperatures /Vlianie bora na protsess treniya poristogo nikelia pri povyshennykh skorostiakh i temperaturakh/.  
15 p2641 A69-31187
- PUGLIANO, A.**  
Determination of an instrument azimuth /Sulla determinazione dell'azimut strumentale/.  
16 p2791 A69-32227
- PUGLIESE, L. A.**  
A new Co-Ni-Mo-Cr ultrahigh-strength corrosion-resistant alloy system - Multiphase.  
18 p3154 A69-34307
- PUGMIRE, T. K.**  
Ammonia Resistojet station keeping subsystem aboard applications technology satellite /ATS/ IV. [AIAA PAPER 69-296]  
09 p1560 A69-21212  
The hybrid /hydrazine/ resistojet. [AIAA PAPER 69-496]  
16 p2838 A69-32649  
ATS-III resistojet thruster system performance. [AIAA PAPER 68-553]  
21 p3786 A69-39754
- PUGOVKIN, A. V.**  
High-frequency modulation of the spatial structure of a ruby laser field /Vysokochastotnaia moduliatsiia prostranstvennoi struktury polia v OKG na rubine/.  
11 p1900 A69-25569  
Effect of the orientation of the active crystal in the resonator on the emission spectrum of a ruby laser /Vlianie orientatsii aktivnogo kristalla v rezonatore na spektr generatsii OKG na rubine/.  
12 p2104 A69-26029
- PUJADO, P. R.**  
Melting of a finite paraffin slab as applied to phase-change thermal control.  
12 p2190 A69-26785
- PUJARA, C. M.**  
Survival, chromosome abnormalities, and recovery in heavy-ion- and X-irradiated mammalian cells.  
03 p0373 A69-13492
- PUJARA, K. K.**  
Forced vibrations of a two layered beam arrangement.  
10 p1800 A69-23241  
Vibrations of circular sandwich plates.  
23 p4236 A69-42495
- PUJES, J. P.**  
Application of fluidics to attitude and guidance control of satellites and rockets /Application de la fluidique au controle d'attitude et au pilotage des satellites et des fusees/.  
07 p1230 A69-19292
- PUJES, J.-P.**  
Application of fluidics to attitude control and guidance of satellites and rockets /Application de la fluidique au controle d'attitude et au pilotage des satellites et des fusees/.  
17 p3049 A69-33243



## PUJOL, J.

Recent developments of ultrahigh-speed cinematographic materials in France /Recents developements des materiels de cinematographie ultra-rapide en France/.

12 p2090 A69-26197

## PUJOL, Y.

Detonation characteristics of gaseous explosives /Caracteristiques de detonation d'explosifs gazeux/.

05 p0848 A69-16337

Variation of the detonation velocity in liquid nitromethane with initial pressure /Variation, avec la pression initiale, de la celerite de detonation dans le nitromethane liquide/.

22 p4051 A69-40713

## PUKHNACHEV, I. V.

Introduction to the dynamics of a bubble inside a liquid /Vvedenie v dinamiku puzryia, nakhodiashegosia vnutri zhidkosti/.

03 p0418 A69-13813

## PUKHNACHEV, V. V.

Asymptotic behavior of an axisymmetric solution to the flow problem for the Navier-Stokes equations /Asimptotika osesimmetrichnogo reshenia zadachi obtekaniiia dlia uravnenii Nav'e-Stoksa/.

19 p3298 A69-36143

## PUKHOV, K. K.

Frequency transformation in multi-level quantum systems.

07 p1146 A69-18481

Theoretical and experimental study of the inversion coefficient in a ruby /Teoreticheskoe i eksperimental'noe issledovanie koeffitsienta inverzii v rubine/.

16 p2795 A69-31570

## PULEO, J. R.

Release of microbial contamination from fractured solids.

11 p1828 A69-25461

Release of microbial contamination from fractured solids.

20 p3475 A69-37614

## PULFREY, R. E.

Gas analysis with pulsed vacuum networks.

13 p2247 A69-28085

Theory of pulsed molecular-flow networks.

16 p2813 A69-32325

## PULLEY, P. E., JR.

A theoretical study of pulmonary capillary gas exchange and venous admixture.

07 p1068 A69-19482

## PULLIAM, T. L.

Analysis of failures in spacecraft and aircraft components.

18 p3143 A69-34483

## PULTSIN, N. M.

Mechanism of crack formation in titanium alloys during thermal-fatigue tests /O mekhanizme obrazovaniia treshchiny pri ispytanii titanovykh splavov na termicheskuiu ustalost'/.

01 p0094 A69-10215

The mechanism of crack formation in thermal fatigue tests of titanium alloys.

15 p2637 A69-30271

Indirect method of measurement of hardness of titanium alloys.

23 p4177 A69-41598

## PUMPER, A. R.

Don't get caught - Too low, too slow, too late.

06 p0877 A69-16956

## PUN, W. M.

Heat and Mass Transfer in Recirculating Flows.

21 p3691 A69-38333

## PUNGOR, E.

The equilibrium between H and OH radicals in turbulent hydrogen flames.

11 p1999 A69-24487

## PUNKIN, I. I.

Investigation of the stressed state of turbocompressor disks /Issledovanie napriazhennogo sostoianiia diskov turbokompressora/.

19 p3436 A69-35850

## PUPKO, V. IA.

Thermionic converter electrical characteristics with matrix circuit connections.

14 p2400 A69-29225

## PUPYSHEVA, L. V.

Observations of the polarization of cosmic radio emission near the galactic anticenter at wavelengths of 70, 60, and 40 cm /Nabludeniia polarizatsii

kosmicheskogo radioizlucheniia vblizi antitsentra galaktiki na volnakh 70, 60 i 40 cm/.

03 p0501 A69-13704

## PURAKHIN, I. U. N.

Effect of prolonged hypokinesia on the brain biopotentials of healthy men /Vlianie dlitel'noi gipokinezii na biopotentsialy golovnogo mozga zdorovykh liudei/.

05 p0710 A69-16520

Neurological changes in healthy humans subjected to two months of hypokinesia.

10 p1647 A69-23585

Effect of protracted hypokinesia on brain bioelectric potentials of healthy persons.

18 p3096 A69-34739

## PURCELL, E. M.

On the alignment of interstellar dust.

10 p1781 A69-23675

## PURCELL, J. D.

Solar rocket observations on an eclipse day.

15 p2696 A69-31099

## PURDON, B.

Advanced techniques for chemical and mechanical machining of beryllium. [SAE PAPER 680649]

03 p0434 A69-13455

## PURDY, K. R.

On the interaction of intense acoustic fields and viscous fluid flows. [ASME PAPER 68-WA/FE-8]

05 p0748 A69-16091

On the interaction of intense acoustic fields and viscous fluid flows. [ASME PAPER 68-WA/FE-8]

14 p2430 A69-29444

## PURDY, R. R.

Secondary flow induced by a transverse resonant acoustic field in a circular duct. [AIAA PAPER 69-667]

17 p2954 A69-33457

## PURI, R. K.

The flux of primary helium nuclei near Hyderabad during 1965.

06 p0988 A69-17275

Rigidity spectrum of cosmic ray helium nuclei greater than 12 bv.

06 p0988 A69-17276

Flux and spectrum of primary hydrogen nuclei near geomagnetic equator.

22 p4005 A69-40520

## PURI, S.

Experiment in stochastic heating.

08 p1368 A69-20805

## PURIAEV, D. T.

Interferometer for quality control of cylindrical concave surfaces /Interferometr dlia kontrolya vognutykh tsilindricheskikh poverkhnostei/.

19 p3311 A69-36196

## PURKAIT, N. N.

Electron velocity distribution and the interpretation of cross-modulation experiments.

16 p2850 A69-32190

## PURKAYASTHA, S.

On the stability of stochastic Lurie type systems.

01 p0050 A69-10240

## PUROHIT, R. K.

Efficiency calculations of heterojunction solar energy converters.

15 p2552 A69-30034

## PURONEN, E. O.

Calibration apparatus for surface thermocouples.

19 p3292 A69-35725

## PURTON, C. R.

Radio emission of Cygnus X-2.

16 p2865 A69-32804

Rapid radio variations in BL Lac.

21 p3798 A69-38545

Flux densities of radio sources at a wavelength of 2.8 cm.

22 p4014 A69-40127

## PURUSHOTHAM, G.

Intrinsic equations of steady diabatic gas flows.

21 p3695 A69-39007

## PUSHKAREV, G. P.

Thermal stability of a DC plasmatron arc /Temperaturnaia ustoiichivost' dugi plazmatrona postoiannogo toka/.

15 p2663 A69-30994

## PUSHKAREV, O. E.

The optimum dynamic regimes of MGD energy converters.

10 p1636 A69-23099

The distribution of electrons according to energie and the electron concentration in a low-temperature plasma /Raspredelenie elektronov po energiam i ikonsentratsiia v nizkotemperaturnoi plazme/.

11 p1935 A69-25755

## PUSHKOV, N. V.

Studies of the magnetic fields of the earth and planets /Issledovaniia magnitnykh polei zemli i planet/.

13 p2336 A69-27352

## PUSHTARIK, V. A.

Neutron distribution in the atmosphere with allowance for density variation.

12 p2149 A69-26683

## PUSTOGAROV, A. V.

Investigation of the operation of a plasma generator /Issledovanie rabochego protessa plazmogeneratora/.

24 p4255 A69-43077

## PUSTOVALOV, V. V.

Influence of grain boundaries, crystal purity, and strain rate on discontinuous slip in aluminum at low temperatures /O vlianii granits zeren, chistoty kristallov i skorosti deformirovaniia na preryvistoe skol'zhenie v alumini pri nizkikh temperaturakh/.

21 p3750 A69-39789

## PUSTOVOIT, V. I.

Interaction of electron streams with elastic lattice waves /Vzaimodeistvie elektronnykh potokov s uprugimi volnami reshetki/.

11 p1926 A69-24641

## PUTHOFF, H. E.

Stimulated photon-electron scattering. [IEEE PAPER S-9]

07 p1154 A69-19081

## PUTIANIN, V. V.

Analysis of eigenvalues in problems of the theory of mechanical oscillations /K analizu sobstvennykh znachenii v zadachakh teorii mekhanicheskikh kolebani/.

01 p0170 A69-10827

## PUTIATIN, E. P.

Simulation of the statics of hearing and vision adaptation /Modelirovanie statiki adaptatsii slukha i zreniia/.

23 p4109 A69-41979

Simulation of the dynamics of vision and hearing adaptation /Modelirovanie dinamiki adaptatsii zreniia i slukha/.

23 p4110 A69-41984

Construction of a mathematical model of human vision, taking into account adaptation to light /K postroeniiu matematicheskoi modeli zreniia cheloveka s uchetom tsvetovoi adaptatsii/.

23 p4110 A69-41985

## PUTILIN, E. S.

Emission spectrum of CdS crystals during two-photon excitation /Spektr generatsii kristallov CdS pri dvukhfotonnom vozbuzhdenii/.

14 p2458 A69-29167

## PUTNAM, D. F.

Recovery of potable water from human urine.

19 p3258 A69-36455

## PUTT, C. W.

Use of time-sharing computer to support several large test facilities.

17 p2932 A69-33106

## PUTTOCK, M. J.

Structural performance of the Parkes 210-ft paraboloid.

23 p4231 A69-42130

## PUTZ, J. L.

A wide-band microwave light modulator.

05 p0732 A69-16553

## PUTZER, E. J.

Redirective and retrodirective antenna arrays.

23 p4136 A69-41580

## PUZACH, V. G.

Calculation of temperature fields in multilayer cylindrical bodies /Raschet temperaturnykh polei v mnogosloinykh tsilindricheskikh telakh/.

21 p3855 A69-39855

## PUZANOV, V. A.

Radiometer with a paramagnetic quantum amplifier for spectral measurements in the 8 mm range /Radiometr dlia spektral'nykh izmerenii v diapazone 8 mm s kvantovym paramagnitnym usiletem/.

04 p0597 A69-14851

## Q

- Detection of the galactic radio line H56 alpha - The first radio line observed in the millimeter band.  
08 p1397 A69-20771
- Radiometer for spectral measurements in the 8-mm range with a quantum paramagnetic amplifier.  
15 p2607 A69-30243
- PUZYNA, C.**  
Results of the study of noise and vibrations in domestic passenger aircraft /Wyniki badan halasu drgan na krajowych samolotach pasazerskich/.  
22 p3862 A69-40005
- PUZYNOVICH, IU. T.**  
Study of the electrical conductivity of the plasma in coaxial-type MHD generator models /Issledovanie elektroprovodnosti plazmy v modeliakh MGD-generatorov koaksial'nogo tipa/.  
10 p1735 A69-23463
- PKACZ, H.**  
Application of a microwave system to infrared detection - Signal problem /Zastosowanie ukladu mikrofalowego do detekcji podczerwieni - Zagadnienie sygnalu/.  
13 p2223 A69-28639
- PYKE, D. L.**  
Technological forecasting in planning for company growth.  
06 p1044 A69-17871  
Technological forecasting to aid R and D planning.  
20 p3639 A69-37353
- PYKLIS, E. A.**  
Study of the vaporization and thermodynamic properties of silicon nitride /Issledovanie isparenia i termodynamicheskikh svoystv nitrida kremniia/.  
12 p2118 A69-26261
- PYLDMAA, V. K.**  
Altitude variation of the daytime-sky brightness in the mesosphere /Vysotnyi khod iarkosti dnevnogo neba v mezosfere/.  
21 p3716 A69-39116
- PYNZAR, A. V.**  
Measurement of the right ascension of the Crab Nebula at meter wavelengths /Izmerenie priamogo voskhozhdeniia Krabovidnoi tumannosti na metrovykh volnakh/.  
20 p3607 A69-38040
- PYRZ, A. P.**  
Simulating the effects of gravitational field and atmosphere on behavior of granular media. [AIAA PAPER 69-1009]  
22 p3921 A69-40382
- PYSHKIN, S. L.**  
Gallium phosphide emission near the indirect transition during multiphoton excitation /Izluichenie fosfida galliia vblizi nepriamogo perekhoda pri mnogofoton-nom vozbuzhdenii/.  
03 p0489 A69-13892  
Luminescence of gallium phosphide near an indirect transition in the multiphoton excitation case.  
11 p1939 A69-25693  
Carrier dragging in a solid under the influence of laser emission.  
13 p2271 A69-27661
- PYTLEWSKI, Z.**  
Possibility of calculating the influence of mud and water covering runway surfaces on the takeoff length of jet aircraft /Mozliwosci obliczania wplywu blota i wody na nawierzchni pasa startowego na dlugosc rozbiegu samolotow odrzutowych/.  
17 p2903 A69-34216
- PYTTE, A.**  
Conductivity tensor of a collisional plasma in a magnetic field.  
14 p2503 A69-29999  
Relativistic corrections to the conductivity of a collisional plasma in a magnetic field.  
14 p2503 A69-30000
- PYTTE, E.**  
Soft modes, critical fluctuations, and optical properties for a two-valley model of Gunn- instability semiconductors.  
15 p2581 A69-31240
- PYUN, C. W.**  
Perturbation theory of chemically reacting gases.  
14 p2410 A69-29988
- PYZHEVICH, L. M.**  
Pressure distribution over a sliding contact of cylindrical shape /O raspredelenii davlennii na skol'-ziashchem kontakte tsilindricheskoi formy/.  
18 p3149 A69-35287
- QUAAS, M.**  
The influence of noise on the heart rate and the O sub 2 consumption under medium-to-hard physical loads /Zum Einfluss von Laerm auf die Herzfrequenz und den O sub 2 -Verbrauch bei mittelschwerer physischer Belastung/.  
21 p3654 A69-38908
- QUACCHIA, R. H.**  
Hydroxylamine complexes of some inorganic salts.  
17 p2917 A69-33657
- QUAGLIATO, D.**  
Characterization and coding of DCSP satellite communication channels.  
03 p0387 A69-13177
- QUAIDE, W. L.**  
Genetic implications of lunar regolith thickness variations.  
07 p1213 A69-18604
- QUANN, J. J.**  
A new approach to telemetry data processing - The data reduction laboratory.  
22 p3919 A69-40352
- QUARANTA-VOGLIOTTI, G.**  
Program for the analysis of a space telecommunications mission /Un programma per l'analisi di una missione spaziale di telecomunicazioni/.  
14 p2530 A69-29689
- QUARANTA, G.**  
A method for estimating particle fluxes affecting a satellite in space.  
11 p1949 A69-24863
- QUARMBY, A.**  
Measurement of skin friction using a rectangular mouthed Preston tube.  
11 p1880 A69-24376  
Fully developed turbulent flow in the circular tube and parallel plate channel.  
13 p2248 A69-28131  
Displacement effects on pitot tubes with rectangular mouths.  
17 p2976 A69-34049  
Improved application of the von Karman similarity hypothesis to turbulent flow in ducts.  
20 p3513 A69-37081
- QUASius, G.**  
Celestial navigation.  
18 p3169 A69-34852
- QUAST, A.**  
Conceptual study of satellites for direct-TV- broadcast with incore-thermionic-reactor and electrical propulsion. [UN PAPER 68-95559]  
01 p0114 A69-10466  
Design and dimensioning of a nuclear power supply installation with an in-core thermionic reactor /Zur Auslegung und bemessung einer nuklearen Energieversorgungsanlage mit Incoré-Thermionik-Reaktor/.  
08 p1350 A69-20871
- QUATTRONE, P. D.**  
Current research on regenerative systems.  
20 p3477 A69-37623
- QUEEN, J. E.**  
Mississippi test facility hardware data acquisition system error analysis.  
10 p1673 A69-23287
- QUEENER, C. A.**  
Elastic springback and residual stresses in sheet metal formed by bending.  
08 p1319 A69-20005
- QUEFFELE, J.-L.**  
Photoelectric spectroscopic study, in the visible range, of the radial temperature distribution of an argon-hydrogen plasma /Etude par spectroscopie photoelectrique dans le visible de la distribution radiale des temperatures d'un plasma d'argon et d'hydrogene/.  
08 p1366 A69-20758
- QUEISSER, H. J.**  
Electron-photon coupling in the barriers of GaAs Schottky diodes.  
03 p0493 A69-14242  
Impurity photovoltaic effect in silicon.  
19 p3381 A69-35679
- QUEMADA, D.**  
Waves in Plasmas- Space Physics /Ondes dans les Plasmas- Physique Spatiale/.  
02 p0285 A69-11518  
Plasma Physics /Physique des plasmas/.  
03 p0482 A69-14234  
Analysis of coupling problems for the case of proton whistlers /Analyse des problemes de couplage dans le cas des sifflements protoniques/.  
13 p2254 A69-27981
- QUEMARD, C.**  
Turbulent boundary layer velocity distributions in a uniform or accelerated compressible flow /Distributions de vitesses des couches limites turbulentes en ecoulement compressible, uniforme ou accelere/. [ONERA-TP-693]  
11 p1867 A69-24752
- QUEMENEUR, A.**  
Density measurements by means of the propagation of electron plasma waves in the presence of a strong magnetic field /Mesures de densites par propagation d'ondes plasma electroniques en presence d'un champ magnetique fort/.  
07 p1194 A69-19323
- QUENBY, J. J.**  
The second harmonic of the cosmic ray daily variation.  
02 p0305 A69-11422  
The radial and azimuthal components of cosmic ray streaming in interplanetary space.  
16 p2850 A69-32304
- QUENON, J.**  
Design and study of a low-power nuclear reactor for space propulsion /Conception et etude d'un reacteur nucleaire de faible puissance destine a la propulsion spatiale/.  
17 p3004 A69-33342
- QUENSEL, S.**  
Gas turbine control by fluidic amplifiers /Reglering av gasturbiner - Med fluidistorer/.  
20 p3585 A69-36944
- QUENTIN**  
Development and production of large solid- propellant thrusters /Developpement et production de gros propulseurs a propergol solide/.  
17 p3018 A69-33331
- QUENZEL, H.**  
The effect of vertical turbidity stratification on the energy gain in the atmosphere via continuum absorption /Ueber den Einfluss der vertikalen Truebungsschichtung auf den Energiegewinn der Atmosphäre durch die Kontinuum-Absorption/.  
02 p0277 A69-12777  
Effect of the aerosol size distribution on the accuracy of devices measuring scattered light /Der einfluss der Aerosolgroessenverteilung auf die Messgenauigkeit von Streulichtmessern/.  
24 p4343 A69-42966
- QUEST, R. G.**  
Low cost orbital transportation - How big a step.  
21 p3857 A69-39696
- QUETS, J. M.**  
Thermochemistry of the hot corrosion of superalloys.  
23 p4178 A69-42449
- QUEVAUVILLER, P.**  
Control of the direction of thrust of rocket motors /Contrôle d'orientation de la poussee des moteurs-fusees/.  
03 p0495 A69-12892  
Directional thrust control of solid propellant rockets /Contrôle directionnel de poussee sur les engins a propergol solide/.  
17 p3019 A69-33332
- QUICK, A. W.**  
Several new research results in the fields of flows with energy supply /Sixth Daniel and Florence Guggenheim memorial lecture/.  
24 p4248 A69-43642
- QUIGG, H. T.**  
Effect of sulfur in JP-5 fuel on hot corrosion of coated superalloys in marine environment.  
01 p0141 A69-11059
- QUIGG, R. J.**  
Development of a nickel-base superalloy using statistically designed experiments.  
08 p1329 A69-20001  
Superalloy development for aircraft gas turbines. [ASME PAPER 69-GT-7]  
09 p1527 A69-22506



## QUIGLEY, J.

Characterization and coding of DCSP satellite communication channels.  
03 p0387 A69-13177

## QUIJANO-RICO, M.

Determination of boron, lithium, and chlorine in meteorites.  
19 p3408 A69-36085

## QUINDRY, T. L.

Transmissibility measurements for the determination of structural damping.  
[ASME PAPER 69-VIBR-36]  
10 p1807 A69-24175

## QUINE, J. P.

The reflection coefficients of the edge elements of large periodic antenna arrays.  
04 p0572 A69-14322

On the use of finite-length metal septa for suppression of higher order modes.  
04 p0576 A69-14758

Injection phase-locking characteristics of LSA-mode transferred-electron oscillators.  
14 p2421 A69-29544

## QUINLAN, J. R.

A formal deductive problem-solving system.  
01 p0037 A69-10806

## QUINLAN, W. J., JR.

Thermal regulation in X-irradiated dogs subjected to heat stress.  
09 p1445 A69-22548

## QUINN, B.

Blunt-cone roll-damping derivative.  
04 p0542 A69-14739

## QUINN, R. T.

Structure and elevated-temperature mechanical behavior of unidirectionally solidified Ni-Ni sub 3 Nb eutectic alloy.  
13 p2276 A69-27402

## QUINN, W. J.

Dynamic mechanical components evaluated with infrared optics.  
01 p0085 A69-10295

## QUIRING, F. S.

Nonradiative transfer of excitation energy between rare-earth ions in aqueous solution.  
01 p0023 A69-10288

## QUIROZ, R. S.

Synoptic density maps of the upper atmosphere.  
04 p0626 A69-14909

The warming of the upper stratosphere in February 1966 and the associated structure of the mesosphere.  
22 p3977 A69-39928

## QUISENBERRY, R. C.

The effects of measurement errors and geometry on navigational accuracy.  
17 p3002 A69-34098

## QUIST, W. E.

Intermediate compound Ni sub 8 Nb/Cb/ in nickel-rich nickel-niobium /columbium/ alloys.  
10 p1708 A69-22993

## QUIVY, A.

Contribution to the study of certain metastable phases of the binary zirconium-niobium system /Contribution a l'etude de certaines phases metastables du systeme binaire zirconium-niobium/.  
05 p0781 A69-16614

## QUORI, F.

Approximate study of thermal shock /Studio approssimato dello shock termico/.  
06 p1025 A69-17779

Minimum-resistance ellipsoids of revolution at very low Reynolds numbers /Ellissoidi di rotazione di minima resistenza a bassissimi numeri di Reynolds/.  
06 p0911 A69-17780

## QUOZZO, G.

Thermoelastic effects on gravity gradient stabilization of artificial satellites.  
06 p1025 A69-17613

## R

## RAAB, B.

External-fuel thermionic reactors.  
14 p2480 A69-29185

## RAAB, S.

The influence of external optical coupling on the threshold current density of GaAs injection lasers.  
02 p0260 A69-12687

## RAABE, H.

Biotelemetric examinations of the heart and circulatory systems of helicopter pilots to determine various in-flight stresses /Biotelemetrische Untersuchungen des Herz-Kreislauf-Systems bei Hubschrauberpiloten zur Feststellung der unterschiedlichen fliegerischen Belastung/.  
11 p1829 A69-24347

## RAABE, J.

Blade oscillations in one-stage axial turbomachinery.  
[ASME PAPER 68-FE-7]  
05 p0837 A69-16069

## RAAG, V.

A silicon-germanium solar thermoelectric generator.  
05 p0704 A69-15674

Design and performance analysis of panel-type solar thermoelectric generators.  
05 p0704 A69-15675

Design and performance analysis of silicon-germanium RTG's.  
23 p4188 A69-42260

## RAAL, J. D.

Numerical studies of viscous flow around circular cylinders.  
11 p1867 A69-24279

## RABANAQUE, A.

Observations of Uranus using the A. Danjon astrolabe of the Sao Paulo Observatory /Observations d'Uranus effectuees a l'astrolabe A. Danjon de l'observatoire de Sao Paulo/.  
22 p4031 A69-40912

## RABANUS, G.

An integrated nonvolatile read-write memory with addressing.  
17 p2942 A69-34120

## RABAUT, G.

Crack propagation and initiation in low cycle strain controlled fatigue.  
12 p2188 A69-26914

## RABBOTT, J. P., JR.

Model vs. full scale rotor testing.  
18 p3119 A69-35227

## RABE, E.

Stability characteristics of the short-period Trojan librations.  
01 p0158 A69-11329

Periodic Trojan orbits for the resonance 1/12.  
13 p2350 A69-27824

## RABE, R. E.

Unique fabrication technique for waveguide below cut off high pass filters.  
23 p4170 A69-42231

## RABEAU, M.

Inertial magneto confinement of a plasma produced by the interaction of laser radiation with a solid deuterium granule /Confinement magneto inertiell d'un plasma cree par l'interaction du rayonnement laser avec un granule de deuterium solide/.  
05 p0798 A69-15585

## RABIN, H.

Phase-matched optical harmonic generation in liquid media employing anomalous dispersion.  
[IEEE PAPER V-9]  
07 p1155 A69-19086

## RABINOVICH, A. I.

Density fluctuations correlations in a classical perfect gas.  
03 p0477 A69-13414

## RABINOVICH, A. L.

Influence of temperature and anisotropy on the elastic constants of oriented fiberglass-reinforced plastics /Vliianie temperatury i anizotropii na uprugie konstanty orientirovannykh stekloplastikov/.  
08 p1335 A69-20330

## RABINOVICH, B. I.

Theory of small oscillations of a solid body with a cavity partially filled with a viscous incompressible fluid /K teorii mal'nykh kolebaniy tverdogo tela s polost'iu chasticchno zapolnennoi viazkoi neszchimaemoi zhidkost'iu/.  
01 p0165 A69-10084

Methods of investigating the dynamics of launch vehicles and space vehicles, and the possibilities of using these methods in other engineering fields /O metodakh issledovaniia dinamiki raket-nositel'ei i kosmicheskikh apparatov i vozmozhnosti ispol'zovaniia etikh metodov v drugih oblastiakh tekhniki/.  
[UN PAPER 68-95622]  
06 p1013 A69-17051

Determination of the coupled moments of inertia of a fluid in moving cavities on the basis of a numerical computer solution to the resolving integral equation /Opredelenie prisoedinennykh momentov inertsii zhidkosti v podviznykh polostiakh na osnovе chislennogo resheniia na ET s VM razreshaiushchego integral'nogo uravneniia/.  
11 p1868 A69-24777

Dynamics of a Solid Body with Cavities Partially Filled by Liquid /Dinamika tverdogo tela s polost'iu chasticchno zapolnennymi zhidkost'iu/.  
14 p2530 A69-29816

## RABINOVICH, B. S.

Coefficients of thermal expansion of chromium dioxide and its solid solutions with TiSi sub 2 and VSi sub 2 /Koeffitsienty termicheskogo rasshireniia disilitsida khroma i ego tverdykh rastvorov s TiSi sub 2 i VSi sub 2/.  
04 p0619 A69-15359

Coefficients of thermal expansion of chromium dioxide and its solid solutions with TiSi sub 2 and VSi sub 2.  
18 p3156 A69-35020

## RABINOVICH, F. IA.

Effect of capture centers on the current-voltage characteristic of a p-i-n diode /O vliianii tsentrov priipaniia na vol't-ampernuiu kharakteristiku p-i-n dioda/.  
13 p2236 A69-28521

## RABINOVICH, IU. I.

Study of the microwave radiation field in the atmosphere /Issledovanie polia mikrovolnovogo izlucheniia v atmosfere/.  
06 p0953 A69-17999

Determination of the water vapor content in the atmosphere from microwave radiation measurements /Opredelenie soderzhaniiia vodianogo para v atmosfere po izmereniiu mikrovolnovogo izlucheniia/.  
06 p0953 A69-17999

Possible errors of absolute radio emission measurements /O vozmozhnykh pogreshnostiakh absolutnykh izmerenii radioizlucheniia/.  
06 p0929 A69-18000

Application of thermal radar observations in meteorology /Primenenie radioteplovokatsii v meteorologii/.  
20 p3569 A69-36988

## RABINOVICI, B.

A unilateral transformer.  
21 p3684 A69-39458

## RABINOVITCH, M.

Heat-resistant fiber composites produced by oriented crystallization in the Co-Cr-Ta-C and Ni-Cr-Ta-C systems /Composites refractaires a fibres, realisees par cristallisation orientee dans les systemes Co-Cr-Ta-C et Ni-Cr-Ta-C/.  
[ONERA-TP-710]  
16 p2799 A69-31765

## RABINOWITZ, J.

Studies on the formation and transformation of esters. LXXX.  
16 p2747 A69-31800

## RABINOWITZ, P. H.

Periodic solutions of nonlinear hyperbolic partial differential equations. II.  
12 p2124 A69-26929

## RABOTNOV, IU. N.

Elasto-plastic state of composite structure.  
19 p3444 A69-36808

## RABOTNOV, N. A.

Creep and stress-rupture strength of unidirectional glass-fiber-reinforced plastics /Polzuchest' i dlitel'naiia prochnost' odnonapravlenno go stekloplastika/.  
01 p0101 A69-10080

## RABSON, T. A.

Gunn effect bibliography.  
05 p0810 A69-16566

## RABY, J. S.

FAMILY 1 - Software for NASA-Ames simulation systems.  
04 p0567 A69-15353

## RACHEV, AL.

Stability and vibrations of a long rod of rectangular cross section subjected to finite elastic deformation /Ustoichivost' i kolebaniia dlinnogo sterzhnia priamougol'nogo secheniia pri konechnoi uprugoi deformatsii/.  
10 p1802 A69-24021

## RACINE, J.

Frequency stability and accuracy of hydrogen maser /Stabilitaet und Genauigkeit der Frequenz von Wasserstoff-Masern/.  
21 p3741 A69-39688

- RACKHAM, T. W.**  
The meteorite of April 25, 1969.  
15 p2701 A69-31528
- RACKLEY, R. A.**  
Design of vapor turbines including effects of super-saturation.  
23 p4187 A69-42251
- RACKLEY, R. L.**  
Recent developments in variational methods for nonequilibrium flows.  
04 p0551 A69-15314
- RACO, R. J.**  
Stability of a plane fluid interface in the presence of a transverse electrostatic field.  
15 p2652 A69-30911
- RADCHENKO, R. V.**  
Special characteristics of installations with magnetogasdynamic converters working on the Rankine cycle.  
03 p0369 A69-14154
- RADCLIFFE, F. R.**  
Concepts and advantages of adaptable, integrated space vehicle ground support equipment.  
[AIAA PAPER 69-308] 09 p1479 A69-22385  
Concepts and advantages of adaptable, integrated space vehicle ground support equipment.  
18 p3118 A69-35064  
Integrated space vehicle ground support equipment.  
[AIAA PAPER 69-308] 22 p3927 A69-40552
- RADCLIFFE, S. V.**  
Internal void formation in powder metallurgy tungsten.  
01 p0093 A69-10061
- RADEBOLD, R.**  
Stable heat transfer with metallic two-phase flows /Zur stabilen Waermeuebertragung mit metallischen Zweiphasenstroemungen/.  
05 p0803 A69-15998  
Energy conversion with liquid-metal working fluids in the MHD-staustrahlrohr.  
13 p2372 A69-27482
- RADEK, U.**  
Measurements of the pressure behavior in cavity-generated pressure pulses /Messungen des Druckverlaufs in kavitationserzeugten Druckpulsen/.  
19 p3302 A69-36870
- RADER, C. M.**  
Digital Processing of Signals.  
20 p3487 A69-37146
- RADER, D.**  
The propagation of extensional cylindrical pulses in elastic plates.  
11 p1969 A69-24414  
Stress waves and fracture.  
13 p2275 A69-27229
- RADER, R.**  
Transmission of cardiovascular data from dogs.  
07 p1071 A69-19133
- RADFORD, M. F.**  
The aesthetics of antenna design.  
12 p2044 A69-26924
- RADFORD, R. C.**  
Flight simulation of the CH-46 helicopter.  
[AHS PAPER 361] 17 p2946 A69-33521
- RADFORD, W. E.**  
Ionospheric and magnetic observations at 1000 kilometers during the geomagnetic storm and aurora of May 25-26, 1967.  
18 p3129 A69-34954
- RADHA KRISHNA, C. V.**  
The fluctuating flow of a viscous incompressible conducting fluid past an infinite flat plate with time dependent suction in the presence of a transverse magnetic field.  
21 p3691 A69-38445
- RADHAKRISHNAN, V.**  
Measurements on the period of the pulsating radio source at 1919 plus 21.  
07 p1214 A69-18665  
Evidence in support of a rotational model for the pulsar PSR 0833-45.  
09 p1592 A69-21461  
Detection of a change of state in the pulsar PSR 0833-45.  
12 p2172 A69-27167  
Magnetic poles and the polarization structure of pulsar radiation.  
18 p3202 A69-35215
- RADIN, A. M.**  
Linear self-consistent theory of diffraction emission /Lineinaia samosoglasovannaia teoriia difraktsionnogo izlucheniia/.  
22 p3899 A69-40615  
Application of the method of perturbations to the solution of linear problems of diffraction electronics in a self-consistent formulation /Primenenie metoda vozmushchenii dlia resheniia lineinykh zadach difraktsionnoi elektroniki v samosoglasovannoi postanovke/.  
23 p4124 A69-42033  
Propagation of space charge waves in an annular waveguide /Rasprostraneniye voln prostranstvennogo zariada v kol'tsevom volnovode/.  
23 p4124 A69-42034
- RADIN, H. W.**  
The moon's photometric function near zero phase angle from Apollo 8 photography.  
23 p4220 A69-42380
- RADIN, I.**  
Exploratory drag reduction studies in non-polar soap systems.  
17 p2951 A69-33253
- RADKE, G. E.**  
Correlation of dose rate and spectral measurements in the inner Van Allen belt.  
01 p0145 A69-11081
- RADKE, L. F.**  
An automatic cloud condensation nuclei counter.  
09 p1494 A69-21640
- RADLEY, P. E.**  
Metalization is designed quickly and inexpensively.  
06 p0931 A69-17199
- RADLOFF, R.**  
Groups under Stress- Psychological Research in SEALAB II.  
04 p0552 A69-14533
- RADNOR, M.**  
In-house research on the management of R and D in government agencies.  
20 p3640 A69-38022
- RADOMSKII, M. F.**  
Compromise control in systems with two hierarchy levels /Kompromisne keruvannia v sistemakh z dvoma rivniami ierarkhii/.  
08 p1297 A69-20415
- RADOMYSELSKII, I. D.**  
Mechanical properties of metal-glass materials obtained by impregnation /Mekhanicheskie svoistva metallostekliannykh materialov, poluchennykh propitkoi/.  
15 p2643 A69-31188
- RADON, J. C.**  
Fracture toughness of an Al-alloy in the biaxial stress field.  
17 p2986 A69-32985
- RADOS, R. M.**  
Atmospheric measurements from satellites.  
[AIAA PAPER 69-158] 06 p0954 A69-18038
- RADOSKI, H. R.**  
The polarization of Alfven waves.  
02 p0290 A69-12400  
Physics of the Magnetosphere, Proceedings of the Conference, Boston College, Chestnut Hill, Mass., June 19-28, 1967.  
07 p1207 A69-19351
- RADOVSKII, I. Z.**  
Coefficients of thermal expansion of chromium disilicide and its solid solutions with TiSi sub 2 and VSi sub 2 /Koeffitsienty termicheskogo rasshireniia disilitsida khroma i ego tverdykh rastvorov s TiSi sub 2 VSi sub 2/.  
04 p0619 A69-15392  
Coefficients of thermal expansion of chromium disilicide and its solid solutions with TiSi sub 2 and VSi sub 2.  
18 p3156 A69-35020
- RADOWICZ, A.**  
Statistical theory of continuous distribution of dislocations in a linear isotropic elastic continuum.  
18 p3212 A69-34352
- RADTKE, T.**  
An FM/FM telemetry system /Das FM/FM-Telemetriesystem/.  
16 p2750 A69-31853
- RADZIEVSKII, V. V.**  
Some effects and problems associated with the interaction of stars with the interstellar medium /Nekotorye efekty i problemy vzaimodeistviia zvezd s mezhzvezdnoi sredoi/.  
11 p1955 A69-24386  
Acceleration of the galactic motion of stars /Ob uskorenii galakticheskogo dvizheniia zvezd/.  
20 p3608 A69-38046  
The interaction of stars with the interstellar medium.  
24 p4390 A69-43776
- RADZIMOVSKY, E.**  
Effects of axial vibrations on frictional losses in gear systems.  
[ASME PAPER 69-VIBR-15] 10 p1701 A69-24169
- RADZISZEWSKI, B.**  
The behaviour of the solutions of equations of motion of the mechanical systems with program constraints.  
17 p3053 A69-33017
- RADZIWIILL, W.**  
A highly efficient small brushless D.C. motor.  
12 p2017 A69-26894
- RAE, J.**  
Scattering of photons by plasmas.  
15 p2664 A69-31479
- RAE, S.**  
Methods of treating Coulomb interference corrections in potential scattering.  
18 p3176 A69-35008
- RAE, W. H., JR.**  
Comments on V/STOL wind tunnel data at low forward speeds.  
18 p3119 A69-35229
- RAE, W. J.**  
Some numerical results on viscous low-density nozzle flows in the slender-channel approximation.  
[AIAA PAPER 69-654] 17 p2894 A69-33502
- RAEDER, J.**  
Pressure rise and thermal conductivity in a cylindrically symmetrical hydrogen plasma in an axial magnetic field, taking thermal forces into account /Druckerhoehung und Waermeleitfaehigkeit in einem zylindersymmetrischen Wasserstoffplasma im axialen Magnetfeld unter Beruecksichtigung von Thermokraeften/.  
03 p0479 A69-13967
- RAEDLER, K.-H.**  
Electrodynamics of turbulent conducting media. I, II /Zur Elektrodynamik turbulent bewegter leitender Medien. I, II/.  
03 p0479 A69-13972
- RAEMER, H. R.**  
Signals and noise.  
03 p0394 A69-13398  
Statistical Communication Theory and Applications.  
19 p3267 A69-35900
- RAER, G. A.**  
Experimental application of a universal program of the Leningrad State University Computer Center for calculating axisymmetrically deformed shells of revolution /Opyt ekspluatatsii universal'noi programmy VTs LGU dlia rascheta obolochek vrashcheniia pri osesimmetrichnoi deformatsii/.  
06 p1026 A69-18019
- RAESIDE, D.**  
Linear modelling of multivariable systems with pseudo-random binary input signals.  
04 p0583 A69-15113
- RAETHER, H.**  
Radiative decay of non radiative surface plasmons excited by light.  
07 p1188 A69-18278
- RAETHER, M.**  
Generation of smeared out electron beams for experiments on weak plasma turbulence.  
04 p0636 A69-15020
- RAETHJEN, P.**  
Experimental and Theoretical Research on Atmospheric Circulations, the Jetstream, and Cyclonic Disturbances /Experimentelle und theoretische Untersuchungen ueber die atmosphaeischen Zirkulationen, den jet stream und die zyklonalen Stoerungen/.  
17 p2999 A69-33757  
Energetics of the general circulation and the planetary jetstream /Zur Energetik der allgemeinen Zirkulation und des planetarischen jet stream/.  
17 p3000 A69-33758  
"three-mass" model of general circulation /Dreimasen-Modell der allgemeinen Zirkulation/.  
24 p4346 A69-43153



## RAEVSKAIA, E. B.

Investigation of the time variation of the dielectric constant and domain structure of a ferroelectric ceramic /Issledovanie izmeneniia dielektricheskoi proutsaemosti i domennoi struktury segnetokeramiki vo vremeni/.  
22 p3996 A69-41166

## RAEVSKII, I. I.

The zirconium corner of the phase diagram of the zirconium-aluminum-molybdenum system /Tsirkonievyy ugol diagrammy sostoiianiia sistemy tsirkonii-aliuminiimolibden/.  
02 p0261 A69-11840

The zirconium corner in the phase diagram of the zirconium-beryllium-niobium system /Tsirkonievyy ugol diagrammy sostoiianiia sistemy tsirkonii-berillii-niobii/.  
02 p0262 A69-11843

Corrosion resistance of alloys in the zirconium-beryllium-niobium system /Korroziionnaia stoikost' splovov sistemy tsirkonii-berillii-niobii/.  
02 p0262 A69-11844

Mechanical properties of low-alloy alloys in the zirconium-beryllium-niobium system /Mekhanicheskie svoystva malolegirovannykh splovov sistemy tsirkonii-berillii-niobii/.  
02 p0262 A69-11845

The zirconium corner in the zirconium-iron-niobium phase diagram /Tsirkonievyy ugol diagrammy sostoiianiia tsirkonii-zhelezo-niobii/.  
02 p0263 A69-11851

Zirconium corner of the phase diagram of the zirconium-molybdenum-tantalum system /Tsirkonievyy ugol diagrammy sostoiianiia sistemy tsirkonii-molibden-tantal/.  
02 p0264 A69-11858

The zirconium corner of the zirconium-niobium-chromium system phase diagram /Tsirkonievyy ugol diagrammy sostoiianiia sistemy tsirkonii-niobii-khrom/.  
02 p0264 A69-11861

## RAEVSKII, I. M.

Laser-induced current pulses from a target in a gas.  
18 p3152 A69-35124

## RAFALSKI, A. L.

A high-temperature forge for refractory metals.  
17 p2945 A69-33419

## RAFALSKI, P.

On the variational principles for the heat conduction problem.  
16 p2877 A69-31872

## RAFALSON, A. E.

Possibility of determining lunar rock types by the mass spectrometric method /O vozmozhnosti opredeleniia tipa lunnykh porod mass-spek-trometricheskimi metodami/.  
22 p4034 A69-41106

## RAFERT, W. E.

Army Materiel Command planning principles and philosophy.  
08 p1423 A69-21153

## RAFF, R. A.

Photochemical reaction mechanisms for production of organic compounds in a primitive earth atmosphere.  
09 p1444 A69-21465

## RAFFO, P. L.

Yielding and fracture in tungsten and tungsten-rhenium alloys.  
08 p1331 A69-20190

Creep of powder metallurgy rhenium at 0.43 to 0.72 T sub m.  
17 p2991 A69-34186

## RAFFY, J.

Tunable Raman up-converter as a coherent generator. [IEEE PAPER B-2]  
05 p0774 A69-16309

## RAFTERY, E. B.

Incidence and management of supraventricular arrhythmias after acute myocardial infarction.  
24 p4262 A69-42729

## RAFTOPOULOS, D.

Longitudinal impact of two mutually plastically-deformable missiles.  
12 p2179 A69-26217

## RAGALLER, K.

Steady magnetogasdynamic flows of finite extent /Ueber stationaere, magnetogasdynamische Stromungen endlicher Ausdehnung/.  
07 p1188 A69-18274

## RAGAZZINI, J. R.

Analysis of problems in dynamics by electronic circuits.  
05 p0724 A69-16468

## RAGHAVA REDDI, C.

The variability of time shifts in the spaced fading records.  
03 p0421 A69-13329

Horizontal drifts at the E-region level by the spaced phase path technique.  
03 p0421 A69-13330

## RAGHAVACHAR, M. R.

Thermal instability in the presence of Hall-current.  
16 p2854 A69-31649

## RAGHAVAN, N.

An analysis of the cepheid variable RT Aurigae.  
10 p1778 A69-23605

## RAGHUNATHAN, S.

Theory and performance of conical diffuser/exit duct combinations. [ASME PAPER 68-WA/FE-45]  
05 p0698 A69-16112

## RAGLAND, K. W.

Observed structure of spray detonations.  
03 p0415 A69-13139

Two-phase detonation of a liquid layer.  
16 p2879 A69-32151

Ignition processes in expanding detonations.  
21 p3849 A69-38803

## RAGONESE, P.

Radar system anti-interference circuit using delay lines /Su un circuito anti-interferenza per sistemi radar realizzato con linee di ritardo/.  
08 p1271 A69-19919

## RAGOT, P.

All-metal nuclear thermionic module /Module thermionique nucleaire tout-metal/.  
14 p2398 A69-29181

## RAGSAC, R. V.

Considerations in the development of mission analysis models for power-limited systems.  
09 p1584 A69-21205

Trajectory requirements and performance comparisons of single-stage, electrically propelled space vehicles. [AAS PAPER 68-106]  
21 p3819 A69-39204

## RAGSDALE, R. G.

Some recent gaseous reactor fluid mechanics experiments. [AIAA PAPER 69-477]  
16 p2811 A69-32728

## RAGUZIN, R. M.

Infrared polarizing microscope.  
12 p2093 A69-26595

## RAHE, G. A.

A comparison of several types of data compression.  
07 p1077 A69-18758

## RAHE, J.

Ionization and ray formation in comets.  
13 p2349 A69-27817

## RAHILLY, W. P.

Hardened solar cells.  
19 p3251 A69-35689

## RAHLMANN, D. F.

Phase relationships between circadian rhythms and photoperiodism in the monkey.  
24 p4260 A69-42706

## RAHMAN, M.

Continuum eigenfunctions for a hard-sphere gas.  
01 p0061 A69-10813

## RAHMATULLAH, M.

Measurement of upper atmosphere winds and temperature from rocket-grenade-TMA experiments conducted from Sonmiani in spring and autumn of 1966-67.  
15 p2598 A69-31317

## RAHME, H. S.

A new look at the numerical integration of ordinary differential equations.  
19 p3279 A69-35805

## RAHN, H.

Mixed venous P sub O sub 2, P sub CO sub 2, pH and cardiac output during exercise in trained subjects.  
23 p4078 A69-41316

## RAHN, R. O.

Ultraviolet-induced excited states in deoxyribonucleic acid.  
03 p0372 A69-13488

## RAI-CHOUDHURY, P.

Multi-junction solar cells.  
19 p3251 A69-35690

## RAI, D. B.

Wave motions associated with particle precipitation in the ionosphere.  
18 p3130 A69-35111

Equatorial atmosphere measurements obtained with the sounding rocket grenade experiment.  
23 p4159 A69-42431

## RAI, R. K.

Ionospheric absorption of radio waves during sunrise and sunset hours.  
23 p4127 A69-42431

Dependence of nondeviative ionospheric absorption on solar zenith angle and frequency.  
23 p4127 A69-42431

## RAICH, J. C.

Spin wave approximation for anisotropic Heisenberg antiferromagnet.  
12 p2144 A69-26501

## RAICHENKO, A. I.

X-ray investigation of finely dispersed titanium in various states /Rentgenovskoe issledovanie mek-kodispersnogo titana v razlichnom sostoianii/.  
21 p3745 A69-38951

## RAICHENKO, T. F.

Composition and certain properties of the lower oxides of silicon.  
15 p2643 A69-31240

## RAIFF, L. C.

A one-megahertz iteration rate DDA computer.  
17 p2934 A69-34077

## RAIKHBAUM, I. A. D.

Kinetics of the evaporation of metal particles in an arc plasma /Kinetika ispareniia chastits metallov v dугovoi plazme/.  
15 p2663 A69-30999

## RAIKHMAN, S. R.

Operation of an AC diode switching circuit.  
11 p1857 A69-25711

## RAIKO, V. I.

Ion-optical system of a plasma source.  
15 p2658 A69-30240

## RAIMOND, E.

Positions and Stokes parameters of seven OH-emission sources.  
10 p1787 A69-24114

## RAINAL, A. J.

First and second passage times of sine wave plus noise.  
04 p0561 A69-15453

## RAINBIRD, W. J.

Turbulent boundary-layer growth and separation over a yawed cone. [AIAA PAPER 68-98]  
02 p0190 A69-12520

## RAINER, F.

A controlled laser pulse width technique.  
09 p1515 A69-21427

## RAINES, L. IU.

Relative influence of A and E centers on changes in the electrical properties of silicon during irradiation.  
07 p1199 A69-18680

## RAINEY, R. W.

Some topics in hypersonic body shaping. [AIAA PAPER 69-181]  
06 p0863 A69-18057

Center-of-gravity requirements for trim of several axisymmetric bodies.  
21 p3644 A69-39237

## RAINFORTH, J. H. P.

Design description of the power supply sub-system for the TD1/TD2 satellites.  
13 p2209 A69-28481

Design description of the power supply sub-system for the TD1/TD2 satellites.  
18 p3093 A69-34791

## RAINVILLE, L. P.

Radar measurements of Martian topography.  
16 p2860 A69-32238

## RAITBURD, TS. M.

Adsorption mechanism of the leakage of the lunar atmosphere /Adsorbtsionnyi mekhanizm utechki lunnoy atmosfery/.  
05 p0824 A69-16062

Loss of the lunar atmosphere by an adsorptive mechanism.  
15 p2680 A69-30261

## RAITT, W. J.

Investigations of positive-ion composition and temperature /Experiment S.45/ and electron density and temperature /Experiment S.44/.  
13 p2253 A69-27753

**RAIZBERG, B. A.**

Physical bases and a mathematical model of the process of flame front propagation over the surface of a solid fuel during the period of ignition /Fizicheskie osnovy i matematicheskaya model' protsessa rasprostraneniya fronta plameni po poverkhnosti tverdogo topliva v period ego vosplamneniia/.  
11 p2001 A69-25193

**RAIZER, I. U. P.**

Absorption of laser radiation in transparent substances under conditions of appearance of opacity.  
09 p1520 A69-22655

Elements of Gasdynamics and the Classical Theory of Shock Waves.  
13 p2246 A69-27639

"Transparency" effect in plasma subjected to the action of laser pulses /Effekt "prosvetleniia" plazmy pod deistviem lazernykh impul'sov/.  
13 p2314 A69-28442

Plasma and laser emission /Plazma i lazernoe izluchenie/.  
16 p2797 A69-32382

Shock waves and radiation.  
18 p3230 A69-34926

**RAJA RAO, K. S.**

On the Dst field in the equatorial electrojet region.  
07 p1124 A69-18822

**RAJAGOPALAN, T.**

Response optimization of feedback control systems with reference to single-time-constant ideal.  
08 p1298 A69-20855

**RAJIAIAH, K.**

Effect of boundary condition description on convergence of solution in a boundary-value problem.  
04 p0681 A69-15283

**RAJAN, R. S.**

Techniques for proper revelation and viewing of etch-tracks in meteoritic and terrestrial minerals.  
02 p0245 A69-12569

Chemical composition of nuclei of Z greater than 22 in cosmic rays using meteoritic minerals as detectors.  
05 p0816 A69-16355

Nuclear effects due to solar cosmic rays in meteorites.  
06 p0989 A69-17282

On the energy spectrum of iron-group nuclei as deduced from fossil-track studies in meteoritic minerals.  
19 p3410 A69-36095

On the flux of low-energy particles in the solar system during the last 10 million years.  
19 p3411 A69-36097

Observations on space irradiation of individual crystals of gas-rich meteorites.  
20 p3590 A69-37568

**RAJAN, S.**

Transverse waves in detonations. I - Spacing in the hydrogen-oxygen system.  
09 p1622 A69-21953

**RAJANGAM, K. B.**

Synthesized plasma generator.  
06 p0927 A69-17707

**RAJAPAKSE, Y.**

Thermal stability of a reactive spherical shell.  
21 p3849 A69-38804

**RAJAPPA, N.**

A note on auroral electrons.  
16 p2850 A69-32102

**RAJAPPAN, K. P.**

Improved self-tuning filter for low frequencies.  
11 p1845 A69-24548

**RAJARATNAM, N.**

Yaw probe used as Preston tube.  
05 p0751 A69-16396

**RAJCHL, J.**

On the origin of meteor long-duration train luminosity.  
01 p0154 A69-10874

About turbulence and attachment in meteor trains.  
08 p1393 A69-20608

On the connection between fireballs and "new" comets.  
23 p4208 A69-41285

**RAJESWARI, B. V.**

A theoretical analysis of the source-excited electromagnetic fields.  
12 p2028 A69-25898

**RAJU, I. S.**

Stiffness matrices for sector elements.  
04 p0676 A69-14728

**RAJU, K. N.**

On the calculation of plastic energy dissipation rate during stable crack growth.  
18 p3212 A69-34345

**RAKCHEEV, E. N.**

Determination of stresses in elliptical bottoms of pressure vessels /Opredelenie napriazhenii v ellipticheskikh dnishchakh sudov daviel'niia/.  
04 p0668 A69-14275

**RAKCHEEV, V. P.**

Multichannel amplitude analyzer for space research.  
01 p0084 A69-11315

**RAKHIMOV, A.**

Exact positions of minor planets according to photographic observations on the normal astrograph at Tashkent in 1963 and 1964 /Tochnye polozeniia mal'kh planet po fotograficheskim nabludeniiam na normal'-nom astrografe v Tashkente v 1963-1964 gg./.   
20 p3596 A69-37312

**RAKHIMOV, A. T.**

Increase of CO sub 2 laser power under the influence of a beam of fast protons.  
08 p1323 A69-19802

**RAKHIMOVA, T. V.**

The problem of obtaining a laser with smooth tuning of the lasing frequency. IV /K probleme sozdaniia lazera s plovnoi perestroikoi chastoty generatsii. IV/.  
20 p3554 A69-37723

**RAKHLIN, V. L.**

Absolute measurements of radio-emission intensity of the discrete sources Cassiopeia-A and Cygnus-A at 30-60 cm wavelengths /Absolutnye izmereniia intensivnosti radioizlucheniia diskretnykh istochnikov Kassiopeia-A i Lebed'-A na volnakh 30-60 cm/.  
19 p3428 A69-36876

**RAKHUBOVSKII, A. S.**

Active prominences of 9 and 11 July 1966.  
10 p1764 A69-23739

Spectral emission of active prominences /Spektral'-noe izuchenie aktivnykh protuberantsev/.  
15 p2674 A69-30510

**RAKICH, J. V.**

Theoretical and experimental study of supersonic steady flow around inclined bodies of revolution. [AIAA PAPER 69-187]  
06 p0865 A69-18176

**RAKIN, V. G.**

Study of the dependence of the superconductivity properties on the structure of a titanium-47 wt percent niobium alloy /Issledovanie zavisimosti sverkhprovodiashchikh svoystv ot struktury splava titan-47 ves percent niobia/.  
07 p1158 A69-18532

Electron-microscope and X-ray study of the quenched Ti-25 at. percent Nb alloy /Elektronomikroskopicheskoe i rentgenograficheskoe issledovanie zakalennogo splava Ti-25 at. percent Nb/.  
12 p2112 A69-26040

Investigation of the dislocation structure of molybdenum deformed by hydroextrusion /Issledovanie dislokatsionnoi struktury molibdena, deformirovannogo gidroekstruziei/.  
14 p2463 A69-29311

**RAKIPOVA, L. R.**

Allowance for radiative heat inputs in problems of dynamic meteorology /Uchet radiatsionnykh pritokov tepla v zadachakh dinamicheskoi meteorologii/.  
14 p2477 A69-29827

**RAKITINA, V. I.**

Diffuse galactic radiation at the areas of the Northern Coalsack /Diffuznaya galakticheskaya radiatsiia v ploshchadkakh bol'shoi razvilki Mlechnogo Puti/.  
21 p3817 A69-39725

**RAKOBOLSKAIA, I. V.**

A rare case of observation of genetically related electron-photon cascades with a total energy exceeding 10 super 14 ev.  
13 p2331 A69-28398

**RAKOV, A. M.**

Methods of determining the integral and spectral radiative properties of materials at high temperatures.  
23 p4237 A69-41329

The photographic method for the study of spectral emissivity and spectral distribution of radiation intensity at high temperatures.  
23 p4238 A69-41330

Radiative properties of tantalum, molybdenum, niobium, graphite and niobium carbide at high temperatures.  
23 p4175 A69-41331

**RAKOV, A. V.**

Investigation of the reflection spectra of vanadium dioxide single crystals at the semiconductor-metal phase transition.  
02 p0298 A69-12100

Optical properties and band structure of vanadium dioxide and pentoxide single crystals /Opticheskie svoystva i zonnaia struktura monokristallov dvuokisi i piatiokisi vanadiia/.  
12 p2145 A69-26724

Optical properties and band structure of vanadium dioxide and pentoxide single crystals.  
21 p3781 A69-39137

**RAKOV, V. V.**

Influence of stoichiometry of the melt on the crystallization of gallium arsenide /O vlianii stekhiometrii rasplova na kristallizatsiiu arsenida galliia/.  
12 p2144 A69-26586

Crystallization of gallium arsenide /O kristallizatsiiu arsenida galliia/.  
23 p4199 A69-42469

**RAKOWSKI, J. E.**

Thermally induced natural-frequency variations in a thin disk.  
04 p0682 A69-15494

**RAKSHIT, S.**

Temperature dependence of the total stimulated light power from semiconductor junction lasers.  
21 p3734 A69-38437

Dependence of the differential external quantum efficiency and gain in GaAs laser diodes on laser reflectivity.  
24 p4330 A69-43766

On the dependence of the differential external quantum efficiency and gain in GaAs laser diodes on laser length.  
24 p4330 A69-43768

Dependence of the total stimulated light power and the gain factor in GaAs junction lasers on laser length.  
24 p4330 A69-43768

**RALPH, E. L.**

Solar arrays utilizing large area silicon solar cells.  
19 p3253 A69-35708

**RALPH, J. A.**

Space vehicle data system synthesizer.  
21 p3680 A69-39633

**RALSTON, H. J.**

Energy levels of human body segments during level walking.  
15 p2558 A69-30587

**RAM, D.**

On the classical stability conditions for a spinning shell.  
21 p3772 A69-39294

**RAM, R.**

Vorticity generated behind shock waves in conducting gases.  
08 p1367 A69-20789

**RAM, S.**

Cross modulation in a nonlinear dispersive plasma.  
07 p1086 A69-19228

**RAMA RAO, P. V. S.**

Visual meteoric activity over Waltair - Survey during November, December and January 1964-67.  
04 p0658 A69-14879

**RAMABHADHAN, S.**

Determination of low speed aerodynamic characteristics of finite wings using the deep electrolytic tank.  
23 p4061 A69-42351

Conducting paper analogue in the study of incompressible fluid flow problems.  
24 p4299 A69-43024

**RAMACHANDRA RAO, A.**

An oscillatory point source in a rotating liquid.  
04 p0591 A69-15279

**RAMACHANDRA RAO, B.**

Latitude variation of times of maximum h'F and spread F occurrences.  
03 p0420 A69-13305

The variability of time shifts in the spaced fading records.  
03 p0421 A69-13329

Horizontal drifts at the E-region level by the spaced phase path technique.  
03 p0421 A69-13330

Height variation of drift and anisotropy parameters in the ionosphere during magnetically disturbed days.  
10 p1659 A69-24062



- Latitude variation of the delays between spread-F and magnetic activity. 16 p2779 A69-32194
- A statistical study of horizontal drifts and anisotropy of irregularities in the F2 region. 17 p2960 A69-33164
- RAMACHANDRA RAO, D.**
- A high-resolution study of the C super 3 pi sub 1 goes to B super 3 pi sub g /0,0/ stimulated transitions in N sub 2. 02 p0284 A69-12621
- Accurate laser wavelength measurements in the infrared and far infrared using a Michelson interferometer. 17 p3006 A69-33405
- RAMACHANDRA, S. R.**
- Transistorised multichannel pulse height analyser and recording system for balloon borne cosmic ray telescope. 06 p0924 A69-17284
- RAMACHANDRAN, A.**
- Free convection heat transfer from vertical isothermal cylinders with transverse curvature effect. [ASME PAPER 69-HT-G] 24 p4410 A69-43522
- RAMACHANDRAN, S.**
- A theoretical study of cup and vane anemometers. 08 p1314 A69-20315
- RAMADURAI, S.**
- Interstellar helium spectrum, H super 2 /He super 4 and He super 3 /He ratios in cosmic rays and the amount of matter traversed at low energies. 06 p0988 A69-17270
- Cosmic Ray Studies in Relation to Recent Developments in Astronomy and Astrophysics, Tata Institute of Fundamental Research, Colloquium, Bombay, India, November 11-16, 1968, Proceedings. 21 p3788 A69-38811
- RAMAKRISHNA RAO, C. V.**
- Visual meteoric activity over Waltair - Survey during November, December and January 1964-67. 04 p0658 A69-14879
- RAMAKRISHNAN, A.**
- L-matrix hierarchy and the higher dimensional Dirac Hamiltonian. 04 p0625 A69-15275
- RAMAKUMAR, R.**
- Economic high-pressure hydrogen-oxygen regenerative fuel-cell systems. 23 p4076 A69-42308
- RAMAMOORTHY, C. V.**
- Cellular array implementation and utilization of arithmetic functions for aerospace computer systems. [AIAA PAPER 69-964] 22 p3906 A69-40345
- RAMAMOORTHY, P.**
- Solutions of MHD boundary layer equations with transverse magnetic field and arbitrary pressure gradient. 09 p1545 A69-21396
- RAMAN, A.**
- NbZn - A mu-phase. 15 p2636 A69-30086
- Intermediate phases in the lanthanum- and neodymium-cobalt systems. 15 p2667 A69-30087
- Crystal structures of AB sub 3 and A sub 2 B sub 7 rare earth-nickel phases. 15 p2637 A69-30213
- The lanthanum-rhodium system. 21 p3744 A69-38739
- RAMANA RAO, V. V.**
- On the Rayleigh's flow past an infinite porous plate. I, II. 02 p0232 A69-12156
- Hydromagnetic flow near an accelerated plate in the presence of a magnetic field. 02 p0289 A69-12237
- Hydromagnetic flow in a rotating straight pipe. 06 p0967 A69-17718
- RAMANADHAM, R.**
- The relation between solar radiation and hours of bright sunshine at some tropical stations. 23 p4206 A69-42178
- RAMANATHAN, K. R.**
- The second Umkehr observed in zenith sky twilight and its interpretation. 16 p2786 A69-32634
- RAMANATHAN, N. L.**
- Energy expenditure in work predicted from heart rate and pulmonary ventilation. 22 p3891 A69-40220
- RAMANI, N.**
- Extinction criterion of a monopropellant droplet burning in an atmosphere of inert. 13 p2378 A69-28250
- RAMAPRIAN, B. R.**
- A modified entrainment theory for the prediction of turbulent boundary layer growth in adverse pressure gradients. [ASME PAPER 69-FE-16] 20 p3517 A69-37991
- RAMASTRY, J.**
- Conjugate echoes in Alouette-2 topside-sounder data. 08 p1274 A69-20045
- RAMATY, R.**
- Determination of the coronal magnetic field and the radio-emitting electron energy from a Type IV solar radio burst. 04 p0650 A69-15529
- Cosmic-ray deuterium and helium-3 of secondary origin and the residual modulation of cosmic rays. 08 p1378 A69-20066
- Physical properties of the radio-emitting region in sCo XR-1. 20 p3597 A69-37334
- Microwave and hard X-ray bursts from solar flares. 20 p3589 A69-37551
- On the nature of the high-frequency cutoffs of type IV solar radio bursts. 22 p4006 A69-40577
- RAMAZANOV, P. E.**
- Transmission spectra of gallium arsenide irradiated by protons with an energy of approximately 5 Mev /Spektry propuskaniia arsenida gallia, obleechnennogo protonami s energiei approximately 5 Mev/. 20 p3582 A69-36969
- RAMBERG, E. G.**
- Elimination of speckle noise in holograms with redundancy. 01 p0082 A69-10850
- RAMBERG, H.**
- Instability of layered systems in the field of gravity. I, II. 08 p1309 A69-20578
- RAMBOZ, J. D.**
- A proposed method for the measurement of vibration transducer transverse sensitivity ratio. 04 p0603 A69-15432
- RAMDOHR, D.**
- Contribution to the optimal design of circular cylindrical sandwich shells under pressure and shear loads /Beitrag zur optimalen Auslegung von Kreiszyllinderschalen in Sandwich- Bauweise unter Druck- und Schubbelastung/. 08 p1416 A69-20722
- RAMENDIK, G. I.**
- Method of laminar mass-spectral analysis of thin semiconductor films /Metod posloinogo mass-spektralnogo analiza tonkikh poluprovodnikovykh plenok/. 13 p2316 A69-27293
- RAMIREZ, A.**
- Registration of intravascular pressure and sound by a fiberoptic catheter. 17 p2917 A69-34172
- RAMIREZ, G. A.**
- Relativistic kinematics of deformable continua. I. 08 p1416 A69-20693
- Relativistic kinematics of deformable continua. II. 12 p2189 A69-27116
- RAMIREZ, P.**
- An advanced contact ion microthruster system. [AIAA PAPER 68-552] 21 p3785 A69-39212
- RAMJEE, V.**
- Reverse transition from turbulent to laminar boundary layer in a highly accelerated flow. 01 p0058 A69-10066
- On the criteria for reverse transition in a two-dimensional boundary layer flow. 11 p1872 A69-25129
- RAMKRISHNAN, C. V.**
- Three-dimensional and shell-theory analysis of elastic waves in a hollow sphere. I. [ASME PAPER 69-APMW-7] 24 p4402 A69-43105
- Three-dimensional and shell-theory analysis of elastic waves in a hollow sphere. II. [ASME PAPER 69-APMW-8] 24 p4402 A69-43106
- RAMLOW, H. D.**
- The airplane economic design evaluation /AEDE/ computerized model and its application. [AIAA PAPER 69-814] 19 p3289 A69-35626
- RAMM, A. G.**
- Optimal solution of the problem of linear antenna synthesis. 06 p0897 A69-17544
- Some nonlinear problems in the theory of antenna synthesis /O nekotorykh nelineinykh zadachakh teorii sinteza antenn/. 21 p3684 A69-39644
- RAMNATH, R. V.**
- Transition dynamics of VTOL aircraft. [AIAA PAPER 69-130] 06 p0869 A69-18152
- RAMONAT, D.**
- An antenna switch for a wide-band radio frequency system with high broadcasting power /Eine Antennen- weiche fuer ein Breitband- Richtfunkssystem mit hoher Sendeleistung/. 11 p1854 A69-25611
- RAMOS ALEGRE, D.**
- Flight safety - Concept, means, and methods /La seguridad del vuelo - Concepto, medida y metodos/. 03 p0365 A69-12884
- RAMOUS, E.**
- Stacking faults in cold-worked titanium and zirconium /Su alcuni difetti reticolari del titanio e dello zirconio incruditi/. 21 p3749 A69-396001
- RAMPAL, V. V.**
- A power supply for ruby laser. 02 p0256 A69-120929
- Q-switching techniques for solid state lasers operating at room temperature. 10 p1706 A69-24018
- A wire calorimeter for energy measurement of pulsed ruby laser. 19 p3339 A69-36755
- RAMSAY, J. V.**
- Aberrations of Fabry-Perot interferometers when used as filters. 17 p2972 A69-33081
- RAMSEY, J. B.**
- Reflectance, solar absorptivity, and thermal emissivity of SiO sub 2 -coated aluminum. 11 p1918 A69-24835
- Vacuum deposition of dielectric and semiconductor films by a CO sub 2 laser. 24 p4329 A69-43755
- RAMSEY, N. F.**
- Large storage box hydrogen maser. [IEEE PAPER C-8] 05 p0774 A69-163108
- RANA, M. H.**
- Measurement of small deformation of actual materials by reflection interferometry. 09 p1496 A69-22012
- RANA, R. K.**
- On a certain type of bulk queueing problem with general service time distribution. 02 p0271 A69-12060
- RAND, E.**
- Thermal decomposition of yttrium-doped silver carbonate. 15 p2561 A69-30442
- RAND, R. H.**
- Stability of the triangular points in the elliptic restricted problem of three bodies. [AAS PAPER 68-090] 20 p3595 A69-37175
- RANDALL, C. A., JR.**
- A comparative study of the flow field about an oscillating flat plate with the numerical solution of the Navier-Stokes equations. [AIAA PAPER 69-226] 07 p1121 A69-19565
- Extra-Terrestrial Matter, Central States Universities and Argonne National Laboratory, Conference, Argonne, Ill., March 7, 8, 1968, Proceedings. 22 p4011 A69-40083
- RANDALL, D. G.**
- Sonic bang intensities in a stratified, still atmosphere. 01 p0008 A69-10056
- The development of JT8D turbofan engine composite fan blades. [AIAA PAPER 69-465] 16 p2842 A69-32698
- RANDALL, J. D.**
- An extended figure of merit for the plasma thermocouple. 22 p3869 A69-40134
- RANDALL, M. D.**
- Narrow-gap welding - A process for all positions. 11 p1891 A69-24930

- RANDALL, R. H.**  
Analysis of problems in dynamics by electronic circuits.  
05 p0724 A69-16468
- RANDEL, J. M.**  
Attenuation of the vigilance decrement through stimulation in a second modality.  
06 p0880 A69-17213
- RANDHAWA, J. S.**  
Solar eclipse - Temperature, wind, and ozone in the stratosphere.  
06 p0916 A69-17008
- RANDI, P.**  
A computing program derived from Chree's method.  
13 p2225 A69-27617
- RANDVA, O.**  
Use of a pulsed laser tracking system for tracking satellites.  
13 p2222 A69-28192
- RANEY, R. K.**  
Review of linear system theory.  
20 p3489 A69-37633  
Moving target indication.  
20 p3490 A69-37644  
Motion compensation.  
20 p3490 A69-37645  
Introduction to range-Doppler radar data processing.  
20 p3490 A69-37648  
Quadratic filter theory and partially coherent optical systems.  
24 p4350 A69-42971
- RANGA RAO, M. P.**  
Growth of weak discontinuities in arbitrarily moving gas.  
04 p0630 A69-14532  
Wave propagation in magnetogasdynamics.  
09 p1547 A69-21613
- RANGANATHAN, N. R.**  
A note on some solvable vector potentials for the Dirac equation.  
04 p0638 A69-15273
- RANGARAJAN, S.**  
A worldwide anomaly in the concentration of ozone above 40 km.  
17 p2960 A69-33166
- RANGASWAMY, G.**  
Conducting paper analogue in the study of incompressible fluid flow problems.  
24 p4299 A69-43024
- RANGASWAMY, S.**  
Ionospheric measurements from a rocket radio propagation experiment.  
02 p0245 A69-12736  
Model electron density profiles for the lower ionosphere.  
18 p3125 A69-34248
- RANGER, A. A.**  
Aerodynamic shattering of liquid drops.  
[AIAA PAPER 68-83] 09 p1482 A69-21947
- RANGER, K. B.**  
Multiple flows of a viscous fluid exterior and interior to a circular cylinder.  
04 p0589 A69-14898  
Hydromagnetic analogue of the rotating disc problem.  
13 p2305 A69-27325  
Exact solution for rotating bodies in a viscous conducting fluid.  
16 p2817 A69-31666  
On axially symmetric magnetohydrostatic fields.  
21 p3778 A69-39498
- RANIECKI, B.**  
Remarks on the solutions for some dynamic problems of thermo-viscoelasticity.  
02 p0336 A69-11554
- RANK, D. M.**  
Detection of NH sub 3 molecules in the interstellar medium by their microwave emission.  
03 p0518 A69-14258  
Detection of water in interstellar regions by its microwave radiation.  
08 p1383 A69-19896  
Spectra, variability, size, and polarization of H sub 2 O microwave emission sources in the Galaxy.  
09 p1587 A69-21307  
Further microwave emission lines and clouds of ammonia in our galaxy.  
09 p1597 A69-22150
- RANKEN, W. A.**  
Thermionic electric propulsion system characteristics and capabilities.  
14 p2509 A69-29184
- RANKIN, J. B.**  
Multifunction single-package antenna system for spin-stabilized near-synchronous satellite.  
22 p3913 A69-40694
- RANKIN, T. M.**  
Fluidic angular rate sensor - A replacement for rate gyroscopes/ques/  
21 p3722 A69-38766
- RANKIN, W. D.**  
Radiation measurements and analysis in a nuclear rocket propellant tank mockup.  
[AIAA PAPER 69-475] 16 p2810 A69-32716
- RANNENBERG, G. C.**  
Simple/bootstrap cooling system for a new transport airplane.  
[AIAA PAPER 69-787] 19 p3243 A69-35641
- RANOV, T.**  
Unsteady rotating flow in a cylinder with a free surface.  
[ASME PAPER 68-FE-13] 05 p0747 A69-16065
- RANSOM, V. H.**  
Analysis of three-dimensional scramjet exhaust nozzle flow fields by a new second-order method of characteristics.  
[AIAA PAPER 69-5] 06 p0862 A69-18048
- RANSON, J. H. L.**  
Laser damage in glasses.  
12 p2117 A69-26193
- RANSON, V. H.**  
Three dimensional supersonic nozzle flow field calculations.  
[AIAA PAPER 69-463] 16 p2734 A69-32766
- RANSON, W. F.**  
Scattered light photoelastic thermal stress analysis of a solid-propellant rocket motor.  
[AIAA PAPER 68-512] 02 p0345 A69-12371
- RANTA, M. A.**  
On the application of perturbation technique to the study of missile flight.  
19 p3429 A69-35779
- RAO, A. K.**  
Stiffness matrices for sector elements.  
04 p0676 A69-14728  
Exact analysis of St. Venant torsion and flexure of prismatic bars with arbitrary triangular and polygonal cross-sections. III - Torsion of hollow bars.  
09 p1621 A69-22770  
Stress concentration and load diffusion in rectangular panels with constant stress flanges.  
18 p3219 A69-34785  
Buckling of thick rectangular plates.  
24 p4406 A69-43696
- RAO, B. K. G.**  
Temperature distribution in low pressure magnesium vapour-oxygen diffusion flames.  
[WSCI PAPER 68-20] 07 p1241 A69-18367
- RAO, B. M.**  
Compressibility effects on oscillating rotor blades in hovering flight.  
11 p1821 A69-25514
- RAO, B. S.**  
Satellite television - A system proposal for India.  
[UN PAPER 68-95750] 01 p0028 A69-10495
- RAO, C. N. R.**  
Crystallography and defect chemistry of solid solutions of vanadium and titanium oxides.  
20 p3484 A69-37526
- RAO, C. S. R.**  
Simultaneous observations of electrons /E greater than 45 keV/ at 2000-kilometer altitude and at 100,000 kilometers in the magnetotail.  
03 p0503 A69-14013  
Some observations of energetic electrons in the outer radiation zone during magnetic bays.  
07 p1204 A69-18836
- RAO, G. L.**  
A statistical study of horizontal drifts and anisotropy of irregularities in the F2 region.  
17 p2960 A69-33164
- RAO, K. R.**  
Commercial satellite communications for India.  
19 p3275 A69-36412
- RAO, M. K.**  
Some studies of longwave propagation of Radio Tashkent 164 kc/s.  
10 p1659 A69-24065
- RAO, M. V. S.**  
Calculation of some characteristics of extensive air showers using different models of high energy nuclear interactions.  
06 p0990 A69-17301
- RAO, S. G.**  
The application of parametric sensitivity coefficient vectors to the design of parameter tracking and self-adaptive multivariable control systems.  
06 p0900 A69-17352
- RAO, U. R.**  
Solar cosmic rays as probes to study the interplanetary conditions /Review/.  
06 p0990 A69-17288  
Anisotropies in Forbush decreases.  
06 p0990 A69-17290  
Isotropic background cosmic X-rays and upper limits for solar X-ray flux.  
06 p0992 A69-17311  
The 0.5 Mev gamma ray flux at balloon altitudes over 7.6 deg N geomagnetic latitude.  
06 p0992 A69-17313  
Pioneer 6 observations of the solar flare particle event of 7 July 1966.  
10 p1768 A69-23769  
Time variation of the optical intensity of the Sco X-1 X-ray source.  
16 p2852 A69-32805  
X-ray flux from Centaurus X-2 in the energy range 2-20 keV.  
22 p4007 A69-40773  
Energy spectrum and time variation of SCO X-1.  
22 p4030 A69-40774  
Measurement of cosmic ray anisotropy of solar origin by Explorer 34 satellite.  
24 p4373 A69-43619
- RAOULT, B.**  
Crystals and molecules in molecular jets - An electron diffraction study /Cristaux et molecules dans les jets moleculaires - Etude par diffraction electronique/.  
02 p0284 A69-12629
- RAOULT, G.**  
Propagation of an electromagnetic wave in a waveguide containing a birefringent medium, and detailed study of the case of a waveguide of rectangular cross section /Propagation d'une onde electromagnetique dans un guide contenant un milieu birefringent et etude detaillee du cas d'un guide de section rectangulaire/.  
11 p1853 A69-25350
- RAOULT, J. C.**  
Study of the human operator as an element of a servo system /Etude de l'operateur humain en tant qu'element d'un systeme servo/.  
12 p2025 A69-27081  
Active stabilization of a stratospheric balloon gondola /Stabilisation active d'une nacelle pour ballons stratospheriques/.  
17 p2898 A69-33242
- RAPAPORT, M.**  
Elimination of the short-period terms in the problem of a satellite of strong inclination and eccentricity /Elimination des termes a courte periode dans le probleme d'un satellite a forte inclinaison et excentricite/.  
03 p0514 A69-13783
- RAPAPORT, Z. TS.**  
Frequency dependence of anomalous absorption of cosmic radio emission in the ionospheric auroral zone /Chastotnaya zavisimost' anomal'nogo pogloshchenia kosmicheskogo radioizlucheniya v ionosfere v zone poliarnykh siiani/.  
20 p3587 A69-37033
- RAPATZ, G. L.**  
Cellular structural and ultrastructural modifications associated with cooling.  
10 p1642 A69-23117
- RAPER, O. F.**  
Mariner 6 - Ultraviolet spectrum of Mars upper atmosphere.  
22 p4023 A69-40568
- RAPHAEL, L. A.**  
A characterization of integral operators on the space of Borel measurable functions bounded with respect to a weight function.  
01 p0107 A69-11244



**RAPHELSON, M.**

Reliability incentives - A new dimension.  
22 p3952 A69-40024

**RAPIAL, A. S.**

Preparation and characterization of slush hydrogen and nitrogen gels.  
22 p3998 A69-40632

**RAPIN, M.**

Kinetic study of the transformations of the titanium alloy TA 6 V under isothermal conditions /Etude cinétique des transformations de l'alliage de titane TA 6 V en conditions isothermes/.  
16 p2802 A69-32180

**RAPOPORT, G. N.**

Magnetic retuning of a gyromonotron in the prestarting and starting modes /Magnitnaia perestroika giromonotona v dostartovykh i startovykh rezhimakh/.  
03 p0407 A69-13979

**RAPOPORT, I. B.**

Investigation of the operational properties of esters of trimethylol propane as synthetic lubricating oils /Issledovanie ekspluatatsionnykh svoystv efirov trimetilol-propana v kachestve sinteticheskikh smazochnykh masel/.  
12 p2103 A69-27090

**RAPOPORT, I. D.**

The study of the high energy cosmic ray particles with the "Proton" satellites.  
03 p0499 A69-12944

**RAPOPORT, I. M.**

Dynamics of Elastic Containers Partially Filled with Liquid.  
02 p0346 A69-12480

**RAPOPORT, V. O.**

Radio radiation intensity at 1.68 MHz as measured by "Kosmos-142."  
01 p0158 A69-11322

Relation between sporadic radio emission, recorded by Elektron satellites, and geomagnetic activity /O svyazi sporadicheskogo radioizlucheniia, zaregistrirovannogo na sputnikakh "Elektron," s geomagnitnoi aktivnost'iu/.  
05 p0824 A69-16059

Type 3 solar bursts recorded by the Elektron 4 artificial earth satellite /Solnechnye vspleski III, tipa, zaregistrirovannye na ISZ "Elektron-4"/.  
05 p0824 A69-16060

Variations in the mean radio emission level at frequencies of 1.1 and 2.3 MHz according to measurements on the Elektron 4 artificial earth satellite /Variatsii srednego urovnia radioizlucheniia na chvastotakh 1,1 i 2,3 MGts po izmereniiam na ISZ Elektron-4/.  
09 p1578 A69-21776

Relation between geomagnetic activity and the sporadic radio emission recorded by the Elektron satellites.  
20 p3606 A69-37969

Type-III solar bursts recorded by the Elektron-4 satellite.  
20 p3391 A69-37970

**RAPOPORT, Z. T.**

On frequency dependence of abnormal ionospheric absorption in auroral zone.  
01 p0063 A69-10425

**RAPOPORT, Z. TS.**

Complex investigation of the polar ionosphere /Kompleksnoe issledovanie poliarnoi ionosfery/.  
17 p2963 A69-33950

Latitudinal dependence of ionospheric parameters /O shirotnoi izmenchivosti ionosfernykh parametrov/.  
17 p2964 A69-33963

PCA in July, August, and September 1966 according to observations in the auroral zone /Ppsh v iuile, avguste i sentyabre 1966 g. po nabludeniiam v avral'noi zone/.  
23 p4156 A69-41845

**RAPP, G. M.**

Proposed standard system of symbols for thermal physiology.  
23 p4078 A69-41317

**RAPP, H.**

Investigations on semiconducting collector materials.  
09 p1558 A69-21825

Evaluation of semiconducting collector surfaces in thermionic converters.  
14 p2506 A69-29269

**RAPPAPORT, E.**

Techniques for breadboarding fluidic circuits.  
05 p0705 A69-16009

**RAPPAPORT, S.**

Low-energy X-ray spectra of SCO X-1 and four Sagittarius sources.  
09 p1574 A69-21460

X-ray and optical observations of the pulsar NP 0532 in the Crab Nebula.  
15 p2679 A69-31529

**RAPPAPORT, S. A.**

Chemical composition of primary cosmic rays at 10 super 15 ev.  
13 p2326 A69-27464

**RAPPAPORT, S. E.**

Interstellar absorption of 10-angstrom X-rays.  
21 p3788 A69-38648

**RAPPAPORT, S. S.**

Gain control for diversity receivers.  
03 p0410 A69-13833

On practical setting of detection thresholds.  
22 p3902 A69-41221

**RAPSON, R. C., JR.**

Comparison of a mechanical fatigue life indicator and a resistance type fatigue life indicator.  
[AHS PAPER 378]  
17 p3059 A69-33511

**RARDIN, D. C.**

X-engine emergency cooldown system.  
[AIAA PAPER 69-512]  
16 p2810 A69-31846

**RARENKO, I. M.**

Study of structural imperfections of CdSb crystals /Issledovanie strukturnykh nesovershenstv kristallov CdSb/.  
11 p1938 A69-25030

**RASCH, W.**

Conceptual study of satellites for direct-TV- broadcast with incore-thermionic-reactor and electrical propulsion.  
[UN PAPER 68-95559]  
01 p0114 A69-10466

Design and dimensioning of a nuclear power supply installation with an in-core thermionic reactor /Zur Auslegung und bemessung einer nuklearen Energieversorgungsanlage mit Incore-Thermionik-Reaktor/.  
08 p1350 A69-20871

**RASCHKE, E.**

Problems of meteorological observations from satellites.  
09 p1537 A69-22690

Angular characteristics of the reflectance of the earth-atmosphere system as obtained from a synchronous satellite.  
21 p3704 A69-38372

Observations of the reflection properties of the earth-atmosphere system and the cloud formation above the equatorial Pacific from a synchronous satellite /Beobachtungen der Reflexionseigenschaften des Systems Erde- Atmosphäre und der Bewölkung ueber dem aequatorialen Pazifik von einem synchronen Satelliten aus/.  
24 p4346 A69-43154

**RASHAD, A. R. M.**

Diagnostic of plasmas using laser beams.  
07 p1131 A69-18485

**RASHCHEKTAeva, M. I.**

Influence of laser radiation parameters on the effectiveness of frequency doubling in a KDP crystal /Vliianie parametrov izlucheniia lazera na effektivnost' udvoeniia chastoty v kristalle KDP/.  
04 p0612 A69-15375

The effect of radiation parameters of a laser on the efficiency of frequency doubling in a KDP crystal.  
16 p2797 A69-32122

**RASHEVSKAIA, E. P.**

Determination of inhomogeneity in semiconductor materials by the optical reflection method.  
05 p0764 A69-16664

**RASHID, A.**

Legendre distribution for radiation pattern.  
02 p0209 A69-12341

**RASHKOVAN, V. M.**

Investigation of an oscillating electron-ion discharge in a longitudinal magnetic field /Issledovanie kolebatel'nogo elektronno- ionnogo razriada v prodol'nom magnitnom pole/.  
13 p2311 A69-28109

**RASIWALA, M.**

Dynamics of H II regions with the central star in motion.  
13 p2347 A69-27712

**RASKATOVA, S. R.**

Comparative evaluation of vestibulometric examination methods used in professional selection /Stavniel'-.  
23 p4163 A69-41552

naia otsenka vestibulometricheskikh metodov ob sledovaniia, primeniayemykh v tseliakh profotbora/.  
20 p3481 A69-37272

**RASMUSSEN, C. E.**

Ionization and current growth in an E x B discharge.  
09 p1552 A69-22030

Rotating plasma and gravitational instability.  
09 p1552 A69-22040

**RASMUSSEN, C. P.**

Clutter rejection using a coded burst waveform.  
03 p0388 A69-13180

**RASMUSSEN, H.**

On forced flow against a rotating disc.  
24 p4244 A69-42710

**RASMUSSEN, M. L.**

Free-molecule flow past a cone.  
04 p0541 A69-14710

Shoulder pressures for slender cone-afterbody combinations in hypersonic flow.  
04 p0542 A69-14730

Planar tumbling in atmospheric entry.  
21 p3819 A69-39030

**RASOOL, S. I.**

On the exospheric temperature of Venus.  
02 p0319 A69-12100

Albedo measurements over the Antarctic.  
09 p1484 A69-21400

The planet Venus, after Mariner-5.  
12 p2155 A69-26122

Ocean circulation and climatic changes.  
12 p2067 A69-26330

Structure of the atmosphere of Venus derived from Mariner V S-band measurements.  
21 p3794 A69-38380

**RASOR, N. S.**

A miniature atomic battery based on thermionic control version.  
14 p2399 A69-29190

**RASPOPOV, O.**

Successive development of electromagnetic /ULF and VLF/ and light emissions during magnetic storms /Developement successif des emissions electromagnetiques /U.B.F. et T.B.F./ et lumineuses au cours des sous-orages magnetiques/.  
16 p2788 A69-32640

**RASPOPOV, O. M.**

Possible excitation mechanism of type Pi2 geomagnetic field pulsations.  
03 p0423 A69-13520

Study of the spatial characteristics of type Pc5 geomagnetic pulsations.  
06 p0921 A69-17730

Relation between the irregular pulsations of the geomagnetic field and the pulsations of polar aurora and ULF radiation /O svyazi ireguliarnykh pul'satsii geomagnitnogo polia s pul'satsiiami poliarnykh siiani i UNCh- izlucheniem/.  
09 p1485 A69-21530

Some characteristics of distribution of plasma concentration and the field of Alfvén velocities in the earth's magnetosphere.  
10 p1742 A69-24200

The nature of stable short-period pulsations /Pc3 and Pc4/ in the earth's magnetic field.  
10 p1689 A69-24200

Relation between stable geomagnetic-field pulsations and the magnetosphere parameters /Svyaiz ustoiichivyykh pul'satsii geomagnitnogo polia s parametrami magnitosfery/.  
13 p2253 A69-27690

Relationship between irregular geomagnetic field pulsations and the pulsations of auroras and of VLF emission.  
16 p2783 A69-32530

Spectral characteristics of geomagnetic-field pulsations of the Pi2 type /Spektral'nye kharakteristiki pul'satsii geomagnitnogo polia tipa Pi2/.  
20 p3520 A69-37030

**RASPOPOV, V. I. A.**

Motion of a gyroscope with an unbalanced rotor in the rundown mode /Dvizhenie giroskopa na vybege s razbalansirovannym rotorom/.  
13 p2259 A69-27420

Motion of an unbalanced gyroscope with a variable kinetic moment at constant overloads /Dvizhenie razbalansirovannogo giroskopa s peremennym kineticheskim momentom pri postoiannykh peregruzkakh/.  
23 p4163 A69-41552

**RASSMUSSEN, N. S.**  
Correlation of free-flight base pressure data for M equals 4 to M equals 19. 20 p3458 A69-37196

**RASSWEILER, G. G.**  
Loaded traveling wave antenna elements of reduced size. 11 p1852 A69-25315

**RASTALL, P.**  
An improved theory of gravitation. I. 01 p0115 A69-10340  
Internal energy and gravitation. 07 p1182 A69-19419  
Immersion of space-time. 10 p1774 A69-23162

**RASTOGI, P. K.**  
The coherent solubilities of gamma' in Ni-Al, Ni-Si and Ni-Ti alloys. 13 p2276 A69-27370

**RASTOGI, R. G.**  
Studies of the sudden changes in H at equatorial stations in American Zone. 01 p0068 A69-11116  
Studies of sudden changes in H and Z at equatorial stations in the Indian zone. 08 p1307 A69-20187  
Lunar tidal oscillations in ionospheric absorption at Colombo. 14 p2439 A69-29113  
Lunar tidal oscillations in f sub 0 F sub 2 and h'f at Huancayo during IGY/IGC. 16 p2784 A69-32613  
Studies of horizontal drifts in the E-region of the ionosphere at Ahmedabad /23.0 deg N and 72.6 deg E/. 17 p2962 A69-33678  
Lunar oscillations in the D-region absorption at Singapore. 22 p4035 A69-41211

**RASTOGI, R. P.**  
Combustion of composite solid rocket propellants. 13 p2324 A69-28234

**RASTORGUEVA, V. G.**  
Chromizing of steels by vacuum diffusion /Vakuum-diffuzionnoe khromirovanie stali/. 19 p3329 A69-36572

**RASULOV, M. L.**  
Solution of the Cauchy problem and of the mixed problem for a parabolic system. 03 p0455 A69-13259

**RASZILLIER, V.**  
Some effects of discontinuous friction processes on friction couples made of the same nonferrous materials /Einige Effekte unstetiger Reibungsprozesse bei stoffgleichartigen Nichteisenmetall-Paarungen/. 15 p2629 A69-31027

**RATAICZAK, R. D.**  
Benzene anion radical - Removal of the orbital degeneracy at 4.2 deg K. 03 p0382 A69-13379

**RATEAU, PH.**  
New laser interferometry methods of measuring high speed model missiles. 11 p1886 A69-25042

**RATH, G.**  
Collision phenomena in the ionosphere. I /Ueber Stossvorgaenge in der Ionosphaere. I/. 13 p2252 A69-27614

**RATH, P. C.**  
On the classical stability conditions for a spinning shell. 21 p3772 A69-39294

**RATH, R. S.**  
Flow and heat transfer of a non-Newtonian fluid about an unsteady rotating disk. 05 p0745 A69-15793

**RATHBONE, A. M.**  
Where two new grades fit into the picture. 08 p1333 A69-20405

**RATHBONE, W. M.**  
Flexible format generator design techniques. 23 p4133 A69-41762

**RATHGEBER, M. H.**  
Nuclear interactions and cosmic radiation at energies around 10 super 6 Gev. 12 p2149 A69-26475

**RATHMER, K.**  
Data acquisition and processing /Messwerterfassung - Messwertverarbeitung/. 23 p4167 A69-42459

**RATHSMANN, K. H.**  
Comparative noise measurements in klystron oscillators /Vergleichende Rauschmessungen an Oszillator-klystrons/. 07 p1096 A69-18438

**RATINO, D. A.**  
Telemetry system for physiological evaluation of space suits. 06 p0883 A69-17845

**RATKOWSKY, D. A.**  
Viscous flow in a rectangular cut out. 08 p1304 A69-20811

**RATNER, A. M.**  
Spectral, Spatial, and Time Characteristics of the Laser /Spektral'nye, Prostranstvennye i Vremennye Kharakteristiki Lazera/. 02 p0255 A69-11800  
Kinetic regime in a laser with inhomogeneous broadening. 08 p1327 A69-21024  
Damping of laser relaxation oscillations due to diffusion of excitations /Zatukhanie relaksatsionnykh kolebaniy lazera, svyazannoe s diffuziei vzbuzhdenii/. 10 p1706 A69-24079  
Spectral width of generation under nonstationary conditions. 14 p2456 A69-28736  
Time dependence of the ruby laser spectrum. 15 p2633 A69-30725  
Relation between the angular divergence, spectral width, and kinetic behavior of a laser /Sviaz' mezhdu uglovym raskhozhdeniem, spektral'noi shirinoy i kineticheskim rezhimom opticheskogo kvantovogo generatora/. 19 p3333 A69-35879  
Optical resonators with mirrors of arbitrary form /Opticheskie rezonatory s zerkalami proizvol'noi formy/. 19 p3333 A69-35880  
Emission kinetics of a Q-switched optical resonator. II - Case of a passive Q-switch /Kinetika izlucheniia opticheskogo rezonatora s moduliruemoi dobrotnost'yu. II - Sluchai passivnogo modulirovaniya/. 21 p3740 A69-39550

**RATNER, K.**  
Studies on erythropoiesis. II. 22 p3877 A69-40761

**RATNER, S. B.**  
The character of crack propagation during fatigue failure of polymethyl methacrylate. 09 p1529 A69-21854

**RATZ, A. G.**  
A universal transfer-function analyzer. 15 p2615 A69-31282  
A universal transfer-function analyzer. 20 p3498 A69-37003

**RAU, C. A., JR.**  
The critical tensile stress criterion for cleavage. 01 p0169 A69-10765  
The effect of thickness and drilled holes on the notch-toughness of Charpy V-notch bars. 10 p1798 A69-23087

**RAUCH, G. C.**  
Aging in Nb/Cb-Ti-O superconductors, with appendix. 03 p0484 A69-13118

**RAUCH, H. E.**  
Low thrust swingby trajectories. 06 p1006 A69-17572

**RAUCH, S.**  
Spectrum distortion due to frequency instabilities in a two-way coherent Doppler radar. 01 p0034 A69-11013  
Effect of incidental modulation in systems employing pseudorandom codes. 06 p0890 A69-17824  
Estimation of signal-to-noise ratio. 09 p1452 A69-21320

**RAUCK, H.**  
Developmental work on modern apogee engines /Entwicklungsarbeiten an modernen Apogaumsmotoren/. 15 p2671 A69-31051

**RAUCKHORST, W. H.**  
Low temperature specific heat of praseodymium magnesium nitrate. 12 p2026 A69-25784

**RAUDONIS, A. V.**  
Electroabsorption in CdTe. 19 p3386 A69-36523

**RAUE, G. E.**  
Theory of one-port coupled microwave oscillators. 09 p1466 A69-22444

**RAUH, D.**  
Quantum mechanics calculations of the line width and the intensity correlation of laser radiation /Quantenmechanische Berechnung der Linienbreite und Intensitaetskorrelation der Laserstrahlung/. 17 p2980 A69-33012

**RAULT, A. J.**  
Absolute input-output stability of feedback systems with a single time-varying gain. 01 p0054 A69-11414

**RAUSCH, P. J.**  
Shock propagation in a strain-hardening material. [SAWE PAPER 69-APM-17] 18 p3214 A69-34393

**RAUSCHENBACH, H. S.**  
Electrical output of shadowed solar arrays. 19 p3254 A69-35709

**RAUSCHER, E. A.**  
Electron interactions and quantum plasma physics. 04 p0636 A69-15044

**RAUSER, P.**  
Penetration studies of iron dust particles in thin foils. 21 p3719 A69-38344

**RAUSHENBAKH, B. V.**  
Automatic docking in space and its relation to the theory and practice of automatic control /Avtomaticheskaya stykovka v kosmose i ee svyaz' s teoriei i praktikoi avtomaticheskogo upravleniya/. 06 p1013 A69-17057  
Control system of the "Venera" automatic interplanetary stations. 10 p1792 A69-24198  
Basic results of the space decade /Osnovnye itogi kosmicheskogo desiatiletiia/. 13 p2336 A69-27358

**RAUTH, R. G.**  
RCA's approach to Mil-Std 883. 24 p4287 A69-43205

**RAUTIAN, S. G.**  
The saturation effect theory in a gas system /K teorii effekta nasyshcheniya v gazovoi sisteme/. 03 p0437 A69-13042  
Interaction of atom with monochromatic field in the strong-collision model. 08 p1354 A69-19954  
Theory of a gas laser with nonlinear absorption. 10 p1704 A69-23625  
Certain problems of the theory of gas lasers /Nekotorye voprosy teorii gazovykh kvantovykh generatorov/. 12 p2109 A69-26906  
Radiative perturbation of potassium terms in a ruby-laser radiation field. 13 p2271 A69-27656  
Fluctuations of emission buildup in gas lasers /O fluktuatsiyakh narastaniia izlucheniia v gazovykh kvantovykh generatorakh/. 15 p2634 A69-30960

**RAUTMANN, R.**  
A global solution of the Vlasov equation for low-density media including a relativistic correction /Zur globalen Loesung der Vlasovschen Gleichung fuer Medien geringer Dichte mit relativistischer Korrektur/. 10 p1724 A69-22924

**RAVAGLI, A.**  
Control of aircraft turbine engines /Regulation des turbomachines aeronautiques/. 05 p0812 A69-16528

**RAVELET, S.**  
Study of the attenuation of the current induced by continuous electron bombardment in a cadmium sulfide crystal /Etude de l'attenuation du courant induit par bombardement electronique continu dans un cristal de sulfure de cadmium/. 19 p3392 A69-36727

**RAVENS, K. G.**  
Changes in the activities of lysosomal enzymes in infected canine heart muscle. 24 p4259 A69-42636

**RAVENSCHROFT, I. A.**  
The design of large-aperture low-noise aerials for satellite communication earth stations. 08 p1279 A69-19956

**RAVI, K. V.**  
The strength and alloy softening of bcc metals. 22 p3970 A69-40166



## RAVICH, IU. I.

Effect of impacts between carriers on the Nernst effect and other transport phenomena in nondegenerate semiconductors /Vlianie stolkovlenii mezhdu nositelami na efekt Nernsta i drugie lavleivleniia perenosu v nevyrozhdennykh poluprovodnikakh/.  
09 p1554 A69-21468

Methods of Investigating Semiconductors as Applied to the Lead Chalcogenides PbTe, PbSe, and PbS /Metody issledovaniia poluprovodnikov v primeneni k khal'kogenidam svintsia PbTe, PbSe i PbS/.  
12 p2145 A69-26851

The influence of collisions between carriers on the Nernst-Ettingshausen effect and other transport phenomena in nondegenerate semiconductors.  
15 p2669 A69-30713

## RAVICH, V. N.

Controlling the spectral composition of the emission of GaP p-n structures /Ob upravlenii spektral'nym sostavom izlucheniia GaP p-n struktur/.  
01 p0137 A69-10259

Control of the radiation spectrum of p-n GaP structures.  
09 p1559 A69-22652

## RAVLIK, A. G.

Internal macrostresses in metallic vacuum condensates /Vnutrennie makronapriazheniia v metalicheskikh vakuumnykh kondensatakh/.  
12 p2143 A69-26457

Structure and magnetic properties of "supercritical" films /Struktura i magnitnye svoistva "zakriticheskikh" plenok/.  
12 p2143 A69-26458

## RAWAT, S. S.

A unified approach to fields and propagation in compressible lossy magnetoplasma.  
21 p3775 A69-38434

## RAWE, R. A.

A comparison of the experimental biaxial strength of structural alloys with theoretical predictions.  
10 p1714 A69-23974

## RAWER, K.

Phase measurements of satellite transmissions and their ionospheric interpretation.  
04 p0592 A69-14766

On what bases should space experiments be combined/ques/ /Nach welchen Grundsätzen sollen Weltraumexperimente kombiniert werden/ques/.  
12 p2173 A69-26128

## RAWL, D. E.

The role of moisture and hydrogen in hot-salt cracking of titanium alloys.  
19 p3352 A69-36904

## RAWLANI, P. B.

Turbulence statistics studies at Trombay with a new wind system.  
04 p0626 A69-14911

## RAWLIN, V. K.

Durability of the SERT II hollow cathode and future applications of hollow cathodes.  
[AIAA PAPER 69-304] 09 p1562 A69-21224

## RAWLING, A. G.

On nonzero miss distance.  
04 p0629 A69-15517

## RAWLINGS, R. D.

Comments on "deformation in an iron-30 percent chromium alloy aged at 475 deg C."  
01 p0095 A69-10601

The mechanical behaviour of an iron-11 at percent molybdenum alloy in the temperature range 295 to 1100 deg K.  
12 p2116 A69-26925

## RAWLINSON, W. R.

Evidence for a point source of high energy cosmic gamma rays.  
24 p4365 A69-42606

## RAWLS, J. L.

An analogue study of periodic permanent magnet focusing.  
08 p1285 A69-20555

## RAWSON-HARRIS, D.

Formation of galaxies in Lemaitre's universe.  
14 p2520 A69-29373

## RAY, D.

The effect of radiative heat loss on steady cellular convection.  
02 p0276 A69-12776

## RAY, J. D.

Reinforced plastic composites - Materials and fabrication.  
08 p1340 A69-20503

Nonlinear vibrations of a beam with pinned ends.  
[ASME PAPER 69-VIBR-43] 10 p1807 A69-24181

Graphite fibers - Their properties and resin matrix technology.  
[ASM PAPER W9-16.1] 21 p3728 A69-38655

Vibrations of orthotropic sandwich conical shells with free edges.  
23 p4235 A69-42462

## RAY, J. M.

Concepts and advantages of adaptable, integrated space vehicle ground support equipment.  
[AIAA PAPER 69-308] 09 p1479 A69-22385

Concepts and advantages of adaptable, integrated space vehicle ground support equipment.  
18 p3118 A69-35064

Integrated space vehicle ground support equipment.  
[AIAA PAPER 69-308] 22 p3927 A69-40552

## RAYCHAUDHURI, A. K.

Stationary electromagnetic fields in general relativity.  
01 p0115 A69-10020

## RAYMES, F.

Reusable space transportation systems- 1970/ 1980 - An evolutionary view.  
21 p3827 A69-39693

## RAYMOND, F. W.

Gravity gradient flight experience acquired with the Naval Research Lab satellites.  
07 p1228 A69-18344

## RAYMOND, J. P.

Lumped-model analysis of microcircuit vulnerability.  
06 p0977 A69-16886

## RAYMOND, L.

Materials for a minimum cost space launch vehicle.  
12 p2175 A69-26844

The high-temperature stability of thoriated-nickel-chromium alloys.  
14 p2465 A69-29682

Designing cost-effective pressure vessels based on fracture mechanics.  
16 p2870 A69-31740

Flaw growth in Ti-6Al-4V in Freon environments.  
18 p3150 A69-35411

Materials/processes projections based on MCD constraints.  
19 p3433 A69-35587

Fracture mechanics in cost-effective pressure vessel design.  
21 p3837 A69-39028

## RAYNAUD, S.

A subnanosecond risetime electro-optic shutter for use in a laser system.  
09 p1493 A69-21422

## RAYNE, J. M.

Factors in the design of protective helmets.  
17 p2913 A69-33177

## RAYNOR, D.

Precipitation of gamma' in austenitic stainless steels.  
01 p0096 A69-10613

## RAYNOR, S.

Thermal stresses in a rotating cylinder heated by solar radiation.  
16 p2871 A69-31901

## RAZDAN, H.

Multiplicity spectrum of a IGY neutron monitor at Gulmarg.  
06 p0925 A69-17297

## RAZDOBARIN, G. T.

Determination of the electron temperature and concentration in an arc in a magnetic field on the basis of the scattering of laser light at the electrons /Opredelenie temperatury i konsentratsii elektronov v duge v magnitnom pole po rasseliani lazernogo izlucheniia na elektronakh/.  
14 p2496 A69-29780

Study of an electrical discharge due to a laser spark /Issledovanie elektricheskogo razriada cherez lazernuiu iskru/.  
21 p3740 A69-39552

## RAZDOLSKAIA, L. A.

Inelastic interaction cross section of 7 x 10 super 10 to 10 super 12 ev nuclear-interacting particles in carbon and iron.  
13 p2330 A69-28383

## RAZELOS, P.

On the accuracy of the analog solution of heat conduction problems involving Newtonian cooling.  
22 p4052 A69-41122

## RAZEVIG, V. D.

Tracking breakdown in nonlinear systems operating in an unsteady mode /Sryv slezheniia v neliniinykh sistemakh, rabotaiushchikh v nestatsionarnom rezhime/.  
03 p0409 A69-13079

Follow-up failure in nonlinear systems operating under unsteady conditions.  
14 p2424 A69-28755

## RAZGOVOROV, B. L.

Effect of cystamin and of the shielding of certain parts of the body on the functional state of the gastrointestinal tract of irradiated rats /Vlianie tsistamina i ekranirovaniia nekotorykh oblastei tela na funktsional'noe sostoianie zheludochno-kishechnogo trakta u obлучennykh krys/.  
22 p3877 A69-40283

## RAZHIN, A. F.

Effect of the air intake of a lifting engine on the aerodynamic characteristics of a wing /Vlianie vozdukhozabornika pod'emnogo dvigatelia na aerodinamicheskie kharakteristiki kryla/.  
19 p3239 A69-36400

## RAZIN, V. A.

Observations of the polarization of cosmic radiation emission near the galactic anticenter at wavelengths of 70, 60, and 40 cm /Nabludeniiia polarizatsii kosmicheskogo radioizlucheniia vblizi antitsentra galaktiki na volnakh 70, 60 i 40 cm/.  
03 p0501 A69-13704

Notes on the distribution of ionized interstellar gas /Zamechaniia o raspredelenii ionizovannogo mezhzvezdnogo gaza/.  
15 p2695 A69-30935

## RAZORENOV, L. A.

Use of helium at a supercritical pressure for cooling superconducting systems under spaceflight conditions.  
04 p0585 A69-15407

Heavy nuclei in primary cosmic rays /Tiazhelye iadra v pervichnom kosmicheskom izlucheni/.  
10 p1756 A69-22820

## RAZORENOVA, M. F.

The influence of a previous exposure on the sensitivity of the UF-2T film to short-wave ultraviolet radiation /Vlianie predvaritel'noi zasvetki na chuvstvitel'nost' plenki UF-2T k korotkovolnovomu ul'traioletovomu izlucheni/.  
19 p3314 A69-36626

## RAZUMEEV, A. N.

Problems of space pharmacology /Problemy kosmicheskoi farmakologii/.  
13 p2211 A69-28613

Nervous Mechanisms of Vestibular Reactions /Nervnye Mekhanizmy Vestibuliarnykh Reaktsii/.  
16 p2746 A69-32605

Experimental study in the simulation of various types of neurons /Eksperimental'noe issledovanie po modelirovaniu neuronov razlichnykh tipov/.  
20 p3471 A69-37256

## RAZUMOV, IU. G.

Titanium in structural steel /Titan v konstruktsionnoi stali/.  
15 p2640 A69-30633

## RAZUMOV, O. S.

The problem of the most advantageous conditions for determining directions in space triangulation /K voprosu o vygodneishikh usloviakh opredeleniia napravlenii v kosmicheskoi trianguitatsii/.  
15 p2689 A69-30572

## RAZUMOVA, K. A.

Transport coefficients of the plasma in the Tokamak TM-3 apparatus.  
16 p2820 A69-31795

## RAZUMOVA, T. K.

Investigation of the variation in the absorption spectrum of condensed systems subjected to high-density radiation /Issledovanie izmeneniia spektra pogloscheniia kondensirovannykh sistem pod deistviem izlucheniia bol'shoi plotnosti/.  
03 p0436 A69-13036

Investigation of the population kinetics of the super 2 E metastable state of ruby, and of the resonator losses of a pulsed Q-switched laser /Issledovaniia kinetiki naselennosti metastabil'nogo sostoiianiia super 2 E rubina i poter' v rezonatore lazera s impul'snoi modulatsiei dobrotnosti/.  
04 p0610 A69-14381

- Study of the population kinetics of the metastable super 2 E state of ruby and the losses in a Q-switched laser resonator. 14 p2456 A69-28754
- RAZUMOVSKAIA, A. I.**  
Optical quantum generator application for high-speed photography and holography in ballistic investigations. 12 p2088 A69-26177  
Shadow images of bodies obtained at hypersonic speeds by means of a single-pulse laser /Poluchenie tenevykh izobrazhenii tel pri giperzvukovykh skorostiakh s pomoshch'iu monoimpul'snogo opticheskogo kvantovogo generatora/. 22 p3963 A69-40601
- REA, D. G.**  
A planetary study and its implementation. [AAS PAPER 68-192] 02 p0311 A69-11473  
Calculations of the effect of roughness on microwave emissivity with application to the moon and Venus. 02 p0207 A69-12017  
Anomalous cooling of a cratered lunar surface. 04 p0654 A69-14656  
The opposition effect of Mars and its implications. 07 p1212 A69-18601  
NASA planetary program - Present and future. 15 p2723 A69-31318  
Exobiology and the exploration of Mars. 23 p4212 A69-41611
- REA, F. G.**  
Astrionics selection and operation on interplanetary missions. [AIAA PAPER 69-882] 21 p3764 A69-39408
- READ, I. A.**  
The controlling role of cool flames in two-stage ignition. 11 p1998 A69-24479
- READ, J.**  
Redistribution of stratified pulmonary blood flow during exercise. 23 p4078 A69-41315
- READ, J. G.**  
More meaningful evaluation of mini-trend hook<sup>2</sup> up wire. 05 p0730 A69-16242
- READ, W. F.**  
The Oshkosh meteorite. 22 p4021 A69-40413
- READAL, R. L.**  
Fully austenitic stainless steel welding electrodes for high-temperature applications. 04 p0607 A69-15220
- READER, P. D.**  
Systems characteristics of liquid mercury cathode thrusters. [AIAA PAPER 69-237] 09 p1565 A69-21246
- READY, J. F.**  
Laser applications in metalworking. [ASTME PAPER MR68-406] 02 p0252 A69-11796  
Laser applications in metalworking. 10 p1698 A69-22985
- REAGAN, J. B.**  
Source of high-energy protons trapped on low L shells. 24 p4367 A69-43176
- REALS, W. J.**  
Medical Investigation of Aviation Accidents, College of American Pathologists, Annual Meeting, Washington, D.C., September 17-23, 1966, Proceedings. 12 p2021 A69-25837  
The investigation. 12 p2022 A69-25843
- REAMES, D. V.**  
Cosmic-ray propagation. 05 p0816 A69-16361  
Composition of the 2nd September 1966 solar particle event. 06 p0989 A69-17280  
Computer analysis of tracks in nuclear emulsion utilizing digitized video scan. [IEEE PAPER 2A-7] 07 p1133 A69-19185  
Composition of cosmic rays measured in Gemini XI. 21 p3787 A69-38350
- REASON, J. T.**  
Motion sickness - Some theoretical considerations. 20 p3483 A69-38266
- REASONER, D. L.**  
Spectrophotometry of faint light sources with a tilting-filter photometer. 11 p1884 A69-24834  
Relationship between the flux magnitude and pitch-angle distribution for post-substorm auroral electrons. 20 p3592 A69-38083
- REAY, N. K.**  
Radial velocity and intensity measurements of the night sky H beta emission line. 12 p2074 A69-26963
- REBER, E. E.**  
1.4-mm and 3.4-mm observations of the lunar eclipse on 18 October 1967. 20 p3613 A69-38247
- REBHAN, E.**  
Stability of straight multipoles with shear. 09 p1546 A69-21576  
Electrostatic plasma oscillations in an alternating external electric field. 11 p1924 A69-24298
- REBINDER, P. A.**  
Stress fields of dead-end microcracks. 04 p0674 A69-14548
- REBUFFET, P.**  
Experimental Aerodynamics. Volume 1 /Aerodynamique experimentale. Volume 1/ /3rd Edition/. 17 p2891 A69-33318
- REBUT, P. H.**  
Study of the stability and the conditions of the propagation of low-frequency waves in a central-conductor configuration /Etude de la stabilite et des conditions de propagation des ondes de basse frequence dans une configuration a conducteur central/. 11 p1931 A69-25362  
Formalism for the study of a plasma in the vicinity of a steady equilibrium position /Formalisme pour l'etude d'un plasma au voisinage d'une position d'equilibre stationnaire/. 12 p2135 A69-26284
- REBUT, P.-H.**  
Angular and action variables for a charged particle in an oscillating electromagnetic field /Variables angulaires et d'action pour une particule chargee dans un champ electromagnetique oscillant/. 11 p1927 A69-25100
- RECHKALOVA, A. V.**  
Mechanism of the formation of nonmetallic inclusions during the reduction of iron by aluminum, zirconium, and titanium /Mekhanizm obrazovaniia nemetallicheskiikh vkluchenii pri raskislenii zheleza aluminiiem, tsirkoniem i titanom/. 22 p3969 A69-40069
- RECHKIN, V. N.**  
Production of Ti-Ni-Al alloys by aluminothermic reduction of oxides /Poluchenie spлавov Ti-Ni-Al aluminotermicheskimi vosstanovleniem oksidov/. 22 p3969 A69-40070
- RECHT, H. L.**  
Effects of gamma radiation on the behavior of nickel and cadmium electrodes. 20 p3466 A69-38072
- RECHT, R. F.**  
Stress-strain data obtained at high rates using an expanding ring. 24 p4330 A69-42735
- RECHTEN, A. W.**  
Miniaturization of pure fluid logic circuits. 02 p0196 A69-12084
- RECHTER, R. J.**  
Use of a data relay satellite system with ATS. 03 p0391 A69-13241
- REDD, R. J.**  
Evaluation of protective masks by use of radio telemetry. 23 p4121 A69-41765
- REDDECLIFF, J. M.**  
Hydrostatic bearings for cryogenic rocket engine turbopumps. 22 p3955 A69-40408
- REDDI, M. M.**  
Analysis of asymmetric stiffened shell type structures by the finite element method. II - Six degree-of-freedom model. 15 p2708 A69-30668  
Finite-element solution of the incompressible lubrication problem. 22 p3955 A69-40406
- REDDI, V. G. K.**  
Investigation of waveguide-below-cutoff resonators for solid-state active devices. 15 p2577 A69-30613
- REDDISH, V. C.**  
The evolution of galaxies. 07 p1219 A69-19297  
Accretion of solid hydrogen mantles by grains in Ob associations. 10 p1776 A69-23214  
Galactic discontinuity near l super II equals 140 deg. 10 p1776 A69-23215  
Solid hydrogen and the microwave background. 10 p1776 A69-23216  
The frequency distribution of the masses of stars formed from clouds of solid hydrogen grains. 16 p2862 A69-32372  
Star formation in clouds of solid hydrogen grains. 16 p2862 A69-32375
- REDDY, B. M.**  
Response of the 1000-kilometer ionosphere to magnetic storms. 23 p4161 A69-42438
- REDDY, C. A.**  
Morphological behavior of blanketing sporadic E at middle latitudes. 01 p0070 A69-11158  
Time and latitude variations of blanketing sporadic E of different intensities. 01 p0070 A69-11159  
Formation of sporadic E layer due to wind shear in the presence of electrostatic field. 01 p0072 A69-11174  
Time and latitude variations of blanketing sporadic E of different intensities. 07 p1125 A69-18840  
Rocket observations of electron densities in the night-time auroral E-region at Fort Churchill, Canada. 14 p2439 A69-29117
- REDDY, M. N.**  
Deflection of an arbitrarily loaded rectangular plate. 24 p4404 A69-43593
- REDDY, N. M.**  
A modified model for vibration-dissociation coupling phenomena. 20 p3514 A69-37208
- REDDY, P. G.**  
Effect of wall conductivity on heat transfer by Hartmann's flow in thermal entrance region. 21 p3847 A69-38442
- REDDY, Y. R.**  
Theoretical prediction of discharge coefficients for Herschel type smooth venturimeters. 02 p0250 A69-12414
- REDEKER, G.**  
The effect of vortex breakdown on the aerodynamic coefficients of small-aspect-ratio delta wings during yawing /Ueber den Einfluss des Aufplatzens der Wirbel auf die aerodynamischen Bewerte von Deltaflugeln mit kleinem Seitenverhaeltnis beim Schiebeflug/. 04 p0543 A69-14821
- REDEMANN, H.**  
MIG-21 - The Soviet standard fighter aircraft /MIG-21 - Der sowjetische Standardjaeger/. 24 p4251 A69-42795
- REDER, F.**  
Current distribution on a horizontal cylindrical antenna with rigorous allowance for ground reaction. 09 p1467 A69-22581  
Effects of an idealized ionospheric disturbance on VLF signals - An iteration technique based on mode theory. 17 p2920 A69-33418
- REDER, F. H.**  
Effects of polar cap absorption events on VLF transmissions. 18 p3103 A69-35185
- REDFERN, R. M.**  
A sky-scan for discrete sources of gamma-rays in the energy region 240 to 1000 kev. 11 p1946 A69-24593  
Attempt to detect X-ray pulses from the Crab Nebula. 12 p2149 A69-26226
- REDGATE, C. B.**  
Component defects - An airline's experience. 24 p4318 A69-42776



## REDIESS, H. A.

A new model performance index for the engineering design of flight control systems.  
[AIAA PAPER 69-885] 21 p3764 A69-39410

## REDING, J. P.

Dynamic stability problems associated with flare stabilizers and flap controls.  
[AIAA PAPER 69-182] 06 p1017 A69-18053  
Nonexistence of axisymmetric separated flow.  
23 p4060 A69-41905

## REDKO, V. P.

Transmission spectra of gallium arsenide irradiated by protons with an energy of approximately 5 Mev /Spektry propuskaniia arsenida galliia, oblechennoho protonami s energiei approximately 5 Mev/.  
20 p3582 A69-36969

## REDKOBORODY, I. U. N.

Thermal explosion in a degenerate gas /K voprosu o teplovom vzryve v vyrozhdennom gaze/.  
15 p2682 A69-30507

## REDLICH, R. W.

Slow-wave contributions to image radiation from a finite ground plane.  
11 p1837 A69-25002

## REDMAN, J. D.

The three dimensional reconstruction of people and outdoor scenes using holographic multiplexing.  
11 p1883 A69-24684  
The use of holography to measure the position and velocity of rapidly moving objects.  
12 p2087 A69-26174  
Holographic photogrammetry.  
22 p3944 A69-40044

## REDMANN, G. H.

Quality assurance monitoring of the microbiological aspects of the JPL Sterilization Assembly Development Laboratory.  
15 p2559 A69-31123

## REDMON, M. J.

Interatomic potential model for ion-atom systems including a charge-exchange contribution.  
16 p2815 A69-32464

## REDOROVA, R. I.

A comparative evaluation of different methods for detection of extraterrestrial life.  
01 p0021 A69-11093

## REDWOOD, M.

Piezoelectric generation and detection of ultrasonic surface waves by interdigital electrodes - An electrical equivalent circuit.  
12 p2039 A69-26376  
Electrode interactions in acoustic surface-wave transducers.  
24 p4312 A69-42615

## REECE, O. Y.

Explosive bonding of metal matrix composites.  
24 p4326 A69-43452

## REED-HILL, R. E.

Shear accommodation kinking at second order /1011-/1012/ twins in magnesium.  
01 p0093 A69-10063  
The use of the polarized light microscope for metallic crystallographic studies.  
09 p1499 A69-22302

## REED, D. L.

Problems in R and D automatic support systems development.  
03 p0411 A69-13190

## REED, D. R.

Predictive design for spacecraft propulsion.  
[SAWE PAPER 775] 18 p3184 A69-34873

## REED, E. I.

Effects of energetic particles on photomultipliers in earth orbits up to 1500 km.  
06 p0923 A69-16932

## REED, F. F.

Kinematic monitoring systems for rotating equipment instrumentation.  
10 p1692 A69-23249

## REED, G. W.

Mercury abundances and thermal history of meteorites.  
08 p1404 A69-20920  
Some halogen measurements on achondrites.  
24 p4382 A69-42929

## REED, I. S.

Radiation models using discrete radiator ensembles.  
01 p0030 A69-10556

Asynchronous finite-state machines - A novel control system class.  
[AIAA PAPER 67-988] 13 p2225 A69-28201

## REED, J. E.

The AN/FPS-85 radar system.  
12 p2028 A69-25906

## REED, J. F.

A semiconductor strain gage balance for use in conventional wind tunnels.  
10 p1672 A69-23265

A wind tunnel data acquisition and control system.  
10 p1673 A69-23286

A comparison between transonic wind-tunnel and full-scale store separation characteristics.  
17 p2896 A69-34035

## REED, N. L.

Surfaces and Interfaces II, Physical and Mechanical Properties, Proceedings of the Fourteenth Sagamore Army Materials Research Conference, Raquette Lake, N.Y., August 22-25, 1967.  
03 p0448 A69-13867

## REED, R. A.

Detection and correction of materials and processes problems in thin film networks.  
22 p3911 A69-39955

## REED, R. D.

A low-energy channel-multiplier spectrometer for ATS-E.  
[IEEE PAPER 3C-5] 07 p1135 A69-19199

## REED, R. E.

Flow and filtration characteristics of wire cloth.  
[ASME PAPER 68-WA/FE-39] 05 p0750 A69-16111

## REED, R. J.

The annual temperature variation in the lower tropical stratosphere.  
07 p1126 A69-19043

## REED, R. P.

Fracture behavior of shock-loaded boron-aluminum composite materials.  
20 p3562 A69-37772

Cryostat and strain measurement for tensile tests to 1.5 K.  
[NAS-NRC PAPER J-3] 22 p3947 A69-40627

## REED, R. R.

Nondimensional plots in nonlinear vibrations.  
[ASME PAPER 68-WA/DE-7] 05 p0839 A69-16172

## REED, R., JR.

Combustion bomb tests of an extinguishable fluorocarbon propellant.  
[WSCI PAPER 69-9] 16 p2831 A69-32349

Effect of additives, introduced by spray drying on ammonium perchlorate decomposition.  
[AIAA PAPER 69-502] 16 p2834 A69-32752

## REED, S. J. B.

Ringwoodite, natural /Mg, Fe/ sub 2 SiO sub 4 spinel in the Thendham meteorite.  
09 p1597 A69-22155

Phosphorus in meteoritic nickel-iron.  
19 p3417 A69-36131

## REEDER, J. P.

What's important in simulation/ques/.  
22 p3928 A69-41139

## REEL, L. S.

The Apollo lunar module landing radar.  
19 p3267 A69-35797

## REES, C. E., JR.

Modular hydraulic power systems for general aviation.  
[SAE PAPER 690329] 11 p1825 A69-24505

## REES, D.

High altitude profiles of wind velocity, temperature and density.  
15 p2598 A69-31319

Vertical winds in the lower ionosphere.  
23 p4154 A69-41305

## REES, D. B.

Fission fragment generated plasmas for thermionic diodes - An assessment.  
09 p1440 A69-21829

## REES, J. A.

Tables of Effective Electron Cross Sections and Macroscopic Coefficients. Volume 1 - Hydrogen and Rare Gases /Tables de Sections Efficaces Electroniques et Coefficients Macroscopiques. Volume 1 - Hydrogene et Gaz Rares/.  
09 p1541 A69-21579

Concerning determinations of the drift velocity and lateral diffusion of positive ions in hydrogen.  
20 p3580 A69-38022

## REES, M. H.

The effect of oxygen cooling on ionospheric electron temperatures.  
02 p0245 A69-12739

Langmuir probe evidence for a nocturnal ionization source at Fort Churchill.  
03 p0502 A69-14007

## REES, M. J.

Metastable helium in interstellar and intergalactic space.  
06 p1010 A69-17977

Cosmological implications of the diffuse X-ray background.  
09 p1578 A69-22157

The free-electron concentration in H I regions of the Galaxy.  
15 p2681 A69-30420

The evolution of density fluctuations in the universe. I - Dissipative processes in the early stages.  
21 p3814 A69-39577

The detectability of quasars beyond z approximately equal to 2.  
22 p4024 A69-40582

The evolution of density fluctuations in the universe. II - The formation of galaxies.  
23 p4221 A69-42390

Infrared radiation from dust in Seyfert galaxies.  
24 p4374 A69-43741

## REES, T.

Electric propulsion for ELDO vehicles.  
03 p0496 A69-13994

## REESE, B. A.

Nonequilibrium effects on the supersonic combustion of hydrogen and vitiated air.  
[AIAA PAPER 69-457] 16 p2881 A69-32767

## REESE, B. O.

Heat capacities of liquids. II.  
[WSCI PAPER 68-39] 07 p1202 A69-18368

Basic studies of the mechanism of shock initiation in granular explosives.  
10 p1751 A69-23016

Shock front reaction and initiation of detonation in low density ammonium perchlorate.  
21 p3784 A69-39590

## REESE, C. D.

Ductile creep rupture of shells with strain hardening and time-dependent loading.  
[ASME PAPER 68-WA/MET-15] 05 p0838 A69-16153

## REESE, D. R.

Simulation of the Saturn V boost-phase environment on major Apollo spacecraft stages.  
15 p2588 A69-30405

Ground testing the Apollo vehicle.  
15 p2589 A69-31079

## REESE, E. J.

Mercury's rotation period - Photographic confirmation.  
03 p0517 A69-14233

Evidence of vorticity in the great Red Spot of Jupiter.  
07 p1213 A69-18606

## REESE, J. R.

An analytical and experimental study of the vibration of orthogonally stiffened cylindrical shells.  
[AIAA PAPER 68-349] 19 p3437 A69-35948

## REESE, M.

The gettering of gold and copper from silicon.  
03 p0487 A69-13640

## REESE, R. G.

Simplified fuel systems for light aircraft.  
[SAE PAPER 690334] 11 p1825 A69-24502

## REESING, H. A.

DC-10 reliability program.  
19 p3248 A69-36027

## REEVES, B. L.

The near wake of axisymmetric bodies in hypersonic flow.  
06 p0860 A69-17633

## REEVES, E. M.

The results and interpretation of some of the Harvard OSO-IV observations.  
[AAS PAPER 68-219] 02 p0313 A69-11485

Recent techniques in solar optical astronomy from space.  
05 p0762 A69-15838

- The needs and requirements from the standpoint of the ultraviolet solar observations.  
05 p0822 A69-15861
- REEVES, H.**  
The spectrum of accelerated particles on the surface of stars, revealed by observation of photospheric lithium and beryllium /Le spectre de particules accelerees a la surface des etoiles, revele par l'observation du lithium et du beryllium photospheriques/.  
05 p0817 A69-16711  
Nucleosynthesis of lithium, beryllium, and boron, and the formation of the solar system /Sur la nucleosynthese du lithium, du beryllium et du bore et la formation du systeme solaire/.  
08 p1401 A69-20901  
Astrophysical implications of the stellar abundances of Li, Be and B.  
08 p1401 A69-20902  
Stellar Evolution and Nucleosynthesis.  
11 p1964 A69-25413  
Speculations on the light element abundances in stars.  
16 p2866 A69-32816  
Heat generation in meteorites during the early stage of the solar system.  
19 p3411 A69-36098  
Primitive low-energy particle irradiation of meteoritic crystals.  
20 p3590 A69-37569
- REEVES, R.**  
Chemiluminescent emission in gaseous reactions at low concentrations.  
01 p0024 A69-10618
- REFI, J. J.**  
Output SNR of an FM discriminator with non-ideal limiting.  
07 p1106 A69-19127
- REFSDAL, S.**  
On the determination of the slope from radio-source counts.  
08 p1383 A69-20048  
Evolution with mass exchange in close binary systems of total mass 2.5 solar mass.  
08 p1393 A69-20569
- REGAN, F. J.**  
Free-fall vehicle dynamics - Observation prediction. [AIAA PAPER 69-229]  
06 p0864 A69-18130
- REGAN, J. F.**  
Two-dimensional analysis of transonic gas-particle flows in axisymmetric nozzles. [AIAA PAPER 69-572]  
16 p2731 A69-31847
- REGAS, S. J.**  
An automatic test set for measuring dopant concentration profiles in epitaxial films.  
07 p1130 A69-18245
- REGEL, A. R.**  
Certain features of electrical conductivity of the rare earth metals lanthanum, cerium, praseodymium, and neodymium, in the solid and liquid states /Nekotorye osobennosti elektroprovodnosti legkikh redkozemel'nykh metallov lantana, tseria, prazeodima i neodima v tverdom i zhidkom sostoianiiakh/.  
21 p3781 A69-39070
- REGER, J. L.**  
A continuous process for the production of whisker reinforced composites.  
13 p2269 A69-28676  
Investigation of the effect of impurities on the corrosivity of nitrogen tetroxide.  
21 p3748 A69-39488
- REGIPA, R.**  
Balloons /Les ballons/.  
02 p0193 A69-11915  
Stable balloon systems for long-duration stratospheric flights /Systemes stables de ballons pour vols stratospheriques de longue duree/.  
15 p2551 A69-30703
- REGIRER, S. A.**  
Some aspects of the equations of the hydrodynamics of non-Newtonian media /Nekotorye osobennosti uravnenii gidrodinamiki nen'utonovskikh sred/.  
05 p0745 A69-15786  
Calculation of magnetohydrodynamic flows in the channels of MHD devices /Raschet magnetogidrodinamicheskikh techenii v kanalakh MGD-ustroistv/.  
06 p0969 A69-17913
- REGISTER, H. I.**  
A two component model of changes in Jupiter's radiofrequency rotation period.  
18 p3202 A69-35212
- REGULINSKI, T. L.**  
Mathematical modeling of human performance reliability.  
18 p3097 A69-34478  
Quantifying human performance for reliability analysis of systems.  
21 p3664 A69-38971
- REHDER, L.**  
Radiation cooling behind a strong shock in krypton.  
18 p3171 A69-34450
- REHG, V.**  
Reliability management simulation exercise.  
18 p3117 A69-34487
- REHSE, H.**  
Geometric interpretation and direct measurement of the oblateness of the earth /Die geometrische Deutung und die direkte Bestimmung der Erdbabplattung/.  
01 p0064 A69-10447
- REICH, B.**  
The effects of neutron radiation on second-breakdown and thermal behavior of silicon transistors.  
06 p0975 A69-16873
- REICH, E.**  
Fluorescence studies of nucleotides and polynucleotides. I.  
22 p3898 A69-41078
- REICH, J. E.**  
Let's talk about rescue locator beacons.  
15 p2552 A69-30852
- REICH, S.**  
A circulating-liquid laser system. [IEEE PAPER M-70]  
07 p1153 A69-19069
- REICHE, H.**  
Operational system effectiveness study - A layman's approach.  
18 p3232 A69-34505
- REICHEL, R. H.**  
Space flight - A survey. II - Future space flight programs /Raumfahrt - Ein Ausblick. II - Zukunfftige Raumfahrtprogramme/.  
12 p2155 A69-26005  
Space flight - A survey. I - Technical developmental trends /Raumfahrt - Ein Ausblick. I - Technische Entwicklungstrends/.  
13 p2334 A69-27296  
General developments in space-flight technology in the case of boosters and space vehicles /Allgemeine Entwicklungen in der Raumfahrttechnik bei Traeger-raketen und Raumflugkoerpern/.  
13 p2356 A69-27914  
Propulsion of boosters and space vehicles /Antriebe fuer Traegerraketen und Raumflugkoerper/.  
13 p2325 A69-27915
- REICHEL, W. H.**  
Electron densities and temperatures in a close-spaced cesium plasma diode.  
19 p3380 A69-36415
- REICHENBACH, H.**  
Spark-cinematographic investigation of shock wave attenuation by multiple reflection on diaphragms /Funkenkinematographische Untersuchung der Stosswellendaempfung durch Mehrfachreflexion an Blenden/.  
12 p2088 A69-26184  
Contributions of H. Schardin to the theory and applications of the shock tube.  
18 p3115 A69-34445
- REICHENBACH, R. E.**  
Further experiments on spreading of liquids injected into a supersonic flow.  
09 p1482 A69-21966
- REICHERT, R.**  
The mechanical linear accelerator - Aerospace test equipment.  
17 p2945 A69-33423
- ELGO.**  
17 p3050 A69-33428
- REICHLEY, P. E.**  
Observed decrease in the periods of pulsar PSR 0833-45.  
12 p2154 A69-25878  
Average pulsar energies at centimetre wavelengths.  
18 p3196 A69-34644
- REICHMAN, J.**  
Correlation of mechanical and thermal properties of the lunar surface.  
20 p3613 A69-38248
- REID, B. D.**  
Controlled-interference fits add fatigue life.  
22 p3957 A69-40830
- REID, C.**  
The response of axial flow compressors to intake flow distortion. [ASME PAPER 69-GT-29]  
09 p1571 A69-22493
- REID, C. D.**  
Cinematic holography.  
12 p2087 A69-26173
- REID, G. C.**  
Associative detachment in the mesosphere and the diurnal variation of polar-cap absorption.  
14 p2440 A69-29126
- REID, J. H.**  
A survey of the sudden enhancements of atmospheres /SEA/ data recorded at the Royal Observatory in Edinburgh during the International Geophysical Year.  
16 p2778 A69-32192  
Unusual 1 to 5 GHz solar radio emission of 29 October 1968.  
16 p2865 A69-32811  
An outline of solar physics.  
24 p4379 A69-42781
- REID, M. S.**  
A millimeter wave pseudorandom coded meteorological radar.  
23 p4115 A69-41531
- REID, R. A.**  
The qualification of electronic components for use in space.  
11 p1843 A69-24340
- REID, R. C.**  
Portable life support systems for extra-vehicular activities. [AICHE PAPER 42C]  
04 p0554 A69-14511
- REID, R. H. G.**  
Charge transfer and vibrational excitations in H super plus sub 2 - H sub 2 collisions.  
13 p2302 A69-28196  
Fine-structure transitions and shape resonances.  
15 p2655 A69-30198
- REID, R. L.**  
Outgassing of multifoil insulation materials in sealed vacuum systems.  
13 p2299 A69-28016  
Opacified fibrous insulations. [AIAA PAPER 69-605]  
17 p3072 A69-33282
- REID, W. R.**  
Permanent magnets for microwave devices. [IEEE PAPER 2.3]  
01 p0045 A69-10713
- REID, W. T.**  
A simple optimal control problem involving approximation by monotone functions.  
09 p1531 A69-21412  
Comparison theorems for non-linear vector differential equations.  
10 p1720 A69-23638
- REIDY, W. P.**  
Grazing-incidence telescopes for X-ray astronomy.  
09 p1501 A69-22688
- REIF, J. S.**  
Effect of carbon monoxide on function and structure of the lung.  
22 p3874 A69-40224
- REIF, W.**  
Behavior of the gamma'-phase of a nickel-aluminum-titanium alloy during creep testing /Das Verhalten der gamma'-Phase einer Nickel-Aluminium-Titan-Legierung unter Kriechbelastung/.  
09 p1528 A69-22733
- REIF, Z.**  
A numerical technique for the solution of some non-linear systems.  
22 p4040 A69-39937
- REIFENSTEIN, E. C., III**  
Pulsating radio sources near the Crab Nebula.  
04 p0659 A69-14977  
Crab Nebula pulsar NPO527.  
07 p1221 A69-19405  
Faraday rotation in pulsars.  
18 p3192 A69-34319  
Searches for pulsars.  
18 p3192 A69-34320
- REIFER, E.**  
Checkout-systems for satellites with scientific payload.  
13 p2243 A69-28480
- REIFF, G. A.**  
Radio propagation experiments with interplanetary spacecraft.  
19 p3267 A69-35940



The Pioneer spacecraft program.  
[AAS PAPER 69-066] 24 p4381 A69-42883

REIFFENSTEIN, J. M.  
On the formation of the rings of Saturn.  
04 p0660 A69-15128

REIGBER, CH.  
On the determination of field parameters using a generalized Fourier-analysis.  
15 p2697 A69-31323

REIJNS, G. L.  
Ground operations for the large astronomical satellite /LAS/ project.  
18 p3117 A69-34794

REILLY, H. J.  
Gamma heating in thin heavy-element absorbers.  
07 p1178 A69-18825

REILLY, J. P.  
On the statistical representation of targets for detection studies.  
14 p2414 A69-29500

REILLY, R. J.  
Honeywell and fluidics - A chronology.  
05 p0704 A69-16003

Fluidic safety and sequencing systems.  
[AGARDOGRAPH-118] 08 p1257 A69-20954

Rate and attitude stabilization for aircraft and missiles.  
[AGARDOGRAPH-118] 08 p1257 A69-20955

Fluidic gas turbine control.  
[AGARDOGRAPH-118] 08 p1258 A69-20956

REILLY, T. J.  
New observations on the substrate specificity of cathepsin C/dipeptidyl aminopeptidase I/ including the degradation of beta-corticotropin and other peptide hormones.  
20 p3473 A69-37577

REIMER, M.  
Bounds for the Horner sums.  
03 p0456 A69-13553

Finite difference forms containing derivatives of higher order.  
10 p1719 A69-23518

Classes of semidefinite Peano-kernels.  
15 p2644 A69-30450

REIMERS, D.  
On the microturbulence in A and F stars.  
17 p3039 A69-33729

Photoelectric measurement of metal abundance in stars /Photoelektrische Messung der Metallhaeufigkeit in Sternen/.  
17 p3043 A69-34140

REIN, M. V.  
Optimal transfer flights from elliptic to parabolic orbits.  
01 p0157 A69-11306

Multivalued extremal solutions in optimal control problems.  
06 p0903 A69-17539

REINAGEL, F. G.  
A high-speed digital data acquisition system.  
19 p3307 A69-35745

Instrumentation for experimental investigation of microwave interaction with reacting turbulent boundary layers.  
19 p3294 A69-35754

REINBERG, A.  
Agreement in endpoints from circadian rhythmometry on healthy human beings living on different continents.  
23 p4083 A69-41457

REINECKE, W. G.  
A shock-tunnel driver for use with hydrogen at elevated temperatures and pressures.  
[AIAA PAPER 68-367] 09 p1477 A69-21993

Simulation of total equilibrium shock-layer radiation for three typical entry body shapes.  
[AIAA PAPER 67-324] 24 p4249 A69-43665

REINER, M.  
Dynamical strength of an ideal solid with definite constitutive equation.  
02 p0342 A69-12278

REINHARD, K. L.  
A sampled-data delay-lock loop for synchronizing TDMA space communications systems.  
03 p0390 A69-13216

REINHARDT, J.  
Agreement in endpoints from circadian rhythmometry on healthy human beings living on different continents.  
23 p4083 A69-41457

REINHARDT, M. V.  
Open multipliers in the soft X-ray region.  
17 p2972 A69-33082

Period distribution of pulsars.  
18 p3201 A69-35203

REINHARDT, P. W.  
Collisions of monoenergetic electrons with NO sub 2 - Possible lower limits to electron affinities of O sub 2 and NO.  
13 p2301 A69-27363

REINHARDT, R. E.  
The body image of the aviator.  
23 p4112 A69-42364

REINHARDT, R. F.  
The flyer who fails.  
03 p0369 A69-12883

Personality characteristics of jet pilots as measured by the Edwards Personal Preference Schedule.  
14 p2408 A69-29294

REINHART, T. J.  
Investigation of boron filament wound aircraft landing gears.  
09 p1508 A69-22340

REINHART, T. J., JR.  
Laminated adhesive bonded structures.  
09 p1526 A69-22318

Corrosion resistance of reinforced plastics.  
[ASME PAPER 69-DE-60] 14 p2467 A69-28853

REINHARTZ, K. K.  
The photovoltaic effect in the Cu-Cd-S system.  
19 p3382 A69-35682

REINHOUDT, J. P.  
A flywheel for stabilizing space vehicles.  
12 p2175 A69-26893

REINISCH, R. F.  
A survey of the photodegradation of organic polymers exposed to ultraviolet radiation.  
01 p0102 A69-10861

REINMANN, J. J.  
Power coupling and wave fields of ion-cyclotron waves in a finite length system.  
03 p0474 A69-13114

REIPERT, Z.  
Fourier series with terms satisfying certain definite conditions. I, II.  
09 p1533 A69-22258

REIS, R. J.  
The prediction of rocket exhaust flow field with embedded shocks and nozzle boundary layers.  
[AIAA PAPER 69-569] 16 p2842 A69-32696

REISER, L. L.  
A high power versatile feed system for communication satellite usage.  
23 p4120 A69-41750

REISIG, G. H. R.  
Development of the ballistic rocket concept for rocket climatology /Entwicklung raketen- ballistischer Konzepte fuer die Raketen- Klimatologie/.  
12 p2175 A69-26874

REISMANN, H.  
Response of a cylindrical shell to an inclined, moving pressure discontinuity /shock wave/.  
01 p0164 A69-10057

On the time-dependent heat conduction and thermoelastic problems.  
14 p2535 A69-29364

REISS, E. L.  
Non-linear boundary value problems for the circular membrane.  
07 p1233 A69-19299

REISS, F.  
Pressure balance and maximum power density at the evaporation gained from heat pipe experiments.  
14 p2538 A69-29204

REISS, R.  
Minimal design of sandwich axisymmetric cylindrical shells obeying Mises' criterion.  
12 p2189 A69-27117

REISSIG, R.  
Applications of modern stability theory /Anwendungen der modernen Stabilitaetstheorie/.  
03 p0467 A69-13747

REISSNER, E.  
Saint Venant deflection in the case of moment stresses /Sen-Venanov izgib pri momentnykh napriazheniakh/.  
05 p0834 A69-15783

On the foundations of generalized linear shell theory.  
11 p1977 A69-24803

On generalized two-dimensional plate theory. II. I.  
16 p2876 A69-3201

On finite symmetrical deflections of thin shells revolution.  
[ASME PAPER 69-APM-14] 18 p3214 A69-3401

Rotationally symmetric stress and strain in shells revolution.  
18 p3215 A69-3401

On St. Venant flexure including couple stresses.  
18 p3223 A69-3401

On the equations of linear shallow shell theory.  
22 p4048 A69-4101

On the equations of nonlinear shallow shell theory.  
22 p4048 A69-4101

REIST, P.  
A family of portable versatile aerosol particle analyzers.  
18 p3136 A69-3401

REIT, B.-G.  
Studies of gravity in space according to Bjerhammer.  
18 p3173 A69-3401

REITER, A. N.  
Hard materials and hard metals containing NbC, HfC /Ueber NbC- und HfC-haltige Hartstoffe und Hartmetalle/.  
14 p2464 A69-29500

REITER, E. R.  
Mean and eddy motions in the atmosphere.  
11 p1911 A69-2401

Thoughts on the origin and dynamics of jet streams /Gedanken zur Entstehung und zur Dynamik Strahlstroeme/.  
15 p2647 A69-30450

Interaction between subtropical and polar-front systems.  
18 p3166 A69-3401

Power spectrum, structure function, vertical wind shear, and turbulence in troposphere and stratosphere.  
20 p3570 A69-37577

REITER, R.  
Solar flares and their impact on potential gradients and air-earth current characteristics at high mountain stations.  
05 p0759 A69-16003

REITHEL, R. J.  
Deflagration of secondary explosives by slowly exploding wires.  
01 p0141 A69-10057

REITZ, H. J.  
Effect of uncertainty on risk taking in individual group decisions.  
23 p4091 A69-4201

REITZER, H.  
Study of the hydrodynamic boundary layer - Effect of the injection of secondary fluids into the boundary layer on the resistance to the forward motion of obstacles /Etude de la couche limite hydrodynamique - Effet de l'injection de fluides secondaires dans la couche limite sur la resistance a l'avancement d'obstacles/.  
16 p2768 A69-31600

REKALOVA, G. I.  
Selenium diffusion in indium antimonide /Diffuziia selena v antimonide indii/.  
09 p1554 A69-21400

Diffusion of selenium in indium antimonide.  
15 p2669 A69-30700

REKOFF, M. G., JR.  
A self-adjusting single-degree-of-freedom free-free environment simulator.  
04 p0586 A69-15400

A vibrating momentum exchange device.  
09 p1538 A69-22400

REKOV, A. I.  
High-melting-point oxide and carbide materials for electrode walls of MHD generators /Tugoplavnye oksidnye i karbidnye materialy v elektrodnykh stenkakh MGD-generatorov/.  
13 p2284 A69-27400

REKSTIN, F. S.  
Unsteady processes in a stage of a centrifugal compressor with a vaneless diffuser /Nestatsionarnyye protsessy v stupeni tsentrobezhnogo kompressora bezopatochnym diffuzorom/.  
15 p2547 A69-30000

REKTORYS, K.  
Survey of Applicable Mathematics.  
17 p2995 A69-33600

- REMAGE, N. H.**  
The distribution of neutral hydrogen and the kinetic properties of NGC 6946. 09 p1598 A69-22187
- REMBaum, A.**  
Electronic properties of some TCNQ complexes. 11 p1832 A69-25675
- REMBEZA, S. I.**  
Effect of dislocations on the decomposition of solid solutions of copper-group elements in indium arsenide /Vliianie dislokatsii na raspad tverdykh rastvorov elementov gruppy medi v arsenide indii/. 03 p0484 A69-13283
- REME, H.**  
Auroral precipitations and solar flares /Precipitations aurorales et eruptions solaires/. 11 p1948 A69-24859  
Calculation of the limits of in situ measurements of auroral electrons /Calcul des limites des mesures in situ d'electrons auroraux/. 16 p2785 A69-32617
- REMEDIOS, N. C.**  
Stress transfer from a loaded matrix to a single fibre. 01 p0172 A69-11271
- REMENETS, G. F.**  
Characteristics of the propagation of the first two normal waves excited by a point source in a waveguide channel formed by the earth and an inhomogeneous anisotropic ionosphere /Kharakteristiki rasprostraneniia pervykh dvukh normal'nykh voln, vzbuzhdaemykh tochechnym istochnikom v volnovodnom kanale zemlia - neodnorodnaia anizotropnaia ionosfera/. 16 p2751 A69-32032
- REMENIUK, A. D.**  
Absorption of infrared radiation in n-type gallium phosphide. I - Scattering mechanisms. 03 p0492 A69-14168  
Absorption of infrared radiation in n-type gallium phosphide. II - Photoionization of impurities. 03 p0492 A69-14169  
IR absorption in n-type gallium phosphide. 19 p3385 A69-36518
- REMENNIKOV, M. M.**  
Investigation of the minerals in the ablated crust of the Saratov meteorite /Issledovanie mineralov kory plavleniia meteorita Saratov/. 01 p0160 A69-11385
- REMINGTON, C. R., JR.**  
Schlieren interferometry applied to convective heat transfer studies. 07 p1130 A69-18263
- REMIMI, W.**  
SNAP-27 program review. 23 p4187 A69-42249
- REMIZOV, A. P.**  
Electrostatic analyzers with symmetrical angular characteristics for investigating the solar wind /Elektrostaticheskie analizatory s simmetrichnymi uglovymi kharakteristikami dlia issledovaniia solnechnogo vetra/. 19 p3396 A69-36632
- REMMINGTON, J. E.**  
An outline of the Ferranti data handling system proposed by the Sud-Aviation group for project L.A.S. 20 p3501 A69-37390
- REMONDIERE, A.**  
Examples of hybrid electropneumatic and electrohydraulic servosystems. I - Automatic pointing of the nose of a sounding rocket /Exemples d'asservissements mixtes electro-pneumatique et electro-hydraulique. I - Pointage automatique d'une tete de fusée-sonde/. 04 p0550 A69-15182  
The Cassiopee attitude control device /Le dispositif de controle d'attitude Cassiopee/. [ONERA-TP-707] 19 p3432 A69-36686
- REMPFER, P. S.**  
Application of quadratic optimization to helicopter flight control. 24 p4253 A69-43279
- REMPT, F.**  
Evaluation of the skiagram. 24 p4267 A69-43399  
Acquired myopia in young pilots. 24 p4267 A69-43400
- REMSHARDT, R.**  
Graphical Method of Determining the Rise Time of Planar Transistors /Ein graphisches Verfahren zur Bestimmung der Anstiegszeiten von Planartransistoren/. 01 p0049 A69-11362
- REMY, F.**  
Some observations concerning a particular operation of a graphite hollow cathode /Quelques remarques relatives a un fonctionnement particulier d'une cathode creuse en graphite/. 16 p2814 A69-31838
- REMY, M.**  
A new distribution system for television driving signals - The unique base signal /Un nouveau systeme de distribution des signaux de base en television - Le S.B.U./.. 24 p4282 A69-42745
- RENARD, M. L.**  
Release windows for the ejection of a body along a highly eccentric orbit. 03 p0505 A69-13003  
Assessment of the attitude perturbations of a spinning satellite on an orbit of large eccentricity. 06 p1014 A69-17568  
Practical stability of high eccentricity orbits quasi-normal to the ecliptic. [AIAA PAPER 69-926] 21 p3808 A69-39355
- RENAU, J.**  
Wavelength dependence of total and depolarized back-scattered laser light from rough metallic surfaces. 18 p3172 A69-35011
- RENAUD, M.**  
Role of a computer in an onboard PCM telemetry system /Interet d'un calculateur dans un systeme de telemesure PCM embarque/. 20 p3500 A69-37382
- RENCKEN, D. G.**  
Electrolytic polisher-etcher for standard metallographs. 13 p2281 A69-28156
- RENEMANN, H.**  
Hypoxia resistance test at 7,500 m /24,600 ft/ in the low-pressure chamber before and after combined ergometer and altitude training. 23 p4086 A69-41788
- RENKEL, H. E.**  
Numerical solutions for the flow and pressure fields in an idealized spiral grooved pumping seal. [ASLE FICFS PREPRINT 30] 15 p2619 A69-30481
- RENNELS, D. A.**  
Automatic maintenance of aerospace computers and spacecraft information and control systems. [AIAA PAPER 69-966] 22 p3906 A69-40347
- RENNER, T.**  
Thermoelectric generators and their use in space flight /Thermogeneratoren und ihre Anwendung in der Raumfahrt/. 12 p2016 A69-25868
- RENNER, U.**  
Dynamic coupling of a three-frame platform /Dynamische Verkopplung einer Dreirahmenplattform/. 04 p0629 A69-14830  
The dynamic behavior of acrobatic flight navigation instruments in steep flight /Das dynamische Verhalten kunstflugtauglicher Navigationsgeraete im Steiflug/. 11 p1880 A69-24328
- RENNIE, J.**  
Radar digital processing and display system for air traffic control. 21 p3760 A69-38328
- RENNILSON, J. J.**  
Uniform, variable light sources for instrument calibration. 21 p3726 A69-39580
- RENON, C.**  
Crystal growth and deformation-induced recrystallization /Croissance des cristaux et recristallisation induite par deformation/. 07 p1167 A69-19340
- RENSCH, D. B.**  
Water vapor continuum absorption of carbon dioxide laser radiation near 10 mu. 23 p4173 A69-41631
- RENSE, W. A.**  
Rocket observations of profiles of solar ultraviolet emission lines. 20 p3612 A69-38167
- RENSHAW, T. A.**  
X-ray diffraction analyzes residual surface stress. 21 p3845 A69-39476
- RENSING, L.**  
Ontogenesis and hormonal control of circadian rhythms /Zur Ontogenese und hormonellen Steuerung circadianer Rhythmen/. 22 p3872 A69-40198
- RENTON, C. A.**  
An exploding wire self-healing fuse. 01 p0120 A69-10677  
A unilateral transformer. 21 p3684 A69-39454
- RENTZ, P. E.**  
The optimal design of vibration tests. [SAE PAPER 680753] 03 p0525 A69-13436
- RENTZ, W. A.**  
A dynamic hot-corrosion rig testing procedure. 23 p4150 A69-42448
- RENZETTI, N. A.**  
The deep space network - An instrument for radio navigation for the Mariner mission to Mars - 1969. 16 p2749 A69-31725
- RENZINI, A.**  
Physical conditions in the convective envelopes of stars. I. 11 p1961 A69-25109  
Population II star models and abundance of primeval helium. 12 p2156 A69-26228  
An investigation on H-R diagrams of globular clusters. 14 p2527 A69-29943  
On the stratification of elements in the atmospheres of globular cluster and halo B-stars. 14 p2529 A69-29976  
On the evolution of the horizontal branch stars of metal-poor globular clusters. 14 p2529 A69-29977  
On equilibrium models for main-sequence stars. 16 p2859 A69-32219  
Horizontal-branch star models. 17 p3030 A69-33071
- REPA, I. I.**  
Excessive noise in semiconductors /K voprosu ob izbytochnom shume v poluprovodnikakh/. 13 p2317 A69-27876  
Excess noise in semiconductors. 21 p3782 A69-39142
- REPALOV, N. S.**  
Nonlinear longitudinal oscillations in a nonisothermal plasma /Nelineinye prodol'nye kolebaniia neizotermicheskoi plazmy/. 09 p1550 A69-22025  
Nonlinear theory of longitudinal waves in an electron plasma /K nelineinoi teorii prodol'nykh voln v elektronnoi plazme/. 09 p1550 A69-22026
- REPIC, E. M.**  
Approach navigation and entry corridors for manned planetary atmosphere braking. [AAS PAPER 68-122] 19 p3402 A69-35937
- REPIN, V. G.**  
Adaptive systems of data reception and processing and the statistical-decision theory. 03 p0409 A69-12977
- REPKO, A. J.**  
Note on inclination of fatigue cracks in plane strain fracture toughness test specimens. 12 p2177 A69-25958
- REPNIKOV, N. N.**  
Physicochemical conditions of niobium carbide deposition on graphite /Fiziko-khimicheskie uslovia osazhdeniia na grafite karbida niobiia/. 20 p3566 A69-37367
- REPPERT, J. N.**  
Large scale 70-mm aerial color photography. 11 p1880 A69-24265
- REPUKHOV, V. M.**  
Calculation of air film cooling for a rotating disk /K raschetu plenochного vozduzhnogo okhlazhdeniia vrashchaiushchegosia diska/. 06 p1034 A69-17814  
Effect of initial nonuniformity of the temperature profile of the main stream on the efficiency of thermal shielding of a surface by air injection through a slit or porous collar /Vliianie nachal'noi neravnomernosti porusia temperatury osnovnogo potoka na effektivnost' teplovoi zashchity poverkhnosti vduvom vozdukh cherez shchel'lii poristy poiasok/. 11 p2002 A69-25338  
Approximate solution of a special problem concerning the effectiveness of film cooling /Nablizhenii rozv-



- 'jazok odniei okremoi zadachi pro effektivist' plivkovogo okhlozhdeniia/.  
14 p2537 A69-28971
- Film cooling effectiveness of a flat surface for a turbulent boundary layer behind tangential slots.  
20 p3631 A69-37095
- Film cooling effectiveness of a flat surface downstream of heated section and a porous strip.  
20 p3631 A69-37096
- RESCHKE, M.**  
Studies of acoustical stimulation of the vestibular system.  
03 p0376 A69-14076
- RESHETOV, V. D.**  
Basic factors of an ageostrophic wind /Osnovnye faktory ageostrofiticheskogo vetra/.  
03 p0458 A69-13267
- Ageostrophic property of strong and weak winds /Ageostrofitichnost' sil'nykh i slabyykh vetrov/.  
03 p0458 A69-13268
- RESHOTKO, E.**  
Nonequilibrium boundary layer along an insulator wall.  
[AIAA PAPER 68-134] 16 p2821 A69-31873
- Stability theory as a guide to the evaluation of transition data.  
[AIAA PAPER 68-669] 20 p3514 A69-37184
- Pressure induced by weak interaction with unsteady hypersonic boundary layers.  
24 p4306 A69-43676
- RESLER, E. L., JR.**  
Single-pulse shock-tube studies of the pyrolysis of fluorocarbons and of the oxidation of perfluoroethylene.  
18 p3099 A69-34467
- REST, R.**  
Feasible orbits and an infrared scanning radiometer for a European geostationary satellite.  
15 p2650 A69-31389
- RESTALL, J. E.**  
Improved silicide coatings for the protection of molybdenum-0.5 percent titanium alloy.  
22 p3957 A69-40972
- RESTRICK, R. C., III**  
Electromagnetic scattering by a moving conducting sphere.  
04 p0559 A69-15212
- RETTIE, I. H.**  
Design and development of an air intake for a supersonic transport aircraft.  
[AIAA PAPER 67-752] 01 p0006 A69-11014
- RETTIE, R. S.**  
A decade of space and upper atmospheric research in Canada.  
[UN PAPER 68-9551] 06 p1042 A69-17034
- RETZLER, J.**  
Relativistic electrons confined within the neutral sheet of the geomagnetic tail.  
14 p2433 A69-28934
- REUBER, D.**  
A computer program for predicting temperature distribution and heat transfer through coated and uncoated window systems.  
[AIAA PAPER 69-28] 06 p1038 A69-18178
- REULOS, R.**  
Essay on an electromagnetic theory of gravitational forces - Supplementary data /Essai sur une theorie electromagnetique des forces de gravitation - Complements/.  
03 p0469 A69-14096
- REUSS, J.**  
Plasma production with the aid of steep-front laser pulses /Creation de plasma a l'aide d'impulsions laser a front de montee rapide/.  
05 p0770 A69-15584
- Gas breakdown with nanosecond pulses.  
[IEEE PAPER U-3] 07 p1155 A69-19085
- REUSS, J. H.**  
A refined statistic of cloud band orientation versus the wind vector.  
08 p1346 A69-20442
- REUSS, J.-D.**  
Theoretical study of the ionization of deuterium under the action of a short-pulse laser /Etude theorique de l'ionisation du deuterium sous l'action d'un laser a impulsion courte/.  
02 p0288 A69-12040
- REUTER, F. W., III**  
Oxygen K-shell X-ray production in thin films of aluminum oxide by 20- to 100-kev protons.  
14 p2489 A69-29994
- REUTLINGER, G. W.**  
An automatic test set for measuring dopant concentration profiles in epitaxial films.  
07 p1130 A69-18245
- REUTSKII, V. IU.**  
Principle of taking into account the input signal history in the recognition of moving or changing objects. I /Printsip urakhuvaniya peredistorii vkhidnogo signalu pri rozpoznavanii rukhomikh abo zmennikh ob'ektiv. I/.  
08 p1297 A69-20419
- Effect of previous history of input signal on the recognition of moving or variable objects. I.  
14 p2427 A69-29657
- REVA, E. A.**  
Construction of harmonic and biharmonic functions in the solution of a three-dimensional problem in elasticity theory /Postroenie harmonicheskikh i bigarmonicheskikh funktsii pri reshenii prostranstvennoi zadachi teorii uprugosti/.  
11 p1976 A69-24777
- REVAH, I.**  
Systematic analysis of wind profiles obtained by meteor observation.  
01 p0072 A69-11170
- Study of small scale winds observed by means of meteor trails /Etude des vents de petite echelle observes au moyen des trajectoires meteoriques/.  
16 p2865 A69-32609
- REVAY, A. W., JR.**  
A solid-state synchronous filter.  
03 p0403 A69-13206
- REVEL, G.**  
Migration and precipitation of vacancies in quenched magnesium.  
02 p0267 A69-12187
- REVELL, J. D.**  
Second-order theory for steady or unsteady subsonic flow past slender lifting bodies of finite thickness.  
[AIAA PAPER 68-75] 20 p3458 A69-37182
- REVESZ, A. G.**  
Reduction of radiation sensitivity in MOS structures by aluminum doping of silicon dioxide.  
20 p3584 A69-38070
- REVIKIN, A. V.**  
Solubility of nitrogen in liquid niobium and molybdenum /Rastvorimost' azota v zhidkikh niobii i molibdene/.  
10 p1710 A69-23213
- REVIKIN, V. P.**  
Investigation of the basic angles and force parameters in rolling /Issledovanie osnovnykh uglov i silovykh parametrov prokatki/.  
15 p2630 A69-31183
- REVIKINA, O. K.**  
Heat treatment of maraging steel 00N18K9MST.  
04 p0615 A69-14646
- REX, D.**  
The mechanism of different types of loss in liquid-metal MHD cycles with multi-stage injection.  
13 p2205 A69-27487
- Control maneuvers of a TV satellite with electric propulsion to reach a target position in a synchronous /24-hr/ circular orbit /Steuermaeuver eines Fernsehruhfunk-Satelliten mit elektrischem Antrieb zum Erreichen eines Zielorts auf der 24-h-Bahn/.  
16 p2868 A69-31935
- REXED, B.**  
Histology of the surgical radiolesion in the human brain as produced by high-energy protons.  
03 p0374 A69-13501
- REXROAD, H. N.**  
ESR measurement of quadrupole coupling in N/SO sub 3/ sub 2 super 2 super minus.  
18 p3178 A69-35474
- REY, G.**  
Physical identification of bipolar transistors in a static regime - Development of an associated CAD program /Identification physique des transistors bipolaires en regime statique - Elaboration d'un programme de CAO associe/.  
08 p1280 A69-19972
- Effects of defocusing /DC and AC/ on the behavior of junction transistors /Effets de la defocalisation /C.C. et C.A./ sur le comportement des transistors a jonctions/.  
22 p3911 A69-40011
- REYNARD, D. L.**  
Beta irradiation of lithium doped solar cells.  
19 p3251 A69-3560
- REYNOLDS, B. L.**  
Brazed titanium honeycomb sandwich.  
21 p3730 A69-3860
- REYNOLDS, D. F.**  
An application of statistical techniques to estimate engineering man-hours on major aircraft programs.  
05 p0769 A69-1620
- REYNOLDS, F. L.**  
Surface ionization - An experimental study of strontium and lanthanum on tungsten.  
12 p2142 A69-2610
- REYNOLDS, H. C.**  
Thermal entry for low Reynolds number turbulent flow.  
[ASME PAPER 68-WA/FE-11] 05 p0748 A69-16092
- Velocity profiles and eddy diffusivities for fully developed, turbulent, low Reynolds number pipe flow.  
[ASME PAPER 68-WA/FE-34] 05 p0749 A69-16101
- Thermal entry for low Reynolds number turbulent flow.  
[ASME PAPER 68-WA/FE-11] 14 p2430 A69-29441
- REYNOLDS, H. N.**  
Effects of color of instrument lighting on absolute and acuity thresholds with exposure to a simulated instrument panel.  
03 p0380 A69-14070
- Visual perception beyond the atmosphere.  
17 p2913 A69-33170
- REYNOLDS, H. W., JR.**  
Evolution of the Pratt and Whitney aircraft JT9D engine oil system.  
18 p3185 A69-35240
- Evolution of the Pratt and Whitney aircraft JT9D engine oil system.  
24 p4363 A69-42780
- REYNOLDS, J. A.**  
Anomalous skin effect in bounded plasmas.  
12 p2133 A69-25830
- REYNOLDS, J. F.**  
Shear stabilization of a collision-dominated plasma.  
03 p0473 A69-12922
- Push-pull operation of transferred-electron oscillators.  
15 p2574 A69-30160
- REYNOLDS, J. H.**  
Extinct radioactivities and the history of the elements and the solar system.  
08 p1405 A69-20920
- REYNOLDS, M. L.**  
Absorption and infra-red emission of nickel and cobalt doped alkali halides.  
03 p0490 A69-13940
- REYNOLDS, M. M.**  
A new, sensitive, rapid materials contamination screening system.  
24 p4297 A69-42993
- REYNOLDS, R. S.**  
IRIG telemetry standards 1969.  
23 p4121 A69-41770
- REYNOLDS, R. T.**  
Calculations on the composition of the terrestrial planets.  
14 p2526 A69-29870
- REYNOLDS, R. W.**  
Advanced control of the fusion welding processes.  
09 p1508 A69-22330
- REYNOLDS, T. W.**  
Propellant condensation on surfaces near an electric rocket exhaust.  
[AIAA PAPER 69-270] 09 p1565 A69-21253
- REYNOLDS, W. N.**  
Non-Hookean behaviour of strong carbon fibres.  
03 p0454 A69-13930
- Testing of fibre-bonded composites.  
08 p1339 A69-20498
- REZEK, V.**  
New device for measuring airfoil lattices in the high speed circulating VZLU wind tunnel /Nove zarizeni pro mereni profilovych mriži ve vysokorychlostnim cirkulacnim tunelu VZLU/.  
03 p0412 A69-13780

**REZENDE, S. M.**  
Magnetoelastic waves in time-varying magnetic fields. I - Theory. II - Experiments.  
10 p1746 A69-23655

**REZIKIAN, A. M.**  
Electrostatic screening in a charged plasma /Elektrostaticheskoe ekranirovanie v zaryazhennoi plazme/.  
14 p2490 A69-29035  
Pressure distribution of a neutral gas in a tubular positive column /axial current/ /Raspredelenie davleniia neutral'nogo gaza v trubchatom polozhitel'nom stolbe /aksial'nyi tok//.  
14 p2490 A69-29036

**REZNICHENKO, IU. T.**  
Calculation of axisymmetric supersonic flows past a cone /K raschetu osesimmetrichnogo obtekanii konusa sverkhzvukovym potokom/.  
17 p2890 A69-33123

**REZNICHENKO, N. V.**  
Investigation of oscillation breakdown of varactor diodes /Issledovanie generatsionnogo probiia varak-tornykh diodov/.  
15 p2574 A69-30127

**REZNICHENKO, V. IA.**  
Investigation of the mechanism of two-photon absorption and stimulated emission of CdS-CdSe mixed crystals /Issledovanie mekhanizma dvukhfotonnogo pogloshcheniia i vyznuzhennogo izlucheniia smeshan-nykh kristallov CdS-CdSe/.  
03 p0438 A69-13052  
Investigation of the luminescence of ZnS sub x -CdS sub 1 sub minus x crystals excited by a ruby laser /Issledovanie svecheniia kristallov ZnS sub x -CdS sub 1 sub minus x pri vzbuzhdenii rubinovym lazerom/.  
19 p3331 A69-35866  
Investigation of the laser emission of CdS sub x -CdSe sub 1 sub minus x crystals under two-photon excitation /Issledovanie lazernoi generatsii kristallov CdS sub x -CdSe sub 1 sub minus x pri ikh dvukhfotonom vzbuzhdenii/.  
19 p3332 A69-35867

**REZNICK, A. L.**  
An integrated computerized reliability monitoring program for aircraft systems and components.  
12 p2055 A69-25972

**REZNIK, A. L.**  
Research in frequencies and natural oscillation modes in sporting gliders. II.  
04 p0549 A69-15416  
Research in frequencies and natural oscillation modes in sporting gliders. I.  
04 p0549 A69-15420

**REZNIK, A. M.**  
Optimal radiation pattern for an antenna receiving a scattered Gaussian signal.  
05 p0736 A69-16782

**REZNIKOV, B. A.**  
Determination of the parameters of space- vehicle motion under conditions of powered flight /Ob opredelenii parametrov dvizheniia kosmicheskogo aparata pri polete s deistvuiushchim dvigatelem/.  
01 p0161 A69-10569  
Parametric observability of space vehicles.  
07 p1087 A69-19605  
On determining the parameters of space-vehicle motion during flight with an operating engine.  
15 p2702 A69-30739

**REZNIKOV, G. P.**  
Low-frequency intensity oscillations of helium-plasma radiation at low temperatures.  
01 p0128 A69-10347

**REZNOVA, L. V.**  
Solar radiation pressure on interplanetary dust particles /O davlении solnechnogo izlucheniia na chastitsy mezplanetnoi pyli/.  
11 p1956 A69-24397  
Solar radiation pressure on particles of interplanetary dust.  
24 p4390 A69-43787

**REZONTOV, V. A.**  
Some interpretations of the biological effects of chronic gamma irradiation.  
02 p0197 A69-11494

**REZVETSOV, N. B.**  
Noise stability of the reception of a binary frequency-modulated signal with the aid of an ordinary frequency detector /K voprosu o pomekhoustoiichivosti priema dvoichnogo chastotno-modulirovannogo signala s pomoshch'iu obychnogo chastotnogo detektora/.  
15 p2564 A69-30145

**REZVITSKII, V. A.**  
Study of electromagnetic methods for vibrational treatment of metals during the crystallization process /Issledovanie elektromagnitnykh metodov vibratsionnoi obrabotki metallov v protsesse kristallizatsii/.  
14 p2456 A69-29916

**REZVOV, A. V.**  
Measurements of the amplification coefficient and geometrical optics of a liquid laser.  
09 p1520 A69-22683

**RHEE, J. W.**  
Density of zodiacal dust in interplanetary space.  
08 p1407 A69-20938

**RHEE, M. Y.**  
Second order tracking loop statistics and optimum receiver design.  
19 p3275 A69-36286

**RHEE, S. K.**  
Diffusion bonding of metals.  
17 p2978 A69-33374

**RHEIN, W. J.**  
Temperature distributions on the surfaces of close binary stars.  
24 p4387 A69-43350

**RHINE, P. E.**  
Nitric acid vapor above 19 km in the earth's atmosphere.  
23 p4155 A69-41634

**RHINES, W. J.**  
An extension of generalized plane stress for problems with out-of-plane restraint.  
01 p0165 A69-10114

**RHOADES, T. G.**  
Elastic scattering of negative pions from deuterons at 2.01, 3.77, and 5.53 GeV/c.  
17 p3007 A69-32885  
Pi super minus p elastic scattering at 2.51, 2.76, and 3.01 GeV/c near t approximately equal to minus 3 /GeV/c/ super 2.  
24 p4352 A69-43049

**RHOADES, W. T.**  
Guidelines for implementing system requirements into electrical design.  
[AGARDOGRAPH-114] 08 p1298 A69-20985  
Electrical design of a low cost, high maintainability, general purpose computer with optimum power speed product.  
[AGARDOGRAPH-114] 08 p1278 A69-20988

**RHODES, I. B.**  
Differential games with imperfect state information.  
12 p2053 A69-26505

**RHODES, J. D.**  
The stepped digital elliptic filter.  
16 p2759 A69-31939  
The design and synthesis of a class of microwave bandpass linear phase filters.  
16 p2759 A69-31941

**RHODES, W. B.**  
Initial military flight tests of the X-22A VTOL research aircraft.  
[AIAA PAPER 69-319] 10 p1633 A69-23044

**RIABCHENKOV, A. V.**  
Effect of oxidation of metals on their heat-resistant properties /Vliianie oksleniia metallov na ikh zharoprochnye svoistva/.  
10 p1708 A69-22998

**RIABENKII, V. S.**  
The theory of electron plasma non-linear oscillations.  
18 p3180 A69-34703

**RIABININ, A. G.**  
Elements of the general transient-response theory of liquid-metal conduction MHD generators /Elementy obshchei teorii perekhodnykh rezhimov raboty zhidkometallicheskikh MGD-generatorov konduktсионного tipa/.  
13 p2207 A69-27506

**RIABININ, IU. N.**  
Effect of hydro-extrusion on the mechanical properties of molybdenum.  
02 p0267 A69-12189  
Mechanical properties of molybdenum after hydroextrusion.  
16 p2803 A69-32491  
Mechanical properties of hydro-extruded molybdenum after annealing.  
18 p3156 A69-34719  
Anomalous grain growth and the deformation of single crystals during annealing of hydraulically extruded molybdenum /Anomal'nyi rost zeren i obrazovanie

monokristallov pri otzhige gidroekstrudirovannogo molibdena/.  
21 p3745 A69-38953

**RIABKOV, V. I.**  
Calculation of the optimum parameters of forked attachments /Raschet optimal'nykh parametrov vil'chatykh stykovykh uzlov/.  
04 p0673 A69-14496

**RIABOKON, V. N.**  
Induced-discharge wave propagation in a two-component laser medium /Rasprostraneniye voln induktirovannogo sbrosa v dvukhkompomentnoi lazernoi srede/.  
02 p0206 A69-11609  
The propagation of the waves of an induced surge in a two-component laser medium.  
11 p1895 A69-24716  
Theory of deep-level acceptors in semiconductors /Teoriia akseptorov s glubokimi urovniami v poluprovodnikakh/.  
15 p2665 A69-30039

**RIABOV, A. F.**  
Transverse oscillations of multilayer shells /Poperechnye kolebaniia mnogosloynnykh obolochek/.  
19 p3435 A69-35842

**RIABOV, B. P.**  
Anomalies in the spectra of cosmic radioemission sources in the decameter band.  
06 p1004 A69-17538  
The spectra of discrete radio sources at decametric wavelengths. I, II.  
18 p3200 A69-35134

**RIABOVA, N. V.**  
Interference patterns at large path differences, obtained with a gas laser as the light source.  
12 p2108 A69-26593

**RIABOVA, R. V.**  
New high-resolution photographic layers and their study by the method of holographic resolvometry /Novye fotograficheskie sloi vysokogo razresheniia i ikh issledovanie metodom golograficheskoi resol'vometrii/.  
15 p2606 A69-30052

**RIABYKIN, S. L.**  
Errors of a directional-gyroscope with interframe correction during the pitching and banking of the object /O pogreshnostiakh giroskopa napravleniia i mezhramochnoi korektsiei pri kachke i virazhe ob'ekta/.  
14 p2446 A69-28923

**RIAUX, E.**  
Fluctuation voltage at the terminals of a polar-dielectric capacitor /Tension de fluctuations aux bornes d'un condensateur a dielectrique polaire/.  
08 p1295 A69-21151

**RIAZANOV, G. V.**  
A unified theory of elementary particles /K edinoin teorii elementarnykh chastits/.  
21 p3816 A69-39622

**RIAZANOV, IU. A.**  
Design of Automatic Control Systems /Proektirovanie Sistem Avtomaticheskogo Regulirovaniia/ /2nd Edition/.  
01 p0053 A69-10995

**RIAZANOVA, L. A.**  
Structure of the zonal and meridional circulation in the stratosphere and mesosphere /O strukture zonal'noi i meridional'noi tsirkulatsii v stratosfere i mezosfere/.  
12 p2070 A69-26577  
Preliminary results of an analysis of mean monthly radiation charts obtained from satellite data /Predvaritel'nye rezul'taty analiza srednikh mesiachnykh radiatsionnykh kart po dannym iskusstvennykh sputnikov zemli/.  
15 p2596 A69-30643

**RIAZANTSEV, IU. S.**  
Current concepts of the mechanism of combustion of condensed systems /Review/ /Sovremennyye predstavleniia o mekhanizme goreniia kondensirovannykh sistem /obzor//.  
11 p2000 A69-25187  
Passage of a combustion wave through an inert obstacle during propagation in gunpowder /Prokhozheniye rasprostraniiaushcheisja po porokhu volny goreniia skvoz' inertnuu pregradu/.  
22 p4051 A69-41119

**RIAZIN, A. P.**  
Investigation of the radiation of a dense plasma obtained by means of an exploding wire in vacuum /Issledovanie izlucheniia plotnoi plazmy, poluchennoi pri vzryve provolochki v vakume/.  
03 p0482 A69-14227



- Experimental study of spectral properties of high-temperature air. 18 p3231 A69-35122
- RIBALKO, V. F.**  
Influence of oxygen pressure on the tungsten oxidation process /Vliianie davleniia kisloroda na protsess okisleniia vol'frama/. 21 p3746 A69-39071
- RIBAUD, Y.**  
ONERA cascade wind tunnel - First experimental results /La soufflerie de grilles d'aubes O.N.E.R.A. - Premiers resultats experimentaux/. 17 p2895 A69-33591
- RIBBE, P. H.**  
The composition and structural state of feldspar from chondritic meteorites. 05 p0819 A69-15626  
Composition of phosphate minerals in ordinary chondrites. 15 p2690 A69-30706
- RIBES, E.**  
Study of the correlation between flares and the evolution of magnetic field. 20 p3590 A69-37827
- RIBISL, P. M.**  
Effects of training upon the maximal oxygen uptake of middle-aged men. 21 p3654 A69-38904
- RIBNER, H. S.**  
Jets and noise. 01 p0009 A69-10349  
Acoustic energy flux from shock-turbulence interaction. 11 p1872 A69-25130  
Quadrupole correlations governing the pattern of jet noise. 22 p3931 A69-40891
- RIBOVICH, J.**  
A wedge technique for evaluation of detonation hazards of liquid explosives. 04 p0646 A69-14479
- RICARD, G.**  
The Jaguar - Franco-British two-seat supersonic combat trainer and tactical support single seater /Le "Jaguar" - Bi-place- ecole de combat supersonique et monoplace d'appui tactique franco-britannique/. 04 p0549 A69-15062
- RICARD, P.**  
Numerical integration of attitude equations of the EOLE satellite /Integration numerique des equations d'attitude du satellite EOLE/. 17 p3048 A69-33232
- RICATEAU, P.**  
Recombination transients in argon-cesium discharges /Transitoire de recombinaison dans les discharges argon-cesium/. 10 p1733 A69-23445
- RICCITIELLO, S. R.**  
Evaluation of a polyurethane foam for ablative protection at low heating rates. 04 p0688 A69-15513  
Development of polyurethane for controlling fuel fires in aircraft structures. 15 p2561 A69-30311  
Ablative thermal protection at low heating rates. 19 p3357 A69-35536  
Experimental evaluation of polyurethane foam composites for low-heating-rate thermal protection. 21 p3753 A69-39236
- RICCIUTI, L., JR.**  
Near-field repeatable stimulation of infrared earth horizon sensors in variable environments and test levels. [AIAA PAPER 69-322] 09 p1478 A69-22376
- RICE, C. G.**  
Hazardous exposure to impulse noise. 07 p1066 A69-19171
- RICE, C. J.**  
Cosmic-ray negatron and positron spectra between 12 and 220 Mev. 08 p1380 A69-20728
- RICE, C. M.**  
Recent NERVA technology development. [AIAA PAPER 68-612] 19 p3371 A69-35942
- RICE, D. E.**  
The CFE clutter model, with application to automatic detection. 23 p4117 A69-41604
- RICE, E. J.**  
A new look at microwave silicon technology. 09 p1462 A69-21410
- RICE, J. H.**  
On the nature of ion-molecule collisions. 05 p0797 A69-16428  
Vacancy relaxations in b.c.c. crystals. 05 p0809 A69-16529
- RICE, J. K.**  
Low-energy, high-angle electron-impact spectroscopy. 01 p0123 A69-10620  
Angular dependence of low-energy electron-impact excitation cross section of the lowest triplet states of H sub 2. 06 p0962 A69-17820
- RICE, J. R.**  
Mathematical analysis in the mechanics of fracture. 11 p1974 A69-24670  
Approximation formulas for physical data. 11 p1842 A69-24904
- RICE, L. H.**  
Pyroelectric thermometer for use at low temperatures. 09 p1493 A69-21423
- RICE, M. J.**  
Tunneling measurement of electron-plasmon interaction in degenerate semiconductors. 19 p3382 A69-36049
- RICE, S. O.**  
Uniform asymptotic expansions for saddle point integrals - Application to a probability distribution occurring in noise theory. 03 p0398 A69-13832
- RICH, M. J.**  
Power spectral density analysis of V/STOL aircraft structures. 01 p0168 A69-10407  
Assessing the promise of new materials for VTOL aircraft. 05 p0702 A69-15962  
"Damaged" static and fatigue stress analysis of VTOL structures. [AIAA PAPER 69-214] 07 p1237 A69-19576  
Advanced materials applications for VTOL aircraft. [AIAA PAPER 69-764] 19 p3433 A69-35658
- RICH, R. L.**  
Saturn V pogo and a solution. 11 p1967 A69-25497
- RICHALET, J.**  
Energy stability criteria. 03 p0410 A69-13683
- RICHARD, B. E.**  
Microscopic observation of interfacial phenomena. [AIAA PAPER 69-95] 06 p1038 A69-18126
- RICHARD, C.**  
Mosaic-mirror camera for multiple image, high resolution photography. 17 p2972 A69-33089
- RICHARD, J.-P.**  
Pulsar frequencies and general relativity. 02 p0315 A69-11836
- RICHARD, R. M.**  
Finite element analysis of inelastic structures. [AIAA PAPER 68-291] 13 p2364 A69-28208
- RICHARDS, B. E.**  
Piston driven facilities. 11 p1862 A69-25012  
Hypersonic testing in the V.K.I. Longshot free-piston tunnel. [AIAA PAPER 69-333] 13 p2249 A69-28269
- RICHARDS, D. M.**  
The sequential design of redundant elastic structures. 21 p3842 A69-39302
- RICHARDS, D. W.**  
Observations of pulsar NP 0527. 12 p2156 A69-26227  
The period of pulsar NP 0532. 15 p2680 A69-30232
- RICHARDS, E. G.**  
Influence of boron on the creep-resistance properties of an austenitic nickel-chromium alloy hardened by structural precipitation /Influence du bore sur les proprietes de tenue au fluage d'un alliage austenitique au nickel-chrome a durcissement structural/. 17 p2985 A69-32908
- RICHARDS, E. J.**  
Noise and Acoustic Fatigue in Aeronautics. 05 p0703 A69-16800  
Noise and the design of airports. 22 p3926 A69-40423
- RICHARDS, G. L.**  
Off-axis tensile coupon testing. 20 p3628 A69-37775
- RICHARDS, G. P.**  
Multipath fading in FSK communication links - An experimental investigation. 14 p2414 A69-29404
- RICHARDS, H. H. C.**  
Aircraft window temperature controlled with simple static tap changer. 22 p3869 A69-40414
- RICHARDS, H. L.**  
10.6-micrometer laser communication system experiment for ATS-F and ATS-G. 23 p4120 A69-41758
- RICHARDS, J. A.**  
On the non-uniformly illuminated p super plus -n junction. I. 03 p0486 A69-13636
- RICHARDS, J. C.**  
Automatic checkout of a large hybrid computer system. 04 p0568 A69-153590
- RICHARDS, J. D.**  
Procedure for the simultaneous determination of thermoelectric properties. 18 p3093 A69-34783
- RICHARDS, J. E.**  
Nuclear radiation in the environment - Beta and gamma-ray dose rates and air ionisation from 1951 to 1968. 22 p4007 A69-40915
- RICHARDS, J. H.**  
What should engineering administration do for the chief project engineer/ques/ [SAE PAPER 680682] 03 p0535 A69-13447
- RICHARDS, N. E.**  
Determination of the absolute short-term current efficiency of an aluminum electrolytic cell. 06 p0869 A69-17233
- RICHARDS, P. H.**  
A new method of determining the transport coefficients for high pressure arcs from experimental data. 16 p2817 A69-31644
- RICHARDS, P. L.**  
Tunable far-infrared radiation generated from the difference frequency between two ruby lasers. 16 p2798 A69-32603  
Regenerative Josephson effect detector for far-infrared radiation. 19 p3313 A69-36417
- RICHARDS, P. R.**  
Dry cabin environment, dehydration, and renal calculus in aircrew. 23 p4108 A69-41826
- RICHARDS, W.**  
Saccadic suppression. 15 p2555 A69-31035  
Midbrain as a site for the motion after-effect. 20 p3480 A69-38264
- RICHARDS, W. E.**  
10.6-micrometer laser communication system experiment for ATS-F and ATS-G. 23 p4120 A69-41758
- RICHARDSON, A. J.**  
Interaction of light with a plant canopy. 12 p2097 A69-26985  
Theoretical penetration mechanics of multisheet structures based on discrete debris particle modeling. [AIAA PAPER 69-371] 13 p2367 A69-28303  
A meteoroid stream model for evaluation of the stream hazard to interplanetary flight. 24 p4385 A69-43258
- RICHARDSON, B.**  
Effects of nitrogen limitation on the growth and composition of unicellular algae in continuous culture. 24 p4263 A69-43201
- RICHARDSON, B. D.**  
Manufacture of tubular products by hydrostatic extrusion. [SAE PAPER 690319] 15 p2617 A69-30093

## RICHARDSON, D. L.

- Portable life support systems for extra-vehicular activities.  
[AICHE PAPER 42C] 04 p0554 A69-14511
- Advanced protection systems for astronaut extravehicular activity.  
06 p0882 A69-17643

## RICHARDSON, H. H.

- Fluid suspension, damping and signal pickoff techniques with applications to rate and acceleration sensors.  
[AGARDOGRAPH-118] 08 p1257 A69-20949
- A differential pulse-length modulated pneumatic servo utilizing floating flapper disk switching valves.  
[AGARDOGRAPH-118] 08 p1257 A69-20950
- A design basis for vortex-type fluid amplifiers operating in the incompressible flow regime.  
24 p4256 A69-43299

## RICHARDSON, J. M.

- Turbulent base flow on an axisymmetric body with a single exhaust jet.  
[AIAA PAPER 69-650] 17 p2956 A69-33485

## RICHARDSON, J. R.

- An Ag-GaAs Schottky-barrier ultraviolet detector.  
09 p1462 A69-21334

## RICHARDSON, K. A.

- Meteorite fall at Pueblito de Allende, Chihuahua, Mexico - Preliminary information.  
08 p1396 A69-20686
- Environmental control for radiation testing of lunar rock samples.  
20 p3512 A69-38271

## RICHARDSON, M. C.

- Preliminary evidence for self-focusing in gas breakdown produced by picosecond laser pulses.  
13 p2270 A69-27196

## RICHARDSON, M. K.

- Interference stresses in a half plane containing an elastic disk of the same material.  
13 p2363 A69-28132

## RICHARDSON, N. L.

- Luminous fog layer surrounding a zirconium droplet burning in an oxygen-containing atmosphere.  
13 p2380 A69-28462

## RICHARDSON, N. R.

- Solution of the equations of radiative transfer in a free-electron atmosphere.  
03 p0466 A69-13351

## RICHARDSON, P. C.

- Electric-field disturbances near the human body.  
23 p4101 A69-41449

## RICHARDSON, P. D.

- Surface temperatures of the Galilean satellites of Jupiter.  
03 p0513 A69-13776
- The near-wake of a circular cylinder in crossflow.  
[ASME PAPER 68-FE-5] 05 p0747 A69-16068
- Effects of sound on separated flows.  
18 p3124 A69-35384
- Natural convection from a horizontal cylinder at moderate Grashof numbers.  
21 p3851 A69-38975

## RICHARDSON, P. J.

- The use of super 184 W as a thermal flux monitor at high temperatures.  
24 p4315 A69-43192

## RICHARDSON, P. S.

- The role of the vagus nerves in the ventilatory responses to hypercapnia and hypoxia in anaesthetized and unanaesthetized rabbits.  
21 p3651 A69-38390

## RICHARDSON, R. B.

- Flight and laboratory testing of a double sideband FM telemetry system.  
07 p1084 A69-19132
- Flight and laboratory tests of an "L-band" telemetry RF system.  
19 p3267 A69-35996

## RICHARDSON, R. W.

- Experiments on the use of dry ice ablating wind-tunnel models.  
24 p4297 A69-43255

## RICHARDSON, S.

- Survival, chromosome abnormalities, and recovery in heavy-ion- and X-irradiated mammalian cells.  
03 p0373 A69-13492

## RICHARDSON, T. M.

- Cytoplasmic and ciliary connections between the inner and outer segments of mammalian visual receptors.  
22 p3881 A69-40857

## RICHER, H. B.

- Optical studies of pulsar NP 0532.  
10 p1774 A69-23182

## RICHES, E. E.

- Advances in ferrite materials for microwave devices.  
15 p2670 A69-31208

## RICHEY, E. A.

- Propellant condensation on surfaces near an electric rocket exhaust.  
[AIAA PAPER 69-270] 09 p1565 A69-21252
- Bombardment thruster investigations at the Lewis Research Center.  
12 p2148 A69-26787

## RICHEY, V. A.

- A solid-state synchronous filter.  
03 p0403 A69-13206

## RICHTMAN, J. W.

- Ablative stagnation point heat transfer.  
10 p1808 A69-22934

## RICHTMAN, M. H.

- Direct observation of the effect of particle size on dispersion hardening.  
10 p1714 A69-23980

## RICHTMAN, P. L.

- Compressible fluid flow and the approximation of iterated integrals of a singular function.  
18 p3164 A69-34614

## RICHMOND, A. D.

- Relation of the westward drift of the geomagnetic field to the rotation of the earth's core.  
16 p2774 A69-31983

## RICHMOND, J. H.

- Rigorous field expressions for piecewise-sinusoidal line sources.  
11 p1836 A69-24995

## RICHMOND, J. K.

- On shock-tunnel simulation of scramjet combustion chamber performance.  
[AIAA PAPER 69-84] 06 p0985 A69-18165

## RICHMOND, O.

- Experimental approach to a theory of plasticity at elevated temperatures.  
04 p0671 A69-14454

## RICHMOND, W. J.

- Preparation and properties of cast beryllium-aluminum alloys.  
19 p3340 A69-35524

## RICHTER, G.

- Mutual influence of two different laser transitions with the same ground level. I - Theory /Gegenseitige Beeinflussung zweier verschiedener Laseruebergange mit dem gleichen Grundniveau. I - Theorie/.  
08 p1325 A69-20283
- Concept and characteristics of the Concorde exhaust noise suppressor.  
[AIAA PAPER 67-391] 12 p2148 A69-26759
- Changes produced by strong shock waves in the conditions of gravitational instability and the multiarm structure of the Galaxy /Izmeneniya uslovij gravitatsionnoi neustoiichivosti sil'nykh udarnymi volnami i mnogorukavnaia struktura galaktiki/.  
12 p2170 A69-27066

## RICHTER, H. J.

- An approach for the improvement of EVA/IVA fluid umbilical characteristics.  
[AAS PAPER 69-470] 24 p4272 A69-42847

## RICHTER, J.

- Experimental transition probabilities and the solar abundance of copper /Experimentelle Uebergangswahrscheinlichkeiten und die solare Haeufigkeit des Kupfers/.  
02 p0204 A69-11456
- Radiation of hot gases /thermal and non-thermal/.  
08 p1363 A69-20463
- Quantitative spectroscopy and spectral photometry.  
08 p1315 A69-20467

- Revised solar iron abundance and its influence on the solar photospheric model /Revision der solaren Eisenhaeufigkeit und ihre Bedeutung fuer das Modell der Sonnenphotosphaere/.  
21 p3796 A69-38475

- Absorption spectroscopy of excited cesium atoms /Absorptionsspektroskopie angeregter Caesiumatome/.  
22 p3984 A69-40418

- Abundances of iron and some other elements in the sun and in meteorites.  
24 p4385 A69-43223

## RICHTER, K.

- Contribution to the solution of mass analyses in aircraft design /Prispevek k reseni hmotovych rozboru v projektu letadla/.  
03 p0367 A69-13790

- Conditions for balloon observations of auroral emissions from Kiruna.  
21 p3716 A69-39250

## RICHTER, L.

- Statistics of blue objects near the North Pole of the Galaxy and a two-color diagram of the galactic halo /Statistika golubyykh ob'ektov okolo severnogo poliusa galaktiki i dvukhtsvetnaia diagramma galakticheskogo halo/.  
12 p2168 A69-27054

## RICHTER, N.

- Statistics of blue objects near the North Pole of the Galaxy and a two-color diagram of the galactic halo /Statistika golubyykh ob'ektov okolo severnogo poliusa galaktiki i dvukhtsvetnaia diagramma galakticheskogo halo/.  
12 p2168 A69-27054

## RICHTER, W. J., JR.

- Multi-mode propagation communication system.  
03 p0389 A69-13191

## RICKARD, J. A.

- Pathological oscillations of a rotating fluid.  
11 p1876 A69-25558

## RICKER, D. W.

- Analog methods for on-line system identification using noisy measurements.  
03 p0401 A69-13764

## RICKER, G. R., JR.

- Pulse risetimes in proportional counters.  
09 p1493 A69-21419

## RICKER, T. W.

- On the velocity fields in eccentric annuli.  
[ASME PAPER 68-WA/FE-35] 05 p0750 A69-16108

## RICKETT, B. J.

- Frequency structure of pulsar intensity variations.  
05 p0828 A69-16660
- Further impulsive emission from CP 0950.  
17 p3036 A69-33638

## RICKLIN, P.

- Attitude restoration of a rocket probe tip by a stellar sensor /Reconstitution d'attitude d'une pointe de fusée-sonde par senseur stellaire/.  
[ONERA-TP-731] 17 p3001 A69-33220

## RICKMERS, A. D.

- Basic statistical quality control.  
12 p2100 A69-25846

## RICKUS, G. M., JR.

- Development of an aviation combat criterion.  
09 p1447 A69-22549

## RICO, H. Y.

- Application of flexible light conductors /optical fibers/ to the study of combustion waves /Utilisation des conducteurs souples de lumiere /fibres optiques/ pour l'etude des ondes de combustion/.  
16 p2789 A69-31764

## RIDDLE, A. C.

- Height of the slowly varying component of radio emission at 9.1 cm during the quiet sun years.  
09 p1598 A69-22176
- Observations of the occultation of Sagittarius A by the moon.  
11 p1958 A69-24592
- The quiet and slowly varying components of 9.1 cm radio emission during the solar minimum.  
18 p3188 A69-35395

## RIDEOUT, S. P.

- The role of moisture and hydrogen in hot-salt cracking of titanium alloys.  
19 p3352 A69-36904

## RIDEOUT, V. C.

- The use of multiple models in cardiovascular system studies - Transport and perturbation methods.  
03 p0380 A69-13855
- Computer modeling of the human systemic arterial tree.  
07 p1072 A69-19727
- Computer simulation of physiological processes.  
18 p3098 A69-34669



## RIDEOUT, V. L.

Normalized thermionic-field /T-F/ emission in metal-semiconductor /Schottky/ barriers.  
08 p1373 A69-20861

## RIDGELEY, D.

Stability measurement problems and techniques for operational airborne pulse Doppler radar.  
20 p3492 A69-37711

## RIDHA, R. A.

Minimum weight design of aircraft landing-gear reinforcement rings.  
[AIAA PAPER 68-328] 17 p3066 A69-34030

## RIDLER, K. D.

Errors in the use of shock spectra.  
20 p3548 A69-37301

## RIE, H.

Theoretical evaluation of the simulation of radiative heating of planetary entry vehicles.  
[AIAA PAPER 69-634] 17 p2891 A69-33281

Evaluation of several eddy viscosity models through comparison with measurements in hypersonic flows.  
[AIAA PAPER 69-688] 17 p2954 A69-33454

## RIEBER, J. E.

Developing interactive graphics systems for aerospace applications.  
[AIAA PAPER 69-954] 22 p3905 A69-40336

## RIEBLING, R. W.

Application of space storable injector and chamber design criteria to spacecraft engine development.  
[AIAA PAPER 69-508] 16 p2839 A69-32671

A demonstration of the feasibility of all-solid, exothermic reactions as chemical heat sources suitable for spacecraft thermal control.  
23 p4070 A69-42275

## RIECKER, R. E.

Shear strength of grossly deformed solids.  
04 p0631 A69-15465

## RIECKHOFF, K. E.

Laser induced underwater sparks.  
05 p0771 A69-15818

## RIEDEL, J. T.

Chromatographic separation and purification of chemical compounds used in the technology of ionizing-radiation detectors /Chromatograficzne rozdzielanie i oczyszczanie związków chemicznych stosowanych w technologii detektorów promieniowania jonizacyjnego/.  
02 p0249 A69-12011

## RIEDER, G.

Pointwise bounding of eigenfunctions in vibration and stability problems /Zur punktweisen Eigengrenzung von Eigenfunktionen in Schwingungs- und Stabilitätsproblemen/.  
10 p1794 A69-22925

A variant of Windisch's integral equation for the torsion problem /Eine Variante zur Integralgleichung von Windisch fuer das Torsionsproblem/.  
21 p3836 A69-39003

## RIEDER, R.

Study of trace element abundance in meteorites by neutron activation.  
19 p3407 A69-36080

Cosmic-ray produced radionuclides in the Barwell and Saint-Severin meteorites.  
19 p3410 A69-36094

## RIEDLER, W.

Auroral-zone X-ray measurements obtained by simultaneous balloon flights in Northern Scandinavia in 1967.  
05 p0813 A69-15822

Balloon measurements of solar protons in Northern Scandinavia on 7 July 1966.  
10 p1767 A69-23763

Investigation of low-energy electron and proton precipitation in the northern auroral zone /Experiment S.71B/.  
13 p2328 A69-27755

Rocket instrumentation for detecting aurora-generating particles /Raketeninstrumentierung zur Messung Nordlichterzeugender Teilchen/.  
17 p2972 A69-33038

Auroral rocket research in Scandinavia.  
20 p3542 A69-37794

Measurements of auroral-zone X-rays with balloon borne instruments at Kiruna/Sweden in 1968.  
21 p3791 A69-39252

Balloon observations of proton fluxes during the PCA period, May 23-30, 1967.  
23 p4204 A69-41485

## RIEDMUELLER, W.

Experimental investigation of instabilities in a potassium-seeded argon plasma in crossed electric and magnetic fields.  
10 p1734 A69-23457

## RIEGEL, K. W.

Observations of an unusual cold cloud in the Galaxy.  
22 p4025 A69-40644

## RIEGER, E.

Highly irregular artificial plasma clouds in the auroral zone.  
21 p3710 A69-38507

## RIEGER, H.

The stability of FRP shells.  
17 p3058 A69-33430

## RIEGLER, G. R.

Physical properties of the radio-emitting region in sCo XR-1.  
20 p3597 A69-37334

## RIEKE, G. H.

A search for discrete sources of cosmic gamma rays of energies near  $2 \times 10$  super 12 ev.  
02 p0308 A69-12597

Upper limits to gamma ray fluxes from three pulsating radio sources.  
03 p0513 A69-13772

Production of cosmic gamma rays by Compton scattering in discrete sources.  
08 p1377 A69-20053

## RIENSTRA, W.

The locally isotropic solutions of the Liouville and Poisson equations.  
09 p1605 A69-22412

## RIERA, J. D.

The optical-rotation effect in photoelastic shell analysis.  
04 p0683 A69-15495

On the stress analysis of structures subjected to aircraft impact forces.  
09 p1613 A69-21677

## RIES, G.

Improved horn exciter with two wave modes for shallow paraboloid antennas /Verbesserte Horner-Reger mit zwei Wellentypen fuer flache Parabolantennen/.  
12 p2044 A69-27093

## RIESZ, R. P.

Brewster-angle grinding of optical maser tubes.  
03 p0440 A69-13302

## RIETJENS, L. H. T.

Theoretical and experimental investigation of a nonequilibrium plasma in an MHD channel.  
10 p1736 A69-23465

## RIGAUD, P.

Study of the vertical distribution of the optical density of the atmosphere in the near ultraviolet with the aid of passive satellites /Etude de la repartition verticale de la densite optique de l'atmosphere dans le proche ultraviolet a l'aide de satellites passifs/.  
16 p2787 A69-32638

## RIGAUT, F.

Analog determination of lifting wing profiles in transonic flows /Determination analogique de profils d'aile portant en regime transsonique/.  
02 p0187 A69-11536

## RIGBY, G. A.

New techniques for drift compensation in integrated differential amplifiers.  
07 p1102 A69-18874

Integrated frequency-selective amplifiers for radio frequencies.  
07 p1104 A69-18886

## RIGBY, L. V.

A predictive scale of aircraft emergencies.  
06 p0880 A69-17208

## RIGNEY, J. W.

Simulation of corrective maintenance behavior.  
12 p2025 A69-27086

## RIHACZEK, A. W.

Design of zigzag FM signals.  
01 p0033 A69-11001

Clutter suppression properties of weighted pulse trains.  
04 p0562 A69-15467

Principles of High-Resolution Radar.  
08 p1275 A69-20370

## RIIHIMAA, J. J.

Drift patterns in the dynamic spectra of Jupiter's decametric radiation.  
06 p1008 A69-17958

## RIJF, R.

Auxiliary equipment of an astronomical photometer.  
24 p4318 A69-4389

## RIJLANT, P.

The improvement in the appraisal of the electroactivity of the heart by modern computation methods.  
23 p4105 A69-41113

Norms for quantitative vectorcardiography with special emphasis on the medical evaluation of flying personnel.  
24 p4277 A69-4333

## RIKARDS, R. B.

Long-term stability of orthotropic cylindrical shells under external pressure /Dlitel'naia ustoiichivost' totopnykh tsilindricheskikh obolochek pod deistviem vneshnego davleniia/.  
18 p3225 A69-3533

## RILEY, A.

Check out procedures for the computer program used in the ELDO Inertial Guidance System.  
[AIAA PAPER 69-961] 22 p3978 A69-40341

## RILEY, C.

Reactive scattering of K by HBr, DBr in crossed molecular beams - Angular and velocity distributions of KBr in laboratory and C.M. systems.  
18 p3178 A69-3544

## RILEY, N.

Unsteady heat transfer from a rotating disk.  
08 p1422 A69-20996

## RILEY, V. R.

Fibre/fibre interaction.  
01 p0171 A69-11260

## RILEY, W. B.

Getting more mileage from computers.  
06 p0891 A69-17202

## RILEY, W. F.

Recording dynamic fringe patterns with a Cramér-Schardin camera.  
20 p3541 A69-37770

## RIMAN, R.

Structural stability of the austenitic refractory steels of type Mn18Cr8Ti and Mn18Cr8MoV /Strukturni stabilita austenitickych zaropevnykh oceli typu Mn18Cr8Ti a Mn18Cr8MoV/.  
01 p0100 A69-11299

## RIMMER, R.

A fluidic pressure ratio sensor for gas turbine engine control.  
02 p0249 A69-12081

## RIMON, Y.

Numerical solution of a uniform flow over a sphere at intermediate Reynolds numbers.  
18 p3120 A69-34430

## RIMROTT, F. P. J.

Mechanics of the Solid State.  
07 p1234 A69-19377

The hyperbolic sine creep law in engineering practice.  
07 p1235 A69-19380

Large uniform torsion of a thin-walled open section of circular cross-section.  
10 p1794 A69-22925

## RINALDI, S.

Optimization of discrete systems with delayed control variables - A structural approach.  
09 p1476 A69-22677

On the existence of the optimal control for linear uncontrollable systems.  
10 p1666 A69-23881

## RINALDINI, C.

A heat pipe thermionic reactor concept.  
14 p2480 A69-29181

## RINDAL, R. A.

Graphite temperature and ablation characteristics in various environments.  
[AIAA PAPER 69-148] 06 p0947 A69-18153

## RINDE, J. E.

Unified flight control actuator package.  
[AIAA PAPER 69-788] 19 p3249 A69-35640

## RINDFLEISCH, T. C.

Getting more out of Ranger pictures by computer.  
06 p0924 A69-17166

## RINDLER, W.

Counterexample to the Tanagerlini argument.  
09 p1540 A69-22100

Limits on the cosmological deceleration parameter.  
23 p4219 A69-42377

- RINDNER, R. M.**  
Response of explosives to fragment impact.  
04 p0645 A69-14473
- RING, J.**  
Radial velocity and intensity measurements of the night sky H beta emission line.  
12 p2074 A69-26963
- RINGENBERG, R.**  
Number counts of extragalactic radio sources.  
08 p1390 A69-20388
- RINGKAMP, D. L.**  
Synthesis of an on board hybrid computer for an advanced helicopter fire control system.  
17 p2934 A69-34074
- RINGLER, H.**  
Experimental studies of a hydrogen arc in an axially parallel magnetic field. I, II /Experimentelle Untersuchung an einem Wasserstoff-Lichtbogen im achsenparallelen Magnetfeld. I, II/.  
07 p1189 A69-18489  
Measurement of the thermal conductivity in a magnetic field.  
12 p2133 A69-25765  
Enhanced plasma oscillations observed with scattered laser light.  
13 p2307 A69-27629
- RINGUELET-KASWALDER, A.**  
Spectroscopic observations of Be stars /Observations spectroscopiques d'étoiles Be/.  
23 p4213 A69-41720
- RINK, R. E.**  
Multivariable bilinear system control.  
12 p2049 A69-26083
- RINKEVICHUS, B. S.**  
Influence of a transverse magnetic field on the power and polarization of helium-neon laser emission at the wavelength  $\lambda$  equals  $3.39 \mu$  /Vlianie poperechnogo magnitnogo polia na moshchnost' i polarizatsiiu izlucheniia geliu-neonovogo OKG na dline volny  $\lambda$  equals  $3.39 \mu$ /.  
02 p0260 A69-12844  
Use of a laser with a Fabry-Perot interferometer for measuring the particle velocity in two-phase turbulent flows /Primenenie OKG s interferometrom Fabri-Perot dlia izmereniia skorosti chastits v dvukhfaznykh turbulentnykh potokakh/.  
06 p0933 A69-17252
- RINKIAVICHUS, V. S.**  
Photoconductivity of Sb sub 2 S sub 3 single crystals in the infrared spectral range /Fotoprovodimost' monokristallov Sb sub 2 S sub 3 v infrakrasnoi oblasti/.  
22 p3994 A69-41042
- RINNER, K.**  
Studies on geodetic networks with satellites.  
[UN PAPER 68-95377] 01 p0065 A69-10528  
Determination of scale in spatial direction networks.  
18 p3131 A69-35196
- RINO, C. L.**  
Bandlimited image restoration by linear mean-square estimation.  
15 p2611 A69-31032
- RIONERO, S.**  
On periodic motions in magnetohydrodynamics.  
07 p1194 A69-19437
- RIPLEY, E. L.**  
Structural tests for the supersonic transport aircraft. [RAES PAPER 16] 22 p4043 A69-40495
- RIPPER, J. E.**  
Resonant modes of GaAs junction lasers.  
12 p2108 A69-26637  
Coupled longitudinal mode pulsing in semiconductor lasers.  
15 p2634 A69-30875  
Optimum stripe width for continuous operation of GaAs junction lasers.  
16 p2796 A69-31698  
Resonant modes of GaAs junction lasers. II - High-injection level.  
19 p3338 A69-36691  
Time delays and Q switching in junction lasers. I - Theory.  
22 p3962 A69-40560  
Time delays and Q switching in junction lasers. II - Computer calculations and comparison with experiments.  
22 p3962 A69-40561  
Spiking in light pulses from GaAs Q-switched junction lasers.  
22 p3963 A69-40563
- Optical pulses from CW GaAs injection lasers.  
23 p4173 A69-41500
- RIPPERGER, E. A.**  
The relationship between the constitutive equation and one-dimensional wave propagation.  
02 p0344 A69-12291
- RIPPS, H.**  
The spectral sensitivity of evoked potentials from the retina and cortex of nocturnal and diurnal monkeys.  
22 p3882 A69-40867
- RISEBERG, L. A.**  
Multiphonon orbit-lattice relaxation of excited states of rare-earth ions in crystals.  
01 p0134 A69-10011  
Effective density of phonon states for NdCl sub 3 from vibronic spectra and applications to ion-lattice interactions.  
03 p0473 A69-13907  
Multiphonon relaxation in laser materials and applications to the design of quantum electronic devices. [IEEE PAPER 1-9] 05 p0774 A69-16318
- RISEBROUGH, N. R.**  
The deformation of wrought Zn-Ni-Ti alloy.  
08 p1329 A69-20002
- RISGIN, O.**  
Generation of coherent radiation.  
19 p3335 A69-36067  
Infrared detectors.  
19 p3310 A69-36068  
Infrared image forming sensors.  
19 p3311 A69-36069  
Detection of coherent radiation.  
19 p3335 A69-36070
- RISHBETH, H.**  
Solution of the coupled ion and neutral air equations of the mid-latitude ionospheric F2-layer.  
07 p1123 A69-18818  
Continuity of air motion in the mid-latitude thermosphere.  
21 p3714 A69-38553
- RISHER, D. B.**  
Balance for measuring skin friction in the presence of heat transfer.  
19 p3292 A69-35734
- RISHIN, V. V.**  
Bonding strength of plasma coatings with the substrate /Prochnost' stsepleniia plazmennyykh pokrytii s osnovoi/.  
15 p2630 A69-31189
- RISKA, D. O.**  
The influence of the mode structure on the quantum theory of the laser.  
24 p4327 A69-42789
- RISLEY, E. W., JR.**  
Discontinuity capacitance of a coaxial line terminated in a circular waveguide.  
14 p2423 A69-29754
- RISTOW, D.**  
Flux densities of radio sources at 2695 MHz.  
15 p2696 A69-31206
- RITCHIE, D. W.**  
An evaluation of photovoltaic devices for future spacecraft power demands.  
22 p3868 A69-40130
- RITER, S.**  
Practical phase reference detectors for fully modulated PSK signals.  
03 p0403 A69-13203  
An optimum phase reference detector for fully modulated phase-shift keyed signals.  
20 p3492 A69-37710
- RITOUT, M.**  
ASTRE - A programming language oriented toward a better use of memory /Un langage de programmation orienté vers une meilleure utilisation de la mémoire - ASTRE/.  
03 p0401 A69-14180
- RITT, R. K.**  
High-frequency approximations.  
03 p0384 A69-12903
- RITTENHOUSE, J. D.**  
Rotary head instrumentation recorders for telemetry recording.  
07 p1077 A69-18826
- RITTER, A.**  
The renaissance of subsonic aerodynamics.  
05 p0696 A69-15561
- RITTMANN, K.**  
Calculation of the laminar, stationary, incompressible boundary layer at a body of revolution in an incident flow /Die Berechnung der laminaren, stationären, inkompressiblen Grenzschicht eines angeströmten, rotierenden Drehkörpers/.  
08 p1252 A69-20703
- RIUTOV, D. D.**  
High-temperature electron component in a beam plasma interaction.  
09 p1553 A69-22657
- RIUTOV, V. D.**  
Investigation of the energy losses and effectiveness of the turbulent heating of a plasma by a current /Issledovanie energeticheskikh poteri i effektivnosti turbulentnogo nagreva plazmy tokom/.  
11 p1935 A69-25753  
Scattering of electromagnetic waves by turbulent plasma fluctuations.  
15 p2659 A69-30728
- RIVA, G. M.**  
Amplifier with a logarithmic transfer function over five decades /Amplificatore con funzione di trasferimento logaritmica per oltre cinque decenni/.  
01 p0038 A69-10075
- RIVARD, J. G.**  
Secondary-injection thrust vector control systems.  
10 p1753 A69-23561
- RIVELLO, R. M.**  
Theory and Analysis of Flight Structures.  
03 p0525 A69-13266
- RIVIERE, C.**  
A tension-torsion-compression testing machine /Une machine d'essais en traction-torsion-compression/. [ONERA-TP-596] 17 p2945 A69-33065
- RIVIN, O. V.**  
Modeling of thermoelasticity problems /Modelirovaniia zadach termouprugosti/.  
21 p3680 A69-39851
- RIVKIN, S. S.**  
Determination of the total error of a vertical gyroscope /Ob opredelenii polnoi oshibki girovertikali/.  
22 p3946 A69-40251
- RIVLIN, L. A.**  
Light pulse propagation in a nonlinear, threshold, amplifying medium /Rasprostraneniie svetovogo impul'sa v nelineinoi porogovoi usilivaiushchei srede/.  
03 p0437 A69-13039  
Emission dynamics of semiconductor laser.  
19 p3337 A69-36534  
Photoelectric recording of ultrashort pulses of a semiconductor laser /Fotoelektricheskaiia registratsiia ul'trakorotkikh impul'sov poluprovodnikovogo kvantovogo generatora/.  
24 p4329 A69-43740
- RIVLIN, R. S.**  
Stability in Couette flow of a viscoelastic fluid. I.  
06 p0909 A69-17240  
Orthogonal integrity basis for n symmetric matrices.  
20 p3624 A69-37587
- RIZKIN, A. A.**  
Transmission of holographs by a standard phototelegraphic channel with a limited number of halftones /Peredacha gologramm po standartnomu fototelegrafnomu kanalu s ogranichenym chislom polutonov/.  
11 p1889 A69-25549
- RIZKIN, I. KH.**  
A digital simulation method for nonlinear elements of radio systems /Ob odnom metode tsifrovogo modelirovaniia nelineinykh elementov radiotekhnicheskikh sistem/.  
15 p2582 A69-30111  
Estimation of the nonergodicity of random processes /K otsenke neergodichnosti sluchainykh protsessov/.  
15 p2582 A69-30946
- RIZO, I.**  
Construction of helium-neon lasers operating at 6328 angstrom units.  
14 p2459 A69-29429
- RIZVI, M. H.**  
Nonparametric ranking procedures for comparison with a control.  
08 p1342 A69-20172
- RIZZI, W. J.**  
Kinematic monitoring systems for rotating equipment instrumentation.  
10 p1692 A69-23249



## RIZZO, F. J.

A formulation and solution procedure for the general non-homogeneous elastic inclusion problem.  
03 p0530 A69-14064

## RIZZO, J. M.

Thermostructural simulation of lifting vehicle structures.  
12 p2060 A69-26836

## RIZZO, R. R.

More on the influence of end constraints on off-axis tensile tests.  
13 p2286 A69-28667

## RJA RAO, K. S.

On the axial asymmetry of the geomagnetic disturbance field in the low latitudes.  
16 p2778 A69-32184

## RLEMAS, V.

The challenge of planetary imaging.  
[SMPTE PAPER 105-78] 12 p2078 A69-25770

## ROACH, C. G.

Liquid crystals.  
06 p0885 A69-17842

## ROACH, F. E.

Mechanism for the auroral emission of OI/6300 angstrom units/.  
01 p0062 A69-10137

Maintenance of the tropical night-time F layer.  
02 p0242 A69-11825

Night airglow observations during the IQSY.  
15 p2594 A69-30019

Forbidden transitions in the upper atmosphere - Introductory report.  
19 p3421 A69-36214

The nightglow and the F region ionosphere.  
21 p3712 A69-38518

## ROACH, W. T.

Some aircraft reports of high-level turbulence.  
12 p2127 A69-26901

## ROALSVIG, J. P.

Nonmesonic decay of hydrogen hyperfragments.  
12 p2133 A69-26298

## ROARK, A. L.

On the eigenproblem for displacement integral equations.  
01 p0106 A69-10986

## ROBB, J. D.

Aircraft fuel vent line sensitivity to lightning effects.  
[SAE PAPER 690434] 23 p4062 A69-41651

## ROBBINS, C. R.

Phase Diagrams for Ceramists- 1969 Supplement.  
22 p3971 A69-40782

## ROBBINS, R. F.

An automated resilience apparatus for polymer studies from -196 to plus 180 deg C.  
21 p3689 A69-38593

## ROBE, T. R.

Stability of two tethered unsymmetrical earth-pointing bodies.  
02 p0324 A69-12507

## ROBELOTTO, R.

Residual stresses in welded titanium and their effects upon mechanical behavior.  
[ASM PAPER GG8-6.2] 07 p1169 A69-19674

## ROBERGE, F. A.

Paradoxical inhibition - A negative feedback principle in oscillatory systems.  
23 p4112 A69-42444

## ROBERSON, G. E.

Shock sensitivity of solid explosives and propellants.  
02 p0302 A69-11520

## ROBERSON, R. E.

Equilibria of orbiting gyrostats.  
03 p0522 A69-14246

A linearization tool for use with matrix formalisms of rotational dynamics.  
11 p1970 A69-24608

Rotors in gravity-stabilized satellites.  
17 p3048 A69-33233

The quadratic approximation in rotational dynamical equations.  
18 p3174 A69-35298

Notes on the Thomson-Tait-Chetaev stability theorem.  
20 p3623 A69-37531

## ROBERT, A.

Microwave radiometer for radio meteorology /Radiometre microonde de radiometeorologie/.  
06 p0924 A69-17247

New methods in three-dimensional and bi-dimensional photoelasticity.  
21 p3844 A69-39318

## ROBERT, A.-H.

Systematic method for determining the number of variables that may be considered independent in dimensional-analysis problems /Methode de determination systematique du nombre de grandeurs qu'il est possible de considerer comme independantes dans les problemes d'analyse dimensionnelle/.  
13 p2289 A69-28362

## ROBERT, J. L.

Study of the conduction band of GaSb-InSb compounds at low InSb concentrations.  
19 p3390 A69-36555

## ROBERT, K.

Theoretical studies of the sonic transmission of diatomic gases during nozzle flow in the presence of nonequilibrium oscillations and relaxation dissociation /Theoretische Untersuchungen zum Schalldurchgang zweiatomiger Gase bei Duesenstroemungen mit Schwingungsungleichgewicht und relaxierender Dissoziation/.  
10 p1632 A69-22912

## ROBERTS, A. D.

The elastohydrodynamic lubrication of a highly elastic cylindrical surface.  
23 p4171 A69-42531

## ROBERTS, A. J.

Endocrine functions in an oxygen atmosphere at reduced total pressure.  
01 p0019 A69-11343

Endocrine functions in an oxygen atmosphere at reduced total pressure.  
23 p4087 A69-41790

## ROBERTS, A. K.

Nonlinear longitudinal combustion instability - The influence of propellant composition.  
[AIAA PAPER 69-480] 16 p2834 A69-32736

## ROBERTS, A. S., JR.

A supercritical thermodynamic power cycle with MHD generator.  
16 p2736 A69-31914

## ROBERTS, C. G.

Ultrasonic paramagnetic resonance of Pr super 3 plus-CaF sub 2.  
24 p4360 A69-42790

## ROBERTS, C. S.

Bounce resonant scattering of particles trapped in the earth's magnetic field.  
03 p0503 A69-14014

Cyclotron- and bounce-resonance scattering of electrons trapped in the earth's magnetic field.  
07 p1208 A69-19367

Pitch-angle diffusion of electrons in the magnetosphere.  
12 p2150 A69-26746

## ROBERTS, D. J.

A method to define low altitude exhaust characteristics and impingement effects.  
[AIAA PAPER 69-568] 16 p2842 A69-32693

## ROBERTS, D. L.

Missions to the comets.  
[AAS PAPER 69-320] 24 p4381 A69-42866

## ROBERTS, E. B.

Unutilized ideas in university laboratories.  
15 p2720 A69-30596

## ROBERTS, E., JR.

Elastic displacements for various edge-cracked plate specimens.  
05 p0841 A69-16433

Elastic crack-edge displacements for the compact tension specimen.  
09 p1503 A69-21392

## ROBERTS, F. L.

Surveillance of small turboprop engine problem areas by SOAP/Spectrometric oil analysis procedure/.  
[SAE PAPER 690325] 11 p1941 A69-24508

## ROBERTS, G. O.

Dynamo waves.  
22 p3989 A69-40195

## ROBERTS, J.

Analytical and experimental studies of liquid-metal Faraday generators.  
13 p2205 A69-27485

## ROBERTS, J. A.

Pulsar theory of Chiu, Canuto and Fasio-Canuto.  
16 p2865 A69-32802

## ROBERTS, J. B. G.

High power radar for ionospheric research.  
03 p0398 A69-13768

## ROBERTS, J. H.

Dynamic tracking filter as a low-threshold demodulator in F.M. F.D.M. satellite systems.  
01 p0034 A69-11146

Frequency-feedback receiver as a low-threshold demodulator in F.M. F.D.M. satellite systems.  
01 p0034 A69-11141

FM distortion - A comparison of theory and measurement.  
14 p2416 A69-29552

## ROBERTS, J. J.

Direct current MHD generators with variable conductivity, velocity, and magnetic field.  
21 p3649 A69-39027

## ROBERTS, J. L.

Velocity distribution in the lower mantle.  
07 p1129 A69-19502

## ROBERTS, J. T. A.

Magnetomechanical damping effects in iron and mu-metal.  
15 p2639 A69-30586

## ROBERTS, L.

Transportation to earth orbit - 1975-1985.  
21 p3827 A69-39691

## ROBERTS, L. A.

Modern traveling-wave tubes for space application.  
13 p2232 A69-28055

## ROBERTS, L. W., JR.

Hydrogen embrittlement of stainless steel.  
01 p0093 A69-10062

## ROBERTS, M. G.

Height of the twilight sodium layer - Evening-morning effect observed at Victoria, British Columbia, from February 1967 to February 1968.  
01 p0063 A69-10275

## ROBERTS, M. S.

The distribution of neutral hydrogen and the kinematic properties of NGC 6946.  
09 p1598 A69-22187

Neutral atomic hydrogen in 32 galaxies of small angular diameter.  
10 p1773 A69-22956

Integral properties of spiral and irregular galaxies.  
23 p4220 A69-42383

## ROBERTS, P. H.

Hydromagnetic duct flow - Theory and experiment.  
01 p0132 A69-11209

The Bullard-Gellman dynamo.  
22 p4018 A69-40194

## ROBERTS, R. E.

A resonance theory of termolecular recombination kinetics - H plus H plus M goes to H sub 2 plus M.  
01 p0122 A69-10034

Comment on the discrepancy between the Jackson and Mott transition probability and the exact calculation of Secrest and Johnson.  
01 p0124 A69-10688

Understanding and preventing integrated circuit problems.  
15 p2580 A69-31128

Resonance theory of termolecular recombination kinetics - H plus H plus M yields H sub 2 plus M.  
20 p3579 A69-37345

## ROBERTS, R. H.

The realization of telemetry transmitters with very wide bandwidths.  
23 p4119 A69-41741

## ROBERTS, S. B.

The zeroth-order approximation to the current distribution on the elements of circular arrays of tangential dipoles.  
11 p1853 A69-25318

## ROBERTS, V. L.

A viscoelastic model of the human spine subjected to plus g sub z accelerations.  
07 p1072 A69-19725

## ROBERTS, W. H.

Vibration characteristics of a hypersonic missile interceptor.  
09 p1614 A69-21890

## ROBERTS, W. K.

Elastic scattering of 600 Mev protons from He super 3.  
03 p0472 A69-13464

- Polarization in proton- super 4 He scattering at 540 Mev. 04 p0632 A69-14966
- ROBERTSEN, J. A. Microbiological sampling of surfaces. 05 p0715 A69-15982
- ROBERTSON, A. V. Applications of artificial intelligence for chemical inference. 1 - The number of possible organic compounds - Acyclic structures containing C, H, O, and N. 23 p4114 A69-42214
- ROBERTSON, D. The application of CRT contour analysis to general circulation experiments. 01 p0109 A69-10539
- ROBERTSON, D. S. Trans-Pacific interferometer measurements at 2,300 MHz. 15 p2701 A69-31530
- ROBERTSON, D. W. Preliminary interpretation of near-field effects on measurement accuracy in shielded enclosures. 23 p4141 A69-42226
- ROBERTSON, H. J. Active optics for large orbiting astronomical telescopes. 12 p2092 A69-26423  
Evaluation of multipoint interaction in the design of a thin diffraction-limited active mirror. 13 p2261 A69-27951
- ROBERTSON, H. S. Onset of the helical instability in weakly ionized discharge plasmas. 11 p1924 A69-24299  
Ambipolar diffusion in radio-frequency-excited magnetoplasmas. 16 p2818 A69-31672
- ROBERTSON, J. B. Beryllium as an acceptor in silicon. 09 p1556 A69-21652  
Beryllium as an acceptor in silicon. 10 p1747 A69-23989
- ROBERTSON, P. B. La Malbaie structure, Quebec - A palaeozoic meteorite impact site. 22 p4021 A69-40410
- ROBERTSON, V. S. Spacecraft attitude control. 09 p1609 A69-21617
- ROBILLARD, C. L. Mission constraints on solid-propellant motors for unmanned spacecraft. [AIAA PAPER 68-815] 21 p3819 A69-39031
- ROBIN-CHAMPIGNEUL, Y. Wave coupling in a plasma column as a result of non-linear phenomena in the absence of a continuous magnetic field /Couplage d'ondes dans une colonne de plasma par suite de phenomenes non lineaires en l'absence de champ magnetique continu/. 08 p1371 A69-21150
- ROBINETTE, W. C. Servo control of flutter. 11 p1992 A69-25518
- ROBINOVE, C. J. Space applications in water resource development. [UN PAPER 68-95333] 01 p0064 A69-10487
- ROBINSON, A. C. Survey of dynamic analysis methods for flight control design. [AIAA PAPER 68-832] 12 p2174 A69-26758
- ROBINSON, B. J. Maser action in interstellar OH. 03 p0511 A69-13465  
Protostars as sources of anomalous OH emission. 04 p0661 A69-15143  
A new type of wideband 1665 MHz OH emission. 08 p1397 A69-20772  
OH emission at 1720 MHz in the direction of non-thermal galactic sources. 10 p1776 A69-23220
- ROBINSON, B. W. Penile erection evoked from forebrain structures in Macaca mulatta. 12 p2018 A69-25775
- ROBINSON, C. N. Analysis of dilatational failure of heterogeneous materials by reaction rate theory. 15 p2710 A69-30813
- ROBINSON, D. A. Mechanical components of human eye movements. 22 p3872 A69-40200
- ROBINSON, D. C. The partition of energy in a turbulent plasma. 03 p0476 A69-13384  
An observable peculiarity of the Brans- Dicke radiation zone. 07 p1216 A69-18894  
Turbulent density fluctuations in zeta. 08 p1364 A69-20517
- ROBINSON, D. E. FAMILY I - Software for NASA-Ames simulation systems. 04 p0567 A69-15353
- ROBINSON, D. W. Procedure for calculating the loudness of sonic bangs. 23 p4063 A69-42454
- ROBINSON, E. Limited testing of precracked ceramic rocket nozzles. 02 p0334 A69-12369
- ROBINSON, E. J. Electron scattering by the metastable rare gases. 24 p4354 A69-43818
- ROBINSON, F. C. A simple pulse delay measurement technique. 09 p1463 A69-21896
- ROBINSON, F. D. Tail rotor design. 1 - Aerodynamics. [AHS PAPER 300] 17 p2895 A69-33549
- ROBINSON, F. N. H. Noise in junction diodes and bipolar transistors at moderately high frequencies. 08 p1286 A69-20839
- ROBINSON, F. R. Renal pathology of acute methylhydrazine intoxication in dogs. 06 p0883 A69-17847  
Pathology of normobaric oxygen toxicity in primates. 21 p3660 A69-39179
- ROBINSON, G. S. Ecological foundations of Haley's metalaw. 23 p4240 A69-41304
- ROBINSON, G. Y. Probing of Gunn effect domains with a scanning electron microscope. 08 p1283 A69-20162
- ROBINSON, H. G. R. The systems approach to avionics. [RAES PAPER 6] 22 p3946 A69-40487
- ROBINSON, I. Degenerate gravitational fields with twisting rays. 17 p3004 A69-32832
- ROBINSON, J. Transformation of variables for redundancy optimization in the rank force method. 11 p1993 A69-25529  
Practical application of a computerised structural analysis system which adopts a finite element technique /direct stiffness method/. 21 p3842 A69-39307
- ROBINSON, J. C. Mars Mariner IV - Identification of some Martian surface features. 07 p1213 A69-18605  
Mars - Correlation of optical and radar observations. 11 p1964 A69-25406
- ROBINSON, J. L. Some observations on the influence of oxygen content on the fatigue behaviour of alpha-titanium. 12 p2116 A69-27134  
The influence of internal defects on the fatigue behaviour of alpha-titanium. 23 p4178 A69-42360
- ROBINSON, J. R. Degenerate gravitational fields with twisting rays. 17 p3004 A69-32832
- ROBINSON, L. Laser beam directed at the lunar retro- reflector array - Observations of the first returns. 24 p3484 A69-43197
- ROBINSON, L. C. Generation of far-infrared radiation. 22 p3982 A69-40669
- ROBINSON, N. I. Bending of parabolic and cardioid plates. 16 p2874 A69-32166  
Buckling of parabolic and semi-elliptic plates. 20 p3622 A69-37223
- ROBINSON, S. Relations between physical training, acclimatization, and heat tolerance. 22 p3890 A69-40199
- ROBINSON, S. L. Mechanical behavior of polycrystalline tungsten at elevated temperature. 07 p1158 A69-18241
- ROBLE, R. G. Stellar spectra and atmospheric composition. 03 p0421 A69-13346  
Interferometric measurements of the 6300 A Doppler temperature during a magnetic storm. 20 p3546 A69-38099
- ROBLIN, M. L. Shearing interferometry by wavefront reconstruction using a single exposure. 10 p1690 A69-22952
- ROBSON, A. E. Oblique hydromagnetic shock waves. 17 p3013 A69-33823
- ROBSON, J. D. Response of a vibratory system to imposed- displacement excitation. 17 p3067 A69-34139
- ROBSON, P. N. The stability and reflection gain of subcritically doped Gunn diodes. 01 p0038 A69-10121  
The effect of small transverse dimensions on the operation of Gunn devices. 04 p0639 A69-14335
- ROCARD, J.-M. Tables of Effective Electron Cross Sections and Macroscopic Coefficients. Volume 1 - Hydrogen and Rare Gases /Tables de Sections Efficaces Electroniques et Coefficients Macroscopiques. Volume 1 - Hydrogene et Gaz Rares/. 09 p1541 A69-21579
- ROCCA, F. Quasi-free translationally invariant states and Bogoliubov transformations /Etats quasi libres invariants de translation et transformations de Bogoliubov/. 03 p0455 A69-13364
- ROCCIA, R. Diffuse X radiation - Observation and origin /Rayonnement X diffus - Observation et origine/. 05 p0817 A69-16714  
Observation of celestial X-ray sources /Observation de sources X celestes/. 05 p0817 A69-16715  
Observation of five sources of cosmic X-rays in the 15-150 Kev energy range. 07 p1210 A69-19716
- ROCCO, R. M. Temperature history of hard space suit during GLFC operational test. 21 p3666 A69-39182
- ROCHE, A. E. Electron detachment from negative oxygen ions at beam energies in the range 3 to 100 ev. 09 p1542 A69-21625
- ROCHE, A. O. Bit error rates in the presence of untracked time base fluctuation. 07 p1083 A69-19121
- ROCHE, J. F. Reliability of an 11 GHz communication system in a tropical environment. 22 p3900 A69-40680
- ROCHE, T. "B" staged epoxy-S glass prepreps. 09 p1530 A69-22327
- ROCHFERT, P. The flight test of the Europa I satellite booster. 08 p1410 A69-21144
- ROCHELLE, W. C. Heat-transfer and pressure analysis of rocket exhaust impingement on flat plates and curved panels. 12 p2190 A69-26781
- ROCHESTER, M. G. Perturbations in the earth's rotation and geomagnetic core-mantle coupling. 12 p2077 A69-27110



## ROCHET, A.

Tests on 1-Mev electrons of a logic family for space use /Tests aux electrons de 1 Mev d'une famille logique a usage spatial/.  
15 p2625 A69-30830

## ROCHINO, A.

Analytical investigations of incompressible turbulent swirling flow in stationary ducts.  
[ASME PAPER 69-APM-19]  
18 p3120 A69-34394

## ROCK, B. J.

SNAP-27 program review.  
23 p4187 A69-42249

## ROCKER, M.

Behavioral responses to short periods of lowered gravitational force in blind goldfish.  
11 p1828 A69-25464

## ROCKEY, K.

Influence of the flexural rigidity of flanges upon the load-carrying capacity and failure mechanism of webs in shear.  
18 p3227 A69-35492

## ROCKEY, K. C.

Shear buckling of orthogonally stiffened, infinitely long simply-supported plates - Stiffeners having torsional and flexural rigidities.  
11 p1984 A69-25142

## ROCKLIN, S. R.

Development of a high-efficiency cascaded thermoelectric module.  
20 p3465 A69-37706

## ROCKSCHIES, J.

Possibilities of improving the transmission characteristics of mechanical vibration transducers /Moeglichkeiten zur Verbesserung der Uebertragungseigenschaften von mechanischen Schwingungsmessformern/.  
16 p2789 A69-31842

## ROCKSTROH, J.

A measurement of the spectrum of cosmic-ray electrons between 20 Mev and 3 Bev in 1968 - Further evidence for extensive time variations of this component.  
24 p4367 A69-43175

## ROCKWELL, R. E.

ITC/USA Range Report - Naval Weapons Center, China Lake.  
14 p2411 A69-28880

## ROCKWELL, R. J., JR.

Protection of pilots against lasers.  
07 p1072 A69-19436

## RODAK, M. I.

Relation between electron spin-spin interactions and the polarization and relaxation of ruby nuclei /Sviaz' elektronnykh spin-spinovykh vzaimodeistvii s polarizatsiei i relaksatsiei iader v rubine/.  
08 p1372 A69-20541

## RODDEN, J. J.

Performance of gravity-gradient VCMG systems.  
07 p1228 A69-18345  
A simple momentum control system for satellite maneuvering.  
18 p3207 A69-34684

## RODDEN, W. P.

A doublet-lattice method for calculating lift distributions on oscillating surfaces in subsonic flows.  
[AIAA PAPER 68-73]  
09 p1430 A69-21946  
A strip method for prediction of damping in subsonic wind tunnel and flight flutter tests.  
11 p1987 A69-25368  
Correlation of the vortex lattice method on rotor/wing configurations.  
20 p3458 A69-37163

## RODDIER, F.

A Fourier spectrum analysis of long samples of solar line oscillations.  
22 p4019 A69-40286

## RODDIER, P.

Polarization of light in general relativity /Polarisation de la lumiere en relativite generale/.  
20 p3576 A69-37431

## RODE, D. L.

A method for determining the frequency response of a laser.  
10 p1702 A69-23347

## RODEMICH, E.

On some extremal positive definite functions.  
17 p2993 A69-32831

## RODEMICH, E. R.

Primitive trinomials of high degree.  
03 p0455 A69-13373  
Numerical analysis of an elliptic-parabolic partial differential equation.  
10 p1719 A69-23516  
Data compression with bounded errors.  
23 p4134 A69-42526

## RODEN, W. A.

Evaluation of resistance welding in-process monitors.  
02 p0253 A69-11864

## RODENBAUGH, W. L.

A family of advanced turboshaft engines.  
[AHS PAPER 331]  
17 p3022 A69-33530

## RODER, H. M.

Thermal conductivity measurements on fluid hydrogen at 17 to 200 K and pressures to 10 MN/m<sup>2</sup>.  
[NAS-NRC PAPER D-1]  
22 p3998 A69-40631

## RODERER, H.

The design of an 2-axes-attitude stabilization system for spinning payloads.  
21 p3826 A69-39639

## RODEWALD, M.

Efficiency of controller concepts for hovering rigs and VTOL aircraft /Die Leistungsfahigkeit der Konzeptionen von Reglern fuer Schwebegestelle bzw. Senkrechtstarter/.  
04 p0547 A69-14814

## RODEWALD, N. C.

Improved liquid film cooling concept.  
24 p4408 A69-43127

## RODGERS, A. W.

The influence of line blanketing upon the colours of cepheids and F-K supergiants.  
10 p1771 A69-22854  
Crab and Vela pulsars.  
13 p2354 A69-28470  
The blue horizontal-branch stars of NGC 6397.  
15 p2692 A69-30770

## RODGERS, C.

A cycle analysis technique for small gas turbines.  
[IME PAPER 5]  
12 p2147 A69-25794

## RODGERS, W. E.

Measurement of Ar-Kr integral cross sections at intermediate energies with an arc-heated aerodynamically accelerated atom beam.  
19 p3378 A69-36185  
A metastable atom detection system for ground state atom beams.  
22 p3950 A69-41230

## RODL, W.

Reverse transition turbulent-laminar for flow through a tube with fluid injection.  
04 p0586 A69-14409  
Laminarization of turbulent flow in a circular porous tube with uniform mass injection through the tube wall.  
[ASME PAPER 69-HT-57]  
24 p4303 A69-43537

## RODICHEV, B. IA.

Reflector characteristics of a solar power installation with photoelectric converters /Kharakteristiki konsentratora solnechnoi energeticheskoi ustanovki s fotopreobrazovateliami/.  
16 p2741 A69-32798

## RODIECK, R. W.

The cat local electroretinogram to incremental stimuli.  
22 p3878 A69-40835

## RODIERE, R.

The legal status of air cushion vehicles /Le statut des aeroglisseurs/.  
19 p3455 A69-36330

## RODIGIN, N. M.

Field theory of a striding transducer. I.  
10 p1697 A69-24071

## RODIMKIN, E. D.

Calculation of heat transfer coefficient of a horizontal surface under the simultaneous action of free and forced convection /Raschet koefitsienta teplootdachi gorizontnoi poverkhnosti pri sovmetnom deistvii svobodnoi i vynuzhdennoi konveksii/.  
10 p1810 A69-24085

## RODIMOV, A. P.

Polarization selection of radar signals /K voprosu o polarizatsionnoi selektsii radiolokatsionnykh signalov/.  
11 p1833 A69-24442

## RODIN, S. A.

Man-operator under conditions of acceleration.  
08 p1265 A69-19939

## RODINA, V. M.

Absolute measurements of radio-emission intensities of the discrete sources Cassiopeia-A and Cygnus-A at 30-60 cm wavelengths /Absolutnye izmereniia interesnosti radioizlucheniia diskretnykh istochnikov Kassiopieia-A i Lebed'-A na volnakh 30-60 cm/.  
19 p3428 A69-36871

## RODINO, M.

The educational satellite transmissions.  
[UN PAPER 68-95533]  
01 p0028 A69-10401

## RODIONOV, B. U.

Electron-ion recombination in the wake of an ionizing particle and the scintillation mechanism of noble gases /Elektron-ionnaia rekombinatsiia na sledakh ionizuiushchei chastitsy i mekhanizm tsintillatsii v blagorodnykh gazov/.  
15 p2655 A69-30961

## RODIONOV, E. M.

Influence of centrifugal forces, acting on the balls, on the axial rigidity of a rapidly rotating radial-thrust bearing /Vliianie tsentrobezhnykh sil, deistviushchikh na shariki, na osevuuiu zhestkost' bystro rotiruiushchego radial'no-upornogo podshimnika/.  
04 p0605 A69-14606

## RODIONOV, IA. G.

Steady-state distribution of the oscillation amplitudes and phase in a tracking filter in the presence of small and large noise /Statsionarnoe raspredelenie amplitudy i fazy kolebaniia v slediaschem fil'tre pri mal'nykh i bol'shikh shumakh/.  
11 p1844 A69-24441

## RODIONOV, IA. S.

Potential possibilities of short-range ionospheric prediction for communications purposes /O potentsial'nykh vozmozhnostiakh kratkosrochnogo prognozirovaniia ionosfery v interesakh svyazi/.  
03 p0421 A69-13377

Some patterns in the coefficients of variation and mean square deviations of critical frequencies of the F sub 2 layer of the ionosphere.  
03 p0422 A69-13514

Simulation of F sub 2 layer disturbance on electronic computers.  
03 p0423 A69-13516

The potentialities of short-term ionospheric forecasting for communications purposes.  
14 p2433 A69-28827

## RODIONOV, IU. N.

Time of measurement of the frequency characteristics by the frequency-modulation method /O vremeni izmereniia chastotnykh kharakteristik metodom chastotnoi moduliatsii/.  
01 p0031 A69-10785

Measuring time of frequency characteristics by the frequency modulation method.  
10 p1653 A69-23114

## RODIONOV, K. P.

Effect of hydro-extrusion on the mechanical properties of molybdenum.  
02 p0267 A69-12189

Investigation of the dislocation structure of molybdenum deformed by hydroextrusion /Issledovanie dislokatsionnoi struktury molibdena, deformirovannogo gidroekstruziei/.  
14 p2463 A69-29311

Mechanical properties of molybdenum after hydroextrusion.  
16 p2803 A69-32491

Mechanical properties of hydro-extruded molybdenum after annealing.  
18 p3156 A69-34719

Anomalous grain growth and the deformation of single crystals during annealing of hydraulically extruded molybdenum /Anomal'nyi rost zeren i obrazovanie monokristallov pri otzhige gidroekstrudirovannogo molibdena/.  
21 p3745 A69-38953

## RODIONOV, S. F.

Absolute photometry of artificial earth satellites in the ultraviolet spectral region /Absolutnaia fotometriia iskusstvennykh sputnikov zemli v ul'trafioletovoi oblasti spektra/.  
14 p2447 A69-29408

## RODIONOVA, V. A.

Effect of the edge clamping conditions on the stressed state of a cylindrical circular shell under the action of concentrated radial forces /Vliianie usloviy zakrepleniia tortsov na napriazhennoe sostoiianie kru-

- govoi tsilindricheskoi obolochki pri deistvii radial'nykh  
sosedotochenykh sil/. 13 p2368 A69-28322
- RODIONOVA, V. T.**  
Determination of the aeronomic parameters of the  
ionospheric F region /Ob opredelenii  
aeronomicheskikh parametrov F-oblasti ionosfery/.  
23 p4156 A69-41844
- RODKIEWICZ, C. M.**  
Pressure induced by weak interaction with unsteady  
hypersonic boundary layers. 24 p4306 A69-43676
- RODKINA, T. E.**  
The nature of interplanetary gas /K voprosu o  
prirode mezplanetnogo gaza/. 09 p1577 A69-21769
- RODNEY, P.**  
Optical studies of pulsar NP 0532. 10 p1774 A69-23182
- RODONO, M.**  
Photometric elements of the binary system S Equ.  
16 p2858 A69-32212
- RODOT, H.**  
Preparation of BiTel crystals /Preparation de  
cristaux du compose BiTel/. 02 p0294 A69-11540  
Properties of the semiconductor compound BiTeBr  
/Proprietes du compose semi-conducteur BiTeBr/.  
05 p0810 A69-16609
- RODOT, M.**  
Two new classes of semiconducting materials - Nar-  
row band gap alloys and ferromagnetic semiconduc-  
tors. 19 p3388 A69-36541
- RODRIGUES, R.**  
Simultaneous observations of the optical and X-ray  
spectra of Sco XR-1. 07 p1220 A69-19391  
Detection of X-rays from the Large Magellanic  
Cloud. 10 p1770 A69-24093  
Further simultaneous observations of the optical and  
X-ray spectra of Sco X-1. 15 p2676 A69-30885
- RODRIGUEZ, D. A.**  
Dynamic analysis and development of response  
histories and tradeoff study charts for spherical impact  
limiters. 04 p0683 A69-15508
- RODRIGUEZ, G.**  
Phase shift vs temperature for braided coax.  
08 p1283 A69-20225
- ROE, G. E.**  
An electronic arrangement suitable for measuring  
time mean products and squares in fluid turbulence at  
low frequencies. 04 p0601 A69-15116
- ROE, J. M.**  
Mechanical behavior of poly(ethylene terephthalate/  
at cryogenic temperatures. 05 p0785 A69-16494
- ROE, P. E.**  
Time symmetric electrodynamics in Friedmann  
universes. 22 p4022 A69-40469
- ROEBUCK, J. O.**  
Monitoring equipment for turbine engine develop-  
ment. 10 p1692 A69-23253
- ROEDER, R. C.**  
The screening of distant objects in universes with  
positive cosmological constant. 10 p1790 A69-24135  
On old universes and galaxy evolution. 14 p2527 A69-29944
- ROEDERER, A.**  
Calculation of the field radiated by a log-periodic  
antenna /Calcul du champ rayonne par une antenne a  
periodicite logarithmique/. 10 p1664 A69-23802
- ROEDERER, A. G.**  
A log-periodic cavity-backed slot array. 08 p1281 A69-20035
- ROEDERER, J. G.**  
Charged particle motion in the earth's magnetic  
field. 03 p0504 A69-14235  
The particle and field environment of the earth. 06 p1001 A69-17158
- Quantitative models of the magnetosphere. 12 p2072 A69-26738  
Effect of shell splitting on radial diffusion in the mag-  
netosphere. 20 p3534 A69-38094
- ROEHLER, R.**  
Measurement of the modulation transfer function of  
the living human eye in reflected light /Zur Messung  
der Modulationsuebertragungsfunktion des lebenden  
menschlichen Auges im reflektierten Licht/. 22 p3884 A69-40888
- ROEHLING, D. J.**  
Experiments using a 25 kw hollow cathode lithium  
vapor MPD arc jet. [AIAA PAPER 69-241] 09 p1561 A69-21222
- ROEHRBORN, B.**  
Results of studies of thermionic reactor systems /Er-  
gebnisse von Studien ueber Thermionikreak-  
torsysteme/. 02 p0279 A69-12662  
Results of studies on various fast and thermal ther-  
mionic reactor systems. 14 p2480 A69-29182
- ROEHRS, R. J.**  
Leak testing cryogenic vessels. 02 p0252 A69-11811  
Leak testing of welded vessels. 07 p1140 A69-18799
- ROELANDS, D. L.**  
The attainment of reliability in subcontracted com-  
ponents. 15 p2723 A69-31139
- ROELKER, A.**  
Satellite motion simulator is operational /Satelliten-  
bewegungssimulator einsatzbereit/. 07 p1116 A69-18260
- ROELOFS, T. H.**  
Corrections to total electron content data for  
changes in layer height. 05 p0816 A69-16281  
The use of f sub 0 F2 data to remove the ambiguity in  
total electron content data. 16 p2779 A69-32196
- ROELS, J.**  
Resonant long-period orbits around Lagrange's equi-  
lateral points. I - Critical mass ratio mu sub 3 /Orbites  
de longues periodes resonates autour des points equi-  
lateraux de Lagrange. I - Rapport de masses critique  
mu sub 3/. 07 p1225 A69-19719  
Resonant long-period orbits around Lagrange's equi-  
lateral points. II - Critical mass ratio mu sub k /k  
greater than or equal to 4/ /Orbites de longues periodes  
resonantes autour des points equilateraux de Lagrange.  
II - Rapports de masses critiques mu sub k /k greater  
than or equal to 4//. 13 p2346 A69-27706  
A new family of periodic orbits around equilateral  
points for a resonance of 1/4. III /Nouvelle famille  
d'orbites periodiques autour des points equilateraux  
pour la resonance 1/4. III/. 16 p2854 A69-31654
- ROEMER, E.**  
Comet notes. 07 p1216 A69-19205  
Comet notes. 08 p1408 A69-21140  
Comet notes. 12 p2172 A69-27161  
Comet notes. 19 p3403 A69-35970
- ROEMER, M.**  
The spatiotemporal behavior of the upper at-  
mosphere, determined from orbital changes of artificial  
satellites /Das raumzeitliche Verhalten der Hochat-  
mosphaere, erschlossen aus Bahnaenderungen kuenst-  
licher Satelliten/. 17 p2959 A69-32924
- ROENNAENG, B.**  
New OH radio emission sources in Cygnus. 11 p1964 A69-25403
- ROENNAENG, B. O.**  
Propagation and reflection of an electromagnetic  
transient in a layered ionized medium. 17 p2924 A69-33839
- ROEPCKE, L. A.**  
Army Materiel Command planning principles and  
philosophy. 08 p1423 A69-21153
- ROESCH, J.**  
Applications of laser measurements of the earth-  
moon distance /Les applications des mesures de  
distance terre-lune par laser/. 16 p2788 A69-31624
- ROESCHMANN, P.**  
Resonators made of yttrium-iron-garnet single  
crystals and their use in the microwave range /Resona-  
toren aus Yttrium-Eisen-Granat. Einkristallen und ihre  
Anwendungen im Mikrowellenbereich/. 11 p1855 A69-25627
- ROESEL, G.**  
A basis for the calculation of a DC measuring ampli-  
fier with a time-variable feedback /Eine Berechnung-  
grundlage fuer Gleichspannungsmessverstaecker mit  
zeitvariabler Gegenkopplung/. 09 p1467 A69-22560
- ROESEL, W.**  
Automatic contour plotting in the production of  
orthophotos /Automatische Erzeugung von  
Hochenschichtlinien bei der Herstellung von  
Orthophotos/. 22 p3951 A69-41248
- ROESER, E. P.**  
Comparison of helicopter combat environments to  
structural criteria requirements. [AHS PAPER 375] 17 p3059 A69-33513
- ROFSLER, F. L.**  
Measurement of the abundance of CO sub 2 in the  
Martian atmosphere. 09 p1607 A69-22427
- ROESLER, U.**  
Some problems of the metallurgy and technology of  
beryllium /Einige Probleme der Metallkunde und  
Technologie des Berylliums/. 16 p2793 A69-31788
- ROESNER, K.**  
Calculation of three-dimensional time-dependent  
gas flows with the aid of the four-dimensional theory of  
characteristics /Die Berechnung raemlicher, zeitab-  
haengiger Gasstroemungen mit Hilfe der vierdimen-  
sionalen Charakteristikentheorie/. 10 p1632 A69-22913
- ROESS, D.**  
Laser modulation /Modulation von Lasern/. 22 p3959 A69-39975
- ROESSGER, E.**  
Physicotechnical principles of a system for monitor-  
ing takeoffs of large aircraft /Physikalisch-technische  
Grundlagen fuer ein System zur Ueberwachung des  
Startvorganges bei Grossfluezeugen/. 12 p2128 A69-26119
- ROESSLER, G. D.**  
Corrosion and the EMI/RFI knitted wire mesh  
gasket. 09 p1523 A69-21895
- ROESSLER, R.**  
Stability and habituation of nonspecific GSRs. 03 p0380 A69-13462
- ROETLING, J. A.**  
Extreme temperature performance of graphites.  
[AIAA PAPER 68-297] 04 p0621 A69-15329
- ROETLING, P. G.**  
Partial defocus correction by defocus of a coherent  
optical system. 14 p2450 A69-29641
- ROFE, B.**  
Australian sounding rocket experiments comple-  
menting satellite firings. [UN PAPER 68-95214] 06 p1013 A69-17076  
Solar absorption photometry and the determination  
of atmospheric composition. 12 p2065 A69-26106  
Satellite measurement of upper atmospheric molecu-  
lar oxygen densities. 20 p3523 A69-37413
- ROFFI, G.**  
An upper limit to continuous emission of CP 1133 at  
various pulse intensity levels. 06 p1009 A69-17969
- ROFFMAN, G. L.**  
A discussion of the effects of sound on jets and fluer-  
ic devices. [ASME PAPER 69-VIBR-3] 10 p1640 A69-24161
- ROGALLO, F. M.**  
NASA research on flexible wings. 05 p0701 A69-15568



**ROGASHKOVA, A. I.**

Amplification in a plasma beam system.  
05 p0736 A69-16790

**ROGAVA, O. G.**

Specific features of the asymmetrical solar wind and cosmic-ray absorption in the earth's atmosphere /Osobennosti asimmetrichnogo solnechnogo vetra i pogloshchenie kosmicheskikh luchei v zemnoi atmosfere/.  
10 p1760 A69-22844

**ROGER, K. L.**

Gust design envelope of interacting loads.  
20 p3621 A69-37167

**ROGER, R. S.**

Low-frequency absorption due to IC 1805 and IC 1848.  
10 p1787 A69-24115  
Spectral flux densities of radio sources at 22.25 MHz.I.  
16 p2860 A69-32231  
Large 22-MHz array for radio astronomy.  
20 p3507 A69-37837

**ROGERS, A. C., JR.**

State-of-the-art cryogenic thermal protection for space application.  
12 p2175 A69-26827

**ROGERS, A. E.**

Quaternion parameters in the simulation of a spinning rigid body.  
05 p0724 A69-16469

**ROGERS, A. E. E.**

Venus - Mapping the surface reflectivity by radar interferometry.  
21 p3806 A69-39331

**ROGERS, C.**

Backlund and generalized Legendre transformations in gasdynamics.  
21 p3695 A69-39001

**ROGERS, C. C.**

Stresses at end-milled keyways in plain shafts subjected to tension, bending, and torsion.  
19 p3445 A69-36827  
Protein catabolism in young mice following whole-body X irradiation.  
23 p4099 A69-42151

**ROGERS, C. E.**

A gas-cap radiation probe for the detection of driver gas in the test section of a hypersonic shock tunnel.  
19 p3294 A69-35753

**ROGERS, C. G.**

MOST's at cryogenic temperatures.  
03 p0405 A69-13642  
Low frequency noise in MOST's at cryogenic temperatures.  
06 p0979 A69-17151

**ROGERS, C. R.**

The yielding of truncated solid cones under quasi-static and dynamic loading.  
04 p0682 A69-15301

**ROGERS, D. F.**

Reverse flow solutions for compressible laminar boundary-layer equations.  
15 p2591 A69-30907  
Further similar laminar-flow solutions.  
16 p2772 A69-32173

**ROGERS, D. P.**

NASA's developing strategy of space applications.  
03 p0511 A69-13427

**ROGERS, E.**

A new solar observatory in California.  
11 p1862 A69-24792

**ROGERS, E. H.**

A numerical study of wide-gap Taylor vortices.  
15 p2593 A69-31518

**ROGERS, G. L.**

Secondary cells with lithium anodes and immobilized fused-salt electrolytes.  
04 p0552 A69-15330

**ROGERS, H. H.**

The formation of chlorine pentafluoride in an electrochemical cell. I - From chlorine trifluoride.  
13 p2217 A69-28134  
The formation of chlorine pentafluoride in an electrochemical cell. II - From chlorine.  
13 p2217 A69-28135

**ROGERS, I. W.**

Observations of multiple muons in cosmic rays at a variety of zenith angles.  
15 p2678 A69-31484

**ROGERS, J. W.**

An investigation of the decoupling effects in a magnetic forming beryllium coil assembly.  
11 p1888 A69-25310

**ROGERS, K. H.**

Experimental investigations of ground-jet suppression fences for VTOL aircraft prepared sites.  
[AIAA PAPER 68-639] 17 p2902 A69-34028

**ROGERS, T. A.**

Studies on Arctic survival.  
23 p4088 A69-41810

**ROGERS, V. A. B.**

Concepts and techniques in advanced helicopter design.  
17 p2897 A69-33209

**ROGGE, J. D.**

Comparison of the incidence of cardiac arrhythmias during plus G sub x acceleration, treadmill exercise and tilt table testing.  
06 p0874 A69-17834  
Aeromedical aspects of the first nonstop transatlantic helicopter flight. II - Heart rate and ECG changes.  
19 p3263 A69-36451

**ROGGE, T.**

A coupled thermoelastic problem.  
21 p3836 A69-38927

**ROGGE, T. R.**

Stable elastic waves in anisotropic materials.  
02 p0348 A69-12609

**ROGGENKAMP, C. H.**

Microwave radio interference studies by computer.  
11 p1840 A69-25312

**ROGGER, J. S.**

The solution of adhesive bonding production problems.  
04 p0606 A69-14845  
Metalbonding in satellites and space vehicles - Applications and experiences.  
12 p2101 A69-25859

**ROGIN, L.**

An aircraft squadron performance effectiveness model.  
03 p0367 A69-13911

**ROGISTER, A.**

On the kinetic theory of stable and weakly unstable plasma. II.  
08 p1360 A69-19991

**ROGNLIEN, T. A.**

Pressure gage for high noise environment.  
15 p2611 A69-31029

**ROGO, I. V.**

Theory of a laser with an additional mirror. II /K teorii lazera s dopolnitel'nym zerkalom. II/.  
07 p1148 A69-18802

**ROGOVA, I. V.**

Theory of lasers with an additional mirror. I /K teorii lazerv s dopolnitel'nym zerkalom. I/.  
04 p0612 A69-15372  
Theory of lasers with an ancillary mirror. I.  
16 p2797 A69-32119  
On the theory of lasers with an additional mirror. II.  
21 p3736 A69-38947

**ROGOVTSEV, P. N.**

Investigation of gas protection of optical quartz from heating by a dense plasma /Issledovanie gazovoi zashchity opticheskogo kvartsa ot nagreva plotnoi plazmoi/.  
11 p1926 A69-24616

**ROGOWSKI, L. K.**

Reversible opacity of an optical quartz occurring during contact with a dense plasma /Obratimaia neprozrachnost' opticheskogo kvartsa, voznikaiushchaia pri kontakte s plotnoi plazmoi/.  
14 p2490 A69-29159

**ROGOWSKI, L. K.**

Primary electron detector experiment for OGO-E.  
[IEEE PAPER 3C-4] 07 p1135 A69-19198

**ROGOZHIN, A. M.**

Electron-ion recombination in the wake of an ionizing particle and the scintillation mechanism of noble gases /Elektron-ionnaya rekombinatsiia na slede ionizuiushchei chastitsy i mekhanizm stsintillatsii blagorodnykh gazov/.  
15 p2655 A69-30961

**ROGOZHIN, E. V.**

Spectrum and power of a signal scattered by the ionosphere /K voprosu o spektre i moshchnosti rasseyannogo ionosferoi signala/.  
17 p2930 A69-33899

**ROGSTAD, D. H.**

Radio sources and elliptical galaxies.  
22 p4025 A69-40675

**ROHATGI, V. K.**

Ion drag and current partitioning at the cathode of a plasma accelerator.  
[AIAA PAPER 67-657] 13 p2312 A69-28212  
A system for the measurement of the absorptivity and emissivity of a vehicle during flight conditions.  
15 p2613 A69-31269

**ROHDE, E.**

The stabilization of turbulent ammonia-air flames in flameholders.  
21 p3849 A69-38811

**ROHDE, H. J.**

Injection and field-induced excitation of charge carriers in CdS single crystals.  
21 p3779 A69-38421

**ROHDE, R. W.**

Equation of state of shock-loaded tungsten at 950 deg C.  
20 p3564 A69-38121

**ROHDE, W.**

Precipitation behavior and mechanical properties of various heat-resistant alloys with cobalt contents to 35 percent /Auscheidungsverhalten und mechanische Eigenschaften verschiedener Warmfester legierungen mit Kobaltgehalten bis 35 percent/.  
08 p1334 A69-20760

**ROHLES, F. H.**

Social entrainment of biorhythms in rhesus monkeys.  
24 p2600 A69-42704

**ROHLFING, D. L.**

The effect of time of heating on the thermal polymerization of L-lysine.  
13 p2218 A69-28435

**ROHLFS, K.**

Distance estimates for pulsars.  
08 p1397 A69-20695

**ROHLICEK, F.**

The TESLA TKG 101 ruby laser /Rubinovy laser TESLA TKG 101/.  
08 p1327 A69-20881

**ROHLICEK, FR.**

Ruby-laser resonator terminated by a rectangular prism /Resonator rubinoveho laseru zakonceny pravouhlym hranolem/.  
05 p0777 A69-16526

**ROHLIK, H. E.**

Instrumentation used to define performance of small size, low power gas turbines.  
[ASME PAPER 69-GT-104] 09 p1501 A69-22522

**ROHR, J. A.**

Automatic maintenance of aerospace computers and spacecraft information and control systems.  
[AIAA PAPER 69-966] 22 p3906 A69-40341

**ROHRBOUGH, S. F.**

An air-launched windsonde.  
10 p1692 A69-23254

**ROHRWASSER, W.**

Gastric motility and pH during natural human sleep /Das Verhalten von pH und Motilitaet des Magens im natuerlichen Schlaf des Menschen/.  
23 p4093 A69-42063

**ROHSENOW, W. M.**

Dispersed flow film boiling.  
[ASME PAPER 68-HT-44] 02 p0351 A69-12203  
A new correlation of pool boiling data including the effect of heating surface characteristics.  
[ASME PAPER 68-WA/HT-22] 05 p0847 A69-16125

**ROIFE, I. M.**

High-frequency stabilization of a plasma cylinder carrying current in a longitudinal magnetic field.  
04 p0635 A69-14549

**ROIG, J.**

Granularity of a scattering surface illuminated by coherent light - Observation in the focal plane /Granularite d'une plaque diffusante eclairee en lumiere coherente - Observation dans le plan focal/.  
21 p3741 A69-39575

## ROINISHVILI, N. N.

- Possibilities of investigating resonances and fireballs at energies from 10 super 11 to 10 super 12 ev.  
13 p2303 A69-28380
- Inelastic interaction cross section of 7 x 10 super 10 to 10 super 12 ev nuclear- interacting particles in carbon and iron.  
13 p2330 A69-28383

## ROINISHVILI, V. N.

- Delayed coincidences in air showers.  
13 p2331 A69-28402

## ROITBERG, I. A.

- Theorem of homeomorphisms for elliptic systems and its applications /Teorema o gomeomorfizmakh dlia ellipticheskikh sistem i ee prilozheniia/.  
13 p2287 A69-27515

## ROITENBERG, E. I. A.

- Theory of interconnected nonlinear controlled systems /K teorii vzaimosviazannykh nelineinykh upravliayemykh sistem/.  
01 p0050 A69-10354
- The observability of nonlinear systems /O nabliudamosti nelineinykh sistem/.  
13 p2238 A69-27742

## ROITENBURG, D. I.

- Application of a shock wind tunnel to a study of diffusers /Primenenie udarnoi aerodinamicheskoi truby dlia issledovaniia difuzorov/.  
14 p2391 A69-29622

## ROITFARB, I. Z.

- Self-conjugacy of boundary value problems in engineering shell theory /O samosopriazhennosti kraevykh zadach tekhnicheskoi teorii obolochek/.  
23 p4229 A69-41999
- Properties of contour integrals in plate bending problems /Svoistva konturnykh integralov v zadachakh izgiba plastin/.  
23 p4230 A69-42002

## ROITSCH, P. A.

- A review of operational experience and pilot considerations for aircraft ground operations.  
[SAE PAPER 690378] 23 p4062 A69-41654

## ROIZ, E. F.

- Considerations in the application of modems to data processing systems.  
04 p0564 A69-15208

## ROIZIN, N. M.

- Heat absorption and release in transistors /O pogloshchenii i vydelenii tepla v tranzistorakh/.  
12 p2042 A69-26880

## ROIZMAN, D. KH.

- Laminar pulsating fluid flow in circular tubes /Laminarnoe pul'siruiushchee techenie zhidkosti v kruglykh trubakh/.  
15 p2592 A69-30988

## ROJAS, H. R.

- Photograph of Copernicus/ques/  
01 p0154 A69-10898

## ROJAS, R. R.

- Reduced averaging processing in sonar for extended target detection.  
04 p0562 A69-15477

## ROKHLENKO, K. D.

- Some effects developing during hypokinesia.  
02 p0198 A69-11502
- Changes in the transversostriated muscle fibers of mice with restricted motor activity /Izmeneniia poperechnopolosatogo myshechnogo volokna pri ogranichenii dvigatel'noi aktivnosti myshej/.  
13 p2212 A69-28616

## ROKHLIN, L. L.

- A new field of application of light alloys /Novaia oblast' primeneniia legkikh sployov/.  
20 p3564 A69-38290

## ROKITIANSKII, I. I.

- An experiment in magnetovariational sounding during the early phases of geomagnetic storms /Opyt magnitovariatsionnogo zondirovaniia po nachal'nyim fazam geomagnitnykh bur/.  
20 p3521 A69-37040

## ROKNI, M.

- Enhanced and stimulated multiphoton processes in free atoms.  
[IEEE PAPER S-8] 07 p1154 A69-19080
- Induced versus parametric scattering processes in potassium.  
23 p4171 A69-41391

## ROKOTIAN, V. E.

- Some group-invariant solutions to the equations of the dynamics of the atmosphere.  
02 p0274 A69-11444

## ROKOTOV, V. P.

- Some problems in the synthesis of linear two-dimensional systems /Nekotorye voprosy sinteza lineinykh dnumernykh sistem/.  
14 p2425 A69-28908

## ROLAND, G.

- High resolution spectra of the sun.  
13 p2341 A69-27588
- Observation of the asteroid Icarus at the Royal Observatory of Belgium /Observation de l'asteroide Icare a l'Observatoire Royal de Belgique/.  
14 p2521 A69-29584

## ROLAND, H. L.

- Advanced design weight analysis and systems and equipment weight prediction.  
[SAWE PAPER 790] 18 p3220 A69-34867

## ROLDAN, R.

- Investigation of low power laser signals with picosecond resolution.  
09 p1516 A69-21742

## ROLDAN, R. H. R.

- Spiking in light pulses from GaAs Q-switched junction lasers.  
22 p3963 A69-40563

## ROLDUGIN, V.

- Successive development of electromagnetic /ULF and VLF/ and light emissions during magnetic substorms /Developpement successif des emissions electromagnetiques /U.B.F. et T.B.F./ et lumineuses au cours des sous-orages magnetiques/.  
16 p2788 A69-32648

## ROLDUGIN, V. K.

- Relation between the irregular pulsations of the geomagnetic field and the pulsations of polar aurorae and ULF radiation /O sviazi irreguliarnykh pul'satsii geomagnitnogo polia s pul'satsiiami poliarnykh siianii i UNCh- izlucheniem/.  
09 p1485 A69-21536

- Relationship between irregular geomagnetic field pulsations and the pulsations of auroras and of VLF emission.  
16 p2783 A69-32531

- Complex investigation of the polar ionosphere /Kompleksnoe issledovanie poliarnoi ionosfery/.  
17 p2963 A69-33950

- Pulsations of polar auroras /O pul'satsiakh poliarnykh siianii/.  
17 p2963 A69-33954

- Intensity ratio of INGO super plus sub 2 to IPGN sub 2 as a function of the polar auroral height /Ob otoshenii intensivnosti INGO super plus sub 2 i IPGN sub 2 v zavisimosti ot vysoty poliarnogo siianiia/.  
17 p2963 A69-33956

## ROLFF, J.

- Latest results at SAO /Poslednie rezul'taty SAO/.  
12 p2068 A69-26428

## ROLLAND, J.-N.

- The fluid amplifier with a sudden widening /L'amplificateur fluide a evasement brusque/.  
17 p2903 A69-33010

## ROLLAND, P.

- Stabilization of dissipative drift instability by a high-frequency field /Stabilisation par un champ de haute frequence de l'instabilite de derive dissipative/.  
13 p2308 A69-27979

## ROLLER, M. L.

- Precursor cerebral circulation models.  
19 p3264 A69-36867

## ROLLING, R. E.

- Scale modeling of multilayer insulated spacecraft for use in preliminary design studies.  
[AIAA PAPER 69-613] 17 p3049 A69-33267

## ROLLINS, T. L.

- Radiation from hypervelocity impact generated plasma.  
[AIAA PAPER 69-364] 13 p2313 A69-28296

## ROLSTON, J. A.

- Fill-to-warp ratio effects in woven roving laminates.  
14 p2469 A69-29414

## ROM, F. E.

- The potential of nuclear power for high-speed ocean-going air-cushion vehicles.  
[AIAA PAPER 69-416] 15 p2550 A69-30480
- Status of the nuclear powered airplane.  
[AIAA PAPER 69-554] 16 p2811 A69-32761

## ROM, J.

- The semi-empirical parameters used in the dividing streamline and the momentum integral analyses for separated flows.  
14 p2389 A69-29028

## ROMAN, V. M.

- Calculation of a supercavitation flow past thin foils near a dividing boundary /Raschet superkavitatsionnogo obtekaniia tonkikh profilei vblizi granitsy razdela/.  
22 p3933 A69-41023

## ROMAN, W. C.

- Investigation of high-pressure, vortex- stabilized R-F plasma discharges.  
[AIAA PAPER 69-695] 17 p3010 A69-33442

## ROMAND, P.

- Assembly techniques for digital circuits /Technique d'assemblage de circuits digitaux/.  
20 p3505 A69-37401

## ROMANENKO, P. F.

- Dependence of photosensitivity of a semiconductor-metal system on thickness of semiconducting layer.  
14 p2508 A69-29666

## ROMANENKOVA, I. N.

- Experimental application of a universal program of the Leningrad State University Computer Center for calculating axisymmetrically deformed shells of revolution /Opyt ekspluatatsii universal'noi programmy VTs LGU dlia rascheta obolochek vrashcheniia pri osemimetricnoi deformatsii/.  
06 p1026 A69-18019

## ROMANI, R.

- Design of a local oscillator for a space telecommunications repeater /Realizzazione di un oscillatore locale per ripetitore spaziale di telecomunicazioni/.  
08 p1286 A69-20596

## ROMANIUK, L. I.

- The primary electron energy spectrum and the potential drop in the penetrating plasma of a hot cathode Penning discharge.  
06 p0963 A69-16899

- Plasma flow from a Penning discharge with an incandescent cathode into a vacuum free of a magnetic field /Istechenie plazmy iz razriada Penninga s nakalennym katodom v vakuumnuu oblast', svobodnuu ot magnitnogo polia/.  
11 p1933 A69-25543

## ROMANIUK, S. M.

- The atmospheric refraction coefficient for IR radiation /in the 1-6 mu spectral range/.  
04 p0591 A69-14300

## ROMANO, A.

- Amplifier with a logarithmic transfer function over five decades /Amplificatore con funzione di trasferimento logaritmica per oltre cinque decenni/.  
01 p0038 A69-10075

- DC-to-DC converter stabilized at high performance /Convertitore corrente continua- corrente continua stabilizzato ad alto rendimento/.  
16 p2765 A69-32443

- Possibilities of using vertical takeoff aircraft for air transport services /Possibilita di impiego di velivoli a decollo verticale per servizi di trasporto aereo/.  
20 p3461 A69-37281

## ROMANO, M. J.

- Predicting combined neutron degradation and gamma induced effects on a closed loop system.  
06 p0899 A69-16889

## ROMANOV, A. A.

- Vacuum system of the Sirius stellarator.  
03 p0412 A69-13839

## ROMANOV, A. M.

- Fluxes of fast neutrons in the atmosphere.  
03 p0501 A69-13528

- Energy spectrum of slow atmospheric neutrons /Energeticheskii spektr medlennykh atmosferynykh neutronov/.  
10 p1758 A69-28231

- Intensity measurements of gamma-rays with energies from 0.3 to 3 Mev at various depths of the atmosphere /Izmerenie intensivnosti gamma-luchej s energiei ot 0,3 do 3 Mev na razlichnykh glubinakh atmosfery/.  
10 p1770 A69-23924

- Determination of coupling coefficients from the azimuthal effect of cosmic rays /Opredelenie koefitsientov sviazi po azimuthal'nomu efektu kosmicheskikh luchej/.  
10 p1770 A69-23925



# ROMANOV, E. P.

## ROMANOV, E. P.

Structure of the alloy Zr-4 percent Nb, and its influence on the critical superconductivity parameters.  
05 p0811 A69-16806

## ROMANOV, G. S.

The screening of a metallic surface with the products of its degradation by low-density laser radiation /Ekranirovanie poverkhnosti metalli produktami razrusheniia ee potokami izlucheniia OKG maloi plotnosti/.  
03 p0442 A69-14221

Temperature dependence of the optical constants of a metal in heating by laser radiation.  
06 p0932 A69-16915

## ROMANOV, I. A.

Acoustic plasma waves in thin films /Akusticheskie plazmennye volny v tonkikh plenkach/.  
02 p0300 A69-12649

Kinetic theory of a bounded plasma /K kineticheskoi teorii ograniichennoi plazmy/.  
03 p0477 A69-13712

A possible generalization of the equations of the gravitational field.  
10 p1725 A69-23714

Penetration of a longitudinal electric field into a semibounded plasma.  
12 p2138 A69-26711

The orders of the inertial forces and the pressure gradient in the boundary layer at equatorial latitudes /O poriadkakh sil inertsi i baricheskogo gradienta v prizemnom sloe priekvatorial'nykh shiroi/.  
13 p2293 A69-27845

## ROMANOV, L. M.

Methods of determining the parameters of motion of artificial earth satellites from a selection of a complete or increasing volume of measurements using second-order derivatives /Metody opredeleniia parametrov dvizheniia ISZ po vyborke izmerenii polnogo i narastaiushchego ob'emov s ispol'zovaniem proizvodnykh vtorogo poriadka/.  
22 p4033 A69-41088

## ROMANOV, O. V.

Surface potential of an anodized surface of n-type silicon.  
04 p0643 A69-15260

## ROMANOV, V. A.

Anisotropy of electrical conductivity in the vicinity of contacts in isotropic semiconductors.  
20 p3584 A69-37786

## ROMANOV, V. O.

Anisotropy of the electrical conductivity in the near-contact area of isotropic semiconductors /Anizotropiia elektroprovodnosti u prikontaktnii oblasti izotropnykh napivprovodnikov/.  
05 p0808 A69-16216

## ROMANOVA, A. IA.

Extraction-photometric determination of titanium with diantipryl methane and thiocyanate /exchange of experience/.  
20 p3544 A69-37812

## ROMANOVA, E. A.

Effect of oxygen concentration and the structure on the properties of alloy TS5.  
15 p2637 A69-30266

## ROMANOVA, L. M.

The light field in deep layers of a turbid medium illuminated by a narrow beam.  
02 p0274 A69-11449

Light field in the boundary layer of a turbid medium with strongly anisotropic scattering illuminated by a narrow beam /Svetovoe pole v pogranichnom sloe mutnoi sredy s sil'no anizotropnym rasseianiem pri osveshchenii uzkim puchkom/.  
05 p0789 A69-16640

Light field in the boundary layer of a turbid medium with strongly anisotropic scattering illuminated by a narrow beam.  
14 p2482 A69-28796

## ROMANOVA, N. A.

The orders of the inertial forces and the pressure gradient in the boundary layer at equatorial latitudes /O poriadkakh sil inertsi i baricheskogo gradienta v prizemnom sloe priekvatorial'nykh shiroi/.  
13 p2293 A69-27845

## ROMANOVA, N. N.

Vertical propagation of sound waves in an atmosphere with height-variable viscosity.  
02 p0274 A69-11440

## ROMANOVA, R. M.

Equivalent circuit of an open varactor /Ekvivalentnaia skhema otkrytogo varaktora/.  
04 p0575 A69-14465

## ROMANOVA, R. R.

Effect of natural ageing on subsequent artificial ageing of aluminium alloys.  
04 p0614 A69-14634

Investigation of the dislocation structure of molybdenum deformed by hydroextrusion /Issledovanie dislokatsionnoi struktury molibdena, deformirovannogo gidroekstruziei/.  
14 p2463 A69-29311

## ROMANOVICH, I. V.

Phase diagram of the chromium-boron system /Diagramma sostoiianiia sistemy khrom-bor/.  
15 p2641 A69-31185

## ROMANOVSKII, M.

Towards thermonuclear fusion.  
01 p0156 A69-11065

## ROMANOVSKII, R. K.

Boundedness tests of solutions of a mixed boundary value problem for a second-order hyperbolic equation in a Banach space /Priznaki ograniichenosti reshenii odnoi smeshannoi kraevoi zadachi dlia giperbolicheskogo uravneniia II poriadka v banakhovom prostranstve/.  
12 p2122 A69-26573

## ROMANS, H. B.

Atmospheric stress corrosion testing of aluminum alloys.  
01 p0100 A69-11352

## ROMANYCHEV, A. A.

Peculiarity in the radio-emission spectrum of the Crab Nebula in the decimeter wavelength range /Ob osobennosti v spektre radioizlucheniia krabovidnoi tumannosti v detsimetrovom diapazone voln/.  
10 p1784 A69-23941

## ROMASHCHENKO, I. A.

Electric fields in the auroral ionosphere /Elektricheskie polia v avral'noi ionosfere/.  
14 p2437 A69-29070

## ROMASHKINA, A. S.

Measurements of the phase fluctuations of a signal reflected from the ionosphere in the case of oblique incidence /Izmereniia fluktuatsii fazy otrazhennogo ot ionosfery signala pri naklonnom padenii/.  
10 p1657 A69-23913

## ROMASHOV, V. M.

Phase diagram of the chromium-boron system /Diagramma sostoiianiia sistemy khrom-bor/.  
15 p2641 A69-31185

## ROMBERG, H. F.

Evaluation of failure detection methods.  
18 p3146 A69-34511

## ROMEISER, H. J.

Some problems of the metallurgy and technology of beryllium /Einige Probleme der Metallkunde und Technologie des Berylliums/.  
16 p2793 A69-31788

## ROMEISER, K. P.

The effect of water on the air-supported radome of the 25-m-antenna at Raisting.  
07 p1111 A69-19533

## ROMEO, D. J.

Hypervelocity shock tunnel investigations of wake fluid and plasma properties.  
[AIAA PAPER 69-330] 13 p2242 A69-28266

## ROMER, A.

Thermostatic control of the birefringent filter of the Wroclaw Observatory coronagraph.  
22 p3943 A69-40000

## ROMERO, H. V.

Some new approaches to shallow impurity states.  
10 p1745 A69-23361

## ROMINE, W. D.

Numerical studies of ejecta characteristics behind thin plates.  
[AIAA PAPER 69-357] 13 p2366 A69-28290

## ROMISHEVSKII, E. A.

On the effect of a radiation entropy layer.  
07 p1050 A69-18755  
Nonequilibrium radiation of a strong shock wave /O neravnovesnom izluchении sil'noi udarnoi volny/.  
13 p2245 A69-27380

## ROMODANOVA, L. D.

Mechanism of the action of V sub 2 O sub 5 additions on the combustion rates of compositions based on ammonium perchlorate and metallic fuels /O mekhanizme deistviia dobavki V sub 2 O sub 5 na skorost' goreniia sostavov na osnove perkhlorata ammoniia i metallicheskiikh goruchikh/.  
08 p1375 A69-20342

## ROMOHLER, S.

Time-zone effects.  
16 p2745 A69-32444

## ROMPOLT, B.

The influence of the filamentary structure of prominences and flares on the equivalent widths of lines.  
22 p4001 A69-39994

Illumination in H alpha of a moving prominence by the photosphere.  
22 p4011 A69-39995

A statistical investigation of sunspots and chromospheric flares.  
22 p4001 A69-39999

The Wroclaw Observatory coronagraph.  
22 p3943 A69-39999

Thermostatic control of the birefringent filter of the Wroclaw Observatory coronagraph.  
22 p3943 A69-40000

## RON, A.

Raman spectrum of alpha-N sub 2.  
23 p4194 A69-42204

## RON, N.

An integrated computerized reliability monitoring program for aircraft systems and components.  
12 p2055 A69-25972

## RONA, J.

Certain aerothermodynamic problems of thrust inverters in rocket thrusters /Quelques problemes aerothermodynamiques des inverseurs de pousse des propulseurs d'engins/.  
17 p3018 A69-33327

## RONCA, L. B.

The surface geochemistry of solid bodies in space.  
08 p1407 A69-20935

Large-scale evolution of the lunar surface.  
14 p2528 A69-29947

## RONCHI, L.

Phase correlation measurements of a laser beam propagated through a turbulent medium.  
17 p2976 A69-33857

## RONCIN, J. C.

Evaluation of the reliability of integrated circuits /Evaluation de la fiabilite des circuits integres/.  
15 p2626 A69-3083

## RONGEN, J. J.

Stability considerations in monolithic integrated circuit amplifier limiters.  
07 p1103 A69-18883

## RONNQVIST, A.

The effect of ordering and stacking fault energy on the sensitivity to stress corrosion cracking.  
19 p3350 A69-36892

## RONZIN, V. D.

Calculation and realization of the areas of turbine through-flow cross sections /O raschete i obespechenii ploshchadei prokhodnykh sечenii turbiny/.  
18 p3184 A69-34987

## ROOD, R. T.

Age and initial helium abundance of globular cluster stars.  
22 p4035 A69-41205

## ROOKE, D. P.

A study of crack tip deformation and a derivation of fracture energy.  
10 p1709 A69-23056

Fatigue crack propagation in clad RR58 sheet to DTD 5070A - Analysis and correlation of test results.  
13 p2280 A69-27835

## ROOME, G. T.

Thin ferrite devices for microwave integrated circuits.  
01 p0040 A69-10192

## ROORDA, J.

On the buckling of symmetric structural systems with first and second order imperfections.  
03 p0529 A69-14062

Some statistical aspects of the buckling of imperfection-sensitive structures.  
11 p1969 A69-24415

On the domain of asymptotic stability of nonlinear nonconservative systems.  
16 p2873 A69-32059

## ROOS, D. G.

Stability of highly elliptic Venus orbits under the influence of solar gravitational perturbations.  
02 p0331 A69-12819

- ROOS, F. W.**  
Hydrogen bubble flow visualization at low Reynolds numbers.  
24 p4298 A69-43691
- ROOSEN, J.**  
Some features of the solar microwave emission and their connection with geomagnetic activity. I.  
18 p3188 A69-35396  
Some features of the solar microwave emission and their connection with geomagnetic activity. II.  
20 p3589 A69-37557  
Some features of the solar microwave emission and their connection with geomagnetic activity. III - Sun-spots and geomagnetic activity.  
22 p4020 A69-40306
- ROOSEN, R. G.**  
A photographic investigation of the gegenschein and the earth-moon libration point L sub 5.  
07 p1212 A69-18602  
Messier 87 - The galaxy of greatest known mass.  
15 p2695 A69-30883
- ROOT, C. B.**  
Metal fluoride compounds as cathodes for thermal batteries.  
10 p1640 A69-23997
- ROOT, C. D.**  
Method for determining total burn-in dissipation in a diode.  
15 p2579 A69-31043  
Failure analysis techniques used in a reliability analysis laboratory.  
15 p2722 A69-31133  
Integrated circuit failure mechanisms and their detection through failure analysis - 1969 survey.  
19 p3282 A69-35786
- ROOT, F. A.**  
Hot plastic molding of ceramics.  
17 p2978 A69-33376
- ROOT, W. L.**  
Capacity of classes of Gaussian channels.  
04 p0558 A69-15006
- ROPER, A. T.**  
Development of aircraft vortex wakes in turbulent flow.  
11 p1819 A69-25377
- ROPER, R. G.**  
Measurements of tidal-period winds in the 95- to 135-kilometer region.  
20 p3574 A69-38092
- ROPER, R. W.**  
High altitude profiles of wind velocity, temperature and density.  
15 p2598 A69-31319
- ROPKE, A.**  
Contribution to the study of emission factors of metals /Contribution a l'etude des indicatrices d'emission des metaux/.  
07 p1242 A69-18952  
Influence of the anomalous skin effect on the emissivity factors of metals /Influence de l'effet anormal de peau sur les indicatrices d'emission des metaux/.  
23 p4177 A69-42212
- ROQUE, C.**  
Scattering of charged particles in a weakly unstable plasma.  
03 p0475 A69-13151
- ROQUES, B.**  
Influence of allotropy of molybdenum disilicide MoSi sub 2 on the siliciding of molybdenum and its alloys /Consequences de l'allotropie du disiliciure MoSi sub 2 pour la siliciuration du molybdene et de ses alliages/.  
[ONERA-TP-642] 08 p1335 A69-19967
- ROQUET, J.**  
Microstructures at various latitudes and the spectral composition of the magnetic perturbations of February 1965 and March 1966 /Microstructures a diverses latitudes et composition spectrale des perturbations magnetiques de fevrier 1965 et mars 1966/.  
01 p0069 A69-11126  
A particular case of geomagnetic pulsations observed in the equatorial regions of Africa /Sur un cas particulier de pulsations geomagnetiques observees dans les regions equatoriales d'Afrique/.  
09 p1491 A69-22051
- RORKE, J. B.**  
The prescribed wake-momentum analysis - A hover performance analysis combining the strip-momentum and prescribed wake theories.  
18 p3088 A69-35221
- ROSANOFF, R. A.**  
A survey of modern nonsense as applied to matrix computations.  
11 p1910 A69-25522
- ROSATI, V.**  
Quick-look system for virtual real-time telemetry reception of topside ionograms.  
20 p3508 A69-37862
- ROSATO, D. V.**  
Structural-sandwich construction.  
21 p3836 A69-38935
- ROSCHKE, E. J.**  
Heat transfer and laminar boundary-layer distributions in an internal subsonic gas stream at temperatures up to 13,900 deg R.  
[ASME PAPER 68-HT-16] 13 p2374 A69-27776  
Plasma-transport property correlation using ionization fraction.  
13 p2313 A69-28241
- ROSCOE, R.**  
Bounds for the real and imaginary parts of the dynamic moduli of composite viscoelastic systems.  
08 p1417 A69-20824
- ROSCOE, S. N.**  
The navigation director - An area navigation system.  
01 p0112 A69-10453  
Airborne displays for flight and navigation.  
02 p0203 A69-12213
- ROSE, B. E.**  
A power combiner for step level high power UHF solid state transmitters.  
23 p4137 A69-41743
- ROSE, D.**  
Temperature problems in the structure of jet-lift VTOL aircraft /Temperaturprobleme an der Struktur von VTOL-Strahltransportern/.  
04 p0548 A69-14841
- ROSE, D. C.**  
International Conference on Cosmic Rays, 10th, Calgary, Canada, June 19-30, 1967, Proceedings. Part A - Invited and Rapporteur Papers.  
03 p0497 A69-12928  
A decade of space and upper atmospheric research in Canada.  
[UN PAPER 68-95551] 06 p1042 A69-17034
- ROSE, D. J.**  
Experimental strong turbulent heating.  
17 p3014 A69-33827
- ROSE, G.**  
The possibility of direct detection of vertical air movements in the altitude range from 75 to 80 km /Zur Moeglichkeit des direkten Nachweises vertikaler Luftbewegungen im Hoehenbereich 75-80 km/.  
11 p1913 A69-25436
- ROSE, H.**  
Corneal damage thresholds for CO sub 2 laser radiation.  
11 p1830 A69-24844
- ROSE, H. W.**  
Coherent optical target recognition through a randomly turbulent medium.  
11 p1894 A69-24470
- ROSE, M. F.**  
Shock response of nickel in the pressure range 820-1500 kb.  
15 p2637 A69-30225
- ROSE, R. D.**  
Determination of the gravitational constant G.  
24 p4350 A69-42944
- ROSE, R. G.**  
Pneumatic sensing line nonlinear model.  
[AIAA PAPER 69-117] 06 p0913 A69-18106  
Pneumatic sensing-line nonlinear model.  
[AIAA PAPER 69-117] 24 p4301 A69-43259
- ROSE, R. K.**  
A fluidic proportional thruster system for sounding rocket applications.  
[ASME PAPER 68-WA/FE-32] 05 p0763 A69-16105
- ROSE, S. T.**  
Analog simulation of a chemically reacting system.  
[WSCI PAPER 68-49] 07 p1073 A69-18318
- ROSE, T.**  
Crossed-beam studies of ion-molecule reaction mechanisms.  
03 p0382 A69-13460
- ROSE, T. L.**  
A crossed-beam apparatus for investigation of ion-molecule reactions.  
12 p2092 A69-26477
- ROSE, W. K.**  
Neutrino emission and the onset of carbon burning.  
08 p1384 A69-20059
- ROSELAND, L. M.**  
Adhesives for cryogenic applications.  
05 p0784 A69-16487
- ROSELLI, F.**  
Novel fire retardant polyesters based on bromine.  
08 p1340 A69-20504
- ROSEN, A.**  
Explicit upper bounds for error propagation in the n-body field.  
09 p1595 A69-21937  
Repeated discontinuous yielding of 2024 aluminum alloy.  
15 p2639 A69-30598  
Silane coupling in carbon fibre-reinforced polyester resin.  
16 p2803 A69-31806
- ROSEN, B. W.**  
A statistical theory of material strength with application to composite materials.  
[AIAA PAPER 69-123] 06 p1028 A69-18142
- ROSEN, G.**  
Functional integration theory for incompressible fluid turbulence. II.  
12 p2062 A69-26602  
A necessary condition for the existence of singularity-free global solutions to nonlinear ordinary differential equations.  
14 p3470 A69-29367
- ROSEN, H. A.**  
Satellite system for educational television.  
[UN PAPER 68-95827] 01 p0029 A69-10499
- ROSEN, J. M.**  
Compatibility of inorganic azides with organic explosives.  
02 p0304 A69-12499  
Nuclear radiation damage vs. thermal decomposition of 1,3-diamino-2,4,6-trinitrobenzene and 2,2',4,4',6,6'-hexanitrostilbene.  
02 p0304 A69-12500  
Stratospheric dust and its relationship to the meteoric influx.  
09 p1608 A69-22689
- ROSEN, K. M.**  
Analytical design of the H-3 helicopter engine inlet ice deflector shield.  
01 p0011 A69-11064
- ROSEN, N.**  
Inertial systems in an expanding universe.  
15 p2654 A69-31495
- ROSEN, R.**  
Structural analysis by matrix decomposition.  
01 p0173 A69-11417
- ROSEN, S.**  
Phase equilibria in the nickel-aluminum-yttrium system at 1000 deg C.  
02 p0265 A69-12004  
Cosmic rays.  
02 p0308 A69-12158  
Phase equilibria in the nickel-aluminum-scandium system at 1000 deg C.  
05 p0779 A69-15833  
Matter traversal of high-energy primary cosmic rays from antiproton measurements.  
15 p2678 A69-31491
- ROSENAU, G.**  
Higher root loci for multivariable systems /Hoehere Wurzelortskurven bei Mehrgroessensystemen/.  
12 p2048 A69-26073
- ROSENBAUM, A. S.**  
PSK error performance with Gaussian noise and interference.  
09 p1455 A69-21848
- ROSENBAUM, F. J.**  
Application of reciprocal latching ferrite phase shifters to lightweight electronic scanned phased arrays.  
04 p0572 A69-14320  
Propagation in ferrite-filled coaxial transmission lines.  
04 p0575 A69-14751  
Gunn effect swept frequency oscillator.  
05 p0734 A69-16573



- Theory of the suppressed-rotation reciprocal ferrite phase shifter. 06 p0896 A69-17484
- Bias circuit oscillations in Gunn devices. 12 p2041 A69-26628
- Electromagnetic wave propagation along a ferrite loaded wire. 14 p2417 A69-29755
- ROSENBAUM, M.**  
A versatile uniaxial tensile testing machine. 22 p3926 A69-40441
- ROSENBAUM, S.**  
On the coherent wave motion in bounded, randomly fluctuating regions. 21 p3675 A69-39283
- ROSENBERG, C.**  
Improved radiation storage time predictions by a new approach to inverted transistor characterization. 06 p0977 A69-16884
- ROSENBERG, E.**  
Analysis of the properties of pulmonary surfactant using modified Wilhelmy balances. 21 p3651 A69-38387
- ROSENBERG, M. J.**  
Thermal considerations of spacecraft external panel effects on specular louvre systems. [AIAA PAPER 69-26] 06 p1037 A69-18097  
Thermal considerations of a landed vehicle on the surface of Mars. [AIAA PAPER 69-611] 17 p3049 A69-33295
- ROSENBERG, N. W.**  
Ionospheric winds - A statistical analysis. 01 p0072 A69-11171
- ROSENBERG, R. M.**  
On the existence of normal mode vibrations in nonlinear systems. 01 p0166 A69-10232
- ROSENBERG, T. J.**  
Correlated bursts of VLF hiss, auroral light and X-rays. 02 p0309 A69-12744
- ROSENBERGER, D.**  
Atomic physical principles of laser active materials /Atomphysikalische Grundlagen laseraktiver Stoffe/. 06 p0937 A69-18004  
The gas laser /Der Gaslaser/. 06 p0937 A69-18008  
Attempts to increase the power of a closed CO sub 2 laser by spinning the filling gas /Versuche zur Leistungssteigerung eines abgeschlossenen CO sub 2 - Lasers durch Umwälzen des Füllgases/. 07 p1145 A69-18476  
Relaxation of the CO sub 2 laser levels induced by 10.6-mu radiation /Zur Relaxation der CO sub 2 - Laser-Niveaus unter dem Einfluss von 10.6-mu m-Strahlung/. 09 p1515 A69-21488
- ROSENBLATT, A.**  
At long last, ERTS is on the way. 14 p2453 A69-29952  
Navy gets a new airborne watchdog. 18 p3108 A69-34811  
Cat's eyes for the military. 22 p3945 A69-40141
- ROSENBLATT, L. S.**  
Plasma enzyme responses to blood withdrawal in chickens. 10 p1644 A69-23158  
Mechanisms of action of light on circadian rhythms in the monkey. 15 p2556 A69-31336
- ROSENBLATT, M.**  
Numerical studies of ejecta characteristics behind thin plates. [AIAA PAPER 69-357] 13 p2366 A69-28290
- ROSENBLUM, E.**  
A family of portable versatile aerosol particle analyzers. 18 p3136 A69-34691
- ROSENBLUM, L.**  
Effect of bias light on the spectral response of Cu sub 2 S-CdS cells. 05 p0808 A69-16358
- ROSENBLUTH, M. N.**  
Nonlinear interactions of positive and negative energy modes in plasmas. [IAEA PAPER CN-24/E-13] 07 p1196 A69-19768
- Plasma diffusion in a toroidal stellarator. 09 p1552 A69-22294
- Plasma physics - General survey. 23 p4197 A69-42311
- ROSENCRANS, S.**  
A nonlinear eigenvalue problem in hydrodynamics. 11 p1868 A69-24884
- ROSENDHAL, J. D.**  
The effect of electron scattering on curves of growth. 22 p4007 A69-40903
- ROSENFELD, J. L. J.**  
Shock-wave observations of rate constants for atomic hydrogen recombination from 2500 to 7000 deg K - Collisional stabilization by exchange of hydrogen atoms. 14 p2488 A69-29637
- ROSENFELD, A. R.**  
Plastic zones generated by cracks growing under load. 01 p0098 A69-10762  
The speed of ductile-crack propagation and the dynamics of flow in metals. 02 p0343 A69-12283  
Criteria for crack extension in cylindrical pressure vessels. [ASM PAPER W9-13.3] 21 p3833 A69-38658  
Criteria for crack extension in cylindrical pressure vessels. 22 p4046 A69-41040
- ROSENTHAL, D.**  
Effect of orientation on the fatigue behavior of surface grains in polycrystalline aluminum. 20 p3561 A69-37597
- ROSENTHAL, L.**  
Some recent progress in the study of shock-layer radiation. II /Quelques progres recents dans l'etude du rayonnement de la couche de choc. II/. 01 p0007 A69-11070
- ROSENTHAL, M. L.**  
Multifunction single-package antenna system for spin-stabilized near-synchronous satellite. 22 p3913 A69-40694  
VHF antenna systems for spin-stabilized satellites. 22 p3913 A69-40695
- ROSENTHAL, S. A.**  
Achieving reliability assurance through cause-and-effect failure analysis. 19 p3454 A69-35782
- ROSENTHAL, S. M.**  
Improved value through weight and cost control of the Boeing 747 airplane. 13 p2383 A69-28096
- ROSENTHAL, S. W.**  
Effect of microwaves on the eye. 10 p1648 A69-23185
- ROSHCHIN, V. E.**  
Mechanism of the formation of nonmetallic inclusions during the reduction of iron by aluminum, zirconium, and titanium /Mekhanizm obrazovaniya nemetallicheskiikh vklucheni pri raskislenii zheleza aluminiumem, tsirkoniem i titanom/. 22 p3969 A69-40069
- ROSHCHIN, V. V.**  
Stabilizing filter circuits in the microwave range for solid-state devices /Fil'trovye stabiliziruiushchie tsepi SVCh diapazona dlia tverdotel'nykh priborov/. 11 p1849 A69-24961  
Regenerative amplifier operating in a duct which is mismatched outside of the passband /Regenerativnyi usilitel', rabotaiushchii v trakte, rassoglasovannom vne polosy propuskaniia/. 15 p2573 A69-30118
- ROSHCHINA, N. A.**  
Some effects developing during hypokinesia. 02 p0198 A69-11502
- ROSHKO, A.**  
A review of concepts in separated flow. 02 p0188 A69-11986  
An experimental study of the near wake of a two-dimensional hypersonic blunt body with mass addition. [AIAA PAPER 69-67] 06 p0862 A69-18044  
On the persistence of transition in the near-wake. 19 p3242 A69-36809
- ROSIN, G. S.**  
Measurement of absolute viscosity from translational undamped oscillations of a plate in a liquid /Izmerenie absolutnoi viazkosti po postupatel'ny'm nezatukhaishchim kolebaniyam plastinki v zhidkosti/. 04 p0679 A69-14905
- Absolute viscosity measurement by the undamped lengthwise vibrations of a plate in a fluid. 12 p2182 A69-26655
- ROSINO, L.**  
The spectrum 1966-67 of MH alpha 328-116 equivalent V 1016 Cyg. 19 p3424 A69-36232
- Observations of Saturn during the period of theoretical disappearance of the ring /October 29-December 18, 1966/. 20 p3600 A69-37400
- ROSINSKI, W.**  
Certain methods for measuring the impurity concentration distribution and the resistivity of epitaxial layers /O pewnych metodach pomiaru rozkladu koncentracji domieszek oraz opornosci wlasciwej warstw epitakcyjnych/. 13 p2323 A69-28640
- ROSKAM, J.**  
Elastic wind-tunnel models for predicting longitudinal stability derivatives of elastic airplanes. [AIAA PAPER 68-56] 01 p0011 A69-11011  
An influence coefficient method for the prediction of longitudinal stability derivatives of rigid and elastic airplanes. [AIAA PAPER 69-131] 06 p0868 A69-18133
- ROSKAMM, H.**  
Hypoxia resistance test at 7,500 m /24,600 ft/ in the low-pressure chamber before and after combined ergometer and altitude training. 23 p4086 A69-41788
- ROSLIAKOV, G. S.**  
Computer Methods and Programming - Numerical Methods in Gasdynamics /Vychislitel'nye Metody i Programirovanie - Chislennyye Metody v Gazovoy Dinamike/. 03 p0362 A69-136400  
Survey of work performed at the Moscow University dealing with the investigation of external and internal problems in aerodynamics /Obzor rabot po chislennomu issledovaniyu vneshnykh i vnutrennikh zadach aerodinamiki, vypolnennykh v Moskovskoy Universiteite/. 03 p0363 A69-136575  
Supersonic flow past staggered cones /Sverkhzvukovoe obtekanie stupenchatykh konusov/. 03 p0363 A69-136576
- ROSLUND, C.**  
Investigations of a Milky Way field in Circinus /SA 195/. I. 08 p1389 A69-20246  
Investigations of a Milky Way field in Scorpius. VI. 08 p1389 A69-20256  
Investigations of a Milky Way field in Scorpius. VI. 23 p4211 A69-41483
- ROSNER, D. E.**  
Condensation-enhanced vaporization rates in non-isothermal systems. 03 p0532 A69-131223  
Lifetime of a highly soluble dense spherical particle. 10 p1651 A69-22939
- ROSOV, V. V.**  
Optical and electrical properties of quasi-binary solid solutions of some A super III B super V compounds. 19 p3390 A69-36554
- ROSS, A.**  
Aircraft accidents by older persons. 14 p2541 A69-29308
- ROSS, A. J.**  
Some airframe aerodynamic problems at low speeds. 05 p0695 A69-15542
- ROSS, B.**  
The perforation of a porous medium due to projectile impact. 01 p0165 A69-10115  
Elastic-plastic impact of plates. 14 p2534 A69-29027
- ROSS, B. B.**  
Surface geometry of three-dimensional inviscid hypersonic flows. 04 p0542 A69-14718
- ROSS, C. C.**  
Nuclear rocket propulsion. 11 p1914 A69-25590
- ROSS, C. C., JR.**  
On the multiplication of solutions of homogeneous linear differential systems. 08 p1342 A69-20349

- ROSS, D. K.**  
The shape and energy of a revolving liquid mass held together by surface tension. 07 p1120 A69-19267  
The stability of a rotating liquid mass held together by surface tension. 07 p1121 A69-19268
- ROSS, D. M.**  
Low cost booster propulsion - Technology and management. 21 p3857 A69-39688
- ROSS, D. P.**  
High-temperature plasmas produced by exploding wires. 01 p0129 A69-10667
- ROSS, D. S.**  
Image-tone enhancement. 18 p3133 A69-34338
- ROSS, D. W.**  
Quantum-mechanical interpretation of plasma turbulence. 15 p2660 A69-30915
- ROSS, G. F.**  
Synchronized microwave energy generation by harmonic filtering. 12 p2041 A69-26630  
An improved pulse-forming network for the generation of phase-coherent microwave signals. 13 p2234 A69-28073
- ROSS, H.**  
Effect of the location of a fixed weight penalty on the aircraft growth factor. [SAWE PAPER 796] 18 p3220 A69-34862
- ROSS, H. S.**  
A low cost inertial measurement unit for business aircraft. [SAE PAPER 690337] 15 p2606 A69-30092
- ROSS, I. N.**  
Repetitive Q-switched laser light sources for interferometry and holography. 12 p2087 A69-26170  
Holographic recording of rapid transient events and the problems of evaluation of the reconstructions. 12 p2087 A69-26171
- ROSS, J.**  
Rate coefficients, reaction cross sections and micro-society reversibility. 23 p4113 A69-41519
- ROSS, J. C.**  
Plasma histamine levels and cardiovascular effects after compound 48/80. 22 p3873 A69-40206
- ROSS, J. E.**  
Astrophysical determination of f-values for Till, CrII, FeII. 03 p0508 A69-13175  
The supergiant HD-33579. 14 p2529 A69-29979
- ROSS, J., JR.**  
Increased myocardial oxygen consumption and contractile state associated with increased heart rate in dogs. 24 p4258 A69-42634
- ROSS, M.**  
Desired laser characteristics for space communications. 07 p1146 A69-18483  
Visible and near-IR laser modulation. 07 p1158 A69-19742
- ROSS, R. A.**  
Scattering-center theory and radar glint analysis. 01 p0033 A69-11007  
Bistatic scattering matrix for a frustum. 11 p1837 A69-24999  
Small-angle scattering by a finite cone. 20 p3495 A69-37849
- ROSS, R. E.**  
Standard Agena production reliability evaluation program. 18 p3146 A69-34510
- ROSS, R. F.**  
Determination of mass and aerodynamic characteristics of rolling ballistic vehicles from dynamic motion data using equations of motion methods. I - Roll equation. [AIAA PAPER 69-102] 06 p0862 A69-18039  
Identification of aerodynamic characteristics of re-entry vehicles from flight-test data. 18 p3085 A69-34670
- ROSS, R. S.**  
Advanced balloon systems as photographic plate-forms. 22 p3865 A69-40811
- ROSS, R. W.**  
A gamma ray telescope utilizing large area wire spark chambers. [IEEE PAPER 3A-5] 07 p1134 A69-19192
- ROSS, W. M.**  
Ray tracing in a sectioned and layered atmosphere using a shifting coordinate system. 23 p4154 A69-41532
- ROSSATI, F.**  
Photoelectric observations of the binary AH Vir / Osservazioni fotoelettriche della binaria AH Vir/. 16 p2858 A69-32215
- ROSSBACH, A.**  
The polar aurora spectrum /Das Polarlichtspektrum/. 05 p0752 A69-15799
- ROSSBACH, R. J.**  
Development of a liquid dynamic seal to vacuum. [ASLE FICFS PREPRINT 40] 15 p2620 A69-30485
- ROSSBERG, L.**  
Description of the SPARMO detector SC 67. 05 p0762 A69-15823
- ROSSBY, H. T.**  
A study of Benard convection with and without rotation. 13 p2377 A69-28172
- ROSSEL, P.**  
Study of the influence of surface properties on the reliability of planar bipolar transistors /Etude de l'influence des proprietes de surface sur la fiabilite des transistors bipolaires planars/. 15 p2625 A69-30826
- ROSSER, W. A.**  
Thermal decomposition of ammonium perchlorate. 02 p0304 A69-12312
- ROSSER, W. A., JR.**  
Deactivation of vibrationally excited carbon dioxide /nu sub 3/ by collisions with carbon dioxide or with nitrogen. 20 p3578 A69-36937  
Thermal stability of a reactive spherical shell. 21 p3849 A69-38804
- ROSSER, W. G. V.**  
Classical Electro-Magnetism via Relativity- An Alternative Approach to Maxwell's Equations. 07 p1180 A69-18404
- ROSSETTOS, J. N.**  
The dynamic response of cylindrical and conical panels. [ASME PAPER 69-APM-22] 18 p3214 A69-34396
- ROSSI, A. Z.**  
Kinematic criterion for yield computation in plane two-dimensional systems /Sul criterio cinematico di calcolo a rottura nei sistemi bidimensionali piani/. 05 p0831 A69-15684  
Static criterion for yield computation in plane two-dimensional systems /Sul criterio statico di calcolo a rottura nei sistemi bidimensionali piani/. 05 p0836 A69-16013
- ROSSI, B.**  
Brief description of the current state of X-ray astronomy /Breve descrizione dello stato attuale della X-astronomia/. 15 p2696 A69-31213  
X-ray and gamma ray astronomy. 21 p3789 A69-38817
- ROSSI, B. B.**  
Discrete extrasolar X-ray sources. 23 p4206 A69-42318
- ROSSI, J. A.**  
The laser transition and photon energy of GaAs in the lightly-doped limit. 02 p0257 A69-12615  
Time behavior of exciton formation and laser emission in Cd/SeS/ platelets. 10 p1703 A69-23512  
Laser transition to band edge or to impurity states in GaAs-Ge. 13 p2270 A69-27193  
Time behavior of laser modes in GaAs platelet lasers. 16 p2796 A69-31704
- ROSSI, L. C.**  
A simplified analytical approach and analog simulation results for the attitude perturbed dynamics of a spinning satellite. 20 p3618 A69-37912  
Attitude dynamics and stability conditions of a non-rigid spinning satellite. 23 p4224 A69-42396
- ROSSITER, D. E.**  
Buckland Park aerial array. 24 p4286 A69-42607
- ROSSITTO, F.**  
Systematic uncertainty of the switching delay in a triggering circuit driven by finite slope signals. 11 p1858 A69-24568
- ROSSMANITH, R.**  
Considerations concerning the transistorized Schmitt trigger /Bemerkungen zum transistorisierten Schmitt-Trigger/. 01 p0039 A69-10170
- ROSSNAGEL, W. B.**  
Microelectronic process/quality controls. 19 p3283 A69-36020
- ROSSO, J.-C.**  
Study of the dielectric properties of unsaturated styrene polyester copolymers - Effect of temperature /Etude des proprietes dielectriques des copolymeres polyesteres insatures styrolene - Influence de la temperature/. [ONERA-TP-662] 04 p0621 A69-15114
- ROST, D. F.**  
Modeling UHF transhorizon scatter propagation. 02 p0209 A69-12350
- ROSTAFINSKI, W. A.**  
Transient pumping performance of a two speed, hydraulic turbine driven inducer system. [AIAA PAPER 69-551] 18 p3140 A69-34415
- ROSTOKER, W.**  
Thermal fatigue resistance of martensitic steels. 10 p1714 A69-23979
- ROSVOLD, W. C.**  
Air-gap isolated microcircuits - Beam-lead devices. 02 p0221 A69-12469
- ROTA, P.**  
Thermoregulation problems of space missions /Problemi di termoregolazione nelle missioni spaziali/. 12 p2023 A69-26493
- ROTANOVA, N. M.**  
Theory of electromagnetic induction in the case of a spherical model of the earth. 03 p0423 A69-13523  
Distribution of the electric conductivity of the earth. 06 p0921 A69-17739
- ROTAR, A. IA.**  
Effect of lobeline on oxygen pressure in the region of the gigantocellular nucleus of the medulla oblongata of dogs /Vpliv lobelinu na napruzhennia kisinu v oblasti gigantoklitinnogo iadra dovogastogo mozku sobaki/. 22 p3888 A69-41273
- ROTEM, A.**  
Determination of reinforcement unbonding of composites by a vibration technique. 20 p3511 A69-37761
- ROTEM, Z.**  
Viscous flow in a rectangular cut out. 08 p1304 A69-20811
- ROTH, D.**  
Helium-cooled parametric amplifier for satellite ground stations with 500 MHz bandwidth. 07 p1098 A69-18460  
1.4 GHz parametric amplifier with closed-cycle cooling for radio astronomy. 07 p1098 A69-18461  
Off-resonance frequency doubling using ruby. 07 p1144 A69-18471  
Microwave frequency doubling in ruby. 17 p3015 A69-33024
- ROTH, E. M.**  
Physiological effects of space cabin atmospheres. 03 p0380 A69-13504
- ROTH, J. P.**  
Space applications of a minimization algorithm. 23 p4146 A69-42535
- ROTH, J. R.**  
Analysis of integrated charged particle energy spectra from gridded electrostatic analyzers. 08 p1364 A69-20521



- Experimental observation of low-frequency oscillations described by the plasma continuity equations.  
11 p1925 A69-24315
- Experimental observation of continuity-equation oscillations in slightly ionized deuterium, neon and helium gas.  
22 p3986 A69-40759
- Periodic small-amplitude solutions to Volterra's problem of two conflicting populations and their application to the plasma continuity equations.  
22 p3976 A69-41260
- A theory of moving striations based on the continuity-equation plasma oscillation.  
24 p4356 A69-43122
- ROTH, N.**  
Liquid filled adjustable optical analog of the human eye.  
22 p3888 A69-41231
- ROTH, P.**  
Comparison of measurements of relaxing combustion gases in a nozzle flow with chemical-kinetic calculations /Vergleich von Messungen an relaxierenden Feuergasen in einer Duesenstromung mit chemisch-kinetischen Rechnungen/.  
[DVL-896] 10 p1809 A69-23644
- ROTH, R.**  
Measurements of short-term air-temperature and wind-velocity fluctuations /Messungen kurzfristiger Schwankungen von Lufttemperatur und Windgeschwindigkeit/.  
09 p1535 A69-21515
- The long-wave region of the turbulence spectrum in the free atmosphere /Der langwellige Teil des Turbulenzspektrums in der freien Atmosphäre/.  
24 p4346 A69-43155
- ROTH, R. S.**  
Data unscrambling and the motion of a rocket inside a smoothbore launcher.  
22 p4037 A69-41038
- ROTH, S. H.**  
Multipath fading in FSK communication links - An experimental investigation.  
14 p2414 A69-29498
- ROTH, W.**  
A theory of calculation of flutter vibrations in subsonic flows /Eine Theorie zur Berechnung von Flatterschwingungen bei Unterschallströmungen/.  
02 p0192 A69-12825
- ROTHAAS, H.**  
Electronic data processing at the German Federal Institute for Air Traffic Control /Elektronische Datenverarbeitung im Bereich der Bundesanstalt fuer Flugsicherung/.  
15 p2650 A69-30230
- ROTHER, D. E.**  
Radiative ion-electron recombination in a sodium-seeded plasma.  
07 p1184 A69-19164
- Radiative capture of electrons by chlorine, bromine, and iodine atoms.  
08 p1355 A69-20735
- Emission spectra of atmospheric gases excited by an electron beam.  
24 p4353 A69-43698
- ROTHER, E. W.**  
Crossed-beam study of ionization of Cs by Br sub 2.  
23 p4194 A69-42208
- ROTHER, V. E.**  
Establishment of a center for research and development in aviation education/training.  
[AIAA PAPER 69-785] 19 p3453 A69-35597
- ROTHENBERG, J. H.**  
Specification requirements for space vacuum simulation today.  
17 p2946 A69-33659
- ROTHENBERG, M. A.**  
New fast techniques for bio-assay.  
02 p1201 A69-11773
- ROTHENBERG, R. A.**  
Corrosion considerations pertinent to the use of electromagnetic shielding gaskets.  
05 p0779 A69-15979
- ROTHENFLUG, R.**  
Diffuse X radiation - Observation and origin /Rayonnement X diffus - Observation et origine/.  
05 p0817 A69-16714
- Observation of celestial X-ray sources /Observation de sources X celestes/.  
05 p0817 A69-16715

- Observation of five sources of cosmic X-rays in the 15-150 Kev energy range.  
07 p1210 A69-19716
- ROTHER, G.**  
A geomagnetic normal field of the vertical component in Central Europe.  
16 p2782 A69-32461
- ROTHFUSS, N.**  
High-speed shafting design - Its use in a helicopter application.  
[ASME PAPER 69-DE-5] 14 p2453 A69-28837
- ROTHMAN, E. A.**  
Material characterization results for a selected graphite fiber/epoxy composite.  
[ASME PAPER 69-GT-114] 09 p1531 A69-22520
- ROTHMAN, H.**  
Maintaining surface accuracy of large radio telescopes by active compensation.  
23 p4149 A69-42136
- ROTHMANN, H.**  
Analytical treatment of highly unsteady shock waves in characteristic coordinates /Analytische Behandlung starker instationärer Stosswellen in charakteristischen Koordinaten/.  
10 p1677 A69-22899
- ROTHSTEIN, A. A.**  
Biological monitoring of a full scale simulated Mars lander.  
02 p1201 A69-11774
- Technique for sterile insertion and repair of spacecraft.  
05 p0714 A69-15950
- ROTHSTEIN, A. J.**  
Impact of effectiveness concepts on the project manager.  
[ASME PAPER 68-WA/MGT-2] 05 p0850 A69-16145
- ROTHWART, F.**  
Steady-state flux jumping in superconducting niobium titanium tubes in superimposed AC and DC magnetic fields.  
17 p3016 A69-33787
- ROTHWELL, A.**  
The buckling of shallow corrugated webs in shear.  
01 p0170 A69-10866
- ROTHWELL, P.**  
The polar substorm and electron "islands" in the earth's magnetic tail.  
04 p0594 A69-15122
- Production of fast jets of ionized barium using explosive shaped charges.  
09 p1539 A69-21752
- The plasmopause, the plasma sheet, and energetic trapped electrons in the earth's magnetosphere.  
12 p2151 A69-26953
- ROTHWELL, P. L.**  
Evidence for a geoelectric field over the polar cap.  
04 p0648 A69-14682
- The effects of magnetic storms on electrons and protons at L greater than 2.5.  
15 p2676 A69-31314
- ROTINA, V. IU.**  
Statistical synthesis of a ball gyro servo.  
05 p0764 A69-16669
- ROTONDI, G.**  
The SV-20 twin-turbine winged helicopter /L'elicottero alato biturbina SV-20/.  
12 p2013 A69-26466
- Optimal attitudes of a suborbital aircraft /Sugli assetti ottimali di un veicolo suborbitale/.  
21 p3795 A69-38440
- ROTONDO, P.**  
Buckling of an ellipsoid due to internal pressure.  
[ASME PAPER 68-WA/PVP-12] 05 p0840 A69-16190
- ROTSHEIN, A. IA.**  
Measurement of the geomagnetic-field components in motion using astroorientation /Ob izmerenii sostavliushchikh geomagnitnogo polia v dvizhenii s ispol'zovaniem astroorientatsii/.  
02 p0277 A69-11674
- Use of the vertical and solar components for the exact measurement of magnetic declination from a moving object /Ob ispol'zovanii vertikal'noi i solnechnoi sostavliushchikh dlia tochnogo izmereniia magnitnogo skloneniia s dvizhizhegosia ob'ekta/.  
09 p1486 A69-21538

- Measurement of the geomagnetic field components while in motion, using celestial orientation.  
13 p2257 A69-28707
- Utilization of deep-freezing as a means of substantially improving the characteristics of nuclear-precession magnetometers /Ob ispol'zovanii glubokogo oshlakhdeniia dlia sushchestvennogo uluchsheniia kharakteristik iadernno pretsessionnykh magnetometrov/.  
14 p2446 A69-29094
- Use of the vertical and solar components for the exact measurement of magnetic declination from a moving object.  
16 p2783 A69-32555
- Effect of variable noise on measurements of field strength with the aid of nuclear-precession magnetometers /O vozdeistvii peremnykh pomekh pri izmerenii napriazhennosti polia s pomoshch'iu iadernno pretsessionnykh magnetometrov/.  
23 p4165 A69-41850
- Compact low-noise nuclear-precession sensor for measuring geomagnetic field components /Malogabaritnyi pomekhozashchichennyi iadernno pretsessionnyi datchik dlia izmereniia komponentov geomagnitnogo polia/.  
23 p4165 A69-41860
- ROTT, L. A.**  
Statistical determination of the viscosity-coefficients tensor /Statisticheskoe opredelenie tenzora koefitsientov viskozosti/.  
05 p0794 A69-15781
- Statistical determination of the tensor of viscosity coefficients.  
18 p3173 A69-35033
- ROUANET, A.**  
High temperature study of the systems formed by zirconia with samarium and gadolinium sesquioxides /Etude a haute temperature des systems formes par le zircon avec les sesquioxides de samarium et de gadolinium/.  
01 p0101 A69-10044
- ROUAULT, M.**  
Crystals and molecules in molecular jets - An electron diffraction study /Cristaux et molecules dans les jets moleculaires - Etude par diffraction electronique/.  
02 p0284 A69-12622
- ROUBELLAT, F.**  
Case where the stability region of an attractive limiting set of a second-order recurrence is not simply connected /Cas ou le domaine de stabilite d'un ensemble limite attractif d'une recurrence de deuxieme ordre n'est pas simplement connexe/.  
19 p3287 A69-36655
- ROUCHER, J.**  
Balloon observations of the far-infrared spectrum and brightness temperature of the sun.  
04 p0652 A69-14411
- ROUDEBUSH, W. H.**  
Shorter combustors for high-temperature jet engines.  
14 p2509 A69-29433
- ROUDIL, R.**  
Computer solution of systems of equations representing forced torsional oscillations /Resolution sur ordinateur de systemes d'equations representant des oscillations de torsion forcees/.  
02 p0338 A69-11893
- ROUFFY, F.**  
Dual-reflector antenna design techniques for low noise applications.  
11 p1852 A69-25310
- ROUGEE, P.**  
Existence and uniqueness of weak solutions in the linear theory of the equilibrium of inhomogeneous elastic thin shells /Existence et unicite de solutions faibles dans la theorie lineaire de l'equilibre des coques minces elastiques non homogenes/.  
02 p0340 A69-12030
- ROUGHAN, P. E.**  
Properties of ion-implanted GaAs diodes.  
[ECS PAPER 172] 08 p1284 A69-20369
- ROUGIER, P.**  
The rigidity of the contact between two solid surfaces and its role in causing friction in the presence of vibrations /Sur la rigidite de contact entre deux surfaces solides, et son role dans le frottement en presence de vibrations/.  
12 p2102 A69-26290
- ROUKLOVE, P.**  
Metallography of thermionic converters.  
09 p1439 A69-21824
- Thermionic converter technology.  
14 p2397 A69-29175

- The performance evaluation and life testing of thermoelectric generators at the Jet Propulsion Laboratory.  
23 p4188 A69-42263
- ROULSTON, D. J.**  
Low-noise photoparametric up-converter.  
07 p1104 A69-18888  
High efficiency conditions for an ideal nonlinear capacitor frequency multiplier.  
14 p2421 A69-29537
- ROUNDY, R. W.**  
Liquid crystals.  
06 p0885 A69-17842
- ROURKE, D. L.**  
Spatial interactions in identification and detection of compound visual stimuli.  
22 p3883 A69-40878
- ROUSAR, I.**  
Boundary layer on moving surface /Summary report/.  
03 p0417 A69-13792
- ROUSE, C. A.**  
Helium abundance determination from solar-model photospheres.  
22 p4031 A69-40911
- ROUSE, J. W., JR.**  
Geoscience applications of radar sensors.  
11 p1835 A69-24692  
On the feasibility of imaging radar on small spacecraft.  
11 p1835 A69-24695  
Panchromatic and polypanchromatic radar.  
14 p2416 A69-29529  
Arctic ice type identification by radar.  
14 p2416 A69-29530
- ROUSH, M. S.**  
Material design problems in small gas turbines.  
[ASM PAPER D8-16.2] 07 p1204 A69-19668  
Surveillance of small turboprop engine problem areas by SOAP/Spectrometric oil analysis procedure/.  
[SAE PAPER 690325] 11 p1941 A69-24508
- ROUSHDY, H.**  
Radioprotective properties of some heterocyclic nitrogenous compounds against X-radiation injury to serum proteins in mice.  
23 p4077 A69-41300
- ROUSSEAU, D.**  
A theoretical and experimental analysis of high-strain-rate tensile tests using Malvern's theory.  
23 p4236 A69-42529
- ROUSSENQ, J.**  
Study of the photoelectric effect of thin gold films deposited on a silver foil /Etude de l'effet photoelectrique des couches minces d'or deposees sur une lame d'argent/.  
02 p0300 A69-12630
- ROUSSET, A.**  
Temporary storage unit with a cycle time of 500 nsec /Memoire temporaire a temps de cycle de 500 ns/.  
04 p0564 A69-15222
- ROUTH, W. S.**  
Applications for op-amp ICs.  
11 p1857 A69-25665
- ROUTLEDGE, D.**  
A detailed survey of the galactic plane at a wavelength of 9.26 cm between longitudes 32 deg and 49 deg.  
18 p3195 A69-34426
- ROUVILLOIS, G.**  
Radiative transfer in novae /Transfert de rayonnement dans les novae/.  
22 p4031 A69-40907
- ROUX, B.**  
Effect of angle of attack and Reynolds number on hypersonic flow past a circular cone /Effet de l'incidence et du nombre de Reynolds sur l'ecoulement hypersonique autour d'un cone circulaire/.  
[ONERA-TP-692] 11 p1818 A69-24751  
Wall flow at M sub infinity equals 7, around a cone at incidence /Ecoulement parietal autour d'un cone en incidence a M sub infinity equals 7/.  
19 p3241 A69-36759
- ROUX, D.**  
The absorption of thin-film cesium between 2300 and 11,000 angstrom units /Sur l'absorption du cesium en couches minces entre 2300 et 11000 angstrom units/.  
03 p0491 A69-14060  
Study of the optical absorption of thin films of rubidium prepared under high vacuum /Etude de l'absorption optique de couches minces de rubidium preparees sous ultra-vide/.  
03 p0491 A69-14114
- ROVATTI, A.**  
Design of a local oscillator for a space telecommunications repeater /Realizzazione di un oscillatore locale per ripetitore spaziale di telecomunicazioni/.  
08 p1286 A69-20596
- ROVENSKAIA, L. G.**  
Improvement of diffuse layers in the case of anomalous diffusion in GaAs single crystals /K voprosu o sovershenstve diffuzionnykh sloev dlia sluchai anomal'noi diffuzii v monokristallakh GaAs/.  
15 p2670 A69-31048
- ROVERI, A.**  
Explicit characterization of noise in negative-resistance amplifiers.  
05 p0735 A69-16731
- ROVINSKII, R. E.**  
Optimum frequency range of a stationary induced discharge.  
03 p0481 A69-14144  
Effect of a longitudinal alternating magnetic field on lasing in ionized argon /Vozdeistvie prodol'nogo peremennogo magnitnogo polia na generatsiiu v ionizovannom argone/.  
06 p0934 A69-17467  
Calculation of the parameters of an induced high-pressure high-frequency discharge /K raschetu parametrov induitsirovannogo vysokochastotnogo razriada vysokogo davleniia/.  
15 p2662 A69-30976  
Effect of longitudinal alternating magnetic field on generated power in ionized argon.  
20 p3555 A69-37950
- ROVNER, L. D.**  
Combined telephone and radiotelemetry of the EEG.  
21 p3664 A69-38978
- ROWAN-ROBINSON, M.**  
On cosmological models with an antipole.  
07 p1219 A69-19284
- ROWE, B.**  
Temperature profiles in a laminar boundary layer with an endothermal homogeneous chemical reaction /Profils de temperatures dans une couche limite laminaire avec reaction chimique homogene endothermique/.  
16 p2821 A69-31833
- ROWE, C. A.**  
Synthesis and evaluation of curing agents.  
[AIAA PAPER 69-436] 16 p2747 A69-32777
- ROWE, E. H.**  
Rate of loading effects on fracture mechanics of epoxy resins.  
08 p1338 A69-20491
- ROWE, H. E.**  
Efficient spacing of synchronous communication satellites.  
04 p0562 A69-15458
- ROWE, J. E.**  
Non-isothermal effects in bulk GaAs transit-time-mode oscillators.  
02 p0299 A69-12240  
Focusing of a relativistic electron flow.  
05 p0796 A69-15715  
R-F defocusing in high-power traveling-wave amplifiers.  
07 p1094 A69-18424  
Nonisothermal wave propagation and instabilities in indium antimonide.  
07 p1197 A69-18467  
Transport of noise fluctuations in convergent flow crossed-field electron guns.  
15 p2572 A69-30031
- ROWE, J. N.**  
Changes in electron density and collision frequency at University Park, Pennsylvania during the stratospheric warming of 1967/68.  
21 p3714 A69-38556
- ROWE, M. W.**  
On the origin of excess heavy xenon in primitive chondrites.  
05 p0819 A69-15625
- ROWE, T. J.**  
Laser cuts masks to size, eliminating most errors.  
06 p0931 A69-17200  
Laser machining of photolithographic masks in thin metallic films.  
22 p3954 A69-40236
- ROWELL, G. F.**  
Potential-wetting effects of platinum electrodes.  
08 p1268 A69-20362
- ROWELL, L. B.**  
Human metabolic responses to hyperthermia during mild to maximal exercise.  
22 p3891 A69-40215  
Human cardiovascular adjustments to rapid changes in skin temperature during exercise.  
24 p4258 A69-42633
- ROWELL, W. M., JR.**  
System cost effectiveness analysis.  
19 p3254 A69-36012
- ROWLAND, J. F.**  
The polymorphism of the oxide Ti sub 3 O sub 5.  
07 p1168 A69-19601
- ROWLAND, J. W.**  
Radiation measurements and analysis in a nuclear rocket propellant tank mockup.  
[AIAA PAPER 69-475] 16 p2810 A69-32716
- ROWLAND, K. A.**  
Carbon fibres take to the air.  
21 p3750 A69-38428
- ROWLANDS, R. E.**  
Ultrahigh-speed framing photography employing a multiply pulsed ruby laser and a "smear-type" camera - Application to dynamic photoelasticity.  
12 p2086 A69-26166  
Pulsed laser high-speed photography.  
19 p3306 A69-35731  
A multiple-pulse ruby-laser system for dynamic photomechanics - Applications to transmitted- and scattered-light photoelasticity.  
22 p3944 A69-40076
- ROWLES, J. B.**  
The satellite ESRO II/IRIS in orbit.  
01 p0156 A69-11108
- ROWLEY, W. R. C.**  
Signal strength in two-beam interferometers with laser illumination.  
13 p2259 A69-27450  
Design tolerances in laser measurement systems.  
22 p3960 A69-40238
- ROXBURGH, I. W.**  
Model atmosphere calculation of the solar oblateness.  
08 p1383 A69-19899  
Pulsation periods of rotating white dwarfs.  
17 p3037 A69-33641  
The oblateness of the sun.  
22 p4017 A69-40175
- ROY, A. E.**  
Luni-solar perturbations of an earth satellite.  
22 p4030 A69-40901
- ROY, A. K.**  
The stabilization of the frequency of a klystron.  
02 p0216 A69-12096
- ROY, B.**  
Evolution of the boundary layer in the vicinity of the walls of a magnetoaerodynamic generator /Evolution de la couche limite au voisinage des parois d'un generateur magnetoaerodynamique/.  
13 p2309 A69-28025
- ROY, D. B.**  
Analytical design of the H-3 helicopter engine inlet ice deflector shield.  
01 p0011 A69-11064
- ROY, D. K.**  
On the determination of impurity concentration in the alloyed region of a tunnel diode.  
02 p0301 A69-12685  
Lifetime measurement in degenerate GaAs.  
03 p0483 A69-12917
- ROY, D. N.**  
Heat transfer for developing laminar flow in the entrance of a tube.  
12 p2062 A69-26242
- ROY, M. N.**  
Helical log-periodic array.  
02 p0219 A69-12337
- ROY, P. J.**  
A practical method of fabricating efficient aerostructures, utilizing unidirectional boron composite with metal.  
24 p4323 A69-43419
- ROY, R.**  
The stabilization of the frequency of a klystron.  
02 p0216 A69-12096



## ROY, R. B.

## ROY, R. B.

Comments on "Solid solution softening in b.c.c. alloys."

22 p3969 A69-40165

## ROY, S. B.

A temperature-stable RC transistor oscillator.

12 p2036 A69-25919

## ROY, U.

Nuclear magnetic resonance study of the niobium-nitrogen system NbN sub x.

19 p3383 A69-36445

## ROYER, A.

Crystal lattice - and orientation relating to the matrix - of the precipitate responsible for hardening, by isothermal exposure for less than 100 hr at 700 deg C, of a nickel-chromium - niobium alloy previously quenched in water at 20 deg C /Maille cristalline et relations d'orientation avec la matrice du precipite responsable du durcissement, par maintien isotherme de moins de 100 h a 700 deg C, d'un alliage nickel-chrome-niobium prealablement trempé dans l'eau a 20 deg C/.

08 p1334 A69-20852

## ROYER, H.

Application of holography to hypersonic aerodynamics in a firing tunnel /Application de l'holographie a l'aerodynamique hypersonique en tunnel de tir/.

12 p2087 A69-26176

## ROYER, J.

Programmable 300-Hz to 60-MHz generator-synthesizer and peripheral equipment /Générateur-synthétiseur programmable 300 Hz-60 MHz et équipements peripheriques/.

10 p1664 A69-23796

## ROYLES, R.

Application of generalised strain-measure to simple deformation problems in the field of plasticity.

21 p3844 A69-39321

## ROZALSKY, I.

Embrittlement of type 347 stainless steel weldments by sigma phase.

18 p3150 A69-35429

## ROZANOV, A. G.

Effect of a longitudinal alternating magnetic field on lasing in ionized argon /Vozdeistvie prodol'nogo peremennogo magnitnogo polia na generatsii v ionizovannom argone/.

06 p0934 A69-17467

Effect of longitudinal alternating magnetic field on generated power in ionized argon.

20 p3555 A69-37950

## ROZANOV, N. N.

Perturbation theory of polarization in resonance media.

11 p1895 A69-24630

Broadband intracavity SHF modulation of a He-Ne laser /Shirokopolosnaia vnutrerezonatornaia SVCh moduliatsiia He-Ne-lazera/.

17 p2981 A69-33112

## ROZANOV, O. K.

Certain problems of the polarization of dielectrics in shock waves /Nekotorye voprosy polarizatsii dielektrikov v udarnykh volnakh/.

04 p0589 A69-14988

## ROZANOV, V. B.

Theory of equilibrium and stability of a strong-current discharge in a dense optically transparent plasma /Teoriia ravnovesiia i ustoiichivosti sil'notochnogo razriada v plotnoi opticheski prozrachnoi plazme/.

04 p0636 A69-14983

## ROZANSKI, T. A., III

Thermoplastic adhesives and reinforced plastic laminates for structural usage.

09 p1530 A69-22365

## ROZE, A. V.

Unfavorable characteristics of fiber-reinforced materials /O tritsatel'nye osobennosti materialov, armirovannykh voloknami/.

11 p1907 A69-25680

## ROZE, E. N.

Separation of the normal geomagnetic field on profiles of limited length by the moving average method /Vydelenie normal'nogo geomagnitnogo polia metodom skol'zhashchego srednego na profilakh ogranichennoi dliny/.

09 p1486 A69-21537

Use of statistical methods in the determination of the depth of sources of magnetic anomalies.

12 p2071 A69-26696

Separation of the normal geomagnetic field by the moving average method on profiles of finite length.

16 p2783 A69-32532

## ROZELOT, J. P.

Photography of the UV lines in the solar corona /Photographie et mesure des raies u.v. de la couronne solaire/.

16 p2847 A69-31661

## ROZELOT, J.-P.

Fe XII in the emission corona /Le Fe XII dans la couronne d'émission/.

20 p3603 A69-37548

## ROZENBAND, V. I.

Certain laws of the dynamic conditions of ignition /O nekotorykh zakononmernostiakh dinamicheskikh rezhimov zazhiganiia/.

11 p2000 A69-25188

Approximate methods of calculating the critical conditions of ignition /Priblizhennye metody rascheta kriticheskikh uslovii zazhiganiia/.

11 p2001 A69-25191

## ROZENBAUM, L. B.

Relation between dynamic high-frequency absorption and magnetic aftereffect in ferrites /Sviaz' dinamicheskogo vysokochastotnogo pogloshcheniia s magnitnym posledestviem v ferritakh/.

15 p2665 A69-30038

## ROZENBAUM, R. B.

Concentration-dependent line-shift in optical spectra of ruby.

10 p1744 A69-23321

## ROZENBERG, G. V.

Scientific program and scientific equipment complex of the Cosmos 149 artificial earth satellite /Nauchnaia programma i kompleks nauchnoi apparatury ISZ "Kosmos-149"/.

14 p2447 A69-29403

Equipment for measuring the earth's brightness from the Cosmos 149 satellite /Apparatura dlia izmereniia iarkosti zemli so sputnika "Kosmos-149"/.

14 p2447 A69-29404

Horizontal range of visibility in polarized light /O gorizontnoi dal'nosti nabludaemosti v polarizovanom svete/.

15 p2649 A69-30655

Altitude variation of the daytime-sky brightness in the mesosphere /Vysotnyi khod iarkosti dnevnogo neba v mezofere/.

21 p3716 A69-39116

## ROZENBERG, L. A.

The equations of motion of a body of variable mass in the general theory of relativity.

11 p1965 A69-25744

## ROZENBERG, L. B.

Determination of stresses in elliptical bottoms of pressure vessels /Opredelenie napriazhenii v ellipticheskikh dnishchakh sosudov davleniia/.

04 p0668 A69-14275

Influence of temperature on the mechanical properties of fiberglass-reinforced textolites /Vliianie temperatury na mekhanicheskie svoista steklotekstilov/.

23 p4179 A69-41993

## ROZENBERG, V. I.

Effect of different distributions of raindrop sizes on radar performance.

02 p0208 A69-12259

Attenuation and scattering of electromagnetic waves by rainfalls of various natures /Oslablenie i rassianie elektromagnitnykh voln dozhdiami razlichnoi prirody/.

08 p1275 A69-20430

## ROZENBLIUM, V. I.

Calculation of snap through of thin shells undergoing creep /K raschetu khlopka pri polzuchestii tonkikh obolochek/.

21 p3838 A69-39188

## ROZENDAAL, H. L.

Application of multivariable search techniques to optimal aerodynamic shaping problems.

20 p3459 A69-37527

## ROZENFELD, A. S.

Spectra of nonattenuating signals /O spektrakh nezatukhaiushchikh signalov/.

04 p0583 A69-15134

## ROZENFELD, G. O.

Modeling of thermoelasticity problems /Modelirovanie zadach termouprugosti/.

21 p3680 A69-39851

## ROZENFELD, I. L.

The effect of alloying on the electrochemical oxidation of alloys Ti-Nb and Ti-Ni /Vliianie legirovaniia na elektrokhimicheskoe okislenie spлавov Ti-Nb i Ti-Ni/.

13 p2275 A69-27292

## ROZENTAL, A. K.

Determination of the local parameters of a flow in the mixing chamber of a vaporizer /Opredeleniia lokal'nykh parametrov potoka v kamere smesheniia razgonnogo ustroistva/.

06 p0871 A69-17959

## ROZENTAL, I.

Metagalactic electrons /O metagalakticheskikh elektronakh/.

15 p2687 A69-30549

Interaction of cosmic particles with radiation in an expanding universe /Vzaimodeistvie kosmicheskikh chastits s izlucheniem v rasshiriaushcheisya vesennom/.

20 p3591 A69-38010

## ROZENTAL, I. L.

Interaction of cosmic muons of high energy.

06 p0986 A69-17242

Cosmic rays in an expanding universe /Kosmicheskie luchy v rasshiriaushcheisya vesennom/.

10 p1756 A69-22839

Energy and angular distributions of 10 super 11 to 12 super 12 ev muons.

13 p2332 A69-28424

Concerning the nature of the cosmic isotropic radiation.

16 p2847 A69-31800

Variations in the electron and gamma quanta intensities in the atmosphere /Ob izmeneniiakh intensivnosti elektronov i gamma-quantov v atmosfere/.

20 p3587 A69-37044

## ROZENVASSER, E. N.

Sensitivity equations of pulsed control systems /Urovneniia chuvstvitel'nosti impul'snykh sistem upravleniia/.

17 p2994 A69-33144

## ROZHANSKII, V. A.

Nonlinear signal distortions during light modulation by electrooptical modulators applying the Pockels effect /Nelineinye iskazheniia signala pri modulatsii sveta pri pomoshchi elektrooticheskikh modulatorov ispol'zuushchikh effekt pokkel'sa/.

05 p0718 A69-15655

Nonlinear signal distortions under light modulation by means of electro-optical modulators using Pockel's effect.

16 p2754 A69-32511

## ROZHDESTVENSKII, B. L.

Systems of Quasi-linear Equations and their Application to Gasdynamics /Sistemy kvazilineinykh Uravnenii i ikh Prilozheniia k Gazovoi Dinamike/.

16 p2771 A69-32111

## ROZHDESTVENSKII, I. B.

Composition and thermodynamic functions of a reacting gaseous or heterogeneous system /Sostav i termodinamicheskie funktsii reagiruiushchei gazovoi i geterogennoi sistemy/.

11 p2001 A69-25229

Calculation of flow and thermodynamic variables on an argon-cesium mixture behind a normal shock.

23 p4150 A69-41331

## ROZHDESTVENSKII, M. K.

Results of measurements of the parameters of the Venusian atmosphere on the Soviet Venera 4 automatic interplanetary station /Rezultaty izmerenii parametrov atmosfery Veneri na sovetskoi AMS "Venera-4"/.

13 p2345 A69-27669

## ROZHDESTVENSKII, V. I.

Experimental study of the effect of a magnetic field on the heat transfer between an argon plasma flow and the walls of a channel /Eksperimental'noe issledovanie vliianiia magnitnogo polia na teploobmen potoka plazmy argona so stenkami kanala/.

04 p0636 A69-14989

Some aspects of utilization of higher plants as nutrition source in space missions.

15 p2560 A69-31408

Experimental study of heat transfer in a turbulent air flow in a circular tube with large temperature heads during cooling /Eksperimental'noe issledovanie teploobmena pri turbulentnom techenii vozdukh v krugloi trube s bol'shimi temperaturnymi naporami v sluchae okhlazhdeniia/.

22 p4051 A69-41026

## ROZHKOV, I. V.

Operational characteristics of jet fuels purified of mercaptanes /Ekspluatatsionnye svoista reaktivnykh topliv, ochishchennykh ot merkaptanov/.

01 p0142 A69-11098

## ROZHKOV, V. I.

Asymptotic behavior of a periodic solution of an equation of neutral type with a small delay.

03 p0455 A69-13258

## ROZHKOV, V. V.

Correctness of the problem of the structure of a shock wave in a plasma /Korrektnost' zadachi o strukture udarnoi volny v plazme/.

09 p1551 A69-22032

Partial differential equations with stochastic characteristics /Uravneniia v chastnykh proizvodnykh so sluchainymi kharakteristikami/.

12 p2121 A69-26366

## ROZHKOVSKII, D. A.

Catalog of reflection nebulas /Katalog otrazhatel'nykh tumannostei/.

21 p3816 A69-39722

Diffuse galactic radiation at the areas of the Northern Coalsack /Diffuznaia galakticheskaia radiatsiia v ploshchadkakh bol'shoi razvilki Mlechnogo Puti/.

21 p3817 A69-39725

Evaluation of the albedo of interstellar dust particles on the basis of observations of diffuse galactic radiation /K voprosu ob otsenke al'beto mezhvezdnykh pylinok iz nabludenii diffuznoi galakticheskoi radiatsii/.

22 p4034 A69-41112

## ROZHKOVSKII, V. D.

Problem of the optimization of autonomous system parameters /K voprosu ob optimizatsii parametrov avtonomnykh sistem/.

11 p1858 A69-24557

## ROZIER, J.

Physiological effects of variations of body position and their consequences to motor activity /Effets physiologiques des variations de position du corps et leurs consequences sur l'activite motrice/.

13 p2211 A69-28593

## ROZIN, L. A.

Experimental application of a universal program of the Leningrad State University Computer Center for calculating axisymmetrically deformed shells of revolution /Opyt ekspluatatsii universal'noi programmy VTs LGU dlia rascheta obolochek vrashcheniia pri osemimetricnoi deformatsii/.

06 p1026 A69-18019

## ROZLOVSKII, A. I.

Ignition of diacetylene /Vosplamenenie diatsetilena/.

02 p0351 A69-11981

## ROZNOWSKI, T.

Quantitative analysis of a non-steady-state temperature field in a long cylinder.

05 p0845 A69-15797

## ROZOV, V. M.

Assessment of the time distortions of short-wave binary signals due to fading.

05 p0719 A69-16087

## ROZOV, V. V.

Magnetic susceptibility of an indium phosphide/gallium arsenide solid solution /Magnitnaia vosprimchivost' tverdogo rastvora fosfid indii-arsenid galliia/.

07 p1200 A69-19013

## ROZOVA, V. N.

Controllability of control systems with discontinuous constraints on the controls.

09 p1475 A69-22670

## ROZOVSKII, M. I.

Integral-operator method for studying stress concentrations at a circular hole in the case of large strains and a physical nonlinearity /Integral'no-operatorni metod doslidzhennia kontsentratsii napruzheniia pobliзу krugovogo otvora pri velikikh deformatsiakh ta fizichnii nelineinosti/.

09 p1613 A69-21629

Theory of anisotropic hereditary elastic media /K teorii anizotropnykh uprugoo-nasledstvennykh sred/.

15 p2642 A69-30584

## ROZSNIYAI, B. F.

Rotational excitation of polar molecules by electrons.

06 p0961 A69-17139

## ROZSPAL, A.

Some nonlinear functional models of frequency discrimination of the human ear.

18 p3097 A69-35440

## RTISHCHEVA, N. P.

Method of calculating the equilibrium compositions of reaction products by permutation over a limiting equilibrium surface /Metod rascheta ravnovesnykh sostavov produktov reaktzii peremeshcheniem po predel'noi poverkhnosti ravnovesii/.

11 p2001 A69-25224

## RUAX, R.

New method of measurement of filament diameters and particularly carbon of filaments.

08 p1316 A69-20499

## RUBAN, V. A.

Spherically symmetrical T-models in the general theory of relativity /Sfericheski-simmetrichnye T-modeli v obshchei teorii otноситel'nosti/.

21 p3803 A69-38994

## RUBANOV, A. S.

Nonlinear absorption of laser emission by molecular gases /Nelineinoe pogloshchenie lazernogo izlucheniia molekuliarnymi gazami/.

17 p2983 A69-33973

## RUBANOV, V. S.

Method of calculating the temperature dependence of the gain of a He-Ne laser /Metodika rascheta temperaturnoi zavisimosti koeffitsienta usileniia He-Ne lazera/.

06 p0934 A69-17260

Effect of pumping power on the temperature dependence of the amplification factor of a He-Ne laser /Vliianie moshchnosti nakachki na zavisimost' koeffitsienta usileniia He-Ne lazera ot temperatury/.

07 p1149 A69-18935

Calculation of the polarization characteristics of lasers /Raschet polarizatsionnykh kharakteristik kvantovykh generatorov/.

17 p2983 A69-33967

Analysis of the possibilities of separating the polarizations of opposed waves in a ring laser /Analiz vozmozhnostei razdeleniia polarizatsii vstrechnykh voln v kol'tsevom kvantovom generatore/.

20 p3553 A69-37606

## RUBANOVA, G. M.

Investigation of the variation in the absorption spectrum of condensed systems subjected to high-density radiation /Issledovanie izmeneniia spektra pogloshcheniia kondensirovannykh sistem pod deistviem izlucheniia bol'shoi plotnosti/.

03 p0436 A69-13036

Investigation of the population kinetics of the super 2 E metastable state of ruby, and of the resonator losses of a pulsed Q-switched laser /Issledovaniia kinetiki naselennosti metastabil'nogo sostoiianiia super 2 E rubina i poter' v rezonatore lazera s impul'snoi modulatsiei dobrotnosti/.

04 p0610 A69-14381

Study of the population kinetics of the metastable super 2 E state of ruby and the losses in a Q-switched laser resonator.

14 p2456 A69-28754

## RUBASHEVSKII, A. A.

Influence of atmospheric scintillation on the brightness distribution over the disk of a planet /O vlianii atmosfernogo drozhaniiia na raspredelenie iarkosti po disku planety/.

11 p1960 A69-24729

## RUBASHKINA, L. A.

Changes in the enzymatic activity of cellular and subcellular structures in response to accelerations.

10 p1645 A69-23496

## RUBASHOV, I. B.

Electrogasdynamic generator.

03 p0369 A69-14153

One-dimensional flows in electrogas dynamics /Odnomernye techeniia v elektrogazodinamike/.

06 p0964 A69-17326

Formation of a self-sustained discharge in a moving gas /Voznikovenie samostoiatel'nogo razriada v dvizhushchemsya gaze/.

11 p1933 A69-25545

Electrohydrodynamic flow in channels.

12 p2135 A69-26400

## RUBBO, S. D.

Efficiency of sterilants in terrestrial and extraterrestrial environments.

05 p0712 A69-15937

## RUBENCHIK, L. I.

Microorganisms and the Cosmos /Mikroorganizmy i kosmos/.

20 p3467 A69-37230

## RUBENFELD, L. A.

Bounds on elastic moduli of composite media.

24 p4406 A69-43701

## RUBERTI, A.

The order of linear continuous systems described by the impulse response matrix.

11 p1858 A69-24567

## RUBEY, R. J.

CLASP, computer language for aeronautics and space programming. [AIAA PAPER 69-957]

22 p3905 A69-40339

## RUBIN, A. B.

Mathematical simulation of closed ecosystems.

01 p0021 A69-11316

Energy efficiency of life-support systems /Ob energeticheskoi effektivnosti sistem zhizneobespecheniia/.

06 p0882 A69-17644

## RUBIN, B.

The growth of single crystals by controlled diffusion in silica gel.

10 p1652 A69-23371

## RUBIN, C. P.

Dynamic optimization of complex structures.

11 p1989 A69-25494

## RUBIN, D.

On stability of viscoplastic systems with thermomechanical coupling.

20 p3625 A69-37591

## RUBIN, I. S.

Inverse Laplace transforms for periodic functions.

02 p0271 A69-11983

## RUBIN, L. G.

Quantum effects in cyclotron resonance using a CW hydrogen-cyanide laser [IEEE PAPER C-6]

07 p1150 A69-19051

## RUBIN, P. L.

On the inversion mechanism in the CW argon-ion laser.

12 p2106 A69-26319

## RUBIN, R.

SYMMTRAC I and SYMMTRAC II feeds for low noise antennas.

11 p1852 A69-25317

ATS mechanically despun communications satellite antenna.

22 p3913 A69-40692

## RUBIN, R. H.

Abundances in diffuse nebulae.

10 p1787 A69-24116

## RUBIN, R. T.

Psychological, psychophysiological, and biochemical correlates of prolonged sleep deprivation.

23 p4099 A69-42195

## RUBIN, S. G.

Hypersonic interactions near sharp leading edges.

24 p4248 A69-43579

## RUBIN, V. C.

A note on the systemic velocity of M 31.

21 p3797 A69-38481

Observations of M82 in the optical infrared.

21 p3799 A69-38649

## RUBIN, V. S.

Some properties of gallium arsenide with a nickel impurity /Nekotorye svoistva arsenida galliia s primes'iu nikelia/.

09 p1555 A69-21475

Some properties of nickel-doped gallium arsenide.

15 p2669 A69-30720

Selective and lasing properties of S-diodes based on nickel-doped gallium arsenide /Izbratel'nye i generatsionnye svoistva S-diodov iz arsenida galliia s primes'iu nikelia/.

22 p3912 A69-40606

Some investigations of the electrophysical properties and injection conductivity of high-resistivity gallium arsenide with a nickel impurity /Nekotorye issledovaniia elektrofizicheskikh svoistv i inzhetsionnoi provodimosti vysokomnogo arsenida galliia s primes'iu nikelia/.

24 p4362 A69-43734

Electroluminescence in gallium arsenide S-diodes with iron and nickel impurities /Elektroluminestentsiia v S-diodakh iz arsenida galliia s primes'iu zheleza i nikelia/.

24 p4288 A69-43739

## RUBINO, N.

Measurements of magneto-elastic constants by microwave techniques.

02 p0299 A69-12243

## RUBINOV, A. N.

Experimental determination of the energy characteristics of a ruby laser /Eksperimental'noe opredelenie energeticheskikh parametrov rubinovogo generatora/.

02 p0256 A69-12000

Generation of dye solutions by second harmonic excitation of a ruby laser /Generatsiia rastvorov krasitelei pri vzbuzhdenii vtoroi garmoniki rubinovogo lazera/.

06 p0933 A69-17255

Effect of standing waves on the spectral and power characteristics of a laser with plane mirrors /Vliianie stoiachiikh voln na spektral'nye i energeticheskie kharakteristiki lazera s ploskimi zerkalami/.

07 p1148 A69-18800



- Emission losses in a laser with an inhomogeneous active rod /Poteri izlucheniya v OKG s neodnorodnym aktivnym sterzhenim/.  
11 p1926 A69-24603
- Spectral, temporal, and angular emission characteristics of a composite ruby laser /Spektral'nye, vremennye i uglovye kharakteristiki izlucheniya sostavnogo lazera na rubine/.  
14 p2458 A69-29163
- Lasers based on solutions of organic dyes.  
20 p3555 A69-38011
- Effect of stationary waves on spectral and energy characteristics of a laser with plane mirrors.  
21 p3736 A69-38945
- RUBINS, P. M.**  
Experimental and analytical study of H sub 2-air reaction kinetics using a standing-wave normal shock. [AIAA PAPER 67-479]  
23 p4239 A69-41893
- RUBINSSTEIN, A. I.**  
Mutual influence of unit radiators of the plane open-end waveguide type /Vzaimnoe vlianiye elementarnykh izluchatelei tipa ploskogo volnovoda s otkrytym kontsom/.  
22 p3901 A69-40950
- RUBINSSTEIN, I. A.**  
Effect of the association of sulfur-organic compounds with aromatic hydrocarbons on the oxidation stability of oil /O vlianii assotsiativ sersorganicheskikh soedinenii s aromaticheskimi uglevodorodami na stabil'nost' masla protiv oksisleniia/.  
03 p0494 A69-13800
- RUBINSSTEIN, L. I.**  
Latvian Mathematical Yearbook. Number 3 /Latvinskii Matematicheskii Ezhegodnik. Number 3/.  
03 p0468 A69-13862
- RUBINSSTEIN, M. V.**  
Utilization of forecasts in probabilistic form in the meteorological support of aviation /Ispol'zovanie prognozov v veroyatnostnoi forme pri meteorologicheskoi obespechenii aviatsii/.  
14 p2474 A69-29739
- RUBINSTEIN, C. B.**  
Hologram heterodyne scanners.  
03 p0431 A69-13827
- RUBINSTEIN, M. F.**  
Structural analysis by matrix decomposition.  
01 p0173 A69-11417
- Optimum structural design.  
[SAE PAPER 680752]  
03 p0525 A69-13437
- RUBIO, A.**  
Fracture design practices for rotating equipment.  
17 p3060 A69-33561
- RUBIO, R.**  
Corrections to observed rocketsonde and balloon-sonde temperatures.  
01 p0081 A69-10697
- RUBTSOV, I. I.**  
Kinetics of the thermal decomposition of ammonium perchlorate at high temperatures /Kinetika termicheskogo raspada perklorata ammonia pri vysokikh temperaturakh/.  
08 p1375 A69-20339
- RUBTSOV, N. A.**  
Radiative-convective heat transfer in a plane layer of an absorbing screen /Luchisto-konvektivnyi teploobmen v ploskom sloe pogloschayushchei zavesy/.  
07 p1242 A69-18991
- Radiative-conductive heat transfer in a plane layer of a gray heat-conducting medium /Luchisto-konduktivnyi teploobmen v ploskom sloe seroi teploprovodnoi sredy/.  
09 p1621 A69-21433
- RUBTSOVA, Z. S.**  
Antifriction properties of hard lubricating coatings in an inert gas atmosphere and in a vacuum /Antifriktsionnye svoystva tverdykh smazochnykh pokrytii v atmosfere inertnogo gaza i v vakume/.  
13 p2269 A69-28053
- Behavior of solid lubricating films on a molybdenum disulfide base during friction under high-vacuum conditions /Povedenie tverdykh smazochnykh pokrytii na osnove disulfida molibdena pri trenii v usloviakh glubokogo vakuma/.  
16 p2793 A69-31561
- RUBY, C.**  
Airline pilots look at the future.  
22 p4054 A69-41144
- RUCH, J. G.**  
Transport properties of GaAs.  
01 p0140 A69-11255
- RUCINSKI, S.**  
Atmosphere models of the early spectral type stars. I /Modele atmosfer gwiazd wczesnych typow widmowych. I/.  
11 p1954 A69-24361
- RUCINSKI, S. M.**  
The photometric proximity effects in close binary systems. I - The distortion of the components and the related effects in early type binaries.  
17 p3044 A69-34179
- RUCKENSTEIN, E.**  
Mass transfer in the case of interfacial turbulence induced by the Marangoni effect.  
09 p1621 A69-21903
- On the turbulent field of temperature or concentration.  
24 p4407 A69-42917
- RUD, B. M.**  
Certain properties of praseodymium germanides /Nekotorye svoystva germanidov praeodima/.  
23 p4199 A69-42467
- RUDAKOV, I. U. S.**  
Application of dimensionality theory to the analysis of the thermovortex effect /Primenenie teorii razmernosti k analizu termovikhrevogo effekta/.  
03 p0531 A69-12966
- RUDAKOV, L. I.**  
Instability of a plasma with an isotropic distribution function.  
08 p1359 A69-19949
- Plasma instability in a strongly inhomogeneous magnetic field /Neustoiichivost' plazmy v sil'no neodnorodnom magnitnom pole/.  
09 p1546 A69-21571
- Effect of a high-frequency magnetic field on plasma instability.  
10 p1739 A69-23623
- RUDAKOV, V. A.**  
Characteristics of the neutral and ionized components of the atmosphere at heights of 100-500 km, measured during the flights of geophysical rockets.  
03 p0422 A69-13508
- RUDAKOV, V. M.**  
Optimal choice of moments of time for navigational observations /Ob optimal'nom vybore momentov navigatsionnykh nabludenii/.  
19 p3370 A69-36614
- Processing continuous observations in a space navigation problem /Ob obrabotke nepreryvnogo nabludeniiya v odnoi zadache kosmicheskoi navigatsii/.  
22 p3979 A69-41087
- RUDBERG, D.**  
A microcellular parallel processor for the discrete Kalman filter.  
02 p0224 A69-11743
- RUDD, M. J.**  
A new theoretical model for the laser Doppler-meter.  
06 p0932 A69-16927
- RUDDER, C. L.**  
Polarization effects of scattered coherent light on imagery.  
11 p1896 A69-24849
- Brightness discrimination in reflected laser light.  
24 p4276 A69-43323
- RUDDOCK, K. H.**  
The parafoveal visual response of a tritanope and an interpretation of the V lambda sensitivity functions of mesopic vision.  
22 p3882 A69-40869
- The Purkinje shift.  
22 p3883 A69-40880
- RUDDUCK, R. C.**  
The admittance of a parallel-plate waveguide aperture illuminating a metal sheet.  
02 p0218 A69-12328
- Reflection coefficient of a TEM mode symmetric parallel-plate waveguide illuminating a dielectric layer.  
18 p3108 A69-34802
- Reflection coefficient of a parallel-plate waveguide illuminating a conducting sheet.  
20 p3507 A69-37839
- Application of a surface integration technique to parallel-plate waveguide radiation-pattern analysis.  
23 p4136 A69-41581
- RUELIUS, W.**  
Methods of analyzing the impact of program stretchouts.  
15 p2721 A69-31071
- RUDENKO, N. S.**  
Viscosity of hydrogen at constant density over the temperature range 16.6-300 deg K.  
11 p2003 A69-2570
- RUDENKO, S. I.**  
Investigation of the flow at a swept wing in the region of a stall fence /Issledovaniya tekhnika na strelovidnoi kryle v oblasti peregorodki/.  
06 p0858 A69-173
- RUDENOK, M. I.**  
Electron microscopy study of the formation and growth of thin films of lead sulfide /Elektronnomikroskopicheskoe issledovanie vozniknoveniya i rasta tonkikh plenok sernistogo svintsa/.  
10 p1743 A69-23000
- RUDER, H.**  
Rotational motion of a system of n mass points. I. /Zur rotatorischen Bewegung eines Systems von n Massenpunkten. I/.  
02 p0280 A69-1186
- Rotational motion of a system of n mass points. II. /Zur rotatorischen Bewegung eines Systems von n Massenpunkten. II/.  
24 p4349 A69-42655
- RUDERMAN, M.**  
Neutron starquakes and pulsar periods.  
21 p3798 A69-38545
- RUDERMAN, M. A.**  
Magnetic poles and energetic photon showers in cosmic rays.  
06 p0996 A69-1788
- Crystallization and torsional oscillations of superdense stars.  
17 p3037 A69-33646
- Neutrino-pair bremsstrahlung from a degenerate electron gas.  
18 p3176 A69-35000
- RUDGE, A. W.**  
Beam-scanning primary feed for parabolic reflector antennas.  
08 p1279 A69-19900
- RUDGE, P. T.**  
Crab and Vela pulsars.  
13 p2354 A69-2847
- RUDINA, M. P.**  
Vertical ionization drift and the recombination coefficient in the ionospheric F region /Vertikal'nyi дрейз ionizatsii i koeffitsient rekombinatsii v F-oblasti ionosfery/.  
12 p2070 A69-2658
- An automatic data processing system for ionospheric investigations /Sistema avtomaticheskoi obrabotki dannykh pri issledovanii ionosfery/.  
13 p2225 A69-2761
- Determination of the vertical drift velocity component and the recombination coefficient in the ionospheric F region /Opredeleniye vertikal'noy sostavlyayushchei skorosti dreifa i koeffitsienta rekombinatsii v F-oblasti ionosfery/.  
20 p3521 A69-3704
- RUDIS, M.**  
The determination of the real shape of the time correlation function computed from partially averaged data.  
05 p0786 A69-1592
- RUDIS, M. A.**  
Limiting equilibrium of some shells of revolution made of a material with differing yield stress under tension and compression /Predel'noe ravновесie nekotorykh obolochek vrashcheniya, vypolnennykh iz materiala s raznymi predelami tekuchesti pri rastizhenii i szhatii/.  
18 p3216 A69-3457
- RUDIS, V. I.**  
Some aspects of artificial damping of the longitudinal motions of a winged spacecraft in the earth's atmosphere /Nekotoryye voprosy iskusstvennogo dempfovaniya prodol'nogo dvizheniya krylatogo kosmicheskogo letatel'nogo apparata v atmosfere zemli/.  
21 p3829 A69-39828
- RUDISILL, J. E.**  
A vacuum spark light source for the extreme ultraviolet region.  
11 p1885 A69-24839
- RUDIUK, A.**  
Noise suppression in a passenger aircraft /Zwalozanie halasu w samolocie pasazerskim/.  
07 p1057 A69-1970

## RUDKJOBING, M.

- Kepler's third law and radar determinations of the astronomical unit of length in general relativity.  
04 p0657 A69-14698
- Tentative identification of the diffuse interstellar absorption bands and of a diffuse interstellar doublet line.  
08 p1395 A69-20639

## RUDKO, R.

- Windows for high-power lasers.  
07 p1144 A69-18401

## RUDKO, R. I.

- CO sub 2 laser radiation absorption in semi-insulating gallium arsenide.  
02 p0258 A69-12619
- The singly ionized krypton ion laser.  
12 p2109 A69-26638
- CW operation of high-pressure flowing CO sub 2 lasers.  
23 p4173 A69-41496

## RUDMAN, S.

- Hypersonic interactions near sharp leading edges.  
24 p4248 A69-43579

## RUDMOSE, W.

- Primer on methods and scales of noise measurement.  
14 p2485 A69-29150

## RUDNEV, M. I.

- Interaction between two plasmoids in the magnetic field of a divertor /Vzamedia dvokh plazmovikh zgustkiv u magnitnomu poli divertora/.  
12 p2133 A69-25976
- Interaction between plasma fluxes and a plasma cylinder in the magnetic field of a divertor /Vzamedia plazmovikh potokiv z plazmovim tsilindrom v magnitnomu poli divertora/.  
12 p2134 A69-25977
- Plasma capture in the divertor aperture in the case of asynchronous injection of two plasma streams /Zakhopleniia plazmi v aperturu divertora pri asinkhronnoi inzhetsii dvokh plazmovikh potokiv/.  
21 p3776 A69-38585

## RUDNEV, V. S.

- Experimental study of spectral properties of high-temperature air.  
18 p3231 A69-35122

## RUDNEVA, N. M.

- Ionospheric current systems for some international quiet days.  
03 p0423 A69-13518
- Theoretical form of the boundary of the magnetosphere, taking into account the inclination of the geomagnetic dipole to the geographical axis and to the nondipole section of the geomagnetic field /Teoreticheskaia forma granitsy magnitosfery s uchetom naklona geomagnitnogo dipolia k geograficheskoi osi i nedipol'noi chasti geomagnitnogo polia/.  
10 p1686 A69-23902

## RUDNICK, A.

- Considerations in testing brittle materials.  
24 p4333 A69-43342

## RUDNICKI, K.

- The dependence of the velocity body of stars on space location.  
17 p3031 A69-33102
- Observational aspects of the knowledge concerning supernovae /Obserwacyjne aspekty wiedzy o supernowych/.  
17 p3044 A69-34173
- Redshifts of six galaxies in the vicinity of the Coma Cluster.  
17 p3044 A69-34182

## RUDNITSKII, I. P.

- Liquid lasers /Opticheskii kvantovye generatory na zhidkostiakh/.  
11 p1893 A69-24353
- Energy exchange between active centers in glass /Obobmene energiei mezhdu aktivnymi tsentrami v stekle/.  
15 p2632 A69-30053
- Features of energy transfer and dissipation in luminophors based on phosphate glasses activated by neodymium /Osobennosti perenosia i dissipatsii energii v luminoforakh na osnove fosfatnykh stekol, aktivirovannykh neodimom/.  
20 p3552 A69-37017

## RUDNITSKII, I. S.

- A multilayer method of studying the stresses state of optically active models /Pro bagatosharovii metod doslidzhennia napruzhenogo stanu optichno aktivnykh modelei/.  
18 p3138 A69-35152

## RUDOLF, A.

- The airline ticket in international air travel /Der Flugschein im internationalen Linienverkehr/.  
13 p2381 A69-27530

## RUDOV, I. U. M.

- Approximate method of calculating the parameters of a supersonic gas jet impinging on an inclined plane barrier /Priblizhennyi metod rascheta parametrov sverkhzvukovoi gazovoi strui, padaiushchei na naklonnuiu ploskuu pregradu/.  
03 p0413 A69-12958

## RUDRAIA, N.

- Magnetohydrodynamic laminar flow between porous disks with injection at a large Reynolds number /Magnetogidrodinamicheskoe laminarnoe techenie mezhdu poristymi diskami s vdovom s bol'shim chislom Reinal'dsa/.  
15 p2662 A69-30968

## RUDY, E.

- Revision of the vanadium-carbon and niobium-carbon systems.  
05 p0779 A69-15988

## RUDY, J. F.

- A new method of pressure control for adhesive bonding.  
09 p1512 A69-22367

## RUE, A. K.

- Stabilization of precision electrooptical pointing and tracking systems.  
23 p4131 A69-42544

## RUECKAUER, CH.

- Investigation of the attenuation of shock waves through multiple reflection in a shock tube.  
18 p3121 A69-34475

## RUEDIGER, W.

- Adaptation of electrical autostimulation in the hypothalamus and of the instrumental confirmative reaction to varying conditions of release /Anpassung der elektrischen Autostimulation im Hypothalamus und der instrumentellen Bekraeftigungsreaktion an sich aendernde Ausloesbedingungen/.  
23 p4091 A69-42052

## RUEDINGER, K.

- The present state of titanium alloys /Heutiger Stand der Titanlegierungen/.  
16 p2801 A69-31784

## RUEGG, H. W.

- A proposed punch-through microwave negative-resistance diode.  
02 p0215 A69-11938

## RUEHLE, W.

- The compact Co-60 kernel for space power.  
23 p4187 A69-42257

## RUEPKE, H. D.

- Microwave filter using the magnetodynamic natural oscillations in ferrite spheres /Mikrowellenfilter unter Verwendung magnetodynamischer Eigenschwingungen in Ferritkugeln/.  
11 p1855 A69-25626

## RUEPKE, H.-D.

- High-Q magnetically tunable microwave filters /Magnetisch abstimmbare Mikrowellenfilter mit hoher Guete/.  
06 p0892 A69-16831

## RUESS, A. D.

- Microwave-induced plasma shield propagation in rare gases.  
16 p2818 A69-31671

## RUESTER, R.

- Theoretical treatment of the dynamical behaviour of the F-region during geomagnetic bay disturbances.  
16 p2777 A69-32181

## RUETERING, H.

- Analog simulation of nonlinear functions of a single independent variable /Analogie Nachbildung von nichtlinearen Funktionen einer unabhaengigen Veranderlichen/.  
13 p2224 A69-27531

## RUETHER, W.

- RBE values for fast neutrons in connection with estimates of the radiation burden in space.  
20 p3478 A69-37629

## RUETZ, J. A.

- High power TWT for satellite communication.  
07 p1094 A69-18427

## RUFEL, F.

- Emission characteristics of a duplex vapor-deposited tungsten emitter.  
09 p1438 A69-21820

- Thermal stability as a function of converter performance.  
09 p1441 A69-21838

- Summary of applied research program in thermionic conversion during recent years.  
14 p2397 A69-29173

- Electron scattering in thermionic converters by xenon, krypton and argon.  
14 p2403 A69-29251

## RUFER, R. P.

- An electrooptical automatic gain control.  
14 p2459 A69-29491

## RUFF, F.

- Data acquisition equipment for extra-terrestrial experiments /Bausteine zur Datengewinnung bei extraterrestrischen Experimenten/.  
16 p2759 A69-31857

## RUFFIN, R. S.

- Some biological effects of laser radiation. [AGARDOGRAPH-111]  
08 p1266 A69-20676

## RUFFING, C. R.

- Resins and reinforced plastic laminates for continuous use at 650 deg F. III.  
07 p1171 A69-19545

## RUGE, I.

- Technological applications of heterojunctions /Zur technischen Anwendung von Hetero- Uebergaengen/.  
02 p0294 A69-11598

## RUGGIERI, G.

- Interdependence of the angular velocity and flexural strains of a rotor during passage through critical velocity /Sulla mutua dipendenza tra velocita angolare e deformazioni flessionali di un rotore nel passaggio attraverso la velocita critica/.  
11 p1987 A69-25390

## RUGH, W. J.

- A new approach to the solution of linear optimal control problems. [ASME PAPER 68-WA/AUT-17]  
05 p0738 A69-16175

## RUHL, R. C.

- Splat quenching of iron-nickel-boron alloys.  
10 p1707 A69-22987

## RUHM, H.

- Formation depths of absorption lines in sunspots /Entstehungstiefen von Absorptionslinien im Sonnenfleck/.  
06 p0999 A69-16976

## RUIZ, C.

- Plastic failure under internal pressure of aluminum spherical shells with nozzle reinforced openings - Experimental results and their application to design.  
17 p3052 A69-32983

## RUKHADZE, A. A.

- Kinetic theory of plasma drift-dissipative instabilities /Kinicheskakaia teoriia dreifovo-dissipativnykh neustoiichivostei plazmy/.  
01 p0126 A69-10187
- The nature of the irregular structure of the interplanetary plasma.  
02 p0314 A69-11638
- Excitation of drift oscillations in a weakly ionized plasma /Vozbuzhdenie dreifovykh kolebaniy v slabioionizovannoi plazme/.  
02 p0291 A69-12553
- Theory of equilibrium and stability of a strong-current discharge in a dense optically transparent plasma /Teoriia ravnovesiia i ustoiichivosti sil'notochnogo razriada v plotnoi opticheskii prozrachnoi plazme/.  
04 p0636 A69-14983
- The method of geometrical optics for differential equations of the fourth order as applied to low-frequency plasma oscillations.  
07 p1190 A69-18697
- Low-frequency hydrodynamic instabilities in an inhomogeneous current-carrying plasma /Nizkochastotnye gidrodinamicheskie neustoiichivosti neodnorodnoi plazmy s tokom/.  
11 p1932 A69-25537
- Constrictions in a finitely conducting plasma /Pereziazhki v plazme konechnoi provodimosti/.  
13 p2315 A69-28449
- Current-convective instability in an inhomogeneous solid-state plasma /Tokovoi konvektivnaia neustoiichivost' v neodnorodnoi tverdogo plazme/.  
15 p2665 A69-30042
- Drift oscillations in a weakly ionized plasma.  
15 p2658 A69-30250



## RUKHIN, A. B.

## RUKHIN, A. B.

More accurate determination of the distribution of a diffusing substance in an axisymmetric turbulent flow /Utochnenie raspredeleniia diffundiruiushchei substantzii v osesimmetrichnom turbulentnom potoke/. 14 p2430 A69-29424

## RUKHMAN, E. E.

Application of the Monte Carlo method to the calculation of the aerodynamic characteristics of bodies of complex form in a free molecular flow /Primenenie metoda Monte-Karlo k raschetu aerodinamicheskikh kharakteristik tel slozhnoi formy v svobodnomolekuliarnom potoke/. 09 p1430 A69-21793

## RUKMAN, G. I.

Obtaining holograms with an incoherent light source. 09 p1495 A69-21671

## RULE, B.

A new radio telescope for the Owens Valley observatory. 02 p0229 A69-11974

Lever support systems. I - General discussion, and description of 200-inch system. 12 p2057 A69-26410

Defining of large mirror support systems. 12 p2057 A69-26414

## RULE, G. W.

Cost plus award fee contracting. 15 p2720 A69-30426

## RULLGARD, A.

Some aspects of hybrid computers. 02 p0212 A69-11997

## RUMANOV, E. N.

Critical conditions for self-ignition of a particle agglomeration /Kriticheskie uslovia samovosplamneniia sovokupnosti chastits/. 17 p3070 A69-33142

## RUMBARGER, J. H.

Evaluation of the life margin of oscillating needle roller bearings. [ASME PAPER 68-LC-7] 15 p2622 A69-30609

Lubrication review. 15 p2628 A69-30900

Analysis of the elastic contact of a hollow ball with a flat plate. [ASME PAPER 69-LUBS-5] 18 p3212 A69-34383

## RUMIANTSEV, B. I.

Utilization of deep-freezing as a means of substantially improving the characteristics of nuclear-precession magnetometers /Ob ispol'zovanii glubokogo okhlazhdeniia dia sushchestvennogo uluchsheniia kharakteristik iaderno pretsessionnykh magnetometrov/. 14 p2446 A69-29083

## RUMIANTSEV, I. U. M.

Electrical and photoelectrical properties of heterojunctions prepared by germanium epitaxy on gallium arsenide bases /Elektricheskie i fotoelektricheskie svoista geteroperekhodov, poluchennykh epitaksiei germaniia na podlozhkakh arsenida galliia/. 15 p2667 A69-30078

## RUMIANTSEV, S. V.

Radiation Defectoscopy /Radiatsionnaia Defektoskopiia/. 13 p2268 A69-27935

## RUMIANTSEV, V. V.

Stability of stable motions of free systems /Ob ustoiichivosti statsionarnykh dvizhenii svobodnykh sistem/. 01 p0151 A69-10567

Stability of steady-state satellite motion. 01 p0163 A69-11301

Motion and stability of a solid body containing a rotor and liquids with surface tension /O dvizhenii i ustoiichivosti tverdogo tela s rotorom i zhidkostiami, obladaiushchimi poverkhnostnym natiazheniem/. 03 p0418 A69-13814

On the stability of steady-state motions. 11 p1920 A69-25742

Steady-motion stability of free systems. 15 p2690 A69-30737

On the stability of motions of the rigid bodies with cavities, containing liquid. 17 p3005 A69-33228

On the stability of motion of liquid-filled rigid bodies. 19 p3301 A69-36810

## RUMIANTSEVA, I. A.

Investigation of a plasma blob obtained by means of focused laser radiation /Issledovanie sgustka plazmy, poluchaemoi pri fokusirovanii lazernogo izlucheniia/. 11 p1928 A69-25235

## RUMIANTSEVA, T. I.

Spectral determination of oxygen in titanium with preliminary extraction /Spektral'noe opredelenie kisloroda v titane s predvaritel'noi ekstraktsiei/. 14 p2446 A69-29158

## RUMKEVICH, B. N.

Plasma flow in a transverse inhomogeneous magnetic field /Plazmennyi potok v neodnorodnom poperechnom magnitnom pole/. 12 p2137 A69-26528

## RUMMLER, D. R.

Application of advanced materials to truss structures. 19 p3340 A69-35504

## RUMPEL, W. F.

Radiation heating characteristics of Venus entry. 02 p0351 A69-11751

## RUMRILL, E. W., JR.

The C-5A - Innovations for industrial hydraulics. 20 p3466 A69-38177

## RUMSEY, H.

On some extremal positive definite functions. 17 p2993 A69-32831

## RUMSEY, H., JR.

Primitive trinomials of high degree. 03 p0455 A69-13373

## RUMYSKII, A. N.

Experimental determination of the emissivities of high-temperature gas flows /Eksperimental'noe opredelenie izluchatel'nykh sposobnostei vysokotemperaturnykh gazovykh potokov/. 06 p0911 A69-17348

## RUNCHAL, A. K.

Heat and Mass Transfer in Recirculating Flows. 21 p3691 A69-38333

## RUNCK, R. J.

Demand economics of space-age metals. 19 p3346 A69-36635

## RUNCORN, S. K.

International Dictionary of Geophysics. Volume 1. 19 p3303 A69-36511

International Dictionary of Geophysics. Volume 2. 19 p3304 A69-36512

The Application of Modern Physics to the Earth and Planetary Interiors, Proceedings of the NATO Advanced Study Institute, University of Newcastle-upon-Tyne, Newcastle-upon-Tyne, England, March 29-April 4, 1967. 22 p4015 A69-40172

A palaeontological method of testing the hypothesis of a varying gravitational constant. 22 p4017 A69-40177

## RUNDELL, G. R.

Effect of minor elements on the weldability of a nickel-base heat-resistant alloy. 22 p3967 A69-39882

## RUNDLE, H. N.

Twilight observations of upper atmospheric sodium, potassium, and lithium. [AFRL-69-0097] 06 p0918 A69-17494

An identification of twilight helium 10,830 angstrom units emission with increased resolution and preliminary photometric measurements. [AFRL-69-0294] 14 p2440 A69-29124

## RUNDLE, W. J.

A ruby laser modified for pulse-transmission-mode cavity dumping. 02 p0257 A69-12410

## RUNDO, J.

Measurements of radioactivity in the meteorite of April 25, 1969. 20 p3590 A69-37571

## RUNG, R.

The stress distribution and spring rates in a cantilever cone ring combination. [ASME PAPER 68-WA/DE-3] 05 p0839 A69-16168

## RUNGALDIER, H.

Theoretical and experimental study of rarefied supersonic flows about several simple shapes. 02 p0189 A69-12523

## RUNSTADLER, P. W., JR.

Straight channel diffuser performance at high inlet Mach numbers. [ASME PAPER 68-WA/FE-19] 05 p0698 A69-160959

## RUNYAN, E. J.

Gate arrival terminal for Kansas City MCI airport. 16 p2766 A69-32327

## RUPP, E.

Radar attitude sensing system. 03 p0388 A69-13181

## RUPPE, F.

Behavior of the diurnal cosmic ray variation before a Forbush effect /O povedenii sutochnoi variatsii kosmicheskikh luchej pored Forbush-effektom/. 10 p1769 A69-23904

## RUPPERSBERG, G. H.

Measurement of standard visibility using scattered light recorder during the 1965 Atlantic expedition aboard the "Meteor" /Messungen der Normsichtweite mit einem Streulichtschreiber waehrend der Atlantischen Expedition 1965 "Meteor"/. 04 p0628 A69-15158

## RUSAKOV, A. A.

Anomalous grain growth and the deformation of single crystals during annealing of hydraulically extruded molybdenum /Anomal'nyi rost zeren i obrazovanie monokristallov pri otzhige gidroekstrudirovannogo molidbena/. 21 p3745 A69-38953

## RUSAKOV, M. M.

Experimental investigation of the dispersion of a substance after being penetrated by a strong shock wave /Opytnoe issledovanie razleta veshchestva posle prokhozheniia po nemu moshchnoi udarnoi volny/. 19 p3301 A69-36839

## RUSAKOVA, N. V.

Investigation of iron-nickel and iron-nickel-cobalt ferrites /Issledovanie zhelezo-nikelevykh i zhelezo-nikel'-kobal'tovykh ferritov/. 13 p2319 A69-27992

## RUSANOV, V. D.

Plasma flow around a two-dimensional magnetic dipole. 06 p0967 A69-17738

Propagation of heat in a plasma along a magnetic field /a substitution wave/ /Rasprostraneniie tepla v plazme vdol' magnitnogo polia /volna zameshcheniia/. 10 p1741 A69-23896

Turbulent heating of a plasma in a toroidal system with current /Turbulentnyi nagrev plazmy v toroidal'noi sisteme s tokom/. 11 p1935 A69-25752

Interferometer employing a gas laser for measuring plasmoids /Interferometr na gazovom lazere dlia izmereniia sgustkov plazmy/. 14 p2451 A69-29778

Determination of plasmoid parameters on the basis of infrared radiation /Opredelenie parametrov sgustkov plazmy po infrakrasnomu izlucheniui/. 14 p2496 A69-29785

Allowance for the effects of multiple reflection from dielectric walls in the microwave probing of plasmas /Uchet effektov mnogokratnogo otrazheniia ot dielektricheskikh stenok pri SVCh-zondirovanii plazmy/. 14 p2498 A69-29806

## RUSANOV, V. V.

Three-dimensional Flow of Ideal Gases around Smooth Bodies. 16 p2771 A69-32003

## RUSBRIDGE, M. G.

The partition of energy in a turbulent plasma. 03 p0476 A69-13384

Energy flow in the Zeta discharge. 06 p0970 A69-17955

Turbulent density fluctuations in zeta. 08 p1364 A69-20517

## RUSCH, W. V. T.

Observations of the total lunar eclipse of October 18, 1967, at a wavelength of 3.33 millimeters. 10 p1789 A69-24132

Pioneer VI Faraday-rotation solar-occultation experiment. 15 p2700 A69-31419

## RUSCIO, D. A.

Development of close-coupled accumulators for suppressing missile longitudinal oscillations /POGO/. [AIAA PAPER 69-547] 16 p2869 A69-32729

- RUSERT, E. L.**  
Effects of simulated Mars dust erosion environment on thermal control coatings. [AIAA PAPER 69-1023] 22 p3923 A69-40393
- RUSH, C. M.**  
Equatorial anomaly during a period of declining solar activity. 23 p4161 A69-42436
- RUSH, S.**  
EEG electrode sensitivity - An application of reciprocity. 10 p1648 A69-23186
- RUSH, S. V.**  
Equatorial anomaly during a period of declining solar activity. 23 p4161 A69-42436
- RUSHCHITSKAIA, S. O.**  
Theorem of homeomorphisms for an elliptic differential expression and pseudodifferential boundary conditions /Teorema o gomeomorfizmakh dlia ellipticheskogo differentsial'nogo vyrazheniia i psevdodifferentsial'nykh granichnykh uslovii/. 12 p2121 A69-26200
- RUSHCHITSKII, IA. IA.**  
Applicability of the Volterra principle in studies of crack propagation hereditary elastic media /O primenimosti printsipa Vol'terra pri issledovanii dvizheniia treshchin v nasledstvenno-uprugikh sredakh/. 15 p2715 A69-31201
- RUSHEN, IU.**  
Surface potential of an anodized surface of n-type silicon. 04 p0643 A69-15260
- RUSHTON, K. R.**  
A digital computer solution of the Laplace equation using the dynamic relaxation method. 05 p0697 A69-15713  
Postbuckling of tapered plates. 15 p2704 A69-30291  
Dynamic-relaxation solution for the large deflection of plates with specified boundary stresses. 20 p3619 A69-36938
- RUSHTON, W. A. H.**  
Encoding of nerve signals from retinal rods. 23 p4099 A69-42119
- RUSIN, F. S.**  
The orotron /Orotron/. 02 p0250 A69-12248  
Orotron - An electronic oscillator with an open resonator and reflecting grating. 14 p2421 A69-29546
- RUSINKO, K. N.**  
Influence of the decomposition of a material on the stress distribution /O vliianii razrykheniia materiala na raspredelenie napriazhenii/. 11 p1972 A69-24656
- RUSKOL, V. A.**  
Similar solution of laminar boundary layer equations with a flame front. 07 p1119 A69-18735
- RUPINI, E.**  
EEG monitoring during the treatment of decompression illness /"bends"/. 19 p3261 A69-36268
- RUSSAK, S.**  
Development of meteoroid penetration detectors. 02 p0338 A69-11749
- RUSSAK, S. L.**  
Design of an advanced meteoroid probe of the asteroid belt. [AAS PAPER 69-321] 24 p4392 A69-42867
- RUSSEGGER, M.**  
Vertically polarized log-periodic antenna with lambda/4 radiators /Vertikal polarisierte logarithmischperiodische Antenne mit lambda/4-Strahlern/. 16 p2763 A69-32580
- RUSSELL, B. R.**  
Resolution limitations in holographic images. 21 p3727 A69-39778
- RUSSELL, C. T.**  
OGO 3 observations of ELF noise in the magnetosphere. I. 07 p1124 A69-18834  
Magnetic emissions in the magnetosheath at frequencies near 100 Hz. 16 p2774 A69-31985
- RUSSELL, D. A.**  
Fog dissipation using a CO sub 2 laser. 02 p0258 A69-12622  
A study of fog clearing using a CO sub 2 laser. [AIAA PAPER 69-670] 17 p2945 A69-33449
- RUSSELL, E. R.**  
Determination of the absolute short-term current efficiency of an aluminum electrolytic cell. 06 p0869 A69-17233
- RUSSELL, F. A.**  
Analysis of problems in dynamics by electronic circuits. 05 p0724 A69-16468
- RUSSELL, G.**  
Precursor observations in electrical shock tubes. 20 p3511 A69-38240
- RUSSELL, G. K.**  
Grab one and jump. 19 p3255 A69-36146
- RUSSELL, G. R.**  
Calculation of atom-atom excitation cross sections by classical methods. 20 p3580 A69-37500
- RUSSELL, J. A.**  
The spectrum of a meteor from the 1966 Leonid shower. 04 p0655 A69-14664
- RUSSELL, J. D.**  
The scope of electron beam welding. 04 p0608 A69-15484
- RUSSELL, J. E.**  
A modified cylindrical wave approximation. 04 p0671 A69-14410
- RUSSELL, J. L., JR.**  
Fast critical experiments in support of thermionic reactor physics. 09 p1441 A69-21835  
Fast neutron spectrum for a subcritical section of a homogeneous super 235 U-polyethylene critical assembly. 18 p3170 A69-34313
- RUSSELL, J. M.**  
Entry vehicle instrumentation for heat shield ablation measurements. 04 p0602 A69-15428
- RUSSELL, K. J.**  
Electric propulsion design optimization methodology. [AIAA PAPER 69-254] 09 p1569 A69-21879
- RUSSELL, L. D.**  
Thermoelectric radiometer. 02 p0250 A69-12392  
A method for transient thermal analysis of space radiators. [AIAA PAPER 69-615] 17 p3070 A69-33261
- RUSSELL, M. D.**  
A practical method of fabricating efficient aerostuctures, utilizing unidirectional boron composite with metal. 24 p4323 A69-43419
- RUSSELL, S. II**  
Development of the fixed-frequency topside-sounder satellite. 20 p3618 A69-37857
- RUSSELL, T. G.**  
Recording fluid velocity fields holographically. 11 p1884 A69-24691
- RUSSLER, W.**  
Accident information - Storing and retrieving. 06 p1041 A69-16843
- RUSSMANN, H.**  
Comparison of various methods for the experimental determination of temperature fields in laminar burner flames /Vergleich verschiedener Verfahren zur experimentellen Bestimmung der Temperaturfelder in laminaren Vormischflammen/. 11 p1999 A69-24635
- RUSSO, A.**  
Practical method for determining the most probable point in an astronomical navigation /Su di un pratico procedimento per la determinazione del punto piu probabile in navigazione astronomica/. 23 p4186 A69-42025  
Determination of geographical coordinates by measuring differences between distances /Determinazione delle coordinate geografiche con misure di differenze di distanze/. 23 p4186 A69-42027
- RUSSO, D.**  
Coronal active regions observed by SOLRAD 8 during the eclipse of May 20, 1966. 15 p2698 A69-31363  
X-ray fluxes from the Solrad 9 satellite /1968-17A/ from March 1968 to December 1968. 20 p3588 A69-37473
- RUSSO, E. P.**  
A new solution for the skin-friction drag on a cylinder. 11 p1819 A69-25384
- RUSSO, F.**  
A technique for measuring the electron density of dense, thick, steady-state plasmas. 02 p0290 A69-12349  
Use of rectangular signals in pulse-compression radar /Sull'impiego di segnali rettangolari nel radar a compressione di impulso/. 08 p1271 A69-19918
- RUSSO, G. P.**  
Nomogram for evaluating the thrust coefficient of a nozzle /Un nomogramma per la valutazione del coefficiente di spinta di un ugello/. 03 p0365 A69-14102
- RUSSO, J. F.**  
The separation of corrosion and stress effects in stress corrosion - The critical role of surface preparation. 21 p3747 A69-39435
- RUSSO, M.**  
Electron fractographic study of fatigue cracks in wrought beryllium sheet. 09 p1500 A69-22324
- RUSSO, V.**  
Holographic antennas. 05 p0734 A69-16574  
Microwave holograms. 17 p2976 A69-33891
- RUSSO, V. L.**  
Reduction of titanium tetrachloride to titanium by magnesium /Vosstanovlenie titana iz tetrakhlorida magniia/. 07 p1163 A69-18784
- RUSTA, D.**  
The analysis of voltage-limited battery charging systems. 01 p0013 A69-11010
- RUSTAGI, K. C.**  
Nonlinear electromagnetic response of Bloch electrons in a magnetic field. II - Two-band model for semiconductors. 03 p0487 A69-13753
- RUSTOGI, O. P.**  
Uniform transmission line equivalence of cascaded exponential lines. 01 p0044 A69-10623  
Linearly tapered transmission line and its application in microwaves. 16 p2749 A69-31582
- RUTENFRANZ, J.**  
Investigation of catecholamine secretion in the urine as a criterion of emotional stress - Vibration loading, film presentations, and testing situations /Untersuchungen zur Frage der Catecholaminausscheidung im Harn als Kriterium fuer emotionalen Stress unter verschiedenen Umgebungsbedingungen - Vibration-sbelastung, Filmdarbietungen und Pruefungssituation/. 21 p3654 A69-38909
- RUTHARDT, R.**  
An interstitial compound of titanium disulfide with hydrazine /Ueber eine Schichtelagerungsverbindung des Titandisulfids mit Hydrazin/. 23 p4112 A69-41426
- RUTHER, F. J.**  
Ballistic missile and aircraft operational effectiveness. 18 p3145 A69-34500
- RUTHERFORD, J. L.**  
On measuring the properties of adhesives in bonded joints. 09 p1500 A69-22309
- RUTHROFF, C. L.**  
Injection-locked oscillator FM receiver analysis. 01 p0042 A69-10247
- RUTKEVICH, B. N.**  
Plasma oscillation intensities at combination frequencies /Ob intensivnosti kolebaniia plazmy na kombinatsionnykh chastotakh/. 09 p1550 A69-22024



- Plasma motion in crossed inhomogeneous electric and magnetic fields /Dvizhenie plazmy v skreshchen-nykh neodnorodnykh elektricheskoy i magnitnoy polakh/.  
24 p4358 A69-43475
- RUTKEVICH, I. M.**  
Some aspects of the equations of the hydrodynamics of non-Newtonian media /Nekotorye osobennosti uravnenii gidrodinamiki nen'yutonovskikh sred/.  
05 p0745 A69-15786
- Steady flow of a viscoelastic fluid in a channel with porous walls /Statsionarnoye techeniye vlyazko-uprugoi zhidkosti v kanale s pronitsaemyimi stenkami/.  
22 p3930 A69-40118
- RUTKOVSKII, I. Z.**  
Modulation of the radiation of a GaAs injection laser at a frequency of 1 GHz /Modulatsiya izlucheniya izhektsionnogo lazera iz GaAs na chastote 1 Gts/.  
12 p2105 A69-26031
- RUTKOVSKII, V. IU.**  
Application of Chaplygin theorem to synthesis of self-adaptive circuit parameters of systems utilizing the knowledge of the amplitude-frequency characteristic.  
03 p0410 A69-13685
- Investigation of the dynamics of the preliminary damping system of a gravity-gradient stabilized satellite with allowance for sensor limitations and stabilizer flexural vibrations /Issledovanie dinamiki sistemy predvaritel'nogo uspokoeniya gravitatsionno-ustoiichivogo sputnika s uchetom ogranichenii datchikov i izgibnykh kolebaniy stabilizatora/.  
21 p3826 A69-39638
- RUTLAND, C.**  
Cost data for economical orbital transportation system design.  
[AIAA PAPER 69-439] 16 p2882 A69-32654
- RUTMAN, R. S.**  
The method of three points in sensitivity theory.  
14 p2425 A69-28823
- RUTOVSKII, N. B.**  
Acoustic conductivity of a pipeline with control units in an engine supply system /Akusticheskaya provodimost' truboprovoda s agregatami regulirovaniya v sisteme pitaniya dvigatelya/.  
11 p1942 A69-25335
- Experimental determination of the discharge coefficient of the elements of a pneumohydraulic system and of the opening time of the valve units /K voprosu ob eksperimental'nom opredelenii koeffitsienta rashkoda uzlov pnevmogidrosistem i vremeni otkrytiya klapannykh ustroystv/.  
18 p3094 A69-34981
- RUTSCHER, A.**  
A similarity law for ionization waves /Zum Aehnlichkeitsgesetz der Ionisationswellen/.  
05 p0799 A69-15633
- The production of continuous radiation in the plasma of a positive column of inert gas by the braking of electrons on gas atoms /Die Erzeugung kontinuierlicher Strahlung im Plasma der positiven Edelgasaeule durch Bremsung der Elektronen an Gasatomen/.  
05 p0800 A69-15741
- Mobility and diffusion coefficient of electrons. I - The transport coefficients of electrons in noble gases at average reduced electric field strengths /E/p sub 0 approximately equal to 0.1 to 10 v/cm-torr/ /Beweglichkeit und Diffusionskoeffizient der Elektronen. I - Die Transportkoeffizienten der Elektronen in den Edelgasen bei mittleren reduzierten elektrischen Feldstaerken /E/p sub 0 approximately equal to 0.1-10 v/cm torr//.  
08 p1362 A69-20285
- RUTTEN, H. S.**  
Asymptotic approximation in the three-dimensional theory of thin and thick elastic shells.  
11 p1978 A69-24810
- RUTTENBERG, K.**  
High range resolution by means of pulse to pulse frequency shifting.  
03 p0388 A69-13181
- RUTTENBERG, S.**  
Some systems possibilities for global atmospheric research program.  
[AAS PAPER 69-120] 24 p4307 A69-42817
- RUTTKAY, I.**  
Norms for quantitative vectorcardiography with special emphasis on the medical evaluation of flying personnel.  
24 p4277 A69-43390
- RUTULIS, U.**  
Low noise broadband 4GHz parametric amplifier.  
19 p3270 A69-36240

- RUVIN, A. E.**  
Delay-line bandwidth reduction techniques.  
03 p0392 A69-13251
- RUYLE, C. D.**  
Gas-liquid chromatographic analysis of nucleic acid components.  
13 p2217 A69-28260
- RUZAVIN, E. I.**  
Calculation of the motion of a shock wave and flow parameters in a shock tube with a noninstantaneously opening diaphragm /Raschet dvizheniya udarnoi volny i parametrov potoka pri nemgnovennom otkrytii diafragmy v udarnoi tube/.  
14 p2432 A69-29623
- RUZE, J.**  
Feed support blockage loss in parabolic antennas.  
04 p0576 A69-14771
- Loss calculation on metal space frame radomes.  
23 p4149 A69-42127
- RUZICKA, J. E.**  
Theoretical and experimental investigation of electrohydraulic vibration isolation systems.  
[ASME PAPER 69-VIBR-40] 10 p1641 A69-24178
- RUZICKA, M.**  
Plane potential flow in a spiral casing of rotating fluid flow engines /Ebene Potentialstroemung im Spiralgehause rotierender Stromungsmaschinen/.  
10 p1632 A69-22914
- RUZICKOVA-TOPOLOVA, B.**  
Magnetic fields, green corona and filaments in high solar latitudes.  
11 p1964 A69-25416
- Relation of 1420 MHz radio emission to the distribution of photospheric magnetic fields, coronal emission and filaments.  
11 p1964 A69-25417
- The compensation of the maximum magnetic field strengths of opposite polarities in groups of spots at the time of proton flares.  
17 p3025 A69-34225
- RUZIN, M. I.**  
Solution of a nonlinear problem of the dynamics of the atmospheric boundary layer /Reshenie odnoi nelineinoy zadachi dinamiki pogranichnogo sloia atmosfery/.  
05 p0788 A69-16453
- Effect of microturbulent transfer on the stability of the atmospheric boundary layer /O vliyanii mikroturbulentnogo obmena na ustoiichivost' pogranichnogo sloia atmosfery/.  
13 p2293 A69-27841
- RVACHEV, V. L.**  
Solution to a class of boundary-value problems with mixed boundary conditions for regions of complex form /O reshenii odnogo klassa kraevykh zadach so smeshannymi granichnymi usloviyami dlia oblasti slozhnoy formy/.  
05 p0787 A69-16455
- Horizontal impact against a sphere submerged in an incompressible fluid /O gorizonta'lnom udare sfery, zatoplennoy v neszhimaemoy zhidkosti/.  
24 p4298 A69-42585
- RVACHOV, V. L.**  
Calculation of freely supported plates by the R-function method /Rozkrakhunok vli'no opertikh plastinok metodom R-funktsii/.  
02 p0341 A69-12140
- RYAN, B. M.**  
Lifting-body research vehicles in a low-speed flight test program.  
05 p0702 A69-15571
- RYAN, C. E., JR.**  
A Poynting vector approach to creeping-wave analysis of the sphere.  
08 p1274 A69-20046
- Evaluation of edge-diffracted fields including equivalent currents for the caustic regions.  
23 p4136 A69-41583
- RYAN, G. A.**  
Epidemiology of aerial application accidents.  
09 p1447 A69-22554
- RYAN, K. R.**  
Ionic collision processes in gaseous nitrogen.  
22 p3986 A69-40722
- RYAN, N. E.**  
The formation and stability of group IVA carbides and nitrides in molybdenum.  
12 p2117 A69-27136

- Carbide growth in a molybdenum TZC alloy.  
18 p3155 A69-34632
- RYAN, N. W.**  
Characterization of solid-propellant reactions from hot-wire-ignition data.  
[WSCI PAPER 68-36] 07 p1201 A69-18354
- The chemical arc - A spectrometric study.  
[WSCI PAPER 69-10] 16 p2831 A69-32350
- RYAN, P. W.**  
A computerized method for crewstation geometry evaluation.  
[AIAA PAPER 69-977] 22 p3892 A69-40357
- RYAN, R. J.**  
Additive processing techniques for printed-circuit boards.  
07 p1100 A69-18621
- RYAN, R. S.**  
A study of Saturn AS-502 coupling longitudinal structural vibration and lateral bending response during boost.  
[AIAA PAPER 69-58] 06 p1019 A69-18204
- Attitude control of a manned earth orbiting space station.  
[AIAA PAPER 69-846] 21 p3822 A69-39376
- RYBACH, L.**  
The radioactivity of the Ivory Coast tektites and the formation of the Bosumtwi Crater /Ghana/.  
23 p4210 A69-41347
- RYBACHEK, S. T.**  
VLF propagation in the earth-ionosphere waveguide.  
06 p0920 A69-17732
- RYBACHUK, I. S.**  
Influence of bismuth oxide on the formation and properties of garnet ferrites /Vliyanie oksidi vismuta na obrazovanie i svoystva ferritov-granatov/.  
13 p2320 A69-27998
- RYBAK, J. P.**  
Sweep frequency microwave measurements in simulated reentry environments.  
[AIAA PAPER 69-701] 17 p2920 A69-33461
- Sweep frequency microwave measurements in simulated reentry environments.  
[AAS PAPER 69-282] 24 p4313 A69-42861
- RYBAK, M.**  
Informative interpretation of subjective pilot ratings concerning the maneuverability of flight vehicles /Informatsionnaya interpretatsiya subiektivnykh opiniy pilotov o sterovnosti apparatov latayemykh/.  
08 p1254 A69-20458
- RYBAKIN, IU. P.**  
Calculation and realization of the areas of turbine through-flow cross sections /O raschete i obespechenii ploschadei prokhodnykh secheniy turbin/.  
18 p3184 A69-34987
- RYBAKINA, O. G.**  
Experimental investigation of the laws controlling the plastic dilatation of metals.  
16 p2875 A69-32291
- RYBAKOV, B. V.**  
Polarization characteristics of the emission of a ring laser with a circularly anisotropic resonator /Polarizatsionnye kharakteristiki izlucheniya kol'tsevoogo lazera s tsirkuliarno anizotropnym rezonatorom/.  
24 p4328 A69-43160
- RYBAKOV, E. T.**  
Accuracy of wind determination in the atmosphere by means of radar /Tochnost' opredeleniya vetra v atmosfere metodom radiolokatsii/.  
20 p3572 A69-37698
- RYBAKOV, V. A.**  
Unsteady generation from a ruby laser with a ruby filter /Nestatsionnaya generatsiya rubinovogo OKG s fil'trom iz rubina/.  
11 p1894 A69-24619
- RYBAKOV, V. V.**  
Strength of some glass-fiber-reinforced plastics at low and high temperatures /Prochnost' nekotorykh stekloplastikov pri nizkikh i vysokikh temperaturakh/.  
11 p1907 A69-25181
- RYBALCHENKO, N. D.**  
Structure and phase composition of transition zones in titanium/stainless steel bimetal /Struktura i fazovyy sostav perekhodnykh zon bimetalla titan-nerzhavayushchaya stal'/.  
13 p2283 A69-28490
- RYBICKI, E. F.**  
An incremental complementary energy method of nonlinear stress analysis.  
[AIAA PAPER 69-119] 06 p1028 A69-18159

- RYBICKI, G. B.**  
Non-coherent scattering. V.  
23 p1492 A69-42403
- RYBIN, V. V.**  
Characteristics of plasma motion for some simple models of ionospheric formations /Osobennosti dvizheniya plazmy dlia nekotorykh prostykh modelei ionosfernykh obrazovaniy/.  
14 p2499 A69-29863  
Dependence of the drift velocity on the ratio of the transverse dimensions for a two-dimensional model of an ionospheric inhomogeneity /Zavisimost' skorosti drefa ot otnosheniya poperechnykh razmerov dlia odnoi dvumernoi modeli ionosfernoi neodnorodnosti/.  
14 p2500 A69-29864  
Allowance for electron-ion collisions in models of moving ionospheric inhomogeneities /Uchet elektron-ionnykh stolknovenii v modeliakh dvizhushchikhsia ionosfernykh neodnorodnostei/.  
14 p2443 A69-29865
- RYBKA, M. T.**  
Deflection of an infinite anisotropic plate weakened by a circular hole and reinforced by a thin elastic ring /Izgiб beskonechnoi anizotropnoi plastinki, oslablennoi krugovym otverstiem i podkreplennoi tonkim uprugim kol'tsom/.  
17 p3055 A69-33128
- RYCHLEWSKI, J.**  
On certain cases of elastic non-homogeneity.  
20 p3624 A69-37589
- RYCROFT, M. J.**  
Model hydrogen and helium ion concentrations in the plasmasphere.  
15 p2677 A69-31447
- RYDBECK, O. E. H.**  
Rutile traveling-wave maser system for the Onsala 84-foot radio telescope.  
02 p0257 A69-12463
- RYDNIK, V. I.**  
Determining the thickness and composition of thin films with the aid of scattered electrons and the characteristic X-ray radiation.  
10 p1747 A69-23847
- RYERSON, C. M.**  
Reliability aspects of microjoints.  
09 p1510 A69-22348  
Reliability modeling and microcircuit prediction.  
19 p3283 A69-36019  
Lower level testing and parts screening.  
22 p3953 A69-40029
- RYGOL, J.**  
Structural Analysis by Direct Moment Distribution. Volume 1 - Prismatic Members with Interim Notes on Non-Prismatic Members and Supplement Containing Aids to Analysis.  
01 p0165 A69-10156
- RYKHOVA, L. V.**  
Motion of the earth's pole from 1846.0 to 1891.5 according to observations performed at Pulkovo, Greenwich, and Washington /Dvizhenie poliusa zemli v 1846.0-1891.5 godakh po nabludeniim v Pulkove, Grinviche i Vashingtone/.  
03 p0420 A69-13094  
Motion of the earth's pole, 1846.0-1891.5, from observations at Pulkovo, Greenwich, and Washington.  
14 p2433 A69-28776
- RYKOV, V. A.**  
Averaging the Boltzmann kinetic equation with respect to transverse velocity in the case of one-dimensional gas motions /Ob osrednenii kineticheskogo uravneniya Boltzmana po poperechnoi skorosti dlia sluchaia odnomernykh dvizhenii gaza/.  
24 p4351 A69-43491
- RYKOV, V. V.**  
Some characteristics of neutral pion production in interactions of nucleons with energies above 10 super 13 ev.  
13 p2303 A69-28376  
Spectrum of 10 super 11 to 10 super 13 ev photons in the upper atmosphere.  
13 p2330 A69-28378
- RYLE, M.**  
Radio galaxies and quasars. I.  
05 p0820 A69-15836  
The evolution of quasi-stellar sources and radio galaxies.  
05 p0822 A69-15852
- RYLEY, A.**  
Computer simulation as an aid to the design of a digital Doppler processor.  
12 p2035 A69-27096
- RYOJI, M.**  
Test of a cesium contact ion engine in a vacuum tank.  
22 p4000 A69-40592
- RYON, J. W.**  
Electromagnetic radiation in accelerated systems.  
21 p3772 A69-39466
- RYSIN, V. S.**  
Topological analysis of electronic circuits /Topologicheskii analiz elektronnykh skhem/.  
15 p2582 A69-30112
- RYSKIN, E. I. A.**  
Analysis of nonlinear distortion, arising during the passage of an FM signal through a multipath medium /Analiz nelineynykh iskazhenii, voznikaushchikh pri prokhozhenii ChM signala cherez mnogoluchevuiu sredu/.  
05 p0721 A69-16531  
Noise immunity of interrupted FM signal reception.  
09 p1459 A69-22640  
Nonlinear distortion of an FM signal in a multipath medium.  
16 p2753 A69-32473
- RYSS, I. K.**  
Computation of electron concentration profiles as a method of obtaining information on E sub s.  
03 p0423 A69-13536  
A possible method of calculating radio-wave absorption in the lower ionosphere /Vozmozhnyi metod rascheta pogloshcheniya radiovoln v nizhnii ionosfere/.  
14 p2411 A69-29075
- RYTER, C.**  
X-ray astronomy /Astronomie des rayons X/.  
04 p0662 A69-15326
- RYTERSKI, J.**  
Expansions of the beam transverse-vibration problem in terms of a set of eigenfunctions /O rozwinieciach wedlug ukladu funkcji wlasnych zagadnienia drgan poprzecznych belki/.  
08 p1414 A69-20445
- RYUGUJI, O.**  
Diversity reception in VHF space communications.  
06 p0889 A69-17653  
Diversity reception in VHF space communications.  
10 p1775 A69-23191
- RYVKIN, S. A.**  
An aspiration psychrometric probe /Aspiratsionnyi psikhrometricheskii zond/.  
06 p0927 A69-17689
- RYVKIN, S. M.**  
Generation of the second harmonic in ternary semiconductor compounds /Generatsiia vtoroi garmonii v troinykh poluprovodnikovykh soedineniiakh/.  
03 p0489 A69-13894  
Emission of energy-deficient photons from germanium subjected to uniaxial compression.  
04 p0643 A69-15255  
Generation of a second harmonic in ternary semiconducting compounds.  
11 p1939 A69-25695  
International Conference on the Physics of Semiconductors, 9th, Moscow, USSR, July 23-29, 1968, Proceedings, Volume 1.  
19 p3384 A69-36513  
International Conference on the Physics of Semiconductors, 9th, Moscow, USSR, July 23-29, 1968, Proceedings, Volume 2.  
19 p3387 A69-36540
- RYVKIN, V. B.**  
Realization of a numerical solution to a heat-transfer problem /O realizatsii chislennogo resheniya odnoi zadachi perenosa tepla/.  
07 p1241 A69-18923
- RYZHAK, S. S.**  
Heat treatment of maraging steel 00N18K9M5T.  
04 p0615 A69-14646  
The alpha goes to gamma transformation in maraging steel N18K9M5T.  
04 p0616 A69-14648
- RYZHIKH, S. V.**  
Mass-spectrometer investigation of ions formed by interaction between laser radiation and matter.  
06 p0932 A69-16921
- RYZHIKOV, I. V.**  
Determination of the resistance of a metal-semiconductor contact /Opredelenie soprotivleniya kontakta metall-poluprovodnika/.  
21 p3780 A69-39046
- RYZHIKOVA, M. I.**  
Influence of the test conditions on the state of the surface layer of nozzle guide vanes /Vliianie uslovii ispytaniia na sostoianie poverkhnostnogo sloia lopatok soploвого apparata/.  
20 p3561 A69-37370
- RYZHKOV, I. U. P.**  
The determination of the probability characteristics of a coincidence pulse stream, produced by two random independent pulse streams /Ob opredelenii veroiatnostnykh kharakteristik impul'snogo potoka sovpadeniia, obrazovannogo dvumia sluchainymi nezavisimymi potokami impul'sov/.  
05 p0719 A69-16224
- RYZHKOV, V. I.**  
Effect of pressure on ordering of alloys with an HCP crystalline lattice /Vliianie davleniia na uporiadochenie v splavakh s geksagonal'noi plochnoupakovannoi kristallicheskoi reshetkoi/.  
11 p1937 A69-24704
- RYZKOVA, M. V.**  
Investigation of the flow at a swept wing in the region of a stall fence /Issledovanie techeniia na strelovidnom kryle v oblasti peregorodki/.  
06 p0858 A69-17341  
Heat exchange at the surface of a semicone at large supersonic velocities /Teploobmen na poverkhnosti polukonusa pri bol'shikh sverkhzvukovykh skorostiakh/.  
24 p4246 A69-43494
- RYZKOVA, V. E.**  
Some data on volatile /oxygen-containing/ compounds evolved by a number of vegetables.  
02 p0198 A69-11509
- RYZHOV, I. U. A.**  
Emission of a thin metallic antenna in a randomly inhomogeneous medium /Ob izlucenii tonkoi metallicheskoii anteny v khaoticheskii-neodnorodnoi srede/.  
06 p0894 A69-17451  
On radiation of a thin metal antenna in a randomly inhomogeneous medium.  
17 p2927 A69-33858  
Radiation of a thin metallic antenna in a randomly inhomogeneous medium.  
20 p3508 A69-37936
- RYZHOV, N. I.**  
Quantitative laws of the postirradiation recovery of yeast cells after exposure to heavy high-energy C super 12 ions /Kolichestvennye zakonomernosti postirradiatsionnogo vosstanovleniia drozhzhevykh kletok pri deistvii vysokoenertichnykh tiazhelykh ionov C sub 12/.  
14 p2406 A69-28915  
Characteristics of biological effects of cosmic radiation, model investigations.  
20 p3478 A69-37628
- RYZHOV, O. S.**  
On the three-dimensional sonic flow of an ideal gas past a body.  
04 p0591 A69-15535  
Bodies of revolution in a sonic flow of an ideal gas /O telakh vrascheniia v zvukovom potoke ideal'nogo gaza/.  
10 p1632 A69-23364  
Transonic flow of an ideal gas past half-bodies /Ob obtekanii polutel zvukovym potokom ideal'nogo gaza/.  
14 p2390 A69-29476
- RYZHOV, V. A.**  
Investigation of the small-scale portion of the spectrum of ionospheric inhomogeneities by the radio astronomical method at frequencies of 13-54 MHz.  
12 p2070 A69-26687
- RZHAKSINSKII, F. K.**  
Relative radio-emission fluxes in the active regions of the sun at wavelengths of 2 and 3.2 cm /Otnositel'nye potoki radioizluceniia aktivnykh oblastei solntsa na volnakh 2 i 3.2 cm/.  
02 p0314 A69-11676  
Relative radio fluxes at wavelengths of 2 and 3.2 cm from active regions on the sun.  
13 p2355 A69-28707
- RZHANOV, A. V.**  
Epitaxial gallium arsenide films with a high electron mobility.  
03 p0492 A69-14172  
Absorption of IR radiation by surface states at low temperatures /Pogloshchenie ik izluceniia poverkhnostnymi sostoiianiiami pri ponizhennykh temperaturakh/.  
13 p2317 A69-27879



Synthesis and study of the properties of semiconductor films /Poluchenie i izuchenie svoystv poluprovodnikovyykh plenok/.  
15 p2670 A69-31046

## RZHAVIN, L. N.

Damping properties of certain materials for turbine blades at high temperatures /Dempfiruiushchie svoystva nekotorykh turbolopatochnykh materialov pri vysokikh temperaturakh/.  
17 p2990 A69-33932

Influence of static tension on energy dissipation in a material subjected to transverse vibrations /O vliyaniy staticheskogo raztiazheniya na rasscianiye energii v materiale pri poperechnykh kolebaniyakh/.  
17 p2991 A69-33934

## RZHEVKIN, K. S.

Amplification of microwave oscillations in bulk GaAs /Usilenie SVCh-kolebaniy v ob'eme GaAs/.  
21 p3781 A69-39127

## RZHEVSKAIA, I. IA.

Internal friction due to interstitial atoms in molybdenum.  
04 p0615 A69-14640

## RZHEVSKII, E. V.

Some problems of jet gasdynamics in a cross flow with combustion.  
16 p2879 A69-32140

## RZHIGA, O. N.

An investigation of the backscattering diagram of Venus at 40-cm wavelength.  
02 p0314 A69-11639

Mars - What is its surface composed of /ques/ /Mars - Chem slozhena ego poverkhnost' /ques/.  
03 p0509 A69-13357

Diffuse scattering and the radar reflectivity of planetary surfaces.  
04 p0662 A69-15245

Results of radar probing of planets /Rezultaty radiolokatsii planet/.  
09 p1595 A69-21765

Determination of the flux density of 3C 270 and 3C 278 at the 40-cm wavelength by means of a digital computer /Opredeleniye plotnosti potoka 3C 270 i 3C 278 na volne 40 cm s primeneniem EVTSM/.  
11 p1954 A69-24383

A computer determination of the 40cm flux density of 3C 270 and 3C 278.  
24 p4389 A69-43773

## RZHONDKOVSKAIA, L. S.

Investigations of Nebulas and the Interstellar Medium /Issledovaniya Tumanov i Mezhyzvezdnoi Sredy/.  
21 p3816 A69-39721

## S

## SAAD, M. A.

Role of pressure in spontaneous ignition.  
24 p4415 A69-43667

Analysis of N sub 2 H sub 4 RFNA reaction product.  
24 p4365 A69-43669

## SAADA, A.

Types of electrochemical generators using a zinc electrode in an alkaline medium /Types de generateurs electrochimiques utilisant une electrode de zinc en milieu alcalin/.  
08 p1261 A69-21049

Types of electrochemical generators utilizing a zinc electrode in an alkaline medium /Types de generateurs electrochimiques utilisant une electrode de zinc en milieu alcalin/.  
16 p2739 A69-32420

## SAAKIAN, G. S.

The relativistic generalized theory of gravitation. I /K relativistskoi obobshchennoi teorii gravitatsii. I/.  
13 p2351 A69-27864

Generalized Newtonian theory of gravitation.  
16 p2865 A69-32599

Problems of Present-Day Cosmogony /Problemy Sovremennoi Kosmogonii/.  
21 p3813 A69-39525

## SAAKIAN, I. M.

Dislocation mobility in niobium and molybdenum studied by measuring the amplitude dependence of the internal friction.  
04 p0614 A69-14635

## SAAKIAN, K. A.

Nuclei of spiral galaxies /O iadrakh spiral'nykh galaktik/.  
12 p2165 A69-27028

## SAARI, J. M.

Lunar surface temperatures and thermal characteristics - Surveyor 5 science results.  
02 p0321 A69-12227

Interpretation of extraterrestrial imagery.  
15 p2690 A69-30711

A particulate thermophysical model of the lunar soil.  
18 p3191 A69-34303

Lunar thermal anomalies and internal heating.  
21 p3797 A69-38535

## SABAC, I. GH.

Approximation of the subsonic flow of a compressible fluid around an obstacle /Asupra aproximarii miscarii subsonice a unui fluid compresibil in jurul unui obstacol/.  
09 p1480 A69-21735

## SABADELL, A. J.

Electrostatic probe measurements in solid propellant rocket exhausts.  
16 p2840 A69-32677

## SABADIL, H.

Gunn instabilities in the positive column of an oxygen discharge /Gunn-Instabilitaeten in der positiven Saule der Sauerstoff-Entladung/.  
05 p0800 A69-15739

## SABANSKII, I. L.

Study of the electrical conductivity of the plasma in coaxial-type MHD generator models /Issledovanie elektroprovodnosti plazmy v modeliakh MGD-generatorov koaksial'nogo tipa/.  
10 p1735 A69-23463

## SABATIER, J. P.

Ternary diffusion in Fe-Co-Ni alloys.  
23 p4176 A69-41505

## SABATIUK, A.

The development of supersonic axial compressor boost stages for small gas turbines.  
09 p1570 A69-22478

## SABBAGH, H. A.

Thermal noise in spin-phonon systems.  
24 p4350 A69-43061

## SABELEV, G. I.

Method of computing temperature fields in noncircular channels.  
07 p1243 A69-19734

Calculation of a secondary flow in a turbulent fluid flow /Raschet vtorichnogo techeniya v turbulentnom potoke zhidkosti/.  
24 p4303 A69-43501

## SABIR, A. B.

A stiffness matrix for shallow shell finite elements.  
10 p1802 A69-23892

## SABITOV, SH. N.

Some results of color observations of the IC 2118 nebula /Nekotoryye rezultaty tsvetovykh nabludeniya tumanosti IC 2118/.  
21 p3817 A69-39726

## SABLEV, L. P.

Vacuum system of the Sirius stellarator.  
03 p0412 A69-13839

## SABLIN, E. S.

Analysis of the coupling of rectangular waveguides by a system of oblique slots in a common broad face /Analiz svyazi priamougol'nykh volnovodov cherez sistemu naklonnykh shchelei v obshchei shirokoi stenke/.  
23 p4123 A69-41941

## SABLIN, IU. A.

Experimental determination of the dynamic parameters of electromechanical transducers /EMT/ /Eksperimental'noe opredeleniye dinamicheskikh parametrov elektromekhanicheskikh preobrazovatelei /EMP/.  
22 p3869 A69-40249

## SABLINA, K. A.

Magnetic crystallographic anisotropy of lithium-gallium ferrite single crystals /Magnitnaia kristallograficheskaya anizotropiia monokristallov litii-gallievyykh ferritov/.  
12 p2144 A69-26721

Magnetocrystalline anisotropy of single crystals of lithium gallium ferrites.  
21 p3781 A69-39134

## SABLINA, S. A.

Equivalent circuit of a semiconductor diode operating in a switching mode /Skhema zameshcheniya poluprovodnikovogo dioda v perekliuchatel'nykh rezhimakh/.  
01 p0046 A69-10747

## SABOE, J. M.

A monolithic germanium imaging mosaic.  
11 p1938 A69-25307

## SABOE, M. S.

Operational experience with T53 engines in U.S. Army helicopters.  
07 p1203 A69-18867

## SABROFF, A. E.

Advanced spacecraft stabilization and control techniques.  
02 p0334 A69-12367

A semi-active gravity gradient control system /SAGS/.  
07 p1228 A69-18342

## SABROFF, A. M.

Manufacture of tubular products by hydrostatic extrusion.  
15 p2617 A69-30097

## SACCHI, C. A.

Anti-Stokes generation in trapped filaments of light.  
01 p0114 A69-10012

Picosecond pulses, TEM sub 00 mode, mode-locked ruby laser.  
23 p4172 A69-41395

## SACCHI, G.

On the evaluation of the limit load for rigid-perfectly plastic continua.  
02 p0338 A69-11721

## SACCHI, V.

Jettisoning test equipment at Fiat Aerospace Laboratory.  
16 p2765 A69-31739

## SACHDEV, D. K.

Microwaves sources with frequency multipliers.  
02 p0216 A69-12097

## SACHDEV, P. L.

Propagation of a plane radiative shock in a homogeneous medium.  
08 p1302 A69-19798

## SACHDEV, R. N.

Turbulence statistics studies at Trombay with a new wind system.  
04 p0626 A69-14911

## SACHENKO, A. V.

Determination of the surface recombination rate from the photomagnetic effect. II.  
07 p1198 A69-18505

Dimensional n-type negative resistance in semiconductors /Rozmirmii vid'emnii opir n-tipu u napivprovidnikakh/.  
08 p1374 A69-21081

## SACHIAN, G. A.

Detection of HO sub 2 radicals in a rarefied hydrogen flame /Obvaruzhenie radikalov HO sub 2 v razrezhenom plameni vodoroda/.  
15 p2716 A69-30054

## SACHKOV, V. V.

Study of the properties of maraging steels with increased cobalt and molybdenum content /Issledovanie svoystv martensitno starciushchikh staley s povyshennym soderzhaniiem kobalta i molibdena/.  
01 p0098 A69-10731

Heat treatment of maraging steel 00N18K9M5T.  
04 p0615 A69-14646

Mechanical properties of stainless maraging steels /Mekhanicheskie svoystva nerzhavayushchikh staley so starciushchim martensitom/.  
15 p2640 A69-30631

## SACHOT, E.

Navigation /La navigation/.  
02 p0278 A69-11912

Secondary uses of the Eole satellites /Utilisations secondaires de satellites "Eole"/.  
06 p1013 A69-17077

## SACHS, G.

Extension of a new method for determining the ground effect from flight tests /Erweiterung eines neuen Verfahrens zur Bestimmung des Bodeneffekts aus Flugversuchen/.  
20 p3462 A69-37423

## SACHS, H.

The measurement of three-dimensional antenna patterns.  
17 p2942 A69-34086

## SACHS, H. K.

Characteristics of a nonlinear supercritically damped mass elastic system.  
04 p0671 A69-14413

## SACHS, I. B.

Ground and air resonance characteristics of a soft in-plane rigid-rotor system.  
07 p1055 A69-19559

- SACHS, L. M.**  
LCAO-MO-SCF calculations using Gaussian basis functions. II - BeH sub 2.  
05 p0811 A69-15910
- SACHS, M.**  
Space, time and elementary interactions in relativity.  
08 p1352 A69-20730
- SACHTLER, W. M. H.**  
Atomic processes in chemisorption by metals.  
22 p3895 A69-39898
- SACK, R. L.**  
Computational stability in nonlinear discrete structural systems.  
12 p2185 A69-26819
- SACKMAN, J. L.**  
Longitudinal impact on a hollow cone.  
[ASME PAPER 69-APMW-15]  
24 p4401 A69-43101
- SACKMANN, I. J.**  
Slowly rotating convective models with radiation pressure.  
09 p1606 A69-22422
- SACKMANN, L.-A.**  
Study of the hydrodynamic boundary layer - Effect of the injection of secondary fluids into the boundary layer on the resistance to the forward motion of obstacles /Etude de la couche limite hydrodynamique - Effet de l'injection de fluides secondaires dans la couche limite sur la resistance a l'avancement d'obstacles/.  
16 p2768 A69-31604
- SADAGOPAN, A.**  
Correlation between clear air turbulence and temperature gradients at standard isobaric levels.  
02 p0275 A69-11818
- SADAGOPAN, V.**  
Fast neutron damage and the current carrying capacity of niobium nitride.  
17 p3008 A69-33765
- SADANANDAN, P.**  
Hypercorrelation - A concept for system characterization.  
18 p3236 A69-35236
- SADDLER, N. B.**  
Measurement of the coupling efficiency between dielectric-loaded rectangular waveguides and dielectric-loaded trough waveguides.  
12 p0239 A69-26374
- Technique for the measurement of the percentage of power in the single spurious mode of an overmoded waveguide.  
15 p2577 A69-30611
- SADIGH, D.**  
Search for an effect of mass on frequency during a close approach of pulsar CP 0950 to the sun.  
02 p0323 A69-12298
- Absence of pulsar characteristics in several X-ray sources.  
07 p1218 A69-19254
- SADIN, S. R.**  
Buoyant Venus station for the '70s.  
02 p0333 A69-11745
- SADLER, D. H.**  
Astronomical measures of time.  
01 p0156 A69-10989
- SADLER, F. M.**  
An analysis of lunar occultations 1960-66.  
20 p3601 A69-37494
- SADLER, S. G.**  
The importance of vortex shedding effects on helicopter rotor noise with and without blade slap.  
18 p3088 A69-35223
- SADOKOV, V. P.**  
Study of the effect of latent heat of condensation in cloud formation processes /Izucheniye efekta skrytoi teploty kondensatsii v protsessakh oblakobrazovaniya/.  
17 p2997 A69-33188
- SADOUNE, J.**  
Chemical corrosion of zirconia-based ceramics considered for use in MHD generators /Corrosion chimique de ceramiques a base de zirconie etudies en vue de leur application aux generateurs MHD/.  
13 p2284 A69-27469
- SADOURNY, R.**  
Numerical integration of the primitive equations on a spherical grid with hexagonal cells.  
19 p3364 A69-36509
- SADOV, I. A.**  
Periodic motions of a satellite with a magnetic damper in the plane of a circular orbit /Periodicheskie dvizheniya sputnika s magnitnym dempfom v ploskosti krugovoi orbity/.  
09 p1609 A69-21761
- Satellite turnover in planar orbit by means of a flywheel system.  
10 p1792 A69-24194
- SADOVNICHIL, A. A.**  
Inhomogeneity of the surface charge and surface breakdown in silicon p-n junctions.  
02 p0294 A69-11629
- Measurement of the composite field effect in semiconductors /Izmereniye kombinirovannogo efekta polia v poluprovodnikakh/.  
10 p1698 A69-24210
- SADOVNIKOVA, L. V.**  
Man's thermal tolerance - A review of the literature.  
10 p1645 A69-23494
- SADOVNIKOVA, R. S.**  
Drift of small-scale inhomogeneities in the F2 region according to the observations in Loparskaia /Dreif melkomashtabnykh neodnorodnostei v sloe F2 po nabludeniiam v Loparskoi/.  
14 p2444 A69-29868
- Vertical distribution of the ionospheric drift velocity and of the electric field intensity in the F2 layer /Vysotnoye raspredeleniye skorosti ionosfernykh dreifov i napriazhennosti elektricheskogo polia v sloe F2/.  
17 p2964 A69-33964
- SADOWSKI, M.**  
Review of research on hot plasma performed at the Department of Plasma Physics and Technology of the Institute of Nuclear Research.  
06 p0964 A69-17174
- Containment time of plasma in the SM magnetic trap.  
08 p1360 A69-20082
- SADOWSKY, M. A.**  
On the detachment of the ends of microfibers from the matrix due to tension in the composite.  
01 p0171 A69-11259
- SADYKOV, I. KH.**  
Optimization of systems with allowance for possible failures of their elements /K optimizatsii sistem s uchedom vozmozhnykh otkazov ikh elementov/.  
11 p1966 A69-25331
- A problem of optimal averaging of the controls of discontinuous stochastic systems /K odnoi zadache optimal'nogo osredneniia upravlenii razryynykh stokhasticheskikh sistem/.  
21 p3770 A69-38855
- Optimization of the motion of a flight vehicle taking into account random failures of engine sections /Optimizatsiia dvizheniia letatel'nogo apparata s uchedom sluchainykh otkazov sektsiy dvigatel'/.  
21 p3647 A69-38893
- SAEGER, K. H.**  
Auroral-zone X-ray measurements obtained by simultaneous balloon flights in Northern Scandinavia in 1967.  
05 p0813 A69-15822
- Description of the SPARMO detector SC 67.  
05 p0762 A69-15823
- Measurements of auroral-zone X-rays with balloon borne instruments at Kiruna/Sweden in 1968.  
21 p3791 A69-39252
- Balloon observations of proton fluxes during the PCA period, May 23-30, 1967.  
23 p4204 A69-41485
- SAERG, K.**  
Investigations of a Milky Way field in Circinus /SA 195/.  
08 p1389 A69-20246
- SAERMARK, K.**  
Transmission of helicon-waves through n-type Ge.  
02 p0295 A69-11787
- SAFARIEV, M. S.**  
Numerical solution of bending equations for multiple-support wings /Chislennoe resheniye uravnenii izгиба mnogoopornykh kryl'ev/.  
21 p3835 A69-38872
- Lateral flexure of a doubly supported wing /K poperechnomu izgibu dvukhopornogo kryla/.  
23 p4225 A69-41423
- SAFAROV, V. I.**  
Local oscillations and structure of copper impurity centers in gallium arsenide crystals /Lokal'nye kolebaniia i struktura primesnykh tsentrov medi v kristallakh arsenida galliia/.  
16 p2824 A69-31571
- SAFFIR, O. S.**  
Getting more speed from MOS.  
07 p1113 A69-19765
- SAFFIRE, V. N.**  
Processing techniques for boron filament wound composite structures.  
14 p2455 A69-29413
- SAFFMAN, P. G.**  
Lectures on homogeneous turbulence.  
05 p0745 A69-15772
- The structure of free vertical shear layers in a rotating fluid and the motion produced by a slowly rising body.  
23 p4153 A69-42356
- Application of the Wiener-Hermite expansion to the diffusion of a passive scalar in a homogeneous turbulent flow.  
24 p4302 A69-43359
- SAFONOV, V. A.**  
Increasing the energetic cooling efficiency of vortex tubes used for cooling aircraft components /K voprosu o povyshenii energeticheskoi effektivnosti polucheniia kholoda vikhrevymi trubkami pri okhlazhdenii imi aviatsionnykh detalei/.  
04 p0684 A69-14488
- SAFONOV, V. I.**  
The widening of the transmission band of the ultrasonic flaw detector search unit.  
10 p1697 A69-24073
- SAFONOV, V. M.**  
Influence of the shape of the sawtooth characteristic of a phase detector on the locking range of a phase-locked oscillator /O vliianii formy pilibraznoi kharakteristiki fazovogo detektora na polosku zakhvata FAP/.  
20 p3486 A69-37011
- SAFONOVA, S. S.**  
Methods of designing collimator lenses /Metody rascheta kollimatorynykh linz/.  
06 p0895 A69-17454
- Design of collimator lenses.  
20 p3508 A69-37939
- SAFRONOV, A. N.**  
Saturation of two-circuit parametric converters /Nasyshcheniye dvukhkonturnykh parametricheskikh preobrazovatelei/.  
15 p2574 A69-30119
- SAFRONOV, B. G.**  
Plasma acceleration in a conical induction source /Uskoreniye plazmy v induktsionnom konicheskom istochnike/.  
24 p4357 A69-43468
- Study of the mechanism of capture of a moving plasma by a transverse magnetic field /Issledovanie mekhanizma zakhvata dvizhushcheisia plazmy poperechnym magnitnym polem/.  
24 p4357 A69-43469
- SAFRONOV, I. U. P.**  
Latitudinal dependence of the spectral intensities of terrestrial radiation into space according to observations of Cosmos 45 and Cosmos 65 satellites.  
03 p0422 A69-13507
- Estimation of corrections for nonuniformity of measurement to the correlation relationships between spectral densities of radiation from the earth /Otsenka popravok na neodnovremennost' izmereniia k korrelyatsionnym zavisimostiam mezdu spektral'nymi intensivnostiami izlucheniia zemli/.  
14 p2435 A69-29043
- SAFRONOV, V. S.**  
Relative sizes of the largest bodies during the accumulation of planets.  
13 p2345 A69-27652
- SAGALOVICH, V. N.**  
Diffusion parameters of a turbulent jet.  
21 p3696 A69-39091
- SAGALOVICH, V. V.**  
Diffusion-kinetic range of the process of thermal decomposition of carbonyls of metals /O diffuzionno-kineticheskoi oblasti protsessa termicheskogo razlozheniia karbonilov metallov/.  
20 p3558 A69-37015
- Effect of an electrical field on deposition growth during pyrolysis of molybdenum carbonyl /Vliianie elektricheskogo polia na rost osadkov pri pirolize karbonila molibdena/.  
20 p3559 A69-37016
- SAGALYN, R. C.**  
Charged particle measurements by means of electrostatic probes.  
05 p0761 A69-15702



- Positive ion measurement of spacecraft attitude - Gemini X and XII. 24 p4315 A69-43241
- SAGAN, C.**  
Relationship of planetary quarantine to biological search strategy. 01 p0021 A69-11090
- The planet Mercury. 03 p0509 A69-13368
- An analysis of Martian photometry and polarimetry. 12 p2171 A69-27145
- Microwave radiation from Venus - Thermal versus nonthermal models. 16 p2853 A69-31597
- Moon - Two new mascon basins. 16 p2864 A69-32446
- Frontiers in solar system exobiology. 17 p2907 A69-32968
- On the structure of the Venus atmosphere. 20 p3614 A69-38256
- Gray and nongray planetary atmospheres - Structure, convective instability, and greenhouse effect. 20 p3615 A69-38257
- Lunar and planetary mass concentrations. 21 p3803 A69-38980
- Windblown dust on Mars. 24 p4389 A69-43742
- SAGAWA, K.**  
Coronary perfusion pressure and left ventricular function. 23 p4092 A69-42061
- SAGDEEV, P. Z.**  
Plasma diffusion in a toroidal stellarator /Diffuziia plazmy v toroidal'nom stellaratore/. 07 p1191 A69-18985
- SAGDEEV, R. Z.**  
Plasma diffusion in a toroidal stellarator. 09 p1552 A69-22294
- A one-dimensional nonlinear model of anisotropic plasma instability /Odnomernaia nelineinaiia model' neustoiichivosti anizotropnoi plazmy/. 10 p1741 A69-23961
- Development of a collisionless shock wave program /Razvitiie programmy po udarnym volnam bez stolknovenii/. 17 p3012 A69-33818
- Nonlinear Plasma Theory. 18 p3180 A69-34930
- Interplanetary plasma physics and laboratory experiments /Fizika mezplanetnoi plazmy i laboratornye eksperimenty/. 22 p4028 A69-40689
- Theory of the gravitational stability of a rotating cylinder /Teoriia gravitatsionnoi ustoiichivosti vrashchaiushchegosia tsilindra/. 22 p4032 A69-41017
- SAGE, A. P.**  
Sensitivity analysis of fixed point linear smoothing algorithms. 01 p0059 A69-10238
- Large and small scale sensitivity analysis of optimum estimation algorithms. 02 p0224 A69-11961
- Error bounds for optimum smoothing algorithms. 09 p1533 A69-22436
- Terminal state error analysis using adjoint-generated sensitivities. 13 p2296 A69-27940
- Optimum estimation of bit synchronization. 14 p2413 A69-29496
- Error bounds in optimum smoothing. 14 p2416 A69-29549
- An application of nonlinear filter theory to binary processes in digital telemetry. 19 p3274 A69-36281
- SAGE, W.**  
The significance of particle size in sand erosion of small gas turbines. 16 p2794 A69-32026
- SAGGAU, B.**  
The voltage drop of the ignited mode as a function of current density. 14 p2401 A69-29232
- Investigations on noble gas converters. 14 p2403 A69-29249
- SAGGION, A.**  
On the red shift of quasars. 06 p1009 A69-17968
- Electron-electron neutrino bremsstrahlung. I, II. 24 p4351 A69-42794

- SAGIROW, P.**  
Distribution of moments of rotation on the main engine and control nozzles of propelled flight vehicles /Ueber die Verteilung der Drehmomente auf Haupttriebwerk und Steuerdusen bei angetriebenen Flugkoerpern/. 04 p0665 A69-14832
- An optimal rendezvous of two active flight vehicles /Ein optimales Rendezvous zweier aktiver Flugkoerper/. 10 p1791 A69-22923
- SAGITOV, M. U.**  
Allowance for the effect of the gravitational field of surrounding masses on the result of a determination of the gravitational constant by the method of torsional oscillations /Uchet vliianiia gravitatsionnogo polia okruzhaiushchikh mass na rezul'tat opredeleniia postoiannoii tiagoteniia metodom krutit'nykh kolebani/. 19 p3374 A69-36468
- SAGNER, M.**  
Aerodynamic field induced by a plate moving rapidly at a velocity normal to its plane in an atmosphere initially at rest /Champ aerodynamique induit par une plaque annee rapidement d'une vitesse normale a son plan dans une atmosphere initialement au repos/. 12 p2011 A69-26288
- SAH, C. T.**  
Correlation of experiments with a two-section-model theory of the saturation drain conductance of MOS transistors. 06 p0893 A69-17155
- Lumped model analysis of the low frequency generation noise in gold-doped silicon junction-gate field-effect transistors. 22 p3911 A69-40009
- SAH, C.-T.**  
Theory and experiments of low-frequency generation-recombination noise in MOS transistors. 12 p2041 A69-26627
- SAHA, A. L.**  
Channel-dropping filter for millimetre waves in circular waveguide. 17 p2936 A69-33032
- SAHA, P. K.**  
Theoretical analysis of cylindrical hybrid modes in a corrugated horn. 15 p2575 A69-30175
- SAHADE, J.**  
Forbidden emission transitions in peculiar hot stars including the symbiotic objects. 19 p3423 A69-36227
- SAHAL-BRECHOT, S.**  
Theory of the shift and broadening of spectral lines under the effect of shocks with ions and electrons in an impact approximation /Theorie de l'elargissement et du deplacement des raies spectrales sous l'effet des chocs avec les electrons et les ions dans l'approximation des impacts/. 07 p1187 A69-19720
- Impact theory of the broadening and shift of spectral lines due to the effect of electron and ion shocks. II /Theorie de l'elargissement et du deplacement des raies spectrales sous l'effet des chocs avec les electrons et les ions dans l'approximation des impacts. II/. 20 p3580 A69-37828
- SAHNI, O.**  
Interpretation of double-probe characteristics in a flame with strong injection of electronegative gas /Interpretation des caracteristiques de sonde double dans une flamme avec forte injection de gaz electronegatif/. 01 p0176 A69-10385
- Action of an electric field on the temperature of a flame /Action d'un champ electrique sur la temperature d'une flamme/. 01 p0176 A69-10389
- SAHNI, R. C.**  
Electronic states of molecules. II. 22 p3985 A69-40721
- SAHU, S.**  
Progressive damage of a glass reinforced plastic during fatigue. 08 p1338 A69-20494
- SAIBEL, A. G.**  
Radar Theory and Technology. Number 2 /Teoriia i Tekhnika Radiolokatsii. Number 2/. 15 p2565 A69-30330
- SAIBEL, E.**  
A derivation of the stress-strain relationship of composite bars. 07 p1235 A69-19385

- Final period of decay for a viscoelastic fluid in isotropic turbulence. 22 p3928 A69-39891
- SAIDA, N.**  
An approximate solution of flow around blunt bodies with detached shock waves. I - Axisymmetrical flow. 22 p3861 A69-41178
- An approximate solution of flow around blunt bodies with detached shock waves. II - Asymmetrical flow. 22 p3861 A69-41179
- SAIDOV, A. S.**  
Influence of uniaxial deformation on the activation energy epsilon sub 2 of p-type GaSb. 04 p0644 A69-15269
- SAIDOV, M. S.**  
Current-voltage characteristics of silicon tunnel p-n junctions /Vol't-ampernaia kharakteristika kremnievykh tunnel'nykh p-n perekhodov/. 10 p1746 A69-23574
- SAIKAN, S.**  
Study of self-trapped optical beams by high-speed holography. [IEEE PAPER J-7] 05 p0775 A69-16320
- SAIN, M.**  
Some studies of longwave propagation of Radio Tashkent 164 kc/s. 10 p1659 A69-24065
- The observation of solar soft X-ray bursts and their relations with microwave radio bursts /L'observation des sursauts solaires de rayonnement X doux et leur relation avec les sursauts radio-centimetriques/. 17 p3025 A69-34055
- SAIN, M. K.**  
Trunk and tree searching properties of the Fano sequential decoding algorithm. 06 p0902 A69-17400
- Invertibility of linear time-invariant dynamical systems. 20 p3509 A69-37138
- SAINT-MARTIN, C.**  
Explanation of the variation of the electron density during the change of regime of discharges excited by a high-frequency capacitance and external electrodes /Explication de la variation de la densite electronique lors du changement de regime des decharges a excitation electrique capacitive de haute frequence et electrodes externes/. 04 p0637 A69-15060
- SAISON, R.**  
Cusp curvature stabilisation of universal mode. 01 p0127 A69-10279
- Total energy of a wave in plasma. 02 p0287 A69-11876
- SAITO, A.**  
On the oscillations of "summed and differential types of higher order" under parametric excitation. 02 p0346 A69-12422
- Numerical methods in transient heat conduction. I - Methods using the analog computer. 18 p3229 A69-34835
- SAITO, H.**  
Application of holographic interferometry to the measurement of Poisson's ratio. 19 p3312 A69-36206
- SAITO, I.**  
The survey on the physiological function of the aged pilots of JASDF. 06 p0876 A69-18028
- SAITO, K.**  
The induction period in shock-heated CO-O sub 2 mixtures. 16 p2877 A69-31768
- SAITO, M.**  
Photoelectric observations of 32 Cygni during the 1968 eclipse. 22 p4032 A69-40946
- SAITO, S.**  
Low-loss laser beam transmission through lenses at the Brewster angle. 07 p1148 A69-18863
- Measurements of growth and damping rate of resistive instability in gaseous plasma. 08 p1369 A69-20886
- SAITO, T.**  
Impurity transfer in GaAs vapor growth and carrier-concentration profiles of the grown films. 05 p0807 A69-15957
- Dynamic stability tests of V/STOL model. 06 p0866 A69-17091

- Dynamic characteristics of a mutually synchronised system.  
12 p2030 A69-26388
- Response of a pull-in oscillator for random noise coincident with synchronizing signal.  
12 p2044 A69-27101
- On the influence of heat treatments on the stress corrosion cracking of Al-Zn-Mg alloys.  
17 p2990 A69-33676
- SAITO, Y.**  
Analysis of an up-converter using a varactor.  
15 p2578 A69-30797
- SAITOW, A. R.**  
CSPC - Reporting project progress to the top.  
05 p0850 A69-16300
- SAJBEN, M.**  
An exact solution for axially symmetric equilibrium electron density distributions.  
03 p0476 A69-13159
- Experimental study of a rarefied plasma stream and its interaction with simple bodies.  
[AIAA PAPER 69-79]  
06 p0865 A69-18200
- SAJUS, L.**  
General theory of chain reactions /Theorie generale des reactions en chaines/.  
06 p1031 A69-17415
- SAKAGAMI, H.**  
Simple method of receiving picture signals from a satellite.  
06 p0888 A69-17651
- SAKAGAMI, Y.**  
Experiments on collisionless shock waves in plasmas.  
17 p3013 A69-33822
- Experiments on collisionless shock waves in plasmas.  
19 p3379 A69-35759
- SAKAGUCHI, R. L.**  
Complementary formulation for plate vibration problems.  
18 p3218 A69-34626
- SAKAKIBARA, C.**  
Method of estimating whole-body cold tolerance and its relation to seasonal variation of BMR.  
06 p0876 A69-18024
- Transient changes in oxygen consumption, CO sub 2 elimination and R.Q. during and after acutely induced hypoxia to rabbits.  
06 p0876 A69-18026
- SAKAKIBARA, Y.**  
Studies on the convective heat transfer from a rotating disk. III - Heat and mass transfer in a laminar flow about a rotating disk with suction or injection in the axial stream.  
06 p1029 A69-17002
- SAKALAUSKAITE, D. A.**  
Investigation of the process of formation of the In sub 3 Te sub 4 phase in a polyphase layer of the In-Te system /Issledovanie protsessa obrazovaniia fazy In sub 3 Te sub 4 v polifaznom sloe sistemy In-Te/.  
24 p4361 A69-42994
- SAKHANOV, V. V.**  
Results of radiation observations during the partial eclipse of the sun on May 20, 1966 in Ryazan'.  
15 p2697 A69-31257
- SAKHARIEV, B.**  
Problem of the Relationship between Space and Time in the Special Theory of Relativity /Problema Vzaimosvazi Prostranstva i Vremeni v Spetsial'noi Teorii Otnositel'nosti/.  
13 p2297 A69-27633
- SAKHAROV, B. A.**  
Effect of dislocations of lifetime of minority carriers in silicon.  
06 p0980 A69-17551
- SAKHAROV, B. I.**  
Testing airframe panels for repeated static loads /Ispytaniia paneli planera samoleta na povtorno-staticheskie nagruzki/.  
24 p4400 A69-43086
- SAKHAROV, G. S.**  
Dependence of the structure and properties of titanium alloy blanks on the deformation degree and temperature /Zavisimost' struktury i svoystv zagotovok iz titanovykh splavov ot temperatury i stepeni deformatsii/.  
02 p0266 A69-12124
- Geometrical and thermomechanical parameters of deformation of certain titanium alloys /Geometricheskie i termomekhanicheskie parametry deformirovaniia nekotorykh titanovykh splavov/.  
03 p0452 A69-14123
- Die-forging characteristics of certain high-melting-point metals /Shtampuemost' nekotorykh tugoplavkikh metallov/.  
03 p0452 A69-14124
- SAKHAROV, I. E.**  
Investigation of microwave oscillations excited by an electron beam in a gas-discharge plasma /Issledovanie SVCh kolebaniy, vzbuzhdaemykh v gazorazriadnoi plazme puchkom elektronov/.  
11 p1933 A69-25542
- SAKHAROV, M. P.**  
Simplification of sensitivity models in the design of self-adjusting and adaptive systems.  
04 p0582 A69-14797
- SAKHOKHIA, D. M.**  
Scattering of electromagnetic waves by the turbulent pulsations in an inhomogeneous magnetoactive plasma.  
02 p0289 A69-12174
- Electromagnetic wave scattering at hydrodynamic pulsations of a turbulent plasma /Rasseianie elektromagnitnykh voln na gidrodinamicheskikh pul'satsiakh turbulentnoi plazmy/.  
08 p1275 A69-20435
- SAKOTA, T.**  
Operating characteristics of DC arc plasma torch. I.  
02 p0291 A69-12424
- SAKOVICH, I. S.**  
Mathematical model of parameters of Chlorella cultivation under ionizing irradiation.  
02 p0198 A69-11508
- Survival rates of continuously cultivated chlorella after a single exposure to gamma radiation /Vyzhivaemost' khlorelli pri neperynom kul'tirovani posle odnokratnogo gamma-oblucheniia/.  
22 p3876 A69-40275
- SAKOVICH, V. A.**  
Mathematical model of parameters of Chlorella cultivation under ionizing irradiation.  
02 p0198 A69-11508
- Radiation danger during prolonged space flights and radiobiological investigations.  
08 p1261 A69-19826
- SAKOWSKI, K.**  
Study of the propagation of 12-GHz omnidirectional radiation /Ausbreitungsuntersuchungen bei einer 12-GHz-Rundstrahlung/.  
11 p1841 A69-25637
- SAKRISON, D. J.**  
An extension of the theorem of Kac Murdock, and Szegoe to n dimensions.  
24 p4284 A69-42721
- Addendum to "The rate distortion function of a Gaussian process with a weighted-square error criterion."  
24 p4281 A69-42722
- SAKSONOV, P. P.**  
Medicinal therapy and flight safety /Lekarstvennaia terapiia i bezopasnost' poletov/.  
01 p0014 A69-10583
- Stimulation of growth in certain biological objects subjected to vertical vibrations /Stimulatsiia rosta u nekotorykh biologicheskikh ob'ektov pod vozdeistviem vertikal'noi vibratsii/.  
01 p0014 A69-10584
- Establishment of permissible irradiation doses during spaceflight planning.  
07 p1069 A69-19618
- Outlines of Space Radiobiology /Ocherki Kosmicheskoi Radiobiologii/.  
11 p1827 A69-24263
- Drug therapy and flight safety.  
15 p2555 A69-30753
- Growth stimulation of certain biological specimens subjected to vertical vibrations.  
15 p2555 A69-30754
- SAKSONOV, S. G.**  
Stability under external radial pressure of cylindrical shells with an elastic core.  
21 p3837 A69-39088
- SAKUMOTO, Y.**  
Metallurgical studies on gas turbine blade materials after a long term service.  
[ASME PAPER 69-GT-12]  
09 p1527 A69-22503
- SAKURAI, A.**  
Effect of applied magnetic field on the exploding wire phenomenon.  
01 p0118 A69-10660
- SAKURAI, K.**  
Development of sudden ionospheric disturbances /SID/ associated with solar cosmic-ray flares.  
02 p0308 A69-12398
- Note on the times characteristic on the motion of magnetic lines of force.  
02 p0290 A69-12399
- Observation and identification of I sub 2 fluorescence excited by a 5682-angstrom units krypton-ion laser.  
07 p1156 A69-19304
- Magnetic structure of sunspot groups which produce solar proton flares.  
18 p3189 A69-35415
- Radiation fields of energetic electrons in helical orbits within a magnetoactive plasma.  
22 p4008 A69-39965
- SAKURAI, S.**  
Experimental consideration on Griffith's crack in brittle material.  
06 p1020 A69-17128
- SAKURAI, T.**  
Effect of the plasma impedance on the time variation of the inverse pinch.  
06 p0967 A69-17716
- Spin down of Boussinesq fluid in a circular cylinder.  
13 p2245 A69-27378
- Spin down problem of rotating stratified fluid in thermally insulated circular cylinders.  
21 p3694 A69-38768
- Test result of bottom pressure distribution of STOL seaplane model.  
22 p3864 A69-40586
- SAKVARELIDZE, I. I.**  
Angular distribution of penetrating particles formed in nuclear interactions of cosmic rays with matter.  
13 p2330 A69-28381
- Investigation of the spectrum of ionization bursts produced by the penetrating component of extensive air showers.  
13 p2332 A69-28403
- SALAH, J. E.**  
Hypersonic sphere drag from radar measurements.  
23 p4059 A69-41898
- SALAKHUTDINOV, M. I.**  
Thermodynamic properties of a material in the critical region /Termodinamicheskie svoystva veshchestva v kriticheskoi oblasti/.  
11 p2003 A69-25440
- SALAMA, C. A. T.**  
The use of a breadboard chip in conjunction with computer-aided design of integrated circuits.  
03 p0402 A69-13008
- SALAMANDRA, G. D.**  
Flame propagation in the electric field.  
12 p2190 A69-26192
- SALANE, H. J.**  
Finite-difference methods for plate vibration problems.  
11 p1983 A69-25020
- SALANT, R. F.**  
Visualization of standing acoustic waves using time-averaged optical holographic interferometry.  
06 p0923 A69-17150
- SALAS, M. D.**  
The blunt body problem for a viscous rarefied gas flow.  
[AIAA PAPER 69-139]  
06 p0865 A69-18173
- SALAT, A.**  
Nonlinear high-frequency plasma conductivity.  
11 p1929 A69-25271
- SALAT, A. R.**  
Nonlinear propagation of a moderately strong electromagnetic wave in a fully ionized plasma.  
01 p0133 A69-11213
- SALATINO, N.**  
Cost effectiveness via weighted factor analysis.  
18 p3232 A69-34504
- SALAUEN, P.**  
Transverse motion of an embedded or free semi-infinite beam /Mouvement transversal d'une poutre semi-infinie encastree ou libre/.  
[ONERA-TP-653]  
07 p1230 A69-18264
- SALCUDAN, M.**  
Experimental verification of an analytical method for calculating pressure-circular bearings /Verificarea experimentală a unei metode analitice de calcul a lagarelor circulare alimentate sub presiune/.  
16 p2792 A69-31560
- SALE, B.**  
Thermodynamics of combustion and concepts of aerothermochemistry /Thermodynamique de la combustion et notions d'aerothermochimie/.  
06 p1031 A69-17414



## SALE, R. G.

## SALE, R. G.

Thermonuclear pion production and high temperature stars. 21 p3792 A69-39615

## SALENCON, J.

Punching of a smooth-interface double-layer material in plane deformation /Poinçonnement d'un bicouche a interface lisse, en deformation plane/. 09 p1617 A69-22048

## SALERNO, V. L.

Stress solution for an infinite plate containing two arbitrary circular holes under equal biaxial stresses. [ASME PAPER 68-PVP-11] 03 p0523 A69-12998

The stress distribution and spring rates in a cantilever cone ring combination. [ASME PAPER 68-WA/DE-3] 05 p0839 A69-16168

## SALGANIK, R. L.

Concerning Prandtl's brittle fracture model /K modeli khrupkogo razrusheniia Prandtlia/. 07 p1237 A69-19682

## SALIBEKOV, S. E.

Investigation of nitrogen diffusion in titanium /Issledovanie diffuzii azota v titane/. 09 p1523 A69-21736

Investigation of the diffusion of nitrogen in titanium. 20 p3564 A69-38214

## SALIGA, T. V.

Comparison of a correlation versus a probability detection measure in a coded, sequential detection TM system. 19 p3273 A69-36266

## SALIMOV, R. A.

Diffusion in an unstable highly inhomogeneous plasma. 03 p0478 A69-13840

Turbulent diffusion and ion heating in the presence of a current instability /Turbulentnaia diffuziia i nagrev ionov pri tokovoi neustoiichivosti/. 15 p2662 A69-30959

## SALIMOV, V. M.

Fluctuations in the spectrum of an argon laser. 08 p1327 A69-21023

Experimental determination of the lifetimes of the lower operating levels of an argon laser /Eksperimental'noe opredelenie vremen zhizni nizhnikh rabochikh urovnei argonovogo lazera/. 22 p3965 A69-40965

## SALIN, A.

Ionization of atomic hydrogen by proton impact. 19 p3375 A69-35911

## SALINGER, G. L.

Ultrasonic attenuation in the superconducting state of high-purity thallium. 03 p0485 A69-13293

## SALISBURY, F. B.

Expected biological responses to weightlessness. 21 p3656 A69-38921

## SALISBURY, J. W.

Orbital infrared experiments. [AAS PAPER 68-196] 02 p0312 A69-11474

Compositional implications of the spectral behaviour of the Martian surface 12 p2156 A69-26225

Mid-infrared spectroscopic observations of the moon. 13 p2341 A69-27582

Circularity of lunar craters. 13 p2344 A69-27645

Behavior of water in vacuum - Implications for "lunar rivers." 14 p2485 A69-28873

## SALIVON, S. G.

Heat stress dynamics and limits of heat tolerance in man. 08 p1263 A69-19940

## SALJNIKOV, V.

Generalization of the equation for the problem of the temperature boundary layer /Universalisierung der Gleichung vom Temperaturgrenzschichtproblem/. 10 p1808 A69-22915

## SALKELD, D.

Satellite communications for U.K. defence. 08 p1272 A69-19957

## SALKIND, M.

Creep relaxation and kinking of Al sub 3 Ni whiskers at elevated temperature. 03 p0443 A69-13119

## SALKIND, M. J.

The role of interfaces in fiber composites. 03 p0450 A69-13881

The effect of fiber orientation and morphology on the tensile behavior of Al sub 3 Ni whisker reinforced aluminum. 06 p0939 A69-16943

Diffusion bonding of whisker-reinforced aluminum. 06 p0943 A69-17238

Boron - Its performance and future in vertical flight. 22 p3971 A69-40899

## SALKOV, E. A.

Investigation of the internal photoeffect in the exciton region of the absorption spectrum of CdS single crystals /Doslizhennia vnutrishn'ogo fotoefektu v eksitonnoi oblasti spektra poglinannia monokristaliv CdS/. 14 p2504 A69-28990

## SALKOVA, E. N.

Nonlinear influence of losses on stimulated emission processes /O nelineinomu vliianiiu poter' na protsessy vyzhdennoho izlucheniia/. 03 p0439 A69-13058

Special features of generation self-cutoff in the spherical resonator of a ruby laser. 18 p3152 A69-35026

Mechanism of the self-disruption of ruby laser action /O mekhanizme avtosryva generatsii rubinovogo OKG/. 19 p3331 A69-35863

## SALL, A. O.

Design of optical-acoustic radiation detectors /K voprosu o raschete optiko-akusticheskikh priemnikov izlucheniia/. 03 p0432 A69-14216

## SALLEE, G. P.

Design requirements and objectives for commercial aircraft propulsion systems. [ASME PAPER 69-GT-57] 09 p1572 A69-22514

A status report on community nuisance. [AIAA PAPER 69-489] 16 p2746 A69-32764

## SALMAN-ZADE, R. KH.

Limb effect of Fraunhofer lines in the solar spectrum /Ob "effekte kraia" fraunferovykh linii v spektre solntsa/. 20 p3607 A69-38044

## SALMAN, E. M.

Complex application of radar and satellite observations in the analysis of meso- and macroscale systems of clouds /Kompleksnoe ispol'zovanie radiolokatsionnykh i sputnikovyykh nabludenii pri analize mezo- i makromasshtabnykh oblachnykh sistem/. 13 p2294 A69-27853

Facility and operational procedure for obtaining meteorological radar data on clouds, cloud systems, and dangerous phenomena /Apparatura i metod operativnogo polucheniia radiolokatsionnoi meteorologicheskoi informatsii ob oblakakh, oblachnykh sistemakh i opasnykh iavleniakh/. 16 p2808 A69-32278

Equipment complex for automatically obtaining and processing meteorological radar data /Kompleks apparatury dlia avtomaticheskogo polucheniia i obrabotki radiolokatsionnykh meteorologicheskikh dannyykh/. 16 p2791 A69-32279

## SALMANOV, I. R.

Investigation of the 2 by 2 prismatic, Cassegrainian-focus spectrograph of the two-meter telescope of the Shemakha Astronomical Observatory /Issledovanie 2 x 2 prizmennogo spektrografa fokvsa Kassegraina dvukhmetrovogo teleskopa ShAO/. 19 p3313 A69-36582

## SALMELA, H. A.

Mid-latitude humidity to 32 km. 03 p0461 A69-13345

## SALMI, E. W.

Thermionic electric propulsion system characteristics and capabilities. 14 p2509 A69-29184

## SALMIN, V. V.

Method of determining an approximately optimum control for spacecraft with low-thrust engines /Metod otskaniia priblizhenno- optimal'nogo upravleniia kosmicheskimi apparatami s dvigateliami maloi tiagi/. 01 p0113 A69-10571

A method of finding an approximately optimal control of a space vehicle with low-thrust motor. 15 p2651 A69-30741

## SALMON, D. M.

Minimax controller design. 02 p0224 A69-11966

Policies and controller design for a pursuing vehicle. 24 p4341 A69-43295

## SALMON, J.

Optimal array adapted to the scanning regime /Reseau optimal adapte au domaine de balayage/. 10 p1664 A69-23882

## SALMON, M.

Concorde and the aeronautical research /Concorde et la recherche aeronautique/. 17 p2899 A69-33317

## SALMONA, A.

Possibilities of calculating ionization cross sections of hydrogenoids by the Monte Carlo method /Possibilites de calcul de sections d'ionisation d'hydrogenoides par la methode de Monte-Carlo/. 01 p0122 A69-10001

## SALNIKOV, G. M.

Natural oscillations of truncated conical shells with free edges /O sobstvennykh kolebaniakh useshchennykh konicheskikh obolochek so svobodnymi kraiami/. 12 p2178 A69-26040

## SALNIKOV, V. N.

A possible form of the universal equations of laminar boundary layer /Ob odnoi vozmozhnoi forme universal'nykh uravnenii laminarnogo pogranichnogo sloia/. 11 p1876 A69-25447

## SALOMAKHINA, L. N.

Viscosity and density of thallium sulfide /TI sub 2 S/. /Viazkost' i plotnost' sul'fida talliia /TI sub 2 S/. 04 p0643 A69-14999

## SALOMON, G.

Influence of the atmosphere on the endurance of some solid lubricants compared at constant layer thickness. [IME PAPER 3] 07 p1138 A69-18560

## SALOMON, L. L.

New fast techniques for bio-assay. 02 p1201 A69-11774

## SALOMON, P. M.

Operation of the Surveyor television system in the photon-integration mode. [SMPTE PAPER 105-72] 12 p2078 A69-25777

Environmental testing and calibration of the Marine Mars 1969 television system. 22 p3920 A69-40332

## SALOMONOVICH, A. E.

Radiometer with a paramagnetic quantum amplifier for spectral measurements in the 8 mm range /Radiometr dlia spektral'nykh izmerenii v diapazone 8 mm s kvantovym paramagnitnym usilitel'm/. 04 p0597 A69-14889

Some problems and instrumental features of submillimeter astronomy. 05 p0821 A69-15844

Detection of the galactic radio line H56 alpha - The first radio line observed in the millimeter band. 08 p1397 A69-20777

Some problems and instrumental features of submillimetre astronomy. 13 p2342 A69-27660

Radiometer for spectral measurements in the 8-mm range with a quantum paramagnetic amplifier. 15 p2607 A69-30244

Extra-atmospheric radio-astronomical studies /Vneatmosfernye radioastronomicheskie issledovaniia/. 15 p2682 A69-30516

## SALONEN, E.-M.

A rectangular plate bending element the use of which is equivalent to the use of the finite difference method. 20 p3619 A69-36949

## SALOON, K. C.

Combustion studies of olefins and of their influence on hydrocarbon combustion processes. 02 p0352 A69-12300

Ignition behaviours of mixtures of hydrocarbons. 06 p1035 A69-17933

## SALOP, A.

Improvement of energy resolution in Hughes-Miller 127 deg electrostatic energy selector. 14 p2450 A69-29577

## SALPETER, E. E.

Solar rotation and neutrino flux. 02 p0325 A69-12600

Pulsar amplitude variations. 05 p0825 A69-16333

Fine-structure transitions and the background microwave radiation. 09 p1590 A69-21444

Nuclear reaction rates at high densities. 09 p1606 A69-22444

- Models for carbon-rich stars.  
09 p1606 A69-22419
- Digital search methods for pulsars.  
12 p2172 A69-27169
- Alignment of interstellar grains by cosmic rays.  
13 p2333 A69-28469
- The interaction of X-ray sources with optically thin environments.  
18 p3186 A69-34295
- The interaction of X-ray sources with optically thick environments.  
18 p3186 A69-34296
- Discrete sources and the microwave background in steady-state cosmologies.  
22 p4029 A69-40765
- Introduction and topics in theoretical astronomy.  
23 p4217 A69-42316
- SALSAO, A.**  
Wave propagation in rectangular guides having a time-space periodically modulated side-wall.  
17 p2925 A69-33843
- SALT, D.**  
A note on the principle of virtual work for dielectric materials.  
07 p1200 A69-19174
- SALT, T. L.**  
Modification of gas turbine component life predictions utilizing experience and the discrete formulation of Bayes theorem.  
19 p3394 A69-36004
- SALTER, W. E.**  
Errors resulting from channel filters and adjacent channel crosstalk in DSB/SC telemetry systems.  
07 p1083 A69-19130
- SALTIN, B.**  
Exercise-temperature regulation in man during acute exposure to simulated altitude.  
22 p3891 A69-40219
- Oxygen uptake during maximal treadmill and bicycle exercise.  
22 p3874 A69-40226
- SALTZER, C.**  
Topological codes.  
06 p0948 A69-17866
- SALTZMAN, B.**  
On a steady state theory of global monsoons.  
19 p3362 A69-36405
- SALUENIA, S. S.**  
Damage in polymers under critical loads during the action of laser radiation /Razrushenie v polimerakh pri predel'nykh nagruzkakh pod vozeistviem lazernogo izlucheniia/.  
08 p1328 A69-21190
- Laser radiation-induced breakdown processes in polymers at the load limit.  
18 p3152 A69-35159
- SALUS, W. L.**  
Astra - Boeing's advanced structural analyzer.  
23 p4232 A69-42144
- SALVAGNAC**  
Cerebral circulation under longitudinal acceleration /Circulation cerebrale sous acceleration longitudinale/.  
05 p0710 A69-16625
- SALVAT, M.**  
Electrical conductivity of an argon-potassium plasma at low current densities as a function of the gas temperature.  
05 p0798 A69-15614
- Investigation of argon discharges with metal capillary cathodes.  
10 p1733 A69-23450
- Dependence of electrical conductivity in a rare-gas/alkali plasma on the gas temperature and on preionization.  
10 p1733 A69-23451
- SALVATORI, G.**  
Development of the Fucino earth station and its present characteristics. [UN PAPER 68-95455]  
01 p0028 A69-10493
- SALWEN, H.**  
The stability of steady and time-dependent plane Poiseuille flow.  
01 p0175 A69-10333
- SALZ, J.**  
Digital FM - Tutorial.  
07 p1081 A69-19105
- SALZMAN, F.**  
Acceleration of material particles to the speed of light in general relativity.  
17 p3006 A69-33741
- SALZMAN, G.**  
Acceleration of material particles to the speed of light in general relativity.  
17 p3006 A69-33741
- SAMA, L.**  
Oxidation resistant coatings for tantalum and tungsten.  
21 p3730 A69-38673
- SAMADDAR, S. N.**  
Some integrals associated with the admittance of a plasma or dielectric covered circular aperture antenna.  
06 p0896 A69-17477
- Behavior of the complex refractive index of an isotropic plasma.  
07 p1193 A69-19183
- SAMAIN, A.**  
Angular and action variables for a charged particle in an oscillating electromagnetic field /Variables angulaires et d'action pour une particule chargée dans un champ électromagnétique oscillant/.  
11 p1927 A69-25100
- Formalism for the study of a plasma in the vicinity of a steady equilibrium position /Formalisme pour l'étude d'un plasma au voisinage d'une position d'équilibre stationnaire/.  
12 p2135 A69-26284
- Determination of steady states of a plasma in an oscillating electromagnetic field /Détermination d'états stationnaires d'un plasma dans un champ électromagnétique oscillant/.  
13 p2314 A69-28365
- Stabilization of a confined plasma by an oscillating electromagnetic field.  
14 p2499 A69-29851
- SAMANICH, N. E.**  
Flight and wind tunnel investigation of installation effects on supersonic cruise exhaust nozzles at transonic speeds. [AIAA PAPER 69-427]  
16 p2734 A69-32769
- SAMANTA, B. K.**  
Note of the stress distribution in a rotating spherical shell.  
15 p2712 A69-31005
- SAMARDZHIEV, D.**  
Disturbances in the E sub s layer at mid-latitudes /Smushcheniia v sloia E sub s pri sredni geografski shirini/.  
01 p0066 A69-10600
- Long-range ionospheric propagation of ultrashort waves /Dalechno ionosferno razprostraneniie na ukv/.  
13 p2255 A69-28543
- SAMARIN, A. A.**  
Calculation of the flexural vibrations of elastic truss systems with allowance for hysteresis friction /K raschetu izgibnykh kolebanii balochnykh uprugikh sistem s uchetom gisteretizatsionnoi treniia/.  
03 p0432 A69-12953
- Determination of the amplitudes of forced oscillations of frames with "superfluous" elasto-hysteretic couplings /K opredeleniiu amplitud vyzhdennykh kolebaniy sterzhnei s "lishnimi" upругo-gisteretizatsionnymi svyazami/.  
11 p1986 A69-25333
- SAMARIN, A. M.**  
Physicochemical principles of the melting of heat-resistant alloys /Fiziko-khimicheskie osnovy vyplavki zharooprochnykh splavov/.  
09 p1524 A69-22136
- Solubility of nitrogen in liquid niobium and molybdenum /Rastvorimost' azota v zhidkikh niobii i molibdenie/.  
10 p1710 A69-23213
- SAMARSKII, A. A.**  
A finite-difference method for solving one-dimensional nonsteady-state problems of magnetohydrodynamics /Metod konechnykh raznostei dlia resheniia odnomernykh nestatsionarnykh zadach magnitnoi gidrodinamiki/.  
01 p0129 A69-10722
- Calculation of ionization instability in a low-temperature magnetized plasma /Raschet ionizatsionnoi neustoiichivosti v nizkoterperaturnoi zamagnichennoi plazme/.  
10 p1741 A69-23962
- Completely conservative difference schemes /Polnost'iu konservativnye raznostnye skhemy/.  
23 p4151 A69-41527
- SAMARTSEV, V. V.**  
Luminous echoes in gases /Svitlova luna u gazakh/.  
21 p3774 A69-38589
- SAMBASIVA RAO, R.**  
The hysteresis variation in F2-layer parameters.  
21 p3715 A69-38560
- SAMBELL, K. W.**  
Performance aspects of folding propotor V/STOL aircraft. [AHS PAPER 302]  
17 p2901 A69-33547
- SAMEK, L.**  
Hypoxia resistance test at 7,500 m /24,600 ft/ in the low-pressure chamber before and after combined ergometer and altitude training.  
23 p4086 A69-41788
- SAMELSON, H.**  
Liquid lasers - Promising solutions.  
01 p0092 A69-11194
- Q-switching and mode locking of Nd super 3 plus-SeOCl sub 2 liquid laser  
06 p0935 A69-17776
- Output properties of the Nd super plus super 3 -SeOCl sub 2 liquid laser. [IEEE PAPER M-8]  
07 p1153 A69-19070
- SAMIR, U.**  
The dependence of charge and potential distribution around a spacecraft on ionic composition.  
14 p2518 A69-29122
- SAMKO, S. G.**  
A general singular operator and an integral operator with an automorphic kernel /Obshchii singularnyi operator i integral'nyi operator s avtomorficheskoi iadrom/.  
12 p2122 A69-26574
- SAMMARTINO, E.**  
Visualization of standing acoustic waves using time-averaged optical holographic interferometry.  
06 p0923 A69-17150
- Continuous butt welding using a carbon dioxide laser.  
15 p2617 A69-30099
- SAMMIS, J. C.**  
A combination work and photographic light for portable service in manned spacecraft. [IES PREPRINT 30]  
18 p1338 A69-35173
- SAMMONS, G. D.**  
Dynamic calorimetric solid propellant combustion studies. [AIAA PAPER 69-504]  
16 p2833 A69-32679
- SAMOILENKO, I. I.**  
Stabilization of axisymmetric perturbations in a conducting fluid by means of a distributed automatic control system /Stabilizatsiia osesimmetricheskikh vozmushchenii provodiashchei zhidkosti pri pomoshchi raspredelennoi sistemy avtomaticheskogo regulirovaniia/.  
13 p2311 A69-28105
- A stabilizing resonance shell with space-time dispersion /Rezonansnaia stabiliziruiushchaya obolochka s prostranstvenno-vremennoi dispersiei/.  
19 p3372 A69-35893
- SAMOILUKOVICH, V. A.**  
Determination of the amplification coefficient, luminescence power, and spacing between Fermi quasi-levels in injection lasers /Opredelenie koeffitsienta usileniia, moshchnosti luminentsentsii i rasstoianiiia mezhdu kvaziurovniami Fermi v inzhetsionnykh lazerakh/.  
22 p3965 A69-40801
- SAMOILO, K. A.**  
Differential equations of a single-loop parametric amplifier /Differentsial'nye uravneniia odnokonturnogo parametricheskogo usilitelia/.  
13 p2234 A69-28329
- SAMOILOV, E. A.**  
Vibration of a spherical shell filled with a liquid.  
16 p2873 A69-32129
- SAMOILOV, V. D.**  
Bistable operation of a GaAs semiconductor laser.  
03 p0441 A69-14175
- Multivibrator for electrical and optical oscillations based on an injection semiconductor laser and a photodiode.  
07 p1148 A69-18688
- Hysteresis of radiation power of gallium-arsenide injection lasers.  
07 p1157 A69-19593



- Investigation of injection lasers with nonuniform excitation /Issledovanie inzhetsionnykh lazerov s neodnorodnym vozbuзhdeniem/.  
08 p1326 A69-20539
- SAMOILLOV, V. I.**  
Polarizational-optical investigation of the failure of transparent dielectrics by laser radiation.  
08 p1324 A69-19947
- SAMOILLOVICH, A. I.**  
Use of glass corrugations and cold cathodes in laser discharge tubes.  
03 p0435 A69-12981
- SAMOILLOVICH, D. M.**  
New high-resolution photographic layers and their study by the method of holographic resolvometry /Novye fotograficheskie sloi vysokogo razresheniia i ikh issledovanie metodom golograficheskoi resolyvometrii/.  
15 p2606 A69-30052
- SAMOILLOVICH, G. S.**  
Calculation of the two-dimensional flow of an incompressible fluid past a cascade of arbitrary profiles vibrating with an arbitrary phase shift /Raschet obtekaniiia reshetki proizvol'nykh profilov, vibriuiushchikh s proizvol'nym sdvigom faz, ploskim potokom neszhimaemoi zhidkosti/.  
02 p0190 A69-12574
- SAMOILLOVICH, G. V.**  
Rendezvous of space vehicles at a constant orientation of the relative-range vector /Sblizhenie kosmicheskikh apparatov pri postoiannom napravlenii vektora otnositel'noi dal'nosti/.  
05 p0789 A69-16047  
Approach of space vehicles when the relative-range vector is constant.  
20 p3574 A69-37956
- SAMOKHIN, M. V.**  
Certain specific features of the motion of a plasma in the earth's magnetosphere /Nekotorye osobennosti dvizheniia plazmy v magnitosfere zemli/.  
10 p1769 A69-23901  
On transverse electric fields in the magnetosphere in the presence of quasi-Maxwellian charged-particle distributions.  
10 p1689 A69-24204  
Motion of low-energy charged particles in a magnetosphere model with a constant electric field /Dvizhenie zariazhennykh chastits malykh energii v modeli magnitosfery s postoiannym elektricheskim polem/.  
14 p2512 A69-29040  
Structure of a plasma flow near the frontal point in the earth's magnetosphere /Struktura tekuchiei plazmy v okrestnosti lobovoi točki v magnitosfere zemli/.  
20 p3594 A69-37019  
The form of the plasmopause in the presence of a subsonic convective flow in the magnetosphere /O forme plazmopauzy pri nalichii dozvukovogo konvektivnogo tekuchiei v magnitosfere/.  
22 p3942 A69-41103  
Convergence of the method of successive approximations in the problem of supersonic flow past a dipole /O skhodimosti metoda posledovatel'nykh priblizhenii v probleme sverkhzvukovogo obtekaniiia dipolia/.  
23 p4156 A69-41853
- SAMOKHVALOV, I. V.**  
Polarization of laser radiation scattered by fog and smoke /Polarizatsiia izlucheniia OKG, rasseiannogo tumanami i dymami/.  
03 p0393 A69-13275  
Polarization of OPG /optical photon generator/ radiation scattered by fog and smoke.  
14 p2410 A69-28783  
Experimental study of the reflection of short pulses of optical radiation from fog and smoke /Eksperimental'noe issledovanie otrazheniia korotkikh impul'sov opticheskogo izlucheniia tumanami i dymami/.  
15 p2562 A69-30077
- SAMONOV, V. S.**  
Television-optical observations of Icarus /Optiko-televizionnye nabludeniiia Ikara/.  
21 p3719 A69-38402
- SAMOSUDOV, B. E.**  
On the development of cascade showers in heavy materials.  
13 p2303 A69-28412  
Angular distribution of electrons at different stages of cascade shower development.  
13 p2303 A69-28414
- SAMOUN, A. B.**  
Selection criteria for the design of a computer carried on board a satellite and for its programming language as a function of special requirements /Criteres de choix de l'architecture d'un calculateur embarque sur satellite et de son langage de programmation en fonction des besoins particuliers/.  
20 p3499 A69-37379
- SAMPL, F., JR.**  
Dynamic simulation - A tool for engine component design. [SAE PAPER 690386]  
23 p4200 A69-41655
- SAMPSON, D. H.**  
Comparison of some recently proposed excitation and ionization rates.  
08 p1385 A69-20065  
Some aspects of radiative transport in the outer layer of a hot gas.  
18 p3231 A69-35242
- SAMPSON, J. J.**  
The cardiac lymphatics in experimental chronic congestive heart failure.  
23 p4078 A69-41364
- SAMPSON, R. C.**  
Structures problem-solving in the photoelastic laboratory.  
09 p1479 A69-22734  
Structures problem-solving in the photoelastic laboratory.  
10 p1794 A69-22941
- SAMSON-DOLLFUS, D.**  
Physiological variations of the human ERG as a function of the luminous energy and the wave length /Variations physiologiques de l'ERG humain en fonction de l'energie lumineuse et de la longueur d'onde/.  
22 p3884 A69-40884
- SAMSON, A. M.**  
Accounting for internal reflections in the calculation of the characteristics of a laser with a bleachable filter /Uchet vnutrennikh otrazhenii pri raschete svoistv OKG s prosvetliaushchimsia fil'trom/.  
02 p0256 A69-11999  
Application of the moment method to the determination of the characteristics of a radiation pulse propagating in a luminescent scattering medium /Primenenie metoda momentov dlia opredeleniia kharakteristik impul'sa izlucheniia, rasprostraniushchegosia v rasseivaushchei lumieststviushchei srede/.  
04 p0610 A69-14425  
On the theory of laser resonators.  
09 p1520 A69-22679  
Unsteady generation from a ruby laser with a ruby filter /Nestatsionarnaia generatsiia rubinovogo OKG s fil'trom iz rubina/.  
11 p1894 A69-24619  
Development time and spectral width of a single pulse in a laser with a passive Q-switch /Vremia razvitiia i spektral'naia shirina monoimpul'sa v OKG s prosvetliaushchimsia fil'trom/.  
14 p2458 A69-29166
- SAMSON, C.**  
Remarks concerning superheterodyne millimeter and submillimeter wave detection /Remarques concernant la detection superheterodyne en ondes millimetriques et submillimetriques/.  
15 p2570 A69-31093
- SAMSON, J. A. R.**  
Simultaneous photoexcitation and photoionization of helium.  
11 p1921 A69-24926
- SAMSONENKO, S. V.**  
Measurement of angle in the presence of noise for unknown signal parameters.  
03 p0399 A69-14132
- SAMSONOV, G. V.**  
Some relationships of constitutional diagrams of IIIA-VIA transition metals.  
08 p1331 A69-20191  
Static strength of refractory compounds at high temperatures.  
09 p1523 A69-21873  
Certain physical properties of niobium and titanium carbide alloys in the homogeneity region /Deiaki fizicheskie vlastivosti spлавov karbidov niobiia i titana v oblasti ikh gomogenosti/.  
14 p2462 A69-28976  
Properties of alloys of niobium and titanium carbides in their homogeneity region.  
15 p2638 A69-30282  
Contact interactions of silicon and boron carbides and their alloys with liquid metals /Kontaktna vzaimodiia karbidov kremniia i boru ta ikh spolk z ridskimi metalami/.  
18 p3156 A69-35153
- Emissivity of high melting point compounds /Koeffitsient izlucheniia tugoplavkikh soedinenii/.  
18 p3158 A69-35242**
- Protective Coatings on Metals. Number 2 /Zashchitnye Pokrytiia na Metallakh. Number 2/.  
19 p3328 A69-36111**
- Temperature dependence of the electrical resistance and thermal EMF of carbide alloys of niobium and titanium in the homogeneity range /Temperaturnazavisimost' elektrosoprotivleniia i termo - E.D.S. ikh bidnykh spлавov niobiia i titana v oblasti ikh gomogenosti/.  
20 p3558 A69-36111**
- Investigation of the regularities of extrusion compacting of hard-alloy mixtures /Issledovanie zakonomenosti mundstuchnogo pressovaniia tvoridnykh smesi/.  
22 p3956 A69-40611**
- Study of recrystallization during sintering of powder of niobium and titanium carbides /Issledovanie rekristallizatsii pri spekanii poroshkov karbidov niobiia i titana/.  
22 p3970 A69-40611**
- SAMSONOV, N. M.**  
A year-long medical-technological experiment in ground-based life-support system facility /Godovoe mediko-tekhnicheskii eksperiment v nazemnom korpusse sistem zhizneobespecheniia/.  
13 p2216 A69-28616
- SAMSONOV, V. A.**  
Certain minimum problems in the theory of stable motion of a body containing liquid /O nekotorykh zadachakh minimuma v teorii ustoiichivosti dvizheniia tela s zhidkost'iu/.  
03 p0418 A69-13818
- SAMSONOVA, N. N.**  
Study of alloys of the Ti-V-Cr-Mo system /Issledovanie spлавov sistemy Ti-V-Cr-Mo/.  
04 p0618 A69-15081
- SAMSONOVA, V. G.**  
Changes in the electrical activity of the animal and human cerebrum during stimulation of the vestibular apparatus /Izmenenie elektricheskoi aktivnosti mozga zhivotnykh i cheloveka pri razdrzhenii vestibuliarnogo apparata/.  
20 p3469 A69-37242
- SAMUEL, P.**  
Input-output analysis for total input rate and total mass of body cholesterol in man.  
24 p4259 A69-42631
- SAMUELI, J. J.**  
Methods of simulating cosmic nuclear radiation on the ground - Validity of the simulation and the equivalence of the radiation effect /Moyens de simulation au sol des rayonnements nucleaires spatiaux - Validite de la simulation et equivalence de l'effet de rayonnements/.  
11 p1862 A69-24877
- SAMUELOFF, S.**  
Influence of season and heat on energy expenditure during rest and exercise.  
22 p3890 A69-40211
- SAMUELSON, L. A.**  
Creep buckling of an elastic-plastic cylindrical shell.  
02 p0348 A69-12533  
Experimental investigation of creep buckling of circular cylindrical shells under axial compression and bending.  
03 p0523 A69-12999  
Creep buckling of a circular cylindrical shell. [AIAA PAPER 68-108]  
04 p0676 A69-14701
- SAMUELSON, M. C.**  
Micro soldering techniques for hybrid circuit assemblies.  
09 p1510 A69-22344
- SAMUELSON, R. D.**  
A second-order system model for pneumatic instrumentation lines. [IEEE PAPER 2D-6]  
07 p1059 A69-19119  
Second-order system approximations for describing pneumatic instrumentation line transfer functions.  
10 p1692 A69-23266
- SAMUELSON, R. E.**  
The thermal radiation field emitted by anisotropically scattering cloudy planetary atmospheres.  
20 p3614 A69-38253
- SAMUELSSON, B.**  
Aeronautic simulation - Analog and digital computers used in a "hybrid technique" at SAAB /Flygteknisk simulering - Analogioch digitalmaskiner i "hybridteknik" hos SAAB/.  
23 p4146 A69-41601

- AMUILOV, E. V.**  
Thermodynamics of partially ionized hydrogen /O termodinamike chastichno ionizovannogo vodoroda/.  
21 p3850 A69-38964
- AMUILOV, N. N.**  
Solution to the plane Cauchy problem for a system of differential equations in the theory of heat and mass transfer /Reshenie ploskoi zadachi Koshi dlia sistemy differentsial'nykh uravnenii teorii perenosa tepla i veshchestva/.  
15 p2719 A69-31262
- AMULSKI, J.**  
Experiments on a striated-flow induction synchronous MHD generator.  
10 p1638 A69-23487
- AN MARTIN, R. L.**  
Studies and analyses of the mixing phenomena of liquid propellants leading to a yield-time function relationship.  
04 p0646 A69-14478
- SANAKOEV, T. V.**  
Stability of the periodic modes of motion of a two-mass vibrational system with mutual mass collision /Ustoichivost' periodicheskikh rezhimov dvizhenia dvukhmassovoi kolebatel'noi sistemy so vzaimnym soudarenim mass/.  
14 p2534 A69-29039
- SANAMIAN, V. A.**  
Low-frequency spectra of extragalactic radio sources /Nizkочастотnye spektry vnegalakticheskikh radioistchnikov/.  
13 p2351 A69-27867
- SANANES, F.**  
Calculation of the detached turbulent flow downstream of a sudden widening in a stream of circular cross section /Calcul de l'écoulement turbulent decolle en aval de l'élargissement brusque dans une veine de section circulaire/.  
19 p3299 A69-36648
- SANATANI, S.**  
Thermal structure of an Alouette 2 topside profile as deduced from rocket measurements.  
14 p2510 A69-28942
- SANCHEZ-PALENCIA, E.**  
Existence of solutions to certain boundary problems in magnetohydrodynamics /Existence des solutions de certains problemes aux limites en magnetohydrodynamique/.  
01 p0126 A69-10164
- SANCHEZ, L.**  
Meteorological rocket probes in Spain /Sondeos meteorologicos con cohete en Espana/.  
11 p1877 A69-24519  
On the structure of mesospheric winds.  
15 p2604 A69-31415
- SANCISI, R.**  
21-cm observations at low latitudes in the direction of the galactic centre.  
08 p1392 A69-20562
- SANDAGE, A.**  
On the optical identification of the X-ray source Cen XR-2 as WX Cen.  
01 p0145 A69-10857  
Radio galaxies and quasars. II.  
05 p0820 A69-15837  
On the nature of Ryle and Bailey's candidate star for the pulsating radio source CP 1919.  
09 p1591 A69-21455  
On the nature of faint blue objects in high galactic latitudes. II - Summary of photometric results for 301 objects in seven survey fields.  
10 p1788 A69-24123
- SANDAGE, A. R.**  
UBVRIHKL photometry of the central region of M31.  
20 p3610 A69-38141
- SANDBANK, C. P.**  
Transferred-electron bulk effects in gallium arsenide.  
03 p0484 A69-13292
- SANDBERG, H. J.**  
Mathematical modeling of long term gyro drift rate.  
03 p0463 A69-13213  
Stationary and nonstationary characteristics of gyro drift rate.  
[AIAA PAPER 69-838] 21 p3761 A69-39369
- SANDER, K. F.**  
Dynamic sheath growth in a mercury plasma.  
12 p2134 A69-26099
- SANDER, W. B.**  
Semiconductor memory circuits and technology.  
04 p0569 A69-15362
- SANDERS, H.**  
Thickness of adhesive joints in sandwich structures - The measurement and acceptance criteria of.  
24 p4403 A69-43461
- SANDERS, J. H.**  
Laser action in carbon and nitrogen atoms following dissociative excitation transfer.  
05 p0795 A69-15663
- SANDERS, J. L.**  
Theoretical foundations for teleological systems.  
23 p4134 A69-42059
- SANDERS, J. L., JR.**  
On the shell equations in complex form.  
11 p1978 A69-24811  
A longitudinal crack in a cylindrical shell under internal pressure.  
18 p3212 A69-34346  
The effect of a circumferential stiffener on the stress in a pressurized cylindrical shell with a longitudinal crack.  
18 p3212 A69-34347
- SANDERS, K. L.**  
Initial gross weight and size estimation, emphasizing fighter aircraft.  
[SAWE PAPER 760] 18 p3220 A69-34880  
High-lift devices - A weight and performance tradeoff methodology.  
[SAWE PAPER 761] 18 p3091 A69-34906
- SANDERS, N. D.**  
Integral balance of forces and momenta in accelerated boundary layers.  
[AIAA PAPER 69-666] 17 p2955 A69-33462
- SANDERS, N. L.**  
Measurements of precipitated 1-20 keV protons and electrons during a breakup aurora.  
18 p3187 A69-34946
- SANDERS, R. E.**  
Engineering and operational experiences related to lunar-surface thermal-vacuum qualification of the Apollo extravehicular mobility unit.  
[AIAA PAPER 69-992] 22 p3893 A69-40370
- SANDERS, R. M.**  
Concurrent fixed-ratio fixed-interval performances in adult human subjects.  
23 p4081 A69-41439
- SANDERS, T. C.**  
A low-energy channel-multiplier spectrometer for ATS-E.  
[IEEE PAPER 3C-5] 07 p1135 A69-19199
- SANDERSON, G.**  
Metallographic studies of the stress corrosion cracking of titanium alloys in aqueous chloride solutions.  
19 p3352 A69-36903
- SANDERSON, R. J.**  
Combustion in compressible mixing flows.  
[WSCI PAPER 68-28] 06 p0969 A69-17794  
Interpretation of pressure measurements behind the reflected shock in a rectangular shock tube.  
23 p4152 A69-41903
- SANDERSON, R. L.**  
Comparison of laser mode calculations.  
08 p1328 A69-21091
- SANDFORD, J.**  
NUSAT - First generation nuclear flight stage.  
[AIAA PAPER 69-534] 16 p2810 A69-32707
- SANDFORD, J. W.**  
Major factors influencing the development of a nuclear flight stage.  
[AIAA PAPER 68-591] 21 p3769 A69-39752
- SANDFORD, M. C. W.**  
Atmospheric sodium measured by a tuned laser radar.  
09 p1484 A69-21464
- SANDFORD, P. B.**  
Variations of auroral emissions with time, magnetic activity and the solar cycle.  
03 p0420 A69-13325
- SANDIE, W. G.**  
The latitude variation of fast and slow neutrons at aircraft altitudes during solar minimum.  
09 p1574 A69-21402
- SANDLER, H.**  
Single-channel pressure telemetry unit.  
11 p1831 A69-25642
- An analytic elastic-viscoelastic model for the shape and the forces in the left ventricle.  
12 p2022 A69-26235
- A multichannel implantable telemetry system.  
15 p2559 A69-31044
- Single-channel pressure telemetry unit.  
23 p4100 A69-41295
- SANDLER, R. A.**  
Obtaining titanium aluminum alloys by aluminothermal reduction of TiCl<sub>3</sub> sub 4 /Poluchenie titano-aliuminiyevykh spлавov /ligatur/ aluminotermicheskim vosstanovleniem TiCl<sub>3</sub> sub 4/.  
07 p1159 A69-18536  
Cementation of Al and V by metallic titanium in titanium-containing concentrated chloride melts /Tsementatsiya Al i V metalicheskim titanom v titanosoderzhashchikh kontsentrirrovannykh khlordnykh rasplavakh/.  
22 p3957 A69-40918
- SANDLER, S.**  
The low-temperature oxidation of 2-methylbutane in a flow system during the induction period.  
21 p3669 A69-38798
- SANDLER, S. I.**  
Transport properties of almost-Lorentzian mixtures.  
11 p1997 A69-24286
- SANDLER, S. S.**  
Arrays of cylindrical dipoles.  
04 p0574 A69-14353
- SANDOMIRSKAIA, I. D.**  
Calculation of two-dimensional flows of an equilibrium and perfect gas by the method of networks /Raschet dvumernykh tekhnienii ravновесного i sovershennogo gaza metodom setok/.  
03 p0363 A69-13658
- SANDOMIRSKI, V. B.**  
Experimental studies of the superconductivity of degenerate semiconductors /Eksperimental'nye issledovaniia sverkhprovodimosti v vyrozhdennykh poluprovodnikakh/.  
12 p2144 A69-26620
- SANDOR, B. I.**  
Cumulative fatigue damage under cyclic strain control.  
10 p1715 A69-23983
- SANDOVSKII, V. A.**  
Field theory of a striding transducer. I.  
10 p1697 A69-24071
- SANDOZ, G.**  
Fractography and crystallography of subcritical crack propagation in high strength titanium alloys.  
19 p3343 A69-35922  
Subcritical crack propagation in Ti-8Al-1Mo-1V alloy in organic environments, salt water, and inert environments.  
19 p3353 A69-36907
- SANDQVIST, A.**  
Occultations of the galactic center region in the 1667-MHz OH line.  
06 p1009 A69-17961
- SANDREA, A.**  
Metallic phase of stone meteorites /Phase metallique des meteorites pierreuses/.  
19 p3415 A69-36124
- SANDRETTO, P. C.**  
The Economic Management of Research and Engineering.  
04 p0688 A69-14530
- SANDS, A.**  
A liquid-helium cryopump.  
01 p0088 A69-11155
- SANDS, D. E.**  
Boron modifications produced in an induction-coupled argon plasma.  
08 p1372 A69-20687
- SANDSTROEM, A. E.**  
Short time variations of the cosmic ray diurnal phase and amplitude determined by means of superimposed records.  
23 p4204 A69-41481  
The cosmic ray diurnal variation during an event on the 23d to 24th of December 1957.  
23 p4204 A69-41482
- SANDSTROM, J. D.**  
An evaluation of photovoltaic devices for future spacecraft power demands.  
22 p3868 A69-40130
- SANDULEAK, N.**  
Flare stars in the Coal Sack.  
10 p1790 A69-24141



- Correlation of the distributions of young stars and neutral hydrogen in the Small Magellanic Cloud.  
12 p2152 A69-25802
- A spectroscopic study of the association Scorpius OB I.  
15 p2692 A69-30771
- A finding list of stars of spectral type A7 and earlier in regions at high galactic latitudes. II - South Galactic Pole.  
22 p4021 A69-40436
- SANEMATSU, H. S.**  
Turbulent flame propagation in a homogeneous gas mixture.  
11 p1998 A69-24473
- Turbulent flame propagation parameters.  
11 p1999 A69-24482
- SANFELD, A.**  
Introduction to the Thermodynamics of Charged and Polarized Layers.  
10 p1724 A69-23159
- SANFORD, P. W.**  
Soft X-ray observations from OSO-4.  
12 p2151 A69-26936
- SANGER, N. L.**  
A jet pump cavitation prediction parameter.  
05 p0745 A69-15791
- An experimental investigation of several low-area-ratio water jet pumps.  
18 p3095 A69-35176
- SANITT, N.**  
The Schroedinger operator criterion for the stability of galaxies and gas spheres.  
16 p2862 A69-32374
- SANKAR RAO, M.**  
Tests of the effect of grid resolution in a global prediction model.  
24 p4344 A69-43066
- SANKAR-RAO, M.**  
On a steady state theory of global monsoons.  
19 p3362 A69-36405
- SANKARANARAYANAN, P. E.**  
An electrical transducer and the associated instrumentation for fluid pressure measurement.  
03 p0427 A69-12914
- SANKARANARAYANAN, R.**  
On the calculation of unsteady nonlinear three-dimensional supersonic flow past wings. [ASME PAPER 68-FE-31]  
05 p0698 A69-16078
- Steady creep of circular cylindrical shells under combined lateral and axial pressures.  
06 p1023 A69-17506
- Steady creep of circular cylindrical shells under axially symmetric loading.  
23 p4233 A69-42352
- SANKEY, G. O.**  
Spin tests to determine brittle fracture under plane strain.  
03 p0524 A69-13060
- SANKO, L. A.**  
Study of four-momentum transfers in high-energy interactions of cosmic ray particles.  
13 p2330 A69-28375
- SANN, K. H.**  
The measurement of near-carrier noise in microwave amplifiers.  
02 p0221 A69-12454
- SANNIKOV, V. A.**  
Analysis of a certain class of linear unsteady dynamic systems /Ob analize lineinykh nestatsionarnykh dinamicheskikh sistem odnogo klassa/.  
22 p3917 A69-40616
- SANNINO, M.**  
Study of a variable-polarization tunnel-diode oscillator /Studio di un oscillatore a diodo tunnel a polarizzazione variabile/.  
01 p0038 A69-10070
- Oscillation frequency of a nonsinusoidal tunnel-diode oscillator as a function of polarization /Frequenza di oscillazione di un oscillatore non sinusoidale a diodo tunnel in funzione della polarizzazione/.  
08 p1279 A69-19924
- Some applications of the theory of tunnel diode oscillators /Alcune applicazioni della teoria degli oscillatori a diodo tunnel/.  
19 p3285 A69-36738
- SANNOMIYA, N.**  
Optimum control of space-vehicle orbital elements.  
06 p0955 A69-17579
- SANNUTI, P.**  
Singular perturbation method for reducing the model order in optimal control design.  
02 p0224 A69-11967
- Sensitivity comparison of optimal controls.  
05 p0737 A69-15866
- Near-optimum design of linear systems by a singular perturbation method.  
12 p2052 A69-26503
- SANO, K.**  
Mush cathodes for high power klystrons.  
23 p4144 A69-42532
- SANO, T.**  
Diffusion of carbon in tantalum, niobium and vanadium.  
11 p1906 A69-25575
- SANTAGOSTINO, M.**  
Determination and layout of the eye chart for a digital transmission system by means of computer simulation /Determinazione e tracciamento del diagramma ad occhio per un sistema di trasmissione numerica mediante simulazione al calcolatore/.  
21 p3678 A69-38776
- SANTAMARINA, J.**  
Tristable fluid amplifiers.  
24 p4255 A69-43298
- SANTEE, R.**  
High reliability tape recorders for satellite, aircraft drone applications.  
07 p1133 A69-19104
- SANTHANAM, T. S.**  
The generalized Clifford algebra and the unitary group.  
20 p3568 A69-37072
- SANTINA, R. E.**  
Modeling of solar cosmic ray events based on recent observations. [AIAA PAPER 69-14]  
06 p0997 A69-18160
- SANTINI, N. J.**  
The flux density of Taurus A at 4.3-mm wavelength.  
09 p1591 A69-21450
- Observations of variable radio sources at 9.55-millimeter wavelength.  
13 p2334 A69-27309
- Observations of radio sources at 4.3-mm wavelength.  
22 p4014 A69-40126
- SANTINI, P.**  
Vibrations of helicopter blades /Vibrazioni di pale di elicotteri/.  
11 p1995 A69-25673
- Effects of damping on critical parameters in super-sonic aeroelasticity /Effetto degli smorzamenti sui parametri critici in aeroelasticita supersonica/.  
19 p3437 A69-36148
- SANTORA, F. A.**  
Interaction of astrodynamics and a Mars imaging mission. [AIAA PAPER 69-127]  
06 p1011 A69-18169
- SANTOS, E.**  
A Lagrangian formulation of the theory of random motion.  
07 p1182 A69-19455
- SANTOS, J.**  
Tristable fluid amplifiers.  
24 p4255 A69-43298
- SANTOS, V. A.**  
Laminar velocity profiles in developing flows using a laser Doppler technique.  
15 p2589 A69-30001
- SANWAL, N. B.**  
The masses of stars above the main sequence.  
18 p3195 A69-34429
- SANYASI RAJU, P. T.**  
Latitude variation of the delays between spread-F and magnetic activity.  
16 p2779 A69-32194
- SANZ, H. G.**  
Determination of an internal super 87 Rb-super 87 Sr isochron from the Olivenza chondrite.  
24 p4385 A69-43214
- SANZHAREVSKII, L. G.**  
Hypersonic inviscid flow past a two-dimensional nonexpandable flexible sail /Obtekanie dvumernogo nerastiazhimogo gibkogo parusa v giperzvukovom neviakzom potoke/.  
19 p3237 A69-35814
- SAO, K.**  
Experimental investigation of the propagation of ELF atmospherics.  
23 p4114 A69-41362
- SAPEL'KIN, A. I.**  
Experimental investigation of the dispersion of dielectric waveguides for millimeter wavelengths /Eksperimental'nom issledovanii dispersii dielektricheskikh volnovodov millimetrovogo diapazona voln/.  
21 p3674 A69-39173
- SAPONDZHIAN, O. M.**  
Saint Venant principle for displacements /Printsen-venana dlia smeshchenii/.  
22 p4048 A69-41272
- SAPOZHNIKOV, V. A.**  
Stability of a laminar flow in the presence of a field of mass forces /Ustoichivost' laminarnogo potoka prisutstvii polia massovykh sil/.  
02 p0233 A69-12575
- SAPOZHNIKOVA, V. D.**  
On the theory of simple and double-layer potentials for domains with irregular boundaries.  
07 p1173 A69-18494
- Solution of the third boundary value problem by potential theory methods for domains with irregular boundaries.  
07 p1173 A69-18494
- SAPP, W. W.**  
Energy and width measurements of the pionic 2p-1 transition in super 23 Na.  
01 p0122 A69-10033
- SARA, R. V.**  
Fabrication and properties of graphite-fiber, nickel matrix composites.  
09 p1512 A69-22364
- SARABHAI, V.**  
Anisotropies of galactic cosmic rays.  
06 p0990 A69-17288
- Experimental determination of temperature effects on mu mesons recorded at Trivandrum.  
06 p0924 A69-17294
- Daily variation of the geomagnetic field and the deformation of the magnetosphere.  
21 p3714 A69-38544
- Geomagnetic plasma probe for solar wind.  
24 p4308 A69-42964
- SARANTSEV, A. I.**  
Experimental investigation of a vortex flow past a smooth body of revolution and past a body of revolution with a wing and ribs at a Mach number of two /Eksperimental'noe issledovanie vikhrevogo techeniya okolo izolirovannogo tela vrashcheniya i tekhnicheskoy s krylom i rebrami pri chisle Makha, raznomenno dvum/.  
02 p0191 A69-12584
- Some experimental data concerning the influence of the Mach number on the pattern of a vortex flow past a delta wing and a circular cone /Nekotorye eksperimentalnye dannye o vliyanii chisla Makha na kartinu vikhrevogo techeniya okolo treugol'nogo kryla i konusa/.  
06 p0858 A69-17334
- SARAPH, H. E.**  
Excitation of forbidden lines in gaseous nebulae. I.  
08 p1391 A69-20530
- Resonances in cross sections for excitation of forbidden lines in O super 2 super plus.  
11 p1921 A69-24417
- SARAZIN, A.**  
Methods of simulating cosmic nuclear radiation on the ground - Validity of the simulation and the equivalence of the radiation effect /Moyens de simulation au sol des rayonnements nucleaires spatiaux - Validite de la simulation et equivalence de l'effet des rayonnements/.  
11 p1862 A69-24875
- SARBEL, O. G.**  
Investigation of luminescence and electron emission centers in dispersed gold films /Doslidzhennia tsvetivnitstva ta elektronnoi emisii u dispergovanih zolotikh plivkakh/.  
14 p2504 A69-28992
- Photoelectric emission from GaAs /Fotoelektronna emisii arsenidu galiu/.  
14 p2504 A69-28992
- SARD, E. W.**  
A new procedure for calculating varactor Q from impedance versus bias measurements.  
04 p0575 A69-14753

- JARDANOWSKY, W.**  
Development of VTOL flying and handling qualities requirements using the mission task performance oriented approach. [AHS PAPER 360] 17 p2900 A69-33522
- JARDARIAN, V. S.**  
Thermal EMF in epitaxial films /Termoeds v epitaksial'nykh plenakh/. 09 p1555 A69-21473  
Thermoelectric power of epitaxial films. 15 p2669 A69-30718
- SARDZHENT, U. L. U.**  
Investigation of the nucleus of the Seyfert galaxy NGC 4151 /Issledovanie iadra seifertovskoi galaktiki NGC 4151/. 12 p2164 A69-27023
- SAREEN, S. S.**  
Purge dynamics of fuel cells. 23 p4075 A69-42300
- SARGENT, D.**  
Dynamic effects of vibration on guidance and control system performance. 15 p2608 A69-30367
- SARGENT, G.**  
Work hardening during stress relaxation in titanium at 300 deg K. 19 p3342 A69-35812  
Stress relaxation and thermally activated deformation in titanium. 21 p3749 A69-39598
- SARGENT, J. C.**  
Stress corrosion preventative paints for titanium alloys. 14 p2469 A69-29936
- SARGENT, W. L. W.**  
The 1968 Palomar supernova search. 19 p3403 A69-35963  
An analysis of the peculiar A star HD 204411. 24 p4376 A69-42664
- SARGIN, V. N.**  
A method of solving boundary-value variational problems of flight dynamics /Ob odnom metode reshenia kraevykh variatsionnykh zadach dinamiki poleta/. 21 p3817 A69-39817
- SARGIS, D. A.**  
Fast critical experiments in support of thermionic reactor physics. 09 p1441 A69-21835
- SARI, J. W.**  
Power spectra of the interplanetary magnetic field. 20 p3603 A69-37554
- SARIDIS, G. N.**  
Analog methods for on-line system identification using noisy measurements. 03 p0401 A69-13764  
Identification of distributed parameter systems by stochastic approximation. 06 p0900 A69-17358  
Stochastic approximation algorithms for linear discrete-time system identification. 06 p0904 A69-17940  
Stochastic approximation algorithms for system identification, estimation, and decomposition of mixtures. 11 p1842 A69-24934  
On the stochastic fuel-regulator problem. 24 p4292 A69-43284
- SARIN, S. L.**  
Application of gaskinetics to some flow problems. 08 p1351 A69-20708
- SARJEANT, W. J.**  
Linearly polarized monochromatic radiation from a water-vapor laser at 118.6 microns. 10 p1702 A69-23160  
Far-infrared gas lasers as sources of linearly polarized radiation. 23 p4172 A69-41400
- SARKADY, A. A.**  
Onboard calibration system for gamma-ray spectrometers in space satellites. [IEEE PAPER 3A-6] 07 p1134 A69-19193
- SARKAR, B.**  
The correlation between the responses of two linear systems for transient input as a performance criterion for servomechanisms. 09 p1475 A69-22536  
A method for nonlinear control system design. 09 p1475 A69-22537
- SARKAR, N.**  
Optimum control of a fourth order digital control system. 03 p0408 A69-12916  
A feedback amplifier whose transfer function has its poles on a parabola. 08 p1282 A69-20111
- SARKIES, P. H.**  
Operation of a lithium niobate electrooptic Q switch at 1.06 mu. 01 p0089 A69-10184
- SARKISIAN, R. D.**  
Rocket sampling of a 1968 noctiluent cloud display over Fort Churchill, Canada. 15 p2602 A69-31386
- SARKISIAN, V. S.**  
Plane problem of the theory of elasticity of anisotropic /nonorthotropic/ composite bodies /Ploskaia zadacha teorii uprugosti anizotropnykh /neortotropnykh/ sostavnykh tel/. 10 p1799 A69-23156  
Torsion of anisotropic /nonorthotropic/ composite shafts of varying diameter /Kruchenie anizotropnykh /neortotropnykh/ sostavnykh valov peremennogo diametra/. 11 p1982 A69-24975  
Solution of the problem of bending of anisotropic /nonorthotropic/ plates. 16 p2875 A69-32294
- SARKISIAN, V. SH.**  
Thermoelectric properties of p-Bi sub 0.5 Sb sub 1.5 Te sub 3 and p-Bi sub 0.5 Sb sub 1.5 /TeSe/ sub 3 solid solutions /Termoelektricheskie svoystva tverdykh rastvorov p-Bi sub 0.5 Sb sub 1.5 Te sub 3 i p-Bi sub 0.5 Sb sub 1.5 /TeSe/ sub 3/. 15 p2668 A69-30629
- SARKISOV, G. A.**  
Two variants of a solution to the problem of obtaining an equivalent /O dvukh variantakh resheniia zadachi ekvivalentirovaniia/. 19 p3286 A69-36191
- SARLES, F. W., JR.**  
Solar cell calibration experiments on LES-6. 19 p3254 A69-35712  
Solar cell degradation experiments on LES-4 and -5. 19 p3254 A69-35713
- SARLI, V. J.**  
Optimization of nonequilibrium nozzle performance for selected system considerations. [AIAA PAPER 69-472] 16 p2733 A69-32652
- SARMA, K. S.**  
Transient thermal stresses in an infinite orthotropic cylinder of rectangular section. 08 p1415 A69-20664
- SARMA, V. V. S.**  
Game theoretic approach to minimum-effort control of second-order system. 10 p1667 A69-24040  
Singular optimal control in the presence of uncertainty - A game theoretic approach. 10 p1667 A69-24041
- SARNER, S. F.**  
Solid propellant rockets. 11 p1941 A69-25588
- SAROFIM, A. F.**  
Scattering of radiation by particle layers. [AIAA PAPER 68-30] 02 p0282 A69-12503  
Optical constants of soot and their application to heat-flux calculations. [ASME PAPER 68-HT-13] 13 p2374 A69-27777
- SAROIAN, S. R.**  
Torsion of a rectangular beam reinforced by an off-center circular rod /Kruchenie priamougol'nogo brusa, nesoosno armirovannogo krugovym sterzhnem/. 22 p4049 A69-41279
- SARPKAYA, T.**  
The vortex valve and the angular rate sensor. 05 p0746 A69-16006  
An analytical study of separated flow about circular cylinders. [ASME PAPER 68-FE-15] 05 p0747 A69-16072  
The performance characteristics of geometrically similar bistable amplifiers. [ASME PAPER 68-WA/FE-18] 05 p0748 A69-16094  
A theoretical and experimental investigation of a confined vortex oscillator. [ASME PAPER 69-FLCS-19] 20 p3465 A69-37981
- SARRA, M.**  
Three-dimensional analysis of the vibrations of a homogeneous elastic cylinder. I /Analisi tridimensionale delle vibrazioni di un cilindro elastico omogeneo. I/. 09 p1612 A69-21601  
Three-dimensional analysis of the vibrations of a homogeneous elastic cylinder. II /Analisi tridimensionale delle vibrazioni di un cilindro elastico omogeneo. II/. 09 p1612 A69-21603
- SARRAK, V. I.**  
Dislocation mobility in niobium and molybdenum studied by measuring the amplitude dependence of the internal friction. 04 p0614 A69-14635  
Susceptibility to brittle fracture of maraging steel N18K9MST /MS 200/ and high-strength martensitic steel. 04 p0615 A69-14647
- SARRATE, M.**  
Criteria for crack extension in cylindrical pressure vessels. [ASM PAPER W9-13.3] 21 p3833 A69-38658  
Criteria for crack extension in cylindrical pressure vessels. 22 p4046 A69-41040
- SARRAZIN, A.**  
Effects of hyperventilation on flight personnel /L'hiperventilation dans le personnel navigant/. 24 p4269 A69-43410
- SARRETTE, B.**  
The structural tests of the Concorde development of a laboratory /Les essais structuraux du "Concorde" realisation d'un laboratoire/. 02 p0193 A69-11892
- SARSENBAEV, ZH.**  
Investigation of a turbulent compressible gas jet /Issledovanie turbulentnykh strui szhimaemogo gaza/. 21 p3645 A69-39847
- SARSTEDT, F. W.**  
The KB-18A panoramic strike camera. 15 p2614 A69-31281
- SARTI, E.**  
Sufficient condition for the stability of a class of nonautonomous linear systems /Condizione sufficiente per la stabilita di una classe di sistemi lineari non autonomi/. 08 p1296 A69-19922  
Graphic interpretation of a condition of absolute stability for unsteady systems /Interpretazione grafica di una condizione di stabilita assoluta per sistemi non stazionari/. 16 p2764 A69-32440
- SARTI, G.**  
The Russians in search of markets /I Russi alla ricerca di mercati/. 18 p3232 A69-34538
- SARTORY, W. K.**  
Hydromagnetic stability analysis of jet-driven vortex flow. 05 p0798 A69-15610  
Hydromagnetic stability of dissipative flow between rotating permeable cylinders. II - Oscillatory critical modes and asymptotic results. 11 p1926 A69-24895
- SARYCHEV, A. P.**  
A method of taking atmospheric extinction into account /Ob odnom sposobe ucheta atmosfernoii ekstinktsii/. 01 p0157 A69-11192  
Role of electron impacts in the decomposition of CO molecules on the sun /Rol' elektronogo udara v razrusheniie molekul CO na solntse/. 09 p1590 A69-21376  
The role of electron collision in the dissociation of CO molecules on the sun. 18 p3198 A69-34764
- SARYCHEV, V. A.**  
Satellite gravitational stabilization system with maximum damping rate. 16 p2867 A69-31738  
Stability conditions of a gravitational stabilization system for gyroscopically damped satellites /Usloviia ustoiчивosti sistemy gravitatsionnoi stabilizatsii sputnikov s gidrodemirovaniem/. 16 p2868 A69-32010  
Aerodynamic stabilization system of the satellites. 17 p3047 A69-33226



## SARYCHEV, V. M.

One-dimensional flows of a nonequilibrium plasma with variable degree of ionization in the absence of currents.

07 p1189 A69-18691

Dissociating gas flow in the absence of a local thermodynamic equilibrium /Tchenia dissot-siriushchego gaza pri otsustvii lokal'nogo termodynamicheskogo ravnovesia/.

15 p2548 A69-31065

## SARYCHEVA, L. I.

Characteristics of the interaction of pions and nucleons with nuclei.

13 p2331 A69-28389

Reasons for the production of asymmetric showers in interactions of high-energy strong-interacting particles with nuclei.

13 p2303 A69-28391

Possibilities for determining the pion-to-kayon ratio from the angular distribution of muons.

13 p2332 A69-28421

## SASABE, K.

Tensor analysis of brushless transistor motor.

24 p4255 A69-42678

## SASAKI, M.

Slide methods for redundant mission availability.

18 p3147 A69-34531

## SASAKI, R.

Theoretical and experimental investigations of a propeller working at static condition.

02 p0188 A69-11957

Theoretical and experimental investigations of a propeller working at static condition.

06 p0857 A69-17194

Analysis of stress relaxation data of metals at elevated temperatures by a new parametric method.

19 p3342 A69-35778

Analysis of stress relaxation data of metals at elevated temperatures by a new parametric method.

21 p3846 A69-39812

## SASAKI, R. M.

Effect of proline residue on the hydrolysis of substrates by thermolysin.

15 p2561 A69-30083

## SASAKI, T.

Tandem amplifier system of glass and SeOCl sub 2 liquid lasers doped with neodymium.

07 p1147 A69-18487

A construction of the high power laser amplifier using glass and selenium oxychloride doped with Nd super 3 plus.

23 p4173 A69-41565

## SASAKI, Y.

Quench-aging of niobium-hydrogen alloys at minus 196 deg C.

14 p2463 A69-29288

## SASLAW, W. C.

Interstellar dust and diamonds.

05 p0828 A69-16662

Gravithermodynamics. I - Phenomenological equilibrium theory and zero time fluctuations.

07 p1222 A69-19622

The distribution in space of clusters of galaxies.

16 p2862 A69-32371

Gravithermodynamics. II - Generalized statistical mechanics of violent agitation.

21 p3801 A69-38702

## SASS, D. J.

A discussion of the problems of restraint in experimental investigations of acceleration injury.

17 p2913 A69-33009

Mechanisms of injury due to intense plus of minus G sub z vibration in water-immersed cats.

23 p4082 A69-41447

## SASTRI, A. S.

Martensitic behaviour in the equi-atomic Ni-Ti alloy.

02 p0265 A69-12024

Deformation behavior in the near-equiatomic Ni-Ti alloys.

06 p0941 A69-17222

## SASTRY, T. S. G.

Diurnal change of the parameters of equatorial electrojet as observed by rocket-borne magnetometers.

15 p2598 A69-31320

## SASTRY, U. A.

Shear coefficients for beams of arbitrary cross-sections.

09 p1612 A69-21611

## SATO, F.

A study of neutral hydrogen absorption features of some galactic radio sources.

22 p4034 A69-41200

A study of interstellar matter in the Cassiopeia-Perseus region. I.

24 p4384 A69-43050

## SATO, H.

Single crystal CdS solar cell.

05 p0704 A69-15958

Research activities on electric propulsion in Japan.

06 p0984 A69-17629

Formation of H sub 2 and galaxies in the hot universe.

15 p2680 A69-30205

Test of a cesium contact ion engine in a vacuum tank.

22 p4000 A69-40592

Photoelectric observations of 32 Cygni during the 1968 eclipse.

22 p4032 A69-40946

## SATO, K.

An experimental study of ablation near the region of stagnation point of blunt-nosed axially symmetric bodies at hypersonic speeds.

01 p0006 A69-10758

Nonlinear free vibration of beams with clamped ends and with one end clamped, other end simply supported.

11 p1983 A69-25024

## SATO, M.

An experimental study on the separation control of flow along a cylindrical wall by a jet.

09 p1431 A69-22277

Stability of a plasma with loss from the ends of an axially symmetric magnetic bottle.

15 p2664 A69-31100

## SATO, N.

Large-amplitude ion acoustic waves in a plasma.

22 p3991 A69-41008

## SATO, R.

An equivalent circuit of the single-winding transformer.

15 p2578 A69-30793

## SATO, S.

Collisional ionization cross-sections for Fe ions and the temperature of the solar corona. II.

04 p0651 A69-14365

## SATO, T.

Ionospheric irregularities and the cross-field plasma instability. I.

01 p0073 A69-11178

Ionospheric irregularities and the cross-field plasma instability. II.

01 p0073 A69-11179

Ion cyclotron resonance acceleration in a non-uniformly magnetized plasma.

08 p1360 A69-20079

Observations of the total lunar eclipse of October 18, 1967, at a wavelength of 3.33 millimeters.

10 p1789 A69-24132

Morphology of electron concentration enhancement at a height of 1000 kilometers at polar latitudes.

14 p2510 A69-28938

Storm-time variations of the electron concentration in the polar topside ionosphere.

14 p2510 A69-28939

Pioneer VI Faraday-rotation solar-occultation experiment.

15 p2700 A69-31419

Ionospheric irregularities and the cross-field plasma instability.

16 p2773 A69-31972

Ionization in detonation waves /Ionisation in Detonationswellen/.

21 p3853 A69-39745

On the improvement of air cushion vehicle performance by the recirculation of air curtain.

22 p3866 A69-40816

## SATO, Y.

Influence of boss on burst of high speed rotor.

01 p0142 A69-10306

Preliminary report on recent improvements in the analysis of surface waves.

02 p0243 A69-12006

Theoretical seismograms excited by a localized radial stress on the surface of a gravitating homogeneous mantle over a liquid core.

02 p0243 A69-12010

Shock-wave study of vibrational energy exchange between diatomic molecules.

13 p2301 A69-27361

Recent improvements in the analysis of surface wave observations.

16 p2784 A69-32575

Recent improvements in the analysis of surface wave observations.

16 p2784 A69-32575

Progress report on recent improvements in the analysis of surface wave observations.

23 p4157 A69-42070

Theoretical seismograms of spheroidal type on the surface of a gravitating elastic sphere. III - Case of homogeneous mantle with a liquid core.

23 p4158 A69-42070

## SATOE, H.

Observable horizons in the expanding universe.

04 p0648 A69-14575

## SATOH, T.

Gain measurement of large-aperture antenna for satellite communication.

09 p1456 A69-22111

## SATRE, P.

The Concorde supersonic transport /Concorde transport supersonique/.

12 p2013 A69-26350

The supersonic air transport true problems and misconceptions. [AIAA PAPER 69-759]

19 p3245 A69-35664

Supersonic air travel - Present and future.

22 p3862 A69-39932

## SATTAR, S. A.

Low cycle fatigue of Ti-6Al-4V alloy. [ASM PAPER D8-24.4]

07 p1169 A69-19664

An investigation of the fatigue behavior of a boron epoxy-reinforced titanium compressor disk.

09 p1619 A69-22322

The development of JT8D turbofan engine composite fan blades. [AIAA PAPER 69-465]

16 p2842 A69-32698

Development of metal-matrix composite blading for gas-turbine engines. [AIAA PAPER 68-1037]

20 p3586 A69-37155

## SATTAROV, I.

Spectrometric and spectrophotometric investigation of a sunspot. II /Spektrometricheskoe i spektrofotometricheskoe izuchenie solnechnogo pjatna. II/.

13 p2218 A69-28324

## SATTINGER, I. J.

Methods of feasibility and economic analysis of remote sensing applications.

12 p2193 A69-27013

Economic analysis of remote sensing systems.

20 p3493 A69-37742

## SATTLER, F. J.

Wall thickness measurements for advanced gas turbine engine airfoils.

24 p4312 A69-42753

## SATTLER, J. R.

Conversion of light-weight commercial aircraft to fulfill a specific military mission. [SAE PAPER 690313]

11 p1822 A69-24511

## SATZ, H.

Rotational equations of motion for a two body spacecraft on a common spin axis.

17 p3047 A69-33227

## SAUDER, D. L.

Software/hardware inseparable entities.

11 p1864 A69-25062

## SAUER, H. H.

Magnetospheric cosmic-ray cutoffs and their variations.

14 p2513 A69-29099

## SAUER, H. J., JR.

Schlieren interferometry applied to convective heat transfer studies.

07 p1130 A69-18263

## SAUER, W. E.

Evaporation processes by laser beams.

09 p1519 A69-22476

## SAUFERT, J.

Some problems of failures of high voltage semiconductor diodes.

08 p1294 A69-21116

## SAUL, A. M.

Corrosion behavior of materials in propellant exhaust gases.

21 p3784 A69-39489

## SAUNDERS, G. H.

Development of a flying qualities specification for military V/STOL aircraft. [AHS PAPER 363]

17 p2900 A69-33520

- SAUNDERS, H.**  
Boundary layer acoustic measurements in transitional and turbulent flow at  $M$  infinity equals 4.0. [AIAA PAPER 69-344] 13 p2249 A69-28279
- SAUNDERS, I. J.**  
A gallium arsenide double injection diode. 06 p0893 A69-17156
- SAUNDERS, P. A. H.**  
The partition of energy in a turbulent plasma. 03 p0476 A69-13384
- SAUNDERS, P. T.**  
Observations in homogeneous model universes. 07 p1218 A69-19282  
Observations in some simple cosmological models with shear. 10 p1771 A69-22856
- SAUR, E.**  
Fast neutron damage and the current carrying capacity of niobium nitride. 17 p3008 A69-33765
- SAUSENG, O.**  
Efficiency enhancement of traveling wave tubes by velocity resynchronization. 07 p1094 A69-18423
- SAUTER, F.**  
Electromagnetic waves in metallic electron plasmas /Ueber elektromagnetische Wellen in metallischen Elektronenplasmen/. 02 p0286 A69-11788
- SAUTER, H. D.**  
The engineering approach to failure analysis of switching devices. 13 p2231 A69-28043
- SAUTER, J. L.**  
Reliability in computer programs. 08 p1278 A69-19845
- SAUVEY, L.**  
Environmental tests of space vehicles /Les essais d'environnement des vehicules spatiaux/. 02 p0228 A69-11918
- SAVAGE, B. D.**  
An upper limit to the angular diameter of the nucleus of NGC 4151. 09 p1602 A69-22227  
Thermal generation of hydromagnetic waves in sunspots. 15 p2693 A69-30780
- SAVAGE, J. C.**  
Dirac's principle of cosmology and radioactive dating. 22 p4017 A69-40176
- SAVAGE, K. D.**  
Kerr magneto-optic study of slow to intermediate speed propagation phenomena in thin Ni-Fe films. [IEEE PAPER 11.7] 01 p0138 A69-10716
- SAVAGE, P. G.**  
A strapdown phased array radar tracker loop concept for a radar homing missile. [AIAA PAPER 69-873] 21 p3763 A69-39399
- SAVAGE, R.**  
High speed digital transmission tests at 35 GHz. 03 p0389 A69-13192  
Status of the aerodynamic characteristics of the Apollo entry configuration. [AIAA PAPER 68-1143] 03 p0519 A69-13556
- SAVAGE, S. B.**  
Free convection flows about inclined cylinders. 24 p4416 A69-43687
- SAVAGE, W. F.**  
Effects of minor additions on weldability of Incoloy 800. 22 p3967 A69-39884
- SAVCHENKO, A. IA.**  
Motion of a body with a fluid-filled cavity /Pro rukh tila z porozhniuiu, zapovnenoiu ridinoiu/. 06 p0957 A69-16823  
Inertial motion of a body with a cavity filled with liquid /O dvizhenii po inertsii tela s polost'iu, zapolnennoi zhidkost'iu/. 11 p1868 A69-24788
- SAVCHENKO, I. A.**  
Effect of discharge fluctuations on the laser radiation output /Vliianie fluktuatsii v razriade na vykhod lazernogo izlucheniia/. 19 p3338 A69-36605
- SAVCHENKO, IU. G.**  
Decoding of group codes /O dekodirovanii gruppovykh kodov/. 13 p2225 A69-28537
- SAVCHENKO, M. M.**  
Experimental investigation of self-insulation of bodies in a medium against intense light. 07 p1157 A69-19594  
Structure of laser spark image. 09 p1519 A69-22531
- SAVCHENKO, O. IA.**  
Production of high-intensity hydrogen-ion beams. 03 p0412 A69-13842  
A possible chain mechanism of arc discharge development in crossed electric and magnetic fields /O vozmozhnom tsepnom mekhanizme razvitiia dugovogo razriada v skreshchennykh elektricheskoi i magnitnom poliakh/. 11 p1932 A69-25540
- SAVCHENKO, V. A.**  
Experimental study of the electrical conductivity of lithium and cesium in the condensed phase at temperatures up to 1200 deg K. 03 p0481 A69-14148
- SAVCHENKO, V. I.**  
Machine for high-temperature tensile testing in vacuum. 07 p1117 A69-19319  
Sintered beryllium-base compositions. I. 10 p1711 A69-23334
- SAVCHIN, L. S.**  
Resonance charge transfer of slow cesium ions. 06 p0959 A69-16908  
Resonance charge transfer for slow potassium ions. 06 p0959 A69-16909  
Mobility of Cs super plus and K super plus ions in their vapors. 11 p1922 A69-24226
- SAVE, M.**  
On the evaluation of the limit load for rigid-perfectly plastic continua. 02 p0338 A69-11721
- SAVEDOFF, M. P.**  
A mechanism for the production of planetary nebulae. 08 p1396 A69-20649  
Late phases of stellar evolution. I. 09 p1606 A69-22420  
Evolution of initially pure super 12 C stars and the production of planetary nebulae. 18 p3191 A69-34298
- SAVELEV, B. A.**  
Polarization of laser radiation scattered by fog and smoke /Polarizatsiia izlucheniia OKG, rassciannogo tumanami i dymami/. 03 p0393 A69-13275  
Propagation of laser beams in scattering media. 08 p1328 A69-21092  
Experimental investigations of the brightness of multiply forward scattered light with propagation of narrow collimated beams. 10 p1722 A69-23328  
Polarization of OPG /optical photon generator/ radiation scattered by fog and smoke. 14 p2410 A69-28783
- SAVELEV, V. A.**  
Propagation of a sinusoidally modulated light beam in a scattering medium /O rasprostraneni sinusoidal'no modulirovannogo svetovogo puchka v rasseivaiushchei srede/. 10 p1658 A69-23951  
Distribution of hypothesis tests by series during signal detection in the presence of noise /Raspredelenie ispytaniy gipotez po seriiam pri obnaruzhenii signala v pomekakh/. 13 p2222 A69-28509
- SAVELEV, V. G.**  
Effects associated with generation of giant laser pulses /Effekty pri generatsii gigantikh impul'sov v opticheskikh kvantovykh generatorakh/. 01 p0091 A69-10792  
A case of accurate calculation of Q-switched lasers /Ob odnom sluchae strogogo rascheta opticheskogo generatsora s modulirovannoi dobrotnost'iu/. 01 p0092 A69-10888  
Transmission of highly coherent ruby-laser radiation through an optical amplifier /O prokhozhdении vysokokogerentnogo izlucheniia rubinovogo lazera cherez opticheskii usilitel/. 02 p0255 A69-11608  
On the quasi-classical theory of a Q-switched TW-laser. [IEEE PAPER Q-5] 07 p1154 A69-19077  
Decrease in the divergence of a laser beam during passage through an optical amplifier /Ob umen'shenii
- raskhodimosti lucha lazera pri prokhozhdении cherez opticheskii usilitel/. 08 p1326 A69-20542  
Passage of highly coherent ruby laser radiation through an optical amplifier. 11 p1895 A69-24715  
One case of a rigorous analysis of a modulated-Q laser. 12 p2109 A69-26652  
Effects accompanying generation of giant laser pulses. 20 p3555 A69-38010
- SAVELEVA, A. I.**  
Investigation of nuclear interactions of high-energy particles by the controlled nuclear emulsion method. 13 p2331 A69-28388
- SAVELEVA, E. M.**  
Development of a method for studying a boundary layer in a high-temperature gas /Razrabotka metoda issledovaniia pogranichnogo sloia v vysokotemperaturnom gaze/. 02 p0233 A69-12489
- SAVELEVA, M. M.**  
Investigation of alloys of the Nb-Zr-Cr system /Issledovanie splavov sistemy Nb-Zr-Cr/. 08 p1333 A69-20440
- SAVELLI, M.**  
Comparative action of various annealings of a 2n 2907 p-n-p transistor subjected to 10 super 7 rads of cobalt 60 gamma rays /Action comparee de divers recuits d'un transistor pnp 2n 2907 soumis a 10 super 7 rads de rayons gamma du cobalt 60/. 15 p2625 A69-30827
- SAVENKO, I. A.**  
The study of the high energy cosmic ray particles with the "Proton" satellites. 03 p0499 A69-12944  
Low-energy proton flux in the neighborhood of the moon on December 13, 1966 /Potok protonov mal'kikh energii v okrestnosti Luny 13 dekabria 1966 g./. 09 p1577 A69-21773  
Scientific equipment complex on the Cosmos 137 satellite for studying radiation in circumterrestrial space /Kompleks nauchnoi apparatury na sputnike "Kosmos-137" dlia issledovaniia radiatsii v okolozemnom kosmicheskom prostranstve/. 14 p2446 A69-29047  
A device for recording electrons with energies from 0.1 to 1.5 Gev in cosmic radiation /Pribor dlia registratsii elektronov s energiei 0,1 to 1,5 Gev v kosmicheskom izluchении/. 21 p3724 A69-39074  
Investigation of proton spectra in the inner radiation belt on the Cosmos 137 satellite /Issledovanie spektrov protonov vnutrennego radiatsionnogo poisa na sputnike "Kosmos-137"/. 22 p4007 A69-41093
- SAVENKO, N. G.**  
Natural oscillations of a periodic infinite system of plane open resonators /Sobstvennyye kolebaniia periodicheskoi beskonечноi sistemy ploskikh otkrytykh rezonatorov/. 23 p4139 A69-42039
- SAVENKO, V. I.**  
Determination of the surface energy of titanium in the solid phase /Opredelenie poverkhnostnoi energii titana v tverdogo faze/. 12 p2113 A69-26045
- SAVET, P. H.**  
Exploration of gravitational anomalies of planets from orbiting vehicles. [AAS PAPER 68-198] 02 p0312 A69-11476  
Gravity field exploration by a new gradient technique. [AIAA PAPER 68-851] 21 p3804 A69-39024
- SAVIC, P.**  
Performance of an electrodeless conductivity probe in anisotropic plasma. 03 p0483 A69-14252
- SAVIC, V. O.**  
Early brain atrophies. 23 p4089 A69-41816
- SAVICH, N. A.**  
Peculiarities of absolute dispersion interferometers for plasma diagnostics /Osobennosti absolutnykh dispersionnykh interferometrov dlia issledovaniia plazmy/. 22 p3947 A69-40959
- SAVICHEV, V. V.**  
Measurement of the parameters of the plasma of a helical pulse discharge by probe methods /Izmerenie



- parametrov plazmy impul'snogo vikhrevogo razriada zondovymi metodami/.  
12 p2140 A69-27124
- SAVICKY, E. M.**  
Vanadium and its alloys /Vanadin und seine Legierungen/.  
22 p3968 A69-39887
- SAVILLE, D. A.**  
Free convection at low Prandtl numbers in laminar boundary layers.  
17 p3068 A69-33014
- SAVILOV, A. A.**  
Combined effect of two-month hypokinesia and acceleration on the cardiovascular system.  
02 p0197 A69-11495
- SAVIN, B. I.**  
Selection of materials for the electrode surfaces in electrostatic analyzers /Vybór materialov dlia poverkhnosti elektrodov v elektrostatičeskikh analizatorakh/.  
14 p2446 A69-29048
- SAVIN, G. M.**  
A solution to the basic problems of the theory of elasticity for an anisotropic half-plane and for an anisotropic plane with cuts /Pro odin rozv'язok osnovnykh zadach teorii pruzhnosti dlia anizotropnoi pivploshchiny i anizotropnoi ploshchiny z rozrtzami/.  
06 p1020 A69-16827
- SAVIN, G. N.**  
Elasto-hereditary characteristics of composite materials /Uprugo-nasledstvennye svoystva kompozitnykh materialov/.  
04 p0667 A69-14263  
Studies of stress concentration in the moment theory of elasticity /A review/ /Issledovanie po kontsentratsii napriazhenii v momentnoi teorii uprugosti/ /obzor/.  
08 p1419 A69-21177  
Basic problems in the two-dimensional moment theory of elasticity /Osnovnye zadachi ploskoi momentnoi teorii uprugosti/.  
11 p1973 A69-24659  
Deformation of an elastic two-cavity hyperboloid of revolution /Deformatsiia uprugogo dvupolostnogo giperboloida vrashcheniia/.  
11 p1984 A69-25169  
Origin of the fundamental concepts of nonholonomic mechanics /Review/ /Genezis pervosnovnykh poniatii negolononomnoi mekhaniki/ /obzor/.  
12 p2129 A69-25990  
A solution to the basic problems of bending of isotropic plate for certain regions /Ob odnom reshenii osnovnykh zadach izgiba izotropnykh plit dlia nekotorykh oblastei/.  
21 p3834 A69-38721
- SAVIN, V. D.**  
Reduction of titanium tetrachloride to titanium by magnesium /Vosstanovlenie titana iz tetrakhlorida magniia/.  
07 p1163 A69-18784  
Sodium thermal reduction of titanium tetrachloride to titanium /Natrietermicheskoe vosstanovlenie titana iz tetrakhlorida/.  
07 p1164 A69-18785
- SAVINA, E. A.**  
Clinical and morphological characteristics of hemodynamic peculiarities in the vascular system of eyes of rabbits exposed to acceleration.  
08 p1262 A69-19832
- SAVINO, J. M.**  
An analytical solution for solidification of a moving warm liquid onto an isothermal cold wall.  
21 p3852 A69-39433
- SAVINO, R.**  
Compression effects on transformers, relays, and other piece parts in an encapsulated structure - Lunar module signal conditioner.  
22 p3910 A69-39953
- SAVINOV, A. A.**  
Effect of the air intake of a lifting engine on the aerodynamic characteristics of a wing /Vliianie vozdukhozabornika pod'emnogo dvigatel'ia na aerodinamicheskie kharakteristiki kryla/.  
19 p3239 A69-36400
- SAVINOV, K. G.**  
Impact of a nonuniform supersonic gas flow on a plane obstacle /Udar neravnomernogo sverkhzvukovogo potoka gaza v ploskuiu pregradu/.  
19 p3239 A69-36397
- SAVITSKAIA, M. P.**  
Effect of the second harmonic in the parametric capacitance on the transient processes in the capacitive modulator /Vliianie vtoroi garmoniki parametricheskoi emkosti na perekhodnye protsessy v emkostnom modulatore/.  
15 p2574 A69-30125
- SAVITSKII, A. V.**  
High-strength polymer fibers /Vysokoprochnye polimernye volokna/.  
19 p3358 A69-35984
- SAVITSKII, E. M.**  
Transition temperature of V sub 3 Ga to the superconducting state.  
03 p0483 A69-13023  
Physicochemical investigations of heat-resistant materials based on high-melting-point metals /Fiziko-khimicheskie issledovaniia zharpochnykh materialov na osnove tugoplavkikh metallov/.  
09 p1524 A69-22137  
Palladium Alloys.  
10 p1712 A69-23632  
Physical Metallurgy of Superconducting Materials /Metallovedenie sverkhprovodiashchikh materialov/.  
16 p2802 A69-32051  
Influence of the tempering time and temperature on the structure and superconducting properties of a recrystallized and deformed alloy of niobium with 75 at. percent titanium /Vliianie vremeni i temperatury otpuska na stroenie i sverkhprovodiashchie svoystva rekristallizovannogo i deformirovannogo splava niobia s 75 atomn. percent titana/.  
19 p3345 A69-36302
- SAVITSKII, F. S.**  
Study of the initial section of the shock-tension diagram of metals /Issledovanie nachal'nogo uchastka diagrammy udarnogo rastiazheniia metallov/.  
14 p2464 A69-29314
- SAVITSKII, I. V.**  
Certain laws of change in enzyme activity under the action of ionizing radiation /O nekotorykh zakonmer-nostiakh izmeneniia aktivnosti fermentov pri vozd-eistvii ioniziruiushchego izlucheniia/.  
21 p3658 A69-39054
- SAVITSKII, K. V.**  
Exothermal effects during sintering of a nickel-aluminum powder mixture. I /Ekzotermicheskie efekty pri spekanii smesi poroshkov nikelia i aliuminiia. I/.  
02 p0269 A69-12838  
Exothermal effects during sintering of a nickel-aluminum powder mixture. II /Ekzotermicheskie efekty pri spekanii smesi poroshkov nikelia i aliuminiia. II/.  
02 p0269 A69-12843  
Effect of complex alloying with niobium and chromium on the mechanical properties of G13L steel /Vliianie kompleksnogo legirovaniia niobiem i khromom na mekhanicheskie svoystva stali G13L/.  
04 p0614 A69-14579
- SAVITZ, M. L.**  
Anodic oxidation of cyclic hydrocarbons at fuel cell electrodes. [ECS PAPER 330]  
15 p2562 A69-31540
- SAVKIN, A. E.**  
Mixing of ruby laser radiation with radiation excited by this laser in a liquid laser based on complex molecular solutions /Smeshenie izlucheniia rubinovogo i voz-buzhdennogo im izlucheniia zhidkostnogo OKG na osnove rastvorov slozhnykh molekul/.  
04 p0610 A69-14424
- SAVODCHENKO, V. S.**  
The method of geometrical optics for differential equations of the fourth order as applied to low-frequency plasma oscillations.  
07 p1190 A69-18697
- SAVOLAINEN, G. IA.**  
Passage of flexural waves through an elastic insert located in a joint between two plates /Prokhozhenie izbnykh voln cherez upruguiu prokladku, raspolozhennuiu na styke plastin/.  
04 p0679 A69-14906  
Transmission of flexural waves across an elastic spacer at a plate junction.  
12 p2182 A69-26659
- SAVOSTIANOVA, E. G.**  
Contribution to the theory of finite displacements of a solid body /K teorii konechnykh peremeshchenii tverdogo tela/.  
18 p3172 A69-34589
- SAVOSTINA, T. D.**  
Determination of a waveguide field of arbitrary cross section on models with quasi-static fields /Opredelenie polia volnovodov proizvol'nogo poperechnogo secheniia na modelakh s kvazistaticheskimi polem/.  
05 p0717 A69-15635
- Determination of the field of waveguides of arbitrary cross section by means of models with a quasi-static field.  
16 p2762 A69-32493
- SAVOVA, L. N.**  
Plane problem of the generalized moment theory of elasticity for the stress concentration near a circular hole /Ploskaia zadacha obobshchennoi momentnoi teorii uprugosti o kontsentratsii napriazhenii okolo kru-govogo otverstia/.  
05 p0842 A69-16502
- SAVOYE**  
New prospects concerning materials and technologies for turbine blades /Nouvelles perspectives concernant les matériaux et les technologies pour ailettes de turbines/.  
17 p2978 A69-33334
- SAVRASOV, R. P.**  
Experimental apparatus for the investigation of the thermal conductivity of alkali metal vapors by the dilatometric method.  
02 p0247 A69-11579
- SAVROV, S. D.**  
Explosive magnetohydrodynamic generator with a superconducting magnetic system /Vzryvnoi magnitogidrodinamicheskii generator so sverkhprovodiashchei magnitnoi sistemoi/.  
14 p2393 A69-28911
- SAVRUK, M. P.**  
Stressed state of a shallow shell with a crack under symmetrical loading /Napruzhenii stan pologo obolonki z trishchinou pri simetrichnomu navantazhenii/.  
12 p2181 A69-26614
- SAVULESCU, ST. N.**  
Experimental investigation of the flow about a curved lateral jet /Etude experimentale de l'écoulement autour d'un jet transversal incurvé/.  
05 p0746 A69-16017
- SAVUN, O. I.**  
Investigation of excess radiation in the equatorial regions on board the Cosmos 137 satellite /Issledovanie izbytochnogo izlucheniia v priekvtatorial'nykh oblastakh na sputnike "Kosmos-137"/.  
10 p1783 A69-23922  
Scientific equipment complex on the Cosmos 137 satellite for studying radiation in circumterrestrial space /Kompleks nauchnoi apparatury na sputnike "Kosmos-137" dlia issledovaniia radiatsii v okolozem-nom kosmicheskom prostranstve/.  
14 p2446 A69-29047  
Investigation of proton spectra in the inner radiation belt on the Cosmos 137 satellite /Issledovanie spektrov protonov vnutrennego radiatsionnogo poiasa na sput-nike "Kosmos-137"/.  
22 p4007 A69-41093
- SAVVA, V. A.**  
Characteristics of a molecular oscillator in a magnetic field /Kharakteristiki molekuliarnogo generatora v magnitnom pole/.  
05 p0727 A69-15643  
Properties of a maser in a magnetic field.  
16 p2762 A69-32500
- SAVVIN, V. L.**  
Analysis of a double-beam parametric electron amplifier /Analiz dvukhlučevogo elektronnoho parametricheskogo usilitelia/.  
13 p2237 A69-28578
- SAVVINYKH, S. K.**  
Theory of a gradient instability of a current in semiconductors.  
03 p0487 A69-13728
- SAWA, S.**  
Surface waveguide consisting of inhomogeneous dielectric thin film.  
05 p0731 A69-16294
- SAWADA, M.**  
Effects of Coriolis stimulus during mild centrifugal g load upon stick performance.  
06 p0876 A69-18023
- SAWADA, S.**  
Reproducibility of the boiling point of oxygen and its pressure-temperature relation near 1 atmosphere.  
14 p2540 A69-29888
- SAWADA, T.**  
Equations, tables and charts for shock drag parameter /Mach number- 1.1 approximately 15.0, shock angle- 90 deg approximately Mach angle/.  
02 p0188 A69-11862
- SAWADA, Y.**  
Magneto-quantum-electric effect.  
16 p2826 A69-31823

- SAWAGUCHI, T.**  
Precipitation hardening and recrystallization of Al-0.3 wt percent Zr alloys of various grades.  
04 p0617 A69-14931
- SAWAKATA, K.**  
Measurement of the amplitude-probability distribution and the three moments for atmospheric noise.  
18 p3102 A69-34960
- SAWARAGI, Y.**  
On the method of successive approximations for dynamic optimization of a nonlinear control system subjected to a stationary Gaussian random disturbance.  
11 p1859 A69-25025
- SAWATSKY, J. C.**  
Theory of managing scientific and professional personnel.  
[AIAA PAPER 68-805] 08 p1422 A69-20196
- SAWCZUK, A.**  
On incremental collapse of shells under cyclic loading.  
11 p1980 A69-24820  
Evaluation of upper bounds to shakedown loads for shells.  
24 p4396 A69-42732
- SAWHNEY, B. C.**  
Electronic states of molecules. II.  
22 p3985 A69-40721
- SAWLE, D. R.**  
Hypervelocity impact in thin sheets and semi-infinite targets at 15 km/sec.  
[AIAA PAPER 69-378] 13 p2368 A69-28308
- SAWTELLE, E. M.**  
Elimination of character smear on labelled plan displays.  
09 p1495 A69-21675  
Dynamic CRT spot measurement techniques.  
21 p3719 A69-38329
- SAWYER, C.**  
Evolution of the sunspot group after the proton flare of 7 July 1966.  
10 p1765 A69-23748
- SAWYER, C. D.**  
Multimegawatt thermionic reactor systems for space applications.  
14 p2480 A69-29183  
Theory of thermionic converter operation with applications to thermionic reactor analysis.  
14 p2400 A69-29222
- SAWYER, D.**  
GaSb-ZnTe heterojunction.  
02 p0299 A69-12408
- SAWYER, D. E.**  
Photosensitive barium titanate Schottky diodes.  
07 p1104 A69-18905
- SAWYER, G. A.**  
Coordinated measurements of plasma density and cooperative light scattering in a theta-pinch plasma.  
11 p1924 A69-24304  
Telemetry by the reflex klystron accelerometer and seismometer.  
19 p3272 A69-36255
- SAWYER, N. J.**  
The LM - Packaging the radar assembly.  
10 p1663 A69-23537  
Doppler radar - A clearance-hole packaging method.  
14 p2419 A69-29102
- SAWYER, R. F.**  
Nonequilibrium combustion effects on propellant performance with equilibrium, kinetic, and frozen nozzle flow.  
[AIAA PAPER 69-469] 16 p2832 A69-32659
- SAXENA, A. N.**  
Forward current-voltage characteristics and differential resistance peak of a Schottky barrier diode on heavily doped silicon.  
09 p1557 A69-21744
- SAXENA, P. P.**  
Atomic nitrogen and nitric oxide in the upper atmosphere during day time.  
08 p1307 A69-20185  
Atomic nitrogen and nitric oxide in the upper atmosphere during night-time.  
16 p2785 A69-32622
- SAXENA, S. C.**  
The column method of measuring thermal conductivity of gases - Results on carbon monoxide and oxygen in the temperature range 350 deg to 1500 deg K.  
[AIAA PAPER 69-603] 17 p3073 A69-33298
- SAYANO, R. R.**  
Development of new materials of construction for fuel cells.  
23 p4075 A69-42299
- SAYANO, S.**  
Effect of gaseous injection on the hypersonic flow around transpiration-cooled bodies.  
21 p3644 A69-39014
- SAYDAH, A. R.**  
Heat transfer to steps and cavities in hypersonic turbulent flow.  
[AIAA PAPER 68-673] 23 p4060 A69-41902
- SAYERS, J.**  
Anomalous features of the electron density in the topside ionosphere.  
21 p3716 A69-39257
- SAYERS, K. H.**  
A theoretical examination of the validity of "accelerated" structural tests under creep conditions.  
12 p2186 A69-26838
- SAYERS, M. D.**  
Variation with cavity Q of the beat frequency between axial modes of a gas laser.  
07 p1156 A69-19412  
Mode self-locking in gas lasers.  
07 p1156 A69-19413  
The intensity of a single-mode gas laser as a function of cavity Q.  
07 p1157 A69-19414
- SAVIR, M.**  
Compatibility theorem of the plasticity theory and its application to spatially discontinuous fields /Der Verträglichkeitssatz der Plastizitätstheorie und seine Anwendung auf räumlich unstetige Felder/.  
08 p1418 A69-20845
- SAYLOR, J. M.**  
C-5 engine inlet development.  
[ASME PAPER 69-GT-52] 09 p1570 A69-22481
- SAYN-WITTGENSTEIN, L.**  
Avionics in forest resource inventories.  
01 p0080 A69-10352
- SAZANOV, V. V.**  
On the speed of convergence in the multidimensional central limit theorem.  
10 p1719 A69-23400
- SAZANOVICH, V. M.**  
Investigation of fluctuations in the angle of arrival of laser emission in the atmospheric boundary layer /Issledovanie fluktuatsii uglov prikhoda lazernogo izlucheniia v prizemnom sloe atmosfery/.  
11 p1840 A69-25570
- SAZHIN, N. P.**  
Titanium Alloys for New Technology /Titanovye Splavy dlia Novoi Tekhniki/.  
07 p1160 A69-18760  
Status and aspects of the development of sponge titanium production /Sostoianie i perspektivy razvitiia proizvodstva titanovoi gubki/.  
07 p1161 A69-18761  
Reduction of titanium tetrachloride to titanium by magnesium /Vosstanovlenie titana iz tetrakhlorda magniia/.  
07 p1163 A69-18784
- SAZONOV, D. M.**  
Theory of multibeam antenna arrays with interacting elements.  
09 p1469 A69-22627  
Scattering matrix of an antenna array /Matritsa rasscianiia antennoi reshetki/.  
15 p2579 A69-30951
- SAZONOV, V. N.**  
Synchrotron radiation and its reabsorption.  
06 p0962 A69-17245  
The spectrum and polarization of a source of synchrotron emission with components flying apart at relativistic velocities.  
12 p2155 A69-26207  
Polarization of normal waves and transport of synchrotron radiation in a relativistic plasma /Poliarizatsiia normal'nykh voln i perenos sinkhrotronogo izlucheniia v relativistskoi plazme/.  
13 p2315 A69-28451
- SAZONOVA, M. V.**  
Coatings of oxygen-free high melting point silicon compounds and a silicate binder /Pokrytiia iz beskislородnykh tugoplavkikh soedinenii kremnia i silikatnoi sviazki/.  
20 p3566 A69-37371
- SAZONOVA, V. A.**  
Influence of the conditions of growth in the method of zone melting without a crucible on the orientation, purity and perfection of tantalum single crystals.  
16 p2803 A69-32490
- SBITNEVA, M. M.**  
Calculation of heat transfer coefficient of a horizontal surface under the simultaneous action of free and forced convection /Raschet koefitsienta teplotodachi horizontal'noi poverkhnosti pri sovместnom deistvii svobodnoi i vyzhdennoi konveksii/.  
10 p1810 A69-24085
- SBORSHCHIKOV, V. G.**  
Preliminary results of a search for fractionally-charged particles in the cosmic rays at sea level.  
13 p2333 A69-28425
- SCAGGS, N. E.**  
A test facility for sustained supersonic combustion at low densities.  
[AIAA PAPER 69-340] 13 p2243 A69-28276  
Supersonic combustion studies at low density conditions.  
[AIAA PAPER 69-458] 16 p2880 A69-32743
- SCALA, E.**  
Microplasticity in ductile and brittle molybdenum and molybdenum alloys.  
05 p0778 A69-15759  
Fine-grained ceramics - The role of pressure calcining.  
12 p2119 A69-26832
- SCALA, S. M.**  
Re-entry and Planetary Entry Physics and Technology. I - Dynamics, Physics, Radiation, Heat Transfer and Ablation.  
11 p1967 A69-25573
- SCALISE, S. J.**  
Continuous operation of a YAlG:Nd laser by injection luminescent pumping.  
13 p2270 A69-27192
- SCALZOTT, L. L.**  
Digital simulation stability criterion.  
17 p2944 A69-32899
- SCANNAPIECO, J. F.**  
Optical surface degradation from combined ultraviolet radiation and outgassed materials.  
13 p2299 A69-28015
- SCANO, A.**  
Preliminary results of space biological experiments /Primi risultati degli esperimenti biologici spaziali/.  
12 p2019 A69-26494
- SCARDINA, J. T.**  
Effect of stress ratio on fatigue-crack growth in 7075-T6 aluminum-alloy sheet.  
19 p3346 A69-36435
- SCARF, F. L.**  
Initial results of the Pioneer 8 VLF electric field experiment.  
01 p0035 A69-11224  
Detection of electric-field turbulence in the earth's bow shock.  
04 p0592 A69-14681  
Characteristics of the solar wind near the orbit of Jupiter.  
14 p2513 A69-29115  
The fine structure of the earth's collisionless shock wave.  
[AIAA PAPER 69-676] 17 p2961 A69-33452  
The OGO-V plasma wave detector - Instrumentation and in-flight operation.  
19 p3315 A69-36683
- SCARGLE, J. D.**  
Plasma instabilities in astrophysics.  
06 p1009 A69-17967  
The center of activity in the Crab Nebula.  
13 p2343 A69-27621  
Activity in the Crab Nebula.  
15 p2691 A69-30758  
Optical observations of the Crab Nebula pulsar.  
21 p3799 A69-38645
- SCARLETT, N. A.**  
Grease lubrication of ball bearings in helium.  
[IME PAPER 1] 07 p1137 A69-18559
- SCARPA, E.**  
Forecast of the transit of a terrestrial satellite through an assigned coordinate /La previsione del transito di un satellite terrestre per una coordinata assegnata/.  
16 p2859 A69-32221



## SCARSI, L.

Design and calibration of a counter for the measurement of the atmospheric and earth leakage flux of secondary cosmic-ray neutrons.

07 p1209 A69-19454

East-west asymmetry and charge sign ratio of primary cosmic-ray electrons at 8.3 Gv rigidity cut-off.

15 p2678 A69-31497

## SCERCH, G.

Monitoring the load waveform in radar transmitters with a line modulator / Sul controllo della forma d'onda di carica nei trasmettitori radar con modulatore a linea/.

16 p2753 A69-32439

The use of amplifiers as microwave amplifiers in high power radar systems with frequency agility.

23 p4135 A69-41384

## SCHAAL, S. F.

Effect of lower body negative pressure upon pulmonary ventilation and perfusion as measured using xenon-133.

17 p2909 A69-33180

## SCHABER, A.

Multicomponent diffusion coefficients of dissociated air / Ueber die polynaren Diffusionskoeffizienten dissoziierter Luft/.

09 p1623 A69-22098

## SCHABERT, A.

Interaction of laser light waves by dynamic Stark splitting.

22 p3965 A69-41125

## SCHADE, D.

Buckling torsion in beams with thin-walled cross sections / Zur Wölbkrafttorsion von Stäben mit duennwandigem Querschnitt/.

18 p3224 A69-35296

## SCHADE, H.

Trapping phenomena in iron-doped GaAs sub 0.5 P sub 0.5.

02 p0296 A69-11789

## SCHADE, O. H., SR.

The RCA developmental high-resolution 4.5- inch image-intensifier/return-beam vidicon and camera system.

17 p2976 A69-34063

## SCHADOW, K.

Investigation of boron combustion for its application in air augmented rockets.

16 p2828 A69-31737

## SCHAEDEL, H.

Analogies between electric and fluidic components and networks / Analogien zwischen elektrischen und fluidischen Bauelementen und Netzwerken/.

11 p1861 A69-25676

Theoretical and experimental investigations of tubes and lumped fluidic elements / Theoretische und experimentelle Untersuchungen an Leitungen und konzentrierten Bauelementen der Fluidik/.

17 p2903 A69-33573

## SCHAEFER, E.

Continuity of the Chebyshev operator / Zur Stetigkeit des Tschebyscheff-Operators/.

10 p1718 A69-22875

## SCHAEFER, E. J.

Composition and temperature of the neutral tropic lower thermosphere.

18 p3128 A69-34936

## SCHAEFER, F. P.

Feasibility of CW operation of dye-lasers.

11 p1893 A69-24344

## SCHAEFER, G.

Nonresonant continuous laser oscillation in the visible.

01 p0091 A69-10815

High power ion laser / Hochleistungs-Ionenlaser/.

09 p1515 A69-21487

The synthesis of hemoproteins in the light of biochemical evolution.

23 p4088 A69-41814

## SCHAEFER, G. W.

Bird recognition by radar - A study in quantitative radar ornithology.

17 p2919 A69-33366

## SCHAEFER, H. F., III

Metastability of the super I D state of the nitrogen negative ion.

02 p0284 A69-12598

## SCHAEFER, H. J.

Public health aspects of galactic radiation exposure at supersonic transport altitudes.

03 p0375 A69-14072

## SCHAEFER, J. F.

The application of the method of steepest ascent to a very high order optimization problem - The problem of developing evasion tactics for aircraft pursued by missiles.

06 p0866 A69-17401

## SCHAEFER, L.

Planning STOL facilities.

[SAE PAPER 690421]

23 p4147 A69-41645

## SCHAEFER, S.-S.

Characteristic curves of the sensitivities of primary muscle spindle endings during cold shivering / Kennlinien der Messemphindlichkeiten primaerer Muskel-spindelaferenzen beim Kaeltzittern/.

23 p4096 A69-42091

## SCHAEFER, W.

Technological problems of a solar probe to 0.3 AU minimum distance.

03 p0519 A69-12855

Investigation of low alpha sub s /epsilon-coatings in a simulated space environment.

16 p2867 A69-31741

## SCHAENING, B.

Frequency dependence of atmospheric noise intensity from 1 to 1000 kHz at low and medium latitudes.

05 p0758 A69-16410

Results of measurements of the atmospheric radio noise at 27 kc/s at fixed measuring stations in northern, central and south-eastern Europe.

09 p1491 A69-22163

## SCHAETZLE, W. J.

Effect of vibration on heat transfer for flow normal to a cylinder.

[ASME PAPER 68-WA/HT-5]

05 p0846 A69-16116

Effect of vibration on heat transfer for flow normal to a cylinder.

[ASME PAPER 68-WA/HT-5]

13 p2374 A69-27781

A 4-200 ev neutral molecular beam.

19 p3376 A69-36176

## SCHAFER, R. E.

A sequential Bayes procedure for reliability demonstration.

19 p3327 A69-36040

## SCHAFF, B. W.

Many maraging grades are now available.

08 p1320 A69-20408

## SCHAFF, F. L.

Current gain sensing switch.

07 p1113 A69-19744

## SCHAFFHAUSER, A. C.

Conference on Chemical Vapor Deposition of Refractory Metals, Alloys, and Compounds, Gatlinburg, Tenn., September 12-14, 1967, Proceedings.

01 p0096 A69-10640

The growth of grain boundary gas bubbles in chemically vapor deposited tungsten.

01 p0097 A69-10646

## SCHAFFT, H. A.

Second breakdown in transistors.

08 p1294 A69-21120

## SCHAICER, G. S.

The role of competition in aeronautics.

03 p0536 A69-14110

## SCHAIRER, G. S.

The role of competition in aeronautics.

11 p2004 A69-24372

## SCHAIRER, L. A.

Radiobiological studies of plants orbited in Biosatellite II.

15 p2556 A69-31321

## SCHALKOWSKY, S.

Estimation of microbial survival in heat sterilization.

05 p0707 A69-15941

Potential effects of recent findings on spacecraft sterilization requirements.

11 p1828 A69-25460

## SCHALKWIJK, J. P. M.

Recent developments in feedback communication.

21 p3671 A69-38405

## SCHALLA, R. L.

Effect of bias light on the spectral response of Cu sub 2 S-CdS cells.

05 p0808 A69-16358

## SCHALLER, W.

A high-resolution method for measuring electron density with the aid of laser interferometry / Ein hochauflösendes Verfahren der Elektronendichtemessung mit Hilfe der Laserinterferometrie/.

16 p2798 A69-32589

## SCHALLHORN, D. R.

The dynamic response of solids exposed to a pulsed electron-beam.

05 p0771 A69-15817

## SCHAMBRA, P. E.

Space Radiation Biology, Workshop Conference, University of California, Berkeley, Calif., September 7-10, 1965, Proceedings.

03 p0370 A69-13471

## SCHANDA, E.

A microwave scanning radiometer.

02 p0221 A69-12457

Propagation and amplification of electromagnetic waves in periodic structures / Ausbreitung und Verstärkung elektromagnetischer Wellen in periodischen Strukturen/.

03 p0396 A69-13701

## SCHAPER, M.

Determination of the absolute values of the total excitation cross sections of the rare gases on the basis of electron collisions / Absolutbestimmung der Gesamtanregungsquerschnitte der Edelgase durch Elektronenstoß/.

14 p2493 A69-29693

## SCHAPER, R. A.

On the characterization of nonlinear viscoelastic materials.

20 p3626 A69-37719

## SCHAPPERT, G. T.

Temperature tuning of an organic dye laser.

02 p0258 A69-12617

Multiple scattering in the Kapitza-Dirac effect.

11 p1919 A69-25323

## SCHARER, J.

Ion-cyclotron instabilities resulting from a thermally anisotropic plasma.

06 p0969 A69-17951

## SCHARF, G.

Normal solutions of the linearized Boltzmann equation.

09 p1480 A69-21667

Influencing coarse grain formation in extruded sections of aluminum alloys / Beeinflussung der Grobkornbildung bei Pressprofilen aus Aluminiumlegierungen/.

18 p3160 A69-35472

## SCHARF, L. L.

A comparison of expected flight times for intercept and pure pursuit missiles.

20 p3618 A69-37716

## SCHARF, W.

Conceptual study of satellites for direct-TV, broadcast with incore-thermionic-reactor and electrical propulsion.

[UN PAPER 68-95559]

01 p0114 A69-10466

## SCHARFMAN, W. E.

Ion probes in conventional and magnetically driven shock tubes.

19 p3291 A69-35715

## SCHARLA-NIELSEN, H.

Design of a satellite terminal for contingency deployment.

[AIAA PAPER 68-439]

04 p0579 A69-15367

## SCHARON, L.

Paleomagnetic investigation of some Arkansas alkaline igneous rocks.

14 p2445 A69-29884

## SCHARPEN, L. H.

Rotational spectra of substituted diazirines. III - Methylchlorodiazirine.

23 p4194 A69-42207

## SCHARPF, D. W.

The SHEBA family of shell elements for the matrix displacement method.

01 p0170 A69-10865

A sequel to technical note 13 - The curved tetrahedral and triangular elements TEC and TRIC for the matrix displacement method.

08 p1415 A69-20631

Elastoplastic calculation of general structures and continua / Die elastoplastische Berechnung von allgemeinen Tragwerken und Kontinua/.

08 p1416 A69-20705

Some general considerations on the natural mode technique. I.

11 p1969 A69-24374

- Some general considerations on the natural mode technique. II - Large displacements.  
13 p2362 A69-27838
- The SHEBA family of shell elements for the matrix displacement method. III.  
16 p2872 A69-32025
- A further sequel to technical note 14 - The FUGA family of elements for folded plate structures.  
19 p3447 A69-36852
- The question of convergence in the calculation of elastoplastically deformable aircraft structures and continua /Die Frage der Konvergenz bei der Berechnung elastoplastisch deformierbarer Tragwerke und Kontinua/.  
22 p4044 A69-40619
- SCHARPF, R.**  
Development of VTOL flying and handling qualities requirements using the mission task performance oriented approach.  
[AHS PAPER 360] 17 p2900 A69-33522
- SCHASTLIVYI, V. P.**  
Investigation of the electrophysical properties of the Cd sub x Hg sub 1-x Te alloy /Issledovanie elektrofizicheskikh svoystv splava Cd sub x Hg sub 1-x Te/.  
09 p1557 A69-21737
- Studies on the electrical properties of Cd sub x Hg sub 1-x Te alloys.  
20 p3584 A69-38215
- SCHATTEN, K. H.**  
Prediction of the coronal structure for the solar eclipse of September 22, 1968.  
05 p0818 A69-15602
- A model of interplanetary and coronal magnetic fields.  
11 p1958 A69-24429
- Coronal structure at the solar eclipse of September 22, 1968.  
15 p2690 A69-30696
- Direction of the nearby galactic magnetic field inferred from a cosmic-ray diurnal anisotropy.  
20 p3592 A69-38098
- SCHATTKE, W.**  
Theory of a nonlocal superconductor in a magnetic field /Zur Theorie des nichtlokalen Supraleiters im Magnetfeld/.  
03 p0491 A69-13971
- SCHATZMAN, E.**  
Nucleosynthesis of lithium, beryllium, and boron, and the formation of the solar system /Sur la nucleosynthese du lithium, du beryllium et du bore et la formation du systeme solaire/.  
08 p1401 A69-20901
- Turbulent transport, solar lithium and solar neutrinos.  
16 p2866 A69-32814
- SCHAUB, W. E.**  
A new look at microwave silicon technology.  
09 p1462 A69-21410
- SCHAWARTZ, M. A.**  
High-temperature materials.  
19 p3346 A69-36320
- SCHAY, G.**  
An algebra of conditional events.  
04 p0623 A69-14948
- SCHECHTER, E.**  
Protection of pilots against lasers.  
07 p1072 A69-19436
- SCHECTMAN, R. M.**  
Mean lives of the ip super 2 super 1 D level in F VI and O V.  
17 p3009 A69-34188
- SHEEL, H. A.**  
The development of a shop-ready high modulus carbon and fiberglass composite reinforcement system.  
08 p1340 A69-20508
- SHEEL, K. H.**  
Description of nonlinear continuous multivariable systems /Zur Darstellung nichtlinearer kontinuierlicher Mehrgroessen-Systeme/.  
12 p2049 A69-26081
- SHEEPMAKER, A.**  
Long-term time variations of the cosmic-ray electron flux above 500 Mev.  
16 p2851 A69-32566
- SCHER, J. J.**  
Relaxation oscillations due to impact ionisation in epitaxial sheet-type Gunn oscillators.  
13 p2227 A69-27236
- SCHIEFF, B.**  
Efficient partitioning for the batch-fabricated fourth generation computer.  
04 p0567 A69-15355
- SCHIEFFEL, J. L.**  
Runway roughness effects on new aircraft types.  
01 p0057 A69-11274
- SCHIEFFER, H.**  
Coaxial radiator as feed for low noise paraboloid antennas.  
11 p1856 A69-25635
- SCHIEFFLER, H.**  
Interstellar absorption lines and the galactic structure - A chapter from the exploration of interstellar matter /Interstellare Absorptionslinien und galaktische Struktur - Ein Kapitel aus der Erforschung der interstellaren Materie/.  
24 p4383 A69-42999
- SCHIEGGI, A. M.**  
Holographic antennas.  
05 p0734 A69-16574
- Open resonators with rimmed mirrors.  
14 p2424 A69-29765
- Space research activity in Italy.  
15 p2725 A69-31465
- Microwave holograms.  
17 p2976 A69-33891
- SCHIEBE, E. H.**  
Cutoff-coupled microwave filters.  
09 p1466 A69-22447
- SCHIEBNER, H.**  
Determination of the absolute values of the total excitation cross sections of the rare gases on the basis of electron collisions /Absolutbestimmung der Gesamtanregungsquerschnitte der Edelgase durch Elektronenstoss/.  
14 p2493 A69-29693
- SCHIED, P.**  
Distribution of readiness potential, pre-motor positivity, and motor potential of the human cerebral cortex preceding voluntary finger movements.  
22 p3875 A69-40261
- SCHIEDECKER, M.**  
Ultrasonic inspection of soundness and penetration of corner welds for Zircaloy 2 casings /Contrôle par ultrasons de la compacité et de la pénétration des soudures d'angle de boîtiers en Zircaloy 2/.  
07 p1141 A69-19346
- SCHIEDEGGER, A. L.**  
An on-line conversational information storage and retrieval system.  
18 p3107 A69-35095
- SCHIEE, P.**  
Surface features of cultured mammalian cells.  
20 p3467 A69-37100
- SCHIEE, P. O.**  
Plasmolysis of *Escherichia Coli* B/r with sucrose.  
19 p3257 A69-35973
- Two types of long microextensions from cultivated liver cells.  
20 p3480 A69-38287
- SCHIEFELE, G.**  
Regularization of the perturbed Keplerian motion in a three-dimensional space by a generalized canonical transformation /Regularisation du mouvement Keplerien perturbe dans l'espace a trois dimensions par une transformation canonique generalisee/.  
05 p0827 A69-16602
- SCHIEINMAN, H. Z.**  
Coronary atherosclerosis in military pilots. I - Relationship to flying and aviation accidents.  
03 p0376 A69-14080
- SCHIEINMANN, R.**  
Digital adaptive recording system.  
05 p0766 A69-16754
- SCHIELL, A. C.**  
Electronic scanning.  
01 p0049 A69-11348
- SCHIELL, W. J.**  
Transitions in glasses at low temperatures.  
04 p0621 A69-15308
- Transitions in glasses at low temperatures.  
05 p0717 A69-16493
- SCHIELER, K.**  
Initiation of detonation by incident shock waves in hydrogen-oxygen-argon mixtures.  
02 p0304 A69-12313
- Spectral characteristics of hydrocarbon-air flames containing aluminium, magnesium and boron.  
11 p1940 A69-24483
- The effect of burning velocity inhibitors on the ignition of hydrocarbon-oxygen-nitrogen mixtures.  
[WSCI PAPER 69-14] 16 p2831 A69-32352
- Effect of additives on propagation velocity in the hydrogen-chlorine-nitrogen system.  
[WSCI PAPER 69-13] 16 p2831 A69-32353
- SCHIELHAAS, H.**  
A procedure for calculating eigenvalue bounds, with application to the buckling of rectangular plates /Ein Verfahren zur Berechnung von Eigenwertschranken mit Anwendung auf das Beulen von Rechteckplatten/.  
06 p1020 A69-17131
- SCHIELM, J.**  
Electrical transport in semiconducting FeSi sub 2.  
19 p3390 A69-36556
- SCHELONKA, E. P.**  
Solid state amplifiers operating at and beyond 10 GHz.  
21 p3683 A69-39452
- SCHENCK, H.**  
Solubility of hydrogen in nickel-molybdenum and nickel-tungsten alloys /Wasserstofflöslichkeit in Nickel-Molybdaen- und Nickel-Wolfram-Legierungen/.  
08 p1333 A69-20448
- SCHENDEL, A. H.**  
Project Symphonie /Le Projet Symphonie/.  
05 p0830 A69-16817
- SCHEPERS, H.-J.**  
Resistance and heat-transfer measurements on cylindrical bodies with cavities at hypersonic speeds /Widerstands- und Waermeuebergangsmessungen an zylindrischen Koerpern mit Hohlraeumen bei Hyperschall-Machzahlen/.  
[DVL-850] 04 p0543 A69-14822
- SCHIEPLER, H. C.**  
Things photo optical on Apollo 8 mission.  
15 p2609 A69-30469
- SCHER, M. P.**  
A method of active attitude control based on energy considerations.  
19 p3429 A69-35958
- A dynamical explanation of the falling cat phenomenon.  
19 p3259 A69-36832
- SCHERBERG, M. G.**  
Wake recirculation flows generated by flows /M greater than 1/ over rearward facing steps and blunt bases.  
14 p2389 A69-29031
- SCHERER, E. F.**  
Investigations of the noise spectra of avalanche oscillators.  
02 p0221 A69-12456
- SCHERER, J.**  
For the development of short-haul routes /Pour le developpement des reseaux court-courrier/.  
24 p4250 A69-42565
- SCHERHAG, R.**  
Developments in stratospheric and mesospheric analyses which dictate the need for additional upper air data.  
08 p1345 A69-20134
- SCHERLAG, B. J.**  
Relative roles of sympathetic and parasympathetic nervous systems in the carotid sinus reflex in dogs.  
24 p4257 A69-42629
- SCHERMANN, J. P.**  
Efficiency of a single-hyperfine-state selector for hydrogen masers.  
18 p3153 A69-35306
- SCHERMANN, J.-P.**  
Design of a double focalization in a hydrogen maser.  
12 p2105 A69-26050
- SCHERNER, U.**  
Helium-cooled parametric amplifier for satellite ground stations with 500 MHz bandwidth.  
07 p1098 A69-18460
- SCHERRER, V. E.**  
Interaction of high-powered focused laser beam with exploding wire.  
01 p0090 A69-10666
- SCHETZ, J. A.**  
Approximate analysis of transient laminar boundary-layer development.  
[ASME PAPER 68-HT-10] 02 p0232 A69-12208



- Analysis of the mixing and combustion of gaseous and particle-laden jets in an air stream.  
[AIAA PAPER 69-33] 06 p1038 A69-18146
- Non-gray radiation effects on mixing of non-similar gases.  
08 p1253 A69-20844
- SCHEUER, E. M.**  
Generating random variables having a specified failure rate function.  
12 p2102 A69-26571
- SCHEUER, P. A. G.**  
Radio galaxies and quasi-stellar sources.  
02 p0329 A69-12791
- Radiation.  
02 p0310 A69-12792
- SCHEY, J. A.**  
Effect of die surface composition on friction and adhesion in deformation processing.  
15 p2629 A69-30902
- SCHIAFFINO, P.**  
Indirect measurements of the transfer admittances of transistors /Misura indirette delle ammettenze di trasferimento dei transistori/.  
14 p2420 A69-29396
- Wideband selective amplifiers /Amplificatori selettivi a larga banda/.  
16 p2761 A69-32442
- SCHICK, A.**  
Systems politics and systems budgeting.  
10 p1811 A69-23352
- SCHIEBER, D.**  
Nonlinearity of Hall voltage.  
09 p1548 A69-21683
- SCHIEHLEN, W.**  
Satellite capture /Ueber den Einfangvorgang eines Satelliten/.  
10 p1791 A69-22926
- Quasi-optimum single-axis capture of a satellite.  
17 p3048 A69-33237
- SCHILD, M. A.**  
A source for field-aligned currents at auroral latitudes.  
05 p0755 A69-16266
- Pressure balance between solar wind and magnetosphere.  
09 p1577 A69-21711
- SCHIELER, L.**  
Estimation of activation energies for multivalent reactions by a bond-energy method.  
[WSCI PAPER 68-48] 07 p1239 A69-18321
- Techniques for controlling exothermic decomposition of ammonium perchlorate.  
[WSCI PAPER 68-25] 07 p1202 A69-18363
- Procedures for suppressing premature exothermic decomposition in ammonium perchlorate.  
[AIAA PAPER 69-503] 16 p2833 A69-32688
- SCHIERDING, R. G.**  
Measurement of whisker orientation in composites by X-ray diffraction.  
01 p0102 A69-11262
- SCHIERLOH, F. L.**  
High-velocity deformation properties of polyurethane foams.  
11 p1907 A69-25648
- SCHIESSER, W. E.**  
SALEM - A programming system for the simulation of systems described by partial differential equations.  
04 p0565 A69-15340
- SCHIFF, H. I.**  
Experimental measurements of the diffusion coefficients of H atoms in H sub 2 and in H sub 2 - He and H sub 2 - Ar mixtures.  
07 p1185 A69-19300
- SCHIFF, J.**  
Base pressure measurements on slender cones with domed afterbodies.  
[AIAA PAPER 68-698] 24 p4249 A69-43675
- SCHIFF, L.**  
The asymptotic error probability for transmission of orthogonal signals over the generalized incoherent channel.  
09 p1452 A69-21314
- SCHIFF, L. B.**  
Aerodynamics of bodies of revolution in coning motion.  
[AIAA PAPER 68-20] 04 p0542 A69-14714
- SCHIFF, L. I.**  
Gravitation and relativity.  
07 p1181 A69-18928

- SCHIFF, M. L.**  
Periodicities in the amplitude of ionospheric plasma resonances.  
07 p1125 A69-18847
- SCHIFFER, R. A.**  
Engineering models of the Venus atmosphere based on an interpretation of recent space vehicle observations of Venus.  
[AIAA PAPER 69-51] 06 p1011 A69-18096
- SCHIFFNER, G.**  
Receiving APT-pictures with simple electronic instruments.  
[UN PAPER 68-95451] 01 p0108 A69-10458
- Signal conversion by multiple modulation in optical communication systems.  
07 p1075 A69-18472
- SCHIFFNER, K.**  
Influence of a spherical false bottom on the sloshing of a propellant in a circular tank /Ueber den Einfluss eines kugelfoermigen Zwischenbodens auf die Treibstoffschwingungen in Kugelbehaeltern/.  
[DVL-843] 03 p0416 A69-13665
- SCHIFRINE, J.**  
A special slide rule making possible the practical determination of the range of radars /Une regle a calcul speciale permettant la determination pratique de la portee des radars/.  
04 p0560 A69-15230
- SCHILD, R. E.**  
A spectroscopic study of the association Scorpius OB 1.  
15 p2692 A69-30771
- MK spectral types for bright southern OB stars.  
20 p3612 A69-38161
- HDE 310376 - A rapid variable star similar to Scorpius XR-1.  
22 p4026 A69-40651
- SCHILDHEUER, F.**  
Vertically polarized log-periodic antenna with lambda/4 radiators /Vertikal polarisierte logarithmischperiodische Antenne mit lambda/4-Strahlern/.  
16 p2763 A69-32580
- SCHILLER, H.**  
Thermal plants for space-simulation chambers.  
01 p0057 A69-11154
- SCHILLER, M.**  
The hyperbolic technique for contactless measurement of the surfaces of large parabolic antennas.  
19 p3281 A69-35766
- SCHILLER, U.**  
Release of noradrenalin from the dog heart after a temporary occlusion of coronary artery /Noradrenalinabgabe aus dem Hundeherzen nach voruebergender Okklusion einer Koronararterie/.  
23 p4092 A69-42053
- SCHILLIGER, A.**  
The attitude correction magnetometer of the Aurora satellite /Le magnetometre de restitution d'attitude du satellite Aurorae/.  
15 p2611 A69-31087
- SCHILLING, D. L.**  
Expected number of spikes of phase locked loop demodulators.  
07 p1082 A69-19107
- Performance of binary PSK communication systems.  
07 p1082 A69-19109
- Output SNR of an FM discriminator with non-ideal limiting.  
07 p1106 A69-19127
- Robust detection using extreme-value theory.  
17 p2944 A69-33624
- Performance of self-synchronized PSK systems.  
23 p4128 A69-42501
- SCHILLING, H.**  
Beam displacement at a plasma under the influence of a magnetic field /Strahlversetzung am Plasma unter dem Einfluss eines Magnetfeldes/.  
10 p1740 A69-23724
- SCHILLING, P. E.**  
Fracture toughness of aluminum alloys.  
23 p4175 A69-41476
- SCHILLING, W.**  
The real world of micromin substrates. I.  
04 p0578 A69-15199
- The real world of micromin substrates. III.  
09 p1460 A69-22792

**SCHIMEL, G. G.**

Degradation of magnesium alloy mechanical properties by crystal twinning and the investigation of methods for recovery.  
19 p3341 A69-35583

**SCHIMITSCHEK, E. J.**

Laser emission of a neodymium salt dissolved in POCI sub 3.  
06 p0936 A69-17777

**SCHINDELIN, J. W.**

Space vehicle attitude stabilization and control by a three-degree of freedom control moment gyro with a controllable gyro spin velocity.  
13 p2355 A69-27441

On the calculation of the torques about the joints of a rigid chain-like arranged clusters of flying bodies.  
18 p3208 A69-34776

**SCHINDLER, G.**

Facts and problems connected with the Mars opposition /Tatsachen und Probleme zur Marsopposition/.  
21 p3801 A69-38788

**SCHINDLER, K.**

Landau damping of long wavelength ion acoustic waves in a collision-free plasma with a gravity field.  
08 p1359 A69-19983

Laboratory experiments related to the solar wind and the magnetosphere.  
12 p2150 A69-26737

**SCHINDLER, M.**

Unignited mode converter diagnostics with regard to emitter work function patches.  
14 p2490 A69-29240

**SCHINTU, F.**

Bilateral microscopy of dislocations and dislocation dipoles in germanium.  
03 p0488 A69-13761

**SCHIPMOELDER, J. B.**

Optimization of a viscoelastic structure - The seat-belt problem.  
[ASME PAPER 69-APMW-25] 24 p4275 A69-43094

**SCHIRMER, R. M.**

Effect of sulfur in JP-5 fuel on hot corrosion of coated superalloys in marine environment.  
01 p0141 A69-11059

**SCHLACHTER, A. S.**

Charge-exchange collisions between hydrogen ions and cesium vapor in the energy range 0.5-20 kev.  
08 p1356 A69-20737

**SCHLACK, A. L., JR.**

Gyroscopically induced vibrations of plates and membranes.  
02 p0347 A69-12519

Vibrations of circular cylindrical shells due to gyroscopically induced inertia loads.  
07 p1236 A69-19459

On the response of a beam subjected to a cyclic moving load.  
[ASME PAPER 69-VIBR-13] 10 p1806 A69-24166

Vibrational and stability characteristics of circular membranes subjected to gyroscopically induced inertia loads.  
13 p2370 A69-28665

**SCHLAER, J.**

An experimental laser color TV projection display system.  
07 p1137 A69-19740

**SCHLAIN, D.**

Electrodeposition of molybdenum coatings.  
18 p3156 A69-35001

Electrodeposition of titanium diboride coatings.  
22 p2970 A69-40735

**SCHLEE, F. H.**

Region of Kalman filter convergence for several autonomous navigation modes.  
[AIAA PAPER 67-623] 16 p2809 A69-31875

**SCHLEGEL, E.**

Results of reliability tests on planar transistors.  
03 p0402 A69-13006

**SCHLEGEL, E. S.**

Additional bibliography of metal-insulator-semiconductor studies.  
10 p1743 A69-23169

Behavior of surface ions on semiconductor devices.  
10 p1743 A69-23173

The application of test structures for the study of surface effects in LSI circuitry.  
17 p2936 A69-32894

- Failure mechanisms and analyses in large-scale integrated circuits.  
19 p3282 A69-35787
- SCHLEGEL, R. G.**  
Prediction methods and trends for helicopter rotor noise.  
18 p3088 A69-35224  
Helicopter rotor noise prediction and control.  
22 p3864 A69-40676
- SCHLEICHER, H. W.**  
The creep behaviour of aluminium-alumina (SAP) alloys.  
12 p2120 A69-26938
- SCHLEIFF, M.**  
Approximate method for the solution of a singular linear integrodifferential equation /Ueber Naeherungsverfahren zur Loesung einer singulaeren linearen Integrodifferentialgleichung/.  
02 p0271 A69-12056
- SCHLEPPER, M.**  
Venous tone and skin and muscle blood flow in forearm and hand during exercise /Venotonus, Haut- und Muskeldurchblutung an Unterarm und Hand bei Beinarbeit/.  
23 p4096 A69-42090
- SCHLESINGER, B. M.**  
On the chemical composition and age of NGC 188.  
10 p1789 A69-24127
- SCHLESINGER, F. G.**  
Frequency analysis of heart murmurs.  
24 p4279 A69-43800
- SCHLEUSENER, S. A.**  
Automatic high speed particle sizing using a gas laser.  
04 p0611 A69-15023
- SCHLICHTING, H.**  
Boundary-Layer Theory /6th Edition/.  
12 p2063 A69-26869
- SCHLIE, L. A.**  
Radial profile of neon 1s sub 5 atoms in a He-Ne active discharge and their lens effect on lasing at 6401 angstrom units.  
12 p2108 A69-26636
- SCHLIEP, N.**  
Satellites and space vehicles /Satelliten und Raumfahrzeuge/.  
19 p3432 A69-36750
- SCHLIP, W. H., JR.**  
Isolation techniques for fabricating integrated circuits. II - Dielectric refill techniques and decal air isolation.  
07 p1100 A69-18618
- SCHLOEGEL, H.**  
A simple quadrupole for impedance variation in the VHF range /Ein einfacher Vierpol zur Widerstands- transformation fuer das VHF- Gebiet/.  
01 p0046 A69-10740
- SCHLOERB, O.**  
An improved out-of-core thermionic reactor for low power.  
09 p1441 A69-21836
- SCHLOSS, A.**  
A duty cycle generator for switching regulators.  
23 p4073 A69-42293
- SCHLOSSER, W.**  
Waviness of the tail rays of the comet Morehouse 1908 III /Die Welligkeit der Schweifstrahlen des Kometen Morehouse 1908 III/.  
02 p0311 A69-11459  
Directional fluctuation of the solar wind at middle heliographic latitude /Richtungsfuktuation des Sonnenwindes in mittlerer heliographischer Breite/.  
06 p0985 A69-16981  
Motion of condensations in the tail of comet Morehouse 1908 III /Zur Bewegung der Kondensationen im Schweif des Kometen Morehouse 1908 III/.  
08 p1382 A69-19870  
Lasers and holography in astronomy /Laser und Holographic in der Astronomie/.  
15 p2610 A69-30880
- SCHLOSSER, W. O.**  
Noise in mutually synchronized oscillators.  
02 p0220 A69-12449
- SCHLUDE, F.**  
Convergence problems in the numerical calculation of waveguide inhomogeneities according to the method of integral relations /Konvergenzprobleme bei der numerischen Berechnung von Hohlleiterin- homogenitaeten nach der Integralgleichungsmethode/.  
11 p1855 A69-25621
- SCHLUESSLER, K. H.**  
Singular membrane stress and displacement states of a spherical shell /Singulaere Membran-Spannungs- und Verschiebungszustaeude der Kugelschale/.  
21 p3831 A69-38416
- SCHLUNDT, R. W.**  
Digital autopilots for thrust vector control of the Apollo CSM and CSM/LM vehicles.  
[AIAA PAPER 69-847] 21 p3762 A69-39377
- SCHLUNK, H.**  
New test procedures at WMD-SIAT /Neue Pruefver- fahren bei WMD-SIAT/.  
09 p1513 A69-22564
- SCHMAEDEKE, W. W.**  
Approximate solutions for Volterra integral equa- tions of the first kind.  
01 p0103 A69-10004  
A new approach to the solution of unstable problems using variational techniques.  
08 p1342 A69-20350
- SCHMELE, L.**  
Computer analysis of large structural systems.  
[AIAA PAPER 67-955] 21 p3839 A69-39216
- SCHMELLER, A.**  
Aero L-39 /Aero L-39/.  
24 p4251 A69-42797
- SCHMELTZER, R. A.**  
On the angular distribution of photon radiance of a perfectly reflective spherical satellite irradiated by a Lambertian earth.  
08 p1311 A69-21095
- SCHMELZER, CH.**  
Interaction of laser light waves by dynamic Stark splitting.  
22 p3965 A69-41125
- SCHMID-SCHOENBEIN, H.**  
Rheological consequences of osmotic red cell crena- tion.  
23 p4095 A69-42078
- SCHMID, CH.**  
Coherence and saturation properties of second- har- monic generation with a nonlinear crystal inside the laser cavity. I.  
15 p2632 A69-30026
- SCHMID, E.**  
Electronic tensile stress meter /Elektronischer Zug- spannungsmesser/.  
23 p4111 A69-42056
- SCHMID, H.**  
Unsteady aerodynamic forces on coplanar lifting sur- faces in subsonic flow /wing- horizontal tail inter- ference/.  
04 p0543 A69-14819
- SCHMID, H. H.**  
Application of photogrammetry to three- dimen- sional geodesy.  
10 p1682 A69-23390
- SCHMID, H.-E.**  
Preparation and investigation of tungsten surfaces with preferred orientations.  
14 p2506 A69-29267
- SCHMID, P. E.**  
The S-band Telemetry, Tracking, and Command Ex- periment.  
23 p4121 A69-41759
- SCHMID, P. G.**  
Ventilation, lung volumes, and gas exchange during lower body negative pressure.  
22 p3891 A69-40222  
Effect of vibration on total vascular resistance in the forelimb of the dog.  
22 p3875 A69-40228
- SCHMID, R. C.**  
On reliability terms used with electrical apparatus, equipment and systems.  
08 p1292 A69-21108
- SCHMID, W.**  
Tumbling motions for testing gyroscopic devices /Taubelbewegungen zum Testen von Kreiselgeraeten/.  
10 p1689 A69-22927
- SCHMIDLE, H.**  
The structure of linear gravitation theories /Zur struktur linearer Gravitationstheorien/.  
22 p3979 A69-39976
- SCHMIDT-KALER, T.**  
Curve of growth analysis of the absorption line spec- trum of 3 C 191.  
03 p0514 A69-13962
- SCHMIDT, A.**  
Selection diversity with non-zero correlations.  
01 p0026 A69-10177
- SCHMIDT, B.**  
Measurements of the vertical and latitudinal distribu- tion of ionospheric inhomogeneities with the aid of Ex- plorer 22 /S 66/ signals /Messungen der Hoehen- und Breitenverteilung von Inhomogenitaeten in der Ionosphaere mit Hilfe der Signale von Explorer 22 /S 66/.  
01 p0064 A69-10446  
Technology of vanadium thermistors /O technologi- iumistorow wanadowych/.  
19 p3256 A69-36718  
Impact force and bending stresses on beams during transverse impact /Kontaktkraft und biegespannungen im quergestossenen balken/.  
20 p3628 A69-37922
- SCHMIDT, D.**  
Investigation of linear differential equations with sinusoidal coefficients /Untersuchungen ueber lineare Differentialgleichungen mit sinusfoermigen Koeffizien- ten/.  
05 p0787 A69-16464  
Existence of minimal solutions of doubly infinite trinominal recursions of the Poincare-Perron type /Zur Existenz von Minimalloesungen zweifachunendlicher dreigliedriger linearer Rekursionen vom Poincare-Per- ronschen Typ/.  
05 p0787 A69-16465
- SCHMIDT, E.**  
Theoretical and experimental determination of the limiting heat power transported by sodium heat pipes /Determination theorique et experimentale de la puis- sance thermique limite transferee par des caloducs a sodium/.  
14 p2538 A69-29205  
Determination of the change of optical constants by modulation techniques.  
18 p3173 A69-35014
- SCHMIDT, E. F.**  
Solar-cell generators for missions near the sun /Solarzellen-Generatoren fuer sonnennahe Missionen/.  
02 p0197 A69-12665
- SCHMIDT, E. W.**  
Waste utilization for propulsion on manned space missions. [SAE PAPER 680717]  
03 p0495 A69-13442  
Rocket Propellants /Raketentreibstoffe/.  
10 p1752 A69-23806
- SCHMIDT, F. H.**  
Some biological effects of laser radiation. [AGARDOGRAPH-111]  
08 p1266 A69-20676
- SCHMIDT, F. J.**  
Electroforming of aluminum composite structures by copositioning of high strength, high modulus fibers.  
19 p3318 A69-35510
- SCHMIDT, G.**  
Resonance phenomena in the nonlinear vibration equations /Resonanzerscheinungen bei nichtlinearen Schwingungsgleichungen/.  
03 p0527 A69-13748  
Principles of representation of medium- and large- scale climatological charts /Darstellungsprinzipien von Klimakarten in mittleren und grossen Masstaeben/.  
12 p1214 A69-25893  
High-pressure rocket engines /Hochdruck- Raketen- triebwerke/.  
17 p3021 A69-33361  
Transverse wave propagation and instabilities within the magnetosphere.  
20 p3533 A69-38081
- SCHMIDT, G. B.**  
Saturn software configuration accounting and re- porting system.  
18 p3105 A69-34269
- SCHMIDT, H.**  
Data processing at the Adolf Schmidt Observatory in Niemeck /Zum Stand der Datenverarbeitung am Adolf- Schmidt-Observatorium in Niemeck/.  
16 p2767 A69-32463
- SCHMIDT, H. P.**  
Runway development for increased airport capabili- ty.  
06 p0906 A69-17166
- SCHMIDT, H. U.**  
A model for the Evershed flow in sunspots.  
06 p0999 A69-16977  
Magnetically aligned flows between sunspots /Mag- netisch ausgerichtete Stromungen zwischen Sonnen- flecken/.  
10 p1772 A69-22907



- Theoretical aspects of the flare phenomenon /Invited review paper/.  
24 p4374 A69-43622
- SCHMIDT, H.-U.**  
The influence of the solar corona on the tail of comet Ikeya-Seki 1965 VIII.  
06 p1000 A69-16982
- SCHMIDT, J.**  
Controlling corrosion.  
01 p0093 A69-10148  
Electron spin resonance of gamma-irradiated single crystals of 9-methyladenine.  
19 p3264 A69-35974
- SCHMIDT, K.**  
Linearization unit for contactless displacement measurement /Linearisierungseinheit zu einem Aufnehmer zur beruehrungslosen Wegmessung/.  
08 p1317 A69-20879
- SCHMIDT, K.-H.**  
Temporal variation of the metal content in the Galaxy /Zur zeitlichen Variation des Metallgehaltes in der Galaxis/.  
12 p2160 A69-26854
- SCHMIDT, L. V.**  
Aerodynamic frequency response measurements of a wind anemometer.  
24 p4315 A69-43262
- SCHMIDT, M.**  
Quasi-stellar sources.  
06 p0998 A69-16968  
On the nature of Ryle and Bailey's candidate star for the pulsating radio source CP 1919.  
09 p1591 A69-21455  
Lifetimes of extragalactic radio sources /Prodolzhitel'nost' zhizni vnegalakticheskikh radioistochnikov/.  
12 p2165 A69-27033  
Quasi-stellar radio sources and objects /Kvazizvezdnye radioistochniki i ob'ekty/.  
12 p2167 A69-27042  
On the absorption spectrum of Ton 1530.  
13 p2334 A69-27306  
Mass spectrometric investigations of a hydrogen low-pressure glow discharge plasma column /Massenspektrometrische Untersuchungen am Saeulenplasma der Wasserstoff-Niederdruck-Glimmentladung/.  
14 p2493 A69-29691  
Quasistellar objects.  
21 p3811 A69-39515  
Are some quasi-stellar objects associated with clusters of galaxies/ques/.  
22 p4029 A69-40763
- SCHMIDT, R.**  
Large deflections of a clamped circular plate.  
04 p0675 A69-14596  
Buckling of deep arches at large deflections.  
20 p3622 A69-37210  
Large deflections of multisandwich shells of arbitrary shape.  
23 p4226 A69-41572
- SCHMIDT, R. D.**  
Effects of high-frequency disturbances on turbojet limit controls.  
[AIAA PAPER 69-543]  
16 p2841 A69-32681
- SCHMIDT, R. N.**  
Configuration factors between a small plane and a large sphere.  
24 p4351 A69-43683
- SCHMIDT, W. F.**  
Engine inlet thermal anti-icing analysis techniques.  
01 p0055 A69-11045
- SCHMIDT, W. G.**  
An efficient TDMA system for use by emerging nations with the Intelsat IV satellite.  
03 p0388 A69-13179  
MAT-1 - A 700-channel time-division multiple-access system with demand-assignment features.  
23 p4129 A69-42511
- SCHMIDTBAUER, B.**  
A direct digital attitude control scheme for astronomical satellites.  
17 p3049 A69-33244
- SCHMIDTKE, G.**  
EUV laboratory spectrophotometry as a means of preparing optical flight experiments /EUV - Labor-Spektrophotometrie zur Vorbereitung von optischen Flugexperimenten/.  
08 p1267 A69-19888
- SCHMIDTKE, H.**  
Ergonomy and aviation medicine /Ergonomie und Flugmedizin/.  
17 p2915 A69-33770
- SCHMIEDGEN, D.**  
Study of weld-nugget formation in resistance spot welding /Untersuchung der Schweisslinienbildung beim Widerstandspunktschweißen/.  
05 p0769 A69-16539
- SCHMINDER, R.**  
Solar cycle dependence of winds in the lower ionosphere.  
05 p0759 A69-16421  
On some relationships between correlation analysis and similar-fade analysis results of drift measurements in the lower ionosphere.  
21 p3714 A69-38557
- SCHMIT, L. A., JR.**  
An incremental complementary energy method of nonlinear stress analysis.  
[AIAA PAPER 69-119]  
06 p1028 A69-18159  
Finite deflection discrete element analysis of sandwich plates and cylindrical shells with laminated faces.  
12 p2185 A69-26821
- SCHMITENDORF, W. E.**  
On the applicability of the sweep method to optimal control problems.  
12 p2053 A69-26512  
A conjugate-point condition for a class of differential games.  
24 p4340 A69-42959
- SCHMITT, E.**  
Adaptive systems using learning matrices.  
07 p1088 A69-18387
- SCHMITT, F. J.**  
Cause and effect of time base errors in coherent demodulation of a suppressed carrier AM multiplex.  
07 p1082 A69-19119
- SCHMITT, H.**  
Propagation of weak discontinuities in wave propagation /Fortpflanzung schwacher Unstetigkeiten bei nichtlinearen Wellenausbreitungsvorgaengen/.  
10 p1727 A69-22916
- SCHMITT, R. A.**  
Rare earth abundances in meteoritic chondrules.  
08 p1403 A69-20916  
Indium abundances in chondritic and achondritic meteorites and in terrestrial rocks.  
08 p1404 A69-20917  
Aluminum abundances in stony meteorites.  
11 p1952 A69-24334
- SCHMITTEN, P. F.**  
Remote disassembly and inspection of NRX-A6 reactor.  
[AIAA PAPER 69-511]  
16 p2810 A69-32712
- SCHMITZ, F. H.**  
Takeoff trajectory optimization of a theoretical model of a STOL aircraft.  
[AIAA PAPER 69-935]  
21 p3649 A69-39427
- SCHMITZ, F. J.**  
Materials in a nuclear environment.  
19 p3356 A69-35530
- SCHMITZ, G. E.**  
Selection of reliable radiation hard components.  
18 p3144 A69-34491  
The facts and fallacies of radiation hard device specs.  
24 p4287 A69-43204
- SCHMITZ, G. K.**  
Current status of titanium-boron composites for gas turbines  
[ASME PAPER 69-GT-1]  
09 p1527 A69-22510
- SCHMITZ, H.-D.**  
Trajectory-correcting thrust systems of communication satellites based on hydrazine engines already tested in space /Die Bahnkorrektur-Antriebssysteme von Nachrichtensatelliten auf der Basis von bereits weltraumgetriebenen Hydrazin-Triebwerken/.  
[DGLR-69-013]  
23 p4203 A69-42152
- SCHMITZ, J.**  
Regenerative amplification equipment for pulse code modulation /Regenerativverstärkereinrichtungen fuer Puls-Code-Modulation/.  
16 p2755 A69-31860
- SCHMITZ, N. T.**  
Fluidic resistors.  
05 p0705 A69-16011
- SCHMUCKER, U.**  
Geophysical aspects of structure and composition of the earth.  
22 p4032 A69-40983
- SCHMUECKING, W.**  
Biotelemetric examinations of the heart and circulatory system of jet pilots during flight to determine a number of flight-induced stresses /Biotelemetrische Untersuchungen des Herz-Kreislauf-Systems bei Strahlflugzeugpiloten waehrend des Fluges zur Feststellung der Unterschiedlichen fliegerischen Belastung/.  
05 p0715 A69-1670
- SCHNABLE, G. L.**  
Behavior of surface ions on semiconductor devices.  
10 p1743 A69-23177  
Failure mechanisms in large-scale integrated circuits.  
17 p2935 A69-32887  
The application of test structures for the study of surface effects in LSI circuitry.  
17 p2936 A69-32894  
Failure mechanisms and analyses in large-scale integrated circuits.  
19 p3282 A69-35787
- SCHNAPF, A.**  
The TIROS decade.  
10 p1722 A69-23145  
The Tiros decade.  
19 p3433 A69-36909
- SCHNEIDER, A.**  
A note on transition fading statistics at VLF.  
12 p2032 A69-26862  
Oversea radar propagation within a surface duct.  
20 p3495 A69-37854
- SCHNEIDER, A. M.**  
A practical mechanical calculator for spherical trigonometry.  
07 p1135 A69-19207  
A manual method for space rendezvous navigation and guidance.  
[AIAA PAPER 68-859]  
24 p4348 A69-43243
- SCHNEIDER, E.**  
Determination of aircraft load with the aid of strain gauges /Ermittlung der Belastung von Flugzeugen mit Hilfe von Dehnungsmessstreifen/.  
04 p0677 A69-14842
- SCHNEIDER, F.**  
The decoupling of multivariable control systems /Die Entkopplung von Mehrfachregelkreisen/.  
12 p2048 A69-26074
- SCHNEIDER, G.**  
Physical principles of solar cells /Physikalische Grundlagen der Solarzellen/.  
12 p2015 A69-25864  
Preparation and properties of n-type ZnSb.  
18 p3183 A69-35268
- SCHNEIDER, G. E.**  
Two visual systems.  
08 p1265 A69-20685
- SCHNEIDER, G. J.**  
Effect of fiber geometry and partial debonding on fiber-matrix bond stresses.  
07 p1170 A69-18717
- SCHNEIDER, H.**  
Effect of nonlinear excitation on magnetoacoustic resonance in a cold plasma.  
09 p1548 A69-21668
- SCHNEIDER, H. M.**  
Cavity design for millimeter-wavelength gallium arsenide devices.  
20 p3508 A69-37900
- SCHNEIDER, J. J.**  
The helicopter comes of age - Review of present and future roles of rotary wing aircraft.  
05 p0700 A69-15547  
The influence of propulsion systems on extremely large helicopter design.  
[AHS PAPER 334]  
17 p2901 A69-33528
- SCHNEIDER, J. R.**  
Characteristics of a high response laser flowmeter.  
15 p2616 A69-31292
- SCHNEIDER, K. R.**  
Periodic solutions for a class of nonlinear autonomous systems of third-order differential equations /Ueber die periodischen Loesungen einer Klasse nichtlinearer autonomer Differentialgleichungssysteme dritter Ordnung/.  
22 p3974 A69-39897

- HNEIDER, L. J.**  
Fundamental concepts of reliability.  
22 p3953 A69-40026
- HNEIDER, M.**  
On the determination of field parameters using a generalized Fourier-analysis.  
15 p2697 A69-31323  
BCD classification for 19 cepheids. I - A determination of interstellar reddening /Classification de cepheides. I - Determination de rougissements/.  
17 p3038 A69-33725  
Outline of a general orbit determination method.  
21 p3793 A69-38337
- HNEIDER, M. V.**  
High-power single-frequency lasers using thin metal film mode-selection filters.  
17 p2982 A69-33399  
Microwave and millimeter wave hybrid integrated circuits for radio systems.  
21 p3684 A69-39563
- HNEIDER, O.**  
Lunar remainders in the mean Sq /Lunare Reste im mittleren Sq/.  
16 p2782 A69-32458
- HNEIDER, P. J.**  
Two-dimensional transpiration cooling.  
[AIAA PAPER 69-96] 06 p1039 A69-18212
- HNEIDER, R. A.**  
An approach to cost analysis in low cost launch vehicle studies.  
24 p4393 A69-43120
- HNEIDER, S.**  
Energy control for microwave amplifier arrays.  
01 p0047 A69-10998
- HNEIDER, V.**  
A system for designing fast programming language translators.  
21 p3679 A69-39607
- HNEIDER, W.**  
Influence of heat input on hypersonic flows past a sphere and a circular cylinder /Ueber den Einfluss von Waermezufuhr auf die Hyperschallstroemung um Kugel und Kreiszyylinder/.  
[DVL-844] 03 p0364 A69-13663
- HNEIDER, W. P.**  
The nuclear environment against which equipment must be hardened.  
15 p2651 A69-30380
- HNELL, G. W.**  
Measurement of the velocity of conducting media.  
10 p1731 A69-23435
- HNELL, W. C.**  
An experimental evaluation of exhaust nozzle/airframe interference.  
[AIAA PAPER 69-430] 16 p2733 A69-32730
- HNIPP, O.**  
Absolute far-infrared absorption intensities of alpha-nitrogen.  
20 p3579 A69-37346  
Raman spectrum of alpha-N sub 2.  
23 p4194 A69-42204
- HNITZER, E.**  
Development of a liquid dynamic seal to vacuum.  
[ASLE FICFS PREPRINT 40] 15 p2620 A69-30485
- HNITZLER, C. C.**  
Partition coefficients of rare-earth elements and barium between igneous matrix material and rock-forming-mineral phenocrysts. I.  
08 p1310 A69-20944  
Genesis of continental diabases and oceanic tholeiites considered in light of rare-earth and barium abundances and partition coefficients.  
08 p1310 A69-20945  
Genesis of the calcium-rich achondrites in light of rare-earth and barium concentrations.  
19 p3409 A69-36091  
Rubidium-strontium correlation study of moldavites and Ries Crater material.  
23 p4154 A69-41341
- HNITZLER, K.**  
A system switch for separating 4 and 6 GHz radio frequency bands according to frequency and polarization /Eine Systemweiche zur Trennung der 4- und 6-GHz-Richtfunkbaender nach Frequenz und Polarisierung/.  
11 p1854 A69-25618
- HNITGER, H.**  
Parametric frequency converters for 12 GHz /Parametrische Frequenzumsetzer fuer 12 GHz/.  
11 p1854 A69-25614
- HNNOBRICH, W. C.**  
Finite-element analysis of skewed shallow shells.  
13 p2358 A69-27210
- HNOPPER, H. W.**  
Polarimeter for celestial X rays.  
23 p4207 A69-42382
- HNURBUSCH, J. V.**  
Verification of the Apollo real-time mission program.  
[AIAA PAPER 69-981] 22 p3907 A69-40361
- HNURR, L. E.**  
Recovery of random data from additive noise using real-time correlation of probability functions.  
09 p1459 A69-22593
- HNURR, N. M.**  
Heat transfer to carbon dioxide in the immediate vicinity of the critical point.  
[ASME PAPER 68-HT-32] 13 p2373 A69-27769
- HNURR, R. H.**  
Radiation effects upon gallium arsenide devices.  
06 p0978 A69-16890
- HOBER, T. E.**  
Design and test of a small turbine at 2500F with transpiration cooled blading.  
[SAE PAPER 690035] 07 p1203 A69-18310
- HOCK, A.**  
Thermionic boundary conditions for two-dimensional thermal analysis of converters.  
09 p1440 A69-21834  
Effect of cesium pressure on thermionic stability.  
09 p1441 A69-21837  
External-fuel thermionic reactors.  
14 p2480 A69-29185  
Comparison of methods for calculating radiative heat transfer.  
14 p2539 A69-29223  
Analysis and optimization of "full-length" diodes.  
14 p2401 A69-29228  
Effect of cesium pressure on thermionic stability.  
14 p2402 A69-29236
- HOCK, R. N.**  
Pressure dependence of the infrared absorption of calcite.  
12 p2141 A69-25783
- HOCK, W.**  
Measurements of velocity profiles in plasma jets /Messungen von Geschwindigkeitsprofilen an Plasmatraehlen/.  
13 p2307 A69-27611  
Measurements of radial velocity profiles in a plasma thruster /Messungen von radialen Geschwindigkeitsprofilen in einem Plasmatriebwerk/.  
[DGLR-69-024C] 23 p4202 A69-41926
- HOCKEN, V.**  
Unscheduled landings for medical reasons - A five-year survey of the experience at American Airlines.  
24 p4278 A69-43393
- HOEDERBEK, P. P.**  
Is PERT/Cost dead/ques/  
01 p0180 A69-11251
- HOEDEL, J. P.**  
On the existence of sometimes considerable transport effects in the nighttime ionosphere.  
17 p2959 A69-32926
- HOEFER, P. B.**  
Single-mode power from a 6328 angstrom units laser incorporating neon absorption.  
07 p1149 A69-18901
- HOEFFEL, J. A.**  
X-ray spectrographic camera.  
03 p0427 A69-13101
- HOEN, G.**  
On the expansion and shrinkage of space-charge clouds.  
06 p0959 A69-18219
- HOEN, R. I.**  
Dissociative photoionization of O sub 2.  
06 p0960 A69-17110
- HOEN, S.**  
Airborne digital computers.  
18 p3106 A69-34846
- HOENAUER, W.**  
Numerical experiments with a difference model for the Navier-Stokes equations /Numerische Experimente mit einem Differenzenmodell fuer die Navier-Stokes-Gleichungen/.  
10 p1678 A69-22917
- HOENBERG, M.**  
Large deflections of viscoelastic rings.  
09 p1615 A69-21925
- HOENHALS, R. J.**  
Use of multiple outlets for reducing the stratification-induced propellant supply temperature rise.  
[AAS PAPER 69-395] 24 p4363 A69-42830  
Choking and shock phenomena in a single-component two-phase flow including vibrational effects.  
[ASME PAPER 69-HT-61] 24 p4303 A69-43535
- HOENHEINZ, H.**  
Bounding of eigenvalues of ordinary differential equations by a difference method /Eigenwerteinschliessung bei gewoehnlichen Differentialgleichungen ueber ein Differenzenverfahren/.  
13 p2288 A69-27922
- HOENIG, R. K.**  
Polymeric Schiff bases. XII.  
07 p1074 A69-18628  
Polymeric Schiff bases. XVII.  
13 p2217 A69-28317  
The synthesis of thermally stable polymeric azomethines by polycondensation reactions.  
23 p4113 A69-42019
- HOENMAKER, A. A.**  
A new variable star in Aquarius.  
14 p2519 A69-29139
- HOENY, Z. G.**  
Some problems in the measurement of cochlear distortion.  
23 p4085 A69-41573
- HOESSOW, G. J.**  
Creeping flow solution of Leidenfrost boiling with a moving surface.  
[AIChE PAPER 20] 15 p2718 A69-31116
- HOFIELD, D.**  
Mariner 1969 - Preliminary results of the infrared radiometer experiment.  
24 p4384 A69-43196
- HOFIELD, D. A.**  
On the structure of a class of aerothermodynamic shocks.  
18 p3089 A69-35386
- HOFIELD, D. W.**  
New materials extend high-temperature capability.  
22 p3956 A69-40823
- HOFIELD, P.**  
A study of the spatial structure of turbulent flow by intensity-fluctuation spectroscopy.  
09 p1493 A69-21491
- HOFIELD, W. H.**  
Rough wall turbulent boundary layers.  
18 p3125 A69-35387
- HOLES, A.**  
Bending of normally loaded simply supported rectangular plates in the large-deflection range.  
19 p3445 A69-36828  
The stress analysis of axisymmetric shells using a plane frame analysis program.  
21 p3843 A69-39312
- HOLES, W. J.**  
The calibration of multichannel radiometers for application in spacecraft and space simulation programs.  
06 p0926 A69-17620
- HOELLENBERGER, C. A.**  
Analysis of thick, cambered jet flap airfoils in ground effect.  
[AIAA PAPER 69-738] 18 p3083 A69-34404
- HOLLMEIER, G.**  
Off-resonance frequency doubling using ruby.  
07 p1144 A69-18471
- HOLLMEIER, G. H.**  
Microwave frequency doubling in ruby.  
17 p3015 A69-33024
- SCHOLNICK, I. M.**  
Effect of nose bluntness on hypersonic unsteady aerodynamics.  
[AIAA PAPER 68-889] 12 p2012 A69-26794  
Structure of strong shock waves.  
18 p3120 A69-34457



- SCHOLTEN, C. G. H.**  
Elements for a New Departure in Air Traffic Control.  
11 p1914 A69-25085
- SCHOLTEN, R.**  
Noise problems of VTOL with particular reference to the Dornier DO 31.  
22 p3862 A69-39932
- SCHOLZ, G.**  
Investigations of the structure of the solar corona from photographic polarization measurements during the total eclipse of February 15, 1961 /Untersuchungen ueber die Struktur der Sonnenkorona aus photographischen Polarisationsmessungen waehrend der totalen Sonnenbedeckung am 15. 2. 1961/.  
22 p4001 A69-40001  
Polarimetric investigations of a diffuse coronal ray, and the form of the northern polar rays on February 15, 1961 /Polarimetrische Untersuchungen in einem diffusen Koronastrahl und die Form der noerdlichen Polarstrahlen am 15. 2. 1961/.  
22 p4002 A69-40002
- SCHOMAECKER, H.**  
Thermodynamic functions of ideal gases for temperatures up to 6000 K /Thermodynamische Funktionen idealer Gase fuer Temperaturen bis 6000 deg K/.  
04 p0686 A69-15153
- SCHOMMER, R. A.**  
Interstellar polarization of starlight and the turbulent structure of the Galaxy.  
22 p4030 A69-40771
- SCHONBERG, E.**  
Finite-range gravitation.  
22 p4027 A69-40656
- SCHONFELD, E.**  
Meteorite fall at Pueblito de Allende, Chihuahua, Mexico - Preliminary information.  
08 p1396 A69-20686
- SCHOPMAN, J.**  
Angular dependence of collision-induced excitation of H sub 2 plus ions.  
05 p0798 A69-16698
- SCHORN, R. A.**  
High-dispersion spectroscopic studies of Venus. II - The water vapor variations.  
13 p2345 A69-27650  
High dispersion spectroscopic observations of Venus. IV - The weak carbon dioxide band at 7883 angstrom units.  
16 p2852 A69-31563  
High dispersion spectroscopic observations of Venus. III - The carbon dioxide band at 7820 angstroms.  
20 p3614 A69-38254
- SCHORNHORST, J. R.**  
An experimental examination of the validity of the commonly used methods of radiant heat transfer analysis.  
[ASME PAPER 68-HT-42] 02 p0451 A69-12206
- SCHORR, C. J.**  
Constant chamber pressure throttling of an expansion-deflection nozzle.  
[AIAA PAPER 69-435] 16 p2846 A69-32776
- SCHOTT, F. W.**  
Dynamic mode surface waves on magnetized YIG and ferrite rods.  
10 p1746 A69-23513
- SCHOTT, G.**  
Crack propagation under dynamic loading /Rissausbreitung unter dynamischer Belastung/.  
05 p0842 A69-16543
- SCHOTT, L.**  
Electrical probes.  
08 p1316 A69-20473
- SCHOTTE, J.**  
Dependence of tilt-table and acceleration tolerance on body build and physical fitness /Die Abhaengigkeit der Orthostase- und Beschleunigungstoleranz von Koerperbau und Leistungsfaeigkeit/.  
[DVL-834] 09 p1444 A69-21304
- SCHOWALTER, W. R.**  
Sufficient conditions for stability of fluid motions constitutively described by the infinitesimal theory of viscoelasticity.  
17 p2949 A69-33015
- SCHRAEDER, J. H.**  
Microelectronic data and control transmission system for dynamic wind-tunnel testing.  
10 p1672 A69-23283
- SCHRAEDER, K. W.**  
Solutions of second order ordinary differential equations.  
02 p0272 A69-12129  
Existence theorems for second order boundary value problems.  
14 p2471 A69-29951
- SCHRAEDER, K.-H.**  
System equations for the iterative solution of nonlinear problems involving mechanical structures /Systemgleichungen zur iterativen Loesung nichtlinearer Probleme mechanischer Strukturen/.  
10 p1793 A69-22888
- SCHRAEDER, R.**  
The case for seam welding.  
18 p3149 A69-35272
- SCHRAM, D. C.**  
The relativistic influence on the dielectric behaviour of a plasma near cyclotron resonance.  
05 p0805 A69-16699
- SCHRAM, P. P. J. M.**  
Nonlinear oscillations in a cold plasma.  
02 p0288 A69-12171
- SCHRAML, J.**  
Galactic H II regions. IV - 1.95-cm observations with high angular resolution and high positional accuracy.  
13 p2339 A69-27568  
A search for periodic radiation from CP 1919 at 3.5 mm wavelength.  
14 p2529 A69-29978
- SCHRAMM, D. N.**  
Nuclear chronologies for the Galaxy.  
22 p3986 A69-40766
- SCHRAMM, H. F. W.**  
Data acquisition - A bottleneck/ques/ survey of methods, means, and trends in data acquisition for electronic data processing /Datenerfassung - Ein Engpass/ques/ Ueberblick ueber die Methoden, Mittel und Trends in der Datenerfassung fuer die elektronische Datenverarbeitung/.  
22 p3908 A69-41251
- SCHRAMM, W.**  
Satellites for education - Lessons from a decade of experience with educational television.  
[UN PAPER 68-95355] 06 p0887 A69-17078
- SCHRAUT, E. H.**  
A cesium electron-bombardment microthruster system.  
[AIAA PAPER 69-293] 09 p1561 A69-21223
- SCHREIB, R. R.**  
The hybrid /hydrazine/ resistojet.  
[AIAA PAPER 69-496] 16 p2838 A69-32649
- SCHREIBER, H.**  
The magnetic field of the ring current during the main phase of geomagnetic storms, and a comparison with the observed D sub st -portion of the perturbation field /Das Magnetfeld des Ringstroms waehrend der Hauptphase erdmagnetischer Stuerme und ein Vergleich mit dem beobachteten D sub st -Anteil des Stoerfeldes/.  
07 p1122 A69-18296
- SCHREIBER, O.**  
An FM-AM calibration modulator for noise measurement stands /Ein FM-AM- Eichmodulator fuer Rauschmessplaetze/.  
11 p1856 A69-25631
- SCHREIBER, P. W.**  
Investigation of errors in measuring magnetic fields in high-temperature plasma discharges.  
[AIAA PAPER 68-727] 24 p4316 A69-43571
- SCHREIER, A.**  
Measurement and control devices for parachute testing /Mess- und Steuereinrichtungen fuer Fallschirmuntersuchungen/.  
08 p1317 A69-20875
- SCHREIER, M.**  
The increase in low-energy cosmic ray intensity on 7 July 1966.  
10 p1766 A69-23762
- SCHREINER, H. R.**  
Advances in decompression research.  
21 p3655 A69-38913
- SCHREITMUELLER, K. R.**  
Further investigations on low density Hall accelerators.  
[AIAA PAPER 69-281] 09 p1562 A69-21229
- SCHREITMUELLER, W.**  
Intermodulation problems in multicarrier operation via communication satellites /Intermodulation-
- probleme beim Mehrtraegerbetrieb ueber Nachrichtensatelliten/.  
11 p1841 A69-25631
- SCHRENK, G. L.**  
Fermi-surface structure and field ionization.  
17 p3015 A69-32838  
The selection of spacecraft optical coatings for temperature control.  
[AIAA PAPER 69-979] 22 p4050 A69-40500
- SCHRENK, L. P.**  
Aiding the decision maker - A decision process model.  
24 p4274 A69-43031
- SCHRETZMANN, K.**  
Pressure balance and maximum power density at thin evaporation gained from heat pipe experiments.  
14 p2538 A69-29207
- SCHRIEVER, B. A.**  
Manned space stations - Gateway to our future space.  
16 p2866 A69-31735
- SCHRODER, H. J.**  
Some non-simple-equilibrium aspects in axisymmetric turbomachine flow theory.  
[ASME PAPER 69-GT-10] 09 p1432 A69-22505
- SCHROEDER, F.**  
Failure analysis.  
22 p3953 A69-40031
- SCHROEDER, H. J.**  
The so-called shock-incidence inlet fan of a radial-flow compressor /Der mit sogenanntem Stoss ange-troemte Vorsatzlaufer des Radialverdichters/.  
08 p1251 A69-20606
- SCHROEDER, J. E.**  
IGFET analysis through numerical solution of Poisson's equation.  
10 p1662 A69-23171
- SCHROEDER, K. G.**  
Bandwidth limitations for phase steered planar arrays in satellite applications.  
17 p2941 A69-34088  
Performance analysis of matrix fed /Butler/ planar arrays for satellite systems.  
17 p2942 A69-34089  
Performance analysis of planar hybrid matrix arrays.  
22 p3915 A69-40706
- SCHROEDER, L. S.**  
Elastic scattering of negative pions from deuterons at 2.01, 3.77, and 5.53 GeV/c.  
17 p3007 A69-32888  
Pi super minus p elastic scattering at 2.51, 2.76, and 3.01 GeV/c near t approximately equal to minus 1 /GeV/c/ super 2.  
24 p4352 A69-43044
- SCHROEDER, M. R.**  
Effect of frequency and space averaging on the transmission responses of multimode media.  
23 p4115 A69-41577
- SCHROEDER, W.**  
Characteristic of noctilucent clouds for the year 1963-1967 /Zur Charakteristik der leuchtenden Nachtwolken waehrend der Jahre 1963-1967/.  
04 p0595 A69-15300  
A theory concerning the seasonal frequency of noctilucent clouds /Zur Theorie der jahresperiodischen Haefigkeit der leuchtenden Nachtwolken/.  
16 p2781 A69-32453  
Structural changes of the mesosphere and noctilucent clouds /Strukturaenderungen der Mesosphae und leuchtende Nachtwolken/.  
24 p4307 A69-42966
- SCHROER, G.**  
RF-hazards to electro explosive devices.  
10 p1751 A69-23011
- SCHROERS, L. G.**  
A review of facilities and test techniques used in low speed flight.  
05 p0741 A69-15577
- SCHROETER, E. H.**  
Magnetic field and magnetic flows in isolated symmetrical sunspots /Magnetfeld und Materiestromungen in symmetrischen Einzelflecken/.  
06 p0999 A69-16977  
The intensity, velocity and magnetic structure of sunspot region. III - On the origin of the apparent component in sunspot umbrae.  
14 p2528 A69-29966

- SCHROPP, D. R.**  
An application of third generation ground station concepts.  
10 p1633 A69-23271
- SCHUBART, J.**  
The minor planet /1221/ Amor.  
17 p3038 A69-33723
- SCHUBERT, B. S.**  
Remarks on "Analysis of Normal Shock Waves in a Gas-particle Mixture", by T. D. Varma and N. K. Chopra, ZAMP 18,650 /1967/ /Bemerkungen zu "Analysis of Normal Shock Waves in a Gas-particle Mixture", von T. D. Varma and N. K. Chopra, ZAMP 18,650 /1967//.  
13 p2244 A69-27327
- SCHUBERT, D. W.**  
Active vibration isolation of human subjects from severe dynamic environments. [ASME PAPER 69-VIBR-65]  
10 p1650 A69-24157  
Theoretical and experimental investigation of electrohydraulic vibration isolation systems. [ASME PAPER 69-VIBR-40]  
10 p1641 A69-24178
- SCHUBERT, G.**  
Moving flame experiment with liquid mercury - Possible implications for the Venus atmosphere.  
04 p0664 A69-15466  
Distribution of sinuous rilles and water on the moon.  
05 p0818 A69-15606  
The flow of a weakly ionized gas past a discontinuous wall potential. [AIAA PAPER 69-80]  
06 p0972 A69-18191  
Effect of high electron-proton temperature ratios on the double shock wave structure in the solar wind.  
07 p1205 A69-18849  
A theoretical upper bound to the solar oblateness.  
09 p1600 A69-22201  
Edge effect of a flush electrostatic probe.  
15 p2653 A69-30912  
Time-dependent lunar electric and magnetic fields induced by a spatially varying interplanetary magnetic field.  
22 p4023 A69-40518
- SCHUBERT, K. E.**  
Dissociative photoionization of O sub 2.  
06 p0960 A69-17110
- SCHUBERT, R. G.**  
Reliability vs cost.  
13 p2231 A69-28044
- SCHUBERTH, E. R.**  
Synthesizing aircraft design.  
14 p2392 A69-29432
- SCHUEGRAF, E.**  
1.4 GHz parametric amplifier with closed- cycle cooling for radio astronomy.  
07 p1098 A69-18461
- SCHUELER, C. J.**  
Radiated aerodynamic noise effects on boundary-layer transition in supersonic and hypersonic wind tunnels. [AIAA PAPER 68-375]  
13 p2241 A69-28211
- SCHUELER, F.**  
Description of the production technology for solderless joints employed at the Vilati Institute /A Vilatiban alkalmazott forrasztas nelkuli koetesek technologiajanak ismertetese/.  
16 p2763 A69-32579
- SCHUEMANN, W. C.**  
Fluidic angular rate sensor - A replacement for rate gyroscopes/ques/.  
21 p3722 A69-38766
- SCHUERGERS, M.**  
Absorption coefficient of H sub 2 O sub 2 and N sub 2 H sub 4 between 1200 and 2000 angstrom units /Absorptionskoeffizient von H sub 2 O sub 2 und N sub 2 H sub 4 zwischen 1200 und 2000 angstrom units/.  
02 p0205 A69-11873
- SCHUERING, D.**  
Problems in the development of lunar surface vehicles /Probleme der Entwicklung von Mondfahrzeugen/.  
05 p0741 A69-15673
- SCHURMAN, D. W.**  
A mechanism for the production of planetary nebulae.  
08 p1396 A69-20649
- SCHUESSLER, W.**  
On the measurement of the spectra of pulse signals.  
03 p0399 A69-13939
- SCHUETT, E. P.**  
Application of passive helicopter rotor isolation for alleviation of rotor induced vibration.  
20 p3463 A69-37807
- SCHUETTE, K.**  
Numerical investigations and calculations for simple rendezvous maneuvers in the case of an elliptical target orbit /Numerische Untersuchungen und Vorausberechnungen fuer einfache Rendezvous-Manoever bei elliptischer Zielbahn/.  
09 p1538 A69-21649
- SCHUETZ, D.**  
Consideration of the elastoplastic stress in a notch as an alternative to purely phenomenological fatigue strength research /Die Betrachtung der elastischplastischen Beanspruchung im Kerbgrund als Ausweg aus einer phaenomenologisch betriebenen Schwingfestigkeitsforschung/.  
09 p1620 A69-22576
- SCHUETZ, K.**  
Investigations with a hydrogen maser /Untersuchungen am Wasserstoff-Maser/.  
08 p1327 A69-20715
- SCHUETZ, W.**  
Different points of view for material selection for structures under vibration loading /Gesichtspunkte zur Werkstoffauswahl fuer schwingbeanspruchte Konstruktionen/.  
09 p1620 A69-22574  
Fatigue strength of Ti8Al1Mo1V and Ti5Al2.5Sn titanium alloys under constant and variable amplitude loading /Zeit- und Betriebsfestigkeit der Titanlegierungen Ti8Al1Mo1V und Ti5Al2.5Sn/.  
15 p2637 A69-30227  
Fatigue Design Procedures, International Committee on Aeronautical Fatigue, Symposium, 4th, Munich, West Germany, June 16-18, 1965, Proceedings.  
15 p2705 A69-30355  
Fracture toughness and crack propagation in titanium alloys /Bruchzaehigkeit und Rissfortschritt von Titan-Legierungen/.  
23 p4177 A69-42165
- SCHUG, J. C.**  
Doublet electronic states of the benzyl radical.  
03 p0472 A69-13321  
Luminescence from aromatic polymers, monomers, and dimers under high-energy electron excitation.  
16 p2828 A69-32792
- SCHUHMANN, P. J.**  
High-temperature equilibria from plasma sources. I - Carbon-hydrogen-oxygen systems.  
21 p3670 A69-39737  
High-temperature equilibria from plasma sources. II - Hydrocarbon systems.  
21 p3670 A69-39738
- SCHULENBERGER, J. R.**  
Uniqueness theorems for a class of wave propagation problems.  
20 p3578 A69-38196  
The Green's matrix for steady state wave propagation in a class of inhomogeneous anisotropic media.  
23 p4180 A69-41368
- SCHULMAN, F.**  
Lunar power systems - A long view.  
01 p0013 A69-11396  
Development of electric power supplies for electric propulsion. [AIAA PAPER 69-826]  
16 p2741 A69-32709  
Applications and development of space nuclear electric power systems. [AAS PAPER 69-305]  
24 p4364 A69-42865
- SCHULMAN, R. J.**  
Experimental signal/noise-ratio comparison of the second-order phase-locked loop and the second-order frequency-locked loop.  
06 p0886 A69-16934
- SCHULTE-LIPPERN, K. W.**  
Dimensioning of pulse transformers /Dimensionierung von Impulsuebertragern/.  
08 p1285 A69-20382
- SCHULTE, E. H.**  
Calibration apparatus for surface thermocouples.  
19 p3292 A69-35725  
A high heat flux sensor employing semiconductors.  
19 p3307 A69-35748
- SCHULTE, H.**  
Considerations regarding the fitting of the airport interface to the air traffic of tomorrow /Ueber- legungen zur Anpassung der Nahtstelle Flughafen an den Luftverkehr von Morgen/.  
05 p0742 A69-15918
- SCHULTE, H. F.**  
On ionospheric composition measurements with an R.F. impedance probe.  
24 p4308 A69-43008
- SCHULTE, L. O.**  
Optical and radio telescopes on the lunar surface using LASSO.  
18 p3136 A69-34813
- SCHULTHEISS, P. M.**  
Optimum passive bearing estimation in a spatially incoherent noise environment.  
20 p3576 A69-37322
- SCHULTZ-GRUNOW, F.**  
Second-order similarity boundary layer solutions for hydrodynamic and thermal boundary layers on longitudinally curved walls with boundary layer effect /Aehnliche Grenzschichtloesungen zweiter Ordnung fuer Stroemungs- und Temperaturgrenzschichten an longitudinal gekruemmten Waenden mit Grenzschicht-beeinflussung/.  
12 p2060 A69-25761  
Demixing phenomena in shear flows of nonsedimenting suspensions.  
13 p2251 A69-28498
- SCHULTZ, A. B.**  
Measurements of complex dynamic moduli for laminated fiber-reinforced composites.  
20 p3627 A69-37763
- SCHULTZ, A. W.**  
An analytical approach to infrared nondestructive testing.  
15 p2631 A69-31506
- SCHULTZ, D. G.**  
State variable feedback decoupling and design of multivariable systems.  
24 p4294 A69-43315
- SCHULTZ, F. V.**  
Laser beam broadening in atmospheric propagation.  
12 p2111 A69-27166  
Prolate spheroidal antennas in isotropic plasma media.  
22 p3914 A69-40702
- SCHULTZ, G. V.**  
The application of laser sources to fabrication measurement techniques /Die Verwendung von Laserquellen in der Fertigungsmesstechnik/.  
12 p2094 A69-26903
- SCHULTZ, H.**  
Point defects in body-centered cubic transition metals.  
03 p0447 A69-13817
- SCHULTZ, L.**  
Spallogenic rare gases in taenite separated from iron meteorites.  
19 p3419 A69-36139
- SCHULTZ, L. A.**  
Guidance scheme for low-thrust parabolic insertion. [AAS PAPER 69-403]  
24 p4379 A69-42832
- SCHULTZ, O. T.**  
Shipboard or aircraft gravity vector determination by means of a three-channel inertial navigator.  
23 p4162 A69-41320
- SCHULTZ, W.**  
Statistical field strength fluctuations in pn junctions /Statistische Feldstaerkeschwankungen in pn-Uebergangen/.  
05 p0807 A69-16000
- SCHULTZE, G.**  
New laser interferometry methods of measuring high speed model missiles.  
11 p1886 A69-25042
- SCHULZ-DUBOIS, E. O.**  
Demultiplexing of fast optical pulse code modulation.  
19 p3279 A69-36764
- SCHULZ, E. R.**  
Estimation of pulse transfer function parameters by quasilinearization.  
02 p0225 A69-11972
- SCHULZ, G.**  
Line reversal and excitation temperatures in low-pressure flames /Linienumkehr und Anregungstemperaturen in Niederdruckflammen/.  
02 p0350 A69-11709  
The influence of ground effects on the secondary forces on a VTOL aircraft during hovering and transitional flight /Sekundaerkræfte an einem Senkrechstarter beim Schweb- und Transitionsflug mit Beruecksichtigung des Bodeneffekts/. [DVL-851]  
04 p0547 A69-14813



- Reduction of satellite data, using fixed stars / Reduktion von Satellitenmessbildern mit Fixsternen/  
14 p2446 A69-29286
- SCHULZ, H.**  
Test-stand arrangement and experimental tests of ignition, combustion, and expansion of hypergolic liquid fuels / Pruefstandaufbau und experimentelle Untersuchungen bei der Zuendung, Verbrennung und Expansion hypergoler Fluessigtreibstoffe/  
08 p1301 A69-20170  
Theoretical and experimental studies of the ignition, combustion, and expansion processes in hypergolic liquid propellant mixtures at gas temperatures up to 3000 K / Theoretische und experimentelle Untersuchungen von Zuendungs-, Verbrennungs- und Expansionsvorgaengen hypergoler fluessiger Treibstoffkombinationen bei Gastemperaturen bis 3000 K/  
08 p1375 A69-20723
- SCHULZ, M.**  
Bounce resonant scattering of particles trapped in the earth's magnetic field.  
03 p0503 A69-14014  
Origin of drift-periodic echoes in outer-zone electron flux.  
05 p0815 A69-16259  
Bounce-resonant scattering of auroral-zone electrons.  
05 p0754 A69-16260  
Ionization of helium - Angular correlation of the scattered and ejected electrons.  
06 p0962 A69-17191  
Diffusion of equatorial particles in the outer radiation zone.  
14 p2510 A69-28937  
Interaction between the boundary of the heliosphere and the magnetosphere of Jupiter.  
17 p3033 A69-33379  
Effect of shell splitting on radial diffusion in the magnetosphere.  
20 p3534 A69-38094  
Acoustic wave propagation in a gas discharge.  
20 p3578 A69-38243
- SCHULZ, R. B.**  
An analytical approach to quantifying EMC in system effectiveness.  
23 p4145 A69-42227
- SCHULZ, R. W.**  
Technical and economical prospects of air cargo traffic - An outlook into the future at the 1968 Air Cargo Forum in San Francisco / Technisch-wirtschaftliche Aussichten des Luftfrachtverkehrs - Blick in die Zukunft auf dem Luftfrachtforum San Francisco 1968/  
01 p0008 A69-10030  
Lightweight construction on new paths - Materials as the key to progress / Leichtbau auf neuen Wegen - Werkstoffe als Schluesel zum Fortschritt/  
05 p0779 A69-15917
- SCHULZ, T.**  
Experimental results with a liquid-metal MHD induction converter.  
13 p2208 A69-27509
- SCHULZ, W.**  
Wissenschaftliche Gesellschaft fuer Luft- und Raumfahrt, Yearbook 1967 / Wissenschaftliche Gesellschaft fuer Luft- und Raumfahrt, Jahrbuch 1967/  
04 p0545 A69-14801  
Semiconductor properties of tellurides. XV - Hall effect and conductivity of crystals in the system In sub 2 Te sub 3-Sb sub 2 Te sub 3 / Halbleitereigenschaften von Telluriden, XV - Halleffekt und Leitfaehigkeit von Kristallen des Systems In sub 2 Te sub 3-Sb sub 2 Te sub 3/  
21 p3779 A69-38580
- SCHULZE, A. E.**  
Physiological recording with dry electrodes.  
21 p3666 A69-39441
- SCHULZE, D.**  
Problem of slip in bcc metals / Zur Frage des Gleitens in kubisch-raumzentrierten Metallen/  
05 p0781 A69-16537
- SCHULZE, G. H.**  
Compatibility requirements and considerations of range telemetry tape.  
07 p1133 A69-19117  
Tape recorder calibration  
20 p3546 A69-38233
- SCHULZE, P.**  
Formation and detection of metastable ions in a double-focusing mass spectrometer.  
15 p2561 A69-30021

- A combined electron impact-field ionization source and its application in organic geochemistry.  
15 p2608 A69-30428
- SCHUM, H. J.**  
Some measurement problems encountered when determining the performance of certain turbine stator blades from total pressure surveys.  
[ASME PAPER 69-GT-103]  
09 p1432 A69-22521  
Performance of a single-stage turbine as affected by variable stator area.  
[AIAA PAPER 69-525]  
16 p2841 A69-32686
- SCHUMACHER, D.**  
Migration and precipitation of vacancies in quenched magnesium.  
02 p0267 A69-12187
- SCHUMACHER, H.**  
Relationship between the transfer function and Floquet's theory in the case of linear control systems with periodic parameters / Zusammenhaenge zwischen der Uebertragungsfunktion und der theorie von Floquet bei linearen Regelsystemen mit periodischen Parametern/  
10 p1666 A69-22928  
The application of perturbation theory in the investigation of multivariable control systems / Die Anwendung der Stoerungsrechnung bei der Untersuchung von Mehrgroessenregelungen/  
12 p2173 A69-26067
- SCHUMACHER, P. J., JR.**  
The human operator as an optimal controller.  
06 p0903 A69-17407
- SCHUMACHER, R. A.**  
On the significance of surface fatigue in sliding wear.  
01 p0085 A69-10368
- SCHUMACHER, U.**  
Measurements of the ion energy distribution function and the density profile in strong shock waves.  
17 p3013 A69-33821
- SCHUMAKER, K. H.**  
Investigation of errors in measuring magnetic fields in high-temperature plasma discharges.  
[AIAA PAPER 68-727]  
24 p4316 A69-43571
- SCHUMAN, P. D.**  
Development of vulcanizable elastomers suitable for use in contact with liquid oxygen.  
05 p0717 A69-16497
- SCHUMANN, F. A.**  
An approach to the design of a multifuel-capsule radioisotope thermoelectric generator.  
24 p4349 A69-43191
- SCHUMANN, H.**  
Effect of atomic size on the polymorphism of iron, cobalt, and manganese / Einfluss der Atomgroesse auf die Polymorphie des Eisens, Kobalts und Mangans/  
15 p2638 A69-30321
- SCHUMANN, W. O.**  
Particle motion caused by electromagnetic waves of extremely low frequency in the presence of a constant magnetic field / Teilchenbewegung durch elektromagnetische Wellen extrem geringer Frequenzen bei Anwesenheit eines konstanten Magnetfeldes/  
02 p0240 A69-11712
- SCHUMITZKY, A.**  
Invariant imbedding and sequential interpolating filters for nonlinear processes.  
[ASME PAPER 68-WA/AUT-3]  
05 p0738 A69-16183
- SCHUMM, S. A.**  
Lunar rivers or coalesced chain craters/ques/  
18 p3205 A69-35436
- SCHUNK, R.**  
Thermal diffusion in the topside ionosphere for mixtures which include multiply-charged ions.  
16 p2775 A69-32084
- SCHURMANNS, H.**  
The structural design of the AZUR satellite / GRS-A/.  
12 p2175 A69-26875
- SCHURMEIER, H. M.**  
The 1969 Mariner mission to Mars.  
18 p3201 A69-35141
- SCHUSTER, D. M.**  
Mechanical properties of dispersion-strengthened spray-quenched Al-V alloys.  
13 p2277 A69-27409  
Fracture behavior of shock-loaded boron-aluminum composite materials.  
20 p3562 A69-37772

- SCHUSTER, M. A.**  
A monolithic germanium imaging mosaic.  
11 p1938 A69-25307
- SCHUSTER, TH.**  
Equipment for measuring rest potentials on isolated frog skeletal muscle fibers by means of glass microelectrodes / Einrichtung zur Messung von Ruhepotentialen mittels Glas-Mikroelektroden an isolierten Frosch-Skelettmuskelfasern/  
23 p4111 A69-42054
- SCHUTTLER, R.**  
Use of microwave techniques for measuring carrier lifetime and mobility in semiconductors.  
16 p2825 A69-31611
- SCHUTZLER, J. C.**  
Reliability of analysis techniques and sensitivity to material properties.  
12 p2115 A69-26845
- SCHUURMAN, W.**  
Stability of the screw pinch.  
16 p2821 A69-32037  
On the theory of electrical characteristics of a Penning discharge at low magnetic field.  
22 p3991 A69-40865
- SCHWAB, F.**  
The effect of the front steepness, and of cosmic and artificial radiation on the response voltage of spherical and rod-plate spark gaps / Der Einfluss der Frontsteilheit, der kosmischen und der kuenstlichen Strahlung auf die Ansprechspannung von Kugel- und Stab-Plattenfunkenstrecken/  
11 p1851 A69-25086
- SCHWAB, G.-M.**  
Conductivity measurements of metal-semiconductor sintered mixtures / Leitfaehigkeitsmessungen an Verbundkoerpern Metall-Halbleiter/  
02 p0296 A69-11790  
Contributions to the investigation of semiconductivity in europium sesquioxides / Beitrage zur Untersuchung der Halbleitung in den Europiumsesquioxiden/  
02 p0296 A69-11874  
Contribution to the study of semiconductivity in europium monoxide EuO / Ein Beitrag zur Untersuchung der Halbleitung in Europiummonoxid EuO/  
02 p0296 A69-11875
- SCHWAB, H. A.**  
A study of charge transport in a high-pressure RF discharge.  
10 p1740 A69-23662
- SCHWAIGER, L.**  
Spacecraft design for multipurpose solar electric propulsion missions.  
[AIAA PAPER 69-252]  
09 p1568 A69-21729
- SCHWAIGHOFER, J.**  
Mechanics of the Solid State.  
07 p1234 A69-19377
- SCHWALB, A. J.**  
Energy produced by hydrocarbon-air detonations in a tube.  
[WSCI PAPER 68-26]  
07 p1241 A69-18369  
A system of computer programs to calculate aerodynamic characteristics for missiles, reentry vehicles and spacecraft at angles of attack.  
18 p3107 A69-35068
- SCHWAN, H. P.**  
Effects of microwave radiation on tissue - A survey of basic mechanisms.  
24 p4270 A69-42579
- SCHWANTES, E.**  
Installation for investigating the ground effect / Bodeneffekt-Versuchsanlage/  
08 p1302 A69-20880
- SCHWAR, M. J. R.**  
Velocity measurement by combining the Doppler principle with the schlieren method.  
07 p1135 A69-19259  
Laser techniques in combustion research.  
21 p3741 A69-39589
- SCHWARTZ, A. H.**  
Derivation of reliability specifications for avionics systems.  
15 p2581 A69-31136
- SCHWARTZ, A. N.**  
A cost-benefit analysis of military aircraft replacement policies.  
24 p4253 A69-43058

- SCHWARTZ, B.**  
An automatic test set for measuring dopant concentration profiles in epitaxial films.  
07 p1130 A69-18245
- SCHWARTZ, D. A.**  
Solar and cosmic X-rays above 7.7 kev.  
09 p1578 A69-22171  
Solar and cosmic X-rays above 7.7 kev.  
09 p1579 A69-22173  
The hard solar X-ray spectrum observed from the third orbiting solar observatory.  
20 p3593 A69-38166  
The time structure of solar X-ray bursts above 7.7 kev.  
24 p4371 A69-43610
- SCHWARTZ, F.**  
Design of a large explosive containment capsule for nuclear reactor irradiation.  
04 p0629 A69-14480
- SCHWARTZ, H. C.**  
The role of product assurance in spacecraft sterilization.  
03 p0379 A69-13400
- SCHWARTZ, J.**  
Performance map of the water heat pipe and the phenomenon of noncondensable gas generation.  
[ASME PAPER 69-HT-15] 24 p4413 A69-43554
- SCHWARTZ, K.**  
Time-dependent lunar electric and magnetic fields induced by a spatially varying interplanetary magnetic field.  
22 p4023 A69-40518
- SCHWARTZ, M.**  
Suboptimal decision feedback communications systems.  
10 p1656 A69-23534
- SCHWARTZ, M. D.**  
International Astronautical Federation, Colloquium on the Law of Outer Space, 11th, New York, N.Y., October 17, 18, 1968, Proceedings.  
20 p3634 A69-37102
- SCHWARTZ, M. J.**  
Non-adiabatic and stochastic mechanisms for cyclotron resonance trapping and heating in mirror geometries.  
08 p1364 A69-20518
- SCHWARTZ, M. M.**  
Vacuum brazing - A joining media of the Sixties.  
09 p1509 A69-22343
- SCHWARTZ, P. J.**  
Reflex activity of single preganglionic sympathetic fibres during coronary occlusion.  
23 p4084 A69-41460
- SCHWARTZ, P. R.**  
Water vapor - Observations of galactic sources.  
18 p3205 A69-35435
- SCHWARTZ, R. A.**  
Low-energy cosmic rays from pulsar flares/ques/  
18 p3187 A69-34995
- SCHWARTZ, R. T.**  
Structural-sandwich construction.  
21 p3836 A69-38935
- SCHWARTZ, S.**  
The effects of dielectric overcoating on electromigration in aluminum interconnections.  
17 p2935 A69-32889  
Scanning electron mirror microscopy and scanning electron microscopy of integrated circuits.  
17 p2971 A69-32891  
Space rigidization techniques for expandable structures.  
19 p3433 A69-35585
- SCHWARTZ, S. B.**  
Electron detachment from H super minus by electron impact.  
09 p1542 A69-21622  
Ionization of highly charged positive ions.  
09 p1596 A69-22054
- SCHWARTZ, S. C.**  
A series technique for the optimum detection of stochastic signals in noise.  
17 p2921 A69-33623  
On the estimation of a Gaussian convolution probability density.  
21 p3756 A69-39499
- SCHWARTZBART, H.**  
Wear and friction of fiber-metal molybdenum bodies impregnated with molybdenum disulfide.  
20 p3547 A69-36953
- SCHWARTZBERG, F. R.**  
Selecting structural materials for cryogenic service.  
18 p3158 A69-35416  
Fracture behavior of two new high-strength aluminum alloys.  
21 p3743 A69-38668
- SCHWARTZBURG, M.**  
Performance analysis of satellite electric power systems by computer simulation.  
23 p4068 A69-42241
- SCHWARTZMAN, L.**  
Design criteria for linearly polarized waveguide arrays.  
04 p0571 A69-14313  
Analysis of phased array lenses.  
08 p1280 A69-20014
- SCHWARZ, C. E.**  
Development of the engine inlet air filtration system for the AH-56A.  
01 p0143 A69-11054
- SCHWARZ, D. E.**  
The use of radar in the discrimination and identification of agricultural land use.  
12 p2097 A69-26986
- SCHWARZ, E.**  
Operations research /Unternehmensforschung/.  
08 p1423 A69-20868
- SCHWARZ, F.**  
Self-rhythms of motor nerve fibers stimulated by middle-frequency electrical pulses /Ueber Eigenrhythmen der motorischen Nervenfasern bei Reizung mit mittelfrequenten elektrischen Impulsen/.  
23 p4092 A69-42057
- SCHWARZ, H.**  
Inverse pressure dependence of the quadrupole ionization gauge.  
13 p2262 A69-28020  
Quadrupole ionization gauge.  
13 p2263 A69-28084
- SCHWARZ, H. P.**  
Effects of physical and psychic stress on phosphatidyl glycerol and related phospholipids in humans and animals.  
23 p4088 A69-41815
- SCHWARZ, R. F.**  
Behavior of surface ions on semiconductor devices.  
10 p1743 A69-23173
- SCHWARZ, S. E.**  
Theory of an optical pulse generator.  
01 p0089 A69-10179  
A nonlinear traveling-wave interaction technique for measuring homogeneous linewidths.  
02 p0257 A69-12613  
Observation of level degeneracy effect on interactions between traveling waves.  
10 p1705 A69-23815  
Continuous infrared parametric amplification in a saturable absorber.  
14 p2459 A69-29601
- SCHWARZ, W. H.**  
Deviations from the cosine law for yawed cylindrical anemometer sensors.  
[ASME PAPER 68-WA/APM-16] 04 p0596 A69-14391
- SCHWARZ, W. J., JR.**  
Interfacial relaxation overstability in a tangential electric field.  
08 p1353 A69-20792
- SCHWARZER, D. E.**  
Long term operations of in-pile and out-of-pile thermionic converters.  
14 p2399 A69-29197
- SCHWARZMANN, A.**  
Approximate solutions for a coupled pair of microstrip lines in microwave integrated circuits.  
15 p2580 A69-31078
- SCHWARZSCHILD, M.**  
An upper limit to the angular diameter of the nucleus of NGC 4151.  
09 p1602 A69-22227
- SCHWAUSCH, O. A.**  
Coordinate system influence on the regularized trajectory optimization problem.  
[AIAA PAPER 69-903] 21 p3798 A69-38546
- SCHWEIGHOFER, H. M.**  
Avionics systems for the SST era.  
02 p0279 A69-12364  
Complementing VOR/DME with INS - An improved navigation system.  
[SAE PAPER 690338] 11 p1914 A69-24499
- SCHWEIKLE, J. D.**  
Orbital experimentation for advancing cryogenic technology.  
[AIAA PAPER 67-454] 12 p2174 A69-26782
- SCHWEINFURTH, R. A.**  
Measurements by the low altitude density satellite OVI-16.  
15 p2602 A69-31385
- SCHWEITZER, S.**  
Average scalar electrical conductivity in a Lorentzian gas.  
04 p0638 A69-15317  
One dimensional viscous magnetofluid dynamic flow in an annulus.  
[AIAA PAPER 69-725] 17 p3012 A69-33493
- SCHWEITZER, W. G., JR.**  
Saturated absorption by neon inside a 6328 angstrom units laser with a mixture of neon isotopes in its gain tube.  
07 p1149 A69-18898
- SCHWEIZER, F.**  
Resonant asteroids in the Kirkwood gaps and statistical explanations of the gaps.  
22 p4013 A69-40122
- SCHWEIZER, G.**  
Relationship between the transfer function and Floquet's theory in the case of linear control systems with periodic parameters /Zusammenhaenge zwischen der Uebertragungsfunktion und der theorie von Floquet bei linearen Regelsystemen mit periodischen Parametern/.  
10 p1666 A69-22928  
The application of perturbation theory in the investigation of multivariable control systems /Die Anwendung der Stoeurungsrechnung bei der Untersuchung von Mehrgroessenregelungen/.  
12 p2173 A69-26067  
Control of earth satellites and space vehicles /Regelung von Erdsatelliten und Raumfahrzeugen/.  
13 p2356 A69-27919  
Digital control of an aircraft with variable flight characteristics /Digitale Regelung fuer ein Flugzeug mit variablen Flugeigenschaften/.  
15 p2549 A69-30229
- SCHWENDIMANN, P.**  
Electromagnetic propagation in a resonant medium.  
21 p3769 A69-38382
- SCHWENN, R.**  
Electrical conductivity of an argon-potassium plasma at low current densities as a function of the gas temperature.  
05 p0798 A69-15614  
Dependence of electrical conductivity in a rare-gas/alkali plasma on the gas temperature and on preionization.  
10 p1733 A69-23451
- SCHWENTEK, H.**  
Solar X-ray intensities measured via SOLRAD satellites and their influence on the D and E region of the ionosphere.  
15 p2677 A69-31346  
Midwinter warmings in the stratosphere and lower mesosphere and the behaviour of ionospheric absorption.  
17 p2962 A69-33779
- SCHWERING, F. K.**  
Diffractional crosstalk in beam waveguides for multibeam transmission.  
07 p1100 A69-18648
- SCHWERMER, H.**  
Accurate Calculation of Space-Flight Trajectories /Zur genauen Berechnung von Raumflugbahnen/.  
17 p3039 A69-33798
- SCHWERTASSEK, R.**  
Periodic Solutions and Locking-in Regions for Differential Equations with Switching Points /Periodische Loesungen und Mitnahmehereiche bei Differentialgleichungen mit Schaltstellen/.  
20 p3577 A69-37923  
Boundaries of locking-in regions - Periodic solutions of differential equations with switching points /Grenzen von Mitnahmehereichen - Periodische Loesungen von Differentialgleichungen mit Schaltstellen/.  
22 p3979 A69-39894
- SCHWERTNER, H. A.**  
Effects of nitrogen limitation on the growth and composition of unicellular algae in continuous culture.  
24 p4263 A69-43201
- SCHWESINGER, G.**  
General characteristics of elastic mirror flexure in theory and applications.  
12 p2056 A69-26407



## SCHWIDEFSKY, K.

A point signal system for aerial photography  
/Beitrag zur Punktsignalisierung fuer Luftaufnahmen/.  
14 p2450 A69-29600

## SCHWIEGER, H.

Graphical methods for determining the resulting photoelastic effect of compound states of stress.  
[DVL-903] 09 p1617 A69-22011

## SCHWIRIAN, R. E.

A new momentum-integral method for treating MHD and simple hydrodynamic entrance flows.  
[AIAA PAPER 69-724] 17 p2952 A69-33436

## SCHWIRZKE, F.

Dynamics of a laser created plasma expanding in a magnetic field.  
06 p0970 A69-17952

Observations of enhanced resistivity in the wave front of a laser-produced plasma interacting with a magnetic field.  
16 p2823 A69-32564

## SCHWITTERS, M. T.

A search for Jovian limb aurorae.  
07 p1214 A69-18614

## SCHWOB, M.

Classical methodology of reliability /Methodologie classique de la fiabilite/.  
15 p2624 A69-30821

## SCHWUTTKE, G. H.

Silicon diodes made by laser irradiation.  
06 p0893 A69-17157

## SCHY, A. A.

Deceleration-control system for aerobraking and skipout to orbit at Mars.  
[AIAA PAPER 68-1146] 03 p0520 A69-13564

Deceleration control system for aerobraking and skipout to orbit at Mars.  
[AIAA PAPER 68-1146] 21 p3828 A69-39761

## SCIALOM, G.

Preliminary results of mass spectrometric measurements of the diurnal variation of the composition of the neutral and ionized atmosphere between 100 and 400 km /Resultats preliminaires de mesure par spectrometrie de masse de la variation diurne de la composition de l'atmosphere neutre et ionisee entre 100 et 400 km d'altitude/.  
15 p2601 A69-31371

## SCIAMA, D. W.

Metastable helium in interstellar and intergalactic space.  
06 p1010 A69-17973

Quasi-stellar objects.  
13 p2342 A69-27598

The free-electron concentration in H I regions of the Galaxy.  
15 p2681 A69-30420

Singularities in collapsing stars and expanding universes.  
15 p2691 A69-30854

The evolution of density fluctuations in the universe. I - Dissipative processes in the early stages.  
21 p3814 A69-39571

Recent developments in observational cosmology.  
23 p4219 A69-42327

The evolution of density fluctuations in the universe. II - The formation of galaxies.  
23 p4221 A69-42390

## SCIAMMARELLA, C. A.

Moire-fringe multiplication by means of filtering and a wave-front reconstruction process.  
12 p2099 A69-27164

## SCIANNA, L. J.

Configuration sets - New technique for use in configuration management.  
08 p1322 A69-21154

## SCIARRA, J. J.

A computer method for dynamic structural analysis using stiffness matrices.  
11 p1987 A69-25367

## SCIBBE, H. W.

Lubrication and wear of ball bearings in cryogenic hydrogen.  
01 p0084 A69-10109

Cooling studies with high-speed ball bearings operating in cold hydrogen gas.  
[ASLE PAPER 68-LC-2] 07 p1141 A69-19310

## SCILINGO, A. A.

Carbon-graphite bearings for high loads.  
[SAWE PAPER 68-LC-9] 18 p3148 A69-35002

## SCIPIO, L. A.

Effect of non-homogeneity on the transverse vibrational frequency of uniform beams.  
08 p1413 A69-20413

## SCIULLI, J. A.

Adaptive data compression for video signals.  
03 p0427 A69-12869

## SCOGGINS, J. R.

On the measurement of winds by the AN/FPS-16 radar/spherical balloon method.  
18 p3139 A69-35428

## SCOLA, D. A.

The wetting of silicon carbide surfaces.  
08 p1341 A69-20515

## SCOLE, G.

Energy dependence of the elastic total collision cross section of identical molecules - super 4 He.  
19 p3378 A69-36186

## SCOON, G. E. N.

The telemetry station at Monte Cardiga, Sardinia.  
20 p3512 A69-38280

## SCOP, P. M.

Statistical theory of strength of laminated composites. II.  
07 p1170 A69-18712

## SCOTT, A. B.

Mechanical components of human eye movements.  
22 p3872 A69-40200

## SCOTT, B. F.

Laser energy measurements by absolute methods.  
22 p3961 A69-40243

Boundary layer effects in the turbulent spiral vortex flow of a compressible fluid.  
23 p4152 A69-42109

## SCOTT, C. J.

Heat transfer - A review of current literature.  
04 p0684 A69-14354

Heat transfer bibliography.  
13 p2379 A69-28341

Bounded expansions of supersonic flows.  
[ASME PAPER 69-HT-14] 24 p4247 A69-43555

Reverse flow profiles in turbulent freejet mixing with streamwise pressure gradient.  
24 p4306 A69-43684

## SCOTT, D.

Rolling elements for elevated temperatures.  
[IME PAPER 2] 07 p1138 A69-18566

Electron optical techniques of failure investigation.  
24 p4313 A69-42768

Diagnosis of service failures.  
24 p4398 A69-42772

## SCOTT, D. S.

Maximum Hall-to-electrode current ratio in coaxial plasma accelerators.  
[AIAA PAPER 69-280] 09 p1562 A69-21228

## SCOTT, D. W.

The semi-annual variation in air density at a height of 1100 km from 1964 to 1967.  
06 p0918 A69-17385

The effect of atmospheric rotation on a satellite orbit, when scale height varies with height.  
09 p1594 A69-21660

Evaluation of odd zonal harmonics in the geopotential, of degree less than 33, from the analysis of 22 satellite orbits.  
14 p2439 A69-29118

A determination of the orbit of Secor 6 rocket /1966-51A/.  
14 p2522 A69-29631

Comparison of air densities derived from the orbits of 1966-51A, B and C.  
15 p2600 A69-31349

## SCOTT, E. D.

Performance of gravity-gradient VCMG systems.  
07 p1228 A69-18345

## SCOTT, I. G.

Resistance changes in transversely strained conducting filaments.  
04 p0603 A69-15433

## SCOTT, J. A.

How electron fractography works in practice.  
13 p2269 A69-28182

## SCOTT, J. B.

Black Arrow flight sequence and performance.  
09 p1593 A69-21616

## SCOTT, J. E., JR.

Rotational temperature dependence of the total scattering cross section of N sub 2 on rare gases.  
19 p3377 A69-36184

## SCOTT, J. F.

Resonant surface Raman scattering in direct-gap semiconductors.  
06 p0936 A69-17883

## SCOTT, J. H., JR.

Diffusion characteristics and applications of doped silicon dioxide layers deposited from silane, /SiH sub 4/.  
07 p1198 A69-18611

## SCOTT, J. K.

Organic quenchant aids heat treatment of dip brazed aluminum parts.  
09 p1504 A69-22065

## SCOTT, J. R.

Pacific Missile Range UHF telemetry conversion program.  
09 p1454 A69-21800

## SCOTT, L.

Error reduction in HF loop DF systems.  
14 p2413 A69-29493

## SCOTT, L. B., JR.

Comparison of continuum and discrete lattice results for gas-surface interactions.  
14 p2409 A69-29092

## SCOTT, L. E.

Storage and handling of liquid helium.  
10 p1810 A69-24016

## SCOTT, M. H.

Weldable and structural efficiency.  
20 p3550 A69-37457

## SCOTT, P. F.

Lunar occultations of radio sources at 81.5 MHz.  
10 p1779 A69-23606

Further observations of pulsating radio sources.  
17 p3036 A69-33636

Decrease of flux density of the radio source Cassiopeia A at 81 point 5 MHz.  
23 p4215 A69-42112

## SCOTT, R. A.

Transient non-axisymmetric wave propagation in an infinite isotropic elastic plate.  
06 p1024 A69-17509

## SCOTT, R. F.

Principal science results from Surveyor 5.  
02 p0321 A69-12224

Mechanical properties of lunar surface material.  
24 p4383 A69-42962

## SCOTT, S.

The Bullard-Gellman dynamo.  
22 p4018 A69-40194

## SCOTT, W. D.

Relative energies of /1100/ tilt boundaries in aluminum oxide.  
17 p2993 A69-34191

Impurity deposits on alumina crystals.  
23 p4176 A69-41597

## SCOTT, W. W.

The effects of multiple Coulomb scattering and range straggling in shielding against solar-flare protons.  
10 p1723 A69-23164

## SCOTTO, M.

Molecular motion and Raman band shapes in liquid nitrogen and oxygen.  
06 p0962 A69-17817

## SCOURFIELD, M. W. J.

An image intensifier-vidicon system for auroral cinematography.  
06 p0925 A69-17382

Auroral pulsations and flaming - Some initial results of a cinematographic study using an image intensifier.  
16 p2780 A69-32305

## SCRIVEN, L. E.

Convective instability by active stress.  
14 p2540 A69-29634

## SCROFANI, O.

Investigation of an axial-flow turbine blade cascade in transonic flow /Studio di una schiera di palette di turbina assiale in regime transonico/.  
03 p0365 A69-14103

## SCROGGIE, B. J.

Computer studies of reaction profiles in gas detonations.  
19 p3451 A69-36366

- CRUGGS, D. M.**  
Ductility and mechanical properties of alloyed chromium composites. 23 p4177 A69-41672
- CRUGGS, R. M.**  
An analytical and experimental study of the vibration of orthogonally stiffened cylindrical shells. [AIAA PAPER 68-349] 19 p3437 A69-35948
- CRUTON, C.**  
Some considerations of wind effects on large structures. 23 p4230 A69-42125
- CUCCHI, G. D.**  
Information load and three-man flight crews - An examination of the traditional organization in relation to current and developing airliners. 12 p2023 A69-26555
- CUKA, V.**  
Results of measurements of the atmospheric radio noise at 27 kc/s at fixed measuring stations in northern, central and south-eastern Europe. 09 p1491 A69-22163
- CULL, W. E.**  
Deployable elements of the orbiting geophysical observatories. 06 p1017 A69-17606  
The orbiting geophysical observatories. 19 p3432 A69-36674
- CULLY, J. C.**  
Fracture path of stress corrosion cracks in austenitic stainless steels. 09 p1522 A69-21486  
A fractographic study of the stress corrosion cracking of titanium and its alloys. 10 p1710 A69-23085  
Metallographic studies of the stress corrosion cracking of titanium alloys in aqueous chloride solutions. 19 p3352 A69-36903
- CULLY, M. O.**  
Quantum theory of an optical maser. III - Theory of photoelectron counting statistics. 15 p2635 A69-31238  
Theory of an inhomogeneously broadened laser amplifier. 15 p2635 A69-31239  
The photoelectric effect without photons. 17 p3007 A69-32838
- SEABAUGH, P. W.**  
Boron modifications produced in an induction-coupled argon plasma. 08 p1372 A69-20687
- SEAL, R. T.**  
Solar rocket observations on an eclipse day. 15 p2696 A69-31099
- SEALE, D.**  
Influence of the self-induced magnetic field on the stability of a plasma column in a longitudinal magnetic field. 24 p4356 A69-43366
- SEALEY, J. L.**  
Experiments on decompression bubbles in the circulation using ultrasonic and electromagnetism flowmeters. 21 p3663 A69-38914
- SEALS, R. K., JR.**  
Analysis of MPD arcs with nonequilibrium ionization. [AIAA PAPER 68-87] 02 p0291 A69-12505
- SEALY, K. R.**  
Air transport facilities and regional planning. 19 p3296 A69-36850
- SEAMANS, R. C., JR.**  
The management of a national space program. 01 p0178 A69-10468  
The 1968-1969 Minta Martin Lecture/action and reaction - The national commitment to Apollo. I. 20 p3641 A69-38116  
Action and reaction. II. 24 p4419 A69-43043
- SEARLE, L.**  
Parkes 2134 plus 004 - A quasi-stellar object with a very unusual radio spectrum. 07 p1224 A69-19708  
The chemical composition of the lambda Bootis stars. 08 p1385 A69-20062  
Redshifts of fifteen radio sources. 09 p1602 A69-22224  
The blue horizontal-branch stars of NGC 6397. 15 p2692 A69-30770
- SEARLE, P. C.**  
Data system for turbine engine development. 10 p1660 A69-23284
- SEARLES, C. B.**  
Microwave oscillator noise reduction by a transmission stabilizing cavity. 02 p0220 A69-12451  
The measurement of oscillator noise at microwave frequencies. 02 p0220 A69-12453
- SEARS, R. L.**  
Six-color photometry of stars. XII. 10 p1788 A69-24122
- SEARS, W. R.**  
Aerodynamics, noise, and the sonic boom. 16 p2732 A69-31867  
Annual Review of Fluid Mechanics. Volume 1. 18 p3122 A69-34916
- SEASHOLTZ, R. G.**  
Effect of collisions on Thomson scattering with unequal electron and ion temperatures. 14 p2510 A69-28946
- SEATON, M. J.**  
Excitation of forbidden lines in gaseous nebulae. I. 08 p1391 A69-20530  
Resonances in cross sections for excitation of forbidden lines in O super 2 super plus. 11 p1921 A69-24417  
Forbidden line radiation from gaseous nebulae - Introductory report. 19 p3422 A69-36220
- SEAWELL, W. T.**  
To make assurance double sure. 06 p1041 A69-16840
- SEBAN, R. A.**  
The effect of a spherical protuberance on the local heat transfer to a turbulent boundary layer. [ASME PAPER 68-HT-2] 02 p0351 A69-12204  
Flow and heat transfer in a laminarizing turbulent boundary layer. [ASME PAPER 69-HT-10] 24 p4413 A69-43558
- SEBEKIN, B. I.**  
Diffraction of unsteady surface and internal waves /Difraktsiia neustanovivshikhsia poverkhnostnykh i vnutrennikh voln/. 12 p2061 A69-25953
- SEBEKINA, T. V.**  
Regulatory mechanisms of hemodynamic shifts under the effect of acceleration - Experimental study in a physiologic model. 02 p0198 A69-11503
- SEBESTA, P. D.**  
Rat body composition - Sensor implantation and lighting effects. 12 p2020 A69-26557
- SEBKO, V. P.**  
Three-turn helical magnetic configuration with shear and minimum B. 02 p0288 A69-12168
- SECHRIST, C. F., JR.**  
Coordinated rocket measurements on the D-region winter anomaly. I - Experimental results. 05 p0758 A69-16411
- SECKELMANN, R.**  
Transmission-line properties analyzed. 15 p2581 A69-31525
- SECOR, A.**  
Temperature analysis of nonlinear DC circuits. 18 p3108 A69-34525
- SECOR, G. A.**  
Failure of solid rocket motors undergoing sudden case failure. 24 p4365 A69-43260
- SECRETAN, L.**  
A new criterion for the identification of micrometeor impact sites on aluminized glass. 18 p3199 A69-34952
- SECUNDOV, A. N.**  
An investigation of the turbulent jets of different gases in a general stream. 13 p2200 A69-28501
- SEDACH, V. S.**  
Pressure losses in a pipeline with a venturi tube /Poteri davleniia v truboprovode s truboi venturi/. 15 p2612 A69-31180
- SEDDON, H.**  
Electronographic study of the interstellar 4430 band. 10 p1781 A69-23676
- Interstellar band absorption in a supernova/ques/ 15 p2701 A69-31534
- Defects in interstellar grains. 22 p4023 A69-40472
- SEDELNIKOV, T. KH.**  
Vapor phase coating of particles /Obrazovanie pokrytii na chastitsakh iz parogazovoi fazy/. 20 p3548 A69-37363
- SEDELNIKOV, V. A.**  
The fluctuation width of the emission spectrum of a gas laser /K voprosu o fluktuatsionnoi shine spektra izlucheniia gazovogo opticheskogo kvantovogo generat'ora/. 15 p2633 A69-30121
- SEDIN, V. A.**  
Determination of a waveguide field of arbitrary cross section on models with quasi-static fields /Opredelenie polia volnovodov proizvol'nogo poperechnogo sечения na modelyakh s kvazistaticheskimi polem/. 05 p0717 A69-15635  
Determination of the field of waveguides of arbitrary cross section by means of models with a quasi-static field. 16 p2762 A69-32493
- SEDLACEK, R.**  
Static and cyclic fatigue of alumina. 24 p4334 A69-43343
- SEDLITSKII, R. V.**  
Microheterogeneity of monophase /according to the phase diagram/ titanium alpha-alloys /Mikroneodnorodnost' odnofaznykh po ravновесnym diagrammam sostoianiia alpha-splavov titana/. 04 p0617 A69-14939
- SEDMAK, G.**  
Theoretical analysis of the properties of the hybrid loop in the general case /Analisi teorica delle proprieta dell'anello ibrido nel caso generale/. 04 p0582 A69-15072
- SEDNEY, R.**  
A survey of the method of characteristics for nonequilibrium, internal flows. [AIAA PAPER 69-6] 06 p0915 A69-18170
- SEDOV, A. V.**  
Experimental verification of the permissible radiation doses for extended space missions /"chronic experiments" with dogs/ /K eksperimental'nomu obosnovaniiu dopustimyykh doz radiatsii pri dlitel'nykh kosmicheskikh poletakh /provedenie khronicheskogo eksperimenta na sobakakh//. 05 p0708 A69-16508  
Dynamics of the elimination of certain products of metabolism in humans kept in isolation. 10 p1646 A69-23508  
Experimental verification of permissible radiation doses during prolonged space flights - A "chronic experiment" on dogs. 18 p3095 A69-34727
- SEDOV, B. M.**  
Emission frequency stabilizing effect in a solid-state laser /Effekt stabilizatsii chastoty izlucheniia tverdotel'nogo OKG/. 07 p1147 A69-18543  
A fluorite - Samarium laser. 14 p2458 A69-29328  
The width of the emission spectrum of solid-state lasers /Shirina spektra generatsii tverdotel'nykh lazerv/. 14 p2459 A69-29389  
Frequency stabilization of the radiation from a solid-state laser. 21 p3735 A69-38695
- SEDOV, G. S.**  
Transformation of the spatial structure of laser emission by means of a lens /Preobrazovanie prostranstvennoi struktury izlucheniia lazera s pomoshch'iu linzy/. 17 p2981 A69-33111
- SEDOV, L. I.**  
Models of continuous media with internal degrees of freedom /Modeli sploshnykh sred s vnutrennimi stepeniami svobody/. 05 p0793 A69-15775  
Ten years of space exploration by the Soviet Union. 06 p1005 A69-17561  
Concerning G. I. Barenblatt's article "Certain problems of the mechanics of brittle failure" /O stat'e G. I. Barenblatta "O nekotorykh voprosakh mekhaniki khrupkogo razrusheniia"/. 07 p1238 A69-19691  
Models of continuous media with internal degrees of freedom. 18 p3173 A69-35028



SEDOV, V. E.

Local oscillations and structure of copper impurity centers in gallium arsenide crystals /Lokal'nye kolebaniia i struktura primesnykh tsentrov medi v kristallakh arsenida galliia/.  
16 p2824 A69-31571

SEDOVA, E. S.

The supersonic flow round blunt bodies of revolution with a break in the generator.  
03 p0362 A69-13406

SEDOVA, K. K.

Dynamics of extremal single-channel relay systems of differential type /Dinamika odnokanal'nykh releinykh ekstremal'nykh sistem raznostnogo tipa/.  
12 p2052 A69-26278

The tracking process in extremal differential-type systems /O protsesse sledzheniia v ekstremal'nykh sistemakh raznostnogo tipa/.  
12 p2052 A69-26279

SEDRAKIAN, D. M.

Steady axisymmetric gravitational fields /Statsionarnye aksial'no-simmetricheskie gravitatsionnye polia/.  
02 p0317 A69-11956

Nonrelativistic theory of rotating configurations.  
12 p2159 A69-26662

The internal solution of steady axisymmetric gravitational fields /O vnutrennem reshenii statsionarnykh aksial'no-simmetricheskikh gravitatsionnykh polei/.  
13 p2351 A69-27863

Slow rotation of relativistic polytropes /Medlennoe vrashchenie reliativistskikh politrop/.  
19 p3426 A69-36576

SEDRIS, A. J.

The role of brittle surface films in stress-corrosion phenomena.  
03 p0448 A69-13873

Stress corrosion cracking of titanium in alcohol-iodine solutions.  
16 p2798 A69-31717

Stress corrosion cracking of alpha titanium in nonaqueous environments.  
19 p3352 A69-36906

SEDUNOV, I. U. S.

Certain problems of the kinetics of condensation processes in clouds /Nekotorye voprosy kinetiki kondensatsionnykh protsessov v oblakakh/.  
10 p1722 A69-23972

Some problems of the kinetics of condensation processes in clouds.  
21 p3760 A69-39658

SEDWICK, S. P.

Possible sources of meteoritic material from Hopewell Indian burial mounds.  
11 p1963 A69-25401

SEEBASS, R.

The effect of tensor conductivity on continuum magnetogasdynamic flows.  
01 p0126 A69-10226

Minimum sonic boom shock strengths and overpressures.  
08 p1253 A69-19903

Effect of tensor conductivity on collisionless magnetogasdynamic flows.  
11 p1930 A69-25278

Sonic boom theory.  
17 p2902 A69-34017

SEEBAGH, W. R.

An experimental study of the interaction of a conical shock wave and a turbulent boundary layer including suction effects.  
[AIAA PAPER 69-450]  
16 p2773 A69-32754

SEEGER, A.

Vacancy diffusion in germanium.  
02 p0295 A69-11780

Recent progress in the understanding of work-hardening of fcc single crystals.  
05 p0778 A69-15753

SEEGER, K.

New results in hot-electron and semiconductor physics /Neuere Ergebnisse aus der Physik heisser Elektronen in Halbleitern/.  
03 p0491 A69-14097

Non-ohmic microwave conductivity in semiconductor posts.  
08 p1373 A69-20859

Current controlled negative differential resistivity of p-type tellurium.  
09 p1557 A69-21747

SEEGER, W.

Experimental work on inductive magnetoplasma-dynamic converters.  
10 p1638 A69-23490

SEEGMILLER, H. L.

A 500,000 sample per second digital recorder for the Ames electric arc shock tunnel.  
19 p3293 A69-35744

SEEHUUS, T. K.

Hybrid diagnostic techniques.  
04 p0568 A69-15360

SEELBACH, W. C.

Advanced developments in sub-nanosecond integrated logic circuits.  
20 p3505 A69-37342

SEELIG, W.

Nonresonant continuous laser oscillation in the visible.  
01 p0091 A69-10815

High-efficiency ion lasers /Ionenlaser hoher Leistung/.  
06 p0938 A69-18221

High power ion laser /Hochleistungs-Ionenlaser/.  
09 p1515 A69-21487

SEELMANN, H. A.

Digital control of an aircraft with variable flight characteristics /Digitale Regelung fuer ein Flugzeug mit variablen Flugeigenschaften/.  
15 p2549 A69-30229

The design of an 2-axes-attitude stabilization system for spinning payloads.  
21 p3826 A69-39639

SEELY, L. B.

Heat capacities of liquids. II.  
[WSCI PAPER 68-39]  
07 p1202 A69-18368

Basic studies of the mechanism of shock initiation in granular explosives.  
10 p1751 A69-23016

Equation of state of polydiethylene glycol-bis-allyl carbonate.  
16 p2879 A69-32179

Shock front reaction and initiation of detonation in low density ammonium perchlorate.  
21 p3784 A69-39590

SEEMANN, G. R.

Experimental investigation of surface type airborne electrostatic probes.  
[AIAA PAPER 69-700]  
17 p2974 A69-33443

Temperature history of hard space suit during GLFC operational test.  
21 p3666 A69-39182

SEERY, D. J.

Chemiluminescence in the high-temperature oxidation of methane.  
06 p0885 A69-17937

Ignition mechanisms of hydrocarbon fuels - Methane and acetylene.  
[WSCI PAPER 68-41]  
07 p1240 A69-18356

SEERY, M. E.

Convertible fan/shaft engines.  
[AHS PAPER 333]  
17 p3021 A69-33529

SEFZIG, D.

Radiation loads on a satellite in a synchronous /24-hr/ orbit /Zur Strahlenbelastung eines Satelliten in synchroner /24 h-/ Umlaufbahn/.  
22 p4035 A69-39909

SEGAL, V. M.

Flow during the necking of axisymmetric samples under tension /Plasticheskoe techenie pri rastiazhenii osesimmetrichnykh obratzsov s sheikoi/.  
19 p3446 A69-36847

SEGAL, I. A. S.

Device for observing the developing fatigue cracks on rotating specimens.  
05 p0843 A69-16665

SEGAL, J.

Project management accomplishes "impossible" mission.  
18 p3233 A69-34616

SEGALL, R. L.

Fatigue hardening in face-centered cubic metals.  
06 p0944 A69-17503

SEGALL, V.

Thermal broadening of exciton levels in II-VI compound semiconductors.  
19 p3386 A69-36524

SEGEL, M.

A cryogenic propellant tank pressurization analysis.  
01 p0163 A69-11147

Experimental study of AZ5G-Zr-Cr alloy welded under 1-1/2 biaxial states of stress at low temperature.  
01 p0088 A69-11151

SEGEL, N.

Influence of respiration, stroke volume, and heart rate on pulmonary capillary pulsatility.  
23 p4082 A69-41444

SEGEL, R. M.

Development of the TRAC variable diameter rocket concept.  
[AIAA PAPER 69-221]  
07 p1056 A69-19573

SEGERBLOM, R.

Flux equivalences among Rayleigh, isotropic, and other scattering models.  
04 p0687 A69-15203

SEGURENS, L.

Utilization of titanium alloys for thermionic conversion /Utilisation des alliages de titane en conversion thermo-ionique/.  
14 p2462 A69-29213

SEIBEL, G.

Oriented crystallization in the cobalt-tantalum-carbon system /Crystallisation orientee dans le systeme cobalt-tantale-carbone/.  
[ONERA-TP-673]  
07 p1167 A69-19331

Heat-resistant fiber composites produced by oriented crystallization in the Co-Cr-Ta-C and Ni-Co-Ta-C systems /Composites refractaires a fibres, realisees par cristallisation orientee dans les systemes Co-Cr-Ta-C et Ni-Cr-Ta-C/.  
[ONERA-TP-710]  
16 p2799 A69-31763

SEIBEL, R. P.

Reaction jet damping for an aerodynamically stable entry vehicle.  
02 p0333 A69-11747

SEIBERT, G.

Solar cell output as a function of angle of incidence for both unpolarized and linear polarized light.  
04 p0551 A69-15311

SEIBOLD, W.

Review of the V/STOL program in Germany /Revue de la technique du decollage vertical en Allemagne/.  
17 p2899 A69-3338

SEIBT, W.

Collision-induced dissociation of H sub 2 super plus ions-energy and angular dependences /Stossdissociation von H sub 2 super plus -Ionen-Energie- und Winkelabhaengigkeit/.  
19 p3375 A69-35983

SEIDE, C.

Formation cross sections of lithium, beryllium, and boron isotopes produced by the spallation of oxygen by high-energy protons.  
14 p2512 A69-28963

SEIDEL, B.

S-band occultation experiments.  
[AAS PAPER 68-185]  
02 p0311 A69-11470

Trans-Pacific interferometer measurements at 2,300 MHz.  
15 p2701 A69-31530

SEIDEL, B. L.

A radiometric method for measuring the insertion loss of radome materials.  
02 p0251 A69-12434

Pioneer VI Faraday-rotation solar-occultation experiment.  
15 p2700 A69-31419

SEIDEL, H.

A partly automatic instrument for measuring skylight polarization in the daytime and at twilight /Ein teilautomatisches Geraet zum Messen der Himmelslicht-polarisation bei Tage und in der Daemmerung/.  
12 p2078 A69-25892

SEIDEL, W.

Flutter analysis in the early design stage by means of a subsonic flutter model and concurrent calculation /Flutteranalyse im fruehen Entwurfsstadium mit Hilfe eines Unterschallflattermodells und parallellaufende Rechnungen/.  
04 p0677 A69-14833

SEIDELMANN, P. K.

Mass of Pluto.  
02 p0315 A69-11800

Orbit of Neptune and the mass of Pluto.  
04 p0663 A69-1538

SEIDEN, E. I.

Airframe cost element prediction and application to cost control.  
[SAWE PAPER 731]  
18 p3221 A69-3489

- SEIDEN, M.**  
Optical degradation of high-power ionized argon gas lasers.  
[IEEE PAPER L-4] 05 p0775 A69-16322
- SEIDER, W. D.**  
Confined jet mixing in the entrance of a tubular reactor.  
[AICHE PAPER 25A] 04 p0586 A69-14508
- SEIDL, D.**  
A STOL transport from the CSSR - The L-410 turbolet /STOL-TRANSPORTFLUGZEUG aus der CSSR - L-410 turbolet/.  
24 p4251 A69-42799
- SEIDL, M.**  
Electron heating by beam-plasma interaction in uniform magnetic field.  
05 p0804 A69-16458  
Generation and heating of plasma by beam-plasma interaction.  
17 p3014 A69-33828
- SEIDMAN, L. P.**  
A class of signals for analog telemetry over a coherent channel.  
20 p3492 A69-37713
- SEIDMAN, T. I.**  
Approximate boundary controllability for the heat equation.  
01 p0173 A69-10008
- SEIELSTAD, G. A.**  
One-dimensional polarization distributions over four supernova remnants at 1418 MHz.  
09 p1598 A69-22185  
A measurement of the galactic magnetic field using the pulsating radio source PSR 0833-45.  
13 p2335 A69-27311  
Interferometric observations of the radio source VRO 42 22 01.  
17 p3026 A69-32861  
Circular polarization measurements of compact radio sources at 1420 MHz.  
20 p3606 A69-37831  
Polarization measurements of extragalactic radio sources at 3.12-cm wavelength.  
20 p3610 A69-38139  
East-west linear polarization distributions of radio galaxies at 1418 MHz.  
22 p4015 A69-40155
- SEIFERT, H. S.**  
Hybrid rocket theory and design.  
11 p1944 A69-25589  
Development of a laser-Doppler particle sensor for the measurement of velocities in rocket exhausts.  
[AIAA PAPER 68-723] 12 p2094 A69-26783  
Hopping transporters for lunar exploration.  
[AIAA PAPER 68-1139] 22 p3927 A69-40547
- SEIFF, A.**  
Direct measurements of planetary atmospheres by entry probes.  
[AAS PAPER 68-187] 02 p0311 A69-11472  
Measurements in the atmosphere of Mars.  
23 p4212 A69-41617
- SEIGEL, A. E.**  
An analytic and experimental study of the heat transfer and erosion in the NOL hypervelocity launcher.  
[AIAA PAPER 69-336] 13 p2242 A69-28272
- SEIGER, H. N.**  
Electrical characteristics of a sealed nickel-cadmium battery having a bipolar construction.  
23 p4072 A69-42283
- SEILER, K. III**  
Introduction to Systems Cost-Effectiveness.  
20 p3640 A69-37533
- SEILER, M. R.**  
Radio interferometry of random terrestrial backgrounds.  
20 p3506 A69-37712
- SEINO, K.**  
Lower ionosphere electron densities measured during the solar eclipse of November 12, 1966.  
12 p2073 A69-26861
- SEIREG, A.**  
Optimum design of rotating disks.  
[ASME PAPER 69-DE-1] 14 p2453 A69-28838
- SEISIAN, R. P.**  
Diamagnetic excitons in semiconductors /Diamagnitnye eksitony v poluprovodnikakh/.  
11 p1936 A69-24640
- SEITE, G.**  
Attitude restoration of a rocket probe tip by a stellar sensor /Reconstitution d'attitude d'une pointe de fusée-sonde par senseur stellaire/.  
[ONERA-TP-731] 17 p3001 A69-33220
- SEITTER, W.**  
Problems in spectral classification /Probleme der Spektralklassifikation/.  
06 p0999 A69-16974
- SEITUN, A.**  
Functional changes of somato-sensory system during deep sleep.  
22 p3872 A69-40161
- SEITZ, F.**  
Structure of solids.  
13 p2316 A69-27221
- SEJNOWSKI, T. J.**  
Intensities of radio recombination lines.  
14 p2517 A69-29088  
A theoretical analysis of methods of interpreting radio-line data from H II regions.  
22 p4025 A69-40645
- SEKANIAN, Z.**  
Total gas concentration in atmospheres of the short-period comets and impulsive forces upon their nuclei.  
23 p4221 A69-42387
- SEKANINA, Z.**  
On the perturbations of comets by near-by stars. II.  
01 p0153 A69-10871  
A dynamic investigation of comet Arend-Roland 1957 III.  
04 p0660 A69-15036  
Non-gravitational impulses on 20 short-period comets.  
04 p0660 A69-15037  
Splitting of the primary nucleus of the comet Ikeya Seki 1965f /Razdelenie pervichnogo iadra komety Ikeya-Seki 1965f/.  
14 p2524 A69-29710  
Dynamic effects of ejection phenomena in Halley's comet and the rotation of the cometary nucleus /Dinamicheskie efekty vybrosovykh iavlenii v komete Galleia i vrashchenie ee iadra/.  
14 p2524 A69-29712  
Nongravitational effects in cometary motion and the model of an arbitrarily rotating nucleus /Negravitatsionnye efekty v dvizhenii komet i model' proizvol'nogo vrashchaushchegosia iadra/.  
14 p2524 A69-29713  
Secular decline in the absolute brightness of comet Encke /Vekovoe padenie absolutnogo bleska komety Enke/.  
15 p2684 A69-30518
- SEKHON, K. S.**  
Noncontact temperature and heat flux measuring devices.  
15 p2607 A69-30154  
Temperature control of electronic components aboard a spacecraft.  
[AIAA PAPER 69-1015] 22 p3922 A69-40387
- SEKI, M.**  
A method of estimation of program fatigue life.  
21 p3846 A69-39810
- SEKI, N.**  
Torsional buckling of orthotropic circular cylindrical shells under internal pressure.  
22 p4042 A69-40171
- SEKI, R.**  
Multiple-scattering calculation of the K super minus light-nucleus scattering lengths.  
15 p2655 A69-30309  
Validity of approximations used in mesonic atom calculations.  
22 p3987 A69-41004
- SEKIDO, K.**  
Surface effects on breakdown characteristics of GaAs bulk diodes.  
05 p0733 A69-16561
- SEKIGUCHI, N.**  
Photographic photometry of Saturn's rings around the times of disappearance in 1966.  
08 p1381 A69-19791
- SEKIGUCHI, T.**  
Radiation fields from an electrical dipole moving in a compressible isotropic plasma.  
23 p4114 A69-41359  
Plasma generation by laser beam irradiation on a single solidified gas particle.  
24 p4354 A69-42645
- SEKIGUCHI, Y.**  
Japanese meteorological rocket sounding.  
20 p3543 A69-37795
- SEKIHARA, K.**  
The possibility of ozone measurements from satellites using the 1043 cm super minus super I band.  
16 p2786 A69-32633
- SEKINE, H.**  
Postbuckling behavior of thin curved panels under axial compression.  
20 p3629 A69-38112
- SEKIYA, T.**  
Thermal deformation of skew plates under radiant heating.  
22 p4044 A69-40599
- SEKULA, J.**  
Influence of structural differences of the gyral and sulcal areas of the acoustic projection cortex on primary induced acoustic responses.  
23 p4079 A69-41380
- SEKULER, R.**  
Size-detecting mechanisms in human vision.  
03 p0369 A69-13359  
Contrast response of human visual mechanisms sensitive to orientation and direction of motion.  
22 p3884 A69-40887
- SEKUNDOV, A. N.**  
The propagation of a turbulent jet in an opposing stream.  
07 p1118 A69-18396
- SELEZNEV, K. P.**  
Unsteady processes in a stage of a centrifugal compressor with a vaneless diffuser /Nestatsionarnye protsessy v stupeni tsentroběžnogo kompressora s bezlopatocnym diffuzorom/.  
15 p2547 A69-30073  
Theory and Design of Turbocompressors /Teoriia i raschet turbokompressorov/.  
20 p3459 A69-37238
- SELEZNEV, V. A.**  
An optical method of measuring the burning-surface temperature of condensed systems.  
13 p2379 A69-28453
- SELEZNEV, V. N.**  
Magnetic crystallographic anisotropy of lithium-gallium ferrite single crystals /Magnitnaia kristallograficheskaia anizotropiia monokristallov litii-galievyykh ferritov/.  
12 p2144 A69-26721  
Magnetocrystalline anisotropy of single crystals of lithium gallium ferrites.  
21 p3781 A69-39134
- SELF, S. A.**  
Waves on an electron beam in vacuo and in a plasma.  
07 p1189 A69-18657  
Low-frequency waves and instabilities on the positive column in a magnetic field. I - Analysis and study of axisymmetric modes. II - Study of asymmetric modes.  
11 p1929 A69-25268
- SELIANINA, V. I.**  
Nonuniform distribution of electrical properties in indium arsenide single crystals /Neodnorodnost' raspredelenia elektricheskikh svoystv v monokristallakh antimonida indii/.  
15 p2670 A69-31049
- SELIDOVKIN, A. D.**  
Theory of microfield in a plasma.  
02 p0285 A69-11568
- SELIFONOV, V. S.**  
Calculation of the flow parameters for a real gas /air/ /Raschet parametrov pri techenii real'nogo gaza /vozdukh/.  
24 p4244 A69-43088
- SELIGA, T. A.**  
Analysis and results of low-frequency CW rocket propagation experiments in the D region.  
01 p0076 A69-11232
- SELIGER, R. L.**  
Electric propulsion design optimization methodology.  
[AIAA PAPER 69-254] 09 p1569 A69-21879  
Analysis of the expected thrust misalignment of Kaufman thrusters.  
[AIAA PAPER 69-303] 10 p1753 A69-23362
- SELIM, A. A.**  
Generation of transverse waves by non-linear wave-wave interaction.  
01 p0127 A69-10280



## SELING, T. V.

An upper limit to the abundance of He super 3 in Messier 17. 10 p1785 A69-24098

## SELISSKII, I. A. P.

Study of atomic ordering effects in ternary solid solutions based on Ni sub 3 Fe, and alloyed with the group VI elements chromium, molybdenum, and tungsten /Issledovanie effektiv atomnogo uporiadocheniya v troinykh tverdykh rastvorakh na osnove Ni sub 3 Fe, legirovannykh elementami VI grupy - Khromom, molibdenom, vol'framom/. 11 p1904 A69-24705

## SELIVANENKO, A. S.

The problem of obtaining a laser with smooth tuning of the lasing frequency. IV /K probleme sozdaniya lazera s plynnoi perestroikoi chastoty generatsii. IV/. 20 p3554 A69-37723

Contribution to the problem of designing a laser with smooth emission-frequency retuning. V /K probleme sozdaniya lazera s plynnoi perestroikoi chastoty generatsii. V/. 21 p3739 A69-39539

## SELIVANOV, A. G.

Passage of a quasi-harmonic signal through a parametric limiter /Prokhozhenie kvazigarmonicheskogo signala cherez parametricheskii ogranichitel/. 13 p2236 A69-28573

## SELKE, W.

Review of the developmental status of solar electric engines in Germany /Ueberblick ueber den Entwicklungsstand solarelektrischer Antriebe in Deutschland/. [DGLR 69-021] 23 p4202 A69-41928

## SELL, G.

Capture and control in conservative dynamical systems. 05 p0826 A69-16462

## SELL, G. R.

A note on Volterra integral equations and topological dynamics. 04 p0626 A69-15288

## SELL, H. G.

Advanced processing technology and high temperature mechanical properties of tungsten base alloys /A review/. 07 p1165 A69-18792

## SELLARS, C. M.

Dynamic recrystallization in nickel and nickel-iron alloys during high temperature deformation. 19 p3344 A69-36147

## SELLEN, D. C.

Aberration of dielectric patches and rings. 07 p1111 A69-19530

## SELLEN, J. M., JR.

Operation of solar cell arrays in dilute streaming plasmas. [AIAA PAPER 69-262] 09 p1436 A69-21726  
Study of electric spacecraft plasmas and field interactions. [AIAA PAPER 69-276] 09 p1568 A69-21727  
Measurements of equilibration potential between a plasma "thrust" beam and a dilute "space" plasma. [AIAA PAPER 69-263] 09 p1568 A69-21728

## SELLERS, D. F.

A vibrating momentum exchange device. 09 p1538 A69-22435

## SELLERS, F. F., JR.

Error Detecting Logic for Digital Computers. 02 p0212 A69-11453

## SELLERS, W. D.

The statistical prediction of the vertical ozone distribution. 18 p3132 A69-35426

## SELLERS, W. H.

Derivation of reliability specifications for avionics systems. 15 p2581 A69-31136

## SELLMAIER, A.

Thermal plants for space-simulation chambers. 01 p0057 A69-11154

## SELLS, C. C., Jr.

Plane subcritical flow past a lifting aerofoil. 06 p0859 A69-17470

## SELLS, S. B.

Information load and three-man flight crews - An examination of the traditional organization in relation to current and developing airliners. 12 p2023 A69-26555

## SELTZER, D. D.

Correlation of conductivity to mechanical properties of age-hardenable aluminum alloys using eddy-current methods. 15 p2641 A69-31513

## SELTZER, M. S.

Techniques for transmission electron microscopy and etch pitting of CoO single crystals. 12 p2112 A69-25944

## SELTZER, S. L.

An airline looks at area navigation. 23 p4185 A69-41662

## SELTZER, S. M.

Developing an attitude control system for the Apollo Telescope Mount. 18 p3168 A69-34683

An attitude control system for large launch vehicles. 21 p3819 A69-39032

An attitude control system for large launch vehicles. 24 p4394 A69-43277

## SELVARAJAN, R.

Photolysis of vic-triazoles. 19 p3264 A69-35971

## SELVIN, M.

A manual and automatic terrain-following system for the C-5A transport. [AIAA PAPER 69-797] 19 p3367 A69-35633

## SELZER, E.

Microstructures at various latitudes and the spectral composition of the magnetic perturbations of February 1965 and March 1966 /Microstructures a diverses latitudes et composition spectrale des perturbations magnetiques de fevrier 1965 et mars 1966/. 01 p0069 A69-11126

## SELZER, H.

The unstable nature of the burning mechanism of AP-propellants. [AIAA PAPER 69-177] 06 p1036 A69-18063

## SEMAKOV, L. A.

Synthesis of a time-optimal second-order system with a controllable structure /K sintezu optimal'noi po bystrodeistviu sistemy vtorogo poriadka s upravlaemoi strukturoi/. 21 p3770 A69-38856

## SEMIKHIN, P. V.

Parameters and weight characteristics of Vernier engines. 21 p3785 A69-39093

## SEMIUK, V. F.

Certain characteristics of a plasma flow from a discharge in a magnetic field of up to 100 koe /Pro deiaii osoblivosti vitykannia plazmi z rozriadu, iakii znakhodit'sia u magnitnomu poli do 100 ke/. 08 p1370 A69-21075

## SEMIUTIN, I. P.

Experimental study in the simulation of various types of neurons /Eksperimental'noe issledovanie po modelirovaniu neuronov razlichnykh tipov/. 20 p3471 A69-37256

## SEMINOV, A. A.

Electromagnetic Wave Theory /Teoriia elektromagnitnykh voln/ 2nd revised and enlarged Edition/. 20 p3487 A69-37239

## SEMINOV, A. M.

Second virial coefficient of uncoupled atoms in a nonideal dissociating gas. 02 p0283 A69-11574

Contribution from the interaction of three atoms to the equation of state of a nonideal dissociating gas. 05 p0796 A69-15893

## SEMINOV, A. N.

The interaction of a shock wave in a body in the presence of ionization relaxation. 19 p3450 A69-36361

## SEMINOV, A. P.

X-ray television equipment for industrial defectoscopy. 18 p3138 A69-35113

## SEMINOV, A. S.

Investigation of ultrashort light pulses employing time-base image converter tube. 12 p2083 A69-26139

Dynamics of the emission of injection semiconductor lasers /Dinamika izlucheniia inzhetsionnykh poluprovodnikovykh lazerv/. 16 p2796 A69-31949

Investigation of the radiation pulsations of a CW GaAs injection laser. 18 p3154 A69-35495

Investigation of spike regime operation of the injection laser on gallium arsenide. 19 p3337 A69-36535

Investigation of the performance of a GaAs semiconductor injection laser in the pulsed mode of operation /Issledovanie raboty inzhetsionnogo PKG na GaAs v rezhime pul'satsii izlucheniia/. 22 p3963 A69-40603

## SEMINOV, D. E.

The spectral properties of tellurite glasses containing vanadium pentoxide. 14 p2468 A69-29329

## SEMINOV, N. A.

Wave parameters in coupled surface-wave waveguides /Parametry voln v svyazannykh volnovodakh poverkhnostnoi volny/. 13 p2223 A69-28570

## SEMINOV, S. S.

Experimental study of the nonequilibrium processes behind a shock wave in air and nitrogen by the shadow method /Eksperimental'noe issledovanie neravnovesnykh protsessov za udarnoi volnoi v vozdukhie i azote tenevym metodom/. 21 p3695 A69-38961

## SEMINOV, V. K.

Second experiment aimed at studying the constants of ion-molecule reactions directly in the ionosphere /Vtoroi eksperiment po issledovaniu konstant ionomolekuliarnykh reaktsii neposredstvenno v ionosfere/. 08 p1311 A69-21159

Ion composition of the upper atmosphere at altitudes of 130-155 km during the period of meteor shower Orionides activity. 15 p2603 A69-31406

Investigation of the elementary processes in the ionosphere by means of VV-type devices. 15 p2603 A69-31407

## SEMINOV, V. N.

Investigation of turbulent processes within a shock wavefront in a plasma /Issledovanie kharaktera turbulentnykh protsessov vo fronte udarnoi volny v plazme/. 18 p3180 A69-35017

## SEMINOV, V. V.

Study of an electrical discharge due to a laser spark /Issledovanie elektricheskogo razriada cherez lazernuiu iskru/. 21 p3740 A69-39552

## SEMINOVA, I. P.

Study of electrohydrodynamic flows at large electric Reynolds numbers /Issledovanie elektrogidrodinamicheskikh techenii pri bol'shikh elektricheskikh chislakh Reinal'dsa/. 13 p2305 A69-27379

Equations of electrohydrodynamics and transfer coefficients in a strong electric field /Uravenniia elektrogidrodinamiki i koeffitsienty perenosa v sil'nom elektricheskom pole/. 14 p2492 A69-29610

One-dimensional flows in electrohydrodynamics /Odnomernye techeniia v elektrogidrodinamike/. 18 p3181 A69-35315

## SEMINOVA, O. P.

Influence of electrode vapor on the electron density in a low-current arc discharge plasma in air /O vlianii parov elektrodov na konsentratsiiu elektronov v plazme nizkotochnogo dugovogo razriada v vozdukhel/. 01 p0128 A69-10433

## SEMINOVA, T. D.

Study of the working capacity of a human operator during 64-hour wakefulness /Issledovanie rabotosposobnosti cheloveka-operatora pri 64-chasovom lishenii sna/. 22 p3877 A69-40280

## SEMERENKO, V. V.

Effect of the polarity of indium antimonide on the external photoeffect in the X-ray spectral region /Efekt polarnosti antimonida indii na vneshnem fotoeffekte v rentgenovskoi oblasti spektra/. 15 p2667 A69-30076

## SEMERIA, R.

Theoretical and experimental determination of the limiting heat power transported by sodium heat pipes /Determination theorique et experimentale de la puissance thermique limite transferee par des caloducs a sodium/. 14 p2538 A69-29205

## SEMILETOV, S. A.

Variation of the resistance of indium arsenide films in a magnetic field /Izmenenie soprotivleniia plenok arsenida indii v magnitnom pole/. 01 p0136 A69-10254

Dislocations in epitaxial gallium arsenide. 06 p0981 A69-17891

- Electrical properties of epitaxial films of indium arsenide and antimonide.  
06 p0981 A69-17892
- Change of resistance of indium arsenide films in a magnetic field.  
09 p1559 A69-22647
- SEMINA, E. M.  
Changes in the enzymatic activity of cellular and sub-cellular structures in response to accelerations.  
10 p1645 A69-23496
- SEMINARA, J. L.  
Simulating the lunar astronaut's environment.  
06 p0906 A69-17388
- Control task performance in the lunar visual environment.  
12 p2059 A69-26554
- Effectiveness of space crew performance subsequent to sudden sleep arousal.  
19 p3263 A69-36453
- SEMIONOVA, I. P.  
Investigation into unidimensional stationary flows in electrohydrodynamics.  
12 p2135 A69-26398
- Electrohydrodynamic equations and transfer coefficients in a strong electric field.  
12 p2135 A69-26399
- SEMIROG-ORLIK, V. N.  
Creep and durability of VM-1 alloy.  
15 p2638 A69-30284
- SEMMLHACK, H. P.  
Analysis of intercept control techniques with computer generated movies.  
06 p0906 A69-17397
- SEMLAK, R. A.  
Pressure-formed parabolic reflectors for millimeter wavelengths.  
08 p1282 A69-20039
- SEMPLE, C. A.  
All-weather landing flight director and fault warning display simulator studies.  
01 p0010 A69-10455
- SEMPLE, J. M.  
Combustion of boron particles at atmospheric pressure.  
[AIAA PAPER 69-562] 16 p2880 A69-32741
- SEN GUPTA, R.  
Discussions on the gravitation of a cylindrically symmetric magnetic field.  
01 p0120 A69-10816
- SEN, A. K.  
A theory of geomagnetic micropulsations. I.  
02 p0244 A69-12395
- A theory of geomagnetic micropulsations. II.  
02 p0244 A69-12396
- Gravitational instability with Hall effect in a plasma.  
03 p0478 A69-13803
- The Hall effect and Kelvin-Helmholtz instability in a plasma.  
03 p0478 A69-13804
- SEN, C.  
RF impedance method for determining the electron density and collision frequency in a plasma.  
14 p2492 A69-29352
- SEN, H. K.  
Heating of the ionosphere and attenuation of the equatorial hydromagnetic waves.  
23 p4161 A69-42437
- SEN, K. K.  
Probabilistic model for transfer problem in an externally illuminated spherical shell atmosphere with a perfectly absorbing core.  
02 p0328 A69-12751
- Probabilistic model for radiative transfer problems for spherical shell medium.  
24 p4415 A69-43637
- SEN, P. C.  
A dual range multivibrator.  
06 p0896 A69-17474
- SEN, S. N.  
Breakdown of gases in a high-frequency electric field with and without a steady transverse magnetic field.  
07 p1194 A69-19415
- SENATOR, F. E.  
Improvement in effectiveness of an earth orbital mission through utilization of standby systems.  
19 p3430 A69-36010
- SENATOROV, K. IA.  
Optical quantum amplifier based on a GaAs injection laser /Opticheskii kvantovyi usitel' na osnove inzhetsionnogo lazera iz GaAs/.  
19 p3336 A69-36348
- SENATORSKI, A.  
Kinetic description of plasma in an external field. I.  
05 p0805 A69-16700
- SENATSKII, IU. V.  
Generation and amplification of ultrashort optical pulses.  
[IEEE PAPER H-12] 05 p0774 A69-16317
- Experiments on the observation of neutron emission at a focus of high-power laser radiation on a lithium deuteride surface.  
[IEEE PAPER O-11] 07 p1153 A69-19072
- Generation and amplification of high-intensity light pulses in neodymium glass.  
08 p1323 A69-19946
- Emission of a polymethine dye employed in a neodymium glass laser /Generatsiia polimetinovogo krasitelja, primeniamogo v lazere na neodimovom stekle/.  
21 p3739 A69-39542
- SENAY, L. C., JR.  
Increased blood osmolarity and its effect on respiration of dehydrating men.  
23 p4097 A69-42094
- SENDA, K.  
New experimental method for determining dynamic stress-strain relation of metals.  
03 p0524 A69-13065
- A family of integral transforms and some applications to physical problems.  
11 p1910 A69-25574
- SENDECKYJ, G. P.  
Statistical theory of elastic moduli of particulate composites.  
07 p1159 A69-18722
- Recent Russian work on thermoelastic properties of composites.  
08 p1339 A69-20500
- SENDELBECK, R. L.  
Remarks on the buckled shapes of thin-walled circular cylindrical and conical shells subjected to axial compression.  
19 p3443 A69-36793
- SENDERS, J. W.  
A queueing model of visual sampling experimental validation.  
02 p0202 A69-11954
- SENDROWICZ, H.  
Measurement of fatigue damage /La mesure de l'endommagement par fatigue/.  
07 p1135 A69-19216
- SENECHAL, M.  
Study of validity of logarithmic temperature laws /Etude de la validite des lois logarithmiques de temperature/.  
08 p1420 A69-19877
- SENETA, E.  
New analysis for the geomagnetic D sub st field of the magnetic storm on June 18-19, 1936.  
14 p2444 A69-29883
- SENFTLE, F. E.  
Infrared analysis of water in tektites and other glasses.  
10 p1778 A69-23413
- SENG, F. G.  
Data processing.  
19 p3280 A69-36315
- SENGBUSH, R. L.  
Simplified parameter quantization procedure for adaptive estimation.  
21 p3687 A69-39463
- SENGERS, J. V.  
Density dependence of experimental transport coefficients of gases.  
08 p1353 A69-21009
- SENGUPTA, D. L.  
Experimental study of a spherical array of circularly polarized elements.  
04 p0573 A69-14331
- Non-quasistatic analysis of the wave propagation along magnetized plasma columns surrounded by a dielectric medium.  
10 p1658 A69-24061
- Investigation of the parasitic loop counterpoise antenna.  
20 p3507 A69-37840
- SENGUPTA, P. R.  
Solar X-ray control of the D-layer of the ionosphere.  
03 p0500 A69-13224
- Rocket and satellite studies of solar X-ray flares.  
03 p0500 A69-13225
- Effect of lambda less than 10 angstrom solar X-rays on the ionosphere between 60 and 100 km.  
19 p3397 A69-36754
- SENIK, P. M.  
Analytical investigation of oscillatory processes in systems with nonlinear characteristics /Analiticheskoe issledovanie kolebatel'nykh protsessov v sistemakh s nelineinymi kharakteristikami/.  
17 p3007 A69-33914
- SENIOR, T. B. A.  
Target reflection properties.  
20 p3490 A69-37646
- SENITZKY, B.  
Noise in the presence of strong signals.  
02 p0211 A69-12448
- Sideband amplification at 258 GHz using a saturated gas resonance.  
07 p1145 A69-18479
- SENITZKY, I. R.  
Quantum optics. II.  
03 p0467 A69-13474
- SENKIV, V. A.  
Angular dependences of EPR line widths of Cr super 3 super plus in ZnWO sub 4 /Uglovyje zavisimosti shirin linii EPR Cr super 3 super plus v ZnWO sub 4/.  
10 p1743 A69-23131
- SENKO, E. E.  
Determination of the turbulence parameters from the vertical distribution of Tn and ThB in the ground layer /Opredelenie parametrov turbulentnosti po vertikal'nomu raspredeleniiu Tn i ThB v prizemnom sloe/.  
03 p0459 A69-13273
- The determination of turbulence parameters from the vertical distribution of Tn and ThB in the lower layer of the atmosphere.  
14 p2472 A69-28781
- SENNETT, R. E.  
Effects of hypervelocity impact on honeycomb structures.  
[AIAA PAPER 68-314] 02 p0345 A69-12389
- SENSBURG, O.  
Flutter induced by aerodynamic interference between wing and tail.  
11 p1991 A69-25517
- SENSICLE, A.  
Introduction to Control Theory for Engineers.  
13 p2238 A69-28345
- SENTIURIKHINA, L. N.  
Antifriction properties of hard lubricating coatings in an inert gas atmosphere and in a vacuum /Antifriktsionnye svoystva tverdykh smazochnykh pokrytii v atmosfere inernogo gaza i v vakuum/.  
13 p2269 A69-28053
- Behavior of solid lubricating films on a molybdenum disulfide base during friction under high-vacuum conditions /Povedenie tverdykh smazochnykh pokrytii na osnove disulfida molibdena pri trenii v usloviakh glubokogo vakuuma/.  
16 p2793 A69-31561
- SENTMAN, L. H.  
Rarefied flow past a sphere.  
04 p0542 A69-14731
- SEO, E. T.  
Development of new materials of construction for fuel cells.  
23 p4075 A69-42299
- SEPAN, A. V.  
MITOL - Machine independent telemetry oriented language.  
22 p3905 A69-40340
- SEPTIER, A.  
Study of energy spectra of charged particles emitted by a duoplasmatron-type discharge /Etude des spectres d'energie des particules charges emises par une discharge du type duoplasmatron/.  
14 p2501 A69-29955
- SEPUCHA, R. C.  
Accuracy of constant density and constant pressure assumptions for radiating shock waves.  
13 p2249 A69-28240
- SERABIAN, S.  
An assessment of education in nondestructive testing - Present status and the future needs.  
18 p3232 A69-34518



## SERAFIMOV, K.

On the properties and designing of aerial systems of the Cassegrain type for radio communication with objects in space.

[UN PAPER 68-95280] 01 p0043 A69-10481

Influence of the ionosphere of the earth and other planets on the maximal frequency in space communications.

[UN PAPER 68-95272] 01 p0029 A69-10529

Kinetic process balance in the ionosphere /Balans na kinetichnits protsesi v ionosferata/.

01 p0066 A69-10598

Variations of the negative ion coefficient in the ionosphere /V'rkuh izmeneniata na koefitsienta na otritsatelni ioni v ionosferata/.

01 p0066 A69-10599

Ionization index, electron formation, and effective recombination coefficient in the E sub 2-layer.

06 p0920 A69-17725

Brightness distribution of soft X-rays on the sun, inferred from ionospheric E-layer variations during an eclipse.

07 p1204 A69-18823

The middle and upper ionosphere at the time of the solar eclipse of May 20, 1966 /Srednata i visokata ionosfera po vreme na sl'ncevoto zat'mnenie na 20 mai 1966 g./.

13 p2255 A69-28541

Nonequilibrium processes of homonuclear oxygen combinations in the lower ionosphere /Neravnovesni protsesi na khomonuklearnite s'edineniia na kisloroda v niskata ionosfera/.

13 p2255 A69-28542

## SERAFIMOV, K. B.

Diurnal variations of the temperature in the middle ionosphere.

02 p0246 A69-12768

Dissociative velocity rates of oxygen and ozone in the ionosphere.

02 p0246 A69-12769

## SERAFINI, J. S.

Some observations on the relationship between instabilities and turbulence in plasma.

03 p0474 A69-13115

## SERAFINI, T. T.

Cryogenic Properties of Polymers, Proceedings of the NASA-Case Conference on the Properties of Polymers at Cryogenic Temperatures, NASA Lewis Research Center and Case-Western-Reserve University, Cleveland, Ohio, April 25-27, 1967.

05 p0784 A69-16485

Effect of film processing on cryogenic properties of poly(ethylene terephthalate).

05 p0785 A69-16490

## SERAGO, V. I.

Statistical studies of the current-voltage characteristics of zinc-doped diodes /Statisticheskie issledovaniia vol't-ampernykh kharakteristik diodov s primes'itu tsinka/.

05 p0732 A69-16425

Investigation of the transient characteristics of diodes with a negative resistance /Issledovanie perekhodnykh kharakteristik diodov s otritsatel'nyim soprotivleniem/.

10 p1662 A69-23157

## SERAI, V. M.

Diurnal rhythms and ionizing radiation effects.

15 p2557 A69-31458

## SERBU, G. P.

Explorer 35 measurements of low-energy plasma in lunar orbit.

05 p0825 A69-16278

## SERBYN, M. R.

Measurement of the phase of vibrational displacement by a laser interferometer.

20 p3538 A69-37320

## SERDIUK, N. I.

Glass-fibre laminates based on epoxy-organosilicon resins.

19 p3358 A69-35903

## SERDIUK, O. D.

Investigation of type M sub 3 X superconductors with two overlapping energy bands by the method of nuclear magnetic resonance.

07 p1198 A69-18513

## SERDIUK, V. V.

Trap mechanism of the isothermal drop of photocurrent in cadmium sulfide single crystals /Lovushechnyi mekhanizm izotermicheskogo spada fototoku monokristallov sul'fida kadmiiia/.

08 p1374 A69-21187

Phenomena induced by the capture of carriers injected into illuminated cadmium selenide single crystals /Iavlennia, obuslovlennye zakhvatom nositelei, inzhektirovannykh v osveshchennye monokristally selenida kadmiiia/.

09 p1555 A69-21506

Trapping mechanism of the isothermal decay of the photocurrent of cadmium sulphide single crystals.

18 p3183 A69-35156

## SERDIUKOV, P. N.

Study of the accuracy of velocity measurements by a suboptimal servosystem in the presence of correlated noise /Issledovanie tochnosti izmereniia skorosti v suboptimal'noi slediashechii sisteme pri nalichii korrelirovannogo shuma/.

15 p2567 A69-30341

## SERDOBOLSKII, V. I.

The problem of the distribution of intelligent life in the universe /Problema rasprostraneniia razumnoi zhizni vo vselennoi/.

13 p2353 A69-28435

## SEREBRENNIKOV, G. Z.

Concentration of thermal stresses at the edges of transverse holes in thin-walled components /Konsentratsiia termicheskikh napriazhenii v kromkakh poperechnykh otverstii tonkostennykh detailei/.

11 p1982 A69-24947

## SEREBRENNIKOVA, V. E.

High-melting-point oxide and carbide materials for electrode walls of MHD generators /Tugoplavkie oksinye i karbidnye materialy v elektrodnykh stenkakh MGD-generatorov/.

13 p2284 A69-27471

## SEREBRENY, S. M.

Studies for aerospace global cloud models.

02 p0275 A69-12381

## SEREBRIAKOV, V. A.

Study of the effectiveness of various types of polymethine dyes used in passive Q-switches of neodymium lasers /Issledovanie effektivnosti razlichnykh tipov polimetinovykh krasitelei, primeniamykh v passivnykh zatvorakh neodimovykh OKG/.

17 p2983 A69-33968

Stable passive Q-switch for a neodymium laser /Stabil'nyi passivnyi zatvor dlia neodimovogo lazera/.

17 p2983 A69-33969

## SEREBRIANIK, A. N.

Theory of an O-type backward-wave generator with electrostatic focusing of the electron beam and finite values of the amplification parameter /K teorii generatov obratnoi volny o tipa s elektrostatsicheskoi fokusirovki elektronogo potoka pri konechnykh znacheniiakh parametra usileniia/.

03 p0407 A69-13986

## SEREDA, E. M.

Cometary observations in 1964-1965 /Nabliudeniie komet v 1964-1965 gg./.

14 p2525 A69-29716

## SEREDENKO, M. M.

Characteristic of the blood oxygen parameters in dogs under conditions of a decrease in the oxygen partial pressure in the inhaled air /Kharakteristika kislevykh parametrov krovi u sobak v umovakh znizhennia partial'nogo tisku kisniu u vdikhuvanomovovitri/.

12 p2019 A69-26346

## SERENSEN, S. V.

Statistical evaluation of the fatigue properties of light alloys in connection with strength calculations.

17 p3052 A69-32979

## SERGEANT, R. J.

An experimental investigation of the hover and forward speed aerodynamic characteristics of several tracked air cushion vehicle (TACV) models.

[AIAA PAPER 69-750] 18 p3084 A69-34410

## SERGEEV, A. V.

Spectrographic method of analyzing the variations in cosmic-ray intensity /Spektrograficheskii metod analiza variatsii intensivnosti kosmicheskikh lucheii/.

10 p1759 A69-22836

## SERGEEV, L. V.

Optical cements transparent in the infrared.

08 p1336 A69-20387

## SERGEEV, S. I.

Stability of high-speed rotors with sliding bearings /Problema ustoiichivosti bystrokhodnykh rotorov s oporami skol'zheniia/.

04 p0607 A69-15163

## SERGEEV, V. I.

Capacitance sensor of the vertical employing a flexible electrode /Emkostnyi datchik vertikal'i s uprugim elektrodom/.

23 p4163 A69-41555

## SERGEEV, V. L.

Experimental investigation of heat transfer in the region of a stagnation point.

04 p0544 A69-15413

## SERGEEV, V. S.

Radiation properties of type Kh18N9T stainless steel with heating in air.

03 p0453 A69-1415

Periodic solutions of the equations of motion of a heavy solid body around a fixed point /Periodeskikh resheniia kh uravnenii dvizheniia tiag-zhelogo tverdogo tela vokrug nepodvizhnoi tochkii/.

14 p2445 A69-28896

## SERGEEVA, G. A.

Cosmic ray anisotropy and Forbush effects during a solar activity minimum /Anizotropiia kosmicheskikh lucheii i efekty Forbusha v minimume solnechnoi aktivnosti/.

10 p1758 A69-22835

Effect of the sectoral structure of the interplanetary magnetic field on the cosmic ray intensity and geomagnetic field /Vliianie sektoral'noi struktury mezhplanetnogo magnitnogo polia na intensivnost' kosmicheskikh lucheii i magnitnoe pole zemli/.

10 p1769 A69-23905

## SERGEEVA, N. I.

CW laser employing LaNa/MoO sub 4/ sub 2 - Nd super 3 super plus crystals for operation at 300 K /Opticheski kuantovyi generator nepreryvnogo deistviia na osnove kristallov LaNa/MoO sub 4/ sub 2 - Nd super 3 super plus, rabotaiushchii pri 300 deg K/.

06 p0934 A69-17262

## SERGEEVICH, V.

Estimation of the spectral brightness and transparency of noctilucent clouds /Otsenka spektral'noi iarkosti i prozrachnosti serebristyykh oblakov/.

18 p3130 A69-35148

## SERGEEVICH, V. N.

The phenomenon of the "luminous particles."

07 p1222 A69-19617

## SERGEYEVSKY, A. B.

Circumjovian powered and free-return trajectories.

[AAS PAPER 68-117] 21 p3805 A69-39207

## SERGIENKO, A. V.

The effect of high oxygen concentrations on the animal organism.

08 p1262 A69-19831

## SERGINOV, M.

Effective mass of electrons in cadmium arsenide /Efektivnaia massa elektronov v arsenide kadmiiia/.

13 p2318 A69-27897

Electron and lattice heat conductivity of n-Cd sub 3 As sub 2 at low temperatures /Elektronnaia i reshetochnaia teploprovodnost' n-Cd sub 3 As sub 2 pri nizkikh temperaturakh/.

16 p2824 A69-31568

## SERGO, J. R.

Optimum power allocation for phase and synchronization error in a two channel system.

19 p3274 A69-36288

## SERIAKOV, K. I.

Boundary layer at a tube wall behind a shock wave propagating in a gas-vapor mixture /Pogranichnyi sloi na stenke truby za udarnoi volnoi, rasprostraniasheisia v parogazovoi smesi/.

09 p1480 A69-21591

Thermodynamics of a dense plasma.

11 p1922 A69-24232

Thermodynamic stability of a dense equilibrium plasma /K voprosu o termodinamicheskoi ustoiichivosti plotnoi ravnovesnoi plazmy/.

11 p1928 A69-25234

## SERIAPIN, A. D.

Dynamics of the elimination of certain products of metabolism in humans kept in isolation.

10 p1646 A69-23508

## SERIKOV, V. K.

Determination of heat capacity of posistors /Opredelenie teploemkosti pozistorov/.

01 p0038 A69-10098

## SERIS

Resistance of the human body to high accelerations of short duration /Resistance du corps humain aux accelerations elevees et de courte duree/.

13 p2215 A69-28591

- Comparative study of the effects of three hypnosis-inducing agents on reaction and response times /Etude comparative de trois hypogènes sur les temps de réaction et de réponse/.  
21 p3661 A69-39274
- ERIS, H.**  
The role of radiology in medical investigations after ejection of military jet pilots /La part de la radiologie dans l'enquête médicale après éjection des pilotes militaires d'avions à réaction/.  
24 p4266 A69-43379
- Human resistance to accelerations of high intensity and short duration - Mechanical and circulatory effects /Resistance du corps humain aux accélérations élevées de courte durée - Effets mécaniques et hémodynamiques/.  
24 p4266 A69-43380
- ERIS, H.-J.**  
Mechanical vibrations - Effects on man, safety measures /Les vibrations mécaniques - Action sur l'homme, prévention/.  
19 p3259 A69-35605
- ERKOV, B. B.**  
Combustion of condensed systems in a field of mass forces /Goreníe kondensirovannykh sistem v pole masovykh sil/.  
11 p2001 A69-25195
- SERKOWSKI, K.**  
Changes in polarization of the R Coronae Borealis star by Sagittarii.  
09 p1603 A69-22265  
Wavelength dependence of polarization. XIII - Interstellar extinction and polarization correlations.  
12 p2153 A69-25809  
Polarimetric observations of magnetic stars with a two-channel polarimeter.  
13 p2347 A69-27713  
Changes in polarization of T Tauri stars.  
15 p2694 A69-30882  
The occultation of BD -17 deg 4388 by Neptune. II.  
17 p3041 A69-33815
- SERLEMITOS, P.**  
Cosmic X-ray bremsstrahlung associated with suprathermal protons.  
22 p4006 A69-40643
- SERLEMITOS, P. J.**  
Iron line emission from X-ray sources.  
09 p1580 A69-22231  
Pulsed X-ray emission of NP 0532 in March 1968.  
20 p3590 A69-37574
- SERLIN, R.**  
Magnetospheric electric field measurements with balloons.  
22 p3939 A69-40514
- SEROLD, A. C.**  
Planetary atmosphere determination error analysis using Kalman filter.  
02 p0331 A69-12806
- SEROUSI, S.**  
Cutaneous circulation during adaptation to high altitude /La circulation cutanée au cours de l'adaptation à l'altitude/.  
23 p4098 A69-42106
- SEROVA, A. A.**  
Reliability in the elimination of multivaluedness in phase measurements /O nadezhnosti ustraneniia mnogoznachnosti fazovykh izmerenii/.  
02 p0206 A69-11603  
The reliability of eliminating phase measurement ambiguities.  
11 p1835 A69-24710
- SERPICO, J. C.**  
Experimental studies of the elastic stability of three dimensionally reinforced composite shells. [AIAA PAPER 69-122]  
06 p1029 A69-18216
- SERRES, J.**  
Holographic recordings in spatially incoherent light /Enregistrement d'hologrammes en lumière spatialement incohérente/.  
12 p2090 A69-26293
- SERREZE, H.**  
GaSb-ZnTe heterojunction.  
02 p0299 A69-12408
- SERRIN, J.**  
The behaviour of similar solutions in a compressible boundary layer.  
03 p0413 A69-13013  
The existence of similar solutions for some laminar boundary layer problems.  
05 p0751 A69-16463
- The problem of Dirichlet for quasilinear elliptic differential equations with many independent variables.  
14 p2471 A69-29599
- SERSIC, J. L.**  
Generalization of the Navier-Stokes equations for a self-gravitating fluid /Generalización de las ecuaciones de Navier-Stokes para un fluido autogravitante/.  
04 p0588 A69-14699  
The southern peculiar galaxy NGC 6438 /Iuzhnaia pekuliarnaia galaktika NGC 6438/.  
12 p2169 A69-27059  
Evolution of galaxies and formation of stars /Evolución de galaxias y formación de estrellas/.  
23 p4213 A69-41716  
Hydromagnetic stability of a plasma in a gravitational field.  
23 p4213 A69-41717
- SERTOOUR, G.**  
Materials utilized in the Concorde /Les matériaux utilisés sur Concorde/.  
15 p2639 A69-30464
- SERVANT, C.**  
Inhibiting influence of a two-stage thermal treatment on the extent of the swelling and porosity linked to the Kirkendall effect developing during sintering of mixtures of iron and nickel powders /Influence inhibitrice d'un traitement thermique en deux étapes sur l'importance du gonflement et de la porosité liés au phénomène Kirkendall développé lors du frittage de mélanges de poudres de fer et de nickel/.  
05 p0782 A69-16616
- SERVANTIE, B.**  
Possible biological and physiopathological effects of the UHF electromagnetic radiation of radar antennas /Effets biologiques et physio-pathologiques éventuels des rayonnements électromagnétiques U.H.F. des "aériens-radars"/.  
24 p4273 A69-42996
- SERWACH, A.**  
Dynamic characteristics of a long fluid line /Właściwości dynamiczne hydraulicznej linii długiej/.  
16 p2771 A69-32066
- SESAN, A.**  
Analysis of jointed three-dimensional structures by transfer matrices /Rezolvarea structurilor spațiale articulate prin matrici de transfer/.  
23 p4236 A69-42485
- SESHADRI, S. R.**  
Numerical and asymptotic solutions of the dispersion equation for dipolar surface waves along a magnetoplasma column.  
06 p0968 A69-17774  
Spectrum of Cerenkov radiation in a warm anisotropic plasma.  
13 p2307 A69-27964  
Surface waves guided by a plane ungrounded magnetoplasma slab.  
13 p2308 A69-27966  
Plane wave reflection and transmission by a unidirectionally conducting screen.  
14 p2421 A69-29547
- SESHADRI, V.**  
Further correlations between time domain and frequency domain parameters for linear control systems.  
02 p0225 A69-12026  
Response optimization of feedback control systems with reference to single-time-constant ideal.  
08 p1298 A69-20855
- SESHAGIRI RAO, S. V.**  
Hydromagnetic natural convection flow of a non-Newtonian fluid as affected by electrically conducting walls.  
10 p1728 A69-23237
- SESHAGIRI, N.**  
Hypercorrelation - A concept for system characterization.  
18 p3236 A69-35236
- SESSEN, L.**  
An improved all-equipments reliability tests plan.  
24 p4321 A69-43203
- SESTERO, A.**  
Longitudinal inhomogeneities in Q-machines.  
14 p2502 A69-29959  
A Vlasov-equation study of the geomagnetic ring current.  
15 p2598 A69-31218
- SESTRORETSKII, B. V.**  
Investigation of Gunn-effect pulse generators operating at decimeter wavelengths /Issledovanie impul'snykh generatorov Ganna detsimetrovogo diapazona voln/.  
06 p0895 A69-17459
- A study of decimeter-wave pulsed Gunn oscillators.  
20 p3508 A69-37942
- SETH, B. R.**  
Space transitions.  
19 p3445 A69-36811
- SETHI, D. S.**  
Photolysis of CO sub 2 in far ultraviolet.  
03 p0381 A69-13318
- SETIUKOV, A. I.**  
Influence of the base width on the transistor parameters in the microampere current range /O vlianii shiriny bazy na parametry tranzistora v mikroampernom diapazone tokov/.  
12 p2042 A69-26879
- SETOGUCHI, K.**  
Stress analysis of orthotropic plates.  
12 p2188 A69-27100
- SETOGUTI, K.**  
Stress analysis of orthotropic plates - On the problems for lateral bending and plane thermal stress of rectangular plate.  
01 p0168 A69-10416
- SETTE, D.**  
Interferometric study of phase fluctuations of a laser beam through the turbulent atmosphere.  
01 p0091 A69-10845  
Light scattering by particles suspended in a turbulent fluid.  
07 p1157 A69-19417  
On the possibility of measuring optical visibility by using a ruby laser.  
08 p1327 A69-21089  
Phase fluctuations of laser beam propagating in turbulent atmosphere.  
17 p2927 A69-33855
- SETTLES, J. E.**  
Deficiencies in the testing and classification of dangerous materials.  
04 p0645 A69-14471
- SETTY, C. S. G. K.**  
Collision frequency of electrons in the F-region.  
16 p2779 A69-32197
- SETZER, D. E.**  
Comparison of measured and predicted aerosol scattering functions.  
21 p3719 A69-39774
- SEVASTIANENKO, V. G.**  
Study of the heat transfer in a gas flow in a tube, taking radiation into account /Issledovanie teploobmena s uchetom izlucheniia pri techenii gaza v tube/.  
04 p0686 A69-14993  
Electric arc in a hydrogen flow at high pressure /Elektricheskaiia duga v potoke vodoroda pri vysokom davlenii/.  
13 p2305 A69-27387
- SEVASTIANOV, A. P.**  
Experimental investigation of an injector model as a vaporizer for MHD systems /Eksperimental'noe issledovanie modeli inzhektora kak razgonnogo ustroistva dlia MGD-ustanovok/.  
06 p0871 A69-17918  
Determination of the local parameters of a flow in the mixing chamber of a vaporizer /Opredelenie lokal'nykh parametrov potoka v kamere smesheniia razgonnogo ustroistva/.  
06 p0871 A69-17919  
Method of designing a simple injector /Metodika rascheta prostoishego inzhektora/.  
06 p0872 A69-17920  
Experimental investigation of a wet-steam injector /Eksperimental'noe issledovanie parovodianogo inzhektora/.  
13 p2246 A69-27490
- SEVERDENKO, V. P.**  
Structure of Thin Metal Films /Struktura Tonkikh Metallicheskh Plenok/.  
01 p0140 A69-11106
- SEVERIN, H.**  
Plane reflector with variable reflection coefficient for electromagnetic centimeter waves.  
03 p0406 A69-13938
- SEVERNE, G.**  
Non-equilibrium statistical mechanics and gravitational interactions.  
02 p0323 A69-12273
- SEVERNYI, A.**  
On the lithium abundance in sunspots and the undisturbed solar atmosphere.  
05 p0821 A69-15850  
The magnetic fields and proton flare of 7 July 1966.  
10 p1762 A69-23726



- The fine structure of solar magnetic fields.  
22 p4010 A69-39990
- SEVERNYI, A. B.**  
Magnetic asymmetry and fluctuations of the general magnetic field of the sun /Magnitnaia asimmetriia i kolebaniia obshchego magnitnogo polia solntsa/.  
04 p0651 A69-14367  
Space observations needed for improving our knowledge of solar flares.  
05 p0814 A69-15859  
Mass motions in flares and moustaches indicated by special spectral features.  
06 p0994 A69-17432  
Solar magnetic field /Magnitnoe pole solntsa/.  
09 p1593 A69-21582  
Solar flares and magnetic fields.  
24 p4370 A69-43606
- SEVEROV, L. A.**  
Gyroscopic stabilization of a rotating body /K voprosu giroskopicheskoi stabilizatsii vrashchayushchegosia tela/.  
13 p2259 A69-27428  
Drifts of a triaxial static gyrostabilizer under the action of an external random perturbation along a single stabilization axis /Ob ukhodakh trekhosnogo staticheskogo girostabilizatora pri deistvii vneshnego sluchainogo vozmushcheniia po odnoi osi stabilizatsii/.  
19 p3311 A69-36195
- SEVERSIKE, L. K.**  
Optimization of the parking orbit orientation for a three-dimensional capture-escape mission utilizing Davidson's method.  
[AIAA PAPER 69-918] 21 p3808 A69-39347
- SEVIN, E.**  
Optimum performance bounds and synthesis of dynamic systems.  
18 p3106 A69-34663
- SEVIORA, K.**  
Equivalent circuit for parallel conductor array.  
04 p0576 A69-14756
- SEVOSTIANOV, G. D.**  
Flow of a sonic free gas stream around a profile.  
07 p1050 A69-18740  
Examples of transonic ideal gas flows with shock waves /Primery okolozvukovykh techenii ideal'nogo gaza so skachkom uplotneniia/.  
11 p1820 A69-25468
- SEVY, J. L.**  
The effect of limiting a biphasic or quadriphase signal plus interference.  
14 p2413 A69-29483
- SEWAILEM, M. R.**  
Air-cushion effect in the explosive forming of metal sheet. I.  
06 p0930 A69-17001  
Air-cushion effect in the explosive forming of metal sheet. II.  
06 p0931 A69-17526
- SEWARD, F. D.**  
X-ray airglow in the daytime sky.  
02 p0307 A69-12022  
The soft X-ray spectrum of SCO XR-1.  
02 p0309 A69-12711  
A search for soft X-rays from the Galaxy.  
07 p1204 A69-18599  
Simultaneous observations of the optical and X-ray spectra of Sco XR-1.  
07 p1220 A69-19391  
Detection of X-rays from the Large Magellanic Cloud.  
10 p1770 A69-24093  
Further simultaneous observations of the optical and X-ray spectra of Sco X-1.  
15 p2676 A69-30885
- SEWELL, F. A., JR.**  
Charge storage model for variable threshold FET memory element.  
10 p1742 A69-22947  
An integrated nonvolatile read-write memory with addressing.  
17 p2942 A69-34120
- SEWELL, J. I.**  
Synthesis of multiple loop feedback systems. I.  
10 p1667 A69-24037  
Synthesis of multiple loop feedback systems. II.  
10 p1667 A69-24038
- SEWELL, M. J.**  
A method of post-buckling analysis.  
24 p4396 A69-42730
- SEWELL, R. G. S.**  
Response of structures to blast - A new criterion.  
04 p0671 A69-14476
- SEWING, K.**  
Spectroscopic investigations in a thermionic converter plasma.  
14 p2491 A69-29259
- SEXLI, H.**  
Directional characteristics of lunar nighttime radiation.  
[AIAA PAPER 69-597] 17 p3032 A69-33276  
A crater model for lunar thermal radiation.  
[AIAA PAPER 69-598] 17 p3033 A69-33285
- SEXLI, R. U.**  
Production of particles by gravitational fields.  
17 p3008 A69-33003  
Directional characteristics of lunar nighttime radiation.  
[AIAA PAPER 69-597] 17 p3032 A69-33276  
A crater model for lunar thermal radiation.  
[AIAA PAPER 69-598] 17 p3033 A69-33285  
The lunar photometric function.  
[AIAA PAPER 69-596] 17 p3033 A69-33308  
An exact solution for thermal conduction through a two-dimensional eccentric constriction.  
18 p3228 A69-34375
- SEXTON, M. C.**  
Measurement of plasma electron distributions using microwave cavities.  
02 p0290 A69-12404  
A comparison of frequency and current modulation methods of observing the internal resonances in a plasma column.  
08 p1365 A69-20552  
Electron-temperature, density and gas-temperature measurements in an argon afterglow.  
15 p2658 A69-30173
- SEYBOLT, A. U.**  
A transmission electron microscopic study of some ion-nitrided binary iron alloys and steels.  
06 p0942 A69-17224
- SEYER, F. A.**  
Turbulence phenomena in drag reducing systems.  
15 p2590 A69-30003
- SEYMOUR, P. A. H.**  
Spherical harmonic analysis of interstellar polarization.  
08 p1390 A69-20390
- SEYMOUR, R.**  
Designing with diff-amp and op-amp ICs.  
11 p1857 A69-25664
- SFORZA, P. F.**  
Nonlinear interaction of a microwave field with a plasma slab in a waveguide.  
16 p2749 A69-31703
- SFORZA, P. M.**  
Coupled radiation and conduction in free mixing.  
02 p0354 A69-12504  
Some remarks on three-dimensional wakes and jets.  
02 p0190 A69-12549  
Turbulent mixing - A review, reevaluation, and extension.  
[AIAA PAPER 69-31] 06 p0915 A69-18223  
Chemical reactions in compressible turbulent mixing flows.  
[AIAA PAPER 69-537] 16 p2747 A69-32701  
The wall wake - Flow behind an obstacle on a flat surface.  
18 p3083 A69-34403  
A new ferroelectric transducer for use in heat transfer and flow studies.  
19 p3307 A69-35749  
A quasi-axisymmetric approximation for turbulent, three-dimensional jets and wakes.  
23 p4060 A69-41908
- SHABADASH, A. N.**  
Reaction of epoxy and polyester resins with glass fibre.  
19 p3358 A69-35902
- SHABALIN, E. P.**  
Mechanism of generation of ultrahigh-energy muons with nearly isotropic azimuthal distribution by cosmic rays.  
09 p1581 A69-22530
- SHABALIN, V. D.**  
Dependence of the shape of a nighttime atmospheric on its direction of arrival /Zavisimost' formy nochnogo atmosferyka ot napravleniia ego prikhoda/.  
22 p3941 A69-40961
- Effect of the sphericity of the earth on the forms of terrestrial atmospheres /Vlianie sferichnosti zemli na formy zemnykh atmosferikov/.  
23 p4157 A69-41860
- SHABALIN, V. I.**  
The mechanics of metal fatigue at stresses above the yield point /O mekhanizme ustalosti metallov pri napriazheniakh vyshhe predela tekuchestii/.  
13 p2359 A69-2729
- SHABANOV-KUSHNARENKO, I. U. P.**  
The problem of mathematical simulation of human vision /O zadache matematicheskogo modelirovaniia zreniia cheloveka/.  
23 p4109 A69-41978  
Simulation of the statics of hearing and vision adaptation /Modelirovanie statiki adaptatsii slukha i zreniia/.  
23 p4109 A69-41979  
Simulation of the dynamics of vision and hearing adaptation /Modelirovanie dinamiki adaptatsii slukha i zreniia/.  
23 p4110 A69-41984
- SHABANOV, V. N.**  
Pulsed parametric generation in distributed systems.  
16 p2758 A69-31796
- SHABANSKII, V. P.**  
Structure of the geomagnetic field at great distances from the earth /O strukture geomagnitnogo polia na bol'shikh rasstoianiiakh ot zemli/.  
02 p0236 A69-11655  
Topology of the particle drift envelopes in the magnetosphere /Topologiia obolochek dreifa chastits v magnitosfere/.  
09 p1574 A69-21521  
Motion of charged particles in the geomagnetic field /O dvizhenii zaryazhennykh chastits v geomagnitnom pole/.  
10 p1756 A69-22818  
Structure of the geomagnetic field at great distances from the earth.  
13 p2256 A69-28686  
Displacement of the polar auroral belt /Smeshchenie polosy poliarnykh siiani/.  
14 p2436 A69-29059  
Topology of the drift shells of particles in the magnetosphere.  
16 p2851 A69-32516
- SHABASHOV, V. I.**  
Experimental study of the electrical and thermal conductivity coefficients of an air plasma /Eksperimental'noe issledovanie koefitsientov elektroprovodnosti i teploprovodnosti plazmy vozdukh/.  
15 p2663 A69-30979
- SHABELNIKOV, A. V.**  
Refraction of electromagnetic waves in the earth's atmosphere in the presence of stratified discontinuities /Refraktsiia elektromagnitnykh voln v atmosfere zemli pri nalichii sloistykh neodnorodnostei/.  
06 p0887 A69-17450  
Refraction on electromagnetic waves in the earth's atmosphere in the presence of layered inhomogeneities.  
20 p3496 A69-37935
- SHABELNIKOVA, M. V.**  
Nature of the relationship between air circulation in the troposphere and stratosphere of different regions of the Northern Hemisphere /Kharakter vzaimosviasi tsirkulatsii vozdukh v troposfere i stratosfere razlichnykh raionov severnogo polushariia/.  
14 p2477 A69-29829
- SHABLI, O. N.**  
Determination of the carrying capacity of shallow shells of revolution of variable thickness /Opredelenie nesushchei sposobnosti pologikh obolochek vrashcheniia peremennoi tolshchiny/.  
18 p3225 A69-35370
- SHACKEL, B.**  
Man-computer interaction - The contribution of the human sciences.  
24 p4273 A69-43015
- SHACKELFORD, J. F.**  
Relative energies of /1100/ tilt boundaries in aluminum oxide.  
17 p2993 A69-34191
- SHACKLE, P. W.**  
C.W. anomalous-mode operation in silicon planar IMPATT diodes.  
17 p2934 A69-32846
- SHADE, A. H.**  
Measurement of temperatures associated with bubbles in subcooled pool boiling.  
[ASME PAPER 68-HT-47] 13 p2374 A69-27779

- SHADMAN, D.**  
Method of orthogonal polynomials in plane theory of elasticity.  
17 p3067 A69-34144
- SHAFAL, L.**  
Application of coordinate transformation to two-dimensional scattering and diffraction problems.  
10 p1657 A69-23860
- SHAHER, B. P.**  
Two-dimensional stress wave propagation in thick multilayered cylindrical shells.  
11 p1991 A69-25511
- SHAHER, IU. G.**  
Radiation bursts in the subpolar stratosphere.  
06 p0921 A69-17744  
Monitoring recorder of cosmic rays.  
12 p2094 A69-26697  
Solar protons in the subpolar stratosphere during a solar activity minimum /Solnechnye protony v subpoliarnoi stratosfere v period minimuma solnechnoi aktivnosti/.  
20 p3587 A69-37044  
Radiation effects of the American high-altitude thermonuclear explosion, "Star Fish," measured by the "Cosmos-6" satellite.  
20 p3532 A69-37960  
Radioactivity of the Cosmos 6 satellite and the probable points of radioactive debris collection at altitudes from 300 to 350 km /Radioaktivnost' iz "Kosmos-6" i predpolagaemye mesta nabora radioaktivnykh oskolkov na vysote 300-350 km/.  
23 p4205 A69-41836
- SHAFFER, B. W.**  
Elastic-plastic stress distribution within reinforced plastics loaded normal to its internal filaments.  
02 p0347 A69-12513
- SHAFFER, C. V.**  
Multiloop distributed RC active networks for low parameter sensitivity with low amplifier gain.  
18 p3111 A69-34679
- SHAFFER, H. W.**  
Multifunction receiver system for integrated tracking, telemetry and ranging data acquisition.  
07 p1081 A69-19101
- SHAFIEV, R. A.**  
Some iteration methods of solving non-linear equations with non-differentiable operators.  
18 p3164 A69-34707
- SHAFRAN, J. S.**  
Construction of the minimal time control for processes with bounded control amplitudes and rates.  
20 p3509 A69-37139  
An approximate minimal time closed-loop controller for processes with bounded control amplitudes and rates.  
24 p4293 A69-43304
- SHAFRANOV, V. D.**  
Flute instability of a current-carrying curved plasma column.  
02 p0289 A69-12175  
Influence of ballooning effects on plasma stability in closed systems.  
06 p0965 A69-17519
- SHAFRANOVSKAIA, I. V.**  
Effect of the spatial inhomogeneity of a laser field on the amplification saturation /Vliianie prostranstvennoi neodnorodnosti polia lazera na nasyshchenie usileniia/.  
21 p3740 A69-39549
- SHAHRIN, IU. A.**  
Problems of ozone circulation in the earth's atmosphere /Problemy tsirkulatsii ozona v zemnoi atmosfere/.  
14 p2442 A69-29830
- SHAHRIR, U.**  
Results of micrometeoroid collection experiments flown on rockets and satellites.  
15 p2700 A69-31440  
Free molecular flow effects in cloud physics.  
24 p4345 A69-43145
- SHAGISULTANOVA, E. A.**  
The effect of the "age" of solutions on the catalytic activity of complex cobalt /III/ compounds.  
17 p2988 A69-33433
- SHAGURIN, I. I.**  
"Diode" switching of a transistor in an integrated circuit /O "diodnom" vkluchanii transistora v integral'noi skhemke/.  
05 p0730 A69-16217
- SHAH, A.**  
Noise reduction by gradual memorization.  
02 p0212 A69-12606
- SHAH, A. H.**  
Three-dimensional and shell-theory analysis of elastic waves in a hollow sphere. I.  
[ASME PAPER 69-APMW-7]  
24 p4402 A69-43105  
Three-dimensional and shell-theory analysis of elastic waves in a hollow sphere. II.  
[ASME PAPER 69-APMW-8]  
24 p4402 A69-43106
- SHAH, C. G.**  
Bending of swept cantilever thin elastic plates.  
20 p3621 A69-37207
- SHAH, D. O.**  
Interaction of uranyl ions with phospholipid and cholesterol monolayers.  
11 p1832 A69-25641
- SHAH, G. A.**  
Extinction in the far ultraviolet.  
10 p1781 A69-23674
- SHAH, G. M.**  
The second Umkehr observed in zenith sky twilight and its interpretation.  
16 p2786 A69-32634
- SHAH, H. C.**  
Dynamic stability of thin circular plates subjected to purely stochastic radial excitation.  
11 p1990 A69-25507
- SHAH, N. J.**  
Polarization of radio pulses from extensive air showers.  
04 p0595 A69-15425
- SHAH, P. L.**  
Gunn effect bibliography.  
05 p0810 A69-16565
- SHAH, R. P.**  
Small-amplitude frequency behavior of fluid lines with turbulent flow.  
[ASME PAPER 69-FE-11]  
20 p3516 A69-37988
- SHAHAB, L.**  
Release of noradrenalin from the dog heart after a temporary occlusion of coronary artery /Noradrenalinabgabe aus dem Hundeherzen nach voruebergehender Okklusion einer Koronararterie/.  
23 p4092 A69-42053
- SHAHADY, P.**  
Complex variable theory and elastic stability problems.  
09 p1615 A69-21921
- SHAHINIAN, P.**  
Fatigue crack growth rates in Type 316 stainless steel at elevated temperature as a function of oxygen pressure.  
17 p2987 A69-33074  
Influence of an oxygen atmosphere on surface slip in fatigue of Inconel X-750 at 500 C.  
20 p3558 A69-36966  
The weakening effect of oxygen on nickel in creep rupture.  
23 p4176 A69-41504
- SHAHROKHI, F.**  
Quantitative gas-liquid chromatography of sulfur containing amino acids.  
13 p2217 A69-28259  
Thermocouple total-temperature, probe-radiation errors.  
16 p2789 A69-31903  
An investigation of radiative heat transfer in participating media.  
16 p2878 A69-31925  
An investigation of radiative heat transfer in absorbing, emitting, and scattering media.  
[AIAA PAPER 69-626]  
17 p3073 A69-33297  
Comparison of the radiation heat transfer in plane and spherical geometries with anisotropic, isotropic scattering and no scattering assumption.  
23 p4239 A69-41632
- SHAIKENKO, A. I. A.**  
Stationary and dynamic properties of electrolytic vertical sensors /Sticheskie i dinamicheskie svoistva elektroliticheskikh datchikov vertikal'/.  
14 p2446 A69-28925
- SHAIIDOROV, IU. I.**  
Radiosensitivity of potatoes to gamma-ray and proton irradiation applied to whole tubers and to isolated eyes before planting /Radiochuvstvitel'nost' kartofelia k gamma-lucham i protonam pri predposadochnom obluchenii tselnykh klubnei i izolirovannykh glazkov/.  
05 p0709 A69-16511  
Change in the nature of the radioprotective effect of propyl gallate during proton and gamma irradiation of potatoes.  
08 p1262 A69-19927  
Radiosensitivity of potatoes to gamma and proton irradiation applied to whole tubers and isolated eyes before planting.  
18 p3095 A69-34730
- SHAIIDOROVA, V. V.**  
Isolation of metabolic products from culture broths of *Chlorella*.  
08 p1262 A69-19833  
Bactericidal effect of silver-coated activated carbons and ion-exchange resins /O bakteritsidnom deistvii poserebrennykh aktivirovannykh uglei i ionobmennykh smol'/.  
13 p2216 A69-28621
- SHAIIDUROV, G. F.**  
Parametric instability of a fluid surface in an alternating electric field.  
06 p0957 A69-17542
- SHAIL, R.**  
Some steady state thermoelastic stress distributions in the vicinity of an external crack in an infinite solid.  
07 p1232 A69-19172
- SHAIR, R. C.**  
Parametric charge studies for aerospace nickel-cadmium batteries.  
23 p4071 A69-42282
- SHAK, F. K.**  
Optimal control of discrete processes.  
09 p1475 A69-22668
- SHAKESHAFT, J. R.**  
The latest studies at the Mullard Radio Astronomy Observatory /O poslednikh rabotakh Mallardskoi Radioastronomicheskoi Observatorii/.  
12 p2168 A69-27053  
Continuum radio emission and magnetic fields in the Galaxy.  
21 p3790 A69-38820  
Observations of pulsars.  
21 p3802 A69-38826  
Radio source counts.  
21 p3802 A69-38828  
Decrease of flux density of the radio source Cassiopeia A at 81 point 5 MHz.  
23 p4215 A69-42112
- SHAKHBAZIAN, IU. L.**  
Criteria of material selection for radio telescope structures /O kriteriakh vybora materiala dlia konstruktii radioteleskopov/.  
20 p3546 A69-38306  
Estimation of the rotation of the antenna pattern of a radio telescope parabolic mirror subjected to asymmetric solar heating /K otsenke velichiny povorota diagrammy napravlenosti parabolicheskogo zerkala radioteleskopa pri ego asimmetrichnom solnechnom nagreve/.  
20 p3497 A69-38307
- SHAKHNASAROVA, G. A.**  
Theoretical and experimental investigation of low-voltage arc in thermionic converter.  
14 p2404 A69-29254
- SHAKHNAZARIAN, I. K.**  
Detection of HO sub 2 radicals in a rarefied hydrogen flame /Obnaruzhenie radikalov HO sub 2 v razrezhenom plameni vodoroda/.  
15 p2716 A69-30054
- SHAKHNAZAROVA, G. A.**  
Comparison of the probe and optical methods of measuring the parameters of low-temperature cesium plasma.  
03 p0478 A69-13836  
Low-voltage arc in thermionic converters - Comparison between theory and experiment.  
06 p0963 A69-16910  
The probe and spectral investigations of dense plasma thermionic converters.  
14 p2404 A69-29256
- SHAKHNOVSKAIA, G. V.**  
Selection of displacement functions in calculating a rubber-metal valve /O vybore funktsii peremeshchenii pri raschete rezino-metallicheskogo klapan'/.  
01 p0087 A69-10829
- SHAKHOV, A. A.**  
Selenium diffusion in indium antimonide /Diffuziia selena v antimonide indii/.  
09 p1554 A69-21469



- Diffusion of selenium in indium antimonide.  
15 p2669 A69-30714
- SHAKHOV, B. P.**  
Steady-state digital-analog integrator for solving nonlinear equations of the heat-conduction type /Staticheskii tsifro-analogovyi integrator dlia reshenia nelineinykh uravnenii tipa teploprovodnosti/.  
21 p3680 A69-39852
- SHAKHOV, E. M.**  
Generalization of the Krook kinetic relaxation equation /Ob obobshchenii relaksatsionnogo kineticheskogo uravneniia Kruka/.  
02 p0234 A69-12582  
Nonisotropic relaxation of a Boltzmann gas in a homogeneous space /O neizotropnoi relaksatsii bol'tsmanovskogo gaza v odnorodnom prostranstve/.  
06 p0910 A69-17347  
Enskog's method for the Boltzmann equation /O metode enskoga dlia uravneniia Bol'tsmana/.  
09 p1481 A69-21889  
Structure of a shock wave in a monatomic gas /Struktura skachka uplotneniia v odnoatomnom gaze/.  
14 p2432 A69-29613
- SHAKHOVSKOI, N. M.**  
Spatial position of the orbital planes of close binary stars /O prostranstvennom raspolzhenii ploskosti orbit tesnykh dvoynykh zvezd/.  
15 p2688 A69-30560
- SHAKHTARIN, B. I.**  
Investigation of a piecewise linear automatic phase control system /Issledovanie kusochno-lineinoy sistemy FAP/.  
22 p3918 A69-40956
- SHAKINA, N. P.**  
Some characteristics of the stability of atmospheric flows with respect to mesoscale disturbances /Nekotorye kharakteristiki ustoiichivosti atmosferykh potokov otnositel'no mezomasshtabnykh vozmushchenii/.  
18 p3167 A69-35343
- SHAKURA, N. I.**  
X-ray emission accompanying gas accretion by a neutron star /Rentgenovskoe izluchenie pri akkretsii gaza na neitronnuu zvezdu/.  
15 p2686 A69-30535
- SHALAEV, V. A.**  
Investigation of Gunn-effect pulse generators operating at decimeter wavelengths /Issledovanie impul'snykh generatorov Ganna deitsimetrovogo diapazona voln/.  
06 p0895 A69-17459  
Utilization of presprayed subsidiary metals for preparing GaAs-Sn, GaAs-In, and GaAs-Pb ohmic contacts /Ispol'zovanie prevaritel'no napylennykh vspomagatel'nykh metallov dlia sozdaniia omicheskikh kontaktov GaAs-Sn, GaAs-In, GaAs-Pb/.  
10 p1748 A69-24214  
GaAs oscillators with p-n junctions /GaAs-Generatory s p-n-Perekhodami/.  
15 p2666 A69-30065  
A study of decimeter-wave pulsed Gunn oscillators.  
20 p3508 A69-37942
- SHALDERVAN, A. I.**  
Electrical conductivity of thin gold films of different thicknesses /Elektricheskii tonkikh plenek zolota raznoi tolshchiny/.  
12 p2143 A69-26459  
Influence of gases on the electrical conductivity of chromium, beryllium, nickel, gold, and germanium films of different thicknesses /Vliianie gazov na elektricheskii plenek khroma, berillia, nikelia, zolota i germania razlichnoi tolshchiny/.  
12 p2143 A69-26460
- SHALDIN, I. U.**  
Pyroelectric response of a triglycine sulfate crystal to laser pulse action /Piroelektricheskii ottik kristalla triglitsinsul'fata na deistvie impul'sa OKG/.  
03 p0438 A69-13050
- SHALDYRVAN, V. A.**  
A problem of optimum cooling of a massive body /Ob odnoi zadache optimal'nogo okhlazhdeniia massivnogo tela/.  
11 p1976 A69-24772
- SHALFEEV, V. D.**  
Nonlinear phase-locked automatic frequency control system with a wide locking range /Nelineinaiia sistema chastotno-fazovoi avtopodstroiki s shirokoi polosoi zakhvata/.  
04 p0559 A69-15137  
Phase-locked automatic frequency control system with a nonlinear filter in the phase control loop /Chastotno-fazovaiia avtopodstroika chastoty s nelineinym fil'trom v fazovoi tsepi upravleniia/.  
04 p0559 A69-15140

- SHALIMOV, V. P.**  
Possible injection of charged particles into the captured-radiation zone during the main phase of a magnetic storm /O vozmozhnoi inzhetskii zariazhennykh chastits v zonu zakhvachennoi radiatsii vo vremia glavnoi fazy magnitnoi buri/.  
05 p0815 A69-16057  
Possible injection of charged particles into a radiation zone during the main phase of a magnetic storm.  
20 p3591 A69-37967
- SHALLOWAY, A. M.**  
Estimates of pulsar distances from neutral hydrogen absorption.  
12 p2156 A69-26224
- SHALYT, S. S.**  
Negative magnetoresistance of tellurium at low temperatures.  
06 p0978 A69-16986  
Electron and lattice heat conductivity of n-Cd sub 3 As sub 2 at low temperatures /Elektronnaia i reshetochnaia teploprovodnost' n-Cd sub 3 As sub 2 pri nizkikh temperaturakh/.  
16 p2824 A69-31568  
The entrainment effect in graphite /Ob effekte uvlecheniia v grafite/.  
21 p3753 A69-39562
- SHAMANOV, I. V.**  
Discrete control system simulation method for spacecraft.  
20 p3502 A69-37393
- SHAMANSKII, V. E.**  
On the solution of boundary value problems by iterative methods.  
18 p3165 A69-35050
- SHAMBUROV, V. A.**  
Transverse electrooptical effect in crystals of the 4 bar.m class /Poperechnyi elektroopticheskii effekt v kristallakh klassa 4 bar.m/.  
04 p0639 A69-14427  
A laser with an electrooptical quartz Q-modulator.  
12 p2108 A69-26591  
Single-block shutter-reflector for operation with unpolarized radiation /Monoblochnyi zatvor-otrazhatel' dlia raboty s nepolarizovannym izlucheniem/.  
20 p3554 A69-37611
- SHAMEY, L. J.**  
Calculated profiles of He I 4471 and 4922 angstrom units and their forbidden components.  
07 p1224 A69-19713
- SHAMFAROV, I. A. L.**  
Possibility of using the special features of transient processes for protecting quantum paramagnetic amplifiers of pulsed radars /O vozmozhnosti ispol'zovaniia osobennostei perekhodnykh protsessov dlia zashchity kvantovykh paramagnitnykh usilitel' v impul'snykh radiolokatsionnykh stantsiiakh/.  
05 p0728 A69-15644  
Microwave FM oscillator based on two reflex klystrons with AM suppression.  
05 p0736 A69-16791  
Problem of the saturation of a quantum paramagnetic amplifier /KPU/ in the pulsed mode of operation /K voprosu o насыщении KPU v impul'snom rezhime/.  
08 p1325 A69-20436  
A possible method of protecting quantum paramagnetic amplifiers from saturation /O vozmozhnom metode zashchity KPU ot насыщения/.  
15 p2579 A69-30956  
The possibility of using the characteristics of transition processes for protecting masers in pulsed radar installations.  
16 p2762 A69-32501
- SHAMMAMY, M. R.**  
On the plastic bulging of a circular diaphragm by hydrostatic pressure.  
08 p1418 A69-20826
- SHAMOVSKII, V. G.**  
Production of high-intensity hydrogen-ion beams.  
03 p0412 A69-13842
- SHAMPINE, I. F.**  
On the eigenproblem for displacement integral equations.  
01 p0106 A69-10986  
Nonlinear Two Point Boundary Value Problems.  
04 p0622 A69-14600  
Error bounds and variational methods for nonlinear boundary value problems.  
08 p1343 A69-20536

- Existence and uniqueness for nonlinear boundary value problems.  
10 p1721 A69-23640  
Existence from uniqueness for two point boundary value problems.  
11 p1909 A69-24883
- SHAMRAI, V. F.**  
Superconductivity of alloys of the system Nb sub 3 Al-Nb sub 3 Ge.  
13 p2316 A69-27659
- SHAND, E. B.**  
Engineering glass.  
04 p0619 A69-14585
- SHANDAROV, S. M.**  
High-frequency modulation of the spatial structure of a ruby laser field /Vysokochastotnaia modulatsiia prostranstvennoi struktury polia v OKG na rubine/.  
11 p1900 A69-25569
- SHANDOROV, G. S.**  
Calculation of the axis of a jet in a cross flow.  
21 p3644 A69-39096  
Flow of a compressible gas into a cavity /K zadache o napolnenii emkosti szhimaemym gazom/.  
24 p4298 A69-42587
- SHANDRUK, M. I.**  
Amide catalysis in monosubstitution reactions between hydrazine and esters /Amidnii kataliz v reaktsiiakh monozamishchenikh gidrazinu z skladnimi eframi/.  
14 p2409 A69-29033
- SHANER, H. E.**  
Booster engines for commercial airliners.  
[SAE PAPER 690381]  
23 p4201 A69-41667
- SHANG, W. W.**  
Relation of the catalytic activity of MgO to its electron energy states.  
07 p1073 A69-18374
- SHANGINA, L. I.**  
Theory of lasers with inhomogeneous pumping /K teorii OKG s neodnorodnoi nakachkoi/.  
19 p3339 A69-36880
- SHANK, C. V.**  
A nonlinear traveling-wave interaction technique for measuring homogeneous linewidths.  
02 p0257 A69-12613  
Observation of level degeneracy effect on interactions between traveling waves.  
10 p1705 A69-23815  
Continuous infrared parametric amplification in a saturable absorber.  
14 p2459 A69-29601
- SHANKARANARAYANA RAO, T. V.**  
Determination of low speed aerodynamic characteristics of finite wings using the deep electrolytic tank.  
23 p4061 A69-42351
- SHANKLIN, R. V., III**  
Diagonal conducting wall MHD generator channel flows.  
16 p2736 A69-32172
- SHANNIKOV, V. M.**  
Investigation of the influence of vibrations on the strength of two types of structural plastic /Issledovanie vlianiia vibratsii na prochnost' dvukh vidov konstrukt-sionnykh plastmass/.  
15 p2643 A69-30972
- SHANNON, J. H. W.**  
Free-fall vehicle dynamics - Observation prediction.  
[ATAA PAPER 69-229]  
06 p0864 A69-18130
- SHANNON, J. L.**  
Applications of capillary microscopy in exobiological research.  
01 p0021 A69-11092
- SHANNON, L. J.**  
A model of solid-propellant ignition in a neutral environment.  
13 p2324 A69-28218
- SHANNON, R. H.**  
Psychophysiologic factors in USAF aircraft mishaps involving ground egress.  
06 p0878 A69-16959  
USAF ejection experience in the combat environment - 1 January 1967-30 June 1968.  
06 p0878 A69-16960  
Psychophysiologic factors in USAF aircraft mishaps involving ground egress.  
15 p2558 A69-30462

- ANNON, R. L.**  
Forced laminar flow convection in a horizontal tube with variable viscosity and free convection effects. [ASME PAPER 68-WA/HT-20] 05 p0847 A69-16123  
Thermal scale modeling of spacecraft. [SAE PAPER 690196] 07 p1116 A69-18304  
Forced laminar flow convection in a horizontal tube with variable viscosity and free-convection effects. [ASME PAPER 68-WA/HT-20] 17 p3068 A69-32902
- ANNY, R.**  
Collisional absorption and emission of longitudinal waves in a one-dimensional plasma. 15 p2661 A69-30921
- ANSKII, V. F.**  
Effect of the longitudinal dimensions of a plasma column on the excitation criterion of Kadomtsev-Nedospasov convective-current instability /Vliianie prodol'nykh razmerov plazmennogo stolba na kriterii vzbuzhdeniya tokovo-konvektivnoi neustoiichivosti Kadomtseva-Nedospasova/. 13 p2314 A69-28441
- ANTHA, T. R.**  
Enzyme histochemistry of the cerebral cortex of squirrel monkey and rat. 12 p2018 A69-25773  
Histochemical studies on the nucleus basalis of Meynert of the squirrel monkey /Saimiri sciureus/. 12 p2018 A69-25774  
Enzyme-histochemical studies on the muscle spindle. 12 p2018 A69-25777  
Histological and histochemical observations on the capsule of the muscle spindle in normal and denervated muscle. 15 p2554 A69-30406  
Histological and histochemical studies on the subfornical organ of the squirrel monkey. 20 p3478 A69-37934
- APAREV, N. IA.**  
The quenching of laser action in an ion laser. 06 p0934 A69-17682
- APIRA, J.**  
Identification of sugars as their trifluoroacetyl polyol derivatives. 15 p2558 A69-31539  
Current research on regenerative systems. 20 p3477 A69-37623  
Recent advances in closed life support system concepts. [AAS PAPER 69-143] 24 p4272 A69-42876
- APIRA, Y.**  
Ultrasonic propagation in high-field superconductors. 16 p2826 A69-31825
- APIRO, A. M.**  
Fluorides and silicofluorides as extreme pressure additives in lubricating fluids for titanium. [ASLE PAPER 68-LC-20] 07 p1141 A69-19311
- APIRO, B. H.**  
On-board aircraft weighing systems. 10 p1693 A69-23276
- APIRO, B. I.**  
Contribution to the theory of current fluctuations in a semiconductor /K teorii fluktuatsii toka v poluprovodnike/. 08 p1372 A69-20545
- APIRO, B. S.**  
Thickness variations of the E-F interlayer region /Variatsii tolshchi mezhsloevoi oblasti E-F/. 02 p0239 A69-11682  
Calculations of N/h/ profiles of the ionospheric accounting for the interlayer and underlying ionization /Raschety N/h/-profilей ionosfery s uchetom mezhsloevoi i nizhelezhzhasheiei ionizatsii/. 02 p0239 A69-11687  
Geometric parameters and temperature of the F1 layer during the IGY and IQSY /Geometricheskii parametry i temperatura sloia F1 v MGG i MGSS/. 09 p1486 A69-21544  
Effect of aerodynamic parameters on the ionospheric effect of an SC magnetic storm /Vliianie aeronomicheskikh parametrov na ionosfernyi effekt SC magnitnoi buri/. 09 p1486 A69-21546  
Parameters of N/h/ and the temperature of the F region during a strong magnetoionospheric storm during the IQSY /Parametry N/h/ i temperatura oblasti F vo vremia sil'noi magnito-ionosfernoi buri perioda MGSS/. 10 p1687 A69-23928
- Variations in the thickness of the intermediate E-F region. 13 p2257 A69-28713  
Computations of ionospheric N/h/ profiles with allowance for interlayer and underlying ionization. 13 p2258 A69-28718  
Geometric parameters and temperature of the F sub 1-layer during the IGY and IQSY. 16 p2783 A69-32539  
Influence of aerodynamic parameters on the ionospheric effect of an SC magnetic storm. 16 p2783 A69-32541  
Influence of solar activity on the postsunset altitude peak of the equatorial F region /Vliianie solnechnoi aktivnosti na poslezakhodnyi pik vysot ekvatorial'noi oblasti F/. 17 p2966 A69-33983  
Prognostic maps for the geometric parameters of the F2 layer /Karty prognoza geometricheskikh parametrov sloia F2/. 20 p3526 A69-37663
- APIRO, E. G.**  
Effect of radiation on heat exchange at the stagnation point of a blunt body /Vliianie izlucheniia na teploobmen v kriticheskoii tochkhe zatuplennogo tela/. 14 p2390 A69-29614
- APIRO, E. I.**  
Problem of synthesizing an optimal control system for a linear plant in the case of a partially specified control structure /Ob odnoi zadache sinteza optimal'noi sistemy upravleniya lineinym ob'ektom pri chastichno zadannoi strukture upravliaushchego ustroistva/. 08 p1299 A69-21070  
Problem in synthesis of an optimal system for controlling a linear object when the controller structure is partially specified. 16 p2765 A69-32485
- APIRO, F. M.**  
Noise generator employing avalanche transit-time diodes /Generator shuma na lavinno-proletnom diode/. 07 p1107 A69-19156
- APIRO, G. S.**  
Effect of a local dynamic load on a freely supported rigid ideally plastic plate /O deistvii lokal'noi dinamicheskoi nagruzki na svobodno opertuiu zhestkoideal'no-plasticheskuiu plastinku/. 18 p3217 A69-34593  
On the deformations of elastic-viscoplastic bodies. 19 p3445 A69-36812
- APIRO, I. G.**  
Variability of the intensity of corpuscular radiation in the upper atmosphere at mid-latitudes /Izmenchivost' intensivnosti korpuskuliarnogo izlucheniia v verkhnei atmosfere na srednikh shirotoakh/. 22 p4008 A69-41104
- APIRO, I. I.**  
Radar measurements of Martian topography. 16 p2860 A69-32238
- APIRO, I. J.**  
Corpuscular radiation intensity during geomagnetic disturbances. 15 p2677 A69-31327
- APIRO, IA. M.**  
Principles of Solid-Propellant Rocket Design /Os-novy Proektirovaniia Raket na Tverdom Toplive/. 12 p2175 A69-27077
- APIRO, L.**  
High strength steels in the aerospace industry. [ASM PAPER GG8-9.4] 07 p1169 A69-19675
- APIRO, L. D.**  
Loran-C sky-wave delay measurements. 12 p2029 A69-26052
- APIRO, L. L.**  
Holograph investigation of laser sparks. 08 p1317 A69-21022  
Two-wavelength holography of a laser spark. 16 p2789 A69-31771
- APIRO, M. M.**  
Composition of cosmic rays measured in Gemini XI. 21 p3787 A69-38350
- APIRO, R.**  
Semiannual variation of geomagnetic disturbance and its modulation of shorter period variations. 14 p2434 A69-28955  
The relationship between variations of solar corpuscular and ultra-violet radiation and the intensity of the mid-latitude airglow in the OI line /lambda 5577 angstrom units/. 16 p2850 A69-32322
- APIRO, R. H.**  
Mass spectra of quinoline and isoquinoline N-oxides. 07 p1075 A69-19496
- APIRO, S.**  
Manned space stations - How and why. 06 p1019 A69-18237  
Efficient space-ground data transmission. 09 p1457 A69-22462
- APIRO, S. L.**  
Correlation effects in the display of picosecond pulses by two-photon techniques. 02 p0259 A69-12654
- APIRO, V. D.**  
Contribution to the nonlinear theory of cyclotron attenuation of an electromagnetic wave in a plasma /Do nelineinnoi teorii tsiklotronnogo poglinaniia elektromagnitnoi khvili v plazme/. 08 p1277 A69-21077  
Quasilinear theory of relaxation of an electron beam in a magnetoactive plasma. 09 p1553 A69-22659  
Experimental investigation of plasma drift instability in an external high-frequency field. 14 p2489 A69-28740
- APIRO, W.**  
Efficient space-ground data transmission. 09 p1457 A69-22462  
Steady-state and dynamic analyses of gas-lubricated hybrid journal bearings. [ASME PAPER 68-LUBS-21] 13 p2267 A69-27284  
Analysis and performance of the gas-lubricated tilting pad thrust bearing. [ASLE PREPRINT 69AM 3C-2] 15 p2619 A69-30472
- APKIN, V. V.**  
High-temperature electron component in a beam plasma interaction. 09 p1553 A69-22657
- APLEY, J. J., JR.**  
Engineering flight tests of the OH-6A. 06 p0867 A69-17659  
The development of an improved method of conducting height-velocity testing on rotary wing aircraft. [AHS PAPER 353] 17 p2900 A69-33524
- ASHPOSHNIKOV, I. G.**  
Equations of the magnetohydrodynamics of paramagnetic media /Uravneniia magnitnoi gidrodinamiki paramagnitnykh sred/. 11 p1932 A69-25465
- ASHPOVAL, V. Z.**  
Interaction of microwave and low-frequency oscillations in a plasma-beam system /Vzaimodeistvie sverkh-vysokochastotnykh i nizkochastotnykh kolebaniia v sisteme plazma-puchok/. 13 p2312 A69-28111
- ASHPOVALOV, G. K.**  
A method for solving the Boltzmann equation in the spatially homogeneous case /Ob odnom metode resheniia uravneniia Boltsmanna v prostranstvenno odnorodnom sluchae/. 19 p3373 A69-36202
- ASHPOVALOV, L. A.**  
Investigation of thermal stresses in a cylindrical shell reinforced by longitudinal ribs /Issledovanie temperaturnykh napriazhenii v tsilindricheskoi obolochke, podkreplennoi prodol'nymi rebrami/. 11 p1981 A69-24942  
Allowance for initial shear deformation in the problem of the stability of a long cylindrical shell under torsion /Ob uchete nachal'noi deformatsii sdviga v zadache ustoiichivosti dlinnoi tsilindricheskoi obolochki pri kruchenii/. 21 p3838 A69-39187
- ASHPOVALOVA, I. S.**  
Cholesterol-protein metabolism under normal conditions and during radiation damage /Obmen kholesterin-proteidov v norme i pri lucheovom porazhenii/. 21 p3657 A69-39052
- SHAPALA, V. G.**  
Nonlinear interaction of surface waves /Pro nelineinu vzaimodiuiu poverkhnevikh khvil/. 22 p3990 A69-40790
- SHAPTER, N. N.**  
Federal aviation regulations for improvements on crashworthiness and emergency evacuation. 08 p1254 A69-20497  
FAA crashworthiness program for large and small airplanes. [SAE PAPER 690321] 11 p2004 A69-24509



## SHARADZE, Z. S.

Certain features of the sporadic E layer of the ionosphere /Nekotorye osobennosti sporadicheskogo sloia E ionosfery/.

14 p2435 A69-29038

Vertically traveling perturbations in the ionosphere /Vertikal'no peremeshchaisushchiesia vozmushchenosti v ionosfere/.

17 p2969 A69-34000

Vertically moving disturbances and lower layers of the ionosphere /Vertikal'no peremeshchaisushchiesia vozmushchenosti i nizhnii sloi ionosfery/.

20 p3528 A69-37685

Ionospheric disturbances and short-period oscillations of the earth's electromagnetic field /Vozmushcheniia v ionosfere i KPK elektromagnitnogo polia zemli/.

20 p3528 A69-37686

Processing of ionograms in the case of vertically moving disturbances /Obrabotka ionogramm pri nalichii vertikal'no peremeshchaisushchiesia vozmushchenosti/.

20 p3529 A69-37691

## SHARAF, A. L.

Exact solutions for fields of electric type in spherically stratified isotropic media.

19 p3372 A69-35618

## SHARAIA, S. N.

Numerical solution of the problem of unsteady heating of a fuel mixture in a container /Chislennoe reshenie zadachi o nestatsionarnom nagreve goruchei smesi v sosude/.

11 p2001 A69-25192

Numerical solution to the problem of natural convection in a closed cavity /Chislennoe reshenie zadachi ob estestvennoi konveksii v zamknoiti polosti/.

21 p3855 A69-39853

## SHARANEVICH, L. M.

X-ray study of scandium-containing ferrites /Rentgeniv'ske vivcheniia feritiv, shcho mistiat' skandii/.

03 p0491 A69-14053

X-ray investigation of scandium-containing ferrites.

18 p3182 A69-35046

## SHARAPOV, A. D.

Application of digital computers to a study of the tension and rigidity of gas turbine rotor elements /Primenenie ETsVM dlia issledovaniia napriazhennosti i zhestkosti elementov rotora GTU/.

06 p1026 A69-18017

## SHARDANAND

Attenuation cross sections of Xe and Xe sub 2 near resonance line 1469.6 angstrom units.

02 p0284 A69-12551

Production of an intense helium continuum below 230 angstrom units.

23 p4191 A69-42149

## SHARENOW, M.

New high altitude fast-rising balloon.

01 p0010 A69-10541

## SHARFUDDIN, S. M.

Crack problem in two-dimensional elasticity theory.

07 p1231 A69-18269

## SHARGORODSKII, V. D.

Television-optical observations of Icarus /Optiko-televizionnye nabliudeniia Ikara/.

21 p3719 A69-38402

## SHARIKADZE, D. V.

Flow past a plate in the presence of an applied magnetic field /Obtekanie plastiny pri nalichii prilozhennogo magnitnogo polia/.

07 p1192 A69-19018

Unsteady flow of a horizontal wind in the upper atmosphere /O nestatsionarnom techenii gorizontalnogo vetra v verkhnei atmosfere/.

21 p3758 A69-38411

## SHARINOV, I. L.

Calculation of a closed cylindrical cantilevered shell for concentrated edge loads.

05 p0843 A69-16681

## SHARIVKER, S. IU.

Behavior of zirconium and niobium carbides in a plasma /Povedenie v plazme karbidov tsirkonia i niobia/.

07 p1165 A69-18933

Density of ceramic plasma coatings /Plotnost' keramicheskikh plazmennyykh pokrytii/.

12 p2118 A69-26258

Bonding strength of plasma coatings with the substrate /Prochnost' stsepleniia plazmennyykh pokrytii s osnovoi/.

15 p2630 A69-31189

## SHARKOV, E. A.

Input conductance of resonant modulators with varactors.

10 p1665 A69-24066

## SHARKOV, O. K.

Amplification of electromagnetic waves in a solid-state plasma /Do pittance pro pidsilennia elektromagnitnikh khvil' u plazmi tverdogo tila/.

08 p1374 A69-21078

## SHARMA, A.

Measurement of the abundance of CO sub 2 in the Martian atmosphere.

09 p1607 A69-22427

## SHARMA, B. L.

Efficiency calculations of heterojunction solar energy converters.

15 p2552 A69-30034

## SHARMA, H. S.

Carbon dioxide build-up characteristics in spacesuits.

21 p3665 A69-39170

## SHARMA, M. G.

Flow and fracture of viscoelastic materials.

07 p1202 A69-19386

## SHARMA, M. P.

Propagation of sound pulses in a homogeneous layer under an inhomogeneous half space.

04 p0630 A69-14531

## SHARMA, P. D.

An estimation of performances of unidigit and multidigit communication systems.

17 p2918 A69-33066

## SHARMA, P. K.

On the evolution of the solar system.

05 p0826 A69-16389

Electrical resistivity of alkali metals.

08 p1372 A69-20229

## SHARMA, R. C.

Effect of horizontal and vertical magnetic fields on Kelvin-Helmholtz instability.

07 p1182 A69-19274

Effect of horizontal and vertical magnetic fields on Rayleigh-Taylor instability.

07 p1182 A69-19275

Effect of rotation and a general oblique magnetic field on Kelvin-Helmholtz instability.

14 p2491 A69-29335

## SHARMA, R. D.

Deactivation of bending mode of CO sub 2 by hydrogen and deuterium.

08 p1358 A69-21010

Energy transfer in near-resonant molecular collisions due to long-range forces with application to transfer of vibrational energy from nu sub 3 mode of CO sub 2 to N sub 2.

08 p1358 A69-21011

## SHARMA, S.

Generation of microwave second harmonic and sum and difference frequency in semiconductors at low temperatures.

01 p0137 A69-10334

Some transport coefficients in cadmium sulphide.

03 p0490 A69-13945

Higher order thermal diffusion of electrons in ionized gases.

04 p0636 A69-14878

## SHARMA, S. R.

Propagation of high-frequency waves in a plasma.

07 p1086 A69-19468

## SHARMA, Y. P.

Higher order elastic constants of some face-centered cubic metals.

23 p4233 A69-42337

## SHARP, A.

The moon's mysterious mascons.

11 p1953 A69-24339

## SHARP, G. R.

Finite transform solution of the vibrating beam with ends elastically restrained.

11 p1976 A69-24794

## SHARP, G. W.

Gravity waves observed by ionospheric temperature measurements in the F region.

05 p0754 A69-16262

Structure of the topside ionosphere from early orbits ofOGO-V.

15 p2599 A69-31345

OGO-V ion spectrometer.

19 p3314 A69-36679

## SHARP, J. B.

PDM control analysis using the phase plane. [AIAA PAPER 68-820]

24 p4283 A69-43227

## SHARP, P. J.

Static electrification of electrically heated aircraft windscreens.

19 p3256 A69-36777

## SHARP, R.

Fast critical experiments in support of thermionic reactor physics.

09 p1441 A69-21878

## SHARP, R. D.

Spatial relationships between HF radar aurora, optical aurora and electron precipitation.

06 p0918 A69-17388

Satellite measurements on auroral particle fluxes.

21 p3709 A69-38505

Satellite observations of the average properties of auroral particle precipitations - Latitudinal variations.

22 p3938 A69-40506

## SHARP, R. P.

Mariner 6 television pictures - First report.

21 p3803 A69-38981

Mariner 7 television pictures - First report.

21 p3806 A69-39330

Mariner 6 and 7 television pictures - Preliminary analysis.

24 p4384 A69-43197

## SHARPE, C. L.

Experimental cylinder drag data for hypersonic rarefied flow.

24 p4249 A69-43677

## SHARPE, L. G.

Cerebrospinal fluid production during temperature stress and feeding in the conscious monkey.

23 p4084 A69-41460

## SHARYGIN, G. S.

Experimental studies of slow amplitude and phase variations of 10-centimeter radio waves on near-ground paths /Eksperimental'nye issledovaniia medlen'nykh variatsii amplitudy i fazy 10-santimetrovyykh radiovoln na prizemnykh trassakh/.

08 p1275 A69-20423

## SHASHIN, V. M.

Dynamics of a fluid in a conical tank during the transition from small to appreciable gravity /Dinamika zhidkosti v konicheskom bace pri perekhode ot malovesomosti k znachitel'noi/.

06 p0910 A69-17335

Some problems of the dynamics of a space vehicle with tanks partially filled with liquid.

16 p2866 A69-31733

## SHASHKIN, A. P.

Nonuniform supersonic gas flow past axisymmetric bodies /Obtekanie osesimmetrichnykh tel neravnomernym sverkhzvukovym potokom gaza/.

19 p3238 A69-35851

## SHASHKOV, A. G.

Polytetrafluoro-ethylene ablation in high-temperature jets of different chemical compositions.

20 p3632 A69-37522

Kinetic theory of heat conduction of gas mixtures at low temperatures. I /Kineticheskaiia teoriia teploprovodnosti gazovykh smesi pri nizkikh temperaturakh. I/.

21 p3848 A69-38638

## SHASHKOV, D. P.

Influence of nitriding on the heat resistance and transition temperature of molybdenum alloys /Vliianie azotirovaniia na zharoprochnost' i temperaturnyi porog khрупkosti molibdenovykh splavov/.

01 p0093 A69-10212

Effect of nitriding on heat resistance and cold-brittleness threshold of molybdenum alloys.

15 p2637 A69-30268

## SHASHKOV, V. S.

The effect of overstrain on the sensitivity of animal organisms to cystamine /Vliianie peregruzok na chuvstvitel'nost' organizma zhivotnykh k tsistaminu/.

17 p2909 A69-33386

## SHASHUNKINA, A. M.

Variations in ionospheric parameters during the effect of an SC as a function of solar and magnetic activity, according to the data from Lindau.

03 p0423 A69-13534

## SHASHUNKINA, V. M.

Effect of aeronomical parameters on the ionospheric effect of an SC magnetic storm /Vliianie aeronomicheskikh parametrov na ionosfernyi effekt SC magnitnoi buri/.

09 p1486 A69-21540

- Parameters of the ionospheric effect SC of a magnetic storm as a function of the distance from the area of origin /Parametry ionosferного efekta SC magnitnoi buri v zavisimosti ot rastoiianiia do oblasti generatsii/.  
14 p2435 A69-29051
- Influence of aeronomic parameters on the ionospheric effect of an SC magnetic storm.  
16 p2783 A69-32541
- Investigation of the planetary ionospheric effect of a sudden commencement of a magnetic storm /Issledovanie planetarnogo ionosferного efekta vnezapnogo nachala magnitnoi buri/.  
17 p2967 A69-33987
- HASHURIN, I. P.**  
Experimental study of microwave oscillations generated by the interaction of an electron beam with a plasma.  
07 p1189 A69-18504
- Interaction of microwave and low-frequency oscillations in a plasma-beam system /Vzaimodeistvie sverkhvysokochastotnykh i nizkochastotnykh kolebaniy v sisteme plazma-puchok/.  
13 p2312 A69-28111
- HASKUNKINA, V. M.**  
Parameters of N/h/ and the temperature of the F region during a strong magnetoionospheric storm during the IQSY /Parametry N/h/ i temperatura oblasti F vo vremia sil'noi magnito-ionosfernoi buri perioda MGSS/.  
10 p1687 A69-23928
- SHATALOV, I. U. S.**  
A method of studying singular problems /Ob odnom metode issledovaniia singularnykh zadach/.  
07 p1174 A69-19004
- SHATALOV, K. T.**  
Theoretical and experimental investigation of the forced oscillations of truss elements with allowance for internal and external energy dissipation /Teoreticheskie i eksperimental'noe issledovanie vyznuzhennykh kolebaniy sterzhnevnykh elementov s uchetom vnutrennego i vneshnego rasseianiia energii/.  
17 p3064 A69-33916
- SHATALOV, O. P.**  
Effective cross sections of absorption of ultraviolet radiation by molecular oxygen at temperatures from 3000 to 10,000 K /Effektivnye sечения поглощения ультрафиолетового излучения молекулярным кислородом при температурах от 3000 до 10,000 deg K/.  
11 p1921 A69-24617
- SHATALOV, V. I.**  
Calculation of the stressed state of a shallow spherical shell weakened by holes, with the aid of small computers /Raschet napriazhennogo sostoiianiia oslablennoi otverstsiami pologi sfericheskoi obolochki pri pomoshchi mal'nykh ETSVM/.  
06 p1027 A69-18020
- SHATASHVILI, L. KH.**  
Specific features of the asymmetrical solar wind and cosmic-ray absorption in the earth's atmosphere /Osobennosti asimmetrichnogo solnechnogo vetra i pogloschenie kosmicheskikh luchej v zemnoi atmosfere/.  
10 p1760 A69-22844
- SHATILOV, A. P.**  
Calculation of flow and thermodynamic variables of an argon-cesium mixture behind a normal shock.  
23 p4150 A69-41335
- SHATKHIN, KH. Z.**  
Predawn effect in the f sub 0 F2 variations caused by sunrise at a magnetically conjugate point /Predrassvetnyi efekt v variatsiiakh f sub 0 F2 obuslovlennyi vosk-hodom solntsa v magnitno-sopriazhennoi toчке/.  
02 p0238 A69-11681
- Predawn effect in f sub 0 F sub 2 variations caused by sunrise at a magnetically-conjugate point.  
13 p2257 A69-28712
- SHATSOVA, R. B.**  
Planckian stellar velocity distribution. III - Ellipsoidal approximation /Plankovskoe raspredelenie skorostei zvezd. III - Ellipsoidal'noe priblizhenie/.  
09 p1589 A69-21370
- The Planck stellar velocity distribution. III - The ellipsoidal approximation.  
18 p3198 A69-34759
- SHATUN, V. V.**  
Holograms on photochromic films.  
[IEEE PAPER F-1]  
07 p1133 A69-19053
- Holograms on photochromic films.  
11 p1881 A69-24631
- SHATZ, R. H.**  
The potentialities of VTOL transportation systems in the Northeast corridor.  
[SAE PAPER 690417]  
23 p4147 A69-41642
- SHAULOV, I. U. KH.**  
Thermodynamic analysis of the synthesis of boron nitride with the aid of certain gas-phase reactions.  
17 p2992 A69-33432
- SHAVELSON, R. J.**  
Lunar gravity simulation and its effect on human performance.  
02 p0203 A69-12217
- Effectiveness of space crew performance subsequent to sudden sleep arousal.  
19 p3263 A69-36453
- SHAVER, J. A.**  
Acute and prolonged effects of G suit inflation on cardiovascular dynamics.  
06 p0883 A69-17843
- SHAVER, P. A.**  
A radio source near the X-ray source GX3 plus 1/.  
02 p0308 A69-12595
- High resolution observations of bright emission nebulae at 408 MHz.  
10 p1778 A69-23603
- SHAVER, P. J.**  
Direct series operation of Gunn effect diodes with above critical n sub 0 L products.  
04 p0573 A69-14340
- SHAVER, R. G.**  
Laminates and filament-wound structures of whiskerized high-modulus carbon fiber.  
08 p1339 A69-20501
- Processing of resin matrix composites of whiskerized graphite fiber.  
09 p1511 A69-22360
- Carbon microspheres - A new high-performance filler material for low-weight, high-temperature application.  
19 p3355 A69-35522
- SHAVIT, A.**  
Evaluation of stress concentrations in metals by measuring physical surface parameters.  
21 p3747 A69-39326
- SHAVIV, G.**  
Solar rotation and neutrino flux.  
02 p0325 A69-12600
- The effect of the Brans-Dicke cosmology on solar evolution and neutrino fluxes.  
09 p1605 A69-22415
- SHAVORYKIN, I. U. V.**  
Investigation of the inhomogeneity of a rectangular waveguide filled semiinfinitely by a dielectric with different forms of the interface /Issledovanie neodnorodnosti v vide polubeskonechnogo zapolneniia priamougol'nogo volnovoda dielektrikom s razlichnymi formami granitsy razdela/.  
23 p4125 A69-42047
- SHAVRIN, P. I.**  
Scientific equipment complex on the Cosmos 137 satellite for studying radiation in circumterrestrial space /Kompleks nauchnoi apparatury na sputnike "Kosmos-137" dlia issledovaniia radiatsii v okolozemnom kosmicheskom prostranstve/.  
14 p2446 A69-29047
- Investigation of proton spectra in the inner radiation belt on the Cosmos 137 satellite /Issledovanie spektrov protonov vnutrennego radiatsionnogo poiasa na sputnike "Kosmos-137"/.  
22 p4007 A69-41093
- SHAVROV, A. A.**  
Solution of elliptic equations on electric analogs /Reshenie ellipticheskikh uravnenii na elektricheskikh model'akh/.  
21 p3680 A69-39854
- SHAW, A. W.**  
The use of ground based flight simulators in aircraft design.  
[RAES PAPER 10]  
22 p3927 A69-40490
- SHAW, B. J.**  
Fracture in the refractory metals.  
17 p2989 A69-33556
- Mechanical properties of unidirectionally solidified Ni-Cr eutectic.  
19 p3343 A69-35921
- SHAW, D. A.**  
Scanning electron microscopy in device diagnostics and reliability physics.  
17 p2936 A69-32890
- SHAW, D. M.**  
Milankovitch radiation variations - A quantitative evaluation.  
03 p0426 A69-14232
- Evaluation of data.  
22 p3897 A69-40984
- SHAW, D. T.-K.**  
Energy distribution of electrons in a cesium thermionic discharge.  
19 p3380 A69-36442
- SHAW, E.**  
The Maxson multi-beam antenna - Theory and design for non-interacting beams.  
09 p1463 A69-21676
- SHAW, E. E.**  
A separable payload control system for orientation of scientific research instruments.  
06 p1014 A69-17583
- SHAW, E. K.**  
Effect of magnetic field and collisions on the ion current to a cylindrical probe.  
21 p3776 A69-38712
- SHAW, G.**  
Evidence for extraterrestrial life-identity of sporopollenin with the insoluble organic matter present in the Orgueil and Murray meteorites and also in some terrestrial microfossils.  
21 p3662 A69-39617
- SHAW, G. G.**  
Critical mechanisms in the development of fatigue cracks in 2024-T4 aluminum.  
10 p1710 A69-23076
- SHAW, H. J.**  
Circuit properties of microwave dielectric resonators.  
04 p0575 A69-14750
- SHAW, J. F.**  
Necessary conditions for the validity of the two-temperature plasma model.  
10 p1731 A69-23438
- SHAW, L.**  
Comparison of statistical models for the purpose of designing an optimum predictor.  
01 p0043 A69-10558
- An expansion for evaluating sensitivity to a random parameter.  
21 p3685 A69-38727
- SHAW, P. J. R.**  
Accuracy of observations and computations of upper winds using Plessey radar type WF2 and pilot balloon slide rule.  
06 p0950 A69-17788
- Acoustic sounding - A new approach to the study of atmospheric structure.  
14 p2448 A69-29527
- SHAW, R.**  
Heat capacities of liquids. II.  
[WSCI PAPER 68-39]  
07 p1202 A69-18368
- Ammonia Resistojet station keeping subsystem aboard applications technology satellite /ATS/ IV.  
[AIAA PAPER 69-296]  
09 p1560 A69-21212
- SHAW, R. W.**  
Ultrasonic attenuation in the superconducting state of high-purity thallium.  
03 p0485 A69-13293
- SHAW, S. A.**  
Pyroelectric thermometer for use at low temperatures.  
09 p1493 A69-21423
- SHAY, J. L.**  
Photoemission study of the electronic structure of ZnTe.  
03 p0493 A69-14239
- SHCHANIN, P. M.**  
Microtron with plasma injector.  
08 p1279 A69-19803
- SHCHAVELKINA, T. A.**  
Problem of the electroluminescence of GaAs single crystals.  
04 p0644 A69-15271
- SHCHEDRIN, M. B.**  
Calculation of thyristor pulse generators with a storage capacitor discharge /K raschetu impul'snykh generatorov na tiristorakh s razriadom nakopitel'nogo kondensatora/.  
11 p1846 A69-24615



## SHCHEGLOV, L. L.

Selection of the optimal structure of fiberglass products. I /K voboru optimal'noi struktury steklovoknitov. II/.

08 p1335 A69-20332

The choice of an optimal structure of fiberglass-reinforced materials. II /K voboru optimal'noi struktury steklovoknitov. II/.

18 p3162 A69-35356

## SHCHEGLOV, O. S.

High-frequency oscillations excited by the interaction of an electron beam and a plasma /O vysokochastotnykh kolebaniyakh vzbuzhdaemykh pri vzaimodeistvii elektronnoho puchka s plazmoy/.

12 p2137 A69-26529

## SHCHEGLOV, P. V.

Use of a Fabry-Perot etalon for obtaining monochromatic color images.

02 p0248 A69-11634

## SHCHEGLOV, V. A.

Obtaining population inversion for molecules in a supersonic binary-gas flow in a Laval nozzle /Poluchenie invernoi naselennosti molekul v sverkhzvukovom potoke binarnogo gaza v sope Lavalia/.

07 p1118 A69-18540

Molecular population inversion in the supersonic flow of a binary gas in a Laval nozzle.

21 p3693 A69-38692

Coherent effects in pulsed laser emission /Kogernyye efekty v izlucheniim impul'snogo lazera/.

21 p3737 A69-38999

## SHCHEGLOVA, G. V.

Imparting antimicrobial properties to various materials.

05 p0713 A69-15944

## SHCHEGLOVA, V. M.

Three-dimensional laminar boundary layer on a permeable plate /Trekhnernyi laminarnyi pogranichnyi sloi na pronitsaemoy plastine/.

14 p2433 A69-29898

## SHCHEGOLEV, G. M.

Blowing of neutral gases as a means of protecting the electrodes of MHD devices /Primenenie vduva neitral'nykh gazov dlia zashchity elektrodov MGD-ustroystv/.

11 p1826 A69-25232

Liquid-metal MHD systems with laminar flow and electric power generation by the synchronous principle /Zhidkometallicheskie MGD-sistemy so sloistym potokom i otborom elektricheskoi moshehnosti po sinkhronnomu printsipu/.

13 p2206 A69-27491

## SHCHELEV, M. IA.

Image converter camera for using over wide time intervals.

12 p2083 A69-26140

Multiframe image converter registration of the process of ruby laser giant pulse formation.

12 p2083 A69-26142

Investigation of the temporal structure of neodymium-laser emission in the mode self-locking regime.

18 p3152 A69-35016

## SHCHELKANOVTSV, N. M.

Problem of synthesizing an optimal control system for a linear plant in the case of a partially specified control structure /Ob odnoi zadache sinteza optimal'noi sistemy upravleniya lineinym ob'ektom pri chastichno zadannoi strukture upravlyaiushchego ustroystva/.

08 p1299 A69-21070

Problem in synthesis of an optimal system for controlling a linear object when the controller structure is partially specified.

16 p2765 A69-32485

## SHCHELKIN, K. I.

Interaction of a shock wave with a viscous fluid film /Vzaimodeistvie udarnoi volny s plenкой viazkoi zhidkosti/.

08 p1303 A69-20326

Study of the stability of a normal flame front /Issledovanie ustoiichivosti fronta normal'nogo plameni/.

08 p1421 A69-20344

Hydrodynamics of combustion /Gidrodinamika goreniiia/.

11 p2000 A69-25186

An investigation of gasdynamic stability of a detonation wave of arbitrary profile.

12 p2062 A69-26672

## SHCHELKUNOV, V. N.

Heat transfer by free convection in a spherical volume /Teploobmen pri svobodnoi konveksii v sferovom ob'eme/.

04 p0686 A69-14992

Investigation of free convection in closed axisymmetric volumes /Issledovanie svobodnoi konveksii v zamknytykh osesimmetrichnykh ob'ekmah/.

21 p3848 A69-38634

## SHCHELOKOV, V. A.

Bitonal homodyne frequency conversion /Dvukhtonal'noe gomodinnoe preobrazovanie chastoty/.

14 p2451 A69-29801

## SHCHENNIKOV, V. V.

A class of exact solutions of the Navier-Stokes equations for the case of a compressible heat conducting gas /Ob odnom klasse tochnykh reshenii uravnenii Nav'e-Stoksa dlia sluchaia szhimaemogo teplovodnogo gaza/.

22 p3929 A69-40117

## SHCHEPETNOV, R. V.

Determination of the dimensions of the subsolar magnetosphere from the results of ground observations of geomagnetic micropulsations /Opredelenie razmerov podsolnechnoi magnitosfery po dannym nazemnykh nabludenii geomagnitnykh mikropul'satsii/.

02 p0244 A69-12356

Effect of a sudden discontinuation of type Pc 2-4 geomagnetic pulsations /Effekt vnezapnogo prekrashcheniya geomagnitnykh pul'satsii tipa Pc 2-4/.

14 p2438 A69-29080

## SHCHEPKIN, G. IA.

Focusing of ion beams by a plasma lens.

13 p2307 A69-27658

## SHCHEPKIN, L. A.

Ion composition and coefficients of ionospheric reactions at altitudes from 140 to 200 km in the equatorial ionosphere /Ionnyi sostav i koeffitsienty ionosfernykh reaktsii na vysotakh 140-200 km ekvatorial'noi ionosfery/.

10 p1688 A69-23929

Specific features of the vertical distribution of the molecular ion concentration in the case of a double ion formation maximum /Osobennosti vysotnogo raspredeleniya kontsentratsii molekulyarnykh ionov pri dvoimom maksimume ionobrazovaniia/.

10 p1688 A69-23930

Relationship between the conditions of formation of the F sub 1-layer and ion composition.

12 p2071 A69-26702

Temporal changes in daytime ion concentrations according to n sub e /h/ profile data /Vremennyye izmeneniia kontsentratsii ionov v dneвноe vremia po dannym n sub e /h/-profilei/.

14 p2435 A69-29050

F1 layer and the temperature conditions in the thermosphere /Sloi F1 i temperaturnyi rezhim termosfery/.

17 p2967 A69-33985

Ionospheric Processes /Ionosfernye Protssesy/.

18 p3126 A69-34358

Certain patterns of the vertical distribution of the electron and ion concentrations at altitudes from 130 to 200 km /Nekotorye zakonomenosti vysotnogo raspredeleniya kontsentratsii elektronov i ionov na vysotakh mezdu 130 i 200 km/.

20 p3520 A69-37030

Latitudinal variations in conditions for the occurrence of the F1 layer during the solar activity minimum /Shirotnoe izmeneniye uslovii poavleniia sloia F1 v minimum solnechnoi aktivnosti/.

20 p3527 A69-37669

Diurnal development of the F1 layer /Sutochnoe razvitiie sloia F1/.

20 p3527 A69-37670

## SHCHERBA, N. S.

New heat-resistant materials - Polyimides and polybenzimidazoles.

19 p3358 A69-35901

## SHCHERBAK, N. G.

Possibility of direct investigation of the influence of dislocations on the processes of magnetization of yttrium iron garnet crystals.

09 p1559 A69-22532

## SHCHERBAK, V. V.

Diffraction of electromagnetic waves during oblique incidence on a system of two crossed periodic strip arrays /Difraktsiia elektromagnitnykh voln pri kosom padenii na sistemu iz dvukh skreshchennykh periodicheskikh lentochnykh reshetok/.

23 p4124 A69-42030

Transverse metallic arrays in a rectangular waveguide /Poperechnye metallicheskie reshetki v priamougol'nom volnovode/.

23 p4124 A69-42035

## SHCHERBAKOV, G. I.

Optimal solutions to problems in antenna synthesis theory /Optimal'nye reshenia zadach teorii sinteza anten/.

21 p3682 A69-39124

Optimum antenna synthesis for limited deviations of the source distribution function from the prescribed function /Optimal'nyi sintez anten pri ogranichenii otklonenii funktsii raspredeleniia istochnikov ot zadani noi/.

22 p3916 A69-40952

## SHCHERBAKOV, I. A.

Spectroscopic investigation of stimulated emission from lasers based on CeF sub 3 -Nd super 3 super plus crystals.

14 p2460 A69-29642

## SHCHERBAKOV, I. S.

Wing of simple planform in a sharp-edged gust.

07 p1050 A69-18742

## SHCHERBAKOV, L. A.

Mach number distribution along the axes of underexpanded supersonic jets /O raspredelenii chisla Macha po osi sverkhzvukovykh nedorashshennyykh strui/.

07 p1050 A69-18922

## SHCHERBAKOV, V. A.

Evaluation of the efficiency of methods used in investigating the frequency response of a thermomometer /Ob otsenke effektivnosti priinyatykh metodov izucheniia chastotnoi kharakteristiki termomometra/.

19 p3308 A69-35856

## SHCHERBAKOVA, M. N.

Nuclear interactions with E super gamma greater than 1000 Gev in graphite.

13 p2330 A69-28377

## SHCHERBAN, N. I.

Mechanical properties of metal-glass materials obtained by impregnation /Mekhanicheskie svoista metallostekliannykh materialov, poluchennykh propitkoi/.

15 p2643 A69-31188

Compactibility of Fe, Co, and Ni powders with additions of zirconium, niobium, and molybdenum carbides /Ob uplotniaemosti poroshkov Fe, Co i Ni s dobavkami karbidov tsirkoniia, niobiia i molibdena/.

22 p3970 A69-40634

## SHCHERBANINA, G. B.

Characteristics of the expansion of a fan-shaped jet /Osobennosti rasprostraneniia sverkhzvukovoi vernoi strui/.

21 p3643 A69-38643

## SHCHERBINA, D. M.

Characteristic reflection curves with normal irradiation of a surface.

03 p0534 A69-14161

## SHCHERBININ, E. V.

Plane magnetohydrodynamic jets with variable conductivity /Ploskie magnitogidrodinamicheskie strui s peremennoi provodimost'iu/.

01 p0130 A69-10773

Experimental study of turbulence suppression by a transverse magnetic field in tubes with a special configuration /Eksperimental'noe issledovanie podavleniia turbulentnosti poperechnym magnitnym polem v trubakh spetsial'noi konfiguratsii/.

07 p1192 A69-19016

The application of Pitot and Prandtl tubes in magnetohydrodynamic experiments.

10 p1727 A69-23100

## SHCHERBININ, G. P.

Incoming microwave power meter based on a directional coupler /Izmeritel' prokhodiashchei moshehnosti SVCh na osnove napravlennogo otvettvitiia/.

19 p3282 A69-35826

## SHCHERBININ, P. P.

Distribution function of fast electrons at the electrode interface /Funktsiia raspredeleniia Bystrykh Elektronov na Granitse Elektrodm/.

04 p0635 A69-14764

Angular distribution of electrons leaving the plasma at the electrode boundary /Ob uglovom raspredelenii elektronov, vykhodiashchikh iz plazmy na granitse elektrodov/.

11 p1933 A69-25546

On the theory of electrode layer of plasma.

14 p2490 A69-29237

## SHCHERBININA, V. V.

A multielectrode probe with potentials which are negative with respect to the plasma /Mnogoelektroodnyi

- zond pri otritsatel'nykh potentsialakh otositel'no plazmy/.  
12 p2138 A69-26538
- Application of the delay method in plasma studies /Primenenie metoda zaderzhki dlia issledovaniia plazmy/.  
12 p2138 A69-26539
- CHERBOV, V. A.**  
Classification and principles of construction of fast-response microwave interferometers /Printsy poshtroeniia i klassifikatsiia bystrodeistviushchikh mikrovolnovykh interferometrov/.  
09 p1496 A69-22028
- Analysis of the errors in certain microwave interferometer circuits /Analiz pogreshnostei nekotorykh skhem mikrovolnovykh interferometrov/.  
09 p1496 A69-22029
- CHETNIKOVA, E. N.**  
Heat capacity of cubic monoxides and vanadium oxide /Teploemkost' kubicheskikh monooskisi i oksikarbida vanadiia/.  
09 p1523 A69-21739
- CHITAIEV, N. G.**  
Aircraft Flight Tests /Letnye Ispytaniia Samoletov /2nd Edition/.  
03 p0365 A69-12900
- CHITOVA, V. M.**  
Method for an approximate determination of constant gaps in electrochemical machining.  
08 p1321 A69-20726
- CHUKIN, G. G.**  
Study of the microwave radiation field in the atmosphere /Issledovanie polia mikrovolnovogo izlucheniia v atmosfere/.  
06 p0953 A69-17995
- Determination of the water vapor content in the atmosphere from microwave radiation measurements /Opredelenie soderzhaniiia vodianogo para v atmosfere po izmereniiu mikrovolnovogo izlucheniia/.  
06 p0953 A69-17996
- Possible errors of absolute radio emission measurements /O vozmozhnykh pogreshnostiakh absoliutnykh izmerenii radioizlucheniia/.  
06 p0929 A69-18000
- Application of thermal radar observations in meteorology /Primenenie radioteplolokatsii v meteorologii/.  
20 p3569 A69-36984
- CHUKIN, V. K.**  
Generalization of the gradient method of studying heat transfer to the case of an arbitrary temperature dependence of the thermal conductivity coefficient of the wall material /Obobshchenie gradientnogo metoda issledovaniia teplootdachi na sluchai proizvol'noi zavisimosti koeffitsienta teploprovodnosti materiala stenki ot temperatury/.  
18 p3230 A69-34988
- A gradient method of investigating heat transfer near a permeable surface /Gradientnyi metod issledovaniia teplootdachi okolo pronsaemoi poverkhnosti/.  
20 p3630 A69-36977
- CHUKINA, T. B.**  
Determination of the ionization-recombination parameters in the F2 layer at midlatitudes /Ob opredelenii ionizatsionno-rekombinatsionnykh parametrov sloia F2 na srednikh shirotakh/.  
17 p2966 A69-33979
- Intensity of ion production above the F2 layer maximum /Intensivnost' ionoobrazovaniia vyshhe maksimuma sloia F2/.  
20 p3525 A69-37656
- SHE, C. Y.**  
Symmetrical formulation of the quantum theory of three-wave optical parametric interactions.  
06 p0958 A69-17710
- SHEA, J. F.**  
Entry research and development program management.  
11 p2005 A69-25726
- SHEA, M. A.**  
Comparison of theoretical and experimental cosmic-ray equators.  
14 p2511 A69-28961
- The daily variation of trajectory-derived high-latitude cutoff rigidities in a model magnetosphere.  
22 p4005 A69-40513
- SHEALY, D. L.**  
Infrared emission from a V-shaped metal groove compared with that from a flat surface of the same metal.  
19 p3313 A69-36491
- SHEAR, D. D.**  
Correlated X-ray and optical streak photographs of exploding wires.  
01 p0119 A69-10670
- SHEAR, W. G.**  
Aircraft proximity warning devices. [SAE PAPER 690340]  
11 p1914 A69-24496
- SHEARMAN, E. D. R.**  
Sectoral hoghorn - A new form of line feed for spherical reflector aerials.  
06 p0898 A69-17823
- SHEARS, B. E. G.**  
Low speed characteristics of double-delta wings.  
17 p2890 A69-33246
- SHEATS, J. P.**  
Saturn V navigation update. [AIAA PAPER 69-883]  
21 p3764 A69-39409
- SHEBOLDAEV, S. B.**  
Interaction between metal oxides and carbon during spatial separation of the reagents /Vzaimodeistvie oksidov metallov s uglerodom pri prostranstvennom razdelenii reagentov/.  
03 p0445 A69-13569
- SHEBSHAIEVICH, V. S.**  
Methods of determining the parameters of motion of artificial earth satellites from a selection of a complete or increasing volume of measurements using second-order derivatives /Metody opredeleniia parametrov dvizheniia ISZ po vyborke izmerenii polnogo i narastaiushchego ob'emov s ispol'zovaniem proizvodnykh vtorogo poriadka/.  
22 p4033 A69-41088
- SHEDLOVSKY, J. P.**  
Cosmic-ray produced radionuclides and rare gases near the surface of Saint-Severin meteorite.  
19 p3410 A69-36093
- SHEEKS, O. P.**  
Methods for the practical reciprocity calibration of piezoelectric accelerometers.  
15 p2615 A69-31283
- SHEELEY, N. R., JR.**  
The photospheric network.  
04 p0664 A69-15523
- SHEER, C.**  
Arc jets in science and technology.  
08 p1371 A69-21128
- SHEER, R. E., JR.**  
Circumferential nonuniform heating during transition on a slender cone at hypersonic Mach numbers.  
18 p3085 A69-34435
- SHEERAN, W. J.**  
Applications of a tube wind tunnel in supersonic testing. [AIAA PAPER 69-335]  
13 p2242 A69-28271
- The application of the accelerometer force balance in short-duration testing. [AIAA PAPER 69-351]  
13 p2264 A69-28285
- A study of rocket exhaust plumes at high altitudes. [AIAA PAPER 69-575]  
16 p2869 A69-32746
- Accelerometer force balance techniques.  
19 p3292 A69-35737
- SHEETZ, H. J., III**  
Erectable structures and meshes for space applications.  
19 p3433 A69-35544
- SHEETZ, N. W., JR.**  
Ballistics range boundary-layer transition measurements on cones at hypersonic speeds.  
17 p2890 A69-33250
- SHEF, A. L.**  
National programs and the progress of technological societies.  
03 p0536 A69-14245
- SHEFFER, E. K.**  
Measurement of scattered solar L sub alpha -radiation in the upper atmosphere of the earth at heights from 100 to 3500 km /Izmerenie rasseiannogo L sub alpha -izlucheniia solntsa v verkhnei atmosfere zemli na vysotakh ot 1000 do 3500 km/.  
01 p0152 A69-10577
- Measurement of the dispersed L sub alpha radiation in the earth's atmosphere at altitudes of 1000-3500 km.  
15 p2691 A69-30747
- SHEFFIELD, C.**  
Generalized multi-step methods with an application to orbit computation.  
19 p3397 A69-35611
- SHEFFIELD, J.**  
Oblique hydromagnetic shock waves.  
17 p3013 A69-33823
- SHEFFIELD, K.**  
Orbital EVA. [AAS PAPER 69-517]  
24 p4272 A69-42841
- SHEFFLER, K. D.**  
Microstructure and crystallography of the Ni-Ni sub 3 Ti eutectic alloy.  
10 p1707 A69-22986
- Elevated-temperature mechanical properties and fracture behavior of a Ni-Ni sub 3 Ti eutectic alloy.  
13 p2277 A69-27406
- SHEFOV, N. N.**  
Migration of the H and He inside the atmosphere and their escape.  
15 p2599 A69-31322
- Hydroxyl emission of the upper atmosphere. I.  
16 p2775 A69-32081
- Hydroxyl emission of the upper atmosphere. II.  
24 p4308 A69-43007
- SHEFSIEK, P. K.**  
Reproducibility of thermionic performance.  
09 p1437 A69-21813
- Heat pipe studies at Thermo Electron Corporation.  
09 p1440 A69-21833
- Heat pipe development for thermionic applications.  
23 p4074 A69-42297
- SHEFTEL, E. N.**  
Aging of niobium alloys alloyed with oxygen /Starenie niobievnykh splavov, legirovannykh kislorodom/.  
15 p2640 A69-30632
- SHEFTEL, Z. G.**  
Theorem of homeomorphisms for elliptic systems and its applications /Teorema o gomeomorfizmax dlia ellipticheskikh sistem i ee prilozheniia/.  
13 p2287 A69-27515
- SHEFTER, G. M.**  
Sonic flow of a viscous heat conducting gas past bodies of revolution /Ob obtekanii tel vrashcheniia zvukovym potokom viazkogo teploprovodiaschego gaza/.  
08 p1251 A69-20322
- Sonic flow of viscous heat-conducting gas around bodies of revolution.  
17 p2891 A69-33312
- SHEHADEH, N. M.**  
Optimum filter design for noisy feedback system.  
21 p3687 A69-39449
- Transmission characteristics of split-phase PCM codes.  
21 p3676 A69-39451
- SHEIANOVA, E. V.**  
Saturation of molybdenum with boron by means of thermal diffusion /Termodiffuzionnoe насыщение молибдена бором/.  
19 p3328 A69-36160
- SHEIBLEY, D. W.**  
The use of super 184 W as a thermal flux monitor at high temperatures.  
24 p4315 A69-43192
- SHEIN, A. G.**  
In-phase waves in a two-dimensional periodic slow-wave structure of the type of two parallel "cellular" planes /Sinfaznye volny v dvumerno-periodicheskoi zamedliaushchei sisteme tipa dvukh parallel'nykh "iacheistykh" ploskostei/.  
03 p0407 A69-13981
- Investigation of the inhomogeneity of a rectangular waveguide filled semifinitely by a dielectric with different forms of the interface /Issledovanie neodnorodnosti v vide polubeskonechnogo zapolneniia priamougol'nogo volnovoda dielektrikom s razlichnymi formami granitsy razdela/.  
23 p4125 A69-42047
- Effect of geometry on the characteristics of two-dimensionally periodic resonator slow-wave structures /Vliianie geometrii na kharakteristiki rezonatornykh dvumerno-periodicheskikh zamedliaushchikh sistem/.  
23 p4140 A69-42048
- SHEIN, H. M.**  
Stimulation of C super 14-melatonin synthesis from C super 14-tryptophan by noradrenaline in rat pineal in organ culture.  
22 p3871 A69-40051
- Incorporation of super 14 C-tryptophan into super 14 C-protein by cultured rat pineals - Stimulation by 1-norepinephrine.  
22 p3871 A69-40054



## SHEINDLIN, A. E.

Magnetohydrodynamic Method of Obtaining Electrical Energy /Magnitogidrodinamicheskii Metod Polucheniia Elektroenergii/.

06 p0870 A69-17905

Optimization problem of linear conduction-type MHD generators /Problema optimizatsii lineinykh kondukttsionnykh MGD-generatorov/.

06 p0871 A69-17916

Measuring procedure and experimental equipment for determining the integral normal emissivity of structural materials at temperatures ranging from 1200 to 3000 K /Metodika izmerenii i eksperimental'naia ustanovka dlia opredeleniia integral'noi normal'noi izluchatel'noi sposobnosti konstruktsionnykh materialov v intervale temperatur ot 1200 do 3000 deg K/.

11 p1888 A69-25230

Integral normal emissivity of tantalum and hafnium carbides at temperatures ranging from 1300 to 3000 deg K /Integral'naia normal'naia izluchatel'naia sposobnost' karbidov tantal i hafniia v intervale temperatur 1300-3000 deg K/.

15 p2640 A69-30984

## SHEINKMAN, A. G.

Special characteristics of installations with magnetogasdynamic converters working on the Rankine cycle.

03 p0369 A69-14154

## SHEINKMAN, M. K.

Determination of the parameters of recombination centers in copper-doped gallium arsenide.

02 p0294 A69-11627

## SHEINZON, E. M.

Investigation of the effect of sweep of straight turbine guide vanes /Issledovanie effekta strelovidnosti v priamoii reshetke turbinnykh profilei/.

15 p2547 A69-30570

## SHEKA, D. I.

Multicharge acceptor states in InSb and GaAs /Mnogozariadnye akseptornye sostoiianiia v InSb i GaAs/.

21 p3781 A69-39067

## SHEKA, V. I.

Multicharge acceptor states in InSb and GaAs /Mnogozariadnye akseptornye sostoiianiia v InSb i GaAs/.

21 p3781 A69-39067

## SHEKHOVTSOV, N. A.

The gamma spectrometer on "Luna-10" for the study of the lunar rocks.

01 p0084 A69-11314

Investigation of the switching-on process of germanium p-n-p-m-structures.

04 p0642 A69-14793

## SHEKHTER, I. U. N.

Influence of molybdenum disulfide on the electrochemical corrosion of metals /Vliianie disulfida molibdena na elektrokhimicheskuu korroziiu metallov/.

21 p3733 A69-39804

## SHEKHTER, V. I. A.

Determination of the allowance for the arbitrary yield point for sheet materials working under biaxial tensile load.

10 p1801 A69-23849

## SHEKHTMAN, V. SH.

The Borrmann effect and extinction in holography.

09 p1494 A69-21492

Holography without a reference beam for three-dimensional holograms.

23 p4166 A69-41969

## SHEKUNOV, E. P.

Fundamentals of the Subdivision of Aircraft Structural Design /Osnovy tekhnologicheskogo chleneniia konstruktsii samoleta/.

14 p2456 A69-29860

## SHELAMOV, G. N.

Time characteristics of microwave quadrupoles with ferrite resonators /Vremennye kharakteristiki chetyrekhpolusnikov SVCh s ferritovymi rezonatorami/.

23 p4139 A69-41948

## SHELBY, M. E.

Model for comet-solar wind interaction.

18 p3188 A69-35190

## SHELD AHL, S. A.

Channel identification coding for data compressors.

03 p0391 A69-13219

## SHELDON, C. S., II

The Soviet space program - A growing enterprise.

13 p2381 A69-27303

## SHELDON, J. W.

Ionization of atoms by positive ion bombardment near threshold energy.

11 p1922 A69-25322

## SHELDON, W. R.

Critical examination of direct muon production.

07 p1209 A69-19406

Possible relation of a null solar neutrino flux to the 11 year solar cycle.

08 p1377 A69-19902

## SHELEG, B.

A matrix-fed circular array for continuous scanning.

04 p0573 A69-14329

## SHELEMENTEV, G. S.

Effect of a nonholonomic constraint on the stabilizability of a mechanical system.

14 p2482 A69-28814

A problem of correction of a motion /Ob odnoi zadache korrektsii dvizheniia/.

18 p3174 A69-35316

## SHELEMINA, V. M.

Dependence of the temperature and pressure of a capillary discharge plasma with a vaporizing wall on the geometry of the capillary and the discharge current.

02 p0286 A69-11573

Determination of the emissivity of air, N sub 2, and CO sub 2 at a temperature of approximately 10,000 K /Opredelenie izluchatel'noi sposobnosti vozdukh, N sub 2 i CO sub 2 pri temperature approximately 10,000 deg K/.

02 p0291 A69-12484

Decrease in the transparency of plexiglass during interaction with dense plasma /Umen'shenie prozrachnosti pleksiglasa pri vzaimodeistvii s plotnoi plazmoi/.

03 p0482 A69-14222

Reversible opacity of an optical quartz occurring during contact with a dense plasma /Obratimaia neprozrachnost' opticheskogo kvartsa, voznikaiushchaia pri kontakte s plotnoi plazmoi/.

14 p2490 A69-29159

Method of determining the plasma energy luminosity from experimental data concerning the energy balance /Sposob opredeleniia energeticheskoi svetimosti plazmy iz eksperimental'nykh danykh energeticheskogo balansa/.

15 p2662 A69-30978

## SHELEPIN, L. A.

Relaxation processes and stimulation of radiation in a dense plasma /O relaksatsionnykh protsessakh i usilenii izlucheniia v plotnoi plazme/.

01 p0131 A69-10789

Obtaining an inverse population of vibrational levels in polyatomic molecules /O poluchenii inverсноi zaselenosti na kolebatel'nykh urovniakh mnogoatomnykh molekul/.

02 p0259 A69-12647

Some applications of the relaxation theory of a highly ionized hydrogen plasma /Nekotorye prilozheniia teorii relaksatsii vysokoionizovannoi vodorodnoi plazmy/.

07 p1191 A69-18996

Population inversion of the vibrational levels in CO sub 2 lasers.

07 p1151 A69-19061

Relaxation processes and amplification of radiation in a dense plasma.

20 p3582 A69-38006

## SHELEPOV, V. I. U.

Riemann's problem in regions with boundary of bounded rotation.

06 p0947 A69-16893

## SHELEST, A. E.

Macrogeometry of fracture of tensile test specimens of titanium alloys /Makrogeometriia razrusheniia obraztsov titanovykh spлавov pri rastiazhenii/.

04 p0617 A69-15076

Thermomechanical treatment of some titanium alloys /Termomekhanicheskaia obrabotka nekotorykh titanovykh spлавov/.

07 p1161 A69-18766

Ratio of yield strength to ultimate tensile strength for certain titanium alloys subjected to thermomechanical treatment /Otnoshenie predela tekuchesti k vremenomu soprotivleniiu nekotorykh titanovykh spлавov posle termomekhanicheskoi obrabotki/.

11 p1906 A69-25683

## SHELIAG, A. R.

Characteriograph for recording of the capacitance characteristics of p-n junctions.

04 p0602 A69-15406

## SHELIMOVA, L. E.

Semiconductor Compounds, their Production and Properties /Poluprovodnikovye Soedineniia, ikh Poluchenie i Svoistva/.

01 p0137 A69-10353

## SHELKOV, E. M.

Some results of an investigation of a single-component version of a liquid-metal MHD energy converter /Nekotorye rezul'taty izucheniia odnokomponentnoi skhemy zhidkometallicheskogo MGD-preobrazovaniia energii/.

13 p2205 A69-27488

## SHELL, W. C.

The sonic diagnostic engine analyzer.

24 p4312 A69-42758

## SHELLEY, E. G.

A low-energy channel-multiplier spectrometer for ATS-E. [IEEE PAPER 3C-5]

07 p1135 A69-19199

## SHELLEY, I. J.

Communication satellites applied to broadcasting.

08 p1272 A69-19925

## SHELLEY, P. E.

Effect of small bending stiffness on deformation of inflated structures.

06 p1024 A69-17607

## SHELTING, B. D.

Magnetic field decay in the group 21034 during the proton flare period of July 1966.

10 p1766 A69-23759

## SHELTON, G. A., JR.

Multifluid theory for stagnation flow of partially ionized plasma.

08 p1369 A69-20817

## SHELTON, G. B.

A near-constant-phase variable attenuator.

21 p3681 A69-38410

## SHELTON, J. D.

Wing-tail interaction flutter of moderately spaced tandem airfoils. [AIAA PAPER 69-57]

06 p1028 A69-18105

## SHELTON, J. P.

Multibeam planar arrays.

04 p0570 A69-14309

## SHELTON, L. F.

Aspects of fuselage corrosion.

21 p3646 A69-38392

## SHELTON, R. D.

Advantages of using a combination electromagnetic and material shield.

15 p2652 A69-31522

## SHELUDKO, N. A.

Investigation of Gunn-effect pulse generators operating at decimeter wavelengths /Issledovanie impul'snykh generatorov Ganna detsimetrovogo diapazona voln/.

06 p0895 A69-17459

A study of decimeter-wave pulsed Gunn oscillators.

20 p3508 A69-37942

## SHELUKHIN, G. G.

Experimental study of the process of combustion of heterogeneous condensed systems /Eksperimental'noe issledovanie protsessa goreniia geterogennykh kondensirovannykh sistem/.

17 p3069 A69-33135

## SHEMEGAN, A. A.

Some results of a study of the damping properties of coatings for elements of aircraft structures /Nekotorye rezul'taty issledovaniia dempfiiruushchikh svoistv pokrytii elementov samoletnykh konstruktsii/.

17 p2993 A69-33941

## SHEMSKI, R. M.

Microstrain characteristics of isostatically hot-pressed beryllium.

07 p1168 A69-19598

## SHEMIKIN, M. M.

Regularities in the distribution and size of craters in lunar crater chains /O zakonomernosti v raspolozhenii i razmerakh kraterov v kraternykh tsepochkakh na lune/.

18 p3202 A69-35329

## SHEMIKIN, V. I.

Influence of the choice of the instant of Q-switching in pulsed pumping of a CO sub 2 laser on the intensity of the generated pulses.

10 p1703 A69-23619

## SHEMMING, J.

Excitation of forbidden lines in gaseous nebulae. I.

08 p1391 A69-20530

- EN-MILLER, J.**  
Reciprocity in geotropic response and acceleration constraints of the biosatellites.  
20 p3477 A69-37620
- EN, C. N.**  
Sub-optimum guidance laws for rendezvous with continuous thrust.  
[AIAA PAPER 69-76] 06 p0956 A69-18081  
Adaptive control for Mars entry based on sensitivity analysis.  
[AIAA PAPER 68-8355] 20 p3573 A69-37193  
Time-optimal nuclear rocket propellant start-up with thermal stress constraints based on distributed parameter model.  
21 p3768 A69-39632  
Vector-matrix second-order sensitivity equation with application to Mars entry.  
24 p4388 A69-43690
- EN, C. S.**  
High-energy gamma rays, cosmic-ray electrons, and the far-infrared background radiation.  
09 p1580 A69-22296  
Pulsars and ancient Chinese records of supernova explosions.  
11 p1963 A69-25253
- EN, D. W. C.**  
Computer-aided design of multivariable control systems with applications to VTOL aircraft stability augmentation.  
12 p2013 A69-26068
- EN, F. C. T.**  
A sensitive method for investigating the effect of electric fields on the burning velocities of premixed laminar flames.  
21 p3852 A69-39596
- EN, K. Y.**  
On strong collisions in hydrogenic line broadening.  
09 p1543 A69-22405
- EN, L.-C.**  
A simple formula of current in dipole antennas.  
02 p0218 A69-12330  
The field pattern of a long antenna with multiple excitations.  
08 p1281 A69-20016
- EN, S. S.**  
Thermodynamic analysis of dilute ternary systems. II - The Ag-Cu-Sn system.  
13 p2279 A69-27759  
Thermodynamic analysis of dilute ternary systems. III - The Au-Cu-Sn system.  
17 p2987 A69-33077
- EN, S. W.**  
Noise measurements on field-emission tubes.  
16 p2752 A69-32384
- EN, Y. R.**  
Tunable far-infrared radiation generated from the difference frequency between two ruby lasers.  
16 p2798 A69-32603
- ENDER, E. F.**  
Flexure-drift resonance in semiconductors.  
08 p1371 A69-19806
- SHAPANSKI, J. R.**  
Gravito-inertial fields and relativity.  
07 p1182 A69-19408
- SHPELENKO, V. N.**  
Calculation of cavitation streams /K raschetu kavitatsionnykh techenii/.  
04 p0589 A69-14994
- SHPELEV, A. G.**  
Gap anisotropy in the energy spectrum of superconductors /Anizotropia shcheli v energeticheskoy spektre sverkhprovodnikov/.  
03 p0485 A69-13331
- SHPELEV, E. IA.**  
Possibility of using an artificial atmosphere with a variable gas composition in air-tight cabins /O vozmozhnosti ispol'zovaniia v germeticheskikh kabinakh iskusstvennoi atmosfery s nestatsionarnym gazovym sostavom/.  
22 p3892 A69-40284
- SHPELEVA, V. G.**  
Study of the nonlinear stability of a shallow shell with double curvature in higher-order approximations /Issledovanie nelineinoy ustoychivosti pologo obolochki dvoiakoi krivizny v vysokikh priblizheniiakh/.  
21 p3838 A69-39186
- SHPELEVICH, L. G.**  
Natural fluctuations of the amplitude and phase oscillations at the output of a regenerative frequency divider /Estestvennye fluktuatsii amplitudy i fazy kolebaniia na vykhode regenerativnogo delitelia chastoty/.  
07 p1099 A69-18526
- SHEPERTYCKI, T. H.**  
Unattended controller for a frequency synthesizer.  
06 p0897 A69-17704
- SHEPETNOV, R. V.**  
Some aspects of the excitation of micropulsations during the solar activity cycle /Osobennosti vzbuzhdeniia mikropul'satsii v tsikle solnechnoi aktivnosti/.  
10 p1687 A69-23919  
Pi2 pulsations, polar aurorae ovals, and the plasma density in the magnetosphere /Pul'satsii Pi2, oval poliarnykh sianii i plotnost' plazmy v magnitosfere/.  
19 p3303 A69-36205
- SHEPARD, J. M.**  
Behavioral and physiological changes during prolonged immobilization plus perceptual deprivation.  
24 p4256 A69-42554
- SHEPARD, R. J.**  
A non-linear solution of the oxygen conductance equation - Applications to performance at sea-level and at an altitude of 7350 ft.  
21 p3654 A69-38906
- SHEPHERD, D. C.**  
Auroral absorption occurrence patterns as a function of magnetic activity.  
16 p2848 A69-31968
- SHEPHERD, E. G.**  
Measurement of elevation angles of H.F. waves.  
08 p1275 A69-20293
- SHEPHERD, G. G.**  
Photometric rocket measurements in hydrogen auroras.  
15 p2598 A69-31307  
Airglow spectroscopic temperatures.  
21 p3712 A69-38516  
Rocket measurements of H beta production in a hydrogen aurora.  
24 p4309 A69-43170
- SHEPHERD, S. G.**  
Low speed characteristics of double-delta wings.  
17 p2890 A69-33246
- SHEPPARD, D. E.**  
The dynamic simulation of turbine engine compressors.  
[AIAA PAPER 69-486] 16 p2842 A69-32697
- SHEPPARD, L. M.**  
The temperature at 120 km altitude in April-May 1965.  
07 p1127 A69-19277
- SHEPPARD, N. R.**  
Adaptive multiplex telemetry - Its use in data management.  
02 p0212 A69-12817
- SHEPPARD, R. G.**  
The nonsteady flow of fluids through expandable tubes.  
02 p0232 A69-12477
- SHEPPARD, T. D., JR.**  
Heat pipes and their application to thermal control in electronic equipment.  
22 p4049 A69-39944
- SHEPPHARD, F. H.**  
Systematic derivation of remote sensing platform requirements for oceanography and meteorology observations.  
[AIAA PAPER 69-154] 06 p1044 A69-18122
- SHEPTUN, IU. D.**  
Influence of atmosphere on the oscillation of a cosmic apparatus.  
10 p1792 A69-24208
- SHEPTUNOV, G. S.**  
Nonpolar latitude variations from 1959-1965 observations at the Blagoveshchensk Latitude Laboratory.  
11 p1952 A69-24257
- SHER, D.**  
Radial velocities of B stars in the Sco-Cen association.  
14 p2519 A69-29136
- SHER, V. V.**  
Comparative study of the antioxidantizing and anticorrosion properties of dialkyl- and diarylthiophosphates of metals /Srvnitel'noe issledovanie antioksislitel'nykh i antikorroziionnykh svoystv dialkil- i diarilditiofosfatov metallov/.  
12 p2027 A69-27091
- SHERANOVA, N. M.**  
Effect of random phase aberrations of the correctors on the characteristics of a beam waveguide with a high degree of mode selection /Vliianie sluchainykh fazovykh aberratsii korrektorov na kharakteristiki luchevogo volnovoda pri vysokoi stepeni selektsii mod/.  
10 p1658 A69-23954
- SHERBOURNE, A. N.**  
Effect of skew penetration on stress concentration.  
04 p0674 A69-14589  
Moment-curvature models under reverse cyclic straining.  
04 p0683 A69-15497
- SHERBY, O. D.**  
Mechanical behavior of polycrystalline tungsten at elevated temperature.  
07 p1158 A69-18241  
Mechanical Behavior of Crystalline Solids at Elevated Temperature.  
14 p2465 A69-29749
- SHERE, K. D.**  
Effects of background winds on atmospheric gravity waves.  
18 p3128 A69-34801
- SHERIDAN, K. V.**  
Metre-wave dynamic spectrum of a solar flare on 9 June 1968.  
09 p1582 A69-22748
- SHERIDAN, P. F.**  
The twin-engine BO-105.  
24 p4252 A69-42937
- SHERING, G. C.**  
Stability of a sinusoidal-perturbation extremal-control system.  
12 p2052 A69-26384
- SHERLE, A. I.**  
Traveling excited states in organic semiconductors which are tetracyanoquinodimethane derivatives /Dvizhushchiesia vzbuzhdennyye sostoiianiia v organicheskikh poluprovodnikakh-proizvodnykh tetratsianokhinodimetana/.  
03 p0484 A69-13278  
Moving excited states in organic semiconductors /derivatives of tetracyanoquinodimethane/.  
14 p2508 A69-29652
- SHERMAN, A.**  
Nonequilibrium boundary layer along an insulator wall.  
[AIAA PAPER 68-134] 16 p2821 A69-31873
- SHERMAN, A. B.**  
Excitation and propagation of longitudinal elastic waves with frequencies from 200 to 2000 MHz in lithium niobate crystals.  
03 p0487 A69-13729  
Temperature dependence of elastic wave attenuation in lithium niobate crystals /Temperaturnaia zavisimost' zatukhaniia uprugikh voln v kristallakh niobata litii/.  
15 p2665 A69-30040
- SHERMAN, A. L.**  
Payload optimization factors for storage of liquid hydrogen in a low gravity environment.  
[AIAA PAPER 69-1007] 22 p4021 A69-40381
- SHERMAN, B. W.**  
A lunar-surface electric-field detector.  
03 p0429 A69-13221  
The use of the Stark effect in electric-field measurement.  
03 p0429 A69-13222
- SHERMAN, D. I.**  
A representation of analytic functions and its application to the theory of singular integral equations.  
19 p3361 A69-36813
- SHERMAN, F. S.**  
Rarefied gas dynamics.  
18 p3122 A69-34812  
The transition from continuum to molecular flow.  
18 p3123 A69-34924
- SHERMAN, G. C.**  
Diffracted wave fields expressible by plane-wave expansions containing only homogeneous waves.  
17 p3007 A69-34153
- SHERMAN, J. W.**  
Spacecraft oceanography - Its scientific and economic implications for the next decade.  
[UN PAPER 68-95878] 01 p0064 A69-10491



## SHERMAN, J. W., III

- Oceanographic applications of remote sensing.  
12 p2075 A69-26997
- Synoptic oceanography - Remote sensing studies of the ocean.  
[AAS PAPER 69-062] 24 p4307 A69-42822

## SHERMAN, M.

- Reflective effects of radio ranging on artificial earth satellites.  
18 p3104 A69-35200

## SHERMAN, M. M.

- Flight test measurements of boundary layer transition on a non-ablating 22 deg cone.  
[AIAA PAPER 68-1152] 03 p0362 A69-13648

## SHERMAN, R. G.

- Beta heat treatment of Ti-6Al-4V fasteners.  
21 p3729 A69-38661
- What large-diameter bolts offer.  
22 p3957 A69-40827

## SHERMAN, W. F.

- SIMUPOL - A language for the production of digital simulators.  
[AIAA PAPER 69-960] 22 p3905 A69-40341

## SHERMANZON, E. M.

- Variations in the electron and gamma quanta intensities in the atmosphere /Ob izmeneniakh intensivnosti elektronov i gamma-kvantov v atmosfere/.  
20 p3587 A69-37046

## SHERMERGOR, T. D.

- Calculation of effective elastic moduli of composite materials taking into account multiparticle interactions /Vychislenie effektivnykh uprugikh moduli kompozitsionnykh materialov s uchetom mnogochastichnykh vzaimodeistvii/.  
13 p2360 A69-27382
- Correlation functions of an elastic field of quasi-isotropic solid bodies.  
14 p2531 A69-28806
- Effect of reinforcement on stress relaxation and creep in hereditary elastic materials /Vliianie armirovaniia na relaksatsiiu napriazhenii i polzuchest' uprugogo nasledstvennykh materialov/.  
22 p4045 A69-40744

## SHERMETEVSKII, N. N.

- Experimental space meteorological "Meteor" system.  
06 p1013 A69-17053

## SHERONOV, A. A.

- Bistable operation of a GaAs semiconductor laser.  
03 p0441 A69-14175
- Extinction effect in optically coupled GaAs injection lasers /Effekt gasheniia v opticheskii svyazannykh inzhetsionnykh lazerakh na GaAs/.  
15 p2633 A69-30059

## SHERSBY-HARVIE, R. B. R.

- Ring-laser bias using reciprocal optical components.  
21 p3735 A69-38651

## SHERSHABOVA, M. D.

- Influence of reflections on the parameters of a traveling-wave strophotron amplifier /Vliianie otrazhenii na parametry strofotronnogo usilitelia begushchei volny/.  
03 p0407 A69-13980

## SHERSHKOV, V. V.

- Some aspects of the problem of forced convection in the atmospheric boundary layer /Nekotorye voprosy zadachi vyzhdennoi konveksii v pogranichnom sloe atmosfery/.  
12 p2126 A69-26579

## SHERSTOBITOV, V. E.

- Transverse mode selection in a laser with convex mirrors.  
03 p0440 A69-13426
- Electron scattering in InSb-type semiconductors.  
03 p0492 A69-14170
- Transport phenomena in degenerate n-InSb type semiconductors in the case of inelastic carrier scattering.  
03 p0492 A69-14171
- Properties of a laser with an unstable resonator.  
15 p2634 A69-30730

## SHERTIKOV, A. P.

- Epitaxial gallium arsenide films with a high electron mobility.  
03 p0492 A69-14172

## SHERWOOD, P. J.

- Applications of some refractory metals in space technology.  
23 p4177 A69-42161

## SHESHAGIRI HEBBAR, K.

- Skin friction in compressible turbulent boundary layers.  
16 p2771 A69-31926
- Laminar-sublayer thickness in compressible turbulent boundary layers.  
24 p4306 A69-43724

## SHESTAKOV, V. V.

- Effect of the nuclear form factor on the bremsstrahlung cross section of high-energy muons.  
13 p2333 A69-28422

## SHESTATSKII, S. N.

- Reflection spectra of indium arsenide.  
06 p0979 A69-16995

## SHESTERIKOV, S. A.

- Large deflections of a nonlinearly elastic ring under external pressure /Bol'shie progiby nelineino-uprugogo kol'tsa pod vneshnim davleniem/.  
17 p3062 A69-33715
- The buckling of a ring under unsteady creep conditions /Splushchivanie kol'tsa pri neustanovivshiesia polzuchestii/.  
17 p3062 A69-33716
- Stability of cylindrical shells during creep with hardening /Ustoichivost' tsilindricheskikh obolochek pri polzuchestii s uprochneniem/.  
18 p3217 A69-34597

## SHESTOPAL, O. I. A.

- Measuring the high-temperature shear modulus of tungsten in a wide range of frequencies.  
14 p2465 A69-29651

## SHESTOPAL, V. O.

- Measuring the high-temperature shear modulus of tungsten in a wide range of frequencies.  
14 p2465 A69-29651

## SHESTOPALOV, A. M.

- Gain of aperiodic parametric amplifiers /Usilenie aperiodeskikh parametricheskikh usilitel'ei/.  
11 p1849 A69-24956

## SHESTOPALOV, L. M.

- Breakdown in alkali-halide crystals caused by laser radiation.  
10 p1745 A69-23322
- The effect of laser radiation on metals /Vliianie izlucheniia OKG na metally/.  
11 p1906 A69-25684

## SHESTOPALOV, V. P.

- An apparatus for studying diffraction effects on periodic structures in the millimeter wavelength range /Ustanovka dlia issledovaniia difraktsionnykh iavlenii na periodeskikh strukturakh v millimetrovom diapazone voln/.  
04 p0598 A69-14852
- Radio Engineering /Radiotekhnika/.  
06 p0889 A69-17796
- Theoretical and experimental investigation of the diffraction of a plane wave at a grid composed of squared beams /Teoreticheskoe i eksperimental'noe issledovaniia difraktsii ploskoi volny na reshetke iz brus'ev/.  
07 p1084 A69-19149
- Instrument for investigating diffraction phenomena at periodic structures in the millimeter band.  
15 p2607 A69-30244

## SHESTOPATOV, V. P.

- Linear self-consistent theory of diffraction emission /Lineinaia samosoglasovanniaia teoriia difraktsionnogo izlucheniia/.  
22 p3899 A69-40615

## SHESTOPEROV, A. N.

- Calculation of the space-charge field of the hollow cylindrical electron beam of a traveling wave tube with a nonlinear cross-sectional charge density distribution /Raschet polia prostranstvennogo zariada pologo tsilindricheskogo elektronnogo potoka LBV pri neravnomernom raspredelenii plotnosti zariada po sечeniiu/.  
03 p0407 A69-13984

## SHESTOPEROV, V. I. A.

- Large-area proportional counter for the study of cosmic rays.  
03 p0427 A69-12979
- Interaction free path in iron of nuclear-active particles with energies above  $5.3 \times 10$  super 11 ev.  
13 p2303 A69-28385
- Absorption in an ionization calorimeter of the energy flux of the nuclear component.  
13 p2330 A69-28386

- Measurements with a large ionization calorimeter of the energies of nuclear-active particles in extensive air showers.  
13 p2331 A69-28387

- Investigation of nuclear interactions of high-energy particles by the controlled nuclear emulsion method.  
13 p2331 A69-28388

## SHESTOV, A. N.

- Luminous discharge on nonabsorbing surfaces produced by a single-pulse laser.  
08 p1327 A69-21020
- Induced Mandelstam-Brillouin scattering /IMBS/ in glass in the case of self-focusing of the monopulse laser beam.  
09 p1521 A69-22600

## SHESTOV, M. G.

- Experimental investigation of the deformation of a thin-walled spherical shell connected with a hoop /Eksperimental'noe issledovanie deformirovaniia tselestennoi sfericheskoi obolochki, svyazannoi so shpazn goutom/.  
21 p3846 A69-39717

## SHESTOV, N. S.

- Measurements of the Fourier spectra of two-dimensional functions /Izmerenie spektrov Fur'e dvumernykh funktsii/.  
10 p1725 A69-23300

## SHESTOV, S. A.

- Magnetic centering of the floating system of an integrating gyroscope /Magnitnoe tsentririrovanie poplavkovogo uzla integriruiushchego giroskopa/.  
09 p1497 A69-22104
- Selection of a rational shape for magnetoconductors of the centering elements of magnetically suspended bearings /Vybór ratsional'noi formy magnitopodviesennykh tsentriruiushchikh elementov magnitnykh podvesov/.  
09 p1497 A69-22105

## SHETH, S.

- Reversion resistant urethanes.  
19 p3357 A69-35560

## SHEU, C. Y.

- Recent developments in optimal structural design.  
01 p0170 A69-10814
- Optimal plastic design of circular and annular sandwich plates with piecewise constant cross section.  
08 p1417 A69-20823

## SHEU, C.-Y.

- Optimal design of sandwich beams for elastic deflection and load factor at plastic collapse.  
18 p3218 A69-34623

## SHEVCHENKO, I. M.

- Heat resistance of ZhS6-K alloy subjected to multicomponent diffusion saturation /Zharostoikost' splavy ZhS6-K posle mnogokomponentnogo diffuzionnogo nasyscheniia/.  
19 p3345 A69-36154

## SHEVCHENKO, I. U. F.

- Low-frequency intensity oscillations of helium-plasma radiation at low temperatures.  
01 p0128 A69-10347

## SHEVCHENKO, O. G.

- Electric resistance of thin single-crystal aluminum plates.  
10 p1711 A69-23620

## SHEVCHENKO, S. A.

- Effect of dislocations on the electric properties of indium antimonide.  
14 p2507 A69-29646

## SHEVCHENKO, T. G.

- Gunn-effect cavity-controlled generator.  
09 p1468 A69-22596

## SHEVCHENKO, V.

- Orientation near the moon and at its surface. I /Orientirovanie vblizi luny i na ee poverkhnosti. I/.  
14 p2525 A69-29750
- Orientation in the proximity of the moon and on its surface. II /Orientirovanie vblizi luny i na ee poverkhnosti. II/.  
16 p2855 A69-31929

## SHEVCHENKO, V. I.

- Electron beam defocusing in a TWT operating in the dynamic mode /Rasfokusirovka elektronnoho puchka v LBV v dinamicheskom rezhime/.  
03 p0406 A69-13974
- Experimental investigation of high-frequency defocusing of the beam in a TWT /Eksperimental'noe issledovanie vysokochastotnoi rasfokusirovki puchka v LBV/.  
03 p0407 A69-13975

- Excitation of electromagnetic oscillations in a magnetoactive plasma by a modulated beam.  
07 p1189 A69-18508
- Contribution to the nonlinear theory of cyclotron attenuation of an electromagnetic wave in a plasma /Do nelineinnoi teorii tsiklotronnogo poglinannia elektromagnitnoi khvili v plazmi/.  
08 p1277 A69-21077
- Quasilinear theory of relaxation of an electron beam in a magnetoactive plasma.  
09 p1553 A69-22659
- Parametric instability during the interaction of a modulated beam with plasma in a magnetic field /Parametricheskai neustoiichivost' pri vzaimodeistvii modulirovannogo puchka s plazmoi v magnitnom pole/.  
10 p1741 A69-23947
- SHEVCHENKO, V. IA.**  
Thermal EMF of cadmium arsenide /Termoeds v arsenide kadmii/.  
22 p3993 A69-40607
- SHEVCHENKO, V. K.**  
Spectrographic determination of microimpurities in aluminum-yttrium garnets.  
10 p1747 A69-23843
- SHEVCHENKO, V. P.**  
Effect of concentrated forces and moments on a shell of positive curvature /O deistvii srosredotochennykh sil i momentov na obolochku polozhitel'noi krivizny/.  
18 p3218 A69-34601
- Deflection of plates and shells under local loads /Iz-gib plastin i obolochek pri lokal'nykh nagruzkakh/.  
23 p4228 A69-41986
- Local stresses in a cylindrical shell in the neighborhood of concentrated loads /Mestnye napriazheniia v tsilindricheskoii obolochke v okrestnosti srosredotochennykh vozdeistvii/.  
24 p4395 A69-42593
- SHEVCHENKO, V. V.**  
The nature of the bright rays on the moon.  
02 p0236 A69-11642
- Use of the earth for selenographically tying in lunar images received from space /Isopol'zovanie zemli dlia selenograficheskoi priviazki lunnykh izobrazhenii, poluchennykh iz kosmosa/.  
05 p0763 A69-16055
- Use of the earth as a selenographic reference for lunar images obtained from outer space.  
20 p3545 A69-37965
- Theory of electrodynamic acceleration of a plasma in a high-current pulsed accelerator /K teorii elektrodinamicheskogo uskorenii plazmy v sil'notochnom impul'snom uskoreitele/.  
21 p3778 A69-39548
- SHEVELA, G. F.**  
Facility and operational procedure for obtaining meteorological radar data on clouds, cloud systems, and dangerous phenomena /Apparatura i metod operativnogo polucheniia radiolokatsionnoi meteorologicheskoi informatsii ob oblakakh, oblachnykh sistemakh i opasnykh iavleniiakh/.  
16 p2808 A69-32278
- Equipment complex for automatically obtaining and processing meteorological radar data /Kompleks apparatury dlia avtomaticheskogo polucheniia i obrabotki radiolokatsionnykh meteorologicheskikh dannykh/.  
16 p2791 A69-32279
- A method of diminishing the dead zone of a meteorological radar /Ob odnom metode umen'sheniia mertvoi zony meteorologicheskogo radiolokatora/.  
16 p2791 A69-32281
- SHEVELEV, A. A.**  
Thermal stresses in a cylinder and choice of optimal heating conditions.  
21 p3837 A69-39089
- SHEVELEV, I. A.**  
Neuronal organization of the initial afferent inflow in the cat LGB.  
22 p3879 A69-40845
- SHEVELEV, V. N.**  
Determination of the temperatures of organic substances in shock waves /Opredelenie temperatur organicheskikh veshchestv v udarnykh volnakh/.  
02 p0230 A69-11979
- Determination of the temperature of organic substances in shock waves.  
15 p2561 A69-30264
- SHEVELKO, P. S.**  
Fatigue of Metals in Aircraft Structures /Ustalost' metallov v konstruktssiakh samoletov/.  
20 p3622 A69-37231
- SHEVELKOVA, L. I.**  
A method of manufacturing aspherical surfaces which deviate only slightly from the sphere.  
12 p2102 A69-26597
- SHEVELO, V. N.**  
Oscillatory properties of solutions to second-order nonlinear differential equations with a delayed argument /Ob ostiliatornykh svoistvakh reshenii nelineinykh differentsial'nykh uravnenii vtorogo poriadka s zapazdyvaiushchim argumentom/.  
11 p1908 A69-24767
- SHEVELOV, V. P.**  
Composition and thermodynamic functions of a reacting gaseous or heterogeneous system /Sostav i termodinamicheskie funktsii reagiruiushchei gazovoi ili heterogennoi sistemy/.  
11 p2001 A69-25223
- SHEVLIAGIN, K. V.**  
Nonlinear effects accompanying the excitation of magnetoelastic waves in yttrium garnet /Nelineinye iavleniia pri vzbuzhdenii magnitoupругikh voln v itrievom granate/.  
12 p2145 A69-26725
- Nonlinear phenomena arising during excitation of magnetoelastic waves in yttrium iron garnet.  
21 p3782 A69-39138
- SHEVLIKOV, IU. A.**  
Deflection of plates and shells under local loads /Iz-gib plastin i obolochek pri lokal'nykh nagruzkakh/.  
23 p4228 A69-41986
- Local stresses in a cylindrical shell in the neighborhood of concentrated loads /Mestnye napriazheniia v tsilindricheskoii obolochke v okrestnosti srosredotochennykh vozdeistvii/.  
24 p4395 A69-42593
- SHEVNIN, A. D.**  
Cross-sectional dimensions of the magnetospheric tail at various intensities of polar magnetic disturbances /Razmery poperechnogo sечeniia shleifa magnitosfery pri razlichnoi intensivnosti poliarnykh magnitnykh voz-mushchenii/.  
05 p0753 A69-16050
- The auroral oval and the ring current in the earth's magnetosphere.  
10 p1689 A69-24203
- Dimensions of cross section of magnetotail at different intensities of polar magnetic disturbances.  
20 p3532 A69-37959
- SHEVNINA, N. F.**  
Polar auroras at the minimum and maximum of the solar activity cycle /Poliarnye sianiiia v minime i maksimume tsikla solnechnoi aktivnosti/.  
17 p2963 A69-33955
- The auroral orientation curves for the IQSY.  
24 p4308 A69-43009
- SHEWAGA, W. J.**  
Next generation miniature microwave tuners.  
07 p1102 A69-18672
- SHEWCHUK, J.**  
Low-cycle fatigue of 7075-T651 aluminum alloy in biaxial bending.  
01 p0093 A69-10116
- SHEWCHUN, J.**  
Enhancement of superconductivity in thin aluminum films.  
16 p2825 A69-31634
- SHI, Y.-Y.**  
Asymptotic expansion of a hypervelocity atmospheric entry problem.  
09 p1430 A69-21964
- Asymptotic solutions for orbital resonances due to the general geopotential.  
16 p2863 A69-32401
- SHIBAEV, Z. K.**  
Equipment for studying the drift of small-scale ionospheric inhomogeneities /Apparatura dlia issledovaniia drefia melkomasshtabnykh neodnorodnostei ionosfery/.  
14 p2452 A69-29875
- Method of measuring absolute phase heights in the ionosphere /Metod izmereniia absolutnykh fazovykh vysot v ionosfere/.  
20 p3520 A69-37032
- SHIBAEVA, L. V.**  
Measurement of the corpuscular radiation intensity in the upper atmosphere at various latitudes /Izmerenie intensivnosti korpuskuliarnogo izlucheniia v verkhnei atmosfere na razlichnykh shirotakh/.  
05 p0814 A69-16052
- Measurements of the intensity of corpuscular radiation in the upper atmosphere at different latitudes.  
20 p3591 A69-37962
- The ionization of the lower ionosphere under the influence of corpuscular radiation.  
21 p3787 A69-38352
- SHIBAHARA, M.**  
Problems on the finite hollow cylinders under the axially symmetrical deformations.  
11 p1983 A69-25022
- SHIBAROV, V. I.**  
The use of the YuS-38M chronograph for testing high-speed, curtain-type shutters.  
12 p2093 A69-26598
- SHIDLOVSKAIA, I. I.**  
Effect of a transverse magnetic field on a nonisothermal lubrication layer of a conducting gas /Vliianie poperechnogo magnitnogo polia na neizotermicheskii smazochnyi sloi provodiashchego gaza/.  
04 p0607 A69-14990
- Allowance for the effect of Mach numbers on the characteristics of a nonisothermal layer of gas lubricant /Uchet vliianiia chisel Makha na kharakteristiki neizotermicheskogo sloia gazovoi smazki/.  
15 p2629 A69-31021
- SHIDLOVSKII, A. A.**  
Burning ability and inflammability of mixtures of powdered highly calorific metals with organic compounds of the C sub x H sub y O sub z series /Sposobnost' k goreniu i vosplameniaiost' smesei poroshkov vysokokaloriinykh metallov s organicheskimi veshchestvami formuly C sub x H sub y O sub z/.  
02 p0355 A69-17669
- SHIDLOVSKII, V. P.**  
Effect of a transverse magnetic field on a nonisothermal lubrication layer of a conducting gas /Vliianie poperechnogo magnitnogo polia na neizotermicheskii smazochnyi sloi provodiashchego gaza/.  
04 p0607 A69-14990
- The motion of a viscous and electrically conducting fluid at a rotating disc in the presence of an axial magnetic field.  
10 p1727 A69-23099
- SHIEH, L.-S.**  
Continued fraction inversion by Routh's algorithm.  
16 p2805 A69-32470
- SHIEH, P. S.**  
On the albedo problem for a finite plane-parallel Rayleigh-scattering atmosphere.  
09 p1606 A69-22423
- SHIEH, R. C.**  
Some general principles of dynamic instability of solid bodies.  
05 p0844 A69-16742
- SHIELD, R. T.**  
Large plane deformations of thin elastic sheets of neo-Hookean material.  
13 p2359 A69-27320
- Inverse deformation results for elastic materials.  
13 p2360 A69-27324
- SHIELDS, R. B.**  
Review of the specification and measurement of short-term stability.  
18 p3100 A69-34277
- SHIENOK, G. G.**  
Behavior of the current-voltage characteristics of indium phosphide n-p junctions /Khod vol'tampernykh kharakteristik n-p-perekhodov na fosfide indii/.  
01 p0139 A69-10885
- Investigation of the effect of hydrostatic pressure on the recombination emission from the region of indium phosphide p-n junctions /Issledovanie vliianiia gidrostaticheskogo davlennia na rekombinatsionnoe izluchenie iz oblasti n-p-perekhodov na fosfide indii/.  
04 p0639 A69-14428
- Behavior of current-voltage characteristics of indium phosphide n-p junction.  
12 p2144 A69-26649
- SHIER, J. S.**  
Temperature-dependent isomer shift and anharmonic binding of Sn super 119 in Nb sub 3 Sn from Moessbauer-effect measurements.  
01 p0134 A69-10009
- SHIFFER, H. A.**  
Multiple use doctrines as space law.  
20 p3639 A69-37133
- SHIFRIN, E. G.**  
Flow past a thin wedge in a wind tunnel with partially perforated walls at high subsonic velocities.  
07 p1050 A69-18741



- The convexity of a shock wave on a subsonic segment of a plane flow /O vypuklosti udarnoi volny na dozvukovom otrezke v plaskom techenii/.  
12 p2061 A69-25888
- Problem of supersonic jet flow past an infinite wedge /K zadache obtekanii beskonchnogo klina sverkhzvukovoi strui/.  
14 p2391 A69-29619
- Transonic flows behind a separated shock wave /Transzvukovye techeniia za otoshedshei udarnoi volnoi/.  
23 p4151 A69-41526
- SHIFRIN, IA. S.**  
Certain problems of the statistical theory of traveling-wave antennas /Nekotorye voprosy statisticheskoi teorii anten begushchei volny/.  
06 p0898 A69-17797
- SHIFRIN, K. S.**  
The scattering indicatrix of the atmospheric boundary layer.  
02 p0274 A69-11443
- Satellite Meteorology /Sputnikovaia Meteorologiya/.  
06 p0951 A69-17976
- Experience acquired in the use of data concerning the outgoing short-wave radiation field, as obtained from the Cosmos 122 artificial earth satellite /Opyt ispol'zovaniia dannykh o pole ukhodiashechei korotkovolnovoi radiatsii, poluchennykh s ISZ "Kosmos-122"/.  
06 p0952 A69-17983
- A method for calculating a short-wave radiation field reflected anisotropically from an underlying surface /Metodika rascheta polia korotkovolnovoi radiatsii pri anizotropnom otrazhenii ot podstilaushchei poverkhnosti/.  
06 p0952 A69-17985
- Microwave Radiation Transport in the Atmosphere /Perenos Mikrovolnovogo izlucheniia v Atmosfere/.  
06 p0953 A69-17994
- Study of the microwave radiation field in the atmosphere /Issledovanie polia mikrovolnovogo izlucheniia v atmosfere/.  
06 p0953 A69-17995
- Microwave absorption and scattering by precipitation /Pogloshchenie i rasseianie mikroradiovoin v osadkakh/.  
06 p0954 A69-17997
- Application of thermal radar observations in meteorology /Primenenie radioteplokovatsii v meteorologii/.  
20 p3569 A69-36984
- SHIFRIN, M. N.**  
Practical Aerodynamics of the An-2 Aircraft /Prakticheskaya Aerodinamika Samoleta An-2/.  
18 p3090 A69-34340
- SHIGA, F.**  
Three-photon photoelectric effect in K sub 3 Sh.  
05 p0771 A69-15813
- SHIGAREV, A. S.**  
Effect of heat treatment and shot peening on the fine crystallographic structure and properties of the AL19 alloy /Vliianie termicheskoi obrabotki i drobestruinogo naklepa na tonkuui kristallicheskuu strukturu i svoistva splava AL19/.  
04 p0614 A69-14576
- Effect of heat treatment and cold hardening by shot blasting on the fine structure and properties of alloy AL19.  
15 p2638 A69-30278
- Effect of the rate of deformation on the structure of aluminum alloys /Vliianie skorosti deformirovaniia na strukturu aluminievyykh splavov/.  
21 p3746 A69-38958
- SHIGESAWA, H.**  
Approximate pattern calculation of a leaky waveguide.  
11 p1850 A69-24982
- SHIGETOMI, F.**  
Turbulent heat transfer from a surface having stepwise discontinuities on the wall temperature.  
18 p3229 A69-34836
- SHIH, C.**  
Environmental simulation for re-entry test of thermal scale models.  
[AIAA PAPER 69-1011] 22 p3922 A69-40384
- SHIH, H.**  
Conical refraction in nonlinear optics.  
19 p3330 A69-35604
- SHIH, K. T.**  
Helium transport properties and the Lennard-Jones 6-9 potential.  
[ASME PAPER 67-WA/HT-1]

- 02 p0351 A69-12205
- Anode current and heat flux distributions in an MPD engine.  
[AIAA PAPER 69-244] 09 p1566 A69-21260
- SHIK, M. L.**  
Interaction in biological systems /Vzaimodeistvie v biologicheskikh sistemakh/.  
21 p3662 A69-39708
- SHIKHODYROV, V. V.**  
Pathomorphological peculiarities of radiation sickness in animals irradiated by high-energy protons /Osobennosti patologo-morfologicheskoi kartiny luchevoi bolezni pri obluchenii zhivotnykh protonami vysokikh energii/.  
05 p0708 A69-16509
- Pathomorphological features of radiation sickness in animals irradiated with high-energy protons.  
18 p3095 A69-34728
- SHIKI, T.**  
Theoretical and experimental investigations of a propeller working at static condition.  
02 p0188 A69-11957
- Theoretical and experimental investigations of a propeller working at static condition.  
06 p0857 A69-17194
- SHIKIN, I. S.**  
Solution of the gravitation equations in a homogeneous, completely anisotropic model.  
03 p0466 A69-13423
- SHILDIAEV, V. S.**  
Emission dynamics of semiconductor laser.  
19 p3337 A69-36534
- SHILEIKA, A. J.**  
Electroabsorption in CdTe.  
19 p3386 A69-36523
- SHILEPSKY, A.**  
Soft X-ray background flux.  
24 p4368 A69-43220
- SHILKRUT, D. I.**  
A symmetry theorem for shallow equilibrium forms of geometrically nonlinear shallow and nonshallow shells /Teorema simmetrii dlia pologikh form ravnovesiia geometricheskii nelineinykh pologikh i nepologikh obolochek/.  
22 p4047 A69-41062
- SHILL, F. L.**  
Air Force Eastern Test Range inflight data processing.  
05 p0727 A69-16772
- SHILLING, W. J.**  
Factors affecting aircraft generator weight and system performance.  
17 p2904 A69-34087
- SHILOV, A. A.**  
An analytical method for determining a separatrix analog in the motion of a body about its center of mass in the atmosphere /Analiticheskii metod opredeleniia analoga separatsii pri dvizhenii tela okolo tsentra mass v atmosfere/.  
09 p1595 A69-21762
- Effect of the aerodynamic and mass asymmetry of a body on the characteristics of its spatial motion /Vliianie massovoi i aerodinamicheskoi nesimmetrii tela na kharakter ego prostranstvennogo dvizheniia/.  
09 p1431 A69-22077
- The influence of mass and aerodynamic asymmetry of a body on the character of its spatial motion.  
23 p4060 A69-41968
- SHILOV, V. A.**  
Investigation of a supersonic flow past two separating bodies /Issledovanie sverkhzvukovogo obtekanii dvukh razdeliaushchikhsia tel/.  
14 p2391 A69-29617
- SHILOV, V. M.**  
Effect of diet containing unicellular algae on the composition of enteric microflora in animals.  
02 p0197 A69-11490
- General resistance in 62-day periods of hypokinesia with exposure to acceleration.  
02 p0198 A69-11513
- Changes in the intestinal microflora of rats caused by protein-free diets /Izmeneniia kishechnoi mikroflory pri bezbelkovom pitanii krysi/.  
05 p0709 A69-16516
- Changes in the intestinal microflora of protein-starved rats.  
18 p3096 A69-34735
- SHILOVA, E. I.**  
Plane magnetohydrodynamic jets with variable conductivity /Ploskie magnitogidrodinamicheskie strui s peremennoi provodimost'iu/.  
01 p0130 A69-10773

- SHILOVA, N. S.**  
Densities in the emission regions of ionized metals in the lower chromosphere. I.  
02 p0314 A69-11635
- Densities in the luminescence regions of ionized metals in the lower chromosphere. II /Plotnosti v oblastiakh svecheniia ionizovannykh metallov v nizhnai khromosfere. II/.  
03 p0420 A69-13086
- Densities in the emission regions of ionized metals in the lower chromosphere. II.  
14 p2433 A69-28768
- SHILOVA, S. V.**  
Accuracy of the fundamental star catalog with respect to random errors /K voprosu o tochnosti fundamental'nykh zvezdnykh katalogov v sluchainom otoshenii/.  
05 p0823 A69-16041
- SHILTON, D.**  
A time division multiple access satellite communications system.  
07 p1077 A69-18759
- SHIM, C. S.**  
Mechanical properties of the lung in experimental pulmonary emphysema.  
23 p4082 A69-41442
- SHIMA, M.**  
Some stable and long-lived nuclides produced by spallation in meteoritic iron.  
19 p3411 A69-36099
- SHIMABUKURO, F. I.**  
A comparison of 3.3-mm bursts and H alpha emission during flares.  
04 p0650 A69-15527
- SHIMADA, K.**  
Side-wall currents in unignited hardware-type thermionic energy converters.  
09 p1439 A69-21822
- Electrical testing of a six-converter generator.  
09 p1439 A69-21823
- Pre-ignition and ignition characteristics of cesium thermionic diodes.  
14 p2403 A69-29253
- SHIMADA, M.**  
Possible existence of dense ferrimagnetic perovskite allotropic form of yttrium iron garnet.  
08 p1372 A69-20372
- SHIMADA, S.**  
Center-frequency-tunable directional filter for millimeter waves.  
13 p2226 A69-27187
- SHIMADA, T.**  
A method of reducing the effects of anode aperture in high-perveance convergent electron guns.  
07 p1101 A69-18658
- SHIMAHARA, H.**  
Electrical DC conductivity of a turbulent plasma.  
13 p2305 A69-27302
- SHIMANOV, S. N.**  
Approximate analytic design of controls for systems with time lag.  
03 p0408 A69-12973
- The convergence of the optimal control of a countable system of differential equations.  
04 p0583 A69-15095
- Periodic solutions of time-lag systems close to Liapunov systems /Periodicheskie resheniia sistem s posledstviem, blizkikh k sistemam Liapunova/.  
22 p3980 A69-40107
- SHIMANOVICH, V. D.**  
Study of impulsive discharge in axial rotational air flow.  
02 p0285 A69-11571
- SHIMANOVSKII, V. V.**  
The problem of the minimum number of correction impulses during long-range space flights /K voprosu o minimal'nom kolichestve impul'sov korrektsii pri dal'nikh kosmicheskikh poletakh/.  
21 p3818 A69-39822
- SHIMANSKII, IU. I.**  
Liquid-vapor equilibrium in a model of a lattice gas with allowance for thermal expansion.  
06 p1029 A69-16896
- Thermodynamic theory of the gravitational effect in binary mixtures /Termodinamichna teoriia gravitatsionogo efektu v binarnykh sumishkakh/.  
11 p1999 A69-24914
- Study of light scattering in single-component systems near a critical point with allowance for the gravitational effect /Vivchennia svitlorozsianniia v odnokomponent-

- nikh sistemakh poblizu kritichnoi tochki z vrakhuvani-  
am gravitatsiinogo efektu/. 14 p2485 A69-28995
- IMANUKI, A.**  
Effect of thermal stratification on the Ekman layer. 13 p2290 A69-27390
- IMAREV, S. K.**  
Unsteady flow around models in an electromagnetic shock tube. 07 p1119 A69-18744
- IMAZAKI, T.**  
Nighttime variations of F-region electron density profiles at Puerto Rico. III. 03 p0503 A69-14017  
Vertical drift velocities of the ionospheric F-region during the eclipse of 12 November 1966. 12 p2077 A69-27109
- IMAZU, Y.**  
An energetic study of the evolution of the terrestrial and Cytherean atmospheres. 07 p1213 A69-18608
- IMELEVICH, I. L.**  
Effect of titanium on the mechanical properties of N18K8M5T maraging steel /Vliianie titana na mekhanicheskie svoystva martensito- starciushchei stali N18K8M5OT/. 15 p2639 A69-30630
- IMIZU, G.**  
Elastic wind-tunnel models for predicting longitudinal stability derivatives of elastic airplanes. [AIAA PAPER 68-56] 01 p0011 A69-11018
- IMIZU, H.**  
Fabrication-testing-design of Al-B composite materials. 09 p1510 A69-22351
- IMIZU, M.**  
Occultation of BD -17 deg 4388 by Neptune on 7 April 1968. II - Observation at Okayama station and the scale height of Neptune. 06 p1008 A69-17694  
The recombination mechanism of CO and O in the upper atmospheres of Venus and Mars. 07 p1214 A69-18615  
A model calculation of the Cytherean upper atmosphere. 13 p2344 A69-27643
- IMIZU, S.**  
On the dynamical stress distribution of stiffened plate during vibration. 18 p3223 A69-35168
- IMIZU, T.**  
High-resolution Stark spectroscopy of molecules by infrared and far-infrared masers. [IEEE PAPER C-5] 07 p1150 A69-19050  
Application of carbon dioxide laser interferometer to measurement of plasma electron density. 12 p2100 A69-27177  
System and method to predict times of the closest approach and to identify satellites. 15 p2569 A69-30800
- IMIZU, Y.**  
High-wattage xenon short-arc lamps with seals and improved liquid-cooled electrodes. [AIAA PAPER 69-998] 22 p3920 A69-40376
- IMMINNS, A. J.**  
The spectra of radio galaxies and quasi-stellar objects. 04 p0652 A69-14418  
Parkes 2134 plus 004 - A quasi-stellar object with a very unusual radio spectrum. 07 p1224 A69-19708  
Accurate flux densities at 5009 MHz of 753 radio sources. 24 p4382 A69-42922
- IMODA, K.**  
High-resolution Stark spectroscopy of molecules by infrared and far-infrared masers. [IEEE PAPER C-5] 07 p1150 A69-19050  
Prospects of lasers. 09 p1517 A69-22118  
Undulation in the output of a pulsed water-vapor laser. 14 p2461 A69-29887
- IMONY, U.**  
Evaluation of stress concentrations in metals by measuring physical surface parameters. 21 p3747 A69-39326
- SHIMOTAKE, H.**  
Secondary cells with lithium anodes and immobilized fused-salt electrolytes. 04 p0552 A69-15330  
High-temperature batteries. 17 p2904 A69-33663
- SHIMURA, M.**  
Behavior of GP zones in aluminum alloys during the fatigue process. 07 p1166 A69-18962  
Fatigue crack propagation in aluminum alloys. 17 p3061 A69-33677
- SHIN, S.**  
Weldability of nickel-base heat resisting superalloy - Effect of aluminum content on the weld crackings in Inconel 713C. 11 p1906 A69-25577  
Transmission electron microstructures in the various heat-treated titanium alloys - On Ti-8 percent Mn alloy. 11 p1906 A69-25578
- SHINAGAWA, H.**  
Double-notch creep rupture of 5 Cr-0.5 Mo steels. [ASME PAPER 68-WA/MET-7] 14 p2464 A69-29441
- SHINBROT, C. H.**  
Electrical/thermal integration of dynamic power and life support systems for manned spacecraft. 23 p4189 A69-42269
- SHINDIAPIN, G. P.**  
Effect of viscosity and heat conduction in the presence of a weak Mach reflection /Vliianie вязкости i teploprovodnosti pri slabom makhovskom otrazhenii/. 18 p3124 A69-35326
- SHINDO, M.**  
Heat transfer to fully developed turbulent flow in a circular tube with a nonsteady circumferential heat flux. 22 p4051 A69-40921
- SHINDO, S.**  
Comments on V/STOL wind tunnel data at low forward speeds. 18 p3119 A69-35229
- SHINGARKINA, V. A.**  
Nonequilibrium heating of electrons during the motion of a shock wave across a magnetic field /Neravnovesnyi nagrev elektronov pri dvizhenii udarnoi volny cherez magnitnoe pole/. 10 p1737 A69-23470
- SHINIAEV, A. IA.**  
Oxygen diffusion parameters in beta-titanium /O parametrikh diffuzii kisloroda v beta-titane/. 07 p1163 A69-18783
- SHINKAR, A. I.**  
Digital computer solution of problems associated with an asymmetric stressed state of systems composed of shells of revolution /Reshenie na ETSVM zadach o nesimmetrichnom napriazhennom sostoianii sistem iz obolochek vrashcheniia/. 05 p0840 A69-16201
- SHINKARUK, M. T.**  
Some results of a study of the damping properties of coatings for elements of aircraft structures /Nekotorye rezul'taty issledovaniia dempfiruiushchikh svoystv pokrytii elementov samoletnykh konstruktsii/. 17 p2993 A69-33941
- SHINODA, T.**  
Study on the self-sustained oscillation of a piston-type valving system. II - Analysis of a valving system with a capacity and some experiments. 01 p0012 A69-10310  
Analysis of stress relaxation data of metals at elevated temperatures by a new parametric method. 19 p3342 A69-35778  
Analysis of stress relaxation data of metals at elevated temperatures by a new parametric method. 21 p3846 A69-39812
- SHINOZUKA, M.**  
On the bound of first excursion probability. 13 p2361 A69-27438  
Numerical Fourier transform in random vibration. 17 p2996 A69-33710  
Optimum structural design based on reliability and proof-load test. 19 p3437 A69-36033
- SHIOBARA, S.**  
Application of carbon dioxide laser interferometer to measurement of plasma electron density. 12 p2100 A69-27177
- SHIODA, S.**  
The Toshiba blow-down MHD test facility, and experiments on non-equilibrium ionization. 10 p1673 A69-23477
- SHIOMI, H.**  
A photoelastic study of the stress distribution of box girders. II. 15 p2705 A69-30419
- SHIOMI, Y.**  
Spectra of solar microwave bursts up to 35 GHz /Research note/. 09 p1579 A69-22178
- SHIONOK, G. G.**  
Optical and electrical properties of quasi-binary solid solutions of some A super III B super V compounds. 19 p3390 A69-36554
- SHIOTA, H.**  
Deformation and stress in a cylindrical shell under concentrated loading. I - Radial loading. 01 p0166 A69-10301
- SHIOYA, H.**  
Closed-cycle traveling-wave maser. 02 p0256 A69-11992
- SHIOZAWA, L. R.**  
The mechanism of the photovoltaic effect in high efficiency CdS thin-film solar cells. 19 p3250 A69-35683
- SHIOZAWA, T.**  
Electromagnetic scattering by a moving small ellipsoid. 18 p3105 A69-35485  
Reflection and transmission of a plane electromagnetic wave by a moving isotropic plasma - A general solution. 23 p4114 A69-41360  
Electromagnetic scattering by a small plasma ellipsoid moving through an external stationary magnetic field. 24 p4282 A69-42979
- SHIPAI, A. K.**  
Study of impulsive discharge in axial rotational air flow. 02 p0285 A69-11571
- SHIPALOV, A. S.**  
Method for calculating the population and the excitation rates of the working levels in a CO sub 2 laser /Metod rascheta zaselennosti i skorosti vzbuzhdeniia rabochikh urovnei OKG na CO sub 2/. 22 p3964 A69-40795
- SHIPATOV, E. T.**  
Study of proton channeling in single crystals of ionic compounds and semiconductors /Issledovanie kanalirovaniia protonov v monokristallakh ionnykh soedinenii i poluprovodnikov/. 01 p0140 A69-11109
- SHIPILO, V. B.**  
Preparation of homogeneous solid solutions of indium and gallium antimonides. 10 p1745 A69-23331  
Optical and electrical properties of quasi-binary solid solutions of some A super III B super V compounds. 19 p3390 A69-36554
- SHIPLEY, J.**  
A digitally controlled vibration or acoustics testing system. II - Statistical requirements and spectrum shaping techniques. 15 p2587 A69-30388
- SHIPLEY, M.**  
Forward transient characteristics of gold-doped silicon p super plus -n-n super plus diodes. 07 p1101 A69-18652
- SHIPOV, A. A.**  
Nervous Mechanisms of Vestibular Reactions /Nervnye Mekhanizmy Vestibuliarnykh Reaktsii/. 16 p2746 A69-32605
- SHIPPY, D. J.**  
A formulation and solution procedure for the general non-homogeneous elastic inclusion problem. 03 p0530 A69-14064  
Matrix eigenvalues by numerical integration. 13 p2289 A69-28227  
Attitude stabilization of a non-rotating satellite by means of a gravitational anchor. 19 p3429 A69-35914
- SHIPSTONE, D. M.**  
Morphology of the southern radio auroral zone. 12 p2033 A69-26950



## SHIPUK, I. IA.

Ionization instability in a disk channel of a nonequilibrium MHD generator /Ionizatsionnaia neustoiichivost' v diskovom kanale neravnovesnogo MGD-generatora/.

06 p0871 A69-17911

## SHIPULO, G. P.

Mechanism of optical generation in CaF sub 2 -Dy super 2 super plus /O mekhanizme opticheskoi generatsii CaF sub 2 -Dy super 2 super plus/.

11 p1894 A69-24618

A laser with liquid active elements based on POC1 sub 3 -Nd super 3 super plus /OKG s zhidkimi aktivnymi veshchestvami na osnove POC1 sub 3 -Nd super 3 super plus/.

11 p1894 A69-24620

## SHIRA, C. S.

The influence of minor elements on Alloy 718 weld microfissuring.

22 p3967 A69-39883

## SHIRAHATA, K.

Design technique for wideband tunnel diode amplifier.

15 p2578 A69-30804

## SHIRAI, H.

Spectroscopic measurements of weakly ionized argon plasma jet. II.

21 p3779 A69-39794

Spectroscopic measurements of a weakly ionized argon plasma jet. I - Electronic excitation temperature and electron density measurements in a test section and a plenum chamber.

22 p3990 A69-40596

Piston driven shock tube of Kyoto University.

22 p3928 A69-41046

Spectroscopic measurements of weakly ionized argon plasma jet. III.

22 p3991 A69-41052

## SHIRAI, T.

Supplements to a multimode direction tracking system - Simultaneous usage with a polarization tracker.

06 p0888 A69-17652

## SHIRAIISHI, S.

Low-loss laser beam transmission through lenses at the Brewster angle.

07 p1148 A69-18863

## SHIRAKATA, H.

Experimental study on MHD generators with segmented electrodes at high Hall parameters.

10 p1637 A69-23476

## SHIRAKAWA, H.

Stability of nonlinear feedback systems with backlash.

02 p0225 A69-11968

On the steady-state error of nonlinear control systems.

13 p2237 A69-27188

## SHIRAKAWA, K.

Deformation and stress in a cylindrical shell under concentrated loading. I - Radial loading.

01 p0166 A69-10301

Deformation and strength of a pressure vessel with elliptical cross section.

11 p1983 A69-25023

## SHIRALKAR, B. S.

Deterioration in heat transfer to fluids at supercritical pressure and high heat fluxes. [ASME PAPER 68-HT-39]

13 p2373 A69-27771

## SHIRATANABAN, A. D.

Relationship of paper speed to precision of pulse wave measurements - A multiple observer study of left ventricular ejection time.

19 p3258 A69-36449

## SHIRATORI, E.

The influence of prestrain on subsequent yield surfaces. I.

01 p0166 A69-10303

Experimental study of the subsequent yield surface by using cross-shaped specimens.

04 p0682 A69-15302

## SHIRATORI, M.

Strain distribution at the base of cracks.

06 p1020 A69-17127

On the strain near the tip of a fatigue crack in notched steel plates.

06 p1022 A69-17198

## SHIRCK, J.

Recent fossil track studies bearing on extinct Pu super 244 in meteorites.

19 p3407 A69-36077

## SHIREI, R. A.

Relation between the attenuation coefficient of laser emission and the water content of artificial fogs /Sviaz' koefitsienta oslablenia intensivnosti lazernogo izlucheniia s vodnost'iu iskusstvennykh tumanov/.

21 p3738 A69-39118

## SHIRES, G. L.

Fluid bearings, with special reference to silicon nitride.

06 p0931 A69-17529

## SHIRIAEVA, N. V.

New light alloys of aluminum with lithium and magnesium.

03 p0443 A69-13026

## SHIRK, J. S.

Matrix-isolation spectra of discharge "sputtered" metals.

06 p0957 A69-17113

## SHIRKE, J. S.

Coordinated rocket measurements on the D-region winter anomaly. I - Experimental results.

05 p0758 A69-16411

## SHIRKO, I. V.

Elastoplastic bending of a cylindrical shell /Uprugoplasticheskiy izgib tsilindricheskoi obolochki/.

08 p1419 A69-21179

Axisymmetric bending of a uniformly strong cylindrical shell /Osesimmetrichnyi izgib ravnooprochnoi tsilindricheskoi obolochki/.

15 p2653 A69-31195

## SHIRKOV, A. V.

Paramagnetic masers with different active materials /Paramagnitnye mazery s razlichnymi rabochimi veshchestvami/.

09 p1519 A69-22288

## SHIRLAND, F. A.

Thin film solar cells for balloon applications.

15 p2553 A69-31287

Integrated CdS solar cell array.

19 p3254 A69-35710

## SHIRLEY, J. A.

Gain measurements in a fluid mixing CO sub 2 laser system.

10 p1701 A69-22954

## SHIRLEY, J. H.

Dynamics of a simple maser model.

03 p0441 A69-14108

## SHIRLEY, R. S.

Motion cues in man-vehicle control.

10 p1650 A69-23879

## SHIRMAN, I. A. D.

A random-walk theory for an effective secondary-radiation center /K teorii bluzhdaniia effektivnogo tsentra vtorichnogo izlucheniia/.

05 p0718 A69-15653

On the theory of straying of the effective center of secondary emission.

16 p2754 A69-32510

## SHIROKII, D. K.

Tuning design of single-circuit low-frequency control systems /Rozrakhunok nastroivannia odnokonturnykh niz'kочастотnykh sistem reguliuvannia/.

08 p1297 A69-20418

## SHIROKOV, V. N.

Calculation of a conical shell on a digital computer /Raschet konicheskoi obolochki na ETsVM/.

11 p1981 A69-24943

## SHIROKOVA, G. B.

Corrosive characteristics of jet fuels in the presence of condensing water /Korroziionnye svoista reaktivnykh topliv v usloviakh kondensirovaniia vody/.

01 p0142 A69-11099

## SHIROKOVA, N. I.

Investigation of the equilibrium and characteristics of alloys of the Ti sub 3 Sn-Ti plus 5 percent Zr/ cross section of the Ti-Zr-Sn system /Issledovanie ravnovesiia i svoistv splavov razreza Ti sub 3 Sn-Ti plus 5 percent Zr/ sistemy Ti-Zr-Sn/.

07 p1162 A69-18770

Study of the phase equilibrium and properties of alloys pertaining to the titanium corner of the Ti-Zr-Al system /Issledovanie fazovogo ravnovesiia i svoistv splavov titanovogo ugla sistemy Ti-Zr-Al/.

07 p1162 A69-18771

## SHIROTA, Y.

Strain distribution at the base of cracks.

06 p1020 A69-17127

## SHIRSHOV, I. U. M.

Detection of discrete capture levels at the surface of cadmium sulfide single crystals /Obnaruzhenie diskretnykh urovnei prilipania na poverkhnosti monokristallov sul'fida kadmiia/.

13 p2318 A69-27888

## SHIRSHOV, R. P.

Possibility of determining lunar rock types by their mass spectrometric method /O vozmozhnosti opredeleniia tipa lunnykh porod mass-spektrometricheskimi metodami/.

22 p4034 A69-41105

## SHIRSHOVA, V. V.

Determination of heat capacity of positrons /Opredelenie teploemkosti pozitronov/.

01 p0038 A69-10098

## SHISHKANOVA, S. F.

Bending of plates with reinforced circular apertures /Izгиb plastin s podkreplennymi krugovymi otverstiiami/.

21 p3846 A69-39713

## SHISHKIN, G. V.

Neutrino luminosity of superdense stars /O neitrinnoi svetimosti sverkhplotnykh zvezd/.

13 p2336 A69-27435

## SHISHKIN, N. S.

Physics of Clouds and Cloud Modification /Fizika Oblakov i Aktivnykh Vozdeistviu/.

03 p0459 A69-13285

## SHISHKIN, P. G.

Shrinkage and heat release of a binder consolidated under the action of gamma-radiation /Usadka i teplovydelenie svyaziushchego, strukturirovannogo pod vozeistviem gamma-izlucheniia/.

12 p2117 A69-25991

Influence of exposure rate on the mechanical characteristics of a binder /Vliianie moshchnosti oblucheniia na mekhanicheskie kharakteristiki svyaziushchego/.

23 p4179 A69-41711

## SHISHKINA, V. N.

Determinations of the right ascensions of the fundamental bright stars in the declination range from -90 deg A to plus 40 deg with Zeiss transit instrument No. 18818 /Determinaciones de ascensiones rectas de estrellas fundamentales brillantes en la zona -90 deg A plus 40 deg de declinacion con el instrumento de pasajes Zeiss No. 18818/.

10 p1777 A69-23388

## SHISHKOV, A. A.

Gasdynamics of Solid-Fuel Rocket Motors /Gazodinamika Porokhovykh Raketykh Dvigateli/.

04 p0647 A69-15493

## SHISHKOV, A. G.

Certain dynamic effects in ferrites /Nekotorye dinamicheskie efekty v ferritakh/.

13 p2319 A69-27993

## SHISHOV, V. I.

Fluctuation effects during the propagation of relativistic solar protons in the interplanetary magnetic field /O fluktuatsionnykh iavleniakh pri rasprostraneni relativistskikh solnechnykh protonov v mezplanetnom magnitnom pole/.

14 p2512 A69-29048

## SHITAYA, T.

Single crystal CdS solar cell.

05 p0704 A69-15958

## SHIUKOV, A. G.

Rocket Engines /Raketye Dvigateli/.

01 p0143 A69-11196

## SHIUTTE, N. M.

Characteristics of the neutral and ionized components of the atmosphere at heights of 100-500 km, measured during the flights of geophysical rockets.

03 p0422 A69-13508

## SHIVANANDAN, K.

Preliminary observations of the far-infrared night-sky background radiation.

01 p0121 A69-11249

Rocket observations of bright celestial infrared sources in Ursa Major.

09 p1603 A69-22230

Limb darkening on the earth's night side at wavelengths of 1-3 mu and 3-7.5 mu.

17 p2960 A69-33167

## SHIVITSKIS, I. U.

Bright cadmium plating /Blestiashee kadmirovanie/.

22 p3959 A69-41266

- IIVRIS, O. N.**  
Reflector radio telescope with a resolution of 15 arc seconds /Reflektornyi radioteleskop s razreshaishchei sposobnost'iu 15 sekund dugi/.  
15 p2679 A69-30102
- IIVYRTALOV, M. T.**  
Microtron with plasma injector.  
08 p1279 A69-19803
- IKABARA, E. A.**  
Possible structure of the transfer function in the system comprising pulmonary ventilation and tension in the arterial blood /O vozmozhnoi strukture peredatochnoi funktsii sistemy "legochnaia ventilatsiia-napriazhenie kisloroda v arterial'noi krovi"/.  
19 p3260 A69-35897
- IKADINSKII, K. G.**  
Problem of flame propagation with allowance for hydrodynamics and the temperature dependence of the transport coefficients /Zadacha o rasprostraneni plameni s ucheto gidrodinamiki i temperaturnoi zavisimosti koefitsientov perenosu/.  
17 p3069 A69-33136
- IKADOV, V. IA.**  
Steady flows of a viscous fluid between coaxial rotating cylinders after stability loss /Statsionarnye tekheniia viazkoi zhidkosti mezhdu koaksial'nymi vrashchaiushchimisya tsilindrami posle poteri ustoiichivosti/.  
19 p3299 A69-36391
- IKADOVA, V. P.**  
A near-equilibrium supersonic air flow past bodies of revolution /Okoloravnovesnoe obtekanie tel vrashcheniia sverkhzvukovym potokom vozdukh/.  
11 p1820 A69-25474
- IKALIKOV, V. N.**  
Bistable zones in an oscillator circuit with a p-n junction /O bistabil'nykh zonakh v kolebatel'nom konture s p-n-perekhodom/.  
04 p0575 A69-14463
- Bistable regions in an oscillatory circuit with a p-n junction.  
14 p2418 A69-28834
- ISHKANOV, I. N.**  
Investigation of the fatigue strength of steels 22K and 16GNM under conditions of sharp cycle asymmetry and under the action of boiling water /Issledovanie ustalostnoi prochnosti stali 22K i 16GNM v usloviakh rezkoi asimetrii tsikla i pri vozdetsviu kipiashechei vody/.  
19 p3347 A69-36741
- Investigation of the effect of stress concentration and surface hardening on the fatigue strength of the E1617 alloy /Issledovanie vliianiia kontsentratsii napriazhenii i uprochneniia poverkhnosti na ustalostnuiu prochnost' splava E1617/.  
21 p3745 A69-38875
- Procedure for studying the development of failure by fatigue /Metodika izucheniia razvitiia ustalostnogo razrusheniia/.  
23 p4225 A69-41425
- ISHKAROVSKY, I. P.**  
Generalized turbulence space-correlation and wave-number spectrum-function pairs.  
01 p0127 A69-10339
- Dipole and quadrupole bremsstrahlung and the damping of electron plasma oscillations for any degree of ionization.  
03 p0475 A69-13149
- Turbulence functions useful for probes /space-time correlation/ and for scattering /wave-number-frequency spectrum/ analysis.  
03 p0483 A69-14255
- ISHELEV, E. I.**  
Estimation of the effectiveness of a method for separating the envelope of an AM signal in the presence of AM interference and fluctuation noise /Otsenka effektivnosti odnogo metoda vydeleniia ogibaishchei OAM signala pri deistviu OAM pomekhi i fluktuatsionnogo shuma/.  
19 p3277 A69-36568
- ISHKLIAR, R. S.**  
Structure alterations of nickel during interaction with a high-speed air flow at elevated temperatures.  
05 p0783 A69-16812
- ISHKLIAR, R. SH.**  
X-ray study of structural defects in cobalt /Rentgenograficheskie issledovaniia strukturnykh nesovershenstv v kobalte/.  
12 p2113 A69-26042
- ISHKLIAREVSKII, E. E.**  
Electrical resistivity of aluminum oxide deposited on a substrate by plasma and gas-flame spraying /Udel'noi elektricheskoe soprotivlenie oksidi aluminia, nanesen-
- noi na podlozhu plazmennym i gazoplazmennym napyleniem/.  
15 p2630 A69-31179
- ISHKLOVSKII, I.**  
Concerning the nature of the sky background of soft X-ray emission.  
08 p1380 A69-20769
- ISHKLOVSKII, I. S.**  
Application of the special principle of relativity to a study of the nature of certain sources of cosmic radio emission /Primenenie spetsial'nogo printsipa otноситel'nosti k issledovaniu prirody nekotorykh istochnikov kosmicheskogo radioizlucheniia/.  
03 p0499 A69-13078
- Supernovae.  
07 p1210 A69-18379
- Nature of sources of maser radiation in the OH lines /O prirode istochnikov mazernogo izlucheniia v liniakh OH/.  
11 p1954 A69-24379
- Application of the special-relativity principle to an interpretation of some sources of cosmic radio waves.  
14 p2509 A69-28760
- Remarks on the nature of pulsars /Zamechaniia o prirode pul'sarov/.  
24 p4383 A69-42985
- The nature of sources of maser radiation in OH lines.  
24 p4389 A69-43769
- ISHKODROV, V. G.**  
A method for determining the geopotential from measurements of the gravity force at a known surface, and assessment of the errors of the method on the basis of a model /Metod opredeleniia potentsiala zemli po izmereniiam sily tiazhesti na izvestnoi poverkhnosti i issledovanie oslybok metoda na modeli/.  
15 p2689 A69-30567
- ISHKODROV, VL.**  
Method of determining the geocentric orientation of a quasi-geocentric system of coordinates /Sposob opredeleniia geotsentricheskoi orientatsii kvazigeotsentricheskoi koordinatnoi sistemy/.  
12 p2158 A69-26429
- ISHKOLNIKOV, V. A.**  
Numerical method for determining the Doppler effect and reduced Doppler frequency difference for radiowaves radiated coherently from an artificial earth satellite.  
07 p1087 A69-19610
- Influence of horizontal gradients on the reduced Doppler frequency shift difference for satellites passing through the ionosphere /O vliiani horizontal'nykh gradientov na privedennoi raznost' dopplerovskikh smeshenii chastot pri polete ISZ v ionosfere/.  
13 p2219 A69-27701
- ISHKUNOV, N. V.**  
Frequency mixing in nonlinear electrooptical crystals /Smeshenie chastot v nelineinykh elektroopticheskikh kristallakh/.  
03 p0438 A69-13047
- ISHKURIKHIN, I. B.**  
Investigation of secondary losses in a flat turbine lattice /Issledovanie vtorichnykh poter' v ploskoi turbinoi reshetke/.  
21 p3645 A69-39717
- ISHELSKII, G. N.**  
Study of the effect of iron and silicon impurities on the properties and structure of duraluminum type alloys during the fabrication of compacted semifinished products from granules /Issledovanie vliianiia primesei zheleza i kremniia na svoistva i strukturu splavov tipa duraliumin pri proizvodstve kompaktnykh polufabrikatov iz granul/.  
03 p0452 A69-14120
- ISHELSKII, O. F.**  
Experimental determination of the heat physics coefficients of polymer materials during thermal destruction.  
18 p3161 A69-34696
- ISHLIAIFER, D. B.**  
Solution of a Stefan-type problem by the method of straight lines /Reshenie zadachi tipa Stefana metodom priamykh/.  
20 p3567 A69-36992
- ISHLIAKHOV, V. I.**  
Investigation of the optical characteristics of meteoric objects by means of a laser /Issledovanie nekotorykh opticheskikh kharakteristik meteobektov s pomoshch'iu lazera/.  
12 p2125 A69-25955
- ISHLIAKOV, O. N.**  
Determination of inhomogeneity in semiconductor materials by the optical reflection method.  
05 p0764 A69-16664
- SHLIAKOV, V. I.**  
Stratospheric humidity as determined from the absorption of solar radiation by a resolved spectral structure of water vapor.  
09 p1536 A69-21864
- SHLIAPOCHNIK, L. IA.**  
Calculation of the flow of an ideal gas near the stagnation line for blunt bodies /Raschet tekheniia ideal'nogo gaza v okrestnosti linii tormozheniia zatuplen'nykh tel/.  
03 p0364 A69-13660
- SHLIOMIS, M. I.**  
Equations of the magnetohydrodynamics of paramagnetic media /Uravenniia magnitnoi gidrodinamiki paramagnitnykh sred/.  
11 p1932 A69-25465
- Coupled magnetoacoustic waves in a conducting paramagnetic fluid /Sviazannye magnitozvukovye volny v provodiashchei paramagnitnoi zhidkosti/.  
14 p2492 A69-29609
- SHLIJONSKII, SH. G.**  
Determination of the extreme levels of the  $m/f$  function and MUF under various ionospheric conditions.  
03 p0424 A69-13540
- SHLISH, R.**  
Spectral characteristics of geomagnetic field pulsations of the P2 type /Spektralnye kharakteristiki pul'satsii geomagnitnogo polia tipa P2/.  
20 p3520 A69-37038
- SHLITSA, R. P.**  
Features of the deformation of fiberglass-reinforced plastics during tension /Osobennosti deformirovaniia stekloplastikov pri rastiazhenii/.  
18 p3163 A69-35366
- SHLIUKO, V. IA.**  
Apparatus for obtaining molten high-melting-point compounds /Ustanovka dlia polucheniia plavlenykh tugoplavkikh soedinenii/.  
12 p2055 A69-26264
- SHLOSINGER, A. P.**  
Advancements of space suit temperature control technology by application of modified heat pipes. [AIAA PAPER 69-619]  
17 p2914 A69-33293
- SHMAKOV, IU. I.**  
Peculiarities of the motion of an anisotropic fluid at large Reynolds numbers /Osoblivosti rukhu anizotropnoi ridini pri velikikh chislakh Reinal'dsa/.  
02 p0231 A69-12141
- SHMAKOV, V. P.**  
Axisymmetric oscillations of a hemispherical shell partially filled with a liquid /Osesimmetrichnye kolebaniia polusfericheskoi obolochki, chastiche zapolnennoi zhidkost'iu/.  
04 p0679 A69-14922
- Oscillations of nonshallow spherical shells /O kolebaniiaakh nepologikh sfericheskikh obolochek/.  
21 p3839 A69-39199
- SHMANENKOV, V. N.**  
Heat exchange in the region of an interaction between an axisymmetric supersonic jet and an obstruction /Teplotobmen v oblasti vzaimodeistviia osesimmetrichnoi sverkhzvukovoi strui s pregradoi/.  
24 p4264 A69-43493
- SHMARTSEV, IU. V.**  
Anisotropy of the conduction band in CdSnAs sub 2 /Anizotropiia zony provodimosti v CdSnAs sub 2/.  
03 p0488 A69-13888
- Absorption of infrared radiation in n-type gallium phosphide. I - Scattering mechanisms.  
03 p0492 A69-14168
- Absorption of infrared radiation in n-type gallium phosphide. II - Photoionization of impurities.  
03 p0492 A69-14169
- Influence of uniaxial deformation on the activation energy epsilon sub 2 of p-type GaSb.  
04 p0644 A69-15269
- Anisotropy of the conduction band in CdSnAs sub 2.  
11 p1939 A69-25689
- The problem of the structure of the conduction band in GaSb /K voprosu o strukture zony provodimosti GaSb/.  
13 p2319 A69-27899
- IR absorption in n-type gallium phosphide.  
19 p3385 A69-36518
- Certain properties of sulfur-doped gallium antimonide /Nekotorye svoistva antimonida galliia, legirovanogo seroi/.  
21 p3781 A69-39048



## SHMATKO, E. S.

## SHMATKO, E. S.

Observation of radio emission from extensive air showers with an array of half-wave antennas at the Moscow University installation.  
13 p2332 A69-28407

Some aspects of the use of a half-wave antenna to investigate radio emission from extensive air showers.  
13 p2332 A69-28408

## SHMATKO, O. A.

Thermodynamic properties of solid solutions of tungsten in cobalt.  
07 p1165 A69-18941

## SHMATOV, V. T.

Investigation of the dislocation structure of molybdenum deformed by hydroextrusion /Issledovanie dislokatsionnoi struktury molibdena, deformirovannogo gidroekstruziei/.  
14 p2463 A69-29311

## SHMELEV, G. M.

The drag of a cylindrical satellite rotating in the earth's magnetic field /O tormozhenii tsilindricheskogo sputnika, vrashchayushchegosia v magnitnom pole zemli/.  
12 p2174 A69-26443

Damping of satellite rotation by the earth's magnetic field /O tormozhenii vrashcheniya sputnika magnitnym polem zemli/.  
14 p2530 A69-29065

## SHMELEVA, A. P.

Cross section for pionization in interactions of 100 GeV cosmic ray neutrons and pions with carbon and lead nuclei.  
13 p2330 A69-28382

## SHMELKINA, E. B.

Tables of corrections for refraction during observation of objects in the earth's atmosphere /Tablitsy popravok za refraktsiiu pri nabludenii ob'ektov v zemnoi atmosfere/.  
15 p2646 A69-30160

## SHMETER, S. M.

The effect on the wind field of vertical motion in thick convective clouds.  
02 p0274 A69-11446

Turbulence in a Free Atmosphere /Turbulentnost' v Svobodnoi Atmosfere/.  
18 p3165 A69-34351

## SHMIDT, A. G.

Asymptotic methods in the theory of optimum correction for systems with slowly varying parameters.  
15 p2583 A69-31234

## SHMIDT, G.

Electromechanical investigation of the surface layer of barium titanate /Elektromekhanicheskoe issledovanie poverkhnostnogo sloia titanata baria/.  
22 p3995 A69-41156

## SHMONIN, L. I.

Increasing the stability of scintillation spectrometers for X radiation /Povyshenie stabil'nosti tsintillatsionnykh spektrometrov rentgenovskogo izlucheniia/.  
21 p3727 A69-39856

## SHMOYS, J.

Ray tracing studies for the topside ionosphere.  
07 p1124 A69-18838

Multipath effects in topside sounding in ionospheric ducts.  
14 p2434 A69-28945

## SHMULEV, I. I.

Periodic solution of the standard equations for the motion of a viscous liquid.  
18 p3123 A69-35053

## SHMULIAN, B. L.

Iterative method of determining the weighting function of a plant operating in the normal mode /Iteratsionnyi metod opredeleniya vesovoi funktsii ob'ekta v rezhime normal'noi ego raboty/.  
24 p4289 A69-42951

## SHMULIAN, I. U.

Fractionally linear transformations with operator coefficients and operator spheres /O drobnolichinykh preobrazovaniakh s operatornymi koefitsientami i operatornykh sharakh/.  
05 p0787 A69-16423

## SHMYGLEVSKII, I. U.

Radiative energy transport in spectral lines /O perenose energii izlucheniem v spektral'nykh liniakh/.  
22 p3982 A69-41018

## SHNAID, I. M.

Temperature field in an unsteady adiabatic gas flow /Temperaturnoe pole v nestatsionarnom adiabatcheskom gazovom potoke/.  
06 p0911 A69-17813

## SHNAIDMAN, V. A.

Calculation of the turbulence coefficient in the layers between main isobaric surfaces /Raschet koefitsienta turbulentnosti v sloiakh mezhdu osnovnymi izobaricheskimi poverkhnostiami/.  
15 p2648 A69-30646

Vertical distribution of the characteristics of pulsating wind velocity in the upper troposphere /O vertikal'nom raspredelenii kharakteristik pul'satsionnoi skorosti vetra v verkhnei troposfere/.  
15 p2649 A69-30649

## SHNEEROV, B. E.

Allowance for radiative heat inputs in problems of dynamic meteorology /Uchet radiatsionnykh pritokov tepla v zadachakh dinamicheskoi meteorologii/.  
14 p2477 A69-29827

## SHNENKOV, G. P.

Generation of the second harmonic in ternary semiconductor compounds /Generatsiia vtoroi garmoniki v troinykh poluprovodnikovykh soedineniiakh/.  
03 p0489 A69-13894

## SHNERENKO, K. I.

Investigation of infinite systems of algebraic equations in periodic problems for a spherical shell /Ob issledovanii beskonечnykh sistem algebraicheskikh uravnenii periodicheskikh zadach dlia sfericheskoi obolochki/.  
23 p4227 A69-41706

## SHNIRMAN, E. G.

A method of designing adaptive automatic control systems with variable structure /Ob odnom sposobe postroeniia adaptivnykh sistem avtomaticheskogo upravleniya s peremennoi strukturoi/.  
01 p0052 A69-10795

## SHNOL, E. E.

High-temperature boundary layer in air /O vysokotemperaturnom pogranichnom sloe v vozdukh/.  
01 p0060 A69-10725

## SHOBER, T. I.

Determination of the shape of the lunar surface from the values of the coefficients of expansion of the gravitational potential of the moon /Opredelenie formy poverkhnosti lunny po znacheniiam koefitsientov razlozheniya gravitatsionnogo potentsiala lunny/.  
20 p3596 A69-37308

## SHOCKLEY, Q. O.

Advanced coatings on superalloy blades and vanes for hot corrosion and oxidation resistance. [SAE PAPER 690480]  
24 p4335 A69-43515

## SHOCKLEY, T. D.

Application of the point-matching method in determining the reflection and transmission coefficients in linearly tapered waveguides.  
01 p0044 A69-10629

## SHODIEV, U.

Comparison of the drifts of meteor trails /Sopostavlenie dreifov meteornykh sledov/.  
13 p2353 A69-28035

## SHOEMAKER, A. F.

Strengthening glass and glass-ceramics.  
24 p4335 A69-43034

## SHOEMAKER, E.

The lunar regolith.  
22 p4012 A69-40087

## SHOEMAKER, E. M.

Some paradoxes associated with elastic-plastic limit load analysis.  
02 p0337 A69-11562

A re-examination of the critical speed of a rotating solid disk.  
23 p4235 A69-42480

## SHOEMAKER, R. H.

Clean surfaces - A must when machining titanium.  
20 p3549 A69-37434

The care and treatment of titanium from ingot to finished product.  
24 p4324 A69-43432

## SHOEMAKER, W. J.

Failure of brain norepinephrine depletion to extinguish the daily rhythm in hepatic tyrosine transaminase activity.  
05 p0707 A69-15582

Hepatic tyrosine transaminase rhythm - Interaction of environmental lighting, food consumption and dietary protein content.  
17 p2910 A69-33755

## SHOFER, R. J.

Firing patterns induced by sound in single units of the cerebellar cortex.  
22 p3876 A69-40264

## SHOFNER, F. M.

Concentration measurements in a transient helium air mixture utilizing an electron beam.  
08 p1312 A69-19864

Recording fluid velocity fields holographically.  
11 p1884 A69-24644

Fundamentals of holographic velocimetry.  
19 p3305 A69-35722

Processing holographic velocimetry data.  
19 p3305 A69-35733

## SHOJI, H.

An experimental study on the diffusion characteristics of turbulent flow in a low speed wind tunnel.  
13 p2250 A69-28499

## SHOJI, M.

Improvement of reliability of Gunn diodes.  
09 p1470 A69-22788

## SHOKIN, I. U. A.

Television-optical observations of Icarus /Optiko-televizionnye nabludeniya Ikara/.  
21 p3719 A69-38402

## SHOKIROV, SH.

Investigation of the dependence of the viscosity of simple fluids on the density /K issledovaniyu zavisimosti v'язkosti prostykh zhidkostei ot plotnosti/.  
13 p2299 A69-28036

## SHOLIN, G. V.

Charged particle density measurement in nonstationary plasma through Stark broadening of the H beta Balmer line.  
03 p0481 A69-141454

Possibility of measuring the electron temperature on the basis of the line intensity ratio of beryllium-like ions /O vozmozhnosti izmereniia elektronnoi temperatury po otnosheniiu intensivnosti linii berillipodobnykh ionov/.  
14 p2496 A69-297898

Measurement of nonstationary-plasma density from the Stark broadening of the H sub beta Balmer line /Izmerenie plotnosti nestatsionarnoi plazmy po shkarkovskomu ushireniyu bal'merovskoi linii H sub beta/.  
14 p2497 A69-297904

"Calorimetric" measurement of the plasma electron temperature in a collisionless shock wave /"Kalorimetrichekoe" izmerenie elektronnoi temperatury plazmy v besstolknovitel'noi udarnoi volne/.  
15 p2657 A69-30104

## SHOME, P. L.

Attitude stabilization of a non-rotating satellite by means of a gravitational anchor.  
19 p3429 A69-35914

## SHOMO, L. P.

Tables for the calculation of radial multipole matrix elements by the Coulomb approximation.  
01 p0124 A69-10901

## SHOOK, D.

Monte Carlo calculations of a hemispherical duct neutron streaming experiment.  
18 p3171 A69-35178

## SHOOR, S. K.

Salting out of nonpolar gases in aqueous potassium hydroxide solutions.  
10 p1651 A69-22937

## SHOR, I. A. B.

Tables for the Analysis and Control of Reliability /Tablitsy dlia Analiza i Kontrolya Nadezhnosti/.  
04 p0608 A69-15540

## SHOR, K. G.

Some aspects of designing low-noise transistorized amplifier stages /Osobennosti proektirovaniia maloshumiashechikh usilitel'nykh kaskadov na tranzistorakh/.  
09 p1463 A69-21724

Distinctive features of the design of transistor low-noise amplifier stages.  
20 p3505 A69-37460

## SHORE, C. P.

Flutter design charts for stressed isotropic panels.  
11 p1992 A69-25524

## SHORE, S.

Thermostructural simulation of lifting vehicle structures.  
12 p2060 A69-26836

## SHORIN, S. N.

Some characteristics of the thermal mineralization of biocomplex wastes in a closed system.  
10 p1649 A69-23504

## SHORIN, V. P.

Calculation of forced pressure fluctuations in hydraulic systems taking into account a square law of

- losses at local resistances /Raschet vyznuzhennykh kolebaniy davleniya v gidravlicheskikh sistemakh s uchetom kvadratsionnogo zakona poter' na mestnykh soprotivleniyakh/.  
18 p3094 A69-34991
- HORSHOROV, M. KH.**  
Problems of the theory and technology of welding of heat-resistant alloys based on niobium and nickel /Voprosy teorii i tekhnologii svarki zharoprochnykh spлавov na osnove niobiia i nikelia/.  
09 p1504 A69-22146
- Effect of short-term heating after deformation during thermomechanical treatment on the properties of the VT15 alloy and welded joints of this alloy /Vliianie kratkovremennogo nagreva posle deformatsii pri mekhaniko- termicheskoi obrabotke na svoystva splava VT15 i ego svarnykh soedinenii/.  
11 p1889 A69-24277
- SHORT, R. A.**  
Life test of six high temperature resistojets. [AIAA PAPER 69-294]  
09 p1563 A69-21232
- SHORTILL, R. W.**  
Interpretation of extraterrestrial imagery.  
15 p2690 A69-30711
- The infrared moon. [AIAA PAPER 69-593]  
17 p3033 A69-33302
- SHOSTAK, V. I.**  
Mechanisms of the action of strong photostimuli on the visual analyzer.  
10 p1647 A69-23588
- SHOTOV, A. P.**  
Coherent emission from injection plasma in InSb without magnetic field.  
19 p3387 A69-36532
- SHOUCRI, M. M.**  
Excitation of oscillations in surface waves.  
11 p1931 A69-25365
- Dispersive properties for bounded finite temperature beam-plasma system.  
14 p2502 A69-29957
- SHOUMAN, A. R.**  
Stagnation pressure losses of compressible fluids through abrupt area changes neglecting friction at the walls. [ASME PAPER 68-WA/FE-46]  
05 p0750 A69-16113
- SHPAK, M. T.**  
Passive Q-switching in solid-state lasers, based on stimulated Mandel'shtam-Brillouin scattering of light.  
05 p0770 A69-15699
- Operating characteristics of a ruby laser at 78 deg K.  
05 p0777 A69-16546
- Light generation by organic dye liquid solution systems with negative absorption on activator molecules and induced combination scattering on matrix molecules /Generatsiia sveta sistemami zhidkikh rastvorov organicheskikh krastselei pri otritsatel'nom pogloschenii na molekulkakh aktivatora i induktivirovanom kombinatsionnom rassceianii na molekulkakh matritsy/.  
06 p0933 A69-17256
- SHPAKOV, V. N.**  
Continuous stimulated emission of an LaF sub 3 -Nd super 3 super plus laser at room temperature.  
08 p1323 A69-19945
- SHPAKOVA, S. G.**  
Free oscillations of a plate with concentrated masses /Svobodnye kolebaniia plastinki s sosredotochennymi massami/.  
18 p3226 A69-35377
- SHPENKOV, G. P.**  
Generation of a second harmonic in ternary semiconducting compounds.  
11 p1939 A69-25695
- SHPET, N. G.**  
Investigation of the air cooling systems of the turbine rotors of AI-20 engines /Issledovanie sistem vozdukhonogo okhlazhdeniia rotorov turbin dvigatel'ei AI-20/.  
24 p4364 A69-43081
- SHPILRAIN, E. E.**  
Experimental study of the electrical conductivity of lithium and cesium in the condensed phase at temperatures up to 1200 deg K.  
03 p0481 A69-14148
- Experimental investigation of an injector model as a vaporizer for MHD systems /Eksperimental'noe issledovanie modeli inzhektora kak raznogonno go ustroistva dlia MGD-ustanovok/.  
06 p0871 A69-17918
- Determination of the local parameters of a flow in the mixing chamber of a vaporizer /Opredelenie lokal'nykh parametrov potoka v kamere smesheniia raznogonno go ustroistva/.  
06 p0871 A69-17919
- Thermodynamic analysis of new liquid-metal MHD-generator cycles /Termodinamicheskii analiz novykh tsiklov s zhidkometallicheskim MGD-generatorom/.  
13 p2372 A69-27489
- Experimental investigation of a wet-steam injector /Eksperimental'noe issledovanie parovodiano go inzhektora/.  
13 p2246 A69-27490
- SHIRO, G. S.**  
Design of axisymmetric shells /Raschet osesimmetrichnykh obolochek/.  
17 p3057 A69-33194
- SHPOLSKII, M. R.**  
The influence of a previous exposure on the sensitivity of the UF-2T film to short-wave ultraviolet radiation /Vliianie predvaritel'noi zasvetki na chuvstvitel'nost' plenki UF-2T k korotkovolnovomu ul'trafioletovomu izlucheniui/.  
19 p3314 A69-36626
- SHRADER, W. W.**  
MTI performance degradation caused by limiting.  
03 p0390 A69-13198
- SHRESTHA, G. M.**  
Heat transfer in laminar flow in a uniformly porous channel with an applied transverse magnetic field.  
02 p0289 A69-12235
- Laminar flow with large injection through parallel and uniformly porous walls of different permeability.  
03 p0417 A69-13795
- Laminar elastico-viscous flow in channels with porous walls.  
10 p1680 A69-23668
- Laminar non-Newtonian flow through a porous annulus.  
10 p1680 A69-23690
- SHRIBMAN, V.**  
Developments in explosive welding.  
04 p0608 A69-15481
- SHRINKIN, V. A.**  
General problems in guidance theory /Obshchie voprosy teorii navedeniia/.  
21 p3687 A69-39643
- SHRIVASTAVA, R. S.**  
A simple technique for the determination of Young's modulus.  
22 p4042 A69-40443
- SHRIVASTAVA, S. K.**  
Coupled librational motion of an axi-symmetric satellite in a circular orbit.  
22 p4008 A69-39936
- SHROFF, A. M.**  
Technology of plane and cylindrical thermionic converters /Technologie des convertisseurs thermoioniques plans et cylindriques/.  
14 p2419 A69-29178
- Preliminary results of a study of heat pipes at high temperature /Resultats preliminaires d'une etude sur les caloducs a haute temperature/.  
14 p2539 A69-29208
- Depositions of tungsten, rhenium, niobium, and tungsten-niobium alloys by thermal decomposition in the vapor phase /Depots par decomposition thermique en phase vapeur de tungstene, rhenium et niobium et d'alliage niobium tungstene/.  
14 p2462 A69-29209
- Ceramic-metal seals /Scelllements ceramique-metal/.  
14 p2455 A69-29212
- SHROPSHIRE, S., JR.**  
Changes in acid-base balance induced by 100 percent gradient headward acceleration.  
09 p1444 A69-22540
- SHROYER, E. F.**  
Effect of a central circular hole on fundamental plate frequency. [ASME PAPER 69-VIBR-62]  
10 p1805 A69-24156
- SHTARAS, S. S.**  
Electric field distribution in circular spiral deflection systems of traveling-wave tubes /Raspredelenie elektricheskogo polia v kruglykh spiral'nykh otkloniushchikh sistemakh trubok begushchei volny/.  
13 p2237 A69-28582
- SHTAIN, M. M.**  
Compact betatrons for nondestructive testing applications.  
18 p3136 A69-34779
- SHTAIN, N. S.**  
Physical mechanism of stability loss /Po povodu fizicheskogo mekhanizma poteri ustoiichivosti/.  
06 p0911 A69-17498
- SHTAINBERG, A. S.**  
Kinetics of the thermal decomposition of ammonium perchlorate at high temperatures /Kinetika termicheskogo raspada perkhlorata ammoniia pri vysokikh temperaturakh/.  
08 p1375 A69-20339
- Linear pyrolysis of polymethyl methacrylate /Lineinnyi piroliz polimetilmetakrilata/.  
17 p3017 A69-33132
- Measurement of the total heats of high-temperature polymer gasification /Izmerenie summarnykh teplot vysokotemperaturnoi gazifikatsii polimerov/.  
17 p3069 A69-33133
- Two modes of linear pyrolysis of condensed materials /O dvukh rezhimakh lineinogo piroliza kondensirovannykh veshchestv/.  
17 p3069 A69-33134
- SHTAINBERG, G. S.**  
Origin of large lunar craters and round maria /O proiskhozhdenii krupnykh lunnykh kraterov i kruglykh morei/.  
10 p1784 A69-23960
- SHTAINS, K. A.**  
Allowance for the image brightness distribution during photoelectric recording of the transit of stars /Uchet raspredeleniia iarkosti izobrazheniia pri fotoelektricheskoi registratsii prokhozheniia zvezd/.  
20 p3608 A69-38053
- SHTEINSHLEGER, V. B.**  
Detection of the galactic radio line H56 alpha - The first radio line observed in the millimeter band.  
08 p1397 A69-20771
- SHTEINSHLEIGER, V. B.**  
Radiometer with a paramagnetic quantum amplifier for spectral measurements in the 8 mm range /Radiometr dlia spektral'nykh izmerenii v diapazone 8 mm s kvantovym paramagnitnym usilitel'm/.  
04 p0597 A69-14851
- Radiometer for spectral measurements in the 8-mm range with a quantum paramagnetic amplifier.  
15 p2607 A69-30243
- SHTEKHER, M. S.**  
An optical device for the measurement of local fluid flow velocities /Opticheskii pribor dlia izmereniia mestnykh skorostei potoka zhidkosti/.  
03 p0427 A69-12969
- SHTERENTAL, I. SH.**  
Role of aldosterone and hydrocortisone in the control of the sodium metabolism of the organism /Rol' al'dosterona i gidrokortizona v regulatsii obmena natriia v organizme/.  
21 p3656 A69-38965
- SHTERN, A. G.**  
Certain properties of an MHD boundary layer on a plate /O nekotorykh svoystvakh MGD- pogranichnogo sloia na plastine/.  
01 p0130 A69-10771
- The application of Pitot and Prandtl tubes in magnetohydrodynamic experiments.  
10 p1727 A69-23100
- MHD-characteristics of some mechanical methods of velocity measurement /MGD- osobennost' nekotorykh mekhanicheskikh metodov izmereniia skorosti/.  
14 p2453 A69-29920
- SHTERN, D. IA.**  
Peculiarities of absolute dispersion interferometers for plasma diagnostics /Osobennosti absolutnykh dispersionnykh interferometrov dlia issledovaniia plazmy/.  
22 p3947 A69-40959
- SHTRICKER, J.**  
Evidence for re-reflected shock waves behind taper sections.  
18 p3085 A69-34474
- SHTURBINA, N. A.**  
Changes in the electrical conductivity and color of SrTiO sub 3 single crystals in a constant electric field /Izmenenie elektricheskoi provodnosti i okraski monokristallov SrTiO sub 3 v postoiannom elektricheskom pole/.  
15 p2666 A69-30043
- SHU, F. H.**  
On the spiral structure of disk galaxies. III - Comparison with observations.  
10 p1786 A69-24109



## SHUB, C. M.

An improved algorithm for the simplification of switching functions using unique identifiers on a Karnaugh map.

16 p2764 A69-31710

## SHUBARIN, I. U.

Statistics of the field of a phasing section /Statistika polia faziruiushchei sektsii/.

23 p4125 A69-42041

## SHUBERT, R.

Optical surface waves on thin films and their application to integrated data processors.

13 p2229 A69-27676

## SHUBIN, A. A.

Temperature dependence of helium-neon laser output at low temperatures.

03 p0441 A69-13845

## SHUBINA, G. I. U.

Study of the structure and properties of solid solutions of oxygen in titanium and zirconium /Issledovanie stroeniia i svoistv tverdykh rastvorov kisloroda v titane i tsirkonii/.

04 p0618 A69-15078

## SHUBINA, L. V.

Emission of solutions of organic molecules excited by harmonics of a neodymium laser /Generatsiia rastvorov organicheskikh molekul pri vozbuзhdenii garmnikami neodimovogo lazera/.

12 p2104 A69-26030

## SHUEY, H. M.

Accidental ignition in propellant processing.

16 p2829 A69-31993

## SHUFORD, D. M.

Manufacturing aspects of technology feasibility spacecraft sterilization and bioassay program.

09 p1446 A69-22358

A new method of pressure control for adhesive bonding.

09 p1512 A69-22367

## SHUGAEV, F. V.

The supersonic flow round blunt bodies of revolution with a break in the generator.

03 p0362 A69-13406

Interaction between a shockwave and a blunt body in a supersonic gas flow /Vzaimodeistvie udarnoi volny s zatuplennym telom, obtekaemym sverkhzvukovym potokom gaza/.

14 p2390 A69-29467

## SHUIKIN, N. N.

Effect of temperature on the emission spectrum of semiconductor lasers /Vliianie temperatury na spektr izlucheniia poluprovodnikovyykh kvantovyykh generatorov/.

13 p2271 A69-27888

Influence of a frequency filter on the emission spectrum of semiconductor lasers /Vliianie chastotnogo filtra na spektr izlucheniia poluprovodnikovyykh generatorov/.

15 p2635 A69-30967

Effect of temperature on the emission spectra of semiconductor lasers.

21 p3738 A69-39146

## SHUISKAIA, K. F.

Method for the investigation of heat transfer from wall to gas at high wall temperatures.

18 p3229 A69-34712

## SHUKALOV, I.

Metagalactic electrons /O metagalakticheskikh elektronakh/.

15 p2687 A69-30541

## SHUKALOV, I. B.

Cosmic rays in an expanding universe /Kosmicheskie luchi v rasshiriaushcheisya vselennoi/.

10 p1756 A69-22815

Concerning the nature of the cosmic isotropic X-radiation.

16 p2847 A69-31800

## SHUKEILO, I. U. A.

Nonaxisymmetric temperature field of an unbounded cylinder with a moving heating boundary /Neosimmetrichnoe temperaturnoe pole neogranichennogo tsilindra s dvizhushcheisya granitse nagreva/.

07 p1241 A69-18924

## SHUKUROV, A. K. H.

Absolute photometry of artificial earth satellites in the ultraviolet spectral region /Absolutnaya fotometriia iskusstvennykh sputnikov zemli v ul'traioletovoi oblasti spektra/.

14 p2447 A69-29408

## SHULBERG, A. M.

Application of nonlinear limb darkening laws in compact eclipsing binary systems /O primeneni nelineinykh zakonov potemneniia k kraiu v tesnykh dvoynykh sistemakh/.

15 p2689 A69-30563

## SHULENOK, P. F.

Refinement of the method for surface alloying of high-melting-point metals in aluminum melts /Usovershenstvovanie sposoba poverkhnostnogo legirovaniia tugoplavkikh metallov v rasplavakh aluminia/.

19 p3328 A69-36158

## SHULER, K. E.

Rate coefficients, reaction cross sections and microscopic reversibility.

23 p4113 A69-41519

## SHULER, W. T.

Damage tolerance and logistic transport design. [ICAS PAPER 68-23]

24 p4254 A69-43717

## SHULGA, M. O.

Stress concentration in a spherical shell with holes /Pro konsentratsiiu napruzhen' u sferichnoi obolonsi z otvorami/.

23 p4233 A69-42342

## SHULGA, O. V.

Dislocation model for the electrical resistance and seizing of metal surface layers /Disklatsionnaia model' skhvatyvanii i elektrosoprotivlenie poverkhnostnykh sloev metallov/.

22 p3957 A69-41111

## SHULGA, V. G.

Dispersion properties of a ridge-slot-ridge slow-wave structure /Dispersionnye svoistva zamediiaushchei sistemy grebenka-shchel' - grebenka/.

23 p4140 A69-42049

## SHULGINA, I. L.

Synthetic monosaccharides for nutrition of man in space.

15 p2557 A69-31471

## SHULGINA, N. V.

Interpretation of certain ionograms of high latitude stations /Interpretatsiia nekotorykh ionogramm vysokosirotnykh stantsii/.

20 p3529 A69-37690

## SHULGINOV, B. S.

Energy dissipation in a cyclically deformed material in the presence of static stresses /Pro rozsianniia energii v materiali, shcho tsiklichno deformuet'sia, pri naivnosti v n'omu statichnikh napruzhen'/.

12 p2181 A69-26612

## SHULKEVICH, V. F.

Combination noise and cross noise in a ferrite mixer /Kombinatsionnye i perekrestnye pomekhi v feritovom smesitele/.

15 p2574 A69-30129

## SHULMAN, A. I. A.

Theory of fluctuations in a nonequilibrium electron gas /K teorii fluktuatsii v neravnovesnom elektronnom gaze/.

13 p2314 A69-28445

## SHULMAN, G. P.

Organic analysis by pyrolysis-gas chromatography-mass spectrometry - A candidate experiment for the biological exploration of Mars. [JPL-TR-32-1368]

11 p1832 A69-25640

Sterile soil from Antarctica - Organic analysis.

16 p2746 A69-31552

## SHULMAN, I. SH.

Determination of the position of a moving object with the aid of gyroscopes and apparent rate meters /Opredelenie mestopolozheniia dvizhushchegosia ob'ekta pri pomoshchi giroskopov i izmeritelei kazhushcheisya skorosti/.

18 p3134 A69-34556

## SHULMAN, L.

Development and use of ultra-high-pressure test vessel for characterizing propellants and explosives.

04 p0645 A69-14472

## SHULMAN, L. M.

Toroidal stages in stellar evolution.

12 p2173 A69-27174

Diffusion model of a cometary tail /Diffuzionnaia model' khvosta komety/.

14 p2523 A69-29705

Gasdynamics of the nucleus region of a comet /Gazodinamika okoloiadornoii oblasti komety/.

15 p2684 A69-30520

Physical conditions in the boundary layer of a cometary nucleus /Fizicheskie uslovia v pristenochnom sloe kometnogo iadra/.

15 p2684 A69-30521

## SHULMAN, R. G.

Ultraviolet-induced excited states in deoxyribonucleic acid.

03 p0372 A69-13488

## SHULMAN, S. G.

Properties of indium arsenide film Hall transducers in strong constant magnetic fields at liquid helium temperatures.

10 p1696 A69-23717

## SHULMAN, Y.

Dynamic response of a composite shell. [AIAA PAPER 68-351]

16 p2871 A69-31877

## SHULZHENKO, E. B.

Regulatory mechanisms of hemodynamic shifts under the effect of acceleration - Experimental study in a physiologic model.

02 p0198 A69-11503

Applying the principles of physiological modeling in space biology and medicine.

09 p1444 A69-22541

## SHUM, Y.-M.

Surface temperatures of the Galilean satellites of Jupiter.

03 p0513 A69-13776

## SHUMAEVA, I. U. F.

The possibility of using hydrogen peroxide mixed with a detergent to reduce microbial contamination.

05 p0713 A69-15943

## SHUMAKER, J. B., JR.

Franck-Condon factors for high rotational levels of nitrogen.

07 p1185 A69-19169

## SHUMAKER, M. J.

The effects of sustained high g loads on quartz crystals.

01 p0042 A69-10417

The survivability of delicate components in a sustained high g load environment.

19 p3431 A69-36037

## SHUMAKER, P. K.

The use of the Stark effect in electric-field measurement.

03 p0429 A69-13222

## SHUMAN, B. M.

Propagation of elastic waves in a medium with random inhomogeneities /Rasprostraneniie uprugikh voln v srede so sluchainymi neodnorodnostiami/.

04 p0667 A69-14262

## SHUMAN, F. G.

The currently operational NMC model, and results of a recent simple numerical experiment.

19 p3363 A69-36503

## SHUMANOV, V. S.

Investigation of the radiation of a dense plasma obtained by means of an exploding wire in vacuum /Issledovanie izlucheniia plotnoi plazmy, poluchennoi pri vzryve provolochki v vakuumе/.

03 p0482 A69-14227

Study of a dense plasma during an electric explosion of a wire in a vacuum /Izluchenie plotnoi plazmy pri elektricheskom vzryve provolochki v vakuumе/.

12 p2137 A69-26533

## SHUMIK, M. A.

Behavior of conical shells under dynamic loading /O povedenii konicheskikh obolochek pri dinamicheskoi nagruzhennii/.

21 p3834 A69-38716

## SHUMILOV

On the theory of polar substorms.

16 p2852 A69-32620

## SHUMILOV, O.

Theory of polar storms /K teorii poliarnykh bur'.

09 p1485 A69-21535

Contribution to the theory of polar storms.

16 p2783 A69-32530

## SHUMILOV, O. I.

Polar storms and the development of DR currents /Poliarnye buri i razvitiie DR-tokov/.

02 p0238 A69-11672

Some problems concerning auroral absorption.

03 p0423 A69-13520

Polar storms and the development of DR-currents.

13 p2257 A69-28703

Some problems of auroral absorption /Nekotorye voprosy avroral'nogo pogloscheniia/.

17 p2965 A69-33965

MILKOVA, N. A.

Some problems of the operation of fuel cell oxygen electrodes.

08 p1260 A69-21045

Some problems of the operation of fuel cell oxygen electrodes.

16 p2739 A69-32416

MUKA, A.

A germanium solid-state triode.

09 p1462 A69-21353

MULIANSKII, I. I.

Calculation of smooth multiwave waveguide junctions. I, II /K raschetu plynnykh mnogovolnovykh volnovodnykh perekhodov. I, II/.

23 p4125 A69-42046

MUMPERT, P. K.

Full-scale development of lift engine inlets for the XV-4 B aircraft.

AIAA PAPER 68-636]

20 p3585 A69-37150

MURRAY, L. K.

The facile isolation of a structural phospholipoprotein from *Hydrogenomonas facilis* and *Neurospora crassa*.

22 p3871 A69-40049

MURKO, E. V.

A possible chain mechanism of arc discharge development in crossed electric and magnetic fields /O vozmozhnom tsepnom mekhanizme razvitiia dugovogo razriada v skreshchennykh elektricheskoi i magnitnom poliakh/.

11 p1932 A69-25540

MURTIATSKII, A. B.

Investigation of the optical characteristics of meteoric objects by means of a laser /Issledovanie nekotorykh opticheskikh kharakteristik meteorobektov s pomoshch'iu lazera/.

12 p2125 A69-25955

Polarization studies of the structure of cumulonimbus clouds /Polarizatsionnye issledovaniia struktury kuchevo-dozhdnykh oblakov/.

16 p2806 A69-32266

Investigation of the polarization characteristics of angel echo signals /Issledovanie polarizatsionnykh kharakteristik ekho-signalov ot "iasnogo" neba/.

16 p2779 A69-32274

MUR, A. A.

Effect of the earth on signal correlation in space-diversity reception of microwaves /Vliianie zemli na korreliatsiiu signalov pri prostanstvenno-raznesenno prieme ul'trakorotkikh voln/.

05 p0720 A69-16530

Effect of the ground on signal correlation in space diversity reception of ultra-short waves.

16 p2753 A69-32472

Prediction of noise due to long-range tropospheric propagation of ultrashort waves /Prognoz pomekh, obuslovlennykh dal'nim troposfernym rasprostraneniem ukv/.

17 p2919 A69-33146

MUR, G. N.

Turbulence in a Free Atmosphere /Turbulentnost' v Svoobodnoi Atmosfere/.

18 p3165 A69-34351

MUR, M. S.

Computer calculations of the efficiency of the Gunn generator.

01 p0042 A69-10319

Computer model of the Gunn diode.

07 p1097 A69-18449

Magnetic field influence on the Gunn effect.

18 p3183 A69-35267

MUR, V. B.

Problems of nitrogen fixation under mild conditions /Problemy fiksatsii azota v miagkikh usloviakh/.

03 p0382 A69-14198

MUR, V. I.

Magnetic field effect on GaAs injection laser emission.

19 p3387 A69-36529

MURALEVA, E. I.

Formation of F centers and electron recombination luminescence in alkali-halide crystals activated with Eu super 2 plus /Obrazovanie F-tsentrov i elektronnaia rekombinatsionnaia luminesentsiia v shchelochno-galoidnykh kristallakh, aktivirovannykh Eu super 2 plus/.

19 p3383 A69-36164

MURLEY, J. T.

Reduced sensory input states - Sensory and perceptual deprivation and isolation.

06 p0873 A69-17020

SHURYGIN, A. I.

Preliminary results of investigations of solar X-ray emission by means of the satellite "Kosmos-166."

07 p1210 A69-19614

SHUSHPANOV, O. E.

Quasi-optical transmission line composed of nonideal correctors /Kvaziopticheskaia liniia peredachi iz neideal'nykh korrektorov/.

05 p0717 A69-15637

Application of holograms to the analysis of wave packets in quasi-optical transmission lines /O primeneni gologramm dlia analiza volnovykh puchkov v kvaziopticheskikh liniakh peredachi/.

05 p0718 A69-15650

Combined phase correctors in quasi-optical lines.

05 p0723 A69-16784

Quasi-optical transmission line using nonideal compensation networks.

16 p2754 A69-32495

Application of holograms to the analysis of waveguide beams in quasi-optical transmission lines.

16 p2754 A69-32507

SHUSTER, G. I.

Actinometric instruments on board Soviet meteorological satellites /Aktinometricheskaia apparatura sovetskikh meteorologicheskikh sputnikov zemli/.

06 p0929 A69-17977

SHUSTOV, L. N.

Bases of Electronic Countermeasures and Electronic Intelligence /Osnovy Radioprotivodeistviia i Radiotekhnicheskoi Razvedki/.

03 p0385 A69-12927

SHUTER, W. L. H.

Distances to pulsars.

01 p0149 A69-10271

A study of the 21-cm line in the solar neighbourhood.

14 p2520 A69-29371

SHUTKO, A. V.

Drift waves of finite amplitude in an unstable plasma /O dreifovykh volnakh konechnoi amplitudy v neustoiichivoi plazme/.

08 p1365 A69-20549

Drift instabilities in a plasma column bounded at the ends.

12 p2138 A69-26710

SHUTRASAKUL, L.

Short time variations of the cosmic ray diurnal phase and amplitude determined by means of superimposed records.

23 p4204 A69-41481

Geomagnetic disturbances and the cosmic ray diurnal variation.

23 p4204 A69-41483

SHUTT, A.

Radome performance for G.W. systems.

07 p1112 A69-19540

SHUTT, R. L.

Polarization of emission lines in astronomy. VI.

09 p1600 A69-22204

SHUTTER, W. L. H.

A search for galactic H sub 2 super plus.

16 p2864 A69-32571

SHUVAEV, N. A.

Two forms of motion equations for a system of points with variable masses /Dve formy uravnenii dvizheniia dlia sistemy toчек s peremennymi massami/.

03 p0465 A69-12965

One class of mass variation.

21 p3771 A69-39087

SHUVALOVA, E. N.

Electron-ion recombination in the wake of an ionizing particle and the scintillation mechanism of noble gases /Elektron-ionnaia rekombinatsiia na slede ionizuiushchei chastitsy i mekhanizm stintillatsii blagorodnykh gazov/.

15 p2655 A69-30961

SHVAB, L.

Effects of isolation and sensory deprivation.

08 p1263 A69-19937

SHVALIGIN, I. V.

The headed structure of stellar traces and investigation of the amplitude components of image vibrations by means of satellite traces /Issledovanie komponent amplitudy drozhanii po sledam ISZ i chetochnaia struktura zvezdnykh sledov/.

15 p2647 A69-30166

SHVALIGIN, I. V.

Estimate of the possible error in determining the position of a satellite due to the instability of the earth's atmosphere /Otsenka vozmozhnoi oshibki v opredelenii polozenia ISZ, vyzvannoi nestabil'nost'iu zemnoi atmosfery/.

12 p2158 A69-26445

SHVAREV, V. V.

Soil-density meter-penetrator of the automatic lunar station Luna-13.

03 p0430 A69-13424

Measurement of the lunar surface density by the automatic station "Luna-13."

03 p0430 A69-13425

Study of the lunar surface by the Soviet Luna 9 and Luna 13 automatic stations /Issledovanie lunnoi poverkhnosti na sovetskikh avtomaticheskikh stantsiiakh Luna-9 - Luna-13/.

[UN PAPER 68-95769]

06 p1000 A69-17041

Achievements in studies of properties of materials used for space objects and their use in industry.

06 p0945 A69-17046

Investigations of the physical and mechanical properties of the moon's soil from Luna 13.

18 p3113 A69-34239

SHVARTS, G. L.

Corrosion-resistant titanium alloy with 32 percent Mo /Korroziionnostoikii splyv titana s 32 percent Mo/.

07 p1163 A69-18781

SHVARTS, IA. M.

Atmospheric Electricity /Atmosfernoe Elektrichestvo/.

04 p0593 A69-15101

Investigation of the static electrification of aircraft /Issledovanie staticheskoi elektrizatsii samoletov/.

04 p0549 A69-15107

SHVARTS, N. Z.

Approximation of the current-voltage characteristics of tunnel diodes /K voprosu ob approksimatsii vol'tampennykh kharakteristik tunnel'nykh diodov/.

02 p0214 A69-11613

An approximation of the volt-ampere characteristic of tunnel diodes.

11 p1847 A69-24721

Synthesis of a tunnel-diode amplifier with series stabilization /Sintez tunnel'no go usilitelia s posledovatel'noi stabilizatsiei/.

13 p2236 A69-28575

SHVARTSBURG, A. B.

Nonlinear resonance of modulated radio waves in a plasma /the ionosphere/ /Nelineinyy rezonans dlia modulirovannykh radiovoln v plazme /ionosfere/.

09 p1453 A69-21543

Self-action of waves in a rarefied plasma situated in a magnetic field /Samovozeistvie voln v razrezhennoi plazme, nakhodiasheisia v magnitnom pole/.

13 p2314 A69-28444

Nonlinear resonance for modulated radio waves in a plasma /ionosphere/.

16 p2754 A69-32538

SHVARTSMAN, P. I.

General method of determining the optimum parameters of turbines with a small volumetric flow rate /Obshchii metod opredeleniia optimal'nykh parametrov turbin s malym ob'emnym rashkodom/.

18 p3184 A69-34983

SHVARTSMAN, V. F.

Density of relict particles with zero rest mass in the universe.

16 p2814 A69-31801

SHVED, G. M.

On the physical conditions near the mesopause.

03 p0422 A69-13408

SHVEDOV, V.

Method of flight investigation of statistical characteristics of time-variable stresses in helicopter structures.

05 p0767 A69-16775

SHVEIKIN, G. P.

Heat capacity of cubic monoxides and vanadium oxycarbide /Teplotnost' kubicheskikh monookisii i oksikarbida vanadiia/.

09 p1523 A69-21739

Diffusion of carbon in alloys of niobium with titanium, zirconium, tungsten, and molybdenum /Diffuziia ugleroda v splyavakh niobiia s titanom, tsirkoniem, vol'framom i molibdenom/.

18 p3157 A69-35250

SHVEIKIN, V. I.

The maximum efficiency of an injection laser /O prede'l'noi effektivnosti inzhetsionnogo lazera/.

01 p0091 A69-10883



- The maximum efficiency of an injection laser.  
12 p2109 A69-26647
- SHVEIKO, IU. IU.**  
Vibration and stability of cylindrical shells in a gas flow.  
16 p2875 A69-32287
- SHVETS, A. I.**  
Investigation of the pressure distribution on certain star-shaped bodies at M approximately equals to 4.  
07 p1050 A69-18703  
An investigation of stream behind bodies in a supersonic flow.  
09 p1431 A69-22237  
Theoretical study of separated flows /Teoreticheskie issledovaniia otrynnykh techenii/.  
17 p2949 A69-33124  
Methods of calculating shock wave/boundary layer interaction /Metody rascheta vzaimodeistviia skachkov uplotneniia s pogranichnym sloem/.  
24 p4243 A69-42582
- SHVETS, I. T.**  
Effect of initial nonuniformity of the temperature profile of the main stream on the efficiency of thermal shielding of a surface by air injection through a slit or porous collar /Vliianie nachal'noi neravnomernosti profil'ia temperatury osnovnogo potoka na effektivnost' teplovoi zashchity poverkhnosti vduvom vozdukhha cherez shchel'ili poristy poiasok/.  
11 p2002 A69-25338
- SHVETS, O. M.**  
Heating of plasma ions by an external stochastic field.  
09 p1553 A69-22527
- SHVETS, R. N.**  
Quasi-static problem in coupled thermoelasticity /Kvazistaticheskaiia zadacha vzaimosvaziannoi termoprugosti/.  
12 p2177 A69-25993  
Axisymmetric thermoelastic vibrations of a cylindrical shell /Osesimmetrichnye termoprugie kolebaniia tsilindricheskoi obolochki/.  
14 p2532 A69-28979
- SHVETSOV, A. V.**  
Improvement of solutions to boundary value problems in elasticity theory for nonstar-shaped doubly connected regions /Utochnenie resheniia kraevykh zadach teorii uprugosti dlia nevezdchatykh dvukhsviaznykh oblastei/.  
12 p2178 A69-25998
- SHVETSOV, K. IA.**  
Calculating the probability coefficients to identify stationary input signals.  
14 p2410 A69-28818
- SHVIDENKO, V. I.**  
Method of investigating the thermal stability of highly refractory materials using small samples /K voprosu o metodike izucheniia termostoikosti vysokotemperaturnykh mekhanicheskikh ispytunii neorganicheskikh zharostoikov pokrytii/.  
20 p3538 A69-37360
- SHVIDKOVSKII, E. G.**  
Rocket engineering and development of upper atmosphere physics.  
[UN PAPER 68-95693] 06 p0949 A69-17058  
Measurements of some neutral components of the Arctic thermosphere.  
21 p3704 A69-38367
- SHVIDKOVSKII, E. GR.**  
The comparison of the Soviet Meteorological rocket data with the CIRA-1965 model.  
15 p2650 A69-31421
- SHVILKIN, B. N.**  
Low-frequency waves in a DC discharge plasma /Nizkochastotnye volny v plazme razriada postoiannogo toka/.  
13 p2316 A69-28584  
Effect of discharge fluctuations on the laser radiation output /Vliianie fluktuatsii v razriade na vykhod lazernogo izlucheniia/.  
19 p3338 A69-36605
- SHVOM, E. M.**  
Stable passive Q-switch for a neodymium laser /Stabil'nyi passivnyi zatvor dlia neodimovogo lazera/.  
17 p2983 A69-33969
- SHVYREVA, T. N.**  
The InAs-InP phase diagram.  
03 p0483 A69-13024
- SHYAM, M.**  
Investigation of waveguide-below-cutoff resonators for solid-state active devices.  
15 p2577 A69-30613
- SHYNE, J. J.**  
"Whiskerizing" - A physical and chemical change to the interface of graphite fibers.  
08 p1341 A69-20511
- SIACHINOV, V. I.**  
Scientific program and scientific equipment complex of the Cosmos 149 artificial earth satellite /Nauchnaia programma i kompleks nauchnoi apparatury ISZ "Kosmos-149"/.  
14 p2447 A69-29403  
Equipment for measuring the earth's brightness from the Cosmos 149 satellite /Apparatura dlia izmereniia iarkosti zemli so sputnika "Kosmos-149"/.  
14 p2447 A69-29404  
Certain results of a study of the earth's brightness with the aid of the Cosmos 149 satellite /Nekotorye rezul'taty issledovaniia iarkosti zemli s pomoshch'iu ISZ "Kosmos-149"/.  
15 p2596 A69-30650
- SIAGAEV, V. F.**  
Calculation of flows past plane and axisymmetric bodies with a broken generatrix /O raschete obtekaniiia ploskikh i osesimmetrichnykh tel s lomanoi obrazuiushchei/.  
11 p1820 A69-25470
- SIAGAILO, G. N.**  
Cosmic dust in the Galaxy /Kosmicheskaiia pyl'v galaktike/.  
14 p2527 A69-29897
- SIAHATGAR, S.**  
Display of 8521-angstrom line of cesium utilizing a swept GaAs laser.  
19 p3339 A69-36696
- SIASKIN, IU. M.**  
Thermodynamic analysis of new liquid-metal MHD-generator cycles /Termodinamicheskii analiz novykh tsiklov s zhidkometallicheskim MGD-generatorom/.  
13 p2372 A69-27489
- SIBERT, W.**  
Space applications in support of cartography and geography.  
[UN PAPER 68-95401] 01 p0178 A69-10489
- SIBGATULLIN, N. R.**  
Nonlinear relativistic waves in a superdense gas /Nelineinye relativistskie volny v sverkhshzhatom gaze/.  
22 p3861 A69-41114
- SIBILA, A. I.**  
Small payload potential for earth resources.  
21 p3799 A69-38629
- SIBLEY, E. H.**  
Graphical systems communication - An associative memory approach.  
04 p0566 A69-15343
- SIBULKIN, M.**  
An evaluation of the differential approximation for spherically symmetric radiative transfer.  
[ASME PAPER 68-HT-21] 13 p2373 A69-27774
- SICA, L.**  
Interferometric observation of absorption induced index change associated with thermal blooming.  
07 p1149 A69-18899
- SICHA, M.**  
Study of moving striations in plasmas. III - The fast type "r" and the determination of the ionization frequency dependence on the electron mean energy.  
03 p0477 A69-13801  
Experimental evidence for a similarity relation in ionization waves.  
10 p1740 A69-23721  
Study of moving striations in plasmas. V - A study of the saturation process in large amplitude moving striations.  
10 p1741 A69-23859
- SICHEL, M.**  
Thermal and ablative lag induced by a periodic heat input.  
[AIAA PAPER 67-336] 04 p0685 A69-14720  
Cavities formed on liquid surfaces by impinging gaseous jets.  
11 p1869 A69-24888  
Viscous transonic spiral and radial flow.  
18 p3121 A69-34787
- SICURANZA, G.**  
Direct and indirect measurements of differential parameters of transistors /Misure dirette e indirette di parametri differenziali dei transistori/.  
14 p2420 A69-29397
- SIDA, D. W.**  
The production of ions and electrons by meteoritic processes.  
14 p2520 A69-29372
- SIDDIQEE, M. W.**  
Transient stability of an A.C. generator by Lyapunov's direct method.  
07 p1058 A69-18644
- SIDDIQUI, M. A. Q.**  
Role of 5S ribosomal RNA in polypeptide synthesis.  
23 p4113 A69-41491
- SIDDON, O. J.**  
A laser-schlieren technique to take kine films of gas flows within a highly luminous, transient arc.  
08 p1316 A69-20612
- SIDEBOTTOM, O. M.**  
Elementary Mechanics of Deformable Bodies.  
18 p3222 A69-34922
- SIDELNIKOV, I. A.**  
Sensitivity of the vestibular analyzer and sensory reactions of man during short-term weightlessness /Chuvstvitel'nost' vestibuliarnogo analizatora i sensornye reaktsii cheloveka pri kratkovremennou nevesomosti/.  
07 p1062 A69-18586  
Significance of some vestibulometric tests in the flight surgeon's appraisal of persons predisposed to illusory sensations during flight /Znachenie nekotorykh vestibulometricheskikh prob pri vrac hebno-letnoi eksperimentze lits, predispolozhennykh k illiuzornym oshchushcheniim v polete/.  
20 p3473 A69-37277
- SIDEMAN, S.**  
Direct contact heat transfer with change of phase - Co-current flow of immiscible films with surface evaporation.  
09 p1622 A69-21904
- SIDERIADES, L.**  
Methods of synchronization of a Bethenod pendulum /Modes de synchronisation d'un pendule de Bethenod/.  
24 p4349 A69-42673
- SIDERIS, G.**  
The LSL tradeoffs.  
11 p1845 A69-24530
- SIDHESHWAR RAI**  
Spin doublets in X-ray satellite spectra.  
15 p2675 A69-30700
- SIDHU, G.**  
Elastic-plastic impact of plates.  
14 p2534 A69-29027
- SIDI, C.**  
Short-period motions at the level of the turbopause /Mouvements a courte periode au niveau de la turbopause/.  
15 p2606 A69-31449
- SIDIKINA, T. M.**  
Use of helium at a supercritical pressure for cooling superconducting systems under spaceflight conditions.  
04 p0585 A69-15407
- SIDLES, P. H.**  
Thermal diffusivity and other non-steady-state methods.  
23 p4237 A69-41326
- SIDNEV, V. I.**  
Procedure for the investigation of inelastic strains in metals during cyclic impact loading.  
04 p0674 A69-14539
- SIDNEY, B. D.**  
Onset of rotating disturbance in linear Hall current accelerator.  
[AIAA PAPER 69-381] 09 p1568 A69-21731
- SIDOKHIN, A. F.**  
Kinetics of diffusion brazing of titanium.  
22 p3958 A69-41203
- SIDOKHIN, IU. F.**  
Kinetics of diffusion brazing of titanium.  
22 p3958 A69-41203
- SIDOR, D. J.**  
An automatic test set for measuring dopant concentration profiles in epitaxial films.  
07 p1130 A69-18245
- SIDORENKOV, N. S.**  
Methods for estimating the influence of atmospheric circulation on the earth's rotational velocity.  
02 p0236 A69-11641  
The influence of atmospheric circulations on the earth's rotational velocity, 1956.8-1964.8.  
11 p1952 A69-24258

- Nonuniformity of the earth's rotation according to astronomical observation data over the period from 1965.0-1968.0 /Neravnomenost' vrashcheniia zemli po dannym astronomicheskikh nabludenii za 1965.0-1968.0 gg./.
- 11 p1957 A69-24407
- Nonuniformities in the earth's rotation from astronomical observations during 1965.0-1968.0.
- 24 p4391 A69-43797
- DORENKOVA, G. A.**
- Distribution of the sources of recorded atmospheres with respect to remoteness /for distances greater than 1000 km/ O raspredeleii istochnikov registriruemymkh atmosferik po udalennosti /dlia rassoiianii bol'she 1000 km//.
- 04 p0593 A69-15103
- IDORIK, E. P.**
- Effect of laser radiation on the electrical conductivity of the animal liver /Vpliv viprominiuvannia optichnogo kvantovogo generatora /lazera/ na elektroprovodnist' pechinki tvarin/.
- 23 p4111 A69-42344
- IDORIN, I. A. S.**
- Experimental investigation of the laws controlling the plastic dilatation of metals.
- 16 p2875 A69-32291
- IDOROV, A. F.**
- Certain compressed flows in nonaxisymmetric ring nozzles /O nekotorykh tekhnicheskikh szhatii v neosesimetricznykh kol'tsevykh soplakh/.
- 07 p1120 A69-18989
- Some three-dimensional gas flows adjacent to regions of rest.
- 11 p1876 A69-25729
- Traveling space waves in a barotropic gas /O prostranstvennykh begushchikh volnakh v barotropnom gaze/.
- 12 p2061 A69-25889
- IDOROV, B. A.**
- The effect of laser radiation on metals /Vliianie izlucheniia OKG na metally/.
- 11 p1906 A69-25684
- IDOROV, I. M.**
- Determination of the position angle of an artificial satellite from the data of the magnetic field.
- 01 p0163 A69-11303
- IDOROV, K. K.**
- Comparative toxicological characteristics of some regenerable absorbers of carbon dioxide.
- 10 p1646 A69-23502
- IDOROV, S. N.**
- High-speed SP-III spectrophotochronograph.
- 12 p2085 A69-26161
- IDOROV, V. P.**
- Stabilization of certain plasma instabilities by high-frequency pressure /O stabilizatsii nekotorykh neustoiichivostei plazmy vysokochastotnym davleniem/.
- 11 p1932 A69-25538
- Laser facility for plasma diagnostics /Lazernaia apparatura dlia diagnostiki plazmy/.
- 14 p2461 A69-29782
- IDOROVA, S. G.**
- Latitudinal variations in conditions for the occurrence of the F1 layer during the solar activity minimum /Shirotnoe izmenenie uslovii poiaivleniia sloia F1 v minimum solnechnoi aktivnosti/.
- 20 p3527 A69-37669
- SIDRAN, M.**
- The luminescence of the moon.
- 04 p0653 A69-14615
- SIE, J.**
- The use of avalanche diodes in an amplifying mode to increase source output power.
- 09 p1462 A69-21408
- SIEBERT, L. D.**
- Pulsed laser reflection holograms.
- 08 p1313 A69-20164
- Coherent pulse laser holography.
- 11 p1895 A69-24686
- SIEDENKERSTING, H.**
- Unsteady incident flow in a rotating pot, taking the bottom effect into account /Die instationaere Anlaufstroemung in einem rotierenden Topf unter Beruecksichtigung des Bodeneinflusses/.
- 03 p0414 A69-13019
- Ground effect in the case of accelerating and decelerating flow of viscous fluids in rotating cylinders /Der Bodeneinfluss bei Anlauf- und bei Brems-
- troemungen zaehr Fluessigkeiten in rotierenden Zylindergefaessen/.
- 10 p1677 A69-22896
- SIEGEL, A.**
- Symmetry properties of Cameron-Martin-Wiener kernels.
- 24 p4301 A69-43358
- SIEGEL, A. I.**
- Prediction of individual and crew performance by computer simulation.
- 12 p2026 A69-27087
- SIEGEL, B.**
- A thermal model of wire explosions in methane.
- 01 p0119 A69-10674
- SIEGEL, K. M.**
- Methods of Radar Cross-Section Analysis.
- 03 p0383 A69-12901
- RCS calculation of simple shapes - Bistatic.
- 03 p0384 A69-12906
- SIEGEL, M. D.**
- Aircraft antenna-coupled interference analysis.
- 17 p2943 A69-34134
- Aircraft antenna-coupled interference analysis.
- 23 p4141 A69-42224
- SIEGEL, P. V.**
- Medical factors in U.S. general aviation accidents.
- 07 p1067 A69-19433
- Time-zone effects.
- 16 p2745 A69-32444
- Medical factors in U.S. general aviation accidents.
- 23 p4106 A69-41792
- SIEGEL, R.**
- An analytical solution for solidification of a moving warm liquid onto an isothermal cold wall.
- 21 p3852 A69-39433
- SIEGEL, S.**
- Temperature effects on the phosphorescence of aromatic hydrocarbons in poly(methylmethacrylate/.
- 10 p1652 A69-23523
- SIEGEL, S. M.**
- Evidence for the presence of lignin in moss gametophytes.
- 17 p2912 A69-34176
- Responses of *Cladonia rangiferina* to experimental stress factors.
- 18 p3095 A69-34539
- SIEGMAN, A. E.**
- Current pushing of the oscillation frequency of a 6328-angstrom units He-Ne laser.
- 02 p0260 A69-12658
- Reflection and refraction of Gaussian light beams at tilted ellipsoidal surfaces.
- 10 p1725 A69-23309
- Further measurements of quantum phase noise in a He-Ne laser.
- 10 p1704 A69-23669
- Simple analytic expressions for AM and FM mode-locked pulses in homogeneous lasers.
- 13 p2270 A69-27191
- SIEGMETH, A. J.**
- The general problem of data return from deep space.
- 14 p2517 A69-29096
- SIEGMUND, W. P.**
- Fiber optics.
- 12 p2084 A69-26150
- SIEGRIST, M.**
- Reflection properties of an active three-mirror-resonator.
- 11 p1886 A69-25047
- SIEKIERSKI, S.**
- Use of epitaxial GaAs diodes for switching purposes /Zastosowanie epitaksjalnych diod GaAs do celow przelaczania/.
- 12 p2035 A69-25831
- SIEKMAN, J. G.**
- The mechanism of welding with a sealed-off continuous CO sub 2-gas laser.
- 01 p0086 A69-10821
- A simple power-output meter specially designed for continuous laser beams.
- 01 p0081 A69-10822
- Cutting of thin carbon films with a CO sub 2-gas laser. I - Theoretical considerations and experiments on flat plates.
- 15 p2635 A69-31037
- SIELING, W. R.**
- The effect of sting diameter and length on base pressure at M equals 3.88.
- 05 p0697 A69-15712
- SIEMON, R. E.**
- Ion and electron temperature and density by Thomson scattering with a low resolution monochromator.
- 11 p1925 A69-24310
- SIERAKOWSKI, R. L.**
- The effect of repeated loading on the yield surface.
- 05 p0836 A69-15876
- The extension of a superposition principle to wave propagation in nonhomogeneous elastic media.
- 20 p3627 A69-37765
- SIERRA, P. J.**
- Seismic waves generated by sonic booms - A geoaoustical problem.
- 01 p0077 A69-11281
- SIERRER, W. H.**
- Attitude determination and control of SYNCOM, Early Bird, and applications technology satellites. [AIAA PAPER 67-532]
- 09 p1610 A69-21988
- SIEVERS, H. C.**
- An abundance analysis of the B3 star HD 37058.
- 08 p1407 A69-21133
- SIEVERS, R. F.**
- An empirical simulation of the translunar injection burn for Apollo. [AAS PAPER 68-150]
- 21 p3820 A69-39225
- SIEVWRIGHT, W. M.**
- Quiet homogeneous arcs at Halley Bay.
- 12 p2073 A69-26951
- SIEWERT, C. E.**
- On solutions of an equation of transfer for a planetary atmosphere.
- 08 p1385 A69-20063
- On the albedo problem for a finite plane-parallel Rayleigh-scattering atmosphere.
- 09 p1606 A69-22423
- Remarks on half-space applications regarding an equation of transfer for a planetary atmosphere.
- 18 p3191 A69-34306
- SIFFRE, M.**
- Out-of-time operations in caves /Operations hors du temps en caverne/.
- 23 p4107 A69-41818
- SIFNER, O.**
- The equilibrium properties of carbon dioxide behind the primary and reflected shock waves.
- 15 p2592 A69-31054
- SIGAI, A. G.**
- Phase studies of the systems Mn-S, Mn-Se, and Mn-S-MnSe.
- 20 p3485 A69-38286
- SIGALOV, I. U. M.**
- Corrosion-resistant titanium alloy with 32 percent Mo /Korroziionnostoikii splay titana s 32 percent Mo/.
- 07 p1163 A69-18781
- SIGEL, R.**
- Investigation of a laser produced hydrogen plasma using holographic interferometry.
- 24 p4314 A69-42980
- SIGG, E.**
- Flight recorders.
- 10 p1691 A69-23246
- SIGMAN, D. R.**
- Power coupling and wave fields of ion-cyclotron waves in a finite length system.
- 03 p0474 A69-13114
- SIGMUND, H.**
- Technological applications of heterojunctions /Zur technischen Anwendung von Hetero-Uebergangen/.
- 02 p0294 A69-11598
- SIGNER, P.**
- Short exposure ages of meteorites determined from the spallogenic super 36 Ar/super 38 Ar ratios.
- 19 p3418 A69-36138
- Spallogenic rare gases in taenite separated from iron meteorites.
- 19 p3419 A69-36139
- The thermal release of rare gases from separated minerals of the Mocs meteorite.
- 19 p3419 A69-36141
- SIGNORE, M.**
- Far-field energy radiated by a two-body system /Energie rayonnee, loin des sources, par un systeme de 2-corps/.
- 16 p2812 A69-31836
- SIGNORELLI, R. A.**
- Tungsten alloy fiber reinforced nickel base alloy composites for high temperature turbojet engine applications.
- 14 p2462 A69-29010



## SIGNORINI, C.

Measurement of the solar wind direction with the IMP 1 satellite.

16 p2847 A69-31962

## SIGORSKII, V. P.

Algorithms in electronic circuit analysis /Algoritmy analiza elektronnykh skhem/.

09 p1472 A69-21777

Optimal computer solution of the problem of canonical synthesis of electronic circuits /Optimal'noe reshenie zadach kanonicheskogo sinteza elektronnykh skhem s pomoshch'yu ETSVM/.

09 p1472 A69-21781

Determination of the functions of an electronic circuit on the basis of a hybrid matrix /Opredelenie funktsii elektronnoi skhemy na osnove gibridnoi matritsy/.

11 p1859 A69-24954

## SIGOV, IU. S.

Numerical experiments on flow of rarefied plasma around bodies of various shapes. I.

01 p0134 A69-11307

## SIH, G. C.

Uniqueness of the concentrated-load problem in the linear theory of couple-stress elasticity

02 p0338 A69-11720

Torsional vibration of an elastic solid containing a penny-shaped crack.

04 p0678 A69-14872

External elliptical crack in elastic solid.

10 p1802 A69-24026

Mathematical theories of brittle fracture.

11 p1974 A69-24669

Thermal stresses in a solid weakened by an external circular crack.

12 p2179 A69-26216

Propagation of elastic waves around a crack.

17 p3053 A69-32986

Wave propagation in an elastic solid with a line of discontinuity or finite crack.

21 p3840 A69-39293

The use of eigenfunction expansions in the general solution of three-dimensional crack problems.

24 p4395 A69-42641

## SIKARSKIE, D. L.

On the improvement of approximate solutions for large deflections of plates.

12 p2185 A69-26822

## SIKDAR, S.

A simple digital simulation of control systems.

08 p1296 A69-20110

## SIKHARULIDZE, IU. G.

Investigation of the optimal rendezvous conditions for space vehicles /Issledovanie optimal'nykh rezhimov sblizheniia kosmicheskikh apparatov/.

09 p1538 A69-21759

## SIKKA, S.

Temperature distribution and curvature produced in long solid cylinders in space.

22 p4043 A69-40546

## SILAeva, L. I.

Convective cloud cells according to observations from artificial earth satellites /Konvektivnye oblachnye iacheiki po nabludeniiam s iskusstvennykh sputnikov zemli/.

11 p1912 A69-24827

## SILANTEV, V. A.

The discharge of a gas into a vacuum /Ob istechenii gaza v vakuum/.

02 p0234 A69-12583

## SILBERBERG, M. Y.

The System/360 Continuous System Modeling Program.

05 p0723 A69-16196

## SILBERBERG, R.

Composition of cosmic rays measured in Gemini XI.

21 p3787 A69-38350

## SILBERGLITT, R.

Dynamics of the Heisenberg ferromagnet at low temperatures.

01 p0135 A69-10016

## SILBERT, M. N.

Performance characteristics of a tethered balloon system.

22 p3865 A69-40813

## SILCOCK, J. M.

Precipitation of gamma' in austenitic stainless steels.

01 p0096 A69-10613

## SIENOK-BELSKII, G. A.

Plasma motion in crossed inhomogeneous electric and magnetic fields /Dvizhenie plazmy v skreshchennykh neodnorodnykh elektricheskoi i magnitnoi poliakhl/.

24 p4358 A69-43475

## SILFVAST, W. T.

Efficient CW laser oscillation at 4416 angstrom units in Cd /II/.

02 p0259 A69-12653

## SILIN-BEKCHURIN, I. A.

Gain measurement in the CO sub 2 laser discharge.

07 p1151 A69-19060

## SILIN, A. V.

Estimation of the effectiveness of a method for separating the envelope of an AM signal in the presence of AM interference and fluctuation noise /Otsenka effektivnosti odnogo metoda vydeleniia ogibaiushchei OAM signala pri deistvii OAM pomekhi i fluktuatsionnogo shuma/.

19 p3277 A69-36568

## SILIN, V. P.

Kinetic theory of plasma drift-dissipative instabilities /Kineticheskaia teoriia dreifovo-dissipativnykh neustoiichivosti plazmy/.

01 p0126 A69-10187

Drift instability of plasma with charged impurities.

03 p0478 A69-13834

Instability of a magnetized plasma in a strong high-frequency field /O neustoiichivosti zamagnichennoi plazmy v sil'nom vysokochastotnom pole/.

12 p2136 A69-26526

## SILJAK, D.

Absolute-stability test for discrete systems.

17 p2994 A69-32848

Regions of exponential boundedness for the problem of Lur'e.

18 p3164 A69-34674

An analytic test for absolute stability and positive realness.

18 p3112 A69-34689

Parameter analysis of absolute stability.

21 p3685 A69-38729

## SILJAK, D. D.

Squared-error minimization with stability constraints.

06 p0905 A69-17950

Nonlinear Systems- The Parameter Analysis and Design.

12 p2129 A69-26121

## SILK, J.

Discrete X-ray sources and the diffuse X-ray background.

07 p1206 A69-19255

Predictions of extragalactic gamma ray fluxes between 1 and 100 Mev.

11 p1946 A69-24466

Non-thermal intergalactic bremsstrahlung and the diffuse X-ray background.

11 p1947 A69-24595

The gravitational collapse of a slowly rotating relativistic star.

14 p2520 A69-29374

Galactic line emission from 1 to 10 keV.

24 p4367 A69-43048

## SILK, J. I.

Low-energy cosmic rays from pulsar flares/ques/

18 p3187 A69-34995

Infrared radiation from dust in Seyfert galaxies.

24 p4374 A69-43741

## SILK, L. S.

Direct and indirect effects of large technology programs.

17 p3076 A69-34041

## SILKIN, L. B.

Operation of a tuned phasing circuit in noise.

09 p1460 A69-22641

## SILKIN, N. K.

Energy integral of a system of equations for a quasi-geostrophic approximation /Ob integrale energii sistemy uravnenii kvazigeostroficheskogo priblizheniia/.

05 p0759 A69-16641

The energy integral of the equation system for the quasi-geostrophic approximation.

14 p2433 A69-28797

## SILKIN, V. B.

Free oscillations of a conical shell for various boundary conditions /Svobodnye kolebaniia konicheskoi obolochki pri razlichnykh granichnykh usloviakh/.

17 p3058 A69-33201

## SILL, W. R.

Response of the moon to the time-varying interplanetary magnetic field.

07 p1215 A69-18833

## SILLER, R. H.

The variation with composition of the diffusivity of carbon in austenite.

13 p2279 A69-27763

## SILLS, J. A.

Transformations for infinite regions and their application to flow problems.

04 p0588 A69-14717

A heat-transfer correlation for laminar separation flows.

16 p2879 A69-32165

## SILNOV, S. M.

Mass-spectrometer investigation of ions formed by interaction between laser radiation and matter.

06 p0932 A69-169212

## SILVER, A. B.

Critical temperature for intracranial self-stimulation in white rats.

03 p0375 A69-13897

## SILVER, A. H.

Superconducting quantum electronics. [IEEE PAPER D-7]

07 p1200 A69-190523

## SILVER, A. N.

The remote sensing of earth resources from orbiting vehicles.

24 p4315 A69-43199

## SILVER, J. E.

Distribution of blackbody cavity radiation in a moving frame of reference.

08 p1380 A69-19784

## SILVER, R. S.

The prediction of the transport properties of a turbulent fluid.

01 p0177 A69-11402

## SILVERBERG, E. C.

Laser scatter measurements in the mesosphere and above.

05 p0758 A69-16414

## SILVERBERG, R. F.

Pulsed X-ray emission of NP 0532 in March 1968.

20 p3590 A69-37574

## SILVERLEAF, A.

A review of hovercraft research in Britain.

05 p0702 A69-16393

## SILVERMAN, A.

Inhomogeneous deformation and yielding of glasslike high polymers.

17 p2993 A69-34169

## SILVERMAN, B. D.

Phonons, electrons, and protons in ferroelectric materials.

16 p2827 A69-32262

## SILVERMAN, H. M.

Latitudinal movements in the auroral ionosphere as shown by scintillation measurements.

01 p0069 A69-11127

## SILVERMAN, H. P.

Development of new materials of construction for fuel cells.

23 p4075 A69-42299

## SILVERMAN, J.

Stimulus sensitivity and stimulus intensity control.

21 p3653 A69-38897

## SILVERMAN, J. R.

Use of computers and programmable telemetry systems on scientific satellites.

23 p4132 A69-41735

## SILVERMAN, L. M.

Asymptotic controllability.

12 p2053 A69-26515

## SILVERMAN, M. P.

Automatic apparatus for sampling and preparing gases for mass spectral analysis in studies of carbon isotope fractionation during methane metabolism.

02 p0205 A69-12603

## SILVERMAN, S. M.

Night airglow phenomenology.

21 p3711 A69-38514

## SILVERSMITH, D. J.

Radiative tunneling in GaAs abrupt asymmetrical junctions.

09 p1544 A69-21336

- A modified ultrasonic pulse-echo-overlap method for determining sound velocities and attenuation of solids.  
14 p2450 A69-29567
- LVERSTEIN, C. C.**  
Method for estimating critical velocity for damage to reentering fuels impacting end on.  
04 p0630 A69-14800  
Heat pipe gas turbine regenerators.  
[ASME PAPER 68-WA/GT-7]  
05 p0812 A69-16142
- LVESTER, P.**  
A general high-order finite-element waveguide analysis program.  
16 p2760 A69-31942
- LVESTRO, F. B.**  
Multispectral photographic determination of reflectance.  
11 p1880 A69-24266  
Object detection enhancement.  
18 p3133 A69-34247
- LVESTROVA, I. M.**  
Pyroelectric response of a triglycine sulfate crystal to laser pulse action /Piroelektricheskiy otklik kristalla triglitsinul'fata na deistvie impul'sa OKG/.  
03 p0438 A69-13050
- LVESTROVICH, I. I.**  
Selection of ferrite materials for waveguide devices.  
05 p0810 A69-16792  
Influence of bismuth oxide on the formation and properties of garnet ferrites /Vliianie oksii vismuta na obrazovanie i svoystva ferritov- granatov/.  
13 p3230 A69-27998  
Magnetic and microwave properties of some substituted lithium ferrites /Magnitnyye i s. v. ch. svoystva nekotorykh zameshchennykh litievykh ferritov/.  
13 p3230 A69-28000
- IMADER, F.**  
Effect of strain rate and temperature on the strength and elongation of sintered molybdenum /Einfluss von Dehngeschwindigkeit und Temperatur auf Festigkeit und Dehnung von Sintermolybdaen/.  
14 p2464 A69-29322
- IMAKINA, E. G.**  
On hyperbolic orbits of meteors.  
15 p2697 A69-31253
- IMAKOVA, E. N.**  
Plane pursuit problem.  
09 p1476 A69-22671
- IMAKOVSKII, A. P.**  
Methods of making high-temperature tests of refractory metals in a vacuum.  
10 p1714 A69-23848
- IMANOVSKII, L. N.**  
Changes in the activity of lactodehydrogenase and its isoenzymes in the blood and tissues of rats as a result of training to hypoxia /Izmenenie aktivnosti laktat-dehidrogenazy i ee izoformentov v krovi i tkaniakh krysa v rezul'tate trenirovki k gipoksii/.  
02 p0199 A69-11982
- SIMCOX, T. A.**  
Liquid crystals - Their application to nondestructive testing.  
11 p1892 A69-25293
- SIMECEK, J.**  
Explosive acrylic polymers /Explosive Acryl-polymer/.  
08 p1376 A69-21152
- SIMECEK, T.**  
Optical quantum generators and amplifiers - Lasers /Pitke kvantove generatory a zesilovace - Lasery/.  
18 p3154 A69-35408
- SIMEK, M.**  
Mass distribution of meteoroids as determined by radar observations of underdense meteor trails.  
06 p1003 A69-17493
- SIMEONOV, S. V.**  
Some mathematical methods for solving nonlinear problems in solid-state mechanics /Einige mathematische Methoden zur Loesung nichtlinearer Aufgaben der Festkoerpermechanik/.  
03 p0467 A69-13749  
Stability of an elastoplastic rod /Ob ustoiichivosti uprugoplasticheskogo sterzhnia/.  
04 p0679 A69-14925
- SIMHA, R.**  
Transitions in glasses at low temperatures.  
04 p0621 A69-15308  
Transitions in glasses at low temperatures.  
05 p0717 A69-16493
- Thermal expansivities of polymers at cryogenic temperatures.  
07 p1172 A69-19730
- SIMITSES, G. J.**  
Buckling of eccentrically stiffened cylinders under combined loads.  
09 p1616 A69-21955  
Effect of shear and load behavior on ring stability.  
17 p3061 A69-33707  
Buckling of eccentrically stiffened, thin circular plates.  
20 p3622 A69-37221
- SIMMONDS, P. G.**  
Organic analysis by pyrolysis-gas chromatography-mass spectrometry - A candidate experiment for the biological exploration of Mars.  
[JPL-TR-32-1368]  
11 p1832 A69-25640  
Sterile soil from Antarctica - Organic analysis.  
16 p2746 A69-31552
- SIMMONS, C. J.**  
The electrical properties of liquid semiconductors.  
20 p3584 A69-38024
- SIMMONS, E. L.**  
An improved solid state amplifier for the Dobson ozone spectrophotometer.  
16 p2792 A69-32641  
Some laboratory and field investigations of the accuracy of Brewer-Mast ozone sensors.  
16 p2792 A69-32642
- SIMMONS, G.**  
Granites - Relation of properties in situ to laboratory measurements.  
02 p0241 A69-11806  
Pressure and temperature dependences of the isotropic elastic moduli of polycrystalline alumina.  
02 p0268 A69-12407  
Lunar geophysics.  
18 p3193 A69-34363  
Pressure derivatives of the elastic properties of polycrystalline quartz and rutile.  
20 p3583 A69-37502  
The exploration of the moon.  
23 p4216 A69-42200  
Thermal conductivity of rock-forming minerals.  
24 p4310 A69-43216
- SIMMONS, G. M.**  
Non-grey radiative heat transfer between parallel plates.  
06 p1033 A69-17554
- SIMMONS, H. T., SR.**  
Compatibility of inorganic azides with organic explosives.  
02 p0304 A69-12499
- SIMMONS, J. D.**  
The fourth positive system of carbon monoxide observed in absorption at high resolution in the vacuum ultraviolet region.  
09 p1607 A69-22429
- SIMMONS, N.**  
The development and use of meteorological and sounding rockets in the UK.  
[UN PAPER 68-95785]  
01 p0161 A69-10530  
Some possible concepts for a second phase of communication satellite developments in Europe.  
24 p4393 A69-43133
- SIMMONS, R. F.**  
The inhibition of hydrogen-air flames by hydrogen halides.  
02 p0304 A69-12315  
Temperature measurements in the low temperature combustion of n-pentane.  
02 p0353 A69-12321
- SIMMONS, W. F.**  
A variational method for weak resonant wave interactions.  
13 p2297 A69-27634
- SIMNETT, G. M.**  
Observations of cosmic-ray electrons between 2.7 and 21.5 Mev.  
24 p4365 A69-42667
- SIMON, A.**  
Nonlinear theory of the E x B instability.  
16 p2819 A69-31682  
Two-stream instabilities.  
24 p4355 A69-42685
- SIMON, B. R.**  
Crack-opening displacements and normal strains in centrally notched plates.  
12 p2189 A69-27163
- SIMON, F. F.**  
Stability of cylindrical bubbles in a vertical pipe.  
[ASME PAPER 69-HT-28]  
24 p4411 A69-43540  
Transition from film to nucleate boiling in vertical forced flow.  
[ASME PAPER 69-HT-26]  
24 p4412 A69-43542
- SIMON, G.**  
Solar X rays during the solar eclipse of May 20, 1966 /Le rayonnement X du soleil lors de l'eclipse du 20 mai 1966/.  
17 p3023 A69-33058
- SIMON, G. W.**  
Supergranules and the hydrogen convection zone.  
07 p1211 A69-18408
- SIMON, J. Y.**  
Influence of obstacles on the determination of the axis error /Influence des obstacles sur la determination de l'erreur d'axe/.  
07 p1112 A69-19542
- SIMON, M.**  
Time dependence of Razin spectra in type IV solar radio bursts.  
08 p1380 A69-20775  
Asymptotic form for synchrotron spectra below Razin cutoff.  
13 p2339 A69-27573  
Developmental work on modern apogee engines /Entwicklungsarbeiten an modernen Apogaeumsmotoren/.  
15 p2671 A69-31051
- SIMON, M. K.**  
Nonlinear analysis of an absolute value type of early-late-gate bit synchronizer.  
19 p3270 A69-36246  
An analysis of the steady-state phase-noise performance of a digital-data-transition tracking loop.  
23 p4130 A69-42514
- SIMON, N. R.**  
Pulsational instabilities in hydrogen-poor massive blue stars. I.  
09 p1606 A69-22421  
A criterion for nuclear-energized pulsational instability.  
13 p2340 A69-27576  
An explanation for the blue sequence of variable stars.  
22 p4026 A69-40650
- SIMON, P.**  
General summary on the results of the first proton flare project period, July 1966.  
10 p1769 A69-23787
- SIMON, R.**  
Rotational perturbation of a radial oscillation in a gaseous star.  
21 p3795 A69-38470
- SIMON, R. C.**  
The Elevated-Temperature Properties of Selected Superalloys.  
08 p1328 A69-19913
- SIMON, R. W.**  
Behavior of protective gas contacts under capacitive loads /Ueber das Verhalten von Schutzgaskontakten bei kapazitiver Belastung/.  
13 p2269 A69-28608
- SIMON, T.**  
Multicolor photoelectric photometry of the brighter planets. III - Observations from Boyden Observatory.  
04 p0663 A69-15383
- SIMON, Y.**  
Behavior of passive components at high frequencies /Comportement des composants passifs en haute frequence/.  
08 p1283 A69-20135
- SIMONEAU, R. J.**  
Transition from film to nucleate boiling in vertical forced flow.  
[ASME PAPER 69-HT-26]  
24 p4412 A69-43542
- SIMONEIT, B. R.**  
Organic analysis on the Pueblito de Allende meteorite.  
13 p2337 A69-27520  
A combined electron impact-field ionization source and its application in organic geochemistry.  
15 p2608 A69-30428  
High resolution mass spectrometry of Green River Formation kerogen oxidations.  
15 p2606 A69-31533



## SIMONEN, T. C.

- Plasma electron density measurement with a feedback oscillator. 03 p0473 A69-13103
- Higher-order Landau modes. 11 p1929 A69-25265
- Dispersion and stability of moving striations. 24 p4356 A69-43363

## SIMONENKO, A. F.

- Measurement of the emissivity of nitrogen, oxygen, and air in the vacuum ultraviolet region of the spectrum. 21 p3774 A69-38944

## SIMONENKO, A. N.

- The behavior of small particles detached from a meteoroid. 02 p0314 A69-11645
- Effect of two types of fragmentation on the photometric curve of a meteor /Vliianie dvukh tipov drobeniia na fotometricheskuiu krivuiu meteora/. 12 p2154 A69-25819
- Meteorite radiants and orbits. 19 p3414 A69-36116

## SIMONENKO, I. B.

- Some general problems in the theory of Riemann's boundary-value problem /Nekotorye obshchie voprosy teorii kraevoi zadachi Rimana/. 04 p0622 A69-14513

## SIMONNE, J. J.

- M.I.S. capacitance in heavy inversion. 15 p2565 A69-30179

## SIMONNET, A.

- Measured anisotropies of the plasma focus neutron emission compared with proposed mechanisms. 11 p1930 A69-25321

## SIMONOV, A. P.

- Ultraviolet lasers using organic-scintillator molecules. 13 p2271 A69-27657

## SIMONOV, E. E.

- Evaluation of animal tolerance for impact accelerations by blood enzyme tests. 10 p1645 A69-23500

## SIMONOV, I. U. L.

- A two-circuit selective transistor amplifier of common-base type /Dvukhkonturnyi izbiratel'nyi tranzistornyi usilitel' tipa OB-OB/. 13 p2226 A69-27219
- Observations on the calculation of two-loop resonant amplifiers /Zamechaniia po raschetu dvukhkonturnykh rezonansnykh usilitelei/. 22 p3912 A69-40258

## SIMONOV, L. A.

- Scientific results of a flight of the Lantar 1 automatic ionospheric laboratory /Nauchnye rezul'taty poleta avtomaticheskoi ionosfernoi laboratorii "Lantar-1"/. 05 p0830 A69-16056
- Scientific results of the flight of the automatic ionospheric laboratory "Yantar-1". 20 p3618 A69-37966

## SIMONOV, V. M.

- Conveyer growing of carrots by the aeroponic method /Konveiernoe vyrashchivanie morkovi sposobom aeroponiki/. 17 p2912 A69-32943

## SIMONOVA, N. V.

- Experimental investigation of a pulsed high-frequency plasma on the basis of laser light scattering /Eksperimental'noe issledovanie impul'snoi vysokochastotnoi plazmy po rasscianiui izlucheniia lazera/. 14 p2451 A69-29781
- Laser facility for plasma diagnostics /Lazernaia apparatura dlia diagnostiki plazmy/. 14 p2461 A69-29782
- Observation of the effect of spectral line distortion in a pulse high-frequency plasma /Nabludenie effekta iskrivleniia spektral'nykh liniy v impul'snoi vysokochastotnoi plazme/. 14 p2497 A69-29791

## SIMONOVA, O.

- Telemetric EEG studies during high-performance situations /Telemetricheskie EEG-Untersuchungen in Leistungssituationen/. 15 p2560 A69-31232

## SIMONOVIC, V.

- Contribution to axisymmetric flow through turbomachines. 10 p1631 A69-22910

## SIMONS, D. B.

- Lunar rivers or coalesced chain craters/ques/. 18 p3205 A69-35436

## SIMONS, F. O., JR.

- Nonlinear magnetic field solutions for non-homogeneous isotropic current-free regions. 11 p1888 A69-25311
- The future of DC brushless motors in aerospace applications. 18 p3094 A69-35074
- Sensitivity and optimization theory for launch vehicle attitude control system synthesis. 18 p3210 A69-35092

## SIMONS, J.

- First- and second-order density matrices of symmetry-projected single-determinant wavefunctions. 24 p4351 A69-43810

## SIMONS, M., JR.

- Some observations on charge buildup and release in silicon dioxide irradiated with low energy electrons. 10 p1743 A69-23172

## SIMONS, S.

- On the time derivatives of Boltzmann's H function. 07 p1121 A69-19407
- A new graphic display/plotter for small digital computers. 21 p3679 A69-39608

## SIMONSEN, J. M.

- Mixing and combustion of compressible, particle-laden ducted flows. [AIAA PAPER 69-460] 16 p2880 A69-32650

## SIMONSON, S. C., III

- 21-cm observations at low latitudes in the direction of the galactic centre. 08 p1392 A69-20562

- A spectroscopic and photometric investigation of the association Cepheus OB2. 09 p1599 A69-22194

## SIMONTOV, I. M.

- Noise relationships in amplifier circuits with AGC. 05 p0729 A69-16085
- Analysis of selective amplifiers with AGC by emitter current /K analizu izbiratel'nykh usilitelei s ARU po toku emittera/. 12 p2043 A69-26887

## SIMPKINS, J. M.

- Cesium microthruster system. [AIAA PAPER 69-292] 09 p1569 A69-21875

## SIMPKINS, R. L.

- The solution of safety problems through research and development. 22 p3868 A69-41151

## SIMPSON, A. U.

- Flow and heat transfer characteristics of subtriple-point cryogens in heated tubes. 01 p0176 A69-11146

## SIMPSON, C. J. S. M.

- The construction of a rectangular shock tube for use with pressure and vacuum. 06 p0906 A69-16928

## SIMPSON, D.

- Variation of the R.F. response of a Langmuir probe with amplitude and frequency. 21 p3723 A69-38939

## SIMPSON, E.

- Studies in stellar evolution. VII. 10 p1788 A69-24126

## SIMPSON, F. R.

- Absolute cross sections for electron excitation of the second positive bands of nitrogen. 08 p1355 A69-20208

## SIMPSON, J. A.

- Energy spectra and abundances of the cosmic-ray nuclei helium to iron from the OGO-1 satellite experiment. 08 p1378 A69-20067
- Relativistic electrons confined within the neutral sheet of the geomagnetic tail. 14 p2433 A69-28934
- Analog computing using a planar distributed function generator /PDFG/. 17 p2934 A69-34123

## SIMPSON, R. B.

- The Rayleigh-Ritz process for the simplest problem in the calculus of variations. 24 p4339 A69-42793

## SIMPSON, R. L.

- The turbulent boundary layer on a porous plate - Experimental skin friction with variable injection and suction. 21 p3696 A69-39431

## SIMPSON, R. S.

- Considerations in the use of AGC in AM/FM telemetry systems. 09 p1454 A69-21794
- Baseband AGC in AM/FM systems. 19 p3274 A69-36276
- Digital compensation of tape recorder time-base error. 19 p3312 A69-36284

## SIMPSON, R. W.

- The outlook for future commercial VTOL transportation. [AIAA PAPER 69-198] 07 p1056 A69-19567

## SIMS, C. S.

- Sensitivity reduction in specific optimal control by the use of a dynamical controller. 01 p0051 A69-10441

## SIMS, C. T.

- The high temperature properties of MarM-509. 01 p0095 A69-10546
- FSX-414 - An alloy for gas turbines. 18 p3158 A69-35421

## SIMS, D.

- New fibre-filled thermoplastics. 08 p1337 A69-20479

## SIMS, F. L.

- Sensitivity analysis of discrete Kalman filters. 18 p3110 A69-34675
- Recursive algorithm for the calculation of the adaptive Kalman filter weighting coefficients. 20 p3509 A69-37142

## SIMS, G.

- Temperature distributions and thermal stresses in the bimetallic I-beam structures. 06 p1024 A69-17610

## SIMURA, M.

- Plastic fractures of age-hardened aluminum alloys. 07 p1166 A69-18961

## SINACORI, J. B.

- Validation of ground based simulation. [AHS PAPER 362] 17 p2946 A69-33519

## SINANI, S. S.

- Thermoelectric properties of unalloyed bismuth telluride and solid solutions of the Bi sub 2 Te sub 3 - Bi sub 2 Se sub 3 system. 15 p2670 A69-31248

## SINCHESKUL, V. F.

- Investigation of the objective of the AVR-2 refractor /Issledovanie ob'ektiva refraktora AVR-2/. 17 p2970 A69-32883

## SINCHESKUL, V. N.

- Investigation of the objective of the AVR-2 refractor /Issledovanie ob'ektiva refraktora AVR-2/. 17 p2970 A69-32883

## SINCLAIR, A. C. E.

- Venus - An isothermal lower atmosphere/ques/. 16 p2852 A69-31553

## SINCLAIR, A. T.

- The motions of minor planets close to commensurabilities with Jupiter. 10 p1778 A69-23604

## SINCLAIR, I. G.

- Polynomial curve fitting when abscissas and ordinates are both subject to error. 08 p1343 A69-20827

## SINCLAIR, J.

- The F-region equatorial irregularity belt as observed from scintillation of satellite transmissions. 05 p0758 A69-16418

## SINCLAIR, J. E.

- Characteristics of igniter formulations. 10 p1750 A69-23009

## SINCLAIR, M. W.

- A multi-channel spectral line receiver for radio astronomy. 24 p4283 A69-43115

## SINDLER, I. U. B.

- Optimum two-step procedure for radar measurements at an unknown signal-to-noise ratio /Ob optimal'noi dvukhetapnoi protsedure radiolokatsionnogo izmereniia pri neizvestnom otnoshenii signal/shum/. 07 p1085 A69-19153

- NDT, C. F.**  
Slush hydrogen flow characteristics and solid fraction upgrading.  
[NAS-NRC PAPER F-5] 22 p3998 A69-40626
- NEATH, R. M., JR.**  
Saturn V system reliability analysis.  
18 p3207 A69-34529
- NEGUBKO, L. A.**  
Influence of gas additions on the operation of submillimeter H sub 2 O and D sub 2 O lasers /Vliianie dobavok gazov na rabotu submillimetrovyykh lazerov na H sub 2 O i D sub 2 O/.  
21 p3738 A69-39131
- NELNIKOV, K. D.**  
Interaction between a charge and a TE sub 01 wave in a circular waveguide in the principal resonance regime /Vzaimodeistvie zariada s volnoi TE sub 01 v kruglom volnovode v rezhime glavnogo rezonansa/.  
09 p1551 A69-22037  
Plasma flow in a transverse inhomogeneous magnetic field /Plazmenniy potok v neodnorodnom poperechnom magnitnom pole/.  
12 p2137 A69-26528  
Study of the mechanism of capture of a moving plasma by a transverse magnetic field /Issledovanie mekhanizma zakhvata dvizhushcheisya plazmy poperechnym magnitnym polem/.  
24 p4357 A69-43469  
Plasma motion in crossed inhomogeneous electric and magnetic fields /Dvizhenie plazmy v skreshchennykh neodnorodnykh elektricheskoy i magnitnoy poliax/.  
24 p4358 A69-43475
- NELNIKOV, V. M.**  
Determining the local electron concentration in the outer ionosphere by the coherent-frequencies method using artificial earth satellites.  
01 p0147 A69-11323  
On the local and integral electron density of the ionosphere measured by means of coherent radio waves emitted from artificial earth satellites. I.  
14 p2438 A69-29106  
Results of investigations of the local and integral electron concentration in the ionosphere with the aid of coherent radio waves emitted from a satellite. I/O rezul'tatakh issledovaniy lokal'noy i integral'noy elektronnoy kontsentratsii ionosfery s pomoshch'yu kogerentnykh radiovoln, izluchaemykh s ISZ. I/.  
20 p3519 A69-37022
- SINEOK, V. I.**  
Methods of realizing functional amplitude characteristics in parametric amplifiers /Sposoby realizatsii funktsional'nykh amplitudnykh kharakteristik v parametricheskikh usiliteliakh/.  
11 p1849 A69-24957
- SINES, G.**  
A biaxial fracture criterion for porous brittle materials. [ASME PAPER 68-WA/MET-12]  
05 p0838 A69-16152  
A statistical model for the tensile fracture of parallel fiber composites. [ASME PAPER 68-WA/RP-7]  
05 p0783 A69-16159
- SINFILAM, A.-L.**  
Scattering of electrons by C, N, O, N plus, O plus and O plus plus.  
23 p4193 A69-41452
- SINGER, A.**  
Effect of proline residue on the hydrolysis of substrates by thermolysin.  
15 p2561 A69-30083
- SINGER, B.**  
The field of a line source embedded in a sinusoidally-stratified medium.  
17 p2925 A69-33842
- SINGER, J.**  
Buckling of electroformed conical shells under hydrostatic pressure.  
02 p0347 A69-12515  
Buckling of cylindrical panels under lateral pressure.  
09 p1621 A69-22782  
The influence of stiffener geometry and spacing on the buckling of axially compressed cylindrical and conical shells.  
11 p1979 A69-24815
- SINGER, J. M.**  
Spherical flames of spark-ignited dust clouds.  
02 p0353 A69-12323  
Predicted air entrainment by subsonic free round jets.  
24 p4300 A69-43257
- SINGER, R. A.**  
New canonical forms of general multivariable linear systems with application to estimation and control.  
12 p2048 A69-26075
- SINGER, R. M.**  
Approximate solution of the transient free convection laminar boundary layer equations.  
08 p1305 A69-20842
- SINGER, S.**  
Simultaneous observations of electrons /E greater than 45 keV/ at 2000-kilometer altitude and at 100,000 kilometers in the magnetotail.  
03 p0503 A69-14013  
16-40 angstrom units coronal X-ray emission during the 12 November 1966 eclipse.  
04 p0650 A69-15531  
Vela-4 satellite energetic particle experiment. [IEEE PAPER 3C-2]  
07 p1134 A69-19196  
Penetration of solar energetic protons into the magnetotail.  
16 p2847 A69-31966
- SINGER, S. F.**  
Interplanetary dust.  
19 p3415 A69-36119  
The case for manned planetary exploration. [AAS PAPER 69-180]  
24 p4379 A69-42813
- SINGER, V.**  
Application of fracture mechanics in design and analysis of pressure vessels.  
19 p3439 A69-36438
- SINGH, A.**  
Non-quasistatic analysis of the wave propagation along magnetized plasma columns surrounded by a dielectric medium.  
10 p1658 A69-24061  
Coupling coefficient and excitation impedance for a plasma column excited by a ring source.  
10 p1659 A69-24064
- SINGH, A. K.**  
Electrical resistivity of alkali metals.  
08 p1372 A69-20229
- SINGH, D. N.**  
Petrov classification of the cylindrically symmetric gravitational field.  
07 p1182 A69-19409  
A plane symmetric cosmological model.  
07 p1222 A69-19586
- SINGH, G. S.**  
On the unsteady motion of viscous incompressible conducting fluid in an annulus between two porous coaxial circular cylinders under a toroidal pressure gradient.  
12 p2062 A69-26275  
Laminar unsteady magnetohydrodynamic flow in a porous annular channel under a radial magnetic field.  
20 p3581 A69-36912
- SINGH, K.**  
Diffraction of partially coherent light by an aberration-free annular aperture.  
14 p2460 A69-29640
- SINGH, K. P.**  
Petrov classification of the cylindrically symmetric gravitational field.  
07 p1182 A69-19409  
A plane symmetric cosmological model.  
07 p1222 A69-19586
- SINGH, M.**  
The plastic deformation of internally oxidized silver-magnesium single crystals.  
07 p1159 A69-18627
- SINGH, M. P.**  
Oscillation of a sphere in a compressible viscous fluid in a slip regime.  
19 p3297 A69-35836
- SINGH, P. P.**  
Intermediate phases in the lanthanum- and neodymium-cobalt systems.  
15 p2667 A69-30087  
The lanthanum-rhodium system.  
21 p3744 A69-38739
- SINGH, R. B.**  
Existence of the periodic orbit in the problem of the motion of an artificial satellite.  
21 p3795 A69-38441
- SINGH, R. N.**  
Synchrotron radiation from trapped electrons in the Van Allen belt.  
06 p0992 A69-17324
- Study of synchrotron radiation from energetic electrons in the magnetosphere. I.  
08 p1306 A69-20182  
Heating of electrons in a weakly ionized plasma by high-frequency electromagnetic waves.  
15 p2665 A69-31480
- SINGH, R. P.**  
Synchrotron radiation from trapped electrons in the Van Allen belt.  
06 p0992 A69-17324  
Study of synchrotron radiation from energetic electrons in the magnetosphere. I.  
08 p1306 A69-20182  
Heating of electrons in a weakly ionized plasma by high-frequency electromagnetic waves.  
15 p2665 A69-31480
- SINGH, S.**  
The hydromagnetic oscillations and stability of self-gravitating masses. II - Compressible fluid sphere.  
20 p3605 A69-37822  
Photographic studies of explosive reactions.  
21 p3719 A69-38446
- SINGH, S. B.**  
Some effects of metal flanges on radiation patterns of H-plane sectoral horns.  
02 p0216 A69-12027  
A study of the effect of the relative position of metal flanges on the radiation patterns of H-plane sectoral horn radiators.  
08 p1285 A69-20554  
Effect of asymmetry in amplitude of excitation of secondary sources by a primary aperture antenna.  
11 p1852 A69-25117  
Experimental confirmation of the effect of asymmetric flanges on radiation patterns of aperture antennae.  
24 p4288 A69-43765
- SINGH, S. N.**  
Growth of weak discontinuities in arbitrarily moving gas.  
04 p0630 A69-14532  
Game theoretic approach to minimum-effort control of second-order system.  
10 p1667 A69-24040  
Singular optimal control in the presence of uncertainty - A game theoretic approach.  
10 p1667 A69-24041  
Magnetohydrodynamic free convection from a horizontal plate.  
11 p1930 A69-25277  
Laminar free convection from a horizontal infinite strip facing downwards.  
21 p3853 A69-39672  
Influence of ingot structure and processing on mechanical properties and fracture of a high strength wrought aluminum alloy.  
23 p4176 A69-41506
- SINGH, W.**  
Large deformations of reinforced compressible elastic materials.  
13 p2359 A69-27262
- SINGHA, J. N.**  
Ocular injuries sustained during bailout from a Vampire aircraft /A case report/.  
10 p1649 A69-23380
- SINGHAL, G. S.**  
Mode-locked lasers - Measurements of very fast radiative decay in fluorescent systems.  
12 p2105 A69-26310
- SINGHAL, L. K.**  
The formation of ferrite and sigma-phase in some austenitic stainless steels.  
02 p0269 A69-12764
- SINGHANIA, S.**  
Similarity analysis of compressible laminar wall jet with arbitrary wall temperature. [ASME PAPER 69-FLCS-30]  
20 p3516 A69-37979
- SINGLETON, G. T.**  
Rapid decompression and recompression in the stapel decomized cat.  
14 p2406 A69-29292
- SINGLETON, O. R., JR.**  
An analysis of new quenchant for aluminum.  
01 p0087 A69-10900
- SINGLETON, W. T.**  
Display design - Principles and procedures.  
24 p4274 A69-43017



## SINGPURWALLA, N. E.

A sequential Bayes procedure for reliability demonstration. 19 p3327 A69-36040

## SINGUREL, G.

Power amplification of a laser pulse acting on a substance in the presence of induced Mandelstam-Brillouin backscattering. 04 p0612 A69-15414

Measurement of the power of reflected and transmitted light when focusing a laser beam in a liquid /Izmerenie moshchnosti otrazhennogo i prokhodiashego sveta pri fokusirovke lazernogo lucha v zhidkosti/. 14 p2459 A69-29392

Dielectric breakdown and cavitation in liquids produced by ruby laser radiation. 17 p2979 A69-32826

## SINHA, K. C.

Determination of heat susceptibility and heat tolerance - A new index. 10 p1644 A69-23376

Blood pressure fluctuation in a case of multiple extra-systoles as observed in tilt table studies /A case report/. 10 p1645 A69-23379

## SINHA, M. S.

Durgapur cosmic ray magnetic spectrograph. 06 p0925 A69-17302

Development of a big cloud chamber for measuring the specific ionisation of muons. 06 p0925 A69-17303

Muon-bundles observed at sea level. 06 p0991 A69-17304

Energy spectrum of muons from their knock-on electrons. 06 p0991 A69-17305

## SINHA, N. K.

Propagation of shock waves in a polytrope with a poloidal magnetic field. 04 p0664 A69-15438

## SINHA, P. C.

Forced convection flow past a flat plate with variable viscosity and thermal conductivity. 22 p4051 A69-40685

## SINHA, R.

A review of problems in the nonreacting turbulent far wake. 13 p2200 A69-28500

An experimental investigation of the near wake in an axisymmetric supersonic flow with and without base injection. 14 p2389 A69-29017

## SINHA, S. K.

Burning of platonised propellants. 03 p0494 A69-12881

## SINIAK, IU. E.

Physicochemical method of synthesizing carbohydrates from the products of human biological activity in limited closed spaces /Fiziko-khimicheskiy metod sinteza uglevodov iz produktov zhiznedeiatel'nosti cheloveka v ograniченныхykh zamknyutyykh prostranstvakh/. 03 p0381 A69-14199

Physicochemical synthesis of monosaccharides from human waste products /Fiziko-khimicheskiy sintez monosakharidov iz produktov zhiznedeiatel'nosti cheloveka/. 07 p1071 A69-18971

Investigation of the decomposition of urea by urease in relation to space cabin life support systems. 08 p1265 A69-19834

Investigation of the oxidative-catalytic method of mineralization of wastes in a closed ecological system. 10 p1649 A69-23579

Synthetic monosaccharides for nutrition of man in space. 15 p2557 A69-31471

Physicochemical synthesis of monosaccharides from human wastes. 20 p3483 A69-38219

## SINIAKOV, E. V.

Low-frequency dispersion of BaTiO sub 3 single crystals in strong electric fields /Nizkochastotnaya dispersiya monokristallov BaTiO sub 3 v sil'nykh elektricheskikh pol'yakh/. 01 p0139 A69-10889

Polarization reversal of BaTiO sub 3 single crystals in sinusoidal fields. 06 p0981 A69-17893

Low-frequency dispersion of BaTiO sub 3 single crystals in a strong electric field. 18 p3182 A69-34720

## SINIAKOV, V. S.

Experimental determination of the frequency characteristics of a system in the presence of noise /Eksperimental'noe opredelenie chastotnykh kharakteristik sistemy pri deistvii pomekh/. 24 p4289 A69-42950

## SINIAVSKII, A. L.

Properties of contour integrals in plate bending problems /Svoistva konturnykh integralov v zadachakh izgiba plastin/. 23 p4230 A69-42002

## SINICHENKO, IA. M.

The beaded structure of stellar traces and investigation of the amplitude components of image vibrations by means of satellite traces /Issledovanie komponent amplitudy drozhanii po sledam ISZ i chetochnaia struktura zvezdnykh sledov/. 15 p2647 A69-30166

## SINICKI, G.

Calorimetric study of the energy dissipated from a solid subjected to fatigue cycles. 04 p0618 A69-15205

## SINIGAGLIA, G.

The receiving device of a multistation radar system for the study of meteors and the upper atmosphere /L'apparato ricevente del sistema radar multistazione per lo studio delle meteore e dell'alta atmosfera/. 07 p1077 A69-18674

The Italian cross radio telescope. III - Operation of the telescope. 19 p3295 A69-36643

Design of the transmitting antenna of a multistation radar system for investigating the upper atmosphere and meteors /Progetto dell'antenna trasmittente di un sistema radar multistazione per lo studio dell'alta atmosfera e delle meteore/. 19 p3278 A69-36661

Interferometric determination of the altitude of the reflection zone of meteor trails /Determinazione interferometrica della quota della zona riflettente delle tracce meteoriche/. 24 p4311 A69-43508

## SINITSA, S. P.

Dependence of the recombination rate at the surface of a semiconductor on the concentration of nonequilibrium charge carriers /Zavisimost' tempa rekombinatsii u poverkhnosti poluprovodnika ot kontsentratsii neravnovesnykh nositelei/. 01 p0136 A69-10253

Nonequilibrium carrier density dependence of the rate of recombination at the surface of a semiconductor. 09 p1559 A69-22646

## SINITSin, I. N.

Nonlinear oscillations of a gyroscope with a synchronous actuator /O nelineinykh kolebaniyakh giroskopa s sinkhronnym privodom/. 13 p2264 A69-28438

Drifts of gyroscopic linear acceleration integrators mounted on an irregularly rocking base /Ob ukhodakh girointegratorov lineinykh uskorenii na neregularnoi kachke/. 18 p3135 A69-34586

## SINITsINA, V. G.

Showers initiated in lead by 600, 1000 and 1300 Mev electrons. 13 p2332 A69-28419

## SINITSKII, B. G.

A two-circuit selective transistor amplifier of common-base/common-base type /Dvukhkonturnyy izbiratel'nyi tranzistornyi usilitel' tipa OB-OB/. 13 p2226 A69-27219

## SINITSYN, V. G.

Refraction and scattering in the solar corona during eclipsed observations of cosmic sources /Refraktsiia i rasseyanie v solnechnoi korone pri zamennykh nabludeniakh kosmicheskikh istochnikov/. 15 p2688 A69-30555

## SINIUK, IU. G.

Holography and image recognition /Golografiia i razpiznavannia obraziv/. 08 p1314 A69-20417

Holographic recognition systems. 09 p1495 A69-21859

## SINIUKOV, A. M.

Application of the collocation method to a solution of a contact thermoelasticity problem for a short cylinder /Primenenie metoda kollokatsii pri reshenii

odnoi kontaktnoi zadachi termouprugosti dlia korotkogo tsilindra/. 18 p3217 A69-34599

Thermoelastic stresses in inhomogeneous cylinders and disks of constant thickness /Termouprugie napriazheniia v neodnorodnykh tsilindrakh i diskakh postoiannoi tolshchiny/. 23 p4227 A69-41707

## SINIUKOV, M. P.

Absorption of IR radiation by surface states at low temperatures /Pogloshchenie ik izlucheniia poverkhnostnykh sostoiianii pri ponizhennykh temperaturakh/. 13 p2317 A69-27874

## SINIUTIN, G. V.

Experimental verification on the Raskin phenomenological theory of the arc mode regime of a cesium thermionic converter. 14 p2402 A69-29242

## SINKEVICH, O. A.

Penetration of a magnetic field behind a shock wavefront /Proniknovenie magnitnogo polia za front udarnoi volny/. 07 p1192 A69-19022

Possibility of the existence of the Newtonian speed of sound in a plasma /O vozmozhnosti sushchestvovaniia n'utonovskoi skorosti zvuka v plazme/. 15 p2663 A69-30993

## SINKOVSKII, A. S.

Silicon carbide coatings on graphite /Pokrytiia iz karbida kremniia na grafite/. 20 p3566 A69-37368

## SINMAN, A.

Developments in the method used for the determination of magnetic probe characteristics. 08 p1313 A69-20120

## SINNERSTAD, U.

Photoelectric observations of zeta Aurigae during the eclipse, 1963-1964. 08 p1388 A69-20242

## SINNO, K.

Development of ionospheric absorption associated with sudden stratospheric warmings. 24 p4306 A69-42680

## SINNOTT, D. H.

The use of interpolation in improving finite difference solutions of TEM mode structures. 13 p2221 A69-28064

## SINODOVA, E. P.

Decomposition of titanium-vanadium martensite during heating /Raspad titano-vanadiyevogo martensita pri nagreve/. 07 p1163 A69-18778

Disintegration of titanium-vanadium martensite on continuous heating. 21 p3746 A69-39160

## SINTSOV, V. N.

Evaporographic converter for examination of striations in materials used in the infrared. 08 p1314 A69-20384

## SINZI, A.

Present status of researches on satellite triangulation in Japan. [UN PAPER 68-95285] 01 p0064 A69-10475

## SIPACHEV, G. F.

Optical properties of a plasma from an electrodeless discharge in an airstream /Opticheskie svoistva plazmy bezelektrodnogo razriada v vozdushnom potoke/. 07 p1191 A69-18995

## SIPENHOV, I. E.

Method of theoretical investigation of externally pressurized gas-lubricated bearings. [ASME PAPER 68-LUBS-44] 13 p2267 A69-27283

## SIRAN, G.

Ponderomotoric forces and sudden irregularities in the earth's rotation. I. 09 p1487 A69-21636

Ponderomotoric forces and sudden irregularities in the earth's rotation. II. 19 p3302 A69-35769

## SIRAZETDINOV, T. K.

Selection of a stabilizer of optimum planform /K voprosu o vybere stabilizatora optimal'noi formy v plane/. 11 p1966 A69-25327

## SIRAZUTDINOV, IU. K.

Application of the calculus of variations to the design of minimum-volume structures /O primenenii variatsionnogo issledovaniia k dizaynu struktur minimal'nogo ob'ema/. 11 p1966 A69-25327

- sionnogo ischisleniia k raschetu konstruktssii  
naimen'shego ob'ema/.  
23 p4225 A69-41424
- IRCAR, R.**  
On the stresses due to a concentrated couple acting  
at any point of an elliptic plate with fixed edge.  
15 p2712 A69-31014
- IRIEIX, M.**  
Nozzle adaptation problems /Problemes d'adaptation  
de tuyeres/.  
[ONERA-TP-600] 02 p0187 A69-11620  
Similarity properties of the laminar or turbulent  
separation phenomena in a nonuniform supersonic  
flow /Proprietes de similitude des phenomenes de  
decollement laminaire ou turbulent en ecoulement su-  
peronique non uniforme/.  
[ONERA-TP-659F] 07 p1050 A69-18417
- IRIGNANO, W. A.**  
Nonlinear oscillations in liquid rocket combustion  
chambers.  
19 p3449 A69-36352
- IRINIAN, M. D.**  
Variation in the spinning velocity of solid-propellant  
rockets in flight /Variazione della velocita di rotazione  
in volo dei razzi a combustibile solido/.  
08 p1409 A69-20160
- SIRKAR, K. K.**  
Limiting behavior of the transverse turbulent  
velocity fluctuations close to a wall.  
17 p2949 A69-33013
- SIROHI, R. S.**  
Focusing factor in a stratified medium.  
12 p2029 A69-26100
- SIRONI, A.**  
Interaction mechanisms of laser transitions in argon  
and krypton ion laser.  
13 p2270 A69-27204
- SIRONI, G.**  
Cosmic ray electrons and galactic radio noise.  
06 p0992 A69-17377  
East-west asymmetry and charge sign ratio of primary  
cosmic-ray electrons at 8.3 Gv rigidity cut-off.  
15 p2678 A69-31497
- SIROTA, N. N.**  
Behavior of the current-voltage characteristics of indium  
phosphide n-p junctions /Khod vol'tampernykh  
kharakteristik n-p-perekhodov na fosfide indii/.  
01 p0139 A69-10885  
Investigation of the effect of hydrostatic pressure on  
the recombination emission from the region of indium  
phosphide p-n junctions /Issledovanie vlianiia  
gidrostaticheskogo davleniia na rekombinatsionnoe  
izluchenie iz oblasti n-p-perekhodov na fosfide indii/.  
04 p0639 A69-14428  
Magnetic susceptibility of an indium phosphide/gallium  
arsenide solid solution /Magnitnaia vos-  
priimchivost' tverdogo rastvora fosfid indiiu-arsenid  
galliiu/.  
07 p1200 A69-19013  
Preparation of homogeneous solid solutions of indium  
and gallium antimonides.  
10 p1745 A69-23331  
Behavior of current-voltage characteristics of indium  
phosphide n-p junction.  
12 p2144 A69-26649  
Optical and electrical properties of quasi-binary  
solid solutions of some A super III B super V com-  
pounds.  
19 p3390 A69-36554
- SIROVICH, L.**  
Kinetic description of the propagation of plane  
sound waves in a diatomic gas.  
11 p1920 A69-24287  
Equations for gas mixtures. II.  
11 p1921 A69-24308  
The structure of shock-waves in gas mixtures.  
11 p1874 A69-25356
- SIRUGUE, M.**  
Quasi-free translationally invariant states and  
Bogoliubov transformations /Etats quasi libres invari-  
ants de translation et transformations de Bogoliubov/.  
03 p0455 A69-13364
- SISAKIAN, I. N.**  
Concerning the statistical theory and large-angle  
scattering.  
13 p2302 A69-28368
- SISCOE, G. L.**  
Experimental evidence for a detached lunar com-  
pression wave.  
05 p0824 A69-16251
- Simultaneous plasma and magnetic-field measure-  
ments of probable tangential discontinuities in the solar  
wind.  
11 p1946 A69-24430  
An east-west asymmetry in the solar wind velocity.  
11 p1950 A69-25148  
Corotating structure in the solar wind.  
22 p4003 A69-40302  
On the north-south asymmetry in the solar wind.  
22 p4004 A69-40303
- SISLIAN, ZH. S.**  
Linearized unsteady nonequilibrium flows of a com-  
pressible gas.  
07 p1119 A69-18738
- SISSENWINE, N.**  
Mid-latitude humidity to 32 km.  
03 p0461 A69-13345
- SISSINGH, G. J.**  
Review and discussion of "Dynamics of lifting rotors  
with thrust and tilting moment feedback controls" by  
K. H. Hohenemser and R. L. Johnson.  
[AHS PAPER 340A] 17 p2899 A69-33509
- SISSON, G. M.**  
Isaac Newton 98-inch telescope.  
12 p2058 A69-26416
- SITARAM, H.**  
Satellite television - A system proposal for India.  
[UN PAPER 68-95750] 01 p0028 A69-10495  
A proposed national system for television distribu-  
tion through satellite for India.  
19 p3275 A69-36413
- SITARSKI, G.**  
Ephemeris of comet Grigg-Skjellerup for its reap-  
pearance in 1971/72.  
17 p3044 A69-34183
- SITENKO, A. G.**  
Anomalous fluctuations of acoustic waves in  
semiconductors in an external electric field /Pro-  
anomali fluktuatsii zvukovykh khvil' u napivprovod-  
nikakh, iaki znakhodiat'sia u zovnishn'omu elek-  
trichnomu poli/.  
03 p0491 A69-14054
- SITENKO, O. G.**  
Anomalous sound wave fluctuations in semiconduc-  
tors in an external electric field.  
18 p3182 A69-35047
- SITNIANSKII, N. A.**  
Viscoelastic longitudinal oscillations of a rod with an  
end mass /Viazko-uprugie prodol'nye kolebaniia  
sterzhnia s massoi na kontse/.  
12 p2177 A69-25995
- SITNIK, G. F.**  
Turbulent velocities in faculae and the photosphere.  
02 p0314 A69-11646  
Determination of the probability of the electron  
transition of the red "atmospheric" band system of the  
O sub 2 molecule /Opredelenie veroiatnosti elektron-  
nogo perekhoda krasnoi "atmosfera" sistemy polos  
molekuly O sub 2/.  
03 p0420 A69-13276  
The dependence of telluric-line parameters on the  
air mass and the height of the place of observation.  
03 p0512 A69-13695  
Role of electron impacts in the decomposition of CO  
molecules on the sun /Rol' elektronogo udara v  
razrushenii molekul CO na solntse/.  
09 p1590 A69-21376  
The use of O sub 2 molecular lines in studying physi-  
cal conditions in the earth's atmosphere.  
09 p1490 A69-21863  
Determination of the electronic transition probabili-  
ty of the red "atmospheric" system of the O sub 2  
molecule bands.  
14 p2487 A69-28784  
The role of electron collision in the dissociation of  
CO molecules on the sun.  
18 p3198 A69-34764
- SITNIKOV, L. S.**  
Multistable logic simplifies man-machine interface.  
21 p3686 A69-39065  
Substantial reliability enhancement in phase-pulse  
multistable circuits /Pro istotno pidvishchennia  
nadiinosti fazoimpul'snikh bagatostikiikh skhem/.  
23 p1413 A69-42338
- SITSINSKAIA, N. M.**  
High-speed SFR camera for use in the visual and ul-  
traviolet spectral ranges - For dissection, stereoscopic  
and spectral photography.  
12 p2085 A69-26155
- SITTE, K.**  
Evidence for strongly interacting heavy shower parti-  
cles at 70 m w.e. underground.  
02 p0310 A69-12831  
The nature of the primaries of horizontal air showers.  
15 p2678 A69-31499
- SITTIG, E. K.**  
Ultrasonic dispersive delay lines - An approach to  
better radar systems.  
24 p4286 A69-42901
- SIUGIS, A.**  
High-sensitivity LF and HF frequency-deviation  
meter with resonant RC amplifiers  
/Vysokochuvstvitel'nyi NCh iVCh izmeritel' deviatssii  
chastoty s rezonansnyi RC-usiliteliami/.  
12 p2038 A69-26337
- SIUKAEV, N. V.**  
Electrical properties of diffused p-n junctions in indi-  
um phosphide.  
02 p0294 A69-11628  
Magnetoresistance and Hall effect in compensated  
indium phosphide.  
06 p0978 A69-16987
- SIUNIAEV, R. A.**  
Diffuse X-radiation background in space.  
01 p0147 A69-11310  
The diffuse X-ray background of cosmic space. II.  
10 p1792 A69-24209  
Thermal conditions of the intergalactic gas /IGG/  
/Teplovoi rezhim mezgalakticheskogo gaza /MGG//.  
11 p1954 A69-24381  
Recombination of hydrogen in the hot model of the  
universe.  
15 p2690 A69-30734  
Dielectronic recombination.  
20 p3580 A69-38016  
Motion of the ionization front with allowance for  
outflow of ionized gas /Dvizhenie ionizatsionnogo fron-  
ta s uchedom ottoka ionizovannogo gaza/.  
21 p3771 A69-38997  
Thermal conditions in the intergalactic gas.  
24 p4389 A69-43771
- SIVA SWAMY, R.**  
Triple pulse Doppler radar.  
21 p3672 A69-38436
- SIVAKOVA, E. V.**  
Influence of oxidation on the emissivity of molyb-  
denum disilicide coatings /Vlianie oksisleniia na  
izluchatel'nuu sposobnost' pokrytii iz disilitsida molib-  
dena/.  
09 p1522 A69-21588
- SIVAN, R.**  
On the optimal control of discrete-time linear  
systems with random parameters.  
12 p2052 A69-26501
- SIVAPRAKASAPILLAI, P.**  
Magnetic reflection of constant-radius annular elec-  
tron beams.  
19 p3267 A69-35930
- SIVAPRASAD, K.**  
The Kolar gold fields extensive air shower experi-  
ment.  
06 p0990 A69-17300  
Calculation of some characteristics of extensive air  
showers using different models of high energy nuclear  
interactions.  
06 p0990 A69-17301
- SIVARAMAN, K. R.**  
On the relation between sunspot area changes and  
flare occurrences.  
07 p1206 A69-19252
- SIVASEGARAM, S.**  
Film cooling slots - The importance of lip thickness  
and injection angle.  
20 p3585 A69-37082
- SIVELLS, J. C.**  
Aerodynamic design of axisymmetric hypersonic  
wind tunnel nozzles.  
[AIAA PAPER 69-337] 13 p2200 A69-28273
- SIVERS, L. L.**  
Desorption of yttrium from tungsten in a strong elec-  
tric field /Desorbtssia ittriiia s vol'trama v sil'nom elek-  
tricheskom pole/.  
17 p3015 A69-33631
- SIVERS, V. M.**  
Diffusion of high-density radiation in a one-dimen-  
sional medium /Difuziia viprominiuvannia visokoi  
gustini v odnovimirovomu seredivinchi/.  
21 p3769 A69-38586



## SIVIER, K. R.

A one-component, magnetic support-and-balance system. [AIAA PAPER 68-401] 24 p4298 A69-43714

## SIVINSKI, H. D.

Techniques for the limitation of biological loading of spacecraft before sterilization. 05 p0713 A69-15948

## SIVKOV, S. I.

Methods of calculating the characteristics of solar radiation /Metody rascheta kharakteristik solnechnoi radiatsii/. 20 p3570 A69-37233

## SIVOKON, N. V.

Neutron activation analysis determination of oxygen in beryllium. 20 p3544 A69-37811

## SIVOV, A. N.

Reduction of a two-dimensional diffraction problem on bodies of arbitrary shape to one-dimensional integral equations of the second kind. 09 p1459 A69-22634

## SIVUKHIN, D. V.

The conical refraction of magnetosonic waves. 10 p1727 A69-23091

## SIXOU, A.

Study of a simplified method allowing evaluation of aberrations of the radioelectric axis by a monolithic radome /Recherche d'une methode simplifiee permettant d'apprécier les aberrations d'axe radioelectrique provoquées par un radome monolithique/. 07 p1110 A69-19521

## SIXSMITH, H.

Transient phenomena in the 337- $\mu$  m maser. 17 p2981 A69-33088

## SIZIKOV, V. S.

A model of the mass distribution in M 31. I /Model' raspredeleniia mass v M 31. I/. 13 p2351 A69-27870

Distribution of masses in galaxies according to radial velocity data. II - NGC 7331 model /Raspredelenie mass v galaktikakh po dannym lucheovykh skorostei. II - Model' NGC 7331/. 13 p2353 A69-28325

## SIZMIN, A. M.

Radio radiation intensity at 1.68 MHz as measured by "Kosmos-142." 01 p0158 A69-11322

## SIZONENKO, V. L.

Concerning one possibility of anomalously rapid turbulent heating of plasma ions. 09 p1548 A69-21673

Turbulent heating of plasma ions during the development of an electron-acoustic instability /O turbulentnom nagreve ionov plazmy pri razviti elektronno-zvukovoi neustoiichivosti/. 10 p1728 A69-23137

Induced scattering and decay of electron-acoustic oscillations in a plasma /Indukovane rozsianniia i rozpad elektronno-zvukovykh kolivan' u plazmi/. 21 p3776 A69-38584

## SIZOV, V. P.

Effectiveness of the harmonic balance method in the investigation of the stationary modes of a phase-locked oscillator /Ob effektivnosti metoda garmonicheskogo balansa pri issledovanii statsionarnykh rezhimov fazovoi avtopodstroiki chastoty/. 04 p0559 A69-15138

## SIZUKHIN, O. V.

Anomalous absorption of a powerful electromagnetic wave in a collisionless plasma. 18 p3101 A69-34621

## SJOEBERG, B. E.

The digital computer system in the Swedish aircraft Saab 37 "Viggen." [AIAA PAPER 69-985] 22 p3908 A69-40365

## SJOGREN, W. L.

Lunar gravimetrics. 15 p2697 A69-31313

Lunar gravimetrics. 18 p3194 A69-34413

Consistency of Lunar Orbiter residuals with trajectory and local gravity effects. [AAS PAPER 68-131] 21 p3828 A69-39766

Lunar gravimetry and mascons. 24 p4379 A69-42785

## SKADRON, G.

Nonlinear stabilization of a two-stream plasma instability in the ionosphere. 24 p4310 A69-43182

## SKAGGS, F. L.

Silicon vidicon - An image tube for the viewing of near infrared and visible radiation. 09 p1466 A69-22456

## SKAISTIS, S. J.

Controlling hydraulic machine noise. 22 p3870 A69-41238

## SKALAFURIS, A. J.

The structure of a shock front in atomic hydrogen. III - The radiative relaxation region. 01 p0122 A69-10125

The structure of a shock front in atomic hydrogen. IV - Stability, dissipation, and propagation. 11 p1961 A69-25106

## SKALAK, R.

Interstitial pressure of the lung. 24 p4257 A69-42627

## SKALLA, D. Z.

A look at the inverted spin. 14 p2392 A69-29696

## SKALLOUD, M.

Influence of the flexural rigidity of flanges upon the load-carrying capacity and failure mechanism of webs in shear. 18 p3227 A69-35492

Limiting state of a square plate subjected to shear and reinforced by a vertical stiffener /Etat limite d'une plaque carree, cisaillee, renforcee par un raidisseur vertical/. 24 p4399 A69-42967

## SKALSKAIA, I. P.

Expansion of an arbitrary function into an integral in terms of associated spherical functions. 11 p1910 A69-25731

## SKAPERDAS, D. O.

Latitude variation of the lower ionosphere. 18 p3127 A69-34798

## SKARSGARD, L. D.

Survival, chromosome abnormalities, and recovery in heavy-ion- and X-irradiated mammalian cells. 03 p0373 A69-13492

## SKARTVEDT, C. G.

Development of the Titan III transtage ACS hydrazine monopropellant rocket engine modules. [AIAA PAPER 69-422] 19 p3394 A69-36300

## SKATTEBOL, L. V.

Acoustic holograms. 06 p0923 A69-16933

## SKEER, M. H.

A formula for hand computation in two-stage vehicle optimization. 19 p3429 A69-35918

## SKENDEROFF, C.

Diomedes - A pseudo-random ranging system using optical correlation. 03 p0393 A69-13254

## SKENDEROFF, CL.

Optical correlation for signals coded by a pseudorandom phase law /Correlation optique pour signaux codes avec une loi de phase pseudo-aleatoire/. 24 p4282 A69-42742

## SKERBELE, A.

Excitation by electron impact of vibrational transitions in water and carbon dioxide at kinetic energies between 30 and 60 eV. 06 p0960 A69-17108

## SKERRA, B.

Mössbauer spectroscopy applied to the classification of stone meteorites. 19 p3408 A69-36083

## SKETCH, H. J. H.

Description of the Ariel III satellite project. 21 p3820 A69-39256

## SKIBENKO, A. I.

Alfven oscillations in an inhomogeneous plasma from a pulsed discharge with oscillating electrodes /Al'fvenovskie kolebaniia neodnorodnoi plazmy v impul'snom razriade s ostsiliruiushchimi elektrodami/. 09 p1550 A69-22020

Effect of refraction on the accuracy of plasma density determination by microwave interferometry /Vliianie refraktsii na tochnost' opredeleniia plotnosti plazmy pri mikrovolnovoi interferometrii/. 09 p1496 A69-22031

Determination of the local values of plasma parameters from the energy absorption of a refracted microwave beam /Opredelenie lokal'nykh znachenii

parametrov plazmy po pogloshcheniiu energii i refragiruushchego mikrovolnovogo lucha/. 13 p2312 A69-28112

Plasma multifrequency interferometry /Mnogochastotnaia interferometriia plazmy/. 14 p2497 A69-29795

Generation of a dense plasma by injecting an electron beam into a magnetic trap /Utvorennia shchil'noi plazmi pri inzhetsii elektronnoho puchka v magnitnii ulovliuvach/. 22 p3990 A69-40791

## SKIBENKO, E. I.

Generation of a dense plasma by injecting an electron beam into a magnetic trap /Utvorennia shchil'noi plazmi pri inzhetsii elektronnoho puchka v magnitnii ulovliuvach/. 22 p3990 A69-40791

## SKILLING, J.

Radial oscillation periods for Hamada-Salpeter models of white dwarfs. 17 p3037 A69-33642

## SKILLMAN, T. L.

Propagation of the sudden commencement of July 8, 1966, to the magnetotail. 01 p0075 A69-11226

## SKINNER, D. B.

Effects of increased gravity on gastroesophageal reflux in monkeys. 06 p0874 A69-17838

## SKINNER, D. R.

Thermal defocusing of brief laser pulses. 19 p3330 A69-35601

The effect of laser-rod properties on the energy transfer efficiency of pumping cavities using helical flash lamps. 23 p4173 A69-41630

## SKINNER, D. W.

A model for polymer fatigue. 10 p1717 A69-24217

## SKINNER, G. B.

Initiation of detonation by incident shock waves in hydrogen-oxygen-argon mixtures. 02 p0304 A69-12313

## SKINNER, J. H., JR.

Development of steady flow in the wake of a plane flame. [ASME PAPER 69-FE-33] 20 p3460 A69-37993

## SKINNER, N. J.

The electrojet phenomenon. 02 p0236 A69-11433

## SKIRROW, G.

Studies of stabilized low temperature ignition. I - Cyclohexane. 02 p0304 A69-12314

## SKLADNIK-SADOWSKA, E.

A laboratory electron gun of 50 kv /Laboratoryjne dzialo elektronowe 50 kv/. 09 p1464 A69-22243

## SKLANSKY, J.

The delay method of analyzing Markov chains. 04 p0624 A69-15002

## SKLAREW, R. C.

Elastic scattering of low-energy electrons from metastable helium. 03 p0469 A69-12922

## SKLIAR, F. S.

The structure of a jet at transverse injection into a supersonic flow /O strukture strui pri poperechnom vpryske v sverkhzvukovoi potok/. 11 p1821 A69-25479

## SKLIAREVICH, A. N.

Reliability functions of a finite automaton /Funktsiia nadezhnosti konechnogo avtomata/. 13 p2224 A69-27250

## SKLIAROV, I. A.

Passage of an amplitude-modulated signal with noise through an envelope detector /Prokhozhdenie amplitudno-modulirovannogo signala s shumom cherez detektor ogibaushchei/. 15 p2576 A69-30348

## SKLIAROV, I. U. V.

Motion of a vertical gyroscope mounted in an additional servo frame /Dvizhenie girovertikali, ustanovlennoi v dopolnitel'noi slediashechei rame/. 09 p1498 A69-22108

## SKLIZKOV, G. V.

High temperature effects of intense laser emission focused on a solid target. 09 p1520 A69-22656

- Laser application for investigations of the high-temperature and plasma phenomena.  
10 p1741 A69-23809
- Laser beam usage for high-speed photography.  
12 p2086 A69-26165
- Measurement of the time variation of the temperature of the plasma of a laser flare by means of its X-radiation.  
18 p3154 A69-35496
- Study of gasdynamic processes occurring during the vaporization of a solid material under the action of laser emission /Issledovanie gazodinamicheskikh protsessov, voznikaushchikh pri isparenii tverdogo veshchestva pod deistviem izlucheniia lazera/.  
21 p3740 A69-39551
- KLOVSKAIA, I. L.**  
Hydrodynamics in weak force fields - Onset of steady thermocapillary convection in a spherical fluid film under weightlessness conditions /Gidrodinamika v slabykh silovykh poliakh - Vozniknovenie statsionarnoi termokapil'liarnoi konveksii v sharovom sloe zhidkosti v usloviakh nevesomosti/.  
19 p3452 A69-36392
- KOBOV, V. G.**  
Electromagnetic waves in metals in a magnetic field.  
02 p0299 A69-12565
- KOCZOWSKI, S.**  
Nonlinear controller concept /Konceptcja nieliniowego regulatora/.  
05 p0736 A69-15764
- Optimum conditions for recording with analog continuously recording devices /Optymalne warunki rejestracji analogowymi przyrzadami rejestrującymi z zapisem ciaglym/.  
12 p2091 A69-26332
- SKODA, G.**  
The relation between thermal and radioelectric stability for a dry adiabatic stratification and for inversions /Die Verknüpfung zwischen thermischer und radioelektrischer Stabilität bei trockenadiabatischer Schichtung und bei Inversionen/.  
20 p3571 A69-37509
- SKOFRONICK, J. G.**  
Pumping requirements for a neutral particle nozzle beam source.  
04 p0600 A69-15026
- SKOK, E. M.**  
Thermal EMF in epitaxial films /Termoeds v epitaksial'nykh plenkach/.  
09 p1555 A69-21473
- Thermoelectric power of epitaxial films.  
15 p2669 A69-30718
- SKOKOV, I. V.**  
Problem of a rarefied gas flow past axisymmetric blunt bodies /K voprosu obtekanii zatuplennykh osesimmetrichnykh tel potokom razrezhennogo gaza/.  
06 p0861 A69-17812
- A multibeam interferometer for studies on gas flows.  
08 p1314 A69-20385
- Determination of the parameters of a rarefied gas flow past a cylinder /Opredelenie parametrov obtekanii tsilindra razrezhennym gazovym potokom/.  
24 p4244 A69-43070
- SKOLKA, E. J.**  
Spacecraft loader has all-hydraulic, all-direction positioning.  
20 p3511 A69-38181
- SKOLNICK, A.**  
A structure and scoring method for judging alternatives.  
20 p3640 A69-38023
- SKOLNICK, L. P.**  
Directional effects in the stress corrosion cracking of an aluminum alloy.  
09 p1521 A69-21399
- SKOLOZDRA, R. V.**  
Phase equilibria in the systems vanadium-chromium-carbon, niobium-chromium-carbon, and tantalum-chromium-carbon.  
09 p1523 A69-21872
- SKOMAL, E. N.**  
Analysis of airborne VHF/UHF incidental noise over metropolitan areas.  
17 p2921 A69-33672
- The dimensions of radio noise.  
23 p4126 A69-42217
- SKOMOROVSKII, I. U. A.**  
Nonlinear signal distortions during light modulation by electrooptical modulators applying the Pockels effects /Nelineinye iskazheniia signala pri modulatsii sveta pri pomoshchi elektroopticheskikh modulatorov, ispol'zuushchikh effekt pokkel'sa/.  
05 p0718 A69-15655
- Nonlinear signal distortions under light modulation by means of electro-optical modulators using Pockel's effect.  
16 p2754 A69-32512
- SKOOG, R. A.**  
On the stability of pulse-width-modulated feedback systems.  
06 p0904 A69-17942
- SKOPOWSKI, P. S.**  
A multiple shaker ground vibration test system to simulate inflight levels in a tandem rotor helicopter.  
15 p2585 A69-30357
- SKORIK, K. E.**  
Description of a high-speed plate holder and shutter used for observing the annular solar eclipse of May 20, 1966 /Opisanie bystrodeistvuiushchei kassety i zatvora dlia nabludenii kol'tseobraznogo solnechnogo zatmeniiia 20 maia 1966 g./.  
15 p2686 A69-30534
- SKORIKOV, E. A.**  
Radiator of a monopulse antenna /Obuchatel' monoiimpul'snoi anteny/.  
17 p2939 A69-33905
- SKORIUPIN, V. A.**  
Investigation of the energy losses and effectiveness of the turbulent heating of a plasma by a current /Issledovanie energeticheskikh poter' i effektivnosti turbulentnogo nagreva plazmy tokom/.  
11 p1935 A69-25753
- Scattering of electromagnetic waves by turbulent plasma fluctuations.  
15 p2659 A69-30728
- SKOROKHOD, M. I.**  
The effect of dislocations on the intensity jumps at the interferential transmission of X-rays near the K-edge of absorption in Ge.  
03 p0490 A69-13944
- SKOROKHOD, M. IA.**  
A study of structural defects in CdSe single crystals using X-ray topograms.  
02 p0298 A69-12048
- SKOROKHOD, V. V.**  
Sinterability of porous compacts from molybdenum fibers with small nickel additions.  
10 p1711 A69-23336
- SKORUPSKI, A.**  
Convective and absolute two-stream instabilities for hot plasma.  
14 p2499 A69-29844
- SKOTNIKOV, M. M.**  
Light refraction in the Venusian atmosphere /O refraktsii sveta v atmosfere Venery/.  
19 p3427 A69-36625
- SKOVLI, G.**  
The integral particle flux of protons and electrons /Experiment S.71D/.  
13 p2328 A69-27757
- SKOWRONSKI, J. M.**  
Geometry of the limit domain synthesis for multiple lumped systems.  
16 p2812 A69-32247
- SKREBKOVA, L. A.**  
Influence of radio wave absorption in the interstellar medium on the distribution of cosmic radio emission over the firmament /Vliianie pogloscheniia radiovoln v mezhzvezdnoi srede na raspredelenie kosmicheskogo radioizlucheniia po nebosvodu/.  
15 p2687 A69-30545
- SKRETTINGLAND, K.**  
The centrifuge as a therapeutic device.  
24 p4265 A69-43372
- SKRIABIN, B. N.**  
A dynamic system with a discontinuous characteristic.  
14 p2424 A69-28811
- SKRIABIN, N. G.**  
Solar protons in the subpolar stratosphere during a solar activity minimum /Solnechnye protony v subpoliarnoi stratosfere v period minimuma solnechnoi aktivnosti/.  
20 p3587 A69-37044
- SKRIPAK, V. N.**  
Thermal conductivity of polycrystalline corundum in the range from 90 to 1100 K /Teploprovodnost' polikristallicheskogo korunda v intervale 90-1100 deg K/.  
01 p0101 A69-10108
- Heat transfer by radiation in polycrystalline corundum /Perenos tepla izlucheniem v polikristalicheskom korunde/.  
20 p3565 A69-36975
- SKRIPIN, G. V.**  
Characteristics of the interplanetary magnetic field according to data for semidiurnal cosmic-ray variations /Kharakteristiki mezplanetnogo magnitnogo polia po dannym polusutochnykh variatsii kosmicheskikh luchei/.  
14 p2512 A69-29046
- SKRIPKIN, V. A.**  
Dependence of the effective mass of electrons on their concentration in indium phosphide crystals /Zavisimost' effektivnoi massy elektronov ot ikh koncentratsii v kristallakh fosfida indii/.  
03 p0489 A69-13889
- Dependence of the effective mass of electrons on their density in indium phosphide crystals.  
11 p1939 A69-25690
- SKRIPNICHENKO, S. IU.**  
Trim characteristics of supersonic aircraft.  
16 p2735 A69-32127
- SKRIPNIK, F. I.**  
Effect of liquid media on the change in weight, hardness, volume, and deformation of polyurethane /Vliianie zhidkikh sred na izmenenie vesa, tverdsti, ob'ema i deformatsii poliuretana/.  
18 p3162 A69-35360
- Investigation of the deformation and sliding friction of polyurethane in the presence of lubrication /Issledovanie deformatsii i treniia skol'zheniia poliuretana v prisutstvii smazki/.  
18 p3149 A69-35362
- SKRIVANEK, R. A.**  
Rocket sampling of a 1968 noctilucent cloud display over Fort Churchill, Canada.  
15 p2602 A69-31386
- Particle collection results from recent rocket and satellite experiments.  
21 p3793 A69-38343
- SKROTSKII, G. V.**  
The electromagnetic field of a coherent light beam.  
05 p0777 A69-16789
- Some properties of a narrow monochromatic light beam /Nekotorye svoistva uzkoego monokhromaticheskogo svetovogo puchka/.  
07 p1147 A69-18524
- SKRYPNIK, G. I.**  
Reliability in the elimination of multivaluedness in phase measurements /O nadezhnosti ustraneniia mnogoznachnosti fazovykh izmerenii/.  
02 p0206 A69-11603
- The reliability of eliminating phase measurement ambiguities.  
11 p1835 A69-24710
- SKUDNOVA, E. V.**  
Semiconductor Compounds, their Production and Properties /Poluprovodnikovye Soedineniia, ikh Poluchenie i Svoistva/.  
01 p0137 A69-10353
- SKUDRA, A. M.**  
Strength of reinforced plastics under static loading /Prochnost' armirovannykh plastikov pri staticheskoi nagruzenii/.  
18 p3162 A69-35353
- Static fatigue of glass-fiber reinforced plastics /O staticheskoi ustalosti stekloplastikov/.  
22 p3974 A69-40748
- SKUDRZYK, E. J.**  
The physics of flow noise.  
17 p3004 A69-32953
- SKUGAREV, V. V.**  
Analysis of circuits with arbitrary magnetic couplings on a digital computer /Analiz tsepi s proizvol'nymi magnitnymi svyaziami s pomoshch'iu ETsVM/.  
01 p0036 A69-10745
- Calculation of a universal NOR element with resistors on a digital computer /Raschet universal'nogo elementa "ni" na soprotivleniakh s pomoshch'iu ETsVM/.  
01 p0037 A69-10746
- SKUGAROV, V. I.**  
Synthesis of relief impedance antennas.  
04 p0577 A69-14786
- SKUJINS, J. J.**  
Assay of urease activity using super 14 C-urea stored, geologically preserved, and in irradiated soils.  
18 p3095 A69-34543



## SKUJINS, O.

Rotor downwash in ground effect in the presence of a step.  
[AIAA PAPER 69-225] 08 p1253 A69-21032

## SKUKINA, I. S.

Changes in the radiation effect on plants under the influence of space flight factors /K voprosu ob izmenenii radiatsionnogo effekta u rastenii pod vlianiem faktorov kosmicheskogo poleta/.  
05 p0708 A69-16510

Radiosensitivity of potatoes to gamma-ray and proton irradiation applied to whole tubers and to isolated eyes before planting /Radiochuvstvitel'nost' kartofelia k gamma- lucham i protonam pri predposadochnom obluchenii tselykh klubnei i izolirovannykh glazkov/.  
05 p0709 A69-16511

Change in the nature of the radioprotective effect of propyl gallate during proton and gamma irradiation of potatoes.  
08 p1262 A69-19927

On the problem of changes in effect of radiation on plants subjected to cosmic flight factors.  
18 p3095 A69-34729

Radiosensitivity of potatoes to gamma and proton irradiation applied to whole tubers and isolated eyes before planting.  
18 p3095 A69-34730

## SKULACHENKO, S. S.

Polarization characteristics of the emission of a ring laser with a circularly anisotropic resonator /Polarizatsionnyye kharakteristiki izlucheniia kol'tsevoogo lazera s tsirkulyarno anizotropnym rezonatorom/.  
24 p4328 A69-43160

## SKULLERUD, H. R.

Diffusion of gaseous ions in strong electric fields under the influence of charge-transfer collisions.  
08 p1355 A69-20209

## SKUMANICH, A.

Theoretical line intensities. VII - Wavelength and depth dependence of line-blanking effects for pure absorption and non-coherent scattering.  
09 p1606 A69-22424

Radiative transport in finite homogeneous cylinders by the Monte Carlo technique.  
12 p2191 A69-26970

## SKUPOI, V. F.

Method of analyzing the synchronization of self-oscillations /Metod analiza sinkhronizatsii avtokolebani/.  
13 p2300 A69-28574

## SKURATOVSKII, N. O.

Reduced indices of heat removal intensity and initial temperatures in thermoelectric devices /Privedennyye pokazateli intensivnosti otvoda tepla i nachal'nykh temperatur v termoelektricheskikh ustroystvakh/.  
13 p2209 A69-28314

## SKURATOVSKII, V. N.

Methods of high-temperature mechanical tests of inorganic heat-resistant coatings /Metody vysokotemperaturnykh mekhanicheskikh ispytaniy neorganicheskikh zharostoikikh pokrytii/.  
20 p3538 A69-37360

## SKUREDIN, V. P.

Results of experimental investigations of dosimetry and shielding on board the Cosmos 110 artificial satellite /Rezultaty eksperimental'nykh issledovaniy po dozimetrii i zashchite na ISZ "Kosmos-110"/.  
13 p2356 A69-27702

## SKURIDIN, G. A.

The study of the high energy cosmic ray particles with the "Proton" satellites.  
03 p0499 A69-12944

Soviet studies of the moon, the planets, and interplanetary space /Sovetskie issledovaniia luny, planet i mezplanetnogo prostranstva/.  
[UN PAPER 68-95719] 06 p1000 A69-17055

Basic results of the space decade /Osnovnye itogi kosmicheskogo desiatiletiia/.  
13 p2336 A69-27358

## SKURIN, L. I.

Approximate calculation of a turbulent boundary layer on an insulating wall of a magnetogasdynamic channel /Priblizhennyi raschet turbulentnogo pogranichnogo sloia na izoliatornoi stenke magnetogazodinamicheskogo kanala/.  
01 p0131 A69-10777

Turbulent MHD flow in a transverse magnetic field.  
07 p1195 A69-19736

Turbulent boundary layer in a transverse magnetic field.  
20 p3513 A69-37092

## SKVORCHEVSKII, A. K.

Study of the dependence of surface purity on some design and technological factors in laser-beam working /Issledovanie zavisimosti chistoty poverkhnosti pri obrabotke luchom lazera ot riada konstruktivno-tekhnologicheskikh faktorov/.  
04 p0606 A69-14607

## SKVORTSOV, B. V.

Resistance of a xenon plasma in a large flash lamp.  
03 p0478 A69-13846

Pulse ruby lasers with mercury pumping sources /Impul'snye opticheskie generatory na rubine s rtutnymi istochnikami nakachki/.  
19 p3336 A69-36347

## SKVORTSOV, I. U. V.

A coaxial plasma accelerator with pulsed azimuthal and longitudinal magnetic fields /Koaksial'nyi uskoritel' plazmy s impul'snymi azimutal'nymi i prodol'nymi magnitnymi poliami/.  
03 p0481 A69-14213

## SKVORTSOV, S. S.

Measurement of the proton and neutron spectra on board satellites of the Cosmos series /Izmerenie spektrov protonov i neutronov na sputnikakh serii "Kosmos"/.  
05 p0814 A69-16051

Results of experimental investigations of dosimetry and shielding on board the Cosmos 110 artificial satellite /Rezultaty eksperimental'nykh issledovaniy po dozimetrii i zashchite na ISZ "Kosmos-110"/.  
13 p2356 A69-27702

Measurement of the proton and neutron spectra in the "Cosmos" series satellites.  
20 p3591 A69-37961

## SKVORTSOV, V. A.

Reorienting of molecules in a formaldehyde beam maser.  
07 p1158 A69-19760

Influence of gas additions on the operation of submillimeter H sub 2 O and D sub 2 O lasers /Vlianie dobavok gazov na rabotu submillimetrovyykh lazerov na H sub 2 O i D sub 2 O/.  
21 p3738 A69-39131

## SKVORTSOV, V. V.

The structure of the trail behind a spherical model in a stream of rarefied plasma.  
01 p0134 A69-11308

Some results of an investigation of the perturbations produced by bodies in a rarefied plasma flow /Nekotorye rezultaty issledovaniia vozmushchenii, vnosimyykh telami v potok razrezhennoi plazmy/.  
05 p0803 A69-16048

Investigation of the characteristics of a multiple-electrode probe in a rarefied plasma flow /Issledovanie kharakteristik mnogoelektrodnogo zonda v usloviyakh potoka razrezhennoi plazmy/.  
19 p3314 A69-36622

Some results on disturbances introduced by extraneous bodies into a stream of rarefied plasma.  
20 p3581 A69-37957

## SKVORTSOVA, N. E.

Physics of Microwave Semiconductor Diodes.  
21 p3682 A69-38990

## SLACK, F. F.

Observations of travelling ionospheric disturbances using stationary satellites.  
10 p1685 A69-23831

## SLACK, G. A.

Influence of hot electrons on the optical absorption in Fe-doped CdTe.  
19 p3389 A69-36551

## SLACK, M. W.

Steady expansion of shock-heated gases for recombination studies.  
18 p3228 A69-34466

## SLAMA, R.

Slipperiness of airport runways and remedies for it /La glissance des pistes d'aviation et ses remedes/.  
10 p1674 A69-23707

## SLAPAK, P.

Stability problems in sandwich panels with lightweight cores /Stabilitatsprobleme der sandwichplatten mit leichtem kern/.  
21 p3832 A69-38417

## SLATER, G. G.

Psychological, psychophysiological, and biochemical correlates of prolonged sleep deprivation.  
23 p4099 A69-42195

## SLATER, J. V.

Effect on a flour beetle of irradiation during space flight.  
06 p0876 A69-18177

Effect of temperature and X-irradiation on pupae of the flour beetle, *Tribolium confusum*.  
17 p2910 A69-33748

Mutational responses of insects in the Biosatellite II experiment.  
20 p3476 A69-37618

## SLATER, P. N.

Apollo 9 provides multispectral photography for comparison studies.  
15 p2608 A69-30452

## SLATTERY, J. C.

A spectral measurement of simulated meteors.  
10 p1790 A69-24142

## SLATTERY, P. W.

On the propagation of stress-corrosion cracks in a magnesium-aluminum alloy.  
10 p1710 A69-23086

Stress corrosion cracking of alpha titanium in nonaqueous environments.  
19 p3352 A69-36906

## SLATTERY, R. E.

High speed photographic techniques in a ballistic range.  
12 p2088 A69-26182

## SLAUGHTER, C. D.

The emission spectrum of Comet Ikeya-Seki 1965-f at perihelion passage.  
23 p4221 A69-42386

## SLAUGHTER, H.

Changing airworthiness requirements for air taxi operators and their effect on manufacturers.  
[SAE PAPER 690320] 15 p2549 A69-30090

## SLAVATINSKII, S. A.

Strong interactions at energies greater than 10 super 11 ev.  
03 p0498 A69-12939

## SLAVENAS, I. U. I.

Equipment for low-cycle fatigue testing of specimens in bending with rotation.  
15 p2583 A69-30207

## SLAVIN, F. J.

Aircraft steam catapults.  
10 p1674 A69-24068

## SLAVINSKAIA, A. A.

Nighttime latitude variations in observations with the Danjon astrolabe at Poltava /Kolebaniia shiroy v techenie nochi v nabludeniiakh na astrolabii Danzhona v Poltave/.  
17 p2959 A69-32870

## SLAWECKI, T. K.

Wet oxidation for space waste management.  
[SAE PAPER 680714] 03 p0380 A69-13443

## SLAWSON, H. C.

Management aspects of maintainability and maintenance analysis.  
19 p3455 A69-36035

## SLAYMAKER, F. H.

Real-time Debye-Sears effect spectrum analyzer for audio frequencies.  
01 p0035 A69-11283

## SLECHTA, J.

On the calculation of the bremsstrahlung in the region of the plasma frequency.  
02 p0286 A69-11589

## SLEDGE, O. D.

Scattering of a plane electromagnetic wave by a linear array of cylindrical elements.  
20 p3494 A69-37838

## SLEEMAN, W. C., JR.

Status of research on parawing lifting decelerators.  
[AIAA PAPER 68-967] 24 p4254 A69-43715

## SLEEPER, A.

Trajectory and mass shift of a classical electron in a radiation pulse.  
08 p1377 A69-19790

## SLEEPER, R. K.

A dynamic stability study of a centrifuge-equipped space station.  
[AIAA PAPER 68-142] 02 p0334 A69-12373

## SLEICHER, C. A.

Equations for errors in turbulence measurements with inclined hot wires.  
18 p3134 A69-34442

## SLEIGHT, P.

Reflex regulation of arterial pressure during sleep in man - A quantitative method of assessing baroreflex sensitivity.  
24 p4257 A69-42626

- EMP, W. S.**  
Effects of simulated Mars dust erosion environment on thermal control coatings. [AIAA PAPER 69-1023] 22 p3923 A69-40393
- EPIAN, L. I.**  
Breakdown of a brittle rod under longitudinal impact /Razrushenie khrupkogo sterzhnia pri prodol'nom udare/. 18 p3217 A69-34592
- EPIAN, R. M.**  
Metallographic study of recrystallization in 50 Ni - 50 Fe alloy. 13 p2281 A69-28155
- EPICKA, F.**  
The equilibrium properties of carbon dioxide behind the primary and reflected shock waves. 15 p2592 A69-31054
- EPTSOV, V. M.**  
Compactibility of Fe, Co, and Ni powders with additions of zirconium, niobium, and molybdenum carbides /Ob uplotniaemosti poroshkov Fe, Co i Ni s dobavkami karbidov tsirkoniia, niobiia i molibdena/. 22 p3970 A69-40634
- EPTSOVA, N. P.**  
Sintering of mixtures of powders of nickel and molybdenum. 15 p2638 A69-30280
- EPUSHKIN, E. I.**  
Method for an approximate determination of constant gaps in electrochemical machining. 08 p1321 A69-20726
- ETTEBAK, A.**  
Stellar rotation and Be stars in the h and chi Persei association. 09 p1599 A69-22195
- HD 191980 - A peculiar B-type star.** 11 p1958 A69-24594
- Carbon stars in a south galactic pole region.** 16 p2860 A69-32232
- ETTEN, A. M.**  
Four-meter sparks in air. 02 p0281 A69-12406
- ETTEN, C. J.**  
Electronic scanning. 01 p0049 A69-11348
- EVEN, R. L.**  
Pseudo-exact band-pass filter design saves time. V. 08 p1283 A69-20227
- Pseudo-exact band-pass filter design saves time. VI.** 09 p1470 A69-22794
- Pseudo-exact band-pass filter design saves time. VII.** 15 p2581 A69-31526
- EVIN, J. A.**  
Ionization and attachment in O sub 2 and airlike N sub 2 - O sub 2 mixtures irradiated by 1.5-Mev electrons. 13 p2302 A69-27456
- ELEZ, L. M.**  
The effect of high oxygen concentrations on the animal organism. 08 p1262 A69-19831
- ELEZKO, A. I.**  
Investigation of the regularities of extrusion compacting of hard-alloy mixtures /Issledovanie zakonomernosti mundstutchnogo pressovaniia tverdospilnykh smesei/. 22 p3956 A69-40635
- ELEZOV, V. V.**  
Diffusion processes during the formation of coatings by the condensation method /Diffuzionnye protsessy pri obrazovanii pokrytii metodom kondensatsii/. 20 p3549 A69-37365
- SLIKE, G.**  
CLIP - An interactive multi-computer system for processing ionospheric data. [AIAA PAPER 69-952] 22 p3904 A69-40334
- SLINEY, D. H.**  
The evaluation of laser hazards. 02 p0204 A69-12497
- SLINEY, H. E.**  
Preliminary evaluation of greases to 600 F and solid lubricants to 1500 F in ball bearings. [ASLE PREPRINT 68AM 7C-2] 01 p0087 A69-10912
- SLINKOV, E. N.**  
Technological characteristics of polymethylsilazan treatment of glass cloths used in the fabrication of aircraft structural components /Tekhnologicheskie osobennosti obrabotki polimetilsilazanom steklotkanei, idushchikh na izgotovlenie konstruktii letatel'nykh apparatov/. 21 p3752 A69-38876
- SLIPPY, W. A., JR.**  
The use of the polarized light microscope for metallic crystallographic studies. 09 p1499 A69-22302
- SLIUSAR, V. P.**  
Viscosity of hydrogen at constant density over the temperature range 16.6-300 deg K. 11 p2003 A69-25704
- SLIUSARSKII, V. A.**  
Determination of permittivity from the ratio between the amplitudes of the E-components of waves reflected and transmitted by the dielectric /Opredelenie dielektricheskoi pronitsaemosti po otnosheniiu amplitud E-komponent otrazhennoi i proshedshei cherez dielektrik voln/. 23 p4123 A69-41950
- SLIV, E. I.**  
Cumulative error in inertial navigation systems /O nakoplenii oshibok v sistemakh inertsial'noi navigatsii/. 22 p3978 A69-40252
- SLIVINSKY, C. R.**  
State variable feedback decoupling and design of multivariable systems. 24 p4294 A69-43315
- SLOAN, D. M.**  
A converging, cylindrical, ionizing shock. 04 p0637 A69-15049
- SLOAN, D. S.**  
A search for galactic H sub 2 super plus. 16 p2864 A69-32571
- SLOAN, M. L.**  
Nonlinear interactions of positive and negative energy waves. 01 p0133 A69-11212
- SLOAN, W. A.**  
Intensity measurements of chromospheric fine structures in Lyman-alpha. 03 p0515 A69-14039
- SLOANAKER, R. M.**  
Polarization of discrete sources at 21.2-cm wavelength, and galactic depolarization. 18 p3190 A69-34287
- SLOBIN, S. D.**  
Observations of the total lunar eclipse of October 18, 1967, at a wavelength of 3.33 millimeters. 10 p1789 A69-24132
- SLOBODENIUK, G. I.**  
Calculation of the maximum efficiency of electron-impact ion sources. 06 p0960 A69-16919
- SLOBODIANIUK, V. IA.**  
Investigation into the effect of a single-stage single overloading on the impact strength of Duralumin. 07 p1167 A69-19317
- SLOBODKINA, F. A.**  
Variational problems of magnetohydrodynamics /K variatsionnym zadacham magnitnoi gidrodinamiki/. 06 p0969 A69-17917
- Optimization of one-dimensional flows, when one of the characteristic velocities passes continuously through zero.** 11 p1934 A69-25728
- SLOBODNIK, A. J., JR.**  
Microwave frequency acoustic surface wave propagation losses in LiNbO sub 3. 10 p1703 A69-23511
- SLOBOZHANIN, L. A.**  
Hydrostatics in weak force fields /Gidrostatika v slabykh silovykh poliakh/. 03 p0417 A69-13809
- SLOCUM, K. W.**  
High power TWT for satellite communication. 07 p1094 A69-18427
- SLOCUMB, T. H., JR.**  
Evaluation of entry and terminal deceleration systems for unmanned Martian landers. [AIAA PAPER 68-1147] 03 p0521 A69-13670
- SLONIM, A. R.**  
Rapid procedures to monitor water for potability. 01 p0019 A69-11339
- SLONIM, IU. M.**  
Flares, prominences, and loop prominences. I. 02 p0306 A69-11633
- Flares, filaments, and loop prominences. II.** 11 p1945 A69-24238
- Chromospheric flares and the phenomena in the upper layer of the active region. I /Kromosfernye vspyshki i iavleniia v verkhnem iarushe aktivnoi oblasti. I/. 20 p3591 A69-38042**
- SLONIMSKAIA, M. V.**  
Adsorption mechanism of the leakage of the lunar atmosphere /Adsorbtsionnyi mekhanizm utechki lunnoi atmosfery/. 05 p0824 A69-16062
- Loss of the lunar atmosphere by an adsorptive mechanism.** 15 p2680 A69-30261
- SLOOP, J. L.**  
The aerospace stimulus to technological advance. [UN PAPER 68-95321] 01 p0178 A69-10467
- Development of needed technology.** 17 p3076 A69-34045
- SLOPER, D. K.**  
A general-purpose onboard satellite computer. 05 p0725 A69-16710
- SLOSS, P. W.**  
Wind shear and reflectivity gradient effects on Doppler radar spectra. 03 p0461 A69-13341
- SLOUP, J.**  
The TESLA TKG 101 ruby laser /Rubinovy laser TESLA TKG 101/. 08 p1327 A69-20881
- SLOVLI, G.**  
Results of rocket measurements in the lower auroral ionosphere. 16 p2778 A69-32187
- SLOWEY, J. W.**  
A study of the semi-annual density variation in the upper atmosphere from 1958 to 1966, based on satellite drag analysis. 06 p0918 A69-17380
- SLUIJTER, M. E.**  
Gasexchange at low ambient pressure. 24 p4269 A69-43411
- SLUKA, S. J.**  
Role of hematocrit, heart mass, and high-altitude exposure in acute hypoxia tolerance. 22 p3874 A69-40214
- SLUSHER, R. E.**  
Raman scattering by polaritons in presence of electron plasma in GaAs. 07 p1200 A69-19401
- SLUYTER, M. M.**  
Thermionic electrical power generation from reentry plasmas. I - Performance. II - Integrated system. 14 p2399 A69-29194
- The effect of a magnetic field on a rotating cone in compressible flow.** [AIAA PAPER 69-721] 17 p2892 A69-33484
- SLYE, R. E.**  
An advanced cryogenic core concept for a flexible and economical delivery system. [AIAA PAPER 68-812] 21 p3827 A69-39753
- SLYPER, H. A.**  
Development of explicit stiffness and mass matrices for a triangular plate element. 08 p1414 A69-20526
- Determining centre of flexure of uniform bar of asymmetric cross section.** 09 p1614 A69-21722
- SLYSH, V. I.**  
Extra-atmospheric radio-astronomical studies /Vneatmosfernye radioastronomicheskie issledovaniia/. 15 p2682 A69-30504
- SMAGORINSKY, J.**  
Experimental extended predictions with a nine-level hemispheric model. 07 p1175 A69-18895
- SMAK, J.**  
Some current problems of the U Geminorum type stars /Niektore aktualne problemy gwiazd typu u geminorum/. 11 p1954 A69-24363
- On the rotational velocities of gaseous rings in close binary systems.** 17 p3044 A69-34180
- On the period and physical nature of HZ 22.** 17 p3044 A69-34181
- SMALES, A. A.**  
A comparison of trace element distribution in the metal phase of chondrites and in iron meteorites. 08 p1404 A69-20921



## SMALL, J. G.

## SMALL, J. G.

Extension of absolute frequency measurements to the 84 mu range. 17 p2982 A69-33406

## SMALL, K. R.

Study of a fluid-controlled solid rocket motor for space application. [AIAA PAPER 69-446] 16 p2841 A69-32687

## SMALL, R. A.

Electrical sliprings for space simulation testing. [AIAA PAPER 69-1035] 22 p3925 A69-40402

## SMALL, W. M.

The effect of alloying elements on the solubility of nitrogen in liquid iron-chromium-nickel alloys. 06 p0943 A69-17234

## SMALLEY, A. J.

Static and dynamic characteristics of the gas-lubricated spiral-grooved spool bearing for motion in the axial direction. [ASME PAPER 68-LUBS-12] 13 p2266 A69-27276

## SMART, D. F.

The daily variation of trajectory-derived high-latitude cutoff rigidities in a model magnetosphere. 22 p4005 A69-40513

## SMART, W.

Oxygen reclamation from carbon dioxide using a solid oxide electrolyte. 07 p1071 A69-19423

## SMEDLEY, G. P.

Some causes of fatigue failures in service. 24 p4398 A69-42775

## SMEETS, G.

Evaluation of photographs made by differential interferometer (Aufnahmen mit dem Differential-Interferometer und ihre Auswertung). 12 p2089 A69-26187

Streak-interferometric studies of head wave standoff in a shock tunnel. 18 p3085 A69-34473

## SMEKHOV, G. D.

Radiation mechanism of nitrogen in the nonequilibrium region behind a shock wave. 05 p0745 A69-15890

## SMELT, R.

A US view. 22 p4052 A69-39930

## SMELTZER, D. B.

Study of a family of supersonic inlet systems. [AIAA PAPER 68-580] 17 p3022 A69-34018

## SMELYI, G. N.

Experimental investigation of the stability of smooth cylindrical shells of various scales under axial compression (Eksperimental'noe issledovanie ustoiichivosti gladiikh tsilindricheskikh obolochek razlichnykh mashtabov pri osevom szhatii). 04 p0680 A69-14929

## SMENKOVSKII, E. G.

A method of indicating the possibility of takeoff (Ob odnom metode indikatsii vozmozhnosti vzleta). 24 p4253 A69-43085

## SMENTOWSKI, F. J.

Temperature-dependent electron spin resonance studies. II. 10 p1651 A69-22938

## SMERD, S. F.

The generation of radio waves in astrophysical plasmas. 09 p1608 A69-22743

80 MHz heliograph observations of two type IV events on 4 and 6 May 1968. 09 p1582 A69-22749

## SMERDOV, B. I.

Observation of plasma instability in a strong alternating electric field. 09 p1552 A69-22526

Plasma heating by a fast magnetosonic wave of large amplitude. 14 p2493 A69-29643

## SMERIN, S. E.

Epinephrine metabolism in mammalian brain after intravenous and intraventricular administration. 21 p3650 A69-38323

## SMERNOFF, B. J.

Numerology and local quasi-stellar objects. 10 p1785 A69-24091

## SMET, P.

The quantum theory of electrical birefringence of diamagnetic molecules (Kerr effect) - General formalism (Sur la theorie quantique de la birefringence electrique des molecules diamagnetiques (effet Kerr) - Formalisme general). 02 p0279 A69-11538

## SMETAMIN, I.

On a mixed problem of elasticity theory for a wedge. 14 p2531 A69-28809

## SMETANIN, B. I.

Problem of extension of an elastic space containing a plane annular slit. 11 p1996 A69-25735

## SMETANNIKOVA, IU. S.

Impurity photoconductivity of indium antimonide at low temperatures. 04 p0644 A69-15270

## SMETS, A. J.

Experiments on Alfvén-wave resonances in liquid sodium. 01 p0131 A69-10820

## SMICK, A. E.

Cargo handling - A marketing systems approach. [RAES PAPER 1] 22 p4053 A69-40482

## SMIDDY, M.

Charged particle measurements by means of electrostatic probes. 05 p0761 A69-15702

Positive ion measurement of spacecraft attitude - Gemini X and XII. 24 p4315 A69-43241

## SMIDT, U.

Improvement of body plethysmographic measurements by means of an analog computer (Verbesserung ganzkoerperplethysmographischer Untersuchungen durch Einsatz eines Analogrechners). 23 p4111 A69-42081

## SMIGIELSKI, P.

Application of holography to hypersonic aerodynamics in a firing tunnel (Application de l'holographie a l'aerodynamique hypersonique en tunnel de tir). 12 p2087 A69-26176

Strioscopic methods for measuring mass volume in hypersonic wakes in a hot-shot tunnel (Methodes strioscopiques de mesure des masses volumiques dans les sillages hypersoniques en tunnel de tir). 19 p3293 A69-35740

## SMILEY, T. T.

Rough terrain demonstration of the OV-10A. [AIAA PAPER 69-316] 09 p1434 A69-22391

## SMILEY, V. N.

Conditions for zero reflectance of thin dielectric films on laser materials. 02 p0256 A69-11926

## SMILGA, A. A.

Characteristics of a contact between gold and a polycrystalline cadmium selenide film (Svoistva kontakta zolota s polikristallicheskim sloem selenistogo kadmiia). 19 p3384 A69-36480

## SMILANSKII, V. R.

Slant incidence of an electromagnetic wave on a parabolic plasma layer (Naklonnoe padenie elektromagnitnoi volny na parabolicheskii plazmennyi sloi). 22 p3901 A69-41020

## SMIRENNYI, L. N.

Measurement of the proton and neutron spectra on board satellites of the Cosmos series (Izmerenie spektrov protonov i neutronov na sputnikakh serii "Kosmos"). 05 p0814 A69-16051

Results of experimental investigations of dosimetry and shielding on board the Cosmos 110 artificial satellite (Rezultaty eksperimental'nykh issledovanii po dozimetrii i zashchite na ISZ "Kosmos-110"). 13 p2356 A69-27702

Nuclear Interactions in Spacecraft Shielding (Iadernye Vzaimodeistviia v Zashchite Kosmicheskikh Korabli). 14 p2481 A69-29817

Measurement of the proton and neutron spectra in the "Cosmos" series satellites. 20 p3591 A69-37961

## SMIRIGA, N.

An integral representation of a continuous linear stochastic process with independent pieces. 12 p2121 A69-26365

## SMIRNOFF, M.

Philosophy of law in space (La philosophie du droit de l'espace). 19 p3455 A69-36332

## SMIRNOV, A. A.

Theory of ordering of alloys with several phase transition temperatures (Review) (Teoriia uporiadocheniia splovov s neskol'kimi temperaturami fazovykh perekhodov (obzor)). 11 p1936 A69-24702

Effect of pressure on ordering of alloys with an HCP crystalline lattice (Vliianie davleniia na uporiadochenie v splovlakhs s geksgonal'noi ploiounpakovannoi kristalicheskoi reshetkoi). 11 p1937 A69-24704

## SMIRNOV, A. G.

Obtaining high-quality holograms of three-dimensional diffuse objects with the aid of single-mode ruby lasers (Poluchenie vysokokachestvennykh logogram trekhmernykh diffuznykh ob'ektov s pomoshch'iu odnomodovykh rubinovnykh lazervov). 07 p1132 A69-18801

Holographic recording of the temporal coherence pattern of a wave train from a pulsed radiation source (O logograficheskoi registratsii kartiny vremennoi kogerentnosti tsuga voln impul'snogo istochnika izlucheniia). 17 p2973 A69-33114

Production of high-quality holograms of three-dimensional diffuse objects with the use of single-mode ruby lasers. 21 p3724 A69-38946

Investigation of the generation kinetics of a high-power ruby-laser pulse created by means of a diffraction modulator employing modulated ultrasonic traveling waves (Issledovanie kinetiki generatsii moshchnogo impul'sa rubinovogo lazera, sformirovannogo s pomoshch'iu difraktsionnogo moduliatora na begushchikh modulirovannykh ul'trazvukovykh volnakh). 24 p4328 A69-43163

## SMIRNOV, A. I.

Dynamic stability and vibrations of sandwich panels in a supersonic gas flow. 06 p1024 A69-17552

Supersonic flutter of three-layer plates (Sverkhzvukovoi flatter trekhslonnykh plastin). 08 p1412 A69-20324

The use of freons for cooling radiation detectors. 14 p2447 A69-29330

Theoretical and experimental study of the inversion coefficient in a ruby (Teoreticheskoe i eksperimental'noe issledovanie koeffitsienta inversii v rubine). 16 p2795 A69-31570

Supersonic flutter of sandwich plates. 17 p3058 A69-33317

Natural oscillations and flutter of three-layer cylindrical shells in a supersonic gas flow (Sobstvennye kolebaniia i flatter trekhslonnykh tsilindricheskikh obolochek v sverkhzvukovom potoke gaza). 19 p3437 A69-36201

## SMIRNOV, A. IA.

Pulsed laser emission of nitrogen atoms in a N sub 2-He mixture (Impul'snoe lazernoe izluchenie atomov azota v smesi N sub 2-He). 06 p0933 A69-17258

## SMIRNOV, A. N.

A radar wind patrol (Vetrovoi radiolokatsionnyi patrol'). 17 p2939 A69-33901

## SMIRNOV, A. S.

Boundaries of the region of values of the mean reduced error for pulse-code telemetering systems. 03 p0396 A69-13687

Study of electromagnetic methods for vibrational treatment of metals during the crystallization process (Issledovanie elektromagnitnykh metodov vibratsionnoi obrabotki metallor v protsesse kristallizatsii). 14 p2456 A69-29916

## SMIRNOV, A. V.

Investigation of cast alloys of the Cr-Co-B system which are abrasion- and corrosion-resistant in aggressive media (Izyskanie litnykh splovov sistema Cr-Co-B, ustoiichivnykh protiv abrazivnogo iznashivaniia i korrozii v agressivnykh sredakh). 19 p3347 A69-36742

## SMIRNOV, B. G.

Thermionic emission of 100/ faces of tungsten, rhenium, tantalum, and molybdenum single crystals (Termoelektronnaia emissiia grani /100/ monokristallov splovov vol'fra, reniia, tantala i molidbdena). 17 p3015 A69-33630

- MIRNOV, B. M.**  
Atomic Collisions and Elementary Processes in Plasma /Atomnye Stoklvenia i Elementarnye Protessy v Plazme/.  
01 p0132 A69-11200
- Cross section measurements needed for controlled fusion research, MHD generators, and other plasma studies.  
07 p1195 A69-19652
- Molecular-ion gas laser /Gazoviy lazer na molekulyarnykh ionakh/.  
08 p1325 A69-20325
- A molecular ion gas laser.  
17 p2981 A69-33315
- MIRNOV, E. A.**  
Thermodynamic properties of zirconium-niobium alloys.  
07 p1165 A69-18940
- MIRNOV, E. IA.**  
Stabilization of the null solution of a system of linear differential equations.  
03 p0408 A69-12972
- MIRNOV, E. V.**  
Electrical resistivity of aluminum oxide deposited on a substrate by plasma and gas-flame spraying /Udel'noi elektricheskoe soprotivlenie oksidi aluminium, nanesennoi na podlozku plazmennym i gazoplazmennym napyleniem/.  
15 p2630 A69-31179
- MIRNOV, G. D.**  
Electrophysiological study of the interaction between the vestibular and visual afferent systems /Elektrofiziologicheskoe issledovanie vzaimodeystviya vestibularnoi i zritel'noi afferentnykh sistem/.  
20 p3469 A69-37244
- MIRNOV, I. A.**  
Traveling excited states in organic semiconductors which are tetracyanoquinodimethane derivatives /Dvizhushchiesya vozbuzhdennye sostoyaniya v organicheskikh poluprovodnikakh-proizvodnykh tetratsianokhinodimetana/.  
03 p0484 A69-13278
- Thermal properties of lithium niobate crystals.  
03 p0487 A69-13730
- Methods of Investigating Semiconductors as Applied to the Lead Chalcogenides PbTe, PbSe, and PbS /Metody issledovaniya poluprovodnikov v primeneni k khal'kogenidam svintsya PbTe, PbSe i PbS/.  
12 p12415 A69-26851
- Moving excited states in organic semiconductors /derivatives of tetracyanoquinodimethane/.  
14 p2508 A69-29652
- MIRNOV, I. G.**  
Stability of spherical shells beyond the elastic limit.  
05 p0843 A69-16693
- MIRNOV, I. V.**  
Mathematical model of parameters of Chlorella cultivation under ionizing irradiation.  
02 p0198 A69-11508
- MIRNOV, IU. K.**  
Machine for high-temperature tensile testing in vacuum.  
07 p1117 A69-19319
- MIRNOV, K. V.**  
Problem of reproduction of food protein by autotrophic organisms in extraterrestrial conditions.  
01 p0021 A69-11079
- Feeding of experimental animals in space flights.  
08 p1265 A69-19829
- Influence of transverse acceleration on the secretory activity of the canine gastrointestinal tract.  
10 p1645 A69-23498
- MIRNOV, L. S.**  
Kinetics of new-phase formation under ion bombardment.  
06 p0978 A69-16985
- MIRNOV, M. S.**  
Solution of the three-dimensional problem of the theory of elasticity for a transversely isotropic medium with cylindrical anisotropy /Do roz'iazku trivimnoi zadachi teorii pruzhnosti transversal'noizotropnogo seredivshcha z tsilindrichnoyi anizotropie/.  
11 p1983 A69-25091
- MIRNOV, N. S.**  
Construction of harmonic and biharmonic functions in the solution of a three-dimensional problem in elasticity theory /Postroenie garmonicheskikh i bigarmonicheskikh funktsii pri reshenii prostanstvennoi zadachi teorii uprugosti/.  
11 p1976 A69-24777
- Complex investigation of the polar ionosphere /Kompleksnoe issledovanie poliarnoi ionosfery/.  
17 p2963 A69-33950
- MIRNOV, V. A.**  
Inaccuracy of using effective stellar magnitudes of meteors when calculating meteor masses and atmospheric density /Oshibochnosti primeneniya effektivnykh zvezdnykh velichin meteorov pri vychisleniiakh mass meteorov i plotnosti atmosfery/.  
02 p0314 A69-11695
- Investigation of the shot-impact shaping of parts made of monolithic panels /Issledovanie protessa drobedudarnogo formoobrazovaniya detalei iz monolitnykh panelei/.  
03 p0433 A69-12963
- An electrooptically Q-switched ruby laser with a saturable absorber in the cavity /OKG na rubine s elektroopticheskim modulatorom dobrotnosti i nasyshchayushchimsya poglotitelem v rezonatore/.  
07 p1147 A69-18531
- Photometric standardization and calibration of meteor spectrograms /O fotometricheskoi standartizatsii i kalibrovke spektrogramm meteorov/.  
12 p2154 A69-25820
- Single-frequency ruby laser with active Q-switch.  
13 p2272 A69-27911
- On the incorrect use of effective stellar magnitudes of meteors in computations of meteor mass and atmospheric density.  
13 p2355 A69-28726
- Investigation of the time-dependent characteristics of a Q-switched ruby laser driven by an external signal.  
15 p2634 A69-30727
- A single-frequency ruby laser with a tunable emission frequency in the giant pulse mode /Odnokhastotnyi OKG na rubine s perestraivayemoi chastotoi izlucheniya v rezhime gigantskogo impul'sa/.  
21 p3737 A69-38991
- MIRNOV, V. G.**  
Laser based on Raman scattering in liquid nitrogen.  
09 p1520 A69-22533
- MIRNOV, V. I.**  
Functions of a Complex Variable - Constructive Theory.  
01 p0104 A69-10616
- Boundary Value Problems and Integral Equations.  
07 p1172 A69-18495
- MIRNOV, V. L.**  
Features of the emission of a p-n junction GaAs laser with a nonlinear passive element in the resonator /Osobennosti izlucheniya lazera na p-n-perekhode GaAs s nelineinym passivnym elementom v rezonatore/.  
09 p1515 A69-21474
- Characteristic features of the radiation of a p-n junction GaAs laser with a nonlinear passive element in the resonator.  
15 p2633 A69-30719
- MIRNOV, V. M.**  
Influence of an external magnetic field on the stationary potential distribution in ion-electron beams emitted from a plane /O vliyanii vneshnego magnitnogo polia na stationarnye raspredeleniya potentsiala v ionno-elektronnykh potokakh, emitiruemykh ploskost'yu/.  
03 p0482 A69-14214
- MIRNOV, V. N.**  
Problem of the electroluminescence of GaAs single crystals.  
04 p0644 A69-15271
- MIRNOV, V. P.**  
Allowance for the effects of multiple reflection from dielectric walls in the microwave probing of plasmas /Uchet effektivov mnogokratnogo otrazheniya ot dielektricheskikh stenok pri SVCh-zondirovani plazmy/.  
14 p2498 A69-29806
- Attenuation of a magnetosonic wave in a turbulent plasma.  
16 p2820 A69-31794
- MIRNOV, V. S.**  
Transverse instability of radiation in a laser /O poperechnoi neustoiichivosti izlucheniya v kvantovom generatore/.  
02 p0258 A69-12642
- Cosmic-ray anisotropy and the sectorial structure of the interplanetary magnetic field /Anizotropiya kosmicheskikh luchei i sektornaya struktura mezhplanetnogo magnitnogo polia/.  
10 p1758 A69-22834
- SMIRNOV, V. V.**  
Analytic estimates of the accuracy of satellite coordinates and velocities deduced from the results of statistical processing of astronomical measurements.  
07 p1178 A69-19606
- Q-switching of a ruby laser with the aid of an electrooptical LiNbO<sub>3</sub> shutter /Modulatsiya dobrotnosti rubinovogo lazera pri pomoshchi elektroopticheskogo zatvora iz LiNbO<sub>3</sub> sub 3/.  
19 p3336 A69-36346
- SMIRNOVA, A. V.**  
Effective velocity of vertical displacements of the lower ionosphere at sunset and sunrise.  
06 p0922 A69-17752
- Measurement of the field strength of ionosphere-reflected radio waves in the range from 150 to 1500 kHz at small distances from the emitter /Ob izmerenii napriazhennosti polia otrazhennykh ot ionosfery radiovoln diapazona 150 to 1500 KGTs na nebol'shikh rasstoynaniakh ot peredatchika/.  
23 p4123 A69-41861
- SMIRNOVA, E. G.**  
Reduction of temperature in an open-cycle MGD power plant owing to injected additives.  
03 p0369 A69-14162
- SMIRNOVA, E. V.**  
Radial distributions of the principal characteristics of a plasma column in a free-burning electric arc /Radial'nye raspredeleniya osnovnykh kharakteristik plazmy v stolbe svobodnogoriashchei elektricheskoi dugi/.  
09 p1545 A69-21431
- SMIRNOVA, G. L.**  
Effect of prolonged hypokinesia on the resistance of the human organism to physical stress /Vliyanie dlitel'noi gipokinezii na ustoiчивost' organizma cheloveka k fizicheskoi nagruzke/.  
17 p2907 A69-32939
- SMIRNOVA, I. P.**  
An investigation of the turbulent jets of different gases in a general stream.  
13 p2200 A69-28501
- SMIRNOVA, L. A.**  
Investigation of oscillation breakdown of varactor diodes /Issledovanie generatsionnogo probiya varaktornykh diodov/.  
15 p2574 A69-30127
- SMIRNOVA, M. K.**  
Methods for experimental studies of the stressed state of shells made of glass fiber reinforced plastics /O metodakh eksperimental'nogo issledovaniya napriazhennogo sostoyaniya obolochek iz stekloplastika/.  
11 p1995 A69-25681
- SMIRNOVA, N. B.**  
Thermionic emission of /100/ faces of tungsten, rhenium, tantalum, and molybdenum single crystals /Termoelektronnaya emissiya granei /100/ monokristallov splavov vol'frama, reniya, tantala i molibdena/.  
17 p3015 A69-33630
- SMIRNOVA, N. P.**  
Some evidence of the mechanism in acceleration-induced disturbance of cerebellar reception.  
02 p0198 A69-11504
- Dependence of the change in the evoked activity of the cerebellar cortex of white rats on the level of acting acceleration /Zavisimost' izmeneniya vyzvannoi aktivnosti kory mozghechka belykh krysov ot velichiny deistviushchego uskorennya/.  
22 p3877 A69-40279
- SMIRNOVA, N. V.**  
Lee wave clouds near obstructions, as observed by artificial earth satellites /Volnistye oblaka prepatstviy, nabliudaemye s iskusstvennykh sputnikov zemli/.  
11 p1912 A69-24828
- SMIRNOVA, T. A.**  
Interferential-polarization filter with thermooptically compensated stages for solar corona observations /Interferentsionno-polarizatsionnyy filtr s termoopticheskimi kompensirovannymi stupeniami dlia nabliudeniya korony solntsa/.  
03 p0506 A69-13085
- Influence of diets containing unicellular algae on the recovery of metabolic processes in protein-deficient white rats /Vliyanie ratsiona s odnokletochnymi vodorosliami na vosstanovlenie obmennyykh protsessov u belykh krysov posle belkovogo golodaniya/.  
07 p1065 A69-18977
- A polarization interference filter with thermooptically compensated elements for observing the solar corona.  
14 p2515 A69-28767
- Effect of diets containing unicellular algae on the recovery of metabolism in protein-deficient white rats.  
20 p3479 A69-38225



## SMIRNOVA, V. N.

Investigation of the steady-state response of a multivariable extremal system in the presence of noise /K issledovanie ustanoivshiesia protsessa v mnogomernoi ekstremal'noi sisteme pri nalichii pomekh/.  
04 p0583 A69-15139

## SMIRNOVA, V. V.

Amplification of electric field fluctuations near a body located in a plasma /Usilenie fluktuatsii elektricheskogo polia v okrestnosti tela, nakhodiaschegosia v plazme/.  
12 p2137 A69-26531

## SMIT-VIS, J. H.

Body weight and organ sizes in warmth-adapted and in cold-adapted, hibernating golden hamsters.  
23 p4084 A69-41462

## SMIT, A. B. M.

Line profiles in the spectrum of beta Orionis.  
24 p4391 A69-43804

## SMIT, G. J.

Body weight and organ sizes in warmth-adapted and in cold-adapted, hibernating golden hamsters.  
23 p4084 A69-41462

## SMITH-ROSE, R. L.

Space Research IX, COSPAR Plenary Meeting, 11th, Tokyo, Japan, May 9-21, 1968, Proceedings.  
21 p3698 A69-38334

## SMITH, A.

Status of photovoltaic power technology.  
[ASME PAPER 68-WA/SOL-1]  
05 p0705 A69-16158

Transverse instabilities in a collisionless plasma.  
16 p2817 A69-31645

A quantitative quasi-linear analysis of waves in an anisotropic plasma.  
16 p2817 A69-31646

Status of photovoltaic power technology.  
[ASME PAPER 68-WA/SOL-1]  
19 p3255 A69-36418

## SMITH, A. A.

Jet safety.  
06 p0868 A69-17829

## SMITH, A. E.

A digital simulation of a carrier demodulator/tracking phase-locked loop in a noisy, multipath environment.  
03 p0390 A69-13204

A digital simulation of a phased locked receiver in a fading multipath environment.  
11 p1839 A69-25298

The inevitable appearance of protocells on the primitive earth.  
23 p4085 A69-41479

## SMITH, A. F.

The controllable twist rotor.  
18 p3089 A69-35234

## SMITH, A. G.

Jupiter, the radio-active planet.  
18 p3196 A69-34690

A two component model of changes in Jupiter's radiofrequency rotation period.  
18 p3202 A69-35212

## SMITH, A. H.

Lunar power systems - A long view.  
01 p0013 A69-11396

Criteria for physiological stress produced by increased chronic acceleration.  
10 p1641 A69-23041

Hematological findings associated with chronic acceleration.  
11 p1828 A69-25458

Development of electric power supplies for electric propulsion.  
[AIAA PAPER 69-826]  
16 p2741 A69-32709

Role of hematocrit, heart mass, and high-altitude exposure in acute hypoxia tolerance.  
22 p3874 A69-40214

## SMITH, A. L. S.

Time-resolved spectra of high-current pulsed argon lasers.  
[IEEE PAPER L-12]  
07 p1152 A69-19068

Molecular composition changes in a flowing CO sub 2-N sub 2-Hc-H sub 2 O laser.  
21 p3736 A69-38940

## SMITH, A. M.

In situ angular distribution measurements of visible and near IR radiation reflected from CO sub 2 cryodeposits formed on IN sub 2-cooled surfaces within a vacuum.  
[AIAA PAPER 69-63]  
06 p0959 A69-18131

Rocket spectrographic observations of alpha Virginis.  
13 p2338 A69-27555

Effect of reflections from CO sub 2 cryopanel deposits on the thermal balance of a test model in a space simulation chamber.  
[AIAA PAPER 69-1012]  
22 p3922 A69-40385

## SMITH, A. M. O.

Calculation of profile drag of airfoils at low Mach numbers.  
01 p0006 A69-11017

The determination of spatial amplification factors and their application to predicting transition.  
[AIAA PAPER 69-10]  
06 p0914 A69-18127

Calculation of compressible adiabatic turbulent boundary layers.  
[AIAA PAPER 69-687]  
17 p2955 A69-33470

Solution of the incompressible turbulent boundary-layer equations with heat transfer.  
[ASME PAPER 69-HT-7]  
24 p4304 A69-43561

## SMITH, A. W.

Properties of new and useful tungsten-bronze niobates.  
[IEEE PAPER F-7]  
05 p0808 A69-16313

## SMITH, B. A.

Mercury's rotation period - Photographic confirmation.  
03 p0517 A69-14233

Mars Mariner IV - Identification of some Martian surface features.  
07 p1213 A69-18605

Evidence of vorticity in the great Red Spot of Jupiter.  
07 p1213 A69-18606

Mariner 6 television pictures - First report.  
21 p3803 A69-38981

Mariner 7 television pictures - First report.  
21 p3806 A69-39330

Mariner 6 and 7 television pictures - Preliminary analysis.  
24 p4384 A69-43195

## SMITH, B. E.

Exact solutions of Einstein's cosmological equations.  
10 p1778 A69-23406

## SMITH, B. H.

Long life, lightweight lubrication systems for high speed machinery.  
[ASME PAPER 69-DE-65]  
14 p2454 A69-28845

## SMITH, C. E.

VLF phase anomalies produced by the solar flares of July 8 to 11, 1968.  
05 p0719 A69-15980

Increased capacitance for VLF umbrella antennas using multiple-wire rib construction.  
08 p1282 A69-20041

A shock-tunnel driver for use with hydrogen at elevated temperatures and pressures.  
[AIAA PAPER 68-367]  
09 p1477 A69-21993

A computer-aided measurement of SNR employing a time interval counter.  
11 p1839 A69-25299

Analytical derivation of the time domain expression for a non-periodic frequency modulated square wave.  
24 p4281 A69-42623

## SMITH, C. G.

Kelvin-Helmholtz instability for a collisionless plasma model.  
08 p1367 A69-20799

## SMITH, C. L.

Mid-air.  
11 p1914 A69-25430

A method for multi-aerospace vehicle hybrid simulation.  
[AIAA PAPER 69-937]  
22 p4036 A69-40320

## SMITH, C. R.

Color picture reproduction using a high-resolution television system.  
[SMPTE PAPER 105-79]  
12 p2077 A69-25767

## SMITH, C. V., JR.

Electrohydrodynamic charge relaxation and interfacial perpendicular-field instability.  
16 p2811 A69-31667

Effect of shear and load behavior on ring stability.  
17 p3061 A69-33707

## SMITH, D.

Phase stabilization of widely separated oscillators.  
08 p1273 A69-20022

Aluminum contact deposition and testing for silicon solar cells.  
19 p3250 A69-35686

## SMITH, D. B.

Secondary mission optimization.  
[AAS PAPER 68-138]  
21 p3819 A69-39210

## SMITH, D. C.

Effects of wind on thermal defocusing of CO sub 2 laser radiation.  
10 p1701 A69-22949

Q-switched CO sub 2 laser.  
19 p3338 A69-36694

Variable attenuator for CO sub 2 laser radiation.  
23 p4172 A69-41396

## SMITH, D. E.

Geophysical research based on visual observations of satellites.  
[UN PAPER 68-95789]  
01 p0064 A69-10459

Earth reflected radiation pressure.  
15 p2599 A69-31324

Theoretical considerations in the determination of the attitude of Ariel III by optical means.  
21 p3820 A69-39261

## SMITH, D. G. W.

Vilna meteorite - Camera, visual, seismic and analytic records.  
13 p2334 A69-27189

## SMITH, D. H.

Automated heteroatomic plotting as an aid to the presentation and interpretation of high resolution mass spectral data.  
01 p0024 A69-10905

A survey of the galactic plane at 85 and 150 MHz.  
07 p1216 A69-19138

Wide range heat flux measurements using surface temperature sensors.  
15 p2716 A69-30379

## SMITH, E.

Cracks and dislocation arrays in heterogeneous media.  
10 p1803 A69-24031

## SMITH, E. B.

The absorption of monomethylhydrazine through canine skin.  
22 p3887 A69-41191

## SMITH, E. G.

Plotting vs. other forms of readout.  
12 p2091 A69-26303

On the synthesis of a control moment gyro implemented spacecraft attitude control system.  
21 p3826 A69-39641

## SMITH, E. J.

Planetary magnetic field experiments.  
[AAS PAPER 68-186]  
02 p0311 A69-11471

OGO 3 observations of ELF noise in the magnetosphere. I.  
07 p1124 A69-18834

Large-amplitude Alfvén waves in the interplanetary medium - Mariner 5.  
14 p2510 A69-28949

The radial dependence of the interplanetary magnetic field - 1.0-1.5 AU.  
16 p2856 A69-31964

Magnetic emissions in the magnetosheath at frequencies near 100 Hz.  
16 p2774 A69-31985

Search for a lunar wake at large distances from the moon - Mariner 4.  
16 p2856 A69-31986

A universal terrain-following algorithm.  
[AIAA PAPER 69-817]  
19 p3366 A69-35625

OGO search coil magnetometer experiments.  
19 p3284 A69-36675

High-frequency magnetic fluctuations associated with the earth's bow shock.  
22 p3938 A69-40501

## SMITH, E. K.

Some unexplained features in the statistics for intense sporadic E.  
01 p0070 A69-11157

Do intense blobs exist in temperature-latitude sporadic E/ques/  
01 p0070 A69-11162

## SMITH, E. V. P.

Flare sprays.  
06 p0995 A69-17439

## SMITH, E. W.

Classical path methods in line broadening. I - The classical path approximation.  
23 p4192 A69-41378

Classical path methods in line broadening. II - Application to the Lyman series of hydrogen.  
23 p4193 A69-41379

- SMITH, F. B.**  
The NASA University Program.  
[UN PAPER 68-95413] 01 p0179 A69-10506
- SMITH, F. D.**  
Interferometric testing of precision optics.  
12 p2092 A69-26421
- SMITH, F. G.**  
Faraday rotation of radio waves from the pulsars.  
03 p0513 A69-13771  
Changing periodicities in the pulsars.  
05 p0825 A69-16352  
Polarization of radio pulses from pulsar CP 0328.  
08 p1397 A69-20694  
The pulsars.  
16 p2855 A69-31762  
Linear polarization in pulsating radio sources.  
17 p3036 A69-33635  
The Ariel III cosmic radio noise experiment.  
21 p3806 A69-39258  
Relativistic beaming of radiation from pulsars.  
22 p4035 A69-41206  
The magnetic field of the Galaxy.  
23 p4217 A69-42321  
Radio galaxies and quasars.  
23 p4218 A69-42324
- SMITH, F. J.**  
Collision integrals for high temperature gases.  
01 p0124 A69-10929  
Polynomial curve fitting when abscissas and ordinates are both subject to error.  
08 p1343 A69-20827  
Calorimetric measurements of solar and broadband spectral absorbance during ultraviolet exposure testing in vacuum.  
16 p2789 A69-31815  
The evaluation of definite integrals by interval subdivision.  
20 p3498 A69-36947
- SMITH, F. L., III**  
Electron production and loss rates in the F region.  
03 p0503 A69-14016
- SMITH, F. T.**  
Diabatic and adiabatic representations for atomic collision problems.  
14 p2489 A69-29997  
Heavy particle collisions.  
16 p2815 A69-32259  
Chemical reactions in high-temperature gases as collision processes.  
23 p4113 A69-41518
- SMITH, F. T. J.**  
Resistance of tantalum in the intermediate /superconducting-normal/ state.  
17 p3016 A69-33791
- SMITH, F. W.**  
Evaluation and calibration of mechanical shakers.  
12 p2060 A69-26940
- SMITH, G. E.**  
A Doppler-difference navigation system.  
17 p3002 A69-34078  
Decade forecasting methodology based on information progression.  
[AAS PAPER 69-409] 24 p4417 A69-42803
- SMITH, G. F.**  
Orthogonal integrity basis for  $n$  symmetric matrices.  
20 p3624 A69-37587
- SMITH, G. H.**  
Accuracies of radial-velocity measurements.  
24 p4386 A69-43347
- SMITH, G. J. N.**  
Attitude control of a highly accurate space stabilized platform and experimental package.  
06 p0955 A69-17587
- SMITH, G. L.**  
Some aspects of interplanetary earth-entry simulation.  
15 p2681 A69-30376
- SMITH, G. V.**  
On the distinction between alloy softening due to nitrogen and nickel in dilute lattice solution in iron.  
22 p3969 A69-40164
- SMITH, H.**  
Polarization of radio pulses from extensive air showers.  
04 p0595 A69-15425  
Revised history of the changes in the luminosity of 3C 273 /Utochnennaia istoriia izmenenii iarkosti 3C 273/.  
12 p2167 A69-27044
- SMITH, H. A.**  
Frequency conversion and detection of infrared radiation.  
17 p2969 A69-32839  
Mathematical Foundations of Systems Analysis. Volume 1.  
21 p3754 A69-38576
- SMITH, H. G.**  
Designing for crashworthiness and survivability.  
[AHS PAPER 225] 01 p0009 A69-10408  
Criteria for design and evaluation of fail-safe helicopter structures.  
[AIAA PAPER 69-213] 07 p1054 A69-19549
- SMITH, H. H.**  
Fatigue crack growth rates in Type 316 stainless steel at elevated temperature as a function of oxygen pressure.  
17 p2987 A69-33074  
Influence of an oxygen atmosphere on surface slip in fatigue of Inconel X-750 at 500 C.  
20 p3558 A69-36966
- SMITH, H. I.**  
Method for fabricating high frequency surface wave transducers.  
14 p2455 A69-29571
- SMITH, H. J.**  
Experience using Balakrishnan's epsilon technique to compute optimum flight profiles.  
[AIAA PAPER 69-75] 06 p0868 A69-18058  
McDonald 107-inch telescope.  
12 p2058 A69-26417  
Future manned and automated earth orbital science missions.  
[AAS PAPER 69-036] 24 p4379 A69-42825
- SMITH, H. L.**  
Fracture-toughness measurements on 12 percent Ni maraging steel weldment.  
[AIAA PAPER 68-507] 03 p0450 A69-13910
- SMITH, H. M.**  
Principles of Holography.  
15 p2611 A69-31061
- SMITH, H. P., JR.**  
Oxygen surface-density measurements based on characteristic X-ray production by 100-keV protons.  
04 p0631 A69-14446  
Oxygen K-shell X-ray production in thin films of aluminum oxide by 20- to 100-keV protons.  
14 p2489 A69-29994  
Generation of a fissioning plasma in a shock tube.  
18 p3180 A69-34455
- SMITH, H. W.**  
Poisson's ratio determined with strain rosettes.  
11 p1995 A69-25652
- SMITH, I.**  
Hypertension and aviation medicine.  
23 p4087 A69-41795
- SMITH, I. C.**  
Inorganic High-energy Oxidizers- Synthesis, Structure, and Properties.  
12 p2146 A69-25824
- SMITH, I. E.**  
Combustion in Advanced Gas Turbine Systems, College of Aeronautics, International Propulsion Symposium, College of Aeronautics, Cranfield, Beds., England, April 1967, Proceedings.  
09 p1624 A69-22611
- SMITH, J. A.**  
Experimentally determined structure of the shock reflection process in ionizing xenon.  
01 p0132 A69-11205
- SMITH, J. D.**  
Integrated hardware/software system for electronic module testing.  
11 p1864 A69-25065  
Geomorphology of a sand ridge.  
15 p2596 A69-30443  
Fuel for the supersonic transport - Effects of deposits on heat transfer to aviation kerosene.  
19 p3393 A69-36210
- SMITH, J. E.**  
Studies of amplitude variation in the ultra-low frequency ballistocardiogram with special reference to cardiovascular reactivity.  
09 p1444 A69-22544  
Beta-adrenergic blockade - An aid in diagnosis.  
17 p2909 A69-33184
- SMITH, J. F.**  
An introduction to the ARIEL III satellite project.  
21 p3856 A69-39255
- SMITH, J. G.**  
Noise considerations in broad-band traveling-wave masers.  
02 p0257 A69-12428
- SMITH, J. H.**  
Solution of the inhomogeneous Helmholtz equation with Lebedev transforms.  
04 p0623 A69-14896  
Titanium-strengthened grades.  
21 p3743 A69-38652
- SMITH, J. L.**  
Destructive breakdown in thin films of SiO<sub>2</sub>, MgF sub 2, CaF sub 2, CeF sub 3, CeO sub 2, and Teflon.  
13 p2322 A69-28012  
Destructive breakdown in thin films of SiO<sub>2</sub>, MgF sub 2, CaF sub 2, CeF sub 3, CeO sub 2, and Teflon.  
16 p2761 A69-32323
- SMITH, J. L., JR.**  
The influence of nuclear radiation on pool-boiling heat transfer to liquid helium.  
[ASME PAPER 68-WA/PID-3] 05 p0791 A69-16164  
The inception of nucleate boiling with liquid nitrogen.  
[ASME PAPER 68-WA/PID-10] 05 p0848 A69-16167
- SMITH, J. M.**  
Electrothermal instability - An explanation of the MPD arc thruster rotating spoke phenomenon.  
[AIAA PAPER 69-231] 09 p1566 A69-21254  
Electrothermal instabilities in the entrance region of an MHD generator.  
09 p1548 A69-21919
- SMITH, J. O.**  
Elementary Mechanics of Deformable Bodies.  
18 p3222 A69-34927
- SMITH, J. P.**  
Considerations in the design of large twin-engine transport aircraft.  
[RAES PAPER 11] 22 p3863 A69-40491
- SMITH, J. R.**  
Self-consistent many-electron theory of electron work functions and surface potential characteristics for selected metals.  
14 p2504 A69-29009  
Self-consistent many-electron theory of electron work functions and surface potential characteristics for selected metals.  
19 p3382 A69-36045  
Development of low smoke emission combustors for large aircraft turbine engines.  
[AIAA PAPER 69-493] 19 p3394 A69-36299
- SMITH, J. V.**  
High pressure modification of Mg sub 2 SiO sub 4 crystal structure and crystallochemical and geophysical implications.  
08 p1267 A69-19904
- SMITH, J. W.**  
Lunar surface temperatures and thermal characteristics - Surveyor 5 science results.  
02 p0321 A69-12227  
Nondisturbing tracer technique for quantitative measurements in turbulent flow.  
09 p1495 A69-21911  
A deterministic model for cost-effectiveness analysis of avionics support programs.  
[AIAA PAPER 69-305] 09 p1478 A69-22377  
The transparency of the corneal stroma.  
22 p3884 A69-40886  
Buckland Park aerial array.  
24 p4286 A69-42607
- SMITH, K. C.**  
A dual processor checkout system.  
04 p0568 A69-15361
- SMITH, L.**  
On the ages of delta Cephei stars.  
08 p1392 A69-20564
- SMITH, L. D.**  
Anti-icing today's business jets.  
[SAE PAPER 69-0333] 11 p1822 A69-24500
- SMITH, L. F.**  
Absolute magnitudes and intrinsic colours of Wolf-Rayet stars.  
07 p1221 A69-19583  
The distribution of Wolf-Rayet stars in the Galaxy.  
07 p1223 A69-19636  
Optimum arrangement of rectangular fins on horizontal surfaces for free-convection heat transfer.  
[ASME PAPER 69-HT-44] 24 p4409 A69-43517



## SMITH, L. G.

- Review of sporadic-E structure.  
01 p0070 A69-11161
- Results of a sequence of measurements of nighttime sporadic E.  
01 p0071 A69-11165
- Lower ionosphere electron densities measured during the solar eclipse of November 12, 1966.  
12 p2073 A69-26861
- Rocket observations of electron densities in the night-time auroral E-region at Fort Churchill, Canada.  
14 p2439 A69-29117
- Rocket observations of ozone above 50 km.  
15 p2603 A69-31397
- A sequence of rocket observations of nighttime sporadic E.  
15 p2603 A69-31398
- Latitude variation of the lower ionosphere.  
18 p3127 A69-34798

## SMITH, L. H.

- Report on the high altitude particle physics facility.  
03 p0499 A69-12943

## SMITH, L. L.

- Night airglow observations during the IQSY.  
15 p2594 A69-30019
- OH contamination of night airglow observations at Haleakala, Hawaii.  
16 p2774 A69-31987

## SMITH, L. V., JR.

- Pointing and tracking accuracy - Recommended standards.  
23 p4125 A69-42126

## SMITH, M.

- Optimization of bias in thermistor radiation detectors. I - Bias conditions and performance figures.  
21 p3727 A69-39782

## SMITH, M. A.

- Gas lasers for the far infra-red.  
11 p1898 A69-25051
- Decrease of flux density of the radio source Cassiopeia A at 81 point 5 MHz.  
23 p4215 A69-42112

## SMITH, M. B.

- A precision azimuth reference system for gyrocompass evaluation.  
[AIAA PAPER 69-859] 21 p3725 A69-39387

## SMITH, M. C.

- Stability of an unsymmetrical plane flow.  
08 p1304 A69-20812
- Food technology problems related to space feeding.  
15 p2560 A69-31459
- The stored program data processor for post-Apollo applications.  
19 p3274 A69-36280

## SMITH, M. C. G.

- The aerodynamics of a circulation-controlled rotor.  
18 p3089 A69-35232

## SMITH, M. F.

- The fluidic vibrating string accelerometer.  
02 p0249 A69-12091

## SMITH, M. J.

- Computerized Markov system effectiveness models.  
18 p3195 A69-34527

## SMITH, N. K.

- Axial current density measurements in a wide unstable plasma column.  
16 p2819 A69-31680

## SMITH, N. S.

- Influence of surface parameters on anode losses in arcjets.  
[AIAA PAPER 69-107] 06 p1039 A69-18185

## SMITH, P. A.

- Results derived from simultaneous measurements using the Langmuir plate and spherical ion probe on Explorer XXXI and the ionosonde on Alouette II.  
20 p3531 A69-37883
- Space Research IX, COSPAR Plenary Meeting, 11th, Tokyo, Japan, May 9-21, 1968, Proceedings.  
21 p3698 A69-38334

## SMITH, P. C.

- Three-dimensional boundary-layer flow about an ablating slender cone.  
[ASME PAPER 69-FE-23] 20 p3460 A69-37992

## SMITH, P. D.

- Characteristics of organic dye lasers as tunable frequency sources for nanosecond absorption spectroscopy.  
[IEEE PAPER A-3] 07 p1150 A69-19047

## SMITH, P. H.

- Electronic Applications of the Smith Chart in Waveguide, Circuit, and Component Analysis.  
22 p3915 A69-40780

## SMITH, P. J.

- Efficiency of circular fins of triangular profile.  
13 p2375 A69-27790
- A computational study of the energetics of a limited region of the atmosphere.  
15 p2648 A69-30220
- On the contribution of a limited region to the global energy budget.  
15 p2648 A69-30221

## SMITH, P. L.

- Structural variations in iron meteorites.  
09 p1597 A69-22154

## SMITH, P. W.

- Simultaneous phase-locking of longitudinal and transverse laser modes.  
03 p0441 A69-14188
- High-power single-frequency lasers using thin metal film mode-selection filters.  
17 p2982 A69-33399

## SMITH, R.

- Optimized equations for MacAdam color differences.  
04 p0564 A69-14883
- Compliant coating skin friction experiments.  
[AIAA PAPER 69-165] 06 p0912 A69-18043

## SMITH, R. A.

- The development and exploitation of the very-far infra-red region of the spectrum.  
02 p0296 A69-11791
- A fast, high-responsivity bolometer detector for the very-far infrared.  
08 p1313 A69-20132
- Midbrain as a site for the motion after-effect.  
20 p3480 A69-38264
- Low density RTV silicone rubber sealants.  
24 p4337 A69-43454

## SMITH, R. C.

- ESR spectrum of Ho sub 2 in solutions of hydrogen peroxide in water at 77 deg K.  
01 p0024 A69-10683
- Tunable lasers.  
11 p1893 A69-24343
- Experimental aerodynamics of a rotor entry vehicle.  
[AIAA PAPER 68-950] 20 p3458 A69-37155
- Ring lasers - Principles and applications.  
22 p3961 A69-40240

## SMITH, R. E.

- Distributions of cycles-to-failure in simple fatigue and the associated reliabilities.  
19 p3437 A69-36032
- Effect of norepinephrine and uncoupling agents on brown adipose tissue.  
19 p3258 A69-36294
- Brown fat and thermogenesis.  
23 p4091 A69-42013
- Circadian variations of physiological variables in isolated and non-isolated Macaca nemestrina.  
24 p4261 A69-42707

## SMITH, R. EL.

- Circadian variations in human thermoregulatory responses.  
22 p3872 A69-40201

## SMITH, R. H.

- Rare earth abundances in meteoritic chondrules.  
08 p1403 A69-20916
- Indium abundances in chondritic and achondritic meteorites and in terrestrial rocks.  
08 p1404 A69-20917
- Mutational responses of insects in the Biosatellite II experiment.  
20 p3476 A69-37618
- The second heart sound in coronary artery disease - A phonocardiographic assessment.  
24 p4261 A69-42726

## SMITH, R. J.

- Electrical resistivity versus deuterium concentration in palladium.  
10 p1745 A69-23357

## SMITH, R. L.

- Latitudinal cutoff of VLF signals in the ionosphere.  
14 p2434 A69-28958
- Field test of a technique for establishing personnel performance requirements.  
19 p3261 A69-36025

- A demonstration of the equality of the phases of laser cavity modes by an oscilloscope trace.  
24 p4327 A69-42981

## SMITH, R. T.

- Operating characteristics of a multi-megawatt arc heater used with the AFFDL 50 megawatt facility.  
15 p2586 A69-30374

## SMITH, R. V.

- Cooldown transients in cryogenic transfer lines.  
[NASC-NRC PAPER I-1] 22 p4050 A69-40627

## SMITH, R. W.

- Recent developments of the high speed image intensifier framing camera.  
12 p2082 A69-2613
- Some observations of the predawn enhancement of the red line airglow over Great Britain.  
16 p2775 A69-32080

## SMITH, S.

- Dynamic behavior of a cylinder with a cutout.  
[AIAA PAPER 68-318] 16 p2874 A69-32158

## SMITH, S. D.

- The selective chopper radiometer for atmospheric temperature sounding.  
[UN PAPER 68-95797] 01 p0080 A69-10531

## SMITH, S. H.

- On initial value problems for the flow in a thin sheet of viscous liquid.  
21 p3697 A69-39680

## SMITH, S. J.

- Electron impact excitation of hydrogen Lyman-alpha radiation.  
02 p0283 A69-12466

## SMITH, T. C.

- Blood oxygen content measured by oxygen tension after release by carbon monoxide.  
22 p3873 A69-40203

## SMITH, T. F.

- Surface radiation properties from electromagnetic theory.  
04 p0684 A69-14357

- Apparent radiation properties of a rough surface.  
[AIAA PAPER 69-622] 17 p3071 A69-33271
- Surface roughness effects on equilibrium temperature.  
22 p4050 A69-40558

## SMITH, T. R.

- The progressive nature of fatigue damage in glass reinforced plastics.  
02 p0269 A69-11795

## SMITH, T. R. G.

- The local buckling of box girders under bending stresses.  
18 p3224 A69-35344

## SMITH, T. S.

- Two-photon processes in the solar X-ray spectrum.  
19 p3396 A69-36218
- On the interpretation of intensity ratios of forbidden iron and calcium transitions in the solar corona.  
19 p3422 A69-36219

## SMITH, V. C.

- Temporal and spatial interactions involved in the band movement phenomenon.  
22 p3880 A69-40854

- Scotopic and photopic functions for visual band movement.  
22 p3883 A69-40879

## SMITH, W. B.

- Search for X-rays from the large and small Magellanic clouds.  
01 p0150 A69-10370

- Destructive breakdown in thin films of SiO<sub>2</sub>, MgF sub 2, CaF sub 2, CeF sub 3, CeO sub 2, and Teflon.  
13 p2322 A69-28012

- Destructive breakdown in thin films of SiO<sub>2</sub>, MgF sub 2, CaF sub 2, CeF sub 3, CeO sub 2, and Teflon.  
16 p2761 A69-32323

- Balloon observations of high energy X-ray sources in the region of the galactic centre.  
23 p4206 A69-42114

## SMITH, W. D.

- A new Chroococcacean alga from the Proterozoic of Queensland.  
22 p3936 A69-40059

- The electron content of the low altitude ionosphere.  
24 p4367 A69-43010

## SMITH, W. H.

- Emission spectra excited in benzene.  
15 p2322 A69-30468

- Transition probabilities for the Swan and Mulliken C sub 2 bands. 15 p2694 A69-30789
- MITH, W. L.**  
An improved method for calculating tropospheric temperature and moisture from satellite radiometer measurements. 13 p2252 A69-27638
- Physiological response to steady state hypoxia. 23 p4085 A69-41673
- MITH, W. M.**  
Extravascular dehydration as an etiologic factor in post-recumbency orthostatism. 17 p2909 A69-33179
- MITH, W. S.**  
Wind measurements in noctilucent clouds. 13 p2294 A69-28466
- MITH, W. T.**  
CW gain characteristics of the 890-GHz HCN laser line. 19 p3339 A69-36695
- MITH, W. W.**  
Electron bombardment ion source for low energy beams. 03 p0428 A69-13106
- MITHGALL, H. M., JR.**  
A technique of identification and correction of electromagnetic interference in airborne telemetry aircraft. 16 p2754 A69-32575
- MITHSON, H. K.**  
Supersonic combustion tests with a double-oblique shock scramjet in a shock tunnel. [AIAA PAPER 69-827] 16 p2840 A69-32673
- MITTS, J. F.**  
Lambda waves in EEG of normal adults and their relation to complexity of visual imagery. 24 p4268 A69-43401
- MITTS, T. I.**  
Wear-dependent failure rates and system wearout reliability prediction under nonGaussian random loading. 15 p2705 A69-30366
- MITTS, V. C.**  
Rear gain control of a dielectric rod antenna. 04 p0576 A69-14770
- MODE, F. E.**  
Fatigue resistant fastener. 24 p4325 A69-43438
- SMOGILEV, K. A.**  
Noise factor of a transistor tuned amplifier. 05 p0729 A69-16084
- SMOKTIL, O. I.**  
Light scattering in a spherical aerosol atmosphere /Rasseianie sveta v aerosol'noi sfericheskoi atmosfere/. 10 p1689 A69-23970
- Light scattering in a spherical atmosphere containing aerosols. 21 p3717 A69-39656
- SMOKTYI, O. I.**  
Multiple light scattering in the spherical planetary atmosphere. 05 p0828 A69-16632
- Geophysical investigations on manned spacecrafts. 05 p0759 A69-16633
- SMOLDEREN, J. J.**  
The measurement of drag forces in low density flows using a modulation technique. 06 p0861 A69-17638
- Kinetic theory of hypersonic spherical expansion /source flow/. 11 p1870 A69-25006
- Classical statistical mechanics. 11 p1870 A69-25009
- SMOLENSKII, G. A.**  
Excitation and propagation of longitudinal elastic waves with frequencies from 200 to 2000 MHz in lithium niobate crystals. 03 p0487 A69-13729
- Temperature dependence of elastic wave attenuation in lithium niobate crystals /Temperaturnaia zavisimost' zatukhaniia uprugikh voln v kristallakh niobata litia/. 15 p2665 A69-30040
- SMOLIAKOV, A. V.**  
Certain regularities of a turbulent pressure field in a boundary layer on a plane plate /O nekotorykh zakononmernostiakh polia turbulentnogo davlenii v pogranichnom sloe na ploskoi plastine/. 22 p3933 A69-41027
- SMOLIAKOV, B. P.**  
Acoustic paramagnetic resonance in Cr super 3 super plus and Nd super 3 super plus ferroelectrics in polydomain LiNbO sub 3 /Akusticheskii paramagnitnyi rezonans v segnetoelektrike-Cr super 3 super plus i Nd super 3 super plus v polidomennom LiNbO sub 3/. 09 p1556 A69-21563
- SMOLIAKOVA, L. G.**  
Recrystallization diagrams of alloyed molybdenum /Diagrammy rekristallizatsii legirovannogo molibdena/. 10 p1715 A69-24012
- SMOLIANINOV, V. M.**  
Effect of noise correlation in a simple circuit with coherent summing under diversity reception. 04 p0557 A69-14789
- SMOLIAROV, B. V.**  
Determination of the fluid delivery through a swirl injector taking into account the radial component of flow velocity at the nozzle exit /Opredelenie raskhoda zhidkosti cherez tsentrobezhnuiu forsunku s uchedom radial'noi sostavliushchei skorosti potoka na vykhode iz sopla/. 19 p3297 A69-35820
- SMOLIN, M. D.**  
State of nickel in a nickel molybdenum alloy /O sostoianii nikelia v nikel'molebdenovom splave/. 07 p1159 A69-18535
- SMOLINSKA, B.**  
Reconstruction of holograms in the back diffraction field. 08 p1312 A69-20086
- SMOLINSKI, J.**  
Detection of microturbulence in low dispersion spectra and narrow band photometry. 17 p3044 A69-34178
- SMOLKIN, G. E.**  
Charged particle density measurement in nonstationary plasma through Stark broadening of the H beta Balmer line. 03 p0481 A69-14145
- Measurement of nonstationary-plasma density from the Stark broadening of the H sub beta Balmer line /Izmerenie plotnosti nestatsionarnoi plazmy po shtarkovskomu ushireniiu bal'merovskoi linii H sub beta/. 14 p2497 A69-29790
- "Calorimetric" measurement of the plasma electron temperature in a collisionless shock wave /"Kalorimetricheskoe" izmerenie elektronnoi temperatury plazmy v besstolknovitel'noi udarnoi volne/. 15 p2657 A69-30104
- Structure of collisionless shock waves and the dissipation of strong alternating magnetic fields in a plasma /Struktura besstolknovitel'nykh udarnykh voln i dissipatsiia sil'nykh peremennykh magnitnykh polii v plazme/. 17 p3013 A69-33824
- SMOLLER, J. A.**  
Global solutions for an extended class of hyperbolic systems of conservation laws. 11 p1909 A69-25163
- A uniqueness theorem for Riemann problems. 14 p2433 A69-29678
- SMOLOV, V. B.**  
Time-pulse function generator with piecewise-parabolic approximation /Vremia-impul'snyi funktsional'nyi preobrazovatel' s kusochno-parabolicheskoi approksimatsiei/. 12 p2079 A69-25968
- SMOLSKAIA, T. I.**  
Experimental determination of the energy characteristics of a ruby laser /Eksperimental'noe opredelenie energeticheskikh parametrov rubinovogo generatora/. 02 p0256 A69-12000
- Emission losses in a laser with an inhomogeneous active rod /Poteri izlucheniia v OKG s neodnorodnym aktivnym sterzhnem/. 11 p1926 A69-24603
- Spectral, temporal, and angular emission characteristics of a composite ruby laser /Spektral'nye, vremennye i uglovye kharakteristiki izlucheniia sostavnogo lazera na rubine/. 14 p2458 A69-29163
- SMOOT, L. D.**  
Mixing and combustion of compressible, particle-laden ducted flows. [AIAA PAPER 69-460] 16 p2880 A69-32650
- SMORCHKOVA, S. A.**  
Transformation of the spatial structure of laser emission by means of a lens /Preobrazovanie prostranstvennoi struktury izlucheniia lazera s pomoshch'iu linzy/. 17 p2981 A69-33111
- SMORGONSKII, V. IA.**  
Calculation of the ambiguous section of the dispersion characteristic of a circular waveguide with a dielectric rod /K voprosu o raschete dvukhznachnogo uchastka dispersionnoi kharakteristiki kruglogo volnovoda s dielektricheskim sterzhnem/. 05 p0718 A69-15649
- Calculation of the double-valued part of the dispersion curve of a circular waveguide with dielectric rod. 16 p2762 A69-32506
- SMORODIN, IU. A.**  
Some characteristics of neutral pion production in interactions of nucleons with energies above 10 super 13 ev. 13 p2303 A69-28376
- Spectrum of 10 super 11 to 10 super 13 ev photons in the upper atmosphere. 13 p2330 A69-28378
- SMORODINOV, M. I.**  
Measurement of the lunar surface density by the automatic station "Luna-13." 03 p0430 A69-13425
- Investigations of the physical and mechanical properties of the moon's soil from Luna 13. 18 p3113 A69-34239
- SMUDA, P. A.**  
Thermal isolation with low conductance interstitial materials under compressive loads. [AIAA PAPER 69-25] 06 p1036 A69-18072
- Thermal contact resistance of selected low-conductance interstitial materials. [AIAA PAPER 68-31] 23 p4239 A69-41889
- SMY, P. R.**  
Variation of the R.F. response of a Langmuir probe with amplitude and frequency. 21 p3723 A69-38939
- SMYTH, H. S.**  
Reflex regulation of arterial pressure during sleep in man - A quantitative method of assessing baroreflex sensitivity. 24 p4257 A69-42626
- SMYTH, J. R.**  
Orthopyroxene-high-low clinopyroxene inversions. 24 p4311 A69-43218
- SMYTH, R. K.**  
Guidance and control 1968. [AIAA PAPER 69-72] 06 p0956 A69-18136
- Guidance and control - 1968. [AIAA PAPER 69-72] 07 p1177 A69-19179
- SNAPP, C. P.**  
An efficient multiresonant avalanche diode oscillator in the 1.5 to 11 GHz range. 04 p0573 A69-14334
- Experimental analysis of high-efficiency avalanche-resonance pumped oscillators. 06 p0893 A69-16938
- High current density operation and analysis of avalanche transit-time diodes. 07 p1098 A69-18457
- High-efficiency avalanche-resonance pumped amplification. 08 p1279 A69-19909
- SNARELY, B. B.**  
Experimental measurement of the critical population inversion for the dye solution laser. [IEEE PAPER A-2] 05 p0773 A69-16307
- Feasibility of CW operation of dye-lasers. 11 p1893 A69-24344
- Flashlamp-excited organic dye lasers. 22 p3966 A69-41219
- SNEAD, C. L., JR.**  
Stage-I interstitials in electron-irradiated tungsten. 13 p2284 A69-28682
- SNEATH, P. H. A.**  
Sterilization Techniques for Instruments and Materials as applied to Space Research, COSPAR, Symposium, London, England, July 18-22, 1967, Proceedings /COSPAR Technique Manual Series, Number 4/. 05 p0711 A69-15934
- SNECK, H. J.**  
The misaligned, eccentric face seal. [ASLE FICFS PREPRINT 15A] 15 p2620 A69-30483
- The eccentric face seal with a tangentially varying film thickness. [ASLE FICFS PREPRINT 15B] 15 p2620 A69-30484



SNEDDON, I. N.

Transform solutions of crack problems in the theory of elasticity. 10 p1801 A69-23688

The stress intensity factors for a Griffith crack whose surfaces are loaded asymmetrically. 13 p2369 A69-28352

SNEDKOVA, V. K.

Determination of the effective bandwidth of automatic phase control by the asymptotic method /Opredelenie polosa zakhvata fazovoi avtopodstroiki asimtoticheskim metodom/. 01 p0030 A69-10590

Determination of the pull-in range of a phase- lock AFC system by an asymptotic method. 10 p1653 A69-23105

SNELLEN, G.

On the nature of Ryle and Bailey's candidate star for the pulsating radio source CP 1919. 09 p1591 A69-21455

Infrared and optical measurements of the Crab pulsar NP 0532. 18 p3191 A69-34318

SNELLEN, J. W.

The discrepancy between thermometry and calorimetry during exercise. 23 p4098 A69-42104

SNELLING, W. F.

Engineering/manufacturing interfaces. [SAE PAPER 680668] 03 p0433 A69-13451

SNELSON, A.

Electron paramagnetic resonance and X-ray studies in doped silver carbonate. 22 p3993 A69-40720

SNETSINGER, K. G.

Electron microprobe analysis of vanadium in the presence of titanium. 07 p1073 A69-18419

Manganous ilmenite from a Sierran adamellite. 19 p3302 A69-35977

Ilmenite in ordinary chondrites. 24 p4382 A69-42890

SNEZHKO, I. A.

Effect of alloying additives of aluminum on the corrosion resistance of tungsten disilicide /Vliianie legiruiushchikh dobavok aluminiuma na korrozionnuiu stoikost' disilitsida vol'frama/. 20 p3561 A69-37376

SNIDE, J. A.

Metallographic technique for filament-reinforced, metal-matrix composites. 01 p0103 A69-11269

SNIDER, D.

Transmitted power maximization in communication satellites. [AIAA PAPER 68-437] 09 p1442 A69-21990

SNIJERS, M. A. J.

The abundance of iron in the B2 stars zeta Cassiopeiae and gamma Pegasi. 13 p2347 A69-27715

SNIJERS, R.

Comment on the X-ray event of July 7, 1966. 09 p1579 A69-22180

SNIPES, W.

Electron spin resonance of gamma-irradiated single crystals of 9-methyladenine. 19 p3264 A69-35974

Free radical destruction by gamma-irradiation at 77 K. 19 p3265 A69-36376

SNITKO, O. V.

Role of the surface relief in the field effect in germanium and silicon. 07 p1199 A69-18682

Infrared impurity photoconductivity at the surface of gold-doped silicon /Infrachervonaya domishkova fotoprovodnits' poverkhni kremniu, legovanoi zolotom/. 08 p1373 A69-21073

The influence of metal impurities on electronic states of the real germanium surface. 11 p1939 A69-25703

Detection of discrete capture levels at the surface of cadmium sulfide single crystals /Obnaruzhenie diskretnykh urovnei prilipaniia na poverkhnosti monokristallov sulfida kadmiia/. 13 p2318 A69-27884

SNITZER, E.

Glass lasers. 05 p0772 A69-16227

SNOGREN, R. C.

Bonding materials - Adhesive bonding metals. 14 p2454 A69-28847

SNOOK, S. H.

Psychophysical studies of physiological fatigue criteria. 17 p2911 A69-34013

SNOPKO, K. N.

Calculation of the space-charge field of the hollow cylindrical electron beam of a traveling wave tube with a nonlinear cross-sectional charge density distribution /Raschet polia prostranstvennogo zariada pologo tsilindricheskogo elektronnogo potoka LBV pri neravnomernom raspredelenii plotnosti zariada po secheniiu/. 03 p0407 A69-13984

SNOWBALL, H. M.

The magnetic resonance flowmeter. 15 p2616 A69-31290

SNOWDEN, D. P.

Application of microwave reflection technique to the measurement of transient and quiescent electrical conductivity of silicon. 22 p3997 A69-41226

SNOWDEN, M. S.

Spectrographic and photometric analyses of HR 7484. 15 p2693 A69-30776

SNUGGS, R. M.

Mobilities, diffusion coefficients, and reaction rates of mass-identified nitrogen ions in nitrogen. 13 p2302 A69-27458

SNYDER, A. F.

Active microwave scattering arrays. 08 p1290 A69-20975

SNYDER, A. W.

Coupling of modes on a cylindrical tapered dielectric rod. 14 p2422 A69-29557

SNYDER, D. R.

Investigation of vitiated inlet-air effects on turbojet engine performance. 01 p0143 A69-11063

SNYDER, F. P.

A parametric study of VLF modes below anisotropic ionospheres. 10 p1655 A69-23417

SNYDER, H. A.

Transient response of a differentially heated rotating annulus. 07 p1126 A69-19039

SNYDER, H. H.

On certain wave transmission coefficients for elliptical and rectangular apertures. 11 p1837 A69-25001

SNYDER, J.

Hypnotics and jet-age travel. 24 p4277 A69-43389

SNYDER, J. A.

LM cathode electron bombardment thrusters. [AIAA PAPER 69-302] 09 p1569 A69-21876

SNYDER, J. R.

Laser-beam scintillation over horizontal paths from 5.5 to 145 kilometers. 09 p1517 A69-22080

SNYDER, J. W.

Radiation plan for the Apollo lunar mission. [AIAA PAPER 69-19] 06 p0996 A69-18113

SNYDER, L. E.

Water-vapor clouds in the interstellar medium. 09 p1591 A69-21446

Detection of interstellar H sub 2 C super 13 O super 16. 23 p4220 A69-42376

SNYDER, M. F.

Computer modeling of the human systemic arterial tree. 07 p1072 A69-19727

SNYDER, M. H., JR.

Effects of wingtip-mounted propellers on wing lift and induced drag. 24 p4250 A69-43713

SNYDER, R. G.

Occupant restraint systems of automotive, aircraft, and manned space vehicles - An evaluation of the state-of-the-art and future concepts. 03 p0380 A69-13459

Bioengineering of impact survival in business aircraft. [SAE PAPER 690335] 11 p1829 A69-24493

SNYDER, W. A.

Attitude determination and control of SYNCOM, Early Bird, and applications technology satellites. [AIAA PAPER 67-532] 09 p1610 A69-21988

SNYDER, W. J.

The dynamic response of a flexible rotor blade to a tip-vortex induced moving force. [AIAA PAPER 69-203] 07 p1054 A69-19546

SNYDER, W. T.

Energy dissipation in MHD duct flow. 04 p0635 A69-14726

SNYDERS, L. S.

Optical methods for studying ultrasonic propagation in transparent media. 15 p2617 A69-31516

SNYDERS, P. W.

Multiple use doctrines as space law. 20 p3639 A69-37133

SO, K. L.

An experimental investigation of the hover and forward speed aerodynamic characteristics of several tracked air cushion vehicle /TACV/ models. [AIAA PAPER 69-750] 18 p3084 A69-34410

SOBCZYNSKA, Z.

Action of a moving point source of heat in an unbounded space /Dzialanie ruchomego punkowego zrodla ciepla w przestrzeni nieograniczonej/. 09 p1621 A69-21495

SOBEL, H.

Multi-mode digital radar control. 05 p0718 A69-15750

SOBEL, M.

Nonparametric ranking procedures for comparison with a control. 08 p1342 A69-20172

SOBELMAN, I. I.

Transformation of laser radiation by stimulated Raman scattering. 14 p2460 A69-29648

SOBERMAN, R. K.

Extraterrestrial origin of noctilucent clouds. 21 p3702 A69-38347

SOBIERAJSKI, F.

An explicit closed-loop controller for gravity turn landing maneuvers. 02 p0335 A69-12531

SOBIESKI, S.

Search for ultra-short light pulses from pulsars. 18 p3200 A69-34994

SOBIESZCZANSKI, J.

Structural modification by perturbation method. 04 p0668 A69-14380

The behavior of nonlinear redundant structures simulated on digital computer. [AIAA PAPER 69-120] 06 p1028 A69-18166

Nonlinear structure analysis by force method and subordinated step procedure. 12 p2185 A69-26823

SOBIN, S. S.

Theory of sheet flow in lung alveoli. 22 p3874 A69-40216

SOBINIAKOV, V. A.

Interaction free path in iron of nuclear-active particles with energies above 5.3 x 10 super 11 ev. 13 p2303 A69-28385

Absorption in an ionization calorimeter of the energy flux of the nuclear component. 13 p2330 A69-28386

SOBOL, H.

Microwave integrated circuits. 07 p1096 A69-18441

SOBOL, N. K.

Incoming microwave power meter based on a directional coupler /Izmeritel' prokhodiaschchei moschnosti SVCh na osnove napravlennoogo otvetvlenia/. 19 p3282 A69-35826

SOBOLENKO, L. A.

Rapid method of solving the problem of linear quick response /Uskorennyi metod resheniya zadachi lineinogo bystrodeistviia/. 09 p1473 A69-21791

SOBOLEV, A. P.

Optimum frequency range of a stationary induced discharge. 03 p0481 A69-14144

Calculation of the parameters of an induced high-pressure high-frequency discharge /K raschetu

- parametrov indutsirovannogo vysokochastotnogo razriada vysokogo davleniia/. 15 p2662 A69-30976
- BOBOLEV, I. V.**  
Thermooxidative degradation of various heat-resistant organosilicon binder resins. 17 p2992 A69-33744
- BOBOLEV, IA. P.**  
Bursts of VLF radiation. 06 p0920 A69-17731
- BOBOLEV, IU. I.**  
Section pressing from titanium alloys /Pressovanie profili iz titanovykh splavov/. 07 p1164 A69-18788
- BOBOLEV, N. N.**  
Thermal radiation of nitrogen plasma in the region from 0.5 to 1.1 mu /Teplovoe izluchenie azotnoi plazmy v oblasti 0.5-1.1 mkm/. 07 p1189 A69-18283  
Gain measurement in the CO sub 2 laser discharge. 07 p1151 A69-19060  
Population inversion of the vibrational levels in CO sub 2 lasers. [IEEE PAPER G-15] 07 p1151 A69-19061  
Inversion mechanisms in CO sub 2 high intensity gas lasers. 07 p1157 A69-19655  
Electron energy distribution in discharges used for CO sub 2 lasers. 08 p1323 A69-19801  
On the inversion mechanism in the CW argon-ion laser. 12 p2106 A69-26319  
Dissociation of CO sub 2 in a CO sub 2 laser gas discharge plasma /Dissotsiatsiia CO sub 2 v plazme gazovogo razriada OKG na CO sub 2/. 12 p2107 A69-26540  
Electron forces of the 1 super plus system of N sub 2 bands of the Meinel system of N sub 2 super plus. II /Elektronnye sily 1 super plus sistemy polos N sub 2 i sistemy Mainelia N sub 2 super plus. ii/. 20 p3579 A69-37307
- BOBOLEV, O. S.**  
Applied methods of multivariable control system study. 12 p2048 A69-26076
- BOBOLEV, V. L.**  
Experimental estimation of the accuracy of certain types of accelerated fatigue tests. 07 p1233 A69-19315
- BOBOLEV, V. M.**  
Steady-state distribution of helium atoms according to levels in the solar atmosphere /Statsionarnoe raspredelenie atomov geliia po sostoiianiiam v solnechnoi atmosfere/. 20 p3615 A69-38298
- BOBOLEV, V. V.**  
Anisotropic scattering of light in a semiinfinite atmosphere. II. 04 p0662 A69-15237  
Reflection spectra of indium arsenide. 06 p0979 A69-16995  
The albedo of a planetary atmosphere /Al'bedo planetnoi atmosfery/. 10 p1776 A69-23210  
Albedo and surface illumination of a planet possessing an atmosphere /Al'bedo i osveshchennost' poverkhnosti planety, obladaiushchei atmosferoi/. 15 p2689 A69-30564  
A theoretical study of galactic novae. 17 p3032 A69-33103
- BOBOLEVA, N. S.**  
Observations of the polarized radio emission from Jupiter at a wavelength of 6.6 cm with the aid of the large Pulkovo telescope /Nabliudeniia polarizovannogo radioizlucheniia Iupitera na volne 6.6 cm s pomoshchiu bol'shogo pulkovskogo radioteleskopa/. 03 p0512 A69-13703
- BOBOLEVA, T. S.**  
Interaction between a turbulent wake and the external flow /Vzaimodeistvie turbulentnogo sleda s vneshnim potokom/. 19 p3299 A69-36390
- SOBOTKA, Z.**  
Yield condition of the constant limiting distortion energy for anisotropic bodies. 18 p3227 A69-35494
- SOBOTKA, Z. K.**  
The rheological behaviour of complex viscoelastic solids. 20 p3625 A69-37601
- SOBOOTOVICH, E. V.**  
Uranium cosmochronology /Uranovaia kosmochronologia/. 01 p0025 A69-11369
- SOBOVEJO, A. B. O.**  
Propagation of errors and tolerance analysis in engineering design and stress analysis problems. 21 p3842 A69-39303
- SOBRAL, J. H.**  
Equatorial atmosphere measurements obtained with the sounding rocket grenade experiment. 23 p4159 A69-42423
- SOBRAL, M., JR.**  
Sensitivity in optimal control systems. 01 p0051 A69-10553
- SOCHAVA, L. S.**  
Traveling excited states in organic semiconductors which are tetracyanoquinodimethane derivatives /Dvizhushchiesia vzbuzhdennye sostoiianiia v organicheskikh poluprovodnikakh-proizvodnykh tetratsianokhinodimetana/. 03 p0484 A69-13278  
Moving excited states in organic semiconductors /derivatives of tetracyanoquinodimethane/. 14 p2508 A69-29652
- SOCHET, L. R.**  
Analogy between gas phase and liquid phase oxidation of hydrocarbons in the final stages of the reaction 'Pic d'arret' and 'oxygen cut-off'. 21 p3669 A69-38805
- SOCKOL, P. M.**  
Sheath structure in the unignited mode. 03 p0368 A69-13125  
Sheath structure in the unignited mode. 09 p1440 A69-21828
- SOCKY, R. B.**  
Signature analysis - A materials reliability testing technique. 19 p3322 A69-35574
- SOCOLESCU, D.**  
Incompressible jets bounded by infinite auxiliary thin jets /Asupra jeturilor incompresibile marginite de jeturi auxiliare infinit subtiri/. 09 p1480 A69-21734
- SODA, N.**  
Load carrying capacities of thin films of lubricant compositions. I - Load carrying capacities free of thermal effect. 07 p1140 A69-18968
- SODARO, A.**  
Synthesis of a line filter matched to bipolar video pulse trains with variable envelope frequency /Sintesi di un filtro a linee adattato a treni di impulsi video bipolari a frequenza di inviluppo variabile/. 04 p0558 A69-15071
- SODD, V. J.**  
Another study of the decay of I super 123. 03 p0470 A69-13099
- SODEN, P. D. W.**  
Large deformation of time-dependent materials in uniaxial tension. 19 p3445 A69-36829
- SODER, K. E., JR.**  
A theoretical analysis of the free vibration of discretely stiffened cylindrical shells with arbitrary end conditions. 11 p1992 A69-25521
- SODERBLUM, L. A.**  
Differences between proposed Apollo sites. III - Far infrared emissivity evidence. 21 p3815 A69-39587
- SODHA, M.**  
Some transport coefficients in cadmium sulphide. 03 p0490 A69-13945
- SODHA, M. S.**  
Generation of microwave second harmonic and sum and difference frequency in semiconductors at low temperatures. 01 p0137 A69-10334  
Nonlinear demodulation of an amplitude modulated wave in a plasma - Elementary approach. 04 p0559 A69-15210  
Focusing factor in a stratified medium. 12 p2029 A69-26100  
Generation of sum and difference frequencies in plasmas by non-uniform microwave fields. 14 p2507 A69-29350  
Amplitude modulation of electromagnetic waves by modulated magnetic fields - Modified theory and application to communications during blackout. 14 p2417 A69-29591
- Nonlinear sum and difference frequency generation in an inhomogeneous magnetoplasma. 16 p2821 A69-32036
- SOEBAMBANG**  
1969 national statement of Indonesian space activities. 15 p2723 A69-31428
- SOEBERG, J.**  
The use of digital systems in acoustical measurements. 22 p3945 A69-40168
- SOECHTING, J. F.**  
A bounding principle in the theory of work-hardening plasticity. [ASME PAPER 69-APM-7] 18 p3213 A69-34385
- SOEDEL, W.**  
Stresses in shallow axisymmetric shells using a casting procedure. [SESA PAPER 1332] 11 p1995 A69-25651
- SOEHNGEN, E. E.**  
Investigation of plasmas at very high pressure. 15 p2659 A69-30377
- SOFFA, L. L.**  
Effect of beta working on 6A1-4V titanium alloy. [ASM PAPER D8-24.3] 20 p3564 A69-38136
- SOFFEN, G. A.**  
Extraterrestrial optical microscopy. 23 p4164 A69-41621
- SOFFER, B. H.**  
Continuously tunable picosecond-pulse organic-dye laser. 06 p0935 A69-17759
- SOFFER, L.**  
COHORT-II - A Monte Carlo general purpose shielding computer code. 14 p2417 A69-29004
- SOFFER, L. M.**  
Mechanical properties of epoxy resins and glass/epoxy composites at cryogenic temperatures. 05 p0785 A69-16491
- SOFFER, S. B.**  
Anomalous size effects in the galvanomagnetic properties of zinc caused by compensation. 06 p0981 A69-18232
- SOFIA, S.**  
A study of the positions and proper motions of 83 stars in the region of Sco X-1. 12 p2152 A69-25798  
Dynamical study of an H II region. 19 p3403 A69-35966
- SOFKO, G. J.**  
Periodic fading in 42-MHz auroral backscatter. 18 p3102 A69-34950
- SOFRONOV, IU. D.**  
Study of the scale factor on samples of like size /Ob izuchenii masshtabnogo faktora na obraztsakh odnogo razmera/. 23 p4225 A69-41422
- SOFROSHENKOV, A. F.**  
Wear resistance of diffusion-saturated titanium alloys /Iznosostoikost' titanovykh splavov pri diffuzionnom nasyschenii/. 19 p3344 A69-36153
- SOFTLEY, E. J.**  
Experimental observation of transition of the hypersonic boundary layer. [AIAA PAPER 68-39] 09 p1482 A69-21943  
Boundary layer transition on hypersonic blunt, slender cones. [AIAA PAPER 69-705] 17 p2954 A69-33455  
Base pressure measurements on slender cones with domed afterbodies. [AIAA PAPER 68-698] 24 p4249 A69-43675
- SOGA, N.**  
Elastic constants of polycrystalline BeO as a function of pressure and temperature. 16 p2802 A69-32338
- SOGAME, E.**  
Radiative transfer in the low Reynolds number, blunt-body stagnation region at hypersonic speeds. 23 p4059 A69-41885
- SOHL, G.**  
A cesium electron-bombardment microthruster system. [AIAA PAPER 69-293] 09 p1561 A69-21223  
Thrust vectoring of ion engines. [AIAA PAPER 68-543] 09 p1570 A69-21985



## SOHM, J. C.

Study of zinc oxidation in weakly alkaline solutions /Etude de l'oxydation du zinc dans les solutions faiblement basiques/.  
08 p1268 A69-21050

Study of the oxidation of zinc in weakly basic solutions /Etude de l'oxydation du zinc dans les solutions faiblement basiques/.  
16 p2740 A69-32421

## SOHONI, V. S.

On time optimal trajectories.  
11 p1861 A69-25454

## SOHST, H.

Sensors for inertial navigation systems /Sensoren fuer Traegheitsnavigationssysteme/.  
12 p2078 A69-25874

## SOICHER, H.

Onset of severe amplitude scintillations of satellite radio signals during sunrise.  
01 p0067 A69-10980

Quick-look system for virtual real-time telemetry reception of topside ionograms.  
20 p3508 A69-37862

## SOIFER, V. A.

Estimations of the delay time for pulse signals transmitted through a generalized radio channel /Otsenka vremeni zapazdyvaniia impul'snykh signalov, proshedshikh obobshchennyi radiokanal/.  
13 p2218 A69-27215

## SOJOURNER, J. H.

Air Force Eastern Test Range inflight data processing.  
05 p0727 A69-16772

## SOKHOV, T. Z.

Mesometeorological solitary waves.  
02 p0274 A69-11445

## SOKIRIANSKII, L. F.

Oxygen diffusion parameters in beta-titanium /O parametrah diffuzii kisloroda v beta-titan/.  
07 p1163 A69-18783

Effect of annealing on the oxidation kinetics of titanium /K voprosu o vlianii ozhiga na kinetiku okisleniia titana/.  
12 p2112 A69-26039

## SOKOL, I. A.

Investigation of the properties of a nickel-titanium steel by a thermal-EMF method /Issledovanie svoistv nikel'titanovoi stali metodom T.E.D.S./.  
19 p3345 A69-36154

## SOKOLIK, B.

The use of lasers for distance measurements /Pouziti laseru pro mereni vzdalenosti/.  
22 p3959 A69-39901

## SOKOLOV, A. I.

Parametric mechanism of losses in a ferroelectric ceramic in strong microwave fields /Parametricheskii mekhanizm poter' v segnetokeramike v sil'nykh SVCh-poliakh/.  
22 p3996 A69-41164

## SOKOLOV, A. N.

Influence of the test conditions on the state of the surface layer of nozzle guide vanes /Vlianie uslovii ispytaniia na sostoiianie poverkhnostnogo sloia lopatok soplovoego apparata/.  
20 p3561 A69-37370

## SOKOLOV, A. V.

Long-range Tropospheric Communications /Dal'naiia Troposfernaia Radiosviaz/.  
04 p0558 A69-14919

Relation between the attenuation coefficient of laser emission and the water content of artificial fogs /Sviaz' koefitsienta oslableniia intensivnosti lazernogo izlucheniia s vodnost'iu iskusstvennykh tumanol/.  
21 p3738 A69-39118

## SOKOLOV, B. P.

Methods for experimental studies of the stressed state of shells made of glass fiber reinforced plastics /O metodakh eksperimental'nogo issledovaniia napriazhennogo sostoiianiia obolochek iz stekloplastika/.  
11 p1995 A69-25681

## SOKOLOV, I. U. F.

Physics of Microwave Semiconductor Diodes.  
21 p3682 A69-38990

## SOKOLOV, V. A.

A model of the Venusian atmosphere based on the results of direct temperature and density measurements /Model' atmosfery Veneri po rezul'tatam priamykh izmerenii temperatury i plotnosti/.  
13 p2345 A69-27688

## SOKOLOV, V. B.

Application of the method of generalized parameters to a study of maneuvers in a homogeneous gravitational field /Primenenie metoda obobshchennykh parametrov dlia issledovaniia manevrov v odnorodnom gravitatsionnom pole/.  
13 p2356 A69-27685

## SOKOLOV, V. F.

Sensitivity of leak detection at low pressures and concentrations of probe gases.  
24 p4296 A69-42656

## SOKOLOV, V. G.

Antenna array synthesis by a differential equation technique /Sintez antennykh reshetok metodom differentsial'nogo uravneniia/.  
21 p3682 A69-39125

Wave regimes of an ascending flow in a thin layer of a heavy viscous fluid in contact with a gas /Volnovye rezhimy voskhodiashego techeniia tonkogo sloia viazkoii tiazheloi zhidkosti v kontakte s gazom/.  
24 p4302 A69-43480

## SOKOLOV, V. M.

The microwave mobility of electrons heated by a constant field in polar semiconductors with a non-parabolic dispersion law.  
14 p2508 A69-29662

## SOKOLOV, V. V.

Calculation of the volume coefficients of the haze-induced attenuation of radiation in the wavelength range from 0.3 to 25  $\mu$  /Raschet ob'emnykh koefitsientov oslableniia izlucheniia dymkami v diapazone dlin voln 0.3-25 mkm/.  
11 p1913 A69-25571

## SOKOLOVA, L. E.

Asymptotic stability of the equilibria of gyroscopic systems with partial dissipation.  
04 p0631 A69-15537

## SOKOLOVA, L. V.

Determination of the electron temperature and concentration in an arc in a magnetic field on the basis of the scattering of laser light at the electrons /Opredelenie temperatury i kontsentratsii elektronov v duge v magnitnom pole po rasseianiiu lazernogo izlucheniia na elektronakh/.  
14 p2496 A69-29780

## SOKOLOVA, L. Z.

Feasibility of using holographic techniques for creating new types of storage devices /Vozmozhnosti primeneniia metodov golografii dlia sozdaniia novykh tipov zapominaushchikh ustroistv/.  
07 p1133 A69-19158

## SOKOLOVA, N. I. A.

Problems of Atmospheric Optics /Voprosy atmosfernoii optiki/.  
15 p2646 A69-30159

## SOKOLOVA, ZH. M.

Investigation of wideband impedance decoupling structures /Issledovanie shirokopolosnykh impedantsnykh razv'yaznyushchikh struktur/.  
23 p4138 A69-41938

## SOKOLOVSKII, E. I. A.

Experimental determination of the coincidence error between a star image and a planet edge for various telescope parameters.  
08 p1314 A69-20383

## SOKOLOVSKII, K. I.

Quasi-integral operator for analytical continuation of a potential field /Pro kvaziintegral'nii operator analitichnogo prodolzheniia potentsial'nogo polia/.  
10 p1689 A69-24082

Applications of a quasi-integral analytic continuation operator /Pro zastosovaniia kvaziintegral'nogo operatora analitichnogo prodolzheniia/.  
14 p2470 A69-29032

## SOKOLOVSKII, R. I.

Radiative perturbation of potassium terms in a ruby-laser radiation field.  
13 p2271 A69-27656

## SOKOLOVSKII, V. I.

Monte Carlo calculations of the nuclear cascade process in the atmosphere.  
13 p2331 A69-28397

Dependence of the energy of an electron-photon cascade, produced by collision of a nuclear-active cosmic-ray particle with a lead nucleus, on the energy of the interacting particle.  
17 p3008 A69-33387

## SOKOLOV, V.

The way to the first manned space station /Der Weg zur ersten bemannten Raumstation/.  
24 p4391 A69-42798

## SOKOŁOWSKI, E.

Influence of sudden decompression on the organism /Wplyw naglej dekompresji na ustroj/.  
01 p0020 A69-10753

## SOKOVIKOV, V. V.

Gain measurement in the CO sub 2 laser discharge.  
07 p1151 A69-19060

Population inversion of the vibrational levels in CO sub 2 lasers. [IEEE PAPER G-15]  
07 p1151 A69-19061

Inversion mechanisms in CO sub 2 high intensity gas lasers.  
07 p1157 A69-19655

## SOKOVISHIN, I. U. A.

Wall jet of a conducting fluid in a transverse magnetic field /Pristenochnaia struia provodiashchei zhidkosti v poperechnom magnitnom pole/.  
07 p1192 A69-19020

The boundary layer of a conducting fluid in a magnetic field.  
10 p1727 A69-23093

Boundary-layer jet of a conducting fluid in a slipstream /Pristenochnaia struia provodiashchei zhidkosti v sputnom potoke/.  
14 p2501 A69-29917

## SOLAL, G. C.

Contributions to cadmium sulfide-copper sulfide solar cell studies.  
19 p3250 A69-35685

## SOLARZ, L.

Aero-magnetic flutter of an infinite cylindrical duct.  
18 p3226 A69-35462

## SOLBERG, H. G., JR.

Correlation between Zurich sunspot number and prominence of Jupiter's red spot.  
17 p3045 A69-34185

A 3-month oscillation in the longitude of Jupiter's Red Spot.  
24 p4383 A69-43002

## SOLBERG, Y. J.

Studies on the chemistry of lichens. VII - Chemical investigations of the lichen species Lecanora /Aspicilia/ Myrinii /Fr./ Nyl.  
23 p4080 A69-41428

## SOLBES, A.

Quasi-linear plane wave study of electrothermal instabilities.  
10 p1734 A69-23456

## SOLBRAND, S. G.

Two methods for measuring high permittivity at microwave frequencies.  
02 p0222 A69-12756

## SOLCHATOVA, L. I. A.

Duration of continuous reflections from E sub s /O dlitel'nosti nepreryvnykh otrazhenii ot E sub s/.  
02 p0207 A69-11684

Duration of continuous reflections from E sub s.  
13 p2224 A69-28715

Structural characteristics of the E sub s layer according to individual parameters and their relation with solar activity /Kharakteristika struktury sloia E sub s po otdel'nym parametram i ikh sviaz' s solnechnoi aktivnost'iu/.  
20 p3528 A69-37681

## SOLDATOS, A. C.

Correlation between high performance epoxy cast resin properties and composite performance.  
08 p1340 A69-20510

## SOLDATOV, A. N.

Study of the discharge conditions in a hollow cathode for obtaining lasing at lambda equals 1.15  $\mu$  of neon /Issledovanie uslovii razriada v polom katode dlia polucheniia generatsii na lambda 1,15 mk neona/.  
09 p1516 A69-21507

## SOLDATOV, B. G.

Statistical estimation of side radiation of a mirror antenna.  
04 p0577 A69-14787

## SOLDATOV, I. U. I.

Electrooptical tracking device with pyramidal reflector for field of view dissection.  
10 p1698 A69-24219

## SOLDATOV, M. M.

Estimation of the upper and lower bounds of solutions of the integral equations of viscoelasticity /Dvustoronniia otsenka reshenii integral'nykh uravnenii viazko-uprugosti/.  
08 p1412 A69-20329

## SOLDATOV, V. P.

Computation of the directional characteristic of electrooptical goniometric system.

14 p2420 A69-29332

## SOLER-GOMEZ, A. J. R.

Serrated flow in gold-indium alloys.

24 p4361 A69-43028

## SOLER, A. I.

One dimensional viscous magnetofluidynamic flow in an annulus.

[AIAA PAPER 69-725] 17 p3012 A69-33493

## SOLIANIK, B. L.

Model of the failure sequence of an automatic system subjected to steady random external effects /Model' potoka otkazov apparatury avtomatiki pri stacionarnykh sluchainykh vneshnikh vozdeistviakh/.

24 p4289 A69-42953

## SOLIANIK, O. A.

A zoned parabolic antenna /Zonirovannaia parabolicheskaia antenno/.

17 p2939 A69-33904

## SOLIGNAC, J. L.

Similarity properties of the laminar or turbulent separation phenomena in a nonuniform supersonic flow /Proprietes de similitude des phenomenes de decollement laminaire ou turbulent en ecoulement supersonique non uniforme/.

[ONERA-TP-659F] 07 p1050 A69-18417

## SOLIMINI, D.

Statistical properties of the field diffracted by an aperture with partially coherent illumination.

11 p1836 A69-24978

The double aperture problem with partially coherent illumination.

17 p2929 A69-33877

## SOLIN, N. N.

Production tolerance fluctuations of a quartz oscillator /Tekhnicheskie fluktuatsii kvartsevoego generatora/.

15 p2579 A69-30944

## SOLINGER, A. B.

The galaxy M82. I - Analysis of the observations.

08 p1383 A69-20051

## SOLLERTINSKAIA, E. S.

Improvement of diffuse layers in the case of anomalous diffusion in GaAs single crystals /K voprosu o sovershenstve diffuzionnykh sloev dlia sluchaia anomal'noi diffuzii v monokristallakh GaAs/.

15 p2670 A69-31048

## SOLLFREY, W.

Hard limiting of three and four sinusoidal signals.

09 p1451 A69-21311

## SOLLID, J. E.

The preparation of laboratory plasmas by use of normal ionizing shocks.

[AIAA PAPER 69-693] 17 p2945 A69-33447

Holographic interferometry applied to measurements of small static displacements of diffusely reflecting surfaces.

23 p4167 A69-42185

## SOLLOWAY, C. B.

Comparison of the Newtonian and general relativistic orbits of a point mass in an inverse-square law force field.

[AAS PAPER 68-098] 20 p3595 A69-37176

## SOLMAN, V. E. F.

A bird warning system for aircraft in flight.

17 p2899 A69-33367

## SOLODOVCHENKO, S. I.

Plasma motion in crossed inhomogeneous electric and magnetic fields /Dvizhenie plazmy v skreshchennykh neodnorodnykh elektricheskoi i magnitnom poliakh/.

24 p4358 A69-43475

## SOLODOVNIK, F. A.

Vestibular reactions of cosmonauts during the flight on the Voskhod spacecraft /Vestibuliarnye reaktsii kosmonavtov pri Plete na korabe "Voskhod"/.

07 p1062 A69-18588

Study of the Coriolis couple in the horizontal semicircular canals during rotation of humans with simultaneous rotatory motion of the head /O parakh sil koriolisa v gorizontalt'nykh polukruzhnykh kanalakh pri vrashchenii cheloveka s odnovremennym vrashchatel'nyim dvizheniem golovy/.

12 p2020 A69-26565

Vestibular training of test pilots by passive methods /Vestibuliarnaia trenirovka ispytatelei passivnymi metodami/.

20 p3472 A69-37266

## SOLODOVNIKOV, G. K.

Possibility of unequivocal experimental determination of the Faraday angle of rotation of the polarization plane of radio signals emitted by celestial bodies /O vozmozhnosti odnoznachnogo eksperimental'nogo opredeleniia faradeevskogo ugla povorota ploskosti poliarizatsii radio signalov ISZ za schet kosmicheskikh ob'ektov/.

01 p0030 A69-10574

Measurement of the irregular component of the satellite-signal phase lead due to ionospheric inhomogeneities by the method of coherent frequencies /Izmerenie metodom kogerentnykh chastot neregulyarnoi sostavliaushchei nabega fazy signalov ISZ za schet neodnorodnosti ionosfery/.

06 p0890 A69-17799

Unambiguous experimental determination of the Faraday rotation of the plane of polarization of radio waves emitted by cosmic objects.

15 p2568 A69-30744

Measurement of effects arising in the ionosphere on the basis of radio waves propagating from satellites /Izmerenie effektiv, vozniakaushchikh v ionosfere pri rasprostraneni radiovoln ot iskusstvennykh sputnikov zemli/.

20 p3486 A69-37027

## SOLODOVNIKOV, V. N.

Plate bending in the case of unsteady creep /Izhib plastin pri neustanovivsheisya polzuchestii/.

04 p0679 A69-14923

## SOLODUKHINA, R. V.

Magnetic and microwave properties of some substituted lithium ferrites /Magnitnye i s. v. ch. svoistva nekotorykh zameshchennykh litievykh ferritov/.

13 p2320 A69-28000

## SOLOFF, L. A.

Abnormal mitral valve motion as demonstrated by the ultrasound technique in apparent pure mitral insufficiency.

24 p4261 A69-42727

## SOLOKHIN, E. L.

Experimental investigation of flame stabilization in a high-temperature air jet at low pressure /Eksperimental'nye issledovaniia stabilizatsii plameni v vysokotemperaturnom vozduzhnom potoke pri ponizhenom davlenii/.

03 p0531 A69-12968

## SOLOMAKHA, D. A.

A nonadjustable Fabry-Perot scanning interferometer /Neiusturimy skaniruiushchii interferometr Fabri-Perot/.

04 p0598 A69-14854

Nonadjustable scanning Fabry-Perot interferometer.

15 p2608 A69-30246

## SOLOMATIN, V. S.

Internal modulation of a gas laser in an asynchronous regime /Vnutrenniaia moduliatsiia gazovogo lazera v nesinkhronnom rezhime/.

19 p3335 A69-36341

## SOLOMATINA, E. K.

Change in solar wind ion flux with rise in solar activity level - Data from the "Venera-2" and "Venera-4" space probes.

10 p1771 A69-24201

## SOLOMAK, T. B.

Dirichlet problem for nonuniformly elliptic quasi-linear equations.

07 p1173 A69-18500

## SOLOMIN, V. I.

Calculation of a conical shell on a digital computer /Raschet konicheskoi obolochki na ETsVM/.

11 p1981 A69-24943

## SOLOMKO, A. A.

Modulation of laser emission by a frequency of 36.6 GHz /Moduliatsiia izlucheniia OKG chastotoi 36.6 Ggts/.

19 p3334 A69-35884

## SOLOMON, A. A.

New techniques and apparatus for examining the elevated temperature deformation of metals.

21 p3689 A69-38595

## SOLOMON, A. H.

Beam-lead Schottky-barrier diodes for low-noise integrated microwave mixers.

02 p0222 A69-12474

## SOLOMON, J. E.

A high-performance monolithic IF amplifier incorporating electronic gain control.

07 p1104 A69-18885

## SOLOMON, J. L.

Neck-and-split tensile fracture of anisotropic plate steel.

[ASME PAPER 68-WA/MET-1] 14 p2464 A69-29440

## SOLOMON, L. H.

Optical and radio observations of the flare star UV Ceti in Australasia during September-October 1967.

07 p2124 A69-18666

## SOLOMON, S.

A generalization of the Volterra equation /Sur une generalisation de l'equation de Volterra/.

02 p0270 A69-11534

Functional Volterra equations /Sur les equations fonctionnelles de Volterra/.

08 p1342 A69-20268

## SOLOMON, S. C.

On the density distribution in the moon.

08 p1393 A69-20579

## SOLOMONENKO, V. G.

Statistical characteristics of the bearing of a set of point radiators /Statisticheskie kharakteristiki pelenga sovkupnosti tochechnykh izluchatelei/.

05 p0719 A69-16219

## SOLOMIN, S. M.

Sintering of mixtures of powders of nickel and molybdenum.

15 p2638 A69-30280

Two-layer filters for fine purification of liquid /Dvukhsloynnye fil'try dlia tonkoi ochistki zhidkosti/.

22 p3869 A69-40637

## SOLOMINA, O. P.

Recrystallization and oxidation of titanium alloy VTZ-1 /Rekristallizatsiia i okislenie titanovogo splava VTZ-1/.

01 p0094 A69-10214

Investigation of phase and structural transformations in two-phase industrial titanium alloys /Issledovanie fazovykh i strukturnykh prevrashchenii v dvukhfaznykh promyshlennykh titanovykh splavakh/.

07 p1162 A69-18776

Recrystallization and oxidation of titanium alloy VT3-1.

15 p2637 A69-30270

## SOLONTSINA, N. F.

Vertical ionization drift and the recombination coefficient in the ionospheric F region /Vertikal'nyi dreif ionizatsii i koeffitsient rekombinatsii v F-oblasti ionosfery/.

12 p2070 A69-26584

## SOLONTSYNA, N. F.

Determination of the vertical drift velocity component and the recombination coefficient in the ionospheric F region /Opredelenie vertikal'noi sostavliaushchei skorosti dreifa i koeffitsienta rekombinatsii v F-oblasti ionosfery/.

20 p3521 A69-37049

## SOLOS, L. P.

Influence of surface preparation on boundary friction for a Ni-Cr-Fe alloy.

[ASLE PREPRINT 68AM 6D-4] 07 p1139 A69-18625

## SOLOSKO, R. B.

A log-periodic antenna with vertically polarized omnidirectional radiation.

08 p1281 A69-20033

## SOLOT, S. B.

Temperate latitude 200-mb zonal winds from ghost balloon flights in the Southern Hemisphere.

17 p2997 A69-33163

## SOLOUKHIN, R. I.

Ignition processes in expanding detonations.

21 p3849 A69-38803

## SOLOVAREV, N. K.

Combined superemission signals in multilevel systems with an equidistant spectrum /Kombinirovannye sverkhizluchatel'nye signaly v mnogourovnevnykh sistemakh s ekvidistantnym spektrom/.

21 p3737 A69-39068

## SOLOVEI, L. G.

Regenerative amplifier operating in a duct which is mismatched outside of the passband /Regenerativnyi usilitel', rabotaiushchii v trakte, rassoglasovanom vne polosy propuskaniia/.

15 p2573 A69-30118

Mismatch error in measuring small losses in circulators and reciprocal quadrupoles /O pogreshnosti rassoglasovaniia pri izmerenii mal'kikh poter' v tsirkulyatorakh i vzaimnykh chetyrekhpolusnikakh/.

22 p3875 A69-40259



## SOLOVEV, A. M.

SOLOVEV, A. M.

 On improving the Mar-1 X-ray microanalyzer.  
12 p2093 A69-26596

SOLOVEV, I. I.

 Axisymmetric problem of the theory of elasticity for a torus and a space with a toroidal cavity /Osesimetricchnaia zadacha teorii uprugosti dlia tora i prostranstva s toroidal'noi polost'iu/.  
21 p3839 A69-39192

SOLOVEV, I. U. N.

 Generation of optical harmonics in lithium niobate /Generirovanie opticheskikh garmonik v niobate litii/.  
03 p0437 A69-13046

SOLOVEV, L. E.

 Emission spectrum of CdS crystals during two-photon excitation /Spektr generatsii kristallov CdS pri dvukhfotonnom vozbuзhdenii/.  
14 p2458 A69-29167

 Two-photon excitation of luminescence in uranyl crystals by a ruby laser /Dvukhfotonnoe vozbuзhdenie luminentsentsii kristallov uranila rubinovym lazerom/.  
19 p3334 A69-35982

SOLOVEV, L. S.

 Criterion for the hydromagnetic stability of a plasma in the vicinity of a magnetic axis /Kriterii gidromagnitnoi ustoychivosti plazmy v okrestnosti magnitnoi osi/.  
02 p0290 A69-12355

 The hydromagnetic stability of stationary flows.  
04 p0635 A69-14556

 Criterion for the hydromagnetic stability of plasma in the neighborhood of the magnetic axis.  
15 p2658 A69-30265

SOLOVEV, M. V.

 Some characteristics of neutral pion production in interactions of nucleons with energies above 10 super 13 ev.  
13 p2303 A69-28376

 Spectrum of 10 super 11 to 10 super 13 ev photons in the upper atmosphere.  
13 p2330 A69-28378

SOLOVEV, N. N.

 Investigation of some properties of iron-doped gallium arsenide.  
04 p0643 A69-15263

 Possibility of constructing a high-speed switch from a gallium arsenide crystal doped with iron /O vozmozhnosti sozdaniia bystrodeistviushchego perekliuchatel'ia iz kristalla arsena gallia legirovanogo zhelezom/.  
13 p2319 A69-27898

 Radiative transitions between a deep acceptor and the valence band in gallium arsenide /Izluchatel'nye perekhody glubokii akseptor- valentnaia zona v arsenu gallii/.  
19 p3392 A69-36611

SOLOVEV, S. D.

 Transmission of random noise and signals through a multistage multiplier.  
04 p0557 A69-14777

SOLOVEV, V. I.

 Computer analysis of infrared cloud images obtained from the Cosmos 122 satellite /Mashinnyi analiz infrakrasnykh izobrazhenii oblachnosti, poluchennykh so sputnika "Kosmos-122"/.  
11 p1884 A69-24833

 Cartography of cloud pictures obtained from the "Molniia 1" satellite /Kartografirovaniye snimkov oblachnosti, poluchennykh so sputnika "Molniia-1"/.  
13 p2292 A69-27730

 Analysis of the state of the atmosphere over the globe from a picture obtained by the Zond 5 space station at an altitude of 90,000 km /Analiz sostoiianiia atmosfery nad zemnym sharom po snimku s vysoty 90.000 km. poluchennomu kosmicheskoi stantsiei "Zond-5"/.  
23 p4184 A69-42486

SOLOVEV, V. P.

 Optimum turn of a space vehicle about an arbitrary fixed axis /Ob optimal'nom razvorote kosmicheskogo apparata vokrug proizvol'noi nepodvizhnoi osi/.  
09 p1609 A69-21760

SOLOVEV, V. S.

 Use of glass corrugations and cold cathodes in laser discharge tubes.  
03 p0435 A69-12981

 Time dependence of the ruby laser spectrum.  
15 p2633 A69-30725

SOLOVEVA, E. N.

 Convergence of difference approximations for optimal control problems /O skhodimosti raznostnykh ap-  
proksimatsii dlia zadach optimal'nogo upravleniia/.  
20 p3509 A69-36989

 Difference approximations in optimal control problems.  
21 p3684 A69-38430

SOLOVEVA, E. V.

 Recombination in intrinsic indium arsenide.  
06 p0979 A69-16997

 Determination of ionization energy of cadmium in indium arsenide.  
06 p0979 A69-16998

 Anomalous Hall effect in indium arsenide /Anomal'nyi effekt Kholla v arsenu indii/.  
09 p1555 A69-21472

 Anomalous Hall effect in indium arsenide.  
15 p2669 A69-30717

SOLOVEVA, I. S.

 Experiments in a television survey of the earth from the "Molniia 1" satellite /Eksperimenty po televizionnoi s'emke zemli so sputnika "Molniia-1"/.  
13 p2292 A69-27729

 Cartography of cloud pictures obtained from the "Molniia 1" satellite /Kartografirovaniye snimkov oblachnosti, poluchennykh so sputnika "Molniia-1"/.  
13 p2292 A69-27730

SOLOVEVA, I. U. N.

 Q-switching of a ruby laser with the aid of an electrooptical LiNbO sub 3 shutter /Modulatsiia dobrotnosti rubinovogo lazera pri pomoshchi elektroopticheskogo zatvora iz LiNbO sub 3/.  
19 p3336 A69-36346

SOLOVEVA, S. N.

 Combined effect of two-month hypokinesia and acceleration on the cardiovascular system.  
02 p0197 A69-11495

SOLOVEVA, V. I.

 Study of the structure of extensive air showers at sea level with the modernized hodoscope system of the Moscow University installation.  
13 p2332 A69-28405

 Phenomenological characteristics of extensive air showers at sea level.  
13 p2332 A69-28406

 Observation of radio emission from extensive air showers with an array of half-wave antennas at the Moscow University installation.  
13 p2332 A69-28407

SOLOVIEV, E. G.

 Frequency transformation in multi-level quantum systems.  
07 p1146 A69-18481

SOLTESZ, R. G.

 Radiation measurements and analysis in a nuclear rocket propellant tank mockup.  
[AIAA PAPER 69-475]  
16 p2810 A69-32716

SOLTYSIAK, J.

 Influence of training on performance capacity of rats and their resistance to altitude hypoxia and acceleration.  
23 p4079 A69-41383

SOLUM, D. F.

 Complex metallographic characterization of wear resistant surface coating.  
13 p2282 A69-28164

SOLYMOSI, F.

 Stability of ammonium halates in the solid state - Kinetic investigation of the thermal decomposition and ignition of ammonium chlorate.  
21 p3669 A69-38800

SOM, N. I.

 Problems of Cosmic Physics. Number 3 - Comets, the Sun, and Interplanetary Space /Problemy Kosmicheskoi Fiziki. Number 3 - Komety, Solntse i Mezplanetnoe Prostranstvo/.  
14 p2522 A69-29703

SOM, S. C.

 Holographic method of a posteriori restoration of images formed by coherent and incoherent light by "spatial frequency retrieval".  
19 p3304 A69-35603

SOMA, G. N.

 A priority interrupt oriented by hybrid executive.  
04 p0567 A69-15350

SOMASHEKAR, B. R.

 Structural damping.  
03 p0523 A69-12947

 Application of matrix displacement methods in the study of panel flutter.  
04 p0676 A69-14707

SOMERLOCK, C. R.

 Cosmic radio noise intensity from 0.45 to 3.0 MHz observed by the ATS II satellite.  
07 p1224 A69-19715

SOMLO, P. I.

 The Australian National Standards Laboratory X-band radiometer for the calibration of noise sources.  
02 p0220 A69-12440

 A high-resolution swept-frequency reflectometer.  
16 p2759 A69-31940

SOMMER, D.

 New implicit Runge-Kutta formulas and possible applications of them /Neue implizite Runge-Kutta-Formeln und deren Anwendungsmoeglichkeiten/.  
08 p1343 A69-20705

SOMMER, S. C.

 An experiment to determine the structure of a planetary atmosphere.  
[AIAA PAPER 68-1054]  
03 p0512 A69-13611

 An experiment to determine the structure of a planetary atmosphere.  
[AIAA PAPER 68-1054]  
21 p3715 A69-39023

SOMMERHALDER, R.

 Analog method for calculating the characteristics of field-effect transistors /Ein Analogverfahren zur Berechnung der Eigenschaften von Feldeffekttransistoren/.  
02 p0215 A69-11781

SOMMERS, A. N.

 A nondemographic factor V/STOL prediction model.  
07 p1244 A69-18967

SOMMERS, H. S., JR.

 Theoretical maximum of the power efficiency of a pulsed injection laser with a Fabry-Perot cavity.  
01 p0089 A69-10119

SOMOV, S. V.

 Measurement of the primary specific ionization in noble gases /Izmerenie pervichnoi udel'noi ionizatsii v blagorodnykh gazakh/.  
10 p1726 A69-23128

SOMS, L. N.

 Angular divergence and transverse modes of a neodymium glass laser with a spherical cavity /Uglovoe raskhozhdenie i poperechnye tipy kolebaniy lazera na neodimovom stekle so sfericheskim rezonatorom/.  
20 p3554 A69-37725

SON, J. S.

 Velocity gradients at the wall for flow around a cylinder at Reynolds numbers from 5 x 10 super 3 to 10 super 5.  
11 p1872 A69-25132

 Numerical solution for the flow around a cylinder at Reynolds numbers of 40, 200 and 500.  
11 p1872 A69-25133

SON, P.

 Diffusion of carbon in tantalum, niobium and vanadium.  
11 p1906 A69-25575

SONA, A.

 An argon-ion laser with a mercury pool cathode.  
12 p2107 A69-26326

 Interaction mechanisms of laser transitions in argon and krypton ion laser.  
13 p2270 A69-27204

SONCINI, G.

 Stimulated photon-electron scattering.  
[IEEE PAPER S-9]  
07 p1154 A69-19081

SONDHAUS, C. A.

 Effects of acute exposure to high-energy protons in primates.  
03 p0374 A69-13498

SONDHAUSS, C.

 The step-recovery diode and its mode of operation as a frequency multiplier /Die Speicher-Schaltodiode und ihre Wirkungsweise als Frequenzvervielfacher/.  
21 p3684 A69-39736

SONECHKIN, D.

 An electronic computer recognizes clouds /Elektronnaia mashina opoznaet oblaka/.  
22 p3977 A69-40004

SONECHKIN, D. M.

 An electronic computer recognizes clouds.  
[UN PAPER 68-95759]  
06 p0950 A69-17060

 Statistical structure of outgoing radiation fields /O statisticheskoi strukture polei ukhodiashech radiatsii/.  
11 p1913 A69-24832

 Computer analysis of infrared cloud images obtained from the Cosmos 122 satellite /Mashinnyi analiz infrakrasnykh izobrazhenii oblachnosti, poluchennykh so sputnika "Kosmos-122"/.  
11 p1884 A69-24833

 Objective methods of cloud diagnostics /Ob'ektivnye metody diagnoza oblachnosti/.  
13 p2291 A69-27728

- Experiments in a television survey of the earth from the "Molniia 1" satellite /Eksperimenty po televizionnoi s'emke zemli so sputnika "Molniia-1"/.  
13 p2292 A69-27729
- Correlation functions and the spectral densities of the intensity of outgoing radiation in the spectral range from 0.6 to 0.8 micron /according to Cosmos 45 satellite measurements/ /Korrelatsionnye funktsii i spektral'nye plotnosti intensivnosti ukhodiaschego izlucheniia v intervalle spektra 0,6-0,8 mkm /po izmereniam so sputnika "Kosmos-45"/.  
19 p3366 A69-36672
- SONETT, C. P.**  
The cislunar geomagnetic tail gradient in 1967.  
01 p0077 A69-11237
- Magnetometer experiment.  
[AAS PAPER 68-206] 02 p0312 A69-11481
- The geomagnetic tail - Topology, reconnection and interaction with the moon.  
07 p1128 A69-19365
- Neutral points and magnetic-field reconnection.  
16 p2846 A69-31596
- Resonant spin states and the anomalous rotation of Mercury.  
21 p3814 A69-39568
- Interplanetary shock waves. I - Gross structure.  
23 p4222 A69-42394
- MHD Rankine-Hugoniot equations applied to earth's bow shock.  
23 p4222 A69-42417
- SONG, C. C. S.**  
Numerical integration of a double integral with Cauchy-type singularity.  
23 p4182 A69-41913
- SONG, M. S.**  
Conformal change in Einstein's 'g super lambda super upilon -unified field theory. I.  
03 p0467 A69-13756
- SONG, S. H.**  
Alveolar to mixed venous P sub CO sub 2 difference under conditions of no gas exchange.  
22 p3885 A69-40976
- SONIN, A. A.**  
A laboratory study of the electrodynamic influences on the wakes of ionospheric satellites.  
[AIAA PAPER 69-673] 17 p2893 A69-33488
- Calibration and use of electrostatic probes for hypersonic wake diagnostics.  
19 p3291 A69-35717
- SONIN, E. B.**  
Deviations from a Maxwellian electron energy distribution in a weakly ionized plasma.  
10 p1739 A69-23628
- Theory of the low-voltage arc in the cesium thermionic converter.  
14 p2401 A69-29231
- SONKIN, V. A.**  
Attachment for testing materials for delayed rupture.  
04 p0674 A69-14541
- SONNENBERG, H.**  
Effect of acceptor density on photoemission from p-GaAs-Cs and -Cs sub 2 O.  
23 p4198 A69-41548
- SONNEBLICK, E. H.**  
Effects of altered loading on contractile events in isolated cat papillary muscle.  
24 p4258 A69-42631
- SONNERUP, B. U. O.**  
Acceleration of particles reflected at a shock front.  
09 p1577 A69-21714
- Nature of the rotational discontinuity.  
11 p1923 A69-24293
- Resonant vibration of the magnetosphere observed from Explorer 26.  
14 p2434 A69-28947
- SONNEWEND, G.**  
Pneumatic diode function generator for simulating nonlinear control systems /Pneumatikus diodas fuegvenygenerator nemlinearis szabalyozasi modellezesehez/.  
11 p1858 A69-24580
- SONNTAG, R. W., JR.**  
Urinary excretion of catecholamines and 17-hydroxycorticosteroids following plus G sub x impact in humans.  
06 p0875 A69-17839
- SONSTEGARD, D. A.**  
Effects of a surrounding fluid on the free, axisymmetric vibrations of thin elastic spherical shells.  
09 p1613 A69-21720
- SONTOWSKI, J. F.**  
Evaluation of several eddy viscosity models through comparison with measurements in hypersonic flows.  
[AIAA PAPER 69-688] 17 p2954 A69-33454
- SONU, C. J.**  
Tethered balloon for study of coastal dynamics.  
22 p3865 A69-40808
- SOO, P.**  
Strain aging of niobium in the temperature range 100 to 200 deg C.  
15 p2636 A69-30194
- SOO, S. L.**  
Heat transfer processes of particulate suspensions.  
13 p2377 A69-28151
- SOOD, R. K.**  
Detection of high energy gamma-rays from the galactic disk at balloon altitudes.  
15 p2675 A69-30695
- SOONG, T. T.**  
An extension of the moment method in statistical estimation.  
24 p4342 A69-43704
- SOONG, T.-C.**  
Buckling of cylindrical shells with eccentric spiral-type stiffeners.  
04 p0676 A69-14710
- Maximum stress of a stiffened circular cylinder under bending.  
11 p1987 A69-25380
- Remarks on the buckled shapes of thin-walled circular cylindrical and conical shells subjected to axial compression.  
19 p3443 A69-36793
- SOOS, E.**  
Reciprocity theorems for elastic and thermo-elastic materials with micro-structure.  
09 p1618 A69-22259
- Some applications of the theorem on reciprocity for an elastic and thermo-elastic material with micro-structure.  
09 p1618 A69-22260
- SOOVIK, T. A.**  
Photosimulation of the electron-hole and exciton mechanisms of NaI-Tl and KI-Tl single-crystal scintillations /Fotomodelirovanie elektronno-dyrochnogo i eksitonogo mekhanizmov stsintillatsii v kristallakh NaI-Tli KJ-Tli/.  
12 p2144 A69-26722
- Selective photon modeling of both the electron/hole-induced and the exciton-induced scintillation mechanisms in NaI-Tl and KI-Tl crystals.  
21 p3781 A69-39135
- SOPHER, R.**  
Three-dimensional potential flow past the surface of a rotor blade.  
[AHS PAPER 324] 17 p2895 A69-33537
- SOPHER, R. L.**  
Renal pathology of acute methylhydrazine intoxication in dogs.  
06 p0883 A69-17847
- Pathology of normobaric oxygen toxicity in primates.  
21 p3660 A69-39179
- SOPIN, E. F.**  
Cholesterol-protein metabolism under normal conditions and during radiation damage /Obmen kholesterin-proteidov v norme i pri lucheovom porazhenii/.  
21 p3657 A69-39052
- SORA, C.**  
A system of parameters of the electric quadrupole /Sur un systeme de parametres du quadripole electrique/.  
04 p0579 A69-15228
- SORASS, F.**  
Measurement of medium-energy protons /Experiment S.71C/.  
13 p2328 A69-27756
- SORENSEN, A., JR.**  
A general theory of fatigue damage accumulation.  
[ASME PAPER 68-WA/MET-6] 05 p0838 A69-16149
- A general theory of fatigue damage accumulation.  
[ASME PAPER 68-WA/MET-6] 14 p2535 A69-29436
- SORENSEN, E. R.**  
Nondimensional plots in nonlinear vibrations.  
[ASME PAPER 68-WA/DE-7] 05 p0839 A69-16172
- SORENSEN, N. E.**  
Study of a family of supersonic inlet systems.  
[AIAA PAPER 68-580] 17 p3022 A69-34018
- SORENSEN, R. G.**  
Nonmesonic decay of hydrogen hyperfragments.  
12 p2133 A69-26298
- SORENSEN, S. C.**  
Ventilatory response to a single breath of CO sub 2 in O sub 2 in normal man at sea level and high altitude.  
22 p3890 A69-40207
- SORENSEN, H. W.**  
Controllability and observability of linear, stochastic, time-discrete control systems.  
04 p0581 A69-14569
- On the treatment of inertial measurement unit data in optimal linear navigation policies.  
14 p2479 A69-29487
- SORENSEN, P. H.**  
Fluidic resistors.  
05 p0705 A69-16011
- SORG, H.**  
Theory of the gyrovibrator.  
01 p0083 A69-11004
- SORGER, P.**  
Stability of bifurcation solutions of a hydrodynamic boundary-value problem /Stabilitaet von Verzweigungslösungen der hydrodynamischen Randwertaufgabe/.  
10 p1677 A69-22901
- Branching analysis for the Taylor problem.  
17 p2958 A69-34152
- Branching solutions of the Benard problem.  
19 p3301 A69-36791
- SORKIN, I. J.**  
A frequency assignment guide for tactical FM radios in the 30- to 76-MHz frequency band.  
23 p4126 A69-42229
- SORKIN, L. I.**  
Calculation of the noise characteristics of jet air-liners.  
09 p1435 A69-22637
- SORM, F.**  
Radioprotective effect of 5-azacytidine in AKR mice.  
23 p4080 A69-41429
- SOROCHENKO, R. L.**  
Radiometer with a paramagnetic quantum amplifier for spectral measurements in the 8 mm range /Radiometr dlia spektral'nykh izmerenii v diapazone 8 mm s kvantovym paramagnitnym usilitелеm/.  
04 p0597 A69-14851
- Detection of the galactic radio line H56 alpha - The first radio line observed in the millimeter band.  
08 p1397 A69-20771
- Detection of radio-frequency spectral lines of excited hydrogen, caused by n goes to n - 1 type transitions for n equals 91 /Obnaruzhenie radiolinnii vozbuzhdenного vodoroda, obuslovennoi perekhodami tipa n goes to n - 1 dlia n equals 91/.  
13 p2353 A69-28433
- Radiometer for spectral measurements in the 8-mm range with a quantum paramagnetic amplifier.  
15 p2607 A69-30243
- Study of the radio lines of excited hydrogen /Izuchenie radiolinnii vozbuzhdenного vodoroda/.  
15 p2682 A69-30502
- Relation between the discrete radio source W 43 and neutral hydrogen /Sviaz' diskretnogo istochnika radioizlucheniia W 43 s neutral'nym vodorodom/.  
15 p2687 A69-30543
- SOROKIN, A. G.**  
Method for the investigation of heat transfer from wall to gas at high wall temperatures.  
18 p3229 A69-34712
- SOROKIN, N. M.**  
Theory of conductivity of plasma media in crossed electric and magnetic fields /K teorii provodimosti plazmennyykh sred v skreshchennykh elektricheskoi i magnitnom poliakh/.  
09 p1546 A69-21565
- SOROKIN, O. M.**  
Determination of the absolute sensitivity of the UTs-3 photographic emulsion to vacuum ultraviolet.  
07 p1136 A69-19620
- SOROKIN, P.**  
Organic lasers.  
07 p1149 A69-18908
- SOROKIN, V. K.**  
Mechanism of epitaxial growth of PbTe on KCl.  
10 p1745 A69-23323



## SOROKIN, V. N.

Substructural step-by-step transitions at the early stages of epitaxial growth of PbTe on NaCl.  
12 p2144 A69-26675

## SOROKIN, V. N.

Motion of a particle in a turbulence chamber /O dvizhenii chastitsy v vikhrevoi kamere/.  
07 p1181 A69-19000

## SOROKIN, V. V.

Compressibility effect in stability problems of elastoplastic plates and shells.  
16 p2875 A69-32292

## SOROKINA, I. U. G.

Effect of the number and size of gamma'-particles on the long-term strength of Ni-Cr-Al-Ti alloys.  
04 p0616 A69-14651

## SOROKINA, V. M.

Experimental verification of the concept of equivalent pressure in a hot mercury arc.  
03 p0478 A69-13843

## SORRELL, F. Y.

Shock and current-sheet separation in magnetic shock tubes.  
20 p3511 A69-38241

## SORRELLS, A. R.

The great promise of zero G.  
18 p3206 A69-35490

## SOS, J. Y.

Delta-T curves for measuring magnetic tape link jitter.  
07 p1132 A69-18827

The signal-to-noise ratio estimation techniques for PCM signals.  
07 p1083 A69-19122

Data handling equipment requirements for convolutional PCM telemetry.  
19 p3273 A69-36267

## SOSEDOV, I. B.

Optical oscillator with an injection GaAs diode and a closed cycle cooling system.  
05 p0777 A69-16793

## SOSHO, A. I.

The character of the influence of surface-active media on the strength of polymethyl methacrylate.  
09 p1528 A69-21852

## SOSHNIKOV, V. N.

Theory of a helical discharge /skin effect/ at atmospheric pressure in air and argon /Teoriia vikhrevo razriada /skin-effekta/ pri atmosfernom davlenii v vozduke i argone/.  
12 p2140 A69-27122

A helical discharge in argon at atmospheric pressure with injection /Vikhrevoi razriad v argone pri atmosfernom davlenii s produmov/.  
12 p2141 A69-27131

Dynamics of a model of the relative motion of a spacecraft and an astronaut during an approach with the aid of a tether /O dinamike odnoi modeli otositel'nogo dvizhenia korablia i kosmonavta pri blizhenii s pomoshch'iu trosa/.  
15 p2696 A69-31064

Dynamics of the movement of an astronaut toward a spacecraft with the aid of a tether, and a principle of spacecraft control synthesis based on the theory of systems with a variable structure /Dinamika peremeshchenii kosmonavta k korabliu s pomoshch'iu trosa i printsip sinteza upravleniia korabl'em, osnovanyi na teorii sistem s peremennoi strukturoi/.  
21 p3667 A69-39630

## SOSKA, F.

Relations between derivatives of thermodynamic quantities /Vztahy mezi derivacemi termodynamickych velicin/.  
22 p4051 A69-40970

## SOSKIN, M. S.

Nonlinear influence of losses on stimulated emission processes /O nelineinom vliianii poter' na protsessy vynuzhdennoho izlucheniia/.  
03 p0439 A69-13058

Dispersive resonators for laser frequency tuning.  
05 p0777 A69-16371

Field genesis and structure in ruby and neodymium lasers with inclined external mirrors.  
09 p1520 A69-22663

Holographic reconstruction of the spatial distribution of a laser light field /Golografichne vidnovlennia prostorovogo rozpodilu svitlovoho polia OKG/.  
11 p1885 A69-24919

Energy exchange between active centers in glass /Ob ohmene energiei mezhdru aktivnymi tsentrami v stekle/.  
15 p2632 A69-30053

Special features of generation self-cutoff in the spherical resonator of a ruby laser.  
18 p3152 A69-35026

Mechanism of the self-disruption of ruby laser action /O mekhanizme avtosryva generatsii rubinovogo OKG/.  
19 p3331 A69-35863

The problem of the frequency modulation of the emission of solid-state lasers and the experimental realization of the frequency scanning of ruby and neodymium-glass lasers during the lasing process /Problema chastotnoi modulatsii izlucheniia tverdotel'nykh lazerov i eksperimental'noe osushchestvlenie skanirvaniia chastoty rubinovogo i neodimovogo OKG v protsesse generatsii/.  
19 p3331 A69-35864

Smooth retuning and control of the lasing frequency of solid-state lasers /Plavnaia perestroika i kontrol' chastot generatsii tverdotel'nykh lazerov/.  
19 p3331 A69-35865

Holographic method of transforming coherent light fields /Golograficheskii metod preobrazovaniia kogerentnykh svetovykh polei/.  
22 p3950 A69-41115

## SOSKOVA, I. N.

Study of the influence of the temperature factor on the transition from a laminar to a turbulent flow regime in the boundary layer /Issledovanie vliianiia temperatur'nogo faktora na perekhod ot laminarnogo k turbulentnomu rezhimu tekheniia v pogranichnom sloe/.  
13 p2251 A69-28558

## SOSNIN, A. V.

Transparency of the atmospheric boundary layer to laser emissions in the infrared region of the spectrum /Prozrachnost' prizemnogo sloia atmosfery dlia izlucheniia nekotorykh OKG v infrakrasnoi oblasti spektra/.  
12 p2028 A69-25957

## SOSNOVA, A. K.

Reflection of radio waves from meteor trails. I - Reflection coefficients.  
12 p2031 A69-26691

Reflection of radio waves from meteor trails. II - Diffraction patterns /Otrazhenie radiovoln ot meteornykh sledov. II - Difraktsionnye kartiny/.  
23 p4214 A69-41846

## SOSNOVETS, E. N.

Radial diffusion of electrons of energy greater than 100 kev in the outer radiation belt.  
06 p0919 A69-17720

Particle fluxes in the outer geomagnetic field.  
12 p2150 A69-26744

## SOSNOVSKII, A. A.

Fundamentals of Electronics and Radio Instrumentation of Flight Vehicles /Osnovy radioelektroniki i radiooborudovanie letatel'nykh apparatov/.  
09 p1463 A69-21930

Effect of correlated random signals with different spectral widths on a subtractor /Vozeistvie na vychitaushchee ustroistvo korrelirovannykh sluchainykh signalov s razlichnoi shirinoy spektra/.  
15 p2572 A69-30346

Pulsed process with a determinate repetition period and simultaneous amplitude and duration modulation by correlated random processes /Impul'snyi protsess s determinirovannym taktovm intervalom pri odnovremennom modulatsii po amplitude i dlitel'nosti korrelirovannymi sluchainymi protsessami/.  
15 p2567 A69-30347

## SOSNOWSKI, T. P.

Frequency shifts of the Lamb dip minimum in the helium-neon laser.  
14 p2457 A69-28929

## SOSULIN, I. U. G.

Detection of weak coherent signals in correlated non-Gaussian noise /Obnaruzhenie slabnykh kogerentnykh signalov v korrelirovannykh negaussovykh pomekakh/.  
09 p1456 A69-22286

Detection of deterministic signals against a background of non-Gaussian noise /Obnaruzhenie determinirovannykh signalov na fone negaussovykh pomekh/.  
15 p2567 A69-30340

## SOTNICHENKO, A. L.

Investigation of the processes of strain aging the SAV-1 alloy /Issledovanie protsessov deformatsionnogo starenii splaya SAV-1/.  
04 p0614 A69-14575

Strain aging processes in alloy SAV-1.  
15 p2638 A69-30276

## SOTNIKOV, D. I.

Experimental investigation of the stability of smooth cylindrical shells of various scales under axial compression /Eksperimental'noe issledovanie ustoiichivosti gladkikh tsilindricheskikh obolochek razlichnykh masshtabov pri osevom szhati/.  
04 p0680 A69-14929

## SOTNIKOV, G. G.

A comparative evaluation of different methods for detection of extraterrestrial life.  
01 p0021 A69-11093

## SOTNIKOV, V. M.

Generalized quantum yield of multistage electrooptical converters /Obobshchennyi kvantovyi vykhod mnogokaskadnykh elektronno-opticheskikh preobrazovatelei/.  
14 p2496 A69-29788

## SOTSKOV, B. M.

Designing time compressors for accelerated spectral analyzers using electron-beam tubes with charge storage /Postroenie vremennykh szhimatelei uskorenykh spektroanalizatorov na elektron-noluchevykh trubkakh nakopleniem zariadov/.  
15 p2576 A69-30351

## SOTTER, J. G.

Resonant combustion in rockets.  
02 p0305 A69-12494

Injector response to strong, high-frequency pressure oscillations.  
21 p3786 A69-39235

## SOUBBARAMAYER

Laminar mass convection in a porous tube with wall suction /Convection de masse laminaire dans un tube poreux avec aspiration parietale/.  
05 p0744 A69-15618

## SOUBIROU, J.

Optimization of a stabilization system using flywheels desaturated by magnetic action /Optimisation d'un systeme de stabilisation a volants desatures par action magnetique/.  
17 p3049 A69-33241

## SOUBRIER, A.

French stratospheric balloons and the launching center at Aire-sur-l'Adour /Les ballons stratospheriques francais et le centre de lancement d'Aire-sur-l'Adour/.  
16 p2734 A69-31759

## SOUCHET, R.

The two fundamental problems of plane elastostatics with stress couples /Sur les deux problemes fondamentaux de l'elastostatique plane avec couples de contrainte/.  
07 p1233 A69-19328

## SOUDER, W. E.

The validity of subjective probability of success forecasts by R and D project managers.  
15 p2721 A69-31072

## SOUFFRIN, S.

Study of the nuclei of the Seyfert galaxies. II - Physical conditions /Etude des noyaux des galaxies de Seyfert. II - Conditions physiques/.  
09 p1596 A69-22056

Study of Seyfert galaxies. III - Ionization mechanism /Etude des galaxies de Seyfert. III - Mecanisme d'ionisation/.  
13 p2346 A69-27710

## SOULE, H.

Logistics aircraft - Emphasis switches to intratheater supply.  
07 p1053 A69-19177

## SOULE, P. W.

Precise navigation over wide areas using satellites.  
15 p2650 A69-30088

## SOULEN, J. R.

New sulfide addition agents for lubricant materials.  
01 p0102 A69-10907

## SOULES, S. D.

Two tropical storms viewed by Apollo 7.  
10 p1722 A69-22944

## SOULEZ-LARIVIERE, J.

The vertical takeoff and landing /VTOL/ transport aircraft - Today's dream or tomorrow's reality /L'avion de transport a decollage et atterrissage verticaux /ADAV/- reve d'aujourd'hui ou realite de demain/.  
24 p4250 A69-42564

## SOULIER, C.

Measurements in a wind-tunnel of the drag of the rear parts of aircraft models.  
02 p0226 A69-11624

- SOMERSKA, T.**  
The effect of ionizing radiation on haemolytic plaques forming spleen cells upon using certain chemical radioprotectors.  
13 p2210 A69-28334
- SOUNDALGEKAR, V. M.**  
Heat transfer in crossed-fields MHD Couette flow.  
03 p0476 A69-13306
- SOUPRUNENKO, V. A.**  
Collective interactions in a fast thiatron discharge.  
09 p1552 A69-22046  
High-speed shock-wave investigation in rarefied gas.  
14 p2433 A69-29846
- SOUQUET, J.**  
Onboard microthrusters state of development and comparative analysis of - Fields of utilization / Les micropulseurs embarques - Etat d'avancement et analyse comparative des domaines d'utilisation/.  
17 p3019 A69-33336
- SOURANDER, P.**  
Histology of the surgical radiolesion in the human brain as produced by high-energy protons.  
03 p0374 A69-13501
- SOUTH, F. E.**  
Sleep, hibernation and hypothermia in the yellow-bellied marmot /M. flaviventris/.  
10 p1643 A69-23122
- SOUTH, J. C., JR.**  
New features of the method of integral relations for the blunt body problem.  
09 p1430 A69-21972
- SOUTHGATE, P.**  
Simulation as a tool in the evolution of a new flight test data system.  
05 p0743 A69-16759
- SOUTHGATE, P. D.**  
Field dependence of recombination radiation from bulk-ionized semiconductors.  
23 p4198 A69-41499
- SOUTHWARD, H. D.**  
Radiation effects upon gallium arsenide devices.  
06 p0978 A69-16890
- SOUTHWOOD, D. J.**  
Bounce resonant interaction between pulsations and trapped particles.  
12 p2073 A69-26946
- SOUTHWORTH, H. L.**  
Thermal nondestructive testing with cholesteric liquid crystals.  
15 p2631 A69-31507
- SOUVOROV, E. V.**  
Concerning Fung's letter "Two methods of solving the radiative instability problem of a stream-plasma system in the kinetic regime."  
14 p2502 A69-29960
- SOVA, G. J.**  
Asymptotic solutions for heat conduction in radiating shells subject to discontinuous solar flux.  
24 p4416 A69-43689
- SOVA, J.**  
Genetic background of circadian rhythms.  
04 p0553 A69-15152
- SOVIE, R. J.**  
The effect of background pressure and magnetic field shape on MPD thruster performance.  
[AIAA PAPER 69-243] 09 p1564 A69-21239  
A study of the axial velocities in an ammonia MPD thruster.  
16 p2835 A69-31890
- SOVRANO, R.**  
Study of the wave configurations in supersonic compressors by hydraulic analogy /Etude par analogie hydraulique de la configuration d'ondes dans les compresseurs supersoniques/.  
[ONERA-TP-598] 02 p0187 A69-11621  
Contribution to the study of supersonic compressors - Wave configurations obtained by hydraulic analogy /Contribution a l'etude des compresseurs supersoniques - Configurations d'ondes obtenues par analogie hydraulique/.  
[ONERA-TP-669] 05 p0699 A69-16340
- SOWA, E. S.**  
The laser microprobe applied to investigation of sodium penetration into stainless steel.  
18 p3154 A69-35473
- SOWA, W. A.**  
Apparatus for the precision measurement of internal friction.  
03 p0428 A69-13108
- SPECIAL Semiconductor Devices.**  
09 p1462 A69-21638
- SOWERBY, L.**  
Thermal boundary layer on a hot gas bubble in a time-varying chemically reactive stream.  
01 p0058 A69-10162
- SOWERBY, R.**  
Large deformation of time-dependent materials in uniaxial tension.  
19 p3445 A69-36829
- SOWERS, H.**  
Drag analyses of powered nacelle fan jet engine model test.  
13 p2199 A69-27446
- SOX, C.**  
Computer program to predict heat transfer through glass.  
[AIAA PAPER 68-65] 13 p2378 A69-28215
- SOZOU, C.**  
A self consistent ring current in the earth's dipole field.  
12 p2151 A69-26948  
Adiabatic transverse modes in a uniformly rotating fluid.  
14 p2431 A69-29581  
Non-linear symmetric inflation of a magnetic dipole.  
16 p2776 A69-32096
- SPACIL, H. S.**  
Oxygen isotope separation in zirconia electrolyte cells.  
15 p2552 A69-30701  
Cathode materials and performance in high-temperature zirconia electrolyte fuel cells.  
22 p3869 A69-40734
- SPACU, P.**  
E.S.R. spectra of some molybdenum IV/ polycrystalline complexes.  
22 p3897 A69-40971
- SPADA, G.**  
Low-energy X-ray spectra of SCO X-1 and four Sagittarius sources.  
09 p1574 A69-21460
- SPADACCINI, L. J.**  
Analytical investigation of the effects of vitiated air contamination on combustion and hypersonic air-breathing engine ground tests.  
[AIAA PAPER 69-338] 13 p2325 A69-28274  
The effect of vitiated air contamination on ground testing.  
[AIAA PAPER 69-456] 19 p3448 A69-36333  
Combustion of solid fuels in a high-temperature supersonic airstream.  
24 p4414 A69-43569
- SPADIN, P.**  
Laser beam directed at the lunar retro-reflector array - Observations of the first returns.  
24 p4384 A69-43197
- SPAEDER, C. E., JR.**  
New steel has cryogenic potential.  
18 p3158 A69-35417  
High-strength austenitic stainless steel for cryogenic service.  
23 p4175 A69-41475
- SPAID, F. W.**  
The drag of small protuberances immersed in a turbulent boundary layer.  
16 p2771 A69-31920
- SPAID, W. L.**  
A new concept of successive approximation for an integrated analog to digital converter.  
17 p2934 A69-34124
- SPAKOWSKI, A. E.**  
Observations on CdS solar cell stability.  
03 p0367 A69-13074
- SPALDING, D. B.**  
A theory of the turbulent boundary layer.  
02 p0231 A69-11987  
Heat and Mass Transfer in Recirculating Flows.  
21 p3691 A69-38333  
A general method for predicting friction, heat transfer and mass transfer in two-dimensional boundary layers.  
22 p3932 A69-40939
- SPALVINS, T.**  
Deposition of MoS sub 2 films by physical sputtering and their lubrication properties in vacuum.  
[ASLE PAPER 68-LC-15] 07 p1140 A69-19308  
Energetics in vacuum deposition methods for depositing solid film lubricants.  
14 p2454 A69-29001
- Sputtering of solid lubricants.**  
24 p4321 A69-43126
- SPANGLER, C. W.**  
Hydrocarbon formation under exploding wire conditions.  
01 p0120 A69-10675  
Apparatus with electronic crowbar for chemical investigations of exploding wire phenomena.  
01 p0081 A69-10680
- SPANGLER, J. G.**  
Studies of viscous drag reduction with polymers including turbulence measurements and roughness effects.  
17 p2951 A69-33252
- SPANGLER, S. B.**  
Review of methods for predicting the aerodynamic characteristics of parawings.  
[AIAA PAPER 68-10] 01 p0007 A69-11027
- SPANN, R. N.**  
Diagnosis of single-gate failures in combinational circuits.  
15 p2583 A69-31112
- SPANNAGEL, G.**  
Radiation ages of chondrites.  
19 p3412 A69-36102
- SPANO, L. A.**  
Experimental study of a passive thermal control system for space suits.  
12 p2023 A69-26549
- SPARHAWK, H. E.**  
Ablative heat shields for planetary entry vehicles.  
02 p0333 A69-11750
- SPARKES, J. J.**  
Pattern recognition and a model of the brain.  
24 p4273 A69-42909
- SPARKS, R. B.**  
The effect of macro /prior beta/ grain size on the fatigue of Ti-6Al-4V forgings.  
[AIME PAPER S69-2] 21 p3732 A69-39470
- SPARKS, R. H.**  
Integral electronic charge controls for high performance secondary batteries.  
23 p4076 A69-42542
- SPARKS, W. M.**  
Dynamical models of novae.  
15 p2692 A69-30769
- SPARROW, A. H.**  
Radiobiological studies of plants orbited in Biosatellite II.  
15 p2556 A69-31321
- SPARROW, E. M.**  
Deviations from classical free convection boundary-layer theory at low Prandtl numbers.  
01 p0177 A69-11409  
Heat transfer - A review of current literature.  
04 p0684 A69-14354  
Binary, gravity-flow film condensation.  
[ASME PAPER 68-WA/HT-21] 05 p0847 A69-16124  
Heat transfer bibliography.  
06 p1033 A69-17558  
Heat transfer bibliography.  
13 p2379 A69-28341  
Free convection from a plane vertical surface with a non-horizontal leading edge.  
13 p2379 A69-28342  
Mutually dependent heat and mass transfer in laminar duct flow.  
15 p2716 A69-30004  
Solution of heat transfer problems by orthonormalization methods.  
18 p3229 A69-34662  
Longitudinal vortices in natural convection flow on inclined plates.  
18 p3124 A69-35383  
Turbulent flow, heat transfer, and mass transfer in a tube with surface suction.  
[ASME PAPER 69-HT-4] 24 p4414 A69-43562
- SPARROW, J. G.**  
OSO-B2 satellite observations of zodiacal light.  
02 p0245 A69-12718
- SPASKII, R. O.**  
Different kinds of conditions of absolute invariance of certain nonlinear systems of differential equations /Pro rizni vid umov absolutnoi invariantnosti nelineinikh sistem differentsial'nikh ravnaniy/.  
23 p4183 A69-42372



## SPASOV, A. IA.

Differential equations of a single-loop parametric amplifier /Differentsial'nye uravneniia odnokonturnogo parametricheskogo usilitelia/.  
13 p2234 A69-28329

## SPAUSCHUS, H. O.

Effect of environment on electrical properties of polymeric insulation.  
13 p2285 A69-27985

## SPEAKE, A.

Application of bionics to spacecraft energy allocation.  
07 p1058 A69-18389

## SPEAKMAN, E. R.

Fatigue life improvement through stress coining methods.  
[AIAA PAPER 69-761] 19 p3433 A69-35659

## SPEAR, A. J.

A high-rate telemetry system for the Mariner 1969 mission.  
07 p1083 A69-19125

## SPEAR, E. E.

Spacecraft sizing technique for planetary missions.  
[AIAA PAPER 69-125] 06 p1018 A69-18076  
Spacecraft sizing technique for planetary missions.  
[AIAA PAPER 69-125] 21 p3828 A69-39770

## SPEARS, D. L.

Flux-dependent aspects of the evolution of acoustoelectric domains in n-GaAs.  
05 p0806 A69-15815

## SPECHT, H.

Auroral-zone X-ray measurements obtained by simultaneous balloon flights in Northern Scandinavia in 1967.  
05 p0813 A69-15822

Measurements of auroral-zone X-rays with balloon borne instruments at Kiruna/Sweden in 1968.  
21 p3791 A69-39252

## SPEECHLEY, J.

Westland inter-city VTOL.  
13 p2203 A69-28355

## SPEIDEL, M. O.

Interaction of dislocations with precipitates in high strength aluminum alloys and susceptibility to stress corrosion cracking.  
19 p3351 A69-36898

## SPEIDEL, T.

Large cylindrical thermionic diode with rhenium emitter for diode kinetic experiments.  
09 p1438 A69-21818

## SPEIDEL, T. O.

Fixed-space planar thermionic diode with collector guard ring.  
09 p1438 A69-21815

## SPEIGHTS, W. F., JR.

Effect of load admittance on the low-pass characteristics of distributed RC lines.  
11 p1839 A69-24939

## SPEISER, T. W.

Electromagnetic noise in the current sheet in the geomagnetic tail.  
[AFRL-69-0395] 16 p2781 A69-32317  
Some recent results using the Dungey model.  
21 p3711 A69-38511

## SPELLMIRE, R. J.

Radar detector for survivors.  
06 p0878 A69-16964

## SPENCE, D. C.

Effects of mission environments on the mechanical properties of dacron parachute material.  
[AIAA PAPER 69-1018] 22 p3923 A69-40390

## SPENCER, A. J. M.

Finite axisymmetric deformations of an initially cylindrical elastic membrane.  
08 p1418 A69-21001

## SPENCER, B., JR.

Aerodynamic and flight characteristics of several variable geometry entry spacecraft during subsonic wing deployment and landing.  
[AIAA PAPER 69-742] 18 p3084 A69-34407

## SPENCER, M. P.

Experiments on decompression bubbles in the circulation using ultrasonic and electromagnetic flowmeters.  
21 p3663 A69-38914

Pharmacologic agents in the prevention of decompression sickness.  
21 p3655 A69-38917

## SPENCER, N. W.

Planetary atmosphere mass spectrometry.  
[AAS PAPER 68-183] 02 p0247 A69-11468  
Temperatures of the earth's upper atmosphere.  
04 p0592 A69-14975

## SPENCER, P. J.

Thermodynamic analysis of dilute ternary systems. II - The Ag-Cu-Sn system.  
13 p2279 A69-27759  
Thermodynamic analysis of dilute ternary systems. III - The Au-Cu-Sn system.  
17 p2987 A69-33077

## SPENCER, R. E.

Radio pulses from cosmic ray air showers at 44, 105, 239 and 408 MHz.  
13 p2333 A69-28471

## SPENCER, R. H.

The effect of noise regulations on VTOL aircraft of the future.  
01 p0009 A69-10421

## SPENCER, R. L.

Lunar surface mechanical properties.  
02 p0321 A69-12225

## SPENCER, W. O.

A preliminary evaluation of a low-altitude turbulence model based on A6A gust data.  
01 p0056 A69-11053

## SPENGLER, G.

Hypergolic filling materials for solid fuels consisting of hybrid propellant combinations /Hypergole Fuellstoffe fuer Festbrennstoffe lithergole Treibstoffkombinationen/.  
10 p1753 A69-24023

Fuels for flight speeds up to Mach 3.5 /Kraftstoffe fuer Flugeschwindigkeiten bis Mach 3,5/.  
11 p1941 A69-25422

Thermodynamic calculations of rocket propellant performance data. VII - Lithium- and halogen-containing hybrid fuel systems /Thermodynamische Berechnung der Leistungsdaten von Raketentreibstoffen. VII - Lithium- und halogenhaltige lithergole Systeme/.  
22 p3997 A69-39919

## SPENNY, C. H.

A survey of structural flexibility effects on spacecraft control systems.  
[AIAA PAPER 69-116] 06 p1019 A69-18187  
Minimizing spacecraft structure control-system interaction.  
11 p1967 A69-25500

## SPERA, D. A.

The calculation of thermal-fatigue life based on accumulated creep damage.  
13 p2365 A69-28252

## SPERANSKAIA, A. A.

Laboratory study of the statistical characteristics of the initial stage of wave development /Laboratornoe issledovanie statisticheskikh kharakteristik nachal'noi stadii razvivaiushchegosia volneniia/.  
18 p3167 A69-35341

## SPERLING, F. B.

Design and analysis of the Surveyor landing shock attenuation system.  
[ASME PAPER 69-DE-54] 14 p2530 A69-28848

## SPERLING, H. J.

A first-order theory for the rotational motion of a triaxial rigid body orbiting an oblate primary.  
16 p2861 A69-32240

## SPERRY, P. R.

The relationship between structure and susceptibility to stress corrosion in aluminum-magnesium alloys.  
19 p3350 A69-36896

## SPEYER, J. L.

The separation computation of arcs for optimal flight paths with state variable inequality constraints.  
19 p3399 A69-35667

## SPICER, D. R.

Apparatus for impact testing of fluorinating agents.  
06 p0907 A69-17876

## SPICER, P.

Seen through a hologram darkly.  
08 p1312 A69-19894

## SPICER, W. E.

Spectral analysis of photoemissive yields in GaAs and related crystals.  
01 p0140 A69-11254

Photoemission study of the electronic structure of ZnTe.  
03 p0493 A69-14239

## SPIEGEL, E. A.

On the flow of gas from the galactic center.  
09 p1599 A69-2211

## Semiconvection.

15 p2681 A69-3041

## Fluidization on the moon/ques/.

23 p4221 A69-4251

## SPIEGEL, J. M.

Simulation of Venus atmospheric entry by earth reentry.  
[AIAA PAPER 68-1148] 03 p0412 A69-13476

Simulation of Venus atmospheric entry by earth reentry.  
[AIAA PAPER 68-1148] 24 p4394 A69-43242

## SPIEGLER, D. B.

An objective layer of maximum wind analysis technique for the Northern Hemisphere.  
01 p0110 A69-10646

A numerical experiment on the spatial distribution of cloud seeding nuclei.  
09 p1535 A69-21636

## SPIELMAKER, R. E.

Advanced concept for airborne inverters /digital inverter/.  
[SAE PAPER 69-0339] 11 p1824 A69-24499

## SPIELVOGEL, R.

Effect of lower body negative pressure upon pulmonary ventilation and perfusion as measured using xenon-133.  
17 p2909 A69-33188

## SPIERS, R.

Traction in friction-grip bolted joints.  
23 p4235 A69-42466

## SPIES, K. P.

On the diffraction by a knife-edge obstacle on a conducting earth.  
[AFRL-68-0375] 04 p0560 A69-15211

Radio propagation over a cylindrical hill including the effect of a surmounted obstacle.  
08 p1273 A69-20024

Phase shift for total reflection from a bounded dielectric layer.  
10 p1657 A69-23861

Internal guiding of microwaves by an elevated tropospheric layer.  
12 p2032 A69-26855

Electromagnetic induction in a conducting sphere with a concentric shell.  
[AFRL-69-0082] 18 p3101 A69-34800

## SPIESS, G.

Study of a synthesized plasma /Etude d'un plasma d'ionisation synthetise/.  
14 p2502 A69-29955

## SPILLER, K. R.

Welding problems in aluminum cryogenic vessels.  
15 p2630 A69-31211

## SPILLERS, W. R.

Techniques for analysis of large structures.  
01 p0169 A69-10633

On the analysis of structural design.  
08 p1413 A69-20355

## SPINA, J. F.

A time-sharing scheme to alleviate interference in collocated radio equipments.  
23 p4142 A69-42222

## SPINAK, S.

Temporal reference acoustical holography.  
23 p4166 A69-42188

## SPINDELL, W. A.

Remote sensing of earth resources using manned spacecraft.  
18 p3208 A69-35055

## SPINDLER, R. J., JR.

Franck-Condon factors for band systems of molecular hydrogen. I.  
15 p2656 A69-31155

Franck-Condon factors for band systems of molecular hydrogen. II.  
15 p2656 A69-31155

Franck-Condon factors for band systems of molecular hydrogen. III.  
21 p3774 A69-38755

## SPINELLI, R. A.

On the O.D.E. of stagnation point flows of power law fluids.  
21 p3697 A69-39677

## SPINRAD, H.

The lower atmosphere of Mars - A progress report.  
02 p0319 A69-12101

- The M7 giants in the nuclear bulge of the Galaxy.  
16 p2863 A69-32396
- Infrared spectra of stars.  
21 p3811 A69-39510
- SPINTZYK, J.**  
Influence of maintainability and reliability on the utilization and operating costs of commercial aircraft /Einfluss von Wartbarkeit und Zuverlässigkeit auf den Einsatz und die Betriebskosten von Verkehrsflugzeugen/.  
04 p0547 A69-14806
- SPINULESCU-CARNARU, I.**  
Electrical properties of thin PbTe semiconductor films /Elektricheskie svoystva tonkikh poluprovodnikovykh plenok PbTe/.  
21 p3782 A69-39242
- SPIRA, P. M.**  
On the computation time of finite functions.  
01 p0105 A69-10734  
The time required for group multiplication.  
12 p2034 A69-26752
- SPIRICHEVA, T. V.**  
Noise generator employing avalanche transit-time diodes /Generator shuma na lavinno-proletnom diode/.  
07 p1107 A69-19156
- SPIRIDONOV, E. G.**  
High-melting-point oxide and carbide materials for electrode walls of MHD generators /Tugoplavkie oksidy i karbidnye materialy v elektrodnykh stenkakh MGD-generatorov/.  
13 p2284 A69-27471
- SPIRIDONOV, I. U. G.**  
Theory of the propagation of atmospheric whistlers /K teorii rasprostraneniya svistishchikh atmosferikov/.  
08 p1309 A69-20429
- SPIRIDONOV, N. S.**  
Effect of carrier surface recombination rates in the passive region of the base on the static characteristics of a transistor /Vliianie skorosti poverkhnostnoi rekombinatsii nositelei v passivnoi oblasti bazy na staticheskie kharakteristiki tranzistora/.  
09 p1464 A69-22287
- SPIRITOSO, T.**  
The structure of complex physical performance.  
18 p3098 A69-35085
- SPIRKIN, V. G.**  
Effect of sulfides contained in fuels on their operational properties /Vliianie sul'fidov, sodержashchikh-sia v toplivakh, na ikh ekspluatatsionnye svoystva/.  
07 p1202 A69-19456
- SPIRO, I. J.**  
The optimization of an optical missile guidance tracker.  
23 p4164 A69-41625
- SPIRO, V. E.**  
Calculation of the forced oscillations of one-dimensional girder systems with allowance for nonlinear resisting forces /Raschet vyzhuzhennykh kolbanii odnomernykh balochnykh sistem s uchetom nelineynykh sil soprotivlenii/.  
17 p3064 A69-33917
- SPISZ, E. W.**  
Experimental measurements of thermal radiation properties by cyclic incident radiation.  
01 p0176 A69-10847  
Solar absorptance and hemispherical emittance of various metals at space conditions.  
[AIAA PAPER 69-60] 06 p0945 A69-18154
- SPITKOVSKII, I. M.**  
Effect of bivalent impurities on the electrical conductivity of CsI single crystals /Vliianie dvukhvalentnykh primesei na elektroprovodnost' monokristallov CsI/.  
16 p2824 A69-31573
- SPITZ, E.**  
New antenna techniques in Hertzian radiometry /Techniques nouvelles des antennes en radiometrie Hertzienne/.  
08 p1290 A69-20976
- SPITZ, G.**  
Description of the SPARMO detector SC 67.  
05 p0762 A69-15823  
A transmitter for balloon payloads.  
21 p3682 A69-39251
- SPITZER, L., JR.**  
Diffuse Matter in Space.  
06 p0997 A69-16833  
Absorption lines produced by galactic halos.  
15 p2695 A69-30884
- SPITZER, S. M.**  
Thermal instabilities limiting power dissipation in transistors.  
16 p2758 A69-31618  
The effects of dielectric overcoating on electromigration in aluminum interconnections  
17 p2935 A69-32889
- SPITZER, W. G.**  
Local-mode absorption and defects in compensated silicon-doped gallium arsenide.  
02 p0299 A69-12402
- SPIVAK, I. I.**  
Investigation of the physicomachanical properties of zirconium nitride in the homogeneity range /Izuchenie fiziko-mekhanicheskikh svoystv nitrida tsirkoniia v oblasti gomogennosti/.  
20 p3558 A69-37014
- SPIZZICHINO, A.**  
Systematic analysis of wind profiles obtained by meteor observation.  
01 p0072 A69-11170
- SPLETTSTOESSER, W.**  
Hot-air wind tunnel to test heat and mass transfer in vaporized fuel films /Heissluftwindkanal zur Untersuchung des Waerme- und Stoffaustausches an verdunstenden Kraftstofffilmen/.  
08 p1302 A69-20878
- SPODICK, D. H.**  
Rapid filling period of the left ventricle - Measurement by apexcardiography.  
03 p0376 A69-14081  
Relationship of paper speed to precision of pulse wave measurements - A multiple observer study of left ventricular ejection time.  
19 p3258 A69-36449
- SPOKOINYI, F. E.**  
Some regularities of the pulsating motion of a solid particle in turbulent flow /Nekotorye zakonomernosti pul'satsionnogo dvizheniia tverdoi chastitsy v turbulentnom potoke/.  
11 p1876 A69-25489
- SPONG, E. D.**  
Numerical solution of subsonic compressible flow at two-dimensional inlets.  
23 p4060 A69-41915
- SPONG, F. W.**  
Single-frequency argon laser.  
21 p3738 A69-39140
- SPOONER, C. E.**  
Psychochemical research studies in man.  
04 p0553 A69-14976
- SPOONER, J. B.**  
The changes in the /two-dimensional/ stress distribution round a rectangular hole with rounded corners, caused by a varying internal pressure and temperature.  
06 p1025 A69-17611  
Elastoplastic calculation of general structures and continua /Die elastoplastische Berechnung von allgemeinen Tragwerken und Kontinua/.  
08 p1416 A69-20705
- SPOONER, R. L.**  
On adaptive synchronous detection with finite memory.  
03 p0400 A69-13228
- SPORLEDER, F.**  
Resonance method for determining the excitation of spurious modes in a natural-mode converter /Resonanzmessverfahren zur Bestimmung der Stoerwellenanregung in Eigenwellenwandlern/.  
11 p1856 A69-25630
- SPORN, S. R.**  
An orbiting velocity meter.  
08 p1348 A69-21063
- SPORTON, T. M.**  
The scattering of coherent light from a rough surface.  
18 p3174 A69-35281
- SPOSITO, A.**  
Controlled trajectories /Traiettorie controllate/.  
23 p4186 A69-42023
- SPRADLEY, L. W.**  
Radiation absorption effects on heating loads encountered during hyperbolic entry.  
21 p3644 A69-39040
- SPRAGUE, R.**  
The potential of titanium castings in gas turbine engines.  
[ASME PAPER 69-GT-24] 09 p1513 A69-22494
- SPRAGUE, R. A.**  
Materials for advanced airbreathing aircraft engines.  
[ASM PAPER D8-25.2] 20 p3586 A69-38133
- SPRAGUE, R. E.**  
Electronic instrumentation for the measurement of charged particles by an AC voltage method.  
10 p1662 A69-23256
- SPRATT, J. P.**  
Behavior of surface ions on semiconductor devices.  
10 p1743 A69-23173
- SPREITER, J. R.**  
External aerodynamics of the magnetosphere.  
07 p1128 A69-19360  
Magnetohydrodynamic shock waves in non-aligned flow.  
08 p1360 A69-19988  
Effect of neutral sheet currents on the shape and magnetic field of the magnetosphere tail.  
09 p1488 A69-21661  
Plasma flow around the magnetosphere.  
12 p2150 A69-26736
- SPRENG, M.**  
Control circuits in nature and their importance in human work /Regelkreise in der Physik und ihre Bedeutung fuer die menschliche Arbeit/.  
21 p3652 A69-38784
- SPRENGER, K.**  
Solar cycle dependence of winds in the lower ionosphere.  
05 p0759 A69-16421  
On some relationships between correlation analysis and similar-fade analysis results of drift measurements in the lower ionosphere.  
21 p3714 A69-38557
- SPRENKEL-SEGEL, E. L.**  
Moessbauer investigation of the unequilibrated ordinary chondrites.  
19 p3408 A69-36082
- SPRENKLE, E. W.**  
Partial pole figures from cylindrical and planar tungsten specimens.  
09 p1558 A69-21811
- SPREUER, H.**  
Multicomponent diffusion coefficients of dissociated air /Ueber die polynaeren Diffusionskoeffizienten dissoziierter Luft/.  
09 p1623 A69-22098  
Hydrodynamic stability and entropy production /Hydrodynamische Stabilitaet und Entropieproduktion/.  
10 p1808 A69-22892
- SPRIGGS, J. H.**  
Membrane flutter paradox - An explanation by singular-perturbation methods.  
24 p4403 A69-43573
- SPRIGGS, R. M.**  
Thermochemical and thermomechanical hot forming techniques for fabricating controlled microstructure ceramics.  
24 p4321 A69-43338
- SPRINC, J.**  
Nonlinear impact theory of aircraft tires /Nicht-lineare Stosstheorie des Flugzeugluftreifens/.  
10 p1633 A69-22887
- SPRINGER, G. S.**  
Heat transfer through gases contained between two vertical cylinders at different temperatures.  
01 p0177 A69-11403  
Surface deformations in a draining liquid.  
09 p1483 A69-21999  
Near free-molecule heat transfer and density distribution between concentric spheres.  
16 p2877 A69-31921
- SPRINGER, M. D.**  
Bayesian confidence limits for system reliability.  
19 p3328 A69-36041
- SPRINGER, T. E.**  
TAF - A steady state, frequency response, and time response simulation program.  
04 p0565 A69-15341
- SPRINTSINA, E. N.**  
Study of the stability of a normal flame front /Issledovanie ustoiichivosti fronta normal'nogo plameni/.  
08 p1421 A69-20344
- SPROAT, W. H.**  
Ultrasonically assisted installation of fasteners.  
09 p1478 A69-22373



## SPROTT, J. C.

## SPROTT, J. C.

Double vortex flows in plasmas axially traversing multipole magnetic fields. 15 p2661 A69-30924

## SPROUFSKE, J. F.

Prediction of the final volume of the human body exposed to a vacuum. 19 p3258 A69-36456

## SPROWLS, D. O.

Stress corrosion mechanisms for aluminum alloys. 19 p3350 A69-36895

## SPRUCH, L.

Bounds on cross sections. 07 p1186 A69-19657

## SPRUIELL, J. E.

Formation and characterization of an A15- type structure in chemically vapor deposited tungsten-rhenium alloys. 01 p0098 A69-10649

## SPRUNG, D. W. L.

Relative proton number in neutron star matter. 08 p1381 A69-19785

## SPRY, R. J.

Recombination luminescence in irradiated silicon. 03 p0494 A69-14243

## SPURGEON, W. M.

Diffusion bonding of metals. 17 p2978 A69-33374

## SPURK, J. H.

Experimental and numerical nonequilibrium flow studies. [AIAA PAPER 69-136] 06 p0864 A69-18141  
Modified expansion tube. [AIAA PAPER 68-371] 09 p1477 A69-21960  
Impurity concentration in the expansion tube. [AIAA PAPER 68-371] 09 p1477 A69-21961  
Two-wavelength laser interferometry of hypersonic ionized flows. 19 p3306 A69-35742

## SPURLING, T. H.

Intermolecular forces in globular molecules. VII. 01 p0124 A69-10687

## SPURLOCK, J. M.

Aircraft fuel vent line sensitivity to lightning effects. [SAE PAPER 690434] 23 p4062 A69-41651

## SPYNU, G. A.

Digital systems for automation of machine part design and fabrication /Tsifrovye sistemy dlia avtomatizatsii proektirovaniia i izgotovleniia detalei/. 23 p4169 A69-41952

## SQUIRE, J. S.

A general-purpose onboard satellite computer. 05 p0725 A69-16710

## SQUIRE, L. C.

A law of the wall for compressible turbulent boundary layers with air injection. 21 p3692 A69-38685

## SQUIRES, A. T. B. P.

Lubricant evaluation and systems design for aircraft gas turbine engines. [SAE PAPER 690424] 23 p4200 A69-41648

## SQUIRES, D. M.

Television broadcasting by synchronous satellite. 13 p2220 A69-27830

## SQUYRES, H. P.

Uniform, variable light sources for instrument calibration. 21 p3726 A69-39580

## SRAGOVICH, V. G.

A mathematical model of the oculomotor apparatus /Matematicheskaia model' glazovdigatel'nogo apparata/. 20 p3470 A69-37245

## SRAWLEY, J. E.

Elastic displacements for various edge-cracked plate specimens. 05 p0841 A69-16433

Plane strain fracture toughness tests on two-inch-thick maraging steel plate at various strength levels. 10 p1795 A69-23057

Plane strain fracture toughness tests on two-inch-thick maraging steel plate at various strength levels. 12 p2114 A69-26496

Plane strain fracture toughness. 17 p2989 A69-33566

## SREEDHAR, A. K.

Efficiency calculations of heterojunction solar energy converters. 15 p2552 A69-30034

## SREEDHARAN, C. R.

An Indian electrochemical ozonesonde. 01 p0079 A69-10218

Variations in the vertical distribution of ozone over India. 16 p2786 A69-32627

## SREEKANTAN, B. V.

Studies in extensive air showers at Ootacamund. 06 p0990 A69-17299

The Kolar gold fields extensive air shower experiment. 06 p0990 A69-17300

X-ray astronomy - A review. 06 p0991 A69-17307

Proposed experiments to measure the spectra and time variation of X-ray sources. 06 p0992 A69-17312

Cosmic rays at energies beyond 10 super 12 ev. 21 p3790 A69-38822

## SREEKANTH, A. K.

Preliminary results from an experimental investigation of nozzle wall boundary layer at Mach numbers ranging from 27 to 47. [AIAA PAPER 69-686] 17 p2953 A69-33441

## SREENIVASAN, K.

The determination of thermal diffusivities of thermal energy storage materials. II. [ASME PAPER 68-WA/ENER-5] 05 p0848 A69-16161

Transient temperature response of cylindrical, composite energy storage devices. 22 p3868 A69-40132

## SRETENSKII, L. N.

Oscillations of a heavy fluid with the formation of splashes /Kolebaniia tiazhelei zhidkosti s obrazovaniem vsplekov/. 13 p2247 A69-27746

## SRIDHAR, R.

Invariant imbedding and sequential interpolating filters for nonlinear processes. [ASME PAPER 68-WA/AUT-3] 05 p0738 A69-16183

## SRINATH, L. S.

Analysis of scattered-light methods in photoelasticity. 24 p4396 A69-42737

## SRINIVAS, R. A.

Self-excited vibrating diffusion flames. 16 p2876 A69-31711

## SRINIVAS, S.

Buckling of thick rectangular plates. 24 p4406 A69-43696

## SRINIVASA RAO, M. V.

Studies in extensive air showers at Ootacamund. 06 p0990 A69-17299

## SRINIVASAN, A. V.

Analysis of parallel damped dynamic vibration absorbers. [ASME PAPER 68-WA/DE-6] 05 p0839 A69-16171

Gyroscopic systems as vibration absorbers. [ASME PAPER 69-VIBR-39] 10 p1807 A69-24177

Analysis of parallel damped dynamic vibration absorbers. [ASME PAPER 68-WA/DE-6] 13 p2360 A69-27422

## SRINIVASAN, K. V.

Transistorised multichannel pulse height analyser and recording system for balloon borne cosmic ray telescope. 06 p0924 A69-17284

## SRINIVASAN, P.

Response of gyro systems to stochastic inputs. 01 p0079 A69-10236

On the response of a class of non-linear systems with time dependent parameters. 01 p0050 A69-10237

Study of mechanical systems subjected to combined deterministic and random excitation. 04 p0680 A69-14968

Response spectrum of non-linear spring mass system subjected to transient disturbances. 08 p1413 A69-20402

Effect of creep on the vibrations of mechanical systems subjected to random excitation. 09 p1617 A69-22042

Response of undamped non-linear spring mass systems subjected to constant force excitation. 21 p3836 A69-38642

On the synthesis of a class of second order nonlinear differential equations. 24 p4342 A69-43707

## SRINIVASAN, S.

Indications for the design of porous gas diffusion electrodes arising from analyses of their electrochemical kinetics. 04 p0551 A69-15303

Photographic studies of explosive reactions. 21 p3719 A69-38442

Natural frequencies of vibration of isotropic plates. I. 23 p4233 A69-42348

## SRINIVASAN, V.

Brewster-angle grinding of optical maser tubes. 03 p0440 A69-13308

## SRIRAMA RAO, M.

Visual meteoric activity over Waltair - Survey during November, December and January 1964-67. 04 p0658 A69-14874

## SRIVASTAV, R. P.

A mixed boundary value problem of elastostatics for an isotropic elastic cylinder containing a strip crack opened by internal pressure. 01 p0167 A69-10317

## SRIVASTAVA, B. N.

Measurements of the electron impact excitation cross section of N sub 2 super plus first negative bands. 06 p0961 A69-17135

## SRIVASTAVA, G. P.

Some effects of metal flanges on radiation patterns of H-plane sectoral horns. 02 p0216 A69-12027

A theoretical study of the asymmetric excitation of conducting flanges by a primary aperture antenna and the consequent radiation pattern. 02 p0217 A69-12246

A study of the effect of the relative position of metallic flanges on the radiation patterns of H-plane sectoral horn radiators. 08 p1285 A69-20554

An experimental investigation of the effect of conducting flanges on the H-plane radiation patterns of E-plane sectoral horns. 10 p1665 A69-24063

Sharpening of E-plane radiation patterns of E-plane sectoral horns by metallic grills. 11 p1836 A69-24992

Effect of asymmetry in amplitude of excitation of secondary sources by a primary aperture antenna. 11 p1852 A69-25117

Experimental confirmation of the effect of asymmetric flanges on radiation patterns of aperture antennae. 24 p4288 A69-43765

## SRIVASTAVA, H. N.

Refractivity in the lowest 1 km. over India. 03 p0393 A69-13304

## SRIVASTAVA, K. D.

Performance of solid insulators in vacuum. 05 p0731 A69-16242

## SRIVASTAVA, K. M.

Effect of horizontal and vertical magnetic fields on Kelvin-Helmholtz instability. 07 p1182 A69-19274

Effect of horizontal and vertical magnetic fields on Rayleigh-Taylor instability. 07 p1182 A69-19275

Effect of rotation and a general oblique magnetic field on Kelvin-Helmholtz instability. 14 p2491 A69-29335

Hydromagnetic waves in a finitely conducting fluid mass immersed in a nonuniform magnetic field. 14 p2491 A69-29336

## SRIVASTAVA, L. P.

The effect of gas flow rate on the oxidation kinetics of zirconium. 18 p3154 A69-34272

## SRIVASTAVA, M. P.

Study of transport properties of plasma using semiclassical quantum potential. 05 p0799 A69-15735

Transport properties of plasma using shielded Lande potential. 09 p1553 A69-22539

Motion of a charged particle in superposed heliotron and biconical cusp fields. 16 p2817 A69-31643

Heat transfer in plane Couette flow of a rarefied gas using Bhatnagar-Gross-Krook model. 16 p2876 A69-31688

**SRIVASTAVA, P. N.**  
Unsteady rotational motion of a viscoelastic liquid contained between two concentric spheres. 02 p0230 A69-11563

**SRIVASTAVA, R. C.**  
Statistics of instantaneous frequency and amplitude as related to the Doppler spectrum. 12 p2032 A69-26863  
Precipitation-induced mesoscale wind perturbations in the melting layer. 20 p3572 A69-37909

**SRIVASTAVA, R. S.**  
Motion of a fluid in a curved tube. 01 p0058 A69-10142

**SRIVASTAVA, U. N.**  
Boundary layer flow past a circular cylinder embedded to a wedge. 04 p0590 A69-15276  
On the existence of the solution of a certain boundary layer equation. 18 p3124 A69-35270

**SROCZYNSKA, M.**  
Possible interpretations of the origin of high-velocity hydrogen clouds /Mozliwe interpretacje pochodzenia szybkich oblokow wodoru/. 11 p1954 A69-24364

**SRUBSHCHIK, L. S.**  
Asymptotic behavior of the Reissner equation in the nonlinear theory of symmetrically loaded shells of revolution /Asimptotika uravnenii Reissnera v nelineinoy teorii simmetrichno zagruzhennykh obolochek vrashcheniia/. 01 p0168 A69-10380  
On solvability of nonlinear equations of Reissner for nonshallow symmetrically loaded shells of revolution. 04 p0684 A69-15538  
Nonstiffness of a nonshallow spherical dome. 11 p1996 A69-25733  
Asymptotic properties of Reissner equations in the nonlinear theory of symmetrically loaded shells of revolution. 12 p2182 A69-26679  
On the buckling of flexible plates. 14 p2531 A69-28810

**SSORIN-CHAIKOV, V. N.**  
Application of Chaplygin theorem to synthesis of self-adaptive circuit parameters of systems utilizing the knowledge of the amplitude-frequency characteristic. 03 p0410 A69-13685

**ST. CYR, G. J.**  
The interplay of drifts and flicks in binocular fixation. 22 p3883 A69-40876

**ST. CYR, M. C.**  
Adhesive bonding of beryllium. 19 p3320 A69-35561

**ST. GERMAIN, F.**  
Development of an F-5 boron-epoxy contoured landing gear door. 12 p2103 A69-26826

**ST. JOHN, O. B.**  
All-weather landing. 03 p0465 A69-13697

**ST. JOHN, R. M.**  
Electron excitation of the first positive bands of N sub 2 and of the first negative and Meinel bands of N sub 2 super plus. 12 p2132 A69-26246

**ST. JOHN, R. S.**  
The derivation and application of analytical-statistical weight prediction techniques. [SAWE PAPER 810] 18 p3221 A69-34900

**ST. KALITZIN, N.**  
On a new method of solving the equations of celestial mechanics. [UN PAPER 68-95268] 01 p0150 A69-10476  
A new method of solving the equations of celestial mechanics. 06 p1006 A69-17566

**ST. KINEV**  
Photocells with p-n heterojunctions based on compressed sintered cadmium selenide /Fotoelementi z p-n geteroperekhodami na osnovi spresovanogo spechenogo selenidu kadmiiu/. 08 p1374 A69-21084

**ST. LOUIS, R. V.**  
Absolute far-infrared absorption intensities of alpha-nitrogen. 20 p3579 A69-37346

**ST. PIERRE, G. R.**  
Equilibrium vapor compositions and activities of components for Fe-Cr-Ni alloys at 1600 deg C. 23 p4175 A69-41503

**STABE, R. G.**  
Aerodynamic studies of scale model turbines for the M-1 engine. [AIAA PAPER 69-553] 16 p2840 A69-32678

**STABEKIS, P.**  
On the motion and stability of a rotating space station-cable-counterweight configuration. [AIAA PAPER 69-919] 21 p3820 A69-39349

**STABELL, R.**  
First-order approximation to a spherically symmetric solution of Einstein's equations. 14 p2521 A69-29455

**STABLES, E. R.**  
Birds and aircraft - The problems. 17 p2899 A69-33363

**STACEY, J. M.**  
1.4-mm and 3.4-mm observations of the lunar eclipse on 18 October 1967. 20 p3613 A69-38247

**STACHEJKO, V.**  
Using tests and analyses to achieve reliable microwave equipment. 19 p3282 A69-35785

**STACHEL, J.**  
Perturbations of an arbitrary spherically symmetric metric. 02 p0328 A69-12730

**STACHER, G.**  
Taming titanium. 10 p1700 A69-23600

**STACHER, G. W.**  
Wide integrally stiffened titanium extrusions. 19 p3319 A69-35552

**STACHIEWICZ, J. W.**  
Effect of variation of local film coefficients on fin performance. [ASME PAPER 68-HT-20] 13 p2373 A69-27770

**STACHNIK, A.**  
An S-band parametric amplifier cooled by liquid nitrogen /Wzmacniacz parametryczny na pasmo S - Chlodzony cieklym azotem/. 15 p2578 A69-30636

**STACKPOLE, J. D.**  
The currently operational NMC model, and results of a recent simple numerical experiment. 19 p3363 A69-36503

**STADELBAUER, D. G.**  
A new aerospace balancing system for mass properties determination. [SAWE PAPER 737] 18 p3118 A69-34890

**STADLER, S. L.**  
Single RF carrier time-sharing by remote locations. 07 p1081 A69-19100

**STADNIK, A. V.**  
Perfect monocrystalline silicon films on sapphire. 07 p1198 A69-18509

**STADNYK, B. I.**  
Phase equilibria in the systems Zr-Re-B and W-Re-B. 10 p1711 A69-23332

**STAEDTKE, H.**  
Speed of sound and shock waves in two-phase flows. 13 p2245 A69-27475

**STAEHLE, R. W.**  
Effects of surface preparation on stress corrosion cracking of type 310 stainless steel in boiling 42 percent magnesium chloride. 03 p0444 A69-13311  
Comments on the history, engineering and science of stress corrosion cracking. 19 p3348 A69-36884  
Stress corrosion cracking of iron-nickel-chromium alloys. 19 p3349 A69-36890

**STAELIN, D. H.**  
Pulsating radio sources near the Crab Nebula. 04 p0659 A69-14977  
Crab Nebula pulsar NPO527. 07 p1221 A69-19405  
Measurements of Venus and Jupiter near 1-cm wavelength. 09 p1600 A69-22206

Passive remote sensing at microwave wavelengths. 14 p2414 A69-29514

Fast folding algorithm for detection of periodic pulse trains. 14 p2416 A69-29548

Faraday rotation in pulsars. 18 p3192 A69-34319

Searches for pulsars. 18 p3192 A69-34320

**STAFEEV, A. M.**  
Influence of certain instrument errors on errors of the type delta delta sub delta in star declinations /Vliianie nekotorykh instrumental'nykh oshibok na pogreshnosti vida delta delta sub delta v skloneniakh zvezd/. 17 p2970 A69-32881

**STAFFOLI, C.**  
Transistorized amplifier with a 75-w output for conveyed-wave systems /Amplificatore transistorizzato con 75W di uscita per sistemi ad onde convogliate/. 01 p0038 A69-10074

**STAFFORD, D. L.**  
Space criteria for aircraft aprons. 16 p2766 A69-32328

**STAFFORD, J. R.**  
A multiple scale solution for circular cylindrical shells. 21 p3837 A69-39159

**STAFFORD, M.**  
Symbolic functions and first-order operators. 13 p2287 A69-27242

**STAFFORD, P. H.**  
Space criteria for aircraft aprons. 16 p2766 A69-32328

**STAFFORD, P. S.**  
Guidance and control system design for a six engine Martian soft lander. 02 p0277 A69-11740  
Autonomous navigation for Mars entry. 19 p3368 A69-35790

**STAFSUDD, O. M.**  
Simultaneous HCN and H sub 2 O laser emission in mixtures containing H, C, N, and O. 12 p2107 A69-26330  
The CW gain characteristics of several gas mixtures at 337 microns. 20 p3552 A69-36995

**STAGG, L. J.**  
Bandpass LC filters having prescribed amplitude and nearly constant group-delay characteristics. 05 p0732 A69-16343

**STAGGS, J. F.**  
SERT II flight-type thruster system performance. [AIAA PAPER 69-235] 09 p1566 A69-21255

**STAGNI, R.**  
Periods and magnitudes of four new variable stars of the M 2 cluster /NGC 7089/ /Periodi e magnitudini di quattro nuove stelle variabili dell'ammasso globulare M 2/NGC 7089/. 20 p3599 A69-37477  
Observations of Saturn during the period of theoretical disappearance of the ring /October 29-December 18, 1966/. 20 p3600 A69-37481

**STAHL, B.**  
A strip method for prediction of damping in subsonic wind tunnel and flight flutter tests. 11 p1987 A69-25368

**STAHL, R.**  
A solid state pulsed coagulating diathermy instrument - Preliminary report. 18 p3134 A69-34537

**STAHL, W. J.**  
Fault isolation in conventional linear systems - A progress report. 12 p2040 A69-26568

**STAHLEY, J. A.**  
Real time digital simulation of the Saturn V system. 18 p3113 A69-34268

**STAHMANN, J. R.**  
Aircraft fuel vent line sensitivity to lightning effects. [SAE PAPER 690434] 23 p4062 A69-41651

**STAIB, J. A.**  
Evidence for a point source of high energy cosmic gamma rays. 24 p4365 A69-42606

**STAIKU, ST.**  
On the flow separation from the edges of the antisymmetrical delta wing in supersonic regime. 19 p3241 A69-36779



## STAIMAN, D.

## STAIMAN, D.

New technique for combining solid-state sources.  
02 p0217 A69-12148

## STAINOV, G.

Method for solving the linearized dispersion equation of electron plasma.  
21 p3775 A69-38564

Analogue device for determining the velocity distribution function in electron plasma.  
21 p3776 A69-38565

## STAINOV, G. Z.

Method for determining electron velocity distribution function in gaseous plasma.  
13 p2313 A69-28327

Method for solving the dispersion equation of electron plasma.  
13 p2313 A69-28328

## STAIR, A. T., JR.

Infrared emission of the atmosphere and aurorae measured from 35,000 to 40,000 ft.  
13 p2254 A69-28261

Sunset to sunrise variations of the OH emission of the night sky.  
21 p3712 A69-38520

## STAIR, W. K.

On gas ingestion and fluid inertia effects in viscoseals.  
[ASLE FICFS PREPRINT 31]  
15 p2621 A69-30496

## STAJICH, M. A.

Government versus M and O industry in the value engineering endeavor.  
13 p2383 A69-28099

## STAKGOLD, I.

Boundary Value Problems of Mathematical Physics. Volume 1.  
04 p0625 A69-15232

Boundary Value Problems of Mathematical Physics. Volume 2.  
04 p0625 A69-15233

## STAKHANOV, I. P.

Effect of perturbations in the near-cathode Langmuir layer on the ionization rate in an arc discharge /Vliianie vozmushchenii v lengmiurovskom sloe u katoda na skorost' ionizatsii v dugovom razrjade/.  
04 p0635 A69-14763

Distribution function of fast electrons at the electrode interface /Funktsiia Raspredeleniia Bystriykh Elektronov na Granitse s Elektrodom/.  
04 p0635 A69-14764

Angular distribution of electrons leaving the plasma at the electrode boundary /Oh uglovom raspredelenii elektronov, vykhodiashchikh iz plazmy na granitse s elektrodom/.  
11 p1933 A69-25546

Plasma Thermionic Energy Conversion /Plazmennoe Termoemissionnoe Preobrazovanie Energii/.  
12 p2017 A69-26850

On low-voltage arc in cesium vapor.  
14 p2401 A69-29234

On the theory of electrode layer of plasma.  
14 p2490 A69-29237

## STAKHIRA, I. M.

Negative resistance of In sub 2 Se crystals /Otritsatel'noe soprotivlenie kristallov In sub 2 Se/.  
22 p3992 A69-40602

## STAKHURSKII, L. L.

Temperature dependence of the spontaneous radiation of gadolinium ferrite.  
03 p0487 A69-13731

## STALDER, F.

Air piracy from the legal standpoint /Die Luftpiraterie in rechtlicher Sicht/.  
19 p3454 A69-35979

## STALIO, R.

Luminosity and temperature criteria for O-type stars.  
20 p3598 A69-37463

## STALLER, J. J.

Guidelines for implementation of system requirements into mechanical designs for the aerospace environment.  
[AGARDOGRAPH-114]  
08 p1291 A69-20986

## STALLKAMP, J. A.

The 1969 Mariner mission to Mars.  
18 p3201 A69-35141

## STALLMEYER, J. E.

Cumulative damage theories and application.  
04 p0668 A69-14379

## STALS, L.

The recovery of cold-worked molybdenum.  
15 p2636 A69-30082

## STAMENOV, I.

Influence of meteorological effects on the mean diurnal variations of the neutron component of cosmic rays /Vliianie na meteorologichnite efekti vrkhu srednodenonoshchnite variatsii na neutronnata komponenta na kosmichnoto l'chenie/.  
21 p3791 A69-38840

## STAMMERS, C. W.

Prediction of the unstable regions of a reciprocal system governed by a set of linear equations with periodic coefficients.  
08 p1413 A69-20401

## STAMOV, D. G.

Polarization of celestial light as an independent measure of the purity and transparency of the atmosphere /Polarizatsiia nebesnogo sveta kak samostoitel'naia mera chistoty i prozrachnosti atmosfery/.  
01 p0075 A69-11189

## STAMPER, J. T.

Management of design.  
11 p2004 A69-24371

## STAMPFL, R. A.

Adaptive data compression for video signals.  
03 p0427 A69-12869

## STANCO, J.

Experiments on a striated-flow induction synchronous MHD generator.  
10 p1638 A69-23487

## STANDIL, S.

Removal of meteorological effects from meson-telescope data.  
19 p3308 A69-35991

Pronounced diurnal variation in cosmic-ray intensity as seen by inclined meson telescopes.  
20 p3593 A69-38109

Periodic solar time variations in the cosmic-ray muon component near sea level.  
23 p4207 A69-42498

## STANDING, K. G.

Attempt to detect X-ray pulses from the Crab Nebula.  
12 p2149 A69-26226

## STANDLEY, R. D.

A 50-GHz silicon IMPATT diode oscillator and amplifier.  
05 p0733 A69-16560

Frequency modulation of a millimeter-wave IMPATT diode oscillator and related harmonic generation effects.  
07 p1106 A69-19146

## STANESBY, H.

Special contributions of Great Britain to the design of civil communication-satellite earth stations.  
[UN PAPER 68-95843]  
01 p0054 A69-10507

## STANEV, KH. I.

Theory of n-circuit tunnel-diode LC oscillators /O teorii n-konturnykh LC-generatorov na tunel'nykh diodakh/.  
16 p2764 A69-32256

## STANFILL, D. W.

High bay clean rooms.  
10 p1673 A69-23354

## STANFORTH, C. M.

Measurement of jet engine combustion temperature by the use of thermocouples and gas analysis.  
23 p4165 A69-41650

## STANG, D. A.

The use of planar ribbon winding for control of polar build-up in filament-wound tankage.  
09 p1507 A69-22328

Design application of high-modulus filament-wound composites to aerospace propellant and pressurization tanks.  
19 p3354 A69-35513

## STANG, P. L.

Thrust transient prediction and control of solid rocket engines.  
[WSCIPAPER 68-33]  
07 p1203 A69-18365

## STANFORTH, A.

Ionization in sounding rocket telemetry transmitters.  
02 p0222 A69-12691

## STANFORTH, J. A.

Measurement of the coupling efficiency between dielectric-loaded rectangular waveguides and dielectric-loaded trough waveguides.  
12 p2039 A69-26374

Technique for the measurement of the percentage of power in the single spurious mode of an overmoded waveguide.  
15 p2577 A69-30611

## STANISIC, M. M.

A rapidly converging technique for vibration analysis of plates with a discrete mass distribution.  
04 p0682 A69-15293

Some aspects of linear irreversible thermodynamics in the presence of electromagnetic fields.  
17 p3075 A69-34142

Rotating pendulum under periodic disturbance.  
21 p3771 A69-39004

Some aspects of linear irreversible thermodynamics and continuum mechanics in the presence of electromagnetic fields.  
21 p3851 A69-39289

## STANISLAW, B.

Haemodynamic and bioelectric disturbances in striated muscles of rats subjected to associated influence of acceleration forces and hypokinesia.  
24 p4268 A69-43409

## STANISLAW, T. S.

Extrusion and hot rolling - Two advanced fabrication techniques for the preparation of whisker-metal composites.  
09 p1511 A69-22361

## STANISZEWSKI, B.

Thermodynamic analysis of heat engines and heat pumps operating within the range of negative absolute temperatures /Analiza termodynamiczna silnikow i pomp cieplnych dzialajacych w obszarze ujemnych temperatur bezwzglednych/.  
09 p1623 A69-22219

Investigation of a caloroelectric plasma converter with a concentric electrode arrangement /Badanie plazmowego przetworznika kaloroelektrycznego ze wspolrodkowym ukladem elektrod/.  
16 p2822 A69-32065

## STANIUKOVICH, A. K.

Approximate determination of the specific heat ratio for large meteoric bodies moving through the atmosphere /O priblizhenom opredelenii pokazatelya udarnoi adiabaty pri dvizhenii v atmosfere krupnykh meteornykh tel/.  
19 p3428 A69-36841

## STANIUKOVICH, K. P.

Static formations in the general theory of relativity and plankions /Staticheskie obrazovaniia v obsheiei teorii otnositel'nosti i plankeony/.  
05 p0793 A69-15776

A general solution of the equations of magnetohydrodynamics for one-dimensional non-stationary and plane stationary motions.  
10 p1727 A69-23096

Analysis of statistical data concerning the crater and stone distribution on the surface of the moon /K analizu statisticheskikh dannykh po raspredeleniiu kraterov i kamnei na poverkhnosti luny/.  
12 p2154 A69-25816

Space-time interpretations of the Einstein and Friedmann models of the universe /Prostranstvenno-vremennye interpretatsii modelei "vselennoi" A. Einsteina i A. Fridmana/.  
14 p2484 A69-28865

The motion of a medium at ultrarelativistic velocities in the general theory of relativity /Dvizhenie sredy s ultrarelativistskimi skorostiami v obsheiei teorii otnositel'nosti/.  
15 p2653 A69-31067

Problems in the Theory of Space, Time, and Matter /Problemy Teorii Prostranstva, Vremeni i Materii/.  
16 p2812 A69-32110

Static formations in the general theory of relativity and Planckons.  
18 p3173 A69-35029

The Tolman problem in a centrally symmetrical reading system /Zadacha Tolmana v tsentral'no-simmetrichnoi sisteme otscheta/.  
20 p3594 A69-37079

Schwarzschild metric in a synchronous frame of reference /K voprosu o metrike Shvartsskhil'da v sinkhronnoi sisteme otscheta/.  
22 p3982 A69-41063

Penetration of antimatter into the solar system and the earth's atmosphere /O proniknovenii antiveshchestva v solnechnuiu sistemu i atmosferu zemli/.  
22 p4034 A69-41100

## STANKEVICH, IU. L.

Generators of high-voltage nanosecond controlled-amplitude pulses /Generatory vysokovol'tnykh nanosekundnykh impul'sov s reguliruemoi amplitudoi/.  
04 p0597 A69-14849

STANKEVICH, K. S.

Measurement of small antenna parameters by the method of two absolute blackbodies exposed to different temperatures /Izmerenie parametrov nebol'shikh anten metodom dvukh absolutno chernykh tel, nakhodiaschikhsia pri raznykh temperaturakh/.  
11 p1844 A69-24450

Limitations imposed on the ultimate sensitivity of radiotelescopes by the fluctuations in the thermal radio emission of the atmosphere.  
12 p2031 A69-26643

Absolute temperature measurements of the cosmic radio emission of the sky at decimeter wavelengths /Absolютnye izmereniia temperatury kosmicheskogo radioizlucheniia neba na volnakh detsimetrovogo diapazona/.  
15 p2687 A69-30544

Absolute measurements of radio-emission intensity of the discrete sources Cassiopeia-A and Cygnus-A at 30-60 cm wavelengths /Absolютnye izmereniia intensivnosti radioizlucheniia diskretnykh istochnikov Kassiopeia-A i Lebed'-A na volnakh 30-60 cm/.  
19 p3428 A69-36876

STANKEVICH, V. S.

Attenuation of millimeter and submillimeter radio waves in rains /Ob oslablenii millimetrovyykh i submillimetrovyykh radiovoln v dozhdiaakh/.  
10 p1657 A69-23943

STANKO, V. I.

Heats of formation of the barenes/carboranes /B sub 10 H sub 12 C sub 2 /cryst./ - Determination of the heat of combustion of ortho-barene /Teploity obrazovaniia barenov /karboranov/ B sub 10 H sub 12 C sub 2 /krist./ - Opredelenie teploity sgoraniia orto-barena/.  
21 p3670 A69-39625

STANLEY, A. G.

Performance of cadmium sulfide thin film solar cells in a space environment.  
14 p2405 A69-29538  
Solar cell calibration experiments on LES-6.  
19 p3254 A69-35712

STANLEY, C. A.

Nonlinear combined stress creep experiments on rigid polyurethane foam with application to multiple integral and modified superposition theory.  
04 p0680 A69-15155

STANLEY, J. K.

Solutions to some stress corrosion cracking problems in aerospace situations.  
21 p3748 A69-39491

STANLEY, M. W.

Low-temperature internal friction in quenched niobium.  
03 p0447 A69-13617

STANLEY, P.

Stresses at end-milled keyways in plain shafts subjected to tension, bending, and torsion.  
19 p3445 A69-36827  
A material for accelerated creep testing with models.  
21 p3844 A69-39320

STANNARD, J. E.

300 deg K annealing of electron damage in lithium-doped silicon.  
23 p4197 A69-41498

STANO, A.

Certain methods for measuring the impurity concentration distribution and the resistivity of epitaxial layers /O pewnykh metodach pomiaru rozkladu koncentracji domieszek oraz opornosci wlasciwej warstw epitaksjalnych/.  
13 p2323 A69-28641

STANOJLOVIC, B. R.

Safety in the jumbojet and SST era.  
03 p0365 A69-12882

STANOMIR, D.

Mathematical methods for random processes and their application in the case of stationary random processes /Methodes mathematiques pour les processus aleatoires et leur application dans le cas des processus aleatoires stationnaires/.  
05 p0718 A69-15881

STANSELL, T. A., JR.

The Navy Navigation Satellite System - Description and status.  
02 p0278 A69-12359

STANTON-JONES, R.

Hovercraft.  
03 p0367 A69-14084

STANTON, P. N.

Electron excitation of the first positive bands of N sub 2 and of the first negative and Meinel bands of N sub 2 super plus.  
12 p2132 A69-26246

STANZIANO, A. J.

Criteria for avionic systems realization.  
[AGARDOGRAPH-114] 08 p1317 A69-20982

STAPPER, G.

Electrical testing of a six-converter generator.  
09 p1439 A69-21823

STAPLES, J. L.

Spontaneous reverse current due to the Brillouin EMF in a diode.  
10 p1661 A69-22950

STAPLES, J. W.

Development of the Titan III transtage ACS hydrazine monopropellant rocket engine modules.  
[AIAA PAPER 69-422] 19 p3394 A69-36300

STAPLETON, G. E.

Space Radiation Biology, Workshop Conference, University of California, Berkeley, Calif., September 7-10, 1965, Proceedings.  
03 p0370 A69-13476

STAPLETON, R. E.

High-temperature capacitors from pyrolytic boron nitride.  
04 p0551 A69-15299

STAPLETON, W. G.

Thermal decomposition behavior of perchlorate oxidizers studied by flash mass thermal analysis.  
[WSCI PAPER 69-19] 16 p2832 A69-32357

STARBUCK, J. T.

A multiple-beam high-frequency receiving aerial system.  
13 p2228 A69-27631

STARBUCK, R. J.

Advanced computer for booster/satellite application.  
11 p1843 A69-25320

STARBUNOV, I. U. N.

Interaction of superhigh-energy cosmic rays with neutrinos in the universe /K voprosu o vzaimodeistvii kosmicheskikh luchej sverkhvysokoi energii s neitrino vo vselennoi/.  
10 p1757 A69-22826

STARCHENKOV, B. K.

Contribution to the theory of dielectric dispersion in inhomogeneous dielectrics and semiconductors /K teorii dielektricheskoi dispersii v neodnorodnykh dielektrikakh i poluprovodnikakh/.  
02 p0301 A69-12837

STARCHIK, P. D.

Certain characteristics of a plasma flow from a discharge in a magnetic field of up to 100 koe /Pro deiki osoblivosti vitkannia plazmi z rozriadu, iakii znakhodit'sia u magnitnomu poli do 100 ke/.  
08 p1370 A69-21075

STARGARDTER, H.

The development of JT8D turbofan engine composite fan blades.  
[AIAA PAPER 69-465] 16 p2842 A69-32698

STARIKOV, A. D.

Study of the effectiveness of various types of polymethine dyes used in passive Q-switches of neodymium lasers /Issledovanie effektivnosti razlichnykh tipov polimetinovykh krasitelei, primeniaemykh v passivnykh zatvorakh neodimovykh OKG/.  
17 p2983 A69-33968

Stable passive Q-switch for a neodymium laser /Stabil'nyi passivnyi zatvor dlia neodimovogo lazera/.  
17 p2983 A69-33969

STARIKOVA, G. A.

The dispersion in the two-color diagrams of open star clusters.  
11 p1951 A69-24247

STARIKOVA, M. V.

Approximate analysis of combined pulse-relay control system.  
03 p0410 A69-13684

STARIKOVA, V. B.

Cell and tissue cultures as subject of study in cosmic biology and medicine.  
02 p0198 A69-11501

STARK, A.

The design of an air-transportable satellite earth station.  
08 p1272 A69-19926

STARK, D. A.

Shock testing at AWRE Orfordness.  
11 p1862 A69-24408

STARK, K. W.

Design and development of an annular slit colloid thruster.  
[AIAA PAPER 69-287] 09 p1566 A69-21257

STARK, L.

Microwave components for wide-band phased arrays.  
04 p0571 A69-14318

STARK, L. A.

Experimental analysis of high-efficiency avalanche-resonance pumped oscillators.  
06 p0893 A69-16938  
High-efficiency avalanche-resonance pumped amplification.  
08 p1279 A69-19909

STARK, L. M.

Multi-mode phased array element for scan angle compensation of element impedance.  
17 p2929 A69-33875

STARKE, E. A., JR.

Preprecipitation in Al/Zn/Mg alloys studied by hardness and small-angle X-ray scattering measurements.  
03 p0447 A69-13613  
Explanation of the cleavage plane in stress corrosion cracking of alpha phase titanium-aluminum alloys.  
13 p2283 A69-28189

STAROKOV, G. V.

Influence of the ring current on the location of the auroral oval /Vliianie kol'tseвого toka na polozhenie ovala sianii/.  
09 p1485 A69-21532  
The auroral oval and the ring current in the earth's magnetosphere.  
10 p1689 A69-24203

Dynamics of the region of polar auroras and the propagation of radio waves at high latitudes /Dinamika zony poliarnykh sianii i rasprostraneniie radiovoln v vysokikh shirotakh/.  
14 p2436 A69-29058

Influence of the ring current on the position of the auroral oval.  
16 p2783 A69-32527

Complex investigation of the polar ionosphere /Kompleksnoe issledovanie poliarnoi ionosfery/.  
17 p2963 A69-33950

Polar auroral belt during magnetic disturbances /Polosa poliarnykh sianii pri magnitnykh vozmushcheniiakh/.  
17 p2963 A69-33951

Influence of magnetic activity on the height of polar auroras /Vliianie magnitnoi aktivnosti na vysoty poliarnykh sianii/.  
17 p2963 A69-33953

STAROKOV, V. A.

Remarks on the articles "Calculation of a two-phase flow in an axisymmetric supersonic nozzle" by I. M. Kapura et al, and "Flow of a gas/liquid mixture in a geometrical nozzle with a constant phase velocity difference" by V. G. Selivanov and S. D. Frolov /Zamechania k stat'iam I. M. Kapury i dr. "Raschet techeniia dvukhfaznogo potoka v osesimmetrichnom sverkhzvukovom sople" i V. G. Selivanova i S. D. Frolova "O techenii gazozhidkostnoi smesi v geometricheskom sople s postoiannoii raznost'iu skorostei faz"/.  
06 p0861 A69-17815

STARSKSCHALL, G.

Perturbation of the velocity distribution in the scattering of molecular beams - A thermal beam effect.  
19 p3376 A69-36173

STARLINGER, H.

Investigation of catecholamine secretion in the urine as a criterion of emotional stress - Vibration loading, film presentations, and testing situations /Untersuchungen zur Frage der Catecholaminausscheidung im Harn als Kriterium fuer emotionalen Stress unter verschiedenen Umgebungsbedingungen - Vibration-sbelastung, Filmdarbietungen und Pruefungssituation/.  
21 p3654 A69-38909

STARNER, K. E.

Use of thin-skinned calorimeters for high heat flux arc-jet measurements.  
04 p0602 A69-15427

STAROBINETS, S. S.

Parallel pumping in RbNiF sub 3 /Parallel'naia podkachka v RbNiF sub 3/.  
21 p3781 A69-39069



## STARODUB, M. F.

Investigation of the inhomogeneity of hemoglobin in irradiated animals /Doslizhennia neodnorodnosti gemoglobinu oprominenikh tvarin/.  
22 p3888 A69-41274

## STARODUBOV, I. A. D.

Electron microscopic study of the nature of low-temperature strengthening and of its effect on high-temperature creep of nickel /Elektronomikroskopicheskoe issledovanie prirody nizkotemperaturnogo uprochneniia i ego vliianiia na vysokotemperaturnuiu polzuchest' nikelia/.  
18 p3157 A69-35254

## STARODUBTSEV, A. M.

Prolonged measurements of the radio emission of the moon at a wavelength of 3.2 cm /Dlitel'nye izmereniia radioizlucheniia luny na volne 3.2 cm/.  
20 p3608 A69-38052

## STAROMINSKII, L. R.

Application of a Montardi circuit with sectioned electrodes in MHD systems with an isotropically conducting working body /Ob ispol'zovanii skhemy Montardi s sektiionirovannyimi elektrodami dlia MGD-ustroystv s izotropno provodiashchimi rabochim telom/.  
07 p1059 A69-19031

## STARON, R. T.

A finding list of early-type stars in regions of intermediate galactic latitude.  
20 p3612 A69-38162

## STAROSELSKII, V. I.

"Diode" switching of a transistor in an integrated circuit /O "diodnom" vkluchenii transistora v integral'noi skheme/.  
05 p0730 A69-16217

The Gunn effect and its applications /Effekt Ganna i ego primeneniia/.  
18 p3183 A69-35160

## STAROSILTSEVA, S. P.

Magnetoresistance and Hall effect in compensated indium phosphide.  
06 p0978 A69-16987

## STAROSTIN, A. N.

Insufficiency of the classical description of a non-degenerate dense plasma.  
05 p0802 A69-15892

## STAROSTIN, V. M.

Distribution of the pulsation velocities of the wind in the meteor region of the atmosphere /O raspredelenii pul'satsionnykh skorostei vetra v meteornoi oblasti atmosfery/.  
21 p3759 A69-39115

## STAROVATOV, A. A.

Variations of the critical frequencies of the E sub s layer /Variatsii predel'nykh chastot sloia E sub s/.  
02 p0239 A69-11685

Variations in the limiting frequencies of the E sub s layer.  
13 p2258 A69-28716

Certain peculiarities of the E sub s layer heights /Nekotorye osobennosti vysot sloia E sub s/.  
17 p2968 A69-33996

## STAROVOITOV, A. T.

The study of the magnetic properties of several rare-earth niobates in strong pulsed fields.  
15 p2667 A69-30195

## STARR, A.

Visual suppression during smooth following and saccadic eye movements.  
22 p3879 A69-40842

## STARR, A. W.

Nonzero-sum differential games.  
15 p2645 A69-31237

Further properties of nonzero-sum differential games.  
17 p2943 A69-32834

## STARR, I.

Quantitative studies on the errors of the pulse, when used to estimate cardiac function, I, II.  
24 p4262 A69-42728

## STARR, V. P.

Physics of Negative Viscosity Phenomena.  
12 p2131 A69-26868

Symmetrical formulation of the zonal kinetic energy equation.  
15 p2595 A69-30219

## STARTSEV, A. V.

Frequency transformation in multi-level quantum systems.  
07 p1146 A69-18481

## STARTSEV, G. P.

Measurement of the emissivity of nitrogen, oxygen, and air in the vacuum ultraviolet region of the spectrum.  
21 p3774 A69-38944

## STARTSEVA, M. V.

Spectral brightness of clouds and landscape features in the visible and near infrared spectral regions /Spektral'naia iarkost' oblakov i ob'ektov landshtafta v vidimom i blizhnem infrakrasnom uchastkakh spektra/.  
06 p0953 A69-17991

## STARUNOV, V. S.

Stimulated scattering and broadening of an intense pulse of laser emission in gases /Vynuzhdennoe rassaiianie i ushirenie spektra moshchnogo impul'sa lazernogo izlucheniia v gazakh/.  
09 p1516 A69-21562

## STARZHINSKII, V. M.

A version of a method of obtaining periodic solutions /Ob odnom variante metoda opredeleniia periodicheskikh reshenii/.  
07 p1183 A69-19680

## STAS, V. V.

Statistical characteristics of mechanical vibrations reproducible on a vibrostand /O statisticheskikh kharakteristikakh mekhanicheskikh kolebani, vosproizvodimykh na vibrostende/.  
14 p2536 A69-29743

## STASELKO, D. I.

Obtaining high-quality holograms of three-dimensional diffuse objects with the aid of single-mode ruby lasers /Poluchenie vysokokachestvennykh gologramm trekhmernykh diffuznykh ob'ektov s pomoshch'iu odnomodovykh rubinovykh lazerev/.  
07 p1132 A69-18801

Holographic recording of the temporal coherence pattern of a wave train from a pulsed radiation source /O golograficheskoi registratsii kartiny vremennoi kogerentnosti tsuga voln impul'snogo istochnika izlucheniia/.  
17 p2973 A69-33114

Production of high-quality holograms of three-dimensional diffuse objects with the use of single-mode ruby lasers.  
21 p3724 A69-38946

## STASENKO, A. L.

Criterion for determining the "boundary" of continuum flow in a freely expanding jet /Kriterii dlia opredeleniia "granitsy" sploshnogo techeniia v svobodno rasshiriaushcheisia strue/.  
10 p1679 A69-23425

## STASEVICH, R. A.

Certain physicochemical problems of weightlessness /Nekotorye fiziko-tekhnicheskie problemy nevesomosti/.  
07 p1070 A69-18568

## STASHKEVICH, N. K.

Unsteady generation from a ruby laser with a ruby filter /Nestatsionarnaia generatsiia rubinovogo OKG s fil'trom iz rubina/.  
11 p1894 A69-24619

## STASIUK, Z. V.

Investigation of the effect of adsorption of barium, oxygen, and barium oxide on the electrical conductivity of molybdenum and titanium thin films.  
06 p0978 A69-16900

## STASSEN, H. G.

The polarity coincidence correlation technique - A useful tool in the analysis of human-operator dynamics.  
12 p0222 A69-25931

## STASTNOVA, V.

Periodic solutions of the first boundary value problem for a linear and weakly nonlinear heat equation.  
04 p0625 A69-15109

## STASZEWSKI, A.

Thin-film cermet resistors used in microelectronic integrated circuits /Cienkowarstwowe oporniki cermetowe stosowane w mikroelektronicznych ukladach scalonych/.  
13 p2268 A69-27466

## STATHAM, C. L.

Apollo thermal-protection system development. [AIAA PAPER 68-1142]  
03 p0519 A69-13558

## STATKEVICH, V. N.

Increase in plasticity of cast and recrystallized molybdenum alloys during precipitation of a second phase at high temperatures /Povyshenie plastichnosti li-tykh i rekristalizovannykh spлавov molibdena pri vydelenii vysokotemperaturnoi vtoroi fazy/.  
11 p1906 A69-25685

## STATLER, R. L.

Defect clusters in electron-irradiated silicon.  
06 p0974 A69-16866

Low energy proton damage in silicon solar cells.  
19 p3252 A69-35701

## STATON, R. N.

Constrained regression analysis - A new approach to statistical equation development. [SAWE PAPER 762]  
18 p3220 A69-34879

## STATZ, H.

Silicon and gallium arsenide field-effect transistors with Schottky-barrier gate.  
08 p1286 A69-20863

Locking in multimode solid-state lasers.  
09 p1514 A69-21344

Mode interactions between the 4881- and 5147- angstrom units lines in Ar super plus lasers.  
10 p1705 A69-24003

## STAUB, W. A.

Changing concepts in physiological training as related to survival.  
06 p0879 A69-16965

## STAUDE, J.

About the influence of inhomogeneities of magnetic fields on line contours and magnetographic measurements.  
22 p4019 A69-40288

## STAUDHAMMER, K. P.

A study of chemical compatibility between ceramic whiskers and metallic matrix materials.  
09 p1527 A69-22359

A continuous process for the production of whisker reinforced composites.  
13 p2269 A69-28676

## STAUFENBIEL, R.

Dynamic characteristics of electrohydraulic servactuators - A contribution to flight control analysis /Dynamische Eigenschaften elektrohydraulischer Stellantriebe - Ein Beitrag zur Auslegung von Flugsteuerungen/.  
08 p1256 A69-20718

## STAUFFER, A. D.

Optimum discrete approximation of the Maxwell distribution.  
13 p2313 A69-28222

## STAUFFER, H.

Effect of oxygen on the frequency of X-ray induced somatic crossing over in *Drosophila melanogaster*.  
23 p4099 A69-42118

## STAUGAITIS, C. L.

Sliding friction of copper alloys in vacuum. [ASLE PAPER 68-LC-5]  
15 p2622 A69-30610

## STAVITSKAIA, N. A.

Measurements of the Fourier spectra of two-dimensional functions /Izmerenie spektrov Fur'e dvumernykh funktsii/.  
10 p1725 A69-23301

## STAVROV, V. P.

Initial thermostructural stresses in two-dimensional media.  
17 p3058 A69-33316

Statistical description of the microstructure of fiberglass-reinforced plastics /K statisticheskomu opisaniiu mikrostruktury stekloplastikov/.  
18 p3163 A69-35363

## STAVROVSKII, G. I.

High-melting-point oxide and carbide materials for electrode walls of MHD generators /Tugoplavkie oksinye i karbidnye materialy v elektrodnykh stenkakh MGD-generatorov/.  
13 p2284 A69-27471

## STAVSKY, Y.

Free-edge buckling of heterogeneous cylindrical shells in axial compression.  
10 p1802 A69-23889

Stability of heterogeneous orthotropic cylindrical shells in axial compression.  
14 p2533 A69-29024

Non-linear theory for axisymmetric deformations of heterogeneous shells of revolution.  
20 p3625 A69-37592

Mechanics of composite structures.  
21 p3836 A69-38931

## STAWIKOWSKI, A.

Differences in radial velocities as an indicator of turbulence.  
17 p3044 A69-34177

- STEADMAN, B. L.**  
Electrocardiogram R-wave amplitude detector.  
21 p3667 A69-39443
- STEAR, E. B.**  
State-space structure of model-reference adaptive control for a noisy system.  
18 p3111 A69-34686  
Entropy analysis of parameter estimation.  
21 p3757 A69-39664
- STEARMAN, R. O.**  
Aeroelastic stability characteristics of cylindrical shells considering imperfections and edge constraint. [AIAA PAPER 68-285]  
16 p2874 A69-32159
- STEARN, R.**  
Elastic constants of Ni sub 3 Al between 80 deg and 600 deg K.  
08 p1332 A69-20288
- STEARNS, B.**  
A new picture of the world.  
06 p0923 A69-17119
- STEARNS, S. D.**  
Integration of a digital computer with a vertical balancing system on a real-time basis. [SAWE PAPER 738]  
18 p3220 A69-34888
- STEBBINS, C. F.**  
An experimental study of transverse ionizing MHD shock waves.  
04 p0637 A69-15052
- STEBBINS, F. J.**  
Nonlinear analysis of shells of revolution by the matrix displacement method.  
02 p0346 A69-12511
- STEBER, G. R.**  
On a completely tunable active filter using fixed RC elements.  
14 p2422 A69-29551
- STEBLOVA, R. S.**  
Method of determining the ozonosphere-disturbance height with the aid of the effective temperature /Metod opredeleniia vysoty vozmushcheniia ozonosfery s pomoshch'iu effektivnoi temperatury/.  
02 p0238 A69-11670  
Solar flare effects in the ozonosphere.  
03 p0424 A69-13542  
Unsteady regime of atmospheric ozone.  
12 p2070 A69-26693  
Method of determining the height of an ozonosphere disturbance by means of effective temperature.  
13 p2257 A69-28701
- STECHER, T. P.**  
Ultraviolet spectrophotometry of early-type stars.  
12 p2153 A69-25812  
Interstellar extinction in the ultraviolet. II.  
22 p4030 A69-40772  
The interstellar H super plus sub 2 molecule.  
24 p4375 A69-42610
- STECHMAN, R. C.**  
Design criteria for film cooling for small liquid-propellant rocket engines. [AIAA PAPER 68-617]  
09 p1570 A69-21978  
The prediction of rocket exhaust flow field with embedded shocks and nozzle boundary layers. [AIAA PAPER 69-569]  
16 p2842 A69-32696
- STECKER, F. W.**  
Isotropic gamma radiation and the metagalactic cosmic ray intensity.  
02 p0308 A69-12092  
Cosmic gamma rays from metagalactic proton-antiproton annihilation.  
09 p1574 A69-21459  
Predictions of extragalactic gamma ray fluxes between 1 and 100 Mev.  
11 p1946 A69-24466  
Equilibrium spectra of secondary cosmic-ray positrons in the Galaxy and the spectrum of cosmic gamma-rays resulting from their annihilation.  
14 p2514 A69-29948  
Origin of galactic gamma-rays.  
16 p2852 A69-32806  
Corrections to two previous articles on extragalactic gamma rays and implications of the corrected results.  
17 p3025 A69-34168  
Photodisintegration of ultrahigh-energy cosmic rays by the universal radiation field.  
18 p3188 A69-35006  
The cosmic gamma-ray spectrum from secondary-particle production in the metagalaxy.  
22 p4006 A69-40641
- STEDMAN, J. K.**  
High power density fuel cell.  
23 p4076 A69-42309
- STEDMAN, P. C.**  
Use of a pulsed laser tracking system for tracking satellites.  
13 p2222 A69-28192
- STEED, A. R.**  
Infrared emission of the atmosphere and aurorae measured from 35,000 to 40,000 ft.  
13 p2254 A69-28261
- STEEGER, E. J.**  
ISOTEC thermoelectric generator for space power.  
23 p4189 A69-42270
- STEEL, P. C.**  
Combustion in compressible mixing flows. [WSCI PAPER 68-28]  
06 p0969 A69-17794
- STEEL, T. R.**  
Determination of the constitutive coefficients for a mixture of two solids.  
03 p0529 A69-14063
- STEELE, C. R.**  
Asymptotic analysis of stress waves in inhomogeneous elastic solids.  
16 p2873 A69-32157
- STEELE, C. W.**  
A computer simulation of unbiased digital recording. [IEEE PAPER 3.3]  
09 p1461 A69-22562
- STEELE, E. D.**  
Solar arrays utilizing large area silicon solar cells.  
19 p3253 A69-35708
- STEELE, E. L.**  
A computer model for integrated circuit transistors including substrate interactions.  
07 p1114 A69-18246
- STEELE, J. L.**  
Portable, multiunit low-pressure chamber with locks.  
22 p3891 A69-40217
- STEELE, M. C.**  
High-efficiency series operation of Gunn devices.  
09 p1463 A69-21684
- STEEN, H. B.**  
Inactivation and trapped radicals in dry trypsin exposed to ultraviolet light.  
03 p0372 A69-13486
- STEENBECK, M.**  
Experimental discovery of the electromotive force along the external magnetic field induced by a flow of liquid metal /alpha-effect/.  
04 p0635 A69-14547  
Dynamo theory of stellar and planetary magnetic fields. I - Calculation of sun-like alternating field generators /Zur Dynamothorie stellarer und planetarer Magnetfelder. I - Berechnung sonnenaehnlicher Wechselfeldgeneratoren/.  
10 p1782 A69-23703
- STEENSTRUP, F.**  
Latitudinal movements in the auroral ionosphere as shown by scintillation measurements.  
01 p0069 A69-11127
- STEEVES, E. C.**  
A method for computing the response of a general axisymmetric shell with an attached asymmetric structure.  
11 p1993 A69-25525
- STEFAN, M.**  
Certain visual feedback mechanisms in simulated high-altitude conditions /Certains mecanismes oculaires de feed back dans les conditions des grandes altitudes simulees/.  
06 p0882 A69-17647
- STEFANIAK, J.**  
A generalization of Galerkin's functions for asymmetric thermoelasticity.  
03 p0525 A69-13608
- STEFANISHINA, TS. K.**  
Ternary system chromium-rhenium-boron /Troinaia sistema khrom-renii-bor/.  
10 p1715 A69-24054
- STEFANOV, B.**  
High pressure caesium thermionic converter with a cold region.  
14 p2397 A69-29176
- STEFANSKII, I. S.**  
A study of the effect of chemical treatment on the mechanical properties of titanium alloy tubes.  
03 p0434 A69-13914
- STEFFEN, H.**  
Resonator interferometry of pulsed submillimeter-wave lasers.  
10 p1705 A69-23810
- STEFFEN, J. W.**  
Airframe maintenance - An operator's viewpoint.  
03 p0434 A69-13698
- STEG, S. E.**  
Biological losses and the quarantine policy for Mars.  
11 p1828 A69-25459
- STEGALL, H. F.**  
Cardiovascular effects of low-oxygen atmospheres in conscious and anesthetized dogs.  
23 p4078 A69-41314
- STEGEMANN, J.**  
The influence of the amplitude, frequency and mean value of a sinusoidal pressure stimulus at the baroreceptors on mean arterial blood pressure in dogs /Der Einfluss von Amplitude, Frequenz und Mittelwert sinusfoermiger Reizdrucke an den Pressoreceptoren auf den arteriellen Mitteldruck des Hundes/.  
23 p4092 A69-42062  
Changes of heart rate during diving and breath-hold after exercise /Die Veraenderung der Herzfrequenz beim Tauchen und Atemanhalten nach koerperlicher Anstrengung/.  
23 p4095 A69-42083
- STEGEMOLLER, J. L.**  
A parametric frequency divider using hyperabrupt junction diode capacitance.  
02 p0217 A69-12152
- STEGEN, G. R.**  
Some unsteady motions of a diffusion flame sheet.  
03 p0532 A69-13014
- STEGER, R. D.**  
High response impulse testing of low thrust propulsion devices.  
10 p1672 A69-23278
- STEGMAN, R. L.**  
The weakening effect of oxygen on nickel in creep rupture.  
23 p4176 A69-41504
- STEGNII, V. N.**  
Equilibrium configurations of shallow spherical shells /O formakh ravnovesiia pologikh sfericheskikh obolochek/.  
07 p1237 A69-19685
- STEHLE, H.**  
Deposition of tungsten-layers on molybdenum and interdiffusion.  
14 p2462 A69-29210
- STEHLLING, K. R.**  
Remote sensing of the oceans.  
15 p2607 A69-30190
- STEHMAN, C. J.**  
Fault isolation in conventional linear systems - A progress report.  
12 p2040 A69-26568
- STEIR, W. H.**  
Optical shuttle pulse measurements of gas lenses.  
01 p0120 A69-10849  
Experimental simulation of a multiple beam optical waveguide.  
17 p2974 A69-33400
- STEIGER, W. R.**  
Maintenance of the tropical night-time F layer.  
02 p0242 A69-11825
- STEIGERWALD, E. A.**  
Titanium alloys - Stress corrosion susceptibility to fuel tank sealants.  
12 p2112 A69-25945  
Selecting metals for fracture toughness. [ASME PAPER 69-DE-10]  
14 p2461 A69-28842  
Plane strain fracture toughness of high strength materials.  
19 p3346 A69-36436  
Influence of alloying elements on the low-temperature toughness of martensitic high-strength steels.  
20 p3556 A69-36952
- STEIGMAN, G.**  
Galactic line emission from 1 to 10 kev.  
24 p4367 A69-43048
- STELJN, R. P.**  
The sliding surface of polytetrafluoroethylene - An investigation with the electron microscope.  
01 p0085 A69-10369  
Friction and wear of rutile single crystals. [ASLE PAPER 68-LC-3]  
07 p1140 A69-19307



## STEIN, E.

## STEIN, E.

Relative roles of sympathetic and parasympathetic nervous systems in the carotid sinus reflex in dogs.  
24 p4257 A69-42629

## STEIN, E. E.

Propellant expulsion techniques.  
16 p2736 A69-31734

## STEIN, G.

Stochastic approximation algorithms for linear discrete-time system identification.  
06 p0904 A69-17940

## STEIN, G. D.

Design of a multipurpose wind tunnel.  
21 p3689 A69-38596

## STEIN, H. J.

Electrical properties of neutron-irradiated silicon at 76 deg K - Hall effect and electrical conductivity.  
06 p0975 A69-16868

## STEIN, J. J.

An airborne video tape navigational display.  
03 p0464 A69-13246  
Cascaded phase locked loops.  
09 p1474 A69-22450

## STEIN, M.

Some recent advances in the investigation of shell buckling.  
[AIAA PAPER 68-103] 02 p0347 A69-12516

## STEIN, M. H.

Radiation-processed wood-plastic materials.  
04 p0605 A69-14582

## STEIN, P.

Solution of Linear Ordinary Differential Equations and Simultaneous Systems Using Bar Statics-The Equivalent Beam Method/Die Loesung der linearen gewöhnlichen Differentialgleichungen und simultaner Systeme mit Hilfe der Stabstatik-Das Ersatzbalkenverfahren/.  
15 p2711 A69-30929

## STEIN, R. F.

On the five-minute oscillation of the solar atmosphere.  
13 p2343 A69-27627

## STEIN, S.

The centrifuge as a therapeutic device.  
24 p4265 A69-43372

## STEIN, W. A.

Stellar spectra from 2.8 to 14 microns.  
02 p0327 A69-12713

Applicability of the Maxwell criterion in the calculation of thermodynamic state variables in a two-phase region /Die Anwendbarkeit des Maxwell-Kriteriums zum Berechnen der thermodynamischen Zustandsgroessen im Zweiphasengebiet/.  
06 p1030 A69-17170

Detection of the 12.8-micron Ne super plus emission line from the planetary nebula IC 418.  
09 p1591 A69-21452

Circumstellar infrared emission from two peculiar objects - R Aquarii and R Coronae Borealis.  
09 p1603 A69-22263

The spectrum of NML Cygnus from 7.5 to 14 microns.  
10 p1785 A69-24101

A possible identification of interstellar silicate absorption in the infrared spectrum of 119 Tauri.  
10 p1786 A69-24104

Spectral distribution of infrared radiation from the Trapezium region of the Orion Nebula.  
10 p1786 A69-24106

Boundary conditions for the equations of state of pure fluids at the critical point /Die Grenzbedingungen fuer Zustandsgleichungen reiner fluider Stoffe am kritischen Punkt/.  
11 p2001 A69-25201

The 2.8-14-micron spectrum of Jupiter.  
22 p4028 A69-40662

## STEINBACH, M.

Satellite tracking cameras developed in Germany /GDR/.  
13 p2262 A69-27958

Dome-movement control of the 2 metre-pec telescope-installations.  
15 p2588 A69-30441

## STEINBACH, R.

A new graphic display/plotter for small digital computers.  
21 p3679 A69-39608

## STEINBACHER, R. H.

Surveyor 5 science results.  
02 p0317 A69-12023

## STEINBERG, J.-L.

Radioelectric observations /Observations radioelectriques/.  
02 p0316 A69-11908

New techniques in space radio-astronomy.

05 p0821 A69-15844

## STEINBERG, M.

Calibration and use of electrostatic probes for hypersonic wake diagnostics.  
19 p3291 A69-35717

## STEINBERG, R.

A solution to tritium pump contamination for small accelerators.  
12 p2059 A69-26499

## STEINBERG, R. H.

Comparison of the intraretinal b-wave and d.c. component in the area centralis of cat retina.  
22 p3883 A69-40881

High-intensity effects on slow potentials and ganglion cell activity in the area centralis of cat retina.  
22 p3883 A69-40882

## STEINBERG, S.

Experimental results of the deployment/rapid inflation characteristics of a buoyant Venus station balloon.  
[AIAA PAPER 69-1017] 22 p3922 A69-40389

## STEINBERGER, E. H.

On the hydrodynamics of pairs of spheres falling along their line of centres in a viscous medium.  
05 p0788 A69-15725

## STEINBERGER, S.

Measuring the temperature distributions in an H sub 2 cascade arc up to 27,000 deg K /Messung von Temperaturverteilungen im H sub 2 -Kaskadenbogen bis 27000 deg K/.  
15 p2671 A69-31101

## STEINBRECHER, D. H.

Microwave radiometric capabilities and techniques.  
12 p2033 A69-26976

## STEINBRENNER, F.

Gallons and gammas.  
18 p3139 A69-35468

## STEINBRUNN, K.

Behavior of stationary electromagnetic wave fields for small frequencies /Ueber das Verhalten stationaerer elektromagnetischer Wellenfelder fuer kleine Frequenzen/.  
20 p3487 A69-37071

## STEINBUCH, K.

Adaptive systems using learning matrices.  
07 p1088 A69-18387

## STEINEMANN, A.

Dislocation-free single crystals of gallium arsenide /Einkristallines Galliumarsenid ohne Versetzungen/.  
02 p0296 A69-11792

## STEINEMANN, S.

Resistance to pitting corrosion of Cr-Ni-Mo stainless steel produced normally in a high-frequency furnace and that produced by electroslag remelting /Resistance a la corrosion par piques de l'acier inoxydable au chrome-nickel-molybdene elabore normalement a haute frequence et refondu sous laitier electroconducteur /ESR//.  
05 p0781 A69-16499

## STEINER, C.

Atomic clocks /Les horloges atomiques/.  
09 p1501 A69-22598

## STEINER, D.

Using the time dimension for automated crop surveys from space.  
18 p3126 A69-34337

The use of stereo height as a discriminating variable for crop classification on aerial photographs.  
23 p4155 A69-41721

## STEINER, J. E.

Operational environment requirements of the new generation of large subsonic jets.  
13 p2201 A69-27340

Environmental compatibility planning for commercial aircraft.  
[AAS PAPER 69-326] 24 p4252 A69-42808

## STEINER, K.-H.

Microwave frequency doubling in ruby.  
17 p3015 A69-33024

## STEINER, P.

Synchronous satellites as part of a complex tracking network  
[AIAA PAPER 68-449] 21 p3674 A69-39019

## STEINER, R.

A simplified method of estimating the response of a light aircraft to continuous atmospheric turbulence.  
[AIAA PAPER 69-766] 19 p3433 A69-35657

## STEINHARDT, E.

EDUSAT - An educational television satellite system for the United States.  
18 p3235 A69-35076

## STEINKAMP, J.

The problems of increasing microwave power by means of frequency multipliers /Probleme bei der Erzeugung grosserer Leistungen im Mikrowellendbereich mit Frequenzvervielfachern/.  
11 p1841 A69-25607

## STEINLE, F. W.

Data correlation from investigations of a high-subsonic speed transport aircraft model in three major transonic wind tunnels.  
[AIAA PAPER 69-794] 19 p3237 A69-35636

## STEINLIN, U. W.

Revision of the fundamental data of the RGU system /Revision der Grundlagen des RGU- Systems/.  
03 p0514 A69-13963

## STEINMAN, A. M.

Epinephrine metabolism in mammalian brain after intravenous and intraventricular administration.  
21 p3650 A69-38323

## STEINMAN, J. B.

Effect of composition and thermal treatments on the weldability of nickel-base 718 alloy.  
22 p3968 A69-39885

## STEINMAN, R. M.

Comparison of saccadic eye movements during fixation and reading.  
22 p3880 A69-40855

Tracking eye movements with and without saccadic correction.  
22 p3881 A69-40856

## STEINMANN, J. H.

Reliability demonstration testing - Facilities planning and design.  
22 p3954 A69-40033

## STEINMETZ, D. L.

Stellar spectroscopy, 1.2 mu to 2.6 mu.  
04 p0655 A69-14667

## STEINMETZ, L.

Selection and amplification of a single mode-locked optical pulse.  
03 p0441 A69-14185

## STEINRISSER, F.

Electron and phonon tunneling spectroscopy in metal-germanium contacts.  
06 p0982 A69-18234

Tunneling measurement of electron-plasmon interaction in degenerate semiconductors.  
19 p3382 A69-36049

## STEINWAY, W. J.

Sub-optimal closed-loop control of nonlinear systems using invariant imbedding techniques.  
18 p3111 A69-34678

## STEKHANOV, A. I.

Existence of a diamond-like semiconductor in a glassy state /O sushchestvovanii almazopodobnogo poluprovodnika v stekloobraznom sostoianii/.  
10 p1747 A69-23963

## STEKHNOVSKII, D. I.

Planetary Circulation of the Atmosphere /Planetarnia Tsirkulatsia Atmosfery/.  
14 p2472 A69-29723

Evaluation of the use of radiative information from satellites in operative synoptic work /Opyt ispol'zovaniia radiatsionnoi informatsii so sputnikov v operativnoi sinopticheskoi rabote/.  
14 p2473 A69-29729

Analysis of the state of the atmosphere over the globe from a picture obtained by the Zond 5 space station at an altitude of 90,000 km /Analiz sostoianiia atmosfery nad zemnym sharom po snimku s vysoty 90,000 km, poluchennomu kosmicheskoi stantsiei "Zond-5"/.  
23 p4184 A69-42486

## STEKLY, Z. J. J.

Principles of stability in cooled superconducting magnets.  
17 p3007 A69-33792

Superconducting magnets for MHD generators.  
21 p3782 A69-39478

- STEKNER, B.**  
Conclusions from the visit to the Fokker firm in Schiphol, Holland /Poznatky z navstevy firmy Fokker, Schiphol Holandsko/.  
03 p0434 A69-13791
- STEKOLSHCHIKOV, E. V.**  
On the motion of fluid particles in a one-dimensional gas flow /O dvizhenii kapel' zhidkosti v odnornom gazovom potoke/.  
03 p0419 A69-13920
- STELLMACHER, G.**  
Analysis of faint prominences /Analyse des protuberances de faible brillance/.  
07 p1210 A69-19718  
Indium, rubidium, and caesium in sunspots.  
13 p2343 A69-27626
- STELLMACHER, I.**  
First results of Doppler measurements from the French satellite Diapason /Premiers resultats dus aux mesures Doppler sur le satellite francais Diapason/.  
01 p0065 A69-10543  
Initial processing of French DIA satellite experience /Premieres reductions de l'experience francaise sur satellite DIA/.  
21 p3701 A69-38336
- STELMACH, G. E.**  
Individual differences and intra-individual variability in motor performance under continuous-practice conditions.  
17 p2911 A69-34003
- STELMAKH, O. M.**  
Control of the frequency of a CO sub 2 laser by a boron trichloride filter.  
08 p1323 A69-19804
- STELMAKH, V. F.**  
Microwave instabilities in gallium arsenide /SVCh nestabil'nosti v arsenide gallia/.  
01 p0136 A69-10256  
Microwave instabilities in gallium arsenide.  
09 p1559 A69-22649
- STELMASZCZYK, Z.**  
Monitoring turbine engines during their operation /Kontrola silnikow turbinowych w czasie ich eksploatacji/.  
19 p3329 A69-36873
- STELTER, W.-J.**  
Influence of spinal cord temperature on the stretch response of tonic and phasic alpha-motoneurons /Der Einfluss der Rueckenmarktemperatur auf die Dehnungsantwort tonischer und phasischer alpha-Motoneurone/.  
23 p4098 A69-42099
- STELTZIED, C. T.**  
The ultra cone - An ultra-low-noise space communication ground radio-frequency system.  
[JPL-TR-32-1340] 02 p0220 A69-12429  
A radiometric method for measuring the insertion loss of radome materials.  
02 p0251 A69-12434  
Microwave thermal noise standards.  
02 p0210 A69-12438  
Observations of the total lunar eclipse of October 18, 1967, at a wavelength of 3.33 millimeters.  
10 p1789 A69-24132  
Pioneer VI Faraday-rotation solar-occultation experiment.  
15 p2700 A69-31419  
The effect of capacitive-screw tuners on waveguide loss.  
16 p2757 A69-31586  
Precision insertion-loss calibrations at 90 GHz.  
16 p2760 A69-31945
- STEMBRIDGE, C. H.**  
Organic analysis by pyrolysis-gas chromatography-mass spectrometry - A candidate experiment for the biological exploration of Mars.  
[JPL-TR-32-1368] 11 p1832 A69-25640
- STEMMLE, D. W.**  
Enzymatic synthesis of adrenaline in mammalian brain.  
07 p1066 A69-19260
- STENERHAG, B.**  
Influence of adsorbed gases on the emission of X-rays from exploding tungsten wires in vacuum.  
01 p0118 A69-10668  
Flash radiography using exploding wire technique.  
12 p2092 A69-26480
- STENERSON, R. O.**  
Muon showers deep underground.  
15 p2678 A69-31485
- STENFLO, J. O.**  
The magnetoheliograph.  
11 p1880 A69-24432  
Solar magnetic-field measurements using Babinet compensators /Research note/.  
11 p1880 A69-24433  
A method to obtain a solar velocity map directly in one spectroheliogram.  
17 p3030 A69-33061  
A mechanism for the build-up of flare energy.  
20 p3589 A69-37550  
The Zeeman effect for weak magnetic fields.  
22 p4019 A69-40287
- STENFLO, L.**  
Whistler mode propagation in the presence of a longitudinal electrostatic field.  
05 p0758 A69-16417  
Plasma oscillations in a constant electric field.  
06 p0970 A69-17957  
Time-dependent phenomena for a weakly ionized plasma in an external electric field.  
08 p1362 A69-20265
- STENGEL, R. F.**  
Altitude stability in supersonic cruising flight.  
[AIAA PAPER 69-813] 19 p3366 A69-35627  
Manual attitude control of the Lunar Module.  
[AIAA PAPER 69-892] 21 p3824 A69-39417
- STENGLE, G.**  
Uniform asymptotic solution of second order linear differential equations without turning varieties.  
18 p3163 A69-34328
- STENHOLM, S.**  
Semiclassical theory of a high-intensity laser.  
19 p3335 A69-36048  
The influence of the mode structure on the quantum theory of the laser.  
24 p4327 A69-42789
- STENING, R. J.**  
An assessment of the contributions of various tidal winds to the S sub q current system.  
16 p2775 A69-32087  
An increase in the horizontal magnetic variation near 8 deg dip latitude.  
16 p2778 A69-32189  
Some features of the equatorial electrojet.  
18 p3130 A69-35186
- STENKIN, E. D.**  
Simultaneous efflux of two gas flows from a propelling nozzle.  
21 p3785 A69-39094
- STENNER, P.**  
Radial velocity variations of the shell of zeta Tauri.  
20 p3599 A69-37471
- STENNING, A. H.**  
Attenuation of inlet flow distortion upstream of axial flow compressors.  
[AIAA PAPER 69-485] 16 p2842 A69-32694
- STENSRUD, D. G.**  
Boron fiber-composite-reinforced fuselage stringers for the SST.  
[AIAA PAPER 69-763] 19 p3329 A69-36298
- STENZEL, R. L.**  
Microwave scattering and noise emission from after-glow plasmas in a magnetic field.  
18 p3127 A69-34436
- STEPAN, A.**  
Fatigue properties and test procedures of glass reinforced plastic rotorblades.  
[AHS PAPER 370] 17 p3060 A69-33518
- STEPANCHUK, A. N.**  
Apparatus for obtaining molten high-melting-point compounds /Ustanovka dlia polucheniia pлавlennykh tugoplavkikh soedinenii/.  
12 p2055 A69-26264
- STEPANCHUK, V. F.**  
Method of designing a simple injector /Metodika rascheta prostoishego inzhektora/.  
06 p0872 A69-17920  
Estimation of the efficiency of liquid-metal MHD systems with jumpwise operation of the injector in the mixing chamber of the vaporizer /Otsenka effektivnosti zhidkometallicheskh MGD-ustanovok pri rabote inzhektora so skachkom v kamere smesheniia raznogonno ustroistva/.  
06 p0872 A69-17921
- STEPANENKO, A. S.**  
Stability of orthotropic cylindrical shells taking into account the momentariness of subcritical state /Ustoichivost' ortotropnykh tsilindricheskikh obolochek s uchedom momentnosti dokriticheskogo sostoianiiya/.  
14 p2532 A69-28981
- STEPANENKO, D. V.**  
Possibilities of interpreting from space images of the earth observed in various spectral regions /Vozmozhnosti interpretatsii izobrazhenii zemli iz kosmosa, nabludaemykh v raznykh zonakh spektra/.  
05 p0763 A69-16054  
Possible interpretation of space photographs of the earth taken in different spectral bands.  
20 p3545 A69-37964
- STEPANENKO, I. A.**  
Motion and polarization interaction of a plasma stream in a magnetic multipole.  
08 p1370 A69-21015  
An investigation of the possibility of eliminating impurities in hydrogen plasmoids by injection across an octupole magnetic field.  
08 p1370 A69-21016  
Investigation of the possibility of eliminating impurities from a hydrogen plasmoid by injecting it across an octupole magnetic field /Issledovanie vozmozhnosti oshchistki ot primesei vodorodnogo plazmennogo sgustka pri inzhektirii poperek oktopol'nogo magnitnogo polia/.  
24 p4358 A69-43474
- STEPANENKO, I. P.**  
The MOS transistor as an element of amplifier circuits /MOP-TRANZISTOR kak element usilitel'nykh skhem/.  
18 p3109 A69-35161
- STEPANENKO, M. M.**  
Fabry-Perot interferometer for studying the spatial distribution of the electron concentration in a plasma /Interferometr Fabri-Pero dlia issledovaniia prostranstvennogo raspredeleniia konsentratsii elektronov v plazme/.  
14 p2451 A69-29777
- STEPANENKO, N. D.**  
Damping power of thin-walled fiberglass-reinforced plastic structure during high-frequency vibrations in various eigenmodes /Dempfiruiushchaya sposobnost' tonkostennykh stekloplastikovykh konstrukttsii pri vysokochastotnykh kolebaniyakh po razlichnym sobstvennyim formam/.  
17 p3065 A69-33938
- STEPANENKO, N. P.**  
Drift of two connected gyroscopes /Ob ukhode dvukh svyazannykh giroskopov/.  
18 p3135 A69-34561
- STEPANENKO, V. D.**  
Radio brightness temperature contrasts in observations of clouds and precipitation /Kontrasty radiolarkostnykh temperatur pri nabludenii oblakov i osadkov/.  
06 p0954 A69-17999  
Procedure and results of an experimental investigation of the polarization characteristics of meteorological targets /Metodika i rezul'taty eksperimental'nogo izucheniia poliarizatsionnykh svoistv meteorologicheskikh tselei/.  
16 p2807 A69-32269
- STEPANENKO, V. N.**  
Method of identifying cyclic plants. II /Metod identifikatsii tsiklichnykh ob'ektiv. II/.  
08 p1298 A69-20421  
A method for identification of cyclic plants. I.  
11 p1861 A69-25714  
Identification of cyclic plants. II.  
14 p2427 A69-29659
- STEPANIAN, A. A.**  
Certain results of studies of the diurnal variation in the nucleon and hard components of cosmic rays /Nekotorye rezul'taty issledovaniia sutochnoi variatsii v nuklonnoi i zhestkoi komponentakh kosmicheskikh luchei/.  
04 p0648 A69-14374
- STEPANIAN, N. N.**  
Spectroscopic investigation of a chromospheric flare on September 2, 1966 /Spektroskopicheskoe issledovanie kromosfernoi vspyshki 2 sentyabrya 1966 g./.  
20 p3591 A69-38043
- STEPANIANTS, G. A.**  
Theory of branching systems /K teorii vetviashchikhsia sistem/.  
20 p3509 A69-37075
- STEPANIUK, V. V.**  
Parametric vibrations of a cylindrical shell containing a pulsating flow of liquid in the middle layer.  
06 p1022 A69-17186



## STEPANOV, A. I.

## STEPANOV, A. I.

Effect of inverted-population distribution on transverse laser modes.  
06 p0932 A69-16913

A laser with a resonator mirror transmittance which is variable over the cross section /OKG s peremennym po secheniiu propuskaniem zerkal rezonatora/.  
15 p2634 A69-30962

Angular divergence and transverse modes of a neodymium glass laser with a spherical cavity /Uglovoe raskhozhdenie i poperechnye tipy kolebaniy lazera na neodimovom stekle so sfericheskimi rezonatorom/.  
20 p3554 A69-37725

## STEPANOV, A. M.

Limiting conditions of ignition of a metallic particle /Predel'nye uslovia vosplamneniya metallicheskoj chastitsy/.  
02 p0355 A69-12670

Ignition of a metallic particle /Vosplamnenie metallicheskoj chastitsy/.  
08 p1375 A69-20343

## STEPANOV, A. N.

Influence of reflections on the parameters of a traveling-wave strophotron amplifier /Vliianie otrazhenii na parametry strofotronnogo usilitel'ya begushchei volny/.  
03 p0407 A69-13980

## STEPANOV, A. S.

Plasma Thermionic Energy Conversion /Plazmennoe Termioemionnoe Preobrazovanie Energii/.  
12 p2017 A69-26850

## STEPANOV, B. I.

Loss sources in organic-dye lasers /Istochniki poter' v kvantovykh generatorakh na organicheskikh krastitel'nykh/.  
01 p0090 A69-10381

Sources of losses in organic dye lasers.  
12 p2109 A69-26676

Lasers based on solutions of organic dyes.  
20 p3555 A69-38011

## STEPANOV, B. M.

Radio echo from an explosion region.  
02 p0282 A69-12415

Explosion in an external electric field.  
04 p0634 A69-14430

Investigation of ultrashort light pulses employing time-base image converter tube.  
12 p2083 A69-26139

Long-distance tropospheric propagation at short and moderate wavelengths /O dal'nem troposfernom rasprostraneni korotkikh i srednikh voln/.  
19 p3279 A69-36879

## STEPANOV, D. P.

Frequency fluctuations of a gas laser and the determination of its natural spectral line width /Fluktuatsii chastoty gazovogo lazera i opredelenie estestvennoi shiriny ego spektral'noi linii/.  
08 p1326 A69-20540

## STEPANOV, E. S.

Electrochemical dimensional machining of metals and alloys with a rotating cathode.  
23 p4168 A69-41309

## STEPANOV, G. A.

Effect of a prior long-term loading on the properties of 18Kh2N4VA steel at -196 deg C /Vliianie predvaritel'nogo dlitel'nogo nagruzheniya na svoystva stali 18Kh2N4VA pri -196 deg C/.  
04 p0614 A69-14573

Effect of preliminary prolonged loading on the properties of steel 18Kh2N4VA at -196 deg C.  
15 p2638 A69-30274

## STEPANOV, G. I.

Unsteady flow past a cascade of slender profiles with a stagger angle /Nestatsionarnoe obtekanie reshetki tonkikh profilov s uglom vynosa/.  
02 p0190 A69-12575

Interaction between a turbulent wake and the external flow /Vzaimodeistvie turbulentnogo sleda s vneshnim potokom/.  
19 p3299 A69-36390

## STEPANOV, G. V.

An apparatus for testing materials under tension and impact loading.  
15 p2583 A69-30286

Reaction impulse during collision of spherical particles with obstacles /O reaktivnom impul'se pri sudarenii sfericheskikh chastits s pregradami/.  
22 p4047 A69-41101

Tensile test facility for high strain rates /Ustanovka dlia ispytaniya materialov na raztiazhenie s vysokimi skorostiami deformirovaniia/.  
23 p4147 A69-41710

## STEPANOV, I. U. S.

Penetration depth during meteorite particle impact at prethreshold velocities /Glubina probivaniia pri udare meteornykh chastits s doporogovymi skorostiami/.  
01 p0152 A69-10579

Penetration depth due to impact of meteor particles having subthreshold velocities.  
15 p2709 A69-30749

## STEPANOV, K. L.

The screening of a metallic surface with the products of its degradation by low-density laser radiation /Ekranirovanie poverkhnosti metalla produktami razrusheniia ee potokami izlucheniia OKG maloi plotnosti/.  
03 p0442 A69-14221

## STEPANOV, K. M.

Induced scattering and decay of electron-acoustic oscillations in a plasma /Indukovane rozsiianiia i rozpadi elektronno-zvukovikh kolivan' u plazmy/.  
21 p3776 A69-38584

Contribution to the nonlinear theory of high-frequency hybrid resonances in an inhomogeneous plasma /Do nelineinnoi teorii visokochastotnikh gibridnikh rezonansiv u neodnorodnoi plazmy/.  
21 p3672 A69-38588

## STEPANOV, K. N.

Contribution to the theory of magnetic pumping of an inhomogeneous collisional plasma.  
02 p0288 A69-12167

Interaction of charged particles with surface waves in a plasma.  
03 p0480 A69-14135

Concerning one possibility of anomalously rapid turbulent heating of plasma ions.  
09 p1548 A69-21673

Observation of plasma instability in a strong alternating electric field.  
09 p1552 A69-22526

Turbulent heating of plasma ions during the development of an electron-acoustic instability /O turbulentnom nagreve ionov plazmy pri razvitii elektronno-zvukovoi neustoiichivosti/.  
10 p1728 A69-23137

The coupling of a whistler with acoustic waves in a high pressure plasma.  
18 p3180 A69-35024

The absorption of an extraordinary wave near hybrid resonance in a weakly nonuniform plasma.  
18 p3180 A69-35025

## STEPANOV, L. N.

Some data on volatile /oxygen-containing/ compounds evolved by a number of vegetables.  
02 p0198 A69-11509

Gas chromatographic determination of volatile oxygen-containing compounds in liquid biological media /Gazokhromatograficheskoe opredelenie letuchikh kislorodsoderzhashchikh veshchestv v zhidkikh biologicheskikh sredakh/.  
13 p2216 A69-28627

## STEPANOV, M. I.

The effect of laser radiation on metals /Vliianie izlucheniia OKG na metally/.  
11 p1906 A69-25684

## STEPANOV, N. S.

Adiabatic transformation of a wave spectrum in an unsteady medium with dispersion /Ob adiabaticheskoi preobrazovanii spektra voln v nestatsionarnoi srede s dispersiei/.  
10 p1658 A69-23955

Nonresonance parametric phenomena in distributed systems.  
17 p2928 A69-33868

## STEPANOV, R. D.

Estimate of the anisotropy of the short- and long-term strength of fiberglass-reinforced plastics /K voprosu ob otsenke anizotropii kratkovremennoi i dlitel'noi prochnosti stekloplastikov/.  
18 p3162 A69-35352

## STEPANOV, R. P.

Myocardial changes in rabbits after general chronic irradiation /according to karyometric data/ /Izmeneniia miokarda u krolikov posle obshchego khronicheskogo oblucheniia /po dannym kariometrii/.  
17 p2906 A69-32929

## STEPANOV, S. A.

Study of the effect of gamma irradiation on photochromatic glass by the EPR method /Izuchenie metodom EPR deistviia gamma-oblucheniia na fotokhromnye stekla/.  
23 p4180 A69-42471

## STEPANOV, S. IA.

Steady-state motions of a gyro stabilized satellite /O statsionarnykh dvizheniakh sputnika-girostata/.  
12 p2173 A69-25885

## STEPANOV, V. A.

Problem of mode competition in an ionized krypton laser /K voprosu o konkurentsii perekhodov v OKG na ionizirovannom kriptone/.  
15 p2635 A69-31106

## STEPANOV, V. B.

Investigation of the H-resonator /Issledovanie H-rezonatora/.  
05 p0727 A69-15639

Investigation of an H-cavity.  
16 p2762 A69-32497

## STEPANOV, V. E.

Some results of the active regions magnetic field researches.  
22 p4010 A69-39991

Instruments of the Sayan Sun Observatory.  
22 p3943 A69-39997

## STEPANOV, V. G.

Special characteristics of installations with magnetogasdynamic converters working on the Rankine cycle.  
03 p0369 A69-14154

## STEPANOV, V. I.

Preliminary results of a search for fractionally-charged particles in the cosmic rays at sea level.  
13 p2333 A69-28425

## STEPANOV, V. K.

Experimental investigation of self-insulation of bodies in a medium against intense light.  
07 p1157 A69-19594

Structure of laser spark image.  
09 p1519 A69-22531

## STEPANOV, V. N.

Effect of the nature of metallic materials in contact with a titanium alloy AT-3 on its fatigue strength under fretting corrosion conditions.  
12 p2113 A69-26125

Study of the role of surface layers and conditions of strain aging during multiple thermomechanical treatment, on the basis of internal friction relaxation maxima /Issledovanie roli poverkhnostnykh sloev i uslovii deformatsionnogo starenia pri mnogokratnoi mekhaniko-termicheskoi obrabotke po relaksatsionnym maksimumam vnutrennego treniia/.  
17 p2991 A69-33939

Application of the internal friction method for determining the stability of strengthening effect during thermomechanical treatment of heat-resistant alloys /Ispol'zovanie metoda vnutrennego treniia dlia opredeleniia ustoiчивosti efekta uprochneniia pri mekhaniko-termicheskoi obrabotke zharooprochnykh spлавov/.  
17 p2991 A69-33940

## STEPANOVA, A. I.

A neodymium-doped glass pulsed laser with selected second harmonic radiation.  
12 p2108 A69-26594

## STEPANOVA, E. A.

Results of a determination of orientation from on-board measurement data.  
17 p3001 A69-33221

Results of a determination of the orientation of the Proton 2 satellite and description of its motion with respect to its center of mass /Rezultaty opredeleniia orientatsii sputnika "Proton-2" i opisaniie ego dvizheniia otносitel'no tsentra massa/.  
22 p4037 A69-41090

## STEPANOVA, M. G.

Effect of powdering temperature on the structure and properties of pressed semifinished products of sintered aluminum alloys with iron and chromium additions /Vliianie temperatury raspylevaniia na strukturu i svoystva pressovannykh polufabrikatov iz spechennykh aluminievyykh spлавov s dobavkami zheleza i khroma/.  
03 p0452 A69-14119

## STEPANOVA, S. I.

Mechanisms of spatial orientation in flight and some causes of its disturbance.  
08 p1263 A69-19938

## STEPANYANTS, L. G.

Method of theoretical investigation of externally pressurized gas-lubricated bearings. [ASME PAPER 68-LUBS-44]  
13 p2267 A69-27283

## STEPCHKOV, A. A.

The calculation of flow in a nozzle and a diffuser with MHD interaction /K raschetu techeniia v sople i difuzore s MGD-vozdeistviem/.  
11 p1826 A69-25348

## STEPHAN, J. G.

Space tracking in the Soviet Union.  
01 p0032 A69-10952

## STEPHANOU, S. E.

Application of heat pipe technology to rocket engine cooling.  
[AIAA PAPER 69-582] 16 p2839 A69-32668

## STEPHEN, J. E.

Carrier legal responsibility for commercial air safety.  
06 p1042 A69-16847

## STEPHEN, M. J.

Theory of a Josephson oscillator.  
03 p0486 A69-13387

## STEPHENS, D. G.

The use of helium bubbles as a pogo fix in launch vehicle propellant lines.  
11 p1967 A69-25498

## STEPHENS, S. A.

Rigidity spectrum of cosmic ray helium nuclei greater than 12 bv.  
06 p0988 A69-17276

Cosmic electrons /Invited talk/.  
06 p0991 A69-17308

Cosmic ray electrons in the Galaxy.  
06 p0991 A69-17309

Electrons in metagalaxy and their implications.  
06 p0991 A69-17310

On the existence of the galactic radio halo.  
09 p1590 A69-21395

## STEPHENS, W. B.

Axisymmetric static and dynamic buckling of spherical caps due to centrally distributed pressures.  
[AIAA PAPER 69-89] 06 p1028 A69-18133

## STEPHENS, W. E.

A novel use of a telescope to photograph metal diaphragm openings.  
20 p3538 A69-37227

## STEPHENSON, C. B.

The masses of stars above the main sequence.  
18 p3195 A69-34429

## STEPHENSON, C. J.

Magnetohydrodynamic flow between rotating coaxial disks.  
24 p4354 A69-42599

## STEPHENSON, J. C.

Laser-excited vibrational fluorescence of HCl and the HCl-CO sub 2 laser.  
07 p1144 A69-18289

## STEPHENSON, J. J.

HF radar signatures of traveling ionospheric irregularities, 3D ray-tracing simulation.  
21 p3717 A69-39280

## STEPHENSON, L. D.

Radiation measurements and analysis in a nuclear rocket propellant tank mockup.  
[AIAA PAPER 69-475] 16 p2810 A69-32716

## STEPHENSON, L. M.

A possible relationship between strong, electromagnetic, weak and gravitational interactions.  
22 p3981 A69-40416

## STEPHENSON, N.

New trends in the development of heat-resistant nickel alloys cast by the lost wax method /Nouvelles tendances dans le developpement des alliages de nickel refractaires moules a la cire perdue/.  
09 p1522 A69-21608

Cast high temperature materials.  
[IME PAPER 10] 12 p2147 A69-25795

## STEPHENSON, R. L.

The effect of fabrication variables on the creep-rupture properties of molybdenum-base alloys.  
17 p2987 A69-33076

## STIEPIEN, K.

Photometric behavior of magnetic stars.  
09 p1599 A69-22196

The light, magnetic, and radial-velocity variations of HD 10783.  
09 p1600 A69-22197

RW Camelopardalis - A cepheid with a companion.  
10 p1775 A69-23201

Magnetic stars. I - Observations /Gwiazdy magnetyczne. I - Obserwacje/.  
11 p1954 A69-24362

The magnetic field and light variations of 17 Comae Berenices and chi Cancr.  
15 p2692 A69-30774

## STEPIN, E. V.

A multielectrode probe with potentials which are negative with respect to the plasma /Mnogoelektroodnyi zond pri otritsatel'nykh potentsialakh otositel'no plazmy/.  
12 p2138 A69-26538

Application of the delay method in plasma studies /Primenenie metoda zaderzhki dlia issledovaniia plazmy/.  
12 p2138 A69-26539

## STEPINA, A. I.

Formation of supersaturated ternary solid solutions at large cooling rates of the melt /Obrazovanie peresyshchennykh troinykh tverdykh rastvorov pri bol'shikh skorostiakh okhlazhdeniia rasplava/.  
21 p3745 A69-38955

## STEPKIN, V. S.

Informative properties of infrared scanning equipment of meteorological satellites /Informatsionnye svoystva skaniruiushchei infrakrasnoi apparatury meteorologicheskikh sputnikov/.  
06 p0929 A69-17979

## STEPNIEWSKI, W. Z.

Application of optimization techniques to the design and operation of V/STOL aircraft.  
05 p0701 A69-15570

Emerging philosophy in VTOL handling qualities.  
11 p1823 A69-25387

## STEPNOV, M. N.

Statistical evaluation of the fatigue properties of light alloys in connection with strength calculations.  
17 p3052 A69-32979

## STEPUKHOVICH, V. A.

Theory of regenerative amplification in devices with nonretarded waves /K teorii regenerativnogo usileniia v priborakh s nezamedlennymi volnami/.  
02 p0214 A69-11610

Regenerative amplification in unretarded wave devices.  
11 p1847 A69-24717

## STERE, A.

Effect of hypoxia exposure on RNA synthesis in the rat anterior pituitary in vitro.  
01 p0015 A69-10923

## STERENBOGEN, IJ. A.

Diffusion processes in the welding of metals /Review/ /Diffuzionnye protsessy pri svarke metallov /obzor/.  
11 p1890 A69-24799

## STERLING, S. A.

Regenerative Josephson effect detector for far-infrared radiation.  
19 p3313 A69-36417

## STERLING, T. S.

Detection of explosive sabotage in aircraft crashes.  
06 p0868 A69-17833

## STERLINI, J.

Study of two-phase media for use in MHD devices /Etude des milieux biphasés en vue de leur utilisation dans des dispositifs MHD/.  
13 p2306 A69-27479

## STERMOLE, F. J.

Melting of a finite paraffin slab as applied to phase-change thermal control.  
12 p2190 A69-26785

## STERN, B.

Possibilities of calculating ionization cross sections of hydrogenoids by the Monte Carlo method /Possibilities de calcul de sections d'ionisation d'hydrogenoides par la methode de Monte-Carlo/.  
01 p0122 A69-10040

## STERN, G. S.

Orbit selection for planetary mapping missions.  
03 p0518 A69-14247

## STERN, H. E.

Advantages of using a combination electromagnetic and material shield.  
15 p2652 A69-31522

## STERN, J. A.

Determination of terminal sterilization process parameters.  
05 p0712 A69-15942

Painted helicopter main rotor blades and flicker-induced vertigo.  
17 p2913 A69-33175

## STERN, L.

Fundamentals of Integrated Circuits.  
14 p2419 A69-29002

## STERN, M.

Stability of a finitely deformed thin cylindrical shell.  
08 p1413 A69-20414

## STERN, M. E.

Towards a generalization of "minimum free-energy" applicable to statistically steady turbulent motion.  
04 p0630 A69-14893

## STERN, P.

Statistical linearization of nonlinear memory-type elements /Linearisation statistique des organes non-lineaires a memoire/.  
03 p0409 A69-13005

Comments on "An energy metric algorithm for the generation of Liapunov functions."  
12 p2122 A69-26521

## STERN, R. A.

A 500 kw X-band air-cooled ferrite latching switch.  
13 p2229 A69-27674

## STERN, R. J.

Ground coverage of spin stabilized satellites.  
03 p0522 A69-14244

Orbit selection for planetary mapping missions.  
03 p0518 A69-14247

The maximization of the range of a high lift, low thrust missile in horizontal flight.  
09 p1610 A69-22086

## STERN, W.

Grid probe measurements in negative glow light /Gittersondenmessungen im negativen Glimmlicht/.  
14 p2493 A69-29694

## STERNBERG, E.

On the diffusion of load from a transverse tension bar into a semi-infinite elastic sheet.  
[ASME PAPER 68-WA/APM-15] 04 p0669 A69-14396

Couple-stresses and singular stress concentrations in elastic solids.  
10 p1798 A69-23149

## STERNBERG, S.

Celestial Mechanics. Part 1.  
18 p3199 A69-34928

## STERNIN, B.

Sobolev-type boundary-value problems for elliptic operators /Kraevye zadachi tipa S. L. Soboleva dlia ellipticheskikh operatorov/.  
08 p1344 A69-21157

Boundary value problems of Sobolev type for elliptic operators.  
15 p2645 A69-31250

## STERNSTEIN, S. S.

Inhomogeneous deformation and yielding of glass-like high polymers.  
17 p2993 A69-34169

## STERZER, F.

Microwave solid-state power sources.  
10 p1662 A69-23144

## STESHENKO, N. V.

Magnetic fields of solar faculae /Magnitnye polia sol-nechnykh fakelov/.  
04 p0651 A69-14368

## STETSENKO, V. IA.

Fixed points of nonlinear mappings /O nepodvizhnykh tochkakh nelineinykh otobrazhenii/.  
19 p3361 A69-36640

## STETSIUK, D. V.

An optical device for the measurement of local fluid flow velocities /Opticheskii pribor dlia izmereniia mestnykh skorosti potoka zhidkosti/.  
03 p0427 A69-12969

## STETSON, K. A.

Measuring combination mode vibration patterns by hologram interferometry.  
18 p3135 A69-34635

## STETT, M. A.

Mechanical properties of brittle matrix composites.  
12 p2115 A69-26830

## STEUDEL, H.

Calculation of the line shape for the dynamic Stark effect during irradiation of an optical resonance field /Berechnung der Linienform fuer den dynamischen Starkeffekt bei Einstrahlung eines optischen Resonanzfeldes/.  
08 p1325 A69-20282

## STEURER, W. H.

Processing of materials in space.  
19 p3324 A69-35588



## STEVENS, H. L.

## STEVENS, H. L.

Nondestructive testing for aerospace corrosion.  
21 p3733 A69-39495

## STEVENS, K. N.

Judgments of the acceptability of aircraft noise in the presence of speech.  
18 p3097 A69-34325

## STEVENS, K. W. H.

Origin of pulsar radiation.  
01 p0149 A69-10272

## STEVENS, R. T.

Large-scale displays.  
02 p0250 A69-12159

## STEVENS, S. A.

What is configuration management/ques/  
12 p2192 A69-25849

## STEVENS, S. J.

The effect of inlet conditions on the performance of two annular diffusers.  
[ASME PAPER 68-WA/FE-38]  
05 p0698 A69-16110

## STEVENS, T. S.

Fatty acids in blue-green algae - Possible relation to phylogenetic position.  
05 p0707 A69-15751

## STEVENS, W. A.

Multichannel data compression simulation.  
02 p0213 A69-12814

## STEVENSON, D. C.

Pressure fluctuations in a separated flow region.  
04 p0544 A69-14868

## STEVENSON, F. R.

Characteristics of composite carbon resistors used for measuring accelerator terminal voltages.  
06 p0907 A69-17705

## STEVENSON, G. R.

Temperature-dependent electron spin resonance studies. II.  
10 p1651 A69-22938

## STEVENSON, J.

Effect of salts and organic solvents on the activity of *Halobacterium cutirubrum* catalase.  
18 p3096 A69-35291

## STEVENSON, L.

Application of quadratic optimization to helicopter flight control.  
24 p4253 A69-43279

## STEVENSON, R. E.

Satellite imagery of the earth.  
20 p3536 A69-36930

## STEVENSON, W. H.

Optical frequency shifting by means of a rotating diffraction grating.  
[AOLR-69-1]  
11 p1889 A69-25394

## STEVEDING, B.

Surface temperature and heat transfer conditions in the ablation of shear thinning and shear thickening liquids.  
[ASME PAPER 67-HT-78]  
13 p2374 A69-27778

## STEWART, W. G.

Cooldown transients in cryogenic transfer lines.  
[NAS-NRC PAPER I-1]  
22 p4050 A69-40625

## STEWART, A. I.

Electron impact excitation of the dayglow.  
20 p3591 A69-38061

Mariner 6 - Ultraviolet spectrum of Mars upper atmosphere.  
22 p4023 A69-40568

## STEWART, C. B.

Aircraft manufacturer's air safety program - The SST System Safety Program.  
06 p1041 A69-16838

## STEWART, D. A.

Eddy flux of sensible heat at different levels in the stratosphere.  
04 p0627 A69-15084

## STEWART, E. C.

Study of a global search algorithm for optimal control.  
17 p2933 A69-33745

## STEWART, F. E.

Electronic properties of some TCNQ complexes.  
11 p1832 A69-25675

## STEWART, H. J.

Lunar exploration - The first decade raises more questions than it answers.  
[JPLR-TR-32-1399]  
06 p1001 A69-17159

## STEWART, J. D.

Magnitude estimates of rotational velocity during and following prolonged increasing, constant, and zero angular acceleration.  
04 p0554 A69-15332

Comparison of three methods to determine thresholds for perception of angular acceleration.  
05 p0708 A69-15969

Mass flow rate for nearly-free molecular slit flow.  
11 p1874 A69-25357

Effects of angular acceleration on man - Thresholds for the perception of rotation and the oculogyral illusion.  
23 p4101 A69-41674

Free-molecular drag for flow along a concave cylindrical surface.  
24 p4249 A69-43660

## STEWART, J. J.

X-engine emergency cooldown system.  
[AIAA PAPER 69-512]  
16 p2810 A69-31846

## STEWART, J. L.

Helium speech processing.  
17 p2911 A69-34095

## STEWART, J. M.

Neutrino viscosity in cosmological models.  
01 p0148 A69-10053

## STEWART, J. R.

Economic impact on domestic air traffic - An econometric approach.  
[AAS PAPER 69-329]  
24 p4417 A69-42807

## STEWART, K. H.

Preliminary results of molecular oxygen observations from the Ariel III satellite.  
21 p3717 A69-39263

## STEWART, K. L.

Orthogonal formulation of structural network problems using the concepts of open and closed paths.  
03 p0526 A69-13735

## STEWART, L. E.

Engineering/manufacturing interfaces.  
[SAE PAPER 680668]  
03 p0433 A69-13451

## STEWART, L. G.

Nondestructive measurement of the quality of electroexplosive interfaces.  
04 p0607 A69-14973

## STEWART, P.

Propagation of electromagnetic waves normal to a magnetic field in a uniform anisotropic Maxwellian plasma.  
04 p0637 A69-15048

## STEWART, R. G.

Effect of failure kinetics on time-to-failure distributions.  
17 p2936 A69-32895

Causal approach to reliability.  
18 p3144 A69-34490

## STEWART, R. T.

The dynamic spectrum of the proton event of 7 July 1966.  
10 p1765 A69-23750

Homologous bursts of spectral type II.  
17 p3024 A69-33803

## STEWART, R. W.

Empirical determination of heating efficiencies in the Mars and Venus atmospheres.  
12 p2155 A69-26019

Exospheric temperatures on Mars and Venus.  
12 p2155 A69-26020

Solar cycle variation of exospheric temperatures on Mars and Venus - A prediction for Mariner 6 and 7.  
20 p3595 A69-37136

## STEWART, W. L.

Advanced concepts to increase turbine blade loading.  
[ASME PAPER 68-WA/GT-11]  
05 p0812 A69-16136

## STEWART, W. M.

Alpha-gamma angular correlations in super 120 Sn.  
03 p0469 A69-13098

Alpha-gamma angular correlations on super 58 Ni.  
03 p0470 A69-13100

## STEWARTSON, K.

Pathological oscillations of a rotating fluid.  
11 p1876 A69-25558

Laminar separation.  
18 p3122 A69-34918

Flow near the apex of a plane delta wing.  
19 p3240 A69-36590

On the flow near the trailing edge of a flat plate. II.  
20 p3458 A69-37098

## Self-induced separation.

23 p4151 A69-41691

## STEZHKO, A. V.

Stability analysis of a cylindrical shell reinforced at the edges by elastic ribs /Issledovanie ustoychivosti tsilindricheskoi obolochki, podkreplennoi po kraiam uprugimi shpangoutami/.  
23 p4229 A69-41992

## STIBBS, D. W. N.

The calculation of stellar radiative opacity.  
07 p1222 A69-19589

## STIBER, G.

Measurements of polarization and electron density in the flare spray on July 11, 1966.  
08 p1378 A69-20244

Polarization measurements of the proton flare on 11 July 1966.  
10 p1764 A69-23740

## STIBITZ, G. R.

Calculating diffusion in biological systems by random walks with special reference to gaseous diffusion in the lung.  
22 p3885 A69-40978

## STICKFORD, G. H., JR.

Shock tube measurements of radiation from a simulated Jupiter atmosphere.  
[AIAA PAPER 69-184]  
06 p0908 A69-18207

## STICKLAND, A. C.

The Proton Flare Project /The July 1966 Event/.  
10 p1760 A69-23725

Solar-Terrestrial Physics- Solar Aspects, International Years of the Quiet Sun and COSPAR, Joint Symposium, London, England, July 17-22, 1967, Proceedings. Part I.  
15 p2672 A69-30005

## STICKLAND, D. J.

Interstellar clouds.  
10 p1779 A69-23608

## STICKLEY, C. M.

Color centers and ruby laser output energy degradation.  
02 p0256 A69-12358

Color centers and ruby-laser output-energy degradation.  
16 p2795 A69-31697

## STICKNEY, G. H.

Multi-layer sandwich panels.  
21 p3832 A69-38418

## STICKNEY, R. E.

Measurements of the work function and desorption energy of cesium and potassium on /100/ tungsten.  
09 p1558 A69-21808

## STIDHAM, H. D.

Librational amplitudes - Raman and nuclear quadrupole resonance spectra of p-dichlorobenzene and p-dichlorobenzene-d sub 4.  
01 p0122 A69-10286

Chlorine-35 nuclear quadrupole resonance spectra of several chlorodiazines.  
01 p0123 A69-10290

## STIEFEL, L. J.

Vacuum-ultraviolet photochemistry. IX - Primary and chain processes in the photolysis of hydrogen peroxide.  
10 p1652 A69-23527

## STIEFEL, E.

Regularization of the perturbed Keplerian motion in a three-dimensional space by a generalized canonical transformation /Regularisation du mouvement Keplerien perturbe dans l'espace a trois dimensions par une transformation canonique generalisee/.  
05 p0827 A69-16602

Report of Switzerland to COSPAR on activities in space research in 1968.  
15 p2723 A69-31427

Stabilization of Cowell's method.  
18 p3165 A69-34842

## STIEFEL, S. W.

Directional effects in the stress corrosion cracking of an aluminum alloy.  
09 p1521 A69-21399

## STIEGLER, J. O.

Mechanical behavior of CVD tungsten at elevated temperatures.  
01 p0097 A69-10647

- STIEGLER, K.**  
On the mass of the expanding universe with negative curvature within the Einstein-Friedman theory.  
20 p3599 A69-37472
- STIELER, B.**  
Dynamic stability of the movement of aircraft around their center of gravity during climbing and diving maneuvers / Zur dynamischen Stabilität der Bahnbewegung von Flugzeugen beim Steig- und Sinkflug.  
04 p0548 A69-14825
- STIFFLER, J. J.**  
Coding and synchronization - The signal design problem.  
03 p0383 A69-12871  
On the performance of a class of PCM bit synchronizers.  
19 p3271 A69-36249
- STIGLIC, P.**  
Hypersonic research engine integrated propulsion control.  
[AIAA PAPER 69-546] 16 p2845 A69-32744
- STILES, P. J.**  
GeTe-GaAs tunnel junction - A negative-resistance Schottky-type barrier.  
06 p0980 A69-17770  
Application of a k-p band model to GeTe and SnTe.  
19 p3385 A69-36516
- STILL, E.**  
Statistical foundations of thermodynamics. I.  
09 p1623 A69-22395  
Statistical foundations of thermodynamics. II - Equivalence problem - Stability conditions.  
12 p2191 A69-27148
- STILLER, B.**  
Composition of cosmic rays measured in Gemini XI.  
21 p3787 A69-38350
- STILLER, W.**  
Higher harmonics generation in weakly ionized plasmas in time-varying crossed fields.  
16 p2820 A69-31752  
Generalized electron cyclotron resonance in weakly ionized time-varying magnetoplasmas.  
16 p2820 A69-31753
- STIMPFLING, A.**  
Strioscopic methods for measuring mass volume in hypersonic wakes in a hot-shot tunnel / Methodes strioscopiques de mesure des masses volumiques dans les sillages hypersoniques en tunnel de tir.  
19 p3293 A69-35740
- STIMPSON, L. D.**  
Revised lunar surface thermal characteristics obtained from the Surveyor V spacecraft.  
[AIAA PAPER 69-594] 17 p3033 A69-33287
- STINE, L. L.**  
Real-time compression and transmission of Apollo telemetry data.  
[AIAA PAPER 69-970] 22 p3906 A69-40350
- STINEHELFER, H. E., SR.**  
A multistub filter for microstripline.  
01 p0041 A69-10200
- STINGELIN, R. W.**  
Invited comments - Line scan devices and why to use them.  
12 p2096 A69-26980
- STINNETT, D. M.**  
Comparative evaluation of the thoracic impedance and isotope dilution methods for measuring cardiac output.  
14 p2408 A69-29304
- STIPE, J. G.**  
Iron meteorites as mascons.  
04 p0654 A69-14629
- STIPPE, M.**  
Method of orthogonal polynomials in plane theory of elasticity.  
17 p3067 A69-34144
- STIRLING, W. L.**  
Experimental strong turbulent heating.  
17 p3014 A69-33827
- STIRRUP, K.**  
Aluminum contact deposition and testing for silicon solar cells.  
19 p3250 A69-35686
- STIX, T. H.**  
Finite-amplitude collisional drift waves.  
15 p2660 A69-30916
- STKLIANINA, N. E.**  
Electron microscopic study of changes in solar ganglia due to general X-raying / Elektron-nomikroskopicheskoe issledovanie izmeneniia gangliiv solnechnogo spleneniia v rezul'tate obshchego rentgenovskogo obлучeniia/.  
21 p3659 A69-39064
- STOBBS, S. H.**  
Metastable helium in interstellar and intergalactic space.  
06 p1010 A69-17973
- STOCHL, R. J.**  
Pressurant gas requirements for the pressurized discharge of liquid hydrogen from propellant tanks.  
[AIAA PAPER 69-526] 16 p2845 A69-32737
- STOCK, F. T.**  
Performance of an electrodeless conductivity probe in anisotropic plasma.  
03 p0483 A69-14252
- STOCK, J.**  
The atmospheric extinction at Cerro Tololo.  
10 p1777 A69-23386  
Spectrophotometric parameters of early type stars. I - Equivalent widths of hydrogen lines.  
10 p1777 A69-23387  
The atmospheric extinction in photoelectric photometry.  
17 p3031 A69-33100
- STOCKDALE, J. A. D.**  
Collisions of monoenergetic electrons with NO sub 2 - Possible lower limits to electron affinities of O sub 2 and NO.  
13 p2301 A69-27363
- STOCKEL, J. F.**  
Evaluation of the performance of solar arrays on Intelsat spacecraft at synchronous altitude.  
23 p4072 A69-42287
- STOCKEMER, F. J.**  
AH-56A onboard fueling capability.  
[AIAA PAPER 68-560] 12 p2017 A69-26770
- STOCKER, T. L.**  
Reflectivity enhancement of semiconductors by Q-switched ruby lasers.  
06 p0935 A69-17768
- STOCKHAM, T. G., JR.**  
Digital Processing of Signals.  
20 p3487 A69-37146
- STOCKMAN, D. L.**  
An experimental study of saturable absorbers for ruby lasers.  
07 p1155 A69-19089
- STOCKTON, A.**  
Spectroscopy of a new, faint quasi-stellar object.  
10 p1785 A69-24092
- STODDARD, F. J.**  
Theoretical and experimental studies of piston-compressor techniques for producing hypervelocity test flows.  
[AIAA PAPER 69-334] 13 p2249 A69-28270
- STODDART, J. A. P.**  
Correlation of constant pressure turbulent boundary layer measurements on insulated walls.  
17 p2958 A69-34051
- STOEBE, T. G.**  
Factors affecting the mechanical behavior of lithium fluoride single crystals.  
01 p0138 A69-10602
- STOECKLY, R.**  
Spectrophotometry of a B-type star in the globular cluster M13.  
09 p1599 A69-22193
- STOELINGA, J. H.**  
A simple grating spectrometer for the far infrared / Ein einfacher Gitterspektrometer fuer das ferne Infrarot/.  
21 p3726 A69-39682
- STOESSSEL, W.**  
Photoconduction in CdS crystals generated by a modulated electron beam.  
03 p0490 A69-13946
- STOETZEL-RIEZLER, W.**  
Tritium and argon-39 in stone and iron meteorites.  
09 p1604 A69-22398
- STOFFELS, P. H.**  
Theoretical and experimental investigations of a combustion chamber for high-power engines in the case of continuous and intermittent liquid-fuel injection / Theoretische und experimentelle Untersuchungen an einer Brennkammer fuer Hochleistungstriebwerke bei kontinuierlicher und intermittierender Einspritzung von fluessigem Kraftstoff/.  
08 p1421 A69-20762
- STOFFREGEN, W.**  
Upper atmosphere temperatures deduced from spectra of BaO recorded during barium release experiments.  
09 p1488 A69-21664
- STOIANOV, N. V.**  
Stabilization of a nonlinear controlled system in the critical case of a pair of purely imaginary roots / O stabilizatsii nelineinoi upravliaemoi sistemy v kriticheskom sluchae pary chisto mnimyykh kornei/.  
05 p0794 A69-15790  
The stabilization of a nonlinear control system in the critical case of two pairs of purely imaginary roots / O stabilizatsii nelineinoi upravliaemoi sistemy v kriticheskom sluchae dvukh par chisto mnimyykh kornei/.  
13 p2298 A69-27745
- STOIANOVA, I.**  
Determination of the center of gravity of gravitating bodies by the gravitational anomaly technique / Opredeliane tsent'ra na tezhesta na tela po tekhnite gravitatsionni anomalii/.  
05 p0792 A69-15696
- STOIDA, I. U. M.**  
Change of orthostatic stability in athletes after 40-day hypokinesia.  
10 p1646 A69-23581
- STOIKE, D. A.**  
Heat transfer in pyrolytic graphite - A hybrid computer simulation.  
02 p0353 A69-12387
- STOJANOFF, C. G.**  
Spectroscopic investigations in a thermionic converter plasma.  
14 p2491 A69-29259
- STOJANOVIC, R.**  
On the general solution for torsion of polar elastic media.  
08 p1414 A69-20527  
Dislocations in the generalized elastic Cosserat continuum.  
10 p1799 A69-23153
- STOKER, J. R.**  
Fully automatic structural analysis by the matrix force method.  
21 p3843 A69-39311
- STOKER, P. H.**  
Representation of balloon altitude-intensity data in terms of primary and secondary cosmic-ray particle absorption lengths.  
21 p3791 A69-39249
- STOKES, A. D.**  
Plasma conductivity measurements using RF probes.  
16 p2820 A69-31707
- STOKES, N.**  
The occultation of BD -17 deg 4388 by Neptune. II.  
17 p3041 A69-33815
- STOKKE, E. B.**  
The semidiurnal oscillation in a thermalgeostrophic atmosphere.  
17 p2959 A69-33148
- STOLARIK, J. D.**  
The application of the image orthicon television system to rocket trajectory determination.  
12 p2033 A69-26965  
Electric fields in the vicinity of auroral forms from motions of barium vapor releases.  
18 p3128 A69-34935
- STOLARSKI, R. S.**  
Calculation of auroral emission rates and heating effects.  
02 p0235 A69-11426  
Ionospheric electron temperature calculations including protonospheric and conjugate effects.  
22 p3939 A69-40506
- STOLBETSOV, V. I.**  
Equations of the nonlinear oscillations of a cavity partially filled with a liquid / Ob uravneniakh nelineinykh kolebaniy polosti, chastichno zapolnennoi zhidkost'iu/.  
14 p2432 A69-29626
- STOLIAROV, A. S.**  
Device for recording the moment of sample failure during thermal endurance tests / Ustroystvo dlia registratsii momenta razrusheniia obraztsov pri ispytaniakh na termostoikost'/.  
06 p0927 A69-17690



## STOLIAROV, O. G.

Doping effect observed during measurements of microhardness in GaSb and InSb /Effekt legirovaniia, nabliudaemyi pri izmerenii mikroverdstoi GaSb i InSb/.

01 p0139 A69-10832

Effect of doping, as observed in the measurements of the microhardness of GaSb and InSb.

11 p1936 A69-24699

## STOLIAROVA, L. I.

Short-term strength of full-scale titanium alloy disks /O kratkovremennoi prochnosti naturnykh diskov iz titanovogo splyva/.

06 p1026 A69-18018

## STOLL, A. M.

Mathematical model of skin exposed to thermal radiation.

06 p0875 A69-17840

Thermal protection principles.

[AGARDOGRAPH-111] 08 p1266 A69-20674

## STOLL, H.

A proven method of selection and standardization of ultrasonic probes.

15 p2617 A69-31517

## STOLL, H. M.

Argon laser FM detection.

17 p2981 A69-33091

## STOLL, I.

Comparison of dispersive properties of axial and angular longitudinally magnetized plasma waveguides.

05 p0802 A69-15925

A quantum mechanical system in an external electromagnetic field /Kvantovoe mekhanicka soustava ve vnejsim elektromagnetickem poli/.

18 p3175 A69-35402

## STOLLER, A. I.

Isolation techniques for fabricating integrated circuits. II - Dielectric refill techniques and decal air isolation.

07 p1100 A69-18618

## STOLOFF, N. S.

Liquid metal embrittlement.

03 p0448 A69-13872

Long range order and the grain boundary strengthening of Fe-49 percent Co-2 percent V.

07 p1166 A69-19264

Precipitation hardening of a Mg-Th-Zr alloy.

07 p1167 A69-19265

Effects of alloying on fracture characteristics.

17 p2988 A69-33551

Precipitation processes in a Mg-Th-Zr alloy.

21 p3743 A69-38735

## STOLOV, A. M.

Study of the electrical conductivity of the plasma in coaxial-type MHD generator models /Issledovanie elektroprovodnosti plazmy v modeliakh MGD-generatorov koaksial'nogo tipa/.

10 p1735 A69-23463

## STOLOV, H. L.

Polar cap ionospheric response to solar cosmic ray events observed by Mariners 2 and 4.

24 p4373 A69-43621

## STOLOVICH, N. N.

Study of the influence of mass transfer processes and resistance forces on the electrodynamic acceleration of the plasma /Issledovanie vliianiia protsessov massopereenosy i sil soprotivleniia na elektrodinamicheskoe uskorenie plazmy/.

13 p2315 A69-28555

Energy relations and energy conversion coefficient for electrodynamic plasma acceleration with allowance for mass transfer processes /Energeticheskie sootnosheniia i koeffitsient preobrazovaniia energii pri elektrodinamicheskoi uskorenii plazmy s ucheto protsessov massopereenosy/.

15 p2664 A69-31176

## STOLP, W. C.

A new technique for integrated testing utilizing confidence levels.

15 p2619 A69-30400

## STOLPOVSKII, V. G.

Radial diffusion of electrons of energy greater than 100 kev in the outer radiation belt.

06 p0919 A69-17720

Particle fluxes in the outer geomagnetic field.

12 p2150 A69-26744

## STOLWIJK, J. A. J.

Skin and subcutaneous temperature changes during exposure to intense thermal radiation.

[AGARDOGRAPH-111] 08 p1264 A69-20671

Responses of man to thermal transients.

[AGARDOGRAPH-111] 08 p1265 A69-20675

Skin temperature and cutaneous pain during warm water immersion.

08 p1267 A69-20683

## STOLZENBACH, F. E.

Lactate dehydrogenase of lobster /homarus Americanus/ tail muscle. I.

22 p3897 A69-41069

## STONE, B. J.

Time structure of solar flare proton events.

09 p1582 A69-22754

Optimization of vibration absorbers - Application to complex structures.

20 p3620 A69-36996

## STONE, D. E. W.

A contribution to the application of photoelasticity to the micromechanics of composite materials.

20 p3565 A69-36940

## STONE, D. G.

Entry flight research and experimentation.

11 p1968 A69-25719

## STONE, D. J.

Automatic evaluation of ionospheric current systems.

12 p2074 A69-26958

## STONE, D. R.

Boundary-layer tripping with emphasis on hypersonic flows.

17 p2950 A69-33249

## STONE, E. C.

Cosmic-ray negatron and positron spectra between 12 and 220 Mev.

08 p1380 A69-20728

Access of solar protons into the polar cap - A persistent north-south asymmetry.

24 p4368 A69-43183

## STONE, G. W.

The autorotation characteristics of various shapes for subsonic and hypersonic flows.

[AIAA PAPER 69-132] 06 p0863 A69-18062

## STONE, H.

The KB-18A panoramic strike camera.

15 p2614 A69-31281

## STONE, H. L.

Iterative solution of implicit approximations of multidimensional partial differential equations.

03 p0456 A69-13554

Cardiovascular effects of low-oxygen atmospheres in conscious and anesthetized dogs.

23 p4078 A69-41314

## STONE, J.

Application of pure fluid elements to control systems.

09 p1443 A69-22740

Structure of the cat's retina after occlusion of the retinal circulation.

22 p3884 A69-40883

## STONE, J. L.

Automatic tuning of a superconducting cavity using optical feedback.

17 p2937 A69-33781

An X-band oscillator using a superconducting cavity.

21 p3683 A69-39453

## STONE, J. W.

Air-to-air recovery of re-entry vehicles.

[AIAA PAPER 68-1163] 03 p0520 A69-13563

## STONE, K.

A case of artificial triggering of VLF magnetospheric noise during the drift of a whistler duct across magnetic shells.

11 p1878 A69-25154

## STONE, M. S.

Synthesis of high data rate coherent telemetry systems.

07 p1083 A69-19123

A new bandlimited M-ary non-coherent telemetry system.

23 p4122 A69-41773

## STONE, N. W. B.

Transient phenomena in the 337-mu M maser.

17 p2981 A69-33088

## STONE, P. H.

Concerning the existence of Taylor columns in atmospheres.

02 p0326 A69-12697

A mechanism for Jupiter's equatorial acceleration.

03 p0508 A69-13347

The meridional structure of baroclinic waves.

17 p2960 A69-33150

## STONE, R.

The cockpit team as part of the company.

22 p4054 A69-41149

## STONE, R. B.

Cockpit noise environment of airline aircraft.

23 p4102 A69-41682

## STONE, R. G.

Cosmic radio noise intensity from 0.45 to 3.0 MHz observed by the ATS II satellite.

07 p1224 A69-19715

Measurements in the ionosphere of the aspect dependence of antenna reactance. I - Variations arising from the inhomogeneous plasma distribution about the vehicle.

22 p3934 A69-39964

Type III radio bursts in the outer corona.

22 p4003 A69-40300

The spectrum of the cosmic radio background between 0.4 and 6.5 MHz.

23 p4219 A69-42375

## STONE, R. O.

Satellite imagery of the earth.

20 p3536 A69-36930

## STONE, S. M.

An experimental laser color TV projection display system.

07 p1137 A69-19740

## STONEHOUSE, A. J.

Chemical conversion coatings retard corrosion of beryllium.

07 p1169 A69-19762

Corrosion prevention coatings for beryllium.

14 p2466 A69-29939

## STONER, J. O., JR.

Accurate determination of carbon-foil surface densities.

10 p1746 A69-23663

Unbacked thin film Fabry-Perot interferometer.

20 p3536 A69-36933

## STONESIFER, F. R.

Fracture-toughness measurements on 12 percent Ni maraging steel weldment.

[AIAA PAPER 68-507] 03 p0450 A69-13910

## STOOLZ, J. M.

A closed-form solution for minimum-fuel, constant thrust trajectories.

[AIAA PAPER 69-905] 21 p3806 A69-39337

## STOPACHINSKII, V. B.

Electrical reflection in n-type GaAs /Elektrootrazhenie v GaAs n-tipa/.

15 p2666 A69-30060

Features of electrical reflection in GaAs with low free-carrier concentration /Osobennosti elektrootrazheniia v GaAs s maloi kontsentratsiei svobodnykh nositelei/.

15 p2666 A69-30061

## STOPFKUCHEN, K.

Technological possibilities of active magnetic attitude control for spin-stable satellites /Technische Moeglichkeiten einer aktiven magnetischen Lageregelung fuer spinstabilisierte Satelliten/.

03 p0521 A69-13644

Attitude control for the Azur earth satellite.

17 p3050 A69-33426

## STORDAHL, H.

Finite-element analysis of axi-symmetric rotors.

19 p3445 A69-36826

## STORLIEN, L. H.

Hyperphagia in rats with cuts between the ventromedial and lateral hypothalamus.

21 p3650 A69-38322

## STOROZHEVSKII, I. M.

Variation of tensile, shearing, bending, and torsional strength with the porosity of metal-ceramic materials.

15 p2638 A69-30283

## STORZ, W.

Comparison of several methods for filtering sampled signals /Vergleich mehrerer Methoden zur Filterung abgetasteter Signale/.

08 p1274 A69-20127

## STORZER, D.

Correction of thermally lowered fission track ages of tektites.

15 p2696 A69-31140

New fission track ages of tektites and related glasses.

23 p4210 A69-41345

## STOSIC, N.

Effect of hypoxic hypoxia on the catecholamine content and some cytochemical changes in the hypothalamus of the cat.

14 p2407 A69-29297

## STOTHERS, R.

An interpretation of the peculiar helium star HZ 29.

06 p0998 A69-16931

Pulsational instabilities in hydrogen-poor massive blue stars. I.

09 p1606 A69-22421

Red supergiants and neutrino emission.

10 p1788 A69-24125

A criterion for nuclear-energized pulsational instability.

13 p2340 A69-27576

On the pulsation hypothesis for massive red supergiants.

15 p2692 A69-30766

Mass loss from pulsating neutron stars.

20 p3604 A69-37573

An explanation for the blue sequence of variable stars.

22 p4026 A69-40650

## STOTSII, A. A.

Effect of atmospheric turbulence on the directive gain of a linear antenna /O vliianii atmosfernoii turbulentnosti na knd lineinoi anteny/.

11 p1844 A69-24435

Reflector radio telescope with a resolution of 15 arc seconds /Reflektornyi radioteleskop s razreshaiushchei sposobnost'iu 15 sekund dugi/.

15 p2679 A69-30102

Diurnal and seasonal variations in the intensity of phase-difference fluctuations or radio waves propagating in the atmospheric ground layer /Sutochnye i sezonnye variatsii intensivnosti fluktuatsii raznosti faz radiovoln, rasprostraniayushchikhsia v prizemnom sloe atmosfery/.

20 p3485 A69-36971

## STOTT, P. E.

Effect of atmospheric turbulence on the multiple scattering of electromagnetic waves by a turbulent plasma.

03 p0478 A69-13959

Microwave scattering by turbulent plasma.

07 p1194 A69-19411

## STOTTMANN, P.

Pressure and temperature measurements in the test-jet of jet engines /Druck- und Temperaturmessungen bei Untersuchungen an Strahlantrieben/.

08 p1316 A69-20869

## STOURAC, L.

Electronic properties of amorphous CdGeAs sub 2.

19 p3390 A69-36557

## STOUT, C. L.

Recent developments in head-up display systems.

08 p1315 A69-20451

## STOUT, R. D.

Categories of steels for welded construction.

12 p2111 A69-25826

## STOUT, R. J.

Development and use of molded shim for aircraft structure.

19 p3319 A69-35551

## STOVALL, F. A.

C-5A reliability program.

19 p3247 A69-36011

## STOW, C. D.

Airborne studies of the electrical properties of large convective clouds.

20 p3572 A69-37907

## STOWE, B. W.

Embedded thermocouple temperature measurements of cooled turbine buckets to high heat flux conditions.

15 p2613 A69-31274

## STOWELL, E. Z.

The calculation of fatigue life in the presence of stress concentrations.

05 p0843 A69-16696

Theory of metal fatigue at elevated temperatures.

10 p1803 A69-24043

## STOYAN, D.

An iterative method for the numerical solution of systems of equations in queueing and reliability theory /Ein Iterationsverfahren zur numerischen Auflöschung von Gleichungssystemen der Bedienungs- und Zuverlässigkeitstheorie/.

10 p1721 A69-23691

## STOZHKOVA, I. U. L.

Coupling coefficients for the charged cosmic-ray component in the stratosphere /Koeffitsienty svyazi dlia zariazhennoi komponenty kosmicheskikh lucheii v stratosfere/.

02 p0306 A69-11659

The proton flares on 7 July, 2 September 1966, and 28 January 1967.

10 p1767 A69-23764

Study of the energy spectrum of 11-year variations in cosmic-ray intensity according to measurements in the stratosphere.

12 p2149 A69-26682

Coupling coefficients for the charged component of cosmic rays in the stratosphere.

13 p2334 A69-28690

Cosmic-ray measurements in the stratosphere over the Arctic and Antarctica.

16 p2851 A69-32537

Proton flares of July 7 and September 2, 1966, and January 28, 1967 /Protonnye vspyshki 7 iul'ia, 2 sent'abria 1966 g. i 28 ianvar'ia 1967 g./.

20 p3587 A69-37045

## STOZHKOVA, I. U. L.

Measurements of cosmic rays in the stratosphere over the Arctic and Antarctica /Izmereniia kosmicheskikh lucheii v stratosfere nad Arktikoi i Antarktidoi/.

09 p1575 A69-21542

## STRACH, V.

Influence of the boundary layer on the shadow of a body /Vliv mezne vrstvy na stin tela/.

03 p0364 A69-13787

## STRACHAN, A. J.

A proposed voltage variable resistor MOST.

04 p0574 A69-14351

## STRACK, W. C.

Interplanetary low-thrust mission analysis.

09 p1585 A69-21206

## STRADOMSKII, M. V.

Calculation of air film cooling for a rotating disk /K raschetu plenochного vozdušnogo okhlazhdeniia vrashchayushchegosia diska/.

06 p1034 A69-17814

## STRAEDE, J.

The accuracy of finite difference analogues of simple differential operators.

19 p3365 A69-36510

## STRAETER, T. A.

A comparison of gradient dependent techniques for the minimization of an unconstrained function of several variables. [AIAA PAPER 69-951]

22 p3975 A69-40333

## STRAHL, H.

SNAP 8 vacuum system.

13 p2241 A69-28086

## STRAHLE, W. C.

The temporal development of a reacting boundary layer near the stagnation point of a vaporizing drop. [AIAA PAPER 69-174]

06 p0912 A69-18056

## STRAIGHT, J. W.

Solution to beam vibrations problems with mixed response-excitation input information. [AIAA PAPER 68-319]

04 p0676 A69-14711

## STRAIT, B. G.

An integrated circuit control system for the Pewee reactor. [IEEE PAPER 2B-6]

07 p1179 A69-19188

## STRAIT, B. J.

Array design for a specified pattern by matrix methods.

20 p3507 A69-37847

## STRAITON, A. W.

Radiometric measurements of the moon at 8.6- and 3.2-millimeter wavelengths.

02 p0327 A69-12717

Pressure broadening of the 1.63-mm water-vapor absorption line.

07 p1184 A69-18911

Atmospheric attenuation studies in the 183-325 GHz region.

23 p4115 A69-41586

## STRAIZHIS, V.

Improved response curves and parameters of the U, B, V system - Summary of the results /Utochnenie krivyykh reaktsii i parametrov sistemy U, B, V - Svodka rezul'tatov/.

15 p2689 A69-30562

Energy distribution in the spectrum of gamma-Cas in 1967 /Raspreделение energii v spektre gamma-Cas v 1967 g./.

19 p3426 A69-36565

Effect of red leak of an ultraviolet filter on the color U-V indices /K voprosu vlianiia krasnogo propuskaniia ul'trafioletovogo fil'tra na kolor-indeksy U-V/.

19 p3426 A69-36566

## STRAKA, E. R.

Survey of the present technology of fiber optics.

06 p0958 A69-17676

## STRAKHOV, G. I.

Energy dissipation in bonded structures /Rasseianie energii v kleynykh konstrukttsiakh/.

17 p3066 A69-33943

## STRAKHOV, V. P.

Laboratory clamp-type diode holders for injection lasers and electroluminescent diodes.

03 p0435 A69-12985

Reduction of the oscillation threshold of an uncooled injection laser by uniaxial compression.

03 p0441 A69-13848

Investigation of the radiation pulsations of a CW GaAs injection laser.

18 p3154 A69-35495

About the threshold phenomena in the injection lasers.

19 p3337 A69-36527

## STRAKHOVSKII, G. M.

Characteristics of a molecular oscillator in a magnetic field /Kharakteristiki molekuliarnogo generatora v magnitnom pole/.

05 p0727 A69-15643

Effect of temperature on the emission spectrum of semiconductor lasers /Vliianie temperatury na spektr izlucheniia poluprovodnikovyykh kvantovyykh generatorov/.

13 p2271 A69-27888

Influence of surface contamination of the storage flask on the operation of a hydrogen quantum oscillator /Vliianie zagriazneniia poverkhnosti nakopitel'noi kolby na rabotu vodorodnogo kvantovogo generatora/.

15 p2634 A69-30942

Properties of a maser in a magnetic field.

16 p2762 A69-32500

Effect of temperature on the emission spectra of semiconductor lasers.

21 p3738 A69-39146

## STRAKOVICH, V. O.

A problem of rocket flight dynamics /K odnoi zadache dinamiki poleta rakety/.

21 p3818 A69-38857

## STRANAK, FR.

Thermal noise in a channel with data transmitted by a frequency modulated radio relay link /Tepelny sum v kanalu informace prenasene radioreleovym spojem s kmitoctovou modulaci/.

21 p3672 A69-38653

## STRAND, K. A. A.

The orbit of eta Cassiopeiae.

22 p4013 A69-40120

## STRAND, L. D.

A comparison of two methods of measuring particle size of Al sub 2 O sub 3 produced by a small rocket motor. [AIAA PAPER 69-146]

06 p0984 A69-18117

## STRAND, R. F.

Light scattering constants for a water cloud.

23 p4184 A69-42177

## STRAND, T.

Linearized inviscid-flow theory of two-dimensional thin jet penetration into a stream.

01 p0007 A69-11019

## STRANG, G.

On multiple characteristics and the Levi-Lax conditions for hyperbolicity.

18 p3165 A69-35277

## STRANG, J. R.

Measuring radar range accuracy.

08 p1275 A69-20228

## STRANGWAY, D. W.

Magnetic paleointensity studies on a recent basalt from Flagstaff, Arizona.

02 p0244 A69-12018

Moon - Electrical properties of the uppermost layers.

22 p4023 A69-40570

## STRANNIGAN, J. S.

Stress distribution and buckling in thin sheets with central slits.

10 p1796 A69-23069



## STRAPP, M. G.

- Stress distribution in a tension specimen notched on one edge.  
19 p3447 A69-36859
- Application of grids to plastics for the moire fringe method of strain measurement.  
22 p4042 A69-40312

## STRAPP, M. G.

- Two-dimensional transpiration cooling.  
[AIAA PAPER 69-96] 06 p1039 A69-18212

## STRASCHILL, M.

- Effect of D-amphetamine on the activity of single neurons of the cat's tectum opticum.  
23 p4084 A69-41466

## STRASHININ, E. P.

- Electric-field fluctuations in weakly ionized plasma flows /O fluktuatsiiakh elektricheskogo polia v potokakh slaboionizovannoi plazmy/.  
13 p2310 A69-28029

## STRASHININA, K. P.

- Integrals of the equations of motion of a viscous fluid /Integrali ravnaniy rukhu v'iazkoi ridiini/.  
02 p0231 A69-12135

- Integral of the Navier-Stokes equations for three-dimensional motion of incompressible viscous fluid /Integral uravnenii Nav'e-Stoksa dlia prostranstvennogo dvizheniia viazkoj neszhimaemoi zhidkosti/.  
08 p1342 A69-20320

## STRATFORD, A. H.

- Airports and air transport growth and transformation.  
16 p2766 A69-32020

## STRATONOVA, M. M.

- Calculation of creep in a multilayer cylinder under nonisothermal load /Raschet polzuchesti mnogosloinogo tsilindra pri neizotermicheskom nagruzhenii/.  
18 p3225 A69-35358

## STRATTON, A.

- The Schuler pendulum and inertial navigation.  
02 p0248 A69-11593
- Air traffic and navigation in the Second Century.  
17 p3004 A69-34201

## STRATTON, K.

- Electron spin resonance studies on proton-irradiated ribonuclease and lysozyme.  
03 p0372 A69-13485

## STRATTON, R.

- The accuracy of the WKB approximation for tunneling in metal-semiconductor junctions.  
02 p0301 A69-12652

## STRATTON, T. F.

- Experiments using a 25 kw hollow cathode lithium vapor MPD arc jet.  
[AIAA PAPER 69-241] 09 p1561 A69-21222

## STRATTON, W. K.

- The application of fracture mechanics to the fail safety of rotor blades.  
07 p1053 A69-18872

## STRATY, G. C.

- Bellows-sealed valve for reactive gases at moderately high pressures.  
09 p1493 A69-21428

- The vapor pressure of liquid fluorine.  
[NAS-NRC PAPER H-2] 22 p3998 A69-40624

## STRAUB, D.

- Multicomponent diffusion coefficients of dissociated air /Ueber die polynaeren Diffusionskoeffizienten dissoziierter Luft/.  
09 p1623 A69-22098

## STRAUBINGER, A.

- Simplified simulation of the dynamic behavior of engines /Vereinfachte Simulation des dynamischen Verhaltens von Triebwerken/.  
08 p1301 A69-20167

## STRAUCH, R.

- A radioaltimeter of advanced design /Un radioaltimetre de conception avancee/.  
19 p3315 A69-36699

## STRAUCH, R. G.

- Technique for measurement of HCN-laser linewidth.  
17 p2979 A69-32850

## STRAUS, S.

- Vaporization of organic plasticizers.  
04 p0620 A69-14956

## STRAUSS, B.

- Principles of stability in cooled superconducting magnets.  
17 p3007 A69-33792

## STRAUSS, E. L.

- Ablative heat shields for planetary entry vehicles.  
02 p0333 A69-11750

## STRAUSS, H. J.

- Non-orthogonal beam steering commands for array antennas.  
04 p0570 A69-14305
- Control of electronically scanned radar.  
11 p1834 A69-24544

## STRAUSS, J. C.

- Remarks on the application of dynamic programming to function generation.  
03 p0401 A69-13765
- Digital simulation of continuous dynamic systems - An overview.  
04 p0565 A69-15339
- Hybrid assumed mode solution of non-linear partial differential equations.  
04 p0566 A69-15345

## STRAUT, E. K.

- Studies of the moon /Issledovaniia lunny/.  
13 p2336 A69-27353

## STRAWBRIDGE, D. R.

- Numerical solutions of the Navier-Stokes equations for axisymmetric flows.  
03 p0419 A69-13990

## STRAWDERMAN, W. A.

- Turbulent-flow-excited vibration of a simply supported, rectangular flat plate.  
07 p1236 A69-19461

## STRAZIK, W. F.

- Polymeric Schiff bases. XVI.  
10 p1651 A69-23308
- Polymeric Schiff bases. XVII.  
13 p2217 A69-28317

## STRECKER, H.

- Investigations on semiconducting collector materials.  
09 p1558 A69-21825
- The voltage drop of the ignited mode as a function of current density.  
14 p2401 A69-29232
- Investigations on noble gas converters.  
14 p2403 A69-29249

## STRECKERT, J. H.

- Performance of a wick-limited heat pipe.  
[ASME PAPER 69-HT-20] 24 p4413 A69-43549

## STREED, E. R.

- Passive thermal control by second-surface mirror.  
20 p3632 A69-37290
- A comparison of infrared-emittance measurements and measurement techniques.  
23 p4164 A69-41633

## STREETER, G. R.

- A small, low power pulse height analyzer with memory for space applications.  
[IEEE PAPER 3C-6] 07 p1135 A69-19200

## STREETER, J. K.

- Mass discrimination in a time-of-flight mass spectrometer. I - Geometric mass discrimination at magnetic electron multiplier.  
04 p0599 A69-15014

## STREETER, T. D.

- Optimal design of structures with constraints on natural frequency.  
11 p1989 A69-25496

## STREETER, V. L.

- Two and three-dimensional fluid transients.  
05 p0747 A69-16071

## STREHLOW, R. A.

- Fundamentals of Combustion.  
01 p0176 A69-10906
- Two-dimensional diffuse shock waves in carbon dioxide.  
02 p0233 A69-12534
- Transverse waves in detonations. I - Spacing in the hydrogen-oxygen system.  
09 p1622 A69-21953

- Transverse waves in detonations. II - structure and spacing in H sub 2-O sub 2, C sub 2 H sub 4-O sub 2, and CH sub 4-O sub 2 systems.  
13 p2378 A69-28217
- On the propagation of turbulent flames.  
13 p2379 A69-28452

- Shock-tube studies in exothermic systems.  
18 p3116 A69-34462

- Experimental and analytical study of H sub 2-air reaction kinetics using a standing-wave normal shock.  
[AIAA PAPER 67-479] 23 p4239 A69-41893

## STREICHAN, G.

- Measures for achieving formalized production of electronic spacecraft devices and structural components /Massnahmen zur protokollierten Fertigung elektronischer Raumfahrtgeraete und -Bauelemente/.  
23 p4171 A69-42474

## STREIFER, W.

- Uniform asymptotic expansions for prolate spheroidal wave functions.  
04 p0623 A69-14892
- Comparison of laser mode calculations.  
08 p1328 A69-21091
- Guided waves in inhomogeneous focusing media. I - Formulation, solution for quadratic inhomogeneity.  
13 p2221 A69-28062
- Guided waves in inhomogeneous focusing media. II - Asymptotic solution for general weak inhomogeneity.  
17 p2921 A69-33673
- Guided waves in inhomogeneous focusing media. III - Wall effects, losses, and the transition from fast to slow waves.  
20 p3497 A69-38130

## STRELBITSKAIA, A. I.

- Theory of elastoplastic bending of plates with a nonlinear stress-strain diagram /K teorii uprugoplasticheskogo izgiba plastin s nelineinoi diagrammoi deformirovaniia/.  
04 p0667 A69-14269
- Stress-strain state of plates during bending, taking into account strengthening of the material /Napriazhenno-deformirovannoe sostoianie plastin pri izgibe s uchetom uprochneniia materiala/.  
11 p1985 A69-25175

## STRELETS, V. G.

- Certain dynamic characteristics of the vestibular analyzer under the action of Coriolis forces /Nekotorye dinamicheskie pokazateli vestibularnogo analizatora pri deistvii uskoreniia koriolisa/.  
20 p3472 A69-37262

## STRELKOV, A. S.

- Neutron distribution in the atmosphere with allowance for density variation.  
12 p2149 A69-26683

## STRELKOV, G. M.

- Venusian emission near lambda 1.35 cm /Izлучenie Venery vblizi lambda 1.35 cm/.  
04 p0658 A69-14960
- Greenhouse effect in the Venusian atmosphere /Parnikovyi effekt v atmosfere Venery/.  
13 p2345 A69-27690
- The radiation of Venus near lambda 1.35 cm.  
18 p3197 A69-34723

## STRELNIKOV, I. U. V.

- Position-Sensitive Sensors of Optical Tracking Systems /Pozitsionno-chuvstvitel'nye datchiki opticheskikh slediaschikh sistem/.  
16 p2790 A69-32111

## STRELNIKOVA, I. A.

- Extended electron-hole junctions in single crystals of gallium antimonide.  
10 p1745 A69-23329
- Morphological peculiarities and the distribution of impurities in single crystals of GaSb with extended junctions.  
10 p1745 A69-23330

## STRELTSOVA, V. N.

- Biological action of 120-Mev protons in a wide range of doses /O biologicheskome deistvii protonov energiei 120 Mev v shirokom diapazone doz/.  
21 p3658 A69-39058

## STREMLER, F. G.

- Phase analysis in multiple-sensor receivers with high signal-to-noise ratio.  
13 p2220 A69-27938

## STREMPEL, J.

- Some features of the large antenna array with comments on its mode of operation /Beschreibung der grossen Empfangsanlage und Bemerkungen zu ihrer Funktionsweise/.  
17 p2946 A69-33768

## STRENGERS, TH.

- Studies on the influence of fast transportation on the circadian excretion pattern of the kidney in humans.  
09 p1444 A69-22545
- The urinary excretion of hormonal metabolites before, during and after intercontinental flights.  
24 p4268 A69-43404

## STRENZWILK, D. F.

- Calculation of the sublattice magnetization of yttrium iron garnet by the Oguchi method.  
03 p0485 A69-13297

**STRETEN, N. A.**  
A note on multiple image photo-mosaics for the Southern Hemisphere. 22 p3977 A69-40733

**STREVEY, G. R.**  
A separable payload control system for orientation of scientific research instruments. 06 p1014 A69-17583

**STREY, G.**  
Extremal properties of force constants. III - Dependence of the progressive rigidity model with extremal properties on the force constants of the oscillatory motion of molecules /Extremaleigenschaften von Kraftkonstanten. III - Ueber einen Zusammenhang des "progressive rigidity model" mit Extremaleigenschaften von Kraftkonstanten der Schwingungsbewegung von Molekülen/. 17 p3068 A69-34230

**STREZHNEVA, K. M.**  
Experimental study of the altitude dependence of atmospheric absorption at the 4.1 mm wavelength. 02 p0206 A69-11450  
Absolute measurements of radio-emission intensity of the discrete sources Cassiopeia-A and Cygnus-A at 30-60 cm wavelengths /Absolutnye izmereniya intensivnosti radioizlucheniya diskretnykh istochnikov Kassiopeia-A i Lebed'-A na volnakh 30-60 cm/. 19 p3428 A69-36876

**STRICKER, S.**  
The Hall effect and its applications. 09 p1541 A69-22698

**STRICKLAND, H. J.**  
Transonic swirling flow. [AIAA PAPER 68-693] 23 p4151 A69-41887

**STRICKLER, R. F.**  
Experimental extended predictions with a nine-level hemispheric model. 07 p1175 A69-18895

**STRICKLIN, J. A.**  
Nonlinear analysis of shells of revolution by the matrix displacement method. 02 p0346 A69-12511  
A rapidly converging triangular plate element. 04 p0677 A69-14742  
Dynamic buckling of clamped spherical caps under step pressure loadings. 20 p3622 A69-37229

**STRIGANOVA, E. G.**  
"Calorimetric" measurement of the plasma electron temperature in a collisionless shock wave /"Kalorimetricheskoe" izmerenie elektronnoi temperatury plazmy v besstolknovitel'noi udarnoi volne/. 15 p2657 A69-30104

**STRIGIN, B. K.**  
Heat transfer in tubes with viscous-gravity flow. 07 p1243 A69-19733

**STRIKHA, E. M.**  
Status and prospects of titanium application /Sostoianie i perspektivy vnedreniia titana/. 07 p1161 A69-18767

**STRIKHA, V. I.**  
Effect of an electron-electron interaction on the current-voltage characteristic and equivalent circuit of a metal-semiconductor contact /Vliianie elektron-elektronnogo vzaimodeistviia na vol'tampennuiu kharakteristiku i ekvivalentnuiu skhemu kontakta metall-poluprovodnika/. 07 p1107 A69-19162  
Current-voltage characteristic and the equivalent circuit of a metal-semiconductor contact with allowance for a current disturbance in the distribution function /Vol'tampernaia kharakteristika i ekvivalentnaia skhema kontakta metall-poluprovodnik pri uchete tokovogo narusheniia funktsii raspredeleniia/. 19 p3391 A69-36608

**STRING, J.**  
Contractor basic accounting records as a data source for cost analysis. [AAS PAPER 69-465] 24 p4416 A69-42801

**STRINGER, J.**  
The oxidation of niobium single crystals. 23 p4177 A69-42357

**STRINGFELLOW, M.**  
Solid-state phased-array radar uses Gunn diodes, microwave IC's. 14 p2420 A69-29435

**STRINGHAM, R.**  
The photoxidation of t-butyl iodide at low temperatures. 07 p1073 A69-18375

**STRITTMATTER, P. A.**  
A note on the temperature correction procedure for line-blanketed atmospheres. 17 p3039 A69-33730

Stellar rotation. 21 p3812 A69-39519

**STRIZHAK, T. G.**  
Dynamic stability of a double pendulum with a vibrating point of suspension /Dinamicheskaia ustoiichivost' dvojnogo maiтника s vibriruiushchei tochkoi podvesa/. 11 p1884 A69-24768

**STRIZHAK, V. E.**  
Investigation of a liquid-metal induction MHD generator /Issledovanie zhidkometallicheskogo MHD-generatora induktsionnogo tipa/. 13 p2208 A69-27513

**STRIZHEVSKII, L. N.**  
Method of taking into account small-scale components in an objective analysis of pressure trend fields and surface pressure /Sposob ucheta melkomasshtabnykh sostavliaiushchikh pri ob'ektivnom analize poli baricheskoi tendentsii i prizemnogo davleniia/. 18 p3166 A69-34816

**STRIZHEVSKII, V. L.**  
Photoeffect in semiconductors at high illumination levels. 07 p1148 A69-18690  
Mixing of optical frequencies on the basis of the photoelectric effect /Smeshenie opticheskikh chastot na osnove fotoeffekta/. 19 p3332 A69-35871  
Investigation of certain tensors appearing in problems of nonlinear optics /Issledovanie nekotorykh tenzorov, vstrechaiushchikhsia v zadachakh nelineinoi optiki/. 19 p3334 A69-35882

**STROBEL, D. F.**  
Models for the nighttime Venus ionosphere. 09 p1594 A69-21695

**STROBL, H.**  
A family of bipropellant propulsion systems with thrusts ranging from 40 kp to 1 kp - Their technology and their application possibilities in the Symphonie experimental telecommunications satellite /Une famille de propulseurs bi-ergols d'une pousse allant de 40 kp a 1 kp - Leur technologie et leurs possibilites d'application dans le satellite de telecommunications experimental Symphonie/. 16 p2828 A69-31733  
The Vernier motor for the third stage of the Europa I rocket /Moteur vernier pour le 3eme etage de la fusée Europa I/. 17 p3018 A69-33328

**STROCCHI, P. M.**  
Influence of hydrogen content on the relaxation spectrum of alpha titanium. 01 p0096 A69-10614

**STRODTMAN, C. L.**  
Load support of spherical squeeze-film gas bearings. [ASME PAPER 68-LUBS-3] 13 p2266 A69-27279  
Experiment and analysis of a flat disk squeeze-film bearing including effects of supported mass motion. [ASME PAPER 68-LUBS-35] 13 p2266 A69-27280

**STROEBEL, C. F.**  
Biologic rhythm correlates of disturbed behavior in the rhesus monkey. 24 p4261 A69-42708

**STROGIES, W.**  
Numerical Laplace transform in heat conduction theory /Zur numerischen Laplace-Transformation in der Wärmeleitungstheorie/. 21 p3851 A69-39011

**STROGONOV, I. U. D.**  
Investigation of nitrogen diffusion in titanium /Issledovanie diffuzii azota v titane/. 09 p1523 A69-21736  
Investigation of the diffusion of nitrogen in titanium. 20 p3564 A69-38214

**STROKAN, N. B.**  
Statistical method of monitoring parameter homogeneity in semiconductor materials /Statisticheskii metod kontrolya odnorodnosti parametrov poluprovodnikovykh materialov/. 04 p0642 A69-14856  
Statistical method of checking the homogeneity of the parameters of semiconductor materials. 15 p2667 A69-30248

**STROKE, G. W.**  
A new class of optical imaging systems achieving aperture synthesis from non-conventional optics by a posteriori lensless Fourier-transform holography. 03 p0430 A69-13324  
Fourier-transform holography. 11 p1882 A69-24677  
Theory of holographic interferometry. 15 p2611 A69-31146  
Image deblurring and aperture synthesis using a posteriori processing by Fourier-transform holography. 21 p3722 A69-38793  
X-ray imaging with multiple-pinhole cameras using a posteriori holographic image synthesis. 22 p3943 A69-40019  
Deblurring of motion-blurred photographs using extended-range holographic Fourier-transform division. 22 p3944 A69-40020

**STROLLO, M.**  
Mental hygiene in relation to the work of an aircraft pilot and the flight surgeon's tasks as an element of preventive medicine /L'igiene mentale in rapporto al lavoro del pilota d'aviazione e compiti del medico aeronautico quale elemento della medicina preventiva/. 18 p3097 A69-35301  
Aviation health service for preventing flight accidents /L'opera sanitaria aeronautica in funzione della prevenzione degli incidenti di volo/. 18 p3098 A69-35305

**STROM, K. M.**  
Effect of silicon opacity on B- and A-star atmospheres. 09 p1604 A69-22403  
The effect of Lyman-alpha wing opacity on the temperature scale and helium content for subdwarfs. 09 p1607 A69-22431  
Detailed analyses of the peculiar A stars. I - The manganese stars. 17 p3038 A69-33724  
An analysis of the peculiar A star HD 204411. 24 p4376 A69-42664

**STROM, R. L.**  
Selection and planning of research and development projects. 03 p0535 A69-13552

**STROM, S. E.**  
On the variation of the microturbulence parameter with chemical composition. 01 p0154 A69-10877  
The early A stars. III - Model-atmosphere abundance analysis of four field stars. 09 p1600 A69-22198  
Effect of silicon opacity on B- and A-star atmospheres. 09 p1604 A69-22403  
The effect of Lyman-alpha wing opacity on the temperature scale and helium content for subdwarfs. 09 p1607 A69-22431  
Model atmospheres for RR Lyrae stars. 13 p2338 A69-27561  
An analysis of the peculiar A star HD 204411. 24 p4376 A69-42664  
Departures from LTE in the hydrogen lines of late B stars. 24 p4376 A69-42665

**STROMBERG, I. M.**  
New pulse technique for measuring point discharge in the atmosphere. 15 p2610 A69-30698

**STROME, D. R.**  
Generalized variational principles in the finite-element method. [AIAA PAPER 68-290] 23 p4227 A69-41882  
Astra - Boeing's advanced structural analyzer. 23 p4232 A69-42144

**STROMSTA, R. R.**  
Performance of the aerobell extendible nozzle rocket engine. [AIAA PAPER 69-4] 06 p0985 A69-18195  
Analytical methods for computing the effects of turbine exhaust and film-coolant injection on rocket engine performance. [AIAA PAPER 69-473] 16 p2844 A69-32726

**STRONG, A. E.**  
Remote sensing of sea surface temperature. 18 p3130 A69-35057

**STRONG, I. B.**  
Observations of the solar wind, bow shock and magnetosheath by the Vela satellites. 07 p1208 A69-19361



## STRONG, P. F.

Computer program to predict heat transfer through glass.  
[AIAA PAPER 68-65] 13 p2378 A69-28215

## STRONG, R.

Glass cloth and resin for rectification.  
06 p0931 A69-17713

## STROUD, J. F.

Propulsion system design for maintainability in the Lockheed 1011.  
[SAE PAPER 690390] 23 p4201 A69-41665

## STROUD, W. J.

Minimum-weight stiffened shells with slight meridional curvature designed to support axial compressive loads.  
24 p4405 A69-43671

## STROUHAL, G.

Definition of entry corridor thermal limits for Apollo spacecraft.  
[AIAA PAPER 68-1144] 03 p0521 A69-13673

## STROUP, J. P.

A new Co-Ni-Mo-Cr ultrahigh-strength corrosion-resistant alloy system - Multiphase.  
18 p3154 A69-34307

## STROVER, E. M.

The stress analysis of axisymmetric shells using a plane frame analysis program.  
21 p3843 A69-39312

## STROWALD, J.

Schlieren-optics study of the omega-wave /Schlieren-optische Untersuchung der omega- Welle/.  
08 p1350 A69-19889

## STRSCHELETZKY, M.

Calculation of airfoils and blade cascades based on Prandtl's theory of bound vortices /Zur Berechnung von Tragfluegeln und Beschaeufelungen nach der Prandtl'schen Theorie der tragenden Wirbel/.  
11 p1873 A69-25202

## STRUB, H.

High temperature lithium heat pipes.  
14 p2462 A69-29203

## STRUBEL, H.

Biotelemetric examinations of the heart and circulatory systems of helicopter pilots to determine various in-flight stresses /Biotelemetrische Untersuchungen des Herz- Kreislauf-Systems bei Hubschrauberpiloten zur Feststellung der unterschiedlichen fliegerischen Belastung/.  
11 p1829 A69-24347

## STRUBELI, W.

On the formation of gaseous hydrates in comet nuclei /Ueber die Bildung von Gashydraten im Kern von Kometen/.  
03 p0515 A69-14032

Possibilities and limits of control and adjustment techniques in rocketry /Moeglichkeiten und Grenzen der Steuerungs- und Regelungstechnik in der Raketen-technik/.  
20 p3617 A69-37340

## STRUCK, W.

Spherical detonation waves in gas mixtures /Kugelfoermige Detonationswellen in Gasgemischen/.  
08 p1421 A69-20765

## STRUEBIN, H.

Photographic material as a three-dimensional recording medium /Das photographische Material als dreidimensionales Registriermedium/.  
12 p2089 A69-26196

Cibachrome silver dye bleach materials - Properties and applications in aerial photography.  
22 p3949 A69-40991

## STRUG, E. M.

Investigation of the properties of a nickel-titanium steel by a thermal-EMF method /Issledovanie svoystv nikel'titanovoi stali metodom T.E.D.S./.  
19 p3345 A69-36154

## STRUK, L. I.

Static strength of refractory compounds at high temperatures.  
09 p1523 A69-21873

## STRUKOV, B. A.

Heat capacity of /Ba,Sr/TiO sub 3 solid solutions in the ferroelectric phase transition region /Teploemkost' tverdykh rastvorov /Ba,Sr/TiO sub 3 v oblasti segnetoelektricheskogo fazovogo perekhoda/.  
22 p3996 A69-41162

## STRUMZA, M. V.

Acclimation to altitude and to exhausting muscular work /Acclimatement a l'altitude et travail musculaire epuisant/.  
09 p1445 A69-22725

## STRUMZA, M.-V.

Altitude acclimation and muscular work performed /Acclimatement a l'altitude et travail musculaire soutenu/.  
23 p4086 A69-41787

## STRUNIN, V. A.

Kinetics of the thermal decomposition of ammonium perchlorate at high temperatures /Kinetika termicheskogo raspada perklorata ammoniia pri vysokikh temperaturakh/.  
08 p1375 A69-20339

Effect of ionizing radiation on the combustion of ammonium perchlorate and systems of mixtures containing it /Vliianie ioniziruiushchego izlucheniia na gorenie perklorata ammoniia i i smesevykh sistem na ego osnove/.  
11 p1941 A69-25194

## STRUTT, M. J. O.

Noise in microwave transistors.  
02 p0219 A69-12427

Noise in transistor mixers at high frequencies.  
11 p1857 A69-25662

Correlation between laser emission noise and voltage noise in GaAs CW laser diodes.  
12 p2038 A69-26328

## STRUTT, P. R.

Nature of slip line and substructure formation during creep in stoichiometric NiAl at temperatures between 475 deg and 775 deg C.  
19 p3343 A69-35923

## STRYER, L.

Fluorescence spectroscopy of proteins.  
01 p0023 A69-10291

Fluorescence studies of substrate and subunit interactions of the beta sub 2 protein of Escherichia coli tryptophan synthetase.  
04 p0553 A69-15304

Dependence of the kinetics of singlet-singlet energy transfer on spectral overlap.  
22 p3895 A69-40056

Fluorescence studies of nucleotides and polynucleotides. I.  
22 p3898 A69-41078

## STUART, C.

The US-Europe airline industry gap.  
13 p2381 A69-27338

## STUART, E. B.

An analytical model for the viscous region in wall turbulence.  
[AIAA PAPER 69-163] 06 p0914 A69-18139

## STUART, F.

FORTAN Programming.  
06 p0891 A69-17364

## STUART, G. F.

Irregular regions in the antarctic ionosphere.  
09 p1490 A69-21716

The distribution of irregularities in the Antarctic ionosphere. II - Diurnal, magnetic and solar cycle effects.  
18 p3125 A69-34249

## STUART, J. M.

The role of surfaces in superplasticity.  
03 p0449 A69-13879

## STUBBE, P.

Frictional forces and collision frequencies between moving ion and neutral gases.  
03 p0421 A69-13328

Temperature dependence of the rate constants for the reactions O super plus plus O sub 2 goes to O sub 2 super plus plus O and O super plus plus N sub 2 goes to NO super plus plus N.  
16 p2747 A69-32312

## STUBBS, A.

Contiguity of briefly presented stimuli with food reinforcement.  
23 p4081 A69-41436

## STUBBS, G. S.

Digital autopilots for thrust vector control of the Apollo CSM and CSM/LM vehicles.  
[AIAA PAPER 69-847] 21 p3762 A69-39377

## STUBBS, T. F.

Rocket propulsion in an inverse square force field.  
20 p3595 A69-37203

## STUBER, F. M.

Resonance-frequency behaviour of a cavity with an evanescent section.  
22 p3900 A69-40925

## STUBICAN, V. S.

Pressure-temperature study of sulfospinels.  
02 p0266 A69-12162

## STUCHEBNIKOV, V. M.

Tunneling transitions in semiconductors in strong, crossed electric and magnetic fields /Tunnel'nye perekhody v poluprovodnikakh v sil'nykh skreshchen-nykh elektricheskoi i magnitnoi poliax/.  
02 p0300 A69-12634

Tunnel effects in diffused p-n junctions in gallium antimonide. I - Electrical properties /Tunnel'nye efekty v diffuzionnykh p-n-perekhodakh v antimonide galliia. I - Elektricheskie svoystva/.  
21 p3780 A69-39043

## STUCKEY, C. W.

Preliminary interpretation of near-field effects on measurement accuracy in shielded enclosures.  
23 p4141 A69-42226

## STUCKMANN, O.

Technological possibilities of active magnetic attitude control for spin-stable satellites /Technische Moeglichkeiten einer aktiven magnetischen Lageregelung fuer spinstabilisierte Satelliten/.  
03 p0521 A69-13644

## STUDENIKIN, A. I.

Influence of high-frequency vibrations on a gyroscopic linear-acceleration integrator /Vliianie vysokochastotnoi vibratsii na girkoskopicheskii integrator lineinykh uskorenii/.  
22 p3946 A69-40253

## STUDER, V. J.

Attachment concepts for brittle materials.  
09 p1477 A69-22370

## STUDERUS, C. J.

Theoretical evaluation of the simulation of radiative heating of planetary entry vehicles.  
[AIAA PAPER 69-634] 17 p2891 A69-33281

## STUDIER, M.

Origin of organic matter in meteorites.  
22 p4012 A69-40085

## STUDIER, M. H.

Analyses of pyrimidine and purine bases by a combination of paper chromatography and time-of-flight mass spectrometry.  
11 p1832 A69-24738

## STUDNIARZ, S. A.

Ion-molecule reactions in a 50-MHz discharge.  
01 p0129 A69-10682

## STUEMKE, H.

Rapid Rotations of an Aircraft with Fixed Controls /Schnelle Drehbewegungen eines Flugzeugs bei festen Rudern/.  
12 p2013 A69-26118

## STUEWE, H. P.

On the theory of unstable deformation.  
17 p3053 A69-32987

## STUFF, R.

The theory of shock propagation in a stratified atmosphere /Die Theorie der Knallausbreitung in einer geschichteten Atmosphaere/.  
15 p2551 A69-31171

## STUHLINGER, E.

The versatility of electrically propelled spacecraft for planetary missions.  
[AIAA PAPER 69-253] 09 p1585 A69-21244

Electric space propulsion.  
18 p3185 A69-35108

## STUHRKE, W. F.

The mechanical behavior of aluminum-boron composite material.  
06 p0939 A69-16946

## STUKALO, P. A.

Electrically controlled phase shifter in the microwave range /Elektricheski upravliaemyi fazovrashchatel' SVCh diapazona/.  
03 p0408 A69-13987

Investigation of a modulator employing p-i-n diodes /Issledovanie moduliatora na p-i-n-diodakh/.  
13 p2235 A69-28518

## STUKALOV, V. P.

Inhomogeneous equations of the axisymmetric problem in elasticity theory /Neodnorodnye uravneniia osemimetricnoi zadachi teorii uprugosti/.  
23 p4229 A69-41997

## STULOV, V. P.

Supersonic flow of a detonating mixture past a sphere /Sverkhzvukovoe obtekanie sfery gremuchei smesi'/.  
06 p0859 A69-17343

Effect of radiation on heat exchange at the stagnation point of a blunt body /Vliianie izlucheniia na teploobmen v kriticheskoi toчке zatuplennogo tela/.  
14 p2390 A69-29614

- A similarity law for supersonic flows past blunt bodies /O zakone podobii pri sverkhzvukovom obtekanii zatuplennykh tel/.  
24 p4246 A69-43495
- STULTZ, J. T.**  
A new concept for aircraft separation standards.  
[AIAA PAPER 69-210] 07 p1178 A69-19579
- STULTZ, J. W.**  
Thermal control of a Mars entry capsule.  
[AIAA PAPER 68-1082] 19 p3429 A69-35949
- STUMM, W.**  
Interferometric investigation of shock- processes in plane steel and glass models, using a Q-switched ruby laser as a high-speed light source /Interferometrische Untersuchung von Stossvorgaengen in ebenen Stahl- und Glasmodellen mit einem Q-switched Rubinlaser als Kurzzeitlichtquelle/.  
12 p2089 A69-26185
- STUMP, E. C.**  
Development of vulcanizable elastomers suitable for use in contact with liquid oxygen.  
05 p0717 A69-16497
- STUMPF, H.**  
Pointwise bounds in the theory of elasticity. I, II /Ueber punktweise Eingrenzung in der Elastizitaetstheorie. I, II/.  
01 p0167 A69-10328  
Pointwise limitation in elasticity theory. III /Ueber punktweise Eingrenzung in der Elastizitaetstheorie. III/.  
05 p0831 A69-15599  
On the quantum theory of the anharmonic oscillator in functional space.  
09 p1541 A69-22393  
Upper and lower bounds for inhomogeneous problems in elasticity theory /Obere und untere Schranken bei inhomogenen Problemen der Elastizitaetstheorie/.  
10 p1794 A69-22889
- STUMPF, O.**  
Functions and design of the subsystems of the ESRO research satellites TD 1 and TD 2 /Aufgaben und Auslegung der Untersysteme der ESRO-Forschungssatelliten TD 1 und TD 2/.  
01 p0160 A69-10031  
The power supply of the ESRO research satellites TD1 and TD2 /Die energieversorgung der ESRO-Forschungssatelliten TD1 und TD2/.  
05 p0829 A69-15919  
Survey of the state of development of electric propulsion systems in Europe /Ueberblick ueber den Entwicklungsstand elektrischer Triebwerke in Europa/.  
24 p4363 A69-42668
- STUMPF, K.**  
Applications of an n-body reference orbit.  
03 p0518 A69-14248  
Periodic orbits in the restricted three-body problem in the neighborhood of resonances of type  $k$  plus  $1/k$  /Ueber periodische Bahnen im eingeschnaerkten Dreikoerperproblem und in der Naehere der Kommensurabilitaeten vom Typus  $k$  plus  $1/k$ /.  
08 p1382 A69-19874
- STUPOCHENKO, E. V.**  
Estimation of the width of the front of strong shock waves in gases.  
07 p1118 A69-18702
- STURCH, C.**  
Optical studies of pulsar NP 0532.  
10 p1774 A69-23182  
Color excess and atomic hydrogen at high latitudes.  
12 p2063 A69-25808
- STUREK, W. B.**  
Modified expansion tube.  
[AIAA PAPER 68-371] 09 p1477 A69-21960
- STURGESS, G. J.**  
Film cooling optimization for minimum cooling air-flow in aircraft gas-turbines.  
09 p1625 A69-22623
- STURM, K.**  
Electromagnetic waves in metallic electron plasmas /Ueber elektromagnetische Wellen in metallischen Elektronenplasmen/.  
02 p0286 A69-11788
- STURM, W. A.**  
Space software - At the crossroads.  
04 p0564 A69-15297
- STURMANIS, M.**  
Attitude perturbations on a slowly spinning multi-body satellite.  
[AIAA PAPER 68-856] 12 p2174 A69-26795
- The capture and stability of the LIDOS gravity-gradient satellite in an eccentric orbit.  
[AIAA PAPER 69-921] 21 p3821 A69-39351
- The dynamic modeling of hysteresis and application to damping of spacecraft librations.  
[AIAA PAPER 69-833] 21 p3821 A69-39364
- STURROCK, P. A.**  
Plasma Astrophysics, Italian Physics Society, International School of Physics Enrico Fermi, Varenna, Italy, July 11-30, 1966, Proceedings, Course 39.  
02 p0328 A69-12780
- Waves in plasmas.  
02 p0293 A69-12782
- Force-free magnetic fields and solar filaments.  
02 p0329 A69-12787
- Solar flares.  
02 p0309 A69-12788
- A plasma model of quasars and radio galaxies.  
02 p0329 A69-12794
- Explosions in galaxies and quasars.  
24 p4378 A69-42698
- STURTEVANT, B.**  
Dependence of shock-tube boundary layers on shock strength.  
22 p3930 A69-40531
- STUTTARD, B.**  
New electronic element for synthesizing frequency selective circuits.  
08 p1286 A69-20834
- STUVERUDE, H. N.**  
Operational history and experience with Boeing helicopters.  
01 p0009 A69-10405
- STYLES, J. W.**  
Thermal expansivities, thermal conductivities, and densities of vanadium, titanium, chromium and some vanadium-base alloys.  
22 p3971 A69-40973
- STYRO, B. I.**  
Relations between radioactivity distributions in the atmosphere at different altitudes /O sviaziakh raspredeleniia radioaktivnosti na razlichnykh vysotakh atmosfery/.  
11 p1945 A69-24320  
Regularities of the altitude distribution of radon decay products in the atmosphere and the magnitude of vertical turbulent diffusion /Zakonomernosti raspredeleniia produktov raspada radona po vysote v atmosfere i velichina vertikal'noi turbulentnoi diffuzii/.  
20 p3533 A69-38076
- SU, K. L.**  
Effect of load admittance on the low-pass characteristics of distributed RC lines.  
11 p1859 A69-24939
- SU, L. S.**  
Radiation and annealing characteristics of neutron bombarded silicon transistors.  
06 p0975 A69-16872
- SUBBA RAJU, P. V.**  
Hydromagnetic forced flow against a porous rotating disk.  
08 p1370 A69-21005
- SUBBA RAO, A.**  
Transient response evaluation from the state transition matrix.  
12 p2120 A69-25913
- SUBBARAYA, B. H.**  
A study of the lower ionosphere over the geomagnetic equator at Thumba using a Langmuir and plasma noise probe.  
21 p3702 A69-38353  
Irregularities in the equatorial E region over Thumba.  
23 p4160 A69-42430
- SUBBOTIN, A. I.**  
The problem of convergence of controlled objects.  
14 p2482 A69-28800
- SUBBOTIN, B. T.**  
Application of electronically phased antennas for spin stabilized satellites.  
08 p1289 A69-20969
- SUBBOTIN, M. F.**  
Introduction to Theoretical Astronomy /Vvedenie v Teoreticheskuiu Astronomiiu/.  
07 p1211 A69-18544
- SUBBOTIN, V. I.**  
Apparatus for study of the boiling of potassium in tubes.  
03 p0534 A69-14150
- Method of computing temperature fields in noncircular channels.  
07 p1243 A69-19734
- Thermionic converter electrical characteristics with matrix circuit connections.  
14 p2400 A69-29225
- SUBBOTIN, V. M.**  
A high-sensitivity gyroscopic high-frequency angular acceleration sensor /Giroskopicheskii vysokochastotnyi chuvstvitel'nyi datchik uglovyykh uskoreniy/.  
09 p1498 A69-22109  
Optimal choice of the parameters of a hydraulic sensor of angular accelerations /K optimal'nomu vyboru parametrov gidravlicheskogo datchika uglovyykh uskoreniy/.  
13 p2259 A69-27432
- SUBOTOWICZ, M.**  
Satellite methods of verifying the general theory of relativity /Satelitarne metody sprawdzenia ogolnej teorii wzglednosci/.  
01 p0152 A69-10751  
Detection of antimatter /O detekcji antymaterii/.  
17 p3006 A69-33578  
Possibility of detecting antimatter meteors /O mozliwosci wykrycia meteorow z antymaterii/.  
17 p3034 A69-33579
- SUBRAHMANYAM, V.**  
Circular cylindrical dielectric rod waveguide.  
04 p0577 A69-14971
- SUBRAMANIAN, A.**  
A simple compensator for photoelasticity.  
22 p4042 A69-40442
- SUBRAMANIAN, G.**  
Anisotropies of galactic cosmic rays.  
06 p0990 A69-17289
- SUBRAMANIAN, M.**  
Atmospheric limitations for laser communications.  
03 p0389 A69-13193
- SUBRAMANIAN, N. R.**  
Pressure distribution in inviscid transonic flow past axisymmetric bodies /M sub infinity equals 1/.  
23 p4059 A69-41899  
Determination of low speed aerodynamic characteristics of finite wings using the deep electrolytic tank.  
23 p4061 A69-42351  
Conducting paper analogue in the study of incompressible fluid flow problems.  
24 p4299 A69-43024
- SUBRAMANIAN, R.**  
Vibrations of a composite orthotropic cylinder.  
10 p1800 A69-23243
- SUBRTOVA, S.**  
Experimental observations of acoustic waves in D.C. glow discharge.  
15 p2665 A69-31547
- SUDEC, J.**  
Trajectory and spreading of a turbulent jet in the presence of a crossflow of arbitrary velocity distribution. [ASME PAPER 69-GT-33]  
09 p1483 A69-22491  
Efficiency of circular fins of triangular profile.  
13 p2375 A69-27790
- SUCHKOV, A. A.**  
Spiral structure of galaxies. I /O spiral'noi strukture galaktik. I/.  
15 p2688 A69-30550  
Spiral structure of galaxies. II /O spiral'noi strukture galaktik. II/.  
20 p3607 A69-38036  
Non-Jeans gravitational instability of a system of stars and interstellar gas /Nedzhinovskaya gravitatsionnaya neustoiichivost' sistemy zvezd i mezkhvezdnogo gaza/.  
20 p3607 A69-38037  
Hypothesis on the origin of the spiral structure of the galaxies.  
21 p3797 A69-38537
- SUCHKOV, A. F.**  
Electrodynamics of lasers with an open cavity and an inhomogeneous filler /Elektrodinamika opticheskikh kvantovykh generatorov s otkrytym rezonatorom s neodnorodnym zapolnieniem/.  
12 p2110 A69-26908  
Dynamics of a laser with instantaneous Q-switching /Dinamika opticheskogo kvantovogo generatora s mgnovenным vklucheniem dobrotnosti/.  
12 p2110 A69-26909  
Theory of the effects of inhomogeneous excitation of semiconductor lasers using electron beam pumping /Teoriia effektivov neodnorodnosti vobuzhdeniia



- poluprovodnikovyykh lazerov s nakachkoi elektronnyy puchkom/.  
21 p3737 A69-39041
- SUCHY, K.**  
Transport cross sections for screened and cutoff Coulomb potentials.  
11 p1924 A69-24309
- SUCKEWER, S.**  
Review of research on hot plasma performed at the Department of Plasma Physics and Technology of the Institute of Nuclear Research.  
06 p0964 A69-17174  
Study of various methods of determining the plasma temperature in an MHD-generator duct /Issledovaniia razlichnykh metodov opredeleniia temperatury plazmy v kanale MGD-generatorta/.  
13 p2309 A69-28023  
Relation of ionization equilibrium of nonthermal hydrogen plasma.  
16 p2820 A69-31770
- SUCKLING, J. H.**  
Streak interferometric measurements of transient displacements.  
01 p0078 A69-10117
- SUD, L. V.**  
Cosmic ray intensity increase on January 28, 1967.  
04 p0649 A69-15442  
The increase in low-energy cosmic ray intensity on 7 July 1966.  
10 p1766 A69-23762  
Sudden increases in cosmic ray intensity.  
14 p2514 A69-29773
- SUD, V. K.**  
Oscillation of a sphere in a compressible viscous fluid in a slip regime.  
19 p3297 A69-35836
- SUDA, T.**  
Search for quarks.  
15 p2674 A69-30308
- SUDAN, R. N.**  
Nonlinear interactions of positive and negative energy modes in plasmas.  
[IAEA PAPER CN-24/E-13]  
07 p1196 A69-19768  
Interaction of an electron beam with a whistler /helicon/ wave in a semiconductor plasma.  
10 p1742 A69-24107  
A review of the nonlinear theory of plasma oscillations.  
14 p2501 A69-29953  
Coherent synchrotron deceleration and the emission of type II and type III solar radio bursts.  
22 p4007 A69-40898
- SUDAREVA, S. V.**  
Structure of the alloy Zr-4 percent Nb, and its influence on the critical superconductivity parameters.  
05 p0811 A69-16806  
X-ray and electron microscope study of the structure of the alloy Ti-50 wt percent Nb /Rentgenograficheskoe i elektronnomikroskopicheskoe issledovanie struktury splava Ti-50 ves. percent Nb/.  
12 p2112 A69-26036  
Electron-microscope and X-ray study of the quenched Ti-25 at. percent Nb alloy /Elektronnomikroskopicheskoe i rentgenograficheskoe issledovanie zakalennogo splava Ti-25 at. percent Nb/.  
12 p2112 A69-26040  
Influence of the tempering time and temperature on the structure and superconducting properties of a recrystallized and deformed alloy of niobium with 75 at. percent titanium /Vliianie vremeni i temperatury otpuska na stroenie i sverkhprovodiaschie svoystva rekristallizovannogo i deformirovannogo splava niobiia s 75 atomn. percent titana/.  
19 p3345 A69-36302
- SUDARSHAN, E. C. G.**  
Causality and space-like signals.  
20 p3598 A69-37412
- SUDAVTSOVA, G. K.**  
Digital computer solution of problems associated with an asymmetric stressed state of systems composed of shells of revolution /Reshenie na ETsVM zadach o nesimmetrichnom napriazhenno sostoianii sistem iz obolochek vrashcheniia/.  
05 p0840 A69-16201
- SUDBURY, P. V.**  
Absolute coordinates of lunar features. III.  
07 p1213 A69-18612  
The motion of Jupiter's fifth satellite.  
13 p2345 A69-27653

- SUDBURY, R.**  
Aluminum contact deposition and testing for silicon solar cells.  
19 p3250 A69-35686
- SUDDETH, D.**  
Pulse motor for spacecraft attitude control.  
02 p0194 A69-11762
- SUDOWSKA, D.**  
Cauchy problem for a parabolic system whose coefficients depend on unknown functions /Probleme de Cauchy pour un systeme parabolique dont les coefficients dependent des fonctions inconnues/.  
23 p4181 A69-41410
- SUDZHIUS, I.**  
Photometry of Nova Delphini 1967 /HR Del/ in the UPXYZVS system /Fotometriia Novoi Del'fina 1967 /HR Del/ v sisteme UPXYZVS/.  
19 p3425 A69-36563
- SUEMATSU, Y.**  
Light waveguide.  
09 p1518 A69-22130  
Direct modulation of semiconductor junction laser.  
12 p2110 A69-27069
- SUEN, C. Y.**  
Characteristics of the Darlington composite transistor.  
01 p0041 A69-10244
- SUESS, H. E.**  
Nuclear abundance rules and the composition of meteorites.  
19 p3406 A69-36073
- SUETIN, P. E.**  
A problem of unsteady diffusion /K odnoi zadache o nestatsionarnoi diffuzii/.  
13 p2251 A69-28561  
Plane flow of a Maxwellian gas /Ploskoe techenie maksvellovskogo gaza/.  
19 p3379 A69-36604
- SUEUR, R.**  
Possibilities for European regional satellite communication systems.  
03 p0395 A69-13585  
Advantages and disadvantages of satellite telecommunications /Avantages et inconvenients des telecommunications par satellites/.  
04 p0662 A69-15328
- SUEZAWA, Y.**  
Double-notch creep rupture of 5 Cr-0.5 Mo steels.  
[ASME PAPER 68-WA/MET-7]  
14 p2464 A69-29441
- SUFFCZYNSKI, M.**  
The spectra of bound excitons in semiconductors /Widma ekscytonow zwiazanych w polprzewodnikach/.  
03 p0488 A69-13784
- SUGA, M.**  
Field distribution in a Gunn diode with a distributed capacitance electrode.  
09 p1470 A69-22789
- SUGAKOV, V. I.**  
Dispersion and damping of electromagnetic waves in mixed molecular crystals /Dispersiia i zatukhanie elektromagnitnykh voln v smeshanykh molekuliarnykh kristallakh/.  
03 p0484 A69-13279
- SUGARMAN, R. H.**  
HF receiver interference reduction techniques.  
17 p2943 A69-34132  
Interference blanker for HF receivers.  
23 p4141 A69-42221
- SUGATA, E.**  
An adsorption study of O sub 2 and H sub 2 on Mo by field emission retarding potential analyser.  
08 p1268 A69-20179
- SUGAWARA, K.**  
A wide-band 4-GHz Esaki-diode injection-locked oscillator.  
09 p1470 A69-22785
- SUGAYA, K.**  
An experimental investigation on rocket plumes expanding into vacuum.  
22 p4000 A69-40594
- SUGENO, K.**  
The amino acid sequence of *Scenedesmus ferredoxin*.  
22 p3896 A69-40435
- SUGGS, C. W.**  
The effect of load on muscle output.  
17 p2916 A69-34011

- SUGIMOTO, D.**  
Primordial helium and the luminosity of horizontal-branch stars.  
09 p1601 A69-22211
- SUGIMOTO, S.**  
Performance of suboptimum feedback functions for sequential detection systems with feedback.  
02 p0225 A69-11996  
FM noise reduction of Gunn-effect oscillators by injection locking.  
07 p1102 A69-18862  
Ultrahigh-speed diode switch for 50 GHz band utilizing avalanche breakdown in varactor diodes.  
13 p2229 A69-27671
- SUGIURA, M.**  
Propagation of the sudden commencement of July 8, 1966, to the magnetotail.  
01 p0075 A69-11226  
An improved model equatorial electrojet with a meridional current system.  
20 p3533 A69-38084
- SUGIURA, T.**  
FM noise reduction of Gunn-effect oscillators by injection locking.  
07 p1102 A69-18862
- SUGIYAMA, T.**  
High-power transmitting tubes for satellite communication earth stations.  
05 p0728 A69-15668
- SUGURI, Y.**  
A TDMA/PCM experiment on applications technology satellites.  
23 p4129 A69-42510
- SUH, N. P.**  
The yielding of truncated solid cones under quasi-static and dynamic loading.  
04 p0682 A69-15301
- SUHONEN, E.**  
Some aspects of the relativistic coherence theory of black-body radiation within a transparent medium.  
11 p1920 A69-25563
- SUITA, T.**  
Instabilities arising from beam-plasma interaction.  
11 p1934 A69-25576
- SUITS, G.**  
Introduction to remote sensing.  
20 p3493 A69-37743  
Geometrical optics.  
20 p3577 A69-37744  
Human vision.  
20 p3483 A69-37745  
Photographic film.  
20 p3541 A69-37746
- SUIUNSHKALIEV, N. KH.**  
Flexible circular plate in a stationary temperature field /Gibkaiia kruglaia plastinka v statsionarnom temperaturnom pole/.  
21 p3835 A69-38830
- SUKHANOV, A. L.**  
Geological-morphological mapping of the moon and the peculiarities of the lunar surface structure /Geologo-morfologicheskoe kartirovanie luny i osobennosti stroeniia lunnoi poverkhnosti/.  
03 p0505 A69-12898  
Mechanism for the origination of the lunar seas.  
10 p1782 A69-23710
- SUKHANOV, A. V.**  
Some results of fitting tests /Nekotorye rezul'taty ispytaniia fitinga/.  
23 p4169 A69-41418
- SUKHANOVA, G. B.**  
Influence of electrode vapor on the electron density in a low-current arc discharge plasma in air /O vliianii parov elektrodov na kontsentratsiiu elektronov v plazme nizkotochno dugovogo razriada v vozdukhe/.  
01 p0128 A69-10433
- SUKHAREV, V. A.**  
Investigation of the influence of the geometrical parameters on the rigidity and strength of a siphon /Issledovanie vliianiia geometricheskikh parametrov na zhestkost' i prochnost' sil'fona/.  
19 p3358 A69-35849
- SUKHAREVSKII, I. V.**  
Application of nonresonant Green's functions to the derivation of the integral equations for problems associated with diffraction at open screens /Primenenie nerezonansnykh funktsii Grina k postroeniiu integral'nykh uravnenii zadach difraktsii na nezamknutykh ekranakh/.  
22 p3901 A69-40949

## SUKHARNIKOV, V. N.

An analytical method of determining the working life of the oil in an engine /Analiticheskiy metod opredeleniya sroka sluzhby masla v dvigatele/.  
04 p0604 A69-14500

## SUKHERA, B.

A V.L.F. and particle rocket experiment at Kerguelen Islands. II.  
15 p2571 A69-31424

## SUKHIKH, L. I.

Elastoplastic problem for a strip with a crack /Uprugo-plasticheskaia zadacha dlia polosa s treshchinoi/.  
24 p4395 A69-42591

## SUKHIKH, V. A.

Experimental investigations of forced discontinuous vibrations of a liquid in a conduit /Eksperimental'nye issledovaniia vyzhuzhdennykh razryvnykh kolebaniy zhidkosti v truboprovode/.  
11 p1875 A69-25485

## SUKHODOLSKAIA, A. N.

Additional maximum in the latitude distribution of the maximum ionization in the F2 layer /Dopolnitel'nyi maksimum v shirotnom raspredelenii maksimal'noi ionizatsii sloia F2/.  
20 p3526 A69-37661

## SUKHOIVANENKO, P. I. A.

Processes in the ionosphere associated with changes in polar auroral height /O protsessakh v ionosfere, svyazannykh s izmeneniyem vysoty poliarnykh sinii/.  
17 p2964 A69-33957

## SUKHORUCHENKOV, B. I.

Statistical analysis of a large volume of correlated information in space investigations /Statisticheskii analiz bol'shogo ob'ema korrelirovannoi informatsii pri kosmicheskikh issledovaniyakh/.  
09 p1495 A69-21764

Investigation of the effectiveness of signal separation by the method of least squares /Issledovanie effektivnosti vydeleniya signalov po metodu naimen'shikh kvadratov/.  
11 p1833 A69-24443

## SUKHORUKIKH, V. S.

Diffraction theory of schlieren methods /Beugungstheorie der Schlierenmethoden/.  
12 p2088 A69-26180

## SUKHORUKOV, A. P.

Unsteady phenomena and space-time analogy in nonlinear optics /Nestatsionarnyye yavleniya i prostranstvenno-vremennaya analogiya v nelineinoi optike/.  
02 p0259 A69-12646

Aperture limitations of the effectiveness of nonlinear optical processes /Ob aperturnykh ogranicheniyakh effektivnosti nelineinykh opticheskikh protsessov/.  
03 p0439 A69-13056

Theoretical and experimental investigation of the process of generation of optical harmonics in bounded beams /Teoreticheskoe i eksperimental'noe issledovanie protsessa generatsii opticheskikh harmonik v ogranichennykh puchkakh/.  
03 p0439 A69-13057

Thermal self-actions of laser beams.  
[IEEE PAPER E-12] 05 p0774 A69-16311

Nonstationary nonlinear optical effects and ultrashort light pulse formation.  
[IEEE PAPER H-5] 05 p0774 A69-16316

Parametric interactions in optics and tunable light oscillators.  
[IEEE PAPER K-5] 07 p1152 A69-19066

Second-harmonic generation by beams of finite aperture.  
07 p1158 A69-19756

Investigation of the angular structure of the second optical harmonic. II /Issledovanie uglovoy struktury vtoroi opticheskoi harmoniki. II/.  
17 p2981 A69-33110

## SUKHORUKOV, V. M.

Optimal control in gyroscopic devices in the case of constrained phase coordinates /Optimal'noe upravleniye v giroskopicheskikh ustroystvakh pri ogranichennykh fazovykh koordinatakh/.  
24 p4317 A69-43708

## SUKHORKOVA, E. V.

Predawn effect in the f sub 0 F2 variations caused by sunrise at a magnetically conjugate point /Predrassvetnyy effekt v variatsiyakh f sub 0 F2 obuslovlennyy voskhodom solntsa v magnitno-sopriazhennoi tochke/.  
02 p0238 A69-11681

Predawn effect in f sub 0 F sub 2 variations caused by sunrise at a magnetically-conjugate point.  
13 p2257 A69-28712

Certain features in the form of ionization distribution in the polar ionosphere /Nekotorye osobennosti formy raspredeleniya ionizatsii v poliarnoi ionosfere/.  
14 p2436 A69-29052

## SUKHOV, G. S.

The effect of the construction of the working channel on the flow parameters of a plasma obtained in a shock tube.  
03 p0481 A69-14160

Ambipolar diffusion in the boundary layer formed behind a shock front.  
12 p2139 A69-26713

Interaction between a moving plasma and a transverse magnetic field /O vzaimodeistvii dvizhushcheisya plazmy s poperechnym magnitnym polem/.  
14 p2501 A69-29919

## SUKHOVA, E. E.

Heat-resistant alloys hardened by the Ni sub 3 Nb phase /Zharoprochnyye splavy, uprochnennyye fazoi Ni sub 3 Nb/.  
13 p2283 A69-28488

## SUKHOVAROV, V. F.

Investigation of the precipitation mechanism of the Ni sub 3 Ti phase in the alloy Ni plus 16.3 percent Cr plus 5.8 percent Ti /Issledovanie mekhanizma vydeleniya fazy Ni sub 3 Ti v splave Ni plus 16,3 percent Cr plus 5,8 percent Ti/.  
20 p3558 A69-36968

## SUKHOZHAK, V. V.

Sinterability of porous compacts from molybdenum fibers with small nickel additions.  
10 p1711 A69-23336

## SUKSOV, I. I.

One-dimensional flow of a high temperature gas.  
02 p0350 A69-11576

## SULAJNIS, H.

Selection and physical training of astronauts /Selekcija i trening fizyczny kosmonautov/.  
13 p2216 A69-28636

## SULE, W. P.

Condensation and probe interference effects on planar expansion-deflection nozzle experiments.  
[AIAA PAPER 69-170] 06 p0863 A69-18059

Supersonic wake flow visualization.  
[AIAA PAPER 69-346] 13 p2200 A69-28281

Condensation and probe interference effects on planar expansion-deflection nozzle experiments.  
[AIAA PAPER 69-170] 21 p3645 A69-39769

## SULIDI-KONDRATEV, E. D.

The main problems of selenotectonics /Osnovnyye problemy selenotektoniki/.  
03 p0505 A69-12899

## SULIKASHVILI, R. S.

Stability of the steady-state motions of a gyroscope mounted on a satellite in a gravitational field /Ustoichivost' statsionarnykh dvizhenii giroskopa, ustanovlennogo na sputnike v pole gravitatsii/.  
07 p1137 A69-19679

Stability of steady motions of a satellite with a gyroscope in a central gravitational field /Ob ustoychivosti statsionarnykh dvizhenii sputnika s giroskopom v tsentral'nom pole gravitatsii/.  
14 p2530 A69-29481

Stability of the steady motions of a gyroscope on board a satellite in a Newtonian central-force field /Ob ustoychivosti statsionarnykh dvizhenii giroskopa, ustanovlennogo na sputnike v tsentral'nom n'yutonovskom pole/.  
18 p3135 A69-34585

## SULIMOV, A. A.

Detonation capacity of mixtures with an ammonium perchlorate base /O detonatsionnoi sposobnosti smesi na osnove perkhlorata ammoniya/.  
02 p0305 A69-12674

## SULLENGER, D. B.

Boron modifications produced in an induction-coupled argon plasma.  
08 p1372 A69-20687

## SULLI, E.

Respiratory behavior of B. Coli commune cultivated on various substrates under aerobic and anaerobic conditions /Comportamento respiratorio del B. Coli commune coltivato in aerobiosi ed anaerobiosi di fronte a vari substrati/.  
18 p3097 A69-35302

Microbiological problems of space flight - Screening of astronauts from the microbiological standpoint /I problemi microbiologici del volo spaziale - Selezione dell'astronauta dal punto di vista microbiologico/.  
18 p3097 A69-35304

## SULLINGS, F. J.

Engineering and economic aspects of inertial navigation.  
19 p3371 A69-36734

## SULLIVAN, A. M.

Velocity of cracks extending under stress in an adverse environment.  
10 p1709 A69-23058

## SULLIVAN, C. P.

The effect of dispersed hard particles on the high-strain fatigue behavior of nickel at room temperature.  
03 p0443 A69-13121

Low-cycle fatigue crack initiation in Ti-6Al-4V.  
13 p2278 A69-27413

Relationship of properties to microstructure in cobalt-base superalloys.  
14 p2465 A69-29891

## SULLIVAN, D. B.

Fabrication of tunnel junctions on niobium films.  
17 p3016 A69-33788

## SULLIVAN, D. J.

Augmentation systems for turbofan engines.  
09 p1573 A69-22617

## SULLIVAN, D. P.

Synthesis of high data rate coherent telemetry systems.  
07 p1083 A69-19123

## SULLIVAN, E. M.

Some aspects of interplanetary earth-entry simulation.  
15 p2681 A69-30376

## SULLIVAN, G. A.

The mechanism of the photovoltaic effect in high efficiency CdS thin-film solar cells.  
19 p3250 A69-35683

## SULLIVAN, H. M.

Height of the twilight sodium layer - Evening-morning effect observed at Victoria, British Columbia, from February 1967 to February 1968.  
01 p0063 A69-10275

## SULLIVAN, K. N.

Ventilation, lung volumes, and gas exchange during lower body negative pressure.  
22 p3891 A69-40222

## SULLIVAN, L. J.

Flight test and progress report on C-5A transport.  
06 p0867 A69-17665

## SULLIVAN, M. V.

High resolution television images from space.  
07 p1131 A69-18552

## SULLIVAN, P. A.

On the interaction of a laminar hypersonic boundary layer and a corner expansion wave.  
[AIAA PAPER 69-137] 06 p0913 A69-18078

## SULLIVAN, R. J.

Propulsion requirements for a heavy-lift helicopter system.  
[AHS PAPER 330] 17 p2901 A69-33532

High energy X-ray study of M-87.  
20 p3588 A69-37488

## SULLIVAN, T.

Frequency measurements in the far infrared - Limitations imposed by the noise spectrum in harmonic mixing.  
17 p3006 A69-33674

## SULLIVAN, T. M.

Airport terminal planning for tomorrow's aircraft.  
[SAE PAPER 690399] 23 p4147 A69-41661

## SULLIVAN, W. P.

Measurement of muscle function in astronauts.  
23 p4103 A69-41684

## SULLIVAN, W. T., III

Distribution of ammonia density, velocity, and rotational excitation in the region of Sagittarius B2.  
21 p3799 A69-38647

## SULTAN, G.

Study of the postdischarge of a laser-produced plasma /Etude de la post-décharge d'un plasma produit par laser/.  
01 p0128 A69-10394

## SULTAN, J. N.

Crack propagation studies in crosslinked glassy polymers.  
08 p1338 A69-20492

## SULTANIAN, T. A.

Study of changes in the structure of WC-Co alloys during plastic deformation /Issledovanie izmeneniy v



strukture splavov WC-Co pri plasticheskoj deformatsii/. 18 p3158 A69-35261

## SULTANOV, I.

Current-voltage characteristics of silicon tunnel p-n junctions /Vol't-ampernaia kharakteristika kremnievikh tunnel'nykh p-n-perekhodov/. 10 p1746 A69-23574

## SULTANOV, M. A.

The influence of supersonic plasma jets on polymer films /Deistvie sverkhzvukovykh plazmennyykh strui na polimernye plenki/. 21 p3752 A69-39081

Investigation of the mechanism of breakdown of certain polymers due to the action of a radiative plasma flux /Issledovanie mekhanizma razrusheniia nekotorykh polimerov pod deistviem luchistogo potoka plazmy/. 22 p3974 A69-41031

## SULTANOV, N. A.

Negative-resistance diodes made of cadmium-doped silicon /Diody s otritsatel'ny'm soprotivleniem iz kremniia, legirovannogo kadmiiem/. 09 p1462 A69-21477

Cadmium-doped silicon diodes with negative resistance. 15 p2578 A69-30722

## SULTIS, J. K.

Greenhouse effect in a finite anisotropically scattering atmosphere. 22 p4031 A69-40910

## SULWAY, D. V.

Scanning electron microscopy in device diagnostics and reliability physics. 17 p2936 A69-32890

## SULZHENKO, V. K.

Structural changes in chromium during creep /Strukturnye izmeneniia v khrome pri polzuchestii/. 18 p3160 A69-35453

## SULZMANN, K. G. P.

Approximate laboratory simulation of spectroscopic observations of Mars. 08 p1354 A69-20151

## SUMAREV, S. A.

Study of the structure of extensive air showers at sea level with the modernized hodoscope system of the Moscow University installation. 13 p2332 A69-28405

## SUMI, S.

Thermal deformation of skew plates under radiant heating. 22 p4044 A69-40599

## SUMIK, M. N.

Accuracy of the measurement of the initial phase of a coherently and discretely processed signal /Tochnost' izmereniia nachal'noi fazy signala pri kogherentnoi diskretnoi obrabotke/. 15 p2574 A69-30130

Instrumental accuracy of a discrete phase meter /Instrumental'naia tochnost' diskretnogo fazovogo izmereniia/. 15 p2574 A69-30139

## SUMINOV, V. M.

Study of the dependence of surface purity on some design and technological factors in laser-beam working /Issledovanie zavisimosti chistoty poverkhnosti pri obrabotke luchom lazera ot riada konstruktivno-tekhnologicheskikh faktorov/. 04 p0606 A69-14607

## SUMMA, J. M.

Theoretical dynamic stability of a tethered parafoil. 01 p0009 A69-10415

## SUMMERFIELD, M.

Errors in nonequilibrium combustion theory in the past decade /A review/. [AIAA PAPER 69-178] 06 p1037 A69-18100

Extinguishment of solid propellants by depressurization - Effects of propellant parameters. [AIAA PAPER 69-176] 06 p0983 A69-18102

Thrust transient prediction and control of solid rocket engines. [WSCJ PAPER 68-33] 07 p1203 A69-18365

Role of aluminum in suppressing instability in solid propellant rocket motors. 19 p3393 A69-36814

Theory of propellant ignition by heterogeneous reaction. 23 p4199 A69-41897

## SUMMERS, A. L.

External aerodynamics of the magnetosphere. 07 p1128 A69-19360

Calculations on the composition of the terrestrial planets. 14 p2526 A69-29878

## SUMMERS, G. D.

A biomedical telemetry system for clinical applications. 19 p3262 A69-36272

## SUMMERS, H. P.

The effects of electron and radiation density on dielectronic recombination. 22 p3985 A69-40666

## SUMMERSON, T. J.

Atmospheric exposure of nonferrous metals and alloys - Aluminum - Seven-year data. 01 p0101 A69-11354

## SUMNER, G.

The effect of material stress-strain properties on fatigue failure. 10 p1795 A69-23059

## SUN, C. K.

Absolute-stability test for discrete systems. 17 p2994 A69-32848

## SUN, C. T.

On the vibrations of a laminated body. [ASME PAPER 68-WA/APM-10] 04 p0668 A69-14392

Propagation of a large amplitude longitudinal wave in a semi-infinite elastic rod. 07 p1233 A69-19176

Thermodynamic foundation of finite elastic locking medium. [IS-ERI-70] 09 p1612 A69-21561

The extension of a superposition principle to wave propagation in nonhomogeneous elastic media. 20 p3627 A69-37765

## SUN, F. T.

On the normalized hodographic mapping for constrained trajectory families. [AIAA PAPER 69-924] 21 p3809 A69-39362

## SUN, S.

Effect of xenon, krypton, nitrogen and nitrous oxide on oxygen consumption of rat liver slices. 03 p0375 A69-14069

## SUN, Y. C.

The head wave on a delta wing at zero angle of attack in a steady supersonic flow during the transition from subsonic to supersonic leading edges /Die Kopfwellen an einem nichtangestellten Deltafluegel in stationaerer Ueberschallstroemung beim Uebergang von Unterschall- zu Ueberschallvorderkanten/. [DVL-871] 06 p0858 A69-17242

## SUN, Y.-C.

Three-dimensional supersonic flow around wings of finite span /Dreidimensionale Ueberschallstroemung um Fluegel endlicher Spannweite/. 11 p1820 A69-25425

## SUNAHARA, Y.

An approximate method of optimal control of nonlinear dynamical systems with state-dependent noise. 06 p0902 A69-17404

## SUNAMOTO, D.

Metallurgical studies on gas turbine blade materials after a long term service. [ASME PAPER 69-GT-12] 09 p1527 A69-22503

## SUNDARAM, A. K.

Hydromagnetic radiation from electric and magnetic dipoles in the magnetosphere. 24 p4307 A69-42905

## SUNDARAM, T. R.

A study of the combined effects of nonequilibrium and nose bluntness on hypersonic slender body flows. [AIAA PAPER 69-708] 17 p2894 A69-33501

## SUNDARARAJAN, D.

Some investigations on artificial plasma at microwave frequencies. 18 p3100 A69-34271

## SUNDARARAJAN, R.

Estimate of re-entrant albedo flux over Hyderabad from the observed directional asymmetries. 22 p4005 A69-40519

## SUNDARESAN, M. K.

Continuum eigenfunctions for a hard-sphere gas. 01 p0061 A69-10813

## SUNDBERG, V. C.

Constant-beamwidth antenna development. 02 p0218 A69-12325

## SUNDELIN, J.

Gas turbine control by fluidic amplifiers /Reglering av gasturbiner - Med fluidistorer/. 20 p3585 A69-36944

## SUNDERLAND, J. E.

Unsteady heat conduction in finite hollow circular cylinders under time-dependent boundary conditions of the second kind. 03 p0530 A69-12861

Melting or freezing of finite slabs. [ASME PAPER 68-WA/HT-37] 05 p0848 A69-16128

Development of a modified cascade thermoelectric heat pump. 22 p3869 A69-40133

## SUNDERRAJAN, R.

Splash albedo measurements over Hyderabad /lambda da equals 8 deg N. geo. mag./. 06 p0989 A69-17278

## SUNDERRAJAN, R. R.

Attempts to detect relativistic heavy nuclei with plastics. 06 p0924 A69-17286

## SUNDGREN, N.

Essential hypertension in airline pilots. 06 p0875 A69-17850

## SUNDRY, J. L.

Constant envelope threshold detector. 09 p1459 A69-22474

## SUNDSTROM, A.

A truncation error reducing scheme for balanced forecast models. 07 p1176 A69-19629

Stability theorems for the barotropic vorticity equation. 13 p2294 A69-28494

## SUNDT, C. V.

Development of hollow turbine disks. 09 p1509 A69-22345

## SUNIAEV, R. A.

The interaction of the metagalactic ultraviolet background radiation with galaxies and the limit on the density of the intergalactic gas. 11 p1946 A69-24589

The interaction of matter and radiation in a hot-model universe. 21 p3797 A69-38536

Fluctuations in the microwave background radiation. 21 p3815 A69-39611

Distortions of the background radiation spectrum. 21 p3815 A69-39612

An open universe/ques/. 23 p4221 A69-42391

## SUNKA, P.

Generation and heating of plasma by beam-plasma interaction. 17 p3014 A69-33828

## SUNOUCHI, H.

Perturbation theory of difference schemes. 08 p1343 A69-20537

## SUNTSOV, G. N.

Synchronization of high-speed streak camera operation with a process occurring in a shock tube /O sinkhronizatsii raboty ustanovki SFR s protsessom v aerodinamicheskoi udarnoi trube/. 06 p0926 A69-17499

## SUNYACH, M.

The mixing zone of a plane jet /Zone de melange d'un jet plan/. 12 p2062 A69-26287

Velocity fluctuations induced in the potential cone of a plane jet /Fluctuations de vitesse induites dans le cone a potentiel d'un jet plan/. 13 p2247 A69-27736

Kinematic and thermal discontinuity on the boundaries of the mixing zone of a plane jet /Intermittence cinematique et thermique sur les frontieres de la zone de melange d'un jet plan/. 13 p2247 A69-27978

## SUOMI, V. E.

Satellite observations of the earth's radiation budget. 07 p1127 A69-19261

Geosynchronous meteorological satellite. [AIAA PAPER 68-1094] 12 p2174 A69-26804

## SUPP, H. L.

Unbacked thin film Fabry-Perot interferometer. 20 p3536 A69-36933

## SUPPLE, W. J.

Initial post-buckling behaviour of a class of elastic structural systems. 13 p2359 A69-27261

- SUPRYM, J.**  
A particular case of helicopter instability on the ground /Szczegolny przypadek niestaczejnosci smiglowcow na ziemi/.  
09 p1433 A69-21385
- SURANA, K. S.**  
Optimum design of rotating disks.  
[ASME PAPER 69-DE-1] 14 p2453 A69-28838
- SURDIN, M.**  
The origin of the earth's magnetic field /Sur l'origine du champ magnetique terrestre/.  
03 p0426 A69-14061  
Quasi-stellar objects and radio galaxies /Les objets quasi stellaires et les radio-galaxies/.  
09 p1594 A69-21693
- SURDUTOVICH, G. I.**  
Theory of a gas laser with nonlinear absorption.  
10 p1704 A69-23625  
Quantum theory of the laser /K kvantovoi teorii lazera/.  
21 p3737 A69-38996
- SURESH, N.**  
Pressure signal generator for fluidic research.  
[ASME PAPER 69-FLCS-40] 21 p3649 A69-38603
- SURGET, J.**  
Precise determination of the orientation of a rocket on its launch pad by means of optical sightings - Use of a laser collimator /Determination precise de l'orientation d'une fusée sur sa rampe de lancement par visées optiques - Emploi d'un autocollimateur a laser/.  
06 p0930 A69-17104  
A laser optical system to determine the orientation of a rocket on its pad /Un système optique a laser pour déterminer l'orientation d'une fusée sur sa rampe/.  
09 p1518 A69-22162
- SURI, A.**  
The Kolar gold fields extensive air shower experiment.  
06 p0990 A69-17300
- SURI, A. N.**  
The energy-loss spectrum of extensive air showers recorded by the Haverah Park 500 m array.  
23 p4207 A69-42499
- SURIKOVA, E. E.**  
Static fatigue of glass-fiber reinforced plastics /O staticheskoi ustalosti stekloplastikov/.  
22 p3974 A69-40748
- SURINOV, I. A.**  
Application of a new method of determination of local radiation characteristics to the solution of some fundamental problems in the theory of radiative heat exchange.  
18 p3229 A69-34713  
Estimating the accuracy of approximate solutions of integral equations for radiant heat transfer.  
18 p3230 A69-35119
- SURIS, R. A.**  
Superfluidity of excitons in semiconductors.  
03 p0486 A69-13415
- SURKOV, I. A.**  
The gamma spectrometer on "Luna-10" for the study of the lunar rocks.  
01 p0084 A69-11314  
Study of the lunar surface by the Soviet Luna 9 and Luna 13 automatic stations /Issledovanie lunnoi poverkhnosti na sovetskikh avtomaticheskikh stantsiyakh Luna-9 - Luna-13/.  
[UN PAPER 68-95769] 06 p1000 A69-17041
- SUROV, N. S.**  
Experimental investigation of the parameter distribution in single- and two-phase subsonic plasma jets /Eksperimental'noe issledovanie raspredeleniya parametrov v odnofaznoi i dvukhfaznoi dozvukovykh plazmennyykh struiakh/.  
15 p2663 A69-30989
- SUROVAIA, G. N.**  
Temperature coefficient of the elasticity modulus of niobium alloys.  
04 p0615 A69-14642
- SURRY, D.**  
Two probes for the measurement of the complete velocity vector in subsonic flow.  
05 p0764 A69-16398
- SURYANARAYAN, E. R.**  
Generalized intrinsic form of the characteristic relations in the steady supersonic flow of a gas.  
03 p0412 A69-12847
- SUSAKI, W.**  
Semiconductor lasers.  
09 p1518 A69-22122
- SUSHCHIK, M. M.**  
Influence of a finite beam width on the characteristics of excited parametrically coupled oscillations in optical-range resonators /O vlianii konechnoi shiriny puchka na kharakteristiki vzbuzhdaushchikh-parametricheskii svyazannykh voln impul'sami i puchkami izlucheniia nakachki/.  
03 p0437 A69-13043  
"Capture" of parametrically coupled waves by pulses and beams of pumping radiation /O "plenении" parametricheskii svyazannykh voln impul'sami i puchkami izlucheniia nakachki/.  
10 p1705 A69-23956
- SUSHCHIKH, M. V.**  
Heat transfer in the vicinity of the stagnation point in an axisymmetric turbulent jet impinging on a plane obstacle /Teplotobmen v okrestnosti kriticheskoi tochki pri natekanii osesimmetrichnoi turbulentnoi strui na ploskuiu pregradu/.  
02 p0354 A69-12491  
Calculation of the basic segment of an axisymmetric turbulent supersonic jet /K raschetu osnovnogo uchastka osesimmetrichnoi turbulentnoi sverkhzvukovoi strui/.  
11 p1818 A69-25346  
Spreading of a turbulent jet over a plane perpendicularly positioned obstacle /Rastekanie turbulentnoi strui po ploskoi perpendikuliarno raspolozhennoi pregrade/.  
18 p3123 A69-34990
- SUSHKOV, A. D.**  
Experimental investigation of the current harmonics in a triode-klystron /tristron/ /Eksperimental'noe issledovanie garmonik toka v triodklistrone /tristron//.  
13 p2234 A69-28510
- SUSHKOV, B. G.**  
A mathematical model of the oculomotor apparatus /Matematicheskaya model' glazodvigatel'nogo aparata/.  
20 p3470 A69-37245
- SUSHKOV, F. V.**  
Cell and tissue cultures as subject of study in cosmic biology and medicine.  
02 p0198 A69-11501
- SUSHKOV, I. U. N.**  
New equipment for studying the vestibular analyzer /Novye ustanovki dlia issledovaniia vestibuliarnogo analizatora/.  
20 p3481 A69-37274
- SUSLOV, O. N.**  
Calculation of a convective thermal flux in the neighborhood of a stagnation point in a flow of a partially ionized gas past a body /Raschet konvektivnogo teplovogo potoka v okrestnosti kriticheskoi tochki pri obtekanii tela chastichno ionizovannym gazom/.  
24 p4246 A69-43485
- SUSSKIND, C.**  
Possible enhancement of photosynthesis by laser irradiation.  
24 p4270 A69-42580
- SUSSMAN, M.**  
Tracking solar array maximum power by sensing array temperature.  
23 p4075 A69-42303
- SUSU, A.**  
Reactive scattering from solid surfaces - Atom beam reactions of oxygen with heated germanium and silicon single-crystals.  
19 p3377 A69-36178
- SUSUKIDA, H.**  
Metallurgical studies on gas turbine blade materials after a long term service.  
[ASME PAPER 69-GT-12] 09 p1527 A69-22503
- SUTCLIFFE, D. S.**  
Improvement to the National Physical Laboratory atomic clock.  
21 p3720 A69-38548
- SUTERA, S. P.**  
The effect of external vorticity on stagnation-point heat transfer at high Prandtl number.  
09 p1622 A69-21905  
Laminar boundary layer control by combined blowing and suction in the presence of roughness.  
[AIAA PAPER 69-387] 15 p2591 A69-30477  
Laminar boundary-layer control by combined blowing and suction in the presence of surface roughness.  
[AIAA PAPER 68-641] 17 p2957 A69-34015
- SUTHERLAND, B.**  
Subpicosecond structure in Nd-glass laser relaxation oscillations.  
06 p0938 A69-18231
- SUTHERLAND, G. L.**  
Applications of artificial intelligence for chemical inference. I - The number of possible organic compounds - Acyclic structures containing C, H, O, and N.  
23 p4114 A69-42214
- SUTOVSKII, V. M.**  
Plasma diagnostics in a pinch-discharge laser /Diagnostika plazmy v lazere na pinch-raziade/.  
11 p1933 A69-25548
- SUTRO, L. L.**  
Assembly of computers to command and control a robot.  
21 p3679 A69-39603
- SUTTLE, P. L., JR.**  
Space data relay.  
11 p1839 A69-25295
- SUTTLES, J. T.**  
Some aspects of interplanetary earth-entry simulation.  
15 p2681 A69-30376
- SUTTON, D.**  
Catalyzed ignition of composite propellant fuels by gaseous oxygen.  
16 p2829 A69-31913  
The mechanism of thermal decomposition in ammonium perchlorate-copper chromite mixtures.  
21 p3783 A69-38810
- SUTTON, G.**  
The Apollo passive seismic experiment.  
20 p3539 A69-37516
- SUTTON, G. P.**  
Choosing a rocket engine.  
04 p0647 A69-15296  
Rocket classifications, liquid propellant rockets, engine selection, and heat transfer.  
11 p1943 A69-25587
- SUTTON, G. W.**  
Wake-temperature turbulent fluctuation decay rates deduced from O sub 2 radiation.  
02 p0190 A69-12525  
Effect of chemical reaction fluctuations on turbulent wakes.  
02 p0233 A69-12538  
Use of Langmuir probes for hypersonic turbulent wakes.  
09 p1496 A69-21934  
Species concentration decay in a turbulent boundary layer.  
[AIAA PAPER 69-709] 17 p2955 A69-33480  
Spectral emissivity measurements of ablating phenolic graphite.  
20 p3565 A69-37187  
Effect of turbulent fluctuations in an optically active fluid medium.  
[AIAA PAPER 68-683] 24 p4304 A69-43578
- SUTTON, J.**  
Occultation studies of weak radio sources - List 2.  
02 p0326 A69-12704  
Declination measurements of selected 4C sources using the Arecibo 1000-ft reflector.  
22 p4014 A69-40128
- SUTTON, J. M.**  
Crab Nebula pulsar NP 0532.  
09 p1592 A69-21462  
Digital search methods for pulsars.  
12 p2172 A69-27169
- SUTTON, R. W.**  
Experimental SST terminal for L-band satellite communications/surveillance ATC system.  
17 p2932 A69-34118
- SUTTON, W. H.**  
Ceramic Fibers and Fibrous Composite Materials.  
12 p2118 A69-26340
- SUTULA, R. A.**  
Metal fluoride compounds as cathodes for thermal batteries.  
10 p1640 A69-23997
- SUVOROV, E. V.**  
Kinetic theory of the synchrotron instability of a system or relativistic electrons in plasma.  
04 p0635 A69-14555



## SUVOROV, I. I.

## SUVOROV, I. I.

Study of meteor trail drift according to an IQSY program /1964-1965/ /Izuchenie dreifa meteornykh sledov po programme MGSS /1964-1965 gg./.  
17 p3041 A69-33897

## SUVOROV, P. M.

Influence of age, profession, and physical training on the tolerance of man to prolonged accelerations /Vliianie vozrasta, professii i fizicheskoi podgotovki na perenosimost' chelovekom dlitel'nykh uskorenii/.  
07 p1065 A69-18980

Effect of age, occupation, and physical training on human tolerance to long-term accelerations.  
20 p3479 A69-38228

## SUVOROV, S. G.

Some gnoseological problems in physics /O nekotorykh gnoseologicheskikh problemakh fiziki/.  
20 p3575 A69-37012

## SUVOROVA, V. V.

Interference tolerance in mental activity.  
08 p1262 A69-19839

## SUWA, S.

On the magnetohydrodynamical aligned flow of a compressible fluid past a slender body placed in a circular wind tunnel.  
06 p0861 A69-17719

## SUYO, C. E.

Computer generation of radar return signals.  
03 p0429 A69-13199

Radar waveform synthesis by mean-square optimization techniques.  
20 p3492 A69-37708

## SUZDALNITSKII, I. D.

Elasto-plastic problem for a sheet weakened by a doubly periodic system of circular holes.  
11 p1996 A69-25736

## SUZDALTSEVA, L. F.

Flute instability in an axially symmetric plasma with finite ion larmor radius.  
06 p0966 A69-17520

## SUZUKI, K.

Nonlinear theory of collision-induced instability of partially ionized gases in external magnetic field.  
05 p0804 A69-16441

A one-kw HF wideband untuned power amplifier.  
20 p3488 A69-37286

## SUZUKI, M.

Propagation of Gaussian light beams in a random medium.  
02 p0208 A69-12308

Input admittance of the Fabry-Perot resonator with infinitely long conic-section cylindrical reflectors.  
05 p0731 A69-16295

Application of holographic techniques in radio and sound wave regions.  
09 p1498 A69-22133

## SUZUKI, S.

Japanese meteorological rocket soundings.  
20 p3543 A69-37795

The effects of solid viscosities to dynamic load factors of the hollow sphere subjected to uniformly distributed impulsive loads.  
22 p4044 A69-40598

## SUZUKI, S.-I.

The effects of solid viscosities to dynamic load factors of the ring and the hollow sphere subjected to impulsive loads.  
03 p0530 A69-14089

The effects of axial forces on dynamic load factors of the beam subjected to transverse impulsive loads.  
20 p3629 A69-38113

## SUZUKI, T.

High-power transmitting tubes for satellite communication earth stations.  
05 p0728 A69-15668

Fourier-transform holograms by Fresnel zone-plate achromatic-fringe interferometer.  
12 p2090 A69-26249

Nonequilibrium boundary layer of a dissociated gas over a catalytic flat plate.  
22 p3934 A69-41181

## SUZUKI, U.

Experimental study of penetration of a high-velocity plasma into a cusped field.  
05 p0805 A69-16655

## SUZUKI, Y.

Thermalization of the kinetic energy of a plasma flow by a magnetic mirror field in BSG-I experiments.  
02 p0289 A69-12176

## SVE, C.

Indentations of an elastic layer by moving punches.  
21 p3837 A69-39155

## SVECHINSKII, V. B.

Problems of Neurocybernetics and Neurobionics /Problemy neirokibernetiki i neirobioniki/.  
19 p3263 A69-36747

## SVECHNIKOV, A. M.

Influence of radio wave absorption in the ionosphere on the variation of sporadic E-layer parameters.  
03 p0423 A69-13539

## SVECHNIKOV, S. V.

Hall mobility of photoelectrons in cadmium sulfide layers /Kholliv's'ka rukhlivst' fotoelektroniv u sharakh sul'fidu kadmiiu/.  
03 p0491 A69-14055

Excess conductivity effect in cadmium sulfide single crystals at room temperatures /Do efektu zalishkovoi providnosti u monokristalakh sul'fidu kadmiiu pri kimmnatnikh temperaturakh/.  
08 p1374 A69-21083

Single-crystal CdS films.  
11 p1939 A69-25709

Hall mobility of photoelectrons in layers of cadmium sulfide.  
18 p3182 A69-35048

## SVECHNIKOV, V. M.

Phase diagram of the chromium-cerium system /Diagrama staniv sistemi khrom-tserii/.  
15 p2640 A69-30666

## SVEDMYR, N.

A comparative study of some cardiovascular effects of sotalol /MJ 1999/ and propranolol.  
23 p4080 A69-41403

## SVELTO, O.

Optimum coupling for intracavity second harmonic generation.  
01 p0089 A69-10181

Picosecond pulses, TEM sub 00 mode, mode-locked ruby laser.  
23 p4172 A69-41395

## SVELTO, V.

The statistical behavior of the scintillation detector - Theories and experiments.  
22 p3947 A69-40670

## SVEN-OLOF-KRONOGARD

A theoretical study of the flow in impellers of mixed and radial flow compressors and discussion of methods for design improvements.  
[SAE PAPER 690033]  
07 p1049 A69-18312

## SVENSSON, E. L.

The lunar television camera.  
07 p1133 A69-19137

Lunar television camera.  
23 p4162 A69-41478

## SVENTSITSKAIA, N. A.

Transverse mode selection in a laser with convex mirrors.  
03 p0440 A69-13426

Properties of a laser with an unstable resonator.  
15 p2634 A69-30730

## SVERDLIK, M. B.

Accuracy of the measurement of the initial phase of a coherently and discretely processed signal /Tochnost' izmereniia nachal'noi fazy signala pri kogerentnoi diskretnoi obrabotke/.  
15 p2574 A69-30130

Instrumental accuracy of a discrete phase meter /Instrumental'naia tochnost' diskretnogo fazovogo izmereniia/.  
15 p2574 A69-30139

## SVERDLOV, A. I.

Application of the moire bands technique to the investigation of the deflection of a rectangular cantilever plate with a partially clamped edge /Issledovanie metodom mnuarovykh polos izgiba priamougol'noi konoisol'noi plastiny s chastichno zashchemlennym kraem/.  
17 p3058 A69-33203

## SVESHNIKOV, O. G.

Experimental investigation of a thin-walled welded girder system in the case of partial stability loss /Eksperimental'noe issledovanie tonkostennoi svarnoi balochnoi sistemy, chastichno poteriavshei ustoiichivost'/.  
23 p4169 A69-42007

## SVESHNIKOVA, G. A.

Heat-resistant alloys hardened by the Ni sub 3 Nb phase /Zharoprochnye splavy, uprochnennye fazoi Ni sub 3 Nb/.  
13 p2283 A69-28488

## SVESTKA, Z.

Mass motions in flares indicated by line profiles and filtergrams.  
06 p0993 A69-17427

General summary on the results of the first proton flare project period, July 1966.  
10 p1769 A69-23787

The optical flare.  
24 p4370 A69-43605

## SVETLIK, J. F.

A hybrid computational method for partial differential equations.  
04 p0566 A69-1534

## SVETLOV, B. S.

Combustion of certain organic perchlorates /Goreniie nekotorykh organicheskikh perkloratov/.  
15 p2716 A69-30108

## SVETLOV, I. L.

Possibility of attaining high strength with help of whisker crystals /Vozmozhnost' dostizheniia vysokoi prochnosti s pomoshch'iu nitevidnykh kristallov/.  
09 p1525 A69-22142

## SVIATOGOROV, A. A.

Systems for the Deflection of the Jet Stream of Turbojet Engines /Ustroistva dlia Otkloneniia Reaktivnoi Strui Turboreaktivnykh Dvigatelei/.  
04 p0647 A69-14934

## SVICH, V. A.

Hydrogen as a buffer gas in a submillimeter water-vapor laser /Vodorod v kachestve bufernogo gaza submillimetrovogo lazera na parakh vody/.  
04 p0612 A69-15175

Hydrogen as a buffer gas in a submillimeter water-vapor laser.  
18 p3152 A69-34717

Submillimeter CW laser operating with water vapor and HCN vapor /Submillimetrovyy lazer nepreryvnogo deistviia, rabotaiushchii na parakh H sub 2 O i HCN/.  
22 p3959 A69-39958

## SVIDERSKAIA, Z. A.

Nature of the phase interactions in magnesium alloys of the Mg-Nd-Al system /O kharaktere fazovykh vzaimodeistvii v magnievykh splavakh sistemy Mg-Nd-Al/.  
11 p1902 A69-24271

## SVIDERSKENE, Z.

Energy distribution in the spectrum of gamma-Cas in 1967 /Raspredelenie energii v spektre gamma-Cas v 1967 g./.  
19 p3426 A69-36565

## SVIDZINSKII, K. K.

Induced-discharge wave propagation in a two-component laser medium /Rasprostraneniye voln industirovannogo sbrosa v dvukhkomponentnoi lazernoi srede/.  
02 p0206 A69-11609

The propagation of the waves of an induced surge in a two-component laser medium.  
11 p1895 A69-24716

Theory of deep-level acceptors in semiconductors /Teoriia akseptorov s glubokimi urovniami v poluprovodnikakh/.  
15 p2665 A69-30039

## SVIRCHEVSKAIA, G. V.

Influence of the residual phase term in the spectral characteristic of a linearly frequency-modulated signal on the shape of a compressed signal /O vliiani ostatochnogo fazovogo chlena spektral'noi kharakteristiki signala s lincinoi chastotnoi modulatsiei na formu szhatogo signala/.  
15 p2564 A69-30143

## SVIRIDENKO, S. S.

Distortion of a Barker signal in an ideal linear system and in an RC filter /Iskazheniia barkerovskogo signala v ideal'noi lincinoi sisteme i RC-fil'tre/.  
05 p0720 A69-16443

Distortions of a Barker signal in an ideal linear system and an RC-filter.  
16 p2753 A69-32475

Synchronization in systems transmitting discrete information /Sinkhronizatsiia v sistemakh peredachi diskretnoi informatsii/.  
18 p3104 A69-35264

## SVIRIDOV, A. G.

Electron energy distribution in discharges used for CO sub 2 lasers.  
08 p1323 A69-19801

## SVIRIDOV, A. N.

Measurement of the lifetime of a system of 00 deg v vibrational levels of CO sub 2 molecules /Izmereniye vremen zhizni sistem kolebatel'nykh urovnei 00 deg v molekul CO sub 2/.  
13 p2273 A69-28579

- Measurement of the 00 super 0 1 level population of CO sub 2 molecules /Izmerenie naselennosti urovnia 00 super 0 1 molekul CO sub 2/.  
13 p2274 A69-28580
- Study of a CO sub 2 pulsed laser /Issledovanie lazera na CO sub 2 v impul'snom rezhime/.  
14 p2458 A69-29162
- VIRINA, E. P.**  
The Hall effect in ferrites /Effekt Kholla v ferritakh/.  
01 p0135 A69-10185
- VIRSKII, L. D.**  
Processes of formation of coatings deposited by the method of gas-flame spraying /Protsessy formirovaniia pokrytii, nanosimyykh metodom gazoplennogo napyleniia/.  
20 p3549 A69-37374
- VISTELNIK, A. A.**  
Decoding of group codes /O dekodirovaniia grup-povykh kodov/.  
13 p2225 A69-28537
- VISTUNOV, I. B.**  
Quantitative evaluation of the activity of animal cardiovascular systems during prolonged orbital flight.  
08 p1261 A69-19828
- VISTUNOV, V. M.**  
Concerning certain features of the stationary Josephson effect.  
09 p1556 A69-21669
- SVLAKVELIDZE, G. K.**  
Precipitation intensity measurement with a multi-wave radar /Izmerenie intensivnosti osadkov mnogovolnovym radiolokatorom/.  
16 p2806 A69-32265
- SVOBODA, M.**  
Plane thermal stresses around holes under steady distribution of temperature.  
05 p0836 A69-15877
- The stability of a crack under mechanical and thermal stresses.  
10 p1794 A69-22890
- SVOLOPOULOS, S. N.**  
The relation between /B - V/ color and radiation temperature deduced from eclipsing variables.  
03 p0469 A69-13964
- SVORAD, D.**  
Resting EEG alpha and asymmetry of reflective lateral eye movements.  
22 p3887 A69-41213
- SWAIM, R. L.**  
VTOL aircraft dynamics.  
12 p2014 A69-26776
- State variable synthesis of a control system for a launch vehicle with severe mode interaction.  
24 p4394 A69-43278
- SWAIN, F. E.**  
Guide to development and use of electronic computer programs - Documentation.  
22 p3904 A69-40140
- SWAIN, F. M.**  
Carbohydrate components of Paleozoic plants.  
21 p3669 A69-39333
- Carbohydrate components of upper carboniferous plant fossils from Radstock, England.  
21 p3661 A69-39534
- Amino acid components of some Paleozoic plant fossils and rock samples.  
21 p3662 A69-39535
- SWAINGER, K. H.**  
The mathematically linear analysis of strain in continua.  
07 p1236 A69-19445
- SWAINSTON, M. J. C.**  
Development of spanwise velocity profiles through cascades and axial-flow turbomachines.  
23 p4061 A69-42110
- SWALES, P. D.**  
The elastohydrodynamic lubrication of a highly elastic cylindrical surface.  
23 p4171 A69-42531
- SWAMY, K. S. K.**  
Graphite particle model for NML Cygnus.  
03 p0513 A69-13775
- Line blanketing in stars.  
04 p0653 A69-14626
- Analysis of subdwarf HD 25329.  
09 p1600 A69-22199
- Convection in normal stars and metal-deficient stars.  
14 p2527 A69-29946
- Atmospheres of extreme metal-deficient stars.  
19 p3425 A69-36338
- Solid hydrogen coated graphite particles in the interstellar medium. I.  
20 p3601 A69-37492
- SWAN, W. C.**  
A review of the configuration development of the U.S. supersonic transport.  
[RAES PAPER 17] 22 p3863 A69-40496
- SWANENBURG, B. N.**  
Primary electron detector experiment for OGO-E.  
[IEEE PAPER 3C-4] 07 p1135 A69-19198
- Long-term time variations of the cosmic-ray electron flux above 500 Mev.  
16 p2851 A69-32566
- SWANN, B. M.**  
Fabricating thin gauge corrugated core sandwich structures by fusion welding.  
[SBAC PAPER 9] 20 p3549 A69-37448
- SWANN, G. A.**  
Lunar geological field investigations.  
[AAS PAPER 68-202] 02 p0312 A69-11478
- SWANSON, C. A.**  
Comparison and Oscillation Theory of Linear Differential Equations.  
04 p0622 A69-14598
- Oscillation criteria for elliptic equations.  
09 p1533 A69-22771
- SWANSON, D. W.**  
Real-time strapdown-attitude-package evaluations.  
[AIAA PAPER 69-849] 21 p3765 A69-39424
- SWANSON, S. R.**  
Load history effects in structural fatigue.  
15 p2705 A69-30363
- SWARM, H. M.**  
Electromagnetic scatter from small dielectric gradients in a continuous medium.  
14 p2414 A69-29513
- SWART, H.**  
Exposure to radiation in orbital flights /Zur Strahlenexposition bei Orbitalfluegen/.  
20 p3481 A69-37339
- SWARTZ, D. L.**  
Machined fastened joints - Their use in aerospace structures.  
19 p3319 A69-35553
- SWARTZ, M.**  
X-ray and extreme ultraviolet /1-400 angstrom units/ spectroscopy of the sun, from OSO-III.  
09 p1578 A69-22169
- Observations of the solar flare soft X-ray spectrum and comparison with centimetric radio bursts.  
24 p4371 A69-43609
- SWARTZ, S. E.**  
Buckling of folded-plate structures.  
15 p2709 A69-30679
- SWARTZENDRUBER, L. J.**  
Direct reading instrument for silicon and germanium four-probe resistivity measurements.  
04 p0599 A69-15019
- SWARZTRAUBER, P.**  
The topology of an axisymmetric magnetic field of a differentially rotating sun.  
09 p1606 A69-22425
- SWEARINGEN, T. B.**  
Thermal entry for low Reynolds number turbulent flow.  
[ASME PAPER 68-WA/FE-11] 05 p0748 A69-16090
- Thermal entry for low Reynolds number turbulent flow.  
[ASME PAPER 68-WA/FE-11] 14 p2430 A69-29446
- SWEDLOW, J. L.**  
Initial comparisons between experiment and theory of the strain fields in a cracked copper plate.  
15 p2640 A69-30810
- Elasto-plastic cracked plates in plane strain.  
15 p2710 A69-30811
- Approaches to non-linear problems - The example of plasticity.  
18 p3219 A69-34666
- SWEENEY, B. W.**  
Use of a pulsed laser tracking system for tracking satellites.  
13 p2222 A69-28192
- SWEENEY, F. B.**  
New oxidizer grinding facility and processes.  
[AIAA PAPER 69-516] 16 p2767 A69-32664
- SWEENEY, W. E., JR.**  
Gamma-ray transitions involving isobaric-spin mixed states in Be super 8.  
22 p3987 A69-41043
- SWEET, A. L.**  
Investigation of a random cumulative damage theory.  
04 p0680 A69-15154
- SWEET, L. R.**  
Flickering, a 10-cps fluctuation within bright auroras.  
04 p0594 A69-15129
- SWEET, P. A.**  
A physical explanation of difficulties appearing in the theory of toroidal magnetohydrodynamic oscillations.  
14 p2492 A69-29369
- Mechanisms of solar flares.  
21 p3791 A69-39507
- SWEET, W. H.**  
Time-intensity data in solar cosmic-ray events - Biological data relevant to their effects in man.  
03 p0374 A69-13500
- SWEIGART, A. V.**  
Rocket spectra of Venus and Jupiter from 2000 to 3000 angstroms.  
22 p4028 A69-40661
- SWENGROS, G. V.**  
The design of physical activity programs for industry.  
21 p3663 A69-38919
- SWENSON, B. L.**  
Spacecraft sterilization by destructive heating.  
15 p2560 A69-31472
- SWENSON, C. A.**  
Specific heats of Cu, GaAs, GaSb, InAs, and InSb from 1 to 30 K.  
01 p0140 A69-11252
- SWENSON, G. R.**  
Temperature shape parameter of the thermosphere determined from probe data.  
20 p3534 A69-38088
- Diurnal variations in the thermosphere from a series of Marshall-University-of-Michigan probes.  
22 p3939 A69-40515
- SWENSON, G. W., JR.**  
On the space-frequency equivalence of a correlator interferometer.  
07 p1132 A69-18917
- Synthetic-aperture radio telescopes.  
21 p3677 A69-39512
- SWENSON, L. W.**  
Polarization in proton- super 4 He scattering at 540 Mev.  
04 p0632 A69-14966
- SWERDLING, M.**  
Impactable power subsystems for Mars landers.  
23 p4069 A69-42253
- Solar array configurations and performance on the Martian surface.  
23 p4073 A69-42289
- SWET, C. J.**  
Deployment of a tethered orbiting interferometer.  
[AAS PAPER 69-255] 24 p4313 A69-42859
- SWETT, C. C.**  
Further experiments on ion-cyclotron-wave generation in the RF self-sustained mode.  
03 p0474 A69-13113
- SWEZ, J.**  
Inhibition of gamma-ray-induced degradation of E. coli B sub s-I DNA by infection with T1, T2 and T4 bacteriophage.  
07 p1069 A69-19709
- SWIATROWSKI, Z.**  
Application of hybrid and monolithic microcircuits in electronic digital computer structures /Zastosowanie mikroukladow hybrydowych i monolitycznych w konstrukcjach elektronicznych maszyn cyfrowych/.  
24 p4284 A69-42907
- SWICK, D. A.**  
Walsh function generation.  
09 p1452 A69-21321
- SWIDER, W. JR.**  
Upper atmospheric emission processes.  
21 p3711 A69-38513
- SWIDER, W., JR.**  
Processes for meteoric elements in the E-region.  
16 p2780 A69-32313



## SWIDERSKI, E. F.

Ionization rates due to the attenuation of 1-100 angstrom units nonflare solar X rays in the terrestrial atmosphere. 22 p4004 A69-40447

## SWIDERSKI, E. F.

Power conditioning development for the Sert II ion thruster. 23 p4075 A69-42301

## SWIFT, C. D.

Simultaneous observations of the optical and X-ray spectra of Sco XR-1. 07 p1220 A69-19391

Detection of X-rays from the Large Magellanic Cloud. 10 p1770 A69-24093

Further simultaneous observations of the optical and X-ray spectra of Sco X-1. 15 p2676 A69-30885

## SWIFT, C. T.

The admittance of a parallel-plate waveguide aperture illuminating a metal sheet. 02 p0218 A69-12328

Radiation characteristics of a cavity-backed cylindrical gap antenna. 22 p3914 A69-40698

Admittance of a waveguide-fed aperture loaded with a dielectric plug. 23 p4136 A69-41589

## SWIFT, D. W.

Particle acceleration by electrostatic waves with spatially varying phase velocities. 03 p0479 A69-14028

## SWIFT, H. F.

The effects of bumper material properties on the operation of spaced hypervelocity particle shields. [AIAA PAPER 69-379] 13 p2283 A69-28309

Characterization of debris clouds behind impacted meteoroid bumper plates. [AIAA PAPER 69-380] 13 p2368 A69-28310

## SWIGART, J. I.

Rocket-borne Rayleigh scattering instrumentation to measure atmospheric density. 06 p0927 A69-17698

## SWIHART, T. L.

Inhomogeneities in the solar photosphere. 07 p1217 A69-19238

Astrophysics and Stellar Astronomy. 13 p2337 A69-27463

## SWINBANK, W. C.

A comparison between predictions of dimensional analysis for the constant-flux layer and observations in unstable conditions. 02 p0275 A69-12692

## SWINGLER, D. N.

Simple microwave holograms and moire fringes using the "spinning-dipole" field-perturbation technique. 19 p3315 A69-36824

## SWINGS, J. P.

Examples of astronomical needs for atomic spectra. 03 p0508 A69-13172

Forbidden sulphur I lines in the solar spectrum. 07 p1217 A69-19237

The emission lines in the ultraviolet spectrum of Boss 1985. 08 p1385 A69-20060

Forbidden lines of Fe II in the solar photospheric spectrum. 16 p2854 A69-31652

Presence of /Fe IV/ in the spectrum of MH alpha 328116 /Presence de /Fe IV/ dans le spectre de MH alpha 328116/. 16 p2866 A69-32815

## SWINGS, P.

Examples of astronomical needs for atomic spectra. 03 p0508 A69-13172

## SWINNING, C. M.

Correlation of Ti-6Al-4V fractographs with mechanical behavior in methanol-acid, methanol, and air environments. 16 p2799 A69-31718

## SWINSON, W. F.

Scattered light photoelastic thermal stress analysis of a solid-propellant rocket motor. [AIAA PAPER 68-512] 02 p0345 A69-12371

## SWISHER, J. H.

Sulfur solubility and internal sulfidation of iron-titanium alloys. 06 p0942 A69-17226

## SWISHER, R. L.

Degradation of continuous-channel electron multipliers in a laboratory operating environment. 14 p2449 A69-29565

## SWISS, J.

Relationship between polymer structure and thermal, mechanical and chemical properties important to electrical applications. 13 p2285 A69-27986

## SWITALSKI, R. C.

Periodic shock with added clock. 10 p1644 A69-23304

## SWITHENBANK, J.

On shock-tunnel simulation of scramjet combustion chamber performance. [AIAA PAPER 69-84] 06 p0985 A69-18165

## SWITZKY, H.

Designing for minimum flexibility or weight. 02 p0345 A69-12380

Design and analysis of frames for stability. 13 p2358 A69-27209

## SWOBODA, H.

A sample changer for fatigue studies in ultrahigh vacuum /Probenwechsler fuer Ermuedungsuntersuchungen im Ultrahochvakuum/. 08 p1302 A69-20877

## SWONGER, C. W.

Analysis of intercept control techniques with computer generated movies. 06 p0906 A69-17397

## SWOPE, R. D.

The stability of a fluid layer adjacent to a flat plate submerged in a liquid. [AIAA PAPER 69-386] 15 p2590 A69-30476

## SWORDER, D. D.

On the stochastic maximum principle. 05 p0788 A69-16482

Feedback control of a class of linear systems with jump parameters. 12 p2052 A69-26502

Applications of a simplified multidimensional stochastic approximation algorithm. 24 p4291 A69-43275

## SWYLER, J. L.

Requirements for relays in spacecraft having magnetic field constraints. 13 p2231 A69-28046

## SYCH, V. M.

The flow of a viscous and electrically conducting fluid in a duct of finite electrical conductivity. 10 p1727 A69-23098

Magnetohydrodynamic flow in a rectangular channel with porous walls at finite magnetic Reynolds numbers /Magnitogidrodinamicheskoe techenie v priamougol'nom kanale s pronitsaemyimi stenkami pri konechnykh magnitnykh chislakh Reinal'dsa/. 22 p3989 A69-40256

## SYCHEV, A. A.

Determination of the buildup time of a giant pulse in a laser with a passive shutter /Opredelenie vremeni razvitiia gigantskogo impul'sa v OKG s passivnym zatvorom/. 11 p1894 A69-24621

Kinetics of the free-emission spectrum of a ruby laser with elimination of mode discrimination /Kinetika spektra svobodnoi generatsii OKG na rubine pri isklucheni diskriminatsii mod/. 11 p1900 A69-25547

Kinetics of free generation spectra of a solid-state laser in the traveling-wave regime with mode discrimination excluded. 13 p2271 A69-27655

## SYCHEV, V. V.

Grinding and classification of micropowders of high-melting-point compounds /Izmel'chenie i klassifikatsiia mikroporoshkov tugoplavkikh soedinenii/. 12 p2113 A69-26256

## SYCHRA, J.

A note on the use of the blade cosecant beam in radar meteorology. 04 p0626 A69-14507

## SYCHUGOV, V. A.

A laser with liquid active elements based on POC1 sub 3 -Nd super 3 super plus /OKG s zhidkimi aktivnymi veshchestvami na osnove POC1 sub 3 -Nd super 3 super plus/. 11 p1894 A69-24620

## SYED, A.

Temperature distributions and thermal stresses in bimetallic I-beam structures. 06 p1024 A69-17610

## SYKES, G.

Control and sampling in sterile rooms. 05 p0714 A69-15953

## SYKES, N. P.

Minimum-weight stiffened shells with slight meridional curvature designed to support axial compressive loads. 24 p4405 A69-43671

## SYKES, P.

The manufacture of ceramic radomes by the flame spraying process. 07 p1142 A69-19528

## SYKORA, J.

The photospheric magnetic field structure and corona in a small complex of activity. 11 p1964 A69-25418

## SYLVIA, J.

Parametric charge studies for aerospace nickel-cadmium batteries. 23 p4071 A69-42282

## SYMMONS, W. R.

A strain multiplier for fatigue sensors. 02 p0250 A69-12230

## SYMMONS, M. D.

Radio investigation of the solar plasma. 12 p2161 A69-26942

## SYNDER, L. E.

Microwave detection of interstellar formaldehyde. 10 p1786 A69-24108

## SYNOROV, V. F.

Effect of a distributed base resistance on the emitter current density in drift transistors with a circular emitter /Vliianie raspredelennogo soprotivleniia bazy na plotnost' emitirnogo toka v dreifovykh triodakh s krugovym emitterom/. 11 p1853 A69-25565

Dependence of current gain on the surface recombination rate in a nondrifting triode /Zavisimost' koefitsienta usileniia po toku ot skorosti poverkhnostnoi rekombinatsii v bezdreifovom triode/. 13 p2236 A69-28547

## SYROEGINA, N. A.

Investigation of cast alloys of the Cr-Co-B system which are abrasion- and corrosion-resistant in aggressive media /Izyskanie litykh spлавov sistemy Cr-Co-B, ustoiichivyykh protiv abrazivnogo iznashivaniia i korrozii v agressivnykh sredakh/. 19 p3347 A69-36742

## SYROVATSKII, S. I.

Diffuse X-radiation background in space. 01 p0147 A69-11310

On the origin of cosmic rays. 03 p0497 A69-12929

Synchrotron radiation and its reabsorption. 06 p0962 A69-17245

Magnetohydrodynamic cumulation near a zero field line. 10 p1739 A69-23626

Developments in the theory of synchrotron radiation and its reabsorption. 21 p3772 A69-39513

## SYSHIKOVA, M. P.

The interaction of a shock wave in a body in the presence of ionization relaxation. 19 p3450 A69-36361

## SYSOEV, L. A.

Melting points of covalent semiconductor compounds with stoichiometric vacancies /O temperaturakh plavleniia kovalentnykh poluprovodnikov so stekhiometricheskimi vakansiiami/. 02 p0297 A69-11881

Neodymium laser with regulated pulse duration. 14 p2460 A69-29670

The melting points of covalent semiconductors with stoichiometric vacancies. 18 p3182 A69-35041

## SYTAIA, E. P.

Thermionic emission of /100/ faces of tungsten, rhenium, tantalum, and molybdenum single crystals /Termoelektronnaia emissiia granei /100/ monokristallov spлавov vol'frama, reniia, tantala i molibdena/. 17 p3015 A69-33630

## SYVERSEN, R. G.

Selection of astronaut cooling systems for extravehicular space missions. [AIAA PAPER 69-617] 17 p2914 A69-33278

- SYVERTSON, C. A.**  
Aircraft without wings. 03 p0366 A69-13367
- SYABLEWSKI, W.**  
Turbulent boundary layers with a pressure gradient /Turbulente Grenzschichten mit Druckabfall/. 06 p0908 A69-17133  
Turbulent boundary layers near flow separation /Turbulente Grenzschichten in Ablosungsnaehe/. 15 p2591 A69-30638
- SYABO, A.**  
Optical-microwave double-resonance studies of ruby. 04 p0611 A69-14439  
Self-Q-switching of ruby lasers at 77 deg K. 05 p0776 A69-16332
- SYABO, B. A.**  
Derivation of stiffness matrices for problems in plane elasticity by Galerkin's method. 20 p3619 A69-36951
- SYACHTA, F. D.**  
A sensitive radio receiver for ionospheric measurements. 17 p2936 A69-33062
- SYADECZKY-KARDOSS**  
Application of satellite observations to the coupling of geodetic grids /Primenenie nabludenii iskusstvennykh sputnikov zemli dlia soedineniia geodezicheskikh setei/. 12 p2069 A69-26433
- SYADKOWSKI, J.**  
A synthesis problem for nonlinear second-order differential equations /Sur un probleme de synthese pour les equations differentielles du second ordre non lineaires/. 11 p1910 A69-25602
- SYAFRAN, J.**  
Psychological studies of aging in pilots. 14 p2408 A69-29307
- SYALAY, M.**  
Effect of the application of integrated circuits on the design and production technology of electronic equipment /Integral aramkoeroek alkalmazasanak hatasa az elektronikus keszulekek konstrukciojara es technologiajara/. 16 p2762 A69-32578
- SYAMOSI, G.**  
Classical dynamics in an expanding universe. 11 p1920 A69-25561
- SYCZECINSKI, S.**  
Influence of the blade tip clearance of an axial flow compressor on its parameters /Wplyw luzu wierzchołkowego lopatek sprezarki osiowej na jej parametry/. 16 p2837 A69-32004
- SYCZENIOWSKI, B.**  
Validity of the notion of semiperfect gases /Sur la validite de la notion des gaz semi-parfaits/. 05 p0848 A69-16336  
Study of gas turbine cycles with an isothermic burner and/or diffuser-burner. 16 p2837 A69-32064
- SYCZEPINSKI, W.**  
On the lines of influence of plastic deformation. 17 p3067 A69-34146
- SYE, D. T.**  
An experimental investigation of atmospheric effects on an optical PCM data relay. 11 p1888 A69-25308
- SYE, S. M.**  
Metal-semiconductor IMPATT diode. 08 p1286 A69-20862  
Physics of Semiconductor Devices. 15 p2670 A69-31062
- SYEBEHELY, V.**  
Trajectory optimization using regularized variables. [AAS PAPER 68-099] 20 p3595 A69-37173
- SYEKELY, V.**  
Buildup of Gunn domains. 02 p0297 A69-11948  
Intervalley scattering model of the Gunn domain. 06 p0893 A69-16937
- SYEKERES, G.**  
Effect of gravitation on frequency. 04 p0661 A69-15148
- SYEKERES, P.**  
Multipole particles in equilibrium in general relativity. 08 p1350 A69-19783
- SYENAJCH, W.**  
Synthesis of pneumatic logic control systems from systems realizing negation /Synteza pneumatycznych logicznych ukladow sterowania z ukladow realizujacych negacje/. 18 p3093 A69-34831
- SYENTIRMAI, G.**  
The synthesis of narrow-band crystal band-elimination filters. 08 p1300 A69-21173
- SYEPESI, D.**  
Determination of the wind profile of the lowest 300-m air layer by pilot balloon measurements /Die Bestimmung des Windprofils der unteren Luftschrift von 300 m durch Pilotballonmessungen/. 09 p1535 A69-21516
- SYEWS, A. P.**  
Analysis of an optical motor system energized with a laser. 09 p1442 A69-22457
- SYILAGYI, B.**  
Characterization of the dynamic behavior of a nonlinear control system with the aid of the root-locus curve /Nemlinearis szabalyozasi rendszer dinamikus tulajdonsagainak jellemese gyok-helygoerbevel/. 07 p1114 A69-18290
- SYILAGYI, M.**  
A microminiature five-point measuring head for measuring semiconductor films /Mikrominiatur oetus meroeifej felvezetoe retegek meresere/. 12 p2099 A69-27104
- SYILAGYI, P.**  
Canonical forms for second-order elliptic systems with constant coefficients /Sur les formes canoniques pour systemes elliptiques de deuxieme ordre a coefficients constants/. 07 p1174 A69-19476
- SYKLARZ, E. G.**  
High pressure synthesis and superconducting properties of yttrium sesquicarbide. 07 p1201 A69-19600
- SYKOPIAK, Z. C.**  
Low-temperature internal friction in quenched niobium. 03 p0447 A69-13617  
Hardness of niobium-nitrogen and niobium-oxygen alloys. 23 p4178 A69-42362
- SYLAVIK, F.**  
Radiation damage of junction and MOS transistors /Reteg-es MOS tranzistorok sugarkarosodasa/. 13 p2227 A69-27514
- SYLENKIER, T. K.**  
VTOL transport aircraft - Factors influencing the integration of airframe, power plant and systems. 17 p2897 A69-33207
- SYMELTER, J.**  
A numerical solution of the two dimensional problem of elasticity. 03 p0527 A69-13750
- SYOEKE, A.**  
Accurate laser wavelength measurements in the infrared and far infrared using a Michelson interferometer. 17 p3006 A69-33405
- SYOEKE, S.**  
Relations between electronegativity and potential energy in the alkali metal molecules. 03 p0472 A69-13805
- SYZAN, L.**  
Numerical value rating system. 13 p2383 A69-28098
- SYZBALSKEI, W.**  
Molecular events resulting in radiation injury, repair and sensitization of DNA. 03 p0372 A69-13489
- SYZY, W.**  
Certain nonlinear problem of the stability of a cylindrical shell /O pewnym nieliniowym zagadnieniu statecznosci powloki walcowej/. 22 p4042 A69-40454
- SYZMANSKI, A.**  
Influence of electric fields on the rate of growth of molecular solids. 01 p0135 A69-10140
- SYZMANSKI, L.**  
P-n junctions formed during growth of gallium phosphide crystals /Zlaczna p-n powstajace w czasie wzrostu krysztalow fosforu galu/. 13 p2323 A69-28642
- SYZMANSKI, P.**  
Certain transformations of the Navier-Stokes equations /O niektorych przekształceniach rownan Navier-Stokes'a/. 18 p3122 A69-34830

## T

- TABACHNIK, V. M.**  
Theoretical values of limb-darkening coefficients /O teoreticheskikh znacheniiakh koeffitsientov potemnienii a kraiu/. 09 p1588 A69-21364  
Theoretical values of limb-darkening coefficients. 18 p3197 A69-34754
- TABACK, I.**  
A description of the Lunar Orbiter spacecraft. 05 p0829 A69-15857
- TABACZYNSKI, J. A.**  
On the estimation of the state of noisy nonlinear multivariable systems. 12 p2046 A69-26062  
A comparison of three non-linear filters. 23 p4146 A69-42447
- TABAKOFF, W.**  
Heat transfer by a square array of round air jets impinging perpendicular to a flat surface including the effect of spent air. [ASME PAPER 69-GT-4] 09 p1624 A69-22508  
Drag analyses of powered nacelle fan jet engine model test. 13 p2199 A69-27446  
Solar concentration power and optimization of the cavity type heater for a solar source. 17 p3022 A69-33795
- TABANERA, T. M.**  
System of education via satellite for South America /Sistema de educacion via satelite para Sudamerica/. 19 p3268 A69-36163
- TABARA, H.**  
Structure and evolution of quasi-stellar radio sources. 09 p1592 A69-21500
- TABARROK, B.**  
Complementary formulation for plate vibration problems. 18 p3218 A69-34626
- TABET, D.**  
Utilization of components in circuits /Utilisation des composants dans les circuits/. 15 p2624 A69-30819
- TABUSSE, L.**  
Our experience with asthma in military air crews /Notre experience de l'asthme dans le personnel navigant des forces armees/. 05 p0710 A69-16624
- TACANO, M.**  
Microwave emission from InSb avalanche plasma under a magnetic field. 07 p1197 A69-18466
- TACHIBANA, M.**  
Design of a PCM satellite communication system. 24 p4283 A69-43200
- TACKETT, S. L.**  
Chromium and manganese in chondrites. 15 p2681 A69-30416
- TADJBAKHSH, I. G.**  
A derivation of the stress-strain relationship of composite bars. 07 p1235 A69-19385
- TADOKORO, M.**  
A study of the Local Group by use of the virial theorem. 08 p1381 A69-19795
- TAFEL, H. J.**  
Analogies between electric and fluidic components and networks /Analogien zwischen elektrischen und fluidischen Bauelementen und Netzwerken/. 11 p1861 A69-25676
- TAFT, C.**  
Discontinuous vortex power amplifier design. 09 p1443 A69-22737
- TAFT, C. K.**  
Fluidic electro-pneumatic converter optimization. 15 p2553 A69-31298



## TAFT, D. R.

## TAFT, D. R.

Ferrite elements for hybrid microwave integrated systems.

01 p0040 A69-10191

## TAGANOV, G. I.

Contribution to the theory of stationary separation areas /K teorii statsionarnykh sryvnykh zon/.

02 p0190 A69-12570

Flow calculation for the case of asymmetric supersonic gas flow past an ellipsoid with a frontal area of separation /Raschet techeniia pri nesimmetrichnom obtekanii ellipsoida s perednei sryvnoi zonoj sverkhzvukovym potokom gaza/.

06 p0858 A69-17337

## TAGASHIRA, H.

The measurement of ionization coefficients in hydrogen and nitrogen.

16 p2815 A69-32574

## TAGER, A. S.

Oscillators employing avalanche transit-time diodes at centimeter wavelengths /Generatory na lavinnno-proletnom diode v santimetrovom diapazone voln/.

07 p1107 A69-19155

Noise generator employing avalanche transit-time diodes /Generator shuma na lavinnno-proletnom diode/.

07 p1107 A69-19156

Avalanche transit-time diode oscillators with electrical frequency retuning and multidiode oscillators /Generatory na lavinnno-proletnom diode s elektricheskoi perestroikoi chastoty i mnogodiodynye generatory/.

11 p1844 A69-24449

Avalanche Transit-Time Diodes and their Application in Microwave Technology /Lavinnno-Proletnye Diody i ikh Primenenie v Tekhnike SVCh/.

16 p2761 A69-32109

## TAGGART, R.

Intermediate compound Ni sub 8 Nb/Cb/ in nickel-rich nickel-niobium /columbium/ alloys.

10 p1708 A69-22993

The characteristics of spontaneous martensite in thin foils of Ti-Cr alloys.

10 p1708 A69-22994

The martensite transformation in Ti-Cr binary alloys.

13 p2276 A69-27369

## TAGIROV, R. K.

Influence of the initial boundary layer on base pressure.

07 p1119 A69-18747

Experimental study of separation flows behind a flat protection at M sub 1 equals 1.97 /Eksperimental'noe issledovanie otrynnykh techenii za ploskim ustupom pri M sub 1 equals 1.97/.

24 p4247 A69-43498

## TAGLIAFERRI, E.

A spectral measurement of simulated meteors.

10 p1790 A69-24142

## TAGLIAFERRI, G. L.

The 44-60 angstrom units flux during the ascending period of the solar cycle no. 20 /1964-67/.

04 p0650 A69-15530

Solar X-ray flux deduced from flare effects on VLF propagation.

14 p2411 A69-29105

Coronal active regions observed by SOLRAD 8 during the eclipse of May 20, 1966.

15 p2698 A69-31363

X-ray fluxes from the Solrad 9 satellite /1968-17A/ from March 1968 to December 1968.

20 p3588 A69-37473

## TAGUET, G.

Contribution to the study of the ablation of some materials based on phenolic resins.

11 p1999 A69-24908

## TAI, C. L.

Longitudinal oscillation of a liquid-filled, elastic, cylindrical-conical tank.

[ASME PAPER 69-VIBR-11]

10 p1806 A69-24165

## TAI, M. L.

Investigation of the steady-state response of a multivariable extremal system in the presence of noise /K issledovaniiu ustanovivshegosia protsessu v mnogomer-noi ekstremal'noi sisteme pri nalichii pomekh/.

04 p0583 A69-15139

## TAIEB, C.

Synoptic observations of the F2 layer in the magnetically conjugate regions of Kerguelen and Archangel /Les observations synoptiques de la couche F2 dans les

regions magnetiquement conjuguees de Kerguelen et Arkangelsk/.

16 p2784 A69-32612

Preliminary results of comparison between Thomson scatter and topside sounder measurements.

20 p3532 A69-37898

## TAIEB, SH.

Synoptic observations of the F sub 2 -layer of the ionosphere in the magnetically conjugate regions Kerguelen-Archangel'sk province.

06 p0919 A69-17723

## TAILLET, J.

Use of triple probes in the presence of high- or low-frequency perturbations /Utilisation des sondes triples en presence de parasites a haute ou basse frequence/.

17 p2920 A69-33592

Resonance-sustained radio frequency discharges.

18 p3181 A69-35487

Determination of negative ion concentrations by means of flash photodissociation /Determination des concentrations en ions negatifs par photodetachement-eclair/.

21 p3778 A69-39574

## TAIRA, K.

Measurement of propagation characteristics of optical beams in the atmosphere and analyses of returned echo signals using a laser radar system with A-scope representation.

20 p3487 A69-37284

## TAIRA, S.

Crystallographic study of yield condition of polycrystalline metals. II - HCP metal.

01 p0094 A69-10304

Thermal fatigue combined with static mean stress and reversed mechanical stress.

21 p3847 A69-39813

## TAIRA, T.

Effect of applied magnetic field on the exploding wire phenomenon.

01 p0118 A69-10660

Propagation of shock waves in inhomogeneous gases. VII.

17 p2952 A69-33383

## TAIT, K. E.

Stability properties of discrete-continuous feedback control systems with signal dependent sampling. I - A bibliographical survey.

02 p0226 A69-12733

## TAIT, W. C.

Standing waves and single-mode room-temperature laser emission from electron-beam-pumped cadmium sulfide.

12 p2109 A69-26639

## TAJIMA, Y. A.

Thermal decomposition behavior of perchlorate oxidizers studied by flash mass thermal analysis. [WSCI PAPER 69-19]

16 p2832 A69-32357

## TAJME, T.

Stabilization of a composite-cavity single-frequency laser.

05 p0776 A69-16333

A composite-cavity tunable laser.

23 p4174 A69-41635

## TAJIRI, M.

Mechanical properties of glass and graphite fibers for FRP.

21 p3753 A69-39799

## TAKACS, S.

Transition of a homogeneous type II superconductor cylinder under the influence of axial current.

08 p1371 A69-20202

## TAKAGI, M.

Balloon observation of small ion density and electric conductivity in the stratosphere.

18 p3130 A69-34970

## TAKAGI, N.

General review of Japan's space activities. [UN PAPER 68-95563]

01 p0151 A69-10501

## TAKAGI, T.

Statistical properties of radiance spatial distribution of sky and forest backgrounds.

12 p2131 A69-27072

Response of a pull-in oscillator for random noise coincident with synchronizing signal.

12 p2044 A69-27101

## TAKAHARA, Y.

Structuring of multilevel systems.

12 p2049 A69-26082

## TAKAHASHI, G. H.

Effects of MMH upon the cornea and studies on the blood-aqueous barrier to MMH.

09 p1447 A69-22547

## TAKAHASHI, K.

Collisional ionization cross-sections for Fe ions and the temperature of the solar corona. II.

04 p0651 A69-14365

Diversity reception in VHF space communications.

06 p0889 A69-17653

Temperature dependence of laser-induced damage in polyethylmethacrylate with Q-switching dye.

06 p0936 A69-17777

Solar panel's power of the satellite No. 1.

15 p2552 A69-30072

Diversity effect on VHF space communications.

23 p4115 A69-41585

## TAKAHASHI, M.

Aerodynamic characteristics of propeller-wing-flap systems.

09 p1431 A69-22278

Reproducibility of the boiling point of oxygen and its pressure-temperature relation near 1 atmosphere.

14 p2540 A69-29888

## TAKAHASHI, N.

Abrasion-induced deformation microtwinning observed by transmission electron microscopy /Formation de micromacules de deformation dues a l'abrasion, observee en microscopie electronique par transmission/.

02 p0251 A69-11542

Spatial ion-wave echoes.

16 p2818 A69-31676

Large-amplitude ion acoustic waves in a plasma.

22 p3991 A69-41008

## TAKAHASHI, O.

How to reduce the weight of pressure garments.

06 p0884 A69-18037

## TAKAHASHI, S.

Ultralow-noise preamplifiers in satellite communication earth terminal installations - Traveling-wave maser and cooled parametric amplifier.

05 p0728 A69-15670

The vibration of a cylindrical shell with three supports.

13 p2359 A69-27257

## TAKAHASHI, T.

Effect of heat treatment on resistance to stress corrosion cracking of Al-Zn-Mg ternary alloys. I.

04 p0617 A69-14933

Radio observation of galactic HII regions at 4170 MHz. II.

06 p1008 A69-17696

On the steady flow of a non-equilibrium ionized gas past a wall with sharp corners in the presence of a magnetic field.

17 p3010 A69-32865

## TAKAHASHI, Y.

Hazards in pneumatic fluidic circuits. [ASME PAPER 68-WA/AUT-18]

05 p0706 A69-16174

Optimal state variable feedback with bounded gains. [ASME PAPER 68-WA/AUT-8]

05 p0738 A69-16180

## TAKAKI, R.

Inhomogeneous turbulence without mean flow.

21 p3693 A69-38749

## TAKAKURA, T.

Interpretation of time characteristics of solar X-ray bursts referring to associated microwave bursts.

07 p1206 A69-19250

Interpretation of time characteristics of solar X-ray bursts.

24 p4372 A69-43613

Flare-associated radio bursts.

24 p4372 A69-43614

## TAKAMATSU, Y.

A comparative study of the flow field about an oscillating flat plate with the numerical solution of the Navier-Stokes equations. [AIAA PAPER 69-226]

07 p1121 A69-19565

## TAKAMINE, J.

The application of CRT contour analysis to general circulation experiments.

01 p0109 A69-10539

## TAKANO, A.

Character of hypersonic shock tunnels with real gas effects. II - Dissociational nonequilibrium flow through a converging-diverging nozzle.

22 p3927 A69-40583

- Nonequilibrium boundary layer of a dissociated gas over a catalytic flat plate.  
22 p3934 A69-41181
- TAKAO, I.**  
An application of the parametron amplifier to the X-band ESR spectrometer.  
14 p2423 A69-29757  
An oversize waveguide directional coupler using two prisms interface-matched by means of the Brewster's-angle effect.  
14 p2424 A69-29764
- TAKAO, K.**  
Shock wave structure in expansion flows.  
06 p0908 A69-17021  
Experimental studies of the shock structures in expansion flows.  
06 p0908 A69-17022  
A vehicle-tracking antenna array composed of cross dipoles.  
13 p2226 A69-27185  
Anomalous responses of the GM counter on Explorer 30.  
14 p2514 A69-29383  
Location of temporary radiation zones caused by geomagnetic storms.  
14 p2514 A69-29384
- TAKAO, T.**  
Effect of applied magnetic field on the exploding wire phenomenon.  
01 p0118 A69-10660
- TAKAOKA, Y.**  
A study on plasma diffusion in a uniform magnetic field.  
15 p2657 A69-30023
- TAKARADA, K.**  
Radiation spectra of quasars.  
04 p0648 A69-14565
- TAKASE, B.**  
Three-color photoelectric photometry of Cepheid variables.  
22 p4031 A69-40943
- TAKASHI, K.**  
Diversity reception in VHF space communications.  
10 p1775 A69-23191
- TAKASHIMA, Y.**  
Separation of gas mixture in an axisymmetric supersonic jet.  
06 p0911 A69-17553
- TAKATA, G. Y.**  
Rarefied hypersonic flow about cones and flat plates by Monte Carlo simulation.  
20 p3459 A69-37902
- TAKATA, M.**  
A computational method for the quasi-optimal control from parameter sensitivity viewpoint.  
11 p1859 A69-25165
- TAKATSUJI, M.**  
Self-focussing of laser beams by analogy with gravitational theory.  
08 p1324 A69-20085
- TAKAYAMA, K.**  
Excitation of electron cyclotron harmonic waves in plasmas.  
01 p0127 A69-10335  
Suppression of plasma ion oscillations by electron plasma oscillations.  
02 p0287 A69-11934  
Quenching of ion oscillations at the sheath-plasma resonance.  
03 p0476 A69-13323  
Harmonics of ion oscillations in a neutralized ion beam plasma.  
05 p0804 A69-16459  
Probe noise in quiescent plasmas.  
06 p0967 A69-17715  
Ion cyclotron resonance acceleration in a non-uniformly magnetized plasma.  
08 p1360 A69-20079
- TAKAYANAGI, K.**  
On the photodestruction rate of hydrogen molecules in HI regions.  
18 p3204 A69-35351
- TAKAYANAGI, M.**  
Mechanical relaxation of poly-4-methyl-pentene-1 at cryogenic temperatures.  
05 p0785 A69-16492
- TAKEBE, H.**  
Collisional ionization cross-sections for Fe ions and the temperature of the solar corona. II.  
04 p0651 A69-14365
- TAKEDA, H.**  
Formation of H sub 2 and galaxies in the hot universe.  
15 p2680 A69-30205
- TAKEDA, K.**  
Plasma distributions around a circular cylinder in weakly ionized gas flow.  
19 p3380 A69-35839
- TAKEDA, S.**  
Microwave conductivity in a turbulent plasma with a magnetic field.  
05 p0804 A69-16442  
A matching technique to inject microwave power into high-density plasmas.  
21 p3779 A69-39746
- TAKEDA, Y.**  
Electron reflection by standing wave of giant pulse laser.  
02 p0255 A69-11833
- TAKEI, S.**  
The effect on the geomagnetic field of the solar eclipse of Nov. 12, 1966 at and near the dip equator.  
02 p0241 A69-11727
- TAKEMATSU, M.**  
Stability of a laminar flow along a flexible boundary. I.  
02 p0232 A69-12353  
Stability of a laminar flow along a flexible boundary. I.  
06 p0909 A69-17207
- TAKEMOTO, N.**  
Characteristics of pilots on personality tests. I.  
06 p0876 A69-18033
- TAKENAKA, A.**  
The charge ratio of high-energy cosmic-ray muons at large zenith angles.  
17 p3023 A69-33321
- TAKENAKA, T.**  
Static and dynamic characteristics of oil-hydraulic control valves.  
19 p3256 A69-36713
- TAKENAKA, Y.**  
Static and fatigue strength of end-closed filament-wound vessels under internal pressure.  
21 p3846 A69-39797
- TAKENO, T.**  
A theoretical study for initiation of high-frequency combustion oscillation in premixed gas rocket. [ISAS-430]  
06 p1029 A69-17025
- TAKENOUCHI, T.**  
Occultation of BD -17 deg 4388 by Neptune on 7 April 1968. I - Observations and the determination of a preliminary value for the radius of Neptune.  
06 p1007 A69-17693
- TAKESHIMA, T.**  
Beam scanning of parabolic antenna by defocusing.  
07 p1089 A69-18248  
Frequency bandwidth of slotted array aerial system.  
08 p1286 A69-20836
- TAKESHITA, S.**  
Power transmission properties between arbitrarily focused antennas in Fresnel region.  
11 p1851 A69-24991
- TAKESHITA, T.**  
Excitation and ionization processes in non-equilibrium MHD plasmas.  
10 p1732 A69-23444
- TAKETA, S. T.**  
Effects of acute exposure to high-energy protons on primates.  
03 p0374 A69-13498
- TAKETANI, M.**  
Formation of galaxies from hydrogen gas.  
15 p2680 A69-30204
- TAKETOMI, D.**  
Design technique for wideband tunnel diode amplifier.  
15 p2578 A69-30804
- TAKEUCHI, M.**  
Surface effects on breakdown characteristics of GaAs bulk diodes.  
05 p0733 A69-16561
- TAKEUCHI, N.**  
Undulation in the output of a pulsed water-vapor laser.  
14 p2461 A69-29887  
On the initiation and propagation of fatigue crack.  
17 p3052 A69-32981
- TAKEUTI, M.**  
Oscillations of the atmosphere of a pulsating star /Oscillations de l'atmosphère de l'étoile pulsante/.  
11 p1961 A69-25104
- TAKHAR, H. S.**  
Free convection from a flat plate.  
01 p0175 A69-10331  
Entry-length flow in a vertical cooled pipe.  
05 p0845 A69-15717
- TAKIBAIEV, ZH. S.**  
An apparatus for studying inelastic interactions at energies of 10 super 12 ev /Ustanovka dlia izucheniia neuprugikh vzaimodeistvii pri energiiakh 10 super 12 ev/.  
12 p2093 A69-26583  
Study of four-momentum transfers in high-energy interactions of cosmic ray particles.  
13 p2330 A69-28375  
Energy characteristics of the interaction of cosmic-ray particles with carbon nuclei.  
13 p2330 A69-28379  
On measuring the energy spectrum of nuclear-active particles with an ionization calorimeter having a small absorber thickness.  
13 p2331 A69-28392
- TAKIGAWA, S.**  
Characteristics of pilots on personality tests. I.  
06 p0876 A69-18033
- TAKIYAMA, K.**  
Approximate pattern calculation of a leaky waveguide.  
11 p1850 A69-24982
- TAKIZAWA, E. I.**  
On the stochastic types of motion in a system of coupled harmonic oscillators.  
19 p3374 A69-36752
- TAKSAMI, I. A.**  
Basic parameters on switches based on glassy chalcogenide semiconductors - Parameters and physical principles of switches based on glassy chalcogenide semiconductors /Osnovnye parametry perekliuchatelei na osnove khal'kogenidnykh stekloobraznykh poluprovodnikov - Parametry i fizicheskie osnovy perekliuchatelei na osnove khal'kogenidnykh stekloobraznykh poluprovodnikov/.  
21 p3780 A69-39045
- TAKUMA, H.**  
Study of self-trapped optical beams by high-speed holography. [IEEE PAPER J-7]  
05 p0775 A69-16320  
Solid lasers.  
09 p1517 A69-22120
- TAL, J.**  
Design of time lag systems with sensitivity constraints.  
24 p4293 A69-43293
- TALAAT, E.**  
Design and operation of an experimental closed-loop magnetoplasma dynamic energy conversion system.  
10 p1638 A69-23483
- TALAEV, S. A.**  
Planning of behavior on the basis of received information /Planirovanie povedeniia na osnove vospriniatoi informatsii/.  
23 p4109 A69-41976
- TALALAKIN, G. N.**  
Problem of the electroluminescence of GaAs single crystals.  
04 p0644 A69-15271
- TALANKINA, G. I.**  
Possibility of optical pumping of gases by their self-radiation /O vozmozhnosti opticheskoi nakachki gazov sobstvennym izlucheniem/.  
04 p0610 A69-14382  
On the possibility of optical pumping of gases by their own radiation.  
14 p2456 A69-28755
- TALANOV, V. I.**  
Effect of random phase aberrations of the correctors on the characteristics of a beam waveguide with a high degree of mode selection /Vliianie sluchainykh fazovykh aberratsii korrektorov na kharakteristiki lucheвого volnovoda pri vysokoi stepeni selektsii mod/.  
10 p1658 A69-23954
- TALANTOV, A. V.**  
Influence of initial temperature on the propagation velocity of a flame in a turbulent flow of a homogeneous mixture.  
16 p2837 A69-32138



## TALARICO, K. S.

Investigation of the dependences of combustion processes in a turbulent flow of a homogeneous mixture /Issledovanie zavisimostei protsessov goreniia v turbulentnom potoke odnorodnoi smesi/.  
17 p3069 A69-33140

Influence of the turbulence characteristics of the flow on flame stabilization by means of a bluff body /Vliianie kharakteristik turbulentnosti potoka na stabilizatsiiu plameni s pomoshch'iu plokhogo obtekaemogo tela/.  
24 p4408 A69-43078

## TALARICO, K. S.

Conversion of acetate-2 -super 14 C to super 14 CO sub 2 and super 14 C-fatty acids in the partially hepatectomized rat /33627/.  
19 p3257 A69-35976

Effects of hyperoxia and hypoxia on mitosis in the normal and regenerating rat liver.  
24 p4269 A69-43565

## TALBERT, S. G.

Determination of the approximate structural parameters of a large steerable antenna.  
23 p4230 A69-42129

## TALBOT, L.

Langmuir probe response in a turbulent plasma. [AIAA PAPER 69-698]  
17 p3010 A69-33438

An experimental study of the shock structure in a partially ionized gas. [AIAA PAPER 69-697]  
17 p3011 A69-33466

Rarefied gas dynamics.  
18 p3122 A69-34812

## TALBOTIER, M.

The boosters /Les lanceurs/.  
02 p0334 A69-11919

## TALBOTT, G. R.

Mass spectroscopy and gas chromatography correlated for leak rate measurement.  
01 p0079 A69-10297

## TALCOTT, J. M.

On the spin-stability of a flexible body.  
11 p1994 A69-25533

## TALEKAR, V. L.

Propagation constant and radiation field patterns of linear antennas in weakly ionized plasma.  
08 p1285 A69-20551

A unified approach to fields and propagation in compressible lossy magnetoplasma.  
21 p3775 A69-38434

## TALENTO, J. A.

Laboratory test to determine the weldability of alloy 600/EN 82 Ni-Cr-Fe base-filler alloy combinations.  
22 p3968 A69-39886

## TALLANT, P. E.

Chromospheric inhomogeneities in sunspot umbrae.  
18 p3204 A69-35389

## TALLINEAU, Y.

Attempt to distinguish between very low frequency /VLF/ day and evening emissions by means of magnetic activity - Application to magnetospheric storm periods /Essai de distinction entre les emissions a tres basses frequences /T.B.F./ du jour et du soir au moyen de l'activite magnetique - Application aux periodes d'orage magnetospherique/.  
13 p2253 A69-27740

## TALLMAN, O.

A model for the classification of visual images.  
17 p2911 A69-34094

## TALMOR, E.

Gaseous film cooling at various degrees of hot-gas acceleration and turbulence levels.  
06 p1033 A69-17557

## TALON, R.

Determination of the spectrum and the flux of fast atmospheric neutrons during a quiet-sun period at a geomagnetic latitude of 46 deg North /Determination du spectre et du flux de neutrons atmospheriques rapides en periode de soleil calme et a une latitude geomagnetique de 46 deg Nord/.  
16 p2851 A69-32616

## TALROZE, V. L.

Effect of ionizing radiation on the combustion of ammonium perchlorate and systems of mixtures containing it /Vliianie ioniziruiushchego izlucheniia na gorenie perkhlorata ammoniia i i smesevykh sistem na ego osnove/.  
11 p1941 A69-25194

## TALVAR, A. K.

Propagation of cylindrical shock waves in a gravitating medium /Rasprostraneniie tsilindricheskikh udarnykh voln v gravitiruiushchei srede/.  
19 p3298 A69-36386

## TALWAR, S. P.

Hydromagnetic stability of a spiral arm embedded in a gravitating medium.  
13 p2346 A69-27705

Contraststreaming instability in gravitating fluids with thermal effects.  
24 p4388 A69-43638

## TALYZIN, N. V.

Transmission of newspaper pages in the "Orbit" system /Peredacha polos gazet v sisteme "Orbita"/.  
19 p3277 A69-36567

## TAM, C. K. W.

Amplitude dispersion and nonlinear instability of whistlers.  
18 p3179 A69-34437

## TAM, K. K.

On the asymptotic solution of the Orr-Sommerfeld equation by the method of multiple-scales.  
01 p0059 A69-10332

## TAM, K.-K.

On the thermodynamics of a relativistic scalar fluid.  
01 p0175 A69-10345

Internal energy and gravitation.  
07 p1182 A69-19419

Scalar hydrodynamics and gravitation.  
12 p2130 A69-26462

A covariant treatment of relativistic plasma oscillations in the presence of an external magnetic field.  
16 p2816 A69-31633

Relativistic magnetohydrodynamics of a gravitating fluid.  
22 p3992 A69-41056

## TAMAKI, T.

The influence of a pair of edge dislocations in slip planes perpendicular to each other on the workhardening and strain-ageing.  
07 p1238 A69-19695

## TAMAO, T.

Effects of the electron motion along magnetic field lines on torsional hydromagnetic oscillations.  
12 p2076 A69-27107

Magnetospheric plasma motion associated with time fluctuations of magnetic field in the solar wind.  
14 p2521 A69-29382

A numerical study of particle acceleration in the magnetosphere.  
15 p2594 A69-30095

Hydromagnetic coupling oscillations and drift instabilities in nonuniform, collisionless plasmas.  
21 p3776 A69-38710

## TAMARCHENKO, V. I.

Effect of impacts between carriers on the Nernst effect and other transport phenomena in nondegenerate semiconductors /Vliianie stolkovnenii mezhdru nositeliami na effekt Nernsta i drugie lavlavlavleniia perenosu v nevyrozhdennykh poluprovodnikakh/.  
09 p1554 A69-21468

The influence of collisions between carriers on the Nernst-Ettingshausen effect and other transport phenomena in nondegenerate semiconductors.  
15 p2669 A69-30713

## TAMARIN, P. V.

The entrainment effect in graphite /Ob effekte uvlecheniia v grafite/.  
21 p3753 A69-39562

## TAMARU, T.

Experimental studies of the harmonic radiation in a microwave gas discharge at 34 GHz frequency.  
08 p1283 A69-20177

## TAMATE, O.

The effect of a circular inclusion on the stresses around a line crack in a sheet under tension.  
05 p0841 A69-16432

Behavior of a screw dislocation near a partially bonded bimetallic interface.  
10 p1802 A69-24027

Postbuckling behavior of thin curved panels under axial compression.  
20 p3629 A69-38112

## TAMAYO, P.

The cyclic stress behaviour of a 355 stainless steel 2024-T8 aluminium alloy.  
24 p4331 A69-42925

## TAMBA, A.

Inter-crystalline corrosion of stainless austenitic steels measured on the basis of internal friction at audio frequencies /Interkristalline Korrosion nichtrostender austenitischer Staehle, gemessen auf Grund der inneren Reibung bei Schallfrequenzen/.  
10 p1713 A69-23819

## TAMBURELLO, C.

Study of a variable-polarization tunnel-diode oscillator /Studio di un oscillatore a diodo tunnel a polarizzazione variabile/.  
01 p0038 A69-10070

Oscillation frequency of a nonsinusoidal tunnel-diode oscillator as a function of polarization /Frequenza di oscillazione di un oscillatore non sinusoidale a diodo tunnel in funzione della polarizzazione/.  
08 p1279 A69-19924

Some applications of the theory of tunnel diode oscillators /Alcune applicazioni della teoria degli oscillatori a diodo tunnel/.  
19 p3285 A69-36738

## TAMBURINI, T.

Orbit of the visual binary star ADS 12447 /Orbita della stella doppia visuale ADS 12447/.  
20 p3598 A69-37466

Study of the visual binaries ADS 1223, Don 91, and ADS 9756 /Studio delle stelle doppie visuali ADS 1223, Don 91, ADS 9756/.  
20 p3600 A69-37480

## TAMBURRANO, A.

Discharge characteristic and relaxation processes in a Cs-He thermal plasma.  
10 p1732 A69-23443

## TAMHANE, A. S.

Techniques for proper revelation and viewing of etch-tracks in meteoritic and terrestrial minerals.  
02 p0245 A69-12569

Chemical composition of nuclei of Z greater than 22 in cosmic rays using meteoritic minerals as detectors.  
05 p0816 A69-16355

Attempts to detect relativistic heavy nuclei with plastics.  
06 p0924 A69-17286

On the energy spectrum of iron-group nuclei as deduced from fossil-track studies in meteoritic minerals.  
19 p3410 A69-36095

On the flux of low-energy particles in the solar system during the last 10 million years.  
19 p3411 A69-36097

## TAMIR, T.

On the optimization of the ground wave above a dispersive half-space.  
02 p0209 A69-12347

The field of a line source embedded in a sinusoidally-stratified medium.  
17 p2925 A69-33842

Role of the lateral wave in total reflection of light.  
23 p4191 A69-42148

## TAMMANN, G. A.

Cepheids as distance indicators. I /Cepheids als Entfernungsindikatoren. I/.  
08 p1408 A69-21147

Cepheids as distance indicators. II /Cepheids als Entfernungsindikatoren. II/.  
10 p1780 A69-23646

## TAMME, E. E.

Solution of a nonlinear boundary-value problem for an ordinary second-order differential equation by the finite-difference method /O reshenii nelineinogo kraevoi zadachi dlia obyknovennogo differentsial'nogo uravneniia vtorogo poriadka metodom konechnykh raznostei/.  
01 p0105 A69-10721

## TAMULIS, J. C.

Jet-knife edge interaction as a source of signal noise in proportional fluid amplifiers.  
02 p0195 A69-12078

## TAMURA, A.

Whirl instability of externally pressurized gas journal bearing.  
02 p0254 A69-12426

## TAMURA, H.

Studies on the methanol fuel cell - Cathodic polarization characteristics of hydrogen peroxide electrode.  
11 p1825 A69-24523

The effect of couple-stresses on the stress concentration of a plate containing an infinite row of holes.  
15 p2708 A69-30640

## TAMURA, K.

Optimization problem with bounded state variable.  
12 p2050 A69-26087

## TAMURA, S.

Application of microchemical analysis to diagnostics of lithium plasma.  
05 p0762 A69-15960

- TAMUZH, V. P.**  
Investigation of the energy dissipation in fiberglass-reinforced plastics by the dynamic hysteresis loop method /Issledovanie rasseianiia energii v stekloplastikakh metodom dinamicheskoi peti gisteresisa/. 17 p2993 A69-33937
- TAN, B. T. G.**  
Bulk effect germanium microwave modulation. 01 p0043 A69-10563
- TAN, C. W.**  
Transient heat transfer in MHD plane Couette flow. 13 p2375 A69-27791
- TAN, J. S. C.**  
D.C. servo-system with torque feedback. I. 05 p0736 A69-15659  
D. C. servo-system with torque feedback. II. 07 p1059 A69-19229
- TANABE, T.**  
Generalized variable-time-of-arrival guidance. 22 p3979 A69-41186
- TANAKA, H.**  
The slowly varying component of the radio emission during the period of the July 1966 proton flare. 10 p1783 A69-23734  
High-resolution observations of solar radio bursts with multi-element compound interferometers at 3.75 and 9.4 GHz. 11 p1946 A69-24428  
A high-resolution quick-scan interferometer for solar studies at 3.75 GHz. 18 p3118 A69-34968  
An analog feedback system for digital information transmission. 24 p4289 A69-42977
- TANAKA, K.**  
Emission lines in non-coherent scattering. 08 p1381 A69-19800  
A variational principle for transport phenomena. II - Applications to several problems. 15 p2716 A69-30022  
Electron beam exposure system for integrated circuits. 15 p2579 A69-31039
- TANAKA, M.**  
Hemispherical distribution of turbidity coefficient as estimated from direct solar radiation measurements. 05 p0789 A69-16585  
Estimation of rotational line widths of carbon dioxide bands. 09 p1543 A69-22250  
Deformation and surface temperature rise of 18-8 austenitic steels under double-repeated fatigue tests at elevated temperature. 10 p1711 A69-23393
- TANAKA, O.**  
Plastic deformation and rupture of thin circular plate under lateral pressure. I - Studies on rupture disc. 06 p1020 A69-17129
- TANAKA, R.**  
Hydrogen embrittlement of 18Cr-8Ni stainless steel and its correspondence to corrosion cracking. 19 p3358 A69-35774
- TANAKA, S.**  
Excitation of electron cyclotron harmonic waves in plasmas. 01 p0127 A69-10335  
Ceramic rod array scanned with ferrite phase shifters. 04 p0572 A69-14327  
Motion of a circular cylinder in a rarefied gas due to surface temperature difference. 08 p1305 A69-20888
- TANAKA, S.-I.**  
Stereo-radiography using holographic techniques. 08 p1313 A69-20178
- TANAKA, T.**  
The effects of traps in the semiconductor on the characteristics of MOS transistors. 02 p0299 A69-12183  
Application of the cluster variation method to the s-d interaction Hamiltonian. 03 p0485 A69-13298  
Studies on the convective heat transfer from a rotating disk. III - Heat and mass transfer in a laminar flow about a rotating disk with suction or injection in the axial stream. 06 p1029 A69-17002
- Studies on the convective heat transfer from a rotating disk. IV. 06 p1029 A69-17003  
Effects of interface states on the characteristics of MOS transistors. 06 p0979 A69-17117  
Effect of the superimposed stress of higher frequency on the fatigue strength of an aluminum alloy. 06 p0941 A69-17121  
Ground-state energy of the Anderson model by the cluster variation method. 06 p0958 A69-17712  
Scattering of a beam wave by a spherical object. 08 p1273 A69-20028  
Green's function theory of parametric amplification in a magnetic system. 15 p2668 A69-30685  
On the influence of heat treatments on the stress corrosion cracking of Al-Zn-Mg alloys. 17 p2990 A69-33676  
A method of estimation of program fatigue life. 21 p3846 A69-39810  
Range and spatial variation of the Kondo spin-compensated state. 22 p3983 A69-40061
- TANAKA, Y.**  
The galactic magnetic field derived from cosmic-ray electrons. 05 p0828 A69-16612  
Long-term time variations of the cosmic-ray electron flux above 500 Mev. 16 p2851 A69-32566  
Occurrence of VLF emissions at Showa base. 18 p3102 A69-34964  
Polarization and arriving direction of VLF emissions at Showa base. 18 p3102 A69-34965
- TANASE, T. T.**  
Electrical power sources for business aircraft. [SAE PAPER 690346] 15 p2552 A69-30091
- TANATAROV, L. V.**  
Diffusion processes during the formation of coatings by the condensation method /Diffuzionnyye protsessy pri obrazovanii pokrytii metodom kondensatsii/. 20 p3549 A69-37365
- TANCREDI, J. J.**  
On the utility and measurement of voltage probability density of wideband microwave noise. 02 p0211 A69-12460
- TANDBERG-HANSSEN, E.**  
Magnetic fields in flares and active prominences. I. 09 p1579 A69-22179  
Profiles of the H and K lines of Ca II in disk flares. 17 p3023 A69-33054
- TANDELOV, P. A.**  
Effect of high-power laser radiation on photographic materials /O deistvii moshchnogo lazernogo izlucheniia na fotograficheskie materialy/. 01 p0080 A69-10429
- TANDON, J. N.**  
Electromagnetic radiation from solar flares. 05 p0813 A69-15603  
Magnetogravitational instability of a Vlasov plasma. 06 p0965 A69-17515  
The hydromagnetic oscillations and stability of self gravitating masses. II - Compressible fluid sphere. 20 p3605 A69-37822
- TANDON, S. N.**  
Gallium, germanium, indium and iridium variations in a suite of L-group chondrites. 01 p0155 A69-10976  
Lithium, beryllium, boron and fluorine nuclei in cosmic radiation. 06 p0988 A69-17271  
Steady state spectra of proton and helium nuclei and their modulation. 06 p0988 A69-17272  
Spectra of heavy and super heavy nuclei in steady state. 06 p0988 A69-17273  
Rigidity spectrum of cosmic ray helium nuclei using a magnetic spectrograph. 06 p0989 A69-17277
- TANEDA, S.**  
Standing twin-vortices behind a thin flat plate normal to the flow. 18 p3086 A69-35167  
Vortex wakes of oscillating circular cylinders. 18 p3086 A69-35169
- TANENBAUM, B. S.**  
Effect of collisions on Thomson scattering with unequal electron and ion temperatures. 14 p2510 A69-28946
- TANG, C. C. H.**  
Forward and backward scattered modes in multimode nonuniform transitions. 01 p0043 A69-10621  
Mode conversion in nonuniform multimode waveguides and transitions. 23 p4135 A69-41354  
Determination of orbits of planetary artificial satellites and planetary gravitational fields. 24 p4388 A69-43650
- TANG, C. L.**  
Mode interactions between the 4881- and 5147- angstrom units lines in Ar super plus lasers. 10 p1705 A69-24003  
The singly ionized krypton ion laser. 12 p2109 A69-26638  
Rotational transition of CO sub 2 molecule by collisions. 20 p3581 A69-38121
- TANG, D. T.**  
Coding for error control. 09 p1461 A69-21893
- TANG, J. Y. T.**  
The effect of tensor conductivity on continuum magnetogasdynamics flows. 01 p0126 A69-10226  
Effect of tensor conductivity on collisionless magnetogasdynamics flows. 11 p1930 A69-25278
- TANG, R.**  
Multi-mode phased array element for scan angle compensation of element impedance. 17 p2929 A69-33875
- TANG, S.**  
Elastic stability of a circular plate under unidirectional compression. 04 p0683 A69-15515  
Some problems in thermoelasticity with temperature-dependent properties. 09 p1617 A69-22007  
Natural vibration of isotropic plates with temperature-dependent properties. 16 p2871 A69-31891  
Elastic stresses in rotating anisotropic disks. 17 p3067 A69-34138
- TANG, S. C.**  
A method for the solution of conduction heat transfer with non-linear heat generation. 10 p1809 A69-23689
- TANG, Y. S.**  
Experimental study of vapor velocity limit in a sodium heat pipe. [ASME PAPER 69-HT-21] 24 p4412 A69-43547
- TANGER, G. E.**  
Pool boiling heat transfer from Teflon-coated stainless steel. [ASME PAPER 68-WA/HT-12] 05 p0847 A69-16119
- TANGERUD, A.**  
A hot wire anemometer for the measurement of the three orthogonal components of wind velocity, and also directly the wind direction, employing no moving parts. 06 p0923 A69-16926
- TANGO, W. J.**  
Spectroscopy of K sub 2 using laser-induced fluorescence. 05 p0771 A69-15907  
On probing cometary magnetic fields by measuring depolarization of resonance fluorescence. 09 p1603 A69-22234
- TANGRADI, L. J.**  
SPOT - A versatile navigation/traffic control satellite system for transoceanic aircraft and marine traffic. 03 p0463 A69-13234  
A multi-function satellite system for transoceanic service. 16 p2809 A69-32054
- TANGRI, K.**  
Omega transformation in zirconium alloys. 10 p1707 A69-22988
- TANI, I.**  
Boundary-layer transition. 18 p3123 A69-34920



## TANI, J.

- TANI, J.**  
Buckling of truncated conical shells under torsion.  
24 p4395 A69-42715

## TANIDA, Y.

- Stall-flutter in cascade. III - Arbitrary mode vibration of cascade blades as treated by semi-actuator disc method.  
11 p1818 A69-25028

## TANIGUCHI, O.

- Flexural vibrations of a ring of rectangular cross section.  
24 p4404 A69-43629

## TANIMOTO, M.

- Plasma generation by laser beam irradiation on a single solidified gas particle.  
24 p4354 A69-42645

## TANIUTI, T.

- Self-focusing of a plasma wave along a magnetic field.  
09 p1546 A69-21577

## TANK, W. G.

- A multiwavelength line-of-sight experiment for remote atmospheric sensing.  
14 p2415 A69-29516

- An on-board technique for estimating the effect of water vapor in radio occultation measurements of atmospheric density.  
20 p3545 A69-38097

- An example of air density determinations from electromagnetic phase measurements.  
24 p4313 A69-42898

## TANKE, J. M.

- Predicting combined neutron degradation and gamma induced effects on a closed loop system.  
06 p0899 A69-16889

## TANKIN, R. S.

- Measurement of emission and absorption coefficients of the Balmer line H alpha.  
16 p2822 A69-32040

## TANNENBAUM, R.

- High-powered microwave interactions in a pulsed electron beam-plasma klystron.  
07 p1095 A69-18433

## TANNER, F. J.

- Free-fall vehicle dynamics - Observation prediction. [AIAA PAPER 69-229]  
06 p0864 A69-18130

## TANNER, J. T.

- Abundances of some volatile elements in meteorites.  
08 p1404 A69-20919

## TANNER, L. H.

- An optical interference manometer.  
13 p2263 A69-28190

## TANNER, R. I.

- Annular flows for measuring the second normal stress difference.  
02 p0234 A69-12604

- Network rupture and the flow of concentrated polymer solutions. [AICHE PAPER 42C]  
10 p1800 A69-23369

- Normal-stress effects in drag-reducing fluids.  
17 p2951 A69-33256

- Prediction of polystyrene melt tensile behavior.  
21 p3753 A69-39730

## TANNER, T. L.

- Documenting and evaluating troubles in military systems.  
15 p2722 A69-31121

## TANNER, W. H.

- New experimental techniques in rotorcraft aerodynamics and their application. [AHS PAPER 320]  
17 p2895 A69-33539

- Vortex field, tip vortex, and shock formation on a model propeller.  
18 p3087 A69-35218

## TANNEY, J. W.

- Fluidic velocity sensor.  
18 p3133 A69-34308

## TANNHAEUSER, I. O.

- Overlapping effects in infrared spectra /Ueberlappungseffekte an infraroten Spektren/.  
16 p2814 A69-31792

## TANOHATA, K.

- Investigations of the transequatorial propagation mode in the VHF band.  
10 p1653 A69-23192

## TANSKANEN, P. J.

- On the relationship between auroral-zone X-ray pulsations and development of the auroral electrojet.  
12 p2065 A69-26109

## TANTAM, D. H.

- Lubrication at low temperatures and in associated "pure" gases. [IME PAPER 9]  
07 p1138 A69-18565

## TANTASHEV, M. V.

- Arrangement for studying atmospheric spectral transparency in the infrared spectral region /Ustanovka dlia issledovaniia spektral'noi prozrachnosti atmosfery v ik oblasti spektra/.  
05 p0759 A69-16639

- System for studying the spectral transparency of the atmosphere in the infrared spectral region.  
14 p2433 A69-28795

## TANTRAPORN, W.

- Direct series operation of Gunn effect diodes with above critical n sub 0 L products.  
04 p0573 A69-14340

## TANUNINA, P. M.

- New heat-resistant materials - Polyimides and polybenzimidazoles.  
19 p3358 A69-35901

## TAO, F. F.

- The ball-on-cylinder test for evaluating jet fuel lubricity. [ASLE PREPRINT 68AM 4A-2]  
01 p0083 A69-10914

- A study of oxidation phenomena in corrosive wear. [ASLE PAPER 68-LC-11]  
15 p2622 A69-30605

- Corrosive wear by atmospheric oxygen and moisture. [ASLE PAPER 68-LC-10]  
15 p2622 A69-30608

## TAO, L. C.

- Profiles of laser-created cavities on metal surfaces.  
20 p3552 A69-36917

- Application of ellipsometry to oxidation studies of binary titanium-aluminum alloys.  
24 p4316 A69-43322

## TAO, T. F.

- Dopant dependency of Fermi level location in heavily doped silicon.  
05 p0808 A69-16285

- Dynamic mode surface waves on magnetized YIG and ferrite rods.  
10 p1746 A69-23513

## TAO, T. Y.

- Laser wavelength selection.  
01 p0091 A69-10841

## TAPE, G. F.

- The United States' thermionic program.  
14 p2404 A69-29278

## TAPIA, S.

- UBV photoelectric photometry of epsilon Coronae Australis.  
16 p2863 A69-32398

## TAPLEY, B. D.

- The Hamilton-Jacobi method applied to the low-thrust trajectory problem.  
06 p1007 A69-17574

- Canonical transformation applications to optimal trajectory analysis.  
13 p2353 A69-28202

- An approximate solution for the short-term motion of a lunar satellite.  
19 p3402 A69-35934

- Trajectory optimization using regularized variables. [AAS PAPER 68-099]  
20 p3595 A69-37173

- Coordinate system influence on the regularized trajectory optimization problem. [AIAA PAPER 69-903]  
21 p3798 A69-38546

- The computation of optimal Apollo-type reentry trajectories.  
24 p4386 A69-43281

## TAPLIN, L. B.

- Phenomenology of vortex flow and its application to signal amplification.  
05 p0704 A69-16001

- Small signal analysis of vortex amplifiers. [AGARDOGRAPH-118]  
08 p1257 A69-20953

- Small signal analysis of vortex amplifiers.  
09 p1443 A69-22739

- Vortex amplifiers and circuits.  
10 p1639 A69-23556

## TAPUCU, A.

- The motion of gas bubbles rising through stagnant liquid.  
24 p4299 A69-42918

## TAQVI, S. Z. H.

- Optimum filter design for noisy feedback system.  
21 p3687 A69-39449

## TARADII, V. K.

- Study of a nutation with a period of 18.6 years from the data of the International Latitude Service /Izuchenie nutatsii s periodom 18.6 goda po dannym mezhdunarodnoi sluzhby shiroty/.  
17 p3027 A69-32868

## TARAFDAR, S. P.

- Magnetostatic stellar corona.  
06 p1002 A69-17316

- Rayleigh scattering cross-sections of He, C, N and O.  
06 p1002 A69-17319

## TARAN, E. IU.

- Peculiarities of the motion of an anisotropic fluid at large Reynolds numbers /Osoblivosti rukhu anizotropnoi ridini pri velikikh chislakh Reimol'dsa/.  
02 p0231 A69-12141

## TARAN, IU. A.

- Drifts of a triaxial static gyro stabilizer under the action of an external random perturbation along a single stabilization axis /Ob ukhodakh trekhosnogo staticheskogo girostabilizatora pri deistvii vneshnego sluchainogo vozmushcheniia po odnoi osi stabilizatsii/.  
19 p3311 A69-36195

## TARAN, J. P.

- Self-modulation, self-steepening, and spectral development of light in small-scale trapped filaments.  
08 p1352 A69-20745

## TARAN, V. A.

- A discrete adaptive system with random search for the optimum.  
14 p2425 A69-28824

## TARAN, V. I.

- Study of the inhomogeneous structure of the ionospheric E layer /Issledovanie neodnorodnoi struktury sloia E ionosfery/.  
17 p2962 A69-33896

## TARANENKO, V. P.

- Electron beam defocusing in a TWT operating in the dynamic mode /Rasfokusirovka elektronnoy puchka v LBV v dinamicheskom rezhime/.  
03 p0406 A69-13974

- Experimental investigation of high-frequency defocusing of the beam in a TWT /Eksperimental'noe issledovanie vysokochastotnoi rafokusirovki puchka v LBV/.  
03 p0407 A69-13975

## TARANTOV, E. A.

- Unsteady flow around models in an electromagnetic shock tube.  
07 p1119 A69-18744

## TARARAEVA, E. M.

- The zirconium corner in the zirconium-vanadium-nickel phase diagram /Tsirkoniyevyi ugol diagrammy sostoiianiia tsirkonii-vanadii-nikel'/.  
02 p0262 A69-11847

- The omega-phase and the beta solid solution in zirconium-vanadium-tantalum alloys quenched from 900 deg C /Omega-faza i beta-tverdyi rastvor v splavakh tsirkonii-vanadii-tantal, zakalennykh s 900 deg/.  
02 p0263 A69-11850

- The zirconium corner of the zirconium-copper-niobium phase diagram /Tsirkoniyevyi ugol diagrammy sostoiianiia tsirkonii-med'-niobii/.  
02 p0263 A69-11854

- The zirconium corner of the phase diagram of the zirconium-molybdenum-nickel system /Tsirkoniyevyi ugol diagrammy sostoiianiia sistemy tsirkonii-molibden-nikel'/.  
02 p0264 A69-11855

- The zirconium corner of the zirconium-molybdenum-titanium phase diagram /Tsirkoniyevyi ugol diagrammy sostoiianiia tsirkonii-molibden-titan/.  
02 p0264 A69-11859

- The zirconium corner in the zirconium-nickel-niobium phase diagram /Tsirkoniyevyi ugol diagrammy sostoiianiia tsirkonii-nikel'-niobii/.  
02 p0264 A69-11860

- The comparison of the Soviet Meteorological rocket data with the CIRA-1965 model.  
15 p2650 A69-31421

## TARASENKO, D. A.

- A method for the numerical solution of boundary-value problems /Ob odnom metode chislennogo resheniia kraevykh zadach/.  
11 p1908 A69-24789

## TARASENKO, L. N.

- A method for the numerical solution of boundary-value problems /Ob odnom metode chislennogo resheniia kraevykh zadach/.  
11 p1908 A69-24789

- TARASENKO, O. P.**  
Eccentric reinforcement of an elliptical hole in a plate /Eksentrichne pidkriplennia eliptichnogo otvoru plastini/.  
09 p1613 A69-21630
- TARASENKO, V. N.**  
Concerning certain features of the stationary Josephson effect.  
09 p1556 A69-21669
- TARASEV, G. S.**  
Finite plane deformations of a compressible material.  
06 p1021 A69-17175  
Analysis of quadratic-approximation versions in nonlinear stress concentration problems /Analiz variantov kvadratsnykh priblizhenii v nelineinykh zadachakh o koncentratsii napriazhenii/.  
11 p1973 A69-24660  
A new version of the theory of finite plane deformations /Novii variant teorii skinchennykh ploskikh deformatsii/.  
12 p2181 A69-26613  
A variant of a plane stressed state with final elastic deformations /Ob odnom variante ploskogo napriazhenennogo sostoiianiia pri konechnykh uprugikh deformatsiakh/.  
22 p4046 A69-41061
- TARASEVICH, I. U. F.**  
Macrogeometry of fracture of tensile test specimens of titanium alloys /Makrogeometriia razrusheniia obratstv titanovykh splavov pri rastiizhenii/.  
04 p0617 A69-15076  
Thermomechanical treatment of some titanium alloys /Termomekhanicheskaia obrabotka nekotorykh titanovykh splavov/.  
07 p1161 A69-18766  
Ratio of yield strength to ultimate tensile strength for certain titanium alloys subjected to thermomechanical treatment /Otnoshenie predela tekuchesti k vremennomu soprotivleniiu nekotorykh titanovykh splavov posle termomekhanicheskoi obrabotki/.  
11 p1906 A69-25683
- TARASKIN, S. A.**  
Heat capacity of /Ba,Sr/TiO sub 3 solid solutions in the ferroelectric phase transition region /Teploemkost' tverdykh rastvorov /Ba,Sr/TiO sub 3 v oblasti segnetoelektricheskogo fazovogo perekhoda/.  
22 p3996 A69-41162
- TARASOV, A. F.**  
Frequency spectrum of distributed cosmic radio emission in the range from 6.3 to 40 MHz /O chastotnom spektre raspredelennoho kosmicheskogo radioizlucheniia v diapazone 6.3-40 MGts/.  
03 p0500 A69-13080  
Relation between sporadic radio emission, recorded by Elektron satellites, and geomagnetic activity /O sviazi sporadicheskogo radioizlucheniia, zaregistrirovannogo na sputnikakh "Elektron," s geomagnitnoi aktivnost'iu/.  
05 p0824 A69-16059  
Type 3 solar bursts recorded by the Elektron 4 artificial earth satellite /Solnechnye vspleski III, tipa, zaregistrirovannye na ISZ "Elektron-4"/.  
05 p0824 A69-16060  
Variations in the mean radio emission level at frequencies of 1.1 and 2.3 MHz according to measurements on the Elektron 4 artificial earth satellite /Variatsii srednego urovnia radioizlucheniia na chastotakh 1,1 i 2,3 MGts po izmereniiam na ISZ Elektron-4/.  
09 p1578 A69-21776  
Frequency spectrum of the distributed cosmic radio emission in the range from 6.3 to 40 MHz.  
14 p2509 A69-28762  
Relation between geomagnetic activity and the sporadic radio emission recorded by the Elektron satellites.  
20 p3606 A69-37969  
Type-III solar bursts recorded by the Elektron-4 satellite.  
20 p3591 A69-37970
- TARASOV, A. I. U.**  
Output power pulsations in lasers /O pul'satsiakh moshnosti izlucheniia v lazernykh/.  
20 p3554 A69-37726
- TARASOV, E. A.**  
Problem of completely filling the optical resonator by a single mode of oscillations in a ruby laser /K voprosu polnogo zapolneniia opticheskogo rezonatora odnim tipom kolebaniia v rubinovom OKG/.  
14 p2458 A69-29164
- TARASOV, N. D.**  
Plastic deformation of alpha-titanium alloys at low temperatures /Plasticheskaia deformatsiia alfa-titanovykh splavov pri nizkikh temperaturakh/.  
18 p3158 A69-35444
- TARASOV, S. B.**  
Flow structure in the wake behind a cylinder in a channel /Struktura techeniia v slede za tsilindrom v kanale/.  
21 p3698 A69-39850
- TARASOV, V. K.**  
Frequency mixing in nonlinear electrooptical crystals /Smeshenie chastot v nelineinykh elektroopticheskikh kristallakh/.  
03 p0438 A69-13047
- TARASOV, V. M.**  
Calculation of the limit of repeated static stress of internal-pressure vessels /Raschet na povtorno-staticheskuiu prochnost' sosudov vnutrennego davleniia/.  
15 p2712 A69-30973
- TARASOV, V. N.**  
Results of experimental investigations of a turbine stage with theta equals 3 /Rezultaty eksperimental'nogo issledovaniia turbinnoi stupeni s theta equals 3/.  
21 p3785 A69-38865
- TARASOVA, N. M.**  
Ionizing action of radiation due to heating of substance in the focus of a laser beam and production of a plasma with high degree of ionization.  
03 p0479 A69-13998  
Ionization of a medium by ultraviolet radiation from a substance heated in the focus of a laser beam /Ionizatsiia sredy ul'trafioletovym izlucheniem ot veshchestva, nagretogo v fokuse luchia lazera/.  
11 p1901 A69-25754  
Laser-induced current pulses from a target in a gas.  
18 p3152 A69-35124
- TARASOVA, T. M.**  
Atomic oxygen glow at 6300 angstroms from 1967 rocket data.  
21 p3703 A69-38360
- TARASSOV, V. V.**  
Heat capacity and quasi-chain dynamics of diamond-like structures.  
03 p0490 A69-13943
- TARATUTA, A. S.**  
Noise in a forward-biased p-n junction at low frequencies.  
11 p1857 A69-25705
- TARCSAI, GY.**  
Some theoretical contributions concerning the Doppler geodetical measurements.  
15 p2601 A69-31375
- TARDIF, H. P.**  
Detection of explosive sabotage in aircraft crashes.  
06 p0868 A69-17833
- TARG, R.**  
Frequency stabilization and noise suppression in the argon FM laser. [IEEE PAPER P-7]  
05 p0775 A69-16325  
Kilowatt CO sub 2 gas-transport laser.  
23 p4173 A69-41497
- TARIFA, C. S.**  
Flame propagation on plastic fuels in an oxidizing atmosphere /Propagacion de llamas sobre combustibles plasticos en atmosfera oxidante/.  
17 p3074 A69-33662
- TARKHIN, D. V.**  
Utilization of a gas laser for studying the time constant of photodetectors /Ispol'zovanie gazovogo O.K.G. dlia issledovaniia inertsionnosti fotopriemnikov/.  
10 p1707 A69-24211
- TARKHOV, G. N.**  
Application of lasers to material working /Primenenie opticheskikh kvantovykh generatorov dlia obrabotki materialov/.  
13 p2273 A69-28431
- TARKHUNOVA, V. I.**  
Aviation Climatology /Aviatsionnaia Klimatologiya/.  
12 p2127 A69-26898
- TARKINGTON, R. G.**  
Photography - An electronic-ionic medium for remote sensing applications.  
12 p2096 A69-26975
- TARMANN, H.**  
Production of high grade forgings in titanium and titanium alloys - Their properties and machinability /Herstellung hochwertiger Schmiedestuecke aus Titan und Titanlegierungen, deren Eigenschaften und Spanbarkeit/.  
16 p2801 A69-31785
- TARNAY, K.**  
Buildup of Gunn domains.  
02 p0297 A69-11948  
Intervalley scattering model of the Gunn domain.  
06 p0893 A69-16937
- TARNIZHEVSKII, B. V.**  
Reflector characteristics of a solar power installation with photoelectric converters /Kharakteristiki konsentratora solnechnoi energeticheskoi ustanovki s fotopreobrazovateliami/.  
16 p2741 A69-32798
- TARNOGRODZKI, A.**  
Shape of the bow shock wave in rectilinear flight with acceleration /Kształt czołowej fali uderzeniowej w locie prostoliniowym z przyspieszeniem/.  
09 p1433 A69-21386  
Shape of the bow shock wave in rectilinear flight with acceleration. II - Flight with varying acceleration /Kształt czołowej fali uderzeniowej w locie prostoliniowym z przyspieszeniem. II - Lot ze zmiennym przyspieszeniem/.  
16 p2734 A69-32005  
Simple waves in compressible isentropic flows /Fale proste w przepływach ściśliwych izentropowych/.  
18 p3121 A69-34534
- TARNOPOLSKII, I. U. M.**  
Unfavorable characteristics of fiber-reinforced materials /O tritsatel'nye osobennosti materialov, armirovannykh voloknami/.  
11 p1907 A69-25680
- TARONI, A.**  
Cosmic ray cut-off energy at synchronous distance.  
11 p1949 A69-24860
- TAROWSKY, N.**  
How to assemble hybrid microwave IC's.  
22 p3912 A69-40068
- TARRANTS, G.**  
Ceramic radomes for aerospace vehicles.  
07 p1171 A69-19511  
Why radomes are necessary.  
17 p2942 A69-34084
- TARRARO, I.**  
Redshifts of six galaxies in the vicinity of the Coma Cluster.  
17 p3044 A69-34182
- TARSHIS, L. A.**  
Heat transfer by simultaneous conduction and radiation for two absorbing media in intimate contact.  
13 p2378 A69-28340
- TARTAGLIONE, A.**  
Functional changes of somato-sensory system during deep sleep.  
22 p3872 A69-40161
- TARTAKOVSKAIA, F. M.**  
Experimental study of the effect of the similarity factor on the radiating power /emissivity/ of metals.  
05 p0845 A69-15894
- TARTAKOVSKAIA, L. N.**  
Roentgenographic and metallographic investigations of chromium-silicon diffusion layers on titanium /Rentgenograficheskie i metallograficheskie issledovaniia khromosilitsirovannykh diffuzionnykh sloev na titane/.  
04 p0614 A69-14578  
X-ray and metallographic analysis of chromosilicide coatings on titanium.  
15 p2638 A69-30279
- TARTAKOVSKII, B. D.**  
Vibrodamping /Vibrodempfirovaniie/.  
01 p0168 A69-10399
- TARTAKOVSKII, G. P.**  
Adaptive systems of data reception and processing and the statistical-decision theory.  
03 p0409 A69-12977
- TARTAKOVSKII, I. B.**  
Calculating the wear of machine parts /K raschetu detalei mashin na iznos/.  
13 p2268 A69-28052
- TARTAKOVSKII, L. B.**  
Mutual influence of unit radiators of the plane open-end waveguide type /Vzaimnoe vliianie elementarnykh izluchatelei tipa ploskogo volnovoda s otkrytym kontsom/.  
22 p3901 A69-40950



## TARTARA, G.

Review of general principles of multiple transmission /Rassegna dei principi generali della trasmissione multipla/.

01 p0026 A69-10068

On the minimum mean square error obtainable in PAM-FM.

03 p0392 A69-13250

## TARTER, C. B.

X-ray emission in the nuclei of Seyfert galaxies.

04 p0649 A69-15387

The interaction of X-ray sources with optically thin environments.

18 p3186 A69-34295

The interaction of X-ray sources with optically thick environments.

18 p3186 A69-34296

Ultraviolet- and forbidden-line intensities.

22 p3984 A69-40157

## TARTER, J. H.

A hybrid fluidic pressure regulator.

10 p1639 A69-23560

## TARUI, Y.

Electron beam exposure system for integrated circuits.

15 p2579 A69-31039

## TARUSHKIN, V. T.

Certain problems of stabilizing and controlling the orientation of bodies in a central field /Nekotorye zadachi stabilizatsii i kontrolya orientatsii tel v tsentral'nom pole/.

13 p2300 A69-28326

## TASCH, F. M.

Linear fluid amplifier design.

15 p2553 A69-31299

## TASHENOV, B. T.

Spectrophotometric studies of the transparency and stability of the atmosphere /Spektrofotometricheskie issledovaniya prozrachnosti i ustoychivosti atmosfery/.

01 p0074 A69-11188

Light Scattering in the Atmosphere. Part 2 /Rasseyaniye sveta v atmosfere. Part 2/.

07 p1211 A69-18545

## TASHJIAN, H.

An algorithm for deriving the equations of mathematical physics by symbolic manipulation.

04 p0564 A69-14858

## TASSO, H.

Total energy of a wave in plasma.

02 p0287 A69-11876

On the drift-dissipative instabilities.

11 p1934 A69-25655

## TASSOUL, J. L.

On the oscillations and stability of rotating stellar models. I - Mathematical techniques.

07 p1220 A69-19389

On the oscillations and stability of rotating stellar models. II.

10 p1789 A69-24129

## TATALASHVILI, N. G.

Inelastic interaction cross section of  $7 \times 10$  super 10 to 10 super 12 ev nuclear- interacting particles in carbon and iron.

13 p2330 A69-28383

## TATARCZUK, J. R.

Neutron radiative capture and transmission measurements of W and Zr isotopes in the kev region.

18 p3175 A69-34314

## TATARENCHIK, V. S.

Calculation of axisymmetric supersonic flows, using the results of optical measurements /Raschet sverkhzvukovykh osesimmetrichnykh potokov s ispol'zovaniem rezul'tatov opticheskikh izmerenii/.

24 p4247 A69-43496

## TATARIAN, A.

Evaluation of the driver chamber efficiency for an arc driven shock tube.

18 p3116 A69-34456

## TATARINOV, V. S.

Induced photoconductivity and recombination luminescence in diamonds /Indutsirovannaya fotoprovodimost' i rekombinatsionnaya luminentsent-siyaalmazov/.

19 p3383 A69-36167

## TATARSKII, V. I.

Determining atmospheric density from satellite phase and refraction-angle measurements.

05 p0760 A69-16694

The accuracy achievable in determining atmospheric density from satellite phase and refraction-angle measurement.

09 p1490 A69-21862

Correlation of the transverse shifts of rays in a turbulent atmosphere /Korrelatsiya poperechnykh smeshchenii luche v turbulentnoi atmosfere/.

10 p1657 A69-23942

Application of dynamic equations in probabilistic forecasting of the pressure field /Ispol'zovanie dinamicheskikh uravnenii pri veroiatnostnom prognoze baricheskogo polia/.

14 p2472 A69-29406

Strong fluctuations of a plane light wave moving in a medium with weak random inhomogeneities.

18 p3173 A69-35127

## TATE, E.

A large-scale non-equilibrium MHD generator.

10 p1637 A69-23472

## TATEHIRA, R.

Precipitation-induced mesoscale wind perturbations in the melting layer.

20 p3572 A69-37909

## TATEISHI, M.

Effects of space harmonics in the design of helix-type traveling wave tube.

07 p1105 A69-18950

## TATENO, H.

Microwave oscillation and amplification in a long bulk GaAs with BaTiO sub 3 sheets on the surface.

07 p1197 A69-18452

Suppression of travelling high-field-domain mode oscillations in GaAs by dielectric surface loading.

08 p1371 A69-19911

## TATEVIAN, S. K.

Determination of the positions of distant points on the earth's surface from satellite observations by the orbital method /Opredelenie polozhenii otдалennykh punktov na zemnoi poverkhnosti po nabludeniiam iskusstvennykh sputnikov zemli pri pomoshchi orbital'nogo metoda/.

12 p2068 A69-26430

## TATNALL, F. G.

Prediction of performance by testing.

03 p0525 A69-13307

Development of the scratch gage.

15 p2610 A69-30682

## TATNALL, M. L.

Performance characteristics of multi-variable model-reference adaptive systems synthesized by Liapunov's direct method.

22 p3919 A69-41201

## TATSII, V. G.

Stabilizing the statistical characteristics of random loads in fatigue tests.

18 p3215 A69-34544

## TATTIE, B.

Studies on erythropoiesis. II.

22 p3877 A69-40761

## TATUM, J. B.

The blending effect in the measurement of spectroscopic binary spectra.

07 p1223 A69-19624

## TAUB, A. H.

A singularity-free empty universe.

15 p2690 A69-30732

## TAUB, J. J.

Microwave transversal equalizers.

07 p1102 A69-18671

Equal-element elliptic-function filters.

08 p1300 A69-21175

## TAUB, M.

Glucose tolerance in dogs exposed to altitude and drug administration. I - Chlorpromazine.

14 p2408 A69-29305

## TAUBENHEIM, J.

Brightness distribution of soft X-rays on the sun, inferred from ionospheric E-layer variations during an eclipse.

07 p1204 A69-18823

Ionospheric conditions following the proton flare event of 7 July 1966 as measured at ground-based stations. II - F-region effects.

10 p1684 A69-23783

An investigation of solar X-ray and radio emissions and their relationship to ionospheric phenomena.

24 p4372 A69-43615

## TAUBER, G. E.

Massive vector meson interacting with the gravitational field. I.

14 p2486 A69-29452

## TAUBER, G. M.

Planetary development of blocking processes /O planetarnom razvitii blokiriushchikh protsessov/.

13 p2292 A69-27840

## TAUBER, M. E.

Atmospheric entry into the major planets with emphasis on Jupiter. [AIAA PAPER 68-1150]

03 p0520 A69-13565

## TAUBER, S.

Systems Analysis.

17 p2944 A69-33482

## TAUC, J.

Electronic properties of amorphous CdGeAs sub 2.

19 p3390 A69-36557

## TAUCHERT, T. R.

Thermal stresses at spherical inclusions in uniform heat flow.

01 p0171 A69-11264

Transient temperature distributions in viscoelastic solids subject to cyclic deformations.

05 p0836 A69-15878

Thermal stress concentrations in the vicinity of cylindrical inclusions.

07 p1171 A69-18726

Photothermoelastic investigation of stresses in a composite model.

24 p4396 A69-42739

## TAUKCHI, V. M.

The determination of the probability characteristics of a coincidence pulse stream, produced by two random independent pulse streams /Ob opredelenii veroiatnostnykh kharakteristik impul'snogo potoka sovpadeniia, obrazovannogo dvumia sluchainymi nezavisimymi potokami impul'sov/.

05 p0719 A69-16224

## TAULBEE, J. K.

Factors affecting aircraft generator weight and system performance.

17 p2904 A69-34087

## TAUPIN, M.

Significance of simultaneous double recording of mouth pressure and heart rate in the Flack test /Interet d'une double inscription simultanee de la pression buccale et du rythme cardiaque dans le test de Flack/.

05 p0710 A69-16626

## TAUPIN, P.

Chemical corrosion of zirconia-based ceramics considered for use in MHD generators /Corrosion chimique de ceramiques a base de zircone etudies en vue de leur application aux generateurs MHD/.

13 p2284 A69-27469

## TAUPIN, R.

Measurement of losses and of the phase shift across dielectric panels /Mesure des pertes et du dephasage a travers les panneaux dielectriques/.

07 p1087 A69-19518

## TAURITZ, J. L.

Cross-section control of a thin wire loop by impedance loading techniques.

11 p1837 A69-25000

## TAUSCHER, W.

Studies of binding materials of group VIa metals /Untersuchungen ueber Verbundwerkstoffe der VIa-Metalle/.

05 p0780 A69-15991

## TAUSON, P. O.

Rotary steam engine.

23 p4069 A69-42252

## TAUSSIG, R. T.

Interaction between plasma flow and a magnetic barrier - Shock formation.

06 p0966 A69-17524

Macroscopic quasilinear theory of high-frequency radiation in a cold plasma.

16 p2819 A69-31684

## TAUSWORTHE, R. C.

The radius of Venus as determined by planetary radar and Mariner 5 radio tracking data.

03 p0508 A69-13348

A high-rate telemetry system for the Mariner 1969 mission.

07 p1083 A69-19125

Projected requirements for deep space communications.

23 p4129 A69-42507

- AVARTKILADZE, K. A.**  
Regularities of the altitude distribution of radon decay products in the atmosphere and the magnitude of vertical turbulent diffusion /Zakonomernosti raspredeleniia produktov raspada radona po vysote v atmosfere i velichina vertikal'noi turbulentnoi diffuzii/. 20 p3533 A69-38076
- CAVENNER, M. S.**  
Definition of the refraction and shimmer problem affecting geodetic observations of satellites. 18 p3104 A69-35202
- FAVGER, B. A.**  
Quantum dimensional effects in thin semiconductor and semimetal films /Kvantovye razmernye efekty v poluprovodnikovykh i polumetallicheskiikh plenkakh/. 01 p0136 A69-10186
- FAVLARIDES, L. L.**  
Theory of coupled heat and mass transfer with zero-order reactions in two-phase systems. 14 p2537 A69-29012
- TAWIL, M. N.**  
The use of multilayer insulation on the LM vehicle. [AIAA PAPER 69-609] 17 p3073 A69-33304  
LM flight simulation in the space environment. [AIAA PAPER 69-991] 22 p3920 A69-40369
- TAYLER, R. J.**  
Stellar evolution. 01 p0148 A69-10046  
On the occurrence of semi-convection in massive stars. 22 p4022 A69-40470
- TAYLOR, A.**  
On the kinetic energy spectrum near the ground. 24 p4343 A69-43063
- TAYLOR, A. C.**  
A Bayesian approach to equipment replacement. 23 p4241 A69-41577
- TAYLOR, A. M.**  
An organic Rankine cycle for manned space applications. 23 p4188 A69-42264
- TAYLOR, A. R.**  
Adaptive attitude control for long-life space vehicles. [AIAA PAPER 69-945] 22 p4036 A69-40328
- TAYLOR, A. W.**  
Effect of exercise on hepatic cholesterol of rats fed diets high in saturated or unsaturated fats. 21 p3653 A69-38903
- TAYLOR, A. W. B.**  
The microscopic theory of superconductivity. 02 p0293 A69-11432
- TAYLOR, B. C.**  
Fundamental microwave oscillations in epitaxial GaAs by control of space-charge growth. 02 p0297 A69-11941
- TAYLOR, B. J.**  
The M7 giants in the nuclear bulge of the Galaxy. 16 p2863 A69-32396
- TAYLOR, B. N.**  
Computer analysis techniques for spacecraft adsorption beds. [AICHE PAPER 19C] 09 p1446 A69-21931
- TAYLOR, C. E.**  
Ultrahigh-speed framing photography employing a multiply-pulsed ruby laser and a "smear-type" camera - Application to dynamic photoelasticity. 12 p2086 A69-26166  
Pulsed laser high-speed photography. 19 p3306 A69-35731  
A multiple-pulse ruby-laser system for dynamic photomechanics - Applications to transmitted- and scattered-light photoelasticity. 22 p3944 A69-40076
- TAYLOR, D. B.**  
The calculation of steady plane supersonic gas flows containing an arbitrarily large number of shocks. 04 p0544 A69-15284
- TAYLOR, D. F.**  
Radome boresight measurement systems. 07 p1109 A69-19517
- TAYLOR, D. J.**  
Discovery of optical signals from pulsar NP 0532. 08 p1394 A69-20622  
Filter photometry of Saturn in the spectral region  $\lambda_{\text{max}}$  2950-2450. 09 p1602 A69-22216
- A current-to-frequency converter for astronomical photometry. 12 p2040 A69-26479
- TAYLOR, D. M.**  
Quality assurance monitoring of the microbiological aspects of the JPL Sterilization Assembly Development Laboratory. 15 p2559 A69-31123
- TAYLOR, E.**  
Coatings resist joint corrosion. 22 p3957 A69-40825  
The mod look in aircraft fastener corrosion control. 24 p4334 A69-43442
- TAYLOR, E. C.**  
Diffraction by rocket exhausts. 02 p0209 A69-12352
- TAYLOR, E. F.**  
Reliability - What happens if.../ques/. 18 p3143 A69-34486
- TAYLOR, F. J. D.**  
Global system of commercial satellite communications. 09 p1457 A69-22466
- TAYLOR, F. R.**  
Unified flight control actuator package. [AIAA PAPER 69-788] 19 p3249 A69-35640
- TAYLOR, G. I.**  
The stability of fine fluid jets in a longitudinal field. 12 p2136 A69-26402  
Electrohydrodynamics - A review of the role of interfacial shear stresses. 18 p3123 A69-34919
- TAYLOR, G. N.**  
High power radar for ionospheric research. 03 p0398 A69-13768  
Changes in the total electron content and slab thickness of the ionosphere during a magnetic storm in June 1965. 05 p0759 A69-16420  
F-region electron concentrations at solar activity minimum. 10 p1684 A69-23825
- TAYLOR, G. R.**  
Development program for a general purpose computer and strapdown inertial measurement unit. [AIAA PAPER 69-850] 21 p3765 A69-39426
- TAYLOR, G. W.**  
Energy control for microwave amplifier arrays. 01 p0047 A69-10998
- TAYLOR, H. A.**  
Photolysis of CO sub 2 in far ultraviolet. 03 p0381 A69-13318
- TAYLOR, H. A. JR.,**  
Ion depletion in the high-latitude exosphere - SimultaneousOGO 2 observations of the light ion trough and the VLF cutoff. 18 p3187 A69-34939
- TAYLOR, H. A., JR.**  
Evidence of contraction of the earth's thermal plasmasphere subsequent to the solar flare events of 7 and 9 July 1966. 10 p1683 A69-23777  
Multi-experiment detection of the plasmopause from EOGO satellites and antarctic ground stations. 11 p1878 A69-25153  
Observations of hydrogen and helium ions during a period of rising solar activity. 15 p2599 A69-31326  
Implications for ionospheric chemistry and dynamics of a direct measurement of ion composition in the F 2 region. 16 p2774 A69-31974  
Diurnal and seasonal variation of atmospheric ion composition, correlation with solar zenith angle. 20 p3534 A69-38087
- TAYLOR, H. E.**  
Measurements of the perturbed-interplanetary magnetic field in the lunar wake. 01 p0157 A69-11228  
Sudden commencement associated discontinuities in the interplanetary magnetic field observed by IMP 3. 09 p1598 A69-22183  
Observations of the interplanetary magnetic field, 4-12 July 1966. 10 p1783 A69-23773
- TAYLOR, H. L.**  
The Poole-Frenkel effect with compensation present. 04 p0640 A69-14450
- TAYLOR, H. N.**  
Jet engine data monitoring. 22 p3999 A69-39922
- TAYLOR, H. P.**  
Analysis of a multiplicative feed system for monopulse tracking applications. 20 p3510 A69-37704
- TAYLOR, J.**  
Kinetic heating of aircraft structures. 03 p0534 A69-14087
- TAYLOR, J. B.**  
Plasma fluctuations and convective modes. 11 p1924 A69-24301
- TAYLOR, J. E.**  
Maximum strength elastic structural design. 17 p3062 A69-33708  
Optimal design of structural systems - An energy formulation. 23 p4228 A69-41923
- TAYLOR, J. H.**  
Lunar occultations of the radio source Sagittarius A. 06 p1009 A69-17960  
Two new pulsating radio sources. 09 p1592 A69-21484  
Green flash from high altitude. 12 p2066 A69-26232  
Dynamic spectra of pulsars. 14 p2517 A69-29087  
Catalog of 37 pulsars. 18 p3202 A69-35211  
Periodic intensity fluctuations in pulsars. 24 p4389 A69-43744
- TAYLOR, K. G.**  
7-exo-bromo-2-oxabicyclo[4.1.0]hept-7-yl lithium. 07 p1074 A69-19479
- TAYLOR, L. S.**  
Twinkling range of turbulence layers. 07 p1183 A69-19650  
Forward scattering in the Born approximation. [OSA PAPER WH-16] 18 p3174 A69-35245
- TAYLOR, L. W., JR.**  
Experience using Balakrishnan's epsilon technique to compute optimum flight profiles. [AIAA PAPER 69-75] 06 p0868 A69-18058  
A comparison of Newton-Raphson and other methods for determining stability derivatives from flight data. [AIAA PAPER 69-315] 09 p1434 A69-22379
- TAYLOR, M. G.**  
Reliable information storage in memories designed from unreliable components. 04 p0569 A69-15455  
Reliable computation in computing systems designed from unreliable components. 04 p0569 A69-15456
- TAYLOR, M. M.**  
Perception of interpolated position and orientation by vision and active touch. 24 p4275 A69-43116
- TAYLOR, P. A.**  
On wind and shear stress profiles above a change in surface roughness. 08 p1346 A69-20311  
Visual observation of surface vibration nodal patterns. 12 p2099 A69-27176  
On planetary boundary layer flow under conditions of neutral thermal stability. 17 p2997 A69-33153  
The planetary boundary layer above a change in surface roughness. 17 p2997 A69-33154
- TAYLOR, R. C.**  
Electrical and optical properties of vapor-grown GaP. 04 p0640 A69-14438  
Dynamic infrared detection of fatigue cracks. 15 p2631 A69-31505
- TAYLOR, R. D.**  
Temperature-dependent isomer shift and anharmonic binding of Sn super 119 in Nb sub 3 Sn from Moessbauer-effect measurements. 01 p0134 A69-10009
- TAYLOR, R. E.**  
Dynamic mechanical behavior of stress-graphitized and boron-doped pyrolytic carbon. 10 p1716 A69-23036  
Optimal resource allocation for maximum reliability. 18 p3148 A69-35081



## TAYLOR, R. J.

## TAYLOR, R. J.

- Fabrication-testing-design of Al-B composite materials. 09 p1510 A69-22351
- Thermal/mechanical strengthening of 6061 Al-B composites. 24 p4334 A69-43449

## TAYLOR, R. L.

- Survey of vibrational relaxation data for processes important in the CO sub 2-N sub 2 laser system. 10 p1706 A69-24083
- Experimental measurements of the resonant vibrational energy transfer between mode nu sub 3 of CO sub 2 and N sub 2. 12 p2131 A69-25984
- Experimental determination of the cross-sections for neutral bremsstrahlung. I. 15 p2657 A69-31159
- Experimental determination of the cross-sections for neutral bremsstrahlung. II. 15 p2657 A69-31160

## TAYLOR, R. W.

- Graphical systems communication - An associative memory approach. 04 p0566 A69-15343

## TAYLOR, S. R.

- Geochemistry of Australian impact glasses and tektites /australites/. 08 p1407 A69-20937
- Geochemistry of andesites. 08 p1309 A69-20940
- Genetic significance of the chemical composition of tektites /A review/. 23 p4210 A69-41346

## TAYLOR, T.

- On-board spacecraft processor. 22 p3903 A69-39921

## TAYLOR, T. D.

- Low Reynolds number flows. 04 p0587 A69-14609
- Application of Godunov's method to blunt-body calculations. 16 p2732 A69-31886
- An on-board processor for OAO-C. 23 p4132 A69-41736
- Supersonic flow past a finite cone with large surface mass injection. 23 p4059 A69-41884

## TAYLOR, T. E.

- Shakedown loads for pressure vessels of strain hardening materials. 20 p3620 A69-37002

## TAYLOR, V. R.

- Meso-scale archive and computer products of digitized video data from ESSA satellites. 19 p3279 A69-35810

## TAYLOR, W. C.

- Ion probes in conventional and magnetically driven shock tubes. 19 p3291 A69-35715

## TAYLOR, W. F.

- Mechanism of deposit formation in wing tanks. [SAE PAPER 680733] 03 p0366 A69-13439

## TAYLOR, W. L.

- Noise reduction in wideband atmospheric receiving systems. 23 p4128 A69-42504

## TAYLOR, W. M.

- Airline fleet performance survey. [AIAA PAPER 69-770] 19 p3245 A69-35651

## TCHEN, C. M.

- Kinetic equations for fully ionized plasmas. 23 p4195 A69-41515

## TCHENG, P.

- Measurement of forces and moments from a thrust vector controlled rocket on a five component test stand. 21 p3691 A69-39631

## TEAGUE, M. J.

- Production of free sodium atoms for the spectrum-line reversal technique. 24 p4297 A69-43589

## TEDMON, C. S., JR.

- Oxygen isotope separation in zirconia electrolyte cells. 15 p2552 A69-30701
- Cathode materials and performance in high-temperature zirconia electrolyte fuel cells. 22 p3869 A69-40734

## TEDROW, P. M.

- Measurements of the kinetic inductance of superconducting linear structures. 17 p3016 A69-33783

## TEER, D. G.

- The direct correlation of dislocation structures and surface deformation markings in fatigued aluminium. 11 p1905 A69-25184

## TEETS, P. B.

- Guidance, navigation and control. 19 p3370 A69-36316
- Titan IIIC digital flight controls. [AIAA PAPER 69-878] 21 p3824 A69-39404

## TEFFT, W. E.

- Some new approaches to shallow impurity states. 10 p1745 A69-23361

## TEGART, W. J. MCG.

- Serrated flow in gold-indium alloys. 24 p4361 A69-43028

## TEGEL, O.

- The FM-RB/7400 radio relay system for transmitting radar images /Richtfunksystem FM-RB/7400 zur Uebertragung von Radarbildern/. 16 p2750 A69-31862

## TEGG, D.

- Heat capacities of liquids. II. [WSCI PAPER 68-39] 07 p1202 A69-18368

## TEGHTSOONIAN, E.

- Comments on "slip band continuity across grain boundaries in aluminum." 01 p0095 A69-10607

## TEICH, M. C.

- Two-photon counting statistics for laser and chaotic radiation. 10 p1704 A69-23658
- Homodyne detection of infrared radiation from a moving diffuse target. 17 p2971 A69-32913

## TEIFEL, IA. A.

- Light Scattering in the Atmosphere. Part 2 /Rasseyanie sveta v atmosfere. Part 2/. 07 p1211 A69-18545
- Polarization of daytime skylight and the atmospheric aerosols /Polarizatsiya sveta dnevnogo neba i atmosfer-nyy aerol'/. 09 p1491 A69-22708

## TEIFEL, V. G.

- Optical properties and structure of the atmosphere of Jupiter. I - Photometric contrasts, molecular absorption, and possible structure of the dark equatorial belt in 1962 and 1963 /Opticheskie svoystva i stroenie atmosfery Iupitera. I - Fotometricheskie kontrasty, molekuliarnoe pogloshchenie i vozmozhnaya struktura temnoi ekvatorial'noi polosy v 1962-1963 gg./. 04 p0658 A69-14961
- Optical properties and structure of the Jovian atmosphere. I - Photometric contrasts, molecular absorption, and possible structure of the dark equatorial belt during 1962-1963. 18 p3197 A69-34724

- Optical characteristics and structure of the Jovian atmosphere. II - Influence of multiple scattering in the cloud layer on the contours of planetary absorption lines /Opticheskie svoystva i stroenie atmosfery Iupitera. II - Vliyanie mnogokratnogo rassseyaniya v oblacnom sloe na kontury planetarnykh linii pogloshcheniya/. 18 p3203 A69-35332

## TEIKHMANN, I.

- Effect of a high-frequency magnetic field on plasma instability. 10 p1739 A69-23623

## TEIPEL, I.

- An unsteady laminar boundary layer at curved surfaces /Die instationaere, laminare Grenzschicht an gekrummten Oberflaechen/. [DVL-863] 02 p0231 A69-12053
- The gust problem at Mach 1 /Das Boeenproblem bei der Machzahl 1/. 10 p1632 A69-22918
- Relaxation phenomena in a gas-particle flow /Relaxationserscheinungen in einer Gas-Teilchen-Stromung/. 18 p3121 A69-34772

## TEITELBAUM, H.

- Temperature deduced from decomposition of wind profiles between 90 and 100 km /Temperature deduite de la decomposition des profils de vent entre 90 et 100 km/. 15 p2603 A69-31399

## TEKAAT, T.

- Ionization of helium - Angular correlation of the scattered and ejected electrons. 06 p0962 A69-17191

## TELALOV, A. I.

- Effect of vibration and elevated temperature on the strength of fiberglass-reinforced plastic /Vliyanie vibratsii i povyshennoi temperatury na prochnost stekloplastika/. 15 p2643 A69-31203

## TELEGADAS, K.

- Are particulate radioactive tracers indicative of stratospheric motions/ques/. 10 p1682 A69-23410

## TELEGIN, V. I.

- Numerical solution of the problem of nonlinear plasma oscillations /Chislennoe reshenie zadachi o nelineinykh plazmennyykh kolebaniyakh/. 02 p0285 A69-11461

## TELEGUS, V. S.

- Ternary system chromium-rhenium-boron /Troinaia sistema khrom-renii-bor/. 10 p1715 A69-24054
- X-ray structural study of ternary systems V-Cr-B, Nb-Cr-B, and Mo-Cr-B /Rentgenostrukturnoe issledovanie troinykh sistem V-Cr-B, Nb-Cr-B i Mo-Cr-B/. 18 p3158 A69-35262

## TELENIN, G. F.

- Survey of work performed at the Moscow University dealing with the investigation of external and internal problems in aerodynamics /Obzor rabot po chislen-nomu issledovaniyu vneshnykh i vnutrennykh zadach aerodinamiki, vypolnennykh v Moskovskom Universitete/. 03 p0363 A69-13657
- Approximate method of taking into account the effect of real properties of the gas during hypersonic flow past segmental bodies /Priblizhennyy metod ucheta vlianiia real'nosti gaza pri giperzvukovom obtekanii segmental'nykh tel/. 14 p2391 A69-29620

- Supersonic three-dimensional flow past blunt bodies. 19 p3242 A69-36783

## TELESNIN, R. V.

- Certain dynamic effects in ferrites /Nekotorye dinamicheskie efekty v ferritakh/. 13 p2319 A69-27993

## TELFORD, L. E.

- Observations of the phase effect of Venus at 8.6-mm wavelength. 10 p1773 A69-22959

## TELFORD, R. T.

- Filler metals for HY steels took years to develop. 08 p1320 A69-24046

## TELKOVSKII, V. G.

- Use of electron emission in studies of high-temperature plasmas /O primeneniі elektronnoi emissii dlia izucheniia vysokotemperaturnoi plazmy/. 03 p0481 A69-14211

## TELNOV, IU. IA.

- Angular and energy distribution of gamma quanta during a Compton effect at relativistic electrons /Uglovoe i energeticheskoe raspredeleniia gamma-kvantov pri Kompton-efekte na relativistskikh elektronakh/. 10 p1701 A69-23132

## TELSCHER, E. S.

- Industrial, scientific and commercial applications of NASA developed telemetry technology. 19 p3455 A69-36258

## TEMAM, R.

- Approximation of the solution of the Navier-Stokes equations by the fractional step method /Sur l'approximation de la solution des equations de Navier-Stokes par la methode des pas fractionnaires/. 10 p1718 A69-22861

- Approximate solution to the Navier-Stokes equations by the method of fractional steps. II /Sur l'approximation de la solution des equations de Navier-Stokes par la methode des pas fractionnaires. II/. 18 p3165 A69-35278

## TEMCHENKO, M. E.

- On the theory of the gyrocompass with torsion suspension. 16 p2791 A69-32282
- Investigation of motion stability criteria for a solid body or a gyroscope suspended on a string and containing an ellipsoidal cavity filled with liquid /Ob issledovanii kriteriev ustoiichivosti dvizheniia podveshen-

- nogo na strune tverdogo tela i volchka pri nalichii u nikh ellipsoidal'noi polosti, napolnennoi zhidkost'iu/.  
18 p3135 A69-34558
- EMCHIN, A. N.**  
A method of investigating the state of a rarefied gas /Ob odnom metode issledovaniia sostoiianiia razrezhen-nogo gaza/.  
16 p2814 A69-31958
- EMES, G. C.**  
Filter design using transformed variables.  
08 p1300 A69-21172
- EMESI, E.**  
Design problems of frequency meters /Frekvenciameroe konstrukcijs kerdesei/.  
21 p3720 A69-38563
- EMKIN, A.**  
Rotational excitation of diatomic molecules by electron impact.  
21 p3775 A69-39665
- EMKIN, L. A.**  
Determination of the natural frequencies and forms of small vibrations of an ideal liquid in a spherical container with a weak force field /O nakhozhenii sobstvennykh chastot i form malykh kolebaniia ideal'noi zhidkosti v sfericheskom sosude v slabom silovom pole/.  
11 p1875 A69-25484
- TEMKO, K. V.**  
Application of integral transformations to the solution of a certain class of inverse problems of the potential theory /O primenenii integral'nykh preobrazovanii k resheniiu nekotorigo klassa obratnykh zadach teorii potentsiala/.  
23 p4182 A69-41960
- TEMKO, S. V.**  
Application of integral transformations to the solution of a certain class of inverse problems of the potential theory /O primenenii integral'nykh preobrazovanii k resheniiu nekotorigo klassa obratnykh zadach teorii potentsiala/.  
23 p4182 A69-41960
- TEMLER, I. A.**  
Application of the theory of extreme values to the determination of the reliability of elements /Ispol'zovanie teorii krainikh chlenov dlia opredeleniia nadezhnosti elementov/.  
08 p1322 A69-21103
- TEMME, D. H.**  
Phasers and time delay elements.  
23 p4135 A69-41353
- TEMNOEVA, T. A.**  
Solution of certain quasi-stable problems of dynamic meteorology /O reshenii nekotorykh kvazistatsionarnykh zadach dinamicheskoi meteorologii/.  
14 p2476 A69-29821
- TEMNYI, V. V.**  
Natural electrons in the inner radiation zone.  
01 p0147 A69-11309
- TEMPELMAYER, K. E.**  
In situ angular distribution measurements of visible and near IR radiation reflected from CO sub 2 cryodeposits formed on IN sub 2-cooled surfaces within a vacuum.  
[AIAA PAPER 69-63]  
06 p0959 A69-18131
- TEMPEST, W.**  
Low-frequency noise thresholds.  
21 p3664 A69-38986
- TEMPLETON, F. E.**  
Electromagnetic accelerometer.  
17 p2971 A69-32897
- TEMPLIN, R. J.**  
Recent trends in low-speed wind-tunnel design and techniques.  
05 p0741 A69-15573
- TEMPS, A. J., JR.**  
A biomedical telemetry system for clinical applications.  
19 p3262 A69-36272
- TEN DOESSCHATE, J.**  
Selective g-force application in the treatment of retinal detachment.  
24 p4268 A69-43405
- TEN, C. K.**  
Positive and negative conjugation in the ionospheric F2 layer at low latitudes /Polozhitel'naia i otritsatel'naia sopriazhennost' sloia F2 ionosfery v nizkikh shirotakh/.  
20 p3521 A69-37050
- TENDYS, J.**  
Study of the structure of switch-on ionizing shock waves.  
09 p1552 A69-22045
- TENENBAUM, L. A.**  
Control processes in the respiration system /O protsessakh upravleniia v dykhatel'noi sisteme/.  
01 p0019 A69-10209
- Control processes in the respiratory system.  
14 p2408 A69-28745
- TENERELLI, D. J.**  
An experimental study of the local buckling of ring-stiffened cylinders subject to axial compression.  
14 p2534 A69-29030
- TENIN, M. B.**  
Analysis of a two-antenna method of suppressing reflections from an underlying surface /Analiz dvukhantennogo metoda podavleniia otrazhenii ot podstilaushchei poverkhnosti/.  
15 p2567 A69-30345
- Velocity distribution density of air and ground targets /Plotnost' raspredeleniia skorostei vozduzhnykh i nazemnykh tselei/.  
15 p2567 A69-30349
- TENNANT, R. C.**  
A quart in a pint pot.  
10 p1674 A69-23631
- Air BP prepares for the "Jumbo jet".  
10 p1674 A69-23633
- TENNEKES, H.**  
Asymptotic similarity in neutral barotropic planetary boundary layers.  
03 p0460 A69-13336
- TENNYSON, R. C.**  
The effects of unreinforced circular cutouts on the buckling of circular cylindrical shells under axial compression.  
03 p0523 A69-12988
- Buckling modes of circular cylindrical shells under axial compression.  
24 p4404 A69-43652
- TEODORESCU, P.**  
Two-dimensional problems of elasticity theory. II - Two zero tangential stresses /Problemes bidimensionnels de la theorie de l'elasticite. II - Deux tensions tangentielles nulles/.  
02 p0341 A69-12198
- Application of potential functions to elasticity theory /Sur l'application des fonctions potentiel dans la theorie de l'elasticite/.  
15 p2715 A69-31216
- TEODORESCU, P. P.**  
Some considerations on the two-dimensional problems of the theory of elasticity /Quelques considerations sur les problemes bidimensionnels de la theorie de l'elasticite/.  
08 p1415 A69-20660
- On the action of concentrated loads in the case of a Cosserat continuum.  
10 p1799 A69-23151
- TEODORESCU, V.**  
The Bernoulli equation in relativistic magnetohydrodynamics.  
03 p0476 A69-13385
- TEODORI, E.**  
Ultrasonic diffraction line as a radar chirp signal correlator /La linea ultrasonica a diffrazione quale correlatore per segnali radar chirp/.  
01 p0026 A69-10072
- TEODOROVICH, O. K.**  
Nature of the strength of tungsten-nickel-iron alloys. I - Precipitation-hardening characteristics of W-Ni-Fe alloys.  
05 p0782 A69-16798
- Nature of the strength of tungsten-nickel-iron alloys. II - Rupture mechanism of W-Ni-Fe alloys.  
10 p1711 A69-23333
- TEODOSIC, V.**  
Power spectrum of a pulse train specified by its probability-generating function.  
12 p2030 A69-26383
- TEPLIAKOV, D. I.**  
Effect of transverse receiver defocusing on the energy characteristics of paraboloidal solar devices.  
09 p1436 A69-21803
- Effect of central shading on the energy characteristics of paraboloidal mirrors.  
09 p1436 A69-21804
- Computation and optimization of the thermal regime in concentrator-type solar devices.  
09 p1442 A69-22534
- TEPLIAKOV, V. A.**  
Investigation of the H-resonator /Issledovanie H-rezonatora/.  
05 p0727 A69-15639
- Experimental investigation of the influence of a transverse magnetic field on the flow in a channel with electrodes /Eksperimental'noe issledovanie vliianiia poperechnogo magnitnogo polia na techenie v kanale s elektrodami/.  
14 p2501 A69-29918
- Investigation of an H-cavity.  
16 p2762 A69-32497
- TEPLITSKAIA, R. B.**  
The effect of short-periodic oscillations in the photosphere on the spectral line profile.  
07 p1217 A69-19239
- Equivalent line widths in sunspots /Ekvivalentnye shiriny linii v solnechnykh piatnakh/.  
11 p1955 A69-24388
- Equivalent line widths in sunspots.  
24 p4390 A69-43778
- TEPLITSKII, E. SH.**  
Possibility of resonant variation of the coherent properties of light scattered in a multilevel system /O vozmozhnosti rezonansnogo izmeneniia kogerentnykh svoistv sveta pri rasseianii v mnogourovnnoi sisteme/.  
02 p0258 A69-12637
- TEPLIUK, I. N.**  
Transistorized RC filters /Tranzistornye RC-fil'try/.  
12 p2040 A69-26488
- TEPLOV, I. B.**  
Simulation of the radiation effect of a space medium on spacecraft elements /Modelirovanie radiatsionnogo vozdeistviia kosmicheskoi sredy na elementy kosmicheskikh apparatov/.  
06 p0906 A69-17612
- TEPLOV, N. L.**  
Analysis of optimal schemes for the reception of discrete signals on a background of concentrated /with respect to the spectrum or in time/ noise /Analiz optimal'nykh skhem priema diskretnykh signalov na fone sosedotochennykh /po spektru ili vo vremeni/ pomekh/.  
07 p1088 A69-19676
- Estimation of the noise rejection and carrying capacity of systems transmitting discrete information by signals of complex shape /K otsenke pomekh-houstoichivosti i propusknoi sposobnosti sistem peredachi diskretnoi informatsii signalami slozhnoi formy/.  
13 p2218 A69-27213
- Analysis of optimal circuits for discrete signal reception in a background of /spectrum- or time-/ concentrated noise.  
20 p3488 A69-37458
- TEPLOV, S. V.**  
Investigation of two-phase Laval nozzles /Issledovanie dvukhfaznykh sopel Lavalia/.  
13 p2245 A69-27481
- TEPLY, M. L.**  
Torsionfree injective modules.  
13 p2287 A69-27339
- TEPPER, F.**  
Regenerable carbon dioxide sorbents.  
09 p1447 A69-22552
- TEPPER, M.**  
Weather research satellites. [UN PAPER 68-95350]  
01 p0109 A69-10483
- Some systems possibilities for global atmospheric research program. [AAS PAPER 69-120]  
24 p4307 A69-42817
- TEPTIN, G. M.**  
Distribution of the pulsation velocities of the wind in the meteor region of the atmosphere /O raspredelenii pul'satsionnykh skorostei vetra v meteoroi oblasti atmosfery/.  
21 p3759 A69-39115
- TER HAAR, D.**  
Statistical mechanics of stellar systems.  
14 p2530 A69-29987
- III regions and the distances to pulsars.  
17 p3026 A69-32858
- TER-ARUTUNIANTS, E. T.**  
Parametric damping in automatic systems /O parametricheskom dempfirovanii v avtomaticheskikh ustroistvakh/.  
11 p1857 A69-24556
- TER-MARKARIANTS, N. E.**  
Problems of the interpretation of infrared cloud images transmitted by meteorological earth satellites



/Voprosy interpretatsii infrakrasnykh izobrazhenii oblachnosti s meteorologicheskikh sputnikov zemli/.  
06 p0952 A69-17984

## TER-MINASIAN, G. G.

Mathematical modeling of temperature and humidity processes in sections of sealed spaceship cabins.  
02 p0200 A69-11489

## TER-MINASIANTS, S. M.

Pressure distribution at the wall of a wedge during an instantaneous small variation of its supersonic speed of motion /Raspredelenie davleniia na stenke klina pri mgnovennom malom izmenenii sverkhzvukovoi skorosti ego dvizheniia/.  
03 p0364 A69-13662

## TER-MINASSIANTS, S. M.

The diffraction accompanying the regular reflexion of a plane obliquely impinging shock wave from the walls of an obtuse wedge.  
11 p1873 A69-25135

## TER-MKRTCHIAN, M. G.

Determination of the number of independent stations "equivalent" to a given system of correlated stations /K opredeleniiu chisla nezavisimykh stantsii, "ekvivalentnykh" dannoi sisteme korrelirovannykh stantsii/.  
13 p2293 A69-27851

A new method of realization of discriminant and regressive schemes /Novyi sposob realizatsii diskriminantnykh i regressiionnykh skhem/.  
23 p4184 A69-42490

## TERA, F.

Isotopic analyses of barium in meteorites and in terrestrial samples.  
19 p3425 A69-36422

## TERADA, M.

Calculation of the effect of attenuators on TWT gain.  
12 p2044 A69-27102

## TERAJIMA, Y.

Diurnal field strength and phase variations on VLF /NWC signals/ transmissions over a transequatorial path. I.  
06 p0889 A69-17654

## TERAKADO, R.

On the resistance of a class of two-dimensional inhomogeneous conductors.  
14 p2422 A69-29554

## TERAO, K.

Ionization in detonation waves /Ionisation in Detonationswellen/.  
21 p3853 A69-39745

## TERASHITA, Y.

Radiative opacity in stellar atmospheres. III - Effect of the hydrogen-to-helium ratio on the atmospheric structure.  
13 p2339 A69-27562

The structure of white-dwarf atmospheres. II - Masses and radii determined from atmospheric parameters of DA stars. III - The atmosphere of 40 Eridani B.  
13 p2339 A69-27563

## TEREBIZH, V. IU.

Some nonlinear problems in the theory of radiation transfer within spectral lines.  
16 p2864 A69-32587

## TEREGULOV, I. G.

Bending and Stability of Thin Plates and Shells during Creep /Izgiib i ustoiichivost' tonkikh plastin i obolochek pri polzuchestii/.  
20 p3630 A69-38207

## TEREKHIN, D. K.

Performance of a He-Ne laser excited by microwave pulses /O rabote He-Ne-lazera v rezhime vozbuzhdeniia impul'sami sverkhvysokoi chastoty/.  
04 p0610 A69-14423

Zeeman effect in a multimode He-Ne laser operating at 0.63 and 3.39  $\mu$ m simultaneously.  
06 p0932 A69-16912

Frequency characteristics of a helium-neon laser in a transverse magnetic field /Chastotnye kharakteristiki geli-neonovogo lazera v poperechnom magnitnom pole/.  
11 p1894 A69-24622

Energy characteristics of a helium-neon laser in a transverse magnetic field /Energeticheskie kharakteristiki geli-neonovogo lazera v poperechnom magnitnom pole/.  
12 p2104 A69-26023

## TEREKHIN, S. N.

Single-circuit partially split magnetron with electron retuning of the frequency /Odnokonturnyi chastichno

razrezannyi magnetron s elektronnoi perestroikoi chastoty/.  
21 p3682 A69-39128

## TEREKHOVA, S. F.

Reflection of CdS sub x Se sub 1-x single crystals in the intrinsic absorption region /Otrazhenie monokristallov CdS sub x Se sub 1-x v oblasti sobstvennogo pogloshchennii/.  
19 p3391 A69-36607

## TERENTEY, IU. N.

Analysis of ablation of solids in supersonic flow.  
18 p3231 A69-35121

## TERENTEY, V. E.

Investigation of the generation kinetics of a high-power ruby-laser pulse created by means of a diffraction modulator employing modulated ultrasonic traveling waves /Issledovanie kinetiki generatsii moshchnogo impul'sa rubinovogo lazera, sformirovannogo s pomoshch'iu difraktsionnogo moduliatora na begushchikh modulirovannykh ul'trazvukovykh volnakh/.  
24 p4328 A69-43163

## TERENTEY, V. F.

Effect of the nature of metallic materials in contact with a titanium alloy AT-3 on its fatigue strength under fretting corrosion conditions.  
12 p2113 A69-26125

A model of the physical limit of fatigue in metals and alloys /Model' fizicheskogo predela ustalosti metallov i splavov/.  
14 p2461 A69-28913

## TERENTEV, V. G.

Medicinal therapy and flight safety /Lekarstvennaia terapiia i bezopasnost' poletov/.  
01 p0014 A69-10583

Drug therapy and flight safety.  
15 p2555 A69-30753

Human sensorimotor reactions during rotation in an apparatus with a small radius /Sensorimotornye reaktssii cheloveka pri vozdeistvii vrashchenii na ustanovke s malym radiusom/.  
20 p3471 A69-37258

## TERESA, M. J.

Two year flight performance of the Lockheed Type X1 nickel-cadmium battery.  
23 p4072 A69-42285

## TERESHCHENKO, A. I.

Calculation of smooth multiwave waveguide junctions. I, II /K raschetu plynnykh mnogovolnovnykh volnovodnykh perekhodov. I, II/.  
23 p4125 A69-42046

## TERESHCHENKO, A. P.

Effect of a plant diet which includes a biomass of unicellular algae on excretion and balance of mineral elements.  
10 p1647 A69-23590

Gas chromatographic determination of volatile oxygen-containing compounds in liquid biological media /Gazokhromatograficheskoe opredelenie letuchikh kislorodsoderzhashchikh veshchestv v zhidkikh biologicheskikh sredakh/.  
13 p2216 A69-28627

## TERESHIN, O. N.

Synthesis of relief impedance antennas.  
04 p0577 A69-14786

## TERESHIN, V. I.

The influence of Hall currents on plasmoid dynamics in a spatially-periodic magnetic field.  
08 p1370 A69-21017

## TERHUNE, R. W.

Nonlinear optics.  
05 p0772 A69-16229

## TERJUNG, R. L.

Effects of progressive hypohydration on maximal isometric muscular strength.  
05 p0708 A69-15983

## TERMIER, G.

Global palaeogeography and earth expansion.  
22 p3936 A69-40181

## TERMIER, H.

Global palaeogeography and earth expansion.  
22 p3936 A69-40181

## TERNEAUD, A.

Ultrahigh-speed holography /Holographie ultrarapide/.  
05 p0760 A69-15587

Holographic interferometry with a double-pulse laser /Interferometrie holographique avec un laser a double impulsion/.  
05 p0761 A69-15620

## Pulsed laser holography.

11 p1895 A69-24683

Generation of a monomode giant pulse laser by coherent pumping.  
16 p2797 A69-32018

## TERNES, J. W.

Illumination intensity and behavioral circadian rhythms.  
24 p4260 A69-4270

## TERNOPOL, A. M.

Collective interactions in a fast thetatron discharge.  
09 p1552 A69-2204

## TERNOVSKAIA, M. V.

Results of measurements of fast charged particles by the Cosmos 137 satellite /Rezultaty izmerenii bystrykh zaryazhennykh chastits na sputnike "Kosmos-137"/.  
13 p2327 A69-2769

## TERPIGOREV, V. S.

Effect of turbulence on heat transfer in a supersonic jet with plane obstacle.  
07 p1243 A69-19738

## TERPSTRA, J.

Stability criterion of a natural convection boundary layer on an isothermal vertical plane wall /Critere de stabilite d'une couche limite de convection naturelle sur une paroi plane verticale et isotherme/.  
02 p0188 A69-12038

## TERPUGOV, A. F.

Certain suboptimal schemes for detecting fluctuating Poisson signals /O nekotorykh suboptimal'nykh skhemakh dlia obnaruzheniia fluktuiruiushchikh puasonovskikh signalov/.  
13 p2223 A69-28552

Synthesis of pulse signals with good properties of the uncertainty function. I, II /O sinteze impul'snykh signalov s khoroshimi svoistvami funktsii neopredelenosti. I, II/.  
15 p2563 A69-30140

## TERRET, C.

Frequency-independent antennas /Antennes independantes de la frequence/.  
08 p1295 A69-21149

## TERRIER, J.

The effect of restoration processes makes it possible to distinguish intense irradiations and less intense irradiations among Chlorellae /L'effet des processus de restauration permet de distinguer irradiations aigues et irradiations subaigues chez les chlorelles/.  
22 p3878 A69-40792

## TERRILL, C. L.

Changes in the near-infrared spectra of fifty-one red variable stars.  
16 p2860 A69-32235

## TERRILL, R. M.

Laminar flow with large injection through parallel and uniformly porous walls of different permeability.  
03 p0417 A69-13795

The flow between two parallel circular disks, one of which is subject to a normal sinusoidal oscillation. [ASME PAPER 68-LUBS-1]  
13 p2244 A69-27278

On laminar flow through a uniformly porous pipe.  
24 p4298 A69-42618

## TERRY, C. T.

A viscoelastic model of the human spine subjected to plus g sub z accelerations.  
07 p1072 A69-19725

## TERRY, L. E.

Metallization systems for silicon integrated circuits.  
24 p4286 A69-42761

## TERRY, M. C.

A lunar-surface electric-field detector.  
03 p0429 A69-13221

## TERSKOV, I. A.

Experimental biological life support system. I - Continuous cultivation of algae as a link of a closed ecosystem.  
01 p0020 A69-11077

Experimental biological life support system. II - Gas exchange between man and microalgae culture in a 30-day experiment.  
01 p0021 A69-11078

## TERZAN, A.

Nova Vulpeculae 1968 no 2.  
16 p2855 A69-31659

## TERZIAN, Y.

Reddening curves for planetary nebulae.  
08 p1384 A69-20057

Paschen-line observations of the Orion Nebula.  
08 p1384 A69-20058

- Galactic HII and the dispersion measures of the pulsars. 08 p1397 A69-20696
- Radio emission of normal galaxies. 08 p1398 A69-20777
- The complex galactic radio source W51. 12 p2153 A69-25807
- The planetary nebulae NGC 7027 and IC 418 at  $\lambda$  9.5 mm. 13 p2343 A69-27625
- Low frequency observations of emission nebulae and their electron temperatures. [ASME PAPER 69-DE-46] 14 p2527 A69-29941
- Dispersion measures of pulsars. 23 p4220 A69-42381
- ESHIMA, K.  
Piston driven shock tube of Kyoto University. 22 p3928 A69-41046
- ESHIROGI, T.  
An analysis of antenna arrays including random excitation error. 21 p3681 A69-38742
- ESHUKOV, V. M.  
A problem involving an angular piston /K zadache ob uglovom porshne/. 22 p3861 A69-41025
- ESKE, R. G.  
Observation of the solar soft X-ray component - Study of its relation to transient and slowly-varying phenomena observed at other wavelengths. 09 p1578 A69-22170
- Solar soft X-rays and solar activity. I - Relationships between reported flares and radio bursts, and X-ray bursts. 22 p4003 A69-40297
- ESLENKO, A. G.  
Approximate calculation of the axisymmetric motions of the wall of a tube during deformation by an explosion /Priblizhennyy raschet osesimmetrichnykh dvizhenii stenki trubyy pri deformatsii vzryvom/. 02 p0254 A69-12675
- ESLIA, L. G.  
Plastic scintillators with increased transparency /Plastmassovyye stintillyatory s povyshennoy prozrachnost'yu/. 21 p3724 A69-39073
- ESTA, R. B.  
The elastic stability of fibers in a composite plate. 07 p1232 A69-18714
- ESTARD, D.  
Quasi-free translationally invariant states and Bogoliubov transformations /Etats quasi libres invariants de translation et transformations de Bogoliubov/. 03 p0455 A69-13364
- ESTOV, V. G.  
Microwave study of the relaxation phenomena in a shock-heated argon plasma /K voprosu o mikrovolnovom issledovanii relaksatsionnykh iavlenii v udarnonagretoi argonovoi plazme/. 15 p2663 A69-30995
- ESTUD, J.  
Gravity waves in the thermosphere /Ondes de gravite dans la thermosphere/. 15 p2605 A69-31435
- ETELMAN, A. S.  
The critical tensile stress criterion for cleavage. 01 p0169 A69-10765
- The effect of thickness and drilled holes on the notch-toughness of Charpy V-notch bars. 10 p1798 A69-23087
- Fracture of high-strength materials. 17 p2988 A69-33553
- The mechanism of hydrogen embrittlement in steel. 19 p3350 A69-36894
- ETERS, G. A.  
Stability of fiberglass-reinforced plastic plates coupled to an elastic base /Ob ustoychivosti stekloplastikovyykh plastinok, svyazannykh s uprugim osnovaniem/. 08 p1412 A69-20334
- ETERVIN, N.  
Approximate calculation of Reynolds analogy for turbulent boundary layer with pressure gradient. 20 p3514 A69-37183
- ETERVOV, A. P.  
Wave instability in a drifting plasma /Neustoychivost' voln v dreifuushechi plazme/. 24 p4355 A69-42923
- ETIANKO, V. A.  
Effect of distributed suction on the structure of a turbulent boundary layer /O vlianii raspredeennogo otososa na strukturu turbulentnogo pogranichnogo sloia/. 22 p3933 A69-41029
- TEUNISSEN, H. W.  
An ejector-driven wind tunnel for the generation of turbulent flows with arbitrary mean velocity profile. [AIAA PAPER 69-743] 18 p3114 A69-34408
- TEVDORASHVILI, M. I.  
Seasonal and diurnal variations in radio wave absorption in the ionosphere over Tiflis /Sezonnyye i sutochnyye variatsii pogloshcheniya radiovoln v ionosfere nad Tbilisi/. 20 p3491 A69-37677
- Frequency dependence of radio wave absorption in the ionosphere and the effect of deflecting absorption /Chastotnaya zavisimost' pogloshcheniya radiovoln v ionosfere i vlianie otkloniaushchego pogloshcheniya/. 20 p3491 A69-37680
- TEVIOTDALE, J. R.  
Oriented composites by solidification of off-eutectic mixtures. 13 p2287 A69-28680
- TEWARSON, R. P.  
On the Chebyshev solution of inconsistent linear equations. 04 p0626 A69-15318
- On the orthonormalization of sparse vectors. 15 p2644 A69-30425
- The Crout reduction for sparse matrices. 20 p3497 A69-36946
- On some representations of generalized inverses. 21 p3755 A69-38926
- On computing generalized inverses. 24 p4339 A69-42762
- TEWELES, S.  
Meteorological rocket soundings on a global scale. [UN PAPER 68-95405] 01 p0109 A69-10484
- THACH, J. S., JR.  
A bigeminus pattern in social behavior. 24 p4260 A69-42705
- THACKERAY, A. D.  
Orbits of two O-type spectroscopic binaries HD 93403 and 135240. 11 p1963 A69-25257
- Supernova in M 83. 15 p2682 A69-30451
- Infrared spectra of Eta Carinae. 19 p3423 A69-36229
- Forbidden lines in the spectrum of RR Tel 1951-1968. 19 p3423 A69-36230
- THACKRAY, R. W.  
Chemical erosion of graphite rocket nozzles. 23 p4180 A69-42156
- THADDEUS, P.  
The dry massive model of the atmosphere of Venus and the microwave phase effect. 02 p0319 A69-12108
- Pressure-induced microwave absorption in N sub 2. 03 p0472 A69-13317
- Upper limits to the intensity of background radiation at  $\lambda$  equals 1.32, 0.559, and 0.359 mm. 07 p1221 A69-19404
- Probable detection of interstellar C super 13 H super plus. 09 p1603 A69-22266
- Microwave observations of sea state from aircraft. 18 p3127 A69-34421
- THAILER, H. J.  
In-plane bending of curved circular tubes. [ASME PAPER 68-PVP-12] 03 p0523 A69-12999
- THAL-LARSEN, H.  
Hazards in pneumatic fluidic circuits. [ASME PAPER 68-WA/AUT-18] 05 p0706 A69-16174
- THAL, H. L.  
Theoretical analysis of log-periodic circuits in microwave amplifiers. 05 p0739 A69-16554
- THALER, H. J.  
Thermal effects in modulated IMPATT oscillators. 09 p1468 A69-22588
- THALER, W. J.  
Visible sidelight emission in a CO sub 2 laser. 18 p3153 A69-35243
- THAMES, S. F.  
Organosilicon compounds. IV - Synthesis of organosilicon substituted Bunte salts and mercaptoethylamines. 13 p2210 A69-28486
- Organosilicon compounds. V. 15 p2561 A69-30414
- THAMHAIN, H. J.  
System partitioning for LSI. 09 p1466 A69-22451
- THARPE, M.  
On-board spacecraft processor. 22 p3903 A69-39921
- THATCH, D. W.  
A plan for the efficient use of Washington's area airports. 22 p4053 A69-40709
- THATCHER, J. W.  
The general problem of data return from deep space. 14 p2517 A69-29096
- THATCHER, R. M.  
The airplane economic design evaluation /AEDE/ computerized model and its application. [AIAA PAPER 69-814] 19 p3289 A69-35626
- THAU, F. E.  
A backward equation for a randomly excited diffusion process. 11 p1860 A69-25451
- THAU, S. A.  
Dynamic stress concentration at a cylindrical inclusion in an elastic medium with an arbitrarily stiff bond. 21 p3840 A69-39300
- THAXTER, J. B.  
Light beam deflection using holographic scanning techniques. 11 p1885 A69-24847
- THAYARNYONG, S.  
Short time variations of the cosmic ray diurnal phase and amplitude determined by means of superimposed records. 23 p4204 A69-41481
- Geomagnetic disturbances and the cosmic ray diurnal variation. 23 p4204 A69-41483
- THE BAO, V.  
Minimisation of r.m.s. phase error in larger reflector antennas. 19 p3283 A69-35933
- THEARD, L. P.  
Energy distribution of positive ions extracted from a hot cathode gas discharge ion source. 03 p0427 A69-13102
- THEBERGE, C. C.  
Effect of time at temperature on the mechanical properties of a fabric reinforced phenolic heat shield material. 12 p2119 A69-26825
- THEBERGE, J. E.  
Tensile and impact behavior of a series of glass-fortified thermoplastic resins as a function of straining rate. 08 p1337 A69-20480
- THEDE, A. L.  
Correlation of dose rate and spectral measurements in the inner Van Allen belt. 01 p0145 A69-11081
- THEIMER, O.  
Kinetic-energy corrections to Klein's theorem for the thermodynamic functions of a plasma. 16 p2823 A69-32469
- THEISEN, J. G.  
Servo control of flutter. 11 p1992 A69-25518
- THEKAEKARA, M. P.  
Solar irradiance curves and absorptance of satellite coatings. 09 p1576 A69-21646
- Solar irradiance measurements from a research aircraft. 23 p4216 A69-42191
- THEOBALD, P. E.  
Cracked solder joint mechanism in discrete component assemblies. 07 p1140 A69-19102
- THEOCARIS, P. S.  
Shrinkage stresses in two-phase materials. 13 p2371 A69-28675



- Moire Fringes in Strain Analysis.  
19 p3435 A69-35835
- THEODORIDIS, G. C.**  
Bimodal diffusion in the earth's magnetosphere. I - An acceleration mechanism for trapped particles.  
08 p1307 A69-20183  
Bimodal diffusion in the earth's magnetosphere. II - On the electron belts.  
08 p1307 A69-20184  
Acceleration of trapped electrons and protons through bimodal diffusion in the earth's radiation belts.  
09 p1576 A69-21708  
The angular response of spherical plate electrostatic analyzers.  
14 p2449 A69-29560  
Bimodal diffusion in the earth's magnetosphere. III - On the proton belt.  
16 p2851 A69-32618  
Bimodal diffusion in the earth's magnetosphere. IV - On the space and time dependence of trapped particle energy spectra.  
16 p2852 A69-32619  
Acceleration of trapped particles through bimodal diffusion in an inhomogeneous magnetic field.  
18 p3186 A69-34808
- THEODORSEN, T.**  
Theory of static propellers and helicopter rotors. [AHS PAPER 326]  
17 p2894 A69-33533
- THEON, J. S.**  
Coordinated rocket measurements on the D-region winter anomaly. I - Experimental results.  
05 p0758 A69-16411  
Wind measurements in noctilucent clouds.  
13 p2294 A69-28466
- THERIAULT, J. P.**  
A fast, high-responsivity bolometer detector for the very-far infrared.  
08 p1313 A69-20132
- THERIAULT, P. W.**  
Compound helicopter as a short-haul transport. [SAE PAPER 690419]  
23 p4062 A69-41643
- THEVENIN, J. C.**  
French research on turbojet noise /Recherches francaises sur le bruit des turboreacteurs/.  
13 p2325 A69-28589
- THEVENIN, J.-P.**  
Influence of cumulative thermal cycling on the progressive disappearance of the martensitic transformation of 18 percent-nickel maraging steels /Influence de cyclages thermiques cumules sur la disparition progressive de la transformation martensitique des aciers "maraging" a 18 percent de nickel/.  
18 p3155 A69-34650
- THEVENIN, M.**  
Qualification of explosive components for use in a severe environment /Qualification des composants explosifs pour emploi en ambiance severe/.  
10 p1749 A69-23008
- THEWS, G.**  
Sensor for O sub 2 partial pressure telemetry /Mess-fuehler fuer die Telemetrie des O sub 2 -Partial-druckes/.  
15 p2559 A69-31231  
Dissociation of human hemoglobin /Zur Dissociation des Human-Haemoglobins/.  
23 p4097 A69-42096  
Interpretation of the oxygen-dissociation curve of human hemoglobin /Zur Interpretation der O sub 2-Bindungskurve des Human-Haemoglobins/.  
23 p4097 A69-42097
- THEYS, J.**  
Fluidization on the moon/ques/.  
23 p4221 A69-42392
- THIBAUT, R.**  
Study of flows with a quasi-aligned field in fluid magnetodynamics /Etude d'ecoulements avec champ quasi-aligne en magnetodynamique des fluides/.  
07 p1194 A69-19350
- THIBODEAU, R.**  
PDM control analysis using the phase plane. [AIAA PAPER 68-820]  
24 p4283 A69-43252
- THIEL, F. L.**  
The properties of nickel in silicon.  
24 p4360 A69-42759
- THIEL, H. G.**  
The energy balance of plasma radiation arcs /Die Energiebilanz von Plasmastrahlbogen/.  
05 p0802 A69-15996
- THIELBAHR, W. H.**  
Heat transfer to the highly accelerated turbulent boundary layer with and without mass addition. [ASME PAPER 69-HT-53]  
24 p4409 A69-43518
- THIELE, G. A.**  
Scattering and absorption by short, thin metallic filaments.  
03 p0395 A69-13623  
Analysis of Yagi-Uda-type antennas.  
11 p1850 A69-24980
- THIELE, O. W.**  
Wintertime density variability in the upper atmosphere obtained from rocket measurements at White Sands, New Mexico.  
15 p2601 A69-31374
- THIELEMANN, W.**  
Strength and material problems in the case of satellites and space vehicles /Festigkeits- und Werkstofffragen fuer Satelliten und Raumfahrzeuge/.  
13 p2362 A69-27920
- THIELEMANN, W. F.**  
On the postbuckling equilibrium and stability of thin-walled circular cylinders under axial compression.  
11 p1979 A69-24816
- THIELHEIM, K. O.**  
Trajectories of high-energy cosmic rays in the galactic disk.  
03 p0501 A69-13960  
Monte Carlo studies on the hadronic component of extensive air showers.  
15 p2678 A69-31482
- THIELO, W.**  
Studies of thermionic energy converters /Untersuchungen an thermionischen Energiewandlern/.  
07 p1057 A69-18255
- THIELSCH, H.**  
When are weld defects rejectable/ques/.  
07 p1143 A69-19696  
When are weld defects rejectable/ques/ II.  
10 p1700 A69-23372
- THIER, H.**  
Effect of nitrogen on the precipitation behavior of austenitic chromium-nickel steel X5 CrNiMo 1713 /Der Einfluss von Stickstoff auf das Ausscheidungsverhalten des austenitischen Chrom-Nickel-Stahles X 5 CrNiMo 1713/.  
11 p1902 A69-24369
- THIERY, M. P.**  
Behavior of passive components at high frequencies /Comportement des composants passifs en haute frequence/.  
08 p1283 A69-20135
- THIJSEN, J. H. H.**  
Circadian rhythm and performance.  
24 p4268 A69-43407
- THILLARD, S. V.**  
Temperature profiles of an opposed-jet diffusion flame subjected to an electric field.  
21 p3852 A69-39597
- THIM, H. W.**  
Quenched bulk GaAs oscillators with doping gradients.  
10 p1663 A69-23667
- THIOUNN, M.**  
A general perturbation method in wave mechanics and its utilization in resonance problems /Sur une methode generale de perturbation en mecanique ondulatoire et son utilisation dans les problemes de resonance/.  
18 p3175 A69-35483
- THIRRING, W.**  
Field theory of gravitation.  
01 p0116 A69-10443
- THIRRIOT, C.**  
The equivalent conductance of noncylindrical current tubes /Sur la conductance equivalente de tubes de courant non cylindriques/.  
08 p1303 A69-20270
- THIRUMALAISAMY, S. N.**  
Experimental investigation of the effects of transpiration cooling on turbine stator blade aerodynamics. [ASME PAPER 69-GT-39]  
09 p1432 A69-22487
- THIVELLIER, D.**  
Study of tungsten surfaces with a high work function /Recherche de surfaces de tungstene a travail de sortie eleve/.  
14 p2506 A69-29268
- THODAY, R. D. C.**  
Influence of the ground near transmitting and receiving aerials on the strength of medium-frequency sky waves.  
17 p2918 A69-33025
- THOENI, A. K.**  
Carbon foam - A cellular structural material for high-temperature application.  
17 p2992 A69-3337
- THOMANEK, L.**  
Monopulse antenna of the DVL ground station for satellite transmission /Monopuls-Antenne der Bodenstation fuer Satellitenfunk der Deutschen Versuchsanstalt fuer Luft- und Raumfahrt e.v./.  
02 p0214 A69-11595
- THOMAS-BETTS, A.**  
Ionization and attachment in oxygen at low pressures.  
08 p1354 A69-2009
- THOMAS, A. D., JR.**  
Flexural properties of aluminum-aluminum oxide sandwich composites.  
07 p1159 A69-18723
- THOMAS, B. K.**  
Ionization of positive ions.  
14 p2489 A69-29996
- THOMAS, C. T.**  
Surface radiation balance measurements in India during the IQSY.  
02 p0307 A69-11820
- THOMAS, D. A.**  
Uniaxial compressive creep of polytetrafluoroethylene.  
14 p2469 A69-29412
- THOMAS, D. D.**  
What's holding up low-visibility landing/ques/.  
20 p3574 A69-38119
- THOMAS, D. L.**  
Problems in applying the line reversal method of temperature measurement to flames.  
06 p1035 A69-17929  
An automatic remotely operated sodium D-line reversal temperature measuring technique.  
06 p1035 A69-17932  
Continuum theory of cooled spherical electrostatic probes.  
11 p1930 A69-25274
- THOMAS, D. P.**  
A note on the torsional oscillations of an elastic half-space.  
01 p0169 A69-10809  
Electromagnetic diffraction by a circular aperture in a plane screen between different media.  
12 p2030 A69-26462
- THOMAS, D. R.**  
Unsteady spherically symmetric expansion of a fixed mass of gas into vacuum.  
16 p2772 A69-32168
- THOMAS, E.**  
A new multiple access technique for use with satellite networks.  
23 p4130 A69-42512
- THOMAS, E. C.**  
Flight performance analysis of space systems.  
18 p3206 A69-34501  
Recovery of potable water from human urine.  
19 p3258 A69-36455
- THOMAS, E. T.**  
The impact of biosciences requirements on biosatellite attitude control.  
18 p3210 A69-35094
- THOMAS, E. U.**  
Guidelines for reliable relay application and selection.  
13 p2231 A69-28045
- THOMAS, F. J.**  
Solar energy without neutrinos - Fusion catalysis by quarks.  
18 p3186 A69-34643
- THOMAS, G.**  
Structure and properties of dynamically strain aged Fe-Cr-C and Fe-Mo-C alloys.  
13 p2276 A69-27403
- THOMAS, G. C.**  
Mode conversion and transmission by a circular aperture.  
11 p1899 A69-25056

- THOMAS, G. E.**  
Upper atmospheric response to transient heating.  
11 p1878 A69-25151  
Ultraviolet observations of atomic hydrogen and oxygen from the OGO satellites.  
15 p2603 A69-31400  
Mariner 6 - Ultraviolet spectrum of Mars upper atmosphere.  
22 p4023 A69-40568
- THOMAS, G. L.**  
Reliable glass-fiber-filled polytetrafluoroethylene materials for piston seals in high-pressure oil-free air compressors.  
19 p3323 A69-35579
- THOMAS, H.**  
Microvillar bleb formation in primate hepatocytes irradiated with 32-Mev protons.  
10 p1641 A69-23045  
Soft modes, critical fluctuations, and optical properties for a two-valley model of Gunn instability semiconductors.  
15 p2581 A69-31240  
Connection between a mitochondrion and endoplasmic reticulum in liver.  
23 p4083 A69-41455
- THOMAS, I. B.**  
Perceived pitch of whispered vowels.  
23 p4190 A69-41575
- THOMAS, J. A.**  
Maps of the difference in geomagnetic field at conjugate areas.  
02 p0245 A69-12737  
Evidence for a point source of high energy cosmic gamma rays.  
24 p4365 A69-42606
- THOMAS, J. B.**  
The linear random process.  
01 p0029 A69-10555  
On systems with unknown or uncertain parameters.  
06 p0902 A69-17405
- THOMAS, J. H.**  
AM/PM noise conversion in a microwave signal source.  
02 p0212 A69-12462  
Random vibrations of thin elastic plates.  
05 p0844 A69-16741  
Solar differential rotation and oblateness.  
12 p2157 A69-26308
- THOMAS, J. J.**  
An oversize cavity for exciting the LSA mode in n-GaAs.  
02 p0297 A69-11940
- THOMAS, J. O.**  
Transpolar exospheric plasma. I.  
03 p0425 A69-14018  
Electron density distribution above the winter pole.  
06 p0922 A69-18224  
The trans-polar exospheric plasma. III - A unified picture.  
12 p2151 A69-26952
- THOMAS, J. P.**  
Selective stimulation of two form-sensitive mechanisms.  
22 p3880 A69-40852  
Spatial interactions in identification and detection of compound visual stimuli.  
22 p3883 A69-40878
- THOMAS, K. M.**  
Some shock/wind tunnel observations of interference effects in hypersonic waves.  
15 p2588 A69-30475
- THOMAS, K. S.**  
Coordinated measurements of plasma density and cooperative light scattering in a theta-pinch plasma.  
11 p1924 A69-24304
- THOMAS, L.**  
The effects of ions on the propagation of E.L.F. and V.L.F. waves in the lower ionosphere.  
18 p3125 A69-34254  
Ionospheric phenomena related to airglow.  
21 p3712 A69-38517
- THOMAS, L. K.**  
Optical constants of Ta-W and Nb-Mo alloys at incandescent temperatures /Optische Konstanten von Ta-W- und Nb-Mo- Legierungen bei hohen Temperaturen/.  
17 p2990 A69-33574
- THOMAS, P.**  
Electron-phonon coupling in the barriers of GaAs Schottky diodes.  
03 p0493 A69-14242
- THOMAS, P. D.**  
Flow over a finite plate with massive injection.  
16 p2770 A69-31884
- THOMAS, P. W.**  
On laminar flow through a uniformly porous pipe.  
24 p4298 A69-42618
- THOMAS, R. B.**  
Oxygen intake and body temperature of basal and sleeping Andean natives at high altitude.  
06 p0874 A69-17835
- THOMAS, R. J.**  
Solar soft X-rays and solar activity. I - Relationships between reported flares and radio bursts, and X-ray bursts.  
22 p4003 A69-40297
- THOMAS, R. L.**  
Ribbon reinforcement of composites.  
01 p0172 A69-11265  
Off-axis test of a composite.  
01 p0103 A69-11273  
Signal conditioning for commonly used transducers.  
10 p1691 A69-23228  
Analog computer studies of a 2 to 10 kilowatts electric Brayton cycle space power system including start-up and shutdown.  
23 p4071 A69-42280
- THOMAS, R. M.**  
The detection of high-energy X-rays from Ara XR-I and Nor XR-I.  
09 p1583 A69-22763  
A measurement of the diffuse cosmic X-ray background from 17 to 167 kev.  
09 p1584 A69-22767
- THOMAS, T. J.**  
Airborne analog computers.  
18 p3107 A69-34847
- THOMAS, T. Y.**  
Mathematical foundations of the theory of shocks in gases.  
17 p2948 A69-32845
- THOMAS, W. R.**  
Satellites and sounding rockets for space research.  
03 p0520 A69-13584  
Suborbital probes.  
06 p1012 A69-16859  
Satellites and sounding rockets for space research. I.  
11 p1966 A69-25102  
Satellites and sounding rockets for space research. II.  
12 p2175 A69-26922
- THOMAS, W. R. L.**  
A proposed low cost proximity warning device for aircraft.  
17 p2917 A69-34103
- THOMASCHKY, E.**  
GLD 40 gas laser for investigation of vaporization processes /Gaslaser GLD 40 zur Untersuchung von Verdampfungsvorgaengen/.  
08 p1327 A69-20874
- THOMASON, P. F.**  
Tensile plastic instability and ductile fracture criteria in uniaxial compression tests.  
08 p1328 A69-19891  
An analysis of necking in axis-symmetric tension specimens.  
15 p2704 A69-30292
- THOMASSEN, K. I.**  
Experiment in stochastic heating.  
08 p1368 A69-20805
- THOMASSET, G.**  
Elimination of the effects of piloting in analyzing the accelerations induced by the atmospheric turbulence /Suppression des effets du pilotage lors de l'analyse des accelerations induites par la turbulence/.  
[ICAS PAPER 68-39] 17 p2901 A69-33590  
Use of an aircraft for measuring the statistical distribution of turbulence /Utilisation d'un avion comme moyen de mesure de la distribution statistique de la turbulence/.  
[ONERA-TP-699] 20 p3541 A69-37754
- THOME, G. D.**  
Enhancement of ionizing radiation during a solar flare.  
20 p3590 A69-37558
- THOME, P. G.**  
The challenge of planetary exploration.  
[AAS PAPER 69-286] 24 p4379 A69-42810
- THOME, R.**  
Principles of stability in cooled superconducting magnets.  
17 p3007 A69-33792
- THOMMEN, K.**  
Energy and orientation dependence of electron-irradiation-induced damage in undoped GaSb.  
01 p0141 A69-11256
- THOMPSON, A. R.**  
Electron temperatures in the outer regions of planetary nebulas.  
06 p1009 A69-17962  
Observations of the occultation of Sagittarius A by the moon.  
11 p1958 A69-24592
- THOMPSON, B. J.**  
Holographic detection of submicron particles.  
04 p0596 A69-14292  
Digital signal processing.  
05 p0718 A69-15749  
Complex spatial filtering by holographic Fourier subtraction.  
10 p1690 A69-22953  
Fraunhofer holography.  
11 p1882 A69-24678
- THOMPSON, C. C.**  
Onset of instabilities in coaxial Hall current accelerators.  
[AIAA PAPER 69-230] 09 p1563 A69-21231
- THOMPSON, C. W.**  
Response of certain nonlinearities to modulated inputs.  
01 p0034 A69-11142
- THOMPSON, D. H.**  
An optical interference manometer.  
13 p2263 A69-28190
- THOMPSON, E. G.**  
Hot cracking studies of alloy 718 weld heat-affected zones.  
11 p1905 A69-24933
- THOMPSON, E. H.**  
A hybrid simulation study of a satellite attitude controller using a torqued, 2-axis gimbaled boom as the actuator.  
07 p1227 A69-18335
- THOMPSON, E. R.**  
Structure and properties of Ni sub 3 Al /gamma'/ eutectic alloys produced by unidirectional solidification.  
13 p2277 A69-27407  
High Prandtl number boundary layers with mass injection.  
13 p2249 A69-28238  
Similar solutions of the boundary-layer equations for a non-Newtonian fluid.  
17 p2957 A69-34016
- THOMPSON, H. D.**  
Analysis of three-dimensional scramjet exhaust nozzle flow fields by a new second-order method of characteristics.  
[AIAA PAPER 69-5] 06 p0862 A69-18048  
Two-dimensional analysis of transonic gas-particle flows in axisymmetric nozzles.  
[AIAA PAPER 69-572] 16 p2731 A69-31847  
Three dimensional supersonic nozzle flow field calculations.  
[AIAA PAPER 69-463] 16 p2734 A69-32766
- THOMPSON, H. E.**  
Dynamic visco-elastic properties of the lens.  
22 p3883 A69-40875
- THOMPSON, J. E.**  
Adaptive signal tracking system.  
09 p1459 A69-22477  
Simulating the effects of gravitational field and atmosphere on behavior of granular media.  
[AIAA PAPER 69-1009] 22 p3921 A69-40382
- THOMPSON, J. F.**  
Computer experimentation with an implicit numerical solution of the Navier-Stokes equations for an oscillating body.  
[AIAA PAPER 69-185] 06 p0914 A69-18135
- THOMPSON, J. L.**  
Some existence theorems for the traction boundary value problem of linearized elastostatics.  
12 p2188 A69-26928



## THOMPSON, J. M. T.

- The branching analysis of perfect and imperfect discrete structural systems.  
08 p1417 A69-20822
- A general theory for the branching analysis of discrete structural systems.  
12 p2179 A69-26213

## THOMPSON, J. R.

- Optical identifications of Ohio radio sources with peculiar spectra.  
01 p0153 A69-10854
- Surface characterization studies on CVD tungsten.  
09 p1558 A69-21810

## THOMPSON, M. C., JR.

- Integrated air density near the earth's surface from electromagnetic phase measurement.  
04 p0598 A69-14910
- Phase stabilization of widely separated oscillators.  
08 p1273 A69-20022

## THOMPSON, M. D.

- Growing pains in the evolution of hybrid executives.  
04 p0567 A69-15351

## THOMPSON, M. G.

- Cerenkov radiation of high energy muons.  
06 p0991 A69-17306
- Observations of multiple muons in cosmic rays at a variety of zenith angles.  
15 p2678 A69-31484

## THOMPSON, M. N.

- Paleontological evidence of variations in length of synodic month since late Cambrian.  
02 p0241 A69-11807

## THOMPSON, M. W.

- Defects and Radiation Damage in Metals.  
14 p2503 A69-28889

## THOMPSON, R.

- Precision thermometer for the region 10-40 K.  
06 p0927 A69-17703

## THOMPSON, R. E.

- A 2-1/4- by 2-1/4-inch photogrammetric camera system for the moon.  
22 p3948 A69-40989

## THOMPSON, S. A.

- MOS field effect transistors formed by gate masked ion implantation.  
05 p0734 A69-16563

## THOMPSON, S. O.

- Radioactive isotopes in Hoba West and other iron meteorites.  
22 p4021 A69-40411

## THOMPSON, T. D.

- Absorption of pyrimidines, purines, and nucleosides by Li-, Na-, Mg-, and Ca-montmorillonite /clay-organic studies XIII/.  
05 p0716 A69-15973
- Absorption of pyrimidines, purines, and nucleosides by Co-, Ni-, Cu-, and Fe/III/-montmorillonite /Clay Organic Studies XIII/.  
05 p0716 A69-15974

## THOMPSON, W. E.

- Bayesian confidence limits for system reliability.  
19 p3328 A69-36041
- Infrared spectroscopic study of polycrystalline NH sub 4 CN.  
24 p4280 A69-43809

## THOMPSON, W. J.

- Daytime photograph of a group of meteor trails.  
12 p2157 A69-26231

## THOMSEN, L.

- On the high-temperature equation of state of solids.  
08 p1419 A69-19814

## THOMSEN, W. F.

- Bonding characteristics of alkyl cyanoacrylate adhesives.  
09 p1529 A69-22316

## THOMSON, A.

- Numerical computation of steady, supersonic, two-dimensional gas flow in natural coordinates.  
10 p1679 A69-23595

## THOMSON, A. B.

- Arizona-NASA atlas of infrared solar spectrum. VI.  
21 p3800 A69-38683

## THOMSON, D. N.

- An automatic sequential detector for noncoherent MTI radar.  
03 p0389 A69-13197

## THOMSON, D. W.

- Indirect atmospheric measurements utilizing Rake tropospheric scatter techniques. II - Radiometeorological interpretation of Rake channel-sounding observations.  
14 p2448 A69-29525

## THOMSON, I.

- The temperature dependence of avalanche current in silicon p-n junctions.  
01 p0136 A69-10245

## THOMSON, J. B.

- Flexural fatigue of glass-reinforced thermoplastics.  
08 p1337 A69-20481

## THOMSON, J. M.

- Design and study of a low-power nuclear reactor for space propulsion /Conception et etude d'un reacteur nucleaire de faible puissance destine a la propulsion spatiale/.  
17 p3004 A69-33342

## THOMSON, M. M.

- The Royal Astronomical Society of Canada 1968.  
22 p4033 A69-41058

## THOMSON, R. A. E.

- Thermal regulation in X-irradiated dogs subjected to heat stress.  
09 p1445 A69-22548

## THOMSON, R. M.

- Structure of solids.  
13 p2316 A69-27221

## THOMSON, W. T.

- Dynamics of planetary approach.  
11 p1968 A69-25725
- The eigenvalue problem for structural systems with statistical properties.  
16 p2871 A69-31878

## THONEMANN, P. C.

- Anomalous skin effect in bounded plasmas.  
12 p2133 A69-25833

## THOREN, R.

- Recent engineering advances on the Lockheed L-1011.  
[AIAA PAPER 69-828] 19 p3243 A69-35598

## THORLEY, G. A.

- Some observations on the use of multiband spectral reconnaissance for the inventory of wildland resources.  
15 p2609 A69-30458

## THORNE, K. S.

- Non-radial pulsation of general-relativistic stellar models. II - Properties of the gravitational waves.  
09 p1605 A69-22417
- Relativistic gravitational effects in pulsars.  
15 p2694 A69-30855
- Relativistic star clusters.  
21 p3814 A69-39570

## THORNELL, J. M.

- The Australian commercial satellite communication station.  
09 p1458 A69-22469
- The Moree earth station for satellite communications /Australia/.  
22 p3900 A69-40679

## THORNLEY, C.

- On Stokes and Rayleigh layers in a rotating system.  
03 p0417 A69-13797

## THORNTON, C. L.

- Human factors evaluation of a computer based information storage and retrieval system.  
02 p0204 A69-12220
- Field dependence and target identification.  
06 p0880 A69-17211
- Evaluation of a motion simulator not requiring cockpit motion.  
17 p2947 A69-34007

## THORNTON, D. D.

- Detection of NH sub 3 molecules in the interstellar medium by their microwave emission.  
03 p0518 A69-14258
- Detection of water in interstellar regions by its microwave radiation.  
08 p1383 A69-19896

## THORNTON, J. A.

- Experimental investigation of surface type airborne electrostatic probes.  
[AIAA PAPER 69-700] 17 p2974 A69-33443
- Abrupt intensity transitions in RF generated plasmas.  
23 p4196 A69-41546

## THORNTON, J. R.

- Properties of neodymium laser materials.  
24 p4329 A69-437515

## THORNTON, J. S.

- Flexural properties of aluminum-aluminum oxide sandwich composites.  
07 p1159 A69-18722

## THORNTON, P. R.

- Scanning electron microscopy in device diagnostics and reliability physics.  
17 p2936 A69-32891

## THORNWALL, J. C.

- A stepping motor drive circuit using magnetic core logic.  
01 p0047 A69-11000

## THORP, J. S.

- Exponential approximation with piecewise linear error criteria.  
01 p0107 A69-11415
- Optimum signals for high-resolution radio transmission systems.  
23 p4132 A69-42545

## THORP, J. W.

- Head shielding protection for beagles exposed to supralethal doses of pulses mixed gamma- neutron radiations.  
19 p3259 A69-36459

## THORPE, A. N.

- Infrared analysis of water in tektites and other glasses.  
10 p1778 A69-23413

## THORPE, J. F.

- On the kinematics of electrochemical machining.  
[ASME PAPER 68-WA/PROD-22] 05 p0769 A69-16194

## THORPE, M. L.

- Radio-frequency plasma simulation of gas-core reactor.  
[AIAA PAPER 68-712] 22 p3979 A69-40548

## THORPE, M. R.

- Amplitude distributions resulting from curvature distributions of a reflector.  
07 p1086 A69-19225
- The phase of waves partially reflected from the lower ionosphere /70-120 km/.  
21 p3672 A69-38558

## THORSON, J.

- Objective measure of the dynamics of a visual movement illusion.  
16 p2746 A69-31556

## THORWART, W.

- Electronically controlled inert-gas spark-gap system "Chronolite 8" for picture frequencies up to 1 million frames/sec /Elektronisch gesteuertes Edelgas- Funkenstreckensystem Chronolite 8 fuer Bildfrequenzen bis 1 Million Bilder/s/.  
05 p0763 A69-15985

## THOUREL, L.

- Current trends in radome technology /Tendances actuelles de la technique des radomes/.  
07 p1171 A69-19508

## THOUVENOT, J.

- Satellite transmission of electrophysiological data for real-time analysis /Transmission de donnees electrophysiologiques par satellite pour analyse en temps reel/.  
16 p2746 A69-32070

## THRANE, E. V.

- Diurnal variation of electron production rates in the D region.  
09 p1577 A69-21717

## THRASHER, G. J.

- Optimal programming for aircraft trajectories utilizing a new strategy for handling state inequality constraints.  
[AIAA PAPER 69-812] 19 p3243 A69-35628

## THRIVES, J.

- A broad-band multi-beam array.  
08 p1288 A69-20965
- An X-band Butler matrix array.  
08 p1288 A69-20966

## THRING, M. W.

- M.H.D. research - Present and future.  
11 p1925 A69-24469

## THRO, P.

- Fossil tracks in meteorites and the chemical abundance and energy spectrum of extremely heavy cosmic rays.  
19 p3410 A69-36096

- HRON, H. L.**  
Dependence of the spontaneous rhythm and contractile tonus of an isolated rat aorta on extracellular concentration of noradrenalin, K super plus, and Ca super plus /Spontanrhythmus und contractiler Tonus der isolierten Rattenaorta in Abhängigkeit von der extracellulären Noradrenalin-, K super plus- und Ca super plus plus-Konzentration/.  
23 p4093 A69-42069
- HRUN, Z.**  
The method of subregions in coupled thermoelasticity.  
11 p1970 A69-24606
- HRUSH, B. A.**  
Formation of vibrationally excited N sub 2 O in the reaction of nitrogen atoms with NO sub 2.  
11 p1832 A69-24880
- HUERING, B.**  
New numerical results on gravitational impact.  
02 p0322 A69-12269
- HULEEN, K. L.**  
Translational forces on the Mariner V spacecraft stemming from the attitude control system.  
[AIAA PAPER 69-114] 06 p1018 A69-18108  
Translational forces on Mariner V from the attitude control system.  
[AIAA PAPER 69-114] 24 p4394 A69-43256
- HUNQVIST, D. E. O.**  
Two methods for measuring high permittivity at microwave frequencies.  
02 p0222 A69-12756
- THURGOOD, D. A.**  
Stresses in asymmetric discs.  
19 p3447 A69-36862
- THURMAN, J. L.**  
Application of heat pipes to reduce cryogenic boiloff in space.  
12 p2191 A69-26793
- THURNAUER, P.**  
Methods of treating Coulomb interference corrections in potential scattering.  
18 p3176 A69-35008
- THURSTON, D. B.**  
Skimmer amphibian gets better performance with new hydrofoil.  
10 p1633 A69-23223
- THURSTON, G. A.**  
Continuation of Newton's method through bifurcation points.  
[ASME PAPER 69-APMW-14] 24 p4401 A69-43102
- THURSTONE, F. L.**  
Holographic imaging with ultrasound.  
13 p2265 A69-28663
- THYMIAN, D. M.**  
Second-harmonic enhancement using a self-locked 0.63-mu He-Ne laser.  
12 p2106 A69-26321
- THYRUM, P. T.**  
Reduced cardiac myosin adenosinetriphosphatase activity in dogs with spontaneously occurring heart failure.  
24 p4258 A69-42630
- TIABOTOV, A. E.**  
Investigation of the optical characteristics of meteoric objects by means of a laser /Issledovanie nekotorykh opticheskikh kharakteristik meteobektov s pomoshch'iu lazera/.  
12 p2125 A69-25955
- TIAGAI, V. A.**  
Applicability of the fluctuation-dissipation theorem to a description of nonequilibrium noise of semiconductor diodes.  
07 p1113 A69-19596  
Detection of discrete capture levels at the surface of cadmium sulfide single crystals /Obnaruzhenie diskretnykh urovnei prilipaniia na poverkhnosti monokristallov sul'fida kadmia/.  
13 p2318 A69-27884
- TIAPKIN, I. U. D.**  
The initial stage in the ageing of Fe-Ni alloys containing Ti additions.  
10 p1712 A69-23720
- TIASINA, A. N.**  
Softening mechanism of heat-resisting alloys during cyclic heating /Mekhanizm razuprochneniia zharoprochnykh splavov pri tsiklicheskikh nagrevakh/.  
21 p3746 A69-38957
- TIAZHELOV, V. V.**  
A miniature telemetric device for transmitting electromyograms.  
08 p1265 A69-19836
- TIBBLE, D. V.**  
Measurement of elevation angles of H.F. waves.  
08 p1275 A69-20293
- TIBES, U.**  
The influence of the amplitude, frequency and mean value of a sinusoidal pressure stimulus at the baroreceptors on mean arterial blood pressure in dogs /Der Einfluss von Amplitude, Frequenz und Mittelwert sinusförmiger Reizdrucke an den Pressorezeptoren auf den arteriellen Mitteldruck des Hundes/.  
23 p4092 A69-42062  
Changes of heart rate during diving and breath-hold after exercise /Die Veraenderung der Herzfrequenz beim Tauchen und Atemanhalten nach koerperlicher Anstrengung/.  
23 p4095 A69-42083
- TICHY, J. A.**  
A correlation of bulk moduli and P-V-T data for silicone fluids at pressures up to 500,000 psig.  
01 p0102 A69-10913
- TICKNER, A. H.**  
An investigation into the effect of exercising particular limb-segments upon performance in a tracking task.  
23 p4101 A69-41453
- TIDMAN, D. A.**  
Ballistic wake of turbulence in a plasma shock wave.  
15 p2660 A69-30914  
Plasma Instabilities in Astrophysics, Proceedings of the Conference, Monterey, Calif., October 14-17, 1968.  
24 p4377 A69-42681  
Shock waves in collisionless plasmas.  
24 p4355 A69-42694
- TIEM, D. H.**  
Canonical forms of gravitational field equations in empty space.  
04 p0658 A69-14899
- TIEMANN, W.**  
Gasdynamic phenomena during the dwell time of exploding wires and their importance in reignition /Ueber die gasdynamischen Vorgaenge waehrend der Dunkel-pause von Drahtexplosionen und ihre Bedeutung fuer die Wiederzuendung/.  
07 p1188 A69-18275
- TIEN, C. L.**  
Thermal radiation properties of gases.  
11 p1998 A69-24460  
Two-component heat pipes.  
[AIAA PAPER 69-631] 17 p3071 A69-33268  
A study of heat-transfer processes in multilayer insulations.  
[AIAA PAPER 69-607] 17 p3073 A69-33300  
Total band absorbance of non-isothermal infrared-radiating gases.  
22 p3983 A69-40101  
Analysis of lateral conduction and radiation along two parallel long plates.  
24 p4415 A69-43594
- TIERNAN, T. O.**  
Ion-molecule reactions.  
01 p0124 A69-10859  
Improvement of spectral baseline stability for a time-of-flight mass spectrometer operated at elevated pressures.  
10 p1693 A69-23345
- TIERNEY, J.**  
Space harmonics in a drifted solid-state plasma.  
02 p0287 A69-11945
- TIERNEY, W. L.**  
Combined environment space simulation in the 1970's.  
19 p3288 A69-35531
- TIERSTEN, H. F.**  
Linear Piezoelectric Plate Vibrations: Elements of the Linear Theory of Piezoelectricity and the Vibrations of Piezoelectric Plates.  
16 p2826 A69-31720
- TIETJEN, J. J.**  
Optimization of electroluminescent efficiencies for vapor-grown GaAs sub 1-x P sub x diodes.  
[ECS PAPER 103] 08 p1284 A69-20366  
The preparation and properties of vapor-deposited epitaxial InAs sub 1-x P sub x using arsine and phosphine.  
12 p2142 A69-25934
- Vapor-phase growth of epitaxial GaAs sub 1-x Sb sub x alloys using arsine and stibine.  
12 p2145 A69-26920
- TIFFANY, O. L.**  
Advanced Space Experiments, American Astronautical Society, Conference, Ann Arbor, Mich., September 16-18, 1968, Proceedings.  
18 p3192 A69-34359  
Lunar surface experiments.  
[AAS PAPER 69-207] 24 p4381 A69-42874
- TIFFANY, W. B.**  
Kilowatt CO sub 2 gas-transport laser.  
23 p4173 A69-41497
- TIFFT, W. G.**  
Optical space astronomy.  
[AAS PAPER 68-218] 02 p0313 A69-11484  
Multicolor photoelectric photometry of bright galaxies. III.  
16 p2860 A69-32230
- TIGER, B.**  
Evaluating system states in their mission phases.  
18 p3142 A69-34480
- TIKEKAR, V. G.**  
Plane Couette flow with suction or injection and heat transfer for Rivlin Ericksen fluid.  
04 p0589 A69-14970
- TIKHINSKII, G. F.**  
Physical Metallurgy of Beryllium /Fizicheskoe Metallovedenie Berillia/.  
17 p2986 A69-32952
- TIKHMEDEV, S. S.**  
Influence of the magnetic fields of associated magnetic masses on the precision of moment sensor operation /O vliianii magnitnykh polei prisoedinenennykh magnitnykh mass na tochnost' raboty momentnogo datchika/.  
09 p1497 A69-22102
- TIKHOMIROV, A. A.**  
Possibility of achieving a population inversion between the sublevels of the ground state of a laser /O vozmozhnosti polucheniia inversii naseleennosti mezhdu podurovniami osnovnogo sostoiianiia OKG/.  
11 p1900 A69-25572
- TIKHOMIROV, E. N.**  
Elastoplastic beam /Uprugoplasticheskii brus/.  
17 p3056 A69-33191  
Elastoplastic curved beam /Uprugoplasticheskii krivoi brus/.  
17 p3056 A69-33192
- TIKHOMIROV, E. P.**  
Acceleration tolerance of man under low barometric pressure /Perenosimost' chelovekom uskorenii pri ponizhenom barometricheskom davlenii/.  
07 p1065 A69-18982  
Human tolerance to acceleration at low barometric pressures.  
20 p3480 A69-38230  
Chronotropic reaction of the human heart under the effect of acceleration /Khronotropnaia reaktsiia serdtsa pri deistvii uskorenii na cheloveka/.  
22 p3877 A69-40283
- TIKHOMIROV, G. P.**  
Luminous discharge on nonabsorbing surfaces produced by a single-pulse laser.  
08 p1327 A69-21021
- TIKHOMIROV, N. P.**  
Diffraction of electromagnetic waves at an impedance sphere /Difraktsiia elektromagnitnykh voln na impedansnoi sfere/.  
16 p2751 A69-32028
- TIKHOMIROV, S. P.**  
Estimate of the applicability of the method of partial reflections in studies of the lower ionosphere /Otsenka primenimosti metoda chastichnykh otrazhenii dlia issledovaniia nizhnii ionosfery/.  
16 p2775 A69-32034
- TIKHOMIROV, V. I.**  
Oxidation of metals at high temperatures in the unsteady /transitional/ range. II - Experimental results of titanium oxidation /Okslenie metallov pri vysokikh temperaturakh v nestatsionarnoi /perekhodnoi/ oblasti. II - Eksperimental'nye dannye po oksleniiu titana/.  
18 p3157 A69-35252
- TIKHONOV, A. N.**  
On the stability of the functional optimization problem.  
02 p0271 A69-11648  
Application of regularization methods in inverse problems of atmospheric optics.  
06 p0919 A69-17616



Determination of a plasma electron distribution function from the bremsstrahlung spectrum /Opredelenie funktsii raspredeleniia elektronov plazmy po spektru tormoznogo izlucheniia/.  
08 p1365 A69-20547

Direct methods of solving problems of optimal control.  
18 p3164 A69-34706

Determination of the brightness distribution over the source /O vosstanovlenii raspredeleniia radioiarkosti po istochniku/.  
20 p3606 A69-38033

# TIKHONOV, E. A.

Passive Q-switching in solid-state lasers, based on stimulated Mandel'shtam-Brillouin scattering of light.  
05 p0770 A69-15699

Light generation by organic dye liquid solution systems with negative absorption on activator molecules and induced combination scattering on matrix molecules /Generatsiia sveta sistemami zhidkikh rastvorov organicheskikh krasitelei pri otritsatel'nom pogloshchenii na molekulakh aktivatora i indutsirovannom kombinatsionnom rasseianii na molekulakh matritsy/.  
06 p0933 A69-17256

# TIKHONOV, E. O.

Operating characteristics of a ruby laser at 78 deg K.  
05 p0777 A69-16546

# TIKHONOV, V. I.

Noise stability of optimal reception methods for amplitude-modulated radio signals /Pomekhoustoichivost' optimal'nykh metodov priema amplitudnomodulirovannykh radiosignalov/.  
01 p0030 A69-10589

Statistical characteristics of the random phase of a quasi-harmonic process.  
02 p0208 A69-12263

Tunneling transitions in semiconductors in strong, crossed electric and magnetic fields /Tunnel'nye perekhody v poluprovodnikakh v sil'nykh skreshchennykh elektricheskoi i magnitnom poliax/.  
02 p0300 A69-12634

Electrical properties of In sub 1-x Ga sub x As solid solutions /x equals 0.2-0.25/.  
07 p1199 A69-18689

Noise immunity of optimal methods of AM signal reception.  
10 p1653 A69-23104

# TIKHONOV, V. N.

Determination of small amounts of manganese in metallic titanium /exchange of experience/.  
20 p3544 A69-37813

# TIKHONOV, V. V.

Thermal properties of lithium niobate crystals.  
03 p0487 A69-13730

# TIKHONOVA, G. P.

Comparative toxicological characteristics of some regenerable absorbers of carbon dioxide.  
10 p1646 A69-23502

# TIKHONOVA, T. V.

The effect of the heat flow from the moon's interior on lunar radio emission in the presence of a variation of the material properties with depth /Vliianie potoka tepla iz nedr lunny na ee radioizluchenie pri izmenenii svoystv veshchestva v glubinu/.  
11 p1956 A69-24398

Effect of heat from within the moon on its radio emission for the case of lunar properties which vary with depth.  
24 p4390 A69-43788

# TIKHONOVA, Z. I.

Solution of a variational problem of the flight dynamics of a spacecraft /K resheniiu odnoi variatsionnoi zadachi dinamiki poleta kosmicheskogo apparata/.  
21 p3829 A69-39818

Possibility of using a physical pendulum as a geocentric vertical indicator /O vozmozhnosti ispol'zovaniia fizicheskogo maiatnika v kachestve ukazatelya geotsentricheskoi vertikali/.  
21 p3727 A69-39830

# TIKHONOVICH, V. I.

Effect of Nuclear Radiations on the Structure and Properties of Metals and Alloys /Vozdeistvie iadennykh izlucheni na strukturu i svoystva metallov i sployov/.  
12 p2114 A69-26469

# TIKHONRAV, M. K.

Basic results of the space decade /Osnovnye itogi kosmicheskogo desiatletia/.  
13 p2336 A69-27358

# TILFORD, C. R.

Specific heats of Cu, GaAs, GaSb, InAs, and InSb from 1 to 30 K.  
01 p0140 A69-11252

# TILFORD, S. G.

The fourth positive system of carbon monoxide observed in absorption at high resolution in the vacuum ultraviolet region.  
09 p1607 A69-22429

# TILININ, G. N.

Distribution of potential in a quasistationary coaxial plasma injector.  
03 p0478 A69-13838

# TILIUK, A. G.

Initial stresses in glass-fiber reinforced plastic rings produced by winding /Nachal'nye napriazheniia v kol'tsakh iz stekloplastika, izgotovlennykh namotkoi/.  
22 p4045 A69-40749

# TILK, E. M.

Electronic device for measurements of limbs photographs /Elektronnaia ustanovka dlia izmerenii fotografii limba/.  
17 p2970 A69-32884

# TILLES, D.

Influx measurements of extraterrestrial material.  
03 p0511 A69-13467

# TILLEY, B. J.

A new look at microwave silicon technology.  
09 p1462 A69-21410

# TILLEY, K. W.

Developments in selection and training.  
24 p4274 A69-43020

# TILLMAN, F. A.

Optimization by integer programming of constrained reliability problems with several modes of failure.  
20 p3504 A69-37069

# TILLMAN, J. D.

The zeroth-order approximation to the current distribution on the elements of circular arrays of tangential dipoles.  
11 p1853 A69-25318

# TILLOTSON, L. C.

A model of a domestic satellite communication system.  
04 p0561 A69-15447

Possible large capacity domestic satellite system.  
09 p1458 A69-22467

# TILLU, A. D.

Some comments on the accuracy of the estimated temperature distribution in the upper atmosphere from the intensity measurements of zenith sky during twilight.  
09 p1487 A69-21653

# TILLY, G. P.

The significance of particle size in sand erosion of small gas turbines.  
16 p2794 A69-32026

Erosion caused by airborne particles.  
24 p4363 A69-42787

# TILMES, R.

Inconveniences with material experienced when extremely thin noble metal alloy wires are used in thermoelements /Werkstoffschwierigkeiten beim Einsatz extrem duenner Draehte aus Edelmetall-Legierungen fuer Thermoelemente/.  
07 p1130 A69-18258

# TIMBAL, J.

Heat tolerance in the case of ventilation failure in a supersonic transport aircraft /Tolerance a la chaleur dans le cas de panne de la climatisation sur avion de transport supersonique/.  
24 p4277 A69-43382

Influence of altitude on human heat exchange /Influence de l'altitude sur les echanges thermiques de l'homme/.  
24 p4267 A69-43384

# TIMCHALK, A.

Estimating hurricane wind speeds from satellite pictures.  
17 p2997 A69-33690

# TIMCHENKO, I. K.

Method of data handling by groups in the pattern recognition and decision making problem /Metod gruppovogo urakhuvaniia argumentiv u zadachi rozpiznavanniia obraziv i priiniattia rishev/.  
08 p1278 A69-20420

The group method of data handling in pattern recognition and decision problems.  
14 p2418 A69-29658

# TIMIN, M. E.

A practical mechanical calculator for spherical trigonometry.  
07 p1135 A69-19207

A manual method for space rendezvous navigation and guidance.  
[AIAA PAPER 68-859] 24 p4348 A69-43243

# TIMLECK, P. L.

Electron densities less than 100 electron cm super 33 in the topside ionosphere.  
20 p3532 A69-37899

# TIMMER, H. G.

An approximate solution for the flow of a fluid through a porous solid.  
09 p1430 A69-21973

# TIMMERHAUS, K. D.

Pyroelectric thermometer for use at low temperatures.  
09 p1493 A69-21423

# TIMMONS, K. P.

U.S. Space Program projections.  
02 p0355 A69-11744

# TIMO, D. P.

Fracture design practices for rotating equipment.  
17 p3060 A69-33561

# TIMOFEEV, I. U. M.

The solution of the thermal sounding problem for the atmosphere using the regularization method.  
02 p0274 A69-11448

Inverse problems of satellite meteorology.  
02 p0277 A69-12778

Feasibility of a regularization method in solving the problems of atmospheric thermal sounding /O vozmozhnostiakh metoda regularizatsii pri reshenii zadachi termicheskogo zondirovaniia atmosfery/.  
09 p1491 A69-22707

Numerical modeling of the transmission functions for narrow spectral intervals of the CO sub 2 15-mu band /Chislennoe modelirovanie funktsii propuskaniia dia uzkiikh spektral'nykh intervalov 15 mkm polosy CO sub 2/.  
15 p2597 A69-30653

Possibilities of the regularization method in solving the problem of atmospheric thermal sounding.  
16 p2782 A69-32487

# TIMOFEEV, M. M.

Strength properties of welded joints in Kh 18N9T steel at very low temperatures.  
22 p3958 A69-41204

# TIMOFEEV, N. N.

Specific features of the development and prolongation of artificial hypobiosis in rats /Osobennosti razvitiia i prolongirovaniia iskusstvennogo gipobiozia u krysov/.  
22 p3877 A69-40278

# TIMOFEEV, V. B.

The Borrmann effect and extinction in holography.  
09 p1494 A69-21492

Smooth retuning and control of the lasing frequency of solid-state lasers /Plavnaia perestroika i kontrol' chastot generatsii tverdotel'nykh lazerv/.  
19 p3331 A69-35865

Characteristics of a hologram in an approximation of paraxial optics /Svoystva gologrammy v priblizhenii paraksial'noi optiki/.  
19 p3308 A69-35868

Holography without a reference beam for three-dimensional holograms.  
23 p1466 A69-41969

# TIMOFEEV, Y. M.

Application of regularization methods in inverse problems of atmospheric optics.  
06 p0919 A69-17616

# TIMOFEEVA, G. M.

Results of observations of the total solar eclipse of May 30, 1965, with the aid of a small-base radio interferometer at the 4.0-cm wavelength /Rezultaty nabliudeniia polnogo solnechnogo zatmeniia 30 maiia 1965 g. s pomoshch'iu radiointerferometra s maloi bazoi na volne 4.0 cm/.  
20 p3616 A69-38304

Radiometer for the 4-cm range with a receiver using tunnel and parametric amplifiers /Radiometr 4-cm diapazona s priemnikom na tunnel'nykh i parametricheskikh usiliteliakh/.  
21 p3724 A69-39076

# TIMOFEEV, L. M.

The statistical approach to modern radomes design.  
07 p1111 A69-19531

# TIMONINA, L. G.

Wear resistance of diffusion-saturated titanium alloys /Izносостойкость titanovykh sployov pri diffuzionnom nasyshtchenii/.  
19 p3344 A69-36153

- IMONOV, V. V.**  
Means of studying the interaction between the ocean and the atmosphere /Puti izucheniia vzaimodeistviia okeana i atmosfery/.  
14 p2442 A69-29838
- IMOSHENKO, J. A.**  
Development of metal-matrix composite blading for gas-turbine engines.  
[AIAA PAPER 68-1037] 20 p3586 A69-37153
- IMOSHENKO, L. F.**  
Determination of the parameters of thin sporadic layers of the E-region of the ionosphere.  
06 p0922 A69-17751  
Determination of the parameters of ionized layers from ionospheric data /Opredelenie parametrov ionizirovannykh sloev po ionosfernym dannym/.  
10 p1686 A69-23912  
Determination of the parameters of electron fluxes from ionospheric data /K opredeleniiu parametrov elektronnykh potokov s pomoshch'iu ionosfernykh dannyykh/.  
10 p1688 A69-23931  
Interaction between an electron flux and the atmosphere /Vzaimodeistvie elektronnoho potoka s atmosferoi/.  
14 p2513 A69-29069
- TIMROT, D. L.**  
Experimental apparatus for the investigation of the thermal conductivity of alkali metal vapors by the dilatometric method.  
02 p0247 A69-11579
- TIMUKHIN, G. I.**  
Numerical solution to the hydrodynamic equations of a plane flow of incompressible viscous fluid /O chislennom reshenii uravnenii gidrodinamiki dlia ploskogo potoka viazkoj neszhimaemoi zhidkosti/.  
19 p3297 A69-35853
- TIMUKHINA, M. M.**  
Simplified formulas for the coefficients of turbulent exchange in fluid flows /Uproshchennye formuly dlia koeffitsientov turbulentnogo obmena v potokakh zhidkosti/.  
11 p1873 A69-25228
- TINAWI, R. A.**  
A study of various idealisations for wing structures and numerical procedures involved using matrix methods.  
12 p2184 A69-26809
- TINBERGEN, J.**  
Auxiliary equipment of an astronomical photometer.  
24 p4318 A69-43805
- TINDO, I. P.**  
Diffuse X-radiation background in space.  
01 p0147 A69-11310  
Preliminary results of investigations of solar X-ray emission by means of the satellite "Kosmos-166."  
07 p1210 A69-19614
- TINER, N. A.**  
Electron microautoradiography and its applications.  
13 p2263 A69-28168  
Stress corrosion susceptibility of titanium alloys in aqueous environment.  
21 p3743 A69-38663  
Corrosion testing of materials in liquid propellant systems.  
21 p3748 A69-39485  
Technical note - The role of impurities in corrosion by fluorine oxidizers.  
21 p3784 A69-39487  
Corrosion studies on forged beryllium.  
21 p3749 A69-39493
- TING, C.-Y.**  
Theoretical study of finite dielectric-coated cylindrical antenna.  
12 p2041 A69-26604
- TING, L.**  
Thin airfoil in nonuniform parallel streams.  
12 p2012 A69-26775  
Diffraction of shock wave by moving thin wing.  
[AIAA PAPER 69-647] 17 p2891 A69-33459
- TING, T. C.**  
Plane waves due to combined compressive and shear stresses in a half space.  
[ASME PAPER 69-APM-12] 18 p3213 A69-34388
- TING, T. C. T.**  
The elastic-plastic boundary in one-dimensional wave propagation.  
04 p0670 A69-14407
- Interaction of shock wave due to combined two shear loadings.  
13 p2368 A69-28346  
On the initial slope of elastic-plastic boundaries in combined longitudinal and torsional wave propagation.  
[ASME PAPER 69-APM-13] 18 p3213 A69-34389  
Wave-front analysis in composite materials.  
[ASME PAPER 69-APMW-11] 24 p4401 A69-43103
- TING, T. W.**  
Elastic-plastic torsion problem. III.  
21 p3832 A69-38427
- TINIakov, G. P.**  
Approximate method of taking into account the effect of real properties of the gas during hypersonic flow past segmental bodies /Priblizhennyi metod ucheta vlianiia real'nosti gaza pri giperzvukovom obtekanii segmental'nykh tel/.  
14 p2391 A69-29620  
Supersonic three-dimensional flow past blunt bodies.  
19 p3242 A69-36783
- TINKHAM, M.**  
Coupled motion of vortices in superposed superconducting films.  
01 p0135 A69-10014
- TINNEY, J. W.**  
Establishing flight worthiness of mishandled electronic equipment.  
15 p2576 A69-30362
- TINSLEY, B. A.**  
Anisotropic galactic emissions at Lyman alpha and nearby wavelengths.  
14 p2516 A69-28952  
Reinterpretation of geocoronal observations with increased high/low altitude hydrogen ratio.  
14 p2440 A69-29130  
Variations of Balmer alpha emission and related hydrogen distributions.  
15 p2700 A69-31437  
Hydrogen and helium in the upper atmosphere.  
21 p3714 A69-38529  
Distribution of redshifts of quasars.  
22 p4024 A69-40580
- TINSLEY, B. M.**  
Distribution of redshifts of quasars.  
22 p4024 A69-40580
- TIPPER, C. F. H.**  
Studies of stabilized low temperature ignition. I - Cyclohexane.  
02 p0304 A69-12314
- TIPPETTS, T. B.**  
Optical study of a fluidic temperature sensor.  
[ASME PAPER 68-WA/FE-29] 05 p0763 A69-16102
- TIPSWORD, R. F.**  
Asymmetry parameters and the temperature dependence of the PQR frequencies of super 127 I in SnI sub 4.  
22 p3986 A69-40726
- TIKSKII, G. A.**  
Decomposition of an axisymmetric body of revolution made of a material of complex chemical composition in a partly ionized airstream /Razrushenie osesimmetrichnogo tela vrashcheniia iz materiala slozhnogo khimicheskogo sostava v potoke chastichno ionizovannogo vozdukh/.  
02 p0191 A69-12580  
Calculation of effective diffusion coefficients in a laminar dissociating multicomponent boundary layer /Vychislenie effektivnykh koeffitsientov diffuzii v laminarnom dissiatsirovannom mnogokomponentnom pogranichnom sloe/.  
12 p2190 A69-25890
- TIRUMALESIA, D.**  
Mixing, ignition, and combustion analysis of air-augmented solid rockets with boron particles.  
[AIAA PAPER 67-481] 24 p4365 A69-43668
- TIRUNARAYANAN, M. A.**  
Free convection heat transfer from vertical isothermal cylinders with transverse curvature effect.  
[ASME PAPER 69-HT-G] 24 p4410 A69-43522
- TISCHER, F. J.**  
Analysis of the multiple-strip H guide.  
22 p3917 A69-41254
- TISCHER, R. G.**  
Some observations on the sodium and potassium interactions in the blue-green alga *Anabaena flos-aquae* A-37.  
23 p4079 A69-41386
- The electro dialysis of *Anabaena flos-aquae* A-37.  
23 p4079 A69-41387
- TISCHER, R. L.**  
Effect of additives on propagation velocity in the hydrogen-chlorine-nitrogen system.  
[WSCI PAPER 69-13] 16 p2831 A69-32353
- TISCHLER, A. O.**  
A commentary on low-cost transportation.  
20 p3618 A69-38117
- TISDALE, P. R.**  
A rapidly converging triangular plate element.  
04 p0677 A69-14742
- TISHCHENKO, A. G.**  
Dynamics of formants in the spectrum of audible speech as an objective indicator in the discrimination of positive and negative emotions /Dinamika formant v spektre slyshimoi rechi kak ob'ektivnyi pokazatel' razlicheniia polozhitel'nykh i otritsatel'nykh emotsii/.  
05 p0709 A69-16518  
Frequency ranges of a wideband transistor amplifier /O chastotnykh diapazonakh shirokopolosnogo tranzistornogo usilitelia/.  
15 p2573 A69-30113  
Dynamics of formants in the spectrum of speech as objective indicator of differences between positive and negative emotions.  
18 p3096 A69-34737
- TISHIN, A. P.**  
Nonequilibrium two-phase flow in a Laval nozzle with the coagulation of particles of the polydispersed condensate /Neravnovesnoe dvukhfaznoe techenie v sople Lavalia s koaguliatsiei chastits polidispersnogo kondensata/.  
14 p2391 A69-29621
- TISHLER, S. W.**  
A new octahedrite from South Africa.  
03 p0507 A69-13097
- TISHLER, V. A.**  
Effect of prolonged limitation of muscle activity on cardiac dynamics.  
02 p0198 A69-11515  
Arterial tonus in relation to restriction of muscular activity in man.  
10 p1647 A69-23586
- TISNEK, N. I.**  
Statistical method of monitoring parameter homogeneity in semiconductor materials /Statisticheskii metod kontrolya odnorodnosti parametrov poluprovodnikovykh materialov/.  
04 p0642 A69-14856  
Statistical method of checking the homogeneity of the parameters of semiconductor materials.  
15 p2667 A69-30248
- TITARENKO, I. G.**  
Stress concentration near an elliptical hole in a spherical shell /O koncentratsii napriazhenii okolo ellipticheskogo otverstia v sfericheskoi obolochke/.  
01 p0165 A69-10089
- TITCHMARSH, J. M.**  
A new method for investigating the electric field regions of p-n junctions.  
22 p3994 A69-40752
- TITHERIDGE, J. E.**  
Calculations of diurnal changes in the exosphere.  
01 p0063 A69-10422  
The maintenance of the night ionosphere.  
01 p0063 A69-10423  
Single-polynomial analysis of ionograms.  
07 p1125 A69-18915  
A regular disturbance in the topside ionosphere.  
09 p1489 A69-21703  
Irregular regions in the antarctic ionosphere.  
09 p1490 A69-21716  
Horizontal gradients in the polar ionosphere.  
16 p2774 A69-31989  
The distribution of irregularities in the Antarctic ionosphere. II - Diurnal, magnetic and solar cycle effects.  
18 p3125 A69-34249  
The electron content of the low altitude ionosphere.  
24 p4367 A69-43010
- TITKOV, A. S.**  
Experimental study of the electron component of the thermal flux in the arc mode of operation of a thermoelectric converter /Eksperimental'noe issledovanie elektronnoi sostavliushchei teplovogo potoka v dugovom rezhime TEPE/.  
12 p2017 A69-26544



- TITLI, A.**  
Necessity for an exhaustive criteriologic in the simulation of complex piloting /Necessite d'une criteriologie exhaustive dans la simulation des pilotages complexes/.  
12 p0205 A69-27083
- TITOV, A. V.**  
Turbulent heating of a plasma in a toroidal system with current /Turbulentnyi nagrev plazmy v toroidal'noy sisteme s tokom/.  
11 p1935 A69-25752  
A method of measuring the temporal position of a pulse signal on a noise background /Ob odnom metode izmereniia vremennogo polozheniia impul'snogo signala na fone pomekh/.  
19 p3278 A69-36596  
Coupled Fabry-Perot interferometers in the microwave spectral range /Sviazannye interferometry Fabri-Pero v mikrovolnovoi oblasti spektra/.  
22 p3947 A69-40800
- TITOV, V. V.**  
Conductivity and carrier density distributions in silicon doped by ion bombardment.  
04 p0643 A69-15254
- TITTEL, H. O.**  
Simple determination of electron densities in plasmas submitted to magnetic fields.  
15 p2657 A69-30027
- TITLAER, C.**  
Crater statistics near the Flamsteed P ring.  
21 p3800 A69-38675  
Crater overlap on the near-side of the moon.  
21 p3800 A69-38676
- TITUS, H. A.**  
Adaptive tracking of maneuvering targets.  
11 p1861 A69-25455  
A digital integrated circuit radiosonde system.  
17 p2937 A69-33675
- TITUS, R. R.**  
A new criterion for mission selection - Abort capability. [AAS PAPER 68-139]  
21 p3805 A69-39209  
Manned exploration of Mars and Venus using chemical propulsion. [AAS PAPER 69-492]  
24 p4380 A69-42839
- TIUKIN, V. N.**  
Radio radiation intensity at 1.68 MHz as measured by "Kosmos-142".  
01 p0158 A69-11322
- TIULPANOV, R. S.**  
Burn-out calculations for atomized hydrocarbon fuel in gas turbine combustion chambers.  
08 p1420 A69-19999  
Experimental study of the stability of fuel droplet combustion in a turbulent flow /Eksperimental'noe issledovanie ustoiichivosti goreniia kapel' topliva v turbulentnom potoke/.  
08 p1420 A69-20345
- TIUNEVA, I. M.**  
Linearity range of the mechanical properties of reinforced plastics /Oblast' lineinosti mekhanicheskikh svoistv armirovannykh plastikov/.  
18 p3163 A69-35364
- TIUNOV, I. U. A.**  
Q switching of a laser based on the triplet-triplet transitions of organic molecules.  
09 p1520 A69-22682  
Stability of lead oxide and cryolite dielectric coatings to laser radiation /Ustoiichivost' dielektricheskikh pokrytii iz okisi svintsa i kriolita k izlucheniui OKG/.  
19 p3334 A69-35886
- TIUNOVA, T. I.**  
Time dependence of the ruby laser spectrum.  
15 p2633 A69-30725
- TIUPTIA, V. I.**  
Propagation of waves in an infinite viscoelastic medium with allowance for thermomechanical coupling /Rasprostraneniye voln v neogranichennoi viazkoprugoi srede s uchedom termomekhanicheskogo sopriazheniia/.  
01 p0164 A69-10076
- TIUPTSOV, A. D.**  
Hydrostatics in weak force fields /Gidrostatika v slabnykh silovykh poliakhs/.  
03 p0417 A69-13809
- TIURI, M.**  
Space research in Finland in 1968.  
15 p2723 A69-31426
- TIURIN, E. L.**  
Certain problems of the generation of dense plasma jets in a flowing high-frequency flame discharge /Nekotorye voprosy generatsii plotnykh plazmennykh strui v protochnom vysokochastotnom fabel'nom razriade/.  
12 p2140 A69-27127
- TIURMINA, L. O.**  
Analytical model of the geomagnetic field on the basis of Cosmos 49 data /Analiticheskaia model' geomagnitnogo polia po dannym ISZ "Kosmos-49"/.  
02 p0240 A69-11698  
Test of the use of satellite data for the study of secular variations /Opyt ispol'zovaniia dannykh ISZ dlia izucheniia vekovykh variatsii/.  
09 p1485 A69-21534  
Analytical model of the geomagnetic field according to Cosmos 49 data.  
13 p2258 A69-28729  
An experiment in the use of satellite data for the study of secular variations.  
16 p2783 A69-32529
- TIUTIN, L. A.**  
Effect of hyperoxia on the thoracic organs of albino rats.  
10 p1646 A69-23577
- TIUTIN, L. R.**  
Effect of cystamin and of the shielding of certain parts of the body on the functional state of the gastrointestinal tract of irradiated rats /Vliianie tsistamina i ekranirovaniia nekotorykh oblastei tela na funktsional'noe sostoiianie zheludochno-kishechnogo trakta u obлучennykh krysi/.  
22 p3877 A69-40285
- TIWARI, G. R.**  
Effect of couple-stresses on the distribution of stresses along a crack.  
10 p1800 A69-23242
- TIWARI, S. N.**  
The large path length limit for infrared gaseous radiation.  
05 p0844 A69-15579  
The effect of surface emissivity upon infrared gaseous radiation.  
06 p1033 A69-17559  
The interaction of thermal conduction and infrared gaseous radiation.  
09 p1621 A69-21442
- TIZUL, A. IA.**  
Changes in functions of the nervous system and of some analyzers during the combined action of hypokinesia and radial accelerations.  
02 p0197 A69-11496
- TKACHENKO, A. I.**  
Kinematics of an elastic object /O kinematike uprugogo ob'ekta/.  
04 p0668 A69-14271
- TKACHENKO, B. I.**  
Changes in the lumen of coronary vessels under oligemic hypotension.  
23 p4084 A69-41470
- TKACHENKO, E. V.**  
Linear pyrolysis of polymethyl methacrylate /Lineinyi piroliz polimetilmetakrilata/.  
17 p3017 A69-33132
- TKACHENKO, I. U. G.**  
Methods of investigating regularities of external friction of refractory materials at high temperature in vacuum.  
21 p3690 A69-39154
- TKACHENKO, K. A.**  
Wave method of synthesizing single-loop directional stripline filters /Volnovoi metod sinteza odnopetlevykh napravlennykh fil'trov na poloskovykh liniiakh/.  
19 p3284 A69-36570
- TKACHENKO, Z. IA.**  
Radiation damage in intramural plexes /Radiatsionnye povrezhdeniia intramural'nykh spletenii/.  
21 p3659 A69-39063
- TKACHEV, G. N.**  
Measurement of the parameters of the ionosphere by the method of "incoherent" scattering of radio waves /K izmereniiam parametrov ionosfery metodom "nekoherentnogo" rasseianiia radiovoln/.  
01 p0065 A69-10575  
Ionospheric measurements by the method of incoherent radio wave scattering /K ionosfernym izmereniiam metodom nekoherentnogo rasseianiia radiovoln/.  
10 p1686 A69-23910
- Measurements of the parameters of the ionosphere by the "incoherent" radiowave scattering method.  
15 p2597 A69-30745
- TKACHEVA, G. D.**  
Numerical solution for a nonstationary problem of the motion of a rigid obstacle in a compressible fluid /Chislennoe reshenie odnoi nestatsionarnoi zadachi o dvizhenii zhestkoi pregrady v szhimaemoi zhidkosti/.  
14 p2430 A69-29480
- TKACHUK, A. A.**  
Transmitting and antenna systems of a meteor station with a high effective sensitivity /Peredaushchee i antennoe ustroistva meteornoi stantsii vysokoi effektivnoi chuvstvitel'nosti/.  
17 p2939 A69-33902
- TKACHUK, A. D.**  
Effect of bivalent impurities on the electrical conductivity of CsI single crystals /Vliianie dvukhvalentnykh primesei na elektroprovodnost' monokristallov CsI/.  
16 p2824 A69-31573
- TKALENKO, E. N.**  
Lattice heat conductivity of Mg sub 2 Si-Mg sub 2 Sn, Mg sub 2 Ge-Mg sub 2 Sn, and Mg sub 2 Si-Mg sub 2 Ge solid solutions /Reshetochnaia teploprovodnost' tverdykh rastvorov Mg sub 2 Si-Mg sub 2 Sn, Mg sub 2 Ge-Mg sub 2 Si i Mg sub 2 Si-Mg sub 2 Ge/.  
16 p2824 A69-31567
- TKALENKO, R. A.**  
Development of a linear theory of equilibrium and nonequilibrium flows /K postroeniiu lineinoi teorii neravnovesnykh i ravnovesnykh techenii/.  
06 p0909 A69-17327
- TKALICH, V. S.**  
On linearized theory of a profile in subsonic flow.  
19 p3241 A69-36782
- TKATSKAIA, O. S.**  
Aerodynamics of a turbulent twisted jet in a slipstream /Aerodinamika turbulentnoi zakruchennoi strui v sputnom potoke/.  
21 p3645 A69-39848
- TKESHELASHVILI, G. I.**  
Low voltage Knudsen arc in a cesium-argon mixture.  
06 p0963 A69-16920  
Low-voltage arc in the cesium-barium mixture.  
14 p2403 A69-29247  
Low-voltage Knudsen arc in the cesium-inert gas mixture.  
14 p2403 A69-29248
- TKHAN, D. B.**  
Investigation of certain electrical characteristics of a plasma in a high-frequency field /Issledovanie nekotorykh elektricheskikh kharakteristik plazmy v pole vysokoi chastoty/.  
10 p1741 A69-23946
- TLAMICHA, A.**  
The spectrum of the slowly varying component of solar radio emission at wavelengths of 3.3 mm-21 cm.  
03 p0516 A69-14045  
The radio observations during the partial solar eclipse on May 20, 1966.  
22 p4010 A69-39986
- TOADER, E. I.**  
The positive column in a longitudinal magnetic field.  
08 p1361 A69-20212
- TOANING-NG**  
Laser-induced phonon spectrum of an oriented crystal of thulium gallium garnet.  
02 p0256 A69-11925
- TOBA, K.**  
Kinetic theory of sound propagation in a rarefied gas.  
03 p0466 A69-13156
- TOBAILEM, J.**  
Reconstruction of the Saint-Severin meteorite in space /Reconstitution de la meteorite Saint-Severin dans l'espace/.  
19 p3416 A69-36128
- TOBAK, M.**  
Aerodynamics of bodies of revolution in coning motion. [AIAA PAPER 68-20]  
04 p0542 A69-14714  
Hypothesis for the origin of cross-hatching. [AIAA PAPER 69-11]  
06 p0915 A69-18213
- TOBBACK, P.**  
Carbohydrate components of Paleozoic plants.  
21 p3669 A69-39333
- TOBEY, W. H.**  
EVA maneuvering unit comparison. [AAS PAPER 69-516]  
24 p4272 A69-42850

- TOBIAS, C. A.**  
Effect on a flour beetle of irradiation during space flight. 06 p0876 A69-18177
- TOBIAS, I.**  
The frequency stabilization of gas lasers. 05 p0773 A69-16230  
Semiclassical dispersion theory of lasers. 08 p1326 A69-20571
- TOBIAS, J. V.**  
Cockpit noise intensity - Fifteen single-engine light aircraft. 23 p4102 A69-41676  
Noise in light twin-engine aircraft. 24 p4252 A69-42902
- TOBIAS, R. F.**  
Anodic and cathodic behavior of maraging steel in acid solution. 13 p2282 A69-28188
- TOBIN, M. C.**  
Approximate expressions for the potential distribution in junction semiconductor devices. 03 p0408 A69-14107
- TOCHITSKII, E. I.**  
Structure of Thin Metal Films /Struktura Tonkikh Metallicheskh Plenok/. 01 p0140 A69-11106
- TOCQUEC, Y.**  
Matching a pair of reflectors to a primary source /Adaptation d'un couple de reflecteurs a une source primaire/. 10 p1664 A69-23799
- TODA, K.**  
A discussion of the effects of sound on jets and fluidic devices. [ASME PAPER 69-VIBR-3] 10 p1640 A69-24161
- TODA, N. F.**  
Region of Kalman filter convergence for several autonomous navigation modes. [AIAA PAPER 67-623] 16 p2809 A69-31875
- TODARO, C.**  
Prospects in the representation of meteorological fields by means of polynomials and empirical orthogonal functions /Prospettive nella rappresentazione di campi meteorologici mediante polinomi e funzioni ortogonali empiriche/. 13 p2295 A69-28651
- TODD, P.**  
Responses of cultured Chinese hamster cells to ultraviolet light of different wavelengths. 07 p1068 A69-19492  
Post-irradiation properties of cultured Chinese hamster cells exposed to ultraviolet light. 19 p3257 A69-35975
- TODERO, F.**  
Upper bounds for the variation of sampled signals. 11 p1834 A69-24551
- TODISCO, A.**  
Experimental investigation of two shock wave boundary layer interaction configurations. [AIAA PAPER 69-8] 06 p0915 A69-18172
- TOEBES, G. H.**  
The unsteady flow and wake near an oscillating cylinder. [ASME PAPER 68-WA/FE-23] 05 p0749 A69-16099
- TOEKES, L.**  
Mass spectrometry in structural and stereochemical problems. CLXI - Elucidation of the course of the characteristic ring D fragmentation of steroids. 07 p1069 A69-19497
- TOELKE, F.**  
Applied Function Theory. Volume 6 - Tables in the Field of Theta-Functions and Elliptical Functions with 120 Illustrative Examples. Part I /Praktische Funktionenlehre. Volume 6 - Tafeln aus dem Gebiet der Theta-Funktionen und der elliptischen Funktionen mit 120 erläuternden Beispielen. Part II/. 14 p2471 A69-29774
- TOGGWEILER, U.**  
Novel fire retardant polyesters based on bromine. 08 p1340 A69-20504
- TOHMATSU, T.**  
Rocket observations of visible and ultraviolet dayglow features. 12 p2076 A69-27108
- Hydrogen and helium ultraviolet glow, its origins and aeronomical significance. 15 p2605 A69-31436
- Solar radiation detector system for meso-turbosphere ozone density measurement. 20 p3543 A69-37802
- Rocket observation of the ionosphere in twilight conditions. 21 p3702 A69-38355
- TOIMETOV, B. N.**  
Efficiency of neodymium-activated glass laser as a function of active and inactive absorption by the glass /Koeffitsient poleznogo deistviia OKG na stekle, aktivirovannom neodimom, v zavisimosti ot aktivnogo i neaktivnogo pogloshcheniia stekla/. 22 p3964 A69-40797
- TOKACZ, V.**  
Probability of growth /pG/ of viable microorganisms in Martian environments. 01 p0018 A69-11091
- TOKAREV, I. U.**  
Angular variations of the spectral index of nonthermal cosmic radio emission /Ob uglovyykh variatsiakh spectral'nogo indeksa neteplovogo kosmicheskogo radioizlucheniia/. 10 p1784 A69-23940  
Multiple "Compton" energy losses of fast electrons and their possible effects in various space objects /Mnogokratnye "komptonovskie" poteri energii bystrykh elektronov i ikh vozmozhnaia rol v razlichnykh kosmicheskikh ob'ektakh/. 15 p2676 A69-30953
- TOKAREV, V. A.**  
Application of ultrasonic spectrometry to thickness measurement. 18 p3137 A69-35110
- TOKAREV, V. I.**  
Investigation of a statistical model of turbulent flow /Issledovanie statisticheskoi modeli turbulentnykh techenii/. 03 p0413 A69-12949  
Weak coupling approximation in turbulence theory. 21 p3696 A69-39086
- TOKARSKI, J. M. J.**  
Reconstruction from a nonlinearly recorded hologram. 23 p4165 A69-41636
- TOKATLY, Y. L.**  
Use of satellite cloud pictures in routine meteorological work. [UN PAPER 68-95571] 01 p0109 A69-10482
- TOKIOKA, T.**  
Axially symmetric meridional motions in the baroclinic circular vortex - A numerical experiment. 23 p4153 A69-42346
- TOKSOEZ, M. N.**  
On the density distribution in the moon. 08 p1393 A69-20579
- TOKUDA, N.**  
Dynamics of moving gas bubbles in injection cooling. [ASME PAPER 67-WA/HT-30] 02 p0351 A69-12201
- TOKUMARU, H.**  
On the noninteracting control of linear time-variant multivariable systems. 15 p2582 A69-30024
- TOKUTOME, S.**  
An experimental study on the liquid conditioning jackets. 06 p0883 A69-18027
- TOLANSKY, S.**  
Interferometric examination of tektites. 12 p2173 A69-27175
- TOLIVER, W. H., SR.**  
Liquid crystals. 06 p0885 A69-17842
- TOLK, N.**  
Electron bombardment ion source for low energy beams. 03 p0428 A69-13106  
Spectrum of the two-photon emission from the metastable state of singly ionized helium. 23 p4220 A69-42378
- TOLKACH, P. N.**  
Determination of the temperature coefficient of box-type AMGK dynodes by the single-electron method /Opredelenie temperaturnogo koeffitsienta AMGK-korobchatykh dinodov odnoelektronnym metodom/. 11 p1846 A69-24626
- TOLKACHEV, A. V.**  
Use of a laser with a Fabry-Perot interferometer for measuring the particle velocity in two-phase turbulent flows /Primenenie OKG s interferometrom Fabri-Pero dlia izmereniia skorosti chastits v dvukhfaznykh turbulentnykh potokakh/. 06 p0933 A69-17252
- TOLKACHEV, V. M.**  
On the transfer of loads from reinforcing ribs to a cylindrical shell. 19 p3443 A69-36792
- TOLLE, G. C.**  
An analytic solution for whirl in a finite journal bearing with a continuous lubricating film. [ASME PAPER 69-VIBR-55] 10 p1700 A69-24147
- TOLLE, H.**  
Flight and capture orbits, taking special account of the orbit calculations for Jupiter and solar probes /Flucht- und Einfangbahnen mit besonderer Beruecksichtigung der Bahnrechnungen fuer Jupiter- und Sonnensonden/. 04 p0657 A69-14826  
Theoretical considerations and work in the development of a reentry flight-test vehicle /Ueberlegungen und Arbeiten zur Entwicklung eines Wiedereintrittsflugversuchskoerpers/. 16 p2867 A69-31934
- TOLMACH, I. M.**  
Empirical approximation of the hydraulic drag coefficient in a traveling magnetic field /Ob empiricheskoi approksimatsii koeffitsienta gidravlicheskogo soprotivleniia v begushchem magnitnom pole/. 07 p1192 A69-19017  
Application of a Montardi circuit with sectioned electrodes in MHD systems with an isotropically conducting working body /Ob ispol'zovanii skhemy Montardi s sektiionirovannymi elektrodami dlia MGD-ustroystv s izotropno provodiashchim rabochim telom/. 07 p1059 A69-19031  
Investigation of a liquid-metal induction MHD generator /Issledovanie zhidkometallichesko MGD-generatora induktsionnogo tipa/. 13 p2208 A69-27513  
Basic relationships of an asynchronous MHD generator in an autonomous mode of operation /Osnovnye sootnosheniia asinkhronnogo MGD-generatora v avtonomnom rezhime raboty/. 14 p2405 A69-29457
- TOLMACHEV, A. I.**  
Study of the effectiveness of various types of polymethine dyes used in passive Q-switches of neodymium lasers /Issledovanie effektivnosti razlichnykh tipov polimetinovykh krasitelei, primeniayemykh v passivnykh zatvorakh neodimovykh OKG/. 17 p2983 A69-33968
- TOLMACHEVA, A. V.**  
Certain features of the anomalous radio-wave absorption in the ionosphere in the polar aurora region /O nekotorykh osobennostiakh anomal'nogo pogloshcheniia radiovoln v ionosfere v zone poliarnykh siiani/. 02 p0207 A69-11688  
Some characteristics of anomalous radio wave absorption in the ionosphere in the auroral zone. 13 p2224 A69-28719
- TOLMACHEVA, N. S.**  
Methods for determining the thickness of thin films applied to a dissimilar material. 15 p2607 A69-30239
- TOLOCHKOV, I. U.**  
Clearing and blocking control over frequently over-adjusted automatic equipment in precision machine- and device-construction /Ochishchaisushchii i blokiriushchii kontrol' na chastoprenalazhivaemom avtomaticheskom oborudovanii v tochnom mashino-i priborostroenii/. 06 p0931 A69-17692
- TOLOK, V. T.**  
Motion and polarization interaction of a plasma stream in a magnetic multipole. 08 p1370 A69-21015  
An investigation of the possibility of eliminating impurities in hydrogen plasmas by injection across an octupole magnetic field. 08 p1370 A69-21016  
High-Frequency Properties of Plasma /Vysokochastotnye svoystva plazmy/. 09 p1548 A69-22015



- Interaction between two plasmoids in the magnetic field of a divertor /Vzaemodiia dvokh plazmovikh zgustkiv u magnitnomu poli divortora/.  
12 p2133 A69-25976
- Interaction between plasma fluxes and a plasma cylinder in the magnetic field of a divertor /Vzaemodiia plazmovikh potokiv z plazmovim tsilindrom v magnitnomu poli divortora/.  
12 p2134 A69-25977
- Plasma capture in the divertor aperture in the case of asynchronous injection of two plasma streams /Zakhopleniia plazmy v aperturu divortora pri asinkhronnoi inzhetskii dvokh plazmovikh potokiv/.  
21 p3776 A69-38585
- Investigation of the possibility of eliminating impurities from a hydrogen plasmoid by injecting it across an octupole magnetic field /Issledovanie vozmozhnosti oshchistki ot primesei vodorodnogo plazmennogo sgustka pri inzhetskii poperek oktopol'nogo magnitnogo polia/.  
24 p4358 A69-43474
- TOLOKONNIKOV, L. A.**  
Finite plane deformations of a compressible material.  
06 p1021 A69-17175
- Axissymmetrical deformations of materials with different moduli /Osesimmetrichnye deformatsii raznomodul'nykh materialov/.  
12 p2178 A69-26003
- Formulation of the yield condition and the associated yield law of an anisotropic body /O formulirovke usloviia tekuchesti i assotsirovannogo zakona techeniia anizotropnogo tela/.  
22 p3934 A69-41169
- TOLOKONNIKOV, L. O.**  
A new version of the theory of finite plane deformations /Novii variant teorii skinchennikh ploskikh deformatsii/.  
12 p2181 A69-26613
- TOLPEGIN, B. D.**  
Analysis of the precision of compressor blade positioning in devices of various types /Analiz tochnosti ustanovki lopatok kompressora v prisposobleniakh razlichnykh tipov/.  
21 p3731 A69-38880
- TOLFIGO, K. B.**  
Theory of multiple light scattering.  
14 p2487 A69-29663
- TOLPYGO, K. B.**  
Spatial dispersion of the high-frequency dielectric constant in a semiconductor /Prostranstvennaia dispersiia vysokochastotnoi dielektricheskoi postoiannoii v poluprovodnike/.  
12 p2145 A69-26723
- Spatial dispersion of the high-frequency dielectric constant of a semiconductor.  
21 p3781 A69-39136
- TOLSTIKOV, E. E.**  
Experimental identification of pressure formations from the statistical structure of radiation-temperature fields obtained from earth satellites /Opyt raspoznavaniia baricheskikh obrazovanii po statisticheskoi strukture polei radiatsionnykh temperatur, poluchennykh sLSZ/.  
13 p2293 A69-27842
- TOLSTOSHEEV, M. N.**  
Calculation of the noise characteristics of jet airliners.  
09 p1435 A69-22637
- TOLSTOY, I.**  
Tracking jet stream winds from ground level pressure signals.  
12 p2125 A69-26015
- A model for atmospheric pressure fluctuations in the mesoscale range.  
12 p2126 A69-26016
- TOLUTIS, R. B.**  
Dimensional resonances of helicon waves in an n-InSb waveguide /Razmernye rezonansy gelikonnykh voln v n-InSb volnovode/.  
19 p3383 A69-36479
- TOLUTIS, V. B.**  
Peculiarities of the recrystallization process of the In sub 3 Te sub 4 phase in thin In-Te films consisting of a mixture of In sub 2 Te sub 3 and In sub 3 Te sub 4 phases /Osobennosti protsessa rekristallizatsii fazy In sub 3 Te sub 4 v tonkikh sloiakh In-Te, sostoiashchikh iz smesi faz In sub 2 Te sub 3 i In sub 3 Te sub 4/.  
24 p4361 A69-42993
- Investigation of the process of formation of the In sub 3 Te sub 4 phase in a polyphase layer of the In-Te system /Issledovanie protsessa obrazovaniia fazy In sub 3 Te sub 4 v polifaznom sloe sistemy In-Te/.  
24 p4361 A69-42994
- Results of a microanalytical and X-ray investigation of macroblock thin films of the In sub 3 Te sub 4 phase /Rezultaty mikroanaliticheskogo i rentgenograficheskogo issledovaniia tonkikh krupnoblochnykh plenok fazy In sub 3 Te sub 4/.  
24 p4361 A69-42995
- TOMA, V.**  
Experimental investigation of the flow about a curved lateral jet /Etude experimentale de l'ecoulement autour d'un jet transversal incurve/.  
05 p0746 A69-16017
- TOMAN, M. P.**  
Resonance characteristics of klystron cavities.  
05 p0729 A69-15978
- TOMASCH, J.**  
Numerical capacities of cerebellar cell and fiber systems.  
23 p4084 A69-41467
- TOMASEVICH, O. F.**  
Spatial dispersion of the high-frequency dielectric constant in a semiconductor /Prostranstvennaia dispersiia vysokochastotnoi dielektricheskoi postoiannoii v poluprovodnike/.  
12 p2145 A69-26723
- Spatial dispersion of the high-frequency dielectric constant of a semiconductor.  
21 p3781 A69-39136
- TOMASHEFSKI, J. F.**  
Pulmonary function during zero-gravity maneuvers.  
17 p2909 A69-33181
- Pulmonary function during zero-gravity maneuvers.  
23 p4089 A69-41825
- TOMASHEVSKII, V. T.**  
Experimental determination of the modulus of interlaminar slip during creep of a fiberglass-reinforced plastic produced by winding /Eksperimental'noe opredelenie modulia mezhdusloinogo sdviga pri polzuchesti stekloplastika, izgotovlennoho namotkoi/.  
18 p3163 A69-35365
- TOMASSETTI, N. R.**  
Steam ingestion by aircraft gas turbine engines. II.  
01 p0143 A69-11062
- TOMASSIAN, A. D.**  
Evaluation of the CRAND source for 10- to 50-Mev trapped protons.  
22 p4005 A69-40512
- TOMBACK, S.**  
Digital time-base error compensator for wideband telemetry recorder/reproducers.  
23 p4137 A69-41775
- TOMCHUK, P. M.**  
Effect of electric field and energy dispersion law on plasma oscillations in semiconductors.  
04 p0642 A69-14554
- Anisotropic scattering of current carriers in semiconductors.  
14 p2508 A69-29667
- Propagation of electromagnetic waves in a plate-like semiconductor at nonstandard dispersion law of carrier energy.  
22 p3994 A69-40751
- TOMCZAK, P.**  
Electrodialytic regeneration of alkaline electrolytes in fuel cells.  
08 p1260 A69-21043
- Electrodialytic regeneration of alkaline electrolytes in fuel cells.  
16 p2738 A69-32414
- TOMILIN, M. G.**  
Design trends in lens shutters.  
12 p2094 A69-26601
- TOMILINA, L. G.**  
Effect of lobeline on oxygen pressure in the region of the giantocellular nucleus of the medulla oblongata of dogs /Vpliv lobelinu na napruzheniia kisniu v oblasti gigantoklittinogo iadra dovsgastogo mozku sobak/.  
22 p3888 A69-41273
- TOMILOVA, A. A.**  
Determination of spacecraft orientation from stellar photographs /Opredeleniie orientatsii kosmicheskikh apparatov po snimkam zvezd/.  
13 p2296 A69-27696
- TOMIN, V. I.**  
Emission losses in a laser with an inhomogeneous active rod /Poteri izlucheniia v OKG s neodnorodnym aktivnym sterzhnem/.  
11 p1926 A69-24603
- TOMINAGA, S.**  
The flash spectrum observed at the total eclipse of February 5, 1962.  
24 p4388 A69-43636
- TOMITA, B.**  
A new running test facility for the study of flight dynamics.  
17 p2944 A69-32851
- TOMITA, K.**  
Occultation of BD -17 deg 4388 by Neptune on 7 April 1968. I - Observations and the determination of a preliminary value for the radius of Neptune.  
06 p1007 A69-17693
- TOMIYA, T.**  
Guided-wave propagation through magnetoelectric media.  
14 p2416 A69-29540
- TOMIYASU, K.**  
17.5 ft-long multiconical taper for TE sub 01 mode in 29.7 in-diameter waveguide at X band.  
09 p1468 A69-22604
- TOMKINS, B.**  
Fatigue crack propagation - An analysis.  
02 p0340 A69-12025
- The effect of material stress-strain properties on fatigue failure.  
10 p1795 A69-23059
- Low endurance fatigue in metals and polymers. I, II, III.  
18 p3155 A69-34633
- TOMLIN, G. L., JR.**  
Fault isolation by parameter identification.  
11 p1865 A69-25077
- TOMLINSON, R. L.**  
Production neutron radiography facility for the routine NDT inspection of special aerospace components. [AGN-TP-229]  
10 p1699 A69-23051
- TOMLINSON, W. J.**  
Frequency stabilization of a gas laser.  
08 p1327 A69-21090
- Anisotropy effects in a Zeeman laser.  
16 p2798 A69-32607
- TOMLINSON, W. J., III**  
The water-vapor laser.  
12 p2106 A69-26325
- TOMOV, I. V.**  
Experimental verification of the concept of equivalent pressure in a hot mercury arc.  
03 p0478 A69-13843
- TOMOVIC, R.**  
On man-machine control.  
23 p4112 A69-42443
- TOMOZOVOV, V. M.**  
Physical effects of close encounters of galaxies /O fizicheskikh effektakh tesnykh sblizhenii galaktik/.  
14 p2521 A69-29461
- TOMPA, A. S.**  
Low-temperature grinding technique for infrared analysis of propellants and binders in potassium bromide disks.  
01 p0082 A69-10892
- TOMPKINS, J. C.**  
Turbulent diffusion in a blast wave. [AIAA PAPER 69-672]  
17 p2953 A69-33439
- TON, W. H.**  
Optimal visual characteristics for large screen displays.  
21 p3662 A69-38330
- TONAPETIAN, S. G.**  
Calibration of a dE/dx-counter by cosmic ray muons /Kalibrovka dE/dx-schetchika miunonami kosmicheskogo izlucheniia/.  
21 p3724 A69-39075
- TOND, A.**  
On self-excited vibrations of rotors supported in gas bearings.  
16 p2875 A69-32250
- TONEEV, V. D.**  
Contribution to the calculation of inelastic interactions of cosmic nuclei.  
13 p2330 A69-28370
- TONG, P.**  
Exact solution of certain problems by finite-element method.  
04 p0676 A69-14741
- An assumed stress hybrid finite element method for an incompressible and near-incompressible material.  
13 p2368 A69-28348

- A variational principle and the convergence of a finite-element method based on assumed stress distribution.  
13 p2368 A69-28349  
Basis of finite element methods for solid continua.  
15 p2705 A69-30429
- TONI, J. E. A.**  
Linear sweep studies of the oxygen electrode in nonaqueous media - Kinetics studies on smooth platinum electrodes.  
[ECS PAPER 7] 08 p1268 A69-20361
- TONINI, D. E.**  
Flight testing and evaluation of airborne multisensor display systems.  
[AIAA PAPER 69-317] 09 p1500 A69-22387
- TOKIN, A.**  
Dielectric radome designs for two frequency operation.  
07 p1110 A69-19523
- TONKOV, E. L.**  
Existence of solutions for ordinary nonlinear differential equations with linear boundary conditions /O sushchestvovaniu reshenii nelineynykh obychnykh differentsial'nykh uravnenii s lineinymi kraevymi usloviyami/.  
04 p0621 A69-14416
- TONNA, G.**  
Study of the scattering of a laser beam in artificially produced fog /Studio dello scattering di un fascio laser in nebbia prodotta artificialmente/.  
24 p4328 A69-43503  
Visibility and polar conductivity in fog /Visibilita e conducibilita polare in nebbia/.  
24 p4347 A69-43506
- TONNER, R. C.**  
Beam-lead Schottky-barrier diodes for low-noise integrated microwave mixers.  
02 p0222 A69-12474
- TONON, G.**  
Inertial magneto confinement of a plasma produced by the interaction of laser radiation with a solid deuterium granule /Confinement magneto inertiell d'un plasma cree par l'interaction du rayonnement laser avec un granule de deuterium solide/.  
05 p0798 A69-15585  
Evaluation of a magnetically confined laser created plasma.  
09 p1545 A69-21493
- TONTI, E.**  
Variational formulation of nonlinear differential equations. I.  
23 p4181 A69-41723
- TONWAR, S. C.**  
Studies in extensive air showers at Ootacamund.  
06 p0990 A69-17299  
Calculation of some characteristics of extensive air showers using different models of high energy nuclear interactions.  
06 p0990 A69-17301
- TOOLE, J. M.**  
Special Semiconductor Devices.  
09 p1462 A69-21638
- TOOLIN, R. B.**  
Sun oriented atmospheric optics measurements using the high altitude balloon.  
15 p2615 A69-31288
- TOOMRE, A.**  
Dynamics of the bending of the Galaxy.  
10 p1786 A69-24110  
Some remarks on polar wandering.  
20 p3535 A69-38192
- TOONE, B.**  
A review of aero engine smoke emission.  
09 p1573 A69-22622
- TOONG, T. Y.**  
Electromagnetic effect on flows behind gaseous detonations.  
[AIAA PAPER 69-44] 06 p0970 A69-18084  
Electromagnetic effect on flow behind gaseous detonations.  
20 p3514 A69-37190
- TOOPER, R. F.**  
Adiabatic fluid spheres in general relativity. II - Massive configurations of ideal gas and radiation.  
09 p1605 A69-22416  
Chebyshev polynomial expansion of Bose-Einstein functions of orders 1 to 10.  
24 p4341 A69-43231
- TOOR, A.**  
A rocket borne scintillation spectrometer for observing cosmic X rays.  
14 p2449 A69-29566
- TOOR, J. S.**  
Radiant heat transfer between simply arranged surfaces with direction dependent properties.  
[AIAA PAPER 69-624] 17 p3070 A69-33259
- TOPFER, M. L.**  
Thick film hybrid technology.  
09 p1508 A69-22337
- TOPMILLER, D. A.**  
Mathematical models of human performance in man-machine systems.  
12 p2025 A69-27085
- TOPORETS, A. S.**  
Diffuse reflection of light from a rough surface. III /O difuznom otrazhenii sveta ot sverokhovatoi poverkhnosti. III/.  
14 p2485 A69-29171
- TOPORKOV, S. A.**  
On improving the Mar-1 X-ray microanalyzer.  
12 p2093 A69-26596
- TOPP, M. R.**  
Nanosecond flash photolysis and the absorption spectra of excited singlet states.  
05 p0760 A69-15608
- TOPPER, L.**  
Design criteria for linearly polarized waveguide arrays.  
04 p0571 A69-14313  
Analysis of phased array lenses.  
08 p1280 A69-20014
- TOPPER, T. H.**  
Cumulative fatigue damage under cyclic strain control.  
10 p1715 A69-23983  
Neuber's rule applied to fatigue of notched specimens.  
10 p1715 A69-23984
- TOPTYGIN, I. N.**  
Dependence of the diffusion coefficient of cosmic rays on the spectrum of interplanetary magnetic field inhomogeneities and on the distance from the sun /Zavisimost' koeffitsienta diffuzii kosmicheskikh luchej ot rastoiianiia do solntsa/.  
10 p1757 A69-22822
- TORBOVA, O. D.**  
Crystallization of InAs sub 1-x P sub x solid solutions from the gas phase /Kristallizatsiia tverdykh rastvorov InAs sub 1-x P sub x iz gazovoi fazy/.  
12 p2144 A69-26587
- TORDA, T. P.**  
Analysis of entrainment and flow augmentation for Coanda-type nozzles.  
05 p0746 A69-16021  
Analytical and experimental investigations of aerothermochemical processes in liquid propellant rocket motors.  
16 p2835 A69-31732  
Numerical investigation of unsteady laminar incompressible boundary layer flows with cylindrical symmetry.  
[ASME PAPER 69-FE-47] 20 p3517 A69-37997
- TORECKI, S.**  
Non-stationary combustion scheme of solid rocket fuels.  
22 p4050 A69-40457
- TORELLI, M.**  
Ejections of matter from the main component of fast growing sunspot-groups.  
06 p0995 A69-17441  
Forecasts of solar activity /Sulle previsioni dell'attività solare/.  
10 p1777 A69-23312  
Birth and development of the calcium plage associated with the proton flare of July 1966.  
10 p1763 A69-23729  
Forecasts of solar activity /Sulle previsioni dell'attività solare/.  
13 p2333 A69-28657
- TORELLO, F.**  
Energy dependence of the elastic total collision cross section of identical molecules - super 4 He.  
19 p3378 A69-36186
- TOREV, A.**  
Studies of the biological effectiveness of the mycelium of the *Cantharellus cibarius* mushroom and the possibilities of using it as foodstuff /Issledovaniia biologicheskoi effektivnosti mitseliia griba lisichki /*Cantharellus cibarius* fr./ i vozmozhnosti ego ispol'zovaniia v kachestve pishchevogo produkta/.  
22 p3892 A69-40273
- TOREV, D.**  
Studies of the biological effectiveness of the mycelium of the *Cantharellus cibarius* mushroom and the possibilities of using it as foodstuff /Issledovaniia biologicheskoi effektivnosti mitseliia griba lisichki /*Cantharellus cibarius* fr./ i vozmozhnosti ego ispol'zovaniia v kachestve pishchevogo produkta/.  
22 p3892 A69-40273
- TORGOVANOV, V. A.**  
Relationships characterizing the radiation patterns of large-scale multielement antenna systems /O zakonomernostiakh, kharakterizuiushchikh diagrammy napravlenosti mnogoelementnykh antennykh sistem bol'shikh razmerov/.  
11 p1844 A69-24451
- TORIL, C.**  
A high-resolution quick-scan interferometer for solar studies at 3.75 GHz.  
18 p3118 A69-34968
- TORIL, H.**  
Two dimensional steady MHD jet under the influence of thermal radiation.  
02 p0287 A69-11831
- TORITSUKA, H.**  
Observations of current waveforms of the transferred-electron oscillators.  
07 p1097 A69-18443
- TORIZUKA, H.**  
Observations of voltage and current waveforms of the transferred electron oscillators.  
12 p2036 A69-25908  
Observation of the current and voltage waveforms of the Si IMPATT diode.  
12 p2036 A69-25914
- TORKELSON, T. J.**  
A fluid temperature sensor.  
02 p0249 A69-12089
- TORKILDSEN, R.**  
1 KVA three-phase DC-AC inverter with digital control.  
23 p4074 A69-42294
- TORMEY, J. F.**  
Processing and manufacture of composite propellants.  
16 p2829 A69-31992
- TOROCKHOV, V. IU.**  
Land gyrocompass on torsional suspensions /Sukhoputnyi girokompas na torsionnykh rastiazhakh/.  
13 p2259 A69-27431
- TOROPOV, A. K.**  
A nonadjustable Fabry-Perot scanning interferometer /Neustiruemyi skaniruiushchii interferometr Fabry-Pero/.  
04 p0598 A69-14854  
Nonadjustable scanning Fabry-Perot interferometer.  
15 p2608 A69-30246
- TOROPTSEV, M. N.**  
Calculation of a controllable screw-nut transmission /K raschetu reguliruemoi peredachi vint-gaika/.  
23 p4168 A69-41414  
Experimental determination of the forces acting in bracket mounting bolts /Eksperimental'noe opredelenie usilii v boltakh krepel'niia kronshteyna/.  
23 p4168 A69-41417
- TOROPTSEVA, T. N.**  
Hydrogen-oxygen fuel cells with hydrophobic type electrodes and an alkaline electrolyte /Pilya a combustible hydrogen-oxygen a electrodes d'un type hydrophobe a electrolyte alcalin/.  
08 p1261 A69-21055  
Hydrogen-oxygen fuel batteries based on hydrophobic type electrodes with an alkaline electrolyte /Toplinnye vodorodno-kislorodnye batarei na osnove elektrodov gidrofobnogo tipa s shchelochnym elektrolitom/.  
16 p2740 A69-32426
- TOROSHELIDZE, T. J.**  
Results of spectrographic observations of hydroxyl luminescence in the 10,600 to 11,200-angstrom units region at twilight /Rezultaty spektrograficheskikh nabludeniia gidroksil'nogo sveceniia v oblasti 10,600-11,200 angstrom units v sumerkakh/.  
10 p1681 A69-22847
- TOROSSIAN, A.**  
Study of the stability and the conditions of the propagation of low-frequency waves in a central-con-



- ductor configuration /Etude de la stabilité et des conditions de propagation des ondes de basse fréquence dans une configuration à conducteur central/.  
11 p1931 A69-25362
- TORR, D. G.**  
The inclusion of a particle source of ionization in the ionospheric continuity equation.  
12 p2066 A69-26112
- TORR, M. R.**  
The inclusion of a particle source of ionization in the ionospheric continuity equation.  
12 p2066 A69-26112  
Predawn enhancement in f sub zero F sub 2 at Johannesburg.  
20 p3523 A69-37576
- TORRALBO, A. M.**  
Flame propagation on plastic fuels in an oxidizing atmosphere /Propagación de llamas sobre combustibles plásticos en atmósfera oxidante/.  
17 p3074 A69-33662
- TORRANCE, K. E.**  
Comparison of finite-difference computations of natural convection.  
07 p1242 A69-19397
- TORRES-PEIMBERT, S.**  
Studies in stellar evolution. VII.  
10 p1788 A69-24126
- TORRI, S.**  
Encoding of nerve signals from retinal rods.  
23 p4099 A69-42119
- TORZHEVSKII, A. P.**  
Satellite motion relative to the center of mass and resonances /Dvizhenie iskusstvennogo spútnika otosnítel'no tsentra mass i rezonansy/.  
13 p2357 A69-28502
- TOSCHEK, P.**  
Power broadening in a He-Ne laser.  
01 p0089 A69-10182  
Coherence phenomena in the coupling of laser transitions.  
11 p1898 A69-25045  
Power broadening of gas-laser transitions.  
11 p1898 A69-25046  
Interaction of laser light waves by dynamic Stark splitting.  
22 p3965 A69-41125
- TOSCHEK, P. E.**  
On pressure broadening in a He-Ne laser.  
12 p2105 A69-26317
- TOSCHI, R.**  
Subsonic constant-area MHD generator experiments with the CNEN blow-down loop facility.  
10 p1637 A69-23481  
Performance of the CNEN MHD blow-down loop facility.  
10 p1674 A69-23482
- TOSSMAN, B. E.**  
Magnetic attitude control system for the radio astronomy Explorer-A satellite. [AIAA PAPER 68-855]  
12 p2174 A69-26779
- TOTEL, G. L.**  
Antidiuretic hormone and human eccrine sweating.  
23 p4077 A69-41311
- TOTH, L. W.**  
Application of molded advanced composites to engine components. [AIAA PAPER 69-466]  
16 p2795 A69-32763  
Manufacturing concepts in application of molded advanced composites to aerospace components.  
24 p4326 A69-43448
- TOTH, P.**  
Stability analysis of linear systems with periodic coefficients /Sull'analisi di stabilità dei sistemi lineari a coefficienti periodici/.  
21 p3685 A69-38779
- TOTON, E.**  
Report on the investigation of Mach's principle in the scalar-tensor theory of gravity.  
01 p0120 A69-10858
- TOTSII, E. E.**  
Experimental apparatus for the investigation of the thermal conductivity of alkali metal vapors by the dilatometric method.  
02 p0247 A69-11579
- TOTSUJI, H.**  
Electrical conductivity of weakly ionized gases in quiescent and turbulent states.  
14 p2502 A69-29991

- TOTTENHAM, H.**  
Boundary value problems in thin shallow shells of arbitrary plan form.  
01 p0171 A69-11071
- TOU, J. T.**  
Some results in minimum-entropy feature extraction.  
11 p1909 A69-25291
- TOUBOUL, J.-P.**  
Surface precipitation of carbides during the cooling of molybdenum and tungsten /Sur la précipitation superficielle de carbures lors du refroidissement du molybdène et du tungstène/.  
03 p0451 A69-14000  
The chemisorption of carbon and oxygen on the surface of molybdenum /Sur la chimisorption du carbone et de l'oxygène à la surface du molybdène/.  
20 p3562 A69-37782
- TOUCHAIS, M.**  
The sun and lunar habitations /Le soleil et des habitations lunaires/.  
23 p4111 A69-42213
- TOUGH, J. G.**  
The Braginskii dynamo.  
22 p3989 A69-40192
- TOULEMONT, J.**  
Oscillator with electronic temperature compensation /OCET/ /Oscillateur à compensation électronique de température "OCET"/.  
14 p2420 A69-29398
- TOULINOV, G.**  
Preliminary results of mass spectrometric measurements of the diurnal variation of the composition of the neutral and ionized atmosphere between 100 and 400 km /Résultats préliminaires de mesure par spectrométrie de masse de la variation diurne de la composition de l'atmosphère neutre et ionisée entre 100 et 400 km d'altitude/.  
15 p2601 A69-31371
- TOURAINÉ, J.**  
Measurements of dielectric materials at high temperature /Mesures des matériaux diélectriques à haute température/.  
07 p1136 A69-19515
- TOURKAKIS, H. C.**  
Electron fractographic study of fatigue cracks in wrought beryllium sheet.  
09 p1500 A69-22324
- TOURNEMINE, G.**  
Asymptotic behavior of sonic flow around a body of revolution of finite dimensions, behind the shock wave /Comportement asymptotique de l'écoulement sonique autour d'un corps de révolution de dimensions finies, en aval de l'onde de choc/.  
01 p0058 A69-10160  
A schema of a three-dimensional sonic flow downstream from a shock wave in a perfect fluid /Sur un schéma d'écoulement sonique, tridimensionnel, en aval de l'onde de choc, en fluide parfait/.  
03 p0362 A69-13363
- TOURNES**  
Technical aspects of hypersonic flight /Aspects techniques du vol hypersonique/.  
16 p2867 A69-31761
- TOURTELLOTTE, H. A.**  
Inverse pressure dependence of the quadrupole ionization gauge.  
13 p2262 A69-28020
- TOURYAN, K. J.**  
Multifluid theory for stagnation flow of partially ionized plasma.  
08 p1369 A69-20817  
Thermionic electrical power generation from reentry plasmas. I - Performance. II - Integrated system.  
14 p2399 A69-29194  
The effect of a magnetic field on a rotating cone in compressible flow. [AIAA PAPER 69-721]  
17 p2892 A69-33484
- TOUSCHEK, B.**  
Covariant statistical mechanics.  
03 p0533 A69-13758
- TOUSEY, R.**  
Line identifications in the solar extreme ultraviolet and X-ray regions.  
03 p0507 A69-13171  
Solar rocket observations on an eclipse day.  
15 p2696 A69-31099
- TOUSSAINT, H.-N.**  
Calculation of the transient behavior of a transistor high-frequency oscillator by means of the ECAP program /Berechnung des Anschwingverhaltens eines Transistor-Hochfrequenz-Oszillators mit dem ECAP-Programm/.  
11 p1854 A69-25613

- TOUSSAINT, J.**  
Particulars of the transmitting systems of the ESRO II/IRIS satellite /Particularités des systèmes de transmission du satellite ESRO II/IRIS/.  
01 p0034 A69-11103  
Characteristics of the telemetering system of the ESRO I/Aurora satellite /Particularités du système de télémétrie du satellite ESRO-I/Aurora/.  
13 p2220 A69-27749
- TOUTENHOOFD, W.**  
The Colorado lee wave program.  
17 p2999 A69-33738
- TOVMASIAN, G. M.**  
On the radio emission from some peculiar galaxies /Radioizluchenie galaktik s anomal'nym spektrom i tsvetom ikh tsentral'nykh chastei/.  
12 p2164 A69-27026  
Results of observations of galaxies with connectors /Rezultaty nablúdenii galaktik s peremychkoi/.  
12 p2165 A69-27030  
The correlation between the radio emission of normal galaxies and the shape of their nuclei /O korreliatsii mezhdu radioizlucheniem normal'nykh galaktik i vidom ikh iader/.  
12 p2166 A69-27040  
Irregular galaxies of the type of M 82.  
16 p2865 A69-32598
- TOVMASIAN, N. E.**  
General boundary value problem for elliptic systems of second order with constant coefficients. II.  
03 p0456 A69-13602  
Effective methods of solving the Dirichlet problem for elliptic systems of second-order differential equations with constant coefficients in regions bounded by an ellipse /Effektivnye metody resheniya zadachi Dirikhle dlia ellipticheskikh sistem differentsial'nykh uravnenii vtorogo poriadka s postoiannymi koeffitsientami v oblastiakh, ograničennykh ellipsom/.  
12 p2123 A69-26728
- TOVSTIUK, K. D.**  
Negative resistance of In sub 2 Se crystals /Otritsatel'noe soprotivlenie kristallov In sub 2 Se/.  
22 p3992 A69-40602
- TOWLE, L. C.**  
Shear strength of grossly deformed solids.  
04 p0631 A69-15465
- TOWLER, W. R.**  
Control system for use in the measurement of ultrasmall torques.  
20 p3537 A69-37140
- TOWNER, R. J.**  
High-temperature magnetic test techniques and analyses.  
01 p0093 A69-10111  
High-temperature magnetic test techniques and analyses.  
09 p1512 A69-22375  
Effect of dispersoid parameters on high-temperature behavior of cobalt and iron plus 27 percent cobalt.  
15 p2669 A69-30689
- TOWNES, C. H.**  
Anti-Stokes generation in trapped filaments of light.  
01 p0114 A69-10012  
Detection of NH sub 3 molecules in the interstellar medium by their microwave emission.  
03 p0518 A69-14258  
Detection of water in interstellar regions by its microwave radiation.  
08 p1383 A69-19896  
Spectra, variability, size, and polarization of H sub 2 O microwave emission sources in the Galaxy.  
09 p1587 A69-21307  
Further microwave emission lines and clouds of ammonia in our galaxy.  
09 p1597 A69-22150  
Frequency conversion and detection of infrared radiation.  
17 p2969 A69-32839  
Distribution of ammonia density, velocity, and rotational excitation in the region of Sagittarius B2.  
21 p3799 A69-38647  
A pumping mechanism for anomalous microwave absorption in formaldehyde in interstellar space.  
22 p4029 A69-40768  
Quantum optics or quantum electronics.  
23 p4174 A69-42315

- TOWNSEND, C. G.**  
On the generalized Lienard equation with forcing function.  
02 p0272 A69-12132
- TOWNSEND, D.**  
Configurations for gas turbine compressor end seals. [ASME PREPRINT 68AM 4B-4]  
13 p2267 A69-27366
- TOWNSEND, D. P.**  
Elastohydrodynamic lubrication of a spinning ball in a nonconforming groove. [ASME PAPER 69-LUBS-11]  
18 p3140 A69-34381
- TOWNSEND, M. R.**  
The Small Astronomy Satellite /SAS/ program.  
07 p1229 A69-19126
- TOWNSEND, W. G.**  
A proposed voltage variable resistor MOST.  
04 p0574 A69-14351
- TOWNSHEND, B. W.**  
Ditching the air bus - A matter of self preservation.  
14 p2392 A69-29697
- TOY, A.**  
Residual stresses in welded titanium and their effects upon mechanical behavior. [ASM PAPER GG8-6.2]  
07 p1169 A69-19674  
A study of chemical compatibility between ceramic whiskers and metallic matrix materials.  
09 p1527 A69-22359  
A continuous process for the production of whisker reinforced composites.  
13 p2269 A69-28676  
Fabrication and evaluation of Modmor II carbon fiber reinforced P13N polyimide laminates.  
24 p4325 A69-43445
- TOY, S. M.**  
Studies of galvanic corrosion couples in liquid fluorine.  
06 p0944 A69-17854  
Corrosion testing of materials in liquid propellant systems.  
21 p3748 A69-39485  
Technical note - The role of impurities in corrosion by fluorine oxidizers.  
21 p3784 A69-39487
- TOYOHARA, T.**  
Experimental investigation of ablative materials.  
21 p3753 A69-39800
- TOYOTA, S.**  
Transmission-type Esaki-diode amplifier using dielectric loaded rectangular waveguide.  
13 p2233 A69-28067  
Esaki-diode reflection amplifier using rectangular waveguide.  
15 p2578 A69-30801
- TOZER, B. A.**  
A mode-locked laser as a light source for schlieren photography. [IEEE PAPER H-1]  
05 p0774 A69-16315
- TRAAS, D. W.**  
The removal of volatiles from propellants and the gas-chromatographical determination of these volatiles.  
02 p0302 A69-11522
- TRABESINGER, G.**  
Hard materials and hard metals containing NbC and HfC /Ueber NbC- und HfC-haltige Hartstoffe und Hartmetalle/.  
14 p2464 A69-29323
- TRABKA, J.**  
Influence of structural differences of the gyrar and sulcal areas of the acoustic projection cortex on primary induced acoustic responses.  
23 p4079 A69-41380
- TRACEY, T. R.**  
Mars lander thermal control system parametric studies. [AIAA PAPER 69-610]  
17 p3072 A69-33274
- TRACY, J. C.**  
A study of facetting of tungsten single crystal surfaces.  
08 p1330 A69-20137  
The kinetics of oxygen adsorption on the /112/ and /110/ planes of tungsten.  
18 p3183 A69-35106
- TRAHIN, M.**  
Effective multiphoton ionization cross section calculated using a perturbed Green's function /Section efficace d'ionisation multiphotonique calculee en utilisant une fonction de Green perturbee/.  
02 p0283 A69-11539
- TRAININ, L. IA.**  
Experimental investigation of the motion of individual charged particles in a mirror device.  
15 p2659 A69-30724
- TRAINOR, J. H.**  
Galactic Jupiter probes.  
02 p0324 A69-12303  
Design of a long-life reliable nuclear experiment for space flight.  
19 p3284 A69-36676
- TRAJBOLD, J.**  
Electrohydraulic attitude servomechanism for a pilot training cabin /Polohovy elektrohydraulicky servomechanismus pro pilotni cvicnou kabinu/.  
06 p0906 A69-16966
- TRAJMAR, S.**  
Low-energy, high-angle electron-impact spectrometry.  
01 p0123 A69-10620  
Angular dependence of low-energy electron-impact excitation cross section of the lowest triplet states of H sub 2.  
06 p0962 A69-17820
- TRAKHTENBERG, G. M.**  
Equations of motion of aircraft control surfaces controlled by an electric pulsed autopilot with rigid feedback.  
16 p2809 A69-32134
- TRAKHTENGERTS, V. IU.**  
Possible nature of the fine-scale structure of the polar aurorae /O vozmozhnoi prirode tonkoi struktury poliarnykh sianni/.  
02 p0239 A69-11693  
High-frequency instability of the radiation belts of earth, associated with the "loss cone."  
03 p0501 A69-13526  
Induced and combination radio wave scattering in the ionosphere and the magnetosphere /Ob induirovanom i kombinatsionnom rassianii radiovoln v ionosfere i magnitosfere/.  
07 p1076 A69-18521  
Possible nature of the fine structure of auroras.  
13 p2258 A69-28724
- TRANCHANT, J.**  
Chromatographic analysis of solid propellant stabilizers and their nitro derivatives /Analyse chromatographique des stabilisants des poudres propulsives et de leurs derives nitriels/.  
02 p0303 A69-11528
- TRANter, C. J.**  
Bessel Functions with some Physical Applications.  
15 p2643 A69-30037
- TRANter, W. H.**  
Considerations in the use of AGC in AM/FM telemetry systems.  
09 p1454 A69-21799  
Baseband AGC in AM/FM systems.  
19 p3274 A69-36276
- TRAUB, J. F.**  
The Bell laboratories numerical mathematics program library project.  
01 p0036 A69-10709
- TRAUBOTH, H. H.**  
Recursive formulas for the evaluation of the convolution integral.  
06 p0947 A69-17250
- TRAUTH, C. A., JR.**  
Techniques for the limitation of biological loading of spacecraft before sterilization.  
05 p0713 A69-15948
- TRAVERS, D. N.**  
Experiments with a low polarization error loop array direction finder.  
01 p0048 A69-11006
- TRAVINA, N. T.**  
Mechanical properties of single crystals of the alloy nickel-chromium-titanium-aluminum /Nimonic/ in different structural states.  
02 p0268 A69-12192  
Certain regularities of the strengthening of nimonic alloy single crystals in the deformation process /Nekotorye zakonornosti uprochneniia monokristallov splava nimonik v protsesse deformatsii/.  
12 p2112 A69-26038
- TRAVING, G.**  
Interpretation of line broadening and line shift.  
08 p1363 A69-20464
- TRAVIS, L. D.**  
Radiative opacity in stellar atmospheres. I - Metal absorption coefficients.  
07 p1220 A69-19392
- TRAVITSKAIA, E. O.**  
Temperature-Stable Protective Coatings, Seminar on Heat-Resistant Coatings, 3rd, Leningrad, USSR, May 27-31, 1966, Transactions /Temperaturostoichivye Zashchitnye Pokrytiia, seminar po Zharostoikim Pokrytiyam, 3rd, Leningrad, USSR, May 27-31, 1966, Trudy/.  
20 p3559 A69-37357
- TRAVKIN, IU. I.**  
Thermoelectric strains in a strip /Termouprugaia deformatsiia polosyl/.  
04 p0673 A69-14497
- TRAYNOR, E. J.**  
Resins and reinforced plastic laminates for continuous use at 650 deg F. III.  
07 p1171 A69-19545
- TREACY, E. B.**  
Compression of picosecond light pulses.  
01 p0091 A69-10817  
Generation of chirped pulses at 10.6 microns wavelength.  
04 p0609 A69-14333  
Measurement of picosecond pulse substructure using compression techniques.  
10 p1703 A69-23514  
Optical pulse compression with diffraction gratings.  
23 p4171 A69-41392  
Diffractive coupling from a CO sub 2 laser.  
24 p4329 A69-43753
- TREADGOLD, M. G.**  
The presentation of navigational information.  
15 p2558 A69-30692
- TREADWELL, R. J.**  
Spacecraft data storage in the 1970's.  
18 p3107 A69-35096
- TREAT, C. H.**  
Investigation of a model for bidirectional reflectance of rough surfaces. [AIAA PAPER 69-64]  
06 p0959 A69-18125
- TREBLE, F. C.**  
Large solar cell arrays.  
03 p0368 A69-13993  
Large solar array development in U. K.  
19 p3253 A69-35707
- TREDER, H.-J.**  
Heuristic establishment of a tetrad theory of the gravitational field /Heuristische Begrueudung einer Tetradentheorie des Gravitationsfeldes/.  
08 p1351 A69-20287  
Relativity and the Cosmos- Space and Time in Physics, Astronomy, and Cosmology /Relativitaet und Kosmos- Raum und Zeit in Physik, Astronomie und Kosmologie/.  
10 p1784 A69-24019  
Extragalactic research.  
15 p2681 A69-30436  
Geophysics and cosmology /Geophysik und Kosmologie/.  
16 p2864 A69-32451
- TREDICI, T. J.**  
Effects of topical ophthalmic 2 percent pilocarpine on visual performance of normal subjects.  
01 p0022 A69-11347  
The danger of contact lenses at altitude.  
23 p4106 A69-41806
- TREFFTZ, E.**  
Comparison of calculated oscillator strengths for Si III.  
15 p2656 A69-31158
- TREFILOV, V. I.**  
Structural changes and mechanical properties of molybdenum on annealing.  
02 p0268 A69-12191  
Structural changes and cold shortness of molybdenum subjected to deformation.  
04 p0615 A69-14637  
Investigations of the problem of chromium /Issledovaniia po probleme khroma/.  
09 p1526 A69-22147  
Study of dislocation mobility in indium antimonide /Issledovanie podvizhnosti dislokatsii v antimonide indii/.  
12 p2143 A69-26453  
Change in the mechanical properties and in the dislocation structure of deformed molybdenum alloys during annealing /Izmenenie mekhanicheskikh svoistv i



dislokatsionnoi struktury deformirovannykh molibdenovykh splavov pri otzhigeh/.

14 p2463 A69-29312

Influence of alloying elements on the dislocation structure of chromium /Vliianie legiruyushchikh elementov na dislokatsionnuu strukturu khroma/.

18 p3160 A69-35452

# TREGUB, I. K.

Effect of carrier surface recombination rates in the passive region of the base on the static characteristics of a transistor /Vliianie skorosti poverkhnostnoi rekombinatsii nositelei v passivnoi oblasti bazy na staticheskie kharakteristiki tranzistora/.

09 p1464 A69-22287

# TREGUBOV, I. A.

The zirconium corner of the phase diagram and properties of alloys of the zirconium- aluminum-niobium system /Tsirkoniyevyi ugol diagrammy sostoiانيا i svoistva splavov sistemy tsirkonii-aluminii-niobii/.

02 p0261 A69-11841

The zirconium corner of the phase diagram and properties of alloys of the zirconium- aluminum-chromium system /Tsirkoniyevyi ugol diagrammy sostoiانيا i svoistva splavov sistemy tsirkonii-aluminii-khromi/.

02 p0262 A69-11842

The zirconium corner of the phase diagram and properties of alloys of the zirconium- vanadium-molybdenum system /Tsirkoniyevyi ugol diagrammy sostoiانيا i svoistva splavov sistemy tsirkonii-vanadii-molibdeni/.

02 p0262 A69-11846

The phase diagram of the zirconium-vanadium-niobium system /Diagramma sostoiانيا sistemy tsirkonii-vanadii-niobii/.

02 p0263 A69-11848

Mechanical properties of zirconium-vanadium-niobium alloys /Mekhanicheskie svoistva splavov tsirkonii-vanadii-niobii/.

02 p0263 A69-11849

The zirconium corner of the phase diagram and the properties of alloys in the zirconium- copper-molybdenum system /Tsirkoniyevyi ugol diagrammy sostoiانيا i svoistva splavov sistemy tsirkonii-med'-molibdeni/.

02 p0263 A69-11852

Influence of iron, nickel, and chromium on the corrosion resistance and mechanical properties of zirconium-copper-molybdenum system alloys /Vliianie zheleza, nikelia i khroma na korrozionnuu stoikost' i mekhanicheskie svoistva splavov sistemy tsirkonii-med'-molibdeni/.

02 p0263 A69-11853

Effect of beryllium, cerium, vanadium, and titanium on the oxidizability of Nb-Mo-Cr alloys /Vliianie berillia, tseria, vanadiia i titana na oksidaiemost' splavov Nb-Mo-Cr/.

04 p0618 A69-15081

# TREGUIER, J.-P.

Study of a molecular beam of plane symmetry of supersonic origin /Etude d'un faisceau moleculaire a symetrie plane d'origine supersonique/.

20 p3579 A69-37432

# TREIBER, H.

The third stage of the ELDO booster - An example of a systems management problem /III. Stufe der ELDO-Traggerrakete als Beispiel einer Systemfuehrungsaufgabe/.

17 p3050 A69-33701

# TREIER, V. N.

Determination of the optimum level of improvement in reliability and lifetime for machines and devices /Opredelenie optimal'nogo urovnia povysheniia nadezhnosti i dolgovechnosti mashin i priborov/.

13 p2268 A69-27436

# TREILHOU, J.-P.

Recent results in the study of auroral X radiation /Resultats recents sur l'etude du rayonnement X auroral/.

21 p3787 A69-38359

# TREKHOV, E. S.

Physics of Gas-discharge Plasma /Fizika Gazorazriadnoi Plazmy/.

12 p2139 A69-27121

Theory of a helical discharge /skin effect/ at atmospheric pressure in air and argon /Teoriia vikhrevo go razriada /skin-effekta/ pri atmosfernom davlenii v vozdukhie i argone/.

12 p2140 A69-27122

Effect of the parameters of an electrodeless plasmatron on the mode of operation of a high-frequency oscillator /Vliianie parametrov bezelektrodnogo plazmotrona na rezhim raboty vysokochastotnogo generatara/.

12 p2140 A69-27123

Measurement of the parameters of the plasma of a helical pulse discharge by probe methods /Izmerenie parametrov plazmy impul'snogo vikhrevo go razriada zondovymi metodami/.

12 p2140 A69-27124

Electrodynamic description of a high-frequency flame discharge /Elektrodinamicheskoe opisaniie vysokochastotnogo fakel'nogo razriada/.

12 p2140 A69-27125

Applicability of an electrodynamic model to a high-frequency flame discharge stabilized by axial injection /O primenimosti elektrodinamicheskoi modeli k vysokochastotnomu fakel'nomu razriadu, stabilizirovannomu osevm produvom/.

12 p2140 A69-27126

Certain problems of the generation of dense plasma jets in a flowing high-frequency flame discharge /Nekotorye voprosy generatsii plotnykh plazmennyykh strui v protochnom vysokochastotnom fakel'nom razriade/.

12 p2140 A69-27127

A shielded high-frequency flame discharge /Ekranirovannyi vysokochastotnyi fakel'nyi razriad/.

12 p2140 A69-27128

Certain problems of matching high-frequency oscillators to a load in the form of a flame discharge /Nekotorye voprosy soglasovaniia vysokochastotnykh generatorov s nagruzkoj v vide fakel'nogo razriada/.

12 p2140 A69-27129

Investigation of the current layer expansion in a direction opposite to that of the electrodynamic force /Issledovanie rasprostraneniia sloia toka protiv elektrodinamicheskoi sily/.

12 p2141 A69-27130

A helical discharge in argon at atmospheric pressure with injection /Vikhrevoi razriad v argone pri atmosfernom davlenii s produvom/.

12 p2141 A69-27131

Structural changes in a molybdenum single crystal under the action of laser radiation /Strukturnye izmeneniia monokristalla molibdena pod deistviem lazernogo obluчениia/.

21 p3750 A69-39842

# TREMBATH, C. L.

A low-temperature microwave noise standard.

02 p0211 A69-12446

# TREMEIT, B. A.

New data concerning the stereoscopic field of vision of healthy individuals /Novye dannye ob ob'emnom pole zreniia u zdorovykh lits/.

22 p3886 A69-41113

# TREMKO, J.

Radioactive light-sources in photoelectric photometry.

11 p1951 A69-25421

# TREMOR, J. W.

Weightlessness and the developing frog egg.

01 p0017 A69-11084

Rat body composition - Sensor implantation and lighting effects.

12 p2020 A69-26557

# TRENOGIN, V. A.

On the buckling of flexible plates.

14 p2531 A69-28810

# TRENOUETH, J. M.

A high temperature cyclic oxidation apparatus.

12 p2093 A69-26483

# TRENTACOSTE, N.

Some remarks on three-dimensional wakes and jets.

02 p0190 A69-12549

Turbulent mixing - A review, revaluation, and extension.

[AIAA PAPER 69-31]

06 p0915 A69-18223

# TREON, S. L.

Data correlation from investigations of a high-subsonic speed transport aircraft model in three major transonic wind tunnels.

[AIAA PAPER 69-794]

19 p3237 A69-35636

# TREPKA, R.

Significance of the surface treatment of aluminum and its alloys in elements subjected to adhesive bonding /Znaczenie obrobki powierzchni aluminium i jego stopow w elementach podlegajacych klejeniu/.

07 p1141 A69-19312

# TREPTOW, K.

Dependence of pharmacological effects on the noise level /Zur Abhaengigkeit pharmakologischer Effekte vom Gerauschpegel/.

24 p4262 A69-42947

Correlations between the noise level and conditioned reflex performance /Wechselbeziehungen zwischen Gerauschpegel und bedingt-reflektorischem Leistungsermoegen/.

24 p4262 A69-42948

# TRESKUNOV, ZH. I.

Investigation of the deformation and sliding friction of polyurethane in the presence of lubrication /Issledovanie deformatsii i treniia skol' zheniia poliuretana v prisutstvii smazki/.

18 p3149 A69-35365

# TRESSELT, C. P.

Design and computed theoretical performance of three classes of equal-ripple nonuniform line couplers.

16 p2760 A69-31944

# TRESSLER, R. E.

Pressure-temperature study of sulfospinel.

02 p0266 A69-12167

# TRESVIATSKII, S. G.

Cements for sticking mica-ceramics to titanium.

05 p0786 A69-16799

# TRETIACHENKO, G. N.

Investigations of the thermal stability of heat-resistant materials in a gas flow /Issledovaniia termostoikosti ognepurnykh materialov v gazovom potoke/.

20 p3565 A69-36979

Device for testing materials under thermal and mechanical cyclic loads.

20 p3544 A69-37816

# TRETIKOV, O. V.

Investigation of the impedance of high resistivity gallium arsenide samples with a nonlinear current-voltage characteristic /Issledovanie impedansia obratsovykh vysokoomnogo arsena dia galliia s nelineinoi vol'tamperno i kharakteristikoi/.

13 p2317 A69-27881

Study of the effect of electron heating on the electron current instability in high-resistivity GaAs /Issledovanie vliianiia nagraeva elektronov na neustoiichivost' elektricheskogo toka v vysokoomnom GaAs/.

19 p3391 A69-36609

Impedance of high-resistivity gallium arsenide samples with nonlinear current-voltage characteristics.

21 p3782 A69-39143

# TRETIKOV, D. N.

Energy spectrum of silicon-doped gallium arsenide /Energeticheskii spektr arsena dia galliia, legirovannogo kremniem/.

01 p0139 A69-10833

Coherent emission in epitaxial structures with heterojunctions in the AlAs-GaAs system /Kogerentnoe izluchenie v epitaksial'nykh strukturakh s geteroperekhodami v sisteme AlAs-GaAs/.

03 p0489 A69-13896

Injection properties of n-Al sub x Ga sub 1-x As-p-GaAs heterojunctions.

06 p0979 A69-16993

The energy spectrum of gallium arsenide doped with silicon.

11 p1936 A69-24700

Coherent radiation of epitaxial heterojunction structures in the AlAs-GaAs system.

11 p1939 A69-25697

Radiative recombination in gallium arsenide p-n structures with a germanium-doped p region /Izluchatel'naia rekombinatsiia v arsenidgallievykh p-n strukturakh s p-oblast'iu, legirovannoi germaniem/.

21 p3780 A69-39044

# TRETIKOV, F. E.

Effect of the method of surface treatment on the porosity of welds in VT5-1 titanium alloy.

06 p0945 A69-17897

# TRETIKOV, O. A.

Linear self-consistent theory of diffraction emission /Lineinaia samosoglasovannaia teoriia difraktsionnogo izlucheniia/.

22 p3899 A69-40615

Excitation of diffraction radiation in a periodic structure with losses /Vozbuzhdenie difraktsionnogo izlucheniia v periodicheskoi strukture s poteriami/.

23 p4124 A69-42031

Propagation of space charge waves in an annular waveguide /Rasprostraneniie voln prostranstvennogo zariada v kol'tsevom volnovode/.

23 p4124 A69-42034

# TRETIKOV, P. K.

Calculation of the flame location in a turbulent flow /Raschet polozeniia plameni v turbulentnom potoke/.

19 p3448 A69-35854

# TRETIKOV, V. A.

Methods of realizing functional amplitude characteristics in parametric amplifiers /Sposoby realizatsii funktsional'nykh amplitudnykh kharakteristik v parametricheskikh usiliteliakh/.

11 p1849 A69-24957

- ETIAKOVA, CH. A.**  
Interaction free path in iron of nuclear- active particles with energies above  $5.3 \times 10$  super 11 ev.  
13 p2303 A69-28385  
Absorption in an ionization calorimeter of the energy flux of the nuclear component.  
13 p2330 A69-28386
- ETIAKOVA, M. I.**  
Concerning the role of isobar production processes in nuclear interactions of approximately 20 Gev protons.  
13 p2303 A69-28373
- EVATHAN, C.**  
On-board spacecraft processor.  
22 p3903 A69-39921
- EVATHAN, C. E.**  
An on-board processor for OAO-C.  
23 p4132 A69-41736
- FEVELYAN, B.**  
The practical design of a laser modulator using 45 degree cut ADP crystals.  
13 p2272 A69-28191
- FEVES, A.**  
A simplified method of simulating electromagnetic showers.  
22 p4007 A69-41057
- FEVINO, G.**  
On the response of a structure moving through a random field.  
[ASME PAPER 69-VIBR-38]  
10 p1807 A69-24176
- REXLER, P. C.**  
Technique for sterile insertion and repair of spacecraft.  
05 p0714 A69-15950
- REZEK, G. J.**  
Analytical determination of cylindrical source temperature fields and their relation to thermal diffusivity of brain tissue.  
06 p0879 A69-17085
- RIBBECK, T. D.**  
Computer studies of reaction profiles in gas detonations.  
19 p3451 A69-36366
- RIBOULET, R.**  
Acceptor levels in cadmium telluride /Niveaux accepteurs dans le tellurure de cadmium/.  
02 p0294 A69-11546
- RICHARD, J.**  
Qualification of space stage separations /Qualification des separations d'etages spatiaux/.  
10 p1669 A69-23005
- RICHET, J.-C.**  
The equipment and systems of the Concorde - A unique chance for European industry /Les equipements et systemes de "Concorde" - Une chance unique pour l'industrie europeenne/.  
12 p2091 A69-26360
- TRICK, T. N.**  
Annual Allerton Conference on Circuit and System Theory, 6th, University of Illinois, Monticello, Ill., October 2-4, 1968, Proceedings.  
06 p0901 A69-17394  
Stability of a class of lumped-distributed systems.  
23 p4144 A69-41568
- TRICOMI, F. G.**  
Transonic Aerodynamics.  
04 p0541 A69-14580
- TRICOT, R.**  
Influence of the atmosphere and alloying elements on casehardening by gas carburization /Influence de l'atmosphere et des elements d'alliage sur la carburation superficielle par cementation gazeuse/.  
07 0 A69-19344
- TRIEBWASSER, S.**  
Large-scale integration and the revolution in electronics.  
07 p1090 A69-18372
- TRIECKEL, H. W.**  
RCA's approach to Mil-Std 883.  
24 p4287 A69-43205
- TRIFONOV, A. P.**  
Certain properties of a signal at the output of an optimal receiver /O nekotorykh svoystvakh signala na vykhode optimal'nogo priemnika/.  
06 p0888 A69-17464  
Some properties of the output signal of an optimal receiver.  
20 p3496 A69-37947
- TRIFONOV, IU. M.**  
Measurement of the ion temperature in a rarefied multicomponent plasma /Izmerenie temperatury ionov v razrezhennoi mnogokomponentnoi plazme/.  
23 p4196 A69-41839
- TRIFONOV, V. G.**  
Geological-morphological mapping of the moon and the peculiarities of the lunar surface structure /Geologo-morfologicheskoe kartirovanie luny i osobennosti stroeniia lunnoi poverkhnosti/.  
03 p0505 A69-12898
- TRIFONOW, J.**  
Impulse responses of the nervus opticus to excitation of the retina with acetylcholine /Impulsantworten des Nervus Opticus auf Reizung der Netzhaut mit Acetylcholin/.  
23 p4084 A69-41465
- TRIGER, S. A.**  
Thermodynamic stability of a plasma with strong interaction /O termodinamicheskoi ustoychivosti plazmy s sil'nym vzaimodeistviem/.  
02 p0292 A69-12635  
Theory of equilibrium and stability of a strong-current discharge in a dense optically transparent plasma /Teoriia ravnovesia i ustoychivosti sil'notochnogo razriada v plotnoi opticheski prozrachnoi plazme/.  
04 p0636 A69-14983  
The method of geometrical optics for differential equations of the fourth order as applied to low-frequency plasma oscillations.  
07 p1190 A69-18697  
Constrictions in a finitely conducting plasma /Perez-tiazhki v plazme konechnoi provodimosti/.  
13 p2315 A69-28449
- TRIGG, T. A.**  
Carbon fibre composites in rocket motor systems.  
23 p4180 A69-42158  
Carbon fibre composites in rocket motor systems.  
24 p4336 A69-43210
- TRIGON, R.**  
Optimal array adapted to the scanning regime /Reseau optimal adapte au domaine de balayage/.  
10 p1664 A69-23800
- TRIKHA, A. K.**  
A new criterion for optimizing linear vibration isolator systems subject to random input.  
[ASME PAPER 69-VIBR-44]  
10 p1807 A69-24182  
Comparative study of optimization techniques for shock and vibration isolation.  
[ASME PAPER 69-VIBR-45]  
10 p1808 A69-24183
- TRILLAT, J.-J.**  
Abrasion-induced deformation microtwinning observed by transmission electron microscopy /Formation de micromacules de deformation dues a l'abrasion, observee en microscopie electronique par transmission/.  
02 p0251 A69-11542
- TRILLING, L.**  
Application of molecular beams to the study of gas surface interactions at low and moderate energies.  
19 p3376 A69-36177
- TRIMBLE, V.**  
Frequency of events producing pulsars.  
11 p1963 A69-25252
- TRIMBOLI, F.**  
Study of man during a 56-day exposure to an oxygen-helium atmosphere at 258 mm. Hg total pressure. XIV - Communications.  
07 p1066 A69-19420
- TRIOLO, J. J.**  
Reflectance, solar absorptivity, and thermal emissivity of SiO sub 2-coated aluminum.  
11 p1918 A69-24835
- TRIOLO, L.**  
The behaviour of metal oxides injected into an argon induction plasma.  
13 p2315 A69-28458
- TRIPATHI, B. M.**  
On the possible existence of SH in solar atmosphere.  
06 p1002 A69-17317  
Molecules in the solar photosphere.  
14 p2528 A69-29963  
The dependence of facula-photosphere contrast in molecular lines on dissociation energy.  
18 p3204 A69-35391
- TRIPATHI, S. S.**  
Conjugate direction methods for nonlinear optimization problems.  
09 p1474 A69-22442
- TRIPLETT, W. A.**  
Support system cost effectiveness.  
15 p2722 A69-31126
- TRIPP, B. R.**  
Nanosecond pulse Doppler radar for the investigation of turbulent wakes in shock tunnels and ballistic ranges.  
19 p3293 A69-35743  
A high-speed digital data acquisition system.  
19 p3307 A69-35745
- TRIPP, C. N.**  
Volatile-liquid pressurization.  
[AIAA PAPER 68-630]  
02 p0232 A69-12382
- TRISCHLER, F. D.**  
High temperature thermoplastic adhesives.  
19 p3357 A69-35560
- TRISKA, P.**  
Measurements of ionospheric absorption.  
14 p2441 A69-29418
- TRISKOVA, L.**  
Contemporary outlook on the ionosphere and its study /Soucasny pohled na ionosferu a její vyzkum/.  
04 p0594 A69-15166  
On the possibilities of increasing the effective operation time on meteor forward scatter radio communication paths.  
08 p1394 A69-20609
- TRISTRAM, H.**  
Control of amino acid biosynthesis in micro-organisms.  
06 p0876 A69-18238
- TRITTHART, H.**  
Specific inhibition of the relaxation process in the mammalian myocardium at very low temperatures /1 to 10 deg C/ /Spezifische Hemmung des Erschlaffungsprozesses am stark gekuehlten Warmbluetermyokard /1 deg C-10 deg C/.  
23 p4092 A69-42060
- TRIVEDI, B. M. P.**  
Production rates of nuclides in thick targets and stone meteorites.  
06 p0989 A69-17283  
Production of Na super 22 and H super 3, in a thick silicate target and its application to meteorites.  
19 p3425 A69-36423
- TRIVEDI, N. B.**  
Studies of the sudden changes in H at equatorial stations in American Zone.  
01 p0068 A69-11116  
Studies of sudden changes in H and Z at equatorial stations in the Indian zone.  
08 p1307 A69-20187
- TRIVELPIECE, A. W.**  
Electron cyclotron interaction in a magnetic mirror compression experiment.  
08 p1364 A69-20519
- TRKAL, V.**  
Microwave spectroscopy /Mikrovlnna spektroskopie/.  
18 p3099 A69-35405  
Microwave quantum generators and amplifiers - Masers /Mikrovlnne kvantove generatory a zesilovace - Masery/.  
18 p3153 A69-35407
- TROCH, J.-L.**  
Magnetohydrodynamic flow in a channel of square cross section in the presence of a transverse magnetic field - Case where the walls parallel to the magnetic field are conducting /Ecoulement magneto-hydrodynamique en tube de section carree en presence d'un champ magnetique transversal - Cas ou les parois paralleles au champ magnetique sont conductrices/.  
05 p0799 A69-15697
- TRODAHL, H. J.**  
Peltier measurements below 4 K.  
14 p2449 A69-29563
- TROFIMENKO, A. T.**  
Motion of a jet along a cylinder with suction and blowing through its surface /Dvizhenie strui vdol' tsilindra s otosom i dvumov cherez vego poverkhnost'/.  
21 p3698 A69-39845
- TROFIMENKOFF, F. N.**  
Small-signal, high-frequency equivalent circuit for the metal-oxide-semiconductor field-effect transistor.  
13 p2238 A69-28429
- TROFIMOV, I. L.**  
Measurement of the H and Z components of the geomagnetic field with the aid of a proton magnetometer /Izmerenie H-i Z- sostavliayushchikh zemnogo mag-



nitnogo polia s pomosh'iu protonnogo magnetometra/.  
02 p0238 A69-11675

Measurement of the H and Z components of the geomagnetic field with a proton magnetometer.  
13 p2257 A69-28706

## TROFIMOV, M. G.

Erosion-resistant coatings of tungsten carbide and tungsten carbide with cobalt /Eroziionostoikiye pokrytiia iz karbida vol'frama i karbida vol'frama s kobalt'om/.  
20 p3561 A69-37373

## TROFIMOVA, I. V.

The initial phase of certain ionospheric storms /O nachal'noi faze nekotorykh ionosfernykh bur'/.  
17 p2967 A69-33988

## TROIANKINA, L. V.

Breakdown of a brittle rod under longitudinal impact /Razrushenie khrupkogo sterzhnia pri prodol'nom udare/.  
18 p3217 A69-34592

## TROIANOVSKII, I. E.

The stress state in a hollow viscoelastic cylinder with a variable inner radius /Napriazhennoe sostoiianie pologo viazko- uprugogo tsilindra s peremennym vnutrennim radiusom/.  
13 p2361 A69-27744

## TROINIKOV, A. I.

Line shape and the through width of the gain curve of an He-Ne laser at the wavelength of 0.63  $\mu$ m /Forma linii i shirina provala v krivoi usileniia He-Ne lazera na dline volny 0.63  $\mu$ m/.  
13 p2272 A69-28115

## TROISTKAIA, V. A.

Spectral characteristics of geomagnetic field pulsations of the Pi2 type /Spektral'nye kharakteristiki pul'satsii geomagnitnogo polia tipa Pi2/.  
20 p3520 A69-37038

## TROITSKAIA, I. T.

Influence of diets containing unicellular algae on the recovery of metabolic processes in protein-deficient white rats /Vliianie ratsiona s odnokletochnymi vodorosliami na vosstanovlenie obmennyykh protsessov u belyykh kryss posle belkovogo golodaniia/.  
07 p1065 A69-18977

Effect of diets containing unicellular algae on the recovery of metabolism in protein-deficient white rats.  
20 p3479 A69-38225

## TROITSKAIA, V.

Successive development of electromagnetic /ULF and VLF/ and light emissions during magnetic substorms /Developpement successif des emissions electromagnetiques /U.B.F. et T.B.F./ et lumineuses au cours des sous-orages magnetiques/.  
16 p2788 A69-32648

## TROITSKAIA, V. A.

Preliminary results of micropulsation studies at magnetoconjugate points in the Arctic and Antarctic.  
01 p0068 A69-11112

Relation between changes in pearl type oscillations /Pc1/ and solar activity during an 11-year cycle /O sviazi 11-letnik tsiklicheskiykh izmenenii kolebaniy tipa zhemchuzhyn /Pc1/ s solnechnoi aktivnost'iu/.  
02 p0239 A69-11696

Change in the frequency of Pc 1 micropulsations during a sudden deformation of the magnetosphere /Izmenenie chastoty mikropul'satsii Pc 1 pri vnezapnoi deformatsii magnitosfery/.  
02 p0240 A69-11697

Determination of the dimensions of the subsolar magnetosphere from the results of ground observations of geomagnetic micropulsations /Opredelenie razmerov podsolnechnoi magnitosfery po dannym nazemnykh nabludenii geomagnitnykh mikropul'satsii/.  
02 p0244 A69-12356

Studies at magnetically conjugate points /Issledovaniia v magnitno-sopriazhennykh tochkakh/.  
06 p0918 A69-17391

Relationship between middle-latitude VLF emissions and magnetic activity.  
06 p0920 A69-17735

Preliminary analysis of micropulsations of the electromagnetic field of the earth associated with the proton flare of July 7, 1966.  
06 p0996 A69-17754

Relation between the irregular pulsations of the geomagnetic field and the pulsations of polar aurorae and ULF radiation /O sviazi irreguliarnykh pul'satsii geomagnitnogo polia s pul'satsiiami poliarnykh siianii i UNCh-izlucheniem/.  
09 p1485 A69-21536

Preliminary analysis of micropulsations of the earth's electromagnetic field in connection with the proton flare of 7 July 1966.  
10 p1683 A69-23779

Some aspects of the excitation of micropulsations during the solar activity cycle /Osobennosti vzbuzhdeniia mikropul'satsii v tsikle solnechnoi aktivnosti/.  
10 p1687 A69-23919

Geomagnetic pulsations and diagnostics of the magnetosphere /Geomagnitnye pul'satsii i diagnostika magnitosfery/.  
13 p2254 A69-28176

Relationship between 11-year cyclic variations in pulsations of the pearl type /Pc1/ and solar activity.  
13 p2258 A69-28272

Change in the frequency of Pc1 micropulsations during a sudden deformation of the magnetosphere.  
13 p2258 A69-28278

Certain characteristics of the relation between the intervals of oscillations with diminishing period and ionospheric disturbances /Nekotorye osobennosti sviazi intervalov kolebaniy ubyvaiushchego perioda s ionosfernymi vozmushcheniiami/.  
14 p2436 A69-29060

Effect of a sudden discontinuation of type Pc 2-4 geomagnetic pulsations /Effekt vnezapnogo prekrashcheniia geomagnitnykh pul'satsii tipa Pc 2-4/.  
14 p2438 A69-29080

Relationship between irregular geomagnetic field pulsations and the pulsations of auroras and of VLF emission.  
16 p2783 A69-32531

Pi2 pulsations, polar aurorae ovals, and the plasma density in the magnetosphere /Pul'satsii Pi2, oval poliarnykh siianii i plotnost' plazmy v magnitosfere/.  
19 p3303 A69-36205

Micropulsations of the geomagnetic field and diagnostics of the magnetosphere /Mikropul'satsii magnitnogo polia zemli i diagnostika magnitosfery/.  
19 p3304 A69-36642

## TROITSKII, B. V.

Corpuscular heating of the polar ionosphere /O korpuskuliarnom nagreve poliarnoi ionosfery/.  
02 p0237 A69-11664

Theory of the formation of elongated inhomogeneities in the ionospheric F2 layer /K teorii obrazovaniia vytiianutykh neodnorodnostei v sloe F2 ionosfery/.  
08 p1309 A69-20425

Measurements of electron concentration in the polar ionosphere.  
12 p2071 A69-26703

Corpuscular heating of the polar ionosphere.  
13 p2257 A69-28695

## TROITSKII, I. V.

Optical resonator with an absorbing thin film as an oscillation mode selector /Opticheskii rezonator s tonkoi pogloschchaiushchei plenkoi v kachestve selektora tipov kolebaniy/.  
04 p0610 A69-14384

Method of introducing small calibrated damping in an optical resonator.  
04 p0613 A69-15415

Single-mode generation and Lamb dip in an argon ion gas laser /Odnomodovyi rezhim i lembov proval v gazovom lazere na ionakh argona/.  
10 p1706 A69-24080

Study of the characteristics of absorbing metallic films in the field of a standing wave at optical frequencies /Izuchenie kharakteristik pogloschchaiushchikh metallicheskiykh plenok v pole stoiachei volny opticheskikh chastot/.  
12 p2104 A69-26024

Optical resonator with a thin absorbing film as a mode selector.  
14 p2456 A69-28757

Method of emission line selection in lasers /Ob odnom metode selektsii linii generatsii v lazerakh/.  
20 p3555 A69-37730

Peculiarities of the competition of transitions in a single-mode He-Ne laser /Osobennosti konkurentsii perekhodov v odnomodovom He-Ne lazere/.  
24 p4328 A69-43165

## TROITSKII, S. V.

Wave scattering in a plane waveguide with an isotropic plasma /O rassciani voln v ploskom volnovode s izotropnoi plazmoy/.  
23 p4125 A69-42040

## TROITSKII, V. N.

Long-range Tropospheric Communications /Dal'naiia Troposfernaia Radiosviaz'/.  
04 p0558 A69-14919

## TROITSKII, V. S.

A possibility of signal matching in a radio interferometer with autonomous receivers /Ob odnoi vozmozhnosti sovmeshcheniia signalov radiointerferometra s avtonomnymi priemnikami/.  
03 p0431 A69-13777

The effect of the heat flow from the moon's interior on lunar radio emission in the presence of a variation in the material properties with depth /Vliianie potoka tepla iz nedr luny na ee radioizluchenie pri izmenenii svoistv veshchestva v glubinu/.  
11 p1956 A69-24298

The problem of the thermal conductivity equation in the presence of radiative energy transfer.  
13 p2373 A69-27525

Absolute measurements of radio-emission intensities of the discrete sources Cassiopeia-A and Cygnus-A at 30-60 cm wavelengths /Absolютnye izmereniia intensivnosti radioizlucheniia diskretnykh istochnikov Kassiopeia-A i Lebed'-A na volnakh 30-60 cm/.  
19 p3428 A69-36838

Effect of heat from within the moon on its radio emission for the case of lunar properties which vary with depth.  
24 p4390 A69-43789

## TROKHAN, A. M.

A frequency method for measuring the velocity of fluid flow /O chastotnom metode izmereniia skorosti techeniia zhidkosti/.  
04 p0598 A69-14999

Survey of turbulent gas flows by an optical method.  
06 p0926 A69-17544

## TROKHIMENKO, I. A. K.

Basic algorithms of the method of generalized numbers /Osnovnye algoritmy metoda obobshchennykh chisel/.  
09 p1472 A69-21777

## TROLINGER, J. D.

A wide view-angle holocamera.  
20 p3536 A69-36933

Holographic techniques for the study of dynamic particle fields.  
21 p3726 A69-39777

## TROLLOPE, D. H.

Water pressure beneath a skidding tyre.  
19 p3247 A69-35910

## TROLLOPE, J. R.

Exact solutions of Einstein's cosmological equations.  
10 p1778 A69-23400

## TROMBKA, J.

An integrated experiment for compositional analysis from an orbiter. [AAS PAPER 68-197]  
02 p0312 A69-11475

## TROMBSKI, M.

Vibration of circular orthotropic plates with variable rigidity /Drgania kolowych plyt ortotropowych o zmiennej sztywnosci/.  
09 p1618 A69-22238

## TROMMER, H.

Investigation of short-period field strength variations in the meter and decimeter wavelength range /Untersuchungen ueber kurzperiodische Feldstaerkevariationen im Meter- und Dezimeterwellenbereich/.  
24 p4281 A69-42612

## TROMP, TH. P.

On the economic importance of communication satellites for Europe.  
03 p0535 A69-13583

## TRON, A. S.

Structure and phase composition of transition zones in titanium/stainless steel bimetal /Struktura i fazovyi sostav perekhodnykh zon bimetalla titan-nerzhavieushchaia stal'/.  
13 p2283 A69-28490

## TRON, J.

Propulsion systems for high-speed aircraft /M infinity equals 7/ /Systemes de propulsion pour avions a grande vitesse /M infinity equals 7/.  
08 p1376 A69-20656

## TRONCONI, A.

Protonic compression radar.  
11 p1834 A69-24566

## TRONINA, V. P.

Some aspects of artificial damping of the longitudinal motions of a winged spacecraft in the earth's atmosphere /Nekotorye voprosy iskusstvennogo dempfirovaniia prodol'nogo dvizheniia krylatogo kosmicheskogo letatel'nogo apparata v atmosfere zemli/.  
21 p3829 A69-39828

- ONKO, V. D.**  
Optical insulator of infrared laser radiation /Opticheskii izoliator infrakrasnogo izlucheniia lazera/.  
17 p2981 A69-33117
- OPP, E. A.**  
Laminar flow of a viscous conducting fluid between parallel walls in a traveling magnetic field /Laminarnoe techenie viazkoi provodiashego zhidkosti mezhdu parallel'nymi stenkami v begushchem magnitnom pole/.  
07 p1192 A69-19023
- ROSHCHENKO, V. T.**  
Procedure for the investigation of inelastic strains in metals during cyclic impact loading.  
04 p0674 A69-14539
- Facility for investigating the energy dissipation in refractory metals during fatigue tests /Ustanovka dlia issledovaniia rasseianiia energii v tugoplavkikh metalakh v protsesse ispytaniia na ustalost'/.  
17 p2947 A69-33926
- ROSHICHEV, A. O.**  
Ring current in the magnetosphere and low-latitude magnetic bays /Kol'tsevoi tok v magnitosfere i nizkoshirotnye magnitnye bukhty/.  
13 p2253 A69-27699
- ROSHICHEV, O. A.**  
Streams of quasi-trapped particles and their interaction with the geomagnetic field - Symmetrical approximation /Toki kvazizakhvachennykh chastits i ikh vzaimodeistvie s geomagnitnym polem - Simmetrichnoe priblizhenie/.  
01 p0144 A69-10573
- Angular anisotropy of corpuscular radiation in a time-independent geomagnetic field.  
07 p1210 A69-19619
- Currents of quasi-trapped particles having discontinuities on the daytime and nighttime sides of the earth /Toki kvazizakhvachennykh chastits, imeiushchie razryvy na dnevnoi i nochnoi storonakh zemli/.  
09 p1577 A69-21767
- Currents of quasicaptured particles and their interaction with the geomagnetic field /symmetric approximation/.  
15 p2675 A69-30743
- Angular anisotropy of corpuscular radiation in a stationary geomagnetic field. II /Ob uglovoi anizotropii korpuskuliarnogo izlucheniia v stacionarnom geomagnitnom pole. II/.  
19 p3396 A69-36630
- ROSHIKHIN, G. V.**  
Certain metabolism characteristics in animals during a prolonged stay in a nitrogen- and helium-diluted hyperoxic atmosphere /Nekotorye pokazateli obmena veshchestv u zhivotnykh pri dlitel'nom prebyvanii v giperoksicheskoi atmosfere s azotnym i geliemov razbavleniem/.  
17 p2906 A69-32932
- TROSHIN, B. I.**  
Fluctuations of emission buildup in gas lasers /O fluktuatsiakh narastaniia izlucheniia v gazovykh kvantovykh generatorkh/.  
15 p2634 A69-30960
- Experimental investigation of the spectral composition of the emission of a gaseous ring laser /Eksperimental'noe issledovanie spektral'nogo sostava izlucheniia gazovogo kol'tseвого lazera/.  
24 p4328 A69-43159
- TROSHIN, IA. K.**  
Interaction of a shock wave with a viscous fluid film /Vzaimodeistvie udarnoi volny s plenoi viazkoi zhidkosti/.  
08 p1303 A69-20326
- TROSTIANSKAIA, E. B.**  
Influence of mineral powder fillers on the structure formation of phenolformaldehyde oligomers and the mechanical properties of compacts /Vliianie poroshkovykh mineral'nykh napolnitelei na strukturnoobrazovanie fenolformal'degidnykh oligomerov i mekhanicheskie svoistva pressmaterialov/.  
08 p1335 A69-20331
- Stresses occurring in resins of various compositions during solidification on glass films /Napriazheniia, voznikaiushchie v smolkakh razlichnogo sostava pri ikh otverzhenii na steklannykh plenakakh/.  
22 p3973 A69-40746
- TROTSSENKO, V. A.**  
Wave motions of an ideal fluid in axisymmetric vessels with annular ribs /Volnovye dvizheniia ideal'noi zhidkosti v osesimmetrichnykh sosudakh s kol'tsevymi rebrami/.  
11 p1868 A69-24769
- Calculation of the dynamic characteristics of an oscillating fluid in certain cavities with an annular free surface /O raschete dinamicheskikh kharakteristik kolebiushchiesia zhidkosti v nekotorykh polostiakh, imeiushchikh kol'tsevuuiu svobodnuiu poverkhnost'/.  
20 p3518 A69-38296
- TROTSIUK, N. I.**  
Focusing of molecular beams by electric and magnetic fields with helical symmetry.  
06 p0959 A69-16917
- Focusing of an atomic beam in the field of a six-pole magnetic system with allowance for spherical aberration /Fokusirovka atomnogo puchka v pole shestopolusnoi magnitnoi sistemy s uchedom sfericheskoi aberratsii/.  
19 p3380 A69-36602
- TROTTIER, J.-P.**  
Orientation relationships between phases of a pseudobinary eutectic alloy of cobalt and tantalum carbide, obtained by means of unidirectional solidification /Relations d'orientation entre phases dans un alliage eutectique pseudo-binaire cobalt-carbure de tantale, obtenu par solidification unidirectionnelle/.  
[ONERA-TP-714] 17 p2988 A69-33395
- TROUGHTON, A. J.**  
The use of welding in aircraft design.  
02 p0253 A69-12062
- TROUGHTON, J.**  
Measurement of plasma temperature by absorption of resonant laser radiation.  
14 p2501 A69-29954
- Measurement of magnetic fields in plasmas by the Faraday effect using resonant laser radiation.  
16 p2822 A69-32041
- TROUILHET, R.**  
Electrical and hydraulic monitoring audit Concorde flight controls.  
20 p3467 A69-38190
- Safety designed into Concorde servo flight controls.  
21 p3650 A69-39697
- TROUT, D.**  
Energy dissipation near the tropopause.  
19 p3303 A69-36407
- TROVER, W. F.**  
An adaptive airborne VHF/UHF transmitter system.  
07 p1106 A69-19114
- TROXEL, B. W.**  
Proterozoic eucaryotes from Eastern California.  
22 p3935 A69-40052
- TROXEL, D. I.**  
Reliability tasks vs product reliability.  
18 p3143 A69-34484
- TRUBERT, M. R.**  
An analog technique for the equalization of multiple electromagnetic shakers for vibration testing. [JPL-TR-32-1364] 02 p0229 A69-12374
- TRUBITSYN, V. P.**  
Theory of the figure of rotating planets in hydrostatic equilibrium /Teoriia figury gidrostaticheskii ravnovesnykh vrashchaiushchikhsia planet/.  
20 p3594 A69-37077
- TRUBNIKOV, B. A.**  
Thermodynamics of a weakly relativistic plasma.  
08 p1359 A69-19953
- Are white dwarfs superconductors/ques/ /Belye karliki-Sverkhprovodniki/ques/.  
08 p1391 A69-20546
- Relativistic corrections to the distribution functions of particles in a high-temperature plasma.  
14 p2499 A69-29847
- TRUCKENBRODT, E.**  
Fluid Mechanics, Fundamentals and Technical Applications /Stroemungsmechanik, Grundlagen und Technische Anwendungen/.  
07 p1121 A69-19376
- Flow mechanics theory and its possible applications to medicine /Die Erkenntnisse der Stroemungsmechanik und ihre moeglichen Anwendungen in der Medizin/.  
17 p2915 A69-33771
- TRUCKS, E.**  
Working data for development and design - Electronic data processing - an aid to design activity /Arbeitsunterlagen in Entwicklung und Konstruktion - Die elektronische Datenverarbeitung - ein Hilfsmittel fuer Entwurfsarbeiten/.  
18 p3106 A69-34838
- TRUEB, L. F.**  
Corrosion and stress corrosion cracking of explosively shocked austenitic stainless steels and explosion-bonded stainless steel-to-steel clads.  
03 p0444 A69-13308
- Electron-microscope study of thermal recovery processes in explosion-shocked nickel.  
20 p3563 A69-38126
- TRUEBLOOD, R. B.**  
Traffic control.  
05 p0789 A69-15560
- TRUELL, R.**  
Ultrasonic Methods in Solid State Physics.  
12 p2145 A69-26870
- TRUEMPER, M.**  
Solutions of the Newton-Liouville equations for locally ellipsoidal distributions with constant coefficients /Loesungen der Newton-Liouville-Gleichungen fuer lokal ellipsoidische Verteilungen mit konstanten Koeffizienten/.  
02 p0310 A69-11455
- TRUESDELL, C.**  
Rational mechanics of deformation and flow. II - A general theory of constitutive equations.  
02 p0341 A69-12251
- The nonlinear field theories in mechanics.  
05 p0792 A69-15768
- TRUESDELL, G.**  
Thermodynamics of deformation /La thermodynamique de la deformation/.  
02 p0339 A69-11990
- TRUITT, R. W.**  
Compressible relativistic flow.  
01 p0007 A69-11203
- TRUKHACHEV, A. A.**  
Two-stage detection of a fluctuating incoherent signal /Dvukhetapnoe obnaruzhenie nekogerentnogo fluktuiruiushchego signala/.  
11 p1833 A69-24444
- TRUKHAN, E. P.**  
Use of a pulse discharge with a restricted channel cross section in experimental spectroscopy /K voprosu o primenении impul'snogo razriada s ogranichenym secheniem kanala v eksperimental'noi spektroskopii/.  
06 p0964 A69-17253
- TRUKSHIN, A. K.**  
Emission spectrum of CdS crystals during two-photon excitation /Spektr generatsii kristallov CdS pri dvukhfotonnom vozbuзhdenii/.  
14 p2458 A69-29167
- TRUM, H. M. G. J.**  
Gain measurements at 10.6 mu in pulse-generated CO sub 2 plasmas at high pressures.  
23 p4174 A69-42196
- TRUMBLE, T. M.**  
Fiber optics for supersonic aircraft fire detection.  
06 p0926 A69-17679
- TRUMBO, D.**  
Rate and predictability in rate-tracking tasks.  
11 p1829 A69-24737
- TRUMBO, D. E.**  
Optical identification and observations of the pulsar NP 0532.  
09 p1592 A69-21458
- TRUMBO, R.**  
Transmission of cardiovascular data from dogs.  
07 p1071 A69-19133
- TRUMMEL, J. M.**  
A "fluidic transmitter."  
24 p4256 A69-43300
- TRUMPLER, P. R.**  
The influence of internal friction on the stability of high speed rotors with anisotropic supports. [ASME PAPER 69-VIBR-2]  
10 p1805 A69-24160
- TRUNIN, N. P.**  
Methods for experimental studies of the stressed state of shells made of glass fiber reinforced plastics /O metodakh eksperimental'nogo issledovaniia napriazhennogo sostoianiia obolochek iz stekloplastika/.  
11 p1995 A69-25681
- TRUNOV, IU. V.**  
Spacecraft control during reentry into the atmosphere /Upravlenie kosmicheskimi apparatami pri vkhode v atmosferu/.  
13 p2355 A69-27681



## TRUNOVA, Z. G.

Determination of the flux density of 3C 270 and 3C 278 at the 40-cm wavelength by means of a digital computer /Opređenje plotnosti potoka 3C 270 i 3C 278 na valne 40 cm s primenjenim EVTsM/.  
11 p1954 A69-24383

A computer determination of the 40cm flux density of 3C 270 and 3C 278.  
24 p4389 A69-43773

## TRURAN, J. W.

Nucleosynthesis in supernova explosions.  
08 p1401 A69-20898

The influence of a variable initial composition on stellar silicon burning.  
14 p2529 A69-29983

A numerical test of the quasi-equilibrium approximation for stellar silicon burning.  
14 p2529 A69-29984

Carbon-burning nucleosynthesis at constant temperature.  
20 p3612 A69-38163

## TRUSCELLO, V.

The performance evaluation and life testing of thermoelectric generators at the Jet Propulsion Laboratory.  
23 p1488 A69-42263

## TRUSCOTT, H. A.

Simulation method applied to reliability analysis of turbojet engine components operating in airline service.  
19 p3394 A69-36042

## TRUSHCHENKO, A. A.

Current carriers in ferromagnetic and antiferromagnetic semiconductors. I - Case of weak interaction /Nosii strumu v feromagnitnikh ta antiferomagnitnikh napivprovodnikakh. I - Vipadok slabkoi vzajemodii/.  
14 p2504 A69-28991

## TRUSHECHKIN, V. P.

Device for the thermal-fatigue testing of discs.  
15 p2583 A69-30208

## TRUSHEVSKII, S. N.

Modified nonstationary method of determining the absorptivity of materials /Modifitsirovannyi nestatsionarnyi metod opredeleniia pogloschatel'noi sposobnosti materialov/.  
09 p1528 A69-22720

## TRUSHIN, S. I.

Determination of the parameters of rotation and orientation of a satellite from the results of qualitative analysis.  
07 p1230 A69-19604

## TRUSHIN, V. A.

Influence of rotation on heat exchange between the gas and the components of the air-gas flow area of a gas turbine /Vlianie vrashcheniia na teploobmen mezhdu gazom i elementami protochnoi chasti gazovoi turbiny/.  
03 p0531 A69-12959

Experimental investigation of the coefficients of heat transfer from the gas to the blades of a turbine cascade under rotation conditions and during unsteady operation /K voprosu ob eksperimental'nom issledovanii koeffitsientov teplotodachi ot gaza k lopatkam turbinnoi reshetki v usloviakh vrashcheniia i na nestatsionarnykh rezhimakh/.  
21 p3850 A69-38864

## TRUSHINA, M. N.

Use of prophylactic and therapeutic complexes for repeated exposure to ionizing radiation.  
02 p0197 A69-11493

## TRUSOV, V. S.

Synthesis of pulse signals with good properties of the uncertainty function. I, II /O sinteze impul'snykh signalov s khoroshimi svoistvami funktsii neopredelenosti. I, II/.  
15 p2563 A69-30140

## TRUSOVA, A. S.

Stimulation of growth in certain biological objects subjected to vertical vibrations /Stimulatsiia rosta u nekotorykh biologicheskikh ob'ektov pod vozdustviem vertikal'noi vibratsii/.  
01 p0014 A69-10584

The effect of space flight on *Cosmos-110* on the microspores of *Tradescantia paludosa*.  
01 p0018 A69-11317

Growth stimulation of certain biological specimens subjected to vertical vibrations.  
15 p2555 A69-30754

## TRUSZYNSKI, G.

Communications for space research.  
12 p2028 A69-25933

## TRUSZYNSKI, G. M.

International benefits of cooperative tracking and data acquisition agreements.  
[UN PAPER 68-95912] 06 p1043 A69-17059

## TRUTTSE, I. L.

Upper atmosphere during geomagnetic disturbances.

II. 02 p0235 A69-11421

Upper atmosphere during geomagnetic disturbances.

III - Some regularities in density variations. 09 p1488 A69-21657

Some peculiarities of the heating of the upper atmosphere during geomagnetic storms and aurorae. 15 p2605 A69-31441

## TRUTTSE, Y. L.

Low latitude aurorae and M-arcs. 01 p0062 A69-10136

## TRYON, H. B.

Hot performance characteristics of a gas bearing Brayton cycle turboalternator. 23 p4071 A69-42279

## TRZEBA, E.

Trends in the development of frequency-selective components /Entwicklungstendenzen frequenzselektiver Bauelemente/. 09 p1467 A69-22558

## TRZHISKOVA, L.

Long-range ionospheric propagation of ultrashort waves /Dalechno ionosferno rasprostraneniye na ukv/. 13 p2255 A69-28543

## TRZIL, J. P.

Electron beam welding 2219 aluminum alloy for pressure vessel applications. 24 p4319 A69-42941

## TSAGAREISHVILI, O. P.

Diffraction of a plane electromagnetic wave on an oblique screen composed of conducting wires /Difraktsiia ploskoi elektromagnitnoi volny na skoshennoi reshetke iz provodiashchikh provolok/. 07 p1084 A69-19150

## TSAGARELI, Z. G.

Some ultrastructural indices of the state of myocardial cells during general hypoxia of the organism /Nekotorye ul'trastrukturnye pokazateli sostoiianiia miokardial'nykh kletok pri obshchei gipoksii organizma/. 21 p3651 A69-38412

## TSAI, L. L.

The admittance of a parallel-plate waveguide aperture illuminating a metal sheet. 02 p0218 A69-12328

Reflection coefficient of a TEM mode symmetric parallel-plate waveguide illuminating a dielectric layer. 18 p3108 A69-34802

Reflection coefficient of a parallel-plate waveguide illuminating a conducting sheet. 20 p3507 A69-37839

## TSAI, P. F.

Effect of warping rigidity on stability of a bar under eccentric follower force. 12 p2179 A69-26212

## TSAI, P. J.

On the contact problem of thin elastic shells. 19 p3438 A69-36305

## TSAI, S. W.

Some fundamental principles associated with composite materials. 18 p3154 A69-34607

The influence of random filament packing on the transverse stiffness of unidirectional composites. 20 p3626 A69-37758

Measurements of complex dynamic moduli for laminated fiber-reinforced composites. 20 p3627 A69-37763

## TSAI, W. T.

Dynamic snap-through of an elastic-plastic simple shallow truss. 19 p3446 A69-36836

## TSAI, W.-C.

Gunn effect swept frequency oscillator. 05 p0734 A69-16573

Bias circuit oscillations in Gunn devices. 12 p2041 A69-26628

## TSALIUK, E. B.

Comparison theorems for Volterra equations with a delayed argument. 04 p0625 A69-15099

## TSALIUK, Z. B.

Stability of Volterra equations /Ob ustoychivosti uravnenii Vol'terra/. 05 p0787 A69-16444

Uniqueness of the solutions to Volterra equations /Edinstvennosti reshenii uravnenii Vol'terra/. 10 p1722 A69-24089

Volterra functional inequalities /Funktional'nye neravenstva Vol'terra/. 13 p2290 A69-28687

## TSAMKIRANI-GEORGANOPOULOU, A.

Helicoidally symmetrical stress in cylindrical thin shells /Contrainte helicoidalement symetrique en coques minces cylindriques/. 03 p0529 A69-14050

## TSANDOULAS, G. N.

The effect of surface impedance variation on surface wave propagation along a rod waveguide. 04 p0576 A69-14764

Radiation from elliptic current rings. 11 p1850 A69-24981

## TSAO, C. H.

Composition of cosmic rays measured in Gemini XI. 21 p3787 A69-38356

## TSAO, C. K. H.

High speed digital transmission tests at 35 GHz. 03 p0389 A69-13192

Subsurface radio propagation experiments. 03 p0395 A69-13622

Design of millimeter wave communication systems. 03 p0405 A69-13723

## TSAP, T. T.

Time variations of a chromospheric network /Vremennye izmeneniia khromosfernoi setki/. 04 p0651 A69-14372

## TSAPKIN, V. V.

Energy exchange between active centers in glass /Obmene energiei mezhdu aktivnymi tsentrami v stekle/. 15 p2632 A69-30053

Features of energy transfer and dissipation in luminescence of phosphates based on phosphate glasses activated by neodymium /Osobennosti perenosia i dissipatsii energii v luminoforakh na osnove fosfatnykh stekol, aktivirovannykh neodimom/. 20 p3552 A69-37017

## TSAPLIN, M. I.

Heat transfer through the working blades into the turbine rotor /Peredacha tepla cherez rabochie lopatki v rotor turbiny/. 06 p1034 A69-17870

## TSAPOVA, A. P.

Study of the error in determining azimuths from observations of circumpolar stars at greatest elongation /Issledovanie oshibki opredeleniia azimuta miry po nabludeniim blizpoliushnykh zvezd v elongatsii/. 17 p3028 A69-32878

## TSARENKOV, B. V.

Controlling the spectral composition of the emission of GaP p-n structures /Ob upravlenii spektral'nykh sostavom izlucheniia GaP p-n-struktur/. 01 p0137 A69-10259

Photoluminescence method of measuring the distribution of equilibrium carrier concentration in GaAs /Fotoluminesstentnyi metod izmereniia raspredeleniia kontsentratsii ravnovesnykh nositelei toka v GaAs/. 03 p0489 A69-13893

Power epitaxial GaAs tunnel diodes /Moshchnyye epitaksial'nye tunnel'nye diody iz GaAs/. 03 p0489 A69-13895

Short-wavelength radiation of a GaAs diode laser. 03 p0441 A69-14165

Photoluminescence of epitaxial n-type GaAs prepared from p-type GaAs. 03 p0492 A69-14167

Control of the radiation spectrum of p-n GaP structures. 09 p1559 A69-22652

Photoluminescence method of measuring the equilibrium carrier distribution in GaAs. 11 p1939 A69-25694

High-power epitaxial GaAs tunnel diodes. 11 p1939 A69-25696

Radiative recombination in GaAs. 19 p3386 A69-36525

The shape of the spectral band of n-GaAs edge emission /K voprosu o forme polosy spektra kraevogo izlucheniia n-GaAs/. 19 p3392 A69-36610

Causes of the polarization of spontaneous recombination radiation in semiconductors of gallium arsenide. 04 p0625 A69-15099

- nide type in an electric field /O prichinakh polarizatsii spontannogo rekombinatsionnogo izlucheniia poluprovodnikov tipa arsenida galliia v elektricheskomo pole/.  
24 p4362 A69-43736
- AREVSKII, G. S.**  
The question of a blue companion of the delta Cepheid /delta Cep C /K voprosu o golubom spутнике delta Tsefa /delta Cep C//.  
11 p1957 A69-24405  
The blue companion of delta Cephei delta /Cep C/.  
24 p4391 A69-43795
- SARKOV, E. F.**  
Single-frequency oscillations in multidimensional quasi-linear systems with delay, during the action of random forces /Ob odnochastotnykh kolebaniakh v mnogomernykh kvazilineinykh sistemakh s zapazdyvaniem pri deistvii sluchainykh sil/.  
01 p0170 A69-10825  
Nonlinear oscillatory systems with a constant delay under the action of random forces /Nelineinye kolebatel'nye sistemy s postoiannym zapazdyvaniem pod deistviem sluchainykh sil/.  
03 p0468 A69-13866
- SARKOV, V. D.**  
Electric arc source of a low-temperature plasma.  
05 p0802 A69-15902
- SARKOVA, A. M.**  
Determination of the position of a jetstream axis from weather satellite cloud data /Opredelenie položenia osi struiinogo techeniia po dannym ob oblachnosti s meteorologicheskogo spутnika/.  
19 p3366 A69-36669
- SCHAUER, J.**  
Optimal rendezvous maneuvers in the case of elliptically orbiting targets /Optimale Rendezvousmanoever bei elliptischer Zielbahn/.  
04 p0658 A69-14828
- SCHOEGL, N. W.**  
On the transformation of histograms with geometrically progressing class intervals.  
20 p3627 A69-37764
- SCHUDI, T.**  
Coupled resonators - Critical dependence of the mutual interaction on their separation.  
24 p4329 A69-43756
- SCHUDI, TH.**  
Reflection properties of an active three-mirror-resonator.  
11 p1886 A69-25047
- SCHUNKO, H. F. A.**  
Geometric optical image aberrations of single and double mirrors.  
11 p1918 A69-24836
- TSEBULIA, G. G.**  
Structure of the infrared absorption spectrum of n-CdTe /Pro strukturu v infrachervonomu spektri poglinannia n-CdTe/.  
12 p2142 A69-25979
- TSEDILINA, E. E.**  
Diffusion in a nonisothermal plasma /ionosphere/.  
12 p2071 A69-26700  
Dynamics of inhomogeneities of fast electrons and ions in the earth's magnetosphere. I /Dinamika neodnorodnostei bystrykh elektronov i ionov v magnitosfere zemli. I/.  
20 p3520 A69-37029
- TSEITLIN, M. B.**  
Amplification in a plasma beam system.  
05 p0736 A69-16790
- TSEITLIN, N. M.**  
Peculiarity in the radio-emission spectrum of the Crab Nebula in the decimeter wavelength range /Ob osobennosti v spektre radioizlucheniia krabovidnoi tumannosti v desimetrovom diapazone voln/.  
10 p1784 A69-23941
- TSEITLIN, V. B.**  
Measurement of highly directional mirror-antenna parameters by focusing at a finite distance /Ob izmerenii parametrov ostronapravlenykh zerkal'nykh anten metodom fokusirovki na konechnom rasstoianii/.  
06 p0895 A69-17453  
Methods of designing collimator lenses /Metody rascheta kollimatorynykh linz/.  
06 p0895 A69-17454  
Measurement of parameters of highly directive reflector antennas by the method of focusing at a finite distance.  
20 p3508 A69-37938
- Design of collimator lenses.  
20 p3508 A69-37939
- TSEKHOMSKII, V. A.**  
Study of the effect of gamma irradiation on photochromatic glass by the EPR method /Izuchenie metodom EPR deistviia gamma-oblucheniia na fotokhromnye stekla/.  
23 p4180 A69-42471
- TSEKVA, B. E.**  
Theory of ultrasonic amplification in semiconductors with large dielectric constants.  
05 p0809 A69-16372
- TSELNIK, F. A.**  
Some characteristics of rotating plasma behavior in a magnetic trap.  
10 p1740 A69-23716
- TSEN, L. F.**  
Influence of the immersion depth on the characteristics of a hydrofoil with ventilation induced on the topside /Influence de la profondeur d'immersion sur les caracteristiques d'un profil a ventilation provoquee a l'extrados/.  
01 p0007 A69-11132  
A type of supersonic recycling wind tunnel for training and research /Sur un type de soufflerie supersonique a recyclage pour l'enseignement et la recherche/.  
07 p1116 A69-19289  
Influence of the wall temperature on the transverse flow in a three-dimensional laminar boundary layer /Influence de la temperature parietale sur l'écoulement transversal dans une couche limite laminaire tridimensionnelle/.  
08 p1251 A69-20274  
Some results for the three-dimensional boundary layer /Quelques resultats sur la couche limite tridimensionnelle/.  
19 p3241 A69-36762
- TSENDIN, L. D.**  
Drift-temperature waves in semiconductors with hot carriers.  
04 p0643 A69-15256  
Two-temperature hydrodynamics of gas mixtures with a large difference between the masses of the components /O dvukhtemperaturnoi gidrodinamike dlia gazovykh smesei s bol'shoi raznitsei v massakh komponent/.  
13 p2250 A69-28447
- TSENG, D. Y.**  
Scattering by a multimode corrugated structure with application to p type wood anomalies.  
17 p2925 A69-33844
- TSENG, F. I.**  
Pattern synthesis of circular arrays with many directive elements.  
08 p1282 A69-20036  
Pattern synthesis of circular arrays in a moving medium.  
22 p3915 A69-40706
- TSENG, F.-I.**  
Optimum scannable planar arrays with an invariant sidelobe level.  
04 p0570 A69-14302
- TSENOV, A.**  
Rheographic study of the blood circulation of the forearm after tightening with pneumatic cuff.  
21 p3653 A69-38838
- TSEPKOV, G. V.**  
A multilayer network with lateral couplings for distinguishing features in the recognition of visual patterns /Mnogosloinaia set' s lateral'nyimi svyaziami dlia vydeleniia priznakov i opoznaniia zritel'nykh obrazov/.  
19 p3260 A69-35898
- TSEREVITINOV, S. S.**  
Plasmoid structure in a coaxial injector.  
03 p0478 A69-13841  
Interaction between plasmoids and longitudinal magnetic fields /Vzaimodeistvie plazmennyykh sgustkov s prodol'nymi magnitnymi poliami/.  
03 p0481 A69-14212  
Deceleration and purification of a plasma jet by a rapidly increasing magnetic field /Tormozhenie i oshistka plazmennoi strui bystronarastaiushchimi magnitnym polem/.  
13 p2311 A69-28107
- TSERFAS, K. E.**  
Electric field and turbulence in a free atmosphere /Elektricheskoe pole i turbulentnost' v svobodnoi atmosfere/.  
13 p2295 A69-28523
- TSESTVADZE, A. A.**  
Scattering of current carriers on impurities in strongly compensated semiconductors /Rasseianie nositelei zariada na primesiakh v sil'no kompensirovannykh poluprovodnikakh/.  
15 p2666 A69-30063
- TSESEVICH, V. P.**  
The Cepheids /Tsefeidy/.  
21 p3795 A69-38403
- TSENEK, L. S.**  
A method of manufacturing aspherical surfaces which deviate only slightly from the sphere.  
12 p2102 A69-26597  
Physicostatistical interpretation of abrasive wear of solid bodies /Fiziko-statisticheskaia interpretatsiia abrazivnogo iznashivaniia tverdykh tel/.  
13 p2268 A69-28051  
A probabilistic model of mechanical wear of surfaces in friction.  
14 p2455 A69-29331
- TSESSARSKAIA, T. P.**  
Experimental verification of the permissible radiation doses for extended space missions /"chronic experiments" with dogs/ /K eksperimental'nomu obosnovaniu dopustimyykh doz radiatsii pri dlitel'nykh kosmicheskikh poletakh /provedenie khronicheskogo eksperimenta na sobakakh//.  
05 p0708 A69-16508  
Experimental verification of permissible radiation doses during prolonged space flights - A "chronic experiment" on dogs.  
18 p3095 A69-34727
- TSEUNG, A. C. C.**  
A joint pseudo-splitting/peroxide mechanism for oxygen reduction at fuel cell cathodes.  
16 p2748 A69-32809
- TSIANG, G. S.**  
Computerized ray optics method of calculating average value radar cross section.  
02 p0209 A69-12332
- TSIBAROV, V. A.**  
Flow near the leading edge of a tapered body in a rarefied gas. I /Techenie okolo perednei kromki zaostrennogo tela v razrezhenno gazu. I/.  
05 p0697 A69-16040
- TSIBEREV, V. P.**  
Low-voltage Knudsen arc in the cesium-inert gas mixture.  
14 p2403 A69-29248
- TSIDLKOVSKII, I. M.**  
Magnetoresistance oscillations in n-GaSb associated with 1/11/ minima /Ostsiillatsii magnetosoprotivleniia n-GaSb, svyazannye s minimumami /111//.  
13 p2319 A69-27900
- TSIGANIUK, A. I.**  
Investigation of the hydrodynamic stability of a boundary layer in the presence of suction or blowing /Issledovanie gidrodinamicheskoi ustoiichivosti pogranichnogo sloia pri nalichii otsasyvaniia ili vduvaniia/.  
18 p3124 A69-35381
- TSIGANOV, M. L.**  
Microstructure of a light-scattering medium of large particles.  
14 p2481 A69-28737
- TSIGELMAN, G. E.**  
Possibility of determining lunar rock types by the mass spectrometric method /O vozmozhnosti opredeleniia tipa lunnykh porod mass-spektrometricheskimi metodami/.  
22 p4034 A69-41106  
Possibility and advantages of mass-spectrometric analysis of lunar soil material from the ion component of the products of vaporization of the lunar soil by an electron beam /O vozmozhnosti i preimushchestvakh mass-spektrometricheskogo analiza veshchestva grunta lunny po ionnoi komponente produktov ispareniia grunta elektronnykh luchom/.  
22 p4034 A69-41107
- TSIGLER, A. V.**  
Application of a Mach-Zehnder interferometer for obtaining holograms of transparent objects /O primenении interferometra Tsendera- Makha dlia polucheniia gologramm prozrachnykh ob'ektov/.  
12 p2091 A69-26369
- TSIJULIN, M. A.**  
Shock waves during the motion of large meteoric bodies in the atmosphere /Udarnye volny pri dvizhenii v atmosfere krupnykh meteoritnykh tel/.  
20 p3613 A69-38205



## TSIKIN, A. N.

## TSIKIN, A. N.

Electrical conductivity of silicon monoxide thin films. 10 p1745 A69-23324

Changes in the electrical conductivity and color of SrTiO<sub>3</sub> sub 3 single crystals in a constant electric field /Izmenenie elektroprovodnosti i okraski monokristalov SrTiO<sub>3</sub> sub 3 v postoiannom elektricheskom pole/. 15 p2666 A69-30043

## TSIKIN, B. G.

Mechanism of power saturation in an isochronal traveling wave tube /O mekhanizme nasyschenia moshchnosti v izokhronnoi LBV/. 01 p0047 A69-10882

The power saturation mechanism in an isochronous traveling-wave tube. 12 p2041 A69-26646

## TSIKIN, I. A.

Potential noise stability in the case of an undetermined signal arrival time /O potentsial'noi pomekhovichivosty pri neopredelennom momente prik-hoda signala/. 15 p2563 A69-30134

## TSIKLAURI, G. V.

Experimental investigation of an injector model as a vaporizer for MHD systems /Eksperimental'noe issledovanie modeli inzhektora kak razgonnogo ustroystva dlia MGD-ustanovok/. 06 p0871 A69-17918

Determination of the local parameters of a flow in the mixing chamber of a vaporizer /Opredelenie lokal'nykh parametrov potoka v kamere smesheniia razgonnogo ustroystva/. 06 p0871 A69-17919

Method of designing a simple injector /Metodika rascheta prostieishogo inzhektora/. 06 p0872 A69-17920

Estimation of the efficiency of liquid-metal MHD systems with jumpwise operation of the injector in the mixing chamber of the vaporizer /Otsenka effektivnosti zhidkometallichesikh MGD-ustanovok pri rabote inzhektora so skachkom v kamere smesheniia razgonnogo ustroystva/. 06 p0872 A69-17921

Experimental investigation of a wet-steam injector /Eksperimental'noe issledovanie parovodiano inzhektora/. 13 p2246 A69-27490

## TSIKLIS, D. S.

Thermodynamic properties of nitrogen up to 10,000 atm and 400 deg C. 01 p0175 A69-10366

Handbook of Techniques in High-Pressure Research and Engineering. 07 p1137 A69-18412

## TSIKULIN, M. A.

Geometry of the shock wave of the Tunguska meteorite /Geometriia udarnoi volny tungusskogo meteorita/. 01 p0159 A69-11379

Luminance of shock wave fronts in certain gases. 03 p0415 A69-13411

Spectral brightness of shock waves in air /Spektral'naiia iarkost' udarnykh voln v vozdukh/. 11 p1857 A69-25755

## TSIMAKHOVICH, N. P.

Large Solar Radio Bursts /Bol'shie radiovspleski solntsa/. 20 p3588 A69-37444

## TSIMRING, SH. E.

Wavemeter employing an open resonator with spherical mirrors /Volnomer na otkrytom rezonatore so sfericheskimi zerkalami/. 03 p0407 A69-13983

## TSINENKO, O. V.

Effect of alloying with aluminum on the nature of the decomposition of a copper-titanium alloy. II /O vlianii legirovaniia aluminiumem na prirodu raspada v splyve med'-titan. II/. 11 p1905 A69-24922

## TSINOBER, A. B.

Certain properties of an MHD boundary layer on a plate /O nekotorykh svoistvakh MGD- pogranichnogo sloia na platine/. 01 p0130 A69-10771

The application of Pitot and Prandtl tubes in magnetohydrodynamic experiments. 10 p1727 A69-23100

Turbulent Hartmann flow /Turbulentnoe Gartmanovo techenie/. 14 p2500 A69-29908

## TSINTSADZE, N. L.

Transport of matter by a wave and the associated instability of weakly ionized plasma /Perenos veshchestva volnoi i sviazaanniia s nim neustoiichivost' slaboionizirovannoi plazmy/. 10 p1741 A69-23945

Nonlinear excitation of low-frequency plasma waves. 12 p2138 A69-26709

Influence of ion-acoustic oscillations on the electrical conductivity of a weakly ionized plasma /Vlianie ionno-zvukovykh kolebaniia na elektroprovodnost' slaboionizirovannoi plazmy/. 15 p2662 A69-30970

Suppression and parametric amplification of ion sound in a plasma. 16 p2821 A69-31797

## TSIPULIN, I. P.

Study of the influence of prolonged heating in vacuum and thermal cycling on the properties of SAP sheets /Issledovanie vlianiia dlitel'nykh nagrevov v vakuumie i teplosnem na svoystva listovykh polufabrikatov SAPa/. 02 p0266 A69-12126

Effect of the degree of cold deformation and subsequent annealing on the properties of semifinished SAP sheet products /Vlianie stepeni kholodnoi deformatsii i posleduiushchego otzhiga na svoystva listovykh polufabrikatov SAPa/. 03 p0452 A69-14121

## TSIREL, V. S.

Aeromagnetic determinations of the secular variation of the total-vector modulus /Ob aeromagnitnykh opredeleniakh vekovogo khoda modul'a polnogo vektora/. 20 p3522 A69-37061

## TSIRELMAN, N. M.

Investigation of the heat transfer and hydrodynamic resistance for a turbulent gas flow in the field of a longitudinal sign- variable pressure gradient. I /Issledovanie teploobmena i gidrodinamicheskogo soprotivleniia pri turbulentnom techenii gaza v pole prodol'nogo znakovperemennogo gradianta daviienia. I/. 15 p2548 A69-31173

Investigation of heat transfer and hydrodynamic resistance for a turbulent gas flow in the field of longitudinal pressure gradient of variable sign. II /Issledovanie teploobmena i gidrodinamicheskogo soprotivleniia pri turbulentnom techenii gaza v pole prodol'nogo znakovperemennogo gradianta daviienia. II/. 21 p3848 A69-38635

## TSIRS, G. P.

The quasi-rhythmicity effect in a number of geomagnetic and aeromagnetic phenomena /Effekt kvaziritmichnosti v riade iavlenii geomagnetizma i aeronomii/. 17 p2964 A69-33958

## TSITOVICH, P. A.

Effect of vibration of the bearing of a hydropendulum on vibrations of its axis /O vlianii vibratsii opory gidromaiatnika na kolebaniia ego osi/. 10 p1697 A69-24086

A coupled gyro system /Ob odnoi sviazaanoi giroskopicheskoi sisteme/. 13 p2264 A69-28527

Oscillations in nonlinear systems /O kolebaniiax v nelineynykh sistemakh/. 13 p2300 A69-28529

Theory of coupled gyroscopic systems /K teorii sviazaannykh giroskopicheskikh sistem/. 21 p3723 A69-38829

## TSIVILIN, K. S.

Matrix method for calculating three-dimensional frames of thin-walled rods /Matrichnyi metod rascheta prostranstvennykh ram iz tonkostennykh sterzhnei/. 15 p2714 A69-31199

A matrix method of designing thin-walled rods for bending and torsion /Matrichnyi metod rascheta tonkostennykh sterzhnei na izgib i kruchenie/. 23 p4230 A69-42005

## TSKHAI, V. A.

Stability of the mean density of valence electrons in titanium and vanadium monoxides /O postoiastve srednei plotnosti valentnykh elektronov v monooksiakh titana i vanadiia/. 09 p1523 A69-21738

Diffusion of carbon in alloys of niobium with titanium, zirconium, tungsten, and molybdenum /Diffuziia ugleroda v splyvakh niobiia s titanom, tsirkoniem, vol'framom i molibdenom/. 18 p3157 A69-35250

## TSKHAKAIA, D. D.

Suppression and parametric amplification of ion sound in a plasma. 16 p2821 A69-31797

## TSKHAKAIA, V. K.

Low voltage Knudsen arc in a cesium-argon mixture. 06 p0963 A69-16959

Current oscillations and electromagnetic radiation in low-pressure thermal-emission converters. 14 p2402 A69-29240

Low-voltage arc in the cesium-barium mixture. 14 p2403 A69-29241

Low-voltage Knudsen arc in the cesium-inert mixture. 14 p2403 A69-29242

## TSKHOVREBADZE, A. S.

Photometry of chromospheric flares at near minimum solar activity /Fotometriia khromosfernykh vspyshek okolo minimuma solnechnoi aktivnosti/. 01 p0149 A69-10122

## TSKHVEDADZE, R. M.

Shallow shells of revolution with jumpwise thickness variations /Pologie obolochki vrashcheniia s skachkoobraznym izmeneniiem tolschiny/. 11 p1968 A69-24318

Theory of circular plates with a stepwise varying thickness /K teorii kruglykh plastinok so skachkoobraznym izmeneniiem tolschiny/. 13 p2369 A69-28565

## TSKVITINIDZE, Z. I.

Numerical prediction of the geopotential and wind /K chislennomu prognozu geopotentsiala i vetra/. 13 p2294 A69-28523

## TSO, W. K.

Overall and local buckling of channel columns. 13 p2361 A69-27440

## TSOI, P. V.

Approximate calculation of thermoelastic stresses under nonstationary conditions /Priblizhennyi raschet termoprugikh napriazhenii pri nestatsionarnom rezhime/. 10 p1801 A69-23429

## TSOKOS, C. P.

Stability of controlled motion. 11 p1910 A69-25412

## TSOLKOVSKII, T. I.

The systems niobium-iron-boron and niobium-cobalt-boron. 15 p2641 A69-31246

## TSOU, F. K.

Shock Hugoniot in composite materials - A finite control-volume approach. [AIAA PAPER 69-359] 13 p2366 A69-28292

Analytical study of Hugoniot in unidirectional fiber reinforced composites. 20 p3627 A69-37768

## TSU, R.

Application of a k-p band model to GeTe and SnTe. 19 p3385 A69-36516

## TSUCHIDA, M.

Dynamic viscoelasticity of plasticized epoxy resins. 06 p0946 A69-17125

## TSUCHIYA, A.

The slowly varying component of the solar radiation emission around 1 cm wavelength. 17 p3030 A69-33056

## TSUCHIYA, K.

Aerial measurement of radiation temperatures over Mt. Fuji and Tokyo areas and their application to the determination of ground- and water-surface temperatures. 01 p0110 A69-10693

Sunrise and sunset effects on VLF /18.6 kHz/ transmissions over a long path. 06 p0889 A69-17655

## TSUCHIYA, S.

Shock-wave study of vibrational energy exchange between diatomic molecules. 13 p2301 A69-27361

## TSUDA, T.

Ionospheric irregularities and the cross-field plasma instability. I. 01 p0073 A69-11178

Ionospheric irregularities and the cross-field plasma instability. II. 01 p0073 A69-11179

Energy transfer across the magnetospheric boundary - A computer simulation of the cross-field heat transfer in a collisionless plasma. [ISAS-429] 06 p0916 A69-17023

- Ionospheric irregularities and the cross-field plasma instability.  
16 p2773 A69-31972
- UGE, S.-I.-C.  
Fine structure of hybrid combustion.  
16 p2879 A69-32013
- UI, D. C.  
Observations of surface plasmon excitation by tunneling electrons in GaAs-Pb tunnel junctions.  
07 p1200 A69-19402
- UI, E. Y. W.  
Natural vibrations of cylindrical panels.  
04 p0674 A69-14592
- UI, T.-Y.  
Wave propagation in a finite length bar with a variable cross section.  
04 p0671 A69-14412
- SUJI, M.  
Plastic fatigue life of steel subjected to a multiple repeated stress under rotary bending.  
02 p0346 A69-12421
- SUJI, S.  
A study on vaporizing combustor for gas turbines. I.  
21 p3784 A69-38607
- SUJI, Y.  
Approximate velocity profiles of equilibrium turbulent boundary layers.  
22 p3934 A69-41180
- SUJITA, J.  
The scattering and transmission functions in a two-layered atmosphere.  
08 p1350 A69-19799
- SUJIUCHI, J.  
Reconstruction of blurred images by filtration of spatial frequencies /Restitution des images floues par le filtrage des fréquences spatiales/.  
[UN PAPER 68-95240] 06 p0923 A69-17080
- SUKAMOTO, A.  
New hypersonic gun tunnel at Kyoto University.  
22 p3927 A69-40587  
Piston driven shock tube of Kyoto University.  
22 p3928 A69-41046
- SUKAMOTO, M.  
A CO sub 2 Q-switched laser and its nonlinear amplification characteristics.  
06 p0933 A69-17118
- SUKAMOTO, S.  
On the method of successive approximations for dynamic optimization of a nonlinear control system subjected to a stationary Gaussian random disturbance.  
11 p1859 A69-25025
- SUKANOV, V. B.  
Experimental investigation of an annular Couette flow in a coplanar magnetic field /Eksperimental'noe issledovanie krugovogo techeniia Kuetta v komplanarnom magnitnom pole/.  
16 p2821 A69-31953
- TSUKIJI, Y.  
A high-resolution quick-scan interferometer for solar studies at 3.75 GHz.  
18 p3118 A69-34968
- TSUKISHIMA, T.  
Microwave conductivity in a turbulent plasma with a magnetic field.  
05 p0804 A69-16442
- TSUNEMOTO, K.  
Search for quarks.  
15 p2674 A69-30308
- TSURPAL, I. A.  
A variant of problems concerning the stress concentration in a nonlinear formulation /Ob odnom variante zadach o koncentratsii napriazhenii v nelineinoi postanovke/.  
04 p0667 A69-14268  
Solution of two-dimensional physically nonlinear problems in the theory of elasticity for multiply connected regions /O reshenii ploskikh fizicheskii nelineinykh zadach teorii uprugosti dlia mnogosviaznykh oblastei/.  
05 p0841 A69-16203  
Analysis of quadratic-approximation versions in nonlinear stress concentration problems /Analiz variantov kvadrachnykh priblizhenii v nelineinykh zadachakh o kontsentratsii napriazhenii/.  
11 p1973 A69-24660  
Some problems concerning the stress concentration at holes and cavities with allowance for physical nonlinearities of the material /Nekotorye zadachi kontsentratsii napriazhenii okolo otverstii i polostei s ucheto fizicheskoi nelineinosti materiala/.  
11 p1974 A69-24665
- Two-dimensional problem in thermoelasticity for physically nonlinear media /Ploskaia zadacha termouprugosti dlia fizicheskii nelineinykh sred/.  
19 p3436 A69-35848
- TSURUDA, M.  
Hydrogen emission preceding auroral break-up.  
14 p2441 A69-29386
- TSURUTA, S.  
Nucleosynthesis in supernova explosions.  
08 p1401 A69-20898
- TSURUTA, T.  
Hologram schlieren and phase-contrast methods.  
08 p1313 A69-20176
- TSUTSUMI, M.  
Guided-wave propagation through magnetoelectric media.  
14 p2416 A69-29540
- TSVANG, L. R.  
Turbulence in the atmospheric boundary layer above steppe and sea surfaces /Turbulentnost' v pogranichnom sloe atmosfery nad stepnoi i morskoi poverkhnostiami/.  
03 p0458 A69-13270  
Turbulence in the atmospheric boundary layer above steppe and sea surfaces.  
14 p2471 A69-28778
- TSVANTSIG, V.  
Behavior of the diurnal cosmic ray variation before a Forbush effect /O povedenii sutochnoi variatsii kosmicheskikh lucheii pered Forbush-effektom/.  
10 p1769 A69-23904
- TSVETAEV, I. A.  
Synchronization of high-speed streak camera operation with a process occurring in a shock tube /O sinkhronizatsii raboty ustanovki SFR s protsessom v aerodinamicheskoi udarnoi trubei/.  
06 p0926 A69-17499  
Unsteady flow around models in an electromagnetic shock tube.  
07 p1119 A69-18744
- TSVETKOV, A. A.  
Cyclotron resonance of minority carriers in indium antimonide /Tsiklotronnyi rezonans neosnovnykh nositelei v antimonide indii/.  
15 p2667 A69-30068
- TSVETKOV, E. I.  
Some features of calculating the detection probability characteristics of multistage systems with parallel stage realization /Nekotorye osobennosti vychisleniia veroiatnostnykh kharakteristik obnaruzheniia mnogoetapnykh sistem s paralel'noi realizatsiei etapov/.  
02 p0206 A69-11604  
Computation of the statistical detection characteristics of multistage systems in which the stages are parallel.  
11 p1835 A69-24711
- TSVETKOV, N. M.  
Characteristics of the oscillograms of instantaneous values of wire tension during winding /Kharakteristiki ostillogramm mgnovennykh znachenii natiazheniia provoloki pri namatyvanii/.  
06 p0927 A69-17691
- TSVETKOV, V. V.  
Emission dynamics of semiconductor laser.  
19 p3337 A69-36534
- TSVETKOVA, I. V.  
Some aspects of utilization of higher plants as nutrition source in space missions.  
15 p2560 A69-31408
- TSVETKOVA, I. I.  
Investigation of the mass distribution of meteoric bodies in the Geminids and Quadrantids /Issledovanie raspredeleniia meteornykh tel po massam v potokakh geminid i kvadrantid/.  
05 p0823 A69-16033
- TSVETKOVA, T. N.  
A model of a thermally stratified steady atmospheric boundary layer - Numerical experiments /Model' stationarnogo temperaturnostratifikirovannogo pogranichnogo sloia atmosfery - Chislennye eksperimenty/.  
23 p4184 A69-42489
- TSVETKOVA, V. V.  
Changes in the sugar content of the blood in animals after exposure to general X-raying /Izmeneniia soderzhaniia sakhara v krovi pri obshchem rentgenovskom obluhenii zhivotnykh/.  
21 p3658 A69-39057
- TSVETNOV, V. V.  
Statistical properties of signals of autonomous radiometers /Statisticheskie svoistva signalov avtonomnykh radioizmeritelei/.  
15 p2566 A69-30337  
Energy characteristics of autonomous space radiometers /Energetika avtonomnykh kosmicheskikh radioizmeritelei/.  
15 p2575 A69-30338
- TSVIRKO, I. A.  
Gunn-effect cavity-controlled generator.  
09 p1468 A69-22596  
Resonant transfer of electromagnetic waves through an opaque boundary by a cyclotron plasma wave.  
18 p3181 A69-35027
- TSVYK, A. I.  
Excitation of diffraction radiation in a periodic structure with losses /Vozbuzhdenie difraktsionnogo izlucheniia v periodicheskoi strukture s poteriarmi/.  
23 p4124 A69-42031
- TSYBA, P. G.  
Vapor phase coating of particles /Obrazovanie pokrytii na chastitsakh iz parogazovoi fazy/.  
20 p3548 A69-37363  
Investigation of the process of niobium carbide formation on graphite particles /Issledovanie protsesssa obrazovaniia karbida niobiia na grafitovykh chastitsakh/.  
20 p3566 A69-37369
- TSYBINA, N. V.  
Ionization manometer transducers for measuring pressures from 10 super minus 10 to 10 super minus 1 torr /Ionizatsionnye manometricheskie preobrazovateli dlia izmereniia davlenii 10 super minus 10 to 10 super minus 1 torr/.  
21 p3724 A69-39077
- TSYBIZOV, I. I.  
Theoretical determination of the discharge coefficient of convergent conical nozzles /Raschetnoe opredelenie koeffitsienta rashoda suzhaiushchikhsia konicheskikh sopel/.  
24 p4364 A69-43074
- TSYBULSKII, V. V.  
Dynamics of variations in the aminotransferase activity in the organs and tissues of the rabbit during the development of radiation sickness /Dinamika izmeneniia aktivnosti aminotransferaz v organakh i tkaniakh krolika v protsesse razvitiia luchevoi bolezni/.  
21 p3657 A69-39051
- TSYGANKOV, M. N.  
Calculation of the amplitude-frequency characteristic of a rotor mounted on hydrostatic bearings /Raschet amplitudno-chastotnoi kharakteristiki rotora, ustanovlennogo na gidrostatische opory/.  
03 p0432 A69-12961
- TSYGANOV, S. A.  
Effect of the component ratio on the rate of combustion of condensed mixtures. III - Effect of composition on the pressure dependence of the rate of burning.  
12 p2027 A69-26474
- TSYGANOVA, N. I.  
General resistance in 62-day periods of hypokinesia with exposure to acceleration.  
02 p0198 A69-11513
- TSYGANOVA, S. E.  
Problems of General and Applied Physics, Republic Conference, 1st, Alma-Ata, Kazakh SSR, May 15-19, 1967, Transactions /Voprosy Obshechi i Prikladnoi Fiziki, Respublikanskaia Konferentsiia, 1st, Alma-Ata, Kazakh SSR, May 15-19, 1967, Trudy/.  
21 p3853 A69-39841
- TSYKALOV, V. G.  
Investigation of ferroelectrics at frequencies between 50 and 80 GHz /Issledovanie segnetoelektrikov na chastotakh 50-80 Ggts/.  
22 p3995 A69-41158
- TSYPIN, M. I.  
Improvement of diffuse layers in the case of anomalous diffusion in GaAs single crystals /K voprosu o sovershenstve diffuzionnykh sloev dlia sluchaiia anomal'noi diffuzii v monokristallakh GaAs/.  
15 p2670 A69-31048  
Some peculiarities of the structure and behavior of semiconductor compounds of nonstoichiometric composition.  
15 p2670 A69-31243
- TSYS, S. N.  
Measurement of the amplification coefficients in 00 deg 1 - 10 deg 0 and 00 deg 1 - 02 deg 0 transitions of CO sub 2 /Izmerenie koeffitsientov usileniia na



perekhodakh 00 deg 1 - 10 deg 0 i 00 deg 1 - 02 deg 0  
CO sub 2/.

04 p0611 A69-14426

Possibility of a thermodynamic approach to the calculation of a molecular laser /O vozmozhnosti termodynamicheskogo podkhoda k raschetu molekulyarnogo lazera/.

06 p0934 A69-17465

A thermodynamic approach to the analysis of a molecular laser.

20 p3555 A69-37948

TSYTOIVICH, V. N.

The buildup of electromagnetic waves by an induced Compton effect as a possible source of powerful radio emission /Raskachka elektromagnitnykh voln induktivnykh Kompton-effektom kak vozmozhnyi istochnik moshchnogo radioizlucheniya/.

11 p1957 A69-24402

TSYTOIVICH, V. N.

Spectra of a high-frequency turbulent plasma and the acceleration of subcosmic rays /Spektry vysokochastotnoi turbulentnoi plazmy i uskorenie subkosmicheskikh luchej/.

01 p0145 A69-10790

Scattering of electromagnetic waves by the turbulent pulsations in an inhomogeneous magnetoactive plasma.

02 p0289 A69-12174

Polarization of turbulent plasma radiation under space conditions /Polarizatsiya izlucheniya turbulentnoi plazmy v kosmicheskikh usloviyakh/.

03 p0506 A69-13083

Nonlinear interaction between waves in a relativistic plasma /Nelineinoe vzaimodeistvie voln v relativistskoi plazme/.

03 p0397 A69-13710

Nonlinear theory of hydrodynamic beam instabilities. I.

03 p0480 A69-14137

Nonlinear interaction between intense plasma waves /O nelineinoy vzaimodeistvii intensivnykh plazmennyykh voln/.

08 p1362 A69-20427

Electromagnetic wave scattering at hydrodynamic pulsations of a turbulent plasma /Rasseianie elektromagnitnykh voln na gidrodinamicheskikh pul'satsiyakh turbulentnoi plazmy/.

08 p1275 A69-20435

Spontaneous excitation of magnetic fields in a turbulent plasma.

10 p1740 A69-23715

Conversion of plasma waves into electromagnetic waves in a strong magnetic field.

11 p1922 A69-24245

Low-energy cosmic rays and plasma turbulence /Kosmicheskije luchi nizkoj energii i plazmennaja turbulentnost' /.

11 p1945 A69-24380

Radio emission of fast cosmic ions.

12 p2149 A69-26209

Plasma mechanisms of radiation in astrophysics /Plazmennye mekhanizmy izlucheniya v astrofizike/.

12 p2149 A69-26619

Polarization of the radiation of turbulent plasma under cosmic conditions.

14 p2515 A69-28765

Scattering of radiation in the spectral line of a turbulent plasma /Rasseianie izlucheniya v spektral'noi linii turbulentnoi plazmoi/.

19 p3396 A69-36573

High-frequency turbulence spectra of a plasma and acceleration of subcosmic rays.

20 p3591 A69-38008

Induced Compton effect for plasma and electromagnetic waves under astrophysical conditions /Induktivnyy Kompton-effekt na plazmennyykh i elektromagnitnykh volnakh v astrofizicheskikh usloviyakh/.

20 p3607 A69-38035

The buildup of electromagnetic waves by the induced Compton effect as a possible source of strong radio emission.

24 p4391 A69-43792

TSYTSENKO, V. A.

Some problems associated with the improvement of the production technology and increasing the quality of titanium alloy blanks /Nekotorye voprosy sovershenstva tehnologii proizvodstva i povysheniya kachestva polufabrikatov iz titanovykh splavov/.

07 p1161 A69-18765

TU MANH, P.

Theoretical analysis of the parametric amplification in a beam-plasma system /Analyse theorique de l'amplification parametrique dans un systeme faisceau plasma/.

10 p1740 A69-23791

TUAN, H. S.

Amplitude and phase distortion of a Gaussian pulse carrier propagating in plasmas.

02 p0290 A69-12351

TUAN, H.-S.

Mode theory of waveguide filled with warm uniaxial plasma.

16 p2756 A69-31576

On the properties of warm-plasma-filled rectangular waveguide with strong transverse magnetic field.

16 p2756 A69-31581

TUAN, Y.

Epoxy casting of large contoured nozzles.

24 p4318 A69-42643

TUBA, E. S.

A method of successive approximation applied to an elastic-plastic deformation theory.

19 p3447 A69-36860

TUBA, I. S.

A perturbation theory of antiplane elastic-plastic deformations.

13 p2359 A69-27263

TUBBS, L. D.

Nitric acid vapor above 19 km in the earth's atmosphere.

23 p4155 A69-41634

TUCCARI, M.

ELDO satellite command decoder performance.

11 p1834 A69-24563

TUCHIN, V. V.

The fluctuation width of the emission spectrum of a gas laser /K voprosu o fluktuatsionnoi shirine spektra izlucheniya gazovogo opticheskogo kvantovogo generatora/.

15 p2633 A69-30121

TUCHINSKII, L. I.

Thermal stresses in fiber-reinforced metals. II /Termicheskie napriazheniya v metallakh, armirovannykh voloknami. II/.

04 p0682 A69-15393

Development of techniques for the production of nickel reinforced with mullite whiskers.

05 p0782 A69-16794

Fiber-reinforced metals /FRM/ /Literature review/.

10 p1711 A69-23335

Thermal stresses in fiber-reinforced metals. I.

15 p2638 A69-30285

Thermal stresses in fiber-reinforced metals. II.

18 p3223 A69-35021

TUCHKEVICH, V. M.

Anisotropy of the conduction band in CdSnAs sub 2 /Anizotropiya zony provodimosti v CdSnAs sub 2/.

03 p0488 A69-13888

Influence of uniaxial deformation on the activation energy epsilon sub 2 of p-type GaSb.

04 p0644 A69-15269

Anisotropy of the conduction band in CdSnAs sub 2.

11 p1939 A69-25689

IR absorption in n-type gallium phosphide.

19 p3385 A69-36518

TUCHKOV, L. T.

Measurement of Radio-Thermal and Plasma Radiation in the Microwave Range /Izmerenie Radioteplovyykh i Plazmennyykh Izlucheni v SVCh Diapazone/.

03 p0420 A69-12919

Intrinsic Noise Emissions in Radio Channels /Estestvennyye Shumovyye Izlucheniya v Radiokanalakh/.

13 p2219 A69-27304

TUCK, R. C.

A version of the Aitken accelerator for computer iteration.

20 p3498 A69-36950

TUCKER, D. G.

Design of thinned arrays using the array-excitation autocorrelation function.

11 p1856 A69-25661

TUCKER, G. J.

The body image of the aviator.

23 p4112 A69-42364

TUCKER, P. B.

Wing-tail interaction flutter of moderately spaced tandem airfoils.

06 p1028 A69-18105

TUCKER, R. H.

Flow and filtration characteristics of wire cloth.

05 p0750 A69-16111

Optical positions of radio sources.

11 p1958 A69-24465

TUCKER, R. P.

Dislocation channeling in neutron-irradiated niobium.

09 p1521 A69-21321

Radiation hardening in single crystal niobium: Temperature dependence of yielding.

13 p2275 A69-27341

TUCKER, T. J.

Exploding wire detonators - Threshold burst current dependence upon detonator and environmental parameters.

01 p0119 A69-10670

The properties and transformation characteristics of welds in Ti-6Al-2Sn-4Zr-2Mo titanium alloy.

08 p1318 A69-19911

TUCKER, T. S.

Stability of nonlinear computing schemes.

21 p3678 A69-38770

TUCKER, W. H.

Contribution of infrared galaxies to the cosmic background.

02 p0308 A69-12121

X-ray emission in the nuclei of Seyfert galaxies.

04 p0649 A69-15381

The interaction of X-ray sources with optically thin environments.

18 p3186 A69-34294

Pulsar emission mechanism.

20 p3604 A69-37571

Ionization equilibrium and radiative cooling of a low-density plasma.

24 p4376 A69-42666

Rotating neutron stars, pulsars and cosmic X-ray sources.

24 p4369 A69-43222

TUCKER, W. K.

A device to test mechanical properties of tissues and transducers.

22 p3890 A69-40201

TUCKFIELD, R.

Observations of enhanced resistivity in the wakefront of a laser-produced plasma interacting with a magnetic field.

16 p2823 A69-32564

TUCKFIELD, R. G.

Dynamics of a laser created plasma expanding in a magnetic field.

06 p0970 A69-17952

TUDORACHE, S.

Optical pumping and selective population - Applications to the study of atom-atom collision processes /Pompajul optic si popularea selectiva - Aplicatie la studiul proceselor de ciocnire atom-atom/.

21 p3735 A69-38454

TUFFNELL, G. W.

18 percent nickel 350-maraging steel.

08 p1330 A69-20009

TUFTS, A.

Transient and steady state thermal self-focusing.

10 p1706 A69-24009

TUGOV, I. I.

Possibility of the birth of electron-positron pairs in a vacuum during the focusing of laser radiation /O vozmozhnosti rozhdeniya elektronno-pozitronnykh par v vakuum pri fokusirovke lazernogo izlucheniya/.

22 p3965 A69-41116

TUGUSHEV, R. KH.

Determination of a waveguide field of arbitrary cross section on models with quasi-static fields /Opredelenie polia volnovodov proizvol'nogo poperechnogo secheniya na modeliakh s kvazistaticheskimi polem/.

05 p0717 A69-15635

Determination of the field of waveguides of arbitrary cross section by means of models with a quasi-static field.

16 p2762 A69-32493

TUKHASHVILI, K. I.

Time-space distribution of the winter anomaly /O vremennom i prostranstvennom raspredelenii zimnei anomalii/.

14 p2437 A69-29072

Seasonal and diurnal variations in radio wave absorption in the ionosphere over Tiflis /Sezonnyye i suutochnyye variatsii pogloshcheniya radiovoln v ionosfere nad Tbilisi/.

20 p3491 A69-37677

Frequency dependence of radio wave absorption in the ionosphere and the effect of deflecting absorption /Chastotnaya zavisimost' pogloshcheniya radiovoln v ionosfere i vliyanie otkloniaushchego pogloshcheniya/.

20 p3491 A69-37680

- TUKISH, E. I.**  
Investigation of the shape of nuclear cascade showers in lead and the energy spectrum of nuclear-active particles with the aid of a calorimeter with lead absorbers.  
13 p2303 A69-28399
- TULAK, R.**  
Accurate measurement of distance by radio waves - Radio distance meter.  
18 p3139 A69-35493
- TULCHII, V. I.**  
Solution of some stress concentration problems by the contour smoothing method /O reshenii nekotorykh problem kontsentratsii napriazhenii s pomosh'iu metoda sglazhivaniia kontura/.  
11 p1973 A69-24661  
Deflection of an infinite anisotropic plate weakened by a circular hole and reinforced by a thin elastic ring /Izgb beskonechnoi anizotropnoi plastinki, oslablennoi krugovym otverstiem i podkreplennoi tonkim uprugim kol'stom/.  
17 p3055 A69-33128
- TULENKOVA, L. N.**  
Temperature of a cometary ice nucleus in the proximity of the sun /Temperatura ledianogo iadra komety vblizisolntsa/.  
14 p2523 A69-29706
- TULER, F. R.**  
A criterion for the time dependence of dynamic fracture.  
10 p1803 A69-24032  
Failure mechanisms in materials-structures subjected to short-time loadings.  
15 p2639 A69-30364
- TULIN, M. P.**  
On the creation of ultra-jets.  
19 p3301 A69-36815
- TULINOV, G. F.**  
Temperature measurements of the upper atmosphere in the northern polar zone.  
15 p2606 A69-31448
- TULINOV, V. F.**  
Measurement of the corpuscular radiation intensity in the upper atmosphere at various latitudes /Izmerenie intensivnosti korpuskularnogo izlucheniia v verkhnei atmosfere na razlicnykh shirotakh/.  
05 p0814 A69-16052  
Contribution of corpuscular radiation to the ionization of the ionospheric D layer /Vklad korpuskularnogo izlucheniia v ionizatsiiu D-sloia ionosfery/.  
09 p1577 A69-21770  
Corpuscular radiation intensity during geomagnetic disturbances.  
15 p2677 A69-31327  
The role of L alpha -radiation in ionization of the lower ionosphere.  
15 p2605 A69-31438  
Measurements of the intensity of corpuscular radiation in the upper atmosphere at different latitudes.  
20 p3591 A69-37962  
The ionization of the lower ionosphere under the influence of corpuscular radiation.  
21 p3787 A69-38352  
The role of L sub alpha -radiation in the ionization of the lower ionosphere /O roli L sub alpha -izlucheniia v ionizatsii nizhnei ionosfery/.  
22 p4008 A69-41096  
Variability of the intensity of corpuscular radiation in the upper atmosphere at mid-latitudes /Izmenchivost' intensivnosti korpuskularnogo izlucheniia v verkhnei atmosfere na srednikh shirotakh/.  
22 p4008 A69-41104
- TULL, R. G.**  
Shop-testing a 107-inch telescope mirror.  
13 p2259 A69-27205  
Planetary spectroscopy with the 107-inch telescope.  
21 p3727 A69-39786  
Wavelength errors in spectrographs. I - The effect of surface irregularities in camera mirrors.  
23 p4167 A69-42189
- TULLE, P. A.**  
Measurement of the density gradient of a plasma column /Mesure du gradient de densite d'une colonne de plasma/.  
01 p0128 A69-10390
- TULLIS, B. J.**  
Development of a laser-Doppler particle sensor for the measurement of velocities in rocket exhausts. [AIAA PAPER 68-723]  
12 p2094 A69-26783
- TULLY, J. W.**  
Dynamic mode surface waves on magnetized YIG and ferrite rods.  
10 p1746 A69-23513
- TULUB, A. V.**  
Perturbation theory of polarization in resonance media.  
11 p1895 A69-24630
- TULUNAY, E.**  
Analogue antimultipath communication system.  
11 p1834 A69-24552
- TULUPCHUK, IU. M.**  
Method of data handling by groups in the pattern recognition and decision making problem /Metod grupovogo urakhuvannia argumentiv u zadachi rozpoznavannia obraziv i priiniattia rishe/.  
08 p1278 A69-20420  
The group method of data handling in pattern recognition and decision problems.  
14 p2418 A69-29658
- TULUPOV, B. I.**  
Some characteristics of cumulus cloud structure.  
09 p1536 A69-21866
- TULUPOV, V. I.**  
Angular and spectral distributions of infrared terrestrial radiation into space in the vicinity of the horizon according to satellite observations.  
03 p0422 A69-13506  
Latitudinal dependence of the spectral intensities of terrestrial radiation into space according to observations of Cosmos 45 and Cosmos 65 satellites.  
03 p0422 A69-13507  
Estimation of corrections for nonuniformity of measurement to the correlation relationships between spectral densities of radiation from the earth /Otsenka popravok na neodnovernennost' izmereniia k korreliatsionnym zavisimostiam mezhdz spektral'nymi intensivnostiami izlucheniia zemli/.  
14 p2435 A69-29043  
Correlation functions and the spectral densities of the intensity of outgoing radiation in the spectral range from 0.6 to 0.8 micron /according to Cosmos 45 satellite measurements/ /Korreliatsionnye funktsii i spektral'nye plotnosti intensivnosti ukhodiashego izlucheniia v intervalle spektra 0,6-0,8 mkm /po izmereniam so sputnikha "Kosmos-45"/.   
19 p3366 A69-36672
- TUMA, D. T.**  
Non-adiabatic and stochastic mechanisms for cyclotron resonance trapping and heating in mirror geometries.  
08 p1364 A69-20518  
Electron cyclotron interaction in a magnetic mirror compression experiment.  
08 p1364 A69-20519
- TUMANOV, V. I.**  
Investigation of the structure of cermet hard alloys WC-Co and WC-TiC-Co by magnetic methods /Issledovanie stroeniia metallokeramicheskikh tverdykh splavov WC-Co i WC-TiC-Co magnitnymi metodami/.  
13 p2275 A69-27343
- TUMASHEV, IU. S.**  
Choice of optimum measuring parameters.  
10 p1791 A69-24192  
Determination of the statistical characteristics of the lunar relief /Ob opredelenii statisticheskikh kharakteristik lunnoho rel'efa/.  
22 p4033 A69-41092
- TUN, V.**  
Increase of order property of the direct values of the generalized potentials for comparison functions of the general elliptic operator of the second order.  
03 p0456 A69-13604
- TUNAKOV, A. P.**  
Computerized processing of the calibration of pneumometric devices.  
21 p3724 A69-39100
- TUNALEY, J. K. E.**  
The impedance of a probe in a warm plasma.  
16 p2824 A69-32611
- TUNCUL, OE.**  
An application of diakoptics in the determination of turbine bucket frequencies by the use of perturbations. [ASME PAPER 69-VIBR-57]  
10 p1804 A69-24151
- TUNER, G. D.**  
V/STOL overwater operation. [AIAA PAPER 69-791]  
19 p3243 A69-35638
- TUNIK, A. A.**  
Autonomy conditions for a sampled-data multivariable control system for the spectra of random processes.  
08 p1296 A69-20233  
Multidimensional discrete systems for controlling the spectral characteristics of random processes /Mnogomernye diskretnye sistemy upravleniia spektral'nymi kharakteristikami sluchainykh protsessov/.  
19 p3286 A69-35890
- TUNIK, A. L.**  
Experimental determination of the modulus of interlaminar slip during creep of a fiberglass-reinforced plastic produced by winding /Eksperimental'noe opredelenie modulia mezhdusloinoio sdviga pri poluchestii stekloplastika, izgotovlennogo namotkoi/.  
18 p3163 A69-35365
- TUNITSKII, L. N.**  
Comparison of arc and high-frequency discharges in neon-helium lasers.  
03 p0441 A69-14139  
Pure oxygen laser.  
06 p0932 A69-16923  
Study of the pure oxygen gas laser /Issledovanie gazovogo kvantovogo generatora na chistom kislorode/.  
06 p0933 A69-17259  
The role of collisions in gas lasers /Rol'stolknovenii v gazovykh lazerakh/.  
14 p2459 A69-29388  
Pulsed emission mode in an argon-oxygen laser /Impul'snyi rezhim generatsii v lazere na smesi argon-kislorod/.  
17 p2982 A69-33633
- TUNNICLIFFE, R. J.**  
Concerning determinations of the drift velocity and lateral diffusion of positive ions in hydrogen.  
20 p3580 A69-38026
- TUNSTALL, M. J.**  
On the effect of a sharp bend in a fully developed turbulent pipe-flow.  
03 p0419 A69-13952
- TUNZI, B. R.**  
MOS random-access arrays.  
06 p0894 A69-17203
- TURBABIN, A. S.**  
The Cauchy problem for linear nonhomogeneous differential equations with a delayed argument /K zadache Koshi dlia lineinykh neodnorodnykh differentsial'nykh uravnenii s zapazdvaivushchimi argumentom/.  
15 p2643 A69-30101
- TURCHAK, L. I.**  
Supersonic flow of a detonating mixture past a sphere /Sverkhzvukovoe obtekanie sfery gremuchei smesi'/.  
06 p0859 A69-17343
- TURCHANIN, A. G.**  
Thermodynamic characteristics of high-melting-point carbides in the homogeneity region /O termodinamicheskikh kharakteristikakh tugoplavkikh karbidov v oblasti gomogennosti/.  
21 p3742 A69-38614
- TURCHENKO, V. IA.**  
Application of the Legendre transformation to the study of plane elastoplastic loading waves /Primenenie preobrazovaniia Lezhandra k issledovaniui ploskikh uprugo-plasticheskikh voln nagruzkii/.  
04 p0673 A69-14495
- TURCHIN, N. M.**  
Apparatus for study of the boiling of potassium in tubes.  
03 p0534 A69-14150
- TURCHIN, V. F.**  
Statistical regularization of solutions to incorrect problems /Statisticheskaia reguliariatsiia resheniia nekorrektnykh zadach/.  
10 p1689 A69-23968  
Application of statistical regularization to the determination of the vertical temperature profile of the atmosphere /Primenenie statisticheskoi reguliariatsii k opredeleniiu vertikal'nogo profilia temperatury atmosfery/.  
18 p3167 A69-35339  
Statistical regularization of the solution of incorrectly posed problems.  
21 p3680 A69-39654
- TURCHINA, V. D.**  
Equivalent line widths in sunspots /Ekvivalentnye shiriny linii v solnechnykh piatnakh/.  
11 p1955 A69-24388  
Equivalent line widths in sunspots.  
24 p4390 A69-43778



## TURCI, E.

Data acquisition system for aeronautical use /Sistema di acquisizione dei dati per impieghi aeronautici/. 14 p2450 A69-29686

Different simulations of disturbances in instrumentation utilizing digital integrated circuits for a computation of the reliability in complex circuits. 15 p2628 A69-30848

## TURCK, F.

Attitude control principle of the PAS satellite /Principe du controle en attitude du satellite P.A.S./, 17 p3048 A69-33238

## TURCK, J.

Infrared equipment as an air navigational aid /Equipements infrarouges d'aide a la navigation aerienne/. 19 p3371 A69-36705

## TURCOTTE, D. L.

Convection in a mantle with variable physical properties. 10 p1682 A69-23412

Structure of strong shock waves. 18 p3120 A69-34457

Implications of convection within the moon. 20 p3603 A69-37561

On the propagation of ionization waves. 22 p3990 A69-40758

## TURDYBEKOV, I. T.

Structural changes in a molybdenum single crystal under the action of laser radiation /Strukturnye izmeneniia monokristalla molibdena pod deistviem lazernogo oblucheniia/. 21 p3750 A69-39842

## TUREKIAN, K. K.

The composition of the crust. 08 p1309 A69-20939

Inhomogeneous accumulation of the earth from the primitive solar nebula. 24 p4385 A69-43215

## TURIEL, I.

Simultaneous observations of the optical and X-ray spectra of Sco XR-1. 07 p1220 A69-19391

## TURILINA, E. S.

A method for calculating unsteady thermal conductivity in bodies of simple shape, heated or cooled by thermal radiation. 23 p4238 A69-41333

Approximate estimate of the lower boundary of applicability of the thermal boundary-layer theory. 23 p4150 A69-41334

## TURK, C.

Microplasticity in ductile and brittle molybdenum and molybdenum alloys. 05 p0778 A69-15759

## TURK, C. D.

The mechanical properties of physical vapor deposited titanium. 03 p0443 A69-13117

## TURK, S. L.

Extinguishment of solid propellants by depressurization - Effects of propellant parameters. [AIAA PAPER 69-176] 06 p0983 A69-18102

## TURKEVICH, A.

Zn super 65, nickel, copper, and zinc contents of the Bogou iron meteorite. 23 p4209 A69-41321

## TURKEVICH, A. L.

Chemical composition of the lunar surface in Mare Tranquillitatis. 20 p3601 A69-37517

## TURKOV, I. U. G.

Effects associated with generation of giant laser pulses /Effekty pri generatsii gigantskikh impul'sov v opticheskikh kvantovykh generatorakh/. 01 p0091 A69-10792

A case of accurate calculation of Q-switched lasers /Ob odnom sluchae strogogo rascheta opticheskogo generatora s modulirovannoi dobrotnost'iu/. 01 p0092 A69-10888

Transmission of highly coherent ruby-laser radiation through an optical amplifier /O prokhozhenii vysokokogerentnogo izlucheniia rubinovogo lazera cherez opticheskii usilitel'/. 02 p0255 A69-11608

On the quasi-classical theory of a Q-switched TW-laser. [IEEE PAPER Q-5] 07 p1154 A69-19077

Decrease in the divergence of a laser beam during passage through an optical amplifier /Ob umen'shenii raskhodimosti luchaz lazera pri prokhozhenii cherez opticheskii usilitel'/. 08 p1326 A69-20542

Passage of highly coherent ruby laser radiation through an optical amplifier. 11 p1895 A69-24715

One case of a rigorous analysis of a modulated-Q laser. 12 p2109 A69-26652

Effects accompanying generation of giant laser pulses. 20 p3555 A69-38010

## TURLEY, R.

Stress corrosion cracking of welded aluminum alloys. 21 p3748 A69-39492

## TURLOCK, L. A.

Nonlinear interaction of electromagnetic waves in bounded plasmas. 08 p1273 A69-20030

## TURNAGE, W. T.

Built-in-test for aircraft solid state electric systems. 17 p2977 A69-34110

## TURNBULL, G. F.

Design of an accurate sampled-data simulator using field-effect transistors. 03 p0405 A69-13600

## TURNBULL, R. J.

Electroconvective instability with a stabilizing temperature gradient. I - Theory. 08 p1352 A69-20790

Electroconvective instability with a stabilizing temperature gradient. II - Experimental results. 08 p1352 A69-20791

Electrohydrodynamic Rayleigh-Taylor bulk instability. 20 p3578 A69-38235

## TURNER, A. B.

The heat transfer performance of porous gas turbine blades. 05 p0812 A69-16400

## TURNER, A. P. L.

Comments on dislocation velocity and macro-deformation in molybdenum. 13 p2276 A69-27392

## TURNER, B. E.

New devices for managing the product development process. [ASME PAPER 68-WA/MGT-3] 05 p0850 A69-16146

Observations of satellite-anomalous OH emission sources. 20 p3610 A69-38146

Search for microwave emission from the super 2 pi sub 1/2, J equals 3/2 state of OH. 21 p3796 A69-38477

## TURNER, C. E.

Exploiting computer programs for design data. 21 p3732 A69-39304

Stress analysis in the design of flawed structures. 24 p4398 A69-42773

## TURNER, D. W.

High resolution molecular photoelectron spectroscopy. I - Fine structure in the spectra of hydrogen and oxygen. II - Water and deuterium oxide. 01 p0023 A69-10141

## TURNER, E. J.

Comparative study of protective coatings for gas turbine engine components operating in marine environments. 01 p0099 A69-11057

## TURNER, E. M.

Antennas in perspective. 04 p0576 A69-14767

Hemispherical scanning with small aperture antennas. 08 p1290 A69-20973

Space frequency filter antennas. 08 p1290 A69-20977

## TURNER, G.

The distribution of potassium and argon in chondrites. 08 p1405 A69-20926

Thermal histories of meteorites by the super 39 Ar-super 40 Ar method. 19 p3412 A69-36105

## TURNER, G. D.

Research on VTOL water hover effects including the effect of wind and waves. 01 p0011 A69-11061

## TURNER, H. G.

Fuel management in aircraft. 07 p1057 A69-19705

## TURNER, H. S.

An attempt to produce acclimatization to hypoxia by intermittent altitude exposure with vigorous exercise. 23 p4086 A69-41678

## TURNER, J. M.

Simultaneous plasma and magnetic-field measurements of probable tangential discontinuities in the solar wind. 11 p1946 A69-24430

## TURNER, J. S.

Buoyant plumes and thermals. 18 p3122 A69-34917

## TURNER, J. T.

A computational method for the flow through nonuniform gauzes - The general two-dimensional case. 13 p2248 A69-28174

## TURNER, M. J.

Optimization of structures to satisfy flutter requirements. 11 p1989 A69-25493

Optimization of structures to satisfy flutter requirements. 16 p2874 A69-32163

## TURNER, M. J. L.

A theoretical analysis of extensive air showers. III - Muon showers at large zenith angles. 15 p2678 A69-31483

Observations of multiple muons in cosmic rays at a variety of zenith angles. 15 p2678 A69-31484

## TURNER, R. C.

The "constant temperature" heat pipe - A unique device for the thermal control of spacecraft components. [AIAA PAPER 69-632] 17 p3070 A69-33262

## TURNER, R. E.

Generalized approach to the thermal analysis of orbiting spacecraft. [SAE PAPER 690202] 07 p1239 A69-18305

## TURNER, W. D.

Directional emittance from emitting, absorbing, and scattering media. [AIAA PAPER 69-625] 17 p3005 A69-33301

## TURNERY, H. W., JR.

Navigation for surface and aerospace vehicles by a very low frequency radio network. [AAS PAPER 69-405] 24 p4347 A69-42834

## TURON-LACARRIEU, P.

Balloon observations of the far-infrared spectrum and brightness temperature of the sun. 04 p0652 A69-14419

## TUROVSKAIA, Z. G.

Interference tolerance in mental activity. 08 p1262 A69-19839

## TUROVSKII, B. M.

Effect of dislocations of lifetime of minority carriers in silicon. 06 p0980 A69-17551

## TURPIN, W. C.

Characterization of debris clouds behind impacted meteoroid bumper plates. [AIAA PAPER 69-380] 13 p2368 A69-28310

## TURRI, M.

Beta-blockade and emotional tachycardia - Radiotelemetric investigations in ski jumpers. 23 p4078 A69-41313

## TURREN, R. H.

Pressure-formed parabolic reflectors for millimeter wavelengths. 08 p1282 A69-20039

## TURSKEI, A. J.

Linear response theory of longitudinal plasma excitations. 08 p1362 A69-20286

## TURSKEI, K.

Load carrying capacity of bars weakened by a series of V notches and subjected to axially symmetric tensile loading /Nosnosc graniczna rozciaganych osiowosymetrycznych pretow oslabionych szeregami karbow katowych/. 04 p0680 A69-15169

- On the lines of influence of plastic deformation.  
17 p3067 A69-34146
- URTLE, J. P.**  
The N1 /super 4 S deg sub 3/2 - super 2 D deg sub 5/2, 3/2/ transitions in the upper atmosphere at night.  
14 p2440 A69-29120
- URUKHANO, B. G.**  
Gabor holograms with a pure reference beam /Gaborovskie gologrammy s chistym opornym puchkom/.  
21 p3726 A69-39624
- URUKHANO, N.**  
Gabor holograms with a pure reference beam /Gaborovskie gologrammy s chistym opornym puchkom/.  
21 p3726 A69-39624
- MURUNDAEVSKII, V. B.**  
On the development of a low voltage arc in a thermionic diode with extended electrodes.  
14 p2402 A69-29244
- MURYN, R.**  
Sequences with small correlation.  
06 p0948 A69-17868
- MUSHENTSOVA, I. A.**  
Possibility of determining the slopes of the ionosphere by oblique-incidence sounding /O vozmozhnosti opredeleniya naklona ionosfery metodom vozvratno-naklonnogo zondirovaniya/.  
10 p1686 A69-23914
- MUSTIN, W.**  
In-flight vibration measurements.  
01 p0084 A69-11051  
Decibel scaling has so a place in measurements of vibration.  
04 p0602 A69-15324  
Vibration testing - Analysis of complex vibrations.  
16 p2876 A69-32434  
Vibration testing - Avoiding vibration damage.  
18 p3148 A69-34619  
Reliability vibration testing.  
22 p3954 A69-40036
- MUSUPOV, M. T.**  
Solution of a doubly periodic problem of elastic theory /K resheniiu dvoiakoperiodicheskoi zadachi teorii uprugosti/.  
11 p1972 A69-24652
- MUTAKOV, O. V.**  
Grinding and classification of micropowders of high-melting-point compounds /Izmel'chenie i klassifikatsiya mikroporoshkov tugoplavkikh soedinenii/.  
12 p2113 A69-26256
- MUTEJA, K. S.**  
A feedback amplifier whose transfer function has its poles on a parabola.  
08 p1282 A69-20111
- MUTEUR, F. B.**  
Adaptation in nonstationary environment.  
05 p0737 A69-15806
- MUTIYA, T.**  
A three-phase shunt-commutatorless motor.  
01 p0012 A69-10064
- MUTSHEK, E.**  
Inert gas diffusion in light metals /Edelgasdiffusion in Leichtmetallen/.  
16 p2800 A69-31775
- MUTTER, M.**  
Plasma electron density measurement with a feedback oscillator.  
03 p0473 A69-13103  
Experiments on the Fresnel dragging of 3 cm microwaves by a low-pressure discharge.  
12 p2133 A69-25766
- MUTUBALIN, A. I.**  
Neutron activation analysis determination of oxygen in beryllium.  
20 p3544 A69-37811
- MUTUBALIN, V. N.**  
Approximation of probability measures in variation and products of random matrices.  
10 p1719 A69-23399
- MUTUMI, S.**  
Statistical properties of radiance spatial distribution of sky and forest backgrounds.  
12 p2131 A69-27072
- MUTUNARU, D.**  
Device for tracing profiles with a rounded trailing edge /Mecanisme pentru trasarea profilor cu bord de fuga rotunjit/.  
15 p2549 A69-31264
- TUZIAK, L.-IU. I.**  
X-ray investigation of finely dispersed titanium in various states /Rentgenovskoe issledovanie melkodispersnogo titana v razlichnom sostoianii/.  
21 p3745 A69-38952
- TVANOV, IU. A.**  
Turbulence intensity in the core of a submerged jet and behind grids /Intenzivnost' turbulentnosti v iadre zatoplennoi strui i za reshetkami/.  
16 p2771 A69-31959
- TVERDYI, IU. V.**  
Buckling of an elastic rod under a dynamic load /O vypuchivanii uprugogo sterzhnia pri dinamicheskom nagruzhении/.  
04 p0679 A69-14926
- TVERSKOI, B. A.**  
Dynamics of the Radiation Belts of the Earth /Dinamika Radiatsionnykh Pojasov Zemli/.  
02 p0307 A69-11799  
A possible mechanism for producing sunspot magnetic fields.  
04 p0662 A69-15243  
Spectrum of magnetic inhomogeneities in interplanetary space and cosmic-ray variations /Spektr magnitnykh neodnorodnosti v mezhlplanetnom prostranstve i variatsii kosmicheskikh luchej/.  
10 p1757 A69-22824  
Main mechanisms in the formation of the earth's radiation belts.  
12 p2150 A69-26742  
Diamagnetic plasmoids in the field of a magnetic dipole /Sgustki diamagnitnoi plazmy v pole magnitnogo dipolia/.  
14 p2489 A69-28910  
The role of the dynamo mechanism associated with small-scale motions of neutrals in the creation of magnetic disturbances and ionospheric discontinuities /Rol' mekhanizma dinamo, svyazannogo s melkomasshtabnym dvizheniem neitralov, v sozdanii magnitnykh voz-mushchenii i ionosfernykh neodnorodnosti/.  
20 p3519 A69-37026  
Equilibrium plasma configurations in the magnetic field of a two-dimensional dipole. I /Ravnovesnye konfiguratsii plazmy v magnitnom pole dvumernogo dipolia. I/.  
23 p4205 A69-41835
- TVETEN, L. H.**  
H.F. ionospheric radar ground-scatter map showing land-sea boundaries by a spectral-separation technique.  
09 p1454 A69-26181  
Remote sensing of the terrestrial environment with an HF radio high-resolution azimuth and elevation scan system.  
14 p2448 A69-29520
- TVOROGOV, S. D.**  
Calculation of the volume coefficients of the haze-induced attenuation of radiation in the wavelength range from 0.3 to 25  $\mu$ m /Raschet ob'emnykh koeffitsientov oslableniya izlucheniya dymkami v diapazone dlin voln 0,3-25 mkm/.  
11 p1913 A69-25571
- TWARDOSZ, F.**  
Certain nonlinear problem of the stability of a cylindrical shell /O pewnym nieliniovym zagadnieniu statecznosci powloki walcowej/.  
22 p4042 A69-40454
- TWARDY, H.**  
Small rocket engine research /Forschungsarbeiten an Raketenkleintriebwerken/.  
08 p1376 A69-20870  
Investigations on propellant vaporization and gas mixture formation in a liquid rocket motor using non-hypergolic propellants.  
16 p2828 A69-31724
- TWELVETREES, W. N.**  
The evolution of the rotor blade.  
19 p3329 A69-36768
- TWERSKY, V.**  
Scattering by two-component random distributions of spheres.  
04 p0555 A69-14282
- TWIGG, P. L.**  
Influence of boron on the creep-resistance properties of an austenitic nickel-chromium alloy hardened by structural precipitation /Influence du bore sur les proprietes de tenue au fluage d'un alliage austenitique au nickel-chrome a durcissement structural/.  
17 p2985 A69-32908
- TWISS, P. M.**  
Australian sounding rocket experiments complementing satellite firings. [UN PAPER 68-95214]  
06 p1013 A69-17076
- TWISS, R. Q.**  
Applications of intensity interferometry in physics and astronomy.  
21 p3722 A69-38794
- TYAGI, T. R.**  
Time lag in occurrence of Q-T point on Faraday rotation records at widely spaced frequencies.  
18 p3100 A69-34251
- TYCHINSKII, V. P.**  
Possibility of a thermodynamic approach to the calculation of a molecular laser /O vozmozhnosti termodinamicheskogo podkhoda k raschetu molekular-nogo lazera/.  
06 p0934 A69-17465  
Measurement of the lifetime of a system of 00 deg v vibrational levels of CO sub 2 molecules /Izmerenie vremen zhizni sistemy kolebatel'nykh urovnei 00 deg v molekul CO sub 2/.  
13 p2273 A69-28579  
Measurement of the 00 super 0 1 level population of CO sub 2 molecules /Izmerenie naselennosti urovnia 00 super 0 1 molekul CO sub 2/.  
13 p2274 A69-28580  
Study of a CO sub 2 pulsed laser /Issledovanie lazera na CO sub 2 v impul'snom rezhime/.  
14 p2458 A69-29162  
A thermodynamic approach to the analysis of a molecular laser.  
20 p3555 A69-37948  
Method for calculating the population and the excitation rates of the working levels in a CO sub 2 laser /Metod rascheta zaselennosti i skorosti vzbuzhdeniia rabochikh urovnei OKG na CO sub 2/.  
22 p3964 A69-40795
- TYE, R. P.**  
Thermal Conductivity. Volume 2.  
23 p4236 A69-41323
- TYERS, B. A.**  
Investigation of some causes of boresight error in missile radomes.  
07 p1111 A69-19536
- TYKAL, K.**  
Structural stability of the austenitic refractory steels of type Mn18Cr8Ti and Mn18Cr8MoV /Strukturni stabilita austeniticheskikh zaropnykh oceli tipu Mn18Cr8Ti a Mn18Cr8MoV/.  
01 p0100 A69-11294
- TYLDESLEY, J. R.**  
The prediction of the transport properties of a turbulent fluid.  
01 p0177 A69-11402  
Transport phenomena in free turbulent flows.  
15 p2591 A69-30792
- TYLER, G. L.**  
Oblique-scattering radar reflectivity of the lunar surface - Preliminary results from Explorer 35.  
04 p0655 A69-14657  
Crab Nebula pulsar NP 0532.  
09 p1592 A69-21462  
Fundamentals of radar astronomy.  
20 p3491 A69-37650
- TYLER, J.**  
Basics of pulse code modulation telemetry.  
24 p4281 A69-42620
- TYLER, J. M.**  
Control of aircraft noise at the source.  
14 p2509 A69-29156
- TYLER, J. S., JR.**  
Launch constraints for a synchronous communications satellite mission. [AIAA PAPER 68-445]  
22 p4036 A69-40543
- TYLER, R. A.**  
System considerations and preliminary model tests on a form of vectored thrust powerplant for commercial V/STOL operations.  
15 p2672 A69-31542
- TYLIKOWSKI, A.**  
Vibrations of cylindrical shell under random excitation /O drganiach powloki cylindrycznej pod wpływem wymuszenia losowego/.  
17 p3054 A69-33094  
Unsteady random temperature and stress fields in an infinite bar /Niestacjonalne przypadkowe pole temperatury i naprezen w nieskonczonym pręcie/.  
19 p3440 A69-36685
- TYLKINA, M. A.**  
Palladium Alloys.  
10 p1712 A69-23632



## TYNDALL, F. E.

The procedures for project management - The Downey steering group.  
08 p1423 A69-20628

## TYNNYL, A. N.

The character of the influence of surface-active media on the strength of polymethyl methacrylate.  
09 p1528 A69-21852

## TYSL, V.

Microwave spectroscopy /Mikrovlnna spektroskopie/.  
18 p3099 A69-35405

## TYSON, C. N.

The fine structure of graphitized fibres.  
16 p2803 A69-32572

## TYSON, E. T.

Observation of very weak optical strength of atmospheric turbulence.  
02 p0275 A69-11930

## TYSON, T. J.

Discussion of chemical kinetic integration techniques. [WSCIPAPER 68-45]  
07 p1073 A69-18315  
Finite difference solution for the laminar near-wake recompression behavior. [AIAA PAPER 69-713]  
18 p3085 A69-34417

## TYTE, D. C.

A rate equation approach to saturation in CO sub 2 laser amplifiers.  
11 p1898 A69-25050  
Mean electron energy in a CO sub 2 laser plasma.  
24 p4327 A69-42613

## TZAFESTAS, S. G.

Concerning optimal filtering theory of linear distributed-parameter systems.  
01 p0034 A69-11143  
Boundary and volume filtering of linear distributed-parameter systems.  
15 p2565 A69-30183

## TZOAR, N.

Light scattering from a plasma in a magnetic field.  
01 p0125 A69-10015  
Parametric excitations in plasma in a magnetic field.  
13 p2306 A69-27461  
Raman scattering by coupled plasmon-cyclotron-harmonic modes in semiconducting plasmas.  
16 p2824 A69-32604

## TZUNG, F.

Influence of damping on the snapping of a shallow arch under a step pressure load.  
24 p4405 A69-43654

## U

## UALFEROV, ZH. I.

Recombination radiation in solid Al sub x Ga sub 1-x As solutions with a variable forbidden band width /Rekombinatsionnoe izluchenie v tverdykh rastvorakh Al sub x Ga sub 1-x As s peremennoi shirinoi zapreshchennoi zony/.  
19 p3391 A69-36606

## UBBELOHDE, A. R.

Well oriented graphite composites.  
01 p0102 A69-10978

## UBEROI, C.

Study of combined effect of Kelvin-Helmholtz instability and gravitational instability on a self-gravitating fluid layer.  
07 p1182 A69-19276

## UBEROI, M. S.

Spectra of grid turbulence.  
21 p3693 A69-38704  
Spectra of turbulence in wakes behind circular cylinders.  
21 p3693 A69-38705

## UCHIDA, H.

Space simulation tests of the highly stable crystal oscillators for space use.  
22 p3927 A69-40590

## UCHIDA, T.

Thermalization of the kinetic energy of a plasma flow by a magnetic mirror field in BSG-I experiments.  
02 p0289 A69-12176  
Mode locking of lasers.  
09 p1518 A69-22123

Measurements of slow theta pinch plasma by Mach-zehnder interferometer with giant pulse ruby laser.  
12 p2091 A69-26394

## UCHIDA, Y.

A mechanism for the acceleration of solar chromospheric spicules.  
24 p4374 A69-43635

## UCHISHVILI, L. O.

Calculation of freely supported plates by the R-function method /Rozrazhukov vil'no opertikh plastinok metodom R-funktsii/.  
02 p0341 A69-12140

## UCHIYAMA, S.

Longitudinal oscillation of a liquid-filled, elastic, cylindrical-conical tank. [ASME PAPER 69-VIBR-11]  
10 p1806 A69-24165

## UCHIYAMA, T.

New aspects of two transverse modes locking with multiple longitudinal modes in a He-Ne laser.  
12 p2104 A69-25923

## UDAVCAK, R.

Regenerable carbon dioxide sorbents.  
09 p1447 A69-22552

## UDELSON, B. J.

Computer calculations of avalanche-induced relaxation oscillations in silicon diodes.  
07 p1101 A69-18651

## UDESCHINI, P.

Hamiltonian formalism in Einsteinian gravitation - Geometrical aspect.  
02 p0280 A69-11715

## UDILOV, V. V.

A groups theory application while designing symmetrical dynamic systems.  
12 p2129 A69-26071

Estimation of the stability of interrelated linear systems with distributed parameters /Ob otsenke ustoiichivosti lineinykh vzaimosviazannykh sistem s raspredelennymi parametrami/.  
19 p3286 A69-35892

## UDOGUCHI, T.

Notch effect in low cycle fatigue. I.  
24 p4404 A69-43627

## UDOVENKO, S. A.

Experimental determination of the creep characteristics of fiberglass-reinforced plastics /K voprosu ob eksperimental'nom opredelenii kharakteristik pol-zuchesti stekloplastikov/.  
19 p3358 A69-35830

## UDOVENKO, V. F.

Friction in vacuum.  
03 p0434 A69-13915

Behavior of solid lubricating films on a molybdenum disulfide base during friction under high-vacuum conditions /Povedenie tverdykh smazochnykh pokrytii na osnove disulfida molibdena pri trenii v usloviakh glubokogo vakuuma/.  
16 p2793 A69-31561

## UEDA, G.

An experimental study on the diffusion characteristics of turbulent flow in a low speed wind tunnel.  
13 p2250 A69-28496

## UEDA, T.

Investigation of low cycle fatigue at elevated temperatures.  
18 p3219 A69-34834

## UEDA, Y.

Power dependence on repetition time of the Q-switched CO sub 2 laser.  
23 p4173 A69-41566

CO sub 2 gas laser.  
24 p4327 A69-42640

## UEHARA, K.

High-resolution Stark spectroscopy of molecules by infrared and far-infrared masers. [IEEE PAPER C-5]  
07 p1150 A69-19050

## UEHLING, D. E.

Fluidic overspeed sensor for a power turbine. [ASME PAPER 69-GT-17]  
09 p1571 A69-22500

## UEMURA, M.

Strength of composite cylinders reinforced by unidirectional filament-winding.  
21 p3846 A69-39795

## UENAKA, Y.

Hypersonic aerodynamic characteristics for lifting bodies.  
21 p3645 A69-39793

Measurements of the hypersonic aerodynamic characteristics for several kinds of wave riders.  
21 p3645 A69-39800

New hypersonic gun tunnel at Kyoto University.  
22 p3927 A69-40588

## UENG, C. E. S.

Some remarks on the deflection of orthotropic sandwich plates.  
01 p0172 A69-11270

## UENO, S.

Initial-value methods for integral equations arising in theories of the solar atmosphere.  
13 p2350 A69-27855

Reflection and transmission functions for finitely isotropically scattering atmospheres with specular reflectors.  
15 p2597 A69-31152

## UENOYAMA, S.

System and method to predict times of the closest approach and to identify satellites.  
15 p2569 A69-30800

## UESAKA, Y.

Theory of construction of nonlinear discriminant function.  
15 p2645 A69-30806

## UFIMTSEV, V. B.

Study of the pressure of saturated vapors over solid solutions of indium arsenide-gallium arsenide /Issledovanie davleniia nasyshchennykh parov nad tverdyimi rastvorami arsenid indii-arsenid galliia/.  
04 p0642 A69-14938

## UGAI, IA. A.

The InAs-InP phase diagram.  
03 p0483 A69-13024

## UGAROVA, G. I.

Investigation of the process of spreading of liquid titanium- and zirconium-base alloys on graphite /Issledovanie protsessa rastekaniia po grafitu zhidkikh splavov na osnove titana i tsirkoniia/.  
03 p0446 A69-13573

## UGGERI, G.

The delta t transient in a pneumatic servo control with fluidic elements /Il transitorio delta t nel servocomando pneumatico ad elementi fluidici/.  
08 p1256 A69-20305

## UGIANSKY, G. M.

Directional effects in the stress corrosion cracking of an aluminum alloy.  
09 p1521 A69-21399

## UGLOV, A. E.

Certain reactions of the cardiovascular and respiratory systems of cosmonauts during orbital flight on the Voskhod 2 spacecraft /Nekotorye reaktsii serdchnosnosudistoi i dykhatel'noi sistem kosmonavtov v orbital'nom polete na kosmicheskome korabe "Voskhod 2"/.  
07 p1062 A69-18585

## UGLOVA, L. N.

Radar characteristics of "angel" echoes /Radiolokatsionnye kharakteristiki otrazhenii ot "jasnogo neba"/.  
09 p1491 A69-22706

Radar characteristics of angels.  
16 p2753 A69-32486

## UGLOVA, N. N.

On the significance of typological features of the central nervous system for the sensitivity of animals to acceleration.  
10 p1645 A69-23497

## UGODCHIKOV, A. G.

Solution of boundary value problems with the aid of conformal mappings /K resheniiu kraevykh zadach s pomoshch'iu konformnykh otobrazhenii/.  
11 p1973 A69-24662

Improvement of solutions to boundary value problems in elasticity theory for nonstar-shaped doubly connected regions /Utochnenie resheniia kraevykh zadach teorii uprugosti dlia nezvezdchatykh dvukhsviaznykh oblastei/.  
12 p2178 A69-25998

## UGOLEV, A. M.

Synthetic monosaccharides for nutrition of man in space.  
15 p2557 A69-31471

## UGRIUMOV, E. P.

Time-pulse function generator with piecewise-parabolic approximation /Vremia-impul'snyi funktsional'nyi preobrazovatel' s kusochno-parabolicheskoi approksimatsiei/.  
12 p2079 A69-25968

- GRUMOVA, G. V.**  
The cloud bank structure /O griadovoi strukture oblachnosti/.  
20 p3569 A69-36985
- HAINES, R. F.**  
Changes in perceived size of high luminance targets.  
19 p3259 A69-36458
- HLENBROCK, W.**  
A high-speed ten-bit analog-to-digital converter employing MSI elements /Ein schneller 10-Bit-Analog-Digital-Umsetzer mit MSI-Elementen/.  
11 p1845 A69-24520
- HLENHOPP, E. L.**  
Denaturation of DNA at pH 7.0 by acid and alkali.  
24 p4263 A69-43225
- HLEY, H. N.**  
The cardiac lymphatics in experimental chronic congestive heart failure.  
23 p4078 A69-41364
- HHLIG, H. H.**  
An evaluation of stress corrosion cracking mechanisms.  
19 p3349 A69-36887
- HRAN, J. J., JR.**  
Characteristics of a suboptimum phase-lock demodulator.  
06 p0902 A69-17398  
Experimental results for phase-lock loop systems having a modified nth-order tanlock phase detector. [IEEE PAPER 67-TP-1178-COM]  
10 p1663 A69-23531
- HRIG, R.**  
Static calculation of thin-walled shell structures with the aid of stiffness matrices. II /Zur statischen Berechnung duennwandiger Schalengebilde mit Hilfe von Steifigkeitsmatrizen. II/.  
05 p0835 A69-15829
- HRMEISTER, B.**  
Conversion of an aircraft into a flying simulator /Um-ruestung eines Flugzeugs zu einem fliegenden Simulator/.  
07 p1052 A69-18254
- UHSE, W.**  
Fatigue strength of Ti8Al1Mo1V and Ti5Al2.5Sn titanium alloys under constant and variable amplitude loading /Zeit- und Betriebsfestigkeit der Titanlegierungen Ti8Al1Mo1V und Ti5Al2.5Sn/.  
15 p2637 A69-30227
- UCKER, J. J., JR.**  
Wobble-spin technique for spacecraft inversion and earth photography.  
12 p2174 A69-26780
- UJIHARA, K.**  
High-speed photographic studies of laser-triggered spark gap.  
04 p0610 A69-14349
- UKAI, M.**  
The role of visceral afferent pathways on vasopressin secretion and urinary excretory patterns during surgical stress.  
05 p0708 A69-15970
- UKAJI, H.**  
Theory of stress concentration of two normally intersecting cylindrical shells.  
13 p2359 A69-27255
- UKHANOV, IU. I.**  
Absorption of infrared radiation in n-type gallium phosphide. I - Scattering mechanisms.  
03 p0492 A69-14168  
Absorption of infrared radiation in n-type gallium phosphide. II - Photoionization of impurities.  
03 p0492 A69-14169  
IR absorption in n-type gallium phosphide.  
19 p3385 A69-36518
- UKOLOV, I. S.**  
Automatic optimization of space vehicle flight under maximum L/D ratio conditions /Avtomaticheskaiia optimizatsiia poleta kosmicheskogo apparata na rezhime maksimal'nogo aerodinamicheskogo kachestva/.  
05 p0830 A69-16045  
Problems of the optimization of spacecraft descent control in the atmosphere /Voprosy optimizatsii upravleniia spuskom kosmicheskogo apparata v atmosfere/.  
13 p2355 A69-27683  
Some problems of the control of spaceships.  
16 p2867 A69-31742
- Automatic optimization of the flight of a space vehicle for a regime corresponding to maximum aerodynamic performance.  
20 p3618 A69-37954
- Stochastic optimization of spacecraft descent control in the atmosphere /Stokhasticheskaia optimizatsiia upravleniia spuskom kosmicheskogo apparata v atmosfere/.  
21 p3767 A69-39648
- UKRAINTSEV, E. N.**  
Cyclotron resonance of minority carriers in indium antimonide /Tsiklotronnyi rezonans neosnovnykh nositelei v antimonide indii/.  
15 p2667 A69-30068
- ULABY, F. T.**  
The radar radiometer.  
14 p2421 A69-29528  
Atmospheric attenuation studies in the 183-325 GHz region.  
23 p4115 A69-41586
- ULANOV, G. M.**  
Dynamics of the movement of an astronaut toward a spacecraft with the aid of a tether, and a principle of spacecraft control synthesis based on the theory of systems with a variable structure /Dinamika peremeshcheniia kosmonavta k korabliu s pomoshch'iu trosia i printsip sinteza upravleniia korabl'em, osnovanyi na teorii sistem s peremennoi strukturoi/.  
21 p3667 A69-39630
- ULBER, M.**  
Experimental results with a liquid-metal MHD induction converter.  
13 p2208 A69-27509
- ULBRICH, C. W.**  
A stimulated reflection experiment to demonstrate correlation between photons from independent laser beams.  
18 p3153 A69-35292
- ULIAKOV, P. I.**  
Threshold conditions for laser pumping with the emission of a perfect black body /Porogovye uslovia nakhachi OKG izlucheniem absolutno chernogo tela/.  
03 p0442 A69-14220  
Thermoelastic destruction of transparent media by laser radiation /Termouprugoe razrushenie prozrachnykh sred izlucheniem opticheskikh kvantovykh generatorov/.  
07 p1149 A69-18925  
Polarizational-optical investigation of the failure of transparent dielectrics by laser radiation.  
08 p1324 A69-19947
- ULIAKOVA, N. M.**  
Recrystallization and oxidation of titanium alloy VTZ-1 /Rekristallizatsiia i okislenie titanovogo splava VTZ-1/.  
01 p0094 A69-10214  
Recrystallization and oxidation of titanium alloy VT3-1.  
15 p2637 A69-30270
- ULIANITSKII, IU. D.**  
A method of measuring the temporal position of a pulse signal on a noise background /Ob odnom metode izmereniia vremennogo polozeniia impul'snogo signala na fone pomekh/.  
19 p3278 A69-36596
- ULIANOV, A. F.**  
Experimental study of heat transfer during boiling in conduits during weightlessness.  
01 p0177 A69-11313  
Experimental study of the critical heat flow during forced motion of fluids under conditions of weightlessness.  
07 p1243 A69-19616
- ULIANOV, B. I.**  
The technique of measuring instantaneous pressures.  
07 p1050 A69-18752
- ULIANOV, G. S.**  
Aerodynamic characteristics of delta wings for supersonic flow at large angles of attack /Aerodinamicheskie kharakteristiki treugol'nykh kryl'ev pri sverkhzvukovom obtekanii pri bol'shikh uglakh ataki/.  
02 p0191 A69-12585
- ULIANOV, K. N.**  
Electric arc in a stream of argon with cesium in the presence of a magnetic field.  
02 p0285 A69-11570  
Contraction of a positive column. I, II /Kontraktsiia polozhitel'nogo stolba. I, II/.  
11 p1932 A69-25539
- ULIANOV, R. A.**  
Strength of some glass-fiber-reinforced plastics at low and high temperatures /Prochnost' nekotorykh stekloplastikov pri nizkikh i vysokikh temperaturakh/.  
11 p1907 A69-25181  
Plastic deformation of alpha-titanium alloys at low temperatures /Plasticheskaia deformatsiia al'fai-titanovykh splavov pri nizkikh temperaturakh/.  
18 p3158 A69-35444
- ULIANOV, V. L.**  
Study of contact carburization of molybdenum and niobium castings /Issledovanie kontaktnogo nasyshcheniia uglerodom otlivok iz molibdena i niobia/.  
04 p0619 A69-15391  
Contact carbon impregnation of molybdenum and niobium castings.  
18 p3156 A69-35019
- ULINICH, F. R.**  
Statistical dynamics of a turbulent incompressible fluid /Statisticheskaia dinamika turbulentnoi neszhimaemoi zhidkosti/.  
08 p1303 A69-20323  
Investigation of a liquid-metal jet MHD generator /Issledovanie zhidkometallicheskogo struinogo MGD-generatora/.  
13 p2208 A69-27511  
Statistical dynamics of a turbulent incompressible fluid.  
17 p2952 A69-33313  
The statistical theory of turbulence of an incompressible fluid at large Reynolds numbers.  
20 p3517 A69-38007
- ULITKO, A. F.**  
Exact solution to the problem of the stress distribution near a circular hole in an elastic layer /Tochnoe reshenie zadachi o raspredelenii napriazhenii okolo krugovogo otverstia v uprugom sloe/.  
04 p0667 A69-14266  
Expansion of an elastic space weakened by two circular cracks located at the same plane /Rastiazhenie uprugogo prostranstva, oslabbennogo dvumia krugovymi treshchinami, lezhashchimi v odnoi ploskosti/.  
11 p1973 A69-24663
- ULITKO, A. T.**  
Axisymmetric deformation of an elastic paraboloid of revolution /Osesimetricna deformatsiia pruzhnogo paraboloida obertannia/.  
09 p1613 A69-21631
- ULKE, H.**  
The influence of fuselage/wing interference on dynamic stability during steady sideslip /Beitrag zur Kopplung der Laengs- und Seitenbewegung von Flugzeugen/.  
04 p0548 A69-14824
- ULLMAIER, H.**  
Hard superconductors /Harte Supraleiter/.  
09 p1555 A69-21490
- ULLNER, H.-A.**  
Semiconductor properties of tellurides. XIV - Solid solution formation in the system In sub 2 Te sub 3-x Se sub x /zero less than or equal to x less than or equal to 3/ /Halbleitereigenschaften von Telluriden. XIV - Mischkristallbildung der festen Loesung In sub 2 Te sub 3-x Se sub x /zero less than or equal to x less than or equal to 3/.  
21 p3779 A69-38579
- ULLSCHMIED, J.**  
Focused Fabry-Perot resonator for dynamic measurements of plasma density.  
01 p0080 A69-10318  
Generation and heating of plasma by beam-plasma interaction.  
17 p3014 A69-33828
- ULMER, F. H.**  
Direct reading instrument for silicon and germanium four-probe resistivity measurements.  
04 p0599 A69-15019
- ULMER, M.**  
Soft X-ray background flux.  
24 p4368 A69-43220
- ULMER, W.**  
A schlieren-optical technique for plasma-beam temperature measurements /Ueber ein schlierenoptisches Verfahren zur Temperaturmessung an Plasmastrahlen/.  
12 p2134 A69-26120  
A simple rotating mirror turbine with air bearings.  
12 p2085 A69-26156
- ULMET, J.-P.**  
Magnetophonon oscillations of the transverse magnetoresistance of n-type epitaxial GaAs /Oscillations de



## ULRICH, G.

magnetophonons de la magnetoressistance transverse du GaAs epitaxial de type n/. 08 p1373 A69-20760

## ULRICH, G.

Q dependence of IMPATT-diode F.M. noise. 06 p0899 A69-17826

## ULRICH, R. K.

Studies in stellar evolution. VII. 10 p1788 A69-24126  
Sensitivity of the solar-neutrino fluxes. 15 p2675 A69-30768

## ULRY, D. N.

Application of glass reinforced plastic molding compounds in the OV-10A airplane. [SAE PAPER 690342] 11 p1890 A69-24497

## ULVEDAL, F.

Endocrine functions in an oxygen atmosphere at reduced total pressure. 01 p0019 A69-11343  
Endocrine functions in an oxygen atmosphere at reduced total pressure. 23 p4087 A69-41790

## ULWICK, J. C.

Digital plasma frequency probe for fine scale ionospheric measurements. 20 p3542 A69-37791  
Coordinated measurements from two multi-experiment rockets in an aurora. 21 p3703 A69-38361

## ULYBIN, S. A.

Calculation of the viscosity of compressed nonreacting gas mixtures at high temperatures. 05 p0845 A69-15895

## ULYBIN, V. B.

Linear pyrolysis of polymethyl methacrylate /Lineinyi piroliz polimetilmetakrilata/. 17 p3017 A69-33132  
Measurement of the total heats of high-temperature polymer gasification /Izmerenie sumarnykh teplot vysokotemperaturnoi gazifikatsii polimerov/. 17 p3069 A69-33133  
Two modes of linear pyrolysis of condensed materials /O dvukh rezhimakh lineinogo piroliza kondensirovannykh veshchestv/. 17 p3069 A69-33134

## UMAMAHESWARAM, S.

Effect of couple-stresses on a semi-infinite plate due to Gaussian distribution of load on the bounding surface. 22 p4038 A69-39902

## UMAN, M. A.

Four-meter sparks in air. 02 p0281 A69-12406

## UMANSKII, A. S.

Unsteady problem of the heat conduction of a two-layer cylinder /Nestatsionarnaya zadacha teploprovodnosti dvukhsloinogo tsilindra/. 19 p3448 A69-35981

## UMANSKII, E. S.

Certain problems of interaction between the elements of a fiber-reinforced composite material /Nekotorye voprosy vzaimodeistviia elementov sostavnogo materiala, armirovannogo voloknom/. 12 p2180 A69-26263  
Creep properties of soft fiber-reinforced plastics /O polzuchestii miagkikh armirovannykh voloknom plastikov/. 23 p4179 A69-42006

## UMANSKII, I. A. S.

Peculiarities in the flow mechanism of a magnesium alloy with hydro-explosive loading. 04 p0615 A69-14639  
Rolling and recrystallization textures of nickel-Cobalt alloys. 04 p0615 A69-14643  
Structure and mechanical properties of materials after hydroexplosive forming. 09 p1503 A69-21851

## UMARBAEVA, N. D.

Diurnal and seasonal variations in the intensity of phase-difference fluctuations or radio waves propagating in the atmospheric ground layer /Sutochnye i sezonnye variatsii intensivnosti fluktuatsii raznosti faz radiovoln, rasprostraneniiaushchikhsia v prizemnom sloe atmosfery/. 20 p3485 A69-36971

## UMIAROV, KH. U.

Effect of vibration of the bearing of a hydropendulum on vibrations of its axis /O vlianii vibratsii opory gidromaiatnika na kolebaniia ego osi/. 10 p1697 A69-24086

## UMSCHEID, L., JR.

Tests of the effect of grid resolution in a global prediction model. 24 p4344 A69-43066

## UNBEHAUEN, R.

Low-pass filters with predetermined phase or delay and Chebyshev stopband attenuation. 08 p1300 A69-21171

## UNDERHILL, A. B.

The Wolf-Rayet stars and mass loss. 08 p1395 A69-20640  
Radial velocities of stars in the vicinity of the open cluster NGC 7380. 09 p1597 A69-22060  
On the low hydrogen content of the Ia supergiants of type B. 13 p2348 A69-27722  
Concerning the correlation between the strength of the He I lines and the P II lines in B-type spectra. 15 p2679 A69-30046

## UNDERHILL, P. E.

Production neutron radiography facility for the routine NDT inspection of special aerospace components. [AGN-TP-229] 10 p1699 A69-23051

## UNDERWOOD, G. W.

Structural testing. 01 p0170 A69-10864

## UNDERWOOD, J.

Development of High Down Test Site for Black Arrow. 04 p0585 A69-15041

## UNDERWOOD, J. H.

Optical design of a glancing incidence X-ray telescope. 08 p1318 A69-21087  
An improved collimator for extreme ultraviolet and X rays. 19 p3313 A69-36489  
X-ray imaging with multiple-pinhole cameras using a posteriori holographic image synthesis. 22 p3943 A69-40019  
Calculation of incompressible flow past a circular cylinder at moderate Reynolds numbers. 17 p2896 A69-33600

## UNGAR, E. E.

Analysis of vibratory energy distributions in composite structures. 04 p0675 A69-14687

## UNGAR, S. G.

Sensing the earth's atmosphere with occultation satellites. 14 p2447 A69-29517

## UNGER, F. G.

Possibilities of the support of inertial navigation systems /Moeglichkeiten der Stuetzung von Traegheitsnavigationssystemen/. 12 p2128 A69-25873

## UNGER, H.

Results of studies of thermionic reactor systems /Ergebnisse von Studien ueber Thermionikreaktorsysteme/. 02 p0279 A69-12662  
Results of studies on various fast and thermal thermionic reactor systems. 14 p2480 A69-29182

## UNGER, H. J.

Spectroscopic determination of high velocity flow field static temperatures. 19 p3294 A69-35752

## UNGER, K.

Theoretical study of the filamentary radiation and the surface damage of junction lasers. 19 p3337 A69-36531

## UNGERER, E.

Extended vacuum system with a central control desk /Erweiterte Vakuumanlage mit zentraler Schaltwarte/. 07 p1116 A69-18261  
Some experiments on the "spoke" phenomenon in MPD operation. 09 p1548 A69-21962

Integral measurements in the MPD thruster X12 /Integrale messungen am MPD-triebwert X12/. [DGLR-69-024D] 23 p4202 A69-41927

## UNKAUF, M. G.

Experimental signal/noise-ratio comparison of the second-order phase-locked loop and the second-order frequency-locked loop. 06 p0886 A69-16934

## UNNY, T. E.

The laminar two-dimensional free jet of an incompressible pseudoplastic fluid. 04 p0586 A69-14400

## UNSOELD, A.

On the theory of flares and some related solar phenomena. 01 p0145 A69-10995

The Physics of Stellar Atmospheres, with Emphasis on the Sun /Physik der Sternatmosphaeren- mit besonderer uebercksichtigung der Sonne /2nd Edition/. 11 p1961 A69-25084

## The New Cosmos.

Abundances of iron and some other elements in the sun and in meteorites. 14 p2522 A69-29661  
24 p4385 A69-43222

Evolution of cosmic matter /Evolution kosmischer Materie/. 24 p4386 A69-43335

## UNSOELD, A. O. J.

Stellar abundances and the origin of the elements. 09 p1587 A69-21306

## UNT, V.

Axisymmetric electromagnetic radiation in the general theory of relativity in a first approximation /Aksial'no-simmetrichnoe elektromagnitnoe izluchenie v obshchei teorii otноситel'nosti v pervom priblizhenii/. 01 p0115 A69-10263

Gravitational recoil /O gravitatsionnoi otdache/. 12 p2130 A69-26338

Gravitational recoil /O gravitatsionnoi otdache/. 14 p2485 A69-29358

A combined Bondi and fast approximation method in general relativity. I - The axis-symmetric case. 18 p3173 A69-35146

## UNTI, T.

Two-dimensional Chapman-Ferraro problem with neutral sheet. I - The boundary. 03 p0425 A69-14011

Two-dimensional Chapman-Ferraro problem with neutral sheet. II - The interior field. 18 p3129 A69-34955

## UNUKOVA, A. A.

Temperature distribution in the troposphere and stratosphere in the summer and winter of 1965 /Raspredelenie temperatury v troposfere i stratosfere letom i zimoi 1965 g./. 14 p2442 A69-29725

Influence of the temperature of the stratosphere on the ascent height of radiosondes /Vlianie temperatury stratosfery na vysotu pod'ema radiozondov/. 14 p2473 A69-29731

## UNWIN, A. M.

Improved radiation storage time predictions by a new approach to inverted transistor characterization. 06 p0977 A69-16884

## UNWIN, P. N. T.

Studies of segregation and the initial stages of precipitation at grain boundaries in an aluminium 7 wt. percent magnesium alloy with an energy analysing electron microscope. 03 p0442 A69-12894

## UNZ, F.

General magnetic field and rotation of the outer layers of the sun. 22 p4019 A69-40293

## UNZ, H.

Reflection and transmission of normally incident waves by a semi-infinite longitudinally drifting magnetoplasma. 01 p0134 A69-11290

## UOTSU, H.

An estimation of the heat flux and the water vapour flux by the bulk aerodynamic method. 07 p1176 A69-18965

## UPADHYAYA, K. S.

Vorticity generated behind shock waves in conducting gases. 08 p1367 A69-20789

## UPADKHAIA, G. SH.

Certain physical properties of niobium and titanium carbide alloys in the homogeneity region /Deiaki fizicheskie vlastivosti splaviv karbidov niobiia i titanu v oblasti ikh gomogenosti/. 14 p2462 A69-28976

Properties of alloys of niobium and titanium carbides in their homogeneity region. 15 p2638 A69-30282

- Temperature dependence of the electrical resistance and thermal EMF of carbide alloys of niobium and titanium in the homogeneity range /Temperaturnaia zavisimost' elektrosoprotivleniia i termo - E.D.S. karbidnykh splavov niobia i titana v oblasti ikh homogenosti/.  
20 p3558 A69-36976
- JPADKHAIA, G. S.**  
Some relationships of constitutional diagrams of IIIA-VIA transition metals.  
08 p1331 A69-20191
- JPADYSHEV, V. A.**  
Absorption of laser radiation in transparent substances under conditions of appearance of opacity.  
09 p1520 A69-22655  
Effect of stresses on the orientation of laser damage cracks in transparent dielectrics.  
10 p1703 A69-23621
- UPATNIEKS, J.**  
Holography.  
20 p3540 A69-37637
- UPDEGRAFF, H.**  
Effect of polymer structure on chemical resistance of reinforced plastics.  
08 p1338 A69-20490
- UPDEGROVE, W. S.**  
Analysis of organic matter on the moon by gas chromatography-mass spectrometry - A feasibility study.  
18 p3113 A69-34238
- UPDIKE, P. A.**  
Use of L- and S-band transmitters for outer space applications.  
23 p4137 A69-41740
- UPGREN, A. R.**  
A finding list of early-type stars in regions of intermediate galactic latitude.  
20 p3612 A69-38162
- UPSON, W. L., II**  
Local interstellar reddening.  
22 p4026 A69-40648
- UPTON, E. K. L.**  
Dynamical stability in pre-main-sequence stars.  
07 p1220 A69-19388
- UPTON, H. W.**  
Rotor blade radar in the helicopter multifunction role.  
[AHS PAPER 315] 17 p2920 A69-33535
- URABE, T.**  
An energetic study of the evolution of the terrestrial and Cytherean atmospheres.  
07 p1213 A69-18608
- URAEV, V. P.**  
Certain problems in calculating the temperature of an AC electric arc /Nekotorye voprosy rascheta temperatury elektricheskoi dugi peremennogo toka/.  
12 p2137 A69-26535
- URALSKAIA, V. S.**  
Evolution of the orbits of circumpolar satellites under the influence of lunar and solar perturbations /Evolutsiia orbit ikopolopliarnykh sputnikov pod vliianiem lunno-solnechnykh vozmushchenii/.  
10 p1780 A69-23616  
Motion of circumpolar satellites /Dvizhenie ikopolopliarnykh sputnikov/.  
14 p2521 A69-29460
- URALTSEVA, N. N.**  
Linear and Quasilinear Elliptic Equations.  
02 p0273 A69-12566
- URANOVA, T. A.**  
Spatial structure of the galactic dust layer and its relation to the apparent brightness of the Milky Way /K voprosu o prostranstvennoi strukture galakticheskogo pyl'evogo sloia i ee svyazi s vidimoj iarkost'iu Mlechnogo Puti/.  
09 p1590 A69-21381  
Spatial structure of the galactic dust layer and its relation to the apparent brightness of the Milky Way.  
18 p3198 A69-34769
- URATA, EIZO.**  
Static and dynamic characteristics of oil-hydraulic control valves.  
19 p3256 A69-36713
- URAZBAEV, T. T.**  
Dependence of the second-harmonic conversion factor on the space-time distribution of the radiation of a powerful laser /Zavisimost' koeffitsienta transformatsii vo vtoruiu harmoniku ot prostranstvenno-vremennogo raspredeleniia izlucheniia moshchnogo lazera/.  
12 p2104 A69-26022
- URBACH, J. C.**  
Holographic recording materials.  
11 p1882 A69-24681
- URBAIN, M.**  
Microstructure of cobalt-base high-temperature alloys.  
14 p2465 A69-29890
- URBAN, L. A.**  
Engine vane control.  
[ASME PAPER 69-GT-14] 09 p1571 A69-22502
- URBAN, T. M.**  
Real time/process computer interface with power systems.  
11 p2004 A69-25302
- URBANOSKY, T. F.**  
Fluor light-off detector.  
[ASME PAPER 69-GT-36] 09 p1501 A69-22488
- URBANTKE, H. K.**  
Production of particles by gravitational fields.  
17 p3008 A69-33003
- URBARZ, H.**  
Dynamic radio spectra of proton flares /Dynamische Radiospektren von Protonenflares/.  
06 p0985 A69-16980
- URCH, I. H.**  
A model of the magnetized solar wind.  
17 p3041 A69-33812
- URCIS, S.**  
A subsatellite concept for Martian fields and particles measurements.  
21 p3805 A69-39215
- URDANETA, L.**  
Gastric blood flow and its distribution during restraint.  
17 p2908 A69-33170
- URE, R. W., JR.**  
Study of inhomogeneities in GaAs using a scanning electron microscope.  
09 p1557 A69-21746
- URECHE, V.**  
Contribution to the interpretation of light curves in close binary systems. I /Contributii la interpretarea curbelor de lumina ale sistemelor binare strinse. I/.  
15 p2695 A69-30957
- UREY, H. C.**  
Mascons and the history of the moon.  
04 p0654 A69-14633  
The contending moons.  
06 p1001 A69-17160  
The problem of elemental abundances.  
08 p1403 A69-20914  
Geophysics of the moon.  
13 p2352 A69-27903  
Mascons on the moon.  
15 p2698 A69-31328  
Organic geochemical investigations in relation to the analyses of returned lunar rock samples.  
20 p3476 A69-37616  
Early temperature history of the moon.  
24 p4383 A69-42936
- URGELL, J.**  
Analytical study of avalanche multiplication in abrupt silicon p-n junctions /Etude analytique de la multiplication par avalanche dans les jonctions pn abruptes au silicium/.  
01 p0135 A69-10038  
Directional effect of electric-field growth on avalanche-breakdown conditions /Effet du sens de croissance du champ électrique sur les conditions de claquage par avalanche/.  
06 p0981 A69-17828
- URIADOV, V. P.**  
Frequency correlation of radio-wave fluctuations behind n random screens /O chastotnoi korrelatsii fluktuatsii radiovoln za n khaoicheskimi ekranami/.  
07 p1076 A69-18525
- URITSKII, V. IA.**  
Surface potential of an anodized surface of n-type silicon.  
04 p0643 A69-15260
- URIUKOV, B. A.**  
Electric arc intensity in the region of interaction with a turbulent boundary layer in a vortex-stabilized plasmatron /Napriazhennost' elektricheskoi dugi v oblasti vzaimodeistviia s turbulentnym pogranichnym sloem v plazmatrone s vikhrevoi stabilizatsiei/.  
09 p1545 A69-21432
- Theory of an ideal electric arc in a coaxial plasmatron with an axial magnetic field in the presence of a gas flow /Teoriia ideal'noi elektricheskoi dugi v koaksial'nom plazmatrone s osevm magnitnym polem pri nalichii potoka gaza/.  
13 p2306 A69-27388
- URKOWITZ, H.**  
Reduced averaging processing in sonar for extended target detection.  
04 p0562 A69-15477  
Energy detection of a random process in colored Gaussian noise.  
13 p2220 A69-27937
- URSEL, L. V.**  
Vertical navigation requirements for S.S.T.  
02 p0277 A69-11590
- URSULIAK, N. D.**  
Gallium distribution in yttrium-iron garnet single crystals /Raspredelenie gallia v monokristallakh ittrii-zhelezistogo granata/.  
13 p2321 A69-28002
- URTIEW, P. A.**  
On the genesis of gaseous detonation.  
02 p0350 A69-11530
- URTZ, R. P., JR.**  
Atmospherically induced errors for a coherent optical tracking system.  
[AIAA PAPER 69-871] 21 p3675 A69-39397
- URUSHADZE, G. G.**  
Formation of long-range order in nickel-chromium alloys /Obrazovanie dal'nego poriadka v splavakh nikel'-khrom/.  
10 p1714 A69-23964
- URUSHIDANI, H.**  
A generalized solution of quasi-steady laminar flat plate boundary layer in a shock tube.  
24 p4305 A69-43632
- URY, J. F.**  
Numerical computation of second-order system response with variable parameters.  
08 p1418 A69-20849
- USAMI, T.**  
Theoretical seismograms excited by a localized radial stress on the surface of a gravitating homogeneous mantle over a liquid core.  
02 p0243 A69-12010  
Theoretical seismograms of spheroidal type on the surface of a gravitating elastic sphere. III - Case of a homogeneous mantle with a liquid core.  
23 p4158 A69-42020
- USCINSKI, B. J.**  
The multiple scattering of waves in irregular media. II - Spatial autocorrelation functions.  
03 p0468 A69-13807
- USELL, R. J.**  
Flaw growth in Ti-6Al-4V in Freon environments.  
18 p3150 A69-35411  
Fracture mechanics in cost-effective pressure vessel design.  
21 p3837 A69-39028
- USELL, R. J. JR.**  
Materials/processes projections based on MCD constraints.  
19 p3433 A69-35587
- USHAKOV, A. S.**  
Life in the spacecraft and planetary station.  
01 p0020 A69-11075  
Problem of reproduction of food protein by autotrophic organisms in extraterrestrial conditions.  
01 p0021 A69-11079  
Effect of transverse accelerations on acetylcholine content and cholinesterase activity in the blood of experimental animals.  
02 p0197 A69-11491  
Some aspects of acetylcholine metabolism in guinea-pig brain and heart in relation to radial acceleration.  
02 p0198 A69-11505  
Problems of space nutrition of man.  
15 p2560 A69-31462  
Studies of human adaptation to space flight effects under low-calorie diet conditions.  
20 p3482 A69-37621
- USHAKOV, B. N.**  
Application of moiré patterns to the investigation of displacements and strains /Primenenie muarovykh kartin k issledovaniyu peremeshchenii i deformatsii/.  
11 p1982 A69-24944  
Application of the moiré bands technique to the investigation of the deflection of a rectangular cantilever



- plate with a partially clamped edge /Issledovanie metodom muarovykh polos izgiba priamougol'noi konsol'noi plastiny s chastichno zaschchemlennym kraem/. 17 p3058 A69-33203
- USHAKOV, V. V.**  
The electrohydrodynamic flow between parallel dielectric plates /Elektrohidrodinamicheskoe techenie mezhdu parallel'nymi dielektricheskimi plastinami/. 03 p0419 A69-13919
- USHIUMA, T.**  
Analytical study of the low-level jet stream. 16 p2809 A69-32601
- USHIOKAWA, A.**  
Solar panel's power of the satellite No. 1. 15 p2552 A69-30072
- USHIROKAWA, A.**  
Internal mechanisms and characteristics of Esaki diodes. 05 p0732 A69-16298
- USIAK, L. M.**  
Service life predictions. 12 p2101 A69-25970
- USIK, P. A.**  
Study of four-momentum transfers in high-energy interactions of cosmic ray particles. 13 p2330 A69-28375
- USIUKIN, V. I.**  
Nonlinear deformation of a toroidal membrane shell /Nelineinaya deformatsiya membrannoi torovoi obolochki/. 18 p3216 A69-34575
- USKOV, V. N.**  
Approximate method of calculating the parameters of a supersonic gas jet impinging on an inclined plane barrier /Priblizhennyi metod rascheta parametrov sverkhzvukovoi gazovoi strui, padaiushchei na naklonnuiu ploskuiu pregradu/. 03 p0413 A69-12958
- USMANOV, A. G.**  
Application of a laser as a light source in the investigation of temperature fields and concentrations in fluids by interference techniques /Primenenie opticheskogo kvantovogo generatora v kachestve istochnika sveta pri issledovanii polei temperatur i kontsentratsii v zhidkostiakh interferentsionnym metodom/. 10 p1702 A69-32431
- USMANOV, T.**  
Parametric effects in the infrared region /Parametricheskie efekty v infrakrasnoi oblasti/. 03 p0439 A69-13054
- USPENSKAIA, V. A.**  
Physicochemical method of synthesizing carbohydrates from the products of human biological activity in limited closed spaces /Fiziko-khimicheskii metod sinteza uglevodov iz produktov zhiznedeiatel'nosti cheloveka v ogranichennykh zamknytykh prostranstvakh/. 03 p0381 A69-14199
- Synthetic monosaccharides for nutrition of man in space. 15 p2557 A69-31471
- USPENSKII, A. V.**  
Bistable operation of a GaAs semiconductor laser. 03 p0441 A69-14175
- USPENSKII, B. A.**  
Influence of a small transverse perturbation on the helical instability in an oscillator /Vliianie malogo poperechnogo vozmushcheniia na spiral'nuu neustoiichivost' v ostillistore/. 03 p0488 A69-13886
- Influence of a small transverse perturbation on a helical instability in an oscillator. 11 p1939 A69-25687
- USPENSKII, G. R.**  
Optimization of space communication systems /Optimizatsiia kosmicheskikh sistem svyazi/. [UN PAPER 68-95772] 06 p0886 A69-17030
- USQUIN, M.**  
Mathematical methods applied to economic studies /Les methodes mathematiques appliquees aux etudes economiques/. 03 p0536 A69-14105
- USTALOV, V. V.**  
Plasma flow from a Penning discharge with an incandescent cathode into a vacuum free of a magnetic field /Istechenie plazmy iz razriada Penninga s nakalennym katodom v vakuumnuu oblast', svobodnuiu ot magnitnogo polia/. 11 p1933 A69-25543

**USTIMENKO, B. P.**

Turbulent transfer processes in rotating flows of an incompressible fluid /O protsessakh turbulentnogo perenosu vo vrashchaisushchikhsia techeniakh neszhimaemoi zhidkosti/. 01 p0060 A69-10402

Aerodynamics of a turbulent twisted jet in a slipstream /Aerodinamika turbulentnoi zakruchennoi strui v sputnom potoke/. 21 p3645 A69-39848

Calculation of the turbulent characteristics of a flow in a channel with an internal rotating cylinder /K raschetu turbulentnykh kharakteristik techenia v kanale s vnutrennim vrashchaisushchimsia tsilindrom/. 22 p3933 A69-41028

**USTINGOV, V. I.**

The width of the emission spectrum of solid-state lasers /Shirina spektra generatsii tverdotel'nykh lazerov/. 14 p2459 A69-29389

**USTINOV, M. D.**

Nonisentropic simple waves in plane steady flow of an ideal gas. 05 p0752 A69-16687

Certain plane adiabatic ideal-gas flows containing shock waves /Nekotorye ploskie adiabaticheskie techeniia ideal'nogo gaza, soderzhashchie skachki uplotneniia/. 22 p3861 A69-41024

**USTINOVA, G. K.**

Radioactivity of the moon and meteorites /Radioaktivnost' lunyi i meteoritov/. 10 p1756 A69-22817

Cosmic-radiation-induced radioactivity of the moon and meteorites and the origin of meteorites /Radioaktivnost' luny i meteoritov, vyzvanaia kosmicheskimi luchami, i proiskhozhdenie meteoritov/. 19 p3410 A69-36092

**USUNIER, P.**

From Polaris to Poseidon /De "Polaris" a "Poseidon"/. 19 p3432 A69-36687

**USZYNSKI, A.**

Use of epitaxial GaAs diodes for switching purposes /Zastosowanie epitaksjalnych diod GaAs do celow przełączania/. 12 p2035 A69-25831

**UTEUSH, E. V.**

Simulation of a biological memory /Modelirovanie biologicheskoi pamiaty/. 23 p4110 A69-41982

The memory of cybernetic systems /O pamiaty kiberneticheskikh sistem/. 23 p4110 A69-41983

**UTEVSKII, L. M.**

Phase shape deformation and austenite stabilization in Fe-Ni and Fe-Ni-Ti alloys /O fazovom naklepe i ustoiichivosti austenita v splavakh Fe-Ni i Fe-Ni-Ti/. 18 p3159 A69-35448

**UTHE, E. E.**

Lidar observations of airfield approach conditions - An exploratory study. 15 p2651 A69-30895

**UTHER, J. B.**

Dynamic characteristics of the cardiovascular autonomic effects during severe arterial hypoxia in the unanesthetized rabbit. 24 p4258 A69-42632

Central nervous integration of the circulatory and respiratory responses to arterial hypoxemia in the rabbit. 24 p4258 A69-42635

**UTIAKOV, L. L.**

Multistable logic simplifies man-machine interface. 21 p3686 A69-39065

Substantial reliability enhancement in phase-pulse multistable circuits /Pro istotne pdivisheniia nadiinosti fazoimpul'snikh bagatostiikh skhem/. 23 p4143 A69-42338

**UTIAMYSHEV, R. I.**

Changes in the indices of external respiration, gas exchange, and energy expenditure in humans under conditions of weightlessness /Izmeneniia pokazatelei vneshnego dykhanii, gazoobmena i energotrat cheloveka v usloviakh nevesomosti/. 12 p2020 A69-26563

**UTINA, Z. M.**

An experiment in calculating the components of the turbulent energy balance /Opyt rascheta sostavliaiushchikh balansu energii turbulentnosti/. 20 p3571 A69-37696

**UTIUGOV, E. G.**

Attenuation of a magnetosonic wave in a turbulent plasma. 16 p2820 A69-31794

**UTKIN, N. I.**

Gallium distribution in yttrium-iron garnet single crystals /Raspredelenie galliia v monokristallakh ittriia-zhelezistogo granata/. 13 p2321 A69-28003

**UTKIN, V. V.**

Scientific results of a flight of the Lantar 1 automatic ionospheric laboratory /Nauchnye rezul'taty poleta avtomaticheskoi ionosfernoi laboratorii "Lantar-1"/. 05 p0830 A69-16053

Scientific results of the flight of the automatic ionospheric laboratory "Yantar-1". 20 p3618 A69-37966

**UTKINA, G. A.**

Estimate of the effectiveness of certain false-alarm stabilization circuits in the presence of unsteady Gaussian noise /Otsenka effektivnosti nekotorykh skhem stabilizatsii lozhnoi trevogi pri nestatsionarnom gaussovom shume/. 15 p2567 A69-30342

Determination of the number of channels required for errorless operation of multichannel radar systems /Opredelenie kolichstva kanalov, neobkhodimyykh dlia bezoshibochnoi raboty mnogokanal'nykh RLS/. 15 p2576 A69-30354

**UTTERBACK, N. G.**

Charge-transfer cross sections for N sub 2 super plus ions incident on H sub 2 and D sub 2 between 20 and 1000 ev. 05 p0796 A69-15914

Excitation resonances for the production of metastable atoms in low-energy argon ion-atom collisions. 08 p1354 A69-19809

**UTUKURI, R. R. N.**

Spatial frequency analysis of random arrays. 17 p2929 A69-33873

**UVAROV, A. I.**

Effect of plastic deformation on structural changes and mechanical properties during aging of the austenitic Fe-Ni-Ti alloy /Vliianie plasticheskoi deformatsii na izmenenie struktury i mekhanicheskie svoistva pri starenii austenitnogo splava Fe-Ni-Ti/. 04 p0618 A69-15177

Effect of plastic deformation on the physical and mechanical properties during aging of phase-hardened austenitic Fe-Ni-Ti alloy /Vliianie plasticheskoi deformatsii na fizicheskie i mekhanicheskie svoistva pri starenii fazonaklepannogo austenitnogo Fe-Ni-Ti splava/. 21 p3746 A69-38956

**UVAROV, A. IA.**

Calculation and realization of the areas of turbine through-flow cross sections /O raschete i obespechenii ploshchadei prokhodnykh sечenii turbiny/. 18 p3184 A69-34987

**UVAROV, D. B.**

Determination of the positions of artificial noctilucent clouds or meteor trails by the method of coordinate transformation /Opredelenie polozhenii iskusstvennykh svetiaushchikhsia oblakov ili sledov meteorov metodom transformirovaniia koordinat/. 12 p2154 A69-25822

**UVAROV, V. V.**

Certain problems concerning the plasticity of orthotropic media /Nekotorye voprosy plastichnosti ortotropnykh sred/. 24 p4400 A69-43083

**UYEDA, H. A.**

Experimental performance of a multimode radial transmission line beam forming network. 04 p0576 A69-14768

**UZGALIS, R.**

Computerized display of spatio-temporal EEG patterns. 21 p3668 A69-39864

**UZGIRIS, E. E.**

Large storage box hydrogen maser. [IEEE PAPER C-8] 05 p0774 A69-16310

**UZZELL, B. R.**

Rocket trajectory optimization by a second-order numerical technique. 16 p2857 A69-32154

## V

## VABIENSKY, H. B.

Contribution to the study of the relationship between the gas content and impurities in aluminum melts /Beitrag zur Kenntnis des Zusammenhanges zwischen Gasgehalt und Verunreinigungen in Aluminiumschmelzen/.

01 p0098 A69-10958

## MEYSENBUG, C.-M.

Potential testing methods for corrosion-induced changes in the mechanical properties of materials /Prüfmöglichkeiten fuer die Aenderung des mechanischen Verhaltens von Werkstoffen durch Korrosion/.

10 p1713 A69-23822

## CEK, J.

Influence of the properties of explosives upon the metal sheet velocity in explosive welding /Einfluss der Sprengstoffeigenschaften auf die Blechgeschwindigkeit beim Explosivschweißen/.

18 p3149 A69-35279

## CHON, R. I.

Pool boiling heat transfer from Teflon-coated stainless steel.

[ASME PAPER 68-WA/HT-12]

05 p0847 A69-16119

Quasi-steady compressible flow with heat transfer in accelerating nozzles and ducts.

12 p2012 A69-26790

The prediction of the thermal conductivity of two and three phase solid heterogeneous mixtures.

13 p2378 A69-28337

## CHTSEVANOS, G.

Conditional optimization of nonlinear adaptive control systems.

06 p0900 A69-17351

## CLAVIK, J.

Effect of nonlinear excitation on magnetoacoustic resonance in a cold plasma.

09 p1548 A69-21668

Transformation of waves and electron heating in a radially inhomogeneous plasma.

16 p2816 A69-31638

## ACROUX, A. G.

Estimation in linear discrete systems with time delay.

09 p1473 A69-22437

Operator-centered adaptive compensation of continuous manual control systems.

20 p3482 A69-37721

## AERMAN, J.

Some examples of nondestructive test methods developed for the improvement of safety and reliability of turbines in operation /Quelques exemples de methodes de controle non destructif developpees afin d'ameliorer la securite et la fiabilite des turbo machines en exploitation/.

17 p2978 A69-33330

## AGANOV, R. B.

A dielectric prism in a beam waveguide /Dielektricheskaia prizma v lucheovom volnovode/.

11 p1833 A69-24436

Asymmetrical wave diffraction at a wide slot in a circular waveguide /Difraktsiia nesimmetrichnykh voln na shirokoi shcheli kruglogo volnovoda/.

15 p2570 A69-30955

## AGIN, E. V.

Apparatuses and Machines of Oxygen and Cryogenic Installations /Apparaty i Mashiny Kislorodnykh i Kriogenykh Ustanovok/.

04 p0686 A69-15160

## AGIN, I. U. S.

Spectrum of a laser employing electron-vibrational transitions in a CaF sub 2 -Sm super 2 super plus crystal /O spektre lazera na elektronno-kolebatel'nykh perekhodakh v kristalle CaF sub 2 -Sm super 2 super plus/.

08 p1326 A69-20544

## AGLIO-LAURIN, R.

High altitude aerodynamics and its effects on lifting reentry performance.

06 p0860 A69-17634

On three-dimensional laminar boundary layers with large cross-flow.

17 p2955 A69-33467

## AGRAMIAN, Z. A.

Somatic induced potentials of the gyrus cinguli of cats /Somaticheskie vyzvannye potentsialy limbicheskoi kory koshi/.

22 p3886 A69-41175

## VAGROV, V. G.

Emission from a scalar particle in the field of two electromagnetic waves propagating toward each other /Izluchenie skaliarnoi chastitsy v pole dvukh begushchikh navstrechu drug drugu elektromagnitnykh voln/.

11 p1900 A69-25568

## VAHER, E.

A single frequency argon ion laser for holographic applications.

11 p1895 A69-24689

## VAHLDEK, F. W.

Growth and microstructure of molybdenum oxide crystals.

05 p0779 A69-15831

Hafnium. I - Microstructure.

23 p4178 A69-42361

## VAIANA, G. S.

Grazing-incidence telescopes for X-ray astronomy.

09 p1501 A69-22688

Observation of an X-ray flare - Spatial distribution and physical parameters.

24 p4366 A69-42688

## VAINBERG, D. V.

Conformal mapping and the difference method in stress concentration problems /Konformnoe otobrazhenie i raznostnyi metod v zadachakh o konsentratsii napriazhenii/.

11 p1971 A69-24648

## VAINORIS, Z. A.

Electric field distribution in circular spiral deflection systems of traveling-wave tubes /Raspreделение elektricheskogo polia v kruglykh spiral'nykh ot-kloniaushchikh sistemakh trubok begushchei volny/.

13 p2377 A69-28582

## VAINROT, V. I.

Relativistic theory of gravitation and its significance in geodesy /Relativistskaia teoriia tiagoteniia i ee znachenie dlia geodezii/.

15 p2596 A69-30573

## VAINSHTEIN, B. K.

Optical Fourier transforms and holography.

06 p0928 A69-17890

## VAINSHTEIN, L.

Approximation methods for calculating cross sections for excitation of atoms by electrons.

07 p1187 A69-19658

## VAINSHTEIN, L. A.

Diffuse X-radiation background in space.

01 p0147 A69-11310

The diffuse X-ray background of cosmic space. II.

10 p1792 A69-24209

Open Resonators and Open Waveguides.

14 p2419 A69-29316

Dielectronic recombination.

20 p3580 A69-38016

## VAINSHTEIN, S. I.

Dynamics of a magnetic field in a turbulent medium.

11 p1922 A69-24240

## VAISBERG, O. L.

Observations of the diurnal variation of the intensity of captured electrons.

01 p0147 A69-11321

Basic results of the space decade /Osnovnye itogi kosmicheskogo desiatiletiia/.

13 p2336 A69-27358

## VAISBERG, V. V.

Negative-curvature spectra of discrete sources /Spektry diskretnykh istochnikov s otritsatel'noi kriviznoi/.

15 p2687 A69-30540

## VAISBURD, I. M.

Determining the natural vibration frequencies of shafts.

18 p3147 A69-34546

## VAISFELD, N. M.

Study of the structure-formation processes of sitals by means of electron microscopy /Issledovanie protsessov formirovaniia struktury sitalov metodom elektronnoi mikroskopii/.

11 p1907 A69-25032

## VAISMAN, G. M.

Automatic Control and Telemechanics in Meteorology /Avtomatika i Telemekhanika v Meteorologii/.

01 p0111 A69-10997

## VAKHOMCHIK, V. P.

Unsteady flow past a cascade of slender profiles with a stagger angle /Nestatsionarnoe obtekanie reshetki tonkikh profilei s ugolom vynosa/.

02 p0190 A69-12575

## VAKIN, S. A.

Bases of Electronic Countermeasures and Electronic Intelligence /Osnovy Radioprotivodeistviia i Radiotekhnicheskoi Razvedki/.

03 p0385 A69-12927

## VAKMAN, D. E.

Sophisticated signals and the uncertainty principle in radar.

03 p0385 A69-13000

## VAKSENBURG, S. I.

Facility and operational procedure for obtaining meteorological radar data on clouds, cloud systems, and dangerous phenomena /Apparatura i metod operativnogo polucheniia radiolokatsionnoi meteorologicheskoi informatsii ob oblakakh, oblachnykh sistemakh i opasnykh iavleniakh/.

16 p2808 A69-32278

Equipment complex for automatically obtaining and processing meteorological radar data /Kompleks apparatury dlia avtomaticheskogo polucheniia i obrabotki radiolokatsionnykh meteorologicheskikh dannyyh/.

16 p2791 A69-32279

A method of diminishing the dead zone of a meteorological radar /Ob odnom metode umen'sheniia mertvogo zony meteorologicheskogo radiolokatora/.

16 p2791 A69-32281

## VAKULENKO, O. V.

The effect of free current carriers on the reflectivity of semiconductors in the infrared range of the spectrum /Vliianie svobodnykh nositelei toka na otrazhatel'nuu sposobnost' poluprovodnikov v infrakrasnoi oblasti spektra/.

20 p3583 A69-37610

## VAKULOV, P. V.

Radiation belts of the earth /Radiatsionnye poiasa zemli/.

13 p2326 A69-27350

Cosmic rays /Kosmicheskie luchii/.

13 p2326 A69-27351

## VALAEV, N. I.

Evaluation of the operational reliability of transistorized amplifiers on the basis of step-by-step failures /Otsenka nadezhnosti raboty tranzistornykh usilitel'ei po postepennym otkazam/.

12 p2043 A69-26886

## VALAKH, M. IA.

Q-switching of a laser cavity due to a change in the plasma reflection of semiconductors under conditions of current carrier heating /Moduliatsiia dobrotnosti rezonatora OKG za schet izmeneniia plazmennogo otrazheniia poluprovodnikov v usloviakh razogreva nositelei toka/.

15 p2633 A69-30064

## VALANDIN, I. IA.

Solution of some stress concentration problems by the contour smoothing method /O reshenii nekotorykh problem konsentratsii napriazhenii s pomoshch'iu metoda sglazhivaniia kontura/.

11 p1973 A69-24661

## VALANIS, K. C.

Unified theory of thermomechanical behavior of viscoelastic materials.

02 p0344 A69-12294

Propagation of a large amplitude longitudinal wave in a semi-infinite elastic rod.

07 p1233 A69-19176

Wave propagation in libroelastic materials - Application to solid carbon-dioxide.

13 p2286 A69-28668

Elastic materials with particle interactions of finite range.

13 p2371 A69-28674

The extension of a superposition principle to wave propagation in nonhomogeneous elastic media.

20 p3627 A69-37765

## VALCOVICI, V.

A new direction of cosmological research /Une nouvelle direction de recherche cosmologique/.

02 p0321 A69-12195

## VALD-PERLOV, V. M.

Avalanche Transit-Time Diodes and their Application in Microwave Technology /Lavino-Proletnye Diody i ikh Primenenie v Tekhnike SVCh/.

16 p2761 A69-32109



## VALDEZ, J. V.

Evidence for the emission of energetic gamma rays from the galactic plane in the Cygnus region.  
15 p2676 A69-30888

## VALDEZ, P. J.

Effect of composition and thermal treatments on the weldability of nickel-base 718 alloy.  
22 p3968 A69-39885

## VALDONI, F.

Shunted resonators on a transmission line with an asymmetrical response /Risonatori derivati su una linea di trasmissione a risposta dissimmetrica/.  
08 p1271 A69-19917

## VALEEV, K. G.

Finite-parametric family of solutions to systems of differential equations with a deviating argument /O konechnoparametricheskom semeistve reshenii sistem differentsial'nykh uravnenii s otkloniaushchimsia argumentom/.  
06 p0948 A69-17500

Linear difference equations with exponential coefficients /Lineinye raznostnye uravneniia s eksponentsial'nymi koeffitsientami/.  
13 p2288 A69-27526

Study of oscillations in a quasi-linear autonomous system in the case of resonance /Issledovanie kolebanii v kvazilineinoi avtonomnoi sisteme v rezonansnom sluchae/.  
15 p2653 A69-31193

Optimal control and the point mapping method /Optimal'noe upravlenie i metod tochechnykh otobrazhenii/.  
21 p3688 A69-39860

Investigation of the oscillations of nonlinear systems /Issledovanie kolebanii nelineinykh sistem/.  
22 p3980 A69-40108

## VALEEV, V. G.

Detection of weak coherent signals in correlated non-Gaussian noise /Obnaruzhenie slabykh kogerentnykh signalov v korrelirovannykh negaussovykh pomekakh/.  
09 p1456 A69-22286

## VALENSI, J.

Electrical characteristics of a linear Faraday generator using a binary mixture of noble gases with nonequilibrium ionization /Caracteristiques electriques d'un generateur lineaire de Faraday utilisant un melange binaire de gaz rares, avec ionisation hors d'equilibre/.  
08 p1359 A69-19880

Theoretical and experimental /shock tube/ study of the phenomena accompanying the loss of equilibrium in a closed-cycle MHD generator /Etude theorique et experimentale, en tube a choc, des phenomenes accompagnant la mise hors d'equilibre dans un generateur MHD en cycle ferme/.  
10 p1737 A69-23468

## VALENSTEIN, E. S.

Short-latency antidiuresis following the initiation of food ingestion.  
01 p0014 A69-10860

Steroid hormones and the neuropsychology of development.  
03 p0375 A69-13551

Hypothalamic motivational systems - Fixed or plastic neural circuits/ques/.  
09 p1444 A69-21310

A comparison of stimulus-bound drinking and drinking induced by water deprivation.  
17 p2910 A69-33750

The motivation underlying eating elicited by lateral hypothalamic stimulation.  
17 p2910 A69-33752

Ventromedial hypothalamic lesions and changes in body weight and food consumption in male and female rats.  
17 p2910 A69-33756

## VALENTI, C.

A statistical investigation on polar auroras.  
02 p0247 A69-12772

The history of the aurora.  
13 p2256 A69-28655

## VALENTINE, D.

High-energy proton, helium, and gamma-ray observations on OSO-III.  
09 p1579 A69-22172

## VALENTINE, J. D.

Is visual memory holographic/ques/.  
01 p0083 A69-10985

## VALENTINUZZI, M. E.

A simple mathematical derivation of the Stewart-Hamilton formula for the determination of cardiac output.  
24 p4271 A69-42784

## VALENZUELA CERVERA, L.

Fundamentals and background for the administrative and economic organization of airports /Fundamentos y antecedentes para la organizacion economica y administrativa de los aeropuertos/.  
10 p1811 A69-23602

## VALENZUELA, G. R.

Scattering of electromagnetic waves from a tilted slightly rough surface.  
03 p0395 A69-13625

Scattering of electromagnetic waves from a slightly rough surface moving with uniform velocity.  
04 p0560 A69-15213

## VALENZUELA, R.

Solar eclipse - Temperature, wind, and ozone in the stratosphere.  
06 p0916 A69-17008

## VALERIO, J.

Contributions to cadmium sulfide-copper sulfide solar cell studies.  
19 p3250 A69-35685

## VALERO, F. P. J.

Interferometrically measured thorium lines between 2747 and 4572 angstrom units.  
23 p4191 A69-42150

## VALGORA, M. E.

Hot performance characteristics of a gas bearing Brayton cycle turboalternator.  
23 p4071 A69-42279

## VALIASHKO, E. G.

Temperature dependence of intrinsic absorption in weakly doped p-InSb /Temperaturnaia zavisimost' so sobstvennogo pogloshcheniia v slabo legirovannom p-InSb/.  
01 p0136 A69-10255

Temperature dependence of fundamental absorption in lightly doped p-type InSb.  
09 p1559 A69-22648

## VALID, R.

A method of calculating structures in plasticity and in isothermal creep /Une methode de calcul des structures en plasticite et en fluage isotherme/.  
[ONERA-TP-667] 06 p1020 A69-17099

## VALIGNAT, S.

Spatial coherence of a laser beam /Coherence spatiale d'un faisceau laser/.  
22 p3960 A69-40018

## VALENTINE, A. P.

Effect of temperature on the brittle fracture of polycrystalline tungsten.  
12 p2116 A69-27135

## VALISHVILI, N. V.

Equilibrium configurations of shallow spherical shells /O formakh ravnovesiia pologikh sfericheskikh obolochek/.  
07 p1237 A69-19685

An algorithm for solving nonlinear boundary-value problems /Ob odnom algoritme resheniia nelineinykh kraevykh zadach/.  
09 p1614 A69-21887

## VALITOV, R. A.

Hydrogen as a buffer gas in a submillimeter water-vapor laser /Vodorod v kachestve bufernogo gaza submillimetrovogo lazera na parakh vody/.  
04 p0612 A69-15175

Investigation of Gunn-effect pulse generators operating at decimeter wavelengths /Issledovanie impul'snykh generatorov Ganna detsimetrovogo diapazona voln/.  
06 p0895 A69-17459

Influence of the natural frequency spectrum of an open resonator on its resonance properties in the "reflection" mode /Vliianie spektra sobstvennykh chastot otkrytogo rezonatora na ego rezonansnye kachestva v rezhime "na otrazhenie"/.  
07 p1106 A69-19152

Hydrogen as a buffer gas in a submillimeter water-vapor laser.  
18 p3152 A69-34717

A study of decimeter-wave pulsed Gunn oscillators.  
20 p3508 A69-37942

Submillimeter CW laser operating with vapor and HCN vapor /Submillimetrovyy laser nepreryvnogo deistviia, rabotaiushchii na parakh H sub 2 O i HCN/.  
22 p3959 A69-39958

## VALKO, I. P.

New aspect in the discussion of reliability in microelectronics.  
08 p1294 A69-21122

## VALKOV, IU. A.

A coaxial plasma accelerator with pulsed azimuthal and longitudinal magnetic fields /Koaksial'na uskoritel' plazmy s impul'snymi azimutal'nymi i podol'nymi magnitnymi poliami/.  
03 p0481 A69-14211

## VALKOV, L. S.

A method of designing adaptive automatic control systems with variable structure /Ob odnom sposobe postroeniia adaptivnykh sistem avtomaticheskogo upravleniia s peremennoi strukturoi/.  
01 p0052 A69-10799

## VALLANDER, S. V.

Comments on equations associated with the source and sink method /Zamechania ob uravneniakh svyazannykh s metodom istochnikov i stokov/.  
05 p0747 A69-16032

## VALLE, G.

A program for linear microwave circuit analysis by scattering parameters.  
11 p1858 A69-24577

## VALLENTYNE, J. R.

Pyrolysis of proline, leucine, arginine and lysine in aqueous solution.  
05 p0716 A69-15622

## VALLERANI, E.

Effect of tip blunting on cone laminar heat transfer.  
04 p0542 A69-14722

Optimization study of plane smooth rectangular panels subject to typical loading and heating conditions - Yielding due to simple stress and buckling due to overall instability /Studio di ottimizzazione di pannelli piani rettangolari lisci soggetti a tipiche condizioni di carico ed a riscaldamento - Cedimento per sollecitazione semplice ed ingobbamento per instabilita globale/.  
08 p1417 A69-20822

## VALLERIE, L. L.

Visual detection probability of "sonar" targets as a function of retinal position and brightness contrast.  
02 p0203 A69-12211

## VALLEY, L. M.

Multiple velocity dispersion in normal hydrogen and in normal hydrogen-helium mixtures.  
01 p0121 A69-11288

Rotational relaxation in parahydrogen and its mixtures with helium, neon, and argon at 300 deg K.  
16 p2815 A69-32799

## VALLIAPPAN, S.

Elasto-plastic solutions of engineering problems "Initial stress", finite element approach.  
15 p2706 A69-30443

## VALLIN, J. T.

Influence of hot electrons on the optical absorption in Fe-doped CdTe.  
19 p3389 A69-36555

## VALLONE, A.

First-order theory of orbital transfer for geodetic satellite missions.  
21 p3793 A69-38333

## VALMANIS, IA. IA.

Optimization of a linear induction MHD machine taking into account the longitudinal end effect /Optimizatsiia lineinoi induktsionnoi MGD-mashiny ucheto m prodol'nogo kraevogo efekta/.  
07 p1058 A69-19011

## VALNICEK, B.

The west-limb activity on 9, 10, 11 July 1966 as observed in the H alpha line.  
10 p1764 A69-23744

## VALOVICIN, F. R.

Infrared measurements of jet-stream cirrus.  
01 p0110 A69-10699

## VALSA, I.

Calculation of the frequency characteristics of complex radio circuits with the aid of a digital computer /Raschet chastotnykh kharakteristik slozhnykh radioelektronnykh skhem pri pomoshchi tsifrovoy vychislitel'noi mashiny/.  
09 p1472 A69-21788

## VALUEV, A. A.

Radio Control of Rocket Missiles and Space Vehicles /Radioupravlenie reaktivnymi snariadami i kosmicheskimi apparatami/.  
20 p3574 A69-37223

- ALUEV, I. A.**  
Optimal relations in plane induction pumps without short-circuiting bus bars /Optimal'nye sootnosheniia v ploskikh induktsionnykh nasosakh bez korotkoza-mykaushchikh shin/.  
14 p2405 A69-29913
- ALUEVA, G. E.**  
Representation of the geomagnetic field at the earth's surface and in outer space with the aid of dipole models /Predstavlenie geomagnitnogo polia na poverkhnosti zemli i vo vneshnem prostranstve s pomoshch'iu dipol'nykh modelei/.  
02 p0238 A69-11673  
Spatial structure of the residual Z sub ae field.  
06 p0922 A69-17755  
Dipole model of the geomagnetic field /on the basis of an analysis of the Z sub ae field/.  
12 p2071 A69-26695  
Representation of the geomagnetic field at the surface of the earth and in outer space by means of dipole models.  
13 p2257 A69-28704
- ALUTOV, N. P.**  
Thermal-stability analysis of choke-coil magnetoelastic sensors /Analiz termostabil'nosti drossel'nykh magnitoupругikh datchikov/.  
23 p4166 A69-41995
- AMBERSKII, M. V.**  
Engineering design of H-plane waveguide Y-circulators /Inzhenernyi raschet volnovodnykh H-ploskostnykh Y-tsirkulyatorov/.  
04 p0575 A69-14460  
Correction of the control signal in microwave ferrite modulators /Korreksiia upravliaushchego signala v SVCh ferritovykh modulyatorakh/.  
13 p2226 A69-27216  
Design of H-plane waveguide Y-circulators.  
14 p2418 A69-28831
- AMPOLA, A. L.**  
Energetic electrons at latitudes above the outer-zone cutoff.  
09 p1577 A69-21709
- AN LABADA, T. S.**  
Radial velocities of B stars in the Sco-Cen association.  
14 p2519 A69-29136  
Orbits of four spectroscopic binaries in Lacerta OB 1.  
14 p2519 A69-29137
- VAN ALLEN, J. A.**  
Corrected absolute flux of the July 7, 1966, solar X-ray flare.  
01 p0147 A69-11242  
Particle shadowing by the moon.  
05 p0824 A69-16252  
Particle description of the magnetosphere.  
07 p1208 A69-19355  
The solar X-ray flare of 7 July 1966.  
10 p1766 A69-23754  
Observations of the solar particle event of 7 July 1966 with University of Iowa detectors.  
10 p1768 A69-23768  
Solar particle observations inside the magnetosphere during the 7 July 1966 proton flare event.  
10 p1768 A69-23778  
Charged particles in the magnetosphere.  
12 p2150 A69-26743  
The solar flare of July 8, 1969.  
16 p2849 A69-31988
- VAN ALTENA, W. F.**  
Low-luminosity members of the Hyades cluster. II.  
12 p2152 A69-25797
- VAN ANDEL, E.**  
Heat pipe design theory.  
14 p2539 A69-29206  
Calorimetric measurements with a heat pipe thermionic converter.  
14 p2402 A69-29238
- VAN ANDEL, S. I.**  
New determinations of ancient earth radii from palaeomagnetic data.  
22 p3937 A69-40183
- VAN ATTA, C. W.**  
Correlation measurements in grid turbulence using digital harmonic analysis.  
03 p0419 A69-13950  
Experiments on vortex shedding from rotating circular cylinders.  
24 p4248 A69-43601
- VAN ATTA, L.**  
Superradiance and recombination radiation from cadmium telluride.  
19 p3389 A69-36550
- VAN ATTA, L. C.**  
A simple antenna with good circular polarization.  
23 p4137 A69-41590
- VAN BEEK, H. F.**  
A measurement of auroral electrons in the 1-10 Mev range.  
09 p1576 A69-21663  
Rocket observations of protons and alpha-particles at Andoya after the solar flares of 24th-25th February 1969.  
15 p2677 A69-31329
- VAN BUEREN, H. G.**  
Coherent detection spectroscopy.  
10 p1696 A69-23684
- VAN CHI, F.**  
Relation between stable geomagnetic-field pulsations and the magnetosphere parameters /Sviaz' ustoiichivyykh pul'satsii geomagnitnogo polia s parametrami magnitosfery/.  
13 p2253 A69-27692
- VAN CHONG, N.**  
Anomalous fluctuations of acoustic waves in semiconductors in an external electric field /Pro anomal'ni fluktuatsii zvukovykh khvil' u napivprovidnikakh, iaki znakhodiat'sia u zovnishn'omu elektrichnomu poli/.  
03 p0491 A69-14054  
Coupled waves in ferromagnetic and antiferromagnetic semiconductors in the presence of external electric and magnetic fields.  
05 p0809 A69-16548  
Anomalous sound wave fluctuations in semiconductors in an external electric field.  
18 p3182 A69-35047
- VAN CITTERS, R. L.**  
Cardiovascular performance of Alaska sled dogs during exercise.  
24 p4256 A69-42624
- VAN CLEAVE, R.**  
Transmission characteristics of split-phase PCM codes.  
21 p3676 A69-39451
- VAN DAC, T.**  
A method for computing the hydrodynamic blade cascade for a compressible fluid by means of a stream function.  
20 p3460 A69-37972
- VAN DAEL, W.**  
Measurements of the thermal conductivity of gases. I, II.  
05 p0845 A69-15616
- VAN DAM, R. TH.**  
Refractory period of the dog's ventricular myocardium following sudden changes in frequency.  
24 p4257 A69-42628
- VAN DAN-CHZHI**  
A geometrical representation, on a complex plane, of the motion of a solid body about a fixed point /Ob odnom geometricheskom predstavlenii na kompleksnoi ploskosti dvizheniia tverdogo tela vokrug nepodvizhnoi tochki/.  
01 p0116 A69-10356
- VAN DAO, N.**  
Determination of maximum nonstationary oscillatory amplitudes of dynamical systems with many degrees of freedom.  
16 p2876 A69-32296
- VAN DE HULST, H. C.**  
Multiple light scattering in planetary atmospheres.  
02 p0319 A69-12105  
Asymptotic fitting - A method for solving anisotropic transfer problems in thick layers.  
04 p0595 A69-15285  
The interpretation of the diffuse galactic radiation.  
10 p1782 A69-23680  
Interstellar matter.  
21 p3802 A69-38819
- VAN DE KAMP, P.**  
Summary of 133 parallaxes determined with the 24-in. refractor of the Sproul Observatory.  
04 p0663 A69-15381  
Stars nearer than five parsecs.  
08 p1407 A69-21130  
Parallax and orbital motion of the spectroscopic binary Tau Persei.  
13 p2349 A69-27812
- Parallax, proper motion, acceleration, and orbital motion of Barnard's star.  
13 p2349 A69-27813  
Parallax and mass ratio of the visual binary sigma 1785 from photographs taken with the Sproul 24-inch refractor.  
13 p2349 A69-27814  
Alternate dynamical analysis of Barnard's star.  
22 p4013 A69-40119
- VAN DE VAART, H.**  
Observations of Love wave propagation at UHF frequencies.  
13 p2218 A69-27203
- VAN DE VEN, A. A. F.**  
On the boundedness in the mean square of the forced oscillations of linear systems with stochastic coefficients.  
16 p2873 A69-32058
- VAN DEN BERGH, S.**  
UBV observations of field galaxies.  
10 p1774 A69-22964  
Temporal variation of the metal content in the Galaxy /Zur zeitlichen Variation des Metallgehaltes in der Galaxis/.  
12 p2160 A69-26854  
Observations of the nucleus of the radio galaxy M82.  
13 p2335 A69-27310  
The M7 giants in the nuclear bulge of the Galaxy.  
16 p2863 A69-32396  
Search for an optical remnant of the Cassiopeia A supernova.  
24 p4389 A69-43746
- VAN DEN BRENNK, H. A. S.**  
The oxygen effect in radiation therapy.  
23 p4091 A69-41967
- VAN DEN HEUVEL, E. P. J.**  
The orbital parameters of a binary system in which the more massive component decreases in mass.  
11 p1962 A69-25120
- VAN DEP, N.**  
Equations of a fluid boundary layer with couple stresses.  
14 p2428 A69-28815
- VAN DER BORGHT, R.**  
An investigation of certain aspects of the dynamical stability of stars.  
13 p2336 A69-27449  
The effect of a magnetic field on the convective instability of a compressible polytropic atmosphere.  
16 p2855 A69-31658
- VAN DER BURG, M. G. J.**  
Gravitational waves in general relativity. X.  
14 p2486 A69-29635
- VAN DER GOOT, A. S.**  
The intermetallic compounds in the gadolinium-cobalt system.  
11 p1903 A69-24574
- VAN DER HEYDEN, J.**  
Fluidic display systems.  
01 p0078 A69-10155
- VAN DER HORST, G. J. C.**  
Hue shift and brightness enhancement of flickering light.  
22 p3882 A69-40871
- VAN DER HOUVEN VAN OORDT, A. J.**  
Langmuir probes compared with other diagnostic techniques in a Q-device.  
02 p0288 A69-12172
- VAN DER LAAN, H.**  
Frequency selection, spectral-index distributions and source counts.  
14 p2518 A69-29134
- VAN DER LAARSE, W. D.**  
Effect of gravity on vestibular nystagmus.  
12 p2020 A69-26551
- VAN DER MEER MOHR, H. E. C.**  
Geological interpretation of hyperaltitude photographs from Gemini spacecraft.  
18 p3132 A69-35276  
Geological interpretation of hyperaltitude photographs from Gemini spacecraft.  
22 p3935 A69-40040
- VAN DER MERWE, A. J.**  
Second-order dispersion-energy series for axially symmetric molecules.  
12 p2131 A69-26606
- VAN DER MERWE, J. H.**  
Second-order dispersion-energy series for axially symmetric molecules.  
12 p2131 A69-26606



## VAN DER STEEN, A. B. M.

Refractory period of the dog's ventricular myocardi-  
um following sudden changes in frequency.  
24 p4257 A69-42628

## VAN DER WEKKEN, C. J.

Intermediate compound Ni sub 8 Nb/Cb/ in nickel-  
rich nickel-niobium /columbium/ alloys.  
10 p1708 A69-22993

## VAN DER ZIEL, A.

On the high frequency excess noise and equivalent  
circuit representation of the MOS-FET with n-type  
channel.  
09 p1463 A69-22094

Equivalence of the noise figures of common- source  
and common-gate F.E.T. circuits.  
13 p2227 A69-27237

Noise measurements on field-emission tubes.  
16 p2752 A69-32384

## VAN DIERENDONCK, A. J.

Modeling nonstationary random processes with an  
application to gyro drift rate.  
14 p2479 A69-29486

## VAN DINE, C. P.

An algorithm for the optimization of trajectories with  
associated parameters.  
[AIAA PAPER 68-115] 13 p2353 A69-28203

## VAN DOLAH, R. W.

Fire and explosion hazards of cryogenic liquids.  
17 p3017 A69-33684

Application of Halon 1301 to the prevention of or  
extinguishment of Aerazine-50 fires.  
18 p3094 A69-35090

## VAN DORN, W. G.

Tsunamis on the moon/ques/  
04 p0661 A69-15142

Lunar maria - Structure and evolution.  
21 p3803 A69-38982

## VAN DRIEST, E. R.

Problems of high-speed hydrodynamics.  
13 p2245 A69-27418

## VAN DYKE, M.

Inviscid reacting flow near a stagnation point.  
11 p1876 A69-25560

Annual Review of Fluid Mechanics. Volume 1.  
18 p3122 A69-34916

Higher-order boundary-layer theory.  
18 p3123 A69-34923

## VAN ESS, J. C.

The impact of biosciences requirements on biosatel-  
lite attitude control.  
18 p3210 A69-35094

## VAN FIGGELEN, A.

Burning rates of polymethylmethacrylate in mixtures  
with ammonium perchlorate or in hybrid systems when  
mixed with ammonium chloride.  
13 p2324 A69-28503

## VAN FO FI, G. A.

Stress concentration near holes in three-layer spheri-  
cal shells /Konzentratsiia napruzhen' bna otvoriv u  
trisharovich sferichnikh obolochkakh/.  
21 p3833 A69-38570

## VAN FO FY, G. A.

Relations of the theory of transfer processes in rein-  
forced media /Sootnosheniia teorii protsessov perenosa  
v armirovannykh sredakh/.  
01 p0173 A69-10079

Electrostatics and magnetostatics of reinforced  
polymers /Elektro- i magnitostatika armirovannykh  
polimerov/.  
08 p1336 A69-20336

Fundamental problems of dynamics in the theory of  
composite media /Osnovnye zadachi dinamiki v teorii  
kompozitsionnykh sred/.  
11 p1972 A69-24649

Stress concentration around holes in three- layer  
shells /Konzentratsiia napriazhenii okolo otverstii v  
trekhsloynnykh obolochkakh/.  
11 p1984 A69-25171

Investigation of the fiber distribution in oriented  
fiberglass-reinforced plastics /Issledovanie ras-  
predeleniia volokon v orientoivannykh  
stekloplastikakh/.  
18 p3162 A69-35355

## VAN GENDEREN, A. M.

Five-colour photometry of the X-ray source Sco X-1.  
16 p2847 A69-31648

## VAN GILS, J. N.

A measurement of auroral electrons in the 1-10 Mev  
range.  
09 p1576 A69-21663

Rocket observations of protons and alpha- particles  
at Andoya after the solar flares of 24th-25th February  
1969.  
15 p2677 A69-31329

## VAN HAERINGEN, W.

Role of linear phase anisotropy in a Zeeman laser.  
16 p2798 A69-32606

## VAN HEMERT, R. L.

Threshold photoneutron cross section for Mg super  
26 and a source of stellar neutrons.  
21 p3788 A69-38599

## VAN HERK, G.

Remeasurements of positions of minor planets deter-  
mined at the Leiden Observatory in the years 1938-  
1964.  
20 p3605 A69-37789

## VAN HOEVEN, W.

Fatty acids and hydrocarbons as evidence of life  
processes in ancient sediments and crude oils.  
20 p3523 A69-37538

## VAN HOOFF, A.

Star counts in the constellations Scorpius,  
Ophiuchus, Corona Australis and Sagittarius.  
20 p3604 A69-37788

## VAN HORN, H. M.

Nuclear reaction rates at high densities.  
09 p1606 A69-22418

Late phases of stellar evolution. I.  
09 p1606 A69-22420

## VAN HOUTEN, J. J.

The development of sonic environmental testing.  
12 p2060 A69-26939

## VAN ISACKER, J.

Zonal temperature and spectral characteristics of the  
stratospheric circulation in January and February 1958  
/Temperature zonale et caracteristiques spectrales de  
la circulation dans la stratosphere en janvier-fevrier  
1958/.  
02 p0246 A69-12759

## VAN ITTERBEEK, A.

Properties of epitaxially grown silver and gold films  
and the influence of alpha irradiation.  
03 p0486 A69-13582

## VAN KANN, H.

Influence of the deformation conditions during forg-  
ing and extrusion on the mechanical properties of  
titanium alloys /Der Einfluss der Umformbedingungen  
auf die mechanischen Eigenschaften von Titan-  
legierungen beim Gesenkschmieden und Strangpres-  
sen/.  
16 p2793 A69-31786

The use of titanium die forgings for aircraft /Die Ver-  
wendung von Titan-Gesenkpressteilen im Flugzeug-  
bau/.  
21 p3728 A69-38459

Problems in the production of high-quality materials  
from titanium alloys by drop forging and extrusion  
/Probleme bei der Herstellung hochwertiger  
Gesenkschmiede- und Strangpressprodukte aus Titan-  
legierungen/.  
[DGLR-69-003] 23 p4170 A69-42162

## VAN KESSEL, T. J.

An integrated operational amplifier with novel HF  
behavior.  
07 p1103 A69-18877

## VAN KOEVERING, A. R.

Conception of the "Omega" airborne navigational  
computers /Conception des calculateurs aeroportes de  
navigation "Omega"/.  
08 p1347 A69-20778

## VAN LEER, B.

Stabilization of difference schemes for the equations  
of inviscid compressible flow by artificial diffusion.  
12 p2062 A69-26624

## VAN LIEW, H. D.

Influence of bubble size and blood perfusion on ab-  
sorption of gas bubbles in tissues.  
21 p3651 A69-38389

## VAN LOON, H.

The half-yearly oscillations in the tropics of the  
Southern Hemisphere.  
12 p2064 A69-26011

## VAN MIEGHEM, J.

Zonal temperature and spectral characteristics of the  
stratospheric circulation in January and February 1958  
/Temperature zonale et caracteristiques spectrales de  
la circulation dans la stratosphere en janvier-fevrier  
1958/.  
02 p0246 A69-12759

Advances in Geophysics. Volume 13.  
22 p3940 A69-40534

## VAN MOORHEM, W. K.

Diffraction of a plane shock by an analytic blunt  
body.  
22 p3860 A69-40895

## VAN NESS, J. E.

Inverse iteration method for finding eigenvectors.  
12 p2121 A69-26510

## VAN NESS, R. F.

Flat cable terminating techniques.  
04 p0578 A69-15217

## VAN NICE, L. J.

Identification of important chemical reactions in  
liquid propellant rocket engines.  
[WSCI PAPER 68-7] 11 p1942 A69-24900

## VAN NIEKERK, C. G.

Assessment of aircraft noise disturbance.  
16 p2735 A69-32021

## VAN ORDEN, J. M.

Effect of beta working on 6A1-4V titanium alloy.  
[ASM PAPER D8-24.3] 20 p3564 A69-38136

## VAN PATTEN, R. E.

Vortex tube as a thermal protective device.  
09 p1447 A69-22550

## VAN RENSBURG, W.

On the ionization of H and He in planetary nebulae.  
14 p2518 A69-29133

## VAN ROTTERDAM, A.

Frequency analysis of heart murmurs.  
24 p4279 A69-43800

## VAN RYSWYK, C. W.

ORS discrimination from noisy electrocardiograms.  
21 p3667 A69-39442

## VAN SABBEN, D.

The computation of magnetospheric currents,  
caused by dynamo action in the ionosphere.  
10 p1685 A69-23836

## VAN SANT, J. H.

The spot-insulated plate.  
03 p0531 A69-12863

## VAN SCHMUS, W. R.

The composition and structural state of feldspar  
from chondritic meteorites.  
05 p0819 A69-15622

Composition of phosphate minerals in ordinary  
chondrites.  
15 p2690 A69-30706

Mineralogy, petrology, and classification of types 3  
and 4 carbonaceous chondrites.  
19 p3413 A69-36109

## VAN SLOTEN, J. P.

New devices for managing the product development  
process.  
[ASME PAPER 68-WA/MGT-3] 05 p0850 A69-16146

## VAN SOMEREN, L.

Partial pole figures from cylindrical and planar tung-  
sten specimens.  
09 p1558 A69-21811

Summary of applied research program in thermionic  
conversion during recent years.  
14 p2397 A69-29173

## VAN SPEYBROECK, L. P.

Grazing-incidence telescopes for X-ray astronomy.  
09 p1501 A69-22688

## VAN SPLINTER, A.

Propellant expulsion techniques.  
16 p2736 A69-31734

## VAN STEE, E. W.

Effect of sodium fluoride and AMOX /NF sub 3 O/  
on growth and thyroid function in the rat.  
14 p2406 A69-29291

## VAN STEENBERG, G. N.

Shielded enclosure measurements can be accurate.  
21 p3683 A69-39439

## VAN THIEL, M.

Dynamic yield strength of 2024-T4 aluminum at 313  
kbar.  
10 p1712 A69-23665

## VAN TIGGELEN, A.

Oxidation and Combustion. Volume 1 /Oxydations  
et Combustions. Volume 1/.  
06 p1030 A69-17412

General characteristics of combustion reactions  
/Caracteristiques generales des reactions de com-  
bustion/.  
06 p1031 A69-17413

- Thermodynamics of combustion and concepts of aerothermochemistry /Thermodynamique de la combustion et notions d'aerothermochimie/.  
06 p1031 A69-17414
- General theory of chain reactions /Theorie generale des reactions en chaines/.  
06 p1031 A69-17415
- Oxidation and self-ignition in the gaseous phase /Oxydations et auto-inflammations en phase gazeuse/.  
06 p1031 A69-17416
- Properties of inflammable gaseous mixtures /Proprietes des melanges gazeux inflammables/.  
06 p1031 A69-17417
- Theory of deflagration in the gaseous phase /Theorie de la deflagration en phase gazeuse/.  
06 p1031 A69-17418
- Oxidation and Combustion. Volume 2 /Oxydations et Combustions. Volume 2/.  
06 p1032 A69-17419
- Deflagration in the turbulent regime /La deflagration en regime turbulent/.  
06 p1032 A69-17420
- Combustion in a heterogeneous system /La combustion en systeme heterogene/.  
06 p1032 A69-17421
- Deflagration of solid and hybrid propellants /La deflagration des propergols solides et hybrides/.  
06 p0982 A69-17422
- Chemiluminescence and chemionization in flames /Chimiluminescence et chimionisation dans les flammes/.  
06 p1032 A69-17423
- Detonations /Les detonations/.  
06 p1032 A69-17424
- Liquid-phase radical oxidation /Oxydations radicalaires en phase liquide/.  
06 p1032 A69-17425
- Structure and burning velocity of turbulent premixed flames.  
06 p1035 A69-17931
- VAN TIGGELEN, P. J.**  
Thermodynamics of combustion and concepts of aerothermochemistry /Thermodynamique de la combustion et notions d'aerothermochimie/.  
06 p1031 A69-17414
- Oxidation and self-ignition in the gaseous phase /Oxydations et auto-inflammations en phase gazeuse/.  
06 p1031 A69-17416
- VAN TONGERLOO, E. H.**  
Conduction bands of GaSb.  
07 p1201 A69-19464
- VAN TRAN, N.**  
Free-carrier magneto-optical effects in far-infrared difference-frequency generation in semiconductors.  
09 p1556 A69-21578
- VAN TRONG, N.**  
Contribution to the study of very dense plasmas /Contribution a l'etude des plasmas tres denses/.  
01 p0128 A69-10391
- VAN VALKENBURH, M. E.**  
Progress in radio waves and transmission of information. II - Information theory, circuit theory, and computer-aided design.  
19 p3286 A69-36432
- VAN VOLLENHOVEN, E.**  
Frequency analysis of heart murmurs.  
24 p4279 A69-43800
- VAN WINKLE, D. D.**  
Automated mission analysis-trajectory determination procedures.  
[AAS PAPER 68-148] 19 p3402 A69-35951
- VAN WINKLE, E. W.**  
Computer aided design of linear and saturating servomechanisms.  
18 p3110 A69-34672
- VAN WYK, J. W.**  
Development of solid lubricant compacts for use in ball bearing separators.  
[ASLE PAPER 68-LC-16] 07 p1139 A69-18626
- VANAERSCHOT, A. E.**  
The photovoltaic effect in the Cu-Cd-S system.  
19 p3382 A69-35682
- VANBEEK, G. J.**  
The effect of the solar cycle on magnetic activity at high latitudes.  
15 p2598 A69-31207
- VANBLARICUM, G. F., JR.**  
A modified residue-calculus technique for solving a class of boundary value problems. II.  
20 p3505 A69-37298
- VANCE, R. W.**  
Applications of Cryogenic Technology, Cryogenic Technology Symposia of Cryo-68, Chicago, Ill., June 9-12, 1968, Lectures.  
17 p3006 A69-33679
- Introductory remarks on stress corrosion cracking.  
21 p3748 A69-39490
- VANCHERI, F.**  
Regenerable carbon dioxide sorbents.  
09 p1447 A69-22552
- VANDAKUROV, IU. V.**  
The energy of a rotating star and its dependence on the angular-velocity distribution.  
11 p1952 A69-24249
- Possible unstable oscillations of a neutron star.  
13 p2352 A69-27912
- VANDEN BOUT, P.**  
Search for X-ray polarization in Sco X-1.  
12 p2149 A69-26315
- VANDENPLAS, P. E.**  
Plasma properties and obtention of densities high above critical density in radio-frequency plasmas.  
01 p0131 A69-10818
- Electron Waves and Resonances in Bounded Plasmas.  
04 p0633 A69-14296
- VANDER HEYDEN, W. H.**  
The magnetic resonance flowmeter.  
15 p2616 A69-31290
- VANDER VELDE, W. E.**  
On the existence of stabilizing compensation.  
12 p2054 A69-26517
- VANDER VORST, A.**  
On the accuracy obtained when using variational techniques for asymmetrically loaded waveguides.  
13 p2233 A69-28072
- VANDER VORST, A. S.**  
Wave propagation in a rectangular waveguide loaded with an H-plane dielectric slab.  
13 p2222 A69-28075
- VANDERGRAFT, J. S.**  
Spectral properties of matrices which have invariant cones.  
04 p0624 A69-15003
- VANDERMEER, R. A.**  
Texture inhomogeneities in cold-rolled niobium /columbium/.  
21 p3744 A69-38737
- VANDERVEEN, A. A.**  
Triple-planet ballistic flybys of Mars and Venus.  
[AAS PAPER 68-114] 21 p3805 A69-39206
- VANDERVEEN, J. E.**  
Evaluation of foods for space flights.  
15 p2560 A69-31470
- VANDERVOORT, R. R.**  
High-temperature plastic deformation of polycrystalline rhenium.  
13 p2280 A69-27767
- VANDELDELDE, H. A.**  
Ionosphere, King Baudouin Base - April 1964 to January 1965 /Ionosphere- Base Roi Baudouin - Avril 1964 a Janvier 1965/.  
10 p1681 A69-23315
- VANDORPE, D.**  
Study of a continuously polarized pn junction /Etude d'une jonction pn polarisee en continu/.  
08 p1280 A69-19973
- VANDREY, J. F.**  
Non-existence of a Biota-Cloud recontamination hazard for a planetary lander.  
02 p1201 A69-11771
- VANECEK, V.**  
Contribution to the problem of the heat resistance of low-alloy CrMoWV steels. II - Effect of niobium, cerium, zirconium, and boron on the heat resistance of steels of the type CSN 41 5335 /Prispevek k podstate zarupevnosti nizkolegovanych CrMoWV oceli. II - Vliv obsahu niobu, ceru, zirkonu a boru na zarupevnost oceli typu CSN 41 5335/.  
22 p3972 A69-41079
- Contribution to the theory of the heat resistance of low-alloy CrMoWV steels. I - Influence of the vanadium content on the heat resistance in steels of the type CSN 41 5335 /Prispevek k podstate zarupevnosti nizkolegovanych CrMoWV oceli. I - Vliv obsahu vanadu na zarupevnost oceli typu CSN 41 5335/.  
22 p3972 A69-41083
- VANGEEL, J.**  
High temperature compatibility of refractory metals in contact with refractory materials.  
14 p2463 A69-29219
- VANHOOISSSEN, J. E.**  
In-reactor thermionic converter testing experience at General Electric.  
14 p2399 A69-29195
- VANIAN, L. L.**  
Directional hydromagnetic emission and currents along geomagnetic lines of force.  
06 p0921 A69-17743
- Magnetic field directed propagation of hydromagnetic waves through the lower layers of the ionosphere /O rasprostraneni gidromagnitnykh voln, napravliaemykh magnitnym polem, skvoz' nizhnii sloi ionosfery/.  
10 p1687 A69-23926
- Magnetovariational sounding using the spatial derivatives of the field /Magnitovariatsionnoe zondirovanie s ispol'zovaniem proststvennykh proizvodnykh polia/.  
14 p2438 A69-29081
- Frequency probing of the earth on the basis of the results of a spherical analysis of electromagnetic variations /Chastotnoe zondirovanie zemli po rezul'tatam sfericheskogo analiza elektromagnitnykh variatsii/.  
14 p2438 A69-29082
- Theoretical foundations of the use of electromagnetic variations in studying the electrical conductivity of the earth /O teoreticheskikh osnovakh ispol'zovaniya elektromagnitnykh variatsii dlia izucheniya elektroprovodnosti zemli/.  
20 p3522 A69-37058
- Geomagnetic pulsations with an intensity maximum at mid-latitudes /Geomagnitnye pul'satsii s maksimumom intensivnosti v srednikh shirotakh/.  
20 p3522 A69-37059
- Propagation of low-frequency hydromagnetic waves, directed by the geomagnetic field, through a gyrotropic ionosphere /O rasprostraneni nizkochastotnykh gidromagnitnykh voln, napravliaemykh geomagnitnym polem, skvoz' girotropnuui ionosferu/.  
23 p4157 A69-41864
- Impedance of an inhomogeneous earth /Impedansy neodnorodnoi zemli/.  
23 p4157 A69-41867
- VANICEK, P.**  
New analysis of the earth-pole wobble.  
21 p3716 A69-39244
- VANIERE, A.**  
Reliability evaluation of an electronic system used in civil aviation /Etude de fiabilite sur un ensemble electronique en exploitation dans l'aviation civile/.  
01 p0011 A69-11069
- VANIUKOV, A. V.**  
Investigation of the electrophysical properties of the Cd sub x Hg sub 1-x Te alloy /Issledovanie elektrofizicheskikh svoystv splava Cd sub x Hg sub 1-x Te/.  
09 p1557 A69-21737
- Properties of a p-n junction in cadmium telluride /O svoystvakh p-n-perekhoda v telluride kadmia/.  
10 p1744 A69-23212
- Effect of temperature on the photosensitivity spectrum of cadmium telluride thin films /Vliianie temperatury na spektr fotochuvstvitel'nosti tonkikh sloev tellurida kadmia/.  
13 p2318 A69-27889
- Studies on the electrical properties of Cd sub x Hg sub 1-x Te alloys.  
20 p3584 A69-38215
- VANIUKOV, M. P.**  
Generation of the second optical harmonic in cylindrically focused beams /O generatsii vtoroi opticheskoi garmoniki v tsiindricheski sfokusirovannykh puchkakh/.  
03 p0438 A69-13048
- Influence of laser radiation parameters on the effectiveness of frequency doubling in a KDP crystal /Vliianie parametrov izlucheniia lazera na effektivnost' udvoeniia chastoty v kristalle KDP/.  
04 p0612 A69-15375
- The application of lasers with regulated pulses for photographing distant objects with selection in regard to the range.  
12 p2089 A69-26190
- A neodymium-doped glass pulsed laser with selected second harmonic radiation.  
12 p2108 A69-26594
- The effect of radiation parameters of a laser on the efficiency of frequency doubling in a KDP crystal.  
16 p2797 A69-32122



## VANJE, P. S.

Study of the effectiveness of various types of polymethine dyes used in passive Q-switches of neodymium lasers /Issledovanie effektivnosti razlichnykh tipov polimetinovykh krasitelei, primeniayemykh v passivnykh zatvorakh neodimovykh OKG/.  
17 p2983 A69-33968

## VANJE, P. S.

A routine ionospheric study by means of an atmospheric waveform recorder.  
14 p2440 A69-29351

## VANKE, V. A.

Analysis of a double-beam parametric electron amplifier /Analiz dvukhlučevogo elektronnoho parametricheskogo usilitelia/.  
13 p2237 A69-28578

## VANKOUGHNETT, A. L.

Planar antenna arrays above a stratified medium.  
01 p0042 A69-10343

## VANLANDINGHAM, H. F.

On the solutions of periodically-varying systems.  
11 p1909 A69-25289

## VANLEUGENHAGHE, C.

The 200-W membrane cell "ABEPAC" /La pile a membrane de 200W "ABEPAC"/.  
08 p1259 A69-21040  
The 200-W "ABEPAC" membrane cell /La pile a membrane de 200 W "ABEPAC"/.  
16 p2738 A69-32411

## VANN, W. D.

All-fluidic servo controls helicopter stability.  
24 p4255 A69-42800

## VANNICOLA, V. C.

Range dependent waveform of an active weighted pulse compression receiver.  
23 p4132 A69-42548

## VANNUCCHI, G.

Generalized expressions for the intermodulation noise in amplitude-modulation and frequency-modulation transmission systems /Espressioni generalizzate dei rumori di intermodulazione nei sistemi di trasmissione a modulazione di ampiezza ed a modulazione di frequenza/.  
08 p1271 A69-19916

## VANOSDOL, J. H.

Status report on small reactor-thermoelectric power systems for unmanned space applications.  
23 p4187 A69-42255  
Zirconium hydride reactor - Organic Rankine power systems.  
23 p4189 A69-42265

## VANT VEER-MENNERET, C.

A comparative detailed analysis of 22 Serpents, a high metallicity A2 star, and the standard F0 V-9 Aurige.  
17 p3039 A69-33728

## VANTRAN, N.

Absolute measurement of second order nonlinear coefficient for optical generation of millimeter wave difference frequencies in GaAs.  
06 p0928 A69-17903

## VANYSEK, V.

Detectability of lunar libration clouds at small phase angles.  
05 p0827 A69-16527  
Some problems associated with photoelectric observations of comets /O nekotorykh problemakh fotoelektricheskikh nabludenii komet/.  
15 p2684 A69-30522  
Reflection nebulae and the nature of interstellar grains.  
17 p3032 A69-33104

## VANZANDT, T. E.

Detailed maps of tropical 6300 angstrom units nightglow enhancements and their implications on the ionospheric F2 layer.  
01 p0068 A69-11113

## VANZETTI, R.

Infrared nondestructive testing - Past, present and future.  
15 p2630 A69-31504

## VARAGIC, V.

Effect of hypoxic hypoxia on the catecholamine content and some cytochemical changes in the hypothalamus of the cat.  
14 p2407 A69-29297  
The effect of supersonic flying on the urinary catecholamine excretion in pilots.  
24 p4265 A69-43370

## VARAH, J. M.

The calculation of the eigenvectors of a general complex matrix by inverse iteration.  
03 p0455 A69-13371

## VARAIYA, P. P.

Capacity of classes of Gaussian channels.  
04 p0558 A69-15006  
The epsilon-capacity of classes of unknown channels.  
15 p2570 A69-31142

## VARAKSINA, A. V.

Study of changes in the structure of WC-Co alloys during plastic deformation /Issledovanie izmenenii v strukture splavov WC-Co pri plasticheskoi deformatsii/.  
18 p3158 A69-35261

## VARDANIAN, I. U. S.

The role of the dynamo mechanism associated with small-scale motions of neutrals in the creation of magnetic disturbances and ionospheric discontinuities /Rol' mekhanizma dinamo, svyazannogo s melkomasshtabnym dvizheniem neutralov, v sozdaniy magnitnykh vozmushchenii i ionosfernykh neodnorodnostei/.  
20 p3519 A69-37026

## VARDANIAN, R. A.

Some properties of radio galaxies /O nekotorykh svoistvakh radiogalaktik/.  
13 p2352 A69-27874

## VARDUMIAN, D. T.

Spectrum of ionization bursts in an ionization calorimeter beneath absorbers.  
13 p2331 A69-28393

## VARDYA, M. S.

Rayleigh scattering cross-sections of He, C, N and O.  
06 p1002 A69-17319  
Molecular ratios as indicators of elemental abundance ratios.  
06 p1003 A69-17320

On convective processes in late-type stars.  
06 p1003 A69-17321

## VARENNE, M.

Measurement bases at ground level /Bases de mesures au ras du sol/.  
07 p1136 A69-19516

## VAREY, R. H.

Dynamic sheath growth in a mercury plasma.  
12 p2134 A69-26099

## VARGA, P.

Multiple stimulated scattering of electrons by a powerful laser field.  
15 p2634 A69-30736  
Emission of a polymethine dye employed in a neodymium glass laser /Generatsiya polimetinovogo krasitelia, primeniayemogo v lazere na neodimovom stekle/.  
21 p3739 A69-39542

## VARGO, W. S.

Packaged hydraulics makes Piper landing gear automatic.  
20 p3467 A69-38183

## VARHOLAK, E. M.

Mechanical properties of braze-bonded borsic-aluminum composites.  
19 p3340 A69-35509

## VARIN, J. D.

Relationship of properties to microstructure in cobalt-base superalloys.  
14 p2465 A69-29891  
Materials for advanced airbreathing aircraft engines. [ASM PAPER D8-25.2]  
20 p3586 A69-38133  
Some recent applications of superalloys.  
21 p3785 A69-38928

## VARIN, M. P.

Calculation of lunar coordinates by the BESM-2 electronic digital computer /O vychislenii koordinat lunny na elektronnoi tsifrovoy mashine BESM-2/.  
22 p4024 A69-40611

## VARKEY, T. J.

The low-temperature oxidation of 2-methylbutane in a flow system during the 'induction period'.  
21 p3669 A69-38798

## VARLAS, M.

Development of high modulus graphite/asbestos reinforced laminates.  
24 p4337 A69-43447

## VARMA, C. M.

Off-axial mode selection in solid-state lasers due to nonuniformities.  
12 p2106 A69-26320

## VARMA, T. D.

Propagation of cylindrical shock waves in a gravitating medium /Rasprostraneniye tsilindricheskikh udarnykh voln v gravitiruiushchei srede/.  
19 p3298 A69-36386

## VARNER, J. R.

Multiple-index holographic contouring.  
23 p4164 A69-41628

## VARNEY, R. N.

Production of NO sub 2 super plus ions in air.  
11 p1879 A69-25158

## VARSCHAVSKY, A.

The cyclic stress behaviour of a 355 stainless steel 2024-T8 aluminium alloy.  
24 p4331 A69-42925

## VARSHAL, B. G.

Study of the structure-formation processes of sital by means of electron microscopy /Issledovanie protsessov formirovaniya struktury sitalov metodom elektronnoi mikroskopii/.  
11 p1907 A69-25032

## VARSHALOVICH, D. A.

Dynamical orientation of particle spins in the space medium /Dinamicheskaya orientatsiya spinov chastits v kosmicheskoi srede/.  
13 p2350 A69-27861

## VARSHAVCHIK, M. L.

Statistical characteristics of a signal dispersed by an extended oscillating body /O statisticheskikh kharakteristikakh signala, rasseiannogo protiazhennym koleblushchimsia telom/.  
02 p0206 A69-11602

Interrelation between the statistical amplitude, angular, and phase characteristics of signals scattered at an extended body /K voprosu o vzaimosvyazi statisticheskikh amplitudnykh, uglovyykh i fazovykh kharakteristik signalov, rasseiannykh protiazhennym telom/.  
07 p1085 A69-19154

Statistical characteristics of a signal scattered by an extended oscillating body.  
11 p1835 A69-24709

## VARVAK, O. P.

Periodic contact problem for an elastic cylinder /Dopriodichnoi kontaktnoi zadachi dlia pruzhnogo tsilindra/.  
14 p2532 A69-28972

## VARZHANSKAIA, T. S.

Two-dimensional flow of an incompressible fluid near the sharp leading edge of a plate at zero incidence. II /Ploskoe techenie viazkoi neszhimaemoi zhidkosti vblizi ostroi perednei kromki plastiny pri nulevom ugle ataki. II/.  
03 p0415 A69-13651

A method of formulating the boundary conditions in problems of viscous fluid flow /Ob odnom sposobe postanovki granichnykh uslovii dlia zadach techeniya viazkoi zhidkosti/.  
19 p3299 A69-36394

## VASARHELYI, D. D.

Experimental study of the fatigue of thin steel plates due to cyclic shear buckling.  
17 p3052 A69-32980

## VASATKO, H.

Observations on the initiation of detonation.  
19 p3451 A69-36304

## VASECHKO, T. V.

Topography of potentials induced in the auditory region of the cerebral cortex of dog by acoustic click stimulation /Topografiya viklikanikh potentsialiv slukhovoii dilianki kori golovnogo mozku sobaki pri podraznenni zvukovym shchiglem/.  
22 p3888 A69-41269

## VASENKOV, O. I.

Influence of undissolved air on the elastodynamic characteristics of working fluids in aircraft hydraulic actuators /Vliianie nerastvorennogo vozdukh na upravleniye dinamicheskie kharakteristiki rabochikh zhidkostei aviatsionnykh gidroprivodov/.  
24 p4255 A69-43076

## VASHCHUK, V. I.

Conformally plane fields of gravity created by a pulverized material /Konformno ploskie polia tiagoteniia sozdannye pylevidnym veshchestvom/.  
13 p2298 A69-27796

## VASHKOV, V. I.

The possibility of using hydrogen peroxide mixed with a detergent to reduce microbial contamination.  
05 p0713 A69-15947  
Imparting antimicrobial properties to various materials.  
05 p0713 A69-15947

- VASHKOVIAK, S. N.**  
Mutual perturbations of Martian satellites /Vzaimnye vozmushcheniia sputnikov Marsa/.  
10 p1780 A69-23615
- VASHKOVSKII, A. V.**  
Study of instability in single-crystal disks of yttrium iron garnet /Issledovanie nestabil'nosti v monokristallicheskikh diskakh zhelezo-itriruevogo granata/.  
21 p3783 A69-39561
- VASILCA, GH.**  
Some effects of discontinuous friction processes on friction couples made of the same nonferrous materials /Einige Effekte unstetiger Reibungsprozesse bei stoffgleichartigen Nichteisenmetall-Paarungen/.  
15 p2629 A69-31027
- VASILE, N.**  
Effects of inhalation of amyl nitrite on the carotidogram of a healthy subject /Action de l'inhalation de nitrite d'amyle sur le carotidogramme du sujet sain/.  
21 p3661 A69-39278
- VASILENKO, A. P.**  
Solution of Volterra integral equations by a Runge-Kutta type method /Reshenie integral'nykh uravnenii tipa Vol'terra metodom vida Runge-Kutta/.  
05 p0787 A69-16456
- VASILENKO, IU. V.**  
A function generator for approximating functions of several variables.  
08 p1278 A69-20235  
Optimal piecewise-linear approximation of functions of several variables /Pro optimal'nu kuskovno-liniinu aproksimatsiiu funktsii kil'kokh zmennikh/.  
14 p2425 A69-29142
- VASILENKO, L. S.**  
Collision effect on the saturation character of vibration-rotation transitions for 00 deg 1-10 deg 0 band of CO sub 2.  
14 p2457 A69-28928
- VASILENKO, N. A.**  
Observations of astronomical refraction at large zenith distances at Goloseevo /Nabliudeniia astronomicheskoi refraktsii v Goloseevo na bol'shikh zenitnykh rasstoianiiakh/.  
15 p2679 A69-30161  
Accuracy of the determination of the coordinates of the point of observation and the moments of observation of the annular solar eclipse of May 20, 1966 /Tochnost' opredeleniia koordinat mesta i momentov nabliudeniia kol'tseobraznogo solnechnogo zatmeniiia 20 maiia 1966 g./.  
15 p2686 A69-30533
- VASILENKO, N. N.**  
X-ray emission K sub alpha-band of nitrogen in nitrides of group IV, V, and VI transition metals /Rentgenovskaia emissiionnaia K sub alpha-polosa azota v nitridakh perekhodnykh metallov IV, V i VI grupp/.  
22 p3974 A69-41118
- VASILENKO, N. V.**  
Axisymmetric resonant oscillations of a nonlinearly elastic cylindrical shell with hysteresis /Rezonansnye osesimmetrichnye kolebaniia nelineino uprugoi tsilindricheskoi obolochki s gisterezisom/.  
19 p3435 A69-35843
- VASILENKO, V. P.**  
Solid solutions in InAs-CdS and InAs-CdSe systems /Tverdye rastvory v sistemakh InAs-CdS i InAs-CdSe/.  
02 p0297 A69-11882  
On the theory of the gyrocompass with torsion suspension.  
16 p2791 A69-32282  
Solid solutions in the InAs-CdS and systems.  
18 p3182 A69-35042
- VASILEV, A. A.**  
Determination of the temperature field of the tube of a finned radiation emitter.  
05 p0846 A69-15898  
Optical oscillator with an injection GaAs diode and a closed cycle cooling system.  
05 p0777 A69-16793  
Analysis of clear-air turbulence on the basis of radio sounding data /Analiz turbulentnosti pri iasnom nebe po dannym radiozondirovaniia/.  
14 p2474 A69-29735  
Evaluation of the effectiveness of synoptic criteria for the existence of clear-air turbulence /Otsenka effektivnosti sinopticheskikh kriteriev sushestvovaniia turbulentnosti pri iasnom nebe/.  
14 p2474 A69-29736
- VASILEV, A. P.**  
Radiation transfer in a plasma /O perenose izlucheniia v plazme/.  
07 p1188 A69-18282
- VASILEV, A. S.**  
Experimental study of turbulence suppression by a transverse magnetic field in tubes with a special configuration /Eksperimental'noe issledovanie podavleniia turbulentnosti poperechnym magnitnym polem v trubakh spetsial'noi konfiguratsii/.  
07 p1192 A69-19016  
Experimental investigation of the influence of a transverse magnetic field on the flow in a channel with electrodes /Eksperimental'noe issledovanie vliianiia poperechnogo magnitnogo polia na techenie v kanale s elektrodami/.  
14 p2501 A69-29918
- VASILEV, A. T.**  
Experimental study of the probability of loss of a pulse during the transmission of binary information in the optical wavelength range /Eksperimental'nye issledovaniia veroiatnosti propuska impul'sa pri peredache dvoichnoi informatsii v opticheskom diapazone voln/.  
11 p1834 A69-24611
- VASILEV, B. N.**  
Preliminary results of investigations of solar X-ray emission by means of the satellite "Kosmos-166."  
07 p1210 A69-19614
- VASILEV, B. V.**  
Effect of neutron bombardment on the coercive force of molybdenum permalloy.  
05 p0783 A69-16815
- VASILEV, G. V.**  
Increase in creep resistance of the alloy EI-437B by means of a thermovibrational treatment under conditions of stress relaxation /Povyshenie soprotivliaemosti polzuchesti splava EI-437B putem termovibratsionnoi obrabotki v usloviakh relaksatsii napriazhenii/.  
21 p3744 A69-38869  
Relaxation tests with the alloys EI-437B and EI-617 /Ispytaniia na relaksatsiiu splovov EI-437B i EI-617/.  
23 p4169 A69-41419
- VASILEV, I. N.**  
Design of tests for self-diagnosable control digital computers.  
20 p3502 A69-37394
- VASILEV, IU. M.**  
Interaction in biological systems /Vzaimodeistvie v biologicheskikh sistemakh/.  
21 p3662 A69-39708
- VASILEV, IU. N.**  
Approximate solution of the axisymmetric problem of the theory of elasticity for a finite hollow cylinder under a normal load of general form applied to the end faces /Priblizhennoe reshenie osesimmetrichnoi zadachi teorii uprugosti dlia pologo konechnogo tsilindra s normal'noi nagruzkoj obshego vida na tortsakh/.  
01 p0168 A69-10359
- VASILEV, K. N.**  
Relation of vertically moving ionized formations to solar and magnetic activity.  
06 p0920 A69-17730  
Spatial distribution of the vertical movements of ionized formations in the ionosphere.  
06 p0922 A69-17749  
Relation between E sub s and the vertical displacements of ionized formations /O sviazi E sub s s verikal'nymi peremeshcheniiami ionizirovannykh obrazovani/.  
14 p2437 A69-29074  
Vertical displacements of ionized formations in the F region /O verikal'nykh peremeshcheniiakh ionizirovannykh obrazovani v oblasti F/.  
17 p2969 A69-33998
- VASILEV, K. P.**  
Meteorological satellites and navigation safety. [UN PAPER 68-95776]  
06 p0916 A69-17028
- VASILEV, L. A.**  
Experimental study of the nonequilibrium processes behind a shock wave in air and nitrogen by the shadow method /Eksperimental'noe issledovanie neravnovesnykh protsessov za udarnoi volnoi v vozdukhie i azote tenevym metodom/.  
21 p3695 A69-38961
- VASILEV, M. P.**  
Plasma heating by a fast magnetosonic wave of large amplitude.  
14 p2493 A69-29643
- VASILEV, O. V.**  
A gradient method for solving a class of optimal control problems.  
06 p0904 A69-17886
- VASILEV, P. V.**  
Results of physiological-biochemical study of members of the crew of the spacecraft Voskhod /Rezultaty fiziologo- biokhimicheskogo obsledovaniia chlenov ekipazha kosmicheskogo korablia "Voskhod"/.  
03 p0377 A69-14195  
Certain data concerning the conditions of the cosmonauts during the flight of the first space expedition on the Voskhod spacecraft /Nekotorye dannye o sostoianii kosmonavtov vo vremia poleta pervoi kosmicheskoi ekspeditsii na korable "Voskhod"/.  
07 p1060 A69-18571  
Reactions of the cardiovascular and respiratory systems of cosmonauts under conditions of orbital flight on the Voskhod spacecraft /Reaktsii serdechnosodistoi i dykhatel'noi sistem kosmonavtov v usloviakh orbital'no poleta na kosmicheskom korable "Voskhod"/.  
07 p1061 A69-18584  
Certain reactions of the cardiovascular and respiratory systems of cosmonauts during orbital flight on the Voskhod 2 spacecraft /Nekotorye reaktsii serdechnosodistoi i dykhatel'noi sistem kosmonavtov v orbital'nom polete na kosmicheskom korable "Voskhod 2"/.  
07 p1062 A69-18585  
Some problems of weightlessness in space medicine /Nekotorye problemy nevesomosti v kosmicheskoi meditsine/.  
17 p2909 A69-33384
- VASILEV, S. S.**  
Simulation of the radiation effect of a space medium on spacecraft elements /Modelirovanie radiatsionnogo vozdeistviia kosmicheskoi sredy na elementy kosmicheskikh apparatov/.  
06 p0906 A69-17612
- VASILEV, V. A.**  
Morphological features of the Zabrod'e meteorite /Morfologicheskie osobennosti meteorita zabrod'e/.  
01 p0160 A69-11384  
Certain problems of structural synthesis of spatial motion control systems for an orbital aircraft in the earth's atmosphere /Nekotorye voprosy sinteza struktural'snogo upravleniia prostranstvennym dvizheniem orbital'nogo samoleta v atmosfere zemli/.  
21 p3766 A69-39645
- VASILEV, V. F.**  
Experimental investigation of liquid-metal MHD generators /Eksperimental'nye issledovaniia zhidkometallicheskikh MGD- generatorov/.  
13 p2208 A69-27512
- VASILEV, V. I.**  
Plasmoid structure in a coaxial injector.  
03 p0478 A69-13841  
Interaction between plasmoids and longitudinal magnetic fields /Vzaimodeistvie plazmennyykh sgustkov s prodol'nymi magnitnymi poliami/.  
03 p0481 A69-14212  
Principle of taking into account the input signal history in the recognition of moving or changing objects. I /Printsip urakhuvaniia poredistorii vkidnogo signalu pri razpiznavanii rukhomikh abo zmennikh ob'ektiv. I/.  
08 p1297 A69-20419  
Probability analysis of distortion caused by impulse noise.  
09 p1476 A69-22678  
Deceleration and purification of a plasma jet by a rapidly increasing magnetic field /Tormozhenie i ochkistka plazmennoi strui bystronarastaushchim magnitnym polem/.  
13 p2311 A69-28107  
Effect of previous history of input signal on the recognition of moving or variable objects. I.  
14 p2427 A69-29657  
Probabilistic analysis of the distortion of an elementary code message in the presence of pulse noise /Veroiatnostnyi analiz iskazhenii elementarnoi kodovoi posylki pri nalichii impul'snykh pomekh/.  
17 p2919 A69-33145
- VASILEV, V. K.**  
Influence of high-altitude mountain acclimatization on the tolerance of the organism to environmental effects /Vliianie vysokogornoi akklimatizatsii na ustoiчивost' organizma k vozdeistviu faktorov vneshnei sredy/.  
13 p2212 A69-28623
- VASILEV, V. P.**  
Analysis of the possibilities of separating the polarizations of opposed waves in a ring laser /Analiz vozmozhnosti razdeleniia polarizatsii vstrechnykh voln v kol'tsevom kvantovom generatore/.  
20 p3553 A69-37606



## VASILEV, V. S.

Measurement of the diffusion coefficient of copper in gallium arsenide by an ultrasonic method /Izmerenie koefitsienta diffuzii medi v arsenide gallia ul'trazvukovym metodom/.  
09 p1555 A69-21471

Measurement of the diffusion coefficient of copper in gallium arsenide by an ultrasonic method.  
15 p2669 A69-30716

## VASILEV, V. V.

Nonlinear strains in shells of revolution made of elastic fibers under the action of internal pressure /Nelineinye deformatsii obolochek vrashchennia iz uprugikh nitei pri deistvii vnutrennego davleniia/.  
17 p3057 A69-33195

Axisymmetric deformation of a cylindrical fiber-glass-reinforced plastic shell /Osesimmetrichnaia deformatsiia tsilindricheskoj obolochki iz stekloplastika/.  
18 p3222 A69-34974

## VASILEVA, A. N.

Plasma diagnostics in a pinch-discharge laser /Diagnostika plazmy v lazere na pinch-razriade/.  
11 p1933 A69-25548

## VASILEVA, E. V.

Homologous diffusion law and heat-resistant alloying of metals /Gomologicheski zakon diffuzii i zharoprochnoe legirovanie metallov/.  
09 p1525 A69-22144

Dislocation structure of niobium-titanium alloys.  
21 p3747 A69-39163

Creep in a multicomponent niobium alloy /Pol-zuchest' mnogokomponentnogo splava niobia/.  
22 p3969 A69-40073

## VASILEVA, G. G.

The effect of a hollow cathode in a low-pressure Penning discharge /Effekt pologo katoda v razriade tipa Penninga nizkogo davleniia/.  
11 p1933 A69-25544

## VASILEVA, G. IA.

Some peculiarities of motions in the region of weak magnetic fields in the undisturbed photosphere /O nekotorykh osobennostiakh dvizhenii v oblasti slabyykh magnitnykh polei nevozmushchennoi fotosfery/.  
20 p3535 A69-38300

## VASILEVA, I. A.

Experimental investigation of the influence of small nitrogen impurities on the electron energy balance in an inert gas /Eksperimental'noe issledovanie vlianiia malyykh primesei azota na balans energii elektronov v inertnom gaze/.  
10 p1732 A69-23442

## VASILEVA, R. A.

Analysis of eigenvalues in problems of the theory of mechanical oscillations /K analizu sobstvennykh znachenii v zadachakh teorii mekhanicheskikh kolebani/.  
01 p0170 A69-10827

## VASILEVA, R. V.

Nonequilibrium heating of electrons during the motion of a shock wave across a magnetic field /Neravnovesny nagrev elektronov pri dvizhenii udarnoi volny cherez magnitnoe pole/.  
10 p1737 A69-23470

## VASILEVSKAIA, M. M.

Ageing of Fe-Ni-Ti alloys in the process of the reverse alpha-gamma martensitic transformation.  
04 p0613 A69-14558

## VASILEVSKAIA, V. N.

Study of structural imperfections of CdSb crystals /Issledovanie strukturnykh nesovershenstv kristallov CdSb/.  
11 p1938 A69-25030

## VASILEVSKII, A. E.

Reddening lines in the UVB system of giant stars of the G8-K0 classes /Linii pokrasneniia v sisteme UVB dlia zvezd-gigantov klassov G8-K0/.  
20 p3608 A69-38047

## VASILEVSKII, V. S.

A tracheal cannula applicable in pneumogram recording /Trakheal'na kaniuliya, pristosovana dlia reestratsii pnevmogramii/.  
07 p1131 A69-18538

## VASILEVSKIS, S.

Photographic position observations of Icarus.  
01 p0159 A69-11331

## VASILISHIN, S. A.

Investigation of single-frequency random oscillations of nonautonomous systems with distributed parameters /Issledovanie odnochastotnykh sluchainykh kolebani v

neavtonomnykh sistemakh s raspredelennymi parametrami/.  
11 p1916 A69-24761

## VASILIU, V.

Laser radiation in a hollow cathode glow discharge /Laser in descarcarea luminescenta cu catod tubular/.  
09 p1519 A69-22245

## VASILKOVSKII, A. S.

The effect of dislocations on the intensity jumps at the interferential transmission of X-rays near the K-edge of absorption in Ge.  
03 p0490 A69-13944

## VASILTISOV, V. V.

Large-area proportional counter for the study of cosmic rays.  
03 p0427 A69-12979

## VASIN, M. V.

The effect of overstrain on the sensitivity of animal organisms to cystamine /Vlianie peregruzok na chuvstvitel'nost' organizma zhivotnykh k tsistaminu/.  
17 p2909 A69-33386

## VASIN, V. V.

Regularization of nonlinear partial differential equations /Regularizatsiia nelineinykh differentsial'nykh uravnenii v chastnykh proizvodnykh/.  
07 p1174 A69-19005

## VASIUKEVICH, P. V.

Electric arc source of a low-temperature plasma.  
05 p0802 A69-15902

## VASIUKOVA, Z. V.

Recording meteorite particles by means of piezoelectric transducers /O registratsii meteornykh chastits p'ezodatchikami/.  
01 p0152 A69-10587

Piezoprobe detection of meteoritic particles.  
15 p2691 A69-30757

## VASIUTA, V. D.

Application of high temperatures as a functional-diagnostic test /K voprosu o primeneniі vysokikh temperatur v kachestve funktsional'no-diagnosticskoj proby/.  
05 p0710 A69-16523

Use of high temperatures as provocative tests.  
18 p3096 A69-34742

## VASIUTINSKII, B. M.

Diffusion in vapor-deposited nickel layers on niobium substrate /Diffuziia v sloiakh nikelia, skondensirovannogo iz parovoi fazy na niobievuii podlozhu/.  
20 p3560 A69-37366

## VASKO, N. P.

On the state of oxygen adsorbed on the surface of tungsten and molybdenum single crystals.  
12 p2026 A69-26115

## VASKOV, V. V.

Scattering of radio waves in an inhomogeneous ionosphere /O rasseianii radiovoln v neodnorodnoi ionosfere/.  
09 p1453 A69-21525

Scattering of radio waves on the trail of a horizontally moving body.  
12 p2031 A69-26699

Radio wave scattering in an inhomogeneous ionosphere.  
16 p2754 A69-32520

Scattering of radio waves at the wake of a body moving vertically in an inhomogeneous ionosphere /O rasseianii radiovoln na slede vertikal'no dvizhushchegosia tela v neodnorodnoi ionosfere/.  
20 p3486 A69-37023

Allowance for sphericity in the scattering of radio waves at the wake of a body moving rapidly in the ionosphere /Ob uchete sferichnosti pri rasseianii radiovoln na slede bystro dvizhushchegosia v ionosfere tela/.  
20 p3486 A69-37024

Perturbation of the ion concentration behind a body moving rapidly in a plasma in the presence of a magnetic field /Vozmushchenie ionnoi konsentratsii za bystro dvizhushchimsia v plazme telom pri nalichii magnitnogo polia/.  
20 p3459 A69-37659

Radio wave scattering in the wake of a body moving in the ionosphere /O rasseianii radiovoln na slede tela, dvizhushchegosia v ionosfere/.  
22 p3901 A69-41094

## VASSALLO, A.

Observations of earth satellites with the transit instrument /Osservazioni di satelliti terrestri allo strumento dei passaggi/.  
16 p2858 A69-32211

## VASSEUR, A.

Determination of thermodynamical characteristics of gas-mixture plasmas /Determination des caracteristiques thermodynamiques des plasmas de melange de gaz/.  
10 p1810 A69-23794

## VASSEUR, G.

Dynamics of the F-region observed with Thomson scatter. I - Atmospheric circulation and neutral winds.  
10 p1685 A69-23831

Gravity waves in the thermosphere /Ondes de gravite dans la thermosphere/.  
15 p2605 A69-31414

Thomson scatter observations of a gravity wave in the ionospheric F-region.  
16 p2779 A69-32198

## VASSEUR, J.

East-west asymmetry and charge sign ratio of primary cosmic-ray electrons at 8.3 Gv rigidity cut-off.  
15 p2678 A69-31497

## VASSILIADIS, A.

Corneal damage thresholds for CO sub 2 laser radiation.  
11 p1830 A69-24844

## VASSY, A.

Atmospheric ozone production by silent discharges /Production d'ozone atmospherique par les decharges silencieuses/.  
16 p2785 A69-32623

## VASUDEVAN, R.

A note on some solvable vector potentials for the Dirac equation.  
04 p0638 A69-15273

The generalized Clifford algebra and the unitary group.  
20 p3568 A69-37072

## VASYLIUNAS, V. M.

Low-energy electrons on the day side of the magnetosphere.  
03 p0503 A69-14027

Low-energy electrons in the magnetosphere as observed by OGO-1 and OGO-3.  
07 p1209 A69-19373

## VATAZHIN, A. B.

Deceleration of conducting plasmoids moving in channels in a nonuniform magnetic field /Tormozhenie provodiashchikh guschkov, dvizhushchiksia po kanalam v neodnorodnom magnitnom pole/.  
05 p0801 A69-15781

Calculation of magnetohydrodynamic flows in the channels of MHD devices /Raschet magnetodinamicheskikh techenii v kanalakh MGD-usroistv/.  
06 p0969 A69-17912

Braking of conductive clusters moving in channels in a nonuniform magnetic field.  
18 p3181 A69-35033

## VATCHA, R. H.

Studies in extensive air showers at Ootacamund.  
06 p0990 A69-17295

Calculation of some characteristics of extensive air showers using different models of high energy nuclear interactions.  
06 p0990 A69-17301

## VAUGE, CH.

Measurement and study of the parameters characterizing the plasma of a helium-neon laser /Mesure et etude des parametres caracterisant le plasma d'un laser a helium-neon/.  
17 p2982 A69-33390

## VAUGHAN, A. E.

A pulsar supernova association/ques/.  
01 p0149 A69-10263

Pulsar search at the Molonglo radio observatory.  
02 p0327 A69-12723

Clustering of pulsars along the galactic plane.  
05 p0825 A69-16350

Some further pulsar observations at the Molonglo Radio Observatory.  
14 p2517 A69-2909

Three new pulsars.  
17 p3026 A69-32851

## VAUGHAN, D. A.

Portable, multiunit low-pressure chamber with locks.  
22 p3891 A69-40211

## VAUGHAN, D. H.

Large space erectable structures.  
24 p4398 A69-42871

- VAUGHAN, D. R.**  
A negative exponential solution for the matrix Riccati equation.  
12 p2122 A69-26513
- VAUGHAN, H.**  
Impulse buckling of an elastic-plastic cylinder containing an elastic core.  
04 p0671 A69-14414  
The response of a plastic cylindrical shell to axial impact.  
18 p3218 A69-34624
- VAUGHAN, H. G., JR.**  
Cortical responses to light in unanesthetized monkeys and their alteration by visual system lesions.  
22 p3876 A69-40263  
The spectral sensitivity of evoked potentials from the retina and cortex of nocturnal and diurnal monkeys.  
22 p3882 A69-40867
- VAUGHAN, J. A.**  
Effects of body thermal state on manual performance.  
03 p0381 A69-14074
- VAUGHAN, J. R. M.**  
The injection-locked voltage-tunable magnetron.  
01 p0045 A69-16032  
Observations of multipactor in magnetrons.  
07 p1101 A69-18656  
The high-power voltage-tunable magnetron /VTM/.  
13 p2232 A69-28056
- VAUGHAN, O. H., JR.**  
Model atmospheres of Mercury.  
[AIAA PAPER 69-54] 06 p1010 A69-18042
- VAUGHAN, P. A.**  
Laser altimeter.  
11 p1885 A69-25035
- VAUGHAN, R. W.**  
Glass reinforced p13n polyimide laminates having improved processing characteristics.  
19 p3353 A69-35505  
A new polyimide resin in boron reinforced composites.  
19 p3354 A69-35514  
Fabrication and evaluation of Modmor II carbon fiber reinforced P13N polyimide laminates.  
24 p4325 A69-43445
- VAUGHAN, W. H.**  
Electrically induced fracture of materials.  
17 p2989 A69-33558
- VAUGHAN, W. W.**  
New wind-monitoring system protects R and D launches.  
03 p0462 A69-13852  
Detailed wind and temperature profiles.  
17 p2999 A69-33739
- VAUGHN, G. W.**  
Measurement and correlation of some interaction second virial coefficients from -125 deg to 50 deg C. I.  
14 p2488 A69-29927
- VAULIN, E. P.**  
Determination of the electron concentration in plasma jets with the aid of a microwave Fabry-Perot interferometer and the Stark optical method /Opredelenie konsentratsii elektronov v plazmennyykh struiakh s pomoshch'yu SVCh interferometra Fabri-Pero i opticheskogo shtarkovskogo metoda/.  
12 p2137 A69-26537
- VAULINSKII, E. S.**  
Fabrication of a bimetallic sheet of titanium- 28 percent vanadium alloy plated with niobium by means of the hot-rolling method /Poluchenie bimetallicheskoj lentzy splava titana s 28 percent vanadiia, plakirovannoi niobiem metodom goriachei prokatki/.  
18 p3155 A69-34652
- VAUSE, R.**  
A vector airspeed measuring system /VAMS/ for helicopters and other V/STOL aircraft.  
[AHS PAPER 350] 17 p2974 A69-33527
- VAUTIER, P.**  
Study of a carbon dioxide molecular amplifier operating at high pressures /Etude d'un amplificateur moleculaire a CO sub 2 fonctionnement aux fortes pressions/.  
22 p3962 A69-40474
- VAUVRECY, J.**  
Analysis of the viscous wake of an ablating sphere with the aid of an image converter camera.  
19 p3306 A69-35739
- VAVASSEUR, C.**  
Experimental results of MHD conversion using a rare gas /Resultats d'experiences de conversion MHD a gaz rare/.  
10 p1738 A69-23475
- VAVILOV, E. N.**  
Distribution of hypothesis tests by series during signal detection in the presence of noise /Raspredelenie ispytaniy gipotez po seriami pri obnaruzhenii signala v pomekakh/.  
13 p2222 A69-28509
- VAVILOV, IU. N.**  
Calculation of the vertical muon intensity at great depths.  
13 p2333 A69-28424
- VAVILOV, V. S.**  
Current oscillations in GaAs, associated with the electroacoustic effect /Kolebaniia toka v GaAs, svyazannye s akusto-elektricheskim efektom/.  
13 p2318 A69-27892  
Electrical reflection in n-type GaAs /Elektrootrazhenie v GaAs n-tipa/.  
15 p2666 A69-30060
- VDOVIN, IU. A.**  
The equation of state of a resonantly excited gas.  
04 p0632 A69-14551  
On atomic collisions in gas lasers.  
09 p1521 A69-22687
- VDOVIN, V. G.**  
Effect of the degree of cold deformation and subsequent annealing on the properties of semifinished SAP sheet products /Vlianie stepeni kholodnoi deformatsii i posledeiushego otzhiga na svoista listovykh polufabrikatov SAPa/.  
03 p0452 A69-14121
- VDOVYKIN, G. P.**  
Diamonds in the new Dingo Pup Donga urelite meteorite /Almazы v novom meteorite-urelite Ding Pup Donga/.  
21 p3816 A69-39626
- VEDAM, K.**  
Ellipsometric method for the determination of all the optical parameters of the system of an isotropic nonabsorbing film on an isotropic absorbing substrate - Optical constants of silicon.  
07 p1201 A69-19648  
Thin film characterization by electron microprobe and ellipsometry - SiO sub 2 films on silicon.  
10 p1742 A69-22946  
Ellipsometric liquid immersion method for the determination of all the optical parameters of the system - Nonabsorbing film on an absorbing substrate.  
24 p4316 A69-43321
- VEDEL, J.**  
Contributions to cadmium sulfide-copper sulfide solar cell studies.  
19 p3250 A69-35685
- VEDEL, J. M.**  
Inertial magneto confinement of a plasma produced by the interaction of laser radiation with a solid deuterium granule /Confinement magneto inertiel d'un plasma cree par l'interaction du rayonnement laser avec un granule de deuterium solide/.  
05 p0798 A69-15585
- VEDEL, J. P.**  
The problem of the functional reliability of onboard computers /Le probleme de la fiabilite fonctionnelle des calculateurs embarques/.  
20 p3503 A69-37400
- VEDENEV, O. V.**  
Study of high-energy muons in extensive air showers.  
13 p2332 A69-28409
- VEDERNIKOV, G. F.**  
High-strength maraging steel N18K9MST /MS 200/.  
04 p0615 A69-14645
- VEDERNIKOVA, E. A.**  
"Spotted" structure of the scattered background during the propagation of laser radiation /O "piatnistoi" strukture rasseiannogo fona pri rasprostraneni lazernogo izlucheniia/.  
13 p2273 A69-28550  
Calculation of the light intensity during coherent scattering /O raschete intensivnosti sveta pri kogerentnom rasseianii/.  
15 p2635 A69-31108
- VEDESHENKOV, V. A.**  
Design of tests for self-diagnosable control digital computers.  
20 p3502 A69-37394
- VEDUTA, A. P.**  
Temperature and population distributions in ruby laser rods during pumping /Raspredelenie temperatury i zaslennosti v rubinovykh sterzhniakh OKG vo vremia nakazhki/.  
07 p1150 A69-18937  
Variation of the refractive index of liquids and glasses in a high intensity field of a ruby laser.  
10 p1703 A69-23622
- VEEFKIND, A.**  
Theoretical and experimental investigation of a nonequilibrium plasma in an MHD channel.  
10 p1736 A69-23465
- VEEN, C. H.**  
Human and design reliability measurement.  
19 p3327 A69-36013
- VEERLING, J. P.**  
Newark Airport redevelopment program.  
01 p0057 A69-11275
- VEGA, E.**  
Elements contributing to the lightweight design of the "Cayuse" - The Army's OH-6A light observation helicopter. [SAWE PAPER 781] 18 p3091 A69-34870
- VEIDINGER, L.**  
A finite difference method for evaluating the eigenvalues and eigenfunctions of the Laplace operator.  
02 p0271 A69-11650
- VEILEX, R.**  
Possibilities of application of the Gunn effect to digital electronics /Possibilites d'application de l'effet Gunn a l'electronique digitale/.  
19 p3285 A69-36708
- VEILLEUX, E.**  
Thermal resistance of bolted or screwed sheet metal joints in a vacuum.  
12 p2191 A69-26803
- VEILLEUX, E. D.**  
Thermal greases for heat conduction across sheet-metal interfaces.  
16 p2794 A69-32560
- VEINBERG, T. I.**  
Aluminocalcium glasses, transparent in the near-infrared.  
08 p1336 A69-20386
- VEINKHOLD, K.**  
Investigation of the possibility of producing heteroepitaxial films in the system Ge-GaAs by condensation of germanium on GaAs from molecular beams in vacuum /Issledovanie vozmozhnosti polucheniia geteroepitaksial'nykh sloev v sisteme Ge-GaAs pri kondensatsii germaniia na GaAs iz molekuliarnykh puchkov v vakuumе/.  
11 p1938 A69-25033
- VEITH, W.**  
Comparison of delay lines in high-power traveling-wave tubes /Vergleich von Verzögerungsleitungen fuer Hochleistungswandelfeldroehren/.  
07 p1095 A69-18428  
Measures of construction and manufacture leading to reliable triodes for space flight.  
08 p1295 A69-21122
- VEITSMAN, M. G.**  
Fatigue and corrosion fatigue properties of aluminum alloys 01420.  
03 p0443 A69-13027
- VEJVODA, O.**  
Periodic solutions of the first boundary value problem for a linear and weakly nonlinear heat equation.  
04 p0625 A69-15109
- VEKILOV, IU. KH.**  
Temperature dependence of the elastic constants of highly doped GaAs /Temperaturnaia zavisimost' uprugikh postoiannykh sil'no legirovannogo GaAs/.  
03 p0484 A69-13282  
Temperature dependence of the elastic constants of heavily-doped gallium arsenide.  
14 p2508 A69-29655
- VEKOVA, N.**  
An attempt at analyzing the errors of the equivalent barotropic model.  
19 p3361 A69-35770
- VEKSHINA, L. K.**  
Mathematical model of parameters of Chlorella cultivation under ionizing irradiation.  
02 p0198 A69-11508  
Survival rates of continuously cultivated chlorella after a single exposure to gamma radiation /Vyz-



## VEKSLER, I. G.

hivamost' khlorelly pri nepreryvnom kul'tivirovanii posle odnokratnogo gamma-oblucheniia/.  
22 p3876 A69-40275

## VEKSLER, I. G.

Structure alterations of nickel during interaction with a high-speed air flow at elevated temperatures.  
05 p0783 A69-16812

## VEKSLER, N. D.

Theory of wave processes in the axisymmetric deformation of a spherical shell.  
16 p2875 A69-32288

## VEKUA, I. N.

On one version of the consistent theory of elastic shells.  
11 p1978 A69-24806

Integration of a system of equations of the elastic equilibrium of a plate /Ob integriruvanii sistemy uravnenii uprugogo ravnovesiia plastinki/.  
19 p3438 A69-36203

Integration of the equations of equilibrium of a cylindrical shell /Ob integriruvanii uravnenii ravnovesiia tsilindricheskoi obolochki/.  
20 p3621 A69-37076

A generalization of the bending theory of shells /Ueber eine Verallgemeinerung der Biegetheorie der Schalen/.  
21 p3832 A69-38419

## VELASQUEZ, T.

Irreversible blunted respiratory sensitivity to hypoxia in high altitude natives.  
12 p2018 A69-26130

## VELCHEV, N.

Magneto-electric characteristics of inversion layers.  
08 p1372 A69-20460

Magneto-electric characteristics of p-inversion layer silicon.  
13 p3232 A69-28331

## VELICHENKO, V. V.

A numerical method for solving optimal control problems.  
02 p0271 A69-11649

Sufficient conditions of optimality in the maximum principle /K dostatochnym usloviyam optimal'nosti v printsipe maksimuma/.  
02 p0225 A69-11975

The problem of invariance of dynamic systems /K probleme invariantnosti dinamicheskikh sistem/.  
10 p1718 A69-23206

On sufficient conditions for optimality in the maximum principle.  
10 p1666 A69-23884

On the invariance of dynamical systems.  
21 p3756 A69-39147

## VELICHKO, P. M.

Effect of concentrated forces and moments on a shell of positive curvature /O deistvii sosedotochennykh sil i momentov na obolochku polozhitel'noi krivizny/.  
18 p3218 A69-34601

## VELIE, W. W.

Demonstration of a self-contained organic Rankine silent engine.  
[SAE PAPER 690062] 07 p1058 A69-18309

## VELIKHOV, E. P.

Increase of CO sub 2 laser power under the influence of a beam of fast protons.  
08 p1323 A69-19802

Calculation of ionization instability in a low-temperature magnetized plasma /Raschet ionizatsionnoi neustoiichivosti v nizkoterperaturnoi zamagnichennoi plazme/.  
10 p1741 A69-23962

## VELINOV, P.

On ionization in the ionospheric D-region by galactic and solar cosmic rays.  
01 p0063 A69-10426

On protection from the cosmic rays and internal radiation belt in space flights.  
[UN PAPER 68-95260] 01 p0144 A69-10477

Ionization of the lower ionosphere by cosmic rays.  
06 p0920 A69-17726

Further ionization in the lower ionosphere over the polar cap under the action of solar corpuscular fluxes /O dopolnitel'noi ionizatsii v nizhnei ionosfere polarnoi shapki pod vozdvoistviem solnechnykh korpuskuliarnykh potokov/.  
10 p1759 A69-22838

Variations in electron production rates in the cosmic layer of the lower ionosphere /Variatsii skorosti obrazovaniia elektronov kosmicheskogo sloia v nizhnei ionosfere/.  
10 p1759 A69-22839

On the influence of corpuscular fluxes in the magnetosphere on night ionosphere.  
13 p2254 A69-28333

The influence of cosmic rays on the ionosphere at high latitudes /O vozdeistvii kosmicheskikh luchei na ionosferu vysokikh shirot/.  
13 p2333 A69-28544

Dependence of electron production rate in low ionosphere on the parameters of solar cosmic rays and earth environment.  
17 p3022 A69-33035

## VELKOBORSKY, P.

On the solution of the Molodenskii boundary value problem using successive approximations.  
21 p3716 A69-39248

## VELKOFF, H. R.

Boundary layer discontinuity on a helicopter rotor blade in hovering.  
[AIAA PAPER 69-197] 07 p1051 A69-19561

Comparison of a mechanical fatigue life indicator and a resistance type fatigue life indicator.  
[AHS PAPER 378] 17 p3059 A69-33511

## VELKOV, M.

On the properties and designing of aerial systems of the Cassegrain type for radio communication with objects in space.  
[UN PAPER 68-95280] 01 p0043 A69-10481

## VELMIN, V. A.

Radio echo from an explosion region.  
02 p0282 A69-12415

## VELTHUYSE, F. H. M.

Photographic positions of minor planets and of comet Barbon /1966c/.  
11 p1962 A69-25121

## VELTISHCHEV, N. F.

Weather invisible from the earth - High-resolution television pictures /Pogoda nevidimaia s zemli - Televizionnye snimki vysokogo razresheniia/.  
[UN PAPER 68-95713] 06 p0949 A69-17029

Convective cloud cells according to observations from artificial earth satellites /Konvektivnye oblachnye iacheiki po nabludeniim s iskusstvennykh sputnikov zemli/.  
11 p1912 A69-24827

Small vertical-velocity perturbations in an asymmetrical atmospheric vortex /Malye vozmushcheniia vertikal'noi skorosti v asimmetrichnom atmosfernom vikhre/.  
11 p1912 A69-24829

The cloud bank structure /O griadovoi strukture oblachnosti/.  
20 p3569 A69-36985

## VELTMANN, I. U.-I. K.

Application of a narrow slit in the photometry of stellar systems /O primenenii uzkoj shcheli v fotometrii zvezdnykh sistem/.  
20 p3545 A69-38055

## VELTRI, R.

Tensile strength of boron filament coated with silicon carbide and of uncoated boron filament at elevated temperatures.  
02 p0270 A69-12731

## VELUSAMY, T.

On the spectra of radio sources Cygnus Loop and IC443.  
06 p1003 A69-17322

Polarized brightness distributions of supernova remnants IC 443 and W44 at 6-cm wavelength.  
10 p1787 A69-24113

## VENATOR, W.

Charting a simpler course to the design of YIG filters.  
08 p1292 A69-21006

## VENCATASSIN, J.-L.

Efforts toward a compromise with respect to the convention on the liability for damage caused by space objects /La recherche d'un compromis en matiere de convention sur la responsabilite pour les dommages causes par des objets spatiaux/.  
20 p3636 A69-37110

Field of application of space law /Le champ d'application du droit de l'espace/.  
20 p3639 A69-37130

## VENCILL, J. J.

Rician intersymbol interference in frequency shift keying.  
07 p1080 A69-19095

## VENDELIN, G. D.

Millimeter-wave integrated circuits.  
01 p0040 A69-10197

## VENDELL, E. W.

A coaxial, three-coil probe for measuring local values of electrical conductivity and velocity in plasma streams.  
[AIAA PAPER 69-327] 13 p2313 A69-28264

## VENDEBOOMGAERDE, Y.

Breakdown plasmoids produced by lasers /Sur les boules de claquage crees par lasers/.  
03 p0480 A69-14058

## VENDIK, O. G.

An approximate calculation of the phase constant for a rectangular waveguide containing a dielectric.  
01 p0042 A69-10437

Parametric mechanism of losses in a ferroelectric ceramic in strong microwave fields /Parametricheskii mekhanizm poter' v sngnetokeramike v sil'nykh SVCh-poliakh/.  
22 p3996 A69-41164

## VENDITTI, R. A.

Saturn V system reliability analysis.  
18 p3207 A69-34529

## VENDLOVA, J.

Investigation of some methods for increasing the digestibility in vitro of microalgae.  
21 p3667 A69-39701

## VENEDIKTOV, V. D.

Turbines and Jet Nozzles for Two-Phase Flows /Turbin y i reaktivnye sopla na dvukhfaznykh potokakh/.  
20 p3586 A69-38209

## VENEVTSEV, I. U. N.

Analysis of the conditions for the onset of the spontaneous polarization state in perovskites /Analiz uslovii vozniknoveniia spontannopolizirovannogo sostoianiia v perovskitakh/.  
22 p3995 A69-41159

## VENINI, C.

Relativistic motion of viscous fluids /Sul moto relativistico dei fluidi viscosi/.  
05 p0792 A69-15682

Relativistic behavior of an electromagnetic non-gravitating multipole /Comportamento relativistico di un multipolo elettromagnetico non gravitante/.  
14 p2486 A69-29594

## VENITSKII, V. N.

Possibility of transformation of an antiferromagnetic semiconductor into a metal in a strong magnetic field.  
09 p1556 A69-21672

## VENKATARAMAN, N. S.

Exact analysis of St. Venant torsion and flexure of prismatic bars with arbitrary triangular and polygonal cross-sections. III - Torsion of hollow bars.  
09 p1621 A69-22770

## VENKATARAMAYYA, Y.

Visual meteoric activity over Waltair - Survey during November, December and January 1964-67.  
04 p0658 A69-14879

## VENKATAVARADAN, V. S.

On the flux of low-energy particles in the solar system during the last 10 million years.  
19 p3411 A69-36097

## VENKATAVARDAN, V. S.

Nuclear effects due to solar cosmic rays in meteorites.  
06 p0989 A69-17282

## VENKATESAN, D.

Pronounced diurnal variation in cosmic-ray intensity.  
09 p1576 A69-21706

The radial gradient of interplanetary radiation measured by Mariners 4 and 5.  
20 p3592 A69-38096

## VENKATESAN, K.

A note on some solvable vector potentials for the Dirac equation.  
04 p0638 A69-15273

## VENKATESH, Y. V.

Quadratic Lyapunov functions for linear systems.  
19 p3359 A69-35617

## VENKATESWARAN, S. V.

Equatorial anomaly during a period of declining solar activity.  
23 p4161 A69-42436

## VENKATRAMAN, B.

Creep stress concentration at a circular hole in an infinite plate.  
[AIAA PAPER 68-175] 04 p0676 A69-14708

**VENKAYYA, V. B.**  
An energy criteria and a search procedure for automated design of minimum weight structures. [SAWE PAPER 798] 18 p3219 A69-34861

**VENKIN, G. V.**  
Observation of nonlinear absorption in certain organic substances /Nabliudenie nelineinogo pogloscheniya v nekotorykh organicheskikh veshchestvakh/. 03 p0439 A69-13055

**VENNEREAU, P.**  
Contribution to the study of the conduction mode in single-crystal tungsten oxide /WO sub 3/ /Contribution a l'etude du mode de conduction dans l'oxyde de tungstene WO sub 3 monocristallin/. 16 p2825 A69-31609

**VENTRES, C. S.**  
Influence of in-plane edge support flexibility on the nonlinear flutter of loaded plates. 11 p1992 A69-25523

**VENTRICE, C. A.**  
Axial current density measurements in a wide unstable plasma column. 16 p2819 A69-31680

**VENTSKOVSKII, B. K.**  
Determination of the limit loads of circular and annular plates of smoothly varying profile /Opredelenie predel'nykh nagruzok kruglykh i kol'tsevykh plastinok plavno meniaiushchegosia profilja/. 11 p1982 A69-24946

**VENTURA, D.**  
Study of nightglow intensities as a function of the amount of atmospheric ozone and stratospheric temperatures /Studio delle intensita della radiazione del cielo notturno in relazione alla quantita di ozono atmosferico ed alle temperature stratosferiche/. 07 p1123 A69-18675

**VENUGOPAL, V. R.**  
Distances to pulsars. 01 p0149 A69-10271  
A study of the 21-cm line in the solar neighbourhood. 14 p2520 A69-29371

**VEPA, P. L.**  
Satellite television - A system proposal for India. [UN PAPER 68-95750] 01 p0028 A69-10495

**VERBINSKI, V. V.**  
Direct and compound-nucleus neutrons from 14-18-Mev protons on super 9 Be, super 14 N, super 27 Al, super 56 Fe, super 115 In, super 181 Ta, and super 208 Pb and from 33-Mev bremsstrahlung on super 27 Al, super 206 Pb, super 208 Pb, and super 209 Bi. 12 p2192 A69-26299

**VERBITSKAIA, T. N.**  
Defect structure of ceramic barium titanate with chromium oxide additions /O defektnoi strukture keramicheskogo titanata bariia s dobavkoi okisi khroma/. 22 p3996 A69-41160  
Investigation of the time variation of the dielectric constant and domain structure of a ferroelectric ceramic /Issledovanie izmeneniia dielektricheskoi pronitsaemosti i domennoi struktury segnetokeramiki vo vremeni/. 22 p3996 A69-41166

**VERBITSKII, I. L.**  
Theory of electromagnetic wave propagation in nonlinear media /K teorii rasprostraneniia elektromagnitnykh voln v nelineinykh sredakh/. 03 p0396 A69-13707

**VERCHEVAL, J.**  
Aeronomic phenomena associated with the Apollo 8 lunar flight /Les phenomenes aeronomiques associes au vol lunaire d'Apollo 8/. 11 p1957 A69-24411

**VERDET, J. P.**  
Balloon observations of the far-infrared spectrum and brightness temperature of the sun. 04 p0652 A69-14419  
Atmospheric transmission and solar spectroscopy in the submillimeter wavelength range /Transmission atmospherique et spectroscopie solaire en ondes submillimetriques/. 21 p3796 A69-38472

**VERDEYEN, J. T.**  
Dynamics of optical mixing in a He-Ne laser. 05 p0776 A69-16331  
Dispersion-corrected three-wavelength laser heterodyne measurement of plasma densities. 09 p1544 A69-21331

Radial profile of neon 1s sub 5 atoms in a He-Ne active discharge and their lens effect on lasing at 6401 angstrom units. 12 p2108 A69-26636  
A thermally pumped CO sub 2 laser. 18 p3151 A69-34264  
Measurement of dispersion at 6328 and 6401 angstrom units due to the neon 1 sub 5 metastable atoms in a He-Ne discharge. 23 p4172 A69-41397

**VERDINI, L.**  
On the relaxation effect due to the stress- induced diffusion of interstitial oxygen in tantalum. 07 p1168 A69-19452

**VERDUYN LUNEL, H. F. E.**  
Autokinesis and the perception of movement - The physiology of eccentric fixation. 22 p3878 A69-40837

**VERE, A. W.**  
Mechanical twinning and crack nucleation in lithium niobate. 03 p0486 A69-13618

**VEREGGE, E. J.**  
Aircraft accidents by older persons. 14 p2541 A69-29308

**VERENCHIKOV, N. N.**  
Averaging in measurements of hydrometeorological fields /K voprosu ob osrednenii pri izmerenii gidrometeorologicheskikh polci/. 06 p0952 A69-17989

**VERESHCHAGINA-MYSHKOVA, L. I.**  
Free jet boundary layer during equilibrium gas dissociation. 20 p3513 A69-37094

**VERESHCHETIN, V. S.**  
Remarks on certain legal principles of building space telecommunication systems. 20 p3638 A69-37124

**VERET, C.**  
Precise determination of the orientation of a rocket on its launch pad by means of optical sightings - Use of a laser collimator /Determination precise de l'orientation d'une fusée sur sa rampe de lancement par visees optiques - Emploi d'un autocollimateur a laser/. 06 p0930 A69-17104  
A laser optical system to determine the orientation of a rocket on its pad /Un systeme optique a laser pour determiner l'orientation d'une fusée sur sa rampe/. 09 p1518 A69-22162  
New applications of optical methods to the study of fluid flows /Applications nouvelles des methodes optiques a l'etude des ecoulements de fluides/. 12 p2060 A69-26934  
Photography of laser echoes on satellites /Photographie des echos laser sur satellites/. 15 p2570 A69-31311  
Experiments in laser echo photography on satellites /Experiences de photographie d'echos laser sur satellites/. 21 p3671 A69-38335

**VERETENNIKOV, S. V.**  
Structure and mechanical properties of materials after hydroexplosive forming. 09 p1503 A69-21851

**VEREVKINA, L. V.**  
Design of an acoustic system for the defectoscopy of tubes by circular normal waves. 24 p4296 A69-42655

**VERGA, J.**  
Analysis and design of resonant fixtures to amplify vibrator output. 15 p2588 A69-30404

**VERGEICHK, L. V.**  
Rational distribution of material in a set of longitudinal shell elements /O ratsional'nom raspredelenii materiala v elementakh prodol'nogo nabora obolochki/. 23 p4228 A69-41988

**VERGHESE, C. A.**  
Determination of heat susceptibility and heat tolerance - A new index. 10 p1644 A69-23376  
A nomogram for aircraft rudder pedal design. 10 p1649 A69-23377  
Blood pressure fluctuation in a case of multiple extra-systoles as observed in tilt table studies /A case report/. 10 p1645 A69-23379

**VERGNES, J.**  
Approximate theoretical study of the entrainment, in the presence of a magnetic induction field, of an electrically conducting liquid evolving in a narrow duct of rectangular cross section, in the case where the mean of the induced currents in the right section of the flow assumes a nonzero value /Etude theorique approchee de mouvements d'entrainement, en presence d'un champ d'induction magnetique, d'un liquid electroconducteur evoluant dans une conduite de section rectangulaire de faible epaisseur, dans le cas ou la moyenne des courants induits dans la section droite de l'ecoulement prend un valeur non nulle/. 16 p2816 A69-31606

**VERHULST, F.**  
Two-body problem with decreasing mass - The autonomous case. 14 p2519 A69-29138

**VERIUZHSKII, I. U. V.**  
Properties of contour integrals in plate bending problems /Svoistva konturnykh integralov v zadachakh izgiba plastin/. 23 p4230 A69-42002

**VERKHOROBIN, L. F.**  
Some characteristics of reaction diffusion during vapor phase saturation of refractory metals with beryllium /O nekotorykh osobennostiakh reaktsionnoi diffuzii pri nasyshchenii tugoplavnykh metallov berilliem iz parovoi fazy/. 20 p3549 A69-37364  
Effect of alloying additives of aluminum on the corrosion resistance of tungsten disilicide /Vliianie legiruiushchikh dobavok aluminiia na korrozionnuu stoikost' disilitsida vol'frama/. 20 p3561 A69-37376

**VERLAN, A. F.**  
A method of solving partial differential equations on an analog computer /Ob odnom metode resheniia differentsial'nykh uravnenii v chastykh proizvodnykh s primeneniem AVM/. 12 p2123 A69-26717

**VERMA, J. P.**  
On suboptimal controls. 12 p2054 A69-26518

**VERMA, P.**  
On the validity of some approximations to the Appleton-Hartree magneto-ionic formula. 23 p4126 A69-42354

**VERMA, P. D.**  
Forced convection in laminar flow between two parallel walls and in a circular pipe with suction. 08 p1303 A69-20371

**VERMA, R. P.**  
Lithium, beryllium, boron and fluorine nuclei in cosmic radiation. 06 p0988 A69-17271  
Steady state spectra of proton and helium nuclei and their modulation. 06 p0988 A69-17272  
Spectra of heavy and super heavy nuclei in steady state. 06 p0988 A69-17273  
Rigidity spectrum of cosmic ray helium nuclei using a magnetic spectrograph. 06 p0989 A69-17277

**VERMA, S. D.**  
Production of low-energy /0.1-10-Mev/ positrons in the cosmic radiation. 15 p2676 A69-30887  
Possible origin of the diffuse component of cosmic X rays. 18 p3185 A69-34275

**VERMA, S. N.**  
Photographic studies of explosive reactions. 21 p3719 A69-38446

**VERMA, S. P.**  
A nomogram for aircraft rudder pedal design. 10 p1649 A69-23377

**VERMILYEA, D. A.**  
Corrosion of steel by iodine. 03 p0444 A69-13310  
Reaction films, metal dissolution and stress corrosion cracking. 19 p3349 A69-36885

**VERNEKER, V. R. P.**  
Kinetics and mechanism of the thermal decomposition of nitronium perchlorate. 02 p0303 A69-11897  
Thermal decomposition of LiAlH<sub>4</sub> sub 4. 02 p0304 A69-11898



## VERNER, J. H.

Effects of intentional impurities on the thermal stability of nitronium perchlorate. 02 p0304 A69-11899

Role of point defects in the thermal decomposition of ammonium perchlorate. 03 p0494 A69-12896

Role of impurities in the sensitization of ammonium nitrate /Role des impuretes dans la sensibilisation du nitrate d'ammonium/. 17 p3016 A69-32830

## VERNER, J. H.

The order of some implicit Runge-Kutta methods. 12 p2124 A69-26891

## VERNET, J.-F.

Flight Mechanics- Aircraft and Missile Performance /La Mecanique du Vol- Performances des Avions et des Engins/ 2nd Edition/. 17 p2898 A69-33319

## VERNIANI, F.

The receiving device of a multistation radar system for the study of meteors and the upper atmosphere /L'apparato ricevente del sistema radar multistazione per lo studio delle meteore e dell'alta atmosfera/. 07 p1077 A69-18674

CENFAM design of a multistation radar system for investigating meteors and the upper atmosphere /Progetto CENFAM di un sistema radar multistazione per lo studio delle meteore e dell'alta atmosfera/. 13 p2354 A69-28649

Design of the transmitting antenna of a multistation radar system for investigating the upper atmosphere and meteors /Progetto dell'antenna trasmittente di un sistema radar multistazione per lo studio dell'alta atmosfera e delle meteore/. 19 p3278 A69-36661

Density profiles of the atmosphere between altitudes of 70 and 100 km /Profili di densita atmosferica tra 70 e 100 km di quota/. 24 p4311 A69-43504

Interferometric determination of the altitude of the reflection zone of meteor trails /Determinazione interferometrica della quota della zona riflettente delle tracce meteoriche/. 24 p4311 A69-43508

## VERNIERES, J.

Contribution to the study of the conduction mode in single-crystal tungsten oxide /WO sub 3/ /Contribution a l'etude du mode de conduction dans l'oxyde de tungstene WO sub 3 monocristalin/. 16 p2825 A69-31609

## VERNIGORA, N. M.

Determination of stresses in a nonuniform temperature field with allowance for creep /Viznachennia napruzhen' v neodnorodnomu temperaturnomu poli z vrakhuvanniam povzuchosti/. 21 p3833 A69-38571

## VERNIKOS-DANELIS, J.

The effect of in vitro and in vivo caffeine, theophylline, and hydrocortisone on the phosphodiesterase activity of the pituitary, median eminence, heart, and cerebral cortex of the rat. 02 p0199 A69-11885

Adrenal epinephrine and phenylethanolamine n-methyl transferase /PNMT/ activity in the rat bearing a transplantable pituitary tumor. 08 p1263 A69-20374

Diurnal rhythm of the pituitary-adrenocortical response to stress - Effect of constant light and constant darkness. 15 p2556 A69-31330

Sensitivity of the adrenal corticosterone response to ACTH as a function of time after hypophysectomy. 22 p3870 A69-39871

Compensatory hypertrophy and phenylethanolamine n-methyl transferase /PNMT/ activity in the rat adrenal. 23 p4080 A69-41404

## VERNITSKII, I. U. A.

Analysis of the operation of a switching circuit using MOS unित्रons and having a nonlinear load /Analiz raboty ključevoi skhem y s nelineinoi nagruzkoi na MDP- unित्रonakh/. 13 p2234 A69-28507

## VERNON, R. H.

Emissive probes for plasma potential measurements on the SERT II spacecraft. [AIAA PAPER 69-272] 09 p1492 A69-21217

## VERNON, R. J.

General theorem on symmetry-imposed decoupling of ports of a waveguide junction. 06 p0893 A69-16935

## VERNOV, S. N.

The investigation of the extensive air showers at sea level. 03 p0498 A69-12937

Results of Soviet investigations of charged particles and magnetic fields in space /Rezultaty sovetskikh issledovani zariazhennykh chastits i magnitnykh poliev v kosmicheskom prostranstve/. [UN PAPER 68-95768] 06 p0986 A69-17031

Simulation of the radiation effect of a space medium on spacecraft elements /Modelirovanie radiatsionnogo vozdeistviia kosmicheskoi sredy na elementy kosmicheskikh apparatov/. 06 p0906 A69-17612

Radial diffusion of electrons of energy greater than 100 kev in the outer radiation belt. 06 p0919 A69-17720

Measurements of cosmic rays in the stratosphere over the Arctic and Antarctica /Izmereniia kosmicheskikh lucheiv v stratosfere nad Arktikoi i Antarktidoi/. 09 p1575 A69-21542

Modulation of galactic cosmic rays during minimum solar activity according to satellite measurements /Modulatsiia galakticheskikh kosmicheskikh lucheiv v minimume solnechnoi aktivnosti po izmereniam na sputnikakh zemli/. 10 p1756 A69-22819

Spectrum of magnetic inhomogeneities in interplanetary space and cosmic-ray variations /Spektr magnitnykh neodnorodnostei v mezplanetnom prostranstve i variatsii kosmicheskikh lucheiv/. 10 p1757 A69-22824

Spectra of Forbush decreases in the low-energy region according to earth satellite measurements in 1964 and 1965 /Spektry Forbush-ponizhenii v oblasti mal'kikh energii po izmereniam na sputnikakh zemli v 1964-1965 gg./. 10 p1758 A69-22829

Particle fluxes in the outer geomagnetic field. 12 p2150 A69-26744

Radiation belts of the earth /Radiatsionnye poiasa zemli/. 13 p2326 A69-27350

Cosmic rays /Kosmicheskie luchi/. 13 p2326 A69-27351

Results of measurements of fast charged particles by the Cosmos 137 satellite /Rezultaty izmerenii bystrykh zariazhennykh chastits na sputnike "Kosmos-137"/. 13 p2327 A69-27693

Study of the structure of extensive air showers at sea level with the modernized hodoscope system of the Moscow University installation. 13 p2332 A69-28405

Observation of radio emission from extensive air showers with an array of half-wave antennas at the Moscow University installation. 13 p2332 A69-28407

Study of high-energy muons in extensive air showers. 13 p2332 A69-28409

The earth's radiation belts. 15 p2674 A69-30016

Cosmic-ray measurements in the stratosphere over the Arctic and Antarctica. 16 p2851 A69-32537

## VEROLLET, E.

Measurements of heat flux densities and Reynolds potentials in a turbulent boundary layer with wall suction /Mesures de densites de flux de chaleur et de tensions de Reynolds dans une couche limite turbulente avec aspiration a la paroi/. 19 p3452 A69-36722

Contribution to methods of measuring velocity and temperature turbulence by a hot-wire anemometer /Contribution aux methodes de mesures de turbulence de vitesse et de temperature par l'anemometre a fil chaud/. 22 p3951 A69-41256

## VERON, F.

Radio features of radio galaxies and quasi-stellar radio sources /Radioosobennosti radiogalaktik i kvazivzvednykh radioistotnikov/. 12 p2166 A69-27036

## VERONIS, G.

Effect of a stabilizing gradient of solute on thermal convection. 03 p0532 A69-13012

## VEROSH, T.

Diagrams for high-temperature measurements. 03 p0481 A69-14146

## VERPLAETSE, J. G.

International consultation and the space law treaties. 20 p3636 A69-37111

## VERRAZZANI, L.

Effects of synchronization errors in a compression-line demodulator /Sugli effetti dell'errore di allineamento del sincronismo nel demodulatore a linea di compressione/. 08 p1271 A69-19920

## VERREAU, R. T.

The screening of distant objects in universes with positive cosmological constant. 10 p1790 A69-24135

## VERRIEST, G.

Subjective and objective measurement of adaptation to darkness using the same equipment, and application of the latter to a comparative study of adaptation from infancy to adulthood /Mesure subjective et objective de l'adaptation a l'obscurite a l'aide du meme appareillage et application de celui-ci a l'etude comparative de l'adaptation depuis l'enfance jusqu'a l'age adulte/. 22 p3881 A69-40861

Comparative study of the differential luminance threshold and the spatial summation exponent for solid and annular objects with equal surfaces /Etude comparative du seuil differentiel de luminance et de l'exposant de sommation spatiale pour des objets pleins et pour des objets annulaires de memes surfaces/. 22 p3883 A69-40877

## VERRUIJT, A.

The completeness of Biot's solution of the coupled thermoelastic problem. 07 p1236 A69-19470

## VERSCUUR, G. L.

A new way of determining the optical depth of interstellar neutral hydrogen clouds. 08 p1398 A69-20774

Magnetic fields in interstellar neutral hydrogen clouds. 10 p1785 A69-24096

High resolution observations of a high latitude neutral hydrogen concentration. 13 p2347 A69-27718

The high-velocity cloud complexes as extragalactic objects in the local group. 15 p2694 A69-30785

Measurements of magnetic fields in interstellar clouds of neutral hydrogen. 18 p3190 A69-34291

The neutral hydrogen distribution in the neighborhood of the region of anomalously low polarization at l super II equals 137 deg, b super II equals plus 7 deg. 18 p3194 A69-34425

## VERSNEEL, W.

Numerical method for obtaining the scattering matrix of a microwave two-port from standing wave measurements. 24 p4281 A69-42617

## VERSNYDER, F. L.

The role of interfaces in Ni-base superalloys. 03 p0449 A69-13878

## VERZILIN, N. N.

Obtaining a Chlorella biomass with an enhanced content of sulphur-containing amino acids and its nutritive value /Poluchenie biomassy Khlorelli s povyshennym soderzhaniiem sersoderzhashchikh aminokisl ot ee pishchevaia tennost'/. 13 p2216 A69-28620

## VESECKY, J. F.

The initial development of solar flares. 07 p1205 A69-19246

Radio-frequency synchrotron radiation from trapped electrons above the auroral zones. 12 p2151 A69-26949

Radio frequency synchrotron radiation from inner belt trapped electrons. 18 p3128 A69-34948

## VESEL, J. E.

Accelerated UV degradation to solar cell coatings. 19 p3253 A69-33703

## VESELOV, E. IA.

Heat removal from a laser rod by means of a metallic conductor. 12 p2108 A69-26592

## VESELOV, G. I.

Natural oscillations of a system of n open dielectric waveguides /O sobstvennykh kolebaniakh sistem n otkrytykh dielektricheskikh volnovodov/. 22 p3901 A69-40954

## VESELOVA, A. A.

Study of the effects of various work and rest schedules on subjects under conditions of relative isolation /Izuchenie vliianiia razlichnykh rezhimov truda i otdykha na ispytatelei, nakhalidshchikhsia v usloviakh otositel'noi izolatsii/. 03 p0381 A69-14201

- ESELOVSKII, I. S.**  
Electron recombination coefficient in a plasma in the case of triple collisions /Koeffitsient elektronnoi rekombinatsii v plazme pri troinom stolknovenii/.  
11 p1933 A69-25541
- ESELY, D. D.**  
A computer-controlled flight line tester.  
11 p1864 A69-25060
- ESELY, J.**  
Radioprotective effect of 5-azacytidine in AKR mice.  
23 p4080 A69-41429
- ESENE, T. B.**  
Results of a microanalytical and X-ray investigation of macroblock thin films of the In sub 3 Te sub 4 phase /Rezultaty mikroanaliticheskogo i rentgenograficheskogo issledovaniia tonkikh krupnoblochnykh plenok fazy In sub 3 Te sub 4/.  
24 p4361 A69-42995
- ESNITSKII, A. I.**  
Pulsed parametric generation in distributed systems.  
16 p2758 A69-31796
- EST, C. M.**  
Detection of micro fractures by holographic interferometry.  
24 p4317 A69-43763
- ESTINE, E. H.**  
Determination of surface motions of the earth's core.  
18 p3129 A69-34951
- ETLOV, I. P.**  
Interpretation and use of Satellite Data /Interpretatsiia i ispol'zovanie Sputnikovykh Danykh/.  
11 p1911 A69-24824  
Infrared images of clouds from the Cosmos 122 satellite /Infrakrasnye izobrazheniia oblachnosti so sputnika "Kosmos-122"/.  
11 p1912 A69-24826  
Problems of Satellite Meteorology /Voprosy Sputnikovoi Meteorologii/.  
19 p3365 A69-36667
- ETLUTSKII, V. N.**  
Study of the heat transfer in a gas flow in a tube, taking radiation into account /Issledovanie teploobmena s uchetom izlucheniia pri techenii gaza v trube/.  
04 p0686 A69-14993  
Electric arc in a hydrogen flow at high pressure /Elektricheskai duga v potoke vodoroda pri vysokom davlenii/.  
13 p2305 A69-27387
- VETT, J. J.**  
Titanium-strengthened grades.  
21 p3743 A69-38652
- VETUKHNOVSKAIA, IU. N.**  
A theory for the radio emission from Mercury.  
03 p0512 A69-13688  
"Venera-4" and interpretation of radioastronomical measurements of Venus.  
10 p1791 A69-24202  
Modern data on the planet Venus.  
15 p2698 A69-31360
- VEYRIE, P.**  
Theoretical study of the ionization of deuterium under the action of a short-pulse laser /Etude theorique de l'ionisation du deuterium sous l'action d'un laser a impulsion courte/.  
02 p0288 A69-12040  
Gas breakdown with nanosecond pulses.  
[IEEE PAPER U-3] 07 p1155 A69-19085
- VEYSSIERE, M.**  
Measuring the mass velocity of detonation products of hydrogen-oxygen mixtures /Mesure de la vitesse materielle des produits de detonations des melanges hydrogene-oxygene/.  
02 p0354 A69-12628  
Variation of the gas pressure behind detonation fronts in strictly propane-oxygen mixtures - Influence of the tube diameters and the initial pressure /Variation de la pression des gaz derriere le front des detonations dans les melanges stricts propane-oxygene - Influence du diametre des tubes et de la pression initiale/.  
08 p1421 A69-20757
- VIALI, W. S.**  
The engine inlet on the 747.  
[ASME PAPER 69-GT-41] 09 p4570 A69-22482
- VIALTSEVA, E. E.**  
Certain results of measurements of the temperature field characteristics in the lowest 300 meters of the atmosphere /Nekotorye rezultaty izmerenii kharakteristik temperaturnogo polia v nizhnem 300-metrovom sloe atmosfery/.  
13 p2293 A69-27847
- VIANNA, M. L.**  
Theory of waves on inhomogeneous warm plasmas.  
08 p1365 A69-20744
- VIATKIN, A. P.**  
Surface-barrier gold/gallium arsenide junctions /Poverkhnostno-bar'ernye perekhody zoloto-arsenid galliia/.  
01 p0138 A69-10432  
Microwave diodes on a gallium arsenide base /SVCh-Diody na osnove arsenida galliia/.  
05 p0730 A69-16222
- VIATKIN, G. I.**  
Theory of electrodynamic acceleration of a plasma in a high-current pulsed accelerator /K teorii elektrodinamicheskogo uskoreniia plazmy v sil'notochnom impul'snom uskorigele/.  
21 p3778 A69-39548
- VIATTE, M.**  
Effect of dispersed phases on cavitation of magnesium alloys by creep /Effet de phases dispersees sur la cavitation par fluage d'alliages de magnesium/.  
17 p2985 A69-32907
- VIC, R.**  
A compact hydrogen-oxygen cell /Pile hydrogene-oxygene compacte/.  
08 p1260 A69-21041  
Compact hydrogen-oxygen cell /Pile hydrogene-oxygene compacte/.  
16 p2738 A69-32412
- VICENTE, F. A.**  
Diffraction by rocket exhausts.  
02 p0209 A69-12352
- VICENTINI, V.**  
Atmospheric incoming long-wave radiation at high altitude.  
13 p2256 A69-28647
- VICHNEVETSKY, R.**  
Generalized finite-difference approximations for the parallel solution of initial value problems.  
16 p2756 A69-32552  
Use of functional approximation methods in the computer solution of initial value partial differential equation problems.  
21 p3756 A69-39132  
Stability contours for the analysis of analog/digital hybrid simulation loops.  
21 p3680 A69-39609
- VICK, A. L.**  
White Sands Missile Range - A Rocky Mountain regional space and missile test facility.  
02 p0227 A69-11761
- VICKERS, R. A.**  
Elastomers for the supersonic transport.  
24 p4338 A69-43455
- VICKERS, T. K.**  
Improved navigation techniques for emergency helicopter services.  
02 p0279 A69-12363
- VICKERY, J. D.**  
Mission window definition for Jupiter swingbys to the outer planets.  
[AAS PAPER 68-115] 19 p3402 A69-35936
- VICKI, F. J.**  
Infrared method for detection of inhomogeneities in titanium.  
24 p4318 A69-42757
- VICTOR, G. A.**  
Dipole properties of molecular hydrogen.  
14 p2488 A69-29094
- VICTORY, E. L.**  
Analysis of entrainment and flow augmentation for Coanda-type nozzles.  
05 p0746 A69-16021
- VIDAL, C. R.**  
Classical path methods in line broadening. I - The classical path approximation.  
23 p4192 A69-41378  
Classical path methods in line broadening. II - Application to the Lyman series of hydrogen.  
23 p4193 A69-41379
- VIDAL, G.**  
Determination of impurities in titanium and some of its alloys by spark source mass spectroscopy /Dosage des impuretes dans le titane et certains alliages de titane par spectrographie de masse a etincelles/.  
[ONERA-TP-723] 18 p3155 A69-34638
- VIDAL, P.**  
Nonlinear Sampled-Data Systems /Systemes echantillonnes non lineaires/.  
05 p0739 A69-16544
- VIDAL, R. J.**  
Surface measurements on sharp flat plates and wedges in low-density hypersonic flow.  
20 p3458 A69-37186
- VIDALLON, C.**  
Properties of an equivalent circuit for microwave point diodes /Proprietes du schema equivalent d'une diode a pointe en micro-ondes/.  
05 p0735 A69-16605
- VIDERMAN, V. S.**  
Surface alloying of Zhs6-K alloy by three elements /Poverkhnostnoe legirovanie splava Zhs6-K tremia elementami/.  
19 p3345 A69-36157  
Heat resistance of Zhs6-K alloy subjected to multicomponent diffusion saturation /Zharostoikost' splava Zhs6-K posle mnogokomponentnogo diffuzionnogo nasyshcheniia/.  
19 p3345 A69-36159  
Structure and phase composition of silicide layers in niobium.  
20 p3563 A69-37820
- VIDMAN, D. V.**  
Spectral observations of Markarian's galaxies with an ultraviolet continuum. I /Spektral'nye nabludeniiia galaktik Markariana s ul'trafioletovym kontinuumom. I/.  
13 p2351 A69-27866
- VIDOZ, A. E.**  
Controlled microstructures of Al-CuAl sub 2 eutectic composites and their compressive properties.  
06 p0942 A69-17227  
Tensile properties of unidirectionally solidified Al-CuAl sub 2 eutectic composites.  
10 p1708 A69-22995  
Development of nitrided boron reinforced metal matrix composites.  
13 p2283 A69-28671
- VIDYANIDHI, V.**  
On the Rayleigh's flow past an infinite porous plate. I, II.  
02 p0232 A69-12156  
Hydromagnetic flow in a rotating straight pipe.  
06 p0967 A69-17718
- VIEWHMANN, W.**  
Current oscillations in photoexcited gallium-arsenide.  
09 p1557 A69-21753  
Differential photo effects in gallium arsenide-metal junctions.  
17 p3015 A69-32824
- VIEWMEYER, G. F., JR.**  
Management techniques for complex systems.  
[RAES PAPER 9] 22 p4053 A69-40489
- VIEWHWEGER, G.**  
The influence of ground effects on the secondary forces on a VTOL aircraft during hovering and transitional flight /Sekundaerkræfte an einem Senkrechtstarter beim Schweben- und Transitionsflug mit Beruecksichtigung des Bodeneffekts/.  
[DVL-851] 04 p0547 A69-14813
- VIENOT, J. CH.**  
Study of weak displacements of opaque objects and of the optical distortion in solid-state lasers by holographic interferometry /Etude des faibles deplacements d'objets opaques et de la distorsion optique dans les lasers a solide par interferometrie holographique/.  
19 p3308 A69-35909
- VIERTL, J. R. M.**  
Ages of Darwin glass, Macedon glass, and Far Eastern tektites.  
23 p4210 A69-41344
- VIEZBICKE, P. P., JR.**  
Interactions between nested receiving rhombic antennas.  
11 p1850 A69-24979
- VIEZEE, W.**  
Lidar observations of airfield approach conditions - An exploratory study.  
15 p2651 A69-30895
- VIGANTS, A.**  
Space-diversity performance as a function of antenna separation.  
[IEEE PAPER 68-TP-350-COM] 10 p1656 A69-23535
- VIGDORCHIK, V. I.**  
Single-circuit partially split magnetron with electron retuning of the frequency /Odnokonturnyi chastichno razrezannyi magnetron s elektronnoi perestroikoi chastoty/.  
21 p3682 A69-39128



## VIGDOROVICH, V. N.

Study of the pressure of saturated vapors over solid solutions of indium arsenide-gallium arsenide /Issledovanie davlennia nasyshchennykh parov nad tverdymi rastvorami arsenid indii-arsenid galliia/.

04 p0642 A69-14938

Selenium distribution during oriented crystallization of gallium antimonide /O raspredeleнии selena pri napravlennoi kristallizatsii antimonida galliia/.

23 p4198 A69-41725

## VIGGIANO, A. A.

FM characteristics measurement of telemetry transmitters.

14 p2411 A69-28881

Data transmitter coupling methods - DC versus AC.

23 p4119 A69-41744

## VIGNERI, R. J.

Scene imaging using laser radiation.

03 p0442 A69-14191

## VIGNERON, F. R.

Dynamics of spin-stabilized flexible satellites of crossed-dipole configuration.

15 p2703 A69-31332

## VIGNERON, J.

Relationship between middle-latitude VLF emissions and magnetic activity.

06 p0920 A69-17735

Attempt to distinguish between very low frequency /VLF/ day and evening emissions by means of magnetic activity - Application to magnetospheric storm periods /Essai de distinction entre les émissions à très basses fréquences /T.B.F./ du jour et du soir au moyen de l'activité magnétique - Application aux périodes d'orage magnétosphérique/.

13 p2253 A69-27740

Analysis of coupling problems for the case of proton whistlers /Analyse des problèmes de couplage dans le cas des sifflements protoniques/.

13 p2254 A69-27981

A V.L.F. and particle rocket experiment at Kerguelen Islands. II.

15 p2571 A69-31424

Successive development of electromagnetic /ULF and VLF/ and light emissions during magnetic substorms /Developpement successif des émissions électromagnétiques /U.B.F. et T.B.F./ et lumineuses au cours des sous-orages magnétiques/.

16 p2788 A69-32648

## VIGNES, A.

Ternary diffusion in Fe-Co-Ni alloys.

23 p4176 A69-41505

## VIGROUX, E.

Vertical distribution of atmospheric ozone based on observations of emission and absorption in the 9.6- $\mu$  band /Distribution verticale de l'ozone atmosphérique d'après les observations en émission et en absorption de la bande 9.6  $\mu$ m/.

16 p2785 A69-32625

Absorption coefficients of ozone in the Hartley band /Coefficients d'absorption de l'ozone dans la bande de Hartley/.

16 p2785 A69-32626

## VIJH, A. K.

Electrolytic hydrogen evolution reaction on aluminum, oxide-covered electrodes.

11 p1832 A69-25674

## VIKCHANTAEV, M. KH.

Optimal control of distributed-parameter systems in the presence of random forces /K optimal'nomu upravleniiu sistemami s raspredeleennymi parametrami pri sluchainykh vozdustviyakh/.

23 p4144 A69-41957

## VIKHLII, G. A.

Formation of radiation defects in indium antimonide at subthreshold radiation energies /Obrazovanie radiatsionnykh defektov v antimonide indii pri doporogovykh energiyakh izlucheniia/.

13 p2318 A69-27885

Formation of radiation defects in indium antimonide at subthreshold radiation energy.

21 p3782 A69-39144

## VIKHRENKO, V. S.

Statistical determination of the viscosity-coefficient tensor /Statisticheskoe opredelenie tenzora koeffitsientovвязкости/.

05 p0794 A69-15785

Statistical determination of the tensor of viscosity coefficients.

18 p3173 A69-35037

## VIKHROV, A. I.

Nuclear Interactions in Spacecraft Shielding /Iadernye Vzaimodeistviia v Zashchite Kosmicheskikh Korablei/.

14 p2481 A69-29817

## VIKTOROV, G. V.

Hydrodynamic Cascade Theory /Gidrodinamicheskaia teoriia reshetok/.

21 p3696 A69-39527

## VIKTOROV, S. V.

Analysis of the chemical composition of lunar surface by direct methods.

11 p1832 A69-24629

## VIKTOROVA, A. A.

Radio wave absorption by water vapor in the Venusian and Martian atmospheres /O pogloshchenii radiovoln vodianymi parami v atmosferekh Veneri i Marsa/.

15 p2569 A69-30952

## VIKTOROVA, V. S.

Magnetic correcting devices and possibilities of their application /Magnitnye korrektsionnyye ustroystva i vozmozhnosti ikh primeneniia/.

21 p3685 A69-38453

## VIKULENKOV, V. P.

Calculation of statically indeterminate systems beyond the elastic limit /Raschet staticheskikh neopredelimykh sistem za predelom uprugosti/.

24 p4400 A69-43072

## VIKULIN, I. M.

Influence of a small transverse perturbation on the helical instability in an oscillator /Vliianie malogo poperechnogo vozmushcheniia na spiralniui neustoiichivost' v ostsilistore/.

03 p0488 A69-13886

Influence of a small transverse perturbation on a helical instability in an oscillator.

11 p1939 A69-25687

## VIKULOV, A. P.

A procedure for investigating ferrites in alternating fields /O metodike ispytaniia ferritov v peremennykh poliaxh/.

13 p2320 A69-27996

## VILA, S. C.

Late phases of stellar evolution. I.

09 p1606 A69-22420

## VILBIG, F.

Commercial Satellites /Kommerzielle Satelliten/.

23 p4224 A69-42367

## VILCHUR, IA. P.

The transmission of colorless optical glasses in the near ultraviolet.

12 p2130 A69-26599

## VILCSEK, E.

Cosmic-ray produced radionuclides in the Barwell and Saint-Severin meteorites.

19 p3410 A69-36094

Chlorine-36 and argon-39 production rates in the metal of stone and stony-iron meteorites.

19 p3411 A69-36100

## VILENSKAIA, G. G.

Phenomenon of a sudden increase in laser radiation absorption and the gasdynamic effects associated with it /Iavlennye vspyshki pogloshcheniia izlucheniia OKG i svyazannye s nim gazodinamicheskie efekty/.

21 p3736 A69-38962

## VILENSKII, I. M.

Effective velocity of vertical displacements of the lower ionosphere at sunset and sunrise.

06 p0922 A69-17752

Nonlinear distortion of high-power radio waves propagated through the ionosphere /Experimental investigation/. III.

07 p1088 A69-19746

The method of partial reflections /O metode chastichnykh otrazhenii/.

20 p3522 A69-37055

Measurement of the field strength of ionosphere-reflected radio waves in the range from 150 to 1500 khz at small distances from the emitter /Ob izmerenii napriazhennosti polia otrazhennykh ot ionosfery radiovoln diapazona 150 to 1500 KGTs na nebol'shikh rastoianiiax ot peredatchika/.

23 p4123 A69-41861

## VILIAEVA, N. G.

Solubility of hydrogen in solid and liquid titanium /Rastvorimost' vodoroda v tverdom i zhidkom titane/.

11 p1905 A69-24963

## VILLIAMS, A. P.

Alfven oscillations in an inhomogeneous plasma from a pulsed discharge with oscillating electrodes /Al'fvenovskie kolebaniia neodnorodnoi plazmy v impul'snom razriade s ostsiliruiushchimi elektrodami/.

09 p1550 A69-22020

## VILLIAMS, M. V.

Conveyer growing of carrots by the aeroponic method /Konveiernoe vyrashchivanie morkovi sposobom aeroponiki/.

17 p2912 A69-32943

## VILISOV, A. A.

Microwave diodes on a gallium arsenide base /SVCh-Diody na osnove arsenida galliia/.

05 p0730 A69-16222

## VILIUNOV, V. N.

Critical condition of ignition of gas mixtures by a hot focus, and the laws of establishment of steady flame propagation /O kriticheskom uslovii zazhiganiia gazovykh smesi goriachim ochagom i zakonomenostiakh ustanovleniia rezhima statsionarnogo rasprostraneniia plameni/.

11 p2001 A69-25190

## VILK, IU. N.

Investigation of the laws governing high-temperature vaporization from an open surface in a vacuum of the monocarbide phases of the transition metals of the IV-V groups. I.

02 p0260 A69-11583

## VILKAS, E. P.

Advanced control of the fusion welding processes.

09 p1508 A69-22334

## VILKE, V. G.

Stability of the longitudinal oscillations of a rod under the action of a nonconservative force /Ob ustoiichivosti prodol'nykh kolebaniia sterzhnia pod deistviem nekonservativnoi sily/.

18 p3216 A69-34578

## VILKOVISKII, E. IA.

Stability of superstars and the problem of Galaxy formation /Ustoiichivost' sverkhzvezd i problema obrazovaniia galaktik/.

15 p2696 A69-31151

## VILLA, A.

Studies of self-focusing antennas for telecommunication satellites.

08 p1289 A69-20970

## VILLAGGIO, P.

Theorems of convergence for minimal sequences in limit analysis.

21 p3837 A69-39157

## VILLARD, O. G., JR.

Progress in ionospheric radio.

19 p3303 A69-36428

## VILLENAVE, J.-J.

Analysis of breathable liquid oxygen - Determination of its impurities /Analyse de l'oxygene liquide respirable - Dosage de ses impuretes/.

21 p3666 A69-39273

## VILLEVIEILLE

French space meteorology /La météorologie spatiale française/.

[UN PAPER 68-95838] 06 p0950 A69-17081

## VILLEVIEILLE, A.

French space meteorology /La météorologie spatiale française/.

02 p0275 A69-11911

## VILLEVIEILLE, M.

French space meteorology /La météorologie spatiale française/.

01 p0109 A69-10545

## VILLIERS, J.

Air traffic control procedures in a parallel track system.

02 p0277 A69-11591

The Dioscures system for air control and navigation by satellites /Le système Dioscures de contrôle et de navigation aérienne par satellites/.

[UN PAPER 68-95832] 06 p0954 A69-17063

Control of air traffic over the North Atlantic and its relationships with the accuracy of navigation and the capacity of the telecommunications system - Prospects 1970/1980 /Le contrôle de la circulation aérienne sur l'Atlantique Nord, ses relations avec la précision de navigation et la capacité du système de télécommunications - Perspectives 1970/1980/.

10 p1723 A69-23704

- VILLMAN, CH.**  
Estimation of the spectral brightness and transparency of noctilucous clouds /Otsenka spektral'noi iarkosti i prozrachnosti serebristyykh oblakov/.  
18 p3130 A69-35148
- VILLMANN, CH. I.**  
Statistical data on the occurrence of noctilucous clouds during the IQSY /1964-1965/.  
15 p2598 A69-31255
- VILNER, G. A.**  
Dynamic characteristics of auto-oscillatory temperature control /Dinamicheskie kharakteristiki avtogeratornogo regulatora temperatury/.  
22 p3869 A69-40254
- VILNER, P. D.**  
Damper for suppressing blade vibrations /Dempfer dlia gasheniia vibratsii lopatok/.  
17 p3066 A69-33944
- Experimental investigations of laminated critical rate dampers /Eksperimental'noe issledovanie plastinchatykh dempferov kriticheskikh skorostei/.  
17 p3066 A69-33945
- VILNITIS, A. IA.**  
Calculation of the field in the coil area of x plane linear induction MHD machines with allowance for the finiteness of the magnetic permeability of iron /Raschet polia v obmotочноi zone ploskoliniinykh induktsionnykh MGD-mashin s uchetoм konechnosti magnitnoi prornitsaemosti zheleza/.  
07 p1059 A69-19028
- Calculation of fields in plane-parallel induction MHD machines with allowance for the finiteness of the winding zone thickness and the magnetic permeability of iron /Raschet polia v ploskoliniinykh induktsionnykh MGD-mashinakh s uchetoм konechnosti tolshchiny obmotочноi zony i magnitnoi prornitsaemosti zheleza/.  
14 p2405 A69-29914
- VILUTIS, E. S.**  
Induced photoconductivity and recombination luminescence in diamonds /Induksirovannaiia fotoprovodimost' i rekombinatsionnaia luminestsentsiia almazov/.  
19 p3383 A69-36167
- VIMBERG, G. P.**  
Possibility of detecting clouds and the underlying surface from signals of an IR system /Veroiatnost' obnaruzheniia oblachnosti i podstilaushchei poverkhnosti po signalam ik sistemy/.  
06 p0952 A69-17986
- VINCENT DE PAUL, M.**  
Experimental research on supercritical wing sections /Recherches experimentales sur des profils d'ailes supercritiques/.  
[ONERA-TP-632] 02 p0187 A69-11618
- VINCENT-CARREFOUR, J.**  
Computer-aided design /CAD/ in the fields of electronics and logic systems /La conception assistee par ordinateur /CAO/ dans les domaines de l'electronique et des ensembles logiques/.  
08 p1278 A69-19970
- VINCENT, B. T., JR.**  
Microwave integrated circuits for phased-array applications.  
24 p4286 A69-43109
- VINCENT, D. G.**  
Observational studies of the general circulation of the tropics - Long term mean values.  
18 p3165 A69-34418
- VINCENT, J.**  
Determination of an optimal profile for a sonic nozzle /Sur la determination d'un profil optimal de tuyere sonique/.  
02 p0188 A69-12037
- Considerations concerning the treatment of partial loss of teeth in the fighter pilot /Considerations sur le traitement de l'edentation partielle chez le pilote de chasse/.  
21 p3661 A69-39277
- Evacuation of maxilla-facially wounded persons by air /L'evacuation du blesse maxillo-facial par voie aerienne/.  
24 p4270 A69-42603
- VINCENT, J. P.**  
Engineering and operational experiences related to lunar-surface thermal-vacuum qualification of the Apollo extravehicular mobility unit.  
[AIAA PAPER 69-992] 22 p3893 A69-40370
- VINCENT, J. S.**  
Elastic scattering of 600 Mev protons from He super 3.  
03 p0472 A69-13464
- Polarization in proton- super 4 He scattering at 540 Mev.  
04 p0632 A69-14966
- Study of the Sc super 45 /alpha,t/ Ti super 46 reaction at 41 Mev.  
22 p3988 A69-41044
- VINCENT, R. A.**  
Short period phase height oscillations in the E-region.  
12 p2066 A69-26111
- The relationship between the partial reflection of radio waves from the lower ionosphere and irregularities as measured by rocket probes.  
15 p2604 A69-31420
- A criterion for the use of the multilayer approximation in the study of acoustic-gravity wave propagation.  
16 p2774 A69-31980
- VINCENT, R. J.**  
Magnitude estimation of perceived distance over various distance ranges.  
07 p1069 A69-19501
- Distance discrimination in a simulated space environment.  
12 p2022 A69-26372
- VINCENT, T. L.**  
Disconnected optimal trajectories.  
17 p3026 A69-32837
- VINCENTI, W. G.**  
A substitute-kernel approximation for radiative transfer in a nongrey gas near equilibrium, with application to radiative acoustics.  
15 p2717 A69-30791
- VINCKIER, C.**  
Burning rates of polymethylmetacrylate in mixtures with ammonium perchlorate or in hybrid systems when mixed with ammonium chloride.  
13 p2324 A69-28503
- VINCKIER, J.**  
Structure and burning velocity of turbulent premixed flames.  
06 p1035 A69-17931
- VINERON, ZH.**  
Relation between the irregular pulsations of the geomagnetic field and the pulsations of polar aurorae and ULF radiation /O sviazi ireguliarnykh pul'satsii geomagnitnogo polia s pul'satsiami poliarnykh siianii i UNCh-izlucheniem/.  
09 p1485 A69-21536
- Relationship between irregular geomagnetic field pulsations and the pulsations of auroras and of VLF emission.  
16 p2783 A69-32531
- VINETSKII, V. L.**  
Kinetics of the formation of secondary radiation defects in semiconductors.  
07 p1199 A69-18679
- VINH, L. D.**  
Raman effect in glycerol - A 4880-angstrom units ionized argon laser /Effet Raman du glycerol - Laser a argon ionise 4880 angstrom units/.  
03 p0440 A69-13366
- Raman effect in the Cr sub 2 O sub 7 K sub 2 single crystal - The He-Ne laser /Effet Raman du monocristal Cr sub 2 O sub 7 K sub 2 - Laser He-Ne/.  
12 p2105 A69-26285
- VINH, N. X.**  
Optimum maneuvers of a skip vehicle with bounded lift constraints.  
17 p3025 A69-32836
- Recurrence formulae for the Hansen's developments.  
[AIAA PAPER 69-910] 21 p3807 A69-39342
- Non-linear longitudinal dynamics of an orbital lifting vehicle.  
[AAS PAPER 69-244] 24 p4392 A69-42857
- VINICHENKO, IU. B.**  
Changes in urinary output, creatinine excretion, and thickness of skin-subcutaneous fat layer in athletes during prolonged periods of hypokinesia.  
10 p1646 A69-23582
- VINJE, E. W.**  
An analysis of pilot adaptation in a simulated multi-loop VTOL hovering task.  
10 p1650 A69-23878
- VINNICHENKO, N. K.**  
Turbulence in a Free Atmosphere /Turbulentnost' v Svobodnoi Atmosfere/.  
18 p3165 A69-34351
- VINNIKOV, K. IA.**  
Interpretation of the results of outgoing radiation measurements by radiometers of meteorological earth satellites with an unlimited field of vision /K voprosu ob interpretatsii rezul'tatov izmerenii ukhodiashego izlucheniia radiometrami s neogranichenym polem zreniia na meteorologicheskikh sputnikakh zemli/.  
04 p0627 A69-15032
- VINNIKOVA, A. N.**  
Measuring procedure and experimental equipment for determining the integral normal emissivity of structural materials at temperatures ranging from 1200 to 3000 K /Metodika izmerenii i eksperimental'naia ustanovka dlia opredeleniia integral'noi normal'noi izluchatel'noi sposobnosti konstruktсионnykh materialov v intervalle temperatur ot 1200 do 3000 deg K/.  
11 p1888 A69-25230
- Integral normal emissivity of tantalum and hafnium carbides at temperatures ranging from 1300 to 3000 deg K /Integral'naia normal'naia izluchatel'naia sposobnost' karbidov tantal'a i gafniia v intervalle temperatur 1300- 3000 deg K/.  
15 p2640 A69-30984
- VINNIKOVA, T. L.**  
Calculations of N/h/ profiles of the ionosphere accounting for the interlayer and underlying ionization /Raschety N/h/-profilii ionosfery s uchetoм mezhsloevoi i nizhelezhazhschei ionizatsii/.  
02 p0239 A69-11687
- Computations of ionospheric N/h/ profiles with allowance for interlayer and underlying ionization.  
13 p2258 A69-28718
- VINOGRADOV, A. P.**  
Study of the lunar surface by the Soviet Luna 9 and Luna 13 automatic stations /Issledovanie lunnoi poverkhnosti na sovetkikh avtomaticheskikh stantsiakh Luna- 9 - Luna-13/.  
[UN PAPER 68-95769] 06 p1000 A69-17041
- Problems of Geochemistry and Cosmology, International Geological Congress, 23rd, Prague, Czechoslovakia, August 24-27, 1968, Proceedings /Problemy Geokhimii i Kosmologii, Mezhduнародnyi Geologicheskii Kongress, 23rd, Prague, Czechoslovakia, August 24-27, 1968, Proceedings/.  
07 p1212 A69-18546
- VINOGRADOV, B. S.**  
Evaluation of Laval nozzle resistance /Ob otsenke soprotivleniia sopel Lavalia/.  
03 p0361 A69-12967
- Measurement of gas streams with nonorientable five-channel adapters /Izmerenie gazovykh potokov neorientiruemyi piatikanal'nymi nasadkami/.  
11 p1888 A69-25340
- VINOGRADOV, B. V.**  
Possibilities of interpreting from space images of the earth observed in various spectral regions /Vozmozhnosti interpretatsii izobrazhenii zemli iz kosmosa, nabludaemykh v raznykh zonakh spektra/.  
05 p0763 A69-16054
- Possible interpretation of space photographs of the earth taken in different spectral bands.  
20 p3545 A69-37964
- VINOGRADOV, E. A.**  
Obtaining a visible image of radio emission in the millimeter band.  
04 p0560 A69-15272
- VINOGRADOV, IU. V.**  
The problem of autoturbulence /K voprosu ob avtoturbulentnosti/.  
21 p3850 A69-38861
- VINOGRADOV, V. M.**  
Problems of space pharmacology /Problemy kosmicheskoi farmakologii/.  
13 p2211 A69-28613
- Protective action of antihypoxic preparations under gravitational accelerations /Zashchitnoe deistvie antipokskicheskikh sredstv pri gravitatsionnykh peregruzkakh/.  
17 p2906 A69-32931
- VINOGRADOV, V. N.**  
Electron microscopic changes in the lungs of rats after repeated exposure to pure oxygen /Elektronomikroskopicheskie izmeneniia v legkikh u krys posle povtornogo vozdeistviia chistogo kisloroda/.  
05 p0709 A69-16514
- Body weight and protein synthesis in animals during hypokinesia.  
08 p1262 A69-19928
- Electron microscopic changes in the lungs of rats after repeated exposure to pure oxygen.  
18 p3096 A69-34733
- VINOGRADOVA, M. B.**  
Some aspects of the radio-wave field in the case of diffraction at a regular phase screen /O nekotorykh



## VINOGRADOVA, N. D.

osobennostiakh polia radiovoln pri difraktsii na reguliarnom fazovom ekrane/.  
09 p1453 A69-21526

Some characteristics of the field of radio waves upon diffraction on a regular phase screen.  
16 p2754 A69-32521

## VINOGRADOVA, N. D.

Transport coefficients of the plasma in the Tokamak TM-3 apparatus.  
16 p2820 A69-31795

## VINOGRADOVA, V. G.

Behavior of manganese inidium antimonide.  
04 p0643 A69-15257

## VINOKUROV, L. P.

Strength analysis of rectangular plates with a compliant base under concentrated loads /Raschet priamougol'nykh plit na sosedotochenne nagruzki s svedenim v raschetnuiu skhemu plity podatlivogo osnovaniia/.  
19 p3434 A69-35827

## VINOKUROV, V. R.

Optimal control of processes described by integral equations. I, II, III.  
23 p4183 A69-42472

## VINSON, J. R.

On the free vibrations of plates and beams of pyrolytic graphite type materials.  
[AIAA PAPER 69-55]  
06 p1027 A69-18070

Thermostructural simulation of lifting vehicle structures.  
12 p2060 A69-26836

Influences of large amplitudes, transverse shear deformation and rotatory inertia on lateral vibrations of transversely isotropic plates.  
[ASME PAPER 69-APM-10]  
18 p3213 A69-34386

On the nonlinear oscillations of plates composed of composite materials.  
20 p3627 A69-37771

## VINTAIKIN, E. Z.

Formation of long-range order in nickel-chromium alloys /Gibrozovanie dal'nego poriadka v spлавakh nikel'-khrom/.  
10 p1714 A69-23964

## VINTI, J. P.

Improvement of the spheroidal method for artificial satellites.  
12 p2152 A69-25799

Conservation laws and Liapounov stability of the free rotation of a rigid body.  
19 p3397 A69-35612

## VIOLET, A.

Siting errors in azimuth radio measurements /Erreurs de situation dans les mesures radioelectriques d'azimut/.  
15 p2651 A69-31090

## VIOLETTE, F.

Space biology /La biologie spatiale/.  
02 p0199 A69-11909

## VIOTTI, R.

Analysis of the Eta Carinae spectrum in the period from 1947 to 1949 /Analisi dello spettro di Eta Carinae nel periodo 1947-49/.  
06 p1002 A69-17263

Note on the spectral variations of Eta Carinae in 1947-49.  
19 p3423 A69-36231

On the stellar nucleus of NGC 7023.  
20 p3599 A69-37469

## VIRENE, E. P.

Waiting line /queueing/ effects on availability.  
18 p3145 A69-34495

## VIRGO, D.

Cooling history of orthopyroxenes.  
20 p3523 A69-37518

## VIRGOPIA, N.

Molecular ratios as indicators of elemental abundance ratios.  
06 p1003 A69-17320

## VIRKAR, A. V.

Crystal structures of AB sub 3 and A sub 2 B sub 7 rare earth-nickel phases.  
15 p2637 A69-30213

## VIRKO, V. F.

Nonlinear phenomena in a plasma waveguide.  
07 p1196 A69-19750

## VIRNIK, A. M.

Residual stresses during plasma spray coating /Ostatochnye napriazheniia pri plazmennom napylenii/.  
20 p3548 A69-37328

## VIOBIK, P. F.

Initial results of the Pioneer 8 VLF electric field experiment.  
01 p0035 A69-11224

## VIRY, J.

Hybrid propulsion - Fragmentation of solid fuel /Propulsion hybride - Fragmentation du combustible solide/.  
17 p3021 A69-33358

## VISCONTI, I. C.

New metal composite materials /I nuovi materiali compositi metallici/.  
02 p0268 A69-12750

Preliminary results of the preparation of fibrous metal composites by sintering and rolling /Risultati preliminari della preparazione di compositi metallici fibrosi per sinterizzazione e laminazione/.  
03 p0444 A69-13349

## VISHCHAKAS, IU. K.

Characteristics of a contact between gold and a polycrystalline cadmium selenide film /Svoistva kontakta zolota s polikristallicheskim sloem selenistogo kadmiia/.  
19 p3384 A69-36480

## VISHKAREV, A. F.

Solubility of hydrogen in solid and liquid titanium /Rastvorimost' vodoroda v tverdom i zhidkom titane/.  
11 p1905 A69-24963

## VISHNEV, I. P.

Heat release during the boiling of a downward flowing liquid oxygen film /Teplootdacha pri kipenii zhidkogo kisloroda, stekaiushchego plenoi/.  
04 p0687 A69-15161

## VISHNEVSKII, I. I.

Thermal conductivity of polycrystalline corundum in the range from 90 to 1100 K /Teploprovodnost' polikristallicheskogo korunda v intervalle 90-1100 deg K/.  
01 p0101 A69-10108

Heat transfer by radiation in polycrystalline corundum /Perenos tepla izlucheniem v polikristallicheskom korunde/.  
20 p3565 A69-36975

## VISHNEVSKII, M. M.

Magnetoresistance and Hall effect of n-InSb single crystals having a high dislocation density.  
14 p2503 A69-28734

## VISHNEVSKY, C.

Influence of alloying elements on the low-temperature toughness of martensitic high-strength steels.  
20 p3556 A69-36952

## VISHNIAC, W.

Biochemical bases for life in extraterrestrial environments.  
17 p2908 A69-32973

Life Sciences and Space Research VII COSPAR, Plenary meeting, 11th, Open Meeting of Working Group V and Symposium on Biological Effects of Radiation in Space, Tokyo, Japan, May 14-16, 1968 and May 10, 1968, Proceedings.  
20 p3474 A69-37612

## VISHNIAKOV, IA. D.

Rolling and recrystallization textures of nickel-Cobalt alloys.  
04 p0615 A69-14643

## VISHNIAKOV, V. I.

Interferometric study of heat transfer in turbulent jet flows /Interferometricheskoe issledovanie teploobmena v turbulentnykh struiynykh techeniakh/.  
01 p0005 A69-10101

Determination of the internal efficiency of a condensing injector in power plants with a closed cycle.  
02 p0194 A69-11582

## VISHNIAKOVA, L. A.

Jupiter from observations in 1966 and 1967 /Iupiter po nabludeniam 1966-1967 gg./.  
18 p3203 A69-35337

## VISHOMIRSKIS, R.

Bright cadmium plating /Blestiashee kadmirovani/.  
22 p3959 A69-41266

## VISKANTA, R.

An experimental examination of the validity of the commonly used methods of radiant heat transfer analysis.  
[ASME PAPER 68-HT-42]  
02 p0351 A69-12206

Approximate solution of the transient free convection laminar boundary layer equations.  
08 p1305 A69-20842

Radiative transfer between two concentric gray spheres separated by radiating gas.  
13 p2377 A69-28149

Heat transfer by simultaneous conduction and radiation for two absorbing media in intimate contact.  
13 p2378 A69-28340

The exact solution to a simple nongray radiative transfer problem.  
15 p2718 A69-31153

Radiant heat transfer between simply arranged surfaces with direction dependent properties.  
[AIAA PAPER 69-624]  
17 p3070 A69-33259

## VISKANTA, V. Z.

Compound phase-locked loop receiver.  
19 p3274 A69-36277

## VISSCHER, M. B.

Hypoxia and edema of the perfused isolated canine lung.  
22 p3887 A69-41189

## VISSER, W.

A refined mixed-type plate bending element.  
24 p4404 A69-43591

## VISVANATHAN, N.

The continuum of BL Lac.  
10 p1785 A69-24090

## VISWANADHAM, Y.

The relation between solar radiation and hours of bright sunshine at some tropical stations.  
23 p4206 A69-42178

## VISWANATH, P. R.

The Kolar gold fields extensive air shower experiment.  
06 p0990 A69-17300

Calculation of some characteristics of extensive air showers using different models of high energy nuclear interactions.  
06 p0990 A69-17301

## VISWANATHAN, K. S.

A note on auroral electrons.  
16 p2850 A69-32102

## VISWANATHAN, R.

High temperature corrosion of some gas turbine alloys.  
03 p0444 A69-13309

## VITERBI, A. J.

Error bounds for the white Gaussian and other very noisy memoryless channels with generalized decision regions.  
12 p2029 A69-26204

## VITIAZEV, V. V.

Expansion of planetary nebulae /O rasshirenii planetarnykh tumannostei/.  
19 p3426 A69-36575

## VITINSKII, IU. I.

On the problem of active longitudes of sunspots and flares.  
17 p3022 A69-33049

Variation of the main characteristics of activity centers during the course of the 11-year cycle /Ob izmenenii osnovnykh kharakteristik tsentrov aktivnosti s khodom 11-letnego solnechnogo tsikla/.  
20 p3616 A69-38302

The character of the variation of the mean importance of sunspot groups in various latitude intervals /O kharaktere izmeneniia srednei moshnosti grupp piatev v razlichnykh shirotnykh intervalakh/.  
20 p3616 A69-38303

## VITIUK, V. F.

Oscillations of a fluid in a rectangular basin /O kolebaniakh zhidkosti v priamougol'nom basseine/.  
09 p1483 A69-22711

## VITKEVICH, V. V.

Results of radio-astronomical studies of interplanetary plasma inhomogeneities according to data for 1965 and 1966 /Rezultaty radioastronomicheskikh issledovani neodnorodnosti mezhplanetnoi plazmy po dannym 1965-1966 gg./.  
03 p0505 A69-13081

Radio-astronomical investigations of motions and dimensions of the small-scale irregularities in the interplanetary plasma.  
10 p1782 A69-23711

Flux densities and spectral indices for the sources in the 3C and 3CR catalogs at 86-MHz frequency.  
11 p1951 A69-24237

Results of radio observations of irregularities in the interplanetary plasma, 1965-1966.  
14 p2515 A69-28763

- Determination of the brightness distribution over the source /O vosstanovlenii raspredelenia radioiarkosti po istochniku/.  
20 p3606 A69-38033
- TKINA, TS. Z.  
Magnetic susceptibility of an indium phosphide/gallium arsenide solid solution /Magnitnaia vosprimchivost' tverdogo rastvora fosfid indiiia-arsenid galliia/.  
07 p1200 A69-19013
- TKOVITSKY, I. M.  
Similarities in spark and exploding wire discharges.  
01 p0117 A69-10657
- Collisionless shock waves and turbulent heating in high voltage theta pinches.  
17 p3013 A69-33825
- TKUS, G.  
Lunar surface temperatures and thermal characteristics - Surveyor 5 science results.  
02 p0321 A69-12227
- TLINA, R. Z.  
Theory of a gradient instability of a current in semiconductors.  
03 p0487 A69-13728
- ITO, R. P.  
Creep of conical membrane shells under aerodynamic heating and loading.  
13 p2364 A69-28205
- ITON, M.  
Wide-field astronomical camera for the study of extended light sources - Design technique /Camera astronomique a grand champ pour l'etude de sources lumineuses etendues - Technique de realisation/.  
12 p2080 A69-26127
- Certain results of optical studies of galaxies /Nekotorye rezul'taty opticheskikh issledovaniy galaktik/.  
12 p2170 A69-27063
- ITOVSKII, N. A.  
Formation of radiation defects in indium antimonide at subthreshold radiation energies /Obrazovanie radiatsionnykh defektov v antimonide indiiia pri doporogovykh energiakh izlucheniia/.  
13 p2318 A69-27885
- Formation of radiation defects in indium antimonide at subthreshold radiation energy.  
21 p3782 A69-39144
- VITRICHENKO, E. A.  
The question of a blue companion of the delta Cepheid /delta Cep C/ /K voprosu o golubom sputnike delta Tsefida /delta Cep C//.  
11 p1957 A69-24405
- The blue companion of delta Cephei delta /Cep C/.  
24 p4391 A69-43795
- VITRIKHOVSKII, N. I.  
Temperature dependence of the refractive index of CdS single crystals.  
04 p0644 A69-15268
- Investigation of the luminescence of ZnS sub x -CdS sub 1 sub minus x crystals excited by a ruby laser /Issledovanie svecheniia kristallov ZnS sub x -CdS sub 1 sub minus x pri vzbuzhdenii rubinovym lazerom/.  
19 p3331 A69-35866
- VITS, W.  
The GaAs injection laser - Electrical and Optical Properties During Crystallization out of Solution /Der GaAs-Injektionslaser - Elektrische und optische Eigenschaften bei der Epitaxie aus der Loesung/.  
17 p2982 A69-33571
- VITSHAS, A. F.  
Study of an energy discharge sustained by a Lorentz force /Issledovanie elektricheskogo razriada, podderzhivaemogo siloi Lorentsa/.  
06 p0969 A69-17910
- VITTAL, G. S.  
An experimental circuit for simulation of split range gating.  
08 p1300 A69-20109
- VITVITSKII, P. M.  
Development of plastic strains at the tips of a crack in a thin plate under tension by concentrated forces /Pro rosvitok plastichnikh deformatsii bilia kintsiv shchilini v tonkii plastintsi pri ii roztiagu zoseredzhennimi silami/.  
15 p2708 A69-30659
- VIVENTI, R. V.  
The effect of silane coupling agents in glass-filled polypropylene.  
08 p1337 A69-20482
- VIVES, C.  
The coefficient of friction of porous media in the magnetodynamics of liquids /Sur le coefficient de frottement des milieux poreux en magnetodynamique des liquides/.  
03 p0480 A69-14112
- Experimental study, in the region of validity of the Darcy law, of the flow of a viscous electrically conducting fluid through an insulating porous medium in the presence of a transverse magnetic field /Etude experimentale, dans le domaine de validite de la loi de Darcy, de l'ecoulement d'un liquide visqueux et electroconducteur a travers un milieu poreux isolant en presence d'un champ magnetique transversal/.  
05 p0805 A69-16603
- VIVIAND, H.  
Application of asymptotic methods to the study of free viscous layers /Application des methodes asymptotiques a l'etude des couches visqueuses libres/.  
22 p3932 A69-40927
- Study of boundary layers with closed streamlines /Une etude de couches limites a lignes de courant fermees/.  
22 p3932 A69-40931
- VIVONA, F. M.  
The effect of the moon on the auroral activity of the earth /L'influenza della luna sull'attivita aurorale della terra/.  
24 p4311 A69-43502
- VIZEL, IA. M.  
Mass transfer during the condensation of cesium vapors from a moving mixture containing argon /Massoobmen pri kondensatsii parov tseziia iz dvizhushcheisia smesi s argonom/.  
15 p2718 A69-30998
- VIZERSKAIA, G. E.  
Facility for determining the true energy dissipation in a material subjected to cyclic strains over a wide range of temperatures /Ustanovka dlia opredeleniia istinnogo rassaiianiia energii v tsiklicheski deformirovannom materiale v shirokom diapazone temperatur/.  
17 p2946 A69-33925
- VLAARDINGERBROEK, M. T.  
Reduced build-up of domains in sheet-type gallium-arsenide Gunn oscillators.  
02 p0215 A69-11933
- VLAD, V. I.  
Laser effect in neodymium glass.  
17 p2979 A69-32828
- VLADIMIROV, F. S.  
Collision of jets flowing out of channels with parallel walls /Soudarenie strui, vytekaiushchikh iz kanalov s parallel'nymi stenkami/.  
12 p2016 A69-25879
- VLADIMIROV, S. A.  
Calculation of the unsteady temperature fields in an n-layer cylindrical wall for boundary conditions of the third kind /Raschet nestatsionarnykh temperaturnykh polei n-sloinnoi tsilindricheskoi stenki pri granichnykh usloviakh tret'ego roda/.  
24 p4407 A69-42588
- VLADIMIROV, V.  
Simplified method for calculating auroral absorption for distances of over 4000 km.  
16 p2749 A69-31603
- VLADIMIROV, V. I.  
Carrier dragging in a solid under the influence of laser emission.  
13 p2271 A69-27661
- Study of an electrical discharge due to a laser spark /Issledovanie elektricheskogo razriada cherez lazernuiu iskru/.  
21 p3740 A69-39552
- VLADIMIROV, V. V.  
Degenerate pinch in semiconductors /Vyrozhdennyi pinch v poluprovodnikakh/.  
02 p0300 A69-12638
- VLADIMIROVA, G. V.  
Temperature after-effect in aluminum.  
04 p0615 A69-14638
- VLADIMIRSKAIA, M. A.  
Investigation of the wear resistance of briquetted lubricants on a molybdenum disulfide base /Issledovanie iznosostoiivosti briketirovannykh smazok na osnove disul'fid molibdena/.  
21 p3733 A69-39805
- VLADIMIRSKII, B. M.  
Minor flare effects in cosmic rays according to measurements in the stratosphere /Malye efekty vspyshk v kosmicheskikh luchakh po izmereniiam v stratosfere/.  
04 p0648 A69-14375
- VLADIMIRSKII, V. V.  
A pulsar model.  
14 p2522 A69-29675
- VLAJINAC, M.  
An aerodynamic pitch-roll coupling in spinning vehicles.  
21 p3647 A69-39038
- VLASAK, M.  
Effect of startle stimuli on performance.  
07 p1066 A69-19421
- Startle stimulus, performance and vegetative reactions of men.  
23 p4088 A69-41808
- VLASSENKO, N. A.  
Effect of electrical polarization on electroluminescence brightness waves in zinc sulfide films /Vpliv elektrichnoi polarizatsii na khvili iskravosti elektroluminestsentsii v plivkakh sirchistogo tsinku/.  
05 p0807 A69-16213
- Role of polarization effects in unsteady electroluminescent processes in ZnS-Mn films /Pro pol' polarizatsiiniikh effektiv u nestatsionarnykh elektroluminestentnykh protsesakh v plivkakh ZnS.Mn/.  
05 p0807 A69-16214
- VLASSENKO, V. A.  
Study of the stability of multivariable automatic control systems /Ob issledovanii ustoiichivosti mnogomernykh sistem avtomaticheskogo regulirovaniia/.  
04 p0581 A69-14601
- VLASES, G. C.  
An experimental study of transverse ionizing MHD shock waves.  
04 p0637 A69-15052
- The production of highly ionized, low density plasmas by means of strong ultraviolet radiation.  
08 p1360 A69-20080
- VLASEVNINA, L. K.  
Procedure for calculating a plane melt flow in the production of bimetallic castings /Metodika rascheta ploskogo potoka rasplava pri izgotovlenii bimetalicheskikh otlovlak/.  
18 p3149 A69-35289
- VLASOV, A. D.  
Small-signal interaction of an electron beam with microwave cavities.  
02 p0208 A69-12265
- VLASOV, A. G.  
Problems of the optimization of spacecraft descent control in the atmosphere /Voprosy optimizatsii upravleniia spuskom kosmicheskogo apparata v atmosfere/.  
13 p2355 A69-27683
- Stochastic optimization of spacecraft descent control in the atmosphere /Stokhasticheskaia optimizatsiia upravleniia spuskom kosmicheskogo apparata v atmosfere/.  
21 p3767 A69-39648
- VLASOV, E. V.  
Calculation of the noise characteristics of jet airliners.  
09 p1435 A69-22637
- VLASOV, M. A.  
Ion-acoustic oscillations in an inhomogeneous plasma /Ionnozvuukovye kolebaniia v neodnorodnoi plazme/.  
12 p2136 A69-26527
- VLASOV, R. A.  
Method of determining the impact hardness of materials.  
10 p1801 A69-23850
- Microwave diagnostics of a semiinfinite inhomogeneous plasma with a sharp boundary /Mikrovolnovaia diagnostika polubeskonechnoi neodnorodnoi plazmy s rezkoii grantseii/.  
11 p1926 A69-24602
- VLASOV, V. A.  
Variation of the resistance of indium arsenide films in a magnetic field /Izmenenie soprotivleniia plenok arsenida indiiia v magnitnom pole/.  
01 p0136 A69-10254
- Electrical properties of epitaxial films of indium arsenide and antimonide.  
06 p0981 A69-17892
- Change of resistance of indium arsenide films in a magnetic field.  
09 p1559 A69-22647
- VLASOV, V. I.  
Mathematical experiment for the calculation of transport coefficients.  
03 p0415 A69-13419
- Radio-astronomical investigations of motions and dimensions of the small-scale irregularities in the interplanetary plasma.  
10 p1782 A69-23711



## VLASOVA, E. N.

Structural features of alloys with an f.c.c. lattice. I - The system Ni-Mo. 05 p0782 A69-16808

## VLASOVA, K. N.

New heat-resistant materials - Polyimides and polybenzimidazoles. 19 p3358 A69-35901

## VLASOVA, R. M.

Traveling excited states in organic semiconductors which are tetracyanoquinodimethane derivatives /D-vizhushchesia vzbuzhdennye sostoianiia v organicheskikh poluprovodnikakh-proizvodnykh tetratsianokhinodimetana/. 03 p0484 A69-13278

Moving excited states in organic semiconductors /derivatives of tetracyanoquinodimethane/. 14 p2508 A69-29652

## VLCEK, C. L.

The annual temperature variation in the lower tropical stratosphere. 07 p1126 A69-19043

## VLIET, G. C.

An experimental study of turbulent natural convection boundary layers. [ASME PAPER 69-HT-D] 24 p4410 A69-43525

Natural convection local heat transfer on constant-heat-flux inclined surfaces. [ASME PAPER 69-HT-C] 24 p4410 A69-43526

## VOCI, C.

Investigation of a Ne-Ar thermionic generator. 14 p2398 A69-29180

## VODAR, B.

Demonstration of a polarization of the light from the stimulated Brillouin effect in compressed gaseous nitrogen /Mise en evidence d'une depolarization de la lumiere emise par effet Brillouin stimule dans l'azote gazeux comprime/. 09 p1516 A69-21691

Experimental determination of the density of nitrogen up to 4000 atm and 1000 deg C /Determination experimentale de la densite de l'azote jusqu' a 4000 atm et 1000 deg C/. 17 p3073 A69-33393

## VODIANITSKII, A. A.

Nonlinear longitudinal oscillations in a nonisothermal plasma /Nelineinye prodol'nye kolebaniia neizotermicheskoi plazmy/. 09 p1550 A69-22025

## VODIANITSKII, O. A.

Propagation of an electromagnetic wave in a space with a gravitational wave metric. 14 p2487 A69-29669

## VODICKA, V. W.

The role of friction forces on magnetic tape contact areas. 19 p3312 A69-36285

## VOEGE, K.-H.

On the synthesis of reactance-bridge two-terminal networks with six reactances /Zur Synthese von Reaktanz-Bruecken-Zweipolen mit sechs Reaktanzen/. 08 p1295 A69-21166

## VOELK, H.

Highly irregular artificial plasma clouds in the auroral zone. 21 p3710 A69-38507

## VOELK, H. J.

Macroscopic quasilinear theory of the garden-hose instability. 01 p0133 A69-11217

## VOELKER, W.

A radiation source for testing optical solar radiation effects. 20 p3510 A69-37630

## VOEROES, G.

An alternative solution to the interface problem for display systems /Adatmegjeleno rendszerek interface problemainak lehetséges megoldása/. 22 p3908 A69-40936

## VOEVODA, N. V.

Comparative study of the antioxidizing and anticorrosion properties of dialkyl- and diaryliithiophosphates of metals /Sravnitel'noe issledovanie antiokisliatel'nykh i antikorroziionnykh svoystv dialkil- i diariliditiofosfatov metallov/. 12 p2027 A69-27091

## VOEVODIN, V. V.

Accuracy of the solution of systems of equations by direct methods /O tochnosti resheniia sistem uravnenii priamymi metodami/. 01 p0105 A69-10727

## VOEVODSKII, A. V.

Preliminary results of a search for fractionally-charged particles in the cosmic rays at sea level. 13 p2333 A69-28425

## VOGE, J.

Propagation of Waves. 19 p3275 A69-36382

## VOGEL, C. A.

The high speed tape transport. 23 p4165 A69-41776

## VOGEL, H. R.

Sensor for O sub 2 partial pressure telemetry /Mess-fuehler fuer die Telemetrie des O sub 2 -Partial-druckes/. 15 p2559 A69-31231

## VOGEL, J. S.

Noise in transistor mixers at high frequencies. 11 p1857 A69-25662

## VOGEL, K.

The problems of increasing microwave power by means of frequency multipliers /Probleme bei der Erzeugung groesserer Leistungen im Mikrowellendbereich mit Frequenzvervielfachern/. 11 p1841 A69-25607

## VOGEL, M.

Possibilities of microwave radiometry /Moeglichkeiten der Mikrowellen-Radiometrie/. 07 p1130 A69-18257

## VOGEL, P. E.

Acoustic holographic techniques for nondestructive testing. 10 p1695 A69-23544

## VOGEL, R. W.

Temperature stability of a slightly ionized gas for arbitrary collision cross-sections. 09 p1551 A69-22039

## VOGEL, S.

"Sun leaves" and "shade leaves" - Differences in convective heat dissipation. 18 p3095 A69-34540

## VOGEL, W. M.

Concentration changes in operating fuel cells. [ECS PAPER 335] 20 p3466 A69-38069

## VOGELMAN, J.

Laser link modulation means for wide spectrum telemetry world wide and urban communications systems. 19 p3272 A69-36257

## VOGENITZ, F. W.

Theoretical and experimental study of rarefied supersonic flows about several simple shapes. 02 p0189 A69-12523

Leading edge flow by the Monte Carlo direct simulation technique. [AIAA PAPER 69-141] 06 p0866 A69-18208

## VOGENITZ, R. W.

Rarefied hypersonic flow about cones and flat plates by Monte Carlo simulation. 20 p3459 A69-37902

## VOGES, R. C.

Practical impedance matching of a phased array radiating element. 04 p0572 A69-14323

## VOGT, F. B.

QRS discrimination from noisy electrocardiograms. 21 p3667 A69-39442

## VOGT, G.

Legal consequences of inaccurate air tariff computation /Rechtsfolgen aus fehlerhafter Flugpreisberechnung/. 07 p1244 A69-19232

## VOGT, H.

The temperature dependence of absorption of sodium nitrite in the far infrared. 03 p0490 A69-13940

## VOGT, H. C.

Novel flame-resistant chlorine-containing polyester resins. 08 p1340 A69-20505

## VOGT, L.

Dependence of tilt-table and acceleration tolerance on body build and physical fitness /Die Abhaengigkeit

der Orthostase- und Beschleunigungstoleranz vom Koerperbau und Leistungsfahigkeit/. 09 p1444 A69-21304

Influence of stature and physical fitness on tilt-table and acceleration tolerance. 22 p3889 A69-39940

Physical fitness and tolerances to environmental extremes. 23 p4102 A69-41683

The influence of stature and physical fitness on tilt-table and acceleration tolerance. 23 p4108 A69-41812

## VOGT, R. E.

Cosmic-ray negatron and positron spectra between 12 and 220 Mev. 08 p1380 A69-20728

Characteristics of the diurnally varying electron flux near the polar cap. 22 p4005 A69-40511

## VOHR, J. H.

Theoretical analysis of spiral-grooved screw seal for turbulent operation. [ASLE FICFS PREPRINT 32] 15 p2619 A69-30482

Hydrostatic bearings for cryogenic rocket engine turbopumps. 22 p3955 A69-40408

## VOICHAK, V. P.

Investigation of a turbulent compressible gas jet /Issledovanie turbulentnykh strui szhimaemogo gaza/. 21 p3645 A69-39847

## VOICULESCU, D.

Some applications of the distribution theory in the strength of materials /Quelques applications de la theorie des distributions dans la resistance des materiaux/. 15 p2715 A69-31475

## VOIDA, G.

Cable assemblies for the F-111 aircraft. 05 p0731 A69-16246

## VOINICH, B. A.

Determination of the number of channels required for errorless operation of multichannel radar systems /Opredelenie kolichestva kanalov, neobkhodimyykh dlia bezoshibochnoi raboty mnogokanal'nykh RLS/. 15 p2576 A69-30354

## VOINOV, O. V.

Energy transfer from a radiating sphere to a medium with molecular heat conduction /Perenos energii ot izluchaiushchei sfery v srede s molekuliarnoi teploprovodnost'iu/. 05 p0845 A69-15782

Energy transfer from a radiating sphere into a medium with molecular heat conduction. 18 p3230 A69-35034

Unsteady energy transport from a radiating sphere in a medium with molecular thermal conductivity /Nestatsionarnyi perenos energii ot izluchaiushchei sfery v srede s molekuliarnoi teploprovodnost'iu/. 18 p3231 A69-35325

## VOINOVA, I. I.

Effect of hypoxia on vestibular function in the rat. 02 p0198 A69-11506

Peculiarities of vestibular reactions in rats under conditions of artificial hypothermia /Osobennosti protekaniia vestibuliarnykh reaktsii u krysa v usloviakh iskusstvennoi hipotermii/. 17 p2906 A69-32934

## VOISHVILLO, N. A.

Backscattering of light ("echo") from objects with rough surfaces and volume scattering /Rasseianie sveta nazad ("ekho") ot ob'ektov s sherokhovatoi poverkhnost'iu i ob'emnym rasseianiem/. 06 p0887 A69-17173

## VOISINET, R. L.

An experimental investigation of the compressible turbulent boundary layer with a favorable pressure gradient. [AIAA PAPER 69-685] 17 p2956 A69-33489

## VOIT, S. S.

Diffraction of unsteady surface and internal waves /Difraktsiia neustanovivshikhsia poverkhnostnykh i vnutrennikh voln/. 12 p2061 A69-25953

## VOITENKO, A. E.

A self-similar electrical skin explosion of a conductor /Avtomodel'nyi elektricheskii skinoi vzyry provodnika/. 22 p3982 A69-41019

## MITENKO, D. M.

The interaction of a shock wave with a permeable wall /Vzaimodeistvie udarnoi volny i proniatsaemoi stenki/.

17 p2957 A69-33719

## MITKEVICH, V. I.

Oxygen saturation of outgoing renal blood under normal and hypoxic conditions /Kislorodnoe насыщение крови, оттекающей от почки, в нормальных и гипоксических условиях/.

14 p2406 A69-28916

## MITOVETSKII, V. K.

Methods for determining the thickness of thin films applied to a dissimilar material.

15 p2607 A69-30239

## MITSEKHOVSKII, O. V.

Reflection spectra of solid solutions of indium arsenide with compounds of the A super II and B super VI type.

07 p1198 A69-18511

## MITSEKHOVSKAIA, K. F.

Stability of second-order dynamic systems /Ustoichivost' dinamicheskikh sistem vtorogo poriadka/.

11 p1915 A69-24535

## MITSEKHOVSKAIA, S. A.

Unsteady oscillations of a plate occurring after rupture /O nestatsionarnykh kolebaniyakh plastiny, vznikayushchikh v rezul'tate ee razloma/.

16 p2873 A69-32033

## MITSEKHOVSKII, A. V.

Solid solutions in InAs-CdS and InAs-CdSe systems /Tverdye rastvory v sistemakh InAs-CdS i InAs-CdSe/.

02 p0297 A69-11882

Solid solutions in the InAs-CdS and systems.

18 p3182 A69-35042

## MITSEKHOVSKII, M. I.

The maximum principle for deformations of convex surfaces /Printsip maksimuma dlia izgibanii vypuklykh poverkhnosti/.

13 p2361 A69-27741

## MITSEKHOVSKII, V. B.

Determination of the steady-state and dynamic characteristics of a plant containing an element with constant lag /Viznachennia statichnikh i dinamichnikh kharakteristik ob'ekta, iakii mistit' lanku iz stalim zapiznyuvanniam/.

11 p1859 A69-24965

## VOJNOVIC, B.

Resolution stability of a tunnel diode subnanosecond coincidence circuit.

05 p0735 A69-16743

## VOJTA, G.

Higher harmonics generation in weakly ionized plasmas in time-varying crossed fields.

16 p2820 A69-31752

Generalized electron cyclotron resonance in weakly ionized time-varying magnetoplasmas.

16 p2820 A69-31753

## VOJVODICH, N. S.

Ablative characterization of seven heat shield materials - A review of the NASA-SRI Round-Robin program.

12 p2119 A69-26813

## VOKES, J. C.

A broad-band parametric amplifier.

01 p0041 A69-10243

Gain stabilization of parametric amplifiers.

09 p1467 A69-22585

## VOKHMIANIN, I. T.

Stability and buckling of inhomogeneous rods beyond the elastic limit /Ob ustoichivosti i vypuchivani neodnorodnykh sterzhnei za predelom uprugosti/.

19 p3446 A69-36846

## VOL, V. P.

Analytical design of an automatic system for controlling helicopters flying in formation /Analiticheskoe konstruirovani optimal'noi sistemy avtomaticheskogo upravleniia poletom vertoletov v stroiu/.

18 p3090 A69-34656

## VOLAROVICH, M. P.

Studies in the field of phenomenological rheology /Issledovaniia v oblasti fenomenologicheskoi reologii/.

13 p2369 A69-28562

## VOLCHINSKAIA, M. I.

A finite-difference method for solving one-dimensional nonsteady-state problems of magnetohydrodynamics /Metod konechnykh raznostei dlia resheniia odnomernykh nestatsionarnykh zadach magnitnoi gidrodinamiki/.

01 p0129 A69-10722

## VOLCHKOV, IU. M.

Plate bending in the case of unsteady creep /Izgin plastin pri neustanovivsheisya polzuchesti/.

04 p0679 A69-14923

## VOLCHKOV, V. V.

Thickness and internal structure of a direct shock wave in a highly underexpanded jet discharging into a low-density volume /Tolschina i vnutrenniaia struktura priamoio skachka uplotneniia, obrazuiushchegosia pri istechenii sil'no nedorasshirennoi strui v prostranstvo s maloi plotnost'iu/.

19 p2329 A69-36396

## VOLCKMAN, P. V.

Pseudonoise ionospheric-communication system.

18 p3104 A69-35308

## VOLFBEIN, S. P.

Transmission of Discrete Signals by Means of Frequency Modulation /Peredacha diskretnykh signalov s pomoshch'iu chastotnoi modulatsii/.

12 p2033 A69-26866

## VOLFSON, I. M.

Investigation of the effect of sweep of straight turbine guide vanes /Issledovanie efekta strelovidnosti v priamoio reshetke turbinnykh profilei/.

15 p2547 A69-30570

## VOLGA, V. I.

The entrainment effect in graphite /Ob effekte uvlecheniia v grafite/.

21 p3753 A69-39562

## VOLIAK, L. D.

Experimental determination of saturated lithium vapor pressure /Eksperimental'noe opredelenie davleniia nasyshchennogo para litia/.

15 p2656 A69-30997

## VOLKENSHTEIN, N. V.

Study of the dependence of the superconductivity properties on the structure of a titanium-47 wt percent niobium alloy /Issledovanie zavisimosti sverkhprovodiashchikh svoystv ot struktury splava titan-47 ves percent niobia/.

07 p1158 A69-18532

## VOLKER, W.

Problems of estimating biological radiation doses and radiation protection in space.

11 p1831 A69-24866

## VOLKERSEN, O.

Cylinder reinforced by stringers and ribs under internal overpressure /Der durch Stringer und Spante versteifte Zylinder unter innerem Ueberdruck/.

04 p0548 A69-14838

## VOLKOFF, J. J.

Selection of an effective mass-density value for meteoric matter.

21 p3805 A69-39229

## VOLKONSKII, V. B.

Broadband intraresonator SHF modulation of a He-Ne laser /Shirokopolosnaia vnutrerezonatornaia SVCh modulatsiia He-Ne-lazera/.

17 p2981 A69-33112

## VOLKOV, A.

Artificial gravitation on spacecraft /Iskusstvennaia gravitatsiia na kosmicheskikh korabliakh/.

16 p2746 A69-31930

## VOLKOV, A. F.

Theory of instability in two-valley semiconductors /K teorii neustoiichivosti v dvukhdolnykh poluprovodnikakh/.

06 p0981 A69-17879

Physical phenomena in semiconductors with negative differential conductivity /Fizicheskie iavleniia v poluprovodnikakh s otritsatel'noi differentsial'noi provodimost'iu/.

10 p1744 A69-23300

Theory of instability in two-valley semiconductors.

14 p2503 A69-28788

Design of tests for self-diagnosable control digital computers.

20 p3502 A69-37394

Problem of friction during diamond honing /K voprosu o trenii pri almaznom vyglazhivani/.

22 p3958 A69-41170

## VOLKOV, A. M.

Possibility of using the graph method in electrophysiology /O vozmozhnosti primeneniia metoda grafov v elektrofiziologii/.

11 p1829 A69-24540

Biological principles for constructing a model of the sensorimotor activity of a human operator /Biologicheskie printsipy postroeniia modeli sensomornoio deiatel'nosti cheloveka-operatora/.

22 p3892 A69-40281

## VOLKOV, A. N.

Derivation of an approximate theory of zero-moment shells by asymptotic integration of the equations of elasticity theory.

05 p0843 A69-16689

## VOLKOV, A. V.

X-ray television equipment for industrial defectoscopy.

18 p3138 A69-35113

## VOLKOV, E. A.

Solution by the network method of the Dirichlet problem for the Laplace equation in regions with rounded corners /O reshenii metodom setok zadachi Dirikhle dlia uravneniia Laplasa na oblastiakh s zakruglennymi uglami/.

12 p2123 A69-26730

## VOLKOV, E. D.

Vacuum system of the Sirius stellarator.

03 p0412 A69-13839

## VOLKOV, IU. A.

Turbulence in the atmospheric boundary layer above steppe and sea surfaces /Turbulentnost' v pogranichnom sloe atmosfery nad stepnoi i morskoi poverkhnostiami/.

03 p0458 A69-13270

Transistorized two-stage amplifiers with common feedback /Dvukhkaskadnye tranzistornye usiliteli s obshchei obratnoi svyaz'iu/.

04 p0575 A69-14466

Turbulence in the atmospheric boundary layer above steppe and sea surfaces.

14 p2471 A69-28778

Certain problems in the physics of the near-water atmospheric layer /in connection with the calculation of turbulent flow, amount of movement, heat, and humidity over the sea /Nekotorye voprosy fiziki prirodnoio sloia atmosfery /v svyazi s raschetom turbulentnykh potokov kolichestva dvizheniia, tepla i vlagi nad morem/.

14 p2443 A69-29839

## VOLKOV, IU. M.

Measurement of diffusion cross sections of slow electrons in inert gases by a microwave method.

03 p0481 A69-14143

Electrical conductivity and energy balance in a nonequilibrium plasma - Neon-cesium, krypton-cesium, xenon-cesium gas mixtures /Elektroprovodnost' i balans energii v neravnovesnoi plazme - Smesi neontsezi, kripton-tsezi, ksenon-tsezi/.

10 p1731 A69-23439

## VOLKOV, L. N.

The synthesis of optimal systems with a limited transfer process time.

14 p2425 A69-28820

## VOLKOV, M. S.

Determination of the shape of the lunar surface from the values of the coefficients of expansion of the gravitational potential of the moon /Opredelenie formy poverkhnosti luny po znacheniiam koeffitsientov razlozheniia gravitatsionnogo potentsiala luny/.

20 p3596 A69-37308

## VOLKOV, S. D.

Initial thermomechanical stresses in two-dimensional media.

17 p3058 A69-33316

Static fatigue of glass-fiber reinforced plastics /O staticheskoi ustalosti stekloplastikov/.

22 p3974 A69-40748

## VOLKOV, V. A.

Distribution of the field and current in the cross section of a blank during electromagnetic shaping /Raspredelenie polia i toka po sечeniiu zagotovki pri elektromagnitnoi formovke/.

18 p3151 A69-35456

## VOLKOV, V. G.

Possible errors of absolute radio emission measurements /O vozmozhnykh pogreshnostiakh absoliutnykh izmerenii radioizlucheniia/.

06 p0929 A69-18000

## VOLKOV, V. M.

Methods of realizing functional amplitude characteristics in parametric amplifiers /Sposoby realizatsii funktsional'nykh amplitudnykh kharakteristik v parametricheskikh usiliteliakh/.

11 p1849 A69-24957

Accuracy of the amplitude characteristics of two types of logarithmic amplifiers /Tochnost' amplitudnykh kharakteristik dvukh tipov logarificheskikh usilitel'ei/.

15 p2574 A69-30128



## VOLKOV, V. N.

## VOLKOV, V. N.

A refinement of the Karman-Pohlhausen integral method in boundary layer theory.  
04 p0591 A69-15408

## VOLKOV, V. P.

Interaction of acoustic waves with the hot surface of solid fuels at high frequencies /O vzaimodeistvii akusticheskikh voln s gorishchei poverkhnost'iu tverdykh topliv pri povyshennykh chastotakh/.  
13 p2371 A69-27383

## VOLKOVA, M. A.

Phase equilibria of alloys of the Ti-Al-Mo-Zr system /Fazovye ravновесия v splavakh sistemy Ti-Al-Mo-Zr/.  
04 p0618 A69-15079

Phase diagram of a part of the Ti-Al-V /up to 45 percent Al/ ternary system /Diagramma sostoiianiia chasti trinoi sistemy Ti-Al-V /do 45 percent Al/.  
07 p1161 A69-18768

Investigation of the phase equilibrium and some properties of titanium-rich alloys of the Ti-Al-Mo-Zr system /Issledovanie fazovogo ravновесия i nekotorykh svoystv splavov sistemy Ti-Al-Mo-Zr, bogatykh titanom/.  
07 p1161 A69-18769

Investigation of alloys of the Ti-Al-Mo-Zr system using the bend test method at elevated temperatures /Issledovanie splavov sistemy Ti-Al-Mo-Zr metodom izgiba pri povyshennykh temperaturakh/.  
07 p1163 A69-18779

Study of the phase transformations in titanium-rich alloys of the Ti-Al-Fe system /Issledovanie fazovykh prevrashchenii v splavakh sistemy Ti-Al-Fe v chasti, bogatoi titanom/.  
22 p3969 A69-40074

## VOLKOVA, N. V.

Breakdown in alkali-halide crystals caused by laser radiation.  
10 p1745 A69-23322

Investigation of exchange interactions in lithium ferrite aluminates /Issledovanie obmennyykh vzaimodeistvii v ferritakh- aluminatakh litii/.  
13 p2320 A69-27995

## VOLKOVICH, V. L.

Compromise control in systems with two hierarchy levels /Kompromisne keruvannia v sistemakh z dvoma rivniami ierarkhii/.  
08 p1297 A69-20415

A compromise control in the hierarchical structure controlled members.  
12 p2050 A69-26089

## VOLLAND, H.

Direct in situ measurements of wave propagation in the neutral thermosphere.  
05 p0754 A69-16261

Full wave calculations of gravity wave propagation through the thermosphere.  
11 p1878 A69-25150

The upper atmosphere as a multiply refractive medium for neutral air motions.  
12 p2085 A69-26101

On thermospheric disturbances with periods equal to or greater than one day.  
15 p2605 A69-31439

A theory of thermosphere dynamics. I - Diurnal and solar cycle variations.  
24 p4367 A69-43003

## VOLLERNER, N. F.

Selecting optimum parameters for radio-electronic equipment.  
14 p2418 A69-28835

## VOLLMER, G.

Inverse problem in atom-atom scattering in WKB-approach.  
19 p3378 A69-36189

## VOLLRATH, K.

Photographic investigation of ultrahigh-speed processes in multiply reflected laser light /Photografische Untersuchung von Hoechstgeschwindigkeitssprozessen im mehrfach reflektierten Laserlicht/.  
12 p2086 A69-26168

## VOLLSTAEDT, H.

Investigations of reversal phenomena of the main geomagnetic field /Untersuchungen zu Umkehrungserscheinungen des geomagnetischen Hauptfeldes/.  
16 p2782 A69-32462

## VOLMIR, A. S.

Dynamic and static problems in the theory of deformable membranes of the cardiovascular system /Dinamicheskie i staticheskie zadachi teorii deformiruemykh obolochek krovenosnoi sistemy/.  
12 p2018 A69-25989

## VOLMIR, E. A.

Behavior of an elastic cylindrical panel in a fluid under the action of a shock wave /Povedenie uprugoi tsilindricheskoi paneli pod deistviem udarnoi volny v zhidkosti/.  
18 p3216 A69-34579

## VOLODKO, A. M.

Dynamics of a helicopter after the loss of a portion of the main rotor and tail rotor blades /Dinamika veretoleta pri otryve chasti lopasti nesushchego i rulevogo vintov/.  
14 p2393 A69-29744

## VOLOKHOV, S. A.

Observations of the polarization of cosmic radio emission near the galactic anticenter at wavelengths of 70, 60, and 40 cm /Nabludeniiia polarizatsii kosmicheskogo radioizlucheniia vblizi antitsentra galaktiki na volnakh 70, 60 i 40 cm/.  
03 p0501 A69-13704

## VOLOKHOV, V. S.

Dispersion method of arbitrary /spontaneous/ decomposition of an image space into compact sets /images/. II /Dispersiini metod dovil'nogo /spontannogo/ rozbittia prostoru zobrazen' na kompaktni mnozhini /obrazzi/. II/.  
11 p1859 A69-24964

## VOLOSCHENKO, A. P.

Device for testing materials under thermal and mechanical cyclic loads.  
20 p3544 A69-37816

## VOLOSEVICH, P. P.

A finite-difference method for solving one-dimensional nonsteady-state problems of magnetohydrodynamics /Metod konechnykh raznostei dlia resheniia odnomernykh nestatsionarnykh zadach magnitnoi gidrodinamiki/.  
01 p0129 A69-10722

## VOLOSHCHUK, I. I.

A meteor station recorder with a high effective sensitivity /Registrator meteornoi stantsii vysokoi effektivnoi chuvstvitel'nosti/.  
17 p2976 A69-33898

## VOLOSHIN, A. E.

Experimental investigation of a pulsed high-frequency plasma on the basis of laser light scattering /Eksperimental'noe issledovanie impul'snoi vysokochastotnoi plazmy po rasseianiiu izlucheniia lazera/.  
14 p2451 A69-29781

Laser facility for plasma diagnostics /Lazernaia apparatura dlia diagnostiki plazmy/.  
14 p2461 A69-29782

## VOLOSOV, V. D.

Device for studying the spectral characteristics of laser emission /Ustroistvo dlia issledovaniia spektral'nykh kharakteristik izlucheniia opticheskogo kvantovogo generatora/.  
02 p0257 A69-12560

Generation of the second optical harmonic in cylindrically focused beams /O generatsii vtoroi opticheskoi garmoniki v tsilindricheski sfokusirovannykh puchkakh/.  
03 p0438 A69-13048

Influence of laser radiation parameters on the effectiveness of frequency doubling in a KDP crystal /Vliianie parametrov izlucheniia lazera na effektivnost' udvoeniia chastoty v kristalle KDP/.  
04 p0612 A69-15375

Arrangement for studying the spectral characteristics of laser radiation.  
15 p2633 A69-30257

The effect of radiation parameters of a laser on the efficiency of frequency doubling in a KDP crystal.  
16 p2797 A69-32122

Second harmonic generation of nonmonochromatic laser emission in a nonlinear crystal /Generatsiia vtoroi garmoniki nemonokhromaticheskogo izlucheniia lazera v nelineinom kristalle/.  
20 p3554 A69-37727

## VOLOSOV, V. I.

Some characteristics of rotating plasma behavior in a magnetic trap.  
10 p1740 A69-23716

Measurement of the ion temperature of a plasma on the basis of neutron emission /Izmerenie ionnoi temperatury plazmy po neitronnomu izlucheniui/.  
14 p2498 A69-29808

## VOLOV, V. D.

Observation of radio emission from extensive air showers with an array of half-wave antennas at the Moscow University installation.  
13 p2332 A69-28407

Some aspects of the use of a half-wave antenna to investigate radio emission from extensive air showers.  
13 p2332 A69-28408

## VOLPIN, M. E.

Problems of nitrogen fixation under mild conditions /Problemy fiksatsii azota v miagkikh usloviakh/.  
03 p0382 A69-14199

## VOLYNETS, V. M.

Effect of a plant diet which includes a biomass of unicellular algae on excretion and balance of mineral elements.  
10 p1647 A69-23590

## VOLYNKIN, I. M.

Preliminary data concerning physiological studies relating to manned space flight /Pervye dannye o fiziologicheskikh issledovaniiaxh pri polete cheloveka v kosmos/.  
07 p1060 A69-18569

Certain data concerning the conditions of the cosmonauts during the flight of the first space expedition on the Voskhod spacecraft /Nekotorye dannye o sostoianii kosmonavtov vo vremia poleta pervoi kosmicheskoi ekspeditsii na korabe "Voskhod"/.  
07 p1060 A69-18571

## VOLZ, F. E.

Neutral points of sky polarization in spring and summer 1968.  
12 p2067 A69-26343

## VOLZ, H.

Rotational motion of a system of n mass points. I /Zur rotatorischen Bewegung eines Systems von n Massenpunkten. I/.  
02 p0280 A69-11867

Rotational motion of a system of n mass points. II /Zur rotatorischen Bewegung eines Systems von n Massenpunkten. II/.  
24 p4349 A69-42650

## VOLZ, M.

An operational viewpoint of jet airport runways. [SAE PAPER 690377]  
23 p4147 A69-41670

## VOLZ, W. C.

Slot-jet interaction studies at M sub infinity equals 4 and 5.  
24 p4249 A69-43686

## VOM STEIN, H.-D.

Investigation of shock processes by means of a laser interferometer /Untersuchung von Stossvorgaengen mittels eines Laser-Interferometers/.  
02 p0282 A69-12607

## VOMPE, A. F.

Stimulated emission of dyes in the 720 to 920-nm region /Stimulirovannoe izluchenie krasitelei v oblasti 720-920 nm/.  
04 p0612 A69-15373

Stimulated luminescence of dyes in the 720-920 nm region.  
16 p2797 A69-32120

Study of the effectiveness of various types of polymethine dyes used in passive Q-switches of neodymium lasers /Issledovanie effektivnosti razlichnykh tipov polimetinovykh krasitelei, primeniaemykh v passivnykh zatvorakh neodimovykh OKG/.  
17 p2983 A69-33968

## VON BAUMGARTEN, R. J.

Behavioral responses to short periods of lowered gravitational force in blind goldfish.  
11 p1828 A69-25464

## VON BEZOLD, W.

Method for determining the value of airfield weather forecasts /TAF/ /TAF verification/ /Eine Methode, die Guete von Flugplatzwetter-Vorhersagen /TAF/ zu ermitteln /TAF-Verification/.  
11 p1913 A69-25205

## VON BONIN, E.

The energy balance of plasma radiation arcs /Die Energiebilanz von Plasmastrahlbogen/.  
05 p0802 A69-15996

## VON BONIN, L.

Consideration of the design of a supercharged engine for light aircraft /Gedanken zur Auslegung eines Geblaesetriebwerks fuer Leichtflugzeuge/.  
08 p1254 A69-20168

## VON BORSTEL, R. C.

Mutational responses of insects in the Biosatellite II experiment.  
20 p3476 A69-37618

## VON BRAMER, P. T.

Bonding characteristics of alkyl cyanoacrylate adhesives.  
09 p1529 A69-22316

- N DEL CHAMBERLAIN**  
A network for rapid analysis of fireball trajectories.  
19 p3295 A69-36121
- N E. DOERING, H.**  
Electrode potential measurements of nickel-base alloys in molten salts.  
17 p2990 A69-33650  
Construction and operation of a hot corrosion test facility.  
22 p3928 A69-40673
- N ESHLEMAN, R.**  
The atmosphere of Mars - Radio occultation measurements and interpretations.  
02 p0320 A69-12116
- N GIERKE, H. E.**  
Studies of acoustical stimulation of the vestibular system.  
03 p0376 A69-14076  
Response of the body to mechanical forces - An overview.  
04 p0552 A69-14470
- N GOELER, S.**  
Kelvin-Helmholtz instability for a collisionless plasma model.  
08 p1367 A69-20799  
Classical diffusion of a stationary toroidal plasma.  
11 p1925 A69-24312
- N HAEFEN, G.**  
Investigation of the propagation of microwaves in a model plasma /Untersuchungen zur Mikrowellenausbreitung in einem Modellplasma/.  
17 p2932 A69-34218
- N HARTMANN, W.**  
The application of bench tests in the development of heat-sterilizable battery separators.  
23 p4072 A69-42284
- N HASELBERG, K.**  
Feasible orbits and an infrared scanning radiometer for a European geostationary satellite.  
15 p2650 A69-31389
- N HEIMENDAHL, M.**  
Electron microscope study of recovery in copper-containing aluminum alloys /Elektronenmikroskopische Untersuchung der Reuekbildung in kupferhaltigen Aluminiumlegierungen/.  
22 p3968 A69-40062
- N HERZEN, R. P.**  
Heat flow in oceanic regions.  
21 p3718 A69-39733
- N HOERNER, S.**  
Homologous deformations of tiltable telescopes.  
23 p4231 A69-42138
- N KANN, C. F.**  
A review of the V/STOL situation.  
10 p1811 A69-23221  
The V/STOL situation revisited.  
24 p4418 A69-42870
- N KESZYCKI, C. H.**  
Passenger transport at low supersonic speeds.  
[AIAA PAPER 69-776] 19 p3244 A69-35647
- N KLUEBER, H.**  
Correlation between local solar magnetic fields and central intensities in some Fraunhofer lines.  
07 p1219 A69-19285
- N MICHAELIS, H.**  
Fractionation of some abundant lithophile element ratios in chondrites.  
08 p1403 A69-20915  
The composition of stony meteorites. I - Analytical techniques.  
11 p1953 A69-24358  
The composition of stony meteorites. II - The analytical data and an assessment of their quality.  
11 p1953 A69-24359  
The composition of stony meteorites. III - Some inter-element relationships.  
11 p1954 A69-24360  
Fractionation of some abundant lithophile element ratios in chondrites.  
19 p3409 A69-36087  
The composition of the stony meteorites. IV - Some analytical data on Orgueil, Nogoya, Ornans and Ngawi.  
24 p4382 A69-42927  
The composition of stony meteorites. V - Some aspects of the composition of the basaltic achondrites.  
24 p4382 A69-42928
- N PRAGENAU, G. L.**  
Stability analysis of Apollo-Saturn V propulsion and structure feedback loop.  
[AIAA PAPER 69-877] 21 p3824 A69-39403
- VON RAUCHHAUPT, F. W.**  
Survey and prospects of the law of outer space - 1968.  
20 p3638 A69-37129
- VON RAUCHHAUPT, FR. W.**  
Primary sources of international space law /Die Hauptquellen des Weltraumrechts/.  
13 p2381 A69-27529  
Main sources of Outer-space Law /Die Hauptquellen des Weltraumrechts/.  
15 p2720 A69-31052
- VON ROSENVINGE, T. T.**  
The relative energy spectra of carbon and oxygen nuclei in the primary cosmic radiation.  
08 p1380 A69-20632  
Measurements of cosmic-ray Li, Be and B nuclei in the energy range 100 Mev/nuc to greater than 22 Bev/nuc.  
08 p1380 A69-20638
- VON SCHMELING, H. H. K.**  
On the transformation of histograms with geometrically progressing class intervals.  
20 p3627 A69-37764
- VON SPECHT, J.**  
Measurement of absorption oscillator strengths of Ball lines in the spectral regions from 1400 to 2000 angstrom units and from 4100 to 4600 angstrom units /Messung der Absorptionsoszillatorenstärken von Ball Linien in den Spektralbereichen von 1400-2000 angstrom units und von 4100-4600 angstrom units/.  
02 p0242 A69-11872
- VON STEIN, H. D.**  
New laser interferometry methods of measuring high speed model missiles.  
11 p1886 A69-25042
- VON STRUVE, H. C., III**  
Autonomous navigation for Mars entry.  
19 p3368 A69-35790
- VON TIESENHAUSEN, E.**  
Study of stress corrosion cracking of commercial titanium alloys.  
19 p3353 A69-36908
- VON TRZEBIATOWSKI, A.**  
Determination of temperature and electron density in a plasma beam using a low-dispersion spectrograph /Bestimmung von Temperatur und Elektronendichte mit einem Spektrographen geringer Dispersion in einem Plasmastrahl/.  
05 p0803 A69-15997
- VON WIESER, M. F.**  
Human factors in the all-weather approach.  
23 p4109 A69-41871
- VON ZAHN, U.**  
Mass spectrometric investigation of the thermosphere at high latitudes.  
20 p3533 A69-38086  
Neutral particle density ratios in the thermosphere as derived from mass spectrometric measurements above Sardinia.  
21 p3704 A69-38368  
Digital processing of data from rocket-mass spectrometers /Digitale verarbeitung der messwerte von raketen-massenspektrometern/.  
22 p3904 A69-40232
- VONBUN, F. O.**  
Satellite trajectory determination and their expected errors.  
15 p2698 A69-31331
- VONDER HAAR, T. H.**  
Satellite observations of the earth's radiation budget.  
07 p1127 A69-19261  
Geosynchronous meteorological satellite.  
12 p2174 A69-26804  
Absorption of solar radiation in tropical regions.  
20 p3591 A69-38058
- VONDRAK, J.**  
The trajectory of a light ray through the atmosphere as a solution of a system of differential equations.  
21 p3675 A69-39245  
Results of measuring the positions of the moon by the method of equal altitudes.  
23 p4208 A69-41289
- VONGERICHTEN, E.**  
Methods of simulating random vibrations /Les moyens de simulation des vibrations aleatoires/.  
19 p3294 A69-35904
- VONGPANITLERD, S.**  
Invariant of a noisy two-port.  
07 p1104 A69-18891
- VOORHEES, C. G.**  
Effect of upstream mass injection on the pressure field in a cavity.  
16 p2770 A69-31902
- VOORHEES, H. R.**  
A survey of effects of lower-than-usual rates of strain on the yield and tensile strengths of metals.  
20 p3563 A69-38063
- VOORHIES, H. G.**  
Plasma-current multipole experiments.  
16 p2823 A69-32563
- VOOS, M.**  
Bistable operation of a CW GaAs injection laser.  
01 p0090 A69-10565
- VOPEL, D.**  
A coil theodolite for use with a proton magnetometer to measure the components of the earth's magnetic field /Ein Spulentheodolit zur Messung der erdmagnetischen Komponenten mit dem Protonenmagnetometer/.  
11 p1889 A69-25435
- VORA, M. B.**  
P-n isolation for monolithic integrated circuits.  
02 p0222 A69-12471
- VORABEV, V. I.**  
The influence of nonstationarity and baroclinicity on the turbulence pattern in the atmospheric boundary layer.  
21 p3760 A69-39659
- VORECK, W. E.**  
Capsule for irradiation of explosives.  
17 p3004 A69-32945
- VORIS, C. R.**  
Space applications of beryllium propellants.  
02 p0303 A69-11763
- VORLICEK, V.**  
Electronic properties of amorphous CdGeAs sub 2.  
19 p3390 A69-36557
- VOROBEEV, A. P.**  
Stability of a tangential velocity discontinuity in an acoustic field /Ob ustoiichivosti tangentsial'nogo razryva skorosti v akusticheskoi pole/.  
06 p0910 A69-17344
- VOROBEEV, B. A.**  
Method of calculating the equilibrium compositions of reaction products by permutation over a limiting equilibrium surface /Metod rascheta ravnovesnykh sostavov produktov reaktsii peremescheniem po predel'noi poverkhnosti ravnovesii/.  
11 p2001 A69-25224
- VOROBEEV, E. I.**  
Radiation danger during prolonged space flights and radiobiological investigations.  
08 p1261 A69-19826  
Myocardial changes in rabbits after general chronic irradiation /according to karyometric data/ /Izmeneniia miokarda u krolikov posle obshchego khronicheskogo oblucheniia /po dannym kariometrii/.  
17 p2906 A69-32929
- VOROBEEV, I. U.**  
Experimental study of the probability of loss of a pulse during the transmission of binary information in the optical wavelength range /Eksperimental'nye issledovaniia veroiatnosti propuskai impul'sa pri peredache dvoichnoi informatsii v opticheskoi diapazone voln/.  
11 p1834 A69-24611  
Numerical Methods in the Applied Theory of Elasticity /Chislennye metody v prikladnoi teorii uprugosti/.  
18 p3211 A69-34331
- VOROBEEV, I. U. V.**  
Study of the effect of electron heating on the electron current instability in high-resistivity GaAs /Issledovanie vlianiia nagreva elektronov na neustoiichivost' elektricheskogo toka v vysokoomnom GaAs/.  
19 p3391 A69-36609
- VOROBEEV, L. M.**  
Study of the Coriolis couple in the horizontal semicircular canals during rotation of humans with simultaneous rotatory motion of the head /O parakh sil koriolisa v gorizont'al'nykh polukruzhnykh kanalakh pri vrashchenii cheloveka s odnovremennym vrashchatel'nyim dvizheniem golovy/.  
12 p2020 A69-26565  
Astronavigation of Flight Vehicles /Astronomicheskaiia Navigatsiia Letatel'nykh Apparatov/.  
18 p3168 A69-34355



VOROBEEV, V. I.

An algorithm for discriminating signals with unknown mean values /Ob odnom algoritme razpoznavania signalov s neizvestnymi srednimi znacheniami/.  
05 p0719 A69-16218

Effect of instability and baroclinicity on the turbulent regime of the atmospheric boundary layer /O vliyanii nestatsionarnosti i baroklinnosti na turbulentnyi rezhim pogranichnogo sloia atmosfery/.  
10 p1722 A69-23973

VOROBEEV, V. S.

Nonequilibrium low-temperature plasma. II - Energy distribution of the free electrons.  
05 p0802 A69-15889

Theory of nonequilibrium low-temperature plasma /K teorii neravnovesnoi nizkoteraturnoi plazmy/.  
06 p0969 A69-17906

The optical properties of hot air. I - Basic processes and spectral properties /Opticheskie svoystva goraiachego vozdukh. I - Osnovnye protsessy i spektral'nye kharakteristiki/.  
07 p1185 A69-19166

The optical properties of hot air. II - Integral characteristics between 4000 and 20,000 K /Opticheskie svoystva goraiachego vozdukh. II - Integral'nye kharakteristiki 4000-20 000 deg K/.  
07 p1185 A69-19167

Contribution to the theory of nonequilibrium ionization in a low-temperature plasma /K teorii neravnovesnoi ionizatsii v nizkoteraturnoi plazme/.  
10 p1732 A69-23440

Low-temperature nonequilibrium plasma. III - Electron concentration in a nonequilibrium plasma /Neravnovesnaia nizkoteraturnaia plazma. III - Konsentratsiia elektronov v neravnovesnoi plazme/.  
15 p2662 A69-30975

VOROBEEV, V. V.

Temperature dependence of the lattice constants of yttrium at 77-300 deg K.  
02 p0298 A69-12047

Multiframe image converter registration of the process of ruby laser giant pulse formation.  
12 p2083 A69-26142

VOROBEEVA, A. G.

Influence of a horizontally inhomogeneous boundary layer on the dynamics of large-scale processes.  
02 p0273 A69-11435

VOROBEEVA, E. M.

Orthogonality of the natural oscillation modes of shells within the engineering moment theory /Ob ortogonal'nosti sobstvennykh form kolebaniia obolochek v granitsakh tekhnicheskoi momentnoi teorii/.  
05 p0840 A69-16200

VOROBEEVA, L. P.

Regularities of the change in properties of binary vanadium alloys /Zakonomernosti izmeneniia svoystv dvoynykh vanadiyevykh splavov/.  
08 p1333 A69-20439

VOROBEEVA, N. A.

Difference methods for solving the incorrect Cauchy problem for the three-dimensional Laplace equation /Raznostnye metody resheniia nekorrektnoi zadachi Koshi dlia trekhmernogo uravneniia Laplasa/.  
03 p0424 A69-13661

VOROBEEVA, V. A.

Periods of rotation of the satellites 1965-11-4  
12 p2069 A69-26440

VOROBKALO, F. M.

Recombination radiation of GaAs alloy-type diodes /Rekombinatsiine viprominiuvannia splavnykh GaAs-diodiv/.  
05 p0729 A69-16210

The electroluminescence of alloyed Si and GaAs diodes.  
06 p0893 A69-16898

Electroluminescence of p-GaAs diodes /Elektroluminestsentsiia diodov iz p-GaAs/.  
13 p2230 A69-27887

Recombination radiation of alloyed GaAs diodes.  
20 p3506 A69-37783

Electroluminescence of p-type GaAs diodes.  
21 p3682 A69-39145

VORONENKO, V. I.

Photographic observations of Mars at Nikolaev in 1965 /Fotograficheskie nabludeniiia Marsa v Nikolaev v 1965 g./.   
22 p4025 A69-40613

VORONENKO, V. P.

Optimum relationships in autodyne tunnel diode frequency converters.  
09 p1469 A69-22631

VORONIN, A. M.

The theory of invariance in automatic control systems /Teoriia invariantnosti sistem avtomatichnogo keruvanniia/.  
23 p4145 A69-42368

Stability of combined automatic systems of one class /Pro stiiikst' kombinovanykh avtomatichnykh sistem odnogo klasu/.  
23 p4145 A69-42370

VORONIN, F. S.

Experimental investigation of the supersonic flow of a rarefied gas around blunted cylinders /Eksperimental'noe issledovanie obtekaniiia zatuplennykh tsilindrov sverkhzvukovym potokom razrezhennogo gaza/.  
11 p1821 A69-25478

VORONIN, L. K.

Thermal conductivity, electrical resistivity, and integral degree of blackness of refractory metals at high temperatures /Teplotoprovodnost', udel'noe elektrosoprotivlenie i integral'naia stepen' chernoty tugo-plavkvykh metallov pri vysokikh temperaturakh/.  
09 p1522 A69-21589

VORONIN, V. J.

Temperature drop over the cross section of a wall in the case of transpiration cooling /Temperaturnyi perepad v sechenii stenki pri okhlazhdenii vypotevaniem/.  
11 p2002 A69-25334

VORONINA, T. I.

On electro-physical properties of ZnSnSb sub 2.  
15 p2667 A69-30197

VORONKIN, N. F.

Corrosion resistance of Duralumin in certain working media.  
12 p2113 A69-26124

VORONKIN, V. G.

Nonequilibrium laminar boundary layer of dissociating air at axisymmetric bodies /Neravnovesnyi laminarnyi pogranichnyi sloi disositsiiruushchego vozdukh na osesimmetrichnykh telakh/.  
19 p3239 A69-36395

VORONKO, I. U. K.

Continuous stimulated emission of a LaF sub 3 -Nd super 3 super plus laser at room temperature.  
08 p1323 A69-19945

A laser with liquid active elements based on POCI sub 3 -Nd super 3 super plus /OKG s zhidkimi aktivnymi veshchestvami na osnove POCI sub 3 -Nd super 3 super plus/.  
11 p1894 A69-24620

Continuous-wave lasers based on composite crystals of the yttrifluorite type /Opticheskie kvantovye generatory nepreryvnogo deistviia na osnove smeshannykh kristallov tipa ittrofluorita/.  
13 p2273 A69-28316

VORONKOV, M. G.

Silicoorganic protective coatings /Kremneorganicheskie zashchitnye pokrytiia/.  
24 p4336 A69-43232

VORONKOV, V. V.

Effect of laminar inhomogeneity on the results of measuring the resistivity and Hall effect in semiconductors.  
04 p0642 A69-14534

Anomalous Hall effect in indium arsenide /Anomальный эффект Холла в арсениде индия/.  
09 p1555 A69-21472

Anomalous Hall effect in indium arsenide.  
15 p2669 A69-30717

VORONKOVA, N. N.

Theory of synchronization of a quasi-harmonic oscillator with a nonlinearity in the form of a cubic parabola /K teorii sinkhronizatsii kvazigarmonicheskogo ostil'atora s nelineinost'iu v iude kubicheskoi paraboly/.  
04 p0578 A69-15136

VORONSKII, B. I.

Results of the work performed by the 1963 expedition aimed at studying the discovery site of the Chinese meteorite /Itogi rabot ekspeditsii 1963 g. po izucheniuiu mesta nakhodki meteorita Ching/.  
01 p0160 A69-11380

VORONTSOV-VELIAMINOV, B. A.

Physical conditions in Seyfert's galaxy NGC 4151 /Fizicheskie usloviia v galaktike Seiferta NGC 4151/.  
12 p2164 A69-27021

Peculiar galactic nuclei - Their characteristics and significance /Pekuliarnye iadra galaktik, ikh kharakteristiki i znachenie/.  
12 p2164 A69-27027

A study of interacting galaxies /an introductory report /Issledovanie vzaimodeistviuushchikh galaktik /v-vodnyi doklad/.  
12 p2169 A69-27055

Comparison of galactic masses determined by optical and radio methods /K sravneniiu mass galaktik, opredeliayemykh opticheskimi i radiometodami/.  
15 p2687 A69-30547

The study of the forbidden lines in the planetary nebula spectra.  
19 p3423 A69-36222

Essays Concerning the Universe /Ocherki o vselennoi/.  
21 p3814 A69-39531

VOROSHILOV, I. V.

Phase equilibria in the systems Zr-Re-B and W-Re-B.  
10 p1711 A69-23332

Investigation of the ternary system zirconium - rhenium-carbon /Issledovanie troinoi sistemy tsirkonii-renii-uglerod/.  
10 p1715 A69-24053

VOROSHILOV, V. I.

Investigation of the ratio of total absorption to color excess /Doslizhennia vidnoshennia zagal'nogo opoglinannia do kolorektessu/.  
18 p3199 A69-34914

VOROTYNTSEV, I. U. V.

Investigation of the transition zone in a two-layer steel-titanium sheet /Issledovanie granichnoi zony dvukhsloinogo lista stal'-titan/.  
18 p3159 A69-35450

VOROVICH, I. I.

Stability of a nonshallow spherical dome.  
04 p0684 A69-15539

Some stress concentration problems /Nekotorye problemy konsentratsii napriazhenii/.  
11 p1972 A69-24650

The solubility of the general problem for an elastic closed cylindrical shell in a nonlinear formulation /O razreshimosti obshchei zadachi dlia uprugoi zamknoiti tsilindricheskoi obolochki v nelineinoi postanovke/.  
12 p2177 A69-25881

Estimates of the number of solutions of the Karman equation connected with the problem of plates and shells.  
19 p3445 A69-36816

Study of the nonlinear stability of a shallow shell with double curvature in higher-order approximations /Issledovanie nelineinoi ustoiichivosti pologoi obolochki dvoiakoi krivizny v vysokikh priblizheniiakh/.  
21 p3838 A69-39186

VOROVICH, L. S.

Impact of a sphere immersed in an ideal liquid of finite depth /Udar shara, pogruzhennogo v ideal'nyi zhidkost' konechnoi glubiny/.  
19 p3299 A69-36393

VOSBURGH, M. C.

The application of solid state and microwave integrated circuit technologies to phased array radars.  
01 p0048 A69-11039

VOSIKOVSKY, O.

Displacements and strains at the crack tip.  
05 p0780 A69-16437

VOSILIUS, I. I.

Cutoff of dissipative effects in multivalley semiconductors.  
02 p0298 A69-12098

VOSKOBOINIKOV, I. M.

Determination of the temperatures of organic substances in shock waves /Opredelenie temperatur organicheskikh veshchestv v udarnykh volnakh/.  
02 p0230 A69-11979

Determination of the temperature of organic substances in shock waves.  
15 p2561 A69-30264

VOSKRESENSKAIA, V. I.

Evaporographic converter for examination of striations in materials used in the infrared.  
08 p1314 A69-20384

VOSKRESENSKII, A. D.

Changes in cardiac activity and respiration of cosmonauts during light physical exertion in an orbital flight on the spacecraft Voskhod /Izmeneniia serdtsheinoi deiatel'nosti i dykhaniiu u kosmonavtov pri legkoi fizicheskoi nagruzke vo vremia orbital'nogo poleta na kosmicheskoi korable "Voskhod"/.  
03 p0377 A69-14196

Certain data concerning the conditions of the cosmonauts during the flight of the first space expedition on the Voskhod spacecraft /Nekotorye dannye o sostoianii kosmonavtov vo vremia poleta pervoi kosmicheskoi ekspeditsii na korable "Voskhod"/.  
07 p1060 A69-18571

Reactions of the cardiovascular and respiratory systems of cosmonauts under conditions of orbital flight on the Voskhod spacecraft /Reaktsii ser-

- technosudistoi i dykhatel'noi sistem kosmonavtov v usloviakh orbital'nogo poleta na kosmicheskoy korabli "Voskhod"/.
- 07 p1061 A69-18584
- Effects of immobilization of dogs for two weeks on their cardiovascular reactions to orthostatic tests and lateral acceleration.
- 10 p1645 A69-23499
- Possibility of using an artificial atmosphere with a variable gas composition in air-tight cabins /O vozmozhnosti ispol'zovaniya v germeticheskikh kabinakh skustvennoi atmosfery s nestatsionarnym gazovym sostavom/.
- 22 p3892 A69-40284
- SKRESENSKII, G. P.
- Three-dimensional Flow of Ideal Gases around Smooth Bodies.
- 16 p2771 A69-32003
- Calculation of supersonic flow round sharp asymmetric bodies.
- 18 p3086 A69-34705
- SKRESENSKII, K. D.
- A method for calculating unsteady thermal conductivity in bodies of simple shape, heated or cooled by thermal radiation.
- 23 p4238 A69-41333
- Approximate estimate of the lower boundary of applicability of the thermal boundary-layer theory.
- 23 p4150 A69-41334
- OTTA, F., JR.
- Experimental study of a passive thermal control system for space suits.
- 12 p2023 A69-26549
- TOULGARIS, N. C.
- Linear operation of a p-n-p-n tetrode.
- 18 p3109 A69-35293
- OVK, I. V.
- Effect of the acoustic interaction of electroacoustic transducers on the directional properties of multibeam receiving antennas /K voprosu o vliyanii akusticheskogo vzaimodeistviia elektroakusticheskikh preobrazovatelei na napravlennye svoystva priemnykh mnogoluchevykh anten/.
- 13 p2227 A69-27536
- SOZILKIN, V. A.
- Study of the dependence of the superconductivity properties on the structure of a titanium-47 wt percent niobium alloy /Issledovanie zavisimosti sverkhprovodiashchikh svoystv ot struktury splava titan-47 ves. percent niobia/.
- 07 p1158 A69-18532
- X-ray and electron microscope study of the structure of the alloy Ti-50 wt percent Nb /Rentgenograficheskoe i elektronomikroskopicheskoe issledovanie struktury splava Ti-50 ves. percent Nb/.
- 12 p2112 A69-26036
- VOZHENKO, V. I.
- Selecting optimum parameters for radio-electronic equipment.
- 14 p2418 A69-28835
- VOZNIUK, A. V.
- Construction of asymptotic solutions for nonlinear oscillations of a wedge and a cone /Postroenie asimptoticheskikh reshenii dlia nelineinykh kolebaniy klina i konusa/.
- 11 p1975 A69-24762
- VOZNIUK, L. L.
- Stabilizing the statistical characteristics of random loads in fatigue tests.
- 18 p3215 A69-34544
- Method of transforming the observation space in statistical synthesis of closed nonlinear multiple control systems /Metod peretvorenniya prostoru sposterezen' pri statistichnomu sintezi nelineinykh zamknennykh sistem z kil'koma keruvanniyami/.
- 19 p3287 A69-36662
- VOZNYI, G. T.
- Flow deflection at the exit from the wheel of a centrifugal pump /Otklonenie potoka na vykhode koleasa tseftrubezhnogo nasosa/.
- 15 p2547 A69-30571
- VRABEC, D.
- A new solar observatory in California.
- 11 p1862 A69-24792
- VRABLIK, E. A.
- An electromagnetic attitude control system for a synchronous satellite.
- 21 p3827 A69-39755
- VRANKING, W. J.
- Viscous-elastic pressure generation and friction loss under turbulent conditions [ASLE PREPRINT 68AM 5B-1]
- 01 p0087 A69-10911
- VRANA, J. C.
- Pressure signal generator for fluidic research. [ASME PAPER 69-FLCS-40]
- 21 p3649 A69-38603
- VREELAND, T., JR.
- Mobility of dislocations in aluminum at 74 deg and 83 deg K.
- 10 p1713 A69-23840
- Comments on dislocation velocity and macro-deformation in molybdenum.
- 13 p2276 A69-27392
- VREJOIU, C.
- On the S-matrix theory of electromagnetic interactions.
- 08 p1351 A69-20211
- VREULS, D.
- All-weather landing flight director and fault warning display simulator studies.
- 01 p0010 A69-10455
- VROLYK, J. J.
- Mixing theory and economics of the Quickmix process. [AIAA PAPER 69-517]
- 17 p2978 A69-33033
- VROOM, D. A.
- Emission cross sections of the first negative band system of N sub 2 by electron impact.
- 05 p0795 A69-15617
- Lyman-alpha radiation from electron collisions with simple hydrogen containing molecules.
- 24 p4351 A69-43033
- VSEKHSVIATSKAIA, I. S.
- Statistical models of signals reflected from the ionosphere at an angle /O statisticheskoi modeli signalov, naklonno otrazhenykh ot ionosfery/.
- 03 p0396 A69-13708
- VSEKHSVIATSKII, S. K.
- Comets during the International Quiet Sun Year /Komety v period mezhdunarodnogo goda spokoynogo solntsa/.
- 14 p2523 A69-29704
- Absolute photometry and the determination of the tail type of the comet Ikeya Seki 1965f /Absolutnaya fotometriya i opredelenie tipa khvosta komety Ikeya-Seki 1965f/.
- 14 p2524 A69-29709
- Concerning the existence of Oort's cometary cloud /K voprosu o sushchestvovanii oblaka komet Oorta/.
- 14 p2524 A69-29714
- Comets, interplanetary space, and the problems of the solar system.
- 15 p2679 A69-30011
- Maximum length of cometary tails and some considerations concerning their classification /Maksimal'naya dlinna khvostov komet i nekotorye soobrazheniya k voprosu ob ikh klassifikatsii/.
- 15 p2689 A69-30566
- Problems of Present-Day Cosmogony /Problemy Sovremennoi Kosmogonii/.
- 21 p3813 A69-39525
- VSPENSKII, V. A.
- Separated flow past a vibrating profile.
- 16 p2732 A69-32142
- VUJICIC, V.
- Problem of the dynamic stability of elastic bodies /K voprosu o dinamicheskoi ustoychivosti uprugikh tel/.
- 15 p2652 A69-30860
- VUJICIC, V. A.
- Stability of stationary motions /Ueber die Stabilitaet der stationaeren Bewegungen/.
- 10 p1724 A69-22929
- VUKOBRATOVICH, M.
- Invariance and sensitivity of multivariate dynamic systems.
- 11 p1861 A69-25711
- VUKOSAVA, D.
- The effect of positive pressure breathing on the cerebral circulation and the content of catecholamines in hypothalamus and adrenals.
- 24 p4265 A69-43371
- VUL, A. IA.
- The problem of the structure of the conduction band in GaSb /K voprosu o strukture zony provodimosti GaSb/.
- 13 p2319 A69-27899
- Certain properties of sulfur-doped gallium antimonide /Nekotorye svoystva antimonida gallia, legirovannogo seroi/.
- 21 p3781 A69-39048
- VUL, B. M.
- Mobile electrical domains in semiinsulating gallium arsenide.
- 04 p0643 A69-15261
- Modern problems in semiconductors /Sovremennyye problemy poluprovodnikov/.
- 11 p1937 A69-24736
- VUL, V. A.
- A microwave tunnel-diode switch and its application /SVCh perekliuchatel' na tunnel'nom diode i ego primeneniye/.
- 15 p2574 A69-30132
- VULF, B. K.
- Heat Treatment of Titanium Alloys /Termicheskaya Obrabotka Titanovykh Splavov/.
- 21 p3749 A69-39526
- VULFSON, I. I.
- Oscillations of systems with time-dependent parameters /O kolebaniyakh sistem s parametrami, zavisiashchimi ot vremeni/.
- 18 p3175 A69-35322
- VULFSON, N. I.
- Stimulating the growth of air-mass cumulus clouds.
- 03 p0461 A69-13409
- Some characteristics of cumulus cloud structure.
- 09 p1536 A69-21866
- VULIS, I. L.
- Some results of forecasting the geopotential field by means of a quasi-solenoidal model /Nekotorye rezultaty prognoza polya geopotentsiala s pomoshch'yu kvazisolenoidal'noi modeli/.
- 21 p3758 A69-39110
- Allowance for radiation factors in simulating general circulation processes in the atmosphere /Ob uchete radiatsionnykh faktorov pri modelirovanii protsessov obshchei tsirkulatsii atmosfery/.
- 23 p4184 A69-42487
- VULIS, L. A.
- Numerical solution to the problem of the development of a laminar jet in a channel /Chislennoe reshenie zadachi o razvitiy laminarnoi strui v kanale/.
- 07 p1120 A69-18997
- Calculation of a homogeneous turbulent gas flame.
- 08 p1420 A69-19998
- Transient flow regimes in magnetohydrodynamics.
- 10 p1727 A69-23097
- Some results of a further theoretical study of MHD flows /Nekotorye rezultaty dal'neishego teoreticheskogo issledovaniya MGD-techenii/.
- 10 p1734 A69-23455
- Numerical solution of the problem of unsteady heating of a fuel mixture in a container /Chislennoe reshenie zadachi o nestatsionarnom nagreve goruyei smesi v sosude/.
- 11 p2001 A69-25192
- Mercury flow with a hydraulic shock in a channel situated in a transverse magnetic field /Teheniye rutii s gidravlicheskim pryzhkom v lotke v poperechnom magnitnom pole/.
- 13 p2307 A69-27499
- Unsteady jet flow of a viscous fluid /O nestatsionarnom struinom dvizhenii vizkozi zhidkosti/.
- 14 p2432 A69-29608
- VULLIEZ, G.
- Reliability of thin-film tantalum nitride resistors /Fiabilite des resistances en couches minces de nitride de tantale/.
- 15 p2628 A69-30846
- VULMAN, S. A.
- Solution of axisymmetric elastoplastic problems by the small parameter method /O reshenii oesimmetrichnykh uprugoplasticheskikh zadach metodom malogo parametra/.
- 21 p3839 A69-39198
- VULPE, A.
- Analysis of jointed three-dimensional structures by transfer matrices /Rezolvarea structurilor spatiale articulate prin matrici de transfer/.
- 23 p4236 A69-42485
- VYAWAHARE, M. K.
- Collision frequency of electrons in the F-region.
- 16 p2779 A69-32197
- VYBORNOV, V. G.
- Some results of fitting tests /Nekotorye rezultaty ispytaniya fitinga/.
- 23 p4169 A69-41418
- VYKICKY, M.
- Heat-resistant alloy of Fe-Al type with 30 percent aluminum /Alliage refractaire du type Fe-Al a 30 percent d'aluminium/.
- 07 0 A69-19345



## VYKUKAL, H. C.

## VYKUKAL, H. C.

Dynamic response of the human body to vibration when combined with various magnitudes of linear acceleration.

01 p0022 A69-11335

Advanced developments in hard space suit technology.

03 p0379 A69-12993

## VYLEGZHANIN, D. N.

Determination of the relative cross-relaxation probabilities in ruby from the values of the inversion coefficients /Определение относительных вероятностей кросс-релаксации в рубине по значениям коэффициентов инверсии/.

06 p0980 A69-17458

The determination of the relative probabilities of cross relaxation in ruby from values of the inversion coefficients.

20 p3584 A69-37941

## VYLEZHNEV, V. P.

Susceptibility to brittle fracture of maraging steel N18K9M5T /MS 200/ and high-strength martensitic steel.

04 p0615 A69-14647

## VYSHEBAEV, G. M.

Certain vector and matrix relations in the orbital motion of a point /Некоторые векторные и матричные зависимости в орбитальном движении точки/.

21 p3818 A69-39820

## VYSKOCIL, V.

Statistical characteristics of linear transformations of gravity anomalies.

21 p3716 A69-39247

## VYSKREBENTSEV, A. IA.

Bending theory for two-layer plates /K teorii izгиба двуклосных пластин/.

15 p2714 A69-31198

## VYSOTSKAIA, I. V.

Method of calculating the gasdynamic and electrical parameters of the two-dimensional flow of a low-temperature plasma in a coaxial type magnetogasdynamic channel /Метод расчета газодинамических и электрических параметров двумерного течения низкотемпературной плазмы в магнитогазодинамическом канале коаксиального типа/.

13 p2305 A69-27386

## VYSOTSKII, B. F.

Engineering problems of microminiaturization /Инженерные проблемы микроминиатюризации/.

15 p2576 A69-30352

Effect of microminiaturization on the reliability and effectiveness of equipment with a given overall size /Влияние микроминиатюризации на надежность и эффективность аппаратуры при заданных ее габаритах/.

15 p2576 A69-30353

## VYSOTSKII, I. G.

Studies of human adaptation to space flight effects under low-calorie diet conditions.

20 p3482 A69-37621

## VYSOTSKII, M. G.

Longitudinal mode selection in the He-Ne laser.

03 p0441 A69-13844

Selection of longitudinal oscillation modes in gas lasers with annular cavities /Выбор продольных типов колебаний в газовых ОКГ с кольцевыми резонаторами/.

21 p3740 A69-39553

## VYSOTSKII, V. G.

Results of biological experiments conducted under flight conditions on the Vostok spacecraft with the participation of cosmonauts A. G. Nikolaev, P. R. Popovich, and V. F. Bykovskii /Результаты биологических экспериментов, проведенных в условиях полета на кораблях "Восток" с участием космонавтов А. Г. Николаева, П. Р. Поповича и В. Ф. Быковского/.

07 p1063 A69-18597

## VYSTAVKIN, A. N.

Investigation of the temperature dependence of the detection properties of n-type InSb in the millimeter and submillimeter bands.

07 p1199 A69-18683

## VYTCHIKOVA, M. A.

Peculiarities of the response of the acoustic analyzer of man during prolonged noise effect in a year-long medico-engineering experiment.

24 p4278 A69-43408

## W

## WAALAND, J. R.

Gas vacuole development in a blue-green alga.

10 p1644 A69-23184

## WACH, J.

Mechanism of decomposition of low-pressure ethylene on a high-temperature tungsten ribbon surface /Механизм декомпозиции этилена на поверхности вольфрамовой ленты при низком давлении/.

19 p3265 A69-36729

## WACHSLER, E.

Photometric measurements of turbulence in a hypersonic wake. [AIAA PAPER 69-70]

06 p0864 A69-18158

## WACHTEL, E.

Ternary system aluminum-manganese-vanadium /Das Dreistoffsystem Aluminium-Mangan-Vanadium/.

24 p4330 A69-42601

## WACHTELL, S.

Development and use of ultra-high-pressure test vessel for characterizing propellants and explosives.

04 p0645 A69-14472

## WACHTER, H.

Empirical probabilities based on one- and two-dimensional climatological frequency distributions /Empirische Wahrscheinlichkeiten auf Grund ein- und zweidimensionaler, klimatologischer Häufigkeitsverteilungen/.

09 p1535 A69-21520

## WACKER, R. W.

GaAs integrated microwave circuits.

01 p0040 A69-10196

## WACKERLING, L. R.

Ultraviolet objective-prism spectra from Gemini XI and XII manned space flights.

01 p0153 A69-10870

## WADA, I.

Plasma impedance and its equivalent circuit.

15 p2659 A69-30799

## WADA, M.

Eleven year variations of cosmic ray intensity and heliolatitudes of sunspots.

10 p1754 A69-22802

## WADA, T.

Notch effect in low cycle fatigue. I.

24 p4404 A69-43627

## WADDEL, R. C.

Solar cell radiation damage on synchronous satellite ATS-I.

19 p3253 A69-35704

## WADDELL, E. R.

Accelerating convergence of one-step methods for the numerical solution of ordinary differential equations.

07 p1174 A69-19724

## WADDELL, J.

Flying the 747.

[AIAA PAPER 67-397]

01 p0010 A69-10636

## WADDINGTON, C. J.

Very heavy nuclei in the primary cosmic radiation. I.

05 p0816 A69-16365

Very heavy nuclei in the primary cosmic radiation. II.

05 p0816 A69-16366

A search for energetic gamma-ray emission from the supernova remnant Cassiopeia A.

15 p2675 A69-30760

Evidence for the emission of energetic gamma rays from the galactic plane in the Cygnus region.

15 p2676 A69-30888

## WADDOUPS, M. E.

A method of predicting the nonlinear behavior of laminated composites.

07 p1170 A69-18710

Analysis of anisotropic plates.

07 p1232 A69-18719

## WADDOUPS, R. O.

Mid-latitude OI green emission and high-energy electron flux.

02 p0309 A69-12743

## WADE, G.

Acoustical transparencies for optical imaging and ultrasonic diffraction.

10 p1695 A69-23546

## WADE, J. H. T.

On the velocity fields in eccentric annuli. [ASME PAPER 68-WA/FE-35]

05 p0750 A69-16108

## WADE, N.

Three origins of the moon.

20 p3603 A69-37558

## WADE, R. G.

Requirements for a Canadian ACV industry.

13 p2381 A69-27544

## WADE, T. B.

Analysis and review of mechanical testing procedure for brittle materials.

24 p4333 A69-43340

## WAECHTER, R. T.

Steady longitudinal motion of an insulating cylinder in a conducting fluid.

04 p0638 A69-15192

Steady rotation of a body of revolution in a conducting fluid.

07 p1190 A69-18814

Wing-body interaction in supersonic flow.

20 p3458 A69-37099

## WAECHTER, S.

Observations on the VEB Carl Zeiss Jena transit instrument 100/1000.

15 p2608 A69-30440

## WAEHNELDT, T. V.

The thermal synthesis of neutral and basic proteinoids.

07 p1074 A69-18633

The binding of basic proteinoids with organismic or thermally synthesized polynucleotides.

07 p1074 A69-18635

## WAENKE, H.

Radiogenic and cosmic-ray exposure ages of meteorites, their orbits and parent bodies.

08 p1405 A69-20928

Study of trace element abundance in meteorites by neutron activation.

19 p3407 A69-36080

Determination of boron, lithium, and chlorine in meteorites.

19 p3408 A69-36085

Cosmic-ray produced radionuclides in the Barwell and Saint-Severin meteorites.

19 p3410 A69-36094

Super 39 K /n, p/-produced super 39 Ar in chondrites - New data and their interpretation in terms of size, exposure age and orbital elements.

19 p3411 A69-36101

Beryllium-10 in iron meteorites, their cosmic-ray exposure and terrestrial ages.

19 p3412 A69-36104

## WAESCHE, R. H. W.

Calculation of solid propellant burning rates from condensed-phase decomposition kinetics.

[AIAA PAPER 69-145]

06 p1039 A69-18182

## WAGENHEIM, N. T.

The high temperature properties of MarM-509.

01 p0095 A69-10546

## WAGGONER, A. P.

Aerosol size and velocity determination via holography.

09 p1492 A69-21418

## WAGNER, A.

Numerical Laplace transform in heat conduction theory /Zur numerischen Laplace-Transformation in der Wärmeleitungstheorie/.

21 p3851 A69-39011

## WAGNER, B. M.

Exobiology- The Search for Extraterrestrial Life, American Astronomical Society and American Association for the Advancement of Science, Symposium, New York, N.Y., December 30, 1967, Proceedings.

17 p2907 A69-32967

Sociological aspects of exobiology.

17 p3076 A69-32974

## WAGNER, C. A.

Resonant perturbations of existing satellites.

03 p0521 A69-13777

Combined solution for low degree longitude harmonics of gravity from 12- and 24-hour satellites.

04 p0592 A69-14661

Perturbations of existing resonant satellites.

22 p4035 A69-39968

- WAGNER, C.-U.**  
Space research activities in the German Democratic Republic. 15 p2724 A69-31453  
The "semi-annual" variation of the solar daily quiet geomagnetic variation in the European region. 16 p2782 A69-32459
- WAGNER, CHR.-ULR.**  
The variations of the geomagnetic field in middle and high latitudes during the proton flare event of July 1966. 10 p1683 A69-23780
- WAGNER, D. A.**  
Supersonic combustion tests with a double-oblique-shock scramjet in a shock tunnel. [AIAA PAPER 69-827] 16 p2840 A69-32673
- WAGNER, D. E.**  
Optimum packaging design and sparing levels for extended manned space missions. 05 p0830 A69-16380
- WAGNER, G. A.**  
Correction of thermally lowered fission track ages of tektites. 15 p2696 A69-31140  
New fission track ages of tektites and related glasses. 23 p4210 A69-41345
- WAGNER, H.**  
Approximate frequencies of nonlinear systems. 02 p0348 A69-12612
- WAGNER, H. G.**  
Retinal burn. 08 p1267 A69-20680
- WAGNER, H. GG.**  
Observations on the initiation of detonation. 19 p3451 A69-36364
- WAGNER, J. T.**  
Simplified performance analysis of space and missile guidance. [AAS PAPER 69-404] 24 p4347 A69-42836
- WAGNER, L. S.**  
Enhancement of ionizing radiation during a solar flare. 20 p3590 A69-37558
- WAGNER, L. W.**  
Determination of automatic test equipment utilization. 11 p1865 A69-25074
- WAGNER, M. H.**  
Ballistic limit determination in impacts on multi-material laminated targets. [AIAA PAPER 69-356] 13 p2366 A69-28289
- WAGNER, P. S.**  
On the theory of arc-mode-thermionic-converter performance. 11 p1827 A69-25400
- WAGNER, R.**  
Registration of intravascular pressure and sound by a fiberoptic catheter. 17 p2917 A69-34172
- WAGNER, R. A.**  
North-south cross-sections of the equatorial electrojet in the Pacific and the effect of a solar eclipse. 16 p2777 A69-32182  
Effect of the earth's albedo on the ionospheric D layer. 18 p3127 A69-34800
- WAGNER, R. D., JR.**  
Influence of measured free-stream disturbances on hypersonic boundary-layer transition. [AIAA PAPER 69-704] 17 p2953 A69-33453  
Electron beam flow visualization in hypersonic helium flow. 19 p3291 A69-35722
- WAGNER, R. J.**  
X-band IMPATT microstrip power sources. 02 p0216 A69-12146
- WAGNER, S.**  
On the singularity method of subsonic lifting-surface theory. [AIAA PAPER 69-37] 06 p0865 A69-18167
- WAGNER, W. J.**  
Hartree-Fock calculations of coronal forbidden lines in the argon I isoelectronic sequence. 08 p1385 A69-20071
- WAGNER, W. U.**  
AOOSY - Automatic flight control system for satellites /AOOSY - Automatisches Flugbetriebsystem fuer Satelliten/. 09 p1459 A69-22563
- WAGONER, R. V.**  
Physics of massive objects. 21 p3811 A69-39516  
Synthesis of the elements within objects exploding from very high temperatures. 22 p3980 A69-40148
- WAHL, B. W.**  
Analysis of selected opportunities for manufacturing in space. 18 p3234 A69-35066
- WAHLBECK, P. G.**  
Dissociation energy of TiO/g/ and the high-temperature vaporization and thermodynamics of the titanium oxides. V. 08 p1268 A69-21012
- WAI, C. M.**  
The distribution of trace quantities of germanium between metal, silicate and sulfide phases. 05 p0819 A69-15624
- WAIDELICH, J. P.**  
A mathematical model for the behavior of thrust reversers. [AIAA PAPER 69-3] 06 p0985 A69-18124
- WAIDMANN, G.**  
Plasma propagation in an inductive high-frequency discharge /Plasmaausbreitung in einer induktiven Hochfrequenzentladung/. 05 p0804 A69-16535
- WAINFAN, N.**  
Electric-field distribution in pulsed high-current-density discharges in helium and helium-hydrogen mixtures. 10 p1739 A69-23660  
A vacuum spark light source for the extreme ultraviolet region. 11 p1885 A69-24839
- WAIT, D. F.**  
Measurement of the noise temperature of a mismatched noise source. 02 p0210 A69-12441  
Thermal noise from a passive linear multiport. 02 p0211 A69-12443  
A low-temperature microwave noise standard. 02 p0211 A69-12446  
Microwave circuit analysis using the equivalent generator concept. 04 p0582 A69-14755
- WAIT, J. R.**  
Diffraction and scattering of the electromagnetic groundwave by terrain features. [AFCRL-68-0212] 01 p0033 A69-10970  
Electromagnetic induction in a small conducting sphere above a resistive half space. 01 p0047 A69-10974  
Scattering from a thin sheet obstacle on a curved surface. 03 p0399 A69-14253  
On the diffraction by a knife-edge obstacle on a conducting earth. [AFCRL-68-0375] 04 p0560 A69-15216  
Radio propagation over a cylindrical hill including the effect of a surmounted obstacle. 08 p1273 A69-20024  
Reflection from subrefractive layers. 09 p1454 A69-21679  
Recent theoretical advances in the terrestrial propagation of VLF electromagnetic waves. 09 p1460 A69-22699  
Phase shift for total reflection from a bounded dielectric layer. 10 p1657 A69-23862  
Internal guiding of microwaves by an elevated tropospheric layer. 12 p2032 A69-26856  
Reflection of a plane transient electromagnetic wave from a cold lossless plasma slab. 12 p2033 A69-26865  
Distortion of an ELF pulse after propagation through an antipode. 16 p2750 A69-31978  
Transient response of the penumbral currents for plane wave diffraction by a cylinder. [AFCRL-69-0038] 18 p3100 A69-34232  
On the propagation of a pulse through an antipode. 18 p3100 A69-34233
- Electromagnetic induction in a conducting sphere with a concentric shell. [AFCRL-69-0082] 18 p3101 A69-34803  
On the propagation of acoustic gravity waves over a spherical earth. 23 p4158 A69-42175
- WAIT, J. T.**  
Beta falloff in transistors at high collector currents. 04 p0574 A69-14347
- WAITE, W. P.**  
Geoscience applications of radar sensors. 11 p1835 A69-24692  
Radar scatterometer data analysis techniques. 12 p2099 A69-27010  
Panchromatic and polypanchromatic radar. 14 p2416 A69-29529
- WAKAI, N.**  
Mean variations of the nighttime ionospheric E layer. 03 p0398 A69-13899
- WAKASHIMA, H.**  
Fracture of polycarbonate resin. 19 p3358 A69-35776
- WAKE, W. C.**  
Elastomeric adhesives. 14 p2468 A69-29341
- WAKEFIELD, G. F.**  
Chromium coatings prepared by chemical vapor deposition. [ECS PAPER 223] 05 p0769 A69-16232
- WAKEFIELD, J. S.**  
A telemetry channel frequency response correction technique. 10 p1654 A69-23291
- WAKEFIELD, R. M.**  
Comparison of the performance of a charring ablator under transient and constant combined convective and radiative heating. [AIAA PAPER 69-151] 06 p1036 A69-18055  
Effects of pyrolysis-gas chemical reactions on surface recession of charring ablators. [AIAA PAPER 68-302] 09 p1622 A69-21982
- WAKELAND, W. R.**  
A study of weighting factors of the quadratic performance index. 14 p2534 A69-29317
- WAKSBERG, A. L.**  
Stabilization of a CO sub 2 laser using a three-mirror laser system. 01 p0089 A69-10183
- WAKUI, H.**  
Heat transfer to fully developed turbulent flow in a circular tube with a nonsteady circumferential heat flux. 22 p4051 A69-40921
- WALAWSKI, J.**  
Certain compensatory reactions to prolonged weightlessness /Niektóre kompensacyjne reakcje przedłużonej nieważkości/. 17 p2909 A69-33577
- WALBESSER, W. J.**  
Interference rejection in a phase-locked loop with decision feedback. 03 p0409 A69-13201  
Phase-locked-loop detection of binary PSK signals utilizing decision feedback. 08 p1270 A69-19859
- WALBURN, A. B.**  
Experimental simulation of two-phase venting to a space environment. 15 p2701 A69-30396  
Analytical study of two-phase impingement for orbital cryogenic venting. [AIAA PAPER 69-571] 16 p2869 A69-32753
- WALBURN, P. G.**  
Activation energies in a baffle stabilized flame. 06 p1035 A69-17930
- WALCHNER, O.**  
Laminar hypersonic roll damping derivatives for a 10 deg cone. 09 p1430 A69-21958  
Pressure correlation for blunted slender cones. 24 p4249 A69-43681
- WALD, F.**  
Materials research problems in the direct conversion of thermal radiative and chemical energy into electricity. 02 p0194 A69-11801



## WALDIE, B.

Estimation of the chemical compatibility of alloys with lead telluride and tin telluride thermoelectric materials. 04 p0551 A69-15315

Controlled solidification of metal matrix composites utilising monovariant eutectic reactions. 07 p1166 A69-19145

## WALDIE, B.

Experimental and theoretical studies of gaseous suspensions of thermionic emitting particles for use as MHD working fluids. 10 p1738 A69-23491

## WALDMAN, B. J.

Space storable propellant performance demonstration. [AIAA PAPER 69-505] 16 p2845 A69-32762

## WALDMAN, C. H.

Theory of propellant ignition by heterogeneous reaction. 23 p4199 A69-41897

## WALDMAN, R. H.

Commercial navigation systems for long range subsonic transports in the 1970s. 08 p1348 A69-21062

Navigation systems for subsonic civil air transport in the 1970s /Les systemes de navigation pour les avions subsoniques de transport civil dans les annees 1970/. 20 p3574 A69-37417

## WALDMEIER, M.

The corona during the solar eclipse of November 12, 1966. II - Electron density, polarization, temperature, and monochromatic emission /Die Korona bei der Sonnenfinsternis vom 12. November 1966. II - Elektronendichte, Polarisation, Temperatur und monochromatische Emission/. 02 p0310 A69-11457

Distribution of magnetic fields in photospheric and chromospheric layers in the active region of 7 July 1966 and their correlation with the flare event of 8 July, 1253-1340 UT. 10 p1762 A69-23727

## WALDRON, G. W. J.

Cellular decomposition and precipitation in a superconducting niobium-zirconium alloy. 08 p1331 A69-20192

## WALDTEUFEL, P.

Measurement and diurnal variation of atmospheric density at an altitude of 100 km /Valeur et variation diurne de la densite atmospherique a 100 km d'altitude/. 14 p2440 A69-29125

Study of the variations in the exospheric temperature by means of Thomson scattering /Etude par diffusion de Thomson des variations de la temperature exospherique/. 15 p2604 A69-31409

Preliminary comparisons of middle and low latitude Thomson scatter data. 15 p2604 A69-31418

Thomson scatter observations of a gravity wave in the ionospheric F-region. 16 p2779 A69-32198

Influence of a non-Maxwellian electron distribution on ionospheric measurements by Thomson scattering /Influence sur les mesures ionospheriques par diffusion de Thomson d'une distribution electronique non Maxwellienne/. 16 p2788 A69-32647

The FU-180 Franco-Soviet program of upper atmosphere measurements /La campagne franco-sovietique de mesures de la haute atmosphere FU-180/. 18 p3210 A69-35282

## WALIN, G.

Some aspects of time-dependent motion of a stratified rotating fluid. 13 p2248 A69-28171

## WALKER-ARNOTT, D. A.

Project control in practice. 08 p1423 A69-20630

## WALKER, A. C.

An analysis of the large deflections of beams using the Rayleigh-Ritz finite element method. 05 p0833 A69-15711

A non-linear finite element analysis of shallow circular arches. 08 p1411 A69-20140

A general theory for the branching analysis of discrete structural systems. 12 p2179 A69-26213

A method of solution for non-linear simultaneous algebraic equations. 15 p2711 A69-30871

The post-buckling behaviour of simply-supported square plates. 23 p4234 A69-42395

## WALKER, B. E., JR.

Nondestructive testing for void content in glass-filament-wound composites. 17 p2979 A69-33656

## WALKER, C. W. E.

Magnetic field dependence of the thermoelectric power at low temperatures for very dilute alloys of Fe in Au. 10 p1639 A69-23861

## WALKER, D.

The influence of incentive provisions on project management. 09 p1626 A69-22777

## WALKER, D. M. C.

Profile of upper atmosphere density at heights between 130 and 160 km, from the orbit of the satellite 1968-59B. 02 p0245 A69-12728

The decay of Cosmos 253 rocket. 05 p0830 A69-16656

Air density at a height of 470 km between January 1967 and May 1968, from the orbit of the satellite 1966-118A. 09 p1488 A69-21659

Variations in upper atmosphere density at heights of 140-180 km between July and October 1968. 12 p2066 A69-26229

Air density at heights between 130 and 180 km, from analysis of the orbits of 1968-59A and B. 15 p2599 A69-31348

Air density at heights between 130 and 160 km, from analysis of the orbit of 1968-59B. 16 p2776 A69-32095

Air density at heights of 140-180 km, from analysis of the orbit of 1968-59A. 22 p3935 A69-39971

## WALKER, E. N.

A galactic cluster in the direction of the Large Magellanic Cloud. 17 p3034 A69-33411

## WALKER, F. J.

Variable reluctance type pressure transducers or devices using magnetic effects. 10 p1690 A69-23226

## WALKER, G. A. H.

Photoelectric scanner observations of CH Cygni for August 3, 1967. 13 p2338 A69-27557

## WALKER, G. B.

Experiments with a low polarization error loop array direction finder. 01 p0048 A69-11006

Superconducting antennas. 17 p2937 A69-33784

## WALKER, G. E., JR.

Stress intensity factors for edge cracks in rectangular plates with arbitrary loadings. [ASME PAPER 68-WA/MET-18] 05 p0839 A69-16156

A Green's function for the stress intensity factors of edge cracks and its application to thermal stresses. [ASME PAPER 68-WA/MET-19] 05 p0839 A69-16157

## WALKER, G. H.

Improved method of removing plastic backing films from carbon electron microscope replicas. 09 p1495 A69-21651

## WALKER, J. C.

Rapid analysis of moon-to-earth trajectories. [AAS PAPER 68-089] 20 p3595 A69-37174

## WALKER, J. C. G.

The effect of oxygen cooling on ionospheric electron temperatures. 02 p0245 A69-12739

Langmuir probe evidence for a nocturnal ionization source at Fort Churchill. 03 p0502 A69-14008

Temperatures of the earth's upper atmosphere. 04 p0592 A69-14975

Thermal diffusion in the topside ionosphere for mixtures which include multiply-charged ions. 16 p2775 A69-32084

## WALKER, J. L. C.

Measurement of sympathetic neurohormones in the plasma of race car drivers. 07 p1067 A69-19424

## WALKER, M. F.

Studies of extremely young clusters. V. 08 p1384 A69-20055

Two-color composite photographs of the Magellanic Clouds. 12 p2152 A69-25801

Observation of unsteady phenomena in galactic nuclei /Nabliudeniia nestatsionarnykh iavlenii v iadrakh galaktik/. 12 p2163 A69-27017

Some problems concerning the collisional excitation of forbidden lines in planetary nebulae. 19 p3422 A69-36221

## WALKER, R.

Recent fossil track studies bearing on extinct Pu super 244 in meteorites. 19 p3407 A69-36077

Fossil tracks in meteorites and the chemical abundance and energy spectrum of extremely heavy cosmic rays. 19 p3410 A69-36096

## WALKER, R. D., JR.

Salting out of nonpolar gases in aqueous potassium hydroxide solutions. 10 p1651 A69-22937

## WALKER, R. E.

A liquid rocket performance model based on vaporization interactions. [AIAA PAPER 69-470] 16 p2838 A69-32663

## WALKER, R. G.

Near infrared photometry of late-type stars. 13 p2342 A69-27592

## WALKER, R. M.

The utilization of nuclear particle tracks in solids to study the distribution of certain elements in nature and in the cosmic radiation. 08 p1401 A69-20899

Observation of trans-iron nuclei in the primary cosmic radiation. 21 p3787 A69-38327

## WALKER, R. W.

Aged boric-acid-coated silica reaction vessels. 02 p0205 A69-12322

## WALKER, W. C.

Exciton spectra of CaO and MgO. 18 p3181 A69-34274

## WALKER, W. H.

Cumulative damage theories and application. 04 p0668 A69-14379

## WALKER, W. R.

Mississippi test facility hardware data acquisition system error analysis. 10 p1673 A69-23287

## WALKER, W. W.

The metallography of iron meteorites. 13 p2353 A69-28169

## WALKUP, D. W.

Minimal conditions for association of binary variables. 04 p0624 A69-15007

## WALL, D. B.

Transition from laminar to turbulence in submerged and bounded jets. 14 p2428 A69-28876

## WALL, J. V.

Redshifts of twelve quasi-stellar objects. 09 p1602 A69-22225

Three-color photometry of southern QSO's, radio galaxies, and normal galaxies. 16 p2859 A69-32228

Large variations in the brightness of some quasi-stellar objects. 18 p3201 A69-35206

## WALL, L. A.

Vaporization of organic plasticizers. 04 p0620 A69-14956

## WALL, L. L.

Gas-liquid chromatography of protein amino acids - Separation factors. 13 p2217 A69-28258

## WALL, W. A.

A combination work and photographic light for portable service in manned spacecraft. [IES PREPRINT 30] 18 p3138 A69-35173

## WALLACE, D. C.

Lattice dynamics and the stability of crystals. 06 p0944 A69-17504

- ALLACE, F. L.**  
Head-up displays - Some unanswered questions.  
08 p1315 A69-20452
- ALLACE, G. H.**  
Low temperature electrical resistivity of some engineering alloys.  
[NAS-NRC PAPER D-5] 22 p3970 A69-40633
- ALLACE, G. K.**  
The effect of background density on the Zoellner illusion.  
22 p3879 A69-40841
- ALLACE, H. W.**  
Liquid rocket engine feed system dynamics by the method of characteristics.  
03 p0495 A69-12991
- ALLACE, J.**  
Similarity solutions to the massive blowing problem.  
24 p4305 A69-43658
- ALLACE, J. E.**  
Hypersonic turbulent boundary-layer measurements using an electron beam.  
16 p2770 A69-31907
- ALLACE, J. M.**  
A diagnostic numerical model of the quasi-biennial oscillation.  
03 p0461 A69-13681
- On the relation between Kelvin waves and the quasi-biennial oscillation.  
13 p2290 A69-27391
- Diurnal wind variations, surface to 30 kilometers.  
18 p3166 A69-34828
- ALLACE, K. B.**  
Water pressure beneath a skidding tyre.  
19 p3247 A69-35910
- ALLACE, L.**  
Interpretation of Venus Lyman-alpha emission as observed from Mariner V.  
[AAS PAPER 68-220] 02 p0313 A69-11486
- Analysis of the Lyman-alpha observations of Venus made from Mariner 5.  
05 p0815 A69-16255
- Weak emissions in the near infrared daytime airglow.  
16 p2776 A69-32094
- ALLACE, M. E.**  
Microwave integrated circuits for phased-array applications.  
24 p4286 A69-43109
- ALLACE, N. D.**  
Detection of slowly fading targets with frequency agility.  
17 p2917 A69-32919
- ALLACE, P. R.**  
Intraband collective effects and magneto-optical properties of many-valley semiconductors.  
16 p2826 A69-31821
- ALLACE, R.**  
Neutron exposure in supersonic transport.  
22 p4002 A69-40093
- ALLACE, R. W.**  
Acousto-optic tunable filter.  
17 p2943 A69-34157
- Precision studies of ASTM thermal conductivity test for refractories.  
22 p3956 A69-40671
- ALLACE, T. J.**  
Emulsified fuel for aircraft.  
[ASME PAPER 68-GT-24] 06 p0982 A69-17190
- WALLANDER, S. O.**  
Large signal analytical study of bunching in klystrons.  
02 p0215 A69-11939
- Large signal theory of amplitude and phase nonlinearities in traveling wave tubes.  
07 p1094 A69-18422
- WALLENBERG, R. F.**  
Radiation from apertures in conducting cylinders of arbitrary cross section.  
11 p1836 A69-24985
- WALLENSTEIN, G. D.**  
Compatibility objectives for the world satellite telecommunications network / Objetivos de compatibilidad para la red mundial de telecomunicaciones por medio de satélites/.  
07 p1079 A69-18942
- WALLER, R. A.**  
An improved self-damped pneumatic isolator.  
08 p1301 A69-20398
- WALLERSTEIN, E. P.**  
Space age X-ray optics.  
01 p0121 A69-10896
- WALLERSTEIN, G.**  
Simultaneous observations of the optical and X-ray spectra of Sco XR-1.  
07 p1220 A69-19391
- Motions in the peculiar galaxy NGC 5253.  
08 p1407 A69-21132
- A search for lithium and beryllium in Ib supergiants and Cepheids.  
09 p1604 A69-22402
- Lithium and beryllium in stars.  
21 p3810 A69-39505
- WALLI, C. R.**  
Asynchronous finite-state machines - A novel control system class.  
[AIAA PAPER 67-988] 13 p2225 A69-28201
- WALLING, J. C.**  
Low-noise Microwave Amplifiers.  
03 p0402 A69-13017
- WALLINGTON, V.**  
The polar substorm and electron "islands" in the earth's magnetic tail.  
04 p0594 A69-15122
- WALLIS, D. D.**  
High-altitude observations of a luminous wake behind two Black Brant II rockets.  
06 p0918 A69-17511
- WALLIS, D. E., JR.**  
Optimal inputs for parameter estimation in dynamic systems with white observation noise.  
24 p4293 A69-43294
- WALLIS, F. R.**  
Stress analysis of incompressible solids of revolution by point matching.  
04 p0683 A69-15518
- Stress analysis of solid-propellant rocket charges by point matching.  
24 p4402 A69-43263
- WALLIS, G.**  
Changes produced by strong shock waves in the conditions of gravitational instability and the multiarm structure of the Galaxy /Izmeneniia uslovii gravitatsionnoi neustoiichivosti sil'nyimi udarnymi volnami i mognorukavnaia struktura galaktiki/.  
12 p2170 A69-27066
- WALLIS, M. K.**  
The fountain model for plasma envelopes of comets.  
02 p0310 A69-11423
- WALLIS, S.**  
Spectra of grid turbulence.  
21 p3693 A69-38704
- WALLMARK, J. T.**  
MOS field-effect transistor drivers for laminated-ferite memories.  
01 p0039 A69-10172
- WALMSLEY, C. M.**  
Lyman-line decrements in low-density planetary nebulae.  
09 p1604 A69-22407
- WALOWIT, J. A.**  
Load support and leakage from microasperity-lubricated face seals.  
[ASLE FICFS PREPRINT 21] 15 p2622 A69-30500
- WALPOLE, L. J.**  
On the overall elastic moduli of composite materials.  
24 p4396 A69-42731
- WALRAVEN, TH.**  
Auxiliary equipment of an astronomical photometer.  
24 p4318 A69-43805
- WALSH, D.**  
Harmonic generation using Gunn diodes.  
13 p2226 A69-27235
- WALSH, E. J.**  
Conjugate echoes in Alouette-2 topside-sounder data.  
08 p1274 A69-20045
- WALSH, E. K.**  
Development of shock waves in atmospheres with density and temperature variation.  
16 p2768 A69-31663
- WALSH, T. E.**  
Infrared modulation techniques.  
07 p1158 A69-19743
- Infrared absorbance of ammonia - 20 to 35 microns.  
12 p2132 A69-26247
- WALSH, T. M.**  
A technique for determining the life capability of individual semiconductors.  
18 p3144 A69-34489
- WALSHAW, C. D.**  
The possibility of ozone measurements from satellites using the 1043 cm super minus super 1 band.  
16 p2786 A69-32633
- WALSTON, D. E.**  
Accelerating convergence of one-step methods for the numerical solution of ordinary differential equations.  
07 p1174 A69-19724
- WALT, M.**  
Radial diffusion coefficient for electrons at 1.76 less than L less than 5.  
03 p0502 A69-14002
- Penetration of auroral electrons into the atmosphere.  
07 p1128 A69-19368
- Penetration of particles into the atmosphere.  
21 p3709 A69-38502
- WALTER, D. O.**  
Central nervous, cardiovascular and metabolic data of a Macaca nemestrina during a 30-day experiment.  
24 p4260 A69-42703
- WALTER, F. H.**  
Investigation of electrosag welding by the plasma method /Untersuchungen zum Auftragschweißen mit dem Plasmaverfahren/.  
08 p1321 A69-20766
- WALTER, H. G.**  
The use of ellipsoidal harmonics for the representation of the geopotential.  
15 p2599 A69-31333
- WALTER, K.**  
Passive fluidic elements and fluidic circuits /Passive Fluid-Elemente und Fluidschaltungen/.  
11 p1825 A69-24542
- General magnetic field and rotation of the outer layers of the sun.  
22 p4019 A69-40293
- WALTER, L. S.**  
The major-element composition of individual chondrules of the Bjorboele meteorite.  
19 p3409 A69-36090
- WALTER, R. J.**  
Effect of high pressure hydrogen on metals.  
[ASM PAPER D8-14.2] 07 p1169 A69-19667
- WALTER, W.**  
The method of lines for nonlinear parabolic differential equations /Die Linienmethode bei nicht-linearen parabolischen Differentialgleichungen/.  
04 p0625 A69-15132
- WALTER, W. A.**  
Nonlinear magnetic field solutions for non-homogeneous isotropic current-free regions.  
11 p1888 A69-25311
- Sensitivity and optimization theory for launch vehicle attitude control system synthesis.  
18 p3210 A69-35092
- WALTERS, D. J.**  
The presentation of navigational information.  
15 p2558 A69-30692
- WALTERS, G. K.**  
Intense polarized electron beams from optically pumped helium discharges.  
12 p2130 A69-26312
- WALTERS, H. A.**  
Foamed thermoplastic microspheres in reinforced polyesters.  
14 p2467 A69-29285
- WALTERS, J. J.**  
A dynamic hot-corrosion rig testing procedure.  
23 p4150 A69-42448
- WALTERS, R. E.**  
Rotor downwash in ground effect in the presence of a step.  
[AIAA PAPER 69-225] 08 p1253 A69-21032
- WALTERS, R. F.**  
Cardiovascular changes during tilt and leg negative pressure tests.  
01 p0021 A69-11334
- WALTERS, R. R.**  
Compliant coating skin friction experiments.  
[AIAA PAPER 69-165] 06 p0912 A69-18043



## WALTERS, W. L.

Kerr magneto-optic study of slow to intermediate speed propagation phenomena in thin Ni-Fe films.  
[IEEE PAPER 11.7] 01 p0138 A69-10716

## WALTERS, C. R.

"Fire until touchdown" - A demonstration of the effects of impacting the LM descent engine upon the lunar surface.  
[AIAA PAPER 69-1020] 22 p3923 A69-40391

## WALTKE, G.

Induction phenomena in MHD converters with constant and travelling magnetic field.  
11 p1827 A69-25399

Simultaneous consideration of finite length and finite channel width in MHD induction converters - The compensated converter.  
13 p2207 A69-27496

## WALTMAN, P.

A nonlinear boundary value problem.  
02 p0272 A69-12131

A boundary value problem for a system of nonlinear functional differential equations.  
14 p2470 A69-28906

## WALTMAN, P. E.

Nonlinear Two Point Boundary Value Problems.  
04 p0622 A69-14600

## WALTON, B. A.

A new approach to telemetry data processing - The data reduction laboratory.  
22 p3919 A69-40352

## WALTON, J. D., JR.

Rain erosion of ceramic radome materials at high Mach numbers.  
07 p1171 A69-19532

## WALTON, J. M.

Optimum transfer between hyperbolic asymptotes about a planet of finite size.  
[AAS PAPER 69-242] 24 p4380 A69-42856

## WALTON, K. L.

Constant-beamwidth antenna development.  
02 p0218 A69-12325

## WALTON, W. C., JR.

A geometrically exact finite element for thin shells of revolution.  
[AIAA PAPER 69-56] 06 p1029 A69-18193

A method for computing the response of a general axisymmetric shell with an attached asymmetric structure.  
11 p1993 A69-25525

## WAMPLER, E. J.

Reddening in the nuclei of Seyfert galaxies.  
02 p0325 A69-12593

Television detection of the Crab Nebula pulsar.  
11 p1962 A69-25251

Simultaneous optical and radio observations of NP 0532.  
15 p2680 A69-30233

Optical observations of the Crab Nebula pulsar.  
21 p3799 A69-38645

Laser beam directed at the lunar retro-reflector array - Observations of the first returns.  
24 p4384 A69-43197

## WAN, C. M.

The influence of stacking fault energy on fatigue fracture.  
10 p1795 A69-23060

## WAN, F. Y. M.

Two variational theorems for thin shells.  
04 p0678 A69-14894

The side-force problem for shallow helicoidal shells.  
[ASME PAPER 69-APM-11] 18 p3213 A69-34387

Rotationally symmetric stress and strain in shells of revolution.  
18 p3215 A69-34549

On the equations of linear shallow shell theory.  
22 p4048 A69-41197

Stress functions for nonlinear shallow shell theory.  
22 p4048 A69-41199

## WAN, S.

Optimality and strong stability of control systems.  
07 p1115 A69-18514

## WANAT, T.

Nondestructive testing in commercial aviation /Badania nieniszczące w lotnictwie komunikacyjnym/

07 p1143 A69-19702

Certain problems in monitoring the operational state of passenger aircraft /Niektóre zagadnienia kontroli stanu technicznego samolotów pasażerskich/

11 p1822 A69-24526

## WANBAUGH, W. C.

Pulse interference effects in a phase-lock loop.  
23 p4145 A69-42230

Radio spectrum utilization in aerospace communication systems.  
23 p4128 A69-42502

## WAND, L. C.

Validity of the  $f \cos i$  theorem for the absorption of very low frequency radiowaves in the ionosphere.  
13 p2222 A69-28473

## WANG, A. P.-I.

Discrete radiative transfer in slabs.  
05 p0849 A69-16480

Time-dependent transport process.  
23 p4190 A69-41571

## WANG, C. C.

Preparation, optical and dielectric properties of vapor-deposited niobium oxide thin films.  
[ECS PAPER 17] 08 p1372 A69-20365

Boresight shift analysis for the Apollo LM and CSM tracking systems.  
10 p1672 A69-23277

An exact solution of injection phase-locking.  
23 p4119 A69-41742

## WANG, C. P.

Flux and energy spectrum of cosmic-ray electrons at 42 deg north geomagnetic latitude in October 1967.  
05 p0815 A69-16250

Diurnal variation of cosmic-ray muon intensity near geomagnetic equator and the primary anisotropy.  
14 p2512 A69-28966

Regularity of multiplicity distribution in  $nn$  and  $pn$  collisions and the structure of the nucleon.  
18 p3177 A69-35009

On  $\kappa$ - $n$  interactions at 60 GeV/c and  $n$  bar  $n$  annihilation.  
24 p4351 A69-42791

## WANG, C.-C.

On the geometric structures of simple bodies - A mathematical foundation for the theory of continuous distributions of dislocations.  
05 p0834 A69-15731

Universal solutions for incompressible laminated bodies.  
05 p0834 A69-15732

Generalized simple bodies.  
08 p1410 A69-19822

Performance of chloride and fluoride vapor-deposited tungsten emitters in thermionic converters.  
09 p1438 A69-21819

On the response functions of elastic materials.  
12 p2188 A69-26926

## WANG, C.-Y.

A note on the drag of an impulsively started circular cylinder.  
04 p0544 A69-14897

The impulsive starting of a sphere.  
21 p3696 A69-39296

## WANG, D. Y.

An investigation on fatigue crack propagation and failsafe design of stiffened large aluminum alloy panels with various crack stoppers.  
12 p2186 A69-26835

## WANG, G. Y.

The design of a highly parallel computer organization.  
21 p3856 A69-39133

## WANG, H.-C.

Orthonormal aspect on vibration modes for a class of nonuniform beams.  
14 p2534 A69-29319

## WANG, J. T.-S.

On the solution of plates of composite materials.  
20 p3628 A69-37776

## WANG, K.

Electron and ion distributions in chemical nonequilibrium boundary-layer flows.  
16 p2769 A69-31874

## WANG, K. C.

A new approach to "not-so-slender" wing theory.  
04 p0544 A69-14891

## WANG, L. C.

Properties of metal-polymer-silicon thin film structures.  
21 p3782 A69-39464

## WANG, L. S.

The cooling of gas not in local thermodynamic equilibrium by radiation and conduction.  
[AIAA PAPER 69-638] 17 p3073 A69-33311

## WANG, N. M.

On the plastic bulging of a circular diaphragm by hydrostatic pressure.  
08 p1418 A69-20826

## WANG, N.-M.

Effects of plate thickness on the bending of an elastic plate containing a crack.  
04 p0678 A69-14890

## WANG, P. C.

Design and analysis of frames for stability.  
13 p2358 A69-27209

## WANG, R.

New A sub 3 B sub 5 phases of the titanium group metals with rhodium.  
19 p3343 A69-35920

## WANG, T. N. C.

Radiation resistance of a short dipole immersed in a cold magnetoionic medium.  
07 p1107 A69-19226

## WANG, W. L.

Experimental study of projectile penetration in Ottawa sand at low velocities.  
21 p3839 A69-39231

## WANG, Y.-C.

Applications of Lagrange expansion to the problem of shielded surface waves.  
16 p2750 A69-31947

## WANNER, J. F.

Parallax and mass ratio of the visual binary ADS 1865.  
13 p2349 A69-27811

## WANNER, J.-C.

Influence of system reliability on the risks of accidents due to loss of flying qualities /Influence de la fiabilité des systèmes sur les risques d'accidents dus à un manque de qualités de vol/.

07 p1054 A69-19288

Flight Mechanics- Aircraft and Missile Performance /La Mécanique du Vol- Performances des Avions et des Engins/ /2nd Edition/.

17 p2898 A69-33319

## WANOUS, D. J.

Distributed parameter space radiator dynamic analysis.  
[AIAA PAPER 69-29] 06 p1039 A69-18205

## WAPELHORST, L. J.

Elimination of character smear on labelled plan displays.  
09 p1495 A69-21675

## WARASHINA, M.

Internal mechanisms and characteristics of Esaki diodes.  
05 p0732 A69-16298

## WARBURTON, G. B.

Transmission of vibration in beam systems.  
15 p2706 A69-30431

Free vibration of thin cylindrical shells with a discontinuity in the thickness.  
21 p3836 A69-38984

## WARD, A. L.

Computer calculations of avalanche-induced relaxation oscillations in silicon diodes.  
07 p1101 A69-18651

## WARD, D. C.

Fluorescence studies of nucleotides and polynucleotides. I.  
22 p3898 A69-41078

## WARD, E. G.

Strictly sinusoidal flow around a stationary cylinder.  
[ASME PAPER 69-FE-13] 21 p3643 A69-38601

## WARD, F. R.

Glass-ceramics for the coating and bonding of silicon semiconductor material.  
15 p2669 A69-31040

## WARD, H. R.

The photolytic conversion of an allene to a cyclopropylidene - The photolysis of 1,2-cyclononadiene.  
02 p0205 A69-12721

MTI performance degradation caused by limiting.  
03 p0390 A69-13198

Handbook of Radar Measurement.  
21 p3678 A69-39668

## WARD, I. M.

The mechanical behavior of poly(ethylene terephthalate).  
05 p0785 A69-16489

- Anisotropy in oriented fibres from synthetic polymers.  
09 p1528 A69-21504
- ARD, J. F.  
The dynamic response of a flexible rotor blade to a tip-vortex induced moving force.  
[AIAA PAPER 69-203] 07 p1054 A69-19546
- ARD, J. J.  
Performance of chloride and fluoride vapor-deposited tungsten emitters in thermionic converters.  
09 p1438 A69-21819
- ARD, J. L.  
A queueing model of visual sampling experimental validation.  
02 p0202 A69-11954
- ARD, J. W.  
Study of some of the parameters affecting Knudsen effusion. V - Free-path considerations in small Knudsen cells.  
06 p0908 A69-17111  
The radial field Kaufman thruster.  
[AIAA PAPER 69-259] 09 p1569 A69-21877  
Study and optimization of 15 cm Kaufman thruster discharges.  
[AIAA PAPER 69-257] 09 p1569 A69-21878  
2-1/2 kw low specific impulse, hollow cathode mercury thruster.  
[AIAA PAPER 69-300] 09 p1569 A69-21880
- ARD, P. A.  
Aircraft auxiliary power systems and their influence on power plant design. A.  
17 p3017 A69-33216
- ARD, P. H.  
Dependence of the cochlear microphonics and the summing potential on the endocochlear potential.  
23 p4085 A69-41574
- ARD, R.  
Low temperature magnesium dip brazing.  
09 p1509 A69-22346
- ARD, R. W.  
Asymmetry parameters and the temperature dependence of the PQR frequencies of super 1271 in SnI sub 4.  
22 p3986 A69-40726
- ARD, S. H.  
Determination of electrical parameters of the moon.  
[AAS PAPER 68-199] 02 p0312 A69-11477  
Gross estimates of the conductivity, dielectric constant, and magnetic permeability distributions in the moon.  
07 p1216 A69-19221  
Some factors affecting electromagnetic detection of lunar subsurface water.  
11 p1958 A69-24693  
Discussion of paper by J. L. Blank and W. R. Sill, 'Response of the moon to the time-varying interplanetary magnetic field.'  
24 p4384 A69-43190
- ARD, T. E.  
Application of heat pipe technology to rocket engine cooling.  
[AIAA PAPER 69-582] 16 p2839 A69-32668
- ARD, W. D.  
Noise as a Public Health Hazard, American Speech and Hearing Association, Conference, Washington, D.C., June 13, 14, 1968, Proceedings.  
14 p2541 A69-29149
- WARDEN, C. A.  
"High bypass ratio fan noise research test vehicle."  
[AIAA PAPER 69-492] 16 p2767 A69-32727
- WARE, A. A.  
The effect of finite ion mass on the stability of a space-charge-neutralized electron beam.  
09 p1545 A69-21342
- WARE, J. A.  
Continuous and discrete inverse-scattering problems in a stratified elastic medium. I - Plane waves at normal incidence.  
13 p2300 A69-28664
- WARE, R. W.  
Processing biomedical information by optical methods.  
21 p3666 A69-39440
- WAREING, J.  
The effect of material stress-strain properties on fatigue failure.  
10 p1795 A69-23059
- WARES, G.  
Spectral line intensity variations in planetary nebulae.  
08 p1383 A69-19898
- WARES, G. W.  
Radiative lifetimes of excited electronic states in ionic-species of oxygen.  
13 p2301 A69-27452  
The supergiant HD-33579.  
14 p2529 A69-29979
- WARGA, J. J.  
Mixed boron composites for solid rocket nozzles.  
19 p3354 A69-35515  
Low cost ablative materials for solid rocket nozzles.  
19 p3357 A69-35537
- WARKE, C. S.  
Nonlinear electromagnetic response of Bloch electrons in a magnetic field. II - Two-band model for semiconductors.  
03 p0487 A69-13753
- WARMBOLD, W. R.  
Active cooling of a hydrogen-fueled scramjet engine.  
[AIAA PAPER 68-1091] 24 p4365 A69-43725
- WARNE, E. H.  
Gas turbine fuel and control systems.  
[IME PAPER 12] 12 p2147 A69-25796
- WARNECK, P.  
Primary processes in the photolysis of SO sub 2 at 1849 angstrom units.  
01 p0024 A69-10619  
Photodetachment of NO sub 2.  
22 p3985 A69-40575  
Heats of formation of CHO super plus and C sub 3 H sub 3 super plus by photoionization.  
22 p3896 A69-40727
- WARNECKE, G.  
The influence of cloud distribution on the global coverage of remote atmospheric sounding systems.  
15 p2650 A69-31335  
Satellite mapping of the Pacific tropical cloudiness.  
17 p2996 A69-33001
- WARNER, B.  
Level-broadening constants for Mg I and Si I.  
02 p0310 A69-11454  
The isotopic composition of solar beryllium.  
04 p0655 A69-14666  
The abundances of the elements in the solar photosphere. VII.  
08 p1390 A69-20393  
Van der Waals broadening in Fe I.  
08 p1392 A69-20559  
Optical pulsations in the Crab Nebula pulsar.  
08 p1394 A69-20623  
The composition of late-type peculiar stars.  
08 p1403 A69-20910  
Wavelength independence of the velocity of light in space.  
12 p2157 A69-26233  
Further observations of the Crab Nebula optical pulsar.  
12 p2172 A69-27170  
Search for optical pulsations from the Vela pulsar.  
12 p2173 A69-27173  
Forbidden lines of Ca II in the photospheric spectrum.  
14 p2528 A69-29962  
X-ray and optical observations of the pulsar NP 0532 in the Crab Nebula.  
15 p2679 A69-31529  
Synchronous photometry of DQ Herculis.  
16 p2862 A69-32373
- WARNER, C.  
Theoretical considerations of the ignited mode.  
14 p2490 A69-29233
- WARNER, C. F.  
Velocity and temperature profiles in the turbulent boundary layer above an evaporating liquid film.  
13 p2375 A69-27792
- WARNER, H. D.  
Effects of intermittent noise on human target detection.  
17 p2911 A69-34008
- WARNER, J.  
Spatial resolution measurements in up-conversion from 10.6  $\mu$ m to the visible.  
06 p0928 A69-17904  
Image up-conversion from 10.6  $\mu$ m to the visible.  
11 p1897 A69-25037
- WARNER, R. E.  
Deuteron break-up by 42 Mev alpha particles.  
03 p0472 A69-13469
- WARNKE, E. G.  
The first scientific package for the European Large Astronomical Satellite.  
13 p2264 A69-28477
- WARNOCK, J. M.  
Radio wave reflections from large horizontal gradients in the topside ionosphere.  
14 p2415 A69-29521  
Ionospheric irregularities observed by topside sounders.  
20 p3530 A69-37870  
Sideband structure observed by topside sounders.  
20 p3496 A69-37891
- WARNOCK, W. E.  
Special considerations in the weight estimation of features unique to VTOL airplanes.  
[SAWE PAPER 784] 18 p3090 A69-34868
- WARNOCK, W. W.  
Lack of phase variation of Venus.  
05 p0818 A69-15601
- WARREN, E. D.  
Prescription of exercise for the hypokinetic airline pilot.  
23 p4106 A69-41800
- WARREN, E. S.  
Observation of electrostatic resonances of the ionospheric plasma.  
01 p0067 A69-10983  
Topside sounding of the earth's ionosphere.  
14 p2438 A69-29101  
Objectives, history, and principal achievements of the topside sounder and ISIS programs.  
20 p3529 A69-37855  
The topside ionosphere during geomagnetic storms.  
20 p3530 A69-37872
- WARREN, F. W. G.  
A note on Howard's proof of Miles' theorem.  
03 p0417 A69-13796
- WARREN, J. L.  
Parallax and mass ratio of the visual binary sigma 1785 from photographs taken with the Sproul 24-inch refractor.  
13 p2349 A69-27814
- WARREN, J. W. L.  
Creep of fabricated structures.  
21 p3842 A69-39309  
Utilization of strain gauges over long periods of time at elevated temperatures.  
22 p4042 A69-40313
- WARREN, K. A. J.  
The measurement of frequency modulation noise with a delay line.  
23 p4137 A69-41606
- WARREN, M. R.  
The influence of internal defects on the fatigue behaviour of alpha-titanium.  
23 p4178 A69-42360
- WARREN, N.  
Elastic constants versus porosity for a highly porous ceramic, perlite.  
06 p1000 A69-17009
- WARREN, R.  
Carbide grain growth during the liquid-phase sintering of the alloys NbC-Fe, NbC-Ni, and NbC-Co.  
07 p1168 A69-19599
- WARREN, W. B.  
A two oscillator combiner using mutual synchronization.  
11 p1849 A69-24928
- WARREN, W. B., JR.  
Lossy transmission line filters.  
03 p0406 A69-13906
- WARREN, W. E.  
Wave propagation in the generalized dynamical theory of thermoelasticity.  
23 p4235 A69-42464
- WARREN, W. R.  
A high-density, high-velocity equilibrium freestream shock-tunnel concept.  
[AIAA PAPER 68-17] 16 p2766 A69-32167
- WARSHAWSKY, I.  
Kinetics of the reaction between lithium hydride and liquid ammonia at -78 deg C.  
01 p0025 A69-11285



## WARSI, Z. U. A.

## WARSI, Z. U. A.

A numerical method of solving the three-dimensional boundary layer equations with application to a rotating flat blade.  
[AIAA PAPER 69-227] 07 p1051 A69-19560

Further theoretical investigation of the laminar boundary layer over rotating blades and yawed infinite wings.  
16 p2732 A69-31885

## WASKOW, M. A.

Design for the future in terminal air traffic control.  
[AIAA PAPER 68-1101] 20 p3573 A69-37160

Means of increasing airport capacity.  
22 p3925 A69-40429

## WARTANOWICZ, T.

Investigation of a caloroelectric plasma converter with a concentric electrode arrangement /Badanie plazmowego przetwornika kaloroelektrycznego ze wspolrodkowym ukladem elektrod/.  
16 p2822 A69-32065

## WARTENA, L.

The influence of changes in surface roughness on the development of the turbulent boundary layer in the lower layers of the atmosphere.  
12 p2125 A69-26014

## WARWICK, J. W.

Radiophysics of Jupiter.  
02 p0330 A69-12805

Fifth source of Jupiter decametric radiation.  
05 p0813 A69-15604

Europa and the decametric radiation from Jupiter.  
05 p0813 A69-15605

Drift patterns in the dynamic spectra of Jupiter's decametric radiation.  
06 p1008 A69-17958

Models of pulsating radio sources.  
08 p1397 A69-20688

Decametric radio spectra and positions during the flare of 7 July 1966, 0041 UT.  
10 p1765 A69-23751

Faraday effect on Jupiter's radio bursts.  
20 p3594 A69-38169

## WARWICK, M. G.

Lubrication of bearings and gears for operation in a space environment.  
[IME PAPER 6] 07 p1138 A69-18562

## WARWICK, T. R.

Helicopter engine dynamic analysis.  
[AHS PAPER 332] 17 p2946 A69-33531

## WASHBURN, B. W.

Turbopump vibration measurements at cryogenic temperatures.  
10 p1692 A69-23250

Considerations involved in automation of test facilities.  
10 p1671 A69-23260

Conditioning of digital sampled data spectra.  
10 p1654 A69-23292

## WASHBURN, R. M.

Phosphorus-containing resins and composites for environmental extremes.  
19 p3356 A69-35528

## WASHBURN, T. W.

Comparison of simultaneous forward and backscatter soundings to verify a proposed focusing mechanism of HF sky waves.  
14 p2435 A69-28967

## WASHIMI, H.

Self-focusing of a plasma wave along a magnetic field.  
09 p1546 A69-21577

## WASHINGTON, W. M.

The application of CRT contour analysis to general circulation experiments.  
01 p0109 A69-10539

The effect of horizontal shear flow on geostrophic adjustment in a barotropic fluid.  
15 p2648 A69-30217

## WASHO, B. D.

Heat conduction in linear amorphous high polymers - Orientation anisotropy.  
19 p3359 A69-36443

## WASIK, S. P.

Measurements of gaseous diffusion coefficients by a gas chromatographic technique.  
18 p3099 A69-34280

## WASILJEFF, A.

Generalization of a sum formula of Neumann and Lommel /Verallgemeinerung einer Summenformel von Neumann und Lommel/.  
18 p3101 A69-34625

## WASLIEN, C. I.

Uric acid production of men fed graded amounts of egg protein and yeast nucleic acid.  
05 p0708 A69-15968

Human intolerance to bacteria as food.  
13 p2213 A69-27265

## WASOWSKI, J.

A method of predicting the integral of a non-homogeneous linear differential equation with constant coefficients /Metoda przewidywania calki niejednorodnego liniowego rownania rozniczowego o stalych wspolczynnikach/.  
03 p0455 A69-13022

## WASSERBURG, G. J.

Ages of silicate inclusions in iron meteorites.  
08 p1405 A69-20927

Cosmogenic rare gases and the super 40 K-super 40 Ar age of the Kodaikanal iron meteorite.  
09 p1596 A69-22047

Initial strontium isotopic abundances and the resolution of small time differences in the formation of planetary objects.  
11 p1953 A69-24357

The status of isotopic age determinations on iron and stone meteorites.  
19 p3413 A69-36108

Isotopic analyses of barium in meteorites and in terrestrial samples.  
19 p3425 A69-36422

Nuclear chronologies for the Galaxy.  
22 p3986 A69-40766

Determination of an internal super 87 Rb-super 87 Sr isochron for the Olivenza chondrite.  
24 p4385 A69-43214

## WASSERSTROM, E.

Asymptotic solutions of the stability of one-dimensional incompressible inviscid flows.  
14 p2429 A69-29013

## WASSON, J. T.

Gallium, germanium, indium and iridium variations in a suite of L-group chondrites.  
01 p0155 A69-10976

The distribution of trace quantities of germanium between metal, silicate and sulfide phases.  
05 p0819 A69-15624

Possible sources of meteoritic material from Hopewell Indian burial mounds.  
11 p1963 A69-25401

Primordial rare gases in the atmosphere of the earth.  
20 p3600 A69-37489

The chemical classification of iron meteorites. III - Hexahedrites and other irons with germanium concentrations between 80 and 200 ppm.  
20 p3602 A69-37537

## WASYLKIWSKYJ, W.

Mutual coupling and element efficiency for infinite linear arrays.  
04 p0571 A69-14317

A formulation of the interrelation among mutual coupling, element efficiency, active impedance and patterns in linear arrays.  
17 p2929 A69-33874

## WASZAK, L.

Power-supply design for pulsed lasers.  
15 p2636 A69-31527

## WASZCZYSZYN, Z.

Exact equations and computation of finite elastoplastic deflections of orthotropic shells of revolution /Scisle rownania i obliczanie skonczonego sprzyno-plastycznych ugiec ortotropowych powlok obrotowo-symetrycznych/.  
05 p0831 A69-15680

Finite elastic-plastic deflections of orthotropic shells of revolution - Exact equations and calculations.  
05 p0842 A69-16642

## WASZINK, J. H.

Cesium depletion in the positive column of Cs-Ar discharges.  
19 p3380 A69-36441

## WASZKIEWICZ, P. R.

Attitude performance of the GEOS-II gravity-gradient spacecraft.  
07 p1229 A69-18349

## WATAGHIN, A.

Numerical limitations on the cosmological constant and on the deceleration parameter in a closed radiation-type universe.  
15 p2700 A69-31496

Use of the azimuthal distribution for the analysis of cosmic-ray jets.  
16 p2849 A69-32045

Transverse momentum of particles in jets and determination of fireball parameters in accelerators.  
19 p3396 A69-36644

## WATAGHIN, G.

On the hypothesis that the expansion of the universe is due to a distribution of neutrinos of sufficiently high density and on the gravitational redshift.  
22 p4029 A69-40756

## WATANABE, C.

Investigations of the transequatorial propagation mode in the VHF band.  
10 p1653 A69-23192

## WATANABE, D. J.

Life support.  
19 p3262 A69-36318

## WATANABE, E.

Continual photoelectric monitoring of the flare star UV Cet.  
22 p4032 A69-40945

Continual photoelectric monitoring of the flare star YZ CMi.  
22 p4032 A69-40947

## WATANABE, H.

Design of Chebyshev filters with flat group-delay characteristics.  
08 p1299 A69-21169

An iterative Chebyshev approximation method for network design.  
08 p1299 A69-21170

## WATANABE, K.

An oversize waveguide directional coupler using two prisms interface-matched by means of the Brewster's-angle effect.  
14 p2424 A69-29764

Formation and structure of equatorial anticyclones caused by large-scale cross-equatorial flows determined by ATS-I photographs.  
24 p4342 A69-42895

## WATANABE, S.

A method of self-featuring information compression in pattern recognition.  
07 p1088 A69-18386

On the uniqueness and non-uniqueness of solutions of initial value problems for some quasi-linear parabolic equations.  
10 p1722 A69-24069

## WATANABE, T.

Investigation of quasi-periodic VLF emissions and their relation to geomagnetic micropulsations.  
01 p0063 A69-10274

Instability of a plasma drifting across a magnetic field.  
02 p0286 A69-11830

Electrostatic waves in the ionosphere excited around the lower hybrid resonance frequency.  
06 p0918 A69-17381

The survey on the physiological function of the aged pilots of JASDF.  
06 p0876 A69-18028

Preliminary observations of strong radio sources with 1' fan beam in 3.75 GHz.  
10 p1777 A69-23397

Some remarks on the origin of lower hybrid resonance noise in the ionosphere.  
21 p3702 A69-38358

## WATANABE, Y.

Phase-locking phenomena of multitransverse, longitudinal modes in He-Ne lasers.  
[IEEE PAPER Q-1] 07 p1153 A69-19076

Characteristics and applications of the arc-heated wind tunnel at the National Aerospace Laboratory.  
22 p3927 A69-40595

## WATENPAUGH, K.

The crystal and molecular structure of mu-oxo-bis(chlorobis(2,4-pentanedionato)titanium(IV)-chloroform, /TiCl/C sub 5 H sub 7 O sub 2 / sub 2 / sub 2 O.C.HCl sub 3.  
01 p0023 A69-10411

## WATERFALL, A. P.

The accuracy of the velocity increment vector of the Black Arrow third stage.  
23 p4209 A69-41301

- Effect of ablation on the dynamics of spinning re-entry vehicles. 24 p4245 A69-43249
- WATERMAN, A. T., JR.**  
A data-gathering antenna array for transhorizon propagation research. 11 p1851 A69-24987
- WATERMAN, P. C.**  
Scattering by dielectric obstacles. 17 p2930 A69-33890
- WATERS, A. C.**  
Bed forms in base-surge deposits - Lunar implications. 23 p4216 A69-42203
- WATERS, C. S.**  
Airport noise and the community. 14 p2541 A69-29506
- WATERS, E. D.**  
An ATS-E solar cell space radiator utilizing heat pipes. [AIAA PAPER 69-630] 17 p3072 A69-33277
- WATERS, J. W.**  
Water vapor - Observations of galactic sources. 18 p3205 A69-35435
- WATERS, K. L.**  
Synthesis of a pure-fluidic temperature control system. [ASME PAPER 68-WA/FE-30] 05 p0705 A69-16103
- WATERS, W. E.**  
Theory of the unrippled space-charge flow in general axially symmetric electron beams. 11 p1846 A69-24598
- WATERS, W. M.**  
On the design of a large aperture radar for target imaging. 04 p0562 A69-15476
- WATERSTON, R. J.**  
One-dimensional shock waves and acceleration fronts in non-linear viscoelastic materials. 23 p4235 A69-42463
- WATKINS, C. D.**  
High power radar for ionospheric research. 03 p0398 A69-13768  
F-region electron concentrations at solar activity minimum. 10 p1684 A69-23825  
Ambipolar diffusion and motion of ion clouds in the earth's magnetic field. 12 p2074 A69-26961
- WATKINS, G. B.**  
Composite-glass structures. 21 p3752 A69-38934
- WATKINS, J.**  
A seismic refraction system for lunar use. 23 p4162 A69-41533
- WATKINS, L. S.**  
Lasers in industry. 09 p1521 A69-22783  
Ring lasers - Principles and applications. 22 p3961 A69-40240
- WATKINS, N. D.**  
Attempt to determine the geomagnetic field intensity during a reversal of polarity / Essai de détermination de l'intensité du champ magnétique terrestre au cours d'un renversement de polarité. 16 p2788 A69-32646
- WATKINS, R. V.**  
Ductility and mechanical properties of alloyed chromium composites. 23 p4177 A69-41672
- WATKINSON, F.**  
Metallurgical and process considerations in welding high strength steels. [SBAC PAPER 8] 20 p3549 A69-37447  
Hydrogen cracking in high strength weld metals. 24 p4320 A69-42943
- WATRASIEWICZ, B. M.**  
Speculations on the application of pattern recognition techniques to earth resource satellite data. 21 p3721 A69-38630
- WATRIN, J. L.**  
Urinary 17-ketosteroids and 17-hydroxycorticosteroids for civilian aircrews in a tropical country. 12 p2024 A69-26560
- WATSON, A.**  
Controlled factorial experiments on high voltage vacuum breakdown. 05 p0731 A69-16244
- WATSON, B. F.**  
The effect of the atmosphere on photographic images over a long range oblique path. 01 p0107 A69-10223
- WATSON, C. A., JR.**  
Cathodic cleaning removes flux from furnace brazed aluminum assemblies. 24 p4319 A69-42938
- WATSON, D. C.**  
Investigation of synchronous-wave R-F to D-C conversion. 02 p0212 A69-12816
- WATSON, G. A.**  
An algorithm for minimax approximation in the non-linear case. 08 p1344 A69-20829  
On estimating best approximations of functions defined by differential equations. 20 p3568 A69-37832
- WATSON, H. C.**  
The prediction of the time variation of the state of a reacting non-adiabatic homogeneous system undergoing independent changes in density. [AIAA PAPER 69-87] 06 p1036 A69-18054
- WATSON, H. J.**  
Instruments for motion measurement using laser Doppler heterodyning techniques. 15 p2614 A69-31276  
Instruments for motion measurement using laser Doppler heterodyning techniques. 20 p3552 A69-37004
- WATSON, H., JR.**  
The relationship between the constitutive equation and one-dimensional wave propagation. 02 p0344 A69-12291
- WATSON, J. L.**  
High-resolution measurements of plasma density. 06 p0972 A69-18220
- WATSON, K. M.**  
Multiple scattering of electromagnetic waves in an underdense plasma. 14 p2412 A69-29453
- WATSON, N. D.**  
Generalized approach to the thermal analysis of orbiting spacecraft. [SAE PAPER 690202] 07 p1239 A69-18305
- WATSON, P. A.**  
Shot noise in microwave parametric amplifiers using gallium-arsenide varactors. 01 p0048 A69-11137
- WATSON, R. C., JR.**  
Instruments for motion measurement using laser Doppler heterodyning techniques. 15 p2614 A69-31276  
Instruments for motion measurement using laser Doppler heterodyning techniques. 20 p3552 A69-37004
- WATSON, R. D.**  
Laser techniques for observing the upper atmosphere. 01 p0090 A69-10540
- WATSON, V. R.**  
A collisionless model for high specific impulse accelerators. [AIAA PAPER 69-278] 09 p1563 A69-21233
- WATSON, W.**  
A circulating-liquid laser system. [IEEE PAPER M-70] 07 p1153 A69-19069
- WATSON, W. D.**  
The effect of auto-ionization lines on the opacity of stellar interiors. 20 p3612 A69-38165
- WATSON, W. J.**  
The effect of hypoxia on brain gamma-aminobutyric acid levels. 04 p0552 A69-14482  
Correlation between decreases in brain gamma-aminobutyric acid levels and susceptibility to convulsions induced by hyperbaric oxygen. 19 p3257 A69-35972
- WATSON, W. W.**  
Real time, real temperature, jet V/STOL test facility. [AIAA PAPER 69-310] 09 p1479 A69-22388
- WATT, D. M., JR.**  
Relationship between the limiting pressure and the solid temperature for the deflagration of ammonium perchlorate. 13 p2324 A69-27364
- WATT, T. M.**  
Vertical-incidence pulse dispersion with applications to the Alouette 1 topside sounder. 16 p2750 A69-31977
- WATT, W. S.**  
Atom formation rates behind shock waves in oxygen. 23 p4194 A69-42209
- WATTEAU, J. P.**  
Scattering of laser light by a laboratory plasma / Diffusion de la lumière laser par un plasma de laboratoire. 05 p0798 A69-15586  
Measured anisotropies of the plasma focus neutron emission compared with proposed mechanisms. 11 p1930 A69-25321  
90 deg laser light scattering by a dense plasma focus. 11 p1899 A69-25324
- WATTEAU, J.-P.**  
Axial striograms of a noncylindrical focusing discharge / Striogrammes axiaux d'une décharge non cylindrique focalisante. 08 p1362 A69-20279  
Study of the collective scattering of laser light at an angle of 90 deg by a cold dense plasma / Etude de la diffusion collective à 90 deg de la lumière laser par un plasma dense et froid. 13 p2273 A69-28366
- WATTON, A.**  
The fuel-mixing mechanism in diffusion-type supersonic combustion. [AIAA PAPER 69-32] 07 p1242 A69-19266
- WATTS, A. M.**  
On forced flow against a rotating disc. 24 p4244 A69-42718
- WATTS, C. R.**  
Chemical compatibility of nickel and molybdenum fibers with beryllium. 10 p1707 A69-22991
- WATTS, G. A.**  
Dynamics of a rigid-rotor controlled by a high-speed gyro as it slows/stops at high forward speed. [AHS PAPER 343] 17 p2899 A69-33508
- WATTS, J. W.**  
Advantages of using a combination electromagnetic and material shield. 15 p2652 A69-31522
- WATTS, R. G.**  
An analytical expression of microlayer thickness in nucleate boiling. 13 p2375 A69-27789
- WATTSON, R. B.**  
An investigation of a gray, optically thick planetary atmosphere in radiative-convective equilibrium. 09 p1600 A69-22200
- WAUK, M. T.**  
Vacuum deposition of AlN acoustic transducers. 05 p0761 A69-15820
- WAX, R. L.**  
Measurements of precipitated 1-20 kev protons and electrons during a breakup aurora. 18 p3187 A69-34946
- WAXMAN, A.**  
Preparation, optical and dielectric properties of vapor-deposited niobium oxide thin films. [ECS PAPER 17] 08 p1372 A69-20365
- WAXMAN, A. S.**  
Radiation resistance of Al sub 2 O sub 3 MOS devices. 17 p2935 A69-32888
- WAYLAND, J. R.**  
Two-temperature statistical model of particle spectra. 05 p0797 A69-16368  
The fluctuation origin of cosmic radiation. 12 p2148 A69-26206  
Source requirements for the fluctuation origin of cosmic radiation. 18 p3188 A69-35005  
On the possibility of cosmic rays being transient. 24 p4367 A69-43006
- WAYMAN, P. A.**  
The meteorite of April 25, 1969. 15 p2701 A69-31528



## WAYS, P.

## WAYS, P.

Effect of chronic hypoxic hypoxia on the O sub 2-Hb dissociation curve and respiratory gas transport in man. 21 p3650 A69-38383

## WAYTE, M. J.

A study of rocket exhaust plumes at high altitudes. [AIAA PAPER 69-575] 16 p2869 A69-32746

## WAZZAN, A. R.

On the measurement of wall shear stress by means of an evaporating liquid film. 13 p2375 A69-27793

## WDOWCZYK, J.

Origin of muon-poor extensive air showers. 12 p2152 A69-27099  
Lateral distribution of the muon component in the central region of extensive air showers. 15 p2677 A69-31481  
A theoretical analysis of extensive air showers. III - Muon showers at large zenith angles. 15 p2678 A69-31483  
Theoretical analysis of extensive air showers. IV - Muon showers deep underground. 23 p4207 A69-42497

## WEARMOUTH, C.

Attitude control of a highly accurate space stabilized platform and experimental package. 06 p0955 A69-17587

## WEARMOUTH, W. R.

Effect of "pure" methanol on the cracking of titanium. 09 p1521 A69-21400

## WEART, S. R.

The birth of active regions. 19 p3403 A69-35967  
Photoelectric eclipse observation of the continuum at the extreme solar limb. 22 p4027 A69-40659

## WEATHERSTON, R. C.

The multi-recompression heater, a new concept for large scale hypersonic testing. [AIAA PAPER 69-332] 13 p2242 A69-28268

## WEAVER, C. W.

Irradiation and the ductility of chromium. 01 p0095 A69-10604

## WEAVER, D. C.

The design, testing and implementation of a Halon 1301 fire extinguishment system for use in the Apollo/Saturn Lunar Module adapter at Kennedy Space Center Launch Complex 39. 18 p3094 A69-35062

## WEAVER, E. C.

A dual-beam source of actinic light for photosynthesis research. 19 p3312 A69-36378

## WEAVER, J. A.

Mathematical model of skin exposed to thermal radiation. 06 p0875 A69-17840

## WEAVER, J. J.

Spacecraft attitude control. 09 p1609 A69-21617

## WEAVER, W., JR.

Computer-aided design of a large steerable antenna structure. 23 p4231 A69-42135

## WEBB, B. A.

Fabrication-testing-design of Al-B composite materials. 09 p1510 A69-22351

## WEBB, C. E.

A new technique for measurements of radial distributions of excited species in plasmas and its application to capillary discharges in argon. 04 p0634 A69-14441

## WEBB, H. D.

Solar flares and magnetic storm of May 21 to 28, 1967. 11 p1951 A69-25161

## WEBB, J.

Jet engines spur development of hollow castings. 09 p1503 A69-21907

## WEBB, J. A.

Computation of voltage and power spectra. 05 p0722 A69-16762

## WEBB, J. A., JR.

A multipurpose ventricular actuating system. 24 p4273 A69-42983

## WEBB, J. E.

Space Age Management- The Large-Scale Approach. 16 p2881 A69-31766

## WEBB, J. J.

Solar spectral irradiance measured from 38,000 feet with a Leiss monochromator and a photoelectric filter radiometer. 16 p2861 A69-32261

## WEBB, L. D.

Advanced air data sensing techniques. 05 p0766 A69-16755

## WEBB, R. O.

Fundamentals of holographic velocimetry. 19 p3305 A69-35729  
Processing holographic velocimetry data. 19 p3305 A69-35730

## WEBB, W. A.

Voltage dependence of electroluminescence from GaP diodes prepared by liquid epitaxial techniques. 10 p1663 A69-23664

## WEBB, W. H.

Transformation theory for the compressible turbulent boundary layer with arbitrary pressure gradient. [AIAA PAPER 69-160] 06 p0912 A69-18073  
The optimum calibration interval program. 10 p1699 A69-23288

## WEBB, W. L.

Electrical structure of the stratosphere and mesosphere. 18 p3130 A69-35103

## WEBBER, B. B.

Mutation-induction and nuclear inactivation in *Neurospora crassa* using radiations with different rates of energy loss. 03 p0373 A69-13490

## WEBBER, D.

Effect of shot peening on the fatigue properties of maraging steel and Al-Zn-Mg alloy. 02 p0253 A69-12061

## WEBBER, J. P. H.

Stress analysis in viscoelastic bodies using finite elements and a correspondence rule with elasticity. 19 p3445 A69-36830

## WEBBER, W. R.

The modulation of galactic cosmic rays by interplanetary magnetic fields. 03 p0498 A69-12933

On the relationship between recent measurements of cosmic ray electrons, nonthermal radio emission from the Galaxy, and the solar modulation of cosmic rays. 07 p1206 A69-19269

The relative energy spectra of carbon and oxygen nuclei in the primary cosmic radiation. 08 p1380 A69-20632

Measurements of cosmic-ray Li, Be and B nuclei in the energy range 100 Mev/nuc to greater than 22 Bcv/nuc. 08 p1380 A69-20638

X-ray astronomy - 1968 vintage. 09 p1583 A69-22762

Observations of fluorine nuclei in the primary cosmic radiation made on the Pioneer 8 spacecraft. 15 p2676 A69-30886

A measurement of the spectrum of cosmic-ray electrons between 20 Mev and 3 Bev in 1968 - Further evidence for extensive time variations of this component. 24 p4367 A69-43175

## WEBBINK, R.

Fossil tracks in meteorites and the chemical abundance and energy spectrum of extremely heavy cosmic rays. 19 p3410 A69-36096

## WEBELER, R. W. H.

Viscosity measurements of dilute solutions of helium-3 in superfluid helium-4 between 0.1 and 1.2 deg K. 21 p3772 A69-39582

## WEBER, C. A.

Elements of Detection and Signal Design. 12 p2033 A69-26867

## WEBER, C. F.

A theorem on the representation of potential flows having unbounded free surfaces. 21 p3696 A69-39295

## WEBER, C. L.

Cascaded phase locked loops. 09 p1474 A69-22450

Doppler jitter versus digital error rate.

23 p4122 A69-41771

## WEBER, E. J.

The effect of finite electrical conductivity on the angular-momentum loss of the sun due to the solar wind. 18 p3189 A69-35398

## WEBER, H.

Continuity of the Chebyshev operator /Zur Stetigkeit des Tschebyscheff-Operators/. 10 p1718 A69-22875

Step-up mixer for high performance in the microwave range /Aufwaerts-mischer fuer hohe Leistung im Mikrowellengebiet/. 11 p1854 A69-25615

Optimization of a laser cavity in order to produce minimum pulse widths in Q-switched operation /Optimierung eines Laser-Resonators zur Erzeugung minimaler Pulsbreiten im Q-Switch-Betrieb/. 16 p2796 A69-31802

The state of laser research /Der Stand der Laserforschung/. 21 p3736 A69-38781

## WEBER, H. G.

Generation of large amplitude periodic shock-fronted pressure waves in a resonant tube. 06 p0906 A69-17149

## WEBER, H. P.

Generation and measurement of ultrashort light pulses. 06 p0935 A69-17769

Transient stimulated Raman scattering in liquids and evaluation of picosecond pulse duration. [IEEE PAPER H-6] 07 p1152 A69-19063

Intensity interferometry by two-photon excitation of fluorescence. 10 p1705 A69-23811

Influence of systematic phase deviations on the output of mode-locked lasers. 21 p3741 A69-39683

The output intensity of a non-ideally mode-locked laser. 21 p3741 A69-39684

## WEBER, J.

Evidence for discovery of gravitational radiation. 16 p2784 A69-32565

General relativity theory and experiments. 23 p4192 A69-42331

## WEBER, J. A.

The R and D effort. 05 p0850 A69-16717

## WEBER, J. H.

Profiles of laser-created cavities on metal surfaces. 20 p3552 A69-36917

## WEBER, J. Q.

Selection of recombination rate constants for H-F-O reactions. 04 p0646 A69-14743

## WEBER, J.-D.

Concerning the properties of a class of nonlinear viscoelastic bodies with hidden parameters /Sur les proprietes d'une classe de corps viscoelastiques non lineaires a parametres caches/. 01 p0171 A69-11131

Sufficient conditions of stability of elastic and elastoplastic bodies /Sur des conditions suffisantes de stabilite de corps elastiques et plastoelastiques/. 15 p2707 A69-30621

## WEBER, K. E.

The effect of chloride contamination on cracking in titanium. [SAE PAPER 680642] 03 p0444 A69-13458

## WEBER, L. A.

Specific heats of oxygen at coexistence. 10 p1808 A69-23187

Specific heats C sub v of fluid oxygen from the triple point to 300 K at pressures to 350 atmospheres. 10 p1808 A69-23188

The P-V-T surface of oxygen in the critical region - Densities of saturated liquid and vapor. [NAS-NRC PAPER H-5] 22 p4050 A69-40623

## WEBER, M. J.

Frequency- and time-dependent gain characteristics of laser- and flashlamp-pumped dye solution lasers. 02 p0257 A69-12616

Frequency- and time-dependent gain characteristics of dye lasers. 17 p2980 A69-33025

- VEBER, R. E.**  
Fluidic two axis pulse time modulated position sensor.  
02 p0249 A69-12087  
Determination of surface structures using LEED and energy analysis of scattered electrons.  
09 p1554 A69-21340
- VEBER, R. G.**  
The stress corrosion cracking of a non-age-hardenable aluminum alloy.  
10 p1709 A69-23055
- VEBER, R. R.**  
Cosmic radio noise intensity from 0.45 to 3.0 MHz observed by the ATS II satellite.  
07 p1224 A69-19715  
The spectrum of the cosmic radio background between 0.4 and 6.5 MHz.  
23 p4219 A69-42375
- VEBER, V.**  
The results of the space testing of solid propellant gas generators during the stage separation of the Europa I booster rocket /Die Ergebnisse der Weltraumprobung von Feststoff-Gasgeneratoren bei der Stufenentrennung der Traegerrakete Europa I/.  
23 p4224 A69-42153
- WEBSTER, A. J.**  
Flight test data reduction on a timesharing general purpose computer.  
05 p0726 A69-16758
- WEBSTER, A. R.**  
Ionospheric electron content and scintillation studies at widely-spaced low-latitude stations.  
02 p0235 A69-11427
- WEBSTER, B. L.**  
The masses and galactic distribution of southern planetary nebulae.  
14 p2520 A69-29376  
The kinematics of distant galactic planetary nebulae and the rotation of the disc population of a Magellanic-type irregular galaxy.  
14 p2520 A69-29377  
The early evolution of the nuclei of planetary nebulae.  
14 p2520 A69-29378
- WEBSTER, D.**  
Increasing the toughness of the martensitic stainless steel AFC 77 by control of retained austenite content, ausforming and strain aging.  
08 p1330 A69-20010
- WEBSTER, H. F.**  
Surface characterization studies on CVD tungsten.  
09 p1558 A69-21810  
Wetting of some refractory metals by cesium, potassium, and sodium.  
14 p2506 A69-29270
- WEBSTER, J. C.**  
Noise, you can get used to it.  
11 p1830 A69-24797  
SIL - Past, present, and future.  
23 p4101 A69-41495
- WEBSTER, J. M.**  
A laser-schlieren technique to take kine films of gas flows within a highly luminous, transient arc.  
08 p1316 A69-20615
- WEBSTER, W. M.**  
Integrated microwave modules - A prospectus.  
01 p0039 A69-10188
- WECHSLER, M. S.**  
Dislocation channeling in neutron-irradiated niobium.  
09 p1521 A69-21345  
Radiation hardening in single crystal niobium - The temperature dependence of yielding.  
13 p2275 A69-27368
- WEDDELL, A., JR.**  
Real time, real temperature, jet V/STOL test facility. [AIAA PAPER 69-310]  
09 p1479 A69-22388
- WEDEL, B.**  
The new solar telescope of the Wilhelm-Foerster Observatory in Berlin /Das neue Sonnenfernrohr der Wilhelm-Foerster-Sternwarte in Berlin/.  
15 p2611 A69-30881
- WEDEPOHL, K. H.**  
Handbook of Geochemistry. Volume 2/1.  
22 p3897 A69-40890  
Handbook of Geochemistry. Volume 1.  
22 p3897 A69-40980
- WEDLICH, T.**  
Frequency-response characteristics of mechanical oscillator chains /Frequenzgaenge mechanischer Schwingerketten/.  
20 p3577 A69-37920
- WEDLOCK, B. D.**  
Direct determination of the pinch-off voltage of a depletion-mode field-effect transistor.  
07 p1102 A69-18861
- WEE, R. S. S.**  
A numerical technique for the solution of some nonlinear systems.  
22 p4040 A69-39937
- WEEBE, R. K. E.**  
High temperature sealants for vacuum systems.  
11 p1907 A69-24742
- WEEDMAN, D. W.**  
A comparison of the nuclei in M51 and NGC 4151.  
10 p1785 A69-24089  
Spectral observations of Markarian galaxies with an ultraviolet continuum. II /Spektral'nye nabludeniiia galaktik Markariana s ul'trafioletovym kontinuumom. II/.  
19 p3426 A69-36577
- WEEKES, T. C.**  
A search for discrete sources of cosmic gamma rays of energies near  $2 \times 10$  super 12 ev.  
02 p0308 A69-12597  
Upper limits to gamma ray fluxes from three pulsating radio sources.  
03 p0513 A69-13772  
Production of cosmic gamma rays by Compton scattering in discrete sources.  
08 p1377 A69-20053  
High-Energy Astrophysics.  
22 p4008 A69-39900
- WEEKLEY, C. T.**  
Chemical species and chemical reactions of importance in nonequilibrium rocket engine performance calculations.  
11 p1940 A69-24905
- WEEKS, T. M.**  
Influence of free-stream turbulence on hypersonic stagnation zone heating. [AIAA PAPER 69-167]  
06 p1039 A69-18198  
Effects of flow unsteadiness on hypersonic wind tunnel spectroscopic diagnostics. [AIAA PAPER 69-331]  
13 p2242 A69-28267
- WEEMS, P. V. H.**  
XX century navigation.  
03 p0463 A69-13207
- WEENING, D. L.**  
On the combination of evidence from the eye and ear.  
23 p4111 A69-42168
- WEERTMAN, J.**  
Work Hardening, American Institute of Mining, Metallurgical and Petroleum Engineers, Symposium, Chicago, Ill., November 1, 2, 1966, Proceedings.  
05 p0777 A69-15752  
Dislocation climb theory of steady-state creep.  
08 p1329 A69-20000  
The effect of air pressure on the rate of fatigue crack growth.  
13 p2276 A69-27393  
Theory of rate of growth of fatigue cracks under combined static and cyclic stresses.  
15 p2709 A69-30808  
Effect of cracks on creep rate.  
20 p3619 A69-36964  
Effect of cracks on creep rate. II.  
20 p3620 A69-36965
- WEETON, J. W.**  
Fiber-metal matrix composites.  
08 p1332 A69-20204
- WEFEL, J. P.**  
Observation of trans-iron nuclei in the primary cosmic radiation.  
21 p3787 A69-38327
- WEGENER, H. A. R.**  
Charge storage model for variable threshold FET memory element.  
10 p1742 A69-22947  
An integrated nonvolatile read-write memory with addressing.  
17 p2942 A69-34120
- WEGENER, P. P.**  
Experiments on shock stand-off distance in nonequilibrium flow.  
18 p3089 A69-35385
- WEGER, R. M.**  
Power conditioning development for the Sert II ion thruster.  
23 p4075 A69-42301
- WEGMAN, R. F.**  
Adherend mechanical properties limit adhesive bond strengths.  
09 p1530 A69-22317  
Effect of outdoor aging on unstressed, adhesive-bonded aluminum to aluminum lap shear joints.  
19 p3320 A69-35562  
Effect of outdoor aging on unstressed, adhesive-bonded aluminum to aluminum lap shear joints.  
24 p4319 A69-42932  
Development of adhesive-bonded joints for glass resin composite sandwich structures.  
24 p4403 A69-43462
- WEGMANN, H. M.**  
Dependence of tilt-table and acceleration tolerance on body build and physical fitness /Die Abhaengigkeit der Orthostase- und Beschleunigungstoleranz von Koerperbau und Leistungsfaeahigkeit/. [DVL-834]  
09 p1444 A69-21304  
Impairment of pilot efficiency by alcohol and drugs - An attempt to deduce standard limits from experimental results /Die einschraenkung der flugtaechtigkeit durch alkohol und medikamente - Versuch einer experimentellen erarbeitung von richtwerten/.  
21 p3663 A69-38792  
Influence of stature and physical fitness on tilt-table and acceleration tolerance.  
22 p3889 A69-39940  
Physical fitness and tolerances to environmental extremes.  
23 p4102 A69-41683  
The influence of stature and physical fitness on tilt-table and acceleration tolerance.  
23 p4108 A69-41821
- WEGROWE, J.-G.**  
Langmuir probes compared with other diagnostic techniques in a Q-device.  
02 p0288 A69-12172
- WEGROWICZ, L. A.**  
Determination of the field distribution in the aperture of an antenna realizing scanning with the beam of desired shape.  
15 p2578 A69-30634
- WEH, H.**  
Induction phenomena in MHD converters with constant and travelling magnetic field.  
11 p1827 A69-25399  
Simultaneous consideration of finite length and finite channel width in MHD induction converters - The compensated converter.  
13 p2207 A69-27496  
Cylindrically constructed MHD induction converters.  
13 p2207 A69-27505  
MHD losses.  
21 p3649 A69-39483
- WEHNER, D. R.**  
Tailored response microwave filter.  
14 p2423 A69-29759
- WEHNER, H.**  
Problems in the evaluation of meteorological data for flight-path climatologies /Probleme der Auswertung meteorologischer Daten fuer Flugwegklimatologien/.  
09 p1535 A69-21519
- WEHRLI, CH.**  
The problem of the stability of nonuniformly rotating viscoelastic shafts /Zum Problem der Stabilitaet ungleichformig rotierender viskoelastischer Wellen/.  
18 p3224 A69-35300
- WEI, H. Y.**  
Temperature relaxation near the interface of two semi-infinite plasmas.  
11 p1923 A69-24296
- WEI, M. H. Y.**  
Linearized inviscid-flow theory of two-dimensional thin jet penetration into a stream.  
01 p0007 A69-11019
- WEI, R. P.**  
Fatigue-crack propagation in a high-strength aluminum alloy.  
01 p0098 A69-10766



## WEIBEL, J.

- The effect of D sub 2 O on fatigue-crack propagation in a high-strength aluminum alloy. 15 p2640 A69-30815
- Application of fracture mechanics to stress corrosion cracking studies. 19 p3349 A69-36888

## WEIBEL, J.

- Viruslike particles in the fat body, oenocytes, and central nervous tissue of *Drosophila melanogaster* imagoes. 23 p4091 A69-42021

## WEICHEL, H.

- Effects of radiation pressure on a laser-produced plasma. 07 p1190 A69-18902

## WEICKMANN, H. K.

- High altitude radiometric measurements of cirrus. 09 p1536 A69-21641

## WEIDEMANN, H.

- Hypoxia resistance test at 7,500 m /24,600 ft/ in the low-pressure chamber before and after combined ergometer and altitude training. 23 p4086 A69-41788

## WEIDEMANN, H. L.

- Entropy analysis of parameter estimation. 21 p3757 A69-39664

## WEIDENER, R. A.

- Thermoplastic adhesives. 14 p2469 A69-29347

## WEIDLICH, W.

- Mode interaction in a spatially inhomogeneous laser. 02 p0258 A69-12632
- Quantum theory of the laser. 08 p1324 A69-20221

## WEIDLINGER, P.

- Control of RMS surface error in large antenna structures. 23 p4150 A69-42137

## WEIDMANN, G.

- Thermal effects in modulated IMPATT oscillators. 09 p1468 A69-22588

## WEIDNER, D. K.

- Diurnal variations in the thermosphere from a series of Marshall-University-of-Michigan probes. 22 p3939 A69-40515

## WEIDNER, G. G.

- Wide tuning range S-band maser. 17 p2979 A69-32914

## WEIFFENBACH, C. K.

- High-temperature equilibria from plasma sources. I - Carbon-hydrogen-oxygen systems. 21 p3670 A69-39737

## WEIGERT, A.

- Evolution with mass exchange in close binary systems of total mass 2.5 solar mass. 08 p1393 A69-20569

## WEIGHTON, D.

- A satellite-borne receiver for low-frequency radio astronomy. 03 p0404 A69-13581

## WEIGL, F.

- Two-wavelength, single-exposure holographic interferometry. 21 p3725 A69-39448

## WEIH, L.

- Effects of various types of noise interference in hearing-test rooms on the reliability of quick-check audiometry /Der Einfluss unterschiedlichen Stoerschalls in den Hoerprueftraeumen auf die Zuverlaessigkeit der Quick-Check-Audiometrie/. 21 p3725 A69-39286

## WEHNACHT, M.

- Influence of film thickness on D.C. Josephson current. 15 p2667 A69-30196

## WEIHS, D.

- Carbon dioxide blue continuum emission at high temperatures. 14 p2427 A69-29014
- Carbon dioxide dissociation relaxation times, measured in a shock tube. 16 p2766 A69-31910

## WEIL, A. J.

- Dipole modes and the one-wave approximation for trapped modes in magnetoplasma cylinders. 06 p0967 A69-17756
- Trapped modes in plasma slabs and cylinders. 17 p2926 A69-33850

## WEIL, B. L.

- Stress-corrosion crack detection and characterization using ultrasound. 16 p2876 A69-32334

## WEIL, L.

- Thermal and hydrodynamical study of a whirling layer of liquid hydrogen under high heat flux. 05 p0849 A69-16818

## WEIL, N.

- Relation of kind of background flying to tactical pilots' accident potential. 23 p4103 A69-41685

## WEILAND, E.

- Development of a helicopter with a rigid rotor system /Die Entwicklung eines Hubschraubers mit gelenklosem Rotorsystem/. 04 p0548 A69-14817

## WEILAND, E. F.

- Development and test of the BO 105 rigid rotor helicopter. [AHS PAPER 200] 07 p1052 A69-18869

## WEILER, K. W.

- One-dimensional polarization distributions over four supernova remnants at 1418 MHz. 09 p1598 A69-22185
- East-west linear polarization distributions of radio galaxies at 1418 MHz. 22 p4015 A69-40155

## WEILERSTEIN, G.

- A solution of the inviscid-viscid equations with applications to bounded and unbounded multicomponent reacting flows. [AIAA PAPER 69-83] 06 p1037 A69-18109

## WEILL, G.

- Airglow research during and since the IQSY. 15 p2594 A69-30020

## WEILL, G. M.

- Ni /super 4 S-super 2 D/ radiation in the night airglow and low latitude aurora. 21 p3712 A69-38519

## WEIMER, K. E.

- Application of the energy principle to Astron-type and other axisymmetric devices. 16 p2821 A69-32035

## WEINBAUM, S.

- On the nonlinear propagation of shock waves through nonuniform incoming flows. [AIAA PAPER 69-39] 06 p0913 A69-18103

## WEINBERG, D.

- Stable heat transfer with metallic two-phase flows /Zur stabilen Waermeuebertragung mit metallischen Zweiphasenstroemungen/. 05 p0803 A69-15998

## WEINBERG, D. L.

- Four-photon optical parametric noise in water. 09 p1539 A69-21751

## WEINBERG, E. K.

- Techniques for controlling exothermic decomposition of ammonium perchlorate. [WSCI PAPER 68-25] 07 p1202 A69-18363
- Procedures for suppressing premature exothermic decomposition in ammonium perchlorate. [AIAA PAPER 69-503] 16 p2833 A69-32688

## WEINBERG, F. J.

- Velocity measurement by combining the Doppler principle with the schlieren method. 07 p1135 A69-19259
- Laser techniques in combustion research. 21 p3741 A69-39589

## WEINBERG, J. L.

- Polarization of the nightglow - Line versus continuum. 02 p0235 A69-11428
- Current problems in the zodiacal light. 15 p2599 A69-31334

## WEINBERG, L.

- Heat sterilizable solid rocket motors for unmanned planetary landers. [AIAA PAPER 69-437] 16 p2869 A69-32750

## WEINBERGER, M. R.

- Spring-restrained, momentum-wheel orientation and stabilization system for exoatmospheric vehicles. 21 p3819 A69-39214

## WEINER, D.

- The capacity of multiple beam waveguides and optical delay lines. 04 p0579 A69-15446

## WEINER, H.

- Controlling human fixed-interval performance. 23 p4100 A69-41437
- Solar cell power systems for manned space stations. 23 p4068 A69-42242

## WEINER, L. R.

- Identification of sizes, finishes or treatments on glass fibers by pyrolysis-attenuated total reflectance infrared spectroscopy. 09 p1448 A69-22315

## WEINER, S. D.

- Cone tip scattering - Endfire region. 11 p1836 A69-24988

## WEINGAERTNER, I.

- Holography with partially coherent illumination. 08 p1312 A69-20081

## WEINGART, H.

- S-band integrated parametric amplifier having both flat-gain and linear phase response. 13 p2230 A69-27678

## WEINGARTEN, H.

- Simplification of synthesis procedures by system representation in canonical form /Vereinfachung von Syntheseverfahren durch Darstellung des Systems in kanonischer Form/. 12 p2051 A69-26094

- Treatment of electrical networks with discontinuously variable components in the state space /Ueber die Behandlung von elektrischen Netzwerken mit sprungformig veraenderlichen Schaltelementen im Zustandsraum/. 19 p3287 A69-36763

## WEINMAN, E. W.

- Determining residual stresses rapidly. 18 p3150 A69-35423

## WEINMAN, J. A.

- Investigation of the stratospheric aerosol by infrared and lidar techniques. 04 p0592 A69-14654

- Investigation of clouds above snow surfaces utilizing radiation measurements obtained from the Nimbus II satellite. 15 p2596 A69-30455

## WEINMAN, R.

- Propagation prediction for the Omega navigation system. 17 p3002 A69-34077

## WEINREB, M. P.

- Quenching of N sub 2 /A super 3 sigma sub u super plus/ in high vibrational levels by nitrogen atoms. 19 p3379 A69-36424

## WEINSCHTEL, H. D.

- Design of airborne S-band telemetry antennas. 07 p1106 A69-19112

## WEINSTEIN, L. M.

- Influence of measured free-stream disturbances on hypersonic boundary-layer transition. [AIAA PAPER 69-704] 17 p2953 A69-33453
- Electron beam flow visualization in hypersonic helium flow. 19 p3291 A69-35722

## WEINSTEIN, M.

- Materials research problems in the direct conversion of thermal radiative and chemical energy into electricity. 02 p0194 A69-11801

- Systematic derivation of remote sensing platform requirements for oceanography and meteorology observations. 06 p1044 A69-18122

- Controlled solidification of metal matrix composites utilizing monovariant eutectic reactions. 07 p1166 A69-19145

- Meteorological and geographical aspects of aerial photography of the Southern Hemisphere conducted on the Rockwell around-the-world-polar-flight expedition. 09 p1534 A69-21405

## WEINSTOCK, G.

- Reliability with allowable downtime. 19 p3326 A69-36002

## WEINSTOCK, H.

- Cryogenic Technology, Illinois Institute of Technology, Seminar, Chicago, Ill., June 14-16, 1967, Proceedings. 10 p1810 A69-24014

- Applications of Cryogenic Technology, Cryogenic Technology Symposia of Cryo-68, Chicago, Ill., June 9-12, 1968, Lectures. 17 p3006 A69-33679

- FEINSTECK, J.**  
Nonlinear stabilization of a two-stream plasma instability in the ionosphere.  
24 p4310 A69-43182
- FEIPPERT, E.**  
A contribution to the problem of the heat transfer from horizontal heating surfaces to stationary boiling liquids, taking special account of the effect of the roughness of the heating surface /Ein Beitrag zum Problem des Waermeuebergangs von waagerechten Heizflaechen an ruhende, siedende Flussigkeiten unter besonderer Oberuecksichtigung des Einflusses der Heizflaechenrauigkeit/.  
20 p3633 A69-37917
- FEIPPERT, J. J.**  
Apollo extravehicular communication telemetry subsystem.  
23 p4121 A69-41767
- FEIR, D. H.**  
Theory of manual vehicular control.  
24 p4274 A69-43021
- FEIR, G. J.**  
Computerised methods in the analysis of dynamic records.  
07 p1232 A69-19139
- FEIR, W. B.**  
Wideband multiplexers using directional filters.  
15 p2581 A69-31524
- FEIS, K. A.**  
Visible sidelight emission in a CO sub 2 laser.  
18 p3153 A69-35243
- FEISBERG, S. A.**  
The system approach to reliability demonstration.  
19 p3327 A69-36003
- FEISENBERG, L. A.**  
The influence of minor elements on Alloy 718 weld microfissuring.  
22 p3967 A69-39883
- FEISERT, E. D.**  
Refractory Metal Alloys- Metallurgy and Technology. Proceedings of a Symposium on Metallurgy and Technology of Refractory Metals, Washington, D.C., April 25, 26, 1968.  
07 p1164 A69-18790
- FEISS, A.**  
An interstitial compound of titanium disulfide with hydrazine /Ueber eine Schichteinlagerungsverbindung des Titandisulfids mit Hydrazin/.  
23 p4112 A69-41426
- FEISS, B.**  
The effect of mechanical and ultrasonic vibrations on superpurity aluminum and an AlZnMg alloy /Wechselverformung und Ultraschallwechselverformung von Reinstaluminium und einer AlZnMg-Legierung/.  
16 p2801 A69-31789
- FEISS, B.-Z.**  
Localized microstructural changes and fatigue crack propagation.  
06 p0943 A69-17237
- FEISS, D.**  
Physical flows with self-similar laminar boundary layers.  
24 p4304 A69-43586
- FEISS, E.**  
Influence of gas environment on catabolic activities and on reoxidation of reduced nicotinamide adenine dinucleotide phosphate in Chlamydia.  
16 p2747 A69-31865
- FEISS, E. H.**  
Applications of an n-body reference orbit.  
03 p0518 A69-14248
- FEISS, G.**  
Delta-T curves for measuring magnetic tape link jitter.  
07 p1132 A69-18827
- FEISS, H.**  
Anatomy of the earth's satellite - Theoretical and experimental results /Anatomic des Erdtrabanten - Theorien und Forschungsergebnisse/.  
18 p3196 A69-34631
- FEISS, H.**  
Dynamic behavior of a hingeless fiberglass rotor. [AIAA PAPER 69-204]  
07 p1054 A69-19548
- FEISS, H. G.**  
Anisotropic InSb-NiSb as an infra-red detector.  
08 p1373 A69-20866
- FEISS, H. G.**  
Design studies for a 440-ft-diameter radio and radar telescope.  
23 p4148 A69-42123
- Design of the Haystack antenna and radome.**  
23 p4149 A69-42131
- WEISS, H. S.**  
Three-week exposure of rodents to a neon enriched atmosphere.  
01 p0019 A69-11342
- WEISS, J. A.**  
Hyperoxia compared to surfactant washout on pulmonary compliance in rats.  
21 p3659 A69-39066
- WEISS, J. A.**  
Hyperoxia compared to surfactant washout on pulmonary compliance in rats.  
23 p4081 A69-41440
- WEISS, J. A.**  
Parameters of microstrip transmission lines and of coupled pairs of microstrip lines.  
13 p2229 A69-27672
- WEISS, L.**  
Converse theorems for finite time stability.  
04 p0624 A69-15005
- WEISS, M.**  
Systems considerations for aerospace beryllium applications. [SAE PAPER 680648]  
03 p0444 A69-13456
- WEISS, M.**  
Evaluation of an infrared spectrometer as a clear air turbulence detector. I.  
12 p2098 A69-26999
- WEISS, M.**  
Application of infrared measuring techniques to the remote sensing of water surface temperature.  
15 p2617 A69-31543
- WEISS, M.**  
Ocean and water surface temperature measurements using infrared remote sensing techniques from airborne platforms. [AIAA PAPER 69-590]  
17 p2973 A69-33286
- WEISS, M. M.**  
Diode array camera tubes and X-ray imaging.  
09 p1463 A69-21845
- WEISS, M. R.**  
Inverse scattering in the geometric-optics limit.  
02 p0280 A69-11929
- WEISS, M. R.**  
Numerical evaluation of geometrical optics radar cross section.  
20 p3494 A69-37848
- WEISS, N. O.**  
Supergranules and the hydrogen convection zone.  
07 p1211 A69-18408
- WEISS, N. O.**  
Sunspots and photospheric convection.  
24 p4378 A69-42691
- WEISS, R.**  
The axisymmetric, hypersonic near wake with base injection. [AIAA PAPER 69-66]  
06 p0914 A69-18115
- WEISS, R. E.**  
Optical pumping at high temperatures.  
07 p1148 A69-18893
- WEISS, R. J.**  
X-ray determination of the electron momentum density in diamond, graphite, and carbon black.  
06 p0982 A69-18233
- WEISS, R. J.**  
Compton profile of LiH.  
22 p3993 A69-40730
- WEISS, R. R.**  
Electromagnetic scatter from small dielectric gradients in a continuous medium.  
14 p2414 A69-29513
- WEISS, V.**  
Surfaces and Interfaces II. Physical and Mechanical Properties. Proceedings of the Fourteenth Sagamore Army Materials Research Conference, Raquette Lake, N.Y., August 22-25, 1967.  
03 p0448 A69-13867
- WEISS, V.**  
The effect of testing system stiffness on fracture behavior of sheet specimens.  
10 p1796 A69-23075
- WEISS, V.**  
Crack propagation and initiation in low cycle strain controlled fatigue.  
12 p2188 A69-26914
- WEISSBART, J.**  
Oxygen reclamation from carbon dioxide using a solid oxide electrolyte.  
07 p1071 A69-19423
- WEISSENBERG, K.**  
A rheological approach to research in microcirculation.  
20 p3473 A69-37602
- WEISSENBERGER, S.**  
Regions of exponential boundedness for the problem of Lur'e.  
18 p3164 A69-34674
- WEISSMAN, E. Y.**  
Electrochemical oxidation of multicomponent hydrocarbon fuels. I - Studies with n-octane based fuels containing aromatic, olefinic, and naphthenic components. [ACS PAPER 93]  
05 p0716 A69-16234
- WEISSMAN, E. Y.**  
Electrochemical oxidation of multicomponent hydrocarbon fuels. II - Long-term performance studies with n-octane based fuels containing aromatic, olefinic, and naphthenic components. [ACS PAPER 94]  
05 p0716 A69-16235
- WEISSMAN, M. H.**  
Oxygen and carbon dioxide transfer in membrane oxygenators.  
24 p4279 A69-43799
- WEISSMAN, R.**  
Influence of inertia characteristics on spin susceptibility and spin characteristics of fighter-type airplanes. [AIAA PAPER 69-188]  
06 p0868 A69-18057
- WEITZEL, D. H.**  
An automated resilience apparatus for polymer studies from -196 to plus 180 deg C.  
21 p3689 A69-38593
- WEITZENFELD, A. S.**  
Algorithms for test patterns in multiterminal devices with symmetry constraints.  
23 p4134 A69-42524
- WEITZNER, H.**  
Initial value-boundary value problem for the Bernstein modes.  
23 p4196 A69-41875
- WEKSTEIN, D. R.**  
Circadian variations of physiological variables in isolated and non-isolated Macaca nemestrina.  
24 p4261 A69-42707
- WELCH, B. E.**  
Study of man during a 56-day exposure to an oxygen-helium atmosphere at 258 mm. Hg total pressure. XIV - Communications.  
07 p1066 A69-19420
- WELCH, E. H.**  
A new technique for integrated testing utilizing confidence levels.  
15 p2619 A69-30400
- WELCH, G. A.**  
Motions in the peculiar galaxy NGC 5253.  
08 p1407 A69-21132
- WELCH, L. K.**  
Head injury - A clinical perspective.  
01 p0022 A69-11346
- WELCH, P. A.**  
The infrared polarization of the moon.  
04 p0656 A69-14669
- WELCH, W. J.**  
Detection of NH sub 3 molecules in the interstellar medium by their microwave emission.  
03 p0518 A69-14258
- WELCH, W. J.**  
Anomalous cooling of a cratered lunar surface.  
04 p0654 A69-14656
- WELCH, W. J.**  
Detection of water in interstellar regions by its microwave radiation.  
08 p1383 A69-19896
- WELCH, W. J.**  
The occultation position of an OH emission source in W24.  
09 p1591 A69-21449
- WELCH, W. J.**  
Further microwave emission lines and clouds of ammonia in our galaxy.  
09 p1597 A69-22150
- WELDON, E. J., JR.**  
Some results on majority-logic decoding.  
06 p0891 A69-17867
- WELFORD, W. T.**  
Fringe visibility and localization in hologram interferometry.  
22 p3943 A69-40016
- WELGE, K. H.**  
Absorption coefficient of H sub 2 O sub 2 and N sub 2 H sub 4 between 1200 and 2000 angstrom units /Absorptionskoeffizient von H sub 2 O sub 2 und N sub 2 H sub 4 zwischen 1200 und 2000 angstrom units/.  
02 p0205 A69-11873
- WELHAM, D. P.**  
Shock testing at AWRE Orfordness.  
11 p1862 A69-24408
- WELIACHEW, L.**  
Measurement of pulsar distances by galactic hydrogen absorption.  
06 p1012 A69-18225



## WELKER, E. L.

Neutral hydrogen distribution and dynamics in galaxies. I / Distribution de l'hydrogene neutre et dynamique des galaxies. I/.  
07 p1224 A69-19711

## WELKER, E. L.

The development and application of a methodology of program risk evaluation.  
19 p3455 A69-36008

## WELKER, H.

Taylor-Görtler vortices and their effect on heat transfer. [ASME PAPER 69-HT-3]  
24 p4414 A69-43563

## WELLAR, B. S.

Utilization of multiband aerial photographs in urban housing quality studies.  
13 p2260 A69-27607

## WELLERN, H. O.

Spectroscopy of the hydrogen molecule in the vicinity of its ionization limit / Die Spektroskopie des Wasserstoffmoleküls in der Nähe seiner Ionisierungsgrenze/.  
07 p1184 A69-18490

## WELLHAUSEN, H.-W.

Companding in a PCM time multiplex system operating according to the counting principle and the measurement of its signal-to-noise ratio / Die Kompanierung bei einem nach dem Zählprinzip arbeitenden PCM- Zeitevielfachsystem und die Messung des Signalgerauschabstandes/.  
01 p0031 A69-10739

## WELLINGER, K.

Characteristic values and impact abrasion in metallic materials / Kenngrößen und Verschleiss beim Stoss metallischer Werkstoffe/.  
22 p3966 A69-39876

## WELLNER, K. V.

A method of successive approximation applied to an elastic-plastic deformation theory.  
19 p3447 A69-36860

## WELLS, A.

Gravity gradient booms - Their origin and evolution.  
07 p1226 A69-18327

## WELLS, C. D.

The prescribed wake-momentum analysis - A hover performance analysis combining the strip-momentum and prescribed wake theories.  
18 p3088 A69-35221

## WELLS, C. H.

An analysis of the effect of slip character on cyclic deformation and fatigue.  
11 p1906 A69-25389  
Low-cycle fatigue crack initiation in Ti-6Al-4V.  
13 p2278 A69-27413  
A small-strain plasticity theory for planar slip materials.  
13 p2362 A69-28120

## WELLS, C. S.

Viscous Drag Reduction, Proceedings of the Symposium, Dallas, Tex., September 24, 25, 1968.  
17 p2950 A69-33247  
An analysis of uniform injection of a drag-reducing fluid into a turbulent boundary layer.  
17 p2951 A69-33254

## WELLS, D. R.

A variational approach to the dynamic stability of high-density plasmas in magnetic containment devices.  
08 p1359 A69-19984

## WELLS, F. E.

A survey of leak detection for aerospace hardware.  
15 p2618 A69-30315

## WELLS, O. C.

An irradiation effect in thermally grown SiO<sub>2</sub> sub. 2.  
09 p1557 A69-21743

## WELLS, R.

Rheological consequences of osmotic red cell crenation.  
23 p4095 A69-42078

## WELLS, R. A.

An introduction to the Martian grid system.  
13 p2337 A69-27533

## WELLS, W. C.

Observation of trans-iron nuclei in the primary cosmic radiation.  
21 p3787 A69-38327

## WELPE, E.

Excitation of ellipse phenomena by sinusoidal stimulating currents of 162 to 208 Hz and 287 to 324 Hz / Anregung des Ellipsenphänomens durch sinusförmige Reizströme von 162-208 Hz und 287-324 Hz/.  
23 p4095 A69-42077

## WELSBY, V. G.

Electronic scanning of focused arrays.  
08 p1285 A69-20400

## WELSH, C. J.

Free-flight investigation of the aerodynamic characteristics of a 10-deg semicone at Mach numbers from 6 to 16.  
[AIAA PAPER 69-133]  
06 p0862 A69-18050

## WELSH, R. E.

Energy and width measurements of the pionic 2p-1s transition in super 23 Na.  
01 p0122 A69-10035

## WELSH, W. E., JR.

Strength and stress-strain properties of rapidly heated laminated ablative materials.  
02 p0347 A69-12512  
Shape and surface roughness effects on turbulent nose tip ablation.  
[AIAA PAPER 69-717]  
17 p2952 A69-33435

## WELT, S.

Quasi-optimum control for minimum-time rendezvous in a central force field.  
24 p4349 A69-43313

## WELTI, G. R.

System concepts for global data relay via satellite.  
12 p2028 A69-25949

## WELTIN, E.

Nonorthogonal natural orbitals from open-shell configuration-interaction calculations.  
23 p4194 A69-42206

## WELTMAN, G.

Heart rate and respiratory response correlations in surface and underwater work.  
14 p2406 A69-29293

## WELTZIN, R. D.

Complex metallographic characterization of wear-resistant surface coating.  
13 p2282 A69-28164

## WEMPE, T. E.

Human information processing rates during certain multi-axis tracking tasks with a concurrent auditory task.  
10 p1650 A69-23880

## WEMPNER, G.

Plate theories via energy potentials.  
02 p0340 A69-12055  
Finite elements, finite rotations and small strains of flexible shells.  
08 p1411 A69-20142  
New concepts for finite elements of shells.  
10 p1794 A69-22891

## WEMPNER, G. A.

Finite-element analysis of thin shells.  
04 p0674 A69-14588

## WENCKER, G.

Electrooptical resonance modulation in the microwave region / Elektrooptische Resonanzmodulation im Mikrowellenbereich/.  
19 p3266 A69-35763

## WENDE, C. D.

The solar flare of July 8, 1969.  
16 p2849 A69-31988  
Correlation of solar microwave and soft X-ray radiation. I - The solar cycle and slowly varying components.  
22 p4004 A69-40504

## WENDELBO, A. H.

A potentiostatic determination of stress corrosion susceptibility in 431 stainless steel.  
14 p2466 A69-29935

## WENDKER, H.

The Cygnus X region. V - Catalogue and distances of optically visible H II regions.  
09 p1596 A69-22053

## WENDLING, L. W.

Guidelines for reliable relay application and selection.  
13 p2231 A69-28045

## WENDROFF, B.

A difference scheme for radiative transfer.  
21 p3773 A69-39666

## WENDT, G.

Meshless shutter tube with nine images - Double deflection capability.  
12 p2083 A69-26144

## WENDT, J. F.

The measurement of drag forces in low density flows using a modulation technique.  
06 p0861 A69-17638

## Shock wave structure.

11 p1870 A69-25007

## WENDT, R. L.

Flow in the entrance region of ducts.  
11 p1874 A69-25289

## WENG, T.-L.

Biaxial fracture strength and mechanical properties of graphite-base refractory composites.  
[AIAA PAPER 68-337]  
16 p2803 A69-32153

## WENHAM, R. J.

Computerized air combat simulation - A digital approach and its application.  
[AIAA PAPER 69-811]  
19 p3289 A69-35621

## WENNING, U.

Photoinduced shock processes involving metastable hydrogen atoms and H sub 2 in the energy range from 0.05 to 0.47 eV / Photoinduzierte Stossprozesse metastabiler Wasserstoffatome mit H sub 2 im Energiebereich von 0,05-0,47 eV/.  
16 p2813 A69-31754

## WENOGRAD, J.

Calculation of solid propellant burning rates from condensed-phase decomposition kinetics.  
[AIAA PAPER 69-145]  
06 p1039 A69-18182

## WENTE, V. A.

Operating experience with NASA/SCAN - A large scale selective announcement service.  
21 p3856 A69-39581

## WENTWORTH, R. C.

The geometry of the magnetosphere. II - A weakly connected model of the geomagnetic tail.  
12 p2076 A69-27106

## WENTZ, W. H., JR.

Vortex breakdown on slender sharp-edged wings.  
[AIAA PAPER 69-778]  
19 p3237 A69-35644

## WENTZEL, D. G.

The propagation and anisotropy of cosmic rays. I - Theory for steady streaming.  
13 p2326 A69-27569

Pulsar scintillations due to distant streaming cosmic rays.  
15 p2676 A69-30889

The propagation and anisotropy of cosmic rays. II - Electrons.  
22 p4006 A69-40642

Plasma Instabilities in Astrophysics, Proceedings of the Conference, Monterey, Calif., October 14-17, 1968.  
24 p4377 A69-42681

Particle acceleration in astrophysics.  
24 p4355 A69-42696

## WENTZELL, R. A.

Gravitational stability of cylinders in an aligned magnetic field.  
19 p3380 A69-36483

## WENZEL, W.

Research on variable stars.  
15 p2682 A69-30438

## WENZLAFF, W. F.

A computer approach to analyze aeroelastic stability.  
10 p1634 A69-23274

## WERHEIT, H.

Determination of optical constants of semiconductors using samples with nonideal surfaces / Bestimmung der optischen Konstanten von Halbleitern an Proben mit nichtidealen Oberflächen/.  
21 p3782 A69-39240

## WERKING, R. D.

RAE-A attitude determination ground support system.  
[AIAA PAPER 69-983]  
22 p3907 A69-40363

## WERLE, H.

Experimental verification of the Prandtl-Batchelor theory / Verification experimentale de la theorie de Prandtl-Batchelor/.  
11 p1868 A69-24755

Hydraulic tank for visualization of flows around a fixed point / Cuve hydraulique pour la visualisation des écoulements au point fixe/.  
[ONERA-TP-708]  
17 p2956 A69-33588

## WERLE, M. J.

Slot-jet interaction studies at M sub infinity equals 4 and 5.  
24 p4249 A69-43686

## WERNER, J.

Refinements of two theorems of Zlamal / Verschärfungen zweier Sätze von Zlamal/.  
13 p2289 A69-27925

- ERNER, K.**  
Electrodeposition of tellurium-containing Permalloy films / Galvanische Abscheidung dünner tellurhaltiger Permalloyschichten/. 11 p1935 A69-24332
- ERNER, M.**  
Near infrared night sky background. 13 p2342 A69-27600
- ERNER, M. W.**  
Paschen-line observations of the Orion Nebula. 08 p1384 A69-20058  
Observational evidence for the existence of dense clouds of interstellar molecular hydrogen. 09 p1599 A69-22191  
Dissociation of molecules by the absorption of line radiation. 15 p2693 A69-30783  
Infrared radiation from dust in Seyfert galaxies. 24 p4374 A69-43741
- ERNER, R. A.**  
Feedback control which preserves optimality for systems with unknown parameters. 11 p1860 A69-25441
- ERNER, W. D.**  
Internal friction due to interstitial atoms in molybdenum. 04 p0615 A69-14640
- ERNER, W. J.**  
Effects of minor additions on weldability of Incoloy 800. 22 p3967 A69-39884
- ERNICK, R.**  
A quick guide to environmental specifications. 11 p1862 A69-24331
- ERNICKE, K. G.**  
Tilt propotor composite aircraft, design state of the art. [SAE PAPER 202] 20 p3463 A69-37805
- ERNIK, A. W.**  
On the amplitude distribution of scintillating radio signals from artificial satellites. 23 p4115 A69-41486
- ERT, C.**  
Precipitation of nitrogen on dislocation in niobium. 15 p2639 A69-30585
- ERTZ, D. L.**  
X-ray diffraction study of some concentrated cobalt /II/ chloride solutions. 20 p3484 A69-37496
- ERTZ, D. W.**  
Far-infrared spectra and structure of small ring compounds - Ethylene carbonate, gamma- butyrolactone, and cyclopentanone/. 02 p0206 A69-12723  
Infrared and Raman spectra of substituted hydrazines. 1- Methylhydrazine. 10 p1752 A69-23528
- ESCOTT, E. M.**  
Electric fields in the vicinity of auroral forms from motions of barium vapor releases. 18 p3128 A69-34935
- ESENBERG, D. L.**  
The maximum strength of initially imperfect axially compressed circular cylindrical shells. [AIAA PAPER 69-91] 06 p1028 A69-18181
- ESOLOWSKI, Z.**  
Transition from compressible to incompressible elastic materials. 05 p0834 A69-15795
- ESSEL, J. K.**  
The use of high strength, room temperature vulcanizing silicone rubber in tooling and fabrication of aircraft and missile components. 09 p1507 A69-22331
- ESSEL, W. R.**  
Direct current MHD generators with variable conductivity, velocity, and magnetic field. 21 p3649 A69-39027
- ESSELING, K. H.**  
A novel way of beam switching, particularly suitable at millimeter wavelengths. 11 p1836 A69-24996
- ESSELING, P.**  
Laminar convection cells at high Rayleigh number. 16 p2767 A69-31588
- ESSELIUS, P. R.**  
An H I concentration at latitude plus 69 deg, longitude 103 deg. 13 p2347 A69-27719
- ESSELS, J.**  
On Sobolev's first embedding theorem. 01 p1013 A69-10005
- ESSELS, P. S.**  
Acoustic pumping for propellant management in space. 20 p3548 A69-37294
- ESSELY, H. W.**  
An interferometric technique for measuring the spatial correlation function of optical radiation fields. 15 p2653 A69-31164
- WEST, A. A.**  
Hovercraft range. 03 p0367 A69-13909  
The compressible hovercraft jet. 05 p0697 A69-15708
- WEST, J. B.**  
Ventilation-perfusion inequality and overall gas exchange in computer models of the lung. 21 p3662 A69-38388
- WEST, J. C.**  
The equivalent gain matrix of a multivariable non-linearity. 07 p1114 A69-18286
- WEST, M. J.**  
Methods of profile optimisation by iterative analogue computation. 15 p2709 A69-30671
- WEST, R. G.**  
Fan lift in VTOL design. 22 p3862 A69-39933
- WEST, V. C.**  
Polarization modulation using the Macaluso- Corbino effect. 21 p3739 A69-39447
- WEST, W. S.**  
Thermal model of a 75 watt/E/ space power - Planar RTG system. 23 p4070 A69-42254
- WESTBERG, K.**  
Sterile soil from Antarctica - Organic analysis. 16 p2746 A69-31552
- WESTBROOK, D. R.**  
Symbolic approach to dynamical problems in plates. 01 p0172 A69-11282
- WESTBROOK, J. H.**  
Surface effects on the mechanical properties of non-metals. 03 p0454 A69-13870
- WESTBROOK, R. M.**  
EEG sensing and transmitting system contained in a flight helmet. 12 p2023 A69-26553
- WESTCOTT, B. S.**  
Electromagnetic wave propagation in spherically stratified isotropic media. 04 p0563 A69-15492  
Exact solutions for transverse electromagnetic wave propagation in a cylindrically stratified axially magnetized plasma. 19 p3266 A69-35619
- WESTERBACK, S.**  
Thickness of adhesive joints in sandwich structures - The measurement and acceptance criteria of. 24 p4403 A69-43461
- WESTEREN, H. W.**  
Oil quench vacuum heat treating. 14 p2456 A69-29894
- WESTERHEID, R. J.**  
The Apollo spacecraft qualification program. 19 p3430 A69-36015
- WESTERHEIDE, D. E.**  
Fluid and thermodynamic modeling of a nuclear rocket vehicle. [SAE PAPER 690201] 07 p1178 A69-18306
- WESTERHOF, N.**  
Analog studies of the human systemic arterial tree. 17 p2908 A69-33007
- WESTERLUND, B. E.**  
Optical candidate for pulsar PSR 0833-45. 13 p2337 A69-27516  
European Southern Observatory dedicated in Chile. 15 p2589 A69-31098  
Three-color photometry of southern QSO's, radio galaxies, and normal galaxies. 16 p2859 A69-32228
- OB stars near the supernova remnant RCW 103 and the galactic structure in Norma. 23 p4220 A69-42384**
- WESTERLUND, L. H.**  
The auroral electron energy spectrum extended to 45 ev. 05 p0756 A69-16274
- WESTERLUND, S.**  
Effects of polar cap absorption events on VLF transmissions. 18 p3103 A69-35185
- WESTERMANN, K.**  
Venous tone and skin and muscle blood flow in forearm and hand during exercise /Venotonus, Haut- und Muskeldurchblutung an Unterarm und Hand bei Beinarbeit/. 23 p4096 A69-42090
- WESTERMANN, K. W.**  
Venomotor reactions induced by changes of intrapulmonary pressure during positive and negative pressure breathing /Venomotorische Reaktionen bei Veränderungen des intrapulmonalen Druckes durch Ueber- und Unterdruckatmung/. 23 p4093 A69-42068
- WESTERVELT, P. J.**  
The influence of gravitational fields on the propagation of light. 09 p1540 A69-22081
- WESTFIELD, W. T.**  
Ignition of aircraft fluids on high temperature engine surfaces. [SAE PAPER 690436] 23 p4200 A69-41653
- WESTGATE, C. R.**  
Quantum effects in electron cyclotron resonance in InSb. 13 p2270 A69-27200
- WESTHEAD, J. W.**  
Interaction of Li and O with radiation- produced defects in Si. 09 p1554 A69-21337
- WESTHEIMER, G.**  
The sensory stimulus for disjunctive eye movements. 22 p3881 A69-40859
- WESTIN, H.**  
A statistical study of surges. 06 p0995 A69-17440  
Some statistical properties of surges. 18 p3204 A69-35393
- WESTINE, P. S.**  
Modeling the blast response of structures using dissimilar materials. 16 p2874 A69-32164
- WESTLAKE, D. G.**  
Hydrogen embrittlement - A resistometric study of niobium/columbium/hydrogen alloys. 10 p1707 A69-22989
- WESTLEY, J. W.**  
Determination of steric purity and configuration of diketopiperazines by gas- liquid chromatography, thin-layer chromatography, and nuclear magnetic resonance spectrometry. 07 p1075 A69-19498  
The use of +/-menthyl chloroformate in the optical analysis of asymmetric amino and hydroxyl compounds by gas chromatography. 07 p1075 A69-19499
- WESTLUND, C. D.**  
Measurement of air density. 02 p0251 A69-12809  
Air density measurement. 17 p2971 A69-32898
- WESTMORELAND, G.**  
Development of vulcanizable elastomers suitable for use in contact with liquid oxygen. 05 p0717 A69-16497
- WESTON, V. H.**  
On the electromagnetic inverse scattering problem. 05 p0719 A69-15929  
An inverse scattering technique for electromagnetic bistatic scattering. 16 p2754 A69-32569  
Investigation of the parasitic loop counterpoise antenna. 20 p3507 A69-37840
- WESTPHAL, J. A.**  
On the nature of Ryle and Bailey's candidate star for the pulsating radio source CP 1919. 09 p1591 A69-21455



- Infrared observations of eta Carinae to 20 microns.  
13 p2335 A69-27316
- Infrared and optical measurements of the Crab pulsar NP 0532.  
18 p3191 A69-34318
- WESTPHAL, K. O.**  
Interaction of linear waves with oblique shock waves.  
03 p0414 A69-13137
- Transmission of Alfvén waves through the earth's bow shock.  
16 p2777 A69-32099
- Interaction of magnetoacoustic and entropy waves with normal magnetohydrodynamic shock waves.  
20 p3582 A69-38242
- WESTRUM, E. F., JR.**  
Molecular freedom of the ammonium ion - Heat capacity and thermodynamic properties of ammonium perchlorate from 5 deg -350 deg K.  
20 p3484 A69-37344
- WESTWATER, J. W.**  
Nucleate pool boiling.  
13 p2376 A69-28142
- Dropletwise condensation.  
13 p2376 A69-28143
- WESTWOOD, A. R. C.**  
Surfaces and interfaces in materials technology.  
03 p0434 A69-13868
- WESTWOOD, W. D.**  
Investigation of the plasma produced by a normal ionizing shock wave using polychromator techniques.  
14 p2494 A69-29767
- WETHERILL, G.**  
Collecting a sample of solar wind - An experimental study of its capture in metal films.  
23 p4205 A69-41539
- WETHERILL, G. W.**  
Rubidium-strontium age of hypersthene /L/ chondrites.  
02 p0317 A69-12020
- The distribution of trace quantities of germanium between metal, silicate and sulfide phases.  
05 p0819 A69-15624
- Dynamical studies of asteroidal and cometary orbits and their relation to the origin of meteorites.  
08 p1406 A69-20929
- Rb super 87 -Sr super 87 age of bronzite /H group/ chondrites.  
14 p2526 A69-29881
- Relationships between orbits and sources of chondritic meteorites.  
19 p3415 A69-36118
- Rubidium-strontium age of amphoterite /LL/ chondrites.  
21 p3814 A69-39583
- WETHERINGTON, R. D.**  
Interference predictions - Philosophies, objectives, and future directions.  
23 p4126 A69-42223
- WETMORE, W. C.**  
Improved suit proposed for lunar wear.  
08 p1267 A69-21146
- WETSEL, G. C., JR.**  
Ultrasonic paramagnetic resonance of Pr super 3 plus-CaF sub 2.  
24 p4360 A69-42790
- WETZEL, M.**  
Recent developments of ultrahigh-speed cinematographic materials in France /Recents developpements des matériels de cinématographie ultra-rapide en France/.  
12 p2090 A69-26197
- WETZEL, R. M.**  
Neuber's rule applied to fatigue of notched specimens.  
10 p1715 A69-23984
- WEVER, R.**  
Regularities of human circadian rhythms as determined from the effect of a weak alternating electric field /Gesetzmaessigkeiten der circadianen Periodik des Menschen, gepueft an der Wirkung eines schwachen elektrischen Wechselfeldes/.  
01 p0013 A69-10167
- The effects of electric fields on Circadian rhythmicity in men.  
15 p2557 A69-31461
- Circadian rhythm in man under the effect of light-dark cycles of different periods /Circadiane Periodik des Menschen unter dem Einfluss von Licht-dunkel-Wechseln unterschiedlicher Periode/.  
23 p4094 A69-42070
- Autonomous circadian rhythm in man under the effect of different illumination conditions /Autonome circadiane Periodik des Menschen unter dem Einfluss verschiedener Beleuchtungsbedingungen/.  
23 p4094 A69-42071
- WEXLER, A.**  
An accurate finite-difference method for higher order waveguide modes.  
13 p2228 A69-27670
- WEXLER, D.**  
Qualitative Theory of Sampled-Data Systems /Teoria Calitativa a Sistemelor cu Impulsori/.  
04 p0630 A69-14563
- WEXLER, R.**  
Features of tropospheric and stratospheric dust.  
21 p3718 A69-39773
- WEYGANDT, P. C.**  
Application of gravity gradient stabilization to large manned space vehicles.  
07 p1228 A69-18338
- Why gravity gradient stabilization should be used for the 1970s and 1980s.  
07 p1229 A69-18348
- WEYL, G.**  
Parametric excitation of drift waves in a resistive plasma.  
18 p3179 A69-34440
- WEYMANN, H. D.**  
Precursors ahead of shock waves. I - Electron diffusion.  
20 p3518 A69-38237
- Precursors ahead of shock waves. II - Photoionization.  
20 p3511 A69-38238
- WEYMANN, R. J.**  
Seyfert galaxies.  
04 p0657 A69-14689
- The cosmic X-ray background.  
05 p0814 A69-15848
- WEYMUELLER, C. R.**  
Giant landing gears for the giant jet.  
09 p1434 A69-22064
- WHALE, H. A.**  
Measurements of the coherence ratio of ionospherically propagated radio waves.  
01 p0032 A69-10967
- WHALEN, B. A.**  
Summary of rocket measurements of auroral particle precipitation.  
21 p3707 A69-38489
- WHALEN, B. H.**  
A technique for the analysis of Monte Carlo results.  
21 p3804 A69-39036
- WHALEN, J. A.**  
Airborne observation of the midday aurora.  
18 p3126 A69-34258
- WHALEY, H. L.**  
Optical methods for studying ultrasonic propagation in transparent media.  
15 p2617 A69-31510
- WHALIN, R. L.**  
Analysis and synthesis of a digital phase-locked loop for FM demodulation.  
04 p0561 A69-15452
- WHARTON, C. B.**  
Microwave scattering from plasma waves.  
08 p1276 A69-20798
- WHEADON, W. C.**  
The impact of failure data on management of a launch operations reliability program.  
19 p3294 A69-36022
- WHEATLEY, J. C.**  
Thermal contact to the mixing chamber of a dilution refrigerator.  
09 p1493 A69-21429
- WHEDON, G. D.**  
Bone.  
06 p0873 A69-17019
- WHEELER, C. A.**  
The evolution of strip transmission line.  
15 p2721 A69-31074
- WHEELER, C. B.**  
Measurement of plasma temperature by absorption of resonant laser radiation.  
14 p2501 A69-29954
- Measurement of magnetic fields in plasmas by the Faraday effect using resonant laser radiation.  
16 p2822 A69-32041
- WHEELER, H. A.**  
A systematic approach to the design of a radiator element for a phased-array antenna.  
04 p0572 A69-14323
- WHEELER, J. A.**  
Superspace and the nature of quantum geometrodynamics.  
05 p0793 A69-15775
- WHEELER, J. C.**  
General relativistic instability in white dwarfs.  
06 p1010 A69-17927
- A calculation of a white dwarf supernova.  
12 p2156 A69-26211
- WHEELER, L. A.**  
Flight test support design.  
05 p0742 A69-15804
- WHEELER, P. C.**  
A semi-active gravity gradient control system /SAGS/.  
07 p1228 A69-18342
- WHEELER, R.**  
Silicon dioxide thermally grown in a silicon nitride ambient.  
12 p2142 A69-25935
- WHEELER, R. L.**  
The development phase of the Mountbatten class /SR.N4/ hovercraft.  
15 p2550 A69-30479
- WHEELLOCK, N. R.**  
Improving communication equipment reliability through testing and failure analysis.  
19 p3282 A69-35783
- WHELAN, M. J.**  
Studies of segregation and the initial stages of precipitation at grain boundaries in an aluminium 7 wt. percent magnesium alloy with an energy analysing electron microscope.  
03 p0442 A69-12894
- WHELCHER, J. E., JR.**  
The fast Fourier-Hadamard transform and its use in signal representation and classification.  
03 p0392 A69-13249
- WHETSEL, R. G.**  
Concentration measurements in a transient helium-air mixture utilizing an electron beam.  
08 p1312 A69-19866
- WHICKER, L. R.**  
Now - Ferrite microstrip devices.  
07 p1090 A69-18399
- WHIMERY, J. R.**  
Thermal self-focusing of laser beams in lead glasses.  
05 p0771 A69-15819
- WHINNERY, J. R.**  
Switching of phase-locked states in the intracavity phase-modulated He-Ne laser.  
20 p3552 A69-36994
- WHIPPLE, E. C., JR.**  
Theory of an electron trap on a charged spacecraft.  
16 p2849 A69-31976
- WHIPPLE, F. L.**  
Influence of a comet belt beyond Neptune on the motions of periodic comets.  
01 p0158 A69-11327
- WHISNANT, J. M.**  
Simulation of the attitude stabilization of the DODGE spacecraft with time-lag magnetic damping.  
06 p1014 A69-17584
- Attitude performance of the GEOS-II gravity-gradient spacecraft.  
07 p1229 A69-18349
- Attitude perturbations on a slowly spinning multibody satellite.  
[AIAA PAPER 68-856] 12 p2174 A69-26795
- The capture and stability of the LIDOS gravity-gradient satellite in an eccentric orbit.  
[AIAA PAPER 69-921] 21 p3821 A69-39351
- The dynamic modeling of hysteresis and application to damping of spacecraft librations.  
[AIAA PAPER 69-833] 21 p3821 A69-39364
- Deployment of a tethered orbiting interferometer.  
[AAS PAPER 69-255] 24 p4313 A69-42859
- WHISTLER, C. F.**  
A compatible satellite meteorological data collection system.  
[AIAA PAPER 68-1095] 21 p3819 A69-39025

- HITAKER, D. R.**  
Design studies of a gamma-ray scatter atmospheric density gauge by a multivariable search method.  
09 p1495 A69-21842
- HITAKER, H. P.**  
A new model performance index for the engineering design of flight control systems.  
[AIAA PAPER 69-885] 21 p3764 A69-39410
- HITBREAD, E. G.**  
A remotely controlled explosives processing facility.  
02 p0226 A69-11523
- HITBY, R. H.**  
STOL operations.  
22 p3863 A69-40430
- HITE, D. M.**  
A general orientation to all-weather landing.  
01 p0112 A69-10454
- HITE, D. R.**  
Shock-tube study of vibrational exchange in N sub 2-O sub 2 mixtures.  
06 p0962 A69-17821
- WHITE, E. W.**  
Thin film characterization by electron microprobe and ellipsometry - SiO sub 2 films on silicon.  
10 p1742 A69-22946  
The influence of gravity torque on dual-spin satellite attitude stability.  
19 p3429 A69-35917
- WHITE, F. C.**  
Collision avoidance system.  
05 p0790 A69-16725
- WHITE, F. M.**  
A new integral method for analyzing the turbulent boundary layer with arbitrary pressure gradient.  
[ASME PAPER 68-WA/FE-22] 05 p0749 A69-16098  
A theory of boundary-layer flow noise, with application to pressure gradients and polymer solutions.  
[AIAA PAPER 68-642] 13 p2244 A69-27246
- WHITE, H. J.**  
Systems Analysis.  
17 p2944 A69-33482
- WHITE, J. A.**  
Deceleration-control system for aerobraking and skipout to orbit at Mars.  
[AIAA PAPER 68-1146] 03 p0520 A69-13564  
Deceleration control system for aerobraking and skipout to orbit at Mars.  
[AIAA PAPER 68-1146] 21 p3828 A69-39761
- WHITE, J. F.**  
Review of semiconductor microwave phase shifters.  
04 p0572 A69-14319
- WHITE, J. P.**  
Vibration characteristics of a hypersonic missile interceptor.  
09 p1614 A69-21890
- WHITE, J. R.**  
Design and production - Production welding.  
20 p3549 A69-37446
- WHITE, J. W.**  
Determination of principal moment of inertia using the Hewlett-Packard 9100A calculator.  
[SAWE PAPER 792] 18 p3118 A69-34865
- WHITE, K. L.**  
Precipitation-hardening stainless steels.  
06 p0932 A69-17874
- WHITE, K. R.**  
Advancements in the fabrication technology of titanium for the C-5A.  
[ASM PAPER D8-26.2] 07 p1143 A69-19672
- WHITE, L. M.**  
Infrared evaluation of multilayer boards.  
07 p1117 A69-19698
- WHITE, M. B.**  
Experimental studies of a weakly anisotropic gas laser.  
07 p1145 A69-18473
- WHITE, M. D.**  
The simulator to match the transports to come.  
24 p4297 A69-43044
- WHITE, R. A.**  
Divergence losses for noncircular C-D nozzles, based on source flow.  
19 p3238 A69-35960
- WHITE, R. M.**  
Probing of Gunn effect domains with a scanning electron microscope.  
08 p1283 A69-20162
- WHITE, R. P., JR.**  
Instabilities associated with a rotor blade stopped in flight.  
20 p3463 A69-37804
- WHITE, R. S.**  
The application of fracture mechanics to the fail safety of rotor blades.  
07 p1053 A69-18872
- WHITE, R. W.**  
Response of uniform beams to homogeneous, random pressure fields.  
[ASA PAPER SVT2] 15 p2713 A69-31143
- WHITE, S. A.**  
A holding technique to reduce number of bits in digital transfer functions.  
04 p0584 A69-15464  
Modern microelectronics for digital adaptive control systems.  
09 p1474 A69-22453
- WHITE, S. W.**  
Central nervous integration of the circulatory and respiratory responses to arterial hypoxemia in the rabbit.  
24 p4258 A69-42635
- WHITE, T. T.**  
Apollo 4 and 6 radiation analysis.  
[AIAA PAPER 69-17] 06 p0884 A69-18202
- WHITE, W. A.**  
X-ray and extreme ultraviolet /1-400 angstrom units/ spectroscopy of the sun, from OSO-III.  
09 p1578 A69-22169  
Observations of the solar flare soft X-ray spectrum and comparison with centimetric radio bursts.  
24 p4371 A69-43609
- WHITE, W. F.**  
Rotational spectrum of ethylene episulfoxide.  
08 p1268 A69-20535
- WHITED, R. C.**  
Exciton spectra of CaO and MgO.  
18 p3181 A69-34274
- WHITEHEAD, A. B.**  
Spectrum and yield of electrons emitted when heavy ions pass through metal films.  
03 p0471 A69-13164
- WHITEHEAD, A. H., JR.**  
Flow phenomena and separation over delta wings with trailing-edge flaps at Mach 6.  
[AIAA PAPER 68-97] 02 p0189 A69-12522  
Boundary-layer tripping with emphasis on hypersonic flows.  
17 p2950 A69-33249
- WHITEHEAD, C. S.**  
A broad-band parametric amplifier.  
01 p0041 A69-10243
- WHITEHEAD, D. S.**  
A symmetry property of transfer matrices.  
22 p4040 A69-39938
- WHITEHEAD, G. I., JR.**  
The role of the insurance company in air safety.  
06 p1041 A69-16845
- WHITEHEAD, J. A.**  
Moving flame experiment with liquid mercury - Possible implications for the Venus atmosphere.  
04 p0664 A69-15466
- WHITEHEAD, J. D.**  
The phase ionosonde.  
01 p0071 A69-11163  
Some remarks on the theories of sporadic E.  
01 p0072 A69-11173
- WHITEHEAD, V. S.**  
Cloud height contouring from Apollo 6 photography.  
20 p3569 A69-36926
- WHITEHOUSE, A. C. D.**  
Screening - New wave impedance for the transmission-line analogy.  
19 p3267 A69-35932
- WHITELAW, J. H.**  
The effect of slot height and slot-turbulence intensity on the effectiveness of the uniform density, two-dimensional wall jet.  
[ASME PAPER 68-HT-4] 02 p0352 A69-12209  
Some properties of the two-dimensional, turbulent wall jet in a moving stream.  
[ASME PAPER 68-WA/APM-13] 04 p0586 A69-14390
- Film cooling slots - The importance of lip thickness and injection angle.  
20 p3585 A69-37082  
Some applications of the general theory of friction, heat transfer and mass transfer in two-dimensional boundary layers.  
22 p3933 A69-40940
- WHITEMAN, K. J.**  
Tearing mode instability in the Bessel function model.  
05 p0799 A69-15615
- WHITEOAK, J. B.**  
A supernova remnant in Centaurus.  
09 p1598 A69-22184  
Jovian linear polarization at 6-cm wavelength.  
13 p2343 A69-27623  
The linear polarization of radio sources between 11 and 20 cm wavelength. I - Observations.  
14 p2526 A69-29770  
The linear polarization of radio sources between 11 and 20 cm wavelength. II - Polarization and related properties of extragalactic sources.  
14 p2526 A69-29771
- WHITESIDE, A. E.**  
Automation in photogrammetric compilation.  
24 p4316 A69-43566
- WHITESIDE, R. B.**  
Straight-shanked pins improve fatigue properties.  
22 p3957 A69-40832  
Improving fastened structural fatigue.  
24 p4325 A69-43440
- WHITESIDE, T.**  
High speed transient pressure measurement.  
18 p3133 A69-34244
- WHITESIDE, T. C. D.**  
Fatigue and sleep loss in aircrew.  
21 p3666 A69-39275
- WHITESON, B. V.**  
Electron fractographic techniques.  
04 p0619 A69-15395
- WHITFIELD, D. L.**  
Analysis of boundary layers in low density hypersonic axisymmetric nozzles, including the effects of displacement, first-order transverse curvature, velocity slip, and temperature jump.  
[AIAA PAPER 69-653] 17 p2954 A69-33458
- WHITFIELD, J. D.**  
Experiments on roughness effects on cone boundary-layer transition up to Mach 16.  
[AIAA PAPER 68-377] 13 p2242 A69-28213
- WHITFIELD, W. J.**  
Techniques for the limitation of biological loading of spacecraft before sterilization.  
05 p0713 A69-15948
- WHITFORD, A. E.**  
Six-color photometry of stars. XII.  
10 p1788 A69-24122  
Lick 120-inch telescope.  
12 p2058 A69-26415
- WHITFORD, W. G.**  
Heart rate and changes in body fluids in aestivating toads from xeric habitats.  
11 p1827 A69-24923
- WHITING, A. R.**  
Mutational responses of insects in the Biosatellite II experiment.  
20 p3476 A69-37618
- WHITING, E. E.**  
Line by line calculation of spectra from diatomic molecules and atoms assuming a Voigt line profile.  
18 p3177 A69-35239
- WHITING, G. H.**  
Applications of the heat pipe.  
06 p1030 A69-17189
- WHITLOCK, C. H.**  
Dynamic stability characteristics of large-size 120 deg blunted conical spacecraft in a simulated Martian environment.  
[AIAA PAPER 69-104] 06 p1019 A69-18210  
Damping derivatives of 120 deg conical spacecraft from flights in a low-density environment.  
22 p4036 A69-40550
- WHITLOW, G. L.**  
Experiments with a two-fluid heat pipe.  
23 p4240 A69-42306



## WHITLOW, W. L.

An examination of the impedance-sheet approximation to a plasma slab. 02 p0209 A69-12348

## WHITMAN, A. B.

A dynamical theory of elastic directed curves. 13 p3360 A69-27321

## WHITMAN, G. M.

Transients in dispersive media. II - Excitation of space waves and surface waves in a bounded cold magnetoplasma. 20 p3494 A69-37842

## WHITMIRE, L. D.

Effects of impurities on the plastic flow of molybdenum crystals. 10 p1710 A69-23089

## WHITNEY, C.

Contributions to the theory of ring lasers. 19 p3334 A69-36046

Ring-laser mode coupling. 19 p3334 A69-36047

## WHITNEY, C. R.

Microstructural stability of Pyromet 860 iron-nickel-base heat-resistant alloy. 13 p2279 A69-27764

Short-term tests predict long-term creep-rupture data. 18 p3150 A69-35422

## WHITNEY, G. D.

Behavior of primates following injection of monomethylhydrazine with and without pyridoxine. 03 p0375 A69-14068

## WHITNEY, H. E.

The scintillation boundary. 07 p1125 A69-18846

Scintillation fading of VHF beacons on synchronous satellites. 09 p1457 A69-22461

A proposed index for measuring ionospheric scintillations. 16 p2752 A69-32106

## WHITNEY, J. M.

Bending-extensional coupling in laminated plates under transverse loading. 07 p1231 A69-18711

Analysis of a simply-supported laminated anisotropic rectangular plate. 12 p2184 A69-26808

Shear buckling of unsymmetrical cross-ply plates. 13 p2371 A69-28679

Analysis of heterogeneous anisotropic plates. [ASME PAPER 69-APM-15] 18 p3213 A69-34390

The effect of transverse shear deformation on the bending of laminated plates. 20 p3622 A69-37770

## WHITNEY, L. F.

Interaction between subtropical and polar-front jet stream. 18 p3166 A69-34827

## WHITNEY, R. R.

Experimental determination of the transition effect in electromagnetic cascade showers. 22 p3987 A69-41003

## WHITNEY, W. J.

Performance of a single-stage turbine as affected by variable stator area. [AIAA PAPER 69-525] 16 p2841 A69-32686

## WHITSETT, C. E., JR.

EVA maneuvering unit comparison. [AAS PAPER 69-516] 24 p4272 A69-42850

## WHITTEN, D. H.

United States requirements for commercial surface effect ships. 08 p1254 A69-20199

## WHITTENBERG, R. L.

Modern application of engine oil analysis to airline operation. [SAE PAPER 690423] 23 p4169 A69-41647

## WHITTIER, J. S.

Dynamics of a flexibly bonded two-layered Timoshenko-type cylindrical shell. [AIAA PAPER 68-354] 09 p1616 A69-21941

Moire interferometry with embedded grids - Effect of optical refraction. 14 p2531 A69-28883

Experiments on dispersive pulse propagation in laminated composites and comparison with theory. [ASME PAPER 69-APMW-22] 21 p3651 A69-38390

## WHORIC, J. M.

Some characteristics of an electric discharge in a supersonic gas stream. [AIAA PAPER 68-713] 13 p2249 A69-28231

## WIANT, H. R.

Wire screen booms for gravity gradient and antenna application. 07 p1229 A69-18350

## WIATROWSKI, C.

A new graphic display/plotter for small digital computers. 21 p3679 A69-39608

## WICHMANN, H. G.

Further investigations on low density Hall accelerators. [AIAA PAPER 69-281] 09 p1562 A69-21229

Hall-thruster development at the DFVLR - A contribution to the European space program. 17 p3019 A69-33338

## WICHNER, R. P.

Slip ratios and film roughness in annular, viscous-turbulent, two-phase flow. [ASME PAPER 69-FE-43] 20 p3517 A69-37995

## WICK, R. L., JR.

Study of U.S. physician-pilot flying habits. 01 p0022 A69-11344

## WICKERSHAM, A. F.

The origin and propagation of acoustic-gravity waves ducted in the thermosphere. 04 p0595 A69-15437

## WICKERTS, S.

Wavelength dependence of microwave propagation far beyond the radio horizon. 03 p0395 A69-13626

## WICKHAM, P. L.

The maturing of safety into an engineering discipline. [SAE PAPER 680676] 03 p0433 A69-13449

## WICKLINE, H. E.

Effects of nitrogen limitation on the growth and composition of unicellular algae in continuous culture. 24 p4263 A69-43201

## WICKRAMASINGHE, D. T.

A note on the temperature correction procedure for line-blanketed atmospheres. 17 p3039 A69-33730

## WICKRAMASINGHE, N. C.

Graphite particle model for NML Cygnus. 03 p0513 A69-13775

Accretion of solid hydrogen mantles by grains in Ob associations. 10 p1776 A69-23214

Solid hydrogen and the microwave background. 10 p1776 A69-23216

Interstellar dust and diamonds. 12 p2157 A69-26230

Alignment of interstellar grains by cosmic rays. 13 p2333 A69-28469

A spectral feature of grains at 10 mu/ques. 14 p2521 A69-29586

Strengths of the fundamental bands of ice and solid hydrogen in composite grains. 14 p2486 A69-29587

Star formation in clouds of solid hydrogen grains. 16 p2862 A69-32375

Solid hydrogen coated graphite particles in the interstellar medium. I. 20 p3601 A69-37492

Interstellar grains. 20 p3615 A69-38260

Infrared radiation from dust in Seyfert galaxies. 24 p4374 A69-43741

## WIDAJ, B.

P-n junctions formed during growth of gallium phosphide crystals /Zlaczka p-n powstajace w czasie wzrostu krystalow fosforu galu/. 13 p2323 A69-28642

## WIDDEL, H. U.

The possibility of direct detection of vertical air movements in the altitude range from 75 to 80 km /Zur Möglichkeit des direkten Nachweises vertikaler Luftbewegungen im Höhenbereich 75-80 km/. 11 p1913 A69-25436

On the structure of mesospheric winds. 15 p2604 A69-31415

## WIDDICOMBE, J. G.

The role of the vagus nerves in the ventilatory responses to hypercapnia and hypoxia in anaesthetized and unanaesthetized rabbits. 21 p3651 A69-38390

24 p4401 A69-43097

## WIDERA, O. E.

Clamped annular plate under a concentrated force. 04 p0676 A69-14725

A boundary layer theory for the end problem of a circular cylinder. 07 p1230 A69-18265

An asymptotic theory for the vibration of anisotropic plates. 18 p3224 A69-35299

An asymptotic theory for the moderately large deflections of anisotropic plates. 20 p3630 A69-38129

## WIDHOPF, G. F.

Field tracing with electrostatic probes in low density, slightly ionized flows. 19 p3291 A69-35718

Laboratory measurements of electron-density distributions in the near wake. [AIAA PAPER 68-161] 24 p4248 A69-43643

## WIDING, K. G.

Solar research from rockets and satellites. 10 p1772 A69-22867

## WIDLY, G. J.

Field experience with a microelectronic multimode radar. [AGARDOGRAPH-114] 08 p1277 A69-20989

## WIDMAN, K. O.

A quantitative form of the maximum principle for elliptic partial differential equations with coefficients in  $L$  sub infinity. 03 p0457 A69-13826

## WIDNALL, S. E.

Dynamics of an acoustic probe for measuring pressure fluctuations on a hypersonic re-entry vehicle. 01 p0008 A69-11278

A numerical method for the calculation of nonlinear unsteady lifting potential flow problems. [AIAA PAPER 69-23] 06 p0862 A69-18040

A correlation of vortex noise data from helicopter main rotors. 17 p2896 A69-34034

## WIEBE, W.

Effect of atmospheric humidity on aircraft structural alloy fatigue life. 09 p1521 A69-21390

## WIEBER, D.

Laser beam directed at the lunar retro-reflector array - Observations of the first returns. 24 p4384 A69-43197

## WIEBERS, J. E.

Mineral dynamics during hibernation and chronic immobility - A review. 21 p3660 A69-39175

## WIECHERT, D.

Phase modulator with phase-controlled oscillators - Phase-locked-loop circuit /Phasenmodulator mit phasengeregelten Oszillatoren - Phase-Lock-Loop-Schaltung/. 05 p0729 A69-15965

## WIEDEMEIER, H.

Phase studies of the systems Mn-S, Mn-Se, and Mn-S-MnSe. 20 p3485 A69-38286

## WIEDER, E. A.

Guiding system of the spectro-stratoscope. 13 p2262 A69-27957

## WIEDER, H.

Electron beam writing of spatial filters. 10 p1697 A69-23870

## WIEDERHORN, S. M.

Moisture assisted crack growth in ceramics. 01 p0101 A69-10767

## WIEDERKEHR, R.

Estimation of microbial survival in heat sterilization. 05 p0707 A69-15941

## WIEDMANN, S.

Charge storage in semiconductor diodes - Sinusoidal large signal characteristics of diodes at high frequencies /Ladungsspeicherung in Halbleiterdioden - Eigenschaften der Dioden bei Aussteuerung mit sinusförmigen grossen Signalen bei hohen Frequenzen/. 01 p0049 A69-11361

## WIEGAND, C. L.

Detailed plant and soil thermal regime in agronomy. 12 p2075 A69-26989

## WIEHR, E.

Indium, rubidium, and caesium in sunspots. 13 p2343 A69-27626

- JEJACKI, Z.**  
Orbits of artificial earth satellites /Orbita sztucznych satelitow ziemi/.  
10 p1776 A69-23295
- TELEBINSKI, R.**  
Pulsar search at the Molonglo radio observatory.  
02 p0327 A69-12725  
Clustering of pulsars along the galactic plane.  
05 p0825 A69-16356  
A method of detection which simulates a circularly polarised waveguide mode.  
07 p1105 A69-19046  
A survey of the galactic plane at 85 and 150 MHz.  
07 p1216 A69-19138  
Some further pulsar observations at the Molonglo Radio Observatory.  
14 p2517 A69-29091  
Three new pulsars.  
17 p3026 A69-32857  
Some solar observations at 21 and 43 cm wavelength during solar minimum.  
22 p4001 A69-39988
- TEMANN, J.**  
Mass spectrometry in structural and stereochemical problems. CLXVI.  
09 p1448 A69-22551
- TENECKE, R.**  
Determination of the blast-wave energy of a laser-induced gas breakdown /Energiebestimmung der Stoss-welle eines laserinduzierten Gasdurchbruchs/.  
24 p4299 A69-42651
- TIENER, E. L.**  
Training for vigilance - Combined cueing and knowledge of results.  
13 p2213 A69-28256
- TIENHOLD, H.**  
The relaxation effect in epitaxial Si-MOS structures /Zu Relaxationseffekten bei epitaktischen Si-MOS-Strukturen/.  
03 p0490 A69-13947
- VIENS, R. H.**  
Studies of auroral hydrogen emissions in West-Central Canada. III - Proton and electron auroral ovals.  
19 p3302 A69-35993
- VIENSS, W.**  
Procedure for the launching of the "Europa 1" carrier rocket in Woomera according to prelaunch wind-load calculations /Verfahren zur Startfreigabe der Europa-1-Tragerrakete in Woomera aufgrund von Windbelastungsvorausrechnungen/.  
01 p0160 A69-10032  
Launch clearance procedure on the basis of wind load precalculations for the Europa 1 vehicle in Woomera.  
20 p3619 A69-38281
- VIER, D. D.**  
An investigation of the decoupling effects in a magnetic forming beryllium coil assembly.  
11 p1888 A69-25310
- WIERZBICKI, T.**  
Finite deflection of a circular viscoplastic plate subject to projectile impact.  
02 p0349 A69-12798
- WIESEMANN, K.**  
The influence of electron emission on probe characteristics.  
08 p1361 A69-20232
- WIESER, B.**  
Resonance isolators with lumped structural elements for 230 MHz /Resonanzrichtungsleitung mit konzentrierten Bauelementen fuer 230 MHz/.  
11 p1856 A69-25632
- WIESMAN, W.**  
Organizational communication.  
24 p4419 A69-42930
- WIGERTZ, O.**  
A low-resistance flow meter for wide-range ventilatory measurement.  
22 p3894 A69-40979
- WIGGINS, J. H., JR.**  
Sonic boom damage to structures.  
15 p2585 A69-30370
- WIGGINS, R. A.**  
Monte Carlo inversion of body-wave observations.  
17 p2962 A69-33654
- WIGINTON, C. G.**  
MIL-STD-781B reliability tests - Exponential distribution.  
20 p3551 A69-38289
- WIGHTMAN, J. P.**  
The decomposition of oxy-containing organic compounds in a microwave discharge.  
22 p3895 A69-40103
- WIGINTON, C. L.**  
Flow in the entrance region of ducts.  
11 p1874 A69-25285
- WIGLEY, T. M. L.**  
New kinetic equation for plasmas.  
08 p1369 A69-20816
- WIIG, S.**  
High reliability tape recorders for satellite, aircraft drone applications.  
07 p1133 A69-19104
- WIIN-NIELSEN, A.**  
On the intensity of the general circulation of the atmosphere.  
07 p1175 A69-18947
- WIKTOREK, R. J.**  
A model for polymer fatigue.  
10 p1717 A69-24217
- WILAND, E.**  
Unsteady aerodynamics of stationary elliptic cylinders in subcritical flow.  
[AIAA PAPER 69-745]  
18 p3084 A69-34412
- WILANOWSKI, W.**  
Performance characteristics of the TU-134 in comparison with other aircraft of the same class /Charakterystyki eksploatacyjne samolotu TU-134 w porownaniu z innymi samolotami tej klasy/.  
13 p2202 A69-27931
- WILBUR, A. C.**  
An exploratory study of the interplanetary environmental effects on solar-cell cover glasses.  
19 p3253 A69-35702
- WILBUR, P. J.**  
Energy transfer from a pulse network to a propagating current sheet.  
[AIAA PAPER 69-113]  
06 p0971 A69-18123
- WILCKENS, E.**  
A method of calculating the aerodynamic heating of rocket vehicles, its numerical application, and comparison with flight data obtained for the ELDO-A booster systems /Verfahren zum Berechnen der aerodynamischen Aufheizung von Raketenflugkoepern, seine numerische Anwendung und Vergleich mit Flugmessungen an ELDO-Tragerrystemen/.  
11 p1966 A69-25433
- WILCOCK, D. F.**  
Configurations for gas turbine compressor end seals.  
[ASLE PREPRINT 68AM 4B-4]  
13 p2267 A69-27366
- WILCOX, B. A.**  
Techniques for transmission electron microscopy and etch pitting of CoO single crystals.  
12 p2112 A69-25944  
Tensile and creep deformation of a fiber reinforced Mg-Li alloy.  
17 p2986 A69-33073
- WILCOX, D.**  
Display technology - Today and tomorrow. II - Photorecording.  
06 p0928 A69-17923
- WILCOX, F. A.**  
Flight and wind tunnel investigation of installation effects on supersonic cruise exhaust nozzles at transonic speeds.  
[AIAA PAPER 69-427]  
16 p2734 A69-32769
- WILCOX, J. C.**  
Experimental strapdown redundant sensor inertial navigation system.  
[AIAA PAPER 69-851]  
21 p3762 A69-39379
- WILCOX, J. M.**  
Asymmetry in geomagnetic response to the polarity of the interplanetary magnetic field.  
01 p0077 A69-11236  
A large-scale pattern in the solar magnetic field.  
04 p0665 A69-15532  
Solar and interplanetary magnetic fields and plasmas.  
05 p0821 A69-15841  
A model of interplanetary and coronal magnetic fields.  
11 p1958 A69-24429  
Interplanetary sector structure in the rising portion of the sunspot cycle.  
14 p2517 A69-28957  
Direction of the nearby galactic magnetic field inferred from a cosmic-ray diurnal anisotropy.  
20 p3592 A69-38098
- WILDMAN, P. J. L.**  
Solar wind disturbances associated with flares /Invited review paper/.  
24 p4373 A69-43620
- WILCOX, L. C., JR.**  
Quantitative eddy current testing of metallic foil, sheet, and plate from a single surface.  
10 p1698 A69-23046
- WILCOX, P. L.**  
Effect of a continuous area convergence on the motion of a shock wave.  
23 p4153 A69-42398
- WILCOX, W. R.**  
Oriented composites by solidification of off-eutectic mixtures.  
13 p2287 A69-28680
- WILD, J. P.**  
Radio evidence of a coronal instability before the onset of a solar flare /9 June 1968/.  
09 p1582 A69-22747  
The exploration of the sun by radio.  
10 p1777 A69-23383  
Interactions between distant centres around the sun.  
17 p3040 A69-33801  
Radio evidence of instabilities and shock waves in the solar corona.  
24 p4378 A69-42689
- WILD, J. W.**  
Safety for large space stations.  
[AAS PAPER 69-518]  
24 p4392 A69-42842
- WILD, P. A. T.**  
An area search for subdwarfs.  
08 p1392 A69-20560
- WILD, R. C.**  
Unified flight control actuator package.  
[AIAA PAPER 69-788]  
19 p3249 A69-35640
- WILDA, R. W.**  
The frequency response of volume-terminated pneumatic lines with circular and rectangular cross sections.  
24 p4301 A69-43288
- WILDAVSKY, A.**  
Rescuing policy analysis from PPBS.  
10 p1811 A69-23353
- WILDE, B. E.**  
The variable corrosion resistance of 18Cr-8Ni stainless steels - Behavior of commercial alloys.  
20 p3562 A69-37750
- WILDE, G. L.**  
Engines for VTOL/STOL application.  
05 p0811 A69-15553  
The building block approach to advanced engines.  
[RAES PAPER 14]  
22 p3999 A69-40493
- WILDE, K. A.**  
The role of HNO in the H sub 2 - NO reaction.  
13 p2218 A69-28457
- WILDE, M. G.**  
The aerodynamic derivation of the Concorde wing.  
[RAES PAPER 18]  
22 p3859 A69-40497
- WILDE, P.**  
The torsion of thin-walled bars with variable cross-section.  
02 p0337 A69-11559
- WILDEMAN, T. R.**  
Relative and absolute terrestrial abundances of the rare earths.  
08 p1310 A69-20942
- WILDEY, R. L.**  
Structure of the Jovian disk in the upsilon sub 2 - band of ammonia at 100000 angstrom units.  
02 p0309 A69-12715  
Interpretation of extraterrestrial imagery.  
15 p2690 A69-30711  
The moon's photometric function near zero phase angle from Apollo 8 photography.  
23 p4220 A69-42380
- WILDFEUER, D.**  
Compression effects on transformers, relays, and other piece parts in an encapsulated structure - Lunar module signal conditioner.  
22 p3910 A69-39953
- WILDIN, M. W.**  
Investigation of a model for bidirectional reflectance of rough surfaces.  
[AIAA PAPER 69-64]  
06 p0959 A69-18125
- WILDMAN, P. J. L.**  
Preliminary results of molecular oxygen observations from the Ariel III satellite.  
21 p3717 A69-39263



## WILEY, C. A.

## WILEY, C. A.

Airborne radar navigation. 18 p3169 A69-34851

## WILEY, R. F.

Real-time targeting for the Apollo lunar orbit insertion maneuver. [AIAA PAPER 68-848] 21 p3828 A69-39760

## WILHELM, H.

Temporal changes of the geomagnetic quadrupole field and possible effects on the earth's rotation connected with these changes / Zeitliche Aenderungen des erdmagnetischen Quadrupolfeldes und daraus folgende moegliche Einfluesse auf die Erdrotation/. 22 p3937 A69-40423

## WILHELM, H. E.

Formation of a quasi-neutral plasma in a hydrodynamic channel flow. 10 p1737 A69-23467

Experiment and theory of the ionization and recombination kinetics in plasmas /super 3 He/ produced through neutron irradiation. 10 p1738 A69-23488

## WILHELM, J.

Determination of charge-carrier concentration by means of a double probe in plasmas with a Druyvesteyn distribution of electron components /Ladungstraegerkonzentrationsbestimmung mittels Doppelsonde in Plasmen mit Druyvesteyn-Verteilung der Elektronen-Komponente/. 05 p0800 A69-15737

Basic equations for the frequency portions of the electron-velocity distribution function in a Lorentz-plasma under the influence of time periodic electromagnetic fields with two fundamental frequencies /Grundgleichungen fuer die Frequenzanteile der Elektronen-Geschwindigkeitsverteilungsfunktion im Lorentz-Plasma unter der Einwirkung zeitlich periodischer elektromagnetischer Felder zweier Grundfrequenzen/. 05 p0800 A69-15743

Transport and balance coefficients in weakly ionized neon and helium plasmas in a homogeneous electric field /Transport- und Bilanzkoeffizienten in schwachionisierten Neon- und Heliumplasmen im homogenen elektrischen Feld/. 10 p1740 A69-23722

## WILHELM, K.

Occurrences of Pc 1 pulsations in the course of magnetospheric substorms. 03 p0425 A69-14024

Balloon measurements of solar protons in Northern Scandinavia on 7 July 1966. 10 p1767 A69-23763

Geomagnetic pulsations in the auroral zone. 21 p3708 A69-38497

## WILHELM, K. A.

Test evaluation of a 2500 deg F structural component. 12 p2103 A69-26837

## WILHELM, P. G.

Gravity gradient flight experience acquired with the Naval Research Lab satellites. 07 p1228 A69-18344

## WILHELMS, D. E.

Interpretation of extraterrestrial imagery. 15 p2690 A69-30711

## WILHELMSSON, H.

Non-linear coupling of waves in a magnetized plasma with particle drift motions. 16 p2816 A69-31640

## WILHELMY, L.

Three-phase DC/AC converter with switched transistors /Dreiphasen-Wechselrichter mit geschalteten Transistoren/. 08 p1285 A69-20381

## WILKERSON, G. W.

"TV camera B" described for Mars Mariner VI and VII. 19 p3307 A69-35808

## WILKERSON, T. D.

Plasma observations on Explorer 34. 01 p0076 A69-11234

Reduced shock relations in magnetohydrodynamics. 07 p1193 A69-19242

Radiation studies in shock tubes. 11 p1863 A69-25014

Atomic spectroscopy with the shock tube. 18 p3176 A69-34446

Helium abundance in the solar wind. 22 p4004 A69-40305

## WILKINS, D. R.

Multimegawatt thermionic reactor systems for space applications. 14 p2480 A69-29183

Theory of thermionic converter operation with applications to thermionic reactor analysis. 14 p2400 A69-29222

## WILKINS, J. R.

Microbiological studies on a water management subsystem for manned space flight. [SAE PAPER 680718] 03 p0379 A69-13441

## WILKINS, L. C.

Nth order redundancy reduction. 09 p1533 A69-22458

## WILKINSON, C. K., JR.

Launch-period selection for the 1972 Venus launch opportunity. [AAS PAPER 68-135] 21 p3805 A69-39208

## WILKINSON, D. H.

Analysis and design of aerofoils and cascades in incompressible flow. 23 p4058 A69-41610

## WILKINSON, I.

Dynamos in the solar system. 07 p1210 A69-18371

## WILKINSON, K. G.

Managing unserviceability. 08 p1422 A69-20626

## WILKINSON, S. C.

Design aspects of fabrications for modern aircraft gas turbines. 15 p2629 A69-30928

## WILKOV, M. A.

Effect of surface environment on mode of crack formation in fatigue. 07 p1235 A69-19387

## WILKS, G.

The flow around a semi-infinite oscillating plate and the skin friction on arbitrarily cross-sectioned infinite cylinders oscillating parallel to their length. 19 p3237 A69-35620

## WILKS, J.

The Properties of Liquid and Solid Helium. 04 p0630 A69-14688

## WILLARD, D. A.

The Boeing/Vertol hybrid executive system. 04 p0567 A69-15352

## WILLARD, H. J., JR.

Ultrasonic attenuation in the superconducting state of high-purity thallium. 03 p0485 A69-13293

Ultrasonic attenuation in the normal state of high-purity thallium. 03 p0485 A69-13294

## WILLARDSON, R. K.

Semiconductors and Semimetals. Volume 4 - Physics of III-V Compounds. 04 p0641 A69-14501

## WILLBOURN, A. H.

The problem of polymer selection and the contribution of plastics to other technologies. 18 p3161 A69-34610

## WILLE, R.

Tangential-stress distribution and heat transfer in a circular cylinder with an attached wall jet /Schubspannungsverteilung und Waermeuebergang an einem Kreiszyylinder mit anliegendem Wandstrahl/. 05 p0746 A69-16022

Some measurements in the immediate near wake of blunt bodies. [AIAA PAPER 69-746] 18 p3084 A69-34409

## WILLEMS, J. C.

Some new rearrangement inequalities having application in stability analysis. 06 p0904 A69-17943

The stability of distributed parameter systems. 24 p4293 A69-43303

Some results on the L sub p-stability of linear time-varying systems. 24 p4295 A69-43316

## WILLEMS, P. Y.

A method for stability investigation of a periodic dynamic system with many degrees of freedom. 14 p2534 A69-29318

Attitude stability of deformable satellites. 17 p3047 A69-33229

## WILLETT, J. E.

Nonlinear oscillations in a weakly ionized plasma. 16 p2820 A69-31702

## WILLHOFF, G. S.

Analysis of intercept control techniques with computer generated movies. 06 p0906 A69-17397

## WILLIAMS, A. J., III

An experimental survey of the low energy electron scattering spectrum of nitrogen. 22 p3935 A69-39970

## WILLIAMS, A. L.

First class interior. 20 p3460 A69-36918

## WILLIAMS, B. E.

Analysis of a simplified radar simulator for measuring probability of detection. 17 p2921 A69-33629

## WILLIAMS, B. L.

Improved method of removing plastic backing films from carbon electron microscope replicas. 09 p1495 A69-21651

## WILLIAMS, C. D.

Asymmetry parameters and the temperature dependence of the PQR frequencies of super 127 I in SnI sub 4. 22 p3986 A69-40726

Effect of induced stress on convergent and divergent thinking. 24 p4269 A69-42555

## WILLIAMS, C. E.

Judgments of the acceptability of aircraft noise in the presence of speech. 18 p3097 A69-34325

Optimization of RAE satellite boom deployment timing. [AIAA PAPER 69-920] 21 p3821 A69-39350

## WILLIAMS, C. G.

Differential acclimatization as a function of duration of exposure. 21 p3654 A69-38905

## WILLIAMS, C. R.

Medical evaluation of missile fuel handlers. 09 p1447 A69-22556

## WILLIAMS, C. S.

Spectacularly vs diffusely reflecting walls for cavity-type sources of radiant energy. 12 p2130 A69-26245

## WILLIAMS, D.

Techniques for the analysis of random data obtained from flight tests in atmospheric turbulence. 05 p0767 A69-16756

A radio method for determining the astronomical unit. 07 p1222 A69-19590

Infrared absorbance of carbon monoxide at low temperatures. 07 p1183 A69-19644

Magnetic suspension and guidance for high speed rockets by superconducting magnets. 17 p2946 A69-33789

Nitric acid vapor above 19 km in the earth's atmosphere. 23 p4155 A69-41634

## WILLIAMS, D. A.

The interstellar H super plus sub 2 molecule. 24 p4375 A69-42610

## WILLIAMS, D. J.

The Small Scientific Satellite /S super 3/ program and its first payload. [IEEE PAPER 3C-1] 07 p1230 A69-19195

Proton entry into the magnetosphere on May 26, 1967. 16 p2849 A69-31984

Design of a long-life reliable nuclear experiment for space flight. 19 p3284 A69-36676

## WILLIAMS, D. L.

A high energy density lithium/ dichloroisocyanuric acid battery system. [ECS PAPER 15] 05 p0706 A69-16231

Voltage oscillations of the H sub 2-CO system. 22 p3896 A69-40738

## WILLIAMS, D. P.

Comments on slow crack growth of steels in hydrogen and water environments. 01 p0096 A69-10612

- WILLIAMS, D., JR.**  
A magnetically suspended rocket sled.  
15 p2585 A69-30361
- WILLIAMS, E. O.**  
An etched manganin gauge system for shock- pressure measurement in a high-noise environment.  
04 p0603 A69-15431
- WILLIAMS, E. P.**  
Experimental studies of ablation surface patterns and resulting roll torques.  
[AIAA PAPER 69-180] 06 p1036 A69-18051
- WILLIAMS, E. W.**  
Decompression stress in simulated orbital flight.  
01 p0022 A69-11336  
Endocrine-metabolic response to sequential decompression during simulated orbital flight.  
01 p0022 A69-11337  
Nitrogen and helium as factors affecting decompression stress severity.  
01 p0018 A69-11338  
Anticipatory stress and flight stress in F-102 pilots.  
12 p2023 A69-26552  
Development of a 100 watt/e/ isotope thermionic electrical power module.  
14 p2398 A69-29190  
Aeromedical aspects of the first nonstop transatlantic helicopter flight. III - Endocrine-metabolic effects.  
19 p3263 A69-36452
- WILLIAMS, F.**  
Theory of electronic states and transport in graded mixed semiconductors.  
10 p1745 A69-23360
- WILLIAMS, F. A.**  
Linearized analysis of constant-property duct flows.  
03 p0413 A69-13011  
Simplified model for effect of solid heterogeneity on oscillatory combustion.  
09 p1622 A69-22085  
Analytical and experimental studies of the steady state combustion mechanism of solid propellants.  
16 p2829 A69-31995  
Models for the sublimation of ammonium perchlorate.  
[WSCIPAPER 69-22] 16 p2832 A69-32360
- WILLIAMS, F. V.**  
The laser transition and photon energy of GaAs in the lightly-doped limit.  
02 p0257 A69-12615
- WILLIAMS, G.**  
The effect of external vorticity on stagnation- point heat transfer at high Prandtl number.  
09 p1622 A69-21905
- WILLIAMS, G. B.**  
A method to improve utilization of convertible air- planes.  
[AIAA PAPER 69-784] 19 p3244 A69-35642
- WILLIAMS, G. F., JR.**  
Microwave radiometry of the ocean and the possi- bility of marine wind velocity determination from satel- lite observations.  
21 p3726 A69-39750
- WILLIAMS, G. P.**  
Thermal convection in a rotating fluid annulus. III - Suppression of the frictional constraint on lateral bound- aries.  
03 p0460 A69-13339  
Numerical integration of the three-dimensional Navier-Stokes equations for incompressible flow.  
21 p3694 A69-38770
- WILLIAMS, J.**  
Some airframe aerodynamic problems at low speeds.  
05 p0695 A69-15542
- WILLIAMS, J. A.**  
A Green's function for the stress intensity factors of edge cracks and its application to thermal stresses.  
[ASME PAPER 68-WA/MET-19] 05 p0839 A69-16157  
A general approach to creep failure resulting from wedge crack growth.  
24 p4399 A69-43032
- WILLIAMS, J. B.**  
A correlation of the windward shock angle on yawed cones.  
23 p4060 A69-41918
- WILLIAMS, J. C.**  
Phase transformations in Ti-Mo and Ti-V alloys.  
06 p0943 A69-17230
- A low noise wideband parametric amplifier for satel- lite communications.  
07 p1099 A69-18462
- Active reactance compensation of parametric am- plifiers.  
12 p2039 A69-26380
- Metallurgical aspects of the stress corrosion cracking of titanium alloys.  
19 p3352 A69-36902
- Strength, deformation modes and fracture in titani- um-aluminum alloys.  
20 p3557 A69-36959
- Relationship between composition, microstructure, and stress corrosion cracking /in salt solution/ in titani- um alloys.  
20 p3557 A69-36961
- Transient effects of nuclear radiation on the dielec- tric properties of refractory low-loss ceramics at microwave frequencies.  
20 p3584 A69-38065
- WILLIAMS, J. C., III**  
Nonsteady stagnation-point flow.  
02 p0233 A69-12527  
Slender channel approximation in low Reynolds number channel flow.  
09 p1482 A69-21976  
On transition from supersonic to subsonic flow at low Reynolds numbers in a tube.  
[ASME PAPER 69-APM-23] 18 p3120 A69-34397
- WILLIAMS, J. D.**  
Developments in explosive welding.  
04 p0608 A69-15481
- WILLIAMS, J. E. C.**  
Superconductors.  
04 p0642 A69-14584
- WILLIAMS, J. E. D.**  
Navigation and economics in the air.  
07 p1052 A69-18661
- WILLIAMS, J. E. F.**  
Sound generation by turbulence and surfaces in ar- bitrary motion.  
13 p2247 A69-27974  
Hydrodynamic noise.  
18 p3123 A69-34921  
Real space-time Green's functions applied to plate vibration induced by turbulent flow.  
24 p4395 A69-42597
- WILLIAMS, J. F.**  
Lyman-alpha radiation from electron collisions with simple hydrogen containing molecules.  
24 p4351 A69-43033
- WILLIAMS, J. G.**  
Crack propagation in plates and shells subjected to bending and direct loading.  
10 p1795 A69-23061  
Metal fibre reinforced thermoplastics and the role of adhesion efficiency.  
20 p3559 A69-37083
- WILLIAMS, J. K.**  
Major causes of failure - Civil aircraft structure.  
24 p4251 A69-42779
- WILLIAMS, J. R.**  
Space manufacturing modules.  
18 p3208 A69-35067
- WILLIAMS, M.**  
Experiments using a 25 kw hollow cathode lithium vapor MPD arc jet.  
[AIAA PAPER 69-241] 09 p1561 A69-21222
- WILLIAMS, M. H., JR.**  
Mechanical properties of the lung in experimental pulmonary emphysema.  
23 p4082 A69-41442
- WILLIAMS, M. L.**  
An EPR investigation of newly formed fracture sur- faces.  
03 p0434 A69-13871  
The continuum interpretation for fracture and adhe- sion.  
22 p3974 A69-40760
- WILLIAMS, M. M. R.**  
Boundary-value problems in the kinetic theory of gases. I - Slip flow.  
11 p1869 A69-24893  
Rarefied gas flow between parallel plates.  
19 p3296 A69-35621
- WILLIAMS, P. G.**  
Self-induced separation.  
23 p4151 A69-41691
- WILLIAMS, P. J. S.**  
The spectra of radio sources in the revised 3C catalogue.  
20 p3609 A69-38138
- WILLIAMS, R.**  
Electron emission from the Schottky barrier struc- ture ZnS-Pt-Cs.  
03 p0493 A69-14186
- WILLIAMS, R. A.**  
Harmonic dispersion analysis of incremental waves in uniaxially prestressed plastic and viscoplastic bars, plates, and unbounded media.  
13 p2363 A69-28125  
An outline of the Ferranti data handling system proposed by the Sud-Aviation group for project L.A.S.  
20 p3501 A69-37390
- WILLIAMS, R. C.**  
Some biological effects of laser radiation.  
[AGARDOGRAPH-111] 08 p1266 A69-20676
- WILLIAMS, R. E.**  
Collision strengths and photoionization cross sec- tions for nitrogen, oxygen, and neon.  
22 p3988 A69-41244
- WILLIAMS, R. H.**  
Failure analysis and corrosion control.  
24 p4323 A69-43428
- WILLIAMS, R. M.**  
A comparison of the performance of two rhenium, niobium cylindrical thermionic converters.  
03 p0368 A69-13126  
The performance of a rhenium, niobium cylindrical thermionic converter.  
05 p0707 A69-16359  
Fixed-space planar thermionic diode with collector guard ring.  
09 p1438 A69-21815  
A comparison of the performance of two rhenium, niobium cylindrical thermionic converters.  
09 p1438 A69-21816  
The performance of a rhenium, niobium cylindrical thermionic converter.  
09 p1438 A69-21817  
Some research on rotor circulation control.  
18 p3088 A69-35231
- WILLIAMS, R. S., JR.**  
Degradation of infrared caused by condensation.  
08 p1311 A69-19821  
Interpretation of extraterrestrial imagery.  
15 p2690 A69-30711  
Satellite imagery of the earth.  
20 p3536 A69-36930  
Satellite observation of effusive volcanism.  
21 p3721 A69-38631
- WILLIAMS, R., JR.**  
Infrared sensing of active geologic processes.  
12 p2076 A69-27011
- WILLIAMS, T. J.**  
Noise and flow characteristics of coaxial jets.  
20 p3513 A69-37063
- WILLIAMS, T. O.**  
Design and production - Production welding.  
20 p3549 A69-37446
- WILLIAMS, W. D.**  
Vibrational temperature measurements using the electron beam.  
20 p3579 A69-37222
- WILLIAMS, W. F.**  
Bandwidth limitations for phase steered planar ar- rays in satellite applications.  
17 p2941 A69-34082  
Performance analysis of matrix fed /Butler/ planar arrays for satellite systems.  
17 p2942 A69-34083  
Performance analysis of planar hybrid matrix arrays.  
22 p3915 A69-40707
- WILLIAMS, W. J.**  
Detection of nitric acid in the earth's atmosphere.  
11 p1879 A69-25407  
Infrared solar spectrum as observed from balloons.  
13 p2341 A69-27589  
Presence of HNO sub 3 in the upper atmosphere.  
24 p4308 A69-42969
- WILLIAMS, W. L.**  
Parameter and long-life creep-rupture tests of type 304 steel.  
[ASM PAPER D8-9-6] 07 p1169 A69-19664  
In-house research on the management of R and D in government agencies.  
20 p3640 A69-38022



## WILLIAMS, W. O.

## WILLIAMS, W. G.

- On the concept of rate-independence.  
01 p0166 A69-10227
- On the thermodynamics of non-simple elastic materials with two temperatures.  
08 p1422 A69-20847
- On internal interactions and the concept of thermal isolation.  
22 p4050 A69-40450

## WILLIAMS, W. R.

- Some properties of the day-to-day variability of  $Sq/Hf$ .  
12 p2073 A69-26954

## WILLIAMSON, A. G.

- Procedures for project management based on detailed programming.  
08 p1423 A69-20629

## WILLIAMSON, D. R.

- Phase plane methods for toppling stability analysis of landing spacecraft.  
02 p0334 A69-12376

## WILLIAMSON, E. J.

- The influence of cloud distribution on the global coverage of remote atmospheric sounding systems.  
15 p2650 A69-31335

## WILLIAMSON, J. H.

- On the interpretation of laser interferometer fringe patterns.  
09 p1517 A69-21915

## WILLIAMSON, J. W.

- An extension of Prandtl's mixing length theory.  
[ASME PAPER 69-FE-48] 20 p3516 A69-37978

## WILLIAMSON, R. B.

- The climatic testing of helicopters.  
14 p2427 A69-29505

## WILLIAMSON, R. C.

- Velocity of sound at 1 MHz near the He super 4 critical point.  
06 p0957 A69-17142

- Measurement of the velocity and attenuation of ultrasonic pulses in the presence of noise.  
14 p2449 A69-29564

- Measurement of jet engine combustion temperature by the use of thermocouples and gas analysis.  
23 p4165 A69-41650

## WILLIAMSON, R. G.

- System considerations and preliminary model tests on a form of vectored thrust powerplant for commercial V-STOL operations.  
15 p2672 A69-31542

## WILLIAMSON, S. J.

- Hall effect and transverse voltages in type-II superconductors in the mixed state.  
16 p2827 A69-31827

## WILLIAMSON, W. E.

- The computation of optimal Apollo-type reentry trajectories.  
24 p4386 A69-43281

## WILLIARD, J.

- Planetary entry body heating rate measurements in air and Venus atmospheric gas up to  $T$  equal 15,000 deg K.  
[AIAA PAPER 69-635] 17 p2890 A69-33272

## WILLIARD, J. W.

- Performance of a ceramic-lined 6-in.-diam arc driver.  
[AIAA PAPER 68-366] 09 p1570 A69-21957

## WILLIS, D. L.

- Strain gages in high-g environments.  
24 p4397 A69-42740

## WILLIS, D. M.

- The influx of charged particles at the magnetic cusps on the boundary of the magnetosphere.  
12 p2151 A69-26945

## WILLIS, D. R.

- Asymptotic theory of nearly free-molecular flows.  
11 p1818 A69-25283

## WILLIS, J. P.

- The composition of stony meteorites. I - Analytical techniques.  
11 p1953 A69-24358

- The composition of stony meteorites II - The analytical data and an assessment of their quality.  
11 p1953 A69-24359

- Fractionation of some abundant lithophile element ratios in chondrites.  
19 p3409 A69-36087

## WILLIS, J. R.

- The self-similar problem of the expanding elliptical crack in an anisotropic solid.  
24 p4397 A69-42749

## WILLIS, W.

- Electrode interactions in acoustic surface-wave transducers.  
24 p4312 A69-42615

## WILLISTON, S. H.

- Mercury in the atmosphere.  
02 p0244 A69-12019

## WILLMAN, J. F.

- Shielded enclosure measurements can be accurate.  
21 p3683 A69-39439

## WILLMAN, W. W.

- On the linear smoothing problem.  
12 p2122 A69-26525
- Formal solutions for a class of stochastic pursuit-evasion games.  
24 p4341 A69-43296

## WILLMANN, K.

- Ionization of helium - Angular correlation of the scattered and ejected electrons.  
06 p0962 A69-17191

## WILLMARTH, W. W.

- Aerodynamic lift and moment fluctuations of a sphere.  
14 p2390 A69-29573
- Hydrogen bubble flow visualization at low Reynolds numbers.  
24 p4298 A69-43691

## WILLMORE, A. P.

- Rocket studies of sporadic-E ionisation.  
16 p2780 A69-32310

## WILLOUGHBY, D. S.

- An interpretation of OGO light ion abundance measurements.  
11 p1879 A69-25157
- Temperature and ion abundance profiles deduced from simultaneous Explorer XXXI and Alouette II data.  
20 p3532 A69-37896

## WILLOUGHBY, P. G.

- A photographic and analytic study of composite propellant combustion in an acceleration field.  
[AIAA PAPER 69-173] 06 p0983 A69-18151

## WILLS, D.

- The radio frequency spectra of NGC 1052 and NGC 4278.  
06 p1009 A69-17959
- An investigation of some radio sources detected in high frequency surveys.  
06 p1010 A69-17974

## WILLS, M. S.

- Carbon-dioxide laser with high power per unit length.  
09 p1516 A69-21678
- A rate equation approach to saturation in CO sub 2 laser amplifiers.  
11 p1898 A69-25050

## WILSON, A. J.

- Bed effects upon the flow of a viscous liquid down an inclined plane.  
02 p0234 A69-12774
- Basic flows of a micropolar liquid.  
18 p3121 A69-34786

## WILLSTROP, R. V.

- Optical flashes from the Crab Nebula M1.  
11 p1962 A69-25250
- Search for optical flashes from PSR 0833-45.  
20 p3604 A69-37575

## WILMANSKI, K.

- Dynamics of bodies with microstructure.  
17 p3067 A69-34149

## WILMARTH, R. W.

- Small-signal and saturation characteristics of an X-band cyclotron-resonance oscillator.  
09 p1470 A69-22786
- Cooling of a high-power electron tube in a space vehicle.  
11 p1847 A69-24747
- Nonelectric cathode heating.  
11 p1848 A69-24748

## WILMARTH, V. R.

- Apollo lunar sample analysis program - A progress report.  
22 p3919 A69-40191

## WILMOT, R. D.

- Analysis of a simplified radar simulator for measuring probability of detection.  
17 p2921 A69-33629

## WILMS, E. V.

- Friction damping of deployed structures in a weightless state.  
12 p2183 A69-26792

## WILSDORF, H. G. F.

- Experimental observations of dislocations.  
13 p2316 A69-27223

## WILSEY, N. D.

- Defect clusters in electron-irradiated silicon.  
06 p0974 A69-16866

## WILSHAW, T. R.

- The critical tensile stress criterion for cleavage.  
01 p0169 A69-10765

## WILSHIRE, B.

- Work-hardening and recovery during transient and steady-state creep.  
06 p0943 A69-17236

## WILSHIRE, H. G.

- Chemical composition of the lunar surface at the Surveyor landing sites.  
04 p0655 A69-14658

## WILSON, A.

- Carroll's method applied to small stellar rotations.  
23 p4222 A69-42404

## WILSON, A. M.

- Inversion of the intensity integral for the Doppler core of strong solar absorption lines.  
21 p3796 A69-38478
- An analysis of the solar sodium D lines.  
21 p3796 A69-38479

## WILSON, B. G.

- International Conference on Cosmic Rays, 10th, Calgary, Canada, June 19-30, 1967, Proceedings. Part A - Invited and Rapporteur Papers.  
03 p0497 A69-12928
- The low energy diffuse cosmic X-radiation.  
[ISAS-428] 06 p0986 A69-17024
- Pronounced diurnal variation in cosmic-ray intensity.  
09 p1576 A69-21706
- The diffuse X-radiation spectrum below 4 keV.  
10 p1770 A69-24094
- A spectral measurement of the cosmic X-ray background down to 2 keV.  
21 p3787 A69-38351

## WILSON, C. R.

- Auroral infrasonic waves.  
11 p1878 A69-25152
- Infrasonic waves from moving auroral electrojets.  
16 p2780 A69-32303

## WILSON, D.

- Windows for high-power lasers.  
07 p1144 A69-18401

## WILSON, D. A.

- Measurements of magneto-elastic constants by microwave techniques.  
02 p0299 A69-12243

## WILSON, D. C.

- Design tolerances in laser measurement systems.  
22 p3960 A69-40238

## WILSON, D. J.

- Film cooling with normal injection into a supersonic flow.  
03 p0413 A69-12994

## WILSON, D. K.

- Capacitance recovery in neutron-irradiated silicon diodes by majority and minority carrier trapping.  
06 p0975 A69-16869
- Radiation effects on silicon avalanche /IMPATT/ diodes.  
06 p0976 A69-16874

## WILSON, E. A.

- End displacements of semi-infinite cylinders due to annular loadings.  
15 p2711 A69-30872
- Geometric optimization of concentrated contacts for minimum microslips.  
15 p2629 A69-30903

## WILSON, E. J.

- Use of strain gages for measurements of flight loads in a high-temperature environment.  
15 p2614 A69-31277

- ILSON, E. L.**  
Finite-element large deflection analysis of plates.  
09 p1615 A69-21924
- ILSON, G.**  
The influence of plenum chamber obstructions on the performance of a hovercraft lift fan.  
13 p2202 A69-27546
- ILSON, G. R.**  
A monolithic junction FET - n-p-n operational amplifier.  
07 p1103 A69-18876
- ILSON, H. B., JR.**  
Applications of a tube wind tunnel in supersonic testing.  
[AIAA PAPER 69-335] 13 p2242 A69-28271
- ILSON, J. L.**  
Flight through the air at very high speeds.  
17 p2895 A69-33576  
Influence of reflected shock and boundary-layer interaction on shock-tube flows.  
18 p3116 A69-34448  
On the structure of a class of aerothermodynamic shocks.  
18 p3089 A69-35386
- ILSON, J. M.**  
Spacecraft spin axis motion with active internal devices.  
02 p0332 A69-11739
- ILSON, J. N.**  
A fluid temperature sensor.  
02 p0249 A69-12089  
A fluidic digital position sensor.  
15 p2554 A69-31301  
Density effects on fluidic feedback oscillators.  
[ASME PAPER 69-FLCS-39] 20 p3465 A69-37984
- ILSON, J. W.**  
Four-gimbal systems for simulation display.  
12 p2055 A69-26265  
Evaluation of the Atlantic City mesonet for short range prediction of aviation terminal weather.  
24 p4342 A69-42892
- ILSON, J. W. G.**  
Anomalous features of the electron density in the topside ionosphere.  
21 p3716 A69-39257
- ILSON, K.**  
Gunn effect devices and their applications.  
21 p3681 A69-38394
- ILSON, K. H.**  
Effect of shock precursor absorption on superorbital entry heating.  
02 p0354 A69-12528  
Measurements of the total radiant intensity of air.  
04 p0685 A69-14719
- ILSON, K. R.**  
Application of light alloys to aircraft structures, especially to the "Concorde" project / Die Verwendung der Leichtmetalle im Flugzeugbau, insbesondere fuer das "Concorde"-Projekt.  
08 p1335 A69-21141  
The use of light metals in aircraft construction, especially for the Concorde project / Die Verwendung der Leichtmetalle im Flugzeugbau, insbesondere fuer das "Concorde"-Projekt.  
16 p2801 A69-31791
- ILSON, L. H.**  
Sensitivity of microwave earth stations for analog and digital communications. I.  
07 p1077 A69-18669  
Sensitivity of microwave earth stations for analog and digital communications. II.  
09 p1453 A69-21409  
Phase distortion in FM satellite communication systems.  
[IEEE PAPER 68-TP-382-COM] 13 p2222 A69-28153
- ILSON, M. A.**  
Monte Carlo simulation of system reliability.  
01 p0036 A69-10707
- ILSON, M. D.**  
International Conference on Cosmic Rays, 10th. Calgary, Canada, June 19-30, 1967, Proceedings. Part A - Invited and Rapporteur Papers.  
03 p0497 A69-12928  
Dependence of the high latitude electron /E greater than 35 keV/ boundary on the orientation of the geomagnetic axis.  
03 p0502 A69-14003
- Morphology of outer radiation zone electron /E greater than 35 keV/ acceleration mechanisms.  
11 p1950 A69-25147  
Dawn-dusk asymmetries in the outer radiation zone at magnetically quiet times  
18 p3128 A69-34942  
On the high-latitude limit of closed geomagnetic field lines.  
20 p3531 A69-37875
- WILSON, M. F.**  
Sympathetic vasoconstrictor activity to the kidney in carotid occlusion pressor reflex.  
22 p3887 A69-41190
- WILSON, M. N.**  
Application of variable optics to solar simulation systems for generation of high intensity light beams.  
[AIAA PAPER 69-997] 22 p3920 A69-40375
- WILSON, M. P., JR.**  
The switching process in bistable fluid amplifiers.  
[ASME PAPER 69-FLCS-28] 20 p3465 A69-37977
- WILSON, N. G.**  
A dynamic gas flowmeter for ultra-high vacuum.  
13 p2263 A69-28087
- WILSON, N. W.**  
On the velocity fields in eccentric annuli.  
[ASME PAPER 68-WA/FE-35] 05 p0750 A69-16108
- WILSON, O. C.**  
High-dispersion classification of K2-M6 giants of high and low velocity.  
13 p2338 A69-27556
- WILSON, P. E.**  
Comparison of inflation rigidized wire-film and shell-film cylinders in axial compression and bending.  
09 p1617 A69-21997
- WILSON, P. R.**  
The structure of a sunspot. IV - A two-dimensional radiative transfer analysis of center-limb intensity profiles.  
03 p0516 A69-14040  
Depletion layer and capacitance calculations for Gaussian diffused junctions.  
07 p1196 A69-18242  
On the solution of the transfer equation for continuum radiation in inhomogeneous atmospheres.  
08 p1386 A69-20077  
Temperature fluctuations in the solar photosphere.  
11 p1957 A69-24423  
Temperature fluctuations and convective modes in the solar photosphere.  
17 p3040 A69-33810  
On granulation models /Research note/.  
20 p3603 A69-37541
- WILSON, Q. C.**  
International satellite system for aircraft communications and air traffic control.  
03 p0464 A69-13238  
Satellite communications to mobile terminals - A forecast of needs and techniques.  
18 p3103 A69-35089
- WILSON, R.**  
Ultraviolet astronomy.  
05 p0821 A69-15839
- WILSON, R. A.**  
Fire detection feasibility tests and system development.  
12 p2098 A69-26995
- WILSON, R. D.**  
Development of the engine inlet air filtration system for the AH-56A.  
01 p0143 A69-11054
- WILSON, R. F.**  
Compact ZrH reactor development status and reactor thermoelectric space power systems.  
16 p2809 A69-31723  
Zirconium hydride reactor - Organic Rankine power systems.  
23 p4189 A69-42265
- WILSON, R. G.**  
Fifth source of Jupiter decametric radiation.  
05 p0813 A69-15604  
Europa and the decametric radiation from Jupiter.  
05 p0813 A69-15605
- WILSON, R. K.**  
Airplane flying qualities specification revision.  
[AIAA PAPER 68-245] 17 p2902 A69-34026
- WILSON, R. P., JR.**  
Studies on combustion of aluminum particles.  
[WSCI PAPER 69-3] 16 p2830 A69-32344
- WILSON, R. W.**  
Sun tracker measurements of attenuation by rain at 16 and 30 GHz.  
17 p2920 A69-33398  
Intergalactic H I emission at 21 centimeters.  
18 p3190 A69-34285  
Metallization systems for silicon integrated circuits.  
24 p4286 A69-42761
- WILSON, S. J.**  
A Goedel-type solution of the Einstein-Maxwell equation.  
02 p0280 A69-11814
- WILSON, S. W., JR.**  
A multiple-impulse orbital departure technique for manned interplanetary missions.  
[AIAA PAPER 69-126] 06 p1010 A69-18065
- WILSON, T. G.**  
Analytic solutions of limit cycles in a feedback-regulated converter system with hysteresis.  
06 p0904 A69-17941  
DC to DC converter regulated by a constant-frequency duty-cycle generator.  
09 p1442 A69-22454
- WILSON, W. G.**  
An analysis of the flow-disturbance and side forces due to gaseous secondary injection into a rocket nozzle.  
[AIAA PAPER 69-443] 16 p2839 A69-32666
- WILTSHIRE, R.**  
Electron beam welding the Lunar Module descent engine.  
12 p2102 A69-26621
- WILTSHIRE, V.**  
A simple airglow photometer with improved red sensitivity.  
16 p2777 A69-32107
- WIMBERLY, C. R.**  
Convective heating of a yawed concave hemisphere in a free molecule flow.  
02 p0354 A69-12529
- WIMP, J.**  
Jacobi series which converge to zero, with applications to a class of singular partial differential equations.  
07 p1174 A69-18805
- WIMPENNY, J. C.**  
The design and application of high lift devices.  
05 p0695 A69-15544
- WIMPRESS, J. K.**  
Aerodynamic technology applied to takeoff and landing.  
05 p0696 A69-15569
- WINANS, D. R.**  
Milestones in aviation fuels.  
[AIAA PAPER 69-779] 19 p3392 A69-35643
- WINAVER, A.**  
Description of a "hollow charge" pyrotechnic circuit closer /Description d'un conjoncteur pyrotechnique a "charge creuse".  
10 p1635 A69-23030
- WINBORN, B. R., JR.**  
The ADAM III V/STOL concept.  
[AIAA PAPER 69-201] 07 p1056 A69-19573
- WINCH, D. E.**  
Eccentric geomagnetic dipole potential.  
02 p0245 A69-12735  
Noncyclic variations and S sub q harmonic dials.  
23 p4158 A69-42170  
Changes in geomagnetic multipole parameters 1942.5-1962.5.  
23 p4158 A69-42171
- WINCHENBACH, G. L.**  
Free-flight investigation of the aerodynamic characteristics of a 10-deg semiangle cone at Mach numbers from 6 to 16.  
[AIAA PAPER 69-133] 06 p0862 A69-18050
- WINCKLER, J. R.**  
Observations of the screening of solar cosmic rays by the outer magnetosphere.  
02 p0309 A69-12740  
An atlas of 10-50 keV solar flare X-rays and tentative atlas of solar proton events observed by the OGO-I and OGO-III ionization chambers /Research note/.  
07 p1206 A69-19251  
Sixteen-second periodic pulsations observed in the correlated microwave and energetic X-ray emission from a solar flare.  
09 p1574 A69-21457  
Observations of energetic X-rays and solar cosmic rays associated with the 23 May 1967 solar flare event.  
09 p1579 A69-22182



## WINDER, R. O.

- Simultaneous observations of 5- to 15-second period modulated energetic electron fluxes at the synchronous altitude and the auroral zone. 20 p3592 A69-38082
- Experimental verification of drift-shell splitting in the distorted magnetosphere. 22 p4005 A69-40508
- Intensity correlations and substorm electron drift effects in the outer radiation belt measured with theOGO 3 and ATS 1 satellites. 24 p4309 A69-43172

## WINDER, R. O.

- Threshold logic for LSI. 17 p2943 A69-34122

## WINDISCH, H.

- Special features of the darkening process in photographic layers /Besonderheiten bei der Schwärzung fotografischer Schichten durch Laserimpulse/. 13 p2260 A69-27612

## WINDISCH, ST.

- Revision of the vanadium-carbon and niobium-carbon systems. 05 p0779 A69-15988

## WINDLE, D. W.

- On the day and night reversal in NmF2 north-south asymmetry. 06 p0918 A69-17384
- A self consistent ring current in the earth's dipole field. 12 p2151 A69-26948
- A model midnight meridian magnetospheric field. 13 p2252 A69-27532
- Non-linear symmetric inflation of a magnetic dipole. 16 p2776 A69-32096

## WINDOLPH, G. W.

- System safety analysis techniques for V/STOL aircraft. [AIAA PAPER 69-216] 07 p1056 A69-19575

## WINDSOR, E. E.

- Construction and performance of practical field emitters from lanthanum hexaboride. 09 p1468 A69-22601

## WINDSOR, M.

- An eye protective panel for flash-blindness protection using triplet state photochromism. 21 p3686 A69-39783

## WINDSOR, M. W.

- Laser photolysis and spectroscopy - A new technique for the study of rapid reactions in the nanosecond time range. 05 p0772 A69-16025

## WINEMAN, A. S.

- On general measures of deformation. 08 p1416 A69-20690
- Controllable motions of compressible material materials of various types. 12 p2189 A69-27118

## WINER, I.

- Laser beam directed at the lunar retro-reflector array - Observations of the first returns. 24 p4384 A69-43197

## WINER, W. O.

- A correlation of bulk moduli and P-V-T data for silicone fluids at pressures up to 500,000 psig. 01 p1012 A69-10913

## WINFIELD, D. H.

- A fractional correction procedure for indirect trajectory optimization. 24 p4386 A69-43264

## WING, P. A.

- Adaptive delta modulation. 15 p2565 A69-30177

## WING, R. F.

- Infrared spectra of stars. 21 p3811 A69-39510

## WING, W. G.

- Attitude and heading references. 18 p3169 A69-34853

## WINGET, C. M.

- Plasma enzyme responses to blood withdrawal in chickens. 10 p1644 A69-23158

- Diurnal rhythm of the pituitary-adrenocortical response to stress - Effect of constant light and constant darkness. 15 p2556 A69-31330

- Mechanisms of action of light on circadian rhythms in the monkey. 15 p2556 A69-31336

- Phase relationships between circadian rhythms and photoperiodism in the monkey. 24 p4260 A69-42706

## WINGOLD, H. D.

- Flow through cascades of slotted compressor blades. [ASME PAPER 69-GT-6] 09 p1432 A69-22507

## WINGROVE, R. C.

- Measurement of pilot describing functions from flight test data with an example from Gemini X. 02 p0202 A69-11950

## WINIARSKI, M.

- Occultations of stars by the moon observed at the Cracow Astronomical Observatory in the year 1967. 10 p1776 A69-23205

## WINICOUR, J.

- An observable peculiarity of the Brans-Dicke radiation zone. 07 p1216 A69-18894

## WINICUR, D. H.

- Measurement of Ar-Kr integral cross sections at intermediate energies with an arc-heated aerodynamically accelerated atom beam. 19 p3378 A69-36185

- A metastable atom detection system for ground state atom beams. 22 p3950 A69-41230

## WINKELMANN, G.

- Experience in the production of orthophoto maps /Erfahrungen bei der Herstellung von Orthophotokarten/. 22 p3951 A69-41246

## WINKER, J. A.

- The hot air balloon as an observational platform. 22 p3865 A69-40810

## WINKLER, D.

- Electronic data processing at the German Federal Institute for Air Traffic Control /Elektronische Datenverarbeitung im Bereich der Bundesanstalt fuer Flugsicherung/. 15 p2650 A69-30230

## WINKLER, G.

- A theory for the quantitative description and recognition of patterns /Eine Theorie zur quantitativen Beschreibung und Erkennung von Mustern/. 09 p1461 A69-22292

## WINKLER, H.

- Experimental investigation of the stellar nuclear reaction super 12 C plus super 12 C at low energies. 20 p3612 A69-38164

## WINKLER, M. K.

- Analytical targeting techniques for the Mariner Mars 1969 mission. [AIAA PAPER 69-881] 21 p3764 A69-39407

## WINKLER, M. R.

- Pictorial encoding. 02 p0213 A69-12154

## WINKLER, R.

- Determination of charge-carrier concentration by means of a double probe in plasmas with a Druyvesteyn distribution of electron components /Ladungstraegerkonzentrationsbestimmung mittels Doppelsonde in Plasmen mit Druyvesteyn-Verteilung der Elektronen-Komponente/. 05 p0800 A69-15737

- Basic equations for the frequency portions of the electron-velocity distribution function in a Lorentz-plasma under the influence of time periodic electromagnetic fields with two fundamental frequencies /Grundgleichungen fuer die Frequenzanteile der Elektronen-Geschwindigkeitsverteilungsfunktion im Lorentz-Plasma unter der Einwirkung zeitlich periodischer elektromagnetischer Felder zweier Grundfrequenzen/. 05 p0800 A69-15743

- Transport and balance coefficients in weakly ionized neon and helium plasmas in a homogeneous electric field /Transport- und Bilanzkoeffizienten in schwachionisierten Neon- und Heliumplasmen im homogenen elektrischen Feld/. 10 p1740 A69-23722

## WINKLER, R. H.

- Miniature power amplifier for telemetry transmitters. 07 p1106 A69-19115

## WINKLER, R. L.

- "Good" probability assessors. 01 p0110 A69-10690

## WINN, C. B.

- Satellite system for determining the geopotential. 02 p0331 A69-12807

- Minimum fuel transfers between arbitrary coaxial ellipses, both coplanar and noncoplanar. 19 p3399 A69-35670

## WINNBERG, A.

- The structure of galactic neutral hydrogen in a region of Cygnus. 08 p1388 A69-20243

- New OH radio emission sources in Cygnus. 11 p1964 A69-25403

## WINNINGHOFF, F.

- Satellite studies of clouds and cloud bands near the low-level jet. 20 p3570 A69-37404

## WINOGRAD, Y. Y.

- Electric arc stabilization in crossed convective and magnetic fields. [AIAA PAPER 68-709] 24 p4359 A69-43572

## WINOGRADZKI, J.

- On the role of generalized tensors with invariant components. 19 p3361 A69-36817

## WINOKUR, J. A.

- Shipboard or aircraft gravity vector determination by means of a three-channel inertial navigator. 23 p4162 A69-41320

## WINSEL, A.

- The Varta fuel cell system. 08 p1261 A69-21047

- Sources of electrochemical energy for space flight, particularly the systems Zn/AgO and H sub 2 /O sub 2 /Elektrochemische Energiequellen in der Raumfahrt besonders die Systeme Zn/AgO und H sub 2 /O sub 2 /. 12 p2015 A69-25866

- The Varta fuel cell system. 16 p2739 A69-32418

## WINSLOW, D. K.

- Circuit properties of microwave dielectric resonators. 04 p0575 A69-14750

- Vacuum deposition of AlN acoustic transducers. 05 p0761 A69-15820

## WINSOR, N.

- Geodesic acoustic waves in hydromagnetic systems. 03 p0475 A69-13147

## WINSTANLEY, E. H.

- Geomagnetic disturbance and the troposphere. 18 p3127 A69-34648

## WINSTEAD, T. W.

- An analysis of two-phase flow in LH sub 2 pumps for O sub 2 sub 2 /H sub 2 rocket engines. [AIAA PAPER 69-549] 16 p2845 A69-32759

## WINSTEL, G. H.

- The semiconductor laser /Der Halbleiterlaser/. 06 p0937 A69-18009

## WINTER, H. R.

- Dislocation-free single crystals of gallium arsenide /Einkristallines Galliumarsenid ohne Versetzungen/. 02 p0296 A69-11792

## WINTER, C. F.

- Phase-scanning experiments with two-reflector antenna systems. 04 p0572 A69-14326

## WINTER, C.-J.

- Load-dependent unstable motions of turbine rotors /Lastabhangige instabile Bewegungen von Turbinenlaufer/. 20 p3628 A69-37918

## WINTER, D. F.

- A particulate thermophysical model of the lunar soil. 18 p3191 A69-34303

## WINTER, E. R. F.

- Radiant heat transfer between simply arranged surfaces with direction dependent properties. [AIAA PAPER 69-624] 17 p3070 A69-33259

- Use of multiple outlets for reducing the stratification-induced propellant supply temperature rise. [AAS PAPER 69-395] 24 p4363 A69-42830

- Choking and shock phenomena in a single-component two-phase flow including vibrational effects. [ASME PAPER 69-HT-61] 24 p4303 A69-43535

## WINTER, G.

- Torsional-flexural buckling of thin-walled sections under eccentric load. 20 p3625 A69-37653

## WINTER, H.

- Metallurgical factors governing the development of high-temperature materials. 10 p1712 A69-23630

- INTER, P. M.**  
Histochemical studies in pulmonary oxygen toxicity.  
14 p2407 A69-29298
- INTER, T. C., JR.**  
Biaxial residual surface stresses from grinding and finish machining 304 stainless steel determined by a new dissection technique.  
[ASME PAPER 68-WA/MET-9]  
14 p2455 A69-29437
- INTER, T. G.**  
Vibrational relaxation of oxygen by methane.  
09 p1542 A69-21721
- INTERBERG, F.**  
Internal acoustic gravity waves.  
02 p0242 A69-11868  
Heisenberg's statistical theory of turbulence and the equations of motion for a turbulent flow.  
02 p0230 A69-11869  
Biomagnetic levitation and relativistic space flight.  
22 p3889 A69-39906
- INTERFELD, G.**  
On the stabilization of hydrogen diffusion flames by flame-holders in supersonic flow at low stagnation temperatures.  
[DVL-815]  
09 p1624 A69-22615
- INTERMUTE, G. E.**  
Evaluation of methods for repair of polyimide and polyimide/titanium sandwich composites.  
24 p4323 A69-43420
- INTERS, J. B.**  
A comparison of the photospheric and interplanetary magnetic fields during the flight of Mariner IV.  
18 p3205 A69-35399
- INTERS, W. L., JR.**  
Abnormal mitral valve motion as demonstrated by the ultrasound technique in apparent pure mitral insufficiency.  
24 p4261 A69-42727
- INTRICH, H.**  
Spreading of explosive vapor/air mixtures during aircraft fueling /Die Ausbreitung explosibler Dampf/Luft-Gemische bei der Flugzeugbetankung/.  
15 p2551 A69-30930
- INTZ, P. A.**  
Nth order redundancy reduction.  
09 p1533 A69-22458  
A satellite communication system using PN codes.  
09 p1457 A69-22460  
Optimum transmission of digital data by pulse code modulation.  
19 p3274 A69-36282  
Performance of optimum and suboptimum synchronizers.  
21 p3673 A69-38923
- IPF, S. L.**  
Magnetic suspension and guidance for high speed rockets by superconducting magnets.  
17 p2946 A69-33789
- IPPERMANN, F.**  
Turbulent transports in the atmospheric boundary layer resulting from forced convection /Die turbulenten Transporte in der bodennaechsten Atmosphaerenschicht infolge erzwungener Konvektion/.  
04 p0627 A69-15087
- IRGIN, A.**  
On the theory of scattering from rough lamellar surfaces.  
17 p2930 A69-33885  
Diffraction by a grating of cylinders of rectangular cross section.  
17 p2930 A69-33886
- IRSING, C. E.**  
An application of automatic plasma needle arc fusion welding for miniature electronic devices.  
09 p1511 A69-22355
- IRTANEN, T. E.**  
Photomultiplier reception of satellite beacon flashes.  
17 p2919 A69-33083
- IRTH, H.**  
Systematic errors of earth-tide recording equipment including gravimeters and galvanometers /Systematische Aufzeichnungsfehler bei Erdgezeiten-Registrieranlagen mit Gravimetern und Galvanometern/.  
04 p0601 A69-15305
- IRTH, K.**  
Dependence of dv/dt and dp/dt of ventricular pressure of the heart on physical systolic results /Die Abhaengigkeit von dv/dt und dp/dt des Ventrikeldruckes des Herzens von physikalischen Resultaten der Systole/.  
23 p4095 A69-42076
- IRTH, W.-D.**  
Clutter and signal spectra from Radicord recordings and moving target detection by pulse radar /Clutter- und Signalspektren aus Radicord-Aufnahmen und die Bewegzielentdeckung durch Impuls-Radar/.  
05 p0721 A69-16619
- IRTHS, W.**  
Dynamometer measurements of muscle function during periods of decreased activity and reduced caloric and protein intake /Muskelektionspruefungen mit hilfe von dynamometermessungen unter einfluss mangelnder aktivitaet und restriktiver calorien- und eiweissaufnahme/.  
21 p3653 A69-38901
- IRTZ, M.**  
SECAR - Integration with the primary radar system of Brussels National Airport /SECAR - Integration au systeme radar primaire de l'Aeroport de Bruxelles National/.  
15 p2570 A69-31222
- IRTZ, S.**  
Pressure rise and thermal conductivity in a cylindrically symmetrical hydrogen plasma in an axial magnetic field, taking thermal forces into account /Druckerhoehung und Waermeleitfaehigkeit in einem zylindersymmetrischen Wasserstoffplasma im axialen Magnetfeld unter Beruecksichtigung von Thermokraeften/.  
03 p0479 A69-13967
- WISE, H.**  
Thermal decomposition of ammonium perchlorate.  
02 p0304 A69-12312
- WISE, J. F.**  
Large retractable solar cell array.  
19 p3254 A69-35711
- WISE, R. A.**  
Plasticity of hypothalamic motivational systems.  
22 p3876 A69-40269
- WISEMAN, G. G.**  
Electrocaloric effect in potassium dihydrogen phosphate.  
20 p3583 A69-37343
- WISEMAN, M.**  
Preliminary observations of the effects of a corotating stream on interplanetary scintillation.  
09 p1582 A69-22751
- WISHNA, S.**  
WEFAX - Weather data relay communications experiment.  
03 p0411 A69-13240
- WISHNER, R. P.**  
Suboptimal state estimation for continuous-time nonlinear systems from discrete noisy measurements.  
06 p0904 A69-17939  
On the estimation of the state of noisy nonlinear multivariable systems.  
12 p2046 A69-26062  
A comparison of three non-linear filters.  
23 p4146 A69-42447
- WISLER, D. C.**  
Circumferential nonuniform heating during transition on a slender cone at hypersonic Mach numbers.  
18 p3085 A69-34435
- WISLICKI, B.**  
Assessment of kerosene fuels for turbine engines using model combustion chambers /Ocena wlasciwosci paliw naftowych do silnikow turbinowych w modelowych komorach spalania/.  
13 p2240 A69-27932  
Evaluation of the lubrication properties of mineral oils used in power hydraulics - Analysis of lubrication properties of certain groups of mineral oils /Ocena wlasciwosci smarnych olejow mineralnych stosowanych w hydraulicie silowej - Analiza wlasciwosci smarnych niektorych grup olejow mineralnych/.  
17 p2991 A69-32948
- WISMER, D. A.**  
Two-level optimization techniques for dynamic systems.  
01 p0051 A69-10440  
Degradation of linear filter performance due to modeling error.  
02 p0225 A69-11971
- WISNEWSKI, J. S.**  
V/STOL - A weights study of various concepts.  
[SAWE PAPER 783]  
18 p3091 A69-34869
- WISNEWSKI, R.**  
Temperature and power limitations of transistors /Ograniczenia temperaturowe i mocowe tranzystorow/.  
16 p2760 A69-32047
- WISNEWSKI, S.**  
Influence of the blade tip clearance of an axial flow compressor on its parameters /Wplyw luzu wierzchołkowego lopatek sprzarki osiowej na jej parametry/.  
16 p2837 A69-32004
- WISNEWSKI, W.**  
Wavelength dependence of polarization. XIII - Interstellar extinction and polarization correlations.  
12 p2153 A69-25809
- WISNEWSKI, W. Z.**  
Multicolor photometry of Seyfert galaxies and measurement at 1.55  $\mu$  of the jet in M87.  
04 p0663 A69-15386
- WISSE, P. N. J.**  
Photographic positions of minor planets and of comet Barbon /1966c/.  
11 p1962 A69-25121
- WITALIS, E. A.**  
Theory for oscillations in MPD accelerators.  
23 p4201 A69-41909
- WITCHETT, C. E.**  
Pathology of normobaric oxygen toxicity in primates.  
21 p3660 A69-39179
- WITHBROE, G. L.**  
The results and interpretation of some of the Harvard OSO-IV observations.  
[AAS PAPER 68-219]  
02 p0313 A69-11485  
The solar /Fe II/ lines.  
18 p3191 A69-34305  
The differences between quiet and active regions measured by spectroheliograms in the neutral helium resonance lines.  
23 p4222 A69-42405
- WITHERS, J. C.**  
The chemical vapor deposition of iridium.  
01 p0097 A69-10643  
Commercial chemical vapor deposition of refractory materials.  
01 p0097 A69-10645
- WITHERS, M. J.**  
Beam-scanning primary feed for parabolic reflectors.  
08 p1279 A69-19908  
Self-focussing aerial arrays for airborne communications.  
08 p1289 A69-20971
- WITHERSPOON, J. E.**  
Rocket stability monitoring by temporal radiometry.  
[AIAA PAPER 69-580]  
16 p2839 A69-32670
- WITKOWSKI, J.**  
Effect of the flexibility of connected elements on the load increment of the connecting elements in a chosen screw joint /Wplyw podatnosci elementow laczonych na przyrost obciazenia elementow laczacych w wybranym zlaczu srubowym/.  
09 p1618 A69-22239
- WITKOWSKI, R.**  
Helicopter flight safety /Bezpieczestwo lotu smiglowcow/.  
07 p1054 A69-19313
- WITKOWSKI, S.**  
Numerical calculations of the dynamics of laser produced plasmas.  
02 p0256 A69-11935  
Determination of the blast-wave energy of a laser-induced gas breakdown /Energiebestimmung der Stoss-welle eines laserinduzierten Gasdurchbruchs/.  
24 p4299 A69-42651
- WITMER, E. A.**  
Numerical calculation technique for large elastic-plastic transient deformations of thin shells.  
02 p0347 A69-12518  
Buckling tests on space frame radome.  
23 p4232 A69-42143
- WITT, A. F.**  
Preparation of vitreous materials in the form of well-defined hollow cylinders.  
12 p2101 A69-25936  
Microdistribution of dopants in semiconductor single crystals - InSb.  
19 p3389 A69-36547



## WITT, A. N.

## WITT, A. N.

A search for diffuse galactic light in the spectral region  $\lambda$  2100-2800 angstrom units.  
18 p3202 A69-35210

Interstellar dust.

22 p4013 A69-40096

## WITT, G.

The nature of noctilucous clouds.

21 p3701 A69-38345

## WITT, R. H.

Coated refractory alloy for reusable re-entry structures.

09 p1526 A69-22326

Laser welding structural alloys and parts.

19 p3320 A69-35556

## WITTE, A.

Experimental investigation of a highly ionized, arched, supersonic freejet.  
[AIAA PAPER 68-135]

16 p2772 A69-32153

## WITTE, A. B.

Laser holographic interferometry study of high-speed flow fields.  
[AIAA PAPER 69-347]

13 p2263 A69-28282

## WITTE, J. H.

Mixing shocks in two-phase flow.

16 p2768 A69-31589

## WITTE, K. J.

Contribution to the calculation of the forces exerted by the air during yawing motion of cones in supersonic and hypersonic flows /Beitrag zur Berechnung der Luftkräfte bei der Abfangbewegung von Kegeln im Ueber- und Hyperschall/.

20 p3460 A69-37919

Supersonic and hypersonic flow past a cone with an arbitrarily distorted axis /Ueber- und Hyperschallströmung um einen Kegel mit beliebig verformter Achse/.

23 p4058 A69-41579

## WITTE, L. C.

Heat transfer from spheres into subcooled liquid sodium during forced convection.  
[ASME PAPER 67-WA/HT-32]

02 p0351 A69-12202

## WITTEBORN, F. C.

Experiments to determine the force of gravity on single electrons and positrons.

01 p0125 A69-10979

## WITTELES, A. A.

Neutron radiation effects on MOS FETs - Theory and experiment.

06 p0976 A69-16875

## WITTELS, M. C.

Structural effects of fast neutrons in germanium.

20 p3584 A69-38125

## WITTEMAN, W. J.

High-power single-mode CO sub 2 laser.  
[IEEE PAPER G-11]

07 p1151 A69-19058

Mode competition in lasers with homogeneous line broadening.

12 p2106 A69-26323

Vibrational energy transfer in CO sub 2 under laser conditions with and without water vapor.

23 p4171 A69-41390

## WITTEN, T. R.

Single-proton emission following positive pion absorption in carbon.

02 p0282 A69-11460

## WITTENBURG, J.

The differential equations of motion for a class of systems of rigid bodies in a gravitational field /Die Differentialgleichungen der Bewegung fuer eine Klasse von Systemen starrer Koerper im Gravitationsfeld/.

06 p0957 A69-17130

## WITTICH, K. H.

Influence of amplitude limiting on the reliability of a disturbed standard message evaluated by integration /Ueber den Einfluss einer Amplitudenbegrenzung auf die Sicherheit einer gestoerten Standardnachricht bei Auswertung durch Integration/.

01 p0031 A69-10736

## WITTING, C. F.

Laser emission in ammonia.

10 p1704 A69-23666

## WITTING, H. L.

Mass-spectrometer analysis of a cesium plasma.

09 p1544 A69-21335

## WITTING, J.

Relevance of future space missions to the origin of the solar system.  
[AAS PAPER 68-191]

01 p0153 A69-10823

## WITTLER, M.

Time-optimal nuclear rocket propellant start-up with thermal stress constraints based on distributed parameter model.

21 p3768 A69-39632

## WITTMANN, A.

The Wilson effect in sunspots /Der Wilson-Effekt in Sonnenflecken/.

03 p0504 A69-12893

Some properties of umbral flashes.

18 p3204 A69-35390

## WITTMAYER, H. M.

Fatigue resistant fastener.

24 p4325 A69-43438

## WITTRICK, W. H.

Stability functions for the local buckling of thin flat-walled structures with the walls in combined shear and compression.

05 p0833 A69-15709

General sinusoidal stiffness matrices for buckling and vibration analyses of thin flat-walled structures.

05 p0836 A69-16029

Nodal lines for long plates in combined shear and compression with sinusoidal edge rotations.

11 p1983 A69-25137

Buckling of a long flat panel with a series of equidistant longitudinal supports in combined longitudinal compression and shear.

11 p1984 A69-25138

## WITTRY, D. B.

Electron beam modulated reflectance of germanium.

05 p0807 A69-15816

## WITTRY, J. P.

Description of an inertial test facility incorporating a passively isolated and actively stabilized platform.  
[AIAA PAPER 69-863]

21 p3690 A69-39423

## WITZEL, T. H.

Flight software development laboratory.  
[AIAA PAPER 69-324]

09 p1470 A69-22384

## WITZELL, W. E.

Crack behavior and toughness of 2219-T81 aluminum alloy parent metal and weldments.

14 p2462 A69-29003

Temperature effects on fracture.

17 p2990 A69-33567

Crack behavior and toughness of 2219-T81 aluminum alloy parent and weldments.  
[ASM PAPER W9-19.3]

21 p3743 A69-38669

Fracture toughness of aluminum-boron composites.

24 p4335 A69-43451

## WITZKE, C. H., III

Rotor blade radar in the helicopter multifunction role.  
[AHS PAPER 315]

17 p2920 A69-33535

## WITZKE, W. R.

Superplasticity in tungsten-rhenium alloys.

10 p1707 A69-22990

Creep of powder metallurgy rhenium at 0.43 to 0.72 T sub m.

17 p2991 A69-34186

## WITZLEB, E.

Venomotor reactions induced by changes of intrapulmonary pressure during positive and negative pressure breathing /Venomotorische Reaktionen bei Veraenderungen des intrapulmonalen Druckes durch Ueber- und Unterdruckatmung/.

23 p4093 A69-42068

Venous tone and skin and muscle blood flow in forearm and hand during exercise /Venotonus, Haut- und Muskeldurchblutung an Unterarm und Hand bei Beinarbeit/.

23 p4096 A69-42090

## WLODARCZYK, E.

On a certain closed-form solution of the propagation problem of a spherical wave in an elastic/visco-plastic medium.

03 p0528 A69-13926

The propagation of longitudinal-transverse radial cylindrical waves in a nonhomogeneous elastic/viscoplastic medium. I.

03 p0528 A69-13929

Reflection of a spherical stress wave against a smooth indeformable plane in an elastic/viscoplastic medium.

18 p3226 A69-35463

Reflection of a spherical stress wave against a fixed plane partition in an elastic/visco-plastic medium.

24 p4406 A69-43732

## WLOTZKA, F.

On the formation of chondrules and metal particles by "shock melting."

19 p3409 A69-36088

## WLUDARSKA, J.

Photographic observations of Nova Her 1963 made in the year 1967.

12 p2156 A69-26223

## WNUK, M.

Plastic energy dissipation due to a penny-shaped crack.

10 p1803 A69-24030

## WNUK, M. P.

Effects of time and plasticity on fracture.

23 p4236 A69-42530

## WOBBER, F. J.

Space photography - A new analytical tool for the sedimentologist.

05 p0753 A69-15993

Space photography as a sedimentological research tool.

09 p1490 A69-21797

Environmental studies using earth orbital photography.

18 p3132 A69-35275

Orbital images for earth resources satellite mission planning.

21 p3721 A69-38632

## WOELFLE, R.

Evaluation of super 53 mn by /n gamma/ activation, super 26 Al and special trace elements in meteorites by gamma-coincidence techniques.

19 p3412 A69-36103

## WOELKE, S.

Dynamic stresses in a thin circular disc induced by the action of an unsteady source of heat.

17 p3054 A69-33021

## WOELLER, F.

Studies on the formation and transformation of esters. LXXX.

16 p2747 A69-31808

## WOERNER, H.

Statistical rules for seasonal forecasts and their verification /Statistische Regeln fuer Jahreszeitenprognosen und deren Pruefung/.

12 p2125 A69-25895

## WOESSNER, G.

Optimal design of radiators for power-supply plants of space vehicles /Optimale Auslegung von Radiatoren fuer Energieversorgungsanlagen von Raumfluggeraeten/.

02 p0354 A69-12664

## WOETZEL, R. K.

International coordination of different space telecommunications systems.

20 p3638 A69-37125

## WOGMAN, N. A.

Cosmic-ray induced radioactivity in astronauts as a measure of radiation dose.

11 p1831 A69-25463

## WOGULIS, E. R.

Effect of transverse curvature on skin friction and heat transfer in laminar flows past slender circular cylinders.

02 p0232 A69-12210

## WOHLFELD, R. M.

New experimental techniques in rotorcraft aerodynamics and their application.  
[AHS PAPER 320]

17 p2895 A69-33539

Vortex field, tip vortex, and shock formation on a model propeller.

18 p3087 A69-35218

## WOHLHART, K.

Calculation of nonlinear oscillations /Zur Berechnung von nichtlinearen Schwingungen/.

19 p3438 A69-36308

## WOHLLEBEN, K.

Radiation effects of solar cosmic radiation /solar flares/ on earth satellites and solar probes /Strahlenbelastungen von Erdsatelliten und Sonnensonden durch die solare kosmische Strahlung /solar flares/.

12 p2151 A69-26873

## WOHLLEBEN, R.

Radiation zones and phase center of a two-arm, conical, logarithmic spiral antenna /Strahlungszonen und

- Phasenzentrum der zweiarmligen, kegelförmigen, logarithmischen Spiralantenne/.  
17 p2937 A69-33572
- HOEHLMACHER, P.**  
The FM 4000/70 receiving system for satellite ground stations /Das Empfangssystem FM 4000/70 fuer Satellitenbodenstationen/.  
16 p2766 A69-31855
- HOHRER, L. C.**  
Single crystal flake reinforced composites.  
05 p0785 A69-16581  
Aerospace applications for "Kynol" fibers.  
24 p4337 A69-43424
- HOINSKY, M. N.**  
A noncoherent detector with improved immunity to fading.  
03 p0390 A69-13215
- HOITSCH, W.**  
Dynamic behavior of a hingeless fiberglass rotor.  
[AIAA PAPER 69-204] 07 p1054 A69-19548
- HOITSCH, H. W.**  
The design of an 2-axes-attitude stabilization system for spinning payloads.  
21 p3826 A69-39639
- HOJCIECHOWSKI, J.**  
Prospects for the realization of thin-film integrated microcircuits /Perspektywy realizacji cienkowarstwowych mikroukladow scalonych/.  
24 p4419 A69-42908
- HOJCIECHOWSKI, J. P.**  
On-board gas turbine APU's for executive aircraft.  
[SAE PAPER 690332] 11 p1824 A69-24501
- HOJNO, W.**  
Thermodynamics of a rate sensitive plastic material.  
05 p0834 A69-15792  
On thermodynamics of a rate sensitive plastic material.  
11 p1994 A69-25601
- HOJKIEWICZ, A.**  
An approximation of the conductance of the tunnel diode.  
05 p0735 A69-16647
- HOJASCH, R. F.**  
The optimum statistical estimate of test limits when the test equipment and signal tolerances are known.  
11 p1865 A69-25079
- HOJANSKI, P.**  
Shock tubes and tunnels /Rury i tunele uderzeniowe/.  
13 p2240 A69-27930
- HOJBERG, J. R.**  
Two-phase turbulent jet prediction analysis.  
13 p2247 A69-27787
- HOJBERS, H. L.**  
A program plan for earth orbital space astronomy.  
13 p2240 A69-27947  
A report on the Orbital Astronomy Support Facility /OASF/ study.  
18 p3206 A69-34369
- HOJLCOTT, P. S.**  
Satellite TWT at X-band duplicates C- and S-band performance.  
03 p0405 A69-13678
- HOJLCZAK, B.**  
Discrepancy between energy criteria for evaluating frequency band changes of certain signals /O sprzecznosci energetycznych kryteriow oceny zmian pasm czestotliwosci niektorych sygnalow/.  
19 p3278 A69-36716
- HOJLF, A. L.**  
Establishing a heliport - The legal requirements.  
13 p2381 A69-27433
- HOJLF, A. V.**  
Insensible water loss from human skin as a function of ambient vapor concentration.  
23 p4077 A69-41293
- HOJLF, E.**  
Results of studies of thermionic reactor systems /Ergebnisse von Studien ueber Thermionikreaktorsysteme/.  
02 p0279 A69-12662  
Results of studies on various fast and thermal thermionic reactor systems.  
14 p2480 A69-29182  
Unignited mode converter diagnostics with regard to emitter work function patches.  
14 p2490 A69-29240
- Three-dimensional structure determination of semi-transparent objects from holographic data.  
20 p3546 A69-38198
- HOJLF, F.**  
Simulation of Venus atmospheric entry by earth reentry.  
[AIAA PAPER 68-1148] 03 p0412 A69-13672  
Simulation of Venus atmospheric entry by earth reentry.  
[AIAA PAPER 68-1148] 24 p4394 A69-43248
- HOJLF, G. H.**  
Estimate of a toroidal, magnetohydrodynamically stable, high-beta dynamic equilibrium.  
15 p2660 A69-30877
- HOJLF, J. A., JR.**  
Whirl dynamics of a rotor partially filled with liquid.  
[ASME PAPER 68-WA/APM-25] 05 p0768 A69-16189
- HOJLF, J. D.**  
Radar waveform synthesis by mean-square optimization techniques.  
20 p3492 A69-37708
- HOJLF, J. K.**  
Robust detection using extreme-value theory.  
17 p2944 A69-33624
- HOJLF, L., JR.**  
Measurements of the decay of swirl in turbulent flow.  
16 p2772 A69-32170
- HOJLF, P.**  
An investigation of radiative heat transfer in participating media.  
16 p2878 A69-31925  
An investigation of radiative heat transfer in absorbing, emitting, and scattering media.  
[AIAA PAPER 69-626] 17 p3073 A69-33297  
Comparison of the radiation heat transfer in plane and spherical geometries with anisotropic, isotropic scattering and no scattering assumption.  
23 p4239 A69-41632
- HOJLF, P. R.**  
Lunar control from Ranger photos.  
01 p0147 A69-10022
- HOJLF, R.**  
The laminar compressible viscous layer on partly entrained walls /Die laminare kompressible Reibungsschicht an teilweise mitbewegten Waenden/.  
04 p0591 A69-15294
- HOJLF, R. A.**  
Possible conversion of rotational energy of the neutron star in the Crab Nebula into energy of relativistic electrons.  
09 p1591 A69-21454  
Field-aligned currents in the magnetosphere.  
21 p3792 A69-39567
- HOJLF, R. J.**  
Plane blast wave produced by "dense plasma focus."  
24 p4359 A69-43647
- HOJLF, S.**  
Effects of nonuniform inlet velocity profiles on flow regimes and performance in two-dimensional diffusers.  
[ASME PAPER 68-WA/FE-25] 05 p0698 A69-16100
- HOJLFE, A. M.**  
Discrete source models to explain the microwave background radiation.  
13 p2339 A69-27574  
Some implications of the anisotropy measured in the microwave background.  
18 p3190 A69-34286
- HOJLFE, C. M.**  
Epitaxially grown guard rings for GaAs diodes.  
08 p1284 A69-20368  
GaAs Schottky barrier avalanche photodiodes.  
13 p2226 A69-27195
- HOJLFE, J. H.**  
Review of Ames Research Center plasma-probe results from Pioneers 6 and 7.  
07 p1128 A69-19364  
Preliminary comparison of solar wind plasma observations in the geomagnetospheric wake at 1000 and 500 earth radii.  
12 p2151 A69-26943  
MHD Rankine-Hugoniot equations applied to earth's bow shock.  
23 p4222 A69-42417
- HOJLFENDALE, A. W.**  
Muons and neutrinos.  
03 p0499 A69-12946
- Origin of muon-poor extensive air showers.  
12 p2152 A69-27099
- A theoretical analysis of extensive air showers. III - Muon showers at large zenith angles.  
15 p2678 A69-31483
- Observations of multiple muons in cosmic rays at a variety of zenith angles.  
15 p2678 A69-31484
- Theoretical analysis of extensive air showers. IV - Muon showers deep underground.  
23 p4207 A69-42497
- HOJLFF, A.**  
Automatic drawing of printed circuits with the aid of a computer /Trace automatique des circuits imprimés à l'aide d'un ordinateur/.  
08 p1296 A69-19979
- HOJLFF, C.**  
Interplanetary gas. XVI.  
18 p3186 A69-34301
- HOJLFF, E. G.**  
Oxide thermistor for use to 2500 K.  
12 p2092 A69-26478
- HOJLFF, F. M.**  
Antenna pattern analysis - A computer method.  
23 p4133 A69-41754
- HOJLFF, I.**  
Fields in premagnetized microwave ferrites, illustrated by the example of a coaxial resonator filled with ferrite /Felder in vormagnetisierten Mikrowellenferriten, dargestellt am Beispiel eines ferritgefüllten koaxialen Resonators/.  
11 p1855 A69-25625
- HOJLFF, J. R.**  
The effect of training in swimming and running on the cellular function and structure of muscle /Die Wirkung von Schwimm- und Lauftraining auf die cellulaere Funktion und Struktur des Muskels/.  
23 p4095 A69-42084
- HOJLFF, N. E.**  
Additive processing techniques for printed-circuit boards.  
07 p1100 A69-18621
- HOJLFF, P. A.**  
Light scattering from a plasma in a magnetic field.  
01 p0125 A69-10015
- HOJLFF, R.**  
Search for X-ray polarization in Sco X-1.  
12 p2149 A69-26315
- HOJLFF, R. V.**  
Vacuum cured polyimide laminate properties.  
24 p4335 A69-42933
- HOJLFF, S. C.**  
The magnetic field and light variations of 17 Comae Berenices and chi Cancri.  
15 p2692 A69-30774  
The magnetic field variations of HD 188041.  
20 p3611 A69-38156
- HOJLFGANG, R.**  
Crossed-beam studies of ion-molecule reaction mechanisms.  
03 p0382 A69-13460  
A crossed-beam apparatus for investigation of ion-molecule reactions.  
12 p2092 A69-26477  
Crossed-beam studies of energy dependence of intermediate complex formation in an ion-molecule reaction.  
24 p4280 A69-43813  
Direct mechanism of reaction CH sub 3 super plus plus x CH sub 4 yields C sub 2 H sub 5 super plus plus H sub 2.  
24 p4280 A69-43814
- HOJLFE, T. L.**  
Behavior of primates following injection of monomethylhydrazine with and without pyridoxine.  
03 p0375 A69-14068
- HOJLFSBERG, M.**  
Simple expression for "steric factor" in translational-vibrational energy transfer.  
12 p2134 A69-25988
- HOJLSHTEIN, M.**  
The velocity and temperature distribution in one-dimensional flow with turbulence augmentation and pressure gradient.  
13 p2250 A69-28339  
Heat and Mass Transfer in Recirculating Flows.  
21 p3691 A69-38333



## WOLFSON, R. P.

## WOLFSON, R. P.

An experiment to determine the effects of solid and liquid rocket engine combustion on the viability of microorganisms.

05 p0714 A69-15949

## WOLGA, G.

Laser parameters for the 10.8- $\mu$ m N sub 2 O molecular laser.

[IEEE PAPER G-10] 07 p1151 A69-19057

## WOLGA, G. J.

Observation of the central tuning dip in N sub 2 O and CO sub 2 molecular lasers.

19 p3339 A69-36698

## WOLIN, L. R.

Differential color responses in the visual cortex of the squirrel monkey.

22 p3879 A69-40844

## WOLINSKI, W.

Measurement of the spectrum of laser emission by a Fabry-Perot interferometer /Zagadnienie pomiaru widma promieniowania laserowego interferometrem Fabry-Perot/.

20 p3536 A69-36945

## WOLKEN, J. J.

Rapid recording microspectrophotometer.

03 p0428 A69-13109

## WOLKOWITZ, W.

Extrusion and hot rolling - Two advanced fabrication techniques for the preparation of whisker-metal composites.

09 p1511 A69-22361

## WOLLAN, M.

Controlling the potential hazards of government sponsored technology.

10 p1811 A69-23392

## WOLLENBERGER, A.

Release of noradrenalin from the dog heart after a temporary occlusion of coronary artery /Noradrenalinabgabe aus dem Hundeherzen nach voruebergender Okklusion einer Koronararterie/.

23 p4092 A69-42053

## WOLLRAB, J. E.

Rotational spectrum of ethylene episulfoxide.

08 p1268 A69-20535

Rotational spectra of substituted diazirines. III - Methylchlorodiazirine.

23 p4194 A69-42207

## WOLNIEWICZ, L.

Exchange and Coulomb energy of H sub 2 determined by various perturbation methods.

07 p1186 A69-19446

## WOLOVICH, W. A.

On the stabilization of controllable systems.

06 p0905 A69-17947

On the structure of multivariable systems.

24 p4294 A69-43314

## WOLSKA-BOCHENEK, J.

Contribution to W. Pogorzelski's theory concerning a parabolic equation and a parabolic system of equations with discrete coefficients /Contribution a la theorie de W. Pogorzelski concernant une equation parabolique et un systeme parabolique d'equations aux coefficients discontinus/.

23 p4180 A69-41408

## WOLSTENCROFT, R. D.

Interpretation of Doppler shifts in the zodiacal light spectrum.

06 p1012 A69-18227

The solar wind.

06 p1012 A69-18239

Defects in interstellar grains.

22 p4023 A69-40472

## WOLSTENHOLME, N.

The XV-4B Hummingbird II.

03 p0366 A69-13112

Flight of the Hummingbird.

10 p1634 A69-23597

## WOLTER, H.

Influence of amplitude limiting on the reliability of a disturbed standard message evaluated by integration /Ueber den Einfluss einer Amplitudenbegrenzung auf die Sicherheit einer gestoeerten Standardnachricht bei Auswertung durch Integration/.

G1 p0031 A69-10736

## WOLTHUIS, R. A.

Measurement of blood flow in the limb of man by cuvette densitometry.

23 p4077 A69-41294

## WOLTON, W. P.

Holographic photogrammetry.

22 p3944 A69-40044

## WOMACK, B. F.

A special-purpose navigation computer utilizing current integrators and step motors.

03 p0404 A69-13431

Identification of a class of nonlinear control systems.

[ASME PAPER 68-WA/AUT-19] 05 p0738 A69-16173

Additional features of an adaptive, multicategory pattern classification system.

24 p4285 A69-43134

## WOMACK, J. R.

Electrostatic rocket exhaust effects on solar-electric spacecraft subsystems.

[AIAA PAPER 69-271] 09 p1569 A69-21874

## WONG, A.

Inline hybrid computer for simulation of passively stabilized satellites.

[AIAA PAPER 68-853] 21 p3680 A69-39758

## WONG, A. Y.

Electromagnetic echoes in collisionless plasmas.

16 p2818 A69-31677

## WONG, B.

A comprehensive approach to design of the NF106B-VST model follower system.

[AIAA PAPER 69-886] 21 p3764 A69-39412

## WONG, F. S.

Large plane deformations of thin elastic sheets of neo-Hookean material.

13 p2359 A69-27320

## WONG, G. S.

An analysis of two-phase flow in LH sub 2 pumps for O sub 2 /H sub 2 rocket engines.

[AIAA PAPER 69-549] 16 p2845 A69-32759

## WONG, J. K. S.

Evaporation of sprays.

18 p3119 A69-34246

## WONG, J. P.

Development of the shim-joint concept for composite structural members.

[AIAA PAPER 68-341] 11 p1987 A69-25369

## WONG, J. S. W.

Bounds for solutions of nonlinear integrodifferential equations.

01 p0103 A69-10001

A stability theorem for nonlinear mixed integral equations.

08 p1343 A69-20355

Perturbations of Volterra integral equations.

11 p1909 A69-24886

## WONG, J. Y.

Double-shock method for detecting pressure limits of magnetic phase transitions.

16 p2825 A69-31696

## WONG, M. K. F.

Representations of the orthogonal group. II.

18 p3164 A69-34807

## WONG, N. D.

A two-dimensional, mixed-compression inlet system designed to self-restart at a Mach number of 3.5.

[AIAA PAPER 69-447] 16 p2845 A69-32732

## WONG, N. S.

Multi-mode phased array element for scan angle compensation of element impedance.

17 p2929 A69-33875

## WONG, W. C.

High-frequency scattering from a conducting cylinder with an inhomogeneous plasma sheath.

20 p3494 A69-37843

## WONHAM, W. M.

Optimal stochastic control.

04 p0582 A69-14697

On a matrix Riccati equation of stochastic control.

05 p0740 A69-16601

Optimal stochastic control.

09 p1475 A69-22567

A computational approach to optimal control of stochastic saturating systems.

15 p2582 A69-30601

## WOO, B. B.

Microelectronic filters for frequency division multiplex.

09 p1466 A69-22452

## WOO, R.

RF voltage breakdown in coaxial transmission lines.

[JPL-TR-32-1379] 09 p1470 A69-22790

Radiation characteristics of a circumferential leaky-wave antenna on a conducting cylinder.

20 p3506 A69-37834

Radiation from a circularly polarized antenna through the ionized wake of a Mars-entry capsule.

22 p3914 A69-40700

## WOO, S. B.

Sunlight photodetachment rate of ground state O sub 2 super minus.

16 p2848 A69-31971

## WOOD, A. D.

Measurements of the total radiant intensity of air.

04 p0385 A69-14711

Radiation gas dynamics in the shock tube.

18 p3116 A69-34444

Deactivation of vibrationally excited carbon dioxide /nu sub 3/ by collisions with carbon dioxide or with nitrogen.

20 p3578 A69-36937

## WOOD, B. E.

In situ angular distribution measurements of visible and near IR radiation reflected from CO sub 2 cryodeposits formed on IN sub 2-cooled surfaces within a vacuum.

[AIAA PAPER 69-63] 06 p0959 A69-18131

## WOOD, C.

A pyrotechnic-activated calorimeter for flight research at lunar return velocity.

10 p1669 A69-23026

## WOOD, C. A.

Statistics of central peaks in lunar craters.

04 p0656 A69-14675

## WOOD, C. C.

Evaluation of experimental and analytical data for orbital refueling systems.

[AIAA PAPER 69-566] 16 p2870 A69-32755

## WOOD, C. D.

Evaluation of sixteen anti-motion sickness drugs under controlled laboratory conditions.

03 p0381 A69-14079

Rapid vestibular adaptation in a rotating environment by means of controlled head movements.

17 p2908 A69-33178

## WOOD, D. B.

Twelve-color stellar photometry.

13 p2348 A69-27804

## WOOD, D. C.

Therapeutic potential of dimethyl sulfoxide /DMSO/ in aerospace medicine.

06 p0883 A69-17851

## WOOD, D. J.

A study of the response of coupled liquid flow-structural systems subjected to periodic disturbances.

05 p0747 A69-16073

## WOOD, D. S.

Mobility of dislocations in aluminum at 74 deg and 83 deg K.

10 p1713 A69-23840

## WOOD, E. R.

Rotor induced velocities in forward flight by momentum theory.

[AIAA PAPER 69-224] 07 p1052 A69-19562

On the dynamic plastic response of finite bars.

11 p1991 A69-25512

## WOOD, G. A.

Optimal continuous low-thrust trajectories for co-altitude rendezvous.

16 p2857 A69-32177

## WOOD, G. R.

Aerodynamic Studies of Effusion Cooled Turbine Blades.

[AIAA PAPER 69-871] 21 p3786 A69-39867

## WOOD, H. J.

High-dispersion infrared image-tube spectroscopy with a small telescope.

07 p1074 A69-19203

## WOOD, J. A.

Meteorites and the Origin of Planets.

01 p0152 A69-10702

## WOOD, J. C.

Hot performance characteristics of a gas bearing Brayton cycle turboalternator.

23 p4071 A69-42279

## WOOD, J. D.

The effect of hypoxia on brain gamma-aminobutyric acid levels.

04 p0552 A69-14482

- Correlation between decreases in brain gamma - aminobutyric acid levels and susceptibility to convulsions induced by hyperbaric oxygen.  
19 p3257 A69-35972
- The effect of hyperbaric oxygen on metabolism of the GABA shunt.  
22 p3877 A69-40776
- WOOD, J. M.  
Chemical vapor deposition of beryllium metal.  
01 p0097 A69-10644
- WOOD, K.  
The Advanced Meteorological Sounding System.  
18 p3108 A69-35102
- WOOD, L. E.  
Phase stabilization of widely separated oscillators.  
08 p1273 A69-20022
- WOOD, M. N.  
Jet V/STOL aircraft aerodynamics.  
05 p0696 A69-15566
- WOOD, N. B.  
Hypersonic laminar heat transfer and boundary layer transition on blunted cones.  
05 p0696 A69-15707
- Measurements of the flow field on a 15 deg semi-vertex angle blunt cone at M equals 8.6.  
11 p1818 A69-25143
- WOOD, O.  
An advanced contact ion microthruster system.  
[AIAA PAPER 68-552] 21 p3785 A69-39212
- WOOD, O. P.  
Packaging of high voltage power supplies for electric propulsion.  
22 p3999 A69-39948
- WOOD, O. R.  
Continuous infrared parametric amplification in a saturable absorber.  
14 p2459 A69-29601
- WOOD, R.  
Supernova in M 83.  
15 p2682 A69-30451
- WOOD, R. C.  
On optimum quantization.  
12 p2051 A69-26201
- WOOD, S. K.  
Design and control of the 747 exhaust reverser systems.  
[SAE PAPER 690409] 23 p4200 A69-41637
- WOOD, S. W. H.  
Problems of undercarriage design for V/STOL aircraft.  
09 p1435 A69-22781
- WOOD, W. A.  
Fatigue mechanism in fcc metals at ultrasonic frequencies.  
04 p0613 A69-14448
- Evaluating potential fatigue performance of composites /Cu/W and Cu/Mo/ from microstructural behavior.  
06 p0940 A69-16951
- WOOD, W. G.  
Stress transfer from a loaded matrix to a single fibre.  
01 p0172 A69-11271
- A hydrostatic tension test of a brittle material.  
05 p0784 A69-16434
- Effects of geometry on stresses in discontinuous composite materials.  
20 p3565 A69-36942
- WOODBURY, E. T.  
Force-free magnetic fields and solar filaments.  
02 p0329 A69-12787
- WOODCOCK, C. L. F.  
Electron microscopy of DNA conformations in spinach chloroplasts.  
20 p3479 A69-38001
- WOODE, A. D.  
An experimental study of high peak power Gunn effect oscillators.  
07 p1097 A69-18447
- WOODFORD, D. A.  
Strain-rate sensitivity as a measure of ductility.  
13 p2278 A69-27416
- Measurement and interpretation of the stress dependence of creep at low stresses.  
15 p2639 A69-30599
- WOODFORD, J. B.  
Precise navigation over wide areas using satellites.  
15 p2650 A69-30088
- WOODHEAD, M. M.  
Performing a visual task in the vicinity of reproduced sonic bangs.  
15 p2550 A69-30305
- WOODHOUSE, T. C.  
Air Canada's flight safety organization.  
13 p2201 A69-27541
- WOODING, W. M.  
The computation and use of residuals in the analysis of experimental data.  
21 p3755 A69-39120
- WOODMAN, D. P.  
Optical radar studies of the atmosphere.  
12 p2033 A69-27001
- WOODMAN, J. H.  
On the atmospheric temperature of Jupiter derived from the 3 nu sub 3 methane band.  
01 p0153 A69-10856
- WOODMAN, R. F.  
Methods for the measurement of vertical ionospheric motions near the magnetic equator by incoherent scattering.  
09 p1489 A69-21704
- On the control of the F-region drift velocity by the E-region electric field - Experimental evidence.  
16 p2779 A69-32193
- WOODMANSEE, W. E.  
Thermal nondestructive testing with cholesteric liquid crystals.  
15 p2631 A69-31507
- WOODRUM, A.  
Measurement of the magnitude of the irregular winds in the altitude region near 100 kilometers.  
03 p0426 A69-14031
- Measurements of tidal-period winds in the 95- to 135-kilometer region.  
20 p3574 A69-38092
- WOODS, D.  
Thin-film spherical bolometer for measurement of hazardous field intensities from 400 MHz to 40 GHz.  
24 p4311 A69-42572
- Standard intensity electromagnetic field installation for calibration of radiation hazard monitors from 400MHz to 40GHz.  
24 p4312 A69-42577
- WOODS, D. R.  
Luna spacecraft.  
08 p1409 A69-19969
- WOODS, J. F.  
Electrical and optical properties of vapor-grown GaP.  
04 p0640 A69-14438
- Anomalous electrical properties of solution-grown, p-type GaP.  
09 p1557 A69-21750
- WOODS, L. C.  
Critical Alfvén-Mach numbers for transverse field MHD shocks.  
06 p0970 A69-17954
- WOODS, R. F.  
The SST in international operation.  
[AIAA PAPER 68-1024] 04 p0689 A69-14794
- WOODS, R. T.  
Ages of Darwin glass, Macedon glass, and Far Eastern tektites.  
23 p4210 A69-41344
- WOODS, T. J. C.  
Pulse compression by optical correlation techniques.  
03 p0397 A69-13732
- WOODS, W. A.  
The formation of a shock wave in a blade passage of a partial admission turbine.  
[ASME PAPER 68-FE-25] 05 p0698 A69-16075
- WOODS, W. C.  
Some topics in hypersonic body shaping.  
[AIAA PAPER 69-181] 06 p0863 A69-18052
- WOODS, W. J.  
Substructure optimization in the theory of structural synthesis.  
[AIAA PAPER 69-121] 06 p1027 A69-18069
- WOODS, W. W.  
Optical materials submicrostrain test apparatus.  
13 p2240 A69-27955
- WOODSON, P. D.  
A plastic virtual infinity lens system for large aperture cathode ray tube displays.  
05 p0760 A69-15592
- WOODWARD, F. A.  
Analysis and design of wing-body combinations at subsonic and supersonic speeds.  
[AIAA PAPER 68-55] 01 p0006 A69-11016
- Application of multivariable search techniques to optimal aerodynamic shaping problems.  
20 p3459 A69-37527
- WOODWARD, J. A.  
Olympus engine for the Concorde.  
[ASME PAPER 68-GT-63] 06 p0984 A69-17187
- WOODWARD, J. W.  
Injector response to strong, high-frequency pressure oscillations.  
21 p3786 A69-39235
- WOODWARD, O. M.  
Stepped-scanned ring array.  
14 p2419 A69-28894
- WOODWELL, G. M.  
DDT residues absorbed from organic detritus by fiddler crabs.  
14 p2406 A69-28872
- WOODWORTH, G. G.  
Nonparametric ranking procedures for comparison with a control.  
08 p1342 A69-20172
- WOOLARD, H. W.  
An experimental investigation of the hover and forward speed aerodynamic characteristics of several tracked air cushion vehicle (TACV) models.  
[AIAA PAPER 69-750] 18 p3084 A69-34410
- WOOLDRIDGE, C. E.  
Nonlinear solid propellant burning rate behavior during abrupt pressure excursions.  
[AIAA PAPER 69-172] 06 p1036 A69-18046
- A simple regression rate model for the pressure-sensitive domain of hybrid combustion.  
[WSCI PAPER 68-22] 07 p1240 A69-18362
- WOOLER, P. T.  
Flow of a circular jet into a cross flow.  
17 p2896 A69-34036
- WOOLEY, B. C.  
Physical, chemical, and biological activities at the Lunar Receiving Laboratory.  
21 p3690 A69-38896
- WOOLF, N. J.  
Circumstellar infrared emission from cool stars.  
10 p1786 A69-24102
- A far infrared sky survey.  
13 p2342 A69-27599
- WOOLLAM, J. A.  
Thermomagnetic effects and Fermi surface topology - Results in metallic tin at low temperatures.  
05 p0808 A69-16357
- A simple A.C. technique for galvanomagnetic and Shubnikov-de Haas measurements.  
19 p3312 A69-36375
- WOOLLARD, G. P.  
Status of satellite geodesy.  
[UN PAPER 68-96195] 06 p0917 A69-17082
- Regional variations in gravity.  
21 p3718 A69-39735
- WOOLLEY, J. C.  
Conduction bands of GaSb.  
07 p1201 A69-19464
- WOOLLEY, R.  
Perturbations of galactic orbits by irregularities in the gravitational field. II.  
07 p1223 A69-19634
- WOOLLEY, R. H.  
Air density measurement.  
17 p2971 A69-32898
- WOOLLEY, R. P.  
The magnetotropometer.  
02 p0248 A69-11768
- WOOLLEY, R. V. D. R.  
Photoheliographic results 1961.  
15 p2700 A69-31490
- WOOLRIDGE, C. E.  
Research on the combustion mechanism of hybrid rockets.  
16 p2879 A69-32002
- WORKMAN, J. B.  
Arc structure in a magnetic annular discharge.  
13 p2312 A69-28221



## WORLEY, H. E.

## WORLEY, H. E.

Attitude control of a manned earth orbiting space station.  
[AIAA PAPER 69-846] 21 p3822 A69-39376

## WORLOCK, R.

An advanced contact ion microthruster system.  
[AIAA PAPER 68-552] 21 p3785 A69-39212

## WORLOCK, R. M.

Cesium contact ion microthruster experiment aboard applications technology satellite /ATS/IV.  
[AIAA PAPER 69-297] 09 p1561 A69-21218

Cesium contact ion microthruster experiment aboard applications technology satellite /ATS/-iv.  
[AIAA PAPER 69-297] 24 p4365 A69-43238

## WORLUND, A. L.

Saturn V longitudinal oscillation /POGO/ solution.  
[AIAA PAPER 69-548] 16 p2868 A69-32658

## WORMLEY, D. N.

An analytical model for the incompressible flow in short vortex chambers.  
[ASME PAPER 68-WA/FE-17] 05 p0748 A69-16093

Steady-state characteristics of vortex valve pure fluid modulators.  
09 p1443 A69-22738

A design basis for vortex-type fluid amplifiers operating in the incompressible flow regime.  
24 p4256 A69-43299

## WORNOM, D. E.

Design and adaptation of a 2 S.C. solar simulator to an existing multiwall ultrahigh vacuum chamber.  
[AIAA PAPER 69-1001] 22 p3921 A69-40377

## WORONOWICZ, T. J.

Apparatus for the precision measurement of internal friction.  
03 p0428 A69-13108

## WORRALL, G.

On the frequency dependence of the line source function.  
20 p3588 A69-37540

Inversion of the intensity integral for the Doppler core of strong scalar absorption lines.  
21 p3796 A69-38478

An analysis of the solar sodium D lines.  
21 p3796 A69-38479

## WORT, D. J. H.

Centrifugal instability in an R. F. plasma.  
11 p1931 A69-25366

## WORTHINGTON, C. R.

X-ray analysis of retinal photoreceptors.  
22 p3871 A69-40057

## WORTHINGTON, D. T.

High speed digital transmission tests at 35 GHz.  
03 p0389 A69-13192

## WORTHINGTON, D. W.

Some problems in the measurement of cochlear distortion.  
23 p4085 A69-41573

## WORTHINGTON, R.

Coherent light scattering measurements on single and clad optical glass fibres.  
11 p1918 A69-25044

## WORTHY, W. D.

Computer simulation as an aid to the design of a digital Doppler processor.  
12 p2035 A69-27096

## WORTMAN, A.

Aerodynamics of randomly tumbling bodies.  
09 p1431 A69-22000

High energy recovery pressure and enthalpy sensor.  
19 p3307 A69-35750

Reentry vehicle altitude-velocity sensor.  
[AIAA PAPER 69-866] 21 p3725 A69-39392

## WORTMANN, F. X.

Optimization of wing flap profiles /Zur Optimierung von Klappenprofilen/.  
08 p1251 A69-20441

Design of airfoils for rotors.  
18 p3087 A69-35220

## WOTRING, W. F.

Focus on processing problems in jet engines.  
[ASME PAPER 69-GT-61] 09 p1513 A69-22516

## WOTTON, J.

Integration of aircraft auxiliary power supplies.  
01 p0012 A69-10594

## WOULBROUN, J. M.

Hybrid circuits - Why and where.  
09 p1508 A69-22336

## WOULDS, M. J.

Recent developments in MAR-M alloy 509.  
11 p1901 A69-24259

Casting of cobalt-base superalloys.  
14 p2456 A69-29893

## WOYK, E.

Formulas for ray paths in ionized layers with application to oblique ionograms and duct modes.  
07 p1078 A69-18913

## WOZNIAK, A.

Elements and Circuits for Automatic Control.  
05 p0739 A69-16545

## WOZNIAK, C.

Fundamentals of the Dynamics of Deformable Bodies /Podstawy dynamiki ciał odkształcalnych/.  
23 p4226 A69-41474

## WOZNIAK, CZ.

On continuous models of certain systems of bodies.  
17 p3067 A69-34143

## WRAY, I. M. D.

Some thoughts on tactical aircraft.  
04 p0549 A69-15486

## WRAY, J. D.

Ultraviolet objective-prism spectra from Gemini XI and XII manned space flights.  
01 p0153 A69-10870

The Computation of Orbits of Doubly Photographed Meteors.  
02 p0324 A69-12495

## WRAY, J. H.

Evaluation of the matrix elements P sub z super 2 and P sub z super 4 for asymmetric rotors.  
09 p1614 A69-21913

Refractive index of several glasses as a function of wavelength and temperature.  
17 p3007 A69-34158

## WRAY, K. L.

Structure of the laminar ablating air-Teflon boundary layer.  
[AIAA PAPER 69-99] 06 p1037 A69-18086

Oscillator strengths of transitions between Rydberg states of nitric oxide in the near IR.  
08 p1354 A69-20150

## WRAY, P. J.

Experimental approach to a theory of plasticity at elevated temperatures.  
04 p0671 A69-14454

## WRENCH, E. H.

Vertistat H, a gravity gradient configuration proposed for high pointing accuracy at synchronous altitudes.  
07 p1229 A69-18351

EVA stabilization shoes.  
[AAS PAPER 69-472] 24 p4272 A69-42846

## WRENN, G. L.

The dependence of charge and potential distribution around a spacecraft on ionic composition.  
14 p2518 A69-29122

The Langmuir plate and spherical ion probe experiments aboard Explorer XXXI.  
20 p3545 A69-37881

Comparison of results of Explorer XXXI direct measurement probes.  
20 p3531 A69-37882

Results derived from simultaneous measurements using the Langmuir plate and spherical ion probe on Explorer XXXI and the ionosonde on Alouette II.  
20 p3531 A69-37883

## WRIGHT, D. T.

Instability in reticulated spheroids - Experimental results and the effects of nodal imperfections.  
23 p4232 A69-42140

## WRIGHT, E. N.

Modification of the habitat as a means of bird control.  
17 p2915 A69-33368

## WRIGHT, E. S.

Evaluation of VTOLports for improved airport access.  
[AIAA PAPER 69-804] 19 p3288 A69-35592

## WRIGHT, F. H.

Rocket transportation for measurements in the upper atmosphere.  
[AIAA PAPER 69-159] 06 p1018 A69-18066

## WRIGHT, F. W.

Studies of particles for extraterrestrial origin. VI - Comparisons of previous influx estimates and present satellite flux data.  
04 p0654 A69-14655

Upper limits to the micron and submicron particle flux at satellite altitudes.  
07 p1215 A69-18845

Studies of the Large Magellanic Cloud. X.  
14 p2526 A69-29853

A new and unusual variable star in the Large Magellanic Cloud.  
19 p3403 A69-35965

A semiempirical estimate of the micrometeorite flux at the earth's surface and its implications.  
20 p3614 A69-38251

## WRIGHT, G. T.

Space-charge-limited insulated-gate surface-channel transistor /S.C.L.I.G.F.E.T./.  
01 p0042 A69-10322

## WRIGHT, J.

Accuracy of Omega/VLF range-rate measurements.  
14 p2479 A69-29857

## WRIGHT, J. A.

Some properties of mixed oxide layers having amorphous structures.  
19 p3391 A69-36561

## WRIGHT, J. C.

Ionospheric drift measurements on adjacent aerial arrays.  
05 p0757 A69-16409

Spectroscopic observation of magnetic ordering in DyPO sub 4 using line intensity measurements.  
21 p3773 A69-38331

## WRIGHT, J. J.

Optical pumping at high temperatures.  
07 p1148 A69-18893

## WRIGHT, J. K.

Operation of a lithium niobate electrooptic Q switch at 1.06 mu.  
01 p0089 A69-10184

## WRIGHT, J. P.

Measurable effect of general relativity in satellite orbits.  
08 p1383 A69-19901

The gravitational collapse of a slowly rotating relativistic star.  
14 p2520 A69-29374

## WRIGHT, J. W.

Observations of microstructure and vertical motion in sporadic E.  
01 p0071 A69-11164

Some current developments in radio systems for sounding ionospheric structure and motions.  
14 p2415 A69-29519

The interpretation of ionospheric radio drift measurements. II - Kinesonde observations of microstructure and vertical motion in sporadic E.  
18 p3125 A69-34250

## WRIGHT, L. A.

Proterozoic eucaryotes from Eastern California.  
22 p3935 A69-40052

Douglas design for powerplant reliability and maintainability.  
[SAE PAPER 690391] 23 p4201 A69-41664

## WRIGHT, M. A.

Experimental and analytical investigations of jets exhausting into a deflecting stream.  
[AIAA PAPER 69-223] 07 p1051 A69-19557

High vacuum adhesion test apparatus.  
21 p3689 A69-38594

## WRIGHT, N. J.

Saturation of scintillation magnitude in near-earth optical propagation.  
15 p2570 A69-31030

## WRIGHT, R. A.

Physiological methods and results.  
01 p0015 A69-10947

## WRIGHT, R. D.

Laser display systems. I - Scanners.  
04 p0600 A69-15028

Laser display systems. II.  
09 p1492 A69-21394

Saturated pool boiling burnout of ethane-ethylene mixtures.  
15 p2671 A69-31118

## WRIGHT, R. E.

An outline of the Ferranti data handling system proposed by the Sud-Aviation group for project L.A.S.  
20 p3501 A69-37390

## WRIGHT, R. H.

Vacuum ultraviolet perturbation spectroscopy on the argon ion laser.  
08 p1324 A69-20161

- RIGHT, R. J.**  
Effect of nonequilibrium dissociation on constant pressure laminar mixing. 04 p0588 A69-14733
- RIGHT, R. R.**  
The Law of Airspace. 07 p1244 A69-18709  
Classification of galaxies using the rectified images. 08 p1408 A69-21135
- RIGHT, R. W.**  
Investigation of the stratospheric aerosol by infrared and lidar techniques. 04 p0592 A69-14654
- RIGHT, S. E.**  
Sound radiation from a lifting rotor generated by asymmetric disk loading. 18 p3090 A69-34323  
Helicopter rotor noise generation. 18 p3088 A69-35222
- RIGHT, T.**  
Determination of the design parameters for optimum heavily loaded ducted fans. [AIAA PAPER 69-222] 08 p1253 A69-21030  
Kinetic-energy corrections to Klein's theorem for the thermodynamic functions of a plasma. 16 p2823 A69-32469
- RIGHT, T. O.**  
Maintainability, the measure of availability. 19 p3327 A69-36036
- RIGHT, W. A.**  
An improved viscosity-temperature chart for hydrocarbons. 10 p1753 A69-23975
- RIGHT, W. H.**  
Calibration of a satellite-borne soft particle spectrometer. 04 p0599 A69-15022  
Integral electronic charge controls for high performance secondary batteries. 23 p4076 A69-42542
- RIGHT, W. H., JR.**  
High-power Y-junction E-plane circulator. 07 p1100 A69-18639
- RIGHT, W. W.**  
MAP, a modular design concept for recoverable scientific rocket-borne experiments. 23 p4223 A69-41763
- RIGHTS, G. N.**  
Monte Carlo calculations of a hemispherical duct neutron streaming experiment. 18 p3171 A69-35178
- WRIGHT, B.**  
Engine performance considerations for the large subsonic transport. 16 p2835 A69-31803
- WRIGHT, W. B.**  
An advanced long-range navigation capability concept for a 1979 initial operational capability. 03 p0463 A69-13210
- WRISTON, R. S.**  
Testing X-ray telescope performance. 02 p0248 A69-11736
- WROBEL, J. R.**  
Early exploration of the asteroids region by solar powered electrically propelled spacecraft. [AAS PAPER 69-322] 24 p4381 A69-42868
- WROBLEWSKI, T. E.**  
Chemical and biological protection of the organism against harmful effects of radiation and vibration /Chemiczne i biologiczne zabezpieczenie ustroju przed szkodliwym działaniem promieniowania i wibracji/. 10 p1648 A69-23297
- WRONG, C. B.**  
An introduction to the JT15D engine. [ASME PAPER 69-GT-119] 09 p1572 A69-22524
- WRONSKI, A. S.**  
Meteorite scattering in the earth's gravitational field and the influence of this scattering on the distribution of meteorite precipitation on the moon /O rozpraszaniu meteorytów w polu grawitacyjnym ziemi i wpływie tego rozpraszania na rozkład opadu meteorytów na księżycu/. 01 p0153 A69-10756  
The effects of strain rate and pressurization on the ductile-brittle transition temperature of polycrystalline sintered tungsten. 12 p2117 A69-27138
- The effects of temperature and pressurization on the tensile and compressive properties of polycrystalline cast tungsten. 18 p3154 A69-34273
- WRONSKI, C. R.**  
Electron emission from the Schottky barrier structure ZnS-Pt-Cs. 03 p0493 A69-14186
- WROUT, G. M.**  
Bounds on the librations of parametrically resonant satellites. 20 p3617 A69-37191
- WU, C. G.**  
Experimental studies of vibration of axially excited circular cylindrical shells containing fluid. [ASME PAPER 69-VIBR-4] 10 p1805 A69-24162
- WU, C. I.**  
On the free vibrations of plates and beams of pyrolytic graphite type materials. [AIAA PAPER 69-55] 06 p1027 A69-18070
- WU, C. P.**  
On the asymptotic decay of coupling for infinite phased arrays. 04 p0571 A69-14314  
Determination of resonance conditions in dielectric-sheathed or plug-loaded phase arrays. 08 p1281 A69-20034  
Numerical solutions for the coupling between waveguides in finite arrays. 10 p1663 A69-23421
- WU, C.-H.**  
A boundary layer theory for the end problem of a circular cylinder. 07 p1230 A69-18265
- WU, C.-IH.**  
On the nonlinear oscillations of plates composed of composite materials. 20 p3627 A69-37771
- WU, C.-IH.**  
Influences of large amplitudes, transverse shear deformation and rotatory inertia on lateral vibrations of transversely isotropic plates. [ASME PAPER 69-APM-10] 18 p3213 A69-34386
- WU, C.-S.**  
Enhanced fluctuations in a magnetized plasma due to a degenerate ion-wave instability. 08 p1366 A69-20750
- WU, D. C. F.**  
Application of a surface integration technique to parallel-plate waveguide radiation-pattern analysis. 23 p4136 A69-41581
- WU, E. M.**  
Off-axis test of a composite. 01 p0103 A69-11273
- WU, J.**  
Froude number scaling of wind-stress coefficients. 17 p2996 A69-33152
- WU, J. C.**  
Experimental and analytical investigations of jets exhausting into a deflecting stream. [AIAA PAPER 69-223] 07 p1051 A69-19557
- WU, J. M.**  
Some characteristics of an electric discharge in a supersonic gas stream. [AIAA PAPER 68-713] 13 p2249 A69-28231
- WU, J.-M.**  
Analysis on transverse secondary injection penetration into confined supersonic flow. [AIAA PAPER 69-2] 06 p0913 A69-18080
- WU, K. C.**  
Electrode indentation criterion for resistance spot welding. 01 p0086 A69-10538  
Dual-filler-metal welding of Ti-6Al-6V-2Sn and 6061 aluminum plates. 22 p3956 A69-40462
- WU, M. Y.**  
Lp-stability /I less than p less than infinity/ of nonlinear time-varying feedback systems. 06 p0903 A69-17411  
Stability of a nonlinear time-invariant feedback system under almost constant inputs. 17 p2944 A69-33743  
L super p-stability /p greater than or equal to 1 and less than or equal to infinity/ of nonlinear time-varying feedback systems. 23 p4146 A69-42473
- WU, P.-R.**  
Dispersion characteristics of an open interdigital-line structure. 16 p2748 A69-31580  
A deployable cross LPD array on a conducting cone. 22 p3913 A69-40693
- WU, S. C.**  
Synthesis of array space factors. 07 p1108 A69-19466
- WU, S. T.**  
Radiative heat flux for an optically thin gas. 16 p2877 A69-31892  
Kinetic theory of macroscopic transport phenomena in multifluid systems. 23 p4238 A69-41435  
Stagnation region heat transfer with nongray gas subjected to external radiation. 24 p4415 A69-43590  
Unsteady MHD flow in arbitrary ducts by point-matching method. 24 p4359 A69-43678
- WU, T. T.**  
A simple formula of current in dipole antennas. 02 p0218 A69-12330
- WU, T. Y.-T.**  
Inviscid cavity and wake flows. 04 p0587 A69-14608
- WU, W. W.**  
MAT-1 - A 700-channel time-division multiple-access system with demand-assignment features. 23 p4129 A69-42511
- WU, Y. C. L.**  
Non-similar MHD boundary layers on insulating walls. [AIAA PAPER 69-46] 06 p0972 A69-18192
- WUCHINICH, D.**  
Simple ultra-lowpass filter /diode brake/. 12 p2039 A69-26379
- WUDELL, A. E.**  
EVA maneuvering unit comparison. [AAS PAPER 69-516] 24 p4272 A69-42850
- WUENENBERG, H.**  
The flight characteristics of a high-lift STOL transport aircraft /Ueber die Flugeigenschaften eines STOL-Transportflugzeugs mit Hochauftriebszerzeugung/. 20 p3462 A69-37513
- WUENSCH, Z.**  
Self-reproducing automata /Reprodukující se automaty/. 05 p0723 A69-15826
- WUENSCH, C.**  
Thermally induced frequency variations during an oscillation pulse in avalanche transit-time diodes /Thermisch bedingte Frequenzvariation während des Schwingungsimpulses bei Lawinen-Laufzeit-Dioden/. 07 p1098 A69-18459
- WUENSCHER, H. F.**  
Space manufacturing unique to zero gravity environment. [AAS PAPER 69-486] 24 p4380 A69-42844
- WUERER, J. E.**  
Graphite ablation in high-pressure environments. [AIAA PAPER 68-1153] 04 p0686 A69-14873
- WUERKER, R. F.**  
Holographic interferometry and pulsed laser holography. 11 p1883 A69-24682  
Laser holographic interferometry study of high-speed flow fields. [AIAA PAPER 69-347] 13 p2263 A69-28282  
The investigation of liquid rocket combustion using pulsed laser holography. [AIAA PAPER 69-471] 17 p3075 A69-34200  
Holographic contouring via multifrequency lasers. 20 p3540 A69-37733
- WUERTZ, G.**  
MRB 9/2323 aerial survey camera. 22 p3944 A69-40047
- WUEST, W.**  
Stimulating effects of space aerodynamics on technical and scientific developments. [UN PAPER 68-95459] 06 p0857 A69-17083
- WUKELIC, G. E.**  
Handbook of Soviet Space-Science Research. 01 p0154 A69-10935  
Vertical research rockets. 01 p0162 A69-10936  
Artificial earth satellites. 01 p0162 A69-10937



## WULFECK, J. W.

- Lunar and planetary probes. 01 p0162 A69-10938
- Micrometeorites and meteoric dust. 01 p0155 A69-10939
- Chemical composition of the upper atmosphere and interplanetary space. 01 p0025 A69-10940
- Optical phenomena in the upper atmosphere. 01 p0066 A69-10941
- Physical properties of the upper atmosphere. 01 p0066 A69-10942

## WULFECK, J. W.

- Operational measures of aircraft carrier landing system performance. 17 p2916 A69-34012

## WULFF, J.

- Aging in Nb/Cb/-Ti-O superconductors, with appendix. 03 p0484 A69-13118

## WULFSBERG, K. N.

- Radiometric observations of the planets Jupiter, Venus, and Mars at a wavelength of 8.6 mm. 02 p0327 A69-12716
- Observations of the phase effect of Venus at 8.6-mm wavelength. 10 p1773 A69-22959

## WULFSBERG, P. G.

- Distance measuring equipment for the supersonic transport and the corporate twin. [SAE PAPER 690344] 11 p1914 A69-24490

## WUNDER, C. C.

- Gravity as a biological determinant. 06 p0872 A69-17011
- Methods of simulating weightlessness. 06 p0879 A69-17012
- Decreased antidiuretic activity measured in the blood of chronically centrifuged rats. 14 p2407 A69-29301
- Growth of noncollagen-nitrogen concentration /NCN/ in an antigravity muscle as influenced by body mass of mice. 23 p0480 A69-41406
- Urine solute composition of rats exposed to chronic centrifugation. 24 p4262 A69-42904

## WUNDERLICH, B.

- Crystallization during polymerization. 05 p0783 A69-15967
- Heat capacities of solid polymers. 19 p3359 A69-36287

## WUNDT, R. M.

- Wullenweber arrays. 08 p1288 A69-20962

## WUNSCH, D. C.

- Determination of threshold failure levels of semiconductor diodes and transistors due to pulse voltages. 06 p0977 A69-16883

## WURSTER, C. F.

- DDT residues absorbed from organic detritus by fiddler crabs. 14 p2406 A69-28872

## WURSTER, R. D.

- Influence of rate of change in skin temperature on sweating. 22 p3874 A69-40210

## WURSTER, W. H.

- Shock-tube spectroscopy of ablative species. 18 p3099 A69-34461

## WURTMAN, R. J.

- A sensitive and specific isotopic assay for the estimation of tyrosine transaminase. 01 p0014 A69-10902
- Pharmacologic tools in autonomic nervous system research. 02 p0200 A69-12722
- Failure of brain norepinephrine depletion to extinguish the daily rhythm in hepatic tyrosine transaminase activity. 05 p0707 A69-15582
- Regional uptake of super 3 H-melatonin from blood or cerebrospinal fluid by rat brain. 09 p1444 A69-21466
- Enzymatic conversion of norepinephrine to epinephrine by the brain. 10 p1644 A69-23303
- Hepatic tyrosine transaminase rhythm - Interaction of environmental lighting, food consumption and dietary protein content. 17 p2910 A69-33755

## The pineal gland in relation to reproduction.

- 20 p3480 A69-38284
- Stimulation of C super 14-melatonin synthesis from C super 14-tryptophan by noradrenaline in rat pineal in organ culture. 22 p3871 A69-40051
- Incorporation of super 14 C-tryptophan into super 14 C-protein by cultured rat pineals - Stimulation by 1-norepinephrine. 22 p3871 A69-40054
- Olfactory bulb removal - Effects on brain norepinephrine. 22 p3871 A69-40055

## WURTZ, R. H.

- Visual cortex neurons - Response to stimuli during rapid eye movements. 03 p0369 A69-13360

## WUSTER, W. L.

- UHF TM system coverage predictions over water. 23 p4122 A69-41780

## WYARD, S. J.

- ESR spectrum of Ho sub 2 in solutions of hydrogen peroxide in water at 77 deg K. 01 p0024 A69-10683

## WYATT, S. P.

- The electrostatic charge of interplanetary grains. 09 p1593 A69-21655

## WYATT, T.

- Navigation satellite program. 02 p0277 A69-11753

## WYBORN, W.

- Resistance and heat-transfer measurements on cylindrical bodies with cavities at hypersonic speeds /Widerstands- und Waermeuebergangsmessungen an zylindrischen Koerpern mit Hohlraeumen bei Hyperschall- Machzahlen/. [DVL-850] 04 p0543 A69-14822

## WYCHE, C.

- Electrodeposition of molybdenum coatings. 18 p3156 A69-35001
- Electrodeposition of titanium diboride coatings. 22 p3970 A69-40735

## WYDER, P.

- A simple grating spectrometer for the far infrared /Ein einfacher Gitterspektrometer fuer das ferne Infrarot/. 21 p3726 A69-39682

## WYDEVEN, T.

- Water electrolysis - Prospect for the future. 03 p0379 A69-12987
- Oxygen reclamation from carbon dioxide using a solid oxide electrolyte. 07 p1071 A69-19423
- Thermal decomposition of yttrium-doped silver carbonate. 15 p2561 A69-30442
- Heats of adsorption of carbon dioxide on silver /I/ oxide and copper /II/ oxide as determined by gas chromatography. 20 p3485 A69-38277

## WYGNANSKI, I.

- Two-dimensional turbulent jet in a uniform, parallel stream. 04 p0588 A69-14713
- Jets and wakes in tailored pressure gradient. 08 p1252 A69-20782

## WYLIE, E. B.

- Two and three-dimensional fluid transients. 05 p0747 A69-16071
- Forced and self-excited oscillations in propellant lines. [ASME PAPER 69-FE-6] 20 p3586 A69-37987

## WYLIE, G. W.

- Mechanics of dynamic balancing. [SAWE PAPER 736] 18 p3220 A69-34891

## WYLLIE, D. V.

- An absolute flux density scale at 408 MHz. 10 p1772 A69-22857

## WYMAN, C. L.

- An advanced laser tracking technique for future space guidance systems. [AIAA PAPER 69-870] 21 p3763 A69-39396

## WYMAN, P. W.

- Laser radar eye hazard considerations. 11 p1830 A69-24845

## WYN-ROBERTS, D.

- Friction and wear studies in ultra-high vacuum and the evaluation of electrical slip-rings. [IME PAPER 7] 07 p1138 A69-18561

## WYNHAM, C. H.

- Determinants of oxygen consumption and maximum oxygen intake of Bantu and Caucasian males. 21 p3655 A69-38911
- A study of temperature regulation in the human body with the aid of an analogue computer. 23 p4111 A69-42079

## WYNN-WILLIAMS, C. G.

- High resolution observations of the radio source W49. 11 p1963 A69-25259
- Radio emission from the vicinity of the galactic nebula NGC 6857. 18 p3202 A69-35209

## WYNN, W. D.

- A second order statistical analysis of the operation of a limiter-phase detector- filter cascade. 07 p1084 A69-19147

## WYNNE, C. G.

- Ritchey-Chretien telescopes and extended field systems. 05 p0761 A69-15733

## WYSOCKI, J.

- Long term stability of lithium-doped solar cells irradiated with electrons, protons, or neutrons. 19 p3252 A69-35697

## X

## XENAKIS, G.

- Guidance and control considerations for advanced manned space missions. 19 p3369 A69-35801

## Y

## YAAKOBI, B.

- Spectroscopic investigation of the high-density plasma from exploded lithium wires. 01 p0129 A69-10662

## YABE, H.

- Theoretical analysis of externally pressurized porous journal gas bearings. I. 01 p0085 A69-10312

## YABSLEY, D. E.

- Structural performance of the Parkes 210-ft paraboloid. 23 p4231 A69-42130

## YABUSHITA, S.

- Stability analysis of Saturn's rings with differential rotation. II. 10 p1771 A69-22855
- Spiral structures of disk galaxies as non-axisymmetric perturbations. 18 p3200 A69-35131

## YACKLE, A. R.

- Retracted rotor aircraft technology assessment. [AIAA PAPER 69-219] 07 p1055 A69-19550

## YACOB, A.

- On 26-month periodicity in quiet-day range of geomagnetic horizontal force and in sunspot number. 01 p0063 A69-10427
- Solar cycle response in the horizontal force of the earth's magnetic field. 18 p3205 A69-35414

## YADLOWSKY, E. J.

- Periodic pulling and turbulence in a bounded plasma. 07 p1194 A69-19400

## YAFFEE, M. L.

- Inlet taps point to Tu-154 problem. 19 p3395 A69-36757

## YAGELOWICH, H.

- 10.6-micrometer laser communication system experiment for ATS-F and ATS-G. 23 p4120 A69-41758

## YAGER, E. K.

- A dynamic torsiograph system for high-speed machinery. 10 p1692 A69-23252

## YAGER, T. J.

- Recent studies on effects of runway grooving on airplane operations. [AIAA PAPER 69-773] 19 p3244 A69-35649

- AGGEE, F. L.**  
Thermal expansivities, thermal conductivities, and densities of vanadium, titanium, chromium and some vanadium-base alloys. 22 p3971 A69-40973
- AGI, T.**  
On the relation between the shape of cirrus clouds and the static stability of the cloud level - Studies of cirrus clouds. IV. 20 p3570 A69-37349
- AHIKU, A. Y.**  
Focusing and deflection of heavy charged particle beams. [AIAA PAPER 69-283] 09 p1563 A69-21230  
Research and development of a charged-particle bipolar thruster. [AIAA PAPER 67-728] 13 p2325 A69-28220
- AHYA, S. M.**  
Aerodynamic losses in partial admission turbines. 15 p2547 A69-30290
- YAJIMA, S.**  
Some algebraic properties of sets of stochastic matrices. 15 p2645 A69-31141  
Siliconated pyrolytic graphite. III - Structural features. IV - Electrical resistivity. 24 p4335 A69-42926
- YAJIMA, T.**  
Nonlinear optics. 09 p1518 A69-22124  
Submillimeter-wave generation by difference-frequency mixing of ruby laser lines in ZnTe. [IEEE PAPER B-4] 14 p2457 A69-28927
- YAKOVLEVA, I. A.**  
Peculiarities of the response of the acoustic analyzer of man during prolonged noise effect in a year-long medico-engineering experiment. 24 p4278 A69-43408
- YAKURA, J.**  
Transitional boundary layer considerations for the heating analyses of lifting reentry vehicles. [AIAA PAPER 68-1155] 03 p0416 A69-13674
- YAKURA, J. K.**  
Transitional boundary-layer considerations for the heating analyses of lifting re-entry vehicles. [CIAA PAPER 68-1155] 24 p4300 A69-43251
- YAKUT, M. M.**  
Parametric analysis of some requirements for life support systems applied to earth orbital missions. [SAE PAPER 68-0746] 03 p0379 A69-13438
- YALE, F. G.**  
Lunar crater counts. IV - Mare Orientale and its basin system. 04 p0656 A69-14672  
Mare Orientale and its intriguing basin. 04 p0664 A69-15421
- YALE, G. A.**  
Behavior of optical materials in various environments. 03 p0493 A69-14190
- YAMADA, K.**  
Diurnal field strength and phase variations on VLF /NWC signals/ transmissions over a transequatorial path. I. 06 p0889 A69-17654  
Sunrise and sunset effects on VLF /18.6 kHz/ transmissions over a long path. 06 p0889 A69-17655
- YAMADA, M.**  
Gain measurement of large-aperture antenna for satellite communication. 09 p1456 A69-22116
- YAMADA, T.**  
Fatigue strength of aluminium alloy under actual service loads. 19 p3342 A69-35772
- YAMADA, Y.**  
On the flow between eccentric rotating cylinders when the outer cylinder rotates. 01 p0059 A69-10307
- YAMAGATA, S.**  
Equations, tables and charts for shock drag parameter /Mach number- 1.1 approximately 15.0, shock angle- 90 deg approximately Mach angle/. 02 p0188 A69-11862
- YAMAGISHI, K.**  
On the standing waves in the shell wall of running tyre. 22 p4048 A69-41185
- YAMAGUCHI, G.**  
A dye-solution laser pumped by a dye laser. 02 p0258 A69-12620  
Tandem amplifier system of glass and SeOCl sub 2 liquid lasers doped with neodymium. 07 p1147 A69-18487  
Organic dye solution laser. 11 p1900 A69-25580  
A construction of the high power laser amplifier using glass and selenium oxychloride doped with Nd super 3 plus. 23 p4173 A69-41565
- YAMAGUCHI, I.**  
Application of holographic interferometry to the measurement of Poisson's ratio. 19 p3312 A69-36206
- YAMAGUCHI, M.**  
Helium refrigerator - Installation type and airborne type. 05 p0704 A69-15671
- YAMAGUCHI, T.**  
Laser machining. 09 p1504 A69-22247
- YAMAGUTI, M.**  
A three-phase shunt-commutatorless motor. 01 p0012 A69-10064
- YAMAKAGE, H.**  
Theoretical analysis of externally pressurized porous journal gas bearings. I. 01 p0085 A69-10312
- YAMAKI, N.**  
Influence of prebuckling deformations on the buckling of circular cylindrical shells under external pressure. 16 p2872 A69-31905  
Buckling of truncated conical shells under torsion. 24 p4395 A69-42715
- YAMAMOTO, C. A.**  
Evaluation techniques for simple mechanical property tests on composite materials. 09 p1499 A69-22308
- YAMAMOTO, G.**  
Hemispherical distribution of turbidity coefficient as estimated from direct solar radiation measurements. 05 p0789 A69-16585  
Estimation of rotational line widths of carbon dioxide bands. 09 p1543 A69-22250  
Effect of thermal stratification on the Ekman layer. 13 p2290 A69-27390
- YAMAMOTO, K.**  
Motion of a circular cylinder in a rarefied gas due to surface temperature difference. 08 p1305 A69-20888  
Toroidal theta pinch collapse by the snowplow model. 11 p1924 A69-24303  
Flexible channel multiplier. 22 p3917 A69-41234
- YAMAMOTO, T.**  
On the oscillations of "summed and differential types of higher order" under parametric excitation. 02 p0346 A69-12422  
Instabilities arising from beam-plasma interaction. 11 p1934 A69-25576  
An experimental study on the diffusion characteristics of turbulent flow in a low speed wind tunnel. 13 p2250 A69-28496
- YAMAMOTO, Y.**  
The Toshiba blow-down MHD test facility, and experiments on non-equilibrium ionization. 10 p1673 A69-23477  
Theory of stress concentration of two normally intersecting cylindrical shells. 13 p2359 A69-27255
- YAMAMURA, H.**  
The induction period in shock-heated CO-O sub 2 mixtures. 16 p2877 A69-31768
- YAMANAKA, C.**  
A dye-solution laser pumped by a dye laser. 02 p0258 A69-12620  
Tandem amplifier system of glass and SeOCl sub 2 liquid lasers doped with neodymium. 07 p1147 A69-18487  
The relaxation phenomena in an ionized shock front. 10 p1726 A69-23685
- A new sampling technique of multi-coincidence method of photon counting for optical tracking system of satellite. 11 p1841 A69-25579
- Organic dye solution laser. 11 p1900 A69-25580
- Experiments on collisionless shock waves in plasmas. 17 p3013 A69-33822
- Experiments on collisionless shock waves in plasmas. 19 p3379 A69-35759
- A construction of the high power laser amplifier using glass and selenium oxychloride doped with Nd super 3 plus. 23 p4173 A69-41565
- YAMANAKA, T.**  
Tandem amplifier system of glass and SeOCl sub 2 liquid lasers doped with neodymium. 07 p1147 A69-18487  
Experiments on collisionless shock waves in plasmas. 17 p3013 A69-33822  
Experiments on collisionless shock waves in plasmas. 19 p3379 A69-35759  
Radiation-resisted MHD shocks with viscosity and finite electrical conductivity. 20 p3581 A69-37189  
A construction of the high power laser amplifier using glass and selenium oxychloride doped with Nd super 3 plus. 23 p4173 A69-41565
- YAMANE, M.**  
Hydrogen ions in the positive column of a hydrogen glow discharge. 05 p0802 A69-15913
- YAMANISHI, T.**  
The effective Ohm's law for a non-homogeneous weakly-ionized gas, and the Hartmann problems. 10 p1735 A69-23462
- YAMAOKA, T.**  
Power dependence on repetition time of the Q-switched CO sub 2 laser. 23 p4173 A69-41566  
CO sub 2 gas laser. 24 p4327 A69-42640
- YAMASAKI, K.**  
Fin efficiency and effectiveness of seam-welded U-type fin. 19 p3452 A69-36371
- YAMASAKI, T.**  
Scattering of a beam wave by a spherical object. 08 p1273 A69-20028
- YAMASHITA, E.**  
Variational method for the analysis of microstrip-like transmission lines. 01 p0044 A69-10625
- YAMASHITA, M.**  
The propagation characteristics of ELF radio waves to great distances below the horizontally stratified ionosphere. 03 p0421 A69-13326  
Ionospheric reflection coefficients of the ELF radio waves taking the existence of the ion into consideration. 07 p1124 A69-18820  
Propagation characteristics of ELF radio waves to great distances below the horizontally stratified ionosphere. 20 p3488 A69-37285  
The conductivity of lower ionosphere deduced from sudden enhancements of strength /SES/ of V.L.F. transmissions. 21 p3714 A69-38554  
Experimental investigation of the propagation of ELF atmospherics. 23 p4114 A69-41362
- YAMASHITA, T.**  
Magnetic-field dependence of Josephson current modified by self-field. 04 p0640 A69-14437  
Impingement cooling of concave surfaces with lines of circular air jets. [ASME PAPER 68-WA/GT-1] 05 p0848 A69-16137  
A statistical study of solar bursts at microwave frequencies. 18 p3187 A69-34969
- YAMASHITA, Y.**  
Large-amplitude ion acoustic waves in a plasma. 22 p3991 A69-41008



## YAMAWAKI, K.

Strength of composite cylinders reinforced by unidirectional filamentwinding. 21 p3846 A69-39795

## YAMAWAKI, K. R.

Forbidden absorption bands of O sub 2 in the argon continuum region. 22 p3896 A69-40479

## YAMAYA, K.

Diversity reception in VHF space communications. 06 p0889 A69-17653  
Diversity reception in VHF space communications. 10 p1775 A69-23191

## YAMAZAKI, H.

Propagation of shock waves in inhomogeneous gases. VI. 15 p2680 A69-30202

## YAMAZAKI, Y.

The survey on the physiological function of the aged pilots of JASDF. 06 p0876 A69-18028  
Experimental study on finger dexterity with pressure gloves. 06 p0884 A69-18032

## YAMINY, R. R.

A two-channel monopulse telemetry and tracking antenna feed. 07 p1105 A69-19110  
A high power versatile feed system for communication satellite usage. 23 p4120 A69-41750  
A 17-1 dual band circularly polarized focused two-channel monopulse tracking system. 23 p4120 A69-41752

## YANAI, H.

Design theory of junction-gate field-effect transistor. I - The tectron-like structure. II - The diffused gate structure. 06 p0893 A69-17197  
Observations of current waveforms of the transferred-electron oscillators. 07 p1097 A69-18443  
Observations of voltage and current waveforms of the transferred electron oscillators. 12 p2036 A69-25908  
Observation of the current and voltage waveforms of the Si IMPATT diode. 12 p2036 A69-25914

## YANAI, M.

Finite difference approximations for the barotropic instability problem. 09 p1537 A69-22298  
Large-scale equatorial waves penetrating from the upper troposphere into the lower stratosphere. 23 p4159 A69-42345  
Axially symmetric meridional motions in the baroclinic circular vortex - A numerical experiment. 23 p4159 A69-42346

## YANDA, L. M.

Correction of turbocharged engine performance to standard conditions and prediction of nonstandard day performance. [SAE PAPER 690309] 11 p1942 A69-24514

## YANG, A. T.

Analysis of an offset unsymmetric gyroscope with oblique rotor using  $3 \times 3$  matrices with dual-number elements. [ASME PAPER 68-WA/DE-5] 05 p0764 A69-16170

## YANG, C. H.

On the Lotka-Frank-Kamenetskii isothermal theory of cool flames. 11 p1970 A69-24476

## YANG, E. S.

Small-signal characteristics of the diode-stabilized linear integrated devices. 01 p0041 A69-10204  
Four-terminal field-effect transistors for amplitude modulation. 14 p2420 A69-29459  
Calculation of intrinsic transport parameters of a double-diffused transistor. 16 p2758 A69-31616  
Linear operation of a p-n-p-n-tetrode. 18 p3109 A69-35293

## YANG, H. K.

Effect of wall conductances on convective magnetohydrodynamic channel flow. 09 p1545 A69-21441

## YANG, H. T.

A vortex method for the study of airplane-missile aerodynamic interference. 01 p0007 A69-11026  
One-dimensional free expansion of a collisionless plasma. 16 p2819 A69-31685

## YANG, J. W.

Analysis of heat transfer in evaporative-transpiration-cooled system. 21 p3851 A69-39037

## YANG, J.-N.

On the bound of first excursion probability. 13 p2361 A69-27438  
Numerical Fourier transform in random vibration. 17 p2996 A69-33710  
Optimum structural design based on reliability and proof-load test. 19 p3437 A69-36033

## YANG, T.

A mathematical model for the prediction of the induced flow in a pulsejet ejector with experimental verification. [ASME PAPER 68-WA/FE-33] 05 p0812 A69-16106

## YANG, W. H.

On an integral equation solution for a plate with internal support. 03 p0528 A69-13799

## YANG, W. J.

Dynamics of moving gas bubbles in injection cooling. [ASME PAPER 67-WA/HT-30] 02 p0351 A69-12201

## YANG, W.-J.

Unsteady compressible laminar boundary-layer flow over a flat plate. 04 p0588 A69-14715  
Analysis of laminar film boiling in boundary layer flows with appreciable radiation. 11 p1873 A69-25242

## YANIV, A.

Results of micrometeoroid collection experiments flown on rockets and satellites. 15 p2700 A69-31440  
Isotopic composition of lithium in some meteorites and the role of neutrons in the nucleosynthesis of the light elements in the solar system. 19 p3408 A69-36084

## YANKOPOULOS, N. A.

Registration of intravascular pressure and sound by a fiberoptic catheter. 17 p2917 A69-34172

## YANO, S.

Experimental study on MHD generators with segmented electrodes at high Hall parameters. 10 p1637 A69-23476

## YANO, T.

Numerical solution for two dimensional unsteady state heat conduction problems. 09 p1623 A69-22280

## YANTA, W. J.

An experimental investigation of the compressible turbulent boundary layer with a favorable pressure gradient. [AIAA PAPER 69-685] 17 p2956 A69-33489

An experimental investigation of the Preston probe including effects of heat transfer, compressibility and favorable pressure gradient. [AIAA PAPER 69-648] 17 p2893 A69-33496

Balance for measuring skin friction in the presence of heat transfer. 19 p3292 A69-35734

## YAO, S. S.

Clipping loss in the one-bit autocorrelation spectral line receiver. 16 p2752 A69-32390

## YAPP, H.

Flotation attitude analysis by potential energy technique. [SAE PAPER 773] 18 p3172 A69-34874

## YARBOROUGH, F. B.

Composite materials for large air transports. [ASM PAPER D8-25.4] 07 p1172 A69-19670

## YARBOROUGH, J. M.

New high-power stable modes of operation of the argon laser. 05 p0773 A69-16292

Frequency stabilization and noise suppression in the argon FM laser. [IEEE PAPER P-7] 05 p0775 A69-16325

## YARBROUGH, D. W.

Status of diffusion data in binary compound semiconductors. 02 p0296 A69-11809

## YARCZOWER, M.

Periodic shock with added clock. 10 p1644 A69-23304

## YARDLEY, J. T.

Vibration-to-vibration energy transfer in gas mixtures containing nitrous oxide. 01 p0123 A69-10684

## YARGER, D. N.

Estimating the vertical atmospheric ozone distribution by inverting the radiative transfer equation for pure molecular scattering. 07 p1126 A69-19042  
The statistical prediction of the vertical ozone distribution. 18 p3132 A69-35426

## YARIV, A.

Observation of mode locking and ultrashort optical pulses induced by anisotropic molecular liquids. 02 p0259 A69-12655  
Superradiance and recombination radiation from cadmium telluride. 19 p3389 A69-36550  
Analysis of mode locking and ultrashort laser pulses with a nonlinear refractive index. 23 p4171 A69-41389  
Optical communication through random atmospheric turbulence. 23 p4125 A69-42186

## YASUDA, H.

Dynamic characteristics of a mutually synchronised system. 12 p2030 A69-26388

## YASUDA, N.

Effect of thermal stratification on the Ekman layer. 13 p2290 A69-27390

## YASUE, S.

Thermal fatigue combined with static mean stress and reversed mechanical stress. 21 p3847 A69-39813

## YASUHARA, M.

Flow in a magnetic shock tube with unsteady magnetic field. 08 p1366 A69-20787

## YASUI, T.

Some algebraic properties of sets of stochastic matrices. 15 p2645 A69-31141

## YASUMOTO, K.

A new method for obtaining protein isolates from Chlorella algae, torula yeasts, and other microbial cells. 21 p3662 A69-39712

## YASUOKA, Y.

Lasing wavelength of a GaAs injection laser. 02 p0256 A69-11993

## YASUTAKE, K.

Anomalous enhancement of substrate terminal current beyond pinch-off in silicon n-channel MOS transistors and its related phenomena. 04 p0574 A69-14348

## YASUTOMI, Z.

A linearized theory of a thin jet-flapped aerofoil in proximity of the ground. 09 p1431 A69-22275  
On a calculation of the lift of a tunnel type ram wing. 22 p3860 A69-40819  
An approximate analysis for an aerofoil with a thin jet flap which hits the ground in a case of separation from its leading edge. 22 p3861 A69-41184

## YATA, A.

Japanese meteorological rocket sounding. 20 p3543 A69-37795

## YATES, A. M.

Chromium and manganese in chondrites. 15 p2681 A69-30416

## YATES, G. G.

An electronic arrangement suitable for measuring time mean products and squares in fluid turbulence at low frequencies. 04 p0601 A69-15116

- WATES, M. K.**  
Long term operations of in-pile and out-of-pile thermionic converters. 14 p2399 A69-29197  
Cesium sorption in materials for thermionic converters. 14 p2463 A69-29220
- WATSIV, S.**  
Enhanced and stimulated multiphoton processes in free atoms. [IEEE PAPER S-8] 07 p1154 A69-19080  
Induced versus parametric scattering processes in potassium. 23 p4171 A69-41391
- YAU, L. D.**  
Theory and experiments of low-frequency generation-recombination noise in MOS transistors. 12 p2041 A69-26627
- YAU, W.-F.**  
A mixed problem for an elastic ring. [ASME PAPER 68-WA/APM-17] 04 p0669 A69-14395
- YAVNE, R.**  
An economical method for calculating the discrete Fourier transform. 04 p0565 A69-15336
- YAVUZ, I.**  
Spectroscopic orbital elements of the eclipsing binary BV 224 equals BD plus 53 deg 323 /Die spektroskopischen Bahnelemente des bedeckungsveränderlichen BV 224 equals BD plus 53 deg 323/. 21 p3795 A69-38469
- YBARRONDO, L. J.**  
Development of a modified cascade thermoelectric heat pump. 22 p3869 A69-40133
- YEALLAND, R. M.**  
A heated supersonic beam study of the helium-argon intermolecular potential. 19 p3377 A69-36183
- YEARGAN, J. R.**  
The Poole-Frenkel effect with compensation present. 04 p0640 A69-14450
- YEARGERS, E.**  
Excitation, dissipative, and emissive mechanisms in biochemicals. 03 p0372 A69-13487
- YEAST, A. J.**  
Evaluation of boron-aluminum composite material for space structures. 19 p3318 A69-35507
- YEATES, H.**  
Visual suppression during smooth following and saccadic eye movements. 22 p3879 A69-40842
- YEE, H. K. H.**  
On narrow-band LC 70 MHz IF filters. 12 p2036 A69-25915
- YEE, H. Y.**  
Ray optics - A novel approach to scattering by discontinuities in a waveguide. 14 p2423 A69-29753
- YEE, L.**  
An experiment to determine the structure of a planetary atmosphere. [AIAA PAPER 68-1054] 03 p0512 A69-13699  
An experiment to determine the structure of a planetary atmosphere. [AIAA PAPER 68-1054] 21 p3715 A69-39023
- YEH, C.**  
Wave propagation on a moving plasma column. 06 p0968 A69-17775
- YEH, C.-S.**  
Evidence of transit-time effects in silicon n-nu-n space-charge-limited current /S.C.L.C./ solid-state devices. 03 p0483 A69-12852
- YEH, G. C. K.**  
A comparison of various elasticity formulations valid for all admissible values of Poisson's ratio. 16 p2872 A69-32012  
Draining of a liquid from a transversely moving cylindrical tank. [AIAA PAPER 69-679] 17 p2953 A69-33440
- YEH, H.**  
Electron heat transfer and probe characteristic in a moving non-equilibrium plasma. [AIAA PAPER 69-699] 17 p3011 A69-33475
- YEH, H.-C.**  
Analysis of laminar film boiling in boundary layer flows with appreciable radiation. 11 p1873 A69-25242
- YEH, K. C.**  
Displacement of rays in a turbulent medium. 08 p1272 A69-20021  
Effect of ion drag on propagation of acoustic-gravity waves in the atmospheric F region. 14 p2434 A69-28944  
Diffusion of rays in random media. 17 p2926 A69-33854
- YEH, T.**  
Stabilities of periodic waves in a cold collision-free plasma in a magnetic field. 03 p0474 A69-13143
- YEH, Y. C.**  
The CW gain characteristics of several gas mixtures at 337 microns. 20 p3552 A69-36995
- YELLOZ, G.**  
Computers for missiles - Applications to satellites /Calculateurs pour engins - Applications aux satellites/. 20 p3502 A69-37392
- YELON, W. B.**  
Piezoelectric shakers for wide-frequency calibration of vibration pickups. 17 p2975 A69-33665
- YEN, D. H. Y.**  
Wave propagation in two-dimensional anisotropic media - A study of the fundamental solution and its lacunas. 17 p2925 A69-33841
- YEN, J. L.**  
Numerical and asymptotic solutions of the dispersion equation for dipolar surface waves along a magnetoplasma column. 06 p0968 A69-17774  
Detection of the super 2 pi 3/2, J equals 5/2 state of OH at 5-centimeter wavelength. 13 p2335 A69-27312
- YEN, J. T.**  
On the retrograde motion of electric arcs. [AIAA PAPER 69-45] 06 p0971 A69-18091
- YEN, S. M.**  
Numerical methods for solving rarefied gas flow problems. 17 p2952 A69-33325
- YEN, S.-M.**  
Aerodynamic torque on a spinning spherical satellite with application to measurement of accommodation coefficients. 09 p1611 A69-22087
- YENAWINE, D. L.**  
Flexural properties of aluminum-aluminum oxide sandwich composites. 07 p1159 A69-18723
- YENISCAVICH, W.**  
Effects of minor elements on the weldability of "Hastelloy" alloy X. 22 p3967 A69-39881
- YEOWART, N. S.**  
Low-frequency noise thresholds. 21 p3664 A69-38986
- YETT, D. E.**  
Methods of estimating occupational attrition. 07 p1245 A69-19728
- YETTRAM, A. L.**  
A direct matrix method for the elastic stability analysis of plates. 03 p0522 A69-12866
- YGUERABIDE, J.**  
Dependence of the kinetics of singlet-singlet energy transfer on spectral overlap. 22 p3895 A69-40056
- YIH, C.-S.**  
A class of solutions for steady stratified flows. 11 p1869 A69-24889
- YILDIZ, A.**  
Electromagnetic cavity resonances in accelerated systems. II. 16 p2812 A69-32048
- YILMAZ, F.**  
RGU photometry in a Milky Way field in the direction of the anticenter /RGU- Photometrie in einem Milchstrassenfeld in Richtung des Antizentrums/. 08 p1387 A69-20119
- YIN, F.**  
Peristaltic waves in circular cylindrical tubes. [ASME PAPER 69-APMW-3] 24 p4275 A69-43108
- YIN, L. I.**  
Some parameters affecting Auger and photoelectron spectroscopy as an analytical technique. 07 p1075 A69-19775
- YIN, P. K. L.**  
Studies on CO sub 2 isotope molecules and atmospheric transmission of super 12 C super 18 O sub 2 laser radiation. 21 p3742 A69-39780
- YIN, T. P.**  
The control of vibration and noise. 04 p0606 A69-14691
- YIN, Y. K.**  
Viscous transonic spiral and radial flow. 18 p3121 A69-34787
- YIOU, F.**  
Nucleosynthesis of lithium, beryllium, and boron, and the formation of the solar system /Sur la nucleosynthese du lithium, du beryllium et du bore et la formation du systeme solaire/. 08 p1401 A69-20901  
Formation cross sections of lithium, beryllium, and boron isotopes produced by the spallation of oxygen by high-energy protons. 14 p2512 A69-28968  
Stability of super 7 Be in the galactic cosmic radiation /Stabilite de super 7 Be dans le rayonnement cosmique galactique/. 18 p3189 A69-35482
- YIP, G. L.**  
Numerical and asymptotic solutions of the dispersion equation for dipolar surface waves along a magnetoplasma column. 06 p0968 A69-17774
- YIP, K. B.**  
Interferometric observations of the radio source VRO 42 22 01. 17 p3026 A69-32861
- YINGVESSON, S.**  
Electron-spin memory in the optical-pumping cycle of F centers in alkali halides and electron-spin resonance of the relaxed excited state. 23 p4198 A69-42419
- YOHE, C. F.**  
Aircraft AC power system conversion from brush-to-brushless. 17 p2905 A69-34109
- YOKOBORI, T.**  
Criteria for nearly brittle fracture. 01 p0169 A69-10768  
A criterion for unstable elastic-plastic fracture based on energy balance considerations. 07 p1238 A69-19693  
Brittle fracture with interaction between elastic crack and near-by slip band. 07 p1238 A69-19694  
Kinetic aspects of fatigue crack propagation. 10 p1795 A69-23062  
On the initiation and propagation of fatigue crack. 17 p3052 A69-32981
- YOKOI, H.**  
Gain measurement of large-aperture antenna for satellite communication. 09 p1456 A69-22116
- YOKOI, K.**  
Visual discrimination through scratched canopy. 13 p2214 A69-28533
- YOKOYAMA, A.**  
Dipole radiation effected by the plane earth. 21 p3770 A69-38748
- YOKOYAMA, H.**  
The abundances of arsenic, tin and antimony in chondritic meteorites. 13 p2344 A69-27630
- YOKOYAMA, S.**  
Design of a PCM satellite communication system. 24 p4283 A69-43200
- YOKOYAMA, Y.**  
Accretion rate of cosmic dust estimated from cosmogenic aluminium-26. 03 p0514 A69-13935  
The cometary origin of meteors deduced from the effect of solar cosmic radiation on meteorites and the significance of this origin /Origine cometaire des



## YONEMITSU, H.

meteorites deduite de l'effet du rayonnement cosmique solaire dans les meteorites et la consequence de cette origine/. 08 p1406 A69-20930

## YONEMITSU, H.

Ultralow-noise preamplifiers in satellite communication earth terminal installations - Traveling-wave maser and cooled parametric amplifier. 05 p0728 A69-15670

## YONEZAWA, M.

Aerodynamic characteristics of propeller-wing-flap systems. 09 p1431 A69-22278

## YONEZU, H.

Lasing wavelength of a GaAs injection laser. 02 p0256 A69-11993

## YORDANOV, D.

On the stationary vertical distribution of a weightless radioactive substance in the surface air layer. 04 p0593 A69-15091

A method for dynamic determination of the dew /or frost/ point and its application to radiosonde humidity measurement. 09 p1502 A69-22691

Influence of atmospheric aerosols on the electric field in the ground layer /Influence des aerosols atmospheriques sur le champ electrique dans la couche proche du niveau du sol/. 17 p2996 A69-33036

Steady-state distribution of the electric field in the ground layer as a two-layer problem /Distribution stationnaire du champ electrique dans la couche pres du sol en tant que probleme a deux couches/. 21 p3715 A69-38836

## YORK, S.

Fluorescence studies of substrate and subunit interactions of the beta sub 2 protein of Escherichia coli tryptophan synthetase. 04 p0553 A69-15304

## YORK, T. C.

Longitudinal temperature profiles in fluid flow and consideration of their effect in thermal modelling. [AIAA PAPER 69-30] 06 p1038 A69-18174

## YORK, T. M.

Pressure distribution in the structure of a propagating current sheet. [AIAA PAPER 69-264] 09 p1564 A69-21243

## YORKE, J. A.

The existence and nonexistence of critical points in bounded flows. 22 p3975 A69-40571

## YOSHE, T.

Character of hypersonic shock tunnels with real gas effects. II - Dissociational nonequilibrium flow through a converging-diverging nozzle. 22 p3927 A69-40583

## YOSHIDA, F.

Analysis of error rates due to multipath propagation in microwave PCM systems. 02 p0208 A69-12307

## YOSHIDA, H.

On the thermal decomposition rate of molybdenum sesquisulphide /Mo sub 2 S sub 3/ in vacuum. 14 p2467 A69-29287

## YOSHIDA, K.

Heat transfer mechanisms between wall surface and fluidized bed. 20 p3632 A69-37519

Deforming behaviors of sheet metals in punch-stretching and hydraulic bulging. 20 p3551 A69-38115

## YOSHIDA, M.

Brittle fracture with interaction between elastic crack and near-by slip band. 07 p1238 A69-19694

## YOSHIDA, S.

The geomagnetic and cosmic-ray storm of May 25/26, 1967. 22 p4004 A69-40307

## YOSHIDA, T.

Simple method of receiving picture signals from a satellite. 06 p0888 A69-17651

## YOSHIE, T.

Studies of the nonequilibrium transonic flow through a nozzle. 22 p3861 A69-41177

## YOSHIKAWA, H.

Defective bacteriophage PBSh in Bacillus subtilis. II. 15 p2555 A69-30446

## YOSHIKAWA, N.

Surface waveguide consisting of inhomogeneous dielectric thin film. 05 p0731 A69-16294

## YOSHIKAWA, S.

Nonexistence of toroidal plasma equilibrium in ring devices with conventional supports. 08 p1369 A69-20819

Stationary equilibrium of a two-dimensional plasma in a magnetic field. 24 p4356 A69-43365

## YOSHIMURA, N.

Analysis of large deflection of plates by the finite element method. 15 p2706 A69-30435

## YOSHIMURA, T.

Kinetic aspects of fatigue crack propagation. 10 p1795 A69-23062

## YOSHINAGA, H.

A CO sub 2 Q-switched laser and its nonlinear amplification characteristics. 06 p0933 A69-17118

## YOSHINO, K.

Q-switching of ruby laser by natural chlorophyll and its derivatives. 11 p1900 A69-25581

## YOSHINO, S. Y.

Development of polyimide-glass fabric laminates with nonflammable characteristics in high oxygen concentration spacecraft environments. 09 p1531 A69-22366

Boron/epoxy support strut for non-integral cryogenic tankage. 19 p3354 A69-35516

## YOSHIZAWA, A.

On the skin friction near the trailing edge of a flat plate. 22 p3930 A69-40683

Unsteady viscous flows past a semi-infinite flat plate. 22 p3931 A69-40684

## YOSS, K. M.

Stellar radial velocities derived from microphotometer measurements. 12 p2153 A69-25810

## YOST, E.

The principles and applications of multispectral color aerial photography. 22 p3949 A69-40997

## YOUMANS, A. B.

Search for an effect of mass on frequency during a close approach of pulsar CP 0950 to the sun. 02 p0323 A69-12298

The design of a 300-ft research antenna. 23 p4148 A69-42121

## YOUNG, A. T.

Multicolor photoelectric photometry of the brighter planets. III - Observations from Boyden Observatory. 04 p0663 A69-15383

Relative intensity calculations for carbon dioxide. IV - Calculations of the partition function for isotopes of CO sub 2. 15 p2656 A69-31154

Mariner 6 television pictures - First report. 21 p3803 A69-38981

Mariner 7 television pictures - First report. 21 p3806 A69-39330

Photometric error analysis. VIII - The temporal power spectrum of scintillation. 21 p3773 A69-39771

Mariner 6 and 7 television pictures - Preliminary analysis. 24 p4384 A69-43195

## YOUNG, C. G.

Glass lasers. 05 p0772 A69-16227

Recent advances in glass lasers. 11 p1898 A69-25043

Glass lasers. 21 p3734 A69-38407

## YOUNG, D. M. L.

Corrections to total electron content data for changes in layer height. 05 p0816 A69-16281

The use of f sub 0 F2 data to remove the ambiguity in total electron content data. 16 p2779 A69-32196

## YOUNG, D. W.

Electronic terminal guidance for all-weather VTOL operations. 08 p1348 A69-21064

Design and functional characteristics of a model pressure measuring system. 17 p2947 A69-34023

[AIAA PAPER 68-402] Electronic terminal guidance for all-weather VTOL operations. 22 p3978 A69-39875

## YOUNG, E.

The Orbiting Astronomical Observatory thermal test program. [AIAA PAPER 69-995] 22 p3920 A69-40373

## YOUNG, F. J.

Investigation of a laminated shielding material for audio and microwave frequencies. 09 p1500 A69-22310

The shielding of electromagnetic pulses by use of magnetic materials. 23 p4141 A69-42222

## YOUNG, G.

The applicability of a fracture mechanics-non-destructive testing design criterion for aerospace structures. 21 p3689 A69-38656

Definition of fatigue cracks through nondestructive testing. 23 p4234 A69-42451

## YOUNG, G. A.

Operating experience with NASA/SCAN - A large scale selective announcement service. 21 p3856 A69-39581

## YOUNG, G. Y.

Laminated adhesive bonded structures. 09 p1526 A69-22318

## YOUNG, H.

Toward an algebraic theory of the analysis and testing of digital networks. [AAS PAPER 69-236] 24 p4288 A69-42811

## YOUNG, H. L.

Uptake and incorporation of exogenous leucine in bacterial cells under high oxygen tension. 03 p0369 A69-13433

Physiological and biochemical changes in bacterial cells exposed to oxygen. 15 p2556 A69-31045

## YOUNG, J. A.

Comparative properties of some time differencing schemes for linear and nonlinear oscillations. 13 p2290 A69-27636

## YOUNG, J. C.

Fast neutron spectrum for a subcritical section of a homogeneous super 235 U-polyethylene critical assembly. 18 p3170 A69-34313

## YOUNG, J. F.

Visible CW parametric oscillator. 02 p0260 A69-12701

Nonlinear optical properties of Ba sub 2 NaNb sub 5 O sub 15 in the tetragonal phase. 09 p1515 A69-21354

## YOUNG, J. G.

BWRA experience in the welding of aluminum-zinc-magnesium alloys. 01 p0086 A69-10536

Weldable aluminium alloys and welding processes for aircraft structures. [SBAC PAPER 4] 20 p3549 A69-37445

## YOUNG, J. R.

Outgassing characteristics of stainless steel and aluminum with different surface treatments. 22 p3958 A69-41215

## YOUNG, L.

Proposal for a microwave rotation sensor. 04 p0573 A69-14342

The characteristic impedance of waveguide. 06 p0897 A69-17490

Minimizing the highest dissipation loss of Chebyshev filters over a specified minimum pass band. 10 p1665 A69-23875

Development of fatigue test loading spectra for certification of helicopters. 17 p2945 A69-33515

[AHS PAPER 373] Advances in Microwaves. Volume 4. 23 p4135 A69-41352

## YOUNG, L. C.

Lectures on the Calculus of Variations and Optimal Control Theory. 13 p2289 A69-28054

## YOUNG, L. R.

Motion cues in man-vehicle control. 10 p1650 A69-23879

- The current status of vestibular system models.  
21 p3662 A69-38728
- On adaptive manual control.  
24 p4274 A69-43022
- Vestibular models.  
24 p4276 A69-43274
- YOUNG, M. C.  
Nanosecond pulse Doppler radar for the investigation of turbulent wakes in shock tunnels and ballistic ranges.  
19 p3293 A69-35743
- YOUNG, P. C.  
The use of linear regression and related procedures for the identification of dynamic processes.  
06 p0901 A69-17360
- YOUNG, P. J.  
Cosmic-ray heavy-nucleus enders at various atmospheric depths.  
17 p3025 A69-34219
- YOUNG, R. A.  
Influence of localized umklapp scattering on the galvanomagnetic properties of metals.  
03 p0493 A69-14240
- Charge production in collisions between hydrogen atoms, and He, Ne, Ar, and H sub 2 in the energy range from 50-1000 ev.  
13 p2302 A69-27459
- Stripping and ionization in low-energy collisions of H on O sub 2 and N sub 2.  
16 p2814 A69-31773
- YOUNG, R. C.  
Interaction of Li and O with radiation-produced defects in Si.  
09 p1554 A69-21337
- YOUNG, R. E.  
A digital modified discrete Fourier transform Doppler radar processor.  
03 p0389 A69-13196
- YOUNG, R. H.  
Double perturbation theory applied to frequency-dependent polarizabilities. I.  
03 p0472 A69-13314
- Double perturbation theory applied to frequency-dependent polarizabilities. II.  
03 p0472 A69-13315
- YOUNG, R. J.  
Effect of high energy X-irradiation of the head on cerebral blood flow and blood pressure in the Macaca mulatta.  
03 p0376 A69-14075
- YOUNG, R. M.  
X-ray and extreme ultraviolet /1-400 angstrom units/ spectroscopy of the sun, from OSO-III.  
09 p1578 A69-22169
- Observations of the solar flare soft X-ray spectrum and comparison with centimetric radio bursts.  
24 p4371 A69-43609
- YOUNG, R. S.  
Weightlessness and the developing frog egg.  
01 p0017 A69-11084
- The search for life - Planetary evolution.  
02 p0200 A69-12804
- Biological experiments in space.  
14 p2406 A69-29097
- Life detection techniques.  
17 p2912 A69-32970
- Extraterrestrial life detection.  
23 p4213 A69-41623
- YOUNG, R. W.  
Techniques for breadboarding fluidic circuits.  
05 p0705 A69-16009
- The jet beam deflection amplifier.  
10 p1638 A69-23554
- On estimating noisiness of aircraft sounds.  
13 p2216 A69-28660
- YOUNG, S. G.  
Effect of temperature and pressure on cavitation damage to a cobalt base alloy in sodium.  
18 p3157 A69-35184
- YOUNG, T. Y.  
A recursive method for signal resolution.  
08 p1270 A69-19854
- YOUNG, W.  
Density-matrix methods and time dependence of order parameter in superconductors.  
22 p3994 A69-41053
- YOUNG, W. A.  
Respiratory gas exchange in exercise during helium-oxygen breathing.  
17 p2910 A69-33751
- Respiratory gas exchange in exercise during helium-oxygen breathing.  
22 p3891 A69-40221
- YOUNG, W. C.  
Dry-lubricant films.  
15 p2642 A69-30328
- An automated process for three-dimensional photoelastic analysis.  
15 p2609 A69-30680
- YOUNGBLUTH, O., JR.  
Photomultiplier area sensitivity measurements using a multicolor display technique.  
19 p3305 A69-35724
- YOUNGER, P. F.  
Photoelectric scanner observations of CH Cygni for August 3, 1967.  
13 p2338 A69-27557
- YOUNGLOVE, B. A.  
Measurements of the dielectric constant of saturated liquid oxygen.  
[NAS-NRC PAPER D-3] 22 p3998 A69-40620
- YOUNT, R. E.  
Fusion welding of age-hardenable superalloys.  
[SAE PAPER 690102] 09 p1503 A69-21558
- Joining techniques for thorium dispersion strengthened materials.  
09 p1509 A69-22342
- YOUSEF, A. M.  
Collective interactions in a fast thetatron discharge.  
09 p1552 A69-22046
- YOUSHAU, R. A.  
The magnetic tape recording of ultrasonic test information.  
07 p1117 A69-19697
- YOUTZ, E. M.  
Transient response of a differentially heated rotating annulus.  
07 p1126 A69-19039
- YOVANOVICH, M.  
The determination of the transverse thermal resistance of an isotropic homogeneous cylinder of revolution with mixed boundary conditions /Sur la determination de la resistance thermique transversale d'un cylindre de revolution homogene isotrope avec des conditions aux limites mixtes/.  
12 p2190 A69-26292
- YOVANOVICH, M. M.  
Thermal contact conductance.  
13 p2378 A69-28338
- YU, C. P.  
Effect of wall conductances on convective magnetohydrodynamic channel flow.  
09 p1545 A69-21441
- YU, E. Y.  
Optimal station-keeping at collinear points.  
[AIAA PAPER 69-906] 21 p3807 A69-39338
- Attitude stability of an orbiting vehicle containing a gyrostat.  
22 p4037 A69-40555
- YU, F. T. S.  
Coherent optical target recognition through a randomly turbulent medium.  
11 p1894 A69-24470
- Five-point analysis of nonlinear holograms.  
12 p2090 A69-26255
- YU, S. P.  
Direct series operation of Gunn effect diodes with above critical n sub 0 L products.  
04 p0573 A69-14340
- YU, W.-M.  
The growth and decay of resonant plasma oscillations excited by a small pulsed dipole.  
16 p2817 A69-31641
- YU, Y.  
Analytic solutions of limit cycles in a feedback-regulated converter system with hysteresis.  
06 p0904 A69-17941
- DC to DC converter regulated by a constant-frequency duty-cycle generator.  
09 p1442 A69-22454
- YU, Y.-Y.  
Thermally induced vibration and flutter of a flexible boom.  
[AIAA PAPER 69-21] 06 p0869 A69-18144
- Thermally induced vibration and flutter of a flexible boom.  
22 p4043 A69-40545
- Nonlinear vibrations of shallow spherical shells.  
[ASME PAPER 69-APMW-6] 24 p4402 A69-43107
- YUAN, C.  
On the spiral structure of disk galaxies. III - Comparison with observations.  
10 p1786 A69-24109
- YUAN, F. F. F.  
Simultaneous geomagnetic and cosmic noise absorption pulsations near geomagnetic noon.  
15 p2597 A69-30697
- YUAN, S.  
Design considerations for an integrated 1.8-GHz parametric amplifier.  
01 p0040 A69-10193
- YUAN, S. W.  
Jet circulation control airfoil for VTOL rotors.  
[AIAA PAPER 69-741] 18 p3084 A69-34406
- YUDA, K.  
Reflection of electromagnetic waves at the boundary surface between media moving relative to each other and parallel to both the boundary plane of incidence.  
15 p2568 A69-30796
- YUDIN, O.  
Radio bursts associated with active region McMath No. 8362 of July 1966.  
10 p1764 A69-23742
- YUE, A. S.  
Controlled microstructures of Al-CuAl sub 2 eutectic composites and their compressive properties.  
06 p0942 A69-17227
- Tensile properties of unidirectionally solidified Al-CuAl sub 2 eutectic composites.  
10 p1708 A69-22995
- YUEN, P. C.  
Corrections to total electron content data for changes in layer height.  
05 p0816 A69-16281
- The use of f sub 0 F2 data to remove the ambiguity in total electron content data.  
16 p2779 A69-32196
- YUI, A. K.-M.  
Growth rate of the relativistic fire-hose instability.  
24 p4376 A69-42660
- YUKAWA, S.  
Fracture design practices for rotating equipment.  
17 p3060 A69-33561
- YUKI, A.  
Selective formation of particles by binding of pyrimidine polynucleotides or purine polynucleotides with lysine-rich or arginine-rich proteinoids.  
23 p4113 A69-41509
- YUKI, T.  
A photoelastic study of the stress distribution of box girders. II.  
15 p2705 A69-30419
- YUKON, S. P.  
The effect of an ionized medium on the polarization of synchrotron radiation.  
04 p0648 A69-14420
- YUKUTAKE, T.  
The drift velocity of the geomagnetic secular variation.  
12 p2077 A69-27111
- YUN, S. S.  
Measurement of surface-residual stress by non-destructive methods.  
15 p2631 A69-31511
- YUNG, S. C.  
Free-convection heat transfer from an inclined heated flat plate in air.  
13 p2375 A69-27794
- YURENKA, S.  
An automatic fabrication process for composite aircraft structures.  
09 p1507 A69-22329
- Investigation of boron filament wound aircraft landing gears.  
09 p1508 A69-22340
- YURK, J. F.  
Extending the thermal range of RTV adhesive bonds.  
19 p3321 A69-35563



## YURUGI, R.

## YURUGI, R.

Method of estimating whole-body cold tolerance and its relation to seasonal variation of BMR.  
06 p0876 A69-18024

Alteration of manual performance during sustained acceleration exposure by means of hand-writing pressure measurement in man.  
06 p0884 A69-18030

Effect of abrupt deceleration on the heart rate in monkeys.  
06 p0876 A69-18031

Hypothermia induced by hypoxia in the rat.  
13 p2210 A69-28532

## YUSTEIN, D.

An optical spectrum analyzer for power spectral density measurements.  
08 p1317 A69-21086

## YUSUF, T.

High-Q N-path filter using diode bridges.  
07 p1089 A69-18249

## YUSUFF, S.

Propagation laws of fatigue cracks.  
12 p2187 A69-26846

## YUTZY, J.

Background density and the photographic detection of faint stars.  
12 p2153 A69-25811

## YZERMAN, H.

Filters in aerial photography.  
22 p3948 A69-40986

## Z

## ZAAR, E. I.

On the interrelations between ultraviolet and visible light during their simultaneous action on the cell.  
01 p0017 A69-11085

## ZABBAROV, R.

Hardenability of a porous ShKh-15 steel /Prokalivaemost' poristoi stali ShKh-15/.  
04 p0619 A69-15390

## ZABEGALOV, B. D.

Noise stability of a frequency-modulated-signal receiver with automatic frequency control in the presence of weak noise /O pomekhoustoichivosti priemnika chastotno- modulirovannykh signalov so slediashechi nastroikoi pri slabyykh shumakh/.  
15 p2564 A69-30144

## ZABELIN, A. A.

Interference patterns at large path differences, obtained with a gas laser as the light source.  
12 p2108 A69-26593

## ZABELIN, E. I.

Statistical classification of lunar and Martian annular structures according to their diameters /Statisticheskaya klassifikatsiya kol'tsevykh struktur luny i Marsa po diametram/.  
04 p0658 A69-14959

Statistical classification of ring structures on the moon and Mars and their diameters.  
18 p3197 A69-34722

## ZABELINA, L. G.

Absorption of infrared radiation in n-type gallium phosphide. I - Scattering mechanisms.  
03 p0492 A69-14168

Absorption of infrared radiation in n-type gallium phosphide. II - Photoionization of impurities.  
03 p0492 A69-14169

IR absorption in n-type gallium phosphide.  
19 p3385 A69-36518

## ZABLOTSKY, N. D.

Method of theoretical investigation of externally pressurized gas-lubricated bearings.  
[ASME PAPER 68-LUBS-44]  
13 p2267 A69-27283

## ZABORA, R. F.

Joint concepts for carbon composite structures.  
24 p4323 A69-43426

## ZABOROVSKII, O. R.

High-speed ultrasonic instrument for on-line inspection of welded tube seams.  
18 p3136 A69-34778

## ZABORSZKY, J.

Stochastic optimal control of continuous time systems with unknown gain.  
11 p1860 A69-25442

## ZABOTINSKII, M. E.

Features of energy transfer and dissipation in lumino-phors based on phosphate glasses activated by neodymium /Osobennosti perenosia i dissipatsii energii v lumino-forakh na osnove fosfatnykh stekol, aktivirovannykh neodimom/.  
20 p3552 A69-37017

## ZABUSKY, N. J.

Topics in Nonlinear Physics, Proceedings of the Physics Session of the International School of Nonlinear Mathematics and Physics, Munich, West Germany, June 27- July 15, 1966.  
05 p0792 A69-15767

## ZACHEPTISKII, A. A.

Problem of shielding a radar receiver with a limiter from pulsed noise /K voprosu o zashchishchennosti radiolokatsionnogo priemnika s ogranicheniem ot impul'snykh pomekh/.  
15 p2563 A69-30137

## ZACHMANOGLOU, E. C.

The condition for uniqueness of the Dirichlet problem for hyperbolic equations in cylindrical domains.  
12 p2124 A69-26932

## ZACHOS, T. H.

Resonant modes of GaAs junction lasers.  
12 p2108 A69-26637

Optimum stripe width for continuous operation of GaAs junction lasers.  
16 p2796 A69-31698

Resonant modes of GaAs junction lasers. II - High-injection level.  
19 p3338 A69-36691

## ZACKAY, V. F.

Preliminary toughness results on TRIP steel.  
08 p1330 A69-20012

Interactions between crack growth and strain-induced transformation.  
10 p1709 A69-23074

High strength steels - Present status and future prospects.  
12 p2115 A69-26829

Structural modes of fracture.  
13 p2274 A69-27226

Structure and properties of dynamically strain aged Fe-Cr-C and Fe-Mo-C alloys.  
13 p2276 A69-27403

## ZADRO, M. B.

An ideal isotropic bidimensional filter and its application in the interpretation of gravity anomalies.  
21 p3724 A69-39246

## ZADVORNYI, A. S.

Neutron activation analysis determination of oxygen in beryllium.  
20 p3544 A69-37811

## ZAEHRINGER, J.

Rare gases in stony meteorites.  
05 p0826 A69-16440

K/Ar-age determinations of iron meteorites. V.  
19 p3412 A69-36106

Mass spectrometer measurements of positive ions and neutral gas between 100 and 233 km above Andøya, Norway.  
21 p3702 A69-38354

## ZAEZDNYI, A. M.

Ways of developing radio systems for transmission of discrete information /Puti razvitiia sistem radiosvazi dlia peredachi diskretnoi informatsii/.  
01 p0031 A69-10778

Development of digital data radio transmission systems.  
10 p1653 A69-23107

## ZAFRAN, S.

Colloid microthruster test stand.  
[AIAA PAPER 69-314]  
09 p1478 A69-22380

## ZAGATIN, V. I.

Radiometer with a paramagnetic quantum amplifier for spectral measurements in the 8 mm range /Radiometr dlia spektral'nykh izmerenii v diapazone 8 mm s kvantovym paramagnitnym usilitelem/.  
04 p0597 A69-14851

Radiometer for spectral measurements in the 8-mm range with a quantum paramagnetic amplifier.  
15 p2607 A69-30243

## ZAGORODNIKOV, S. P.

Charged particle density measurement in nonstationary plasma through Stark broadening of the H beta Balmer line.  
03 p0481 A69-14145

Measurement of nonstationary-plasma density from the Stark broadening of the H sub beta Balmer line /Izmerenie plotnosti nestatsionarnoi plazmy po shtarkovskomu ushireniu bal'merovskoi linii H sub beta/.  
14 p2497 A69-29790

## ZAGORSKAIA, T. N.

The zirconium corner in the zirconium-iron-niobium phase diagram /Tsirkoniyevoi ugol diagrammy sostoiانيا tsirkonii-zhelezo-niobii/.  
02 p0263 A69-11851

The zirconium corner of the zirconium-niobium-chromium system phase diagram /Tsirkoniyevoi ugol diagrammy sostoiانيا sistemy tsirkonii-niobii-khrom/.  
02 p0264 A69-11861

## ZAGOURI, A.

Design of a device for inserting equipment into a space simulation chamber /Realisation d'un introducteur de materiels dans un caisson de simulation spatiale/.  
[ONERA-TP-676]  
20 p3510 A69-37405

## ZAGREBELNAIA, L. I.

Theoretical investigation of the gas parameters of reactive burners operating with fuel gas and compressed air /Teoreticheskoe issledovanie parametrov gaza reaktivnykh gorelok, rabotaiushchikh na goruchem gaze i szhatom vozdukh/.  
04 p0684 A69-14487

## ZAGRODZINSKI, J. A.

A microwave measurement system for the 4-mm band /Mikrofalowy uklad pomiarowy dla pasma 4 mm/.  
15 p2610 A69-30709

## ZAGULIAEVA, V. A.

Height distribution of lunar tides in the ionosphere near the magnetic equator.  
05 p0756 A69-16401

Drifts in the F2 region in the IGY and IQSY periods /Dreify v oblasti F2 v periody MGG i MGSS/.  
14 p2443 A69-29866

Height fluctuations of lunar tidal variations in Ashkhabad /Vysootnye izmeneniia lunnykh prilivnykh kolebanii v Ashkhabade/.  
14 p2444 A69-29871

## ZAGUSTIN, E. A.

Stability of an elastic arch in a rigid cavity.  
03 p0524 A69-13066

## ZAHALKA, L. B.

Satellite communications - The present and future.  
06 p0890 A69-17860

Computer simulation plays key role in design of satellite earth stations.  
16 p2750 A69-31852

## ZAHARIA, C.

Evaluation of stress concentrations in metals by measuring physical surface parameters.  
21 p3747 A69-39326

## ZAHLER, C. W.

Guide to development and use of electronic computer programs - Programming.  
22 p3903 A69-40138

Guide to development and use of electronic computer programs - Coding.  
22 p3903 A69-40139

## ZAHN, P.

Geometry-independent optimization of thermoelectric converter systems /Geometrienuabhaengige Optimierung thermoelektrischer Wandlerysteme/.  
18 p3093 A69-34782

## ZAICHENKO, IU. P.

Improving the convergence and increasing the accuracy of stochastic approximation in determining the numerical parameters of a system.  
09 p1461 A69-21857

Dispersion method of arbitrary /spontaneous/ decomposition of an image space into compact sets /images/. II /Dispersiini metod dovil'nogo /spontanogo/ rozbittia prostoru zobrazhen' na kompaktni mnozhini /obrazzi/. II/.  
11 p1859 A69-24964

## ZAIDEL, A. N.

Stroboscopic method of studying vibrations /Strobo-golograficheskii metod izucheniia vibratsii/.  
02 p0251 A69-12561

Holography and cine-holography of rapidly occurring processes /Holografie und Kinoholografie schnell ablaufender Prozesse/.  
12 p2087 A69-26172

Plasma diagnostics by holography /Review/.  
12 p2094 A69-26707

Optical investigations of a laser spark /Opticheskie issledovaniia lazernoi iskry/.  
14 p2461 A69-29779

- Holographic strobe method for studying vibrations.  
15 p2608 A69-30258
- Two-wavelength holography of a laser spark.  
16 p2789 A69-31771
- MAIDELMAN, R. L.**  
The influence of the form of tangential vibrations of blades on their damping power /Vlianie form tangent-sial'nykh kolebaniy lopatok na ikh dempfiruiushchiu sposobnost'/.  
17 p3065 A69-33935
- MAIDINS, C. S.**  
Experimental investigation of the stellar nuclear reaction super 12 C plus super 12 C at low energies.  
20 p3612 A69-38164
- MAIKA, V. V.**  
Field geometry and structure in ruby and neodymium lasers with inclined external mirrors.  
09 p1520 A69-22663
- MAIKIN, P. N.**  
Direct methods of solving problems of optimal control.  
18 p3164 A69-34706
- MAINAGABDINOVA, R. F.**  
Certain geophysical effects observed in Noril'sk during polar aurorae /Nekotorye geofizicheskie iavleniia, nabludaemye v Noril'ske vo vremia poliarnykh siiani'/.  
02 p0239 A69-11694
- Some geophysical phenomena observed at Noril'sk during auroral displays.  
13 p2258 A69-28725
- MAININGER, K. H.**  
Preparation, optical and dielectric properties of vapor-deposited niobium oxide thin films.  
[ECS PAPER 17] 08 p1372 A69-20365
- Designing MOS systems for radiation environments.  
15 p2577 A69-30595
- Surface-state density from high frequency capacitance measurements.  
16 p2827 A69-32556
- Radiation resistance of Al sub 2 O sub 3 MOS devices.  
17 p2935 A69-32888
- Reduction of radiation sensitivity in MOS structures by aluminum doping of silicon dioxide.  
20 p3584 A69-38070
- MAITSEV, A. A.**  
Low-frequency waves in a DC discharge plasma /Nizkochastotnye volny v plazme razriada postoiannogo toka/.  
13 p2316 A69-28584
- Effect of discharge fluctuations on the laser radiation output /Vlianie fluktuatsii v razriade na vykhod lazer-nogo izlucheniia/.  
19 p3338 A69-36605
- MAITSEV, A. B.**  
Computation of the directional characteristic of electrooptical goniometric system.  
14 p2420 A69-29332
- MAITSEV, A. M.**  
Operation of Aircraft Roller Bearings /Ekspluatatsiia Aviatsonnykh Podshipnikov Kacheniiia/.  
04 p0606 A69-14936
- MAITSEV, A. N.**  
Variability of S sub q -variations /Izmenchivost' S sub q -variatsii/.  
09 p1486 A69-21549
- Reference level for field readings in the calculation of S sub q variations /Ob urovne otscheta polia pri vychislenii S sub q -variatsii/.  
09 p1575 A69-21551
- Variability of S sub q variations.  
16 p2784 A69-32544
- Reference field level in the computation of S sub q variations.  
16 p2851 A69-32546
- Quiet solar-diurnal variations of the geomagnetic field during the IGY. IV - High-latitude variations /Spokoynie solnechno-sutochnye variatsii geomagnit-nogo polia v period MGG. IV - Variatsii v vysokikh shirotakh/.  
17 p2964 A69-33960
- MAITSEV, B. D.**  
The MOS transistor as an element of amplifier circuits /MOP-TRANZISTOR kak element usilitel'nykh skhem/.  
18 p3109 A69-35161
- MAITSEV, I. U. A.**  
Polarization errors in phase-type direction finding.  
04 p0561 A69-15404
- The question of resorting to a geometrical-optics approximation in the electrodynamics of inhomogeneous anisotropic media /K voprosu o perekhode k priblizheniiu geometricheskoi optiki v elektrodinamike neodnorodnykh anizotropnykh sred/.  
07 p1076 A69-18519
- MAITSEV, I. U. I.**  
Intensity fluctuations of He-Ne laser radiation at a wavelength of 0.63  $\mu$  /Fluktuatsii intensivnosti izlucheniia He-Ne lazera na volne 0,63  $\mu$ /.  
08 p1325 A69-20431
- Frequency fluctuations of a gas laser and the determination of its natural spectral line width /Fluktuatsii chastoty gazovogo lazera i opredelenie estestvennoi shiriny ego spektral'noi linii/.  
08 p1326 A69-20540
- Frequency stabilization in a He plus Ne laser by using low-frequency oscillations of its intensity /Stabilizatsiia chastoty He plus Ne-lazera s ispol'zovaniem nizkochastotnykh kolebaniy ego intensivnosti/.  
21 p3738 A69-39078
- MAITSEV, R. O.**  
Electromagnetic properties of superconductors with overlapping bands.  
05 p0810 A69-16802
- MAITSEV, S. G.**  
Structure of a supersonic flow of a conducting gas in a transverse magnetic field when drawing the induced EMF and investigation of the current-voltage characteristics /Struktura sverkhzvukovogo potoka provodiashchego gaza v poperechnom magnitnom pole pri s'eme induktivirovannoi EDS i issledovanie vol'tam-pernykh kharakteristik/.  
10 p1737 A69-23469
- MAITSEV, V. I.**  
Sensitivity of leak detection at low pressures and concentrations of probe gases.  
24 p4296 A69-42656
- MAITSEV, V. K.**  
Lattice heat conductivity of Mg sub 2 Si- Mg sub 2 Sn, Mg sub 2 Ge- Mg sub 2 Sn, and Mg sub 2 Si- Mg sub 2 Ge solid solutions /Reshetochnaia teploprovodnost' tverdykh rastvorov Mg sub 2 Si-Mg sub 2 Sn, Mg sub 2 Ge-Mg sub 2 Sn i Mg sub 2 Si- Mg sub 2 Ge/.  
16 p2824 A69-31567
- MAITSEV, V. M.**  
Coupled magnetoacoustic waves in a conducting paramagnetic fluid /Sviazannye magnitovzrukove volny v provodiashchei paramagnitnoi zhidkosti/.  
14 p2492 A69-29609
- Onset of turbulence in a boundary layer on a thermally decomposing surface /Vozniknovenie turbulent-nosti v pogranichnom sloe na termicheski razlagaiushcheisya poverkhnosti/.  
16 p2878 A69-31951
- MAITSEV, V. N.**  
Optical Fourier transforms and holography.  
06 p0928 A69-17890
- MAITSEV, V. P.**  
Absorption measurement in the ionosphere by the A5 method /Izmerenie pogloscheniia v ionosfere metodom A5/.  
17 p2968 A69-33994
- MAITSEV, V. V.**  
Parameters for shock waves generating type II solar radio bursts, and for coronal magnetic fields.  
11 p1945 A69-24243
- Magnetic models of pulsars and rotating neutron stars.  
12 p2172 A69-27168
- Soliton structure in rarefied plasma /O strukture solitonov v razrezhnoii plazme/.  
17 p2922 A69-33696
- Coherent mechanisms of radio emission and magnetic models of pulsars.  
22 p4030 A69-40905
- MAITSEVA, G. V.**  
Optical variability of the nucleus of the Seyfert galaxy NGC 4151 /Opticheskaiia peremennost' iadra seifertovskoe galaktiki NGC 4151/.  
15 p2686 A69-30536
- UBV photometry of Seyfert galaxies /UBV-fotometriia galaktik Seiferta/.  
15 p2686 A69-30537
- MAITSEVA, S. A.**  
Polar storms and the development of DR currents /Poliarnye buri i razvitiie DR- tokov/.  
02 p0238 A69-11672
- Diurnal energy variation of auroral electrons /Sutochnyi khod energii avoral'nykh elektronov/.  
10 p1687 A69-23915
- Development of a polar storm.  
12 p2071 A69-26694
- Polar storms and the development of DR- currents.  
13 p2257 A69-28703
- Complex investigation of the polar ionosphere /Kompleksnoe issledovanie poliarnoi ionosfery/.  
17 p2963 A69-33950
- U-shaped types of polar auroras /U-Obraznye formy poliarnykh siiani'/.  
17 p2963 A69-33952
- MAITSEFF, E. M.**  
Advanced Space Experiments, American Astronautical Society, Conference, Ann Arbor, Mich., September 16-18, 1968, Proceedings.  
18 p3192 A69-34359
- MAITSEFF, J. B.**  
Oceanographic applications of remote sensing.  
12 p2075 A69-26997
- MAJAC, L. J.**  
Dynamics of an explosive hot spot.  
[WSCI PAPER 68-53] 07 p1240 A69-18322
- MAK, I. U. A.**  
Determination of the sequence of performing independent operations on parallel machines /Opredelenie poriadka vypolneniia nezavisimyykh operatsii na paralel'nykh mashinakh/.  
16 p2763 A69-31626
- MAKATOV, L. P.**  
High-temperature electron component in a beam plasma interaction.  
09 p1553 A69-22657
- MAKER, T. A.**  
Dynamic thermal shock in hollow spheres.  
07 p1236 A69-19471
- MAKHANOV, A. L.**  
Method of calculating the thermal stability of power transistors /Metod rascheta teplovyykh soprotivlenii moshchnykh tranzistorov/.  
12 p2042 A69-26881
- MAKHARCHENIA, B. P.**  
Diamagnetic excitons in semiconductors /Diamagnitnye eksitony v poluprovodnikakh/.  
11 p1936 A69-24640
- MAKHARCHENKO, I. G.**  
Anisotropy of Young's modulus in cold-rolled titanium /Anizotropiia modulia lunga v kholodnokatannom titane/.  
01 p0094 A69-10431
- Changes of the Young's modulus of titanium sheet during annealing /Izmenenie modulia lunga listovogo titana pri otzhige/.  
11 p1904 A69-24899
- MAKHARCHENKO, V. F.**  
Rocket Aerodynamics /Aerodinamika Raket/.  
17 p2889 A69-32829
- MAKHARENKOV, V. F.**  
Measurements of the Fourier spectra of two-dimensional functions /Izmerenie spektrov Fur'e dvumernykh funktsii/.  
10 p1725 A69-23301
- MAKHARIN, F. M.**  
Kinematics of Inertial Navigation Systems /Kinematika Inertsial'nykh Sistem Navigatsii/.  
02 p0278 A69-11793
- MAKHARIN, M. I.**  
Kinematics of Inertial Navigation Systems /Kinematika Inertsial'nykh Sistem Navigatsii/.  
02 p0278 A69-11793
- MAKHAROV, A. I.**  
Radiation and temperature stability of ferrites with a rectangular hysteresis characteristic /Radiatsionnaia i temperaturnaia ustoiichivost' ferritov s priamougol'noi gisterezisnoi kharakteristikoi/.  
12 p2142 A69-26259
- MAKHAROV, A. L.**  
Application of the method of simplified equivalents to the calculation of the thermal stability of complex transistorized structures /Primenenie metoda uproshchennykh ekvivalentov dlia rascheta teplovyykh soprotivlenii slozhnykh tranzistornykh struktur/.  
12 p2042 A69-26882
- MAKHAROV, A. M.**  
Deformation of high melting point metals and alloys in vacuum at high temperatures /Deformatsiia tugoplavkikh metallov i spлавov v vakuume pri vysokikh temperaturakh/.  
18 p3155 A69-34651
- MAKHAROV, B. M.**  
Erosion-resistant coatings of tungsten carbide and tungsten carbide with cobalt /Eroziionnostoikiie



## ZAKHAROV, E. D.

pokrytiia iz karbida vol'frama i karbida vol'frama s kobaltom/.  
20 p3561 A69-37373

## ZAKHAROV, E. D.

C-curves of the decomposition of a supersaturated solid solution in duraluminum- type alloys /S-krivye raspada peryeshchennogo tverdogo rastvora v splavakh tipa duralumin/.  
01 p0094 A69-10396

## ZAKHAROV, G. K.

Optimal linear fast responses with two groups of control parameters /Lineinye optimal'nye bystrodeistviia s dvumia grupami upravliushchikh parametrov/.  
09 p1473 A69-21787

## ZAKHAROV, I. S.

Electrical and photoelectrical properties of heterojunctions prepared by germanium epitaxy on gallium arsenide bases /Elektricheskie i fotoelektricheskie svoistva geteroperekhodov, poluchennykh epitaksiei germaniia na podlozhkakh arsenida galliia/.  
15 p2667 A69-30078

## ZAKHAROV, I. U. E.

Graph-analytical method of investigating the stability of hydraulic actuators with a nonlinear load /Grafoanaliticheskii sposob issledovaniia ustoiichivosti gidroprivodov s nelineinoi nagruzkoi/.  
21 p3650 A69-39716

## ZAKHAROV, I. U. P.

Laboratory clamp-type diode holders for injection lasers and electroluminescent diodes.  
03 p0435 A69-12985

Bistable operation of a GaAs semiconductor laser.  
03 p0441 A69-14175

Investigation of spike regime operation of the injection laser on gallium arsenide.  
19 p3337 A69-36535

Investigation of the performance of a GaAs semiconductor injection laser in the pulsed mode of operation /Issledovaniia raboty izuchetskinnogo PKG na GaAs v rezhime pul'satsii izlucheniia/.  
22 p3963 A69-40603

## ZAKHAROV, I. U. S.

Power spectrum analyzer with a zero counter for weak periodic signals obscured by noise /Analizator spektra moshchnosti so schetchikom nulei dlia slabnykh periodicheskikh signalov, skrytykh shumom/.  
15 p2579 A69-30945

## ZAKHAROV, M. F.

Section pressing from titanium alloys /Pressovanie profilov iz titanovykh splavov/.  
07 p1164 A69-18788

## ZAKHAROV, M. I.

Study of the characteristics of absorbing metallic films in the field of a standing wave at optical frequencies /Izuchenie kharakteristik pogloschchaiushchikh metallicheskikh plenok v pole stoiachei volny opticheskikh chastot/.  
12 p2104 A69-26024

## ZAKHAROV, S. D.

Experiments on the observation of neutron emission at a focus of high-power laser radiation on a lithium deuteride surface. [IEEE PAPER 0-11]  
07 p1153 A69-19072

## ZAKHAROV, S. M.

Measurement of the time variation of the temperature of the plasma of a laser fiber by means of its X-radiation.  
18 p3154 A69-35496

## ZAKHAROV, V. E.

Second harmonic generation by an electromagnetic wave incident on an inhomogeneous plasma /Generatsiia vtoroi harmoniki pri padenii elektromagnitnoi volny na neodnorodnuiu plazmu/.  
10 p1653 A69-23133

## ZAKHAROV, V. I.

Electron microscopic study of the nature of low-temperature strengthening and of its effect on high-temperature creep of nickel /Elektronomikroskopicheskoe issledovanie prirody nizkotermperturnogo uprochneniia i ego vliianiia na vysokotermperturnuiu polzuchest' nikeli/.  
18 p3157 A69-35254

## ZAKHAROV, V. V.

Effect of natural aging of an alloy of the Al-Zn-Mg system on subsequent artificial aging at different temperatures /Vliianie estestvennogo starenii splava sistemy Al-Zn-Mg na posleduiushchee iskusstvennoe starenie pri razlichnykh temperaturakh/.  
11 p1905 A69-24921

## ZAKHAROVA, I. N.

Correlation of changes in EEG and food-procuring reflex of rabbits during increasing hypoxia.  
02 p0197 A69-11492

Influence of high oxygen concentration on the conditioned reflex activity and biological activity of certain cortical areas and subcortical formations of rabbits /Vliianie vysokikh kontsentratsii kisloroda na uslovnorefleksionnuiu deiatel'nost' i bioelektricheskuu aktivnost' nekotorykh oblastei kory i podkorkovykh obrazovaniu krolikov/.  
07 p1065 A69-18976

Effect of high oxygen concentrations on conditioned reflexes and bioelectrical activity of certain areas of the cortex and subcortical formations of rabbits.  
20 p3479 A69-38224

## ZAKHAROVA, M. I.

Dislocation redistribution during annealing and deformation of single crystals of high-melting-point metals of group VI A /Pereraspredeleniie dislokatsii pri otzhige i deformatsii v monokristallakh tugoplavkikh metallov VIA grupy/.  
07 p1159 A69-18534

## ZAKHAROVA, V. P.

Recording of low-energy protons on a scintillation counter /Registratsiia protonov mal'kikh energii stsintiliatsionnym schetchikom/.  
18 p3138 A69-35255

## ZAKHEIM, J.

Multichannel telemetry for magnetically suspended models /Registrierung multivoices pour maquettes en suspension magnetique/.  
02 p0226 A69-11623

## ZAKHIDOV, R. A.

Computation and optimization of the thermal regime in concentrator-type solar devices.  
09 p1442 A69-22534

## ZAKHRABOVA, F. A.

Preparation of homogeneous solid solutions of indium and gallium antimonides.  
10 p1745 A69-23331

## ZAKI, K.

Numerical solutions of electromagnetic boundary value problems by means of the asymptotic anticipation method.  
04 p0560 A69-15214

Numerical methods for the analysis of scattering from nonplanar periodic structures.  
17 p2929 A69-33880

## ZAKIN, J. L.

Exploratory drag reduction studies in non-polar soap systems.  
17 p2951 A69-33253

## ZAKIROV, R. A.

Estimate of the reliability of automatically controlled dynamic systems /K otsenke bezopasnosti raboty avtomaticheskii upravliaemykh dinamicheskikh sistem/.  
17 p3001 A69-33144

## ZAKKAY, V.

Laminar boundary layer with constant wall shear stress.  
02 p0233 A69-12535

An experimental investigation of hypersonic turbulent boundary layers in adverse pressure gradient. [AIAA PAPER 68-44]  
04 p0588 A69-14716

A review of problems in the nonreacting turbulent far wake.  
13 p2200 A69-28500

An experimental investigation of the near wake in an axisymmetric supersonic flow with and without base injection.  
14 p2389 A69-29017

Numerical solution of several steady wake flows of the mixed supersonic/subsonic type by a time-dependent method, and comparison with experimental data. [AIAA PAPER 69-649]  
17 p2892 A69-33468

## ZAKLIAZMINSKII, L. A.

Analysis of the phenomenon of the reflection of a shock wave from a current-carrying grid /Analiz iavleniia otrazheniia udarnoi volny ot tokovoi reshetki/.  
07 p1120 A69-18998

Design of an MHD generator with an electric conductivity waveform at small magnetic Reynolds numbers /Raschet MGD-generatorsa s volnoi elektroprovodnosti pri malom magnitnom chisle Reynold'sa/.  
14 p2405 A69-29911

## ZAKOVLEVSKII, O. V.

An investigation of the turbulent jets of different gases in a general stream.  
13 p2200 A69-28501

## ZAKREVSKII, S. V.

Investigation of the mechanism of two-photon absorption and stimulated emission of CdS-CdSe mixed crystals /Issledovanie mekhanizma dvukhfotonnogo pogloscheniia i vynuzhdenno izlucheniia smeshannykh kristallov CdS-CdSe/.  
03 p0438 A69-13052

Increasing the efficiency of laser output from homogeneous semiconductors by use of amplification and increase of resonator Q.  
05 p0777 A69-16378

Investigation of the luminescence of ZnS sub x - CdS sub 1 sub minus x crystals excited by a ruby laser /Issledovanie svecheniia kristallov ZnS sub x - CdS sub 1 sub minus x pri vozbuzhdenii rubinovym lazerom/.  
19 p3331 A69-35866

Investigation of the laser emission of CdS sub x - CdSe sub 1 sub minus x crystals under two-photon excitation /Issledovanie lazernoi generatsii kristallov CdS sub x - CdSe sub 1 sub minus x pri ikh dvukhfotonnom vozbuzhdenii/.  
19 p3332 A69-35867

## ZAKRZHEVSKII, E. B.

Clinical aspects of interplanetary flights /Klinicheskie aspekty mezhplanetnykh poletov/.  
02 p0202 A69-12121

## ZAKRZHEVSKII, M. V.

Forced oscillations of an unbalanced rotor on elastic bearings with nonlinear characteristics /Vynuzhdennye kolebaniia neuravnoveshennogo rotora na uprugikh oporakh s nelineinoi kharakteristikoi/.  
01 p0170 A69-10824

## ZALESSKII, I. E.

Modulation of the radiation of a GaAs injection laser at a frequency of 1 GHz /Modulatsiia izlucheniia inzhetskionnogo lazera iz GaAs na chastote 1 Guts/.  
12 p2105 A69-26031

## ZALESSKII, I. U. G.

Resonant heating of the electrons in a beam plasma discharge /Rezonansnyi nagrev elektronov v puchkovoplazmennom razriade/.  
09 p1549 A69-22016

## ZALETAEV, V. M.

Calculation of the effect of the earth's own radiation on a space vehicle /K raschetu sobstvennogo izlucheniia zemli na kosmicheskii apparat/.  
05 p0824 A69-16053

Calculating the intrinsic radiation from the earth on the surface of a space vehicle.  
20 p3606 A69-37963

## ZALITIS, V. A.

Tunnel-diode slideback sampling gate /Avtokompensatsionnyi stroboskopicheskii preobrazovatel' na tunnel'nom diode/.  
13 p2236 A69-28538

## ZALIUBOVSKII, I. I.

Observation of radio emission from extensive air showers with an array of half-wave antennas at the Moscow University installation.  
13 p2332 A69-28407

Some aspects of the use of a half-wave antenna to investigate radio emission from extensive air showers.  
13 p2332 A69-28408

## ZALIVA, V. I.

Rotation of plane of polarization of electromagnetic waves in a semiconductor situated in a strong electric field.  
06 p0978 A69-16902

## ZALM, P.

Thermionic cathodes.  
09 p1470 A69-22700

## ZALMANZON, L. A.

Theoretical and experimental investigation of fluidic elements.  
02 p0195 A69-12074

Problems in the investigation of pneumatic elements which make use of the properties of boundary layer flows /Zadachi issledovaniia elementov pnevmoniki, v kotorykh ispol'zuiutsia svoistva pristenochnykh techenii/.  
05 p0705 A69-16016

## ZAMALIN, V. M.

The optical properties of hot air. I - Basic processes and spectral properties /Opticheskie svoistva goraiachego vozdukh. I - Osnovnye protsessy i spektral'nye kharakteristiki/.  
07 p1185 A69-19166

The optical properties of hot air. II - Integral characteristics between 4000 and 20,000 K /Opticheskie svoistva goraiachego vozdukh. II - Integral'nye kharakteristiki 4000-20 000 deg K/.  
07 p1185 A69-19167

- LAMBAKHIDZE, D. V.**  
Influence of temperature and anisotropy on the elastic constants of oriented fiberglass-reinforced plastics /Vliianie temperatury i anizotropii na uprugie konstanty orientirovannykh stekloplastikov/.  
08 p1335 A69-20330
- LAMBUTO, M.**  
A verification of holographic measurement of vibration.  
01 p0082 A69-10853
- LAMES, G.**  
Logarithmic variation criteria for the stability of systems with time-varying gains.  
03 p0409 A69-13073  
Stability of systems with sector nonlinearities - a comparison of various inequalities.  
11 p1860 A69-25450
- LAMIATIN, I. A.**  
Signal identification against a background of noise by a human operator and an automation /Otozhdestvlenie signalov na fone shuma chelovekom-operatorom i avtomatom/.  
23 p4109 A69-41955
- LAMIATINA, N. A.**  
Diffusion parameters of a turbulent jet.  
21 p3696 A69-39091
- LAMKOV, V. N.**  
The use of oxygen-free fluxes for fusion welding titanium alloys.  
06 p0930 A69-17093  
Formation of pores in fusion welds in titanium.  
24 p4319 A69-42885
- LAMOLODCHIKOV, G. V.**  
Reliability of Semiconductor Radio Devices of Flight Vehicles /Nadezhnost' poluprovodnikovyykh radioustroystv letatel'nykh apparatov/.  
18 p3108 A69-34350
- LAMORSKII, A. D.**  
Cellular cloud patterns according to data from meteorological earth satellites /Lacheistye sistemy oblakov po dannym meteorologicheskikh sputnikov zemli/.  
14 p2473 A69-29727
- LAMOTRINSKII, V. A.**  
Investigation of wideband impedance decoupling structures /Issledovanie shirokopolosnykh impedantsnykh razv'yazvayushchikh struktur/.  
23 p4138 A69-41938
- ZAMPAGLIONE, V.**  
Alternative description of the nonlinear interaction of a plasma with a weak electron beam.  
10 p1729 A69-23407  
Influence of plasma non-homogeneities on the magneto-acoustic instabilities.  
10 p1734 A69-23459  
Effective conductivity of an MHD plasma in a turbulent state.  
10 p1735 A69-23460  
Optimization of Faraday generators with nonequilibrium ionization.  
24 p4256 A69-43682
- ZAMRIK, S. Y.**  
Low-cycle fatigue of 7075-T651 aluminum alloy in biaxial bending.  
01 p0093 A69-10116
- ZAMULA, G. N.**  
Temperature and thermal stress distribution in a cylindrical shell filled with liquid.  
04 p0682 A69-15413
- ZANCHETTI, A.**  
Reflex activity of single preganglionic sympathetic fibres during coronary occlusion.  
23 p4084 A69-41460
- ZANDBERGEN, P. J.**  
An application of the n-strip method of integral relations for analyzing the flow around a circular cone.  
20 p3460 A69-38128
- ZANDER, R.**  
Interpretation of the character of the O sub 2-dissociation curve. I - The effect of the solubility coefficient on the plot of the O sub 2-dissociation curve /Zur Interpretation des O sub 2-Bindungskurvenverlaufes. I - Der Einfluss des Loslichkeitskoeffizienten auf die Darstellung der O sub 2-Bindungskurve/.  
23 p4095 A69-42086
- ZANDER, T. A.**  
History, application, and performance of the AN/ASN-24/V digital computer set.  
17 p2933 A69-34061
- ZANDI, I.**  
Turbulent flow of non-Newtonian suspensions in pipes.  
09 p1481 A69-21929
- ZANFAGNA, B.**  
Measurement of the density gradient of a plasma column /Mesure du gradient de densite d'une colonne de plasma/.  
01 p0128 A69-10390
- ZANINI, A.**  
Application of the failure distribution functions to the Eyring ageing model.  
08 p1322 A69-21104
- ZANKL, G.**  
Experimental studies of a hydrogen arc in an axially parallel magnetic field. I, II /Experimentelle Untersuchung an einem Wasserstoff-Lichtbogen im achsenparallelen Magnetfeld. I, II/.  
07 p1189 A69-18489  
Measurement of the thermal conductivity in a magnetic field.  
12 p2133 A69-25765
- ZAPALAC, J. J.**  
The application of techniques of artificial intelligence to control system design.  
04 p0581 A69-14568
- ZAPESOCHNYI, I. P.**  
Ionization of alkali metal atoms by slow electrons.  
15 p2655 A69-30726
- ZAPLESHKO, N. N.**  
Oxidation process of alloys of the system niobium-tantalum at 550-1050 deg.  
14 p2464 A69-29650
- ZAPP, H. R.**  
Measurements of magneto-elastic constants by microwave techniques.  
02 p0299 A69-12243
- ZARANDI, L.**  
Carrier-frequency monitoring amplifier with automatic bridge tuning /Automatikus hidhangolasu vivotekvencias merocerosito/.  
22 p3915 A69-40937
- ZARCOVA, L.**  
High pressure caesium thermionic converter with a cold region.  
14 p2397 A69-29176
- ZARDECKI, A.**  
Coherence of electromagnetic field and the radiation source structure.  
09 p1540 A69-22083
- ZARE, R. N.**  
Spectroscopy of K sub 2 using laser-induced fluorescence.  
05 p0771 A69-15907  
On probing cometary magnetic fields by measuring depolarization of resonance fluorescence.  
09 p1603 A69-22234  
Comparison of calculated oscillator strengths for Si III.  
15 p2656 A69-31158
- ZAREMBA, J. G.**  
Implementation of a semi-active gravity gradient controller.  
07 p1227 A69-18334
- ZARENIN, I. U. G.**  
Digital systems for automation of machine part design and fabrication /Tsifrovye sistemy dlia avtomatizatsii proektirovaniia i izgotovleniia detali/.  
23 p4169 A69-41952
- ZARESKI, D.**  
Numerical solution of plane elasticity problems by calculation of the displacement vector /Resolution numerique des problemes d'elasticite plane par le calcul du vecteur deplacement/.  
19 p3441 A69-36719
- ZARET, M. M.**  
Effect of microwaves on the eye.  
10 p1648 A69-23185
- ZARETSKY, E. V.**  
EHD lubrication.  
01 p0088 A69-11324  
Contact conformity effects on spinning torque and friction. [ASME PAPER 68-LUB-10]  
15 p2628 A69-30901  
Elastohydrodynamic lubrication of a spinning ball in a nonconforming groove. [ASME PAPER 69-LUBS-11]  
18 p3140 A69-34381
- Effect of oxygen concentration on synthetic paraffin and advanced ester base lubricants in bearing tests at 400 deg and 450 deg F.  
18 p3149 A69-35177
- ZARGARIANTS, M. N.**  
Investigation of the optical homogeneity of gallium arsenide.  
04 p0644 A69-15266
- ZARGAROVA, M. I.**  
Thermoelectric properties of the GeTe-GaTe system /Termoelektricheskie svoystva sistemy GeTe-GaTe/.  
01 p0138 A69-10404
- ZARGHAMEE, M. S.**  
Minimum weight design of enclosed antennas.  
18 p3211 A69-34341
- ZARKO, V. E.**  
Ignition of ballistite powder by incandescent wires /Zazhiganie ballistitnogo porokha nakalennymi provolochkami/.  
02 p0354 A69-12668
- ZAROSSKII, R. I.**  
On the stability of the solution of a functional equation of dynamic programming.  
06 p0949 A69-17889
- ZARUBIN, A. G.**  
Problem of unsteady free convection /Zadacha o nestatsionarnoi svobodnoi konveksii/.  
09 p1621 A69-21792
- ZARUBIN, L. I.**  
Study of structural imperfections of CdSb crystals /Issledovanie strukturnykh nesovershenstv kristallov CdSb/.  
11 p1938 A69-25030
- ZARUBIN, P. V.**  
Conductivity of CdS under the action of an intense electron beam /Provodimost' CdS pod deistviem intensivnogo puchka elektronov/.  
13 p2318 A69-27886
- ZARUDNYI, L. B.**  
Some characteristics of the thermal mineralization of biocomplex wastes in a closed system.  
10 p1649 A69-23504
- ZARUTSKII, V. A.**  
Annular stresses in cylindrical shells reinforced by longitudinal ribs /O kol'tsevykh napriazheniakh v tsilindricheskikh obolochkakh, usilennykh prodol'nymi rebrami/.  
05 p0841 A69-16208  
Investigation of the carrying capacity of rib-reinforced cylindrical shells /Issledovanie nesushchei sposobnosti rebristykh tsilindricheskikh obolochek/.  
11 p1985 A69-25177  
Influence of the parameters of rib-reinforced cylindrical shells on their stress-strain state /O vlianii parametrov rebristykh tsilindricheskikh obolochek na ikh napriazhenno-deformirovannoe sostoianie/.  
23 p4229 A69-42001
- ZASED, V. S.**  
Impedance of the base region of a semiconducting diode resulting from the Dember effect /Impedans bazovoi oblasti poluprovodnikovogo dioda, obuslovlennyyi Dember-effektom/.  
01 p0137 A69-10260  
Differential capacitance of the n-n heterojunction /Differentsial'naia emkost' n-n-geteroperekhoda/.  
09 p1555 A69-21476  
Base impedance of a semiconductor diode due to the Dember effect.  
09 p1559 A69-22653  
Differential capacitance of an n-n heterojunction.  
15 p2669 A69-30721
- ZASIMCHUK, E. E.**  
Effect of molybdenum on the kinetic recrystallization parameters of deformed nickel /Vliianie molibdena na kineticheskie parametry rekristallizatsii deformirovannogo nikelia/.  
12 p2114 A69-26454  
Influence of metal purity on the kinetic parameters of recrystallization of a strongly deformed single crystal of nickel or nickel-molybdenum alloy /Vliianie chistoty metalla na kineticheskie parametry rekristallizatsii sil'no deformirovannogo monokristalla nikelia i ego splava s molibdenom/.  
18 p3159 A69-35449
- ZASIMCHUK, O. E.**  
Application of X-ray diffraction topography to a study of deformed single-crystal structures /Zastosovniat' rentgenovskoi difraktsionnoi topografi pri vivcheni deformovaniikh struktur u monokristalakh/.  
21 p3742 A69-38583



## ZASLAVSKAIA, N. I.

## ZASLAVSKAIA, N. I.

X-ray analysis of the meteoric dust at the site of the fall of the Tunguska and Sikhote-Alin meteorites /Rentgenometricheskoe issledovanie meteornoii pylis mesta padeniia tungusskogo i sikhote-alinskogo meteoritov/.

01 p0160 A69-11383

## ZASLAVSKII, B. I.

On a class of exact particular solutions of the equations of transonic gas flows.

07 p1118 A69-18698

## ZASLAVSKII, M. M.

The Hamilton principle for a model of an inviscid compressible fluid in Euler coordinates /Printsip Gamil'tona dlia modeli neviazkoii szhimaemoi zhidkosti v eileroevykh koordinatakh/.

11 p1875 A69-25483

## ZASLAVSKII, S. I. A.

A mathematical model of purposeful behavior /Matematicheskaia model' tselestremennogo povedeniia/.

19 p3260 A69-35895

## ZASLAWSKY, M.

The effect of biaxial stress on the creep properties of polymethyl methacrylate.

10 p1717 A69-24216

## ZASORIN, I. P.

Insulating materials of thermoemission converters.

14 p2467 A69-29214

## ZASOVIN, E. A.

Electrooptical effect in GaAs crystals at lambda equals 10.6 mu /Elektroopticheskiy effekt v kristallakh GaAs na lambda equals 10.6 mk/.

06 p0934 A69-17466

The electro-optic effect in GaAs crystals at r equals 10.6 um.

20 p3555 A69-37949

## ZASTENKER, G. N.

Determination of the solar wind temperature for an anisotropic distribution function /Ob opredelenii temperatury solnechnogo vetra pri anizotropnoi funktsii raspredeleniia/.

19 p3396 A69-36631

## ZATSEPIN, I. A.

Luminance of shock wave fronts in certain gases.

03 p0415 A69-13411

## ZATURSKA, M. B.

Thermal stability of a hot inert gas bubble in a cool reactive liquid.

11 p1998 A69-24475

## ZATYKA, H.

Investigations of the tightness of adhesive pressure-welded joints and of the stability of their fabrication process /Badania szczelnosci zlaczyn klejonozgrzewanych i stabilnosci procesu ich wykonawstwa/.

17 p2978 A69-32949

Welding research at the Institute of Aviation /Prace w dziedzinie spawalnictwa w instytucie lotnictwa/.

17 p2979 A69-33688

## ZAUDERER, B.

Discharge structure and stability of a nonequilibrium plasma in a magnetohydrodynamic channel.

08 p1366 A69-20788

Formation of a quasi-neutral plasma in a hydrodynamic channel flow.

10 p1737 A69-23467

A large-scale non-equilibrium MHD generator.

10 p1637 A69-23472

Shock waves.

21 p3778 A69-39482

## ZAUTKIN, V. V.

Parallel pumping in RbNIF sub 3 /Parallel'naia podkuchka v RbNIF sub 3/.

21 p3781 A69-39069

## ZAVADOVSKII, A. F.

Influence of high-altitude mountain acclimatization on the tolerance of the organism to environmental effects /Vliianie vysokogornoii akklimatizatsii na ustoiчивost' organizma k vozeistviu faktorov vneshnei sredy/.

13 p2212 A69-28623

## ZAVADSKA, G. I. A.

Changes in the adrenocortical function during variations in the functional state of the hypothalamus /Zmena funktsii kori nadnirkovykh zaloz pri raznomu funktsional'nomu stani gipotalamusa/.

22 p3888 A69-41272

## ZAVADSKII, A. I. U.

Flow calculation for the case of asymmetric supersonic gas flow past an ellipsoid with a frontal area of separation /Raschet techeniia pri nesimmetrichnom obtekanii ellipsoida s perednei sryvnoi zonoii sverkhzvukovym potokom gaza/.

06 p0858 A69-17337

## ZAVALA, A.

Component-total task relationships - Simple and sequential practice effects.

02 p2023 A69-12214

## ZAVALISHIN, N. V.

Control processes in the respiration system /O protsessakh upravleniia v dykhatel'noi sisteme/.

01 p0019 A69-10209

Control processes in the respiratory system.

14 p2408 A69-28745

## ZAVETOVA, M.

Electronic properties of amorphous CdGeAs sub 2.

19 p3390 A69-36557

## ZAVIAKOV, I. U. G.

Photoelectric emission from GaAs /Fotoelektronna emisiia arsenidu galliia/.

14 p2504 A69-28993

## ZAVIALOV, A. S.

Surface wave antenna in the form of a directional coupler /Antenna poverkhnostnykh voln v vide napravlennoogo otvetvitiia/.

23 p4139 A69-41946

## ZAVIALOV, E.

Artificial gravitation on spacecraft /Iskusstvennaia gravitatsiia na kosmicheskikh korabliakh/.

16 p2746 A69-31930

## ZAVITSANOS, P. D.

Evaporation processes by laser beams.

09 p1519 A69-22476

## ZAVODNI, J.

Effects of increased oxygen pressure on adrenal steroid and catecholamine release.

23 p4087 A69-41791

## ZAVOLZHENSKII, M. V.

Oscillations of the journal in a bearing /Kolebaniia shipa v podshpivnike/.

09 p1514 A69-22712

## ZAWADZKI, A.

Origin of muon-poor extensive air showers.

12 p2152 A69-27099

Lateral distribution of the muon component in the central region of extensive air showers.

15 p2677 A69-31481

## ZAZHIGIN, A. S.

Theoretical investigation of the process of obtaining profiles by drawing a metal strip through an instrumental draw plate with a continuously sliding application of the compressing force in the course of angle shaping /Teoreticheskoe issledovanie protsessa polucheniia profilov pri protigiivanii cherez instrumental'nuui fil'eru metallicheskoii lenty s neprevirno skol'ziashchim prilozheniem szhimaushchego usiliia v protsessie formirovaniia ugla/.

03 p0432 A69-12962

## ZAZIMKO, V. A.

Effect of turbulence on heat transfer in a supersonic jet with plane obstacle.

07 p1243 A69-19738

## ZBIGNIEW, E.

Haemodynamic and bioelectric disturbances in striated muscles of rats subjected to associated influence of acceleration forces and hypokinesia.

24 p4268 A69-43409

## ZDANSKY, K.

Microwave quantum generators and amplifiers - Masery /Mikrovlnne kvantove generatory a zesilovace - Masery/.

18 p3153 A69-35407

## ZDRAVKOVICH, M. M.

Spiral vortex sheet /Spiral'nyi vrtlozhni sloj/.

21 p3692 A69-38610

Smoke observations of the formation of a Karman vortex street.

21 p3644 A69-38687

## ZDRAZIL, A.

Synthesizing linear transistor models /Synteza linearnich modelu tranzistoru/.

03 p0404 A69-13596

## ZDUNKOWSKI, W. G.

Light scattering constants for a water cloud.

23 p4184 A69-42177

## ZEAU, Y.

Balloon observations of the far-infrared spectrum and brightness temperature of the sun.

04 p0652 A69-14419

Atmospheric transmission and solar spectroscopy in the submillimeter wavelength range /Transmission atmospherique et spectroscopie solaire en ondes submillimetriques/.

21 p3796 A69-38472

## ZEBAL, G. P.

Applications of capillary microscopy in exobiological research.

01 p0021 A69-11092

## ZEBROWSKI, M.

Atmospheric turbulence /Turbulencja w atmosferze/.

11 p1911 A69-24527

Flight in turbulence according to onboard instrument readings /Lot w turbulencji wedlug wskazan przyrzadzow pokladowych/.

16 p2734 A69-32007

Flight in turbulence according to onboard instrument readings. II /Lot w turbulencji wedlug wskazan przyrzadzow pokladowych. II/.

17 p2903 A69-34214

## ZECH, R. G.

Pulsed laser reflection holograms.

08 p1313 A69-20164

## ZECHER, R. F.

Encapsulation of electrical components utilizing liquid resin molding techniques.

04 p0607 A69-14955

## ZECHMAN, F. W.

Changes in total leg volume during lower body negative pressure.

17 p2908 A69-33171

## ZEE, C.-H.

Trajectories of satellites under the combined influences of low radial thrust and earth oblateness.

16 p2856 A69-32009

## ZEGE, E. P.

Radiative transport in a plane layer, taking into account the nonlinearity in absorption and dispersion /Perenos izlucheniia v ploskom sloe s uchetom nelineinosti v pogloschenii i rasseianii/.

20 p3553 A69-37608

Asymptotic solution of an unsteady transport equation /Asimptoticheskoe reshenie nestatsionarnogo uravneniia perenosu/.

22 p3983 A69-41267

## ZEGERS, L. E.

Common bandwidth transmission of information signals and pseudonoise synchronization waveforms. [IEEE PAPER 67-TP-1173-COM]

10 p1655 A69-23532

## ZEI, D. B.

A MOS-LSI computer-aided design system - Logic and circuit design verification and testing.

17 p2942 A69-34121

## ZEI, D. W.

Simulation of Venus atmospheric entry by earth reentry. [AIAA PAPER 68-1148]

03 p0412 A69-13672

Simulation of Venus atmospheric entry by earth reentry. [AIAA PAPER 68-1148]

24 p4394 A69-43248

## ZEI, H. D.

On the origin of the heavy nuclei.

17 p3009 A69-34190

## ZEHFUSS, H.

A difference method for the Rayleigh boundary layer /Ein Differenzenverfahren fuer die Rayleigh-Grenzschicht/.

18 p3124 A69-35295

## ZEHLIN, H.

Design problems associated with GFRP roving-end-grain structures in rocket combustion chambers /Entwurfsprobleme bei GFK-Roving-End-Grain-Strukturen in Raketenbrennkammern/.

02 p0305 A69-12748

## ZEHME, K.

Behavior of the gamma'-phase of a nickel-aluminum-titanium alloy during creep testing /Das Verhalten der gamma'-Phase einer Nickel-Aluminium-Titan-Legierung unter Kriechbelastung/.

09 p1528 A69-22733

## ZEHNFENNIG, T. F.

Grazing-incidence telescopes for X-ray astronomy.

09 p1501 A69-22688

## EL, D.

- Profiles of the H and K lines of Ca II in disk flares.  
17 p3023 A69-33054

## EIDENBERGS, G.

- GaAs-GaP heterojunctions.  
21 p3779 A69-38424

## EIDLER, G.

- Efficient frequency doubling with a high repetition rate YAG - Nd-giant pulse laser.  
07 p1144 A69-18469
- Pump-power-dependent efficiency in a YAG- Nd super 3 plus laser.  
10 p1705 A69-23814

## EIGER, S. G.

- Single-mode regime in a gas ring laser /Od-nomodoviy rezhim v gazovom kol'tsevom lazere/.  
17 p2982 A69-33632

## EIGLER, W.

- Thin film characterization by electron microprobe and ellipsometry - SiO sub 2 films on silicon.  
10 p1742 A69-22946

## EINALOV, R. A.

- A method of determining the circular orbit of a satellite from three observations with one exact moment of time /Metod opredeleniya krugovoi orbity ISZ po trem nabludeniyam s odnim tochnym momentom vremeni/.  
09 p1589 A69-21373

## EISSIG, G. A.

- Observations of pulsar NP 0527.  
12 p2156 A69-26227

## ZEITMAN, B. B.

- New observations on the substrate specificity of cathepsin C /dipeptidyl aminopeptidase I/ including the degradation of beta-corticotropin and other peptide hormones.  
20 p3473 A69-37577

## ZEITMAN, S. A.

- Dielectric properties of reactively sputtered films of aluminum nitride.  
13 p2322 A69-28013

## ZELAZNY, P.

- Study of various methods of determining the plasma temperature in an MHD-generator duct /Issledovanie razlichnykh metodov opredeleniya temperatury plazmy v kanale MGD-generatora/.  
13 p2309 A69-28023

## ZELAZNY, S. W.

- Turbulent transport coefficients in coflowing streams. [AIAA PAPER 69-682]  
17 p2952 A69-33434

## ZELDOVIC, JA. B.

- X-rays radiation of a neutron star as a result of gas accretion.  
05 p0814 A69-15847

## ZELDOVICH, B. IA.

- Relaxation of a quantum oscillator.  
18 p3152 A69-35126

## ZELDOVICH, IA. B.

- Neutrinos in anisotropic cosmological solutions.  
01 p0123 A69-10348
- Rotation and pulsation of a gravitating gas cloud /Vrashchenie i pul'satsii gravitiruiushchego oblaka gaza/.  
02 p0317 A69-11955

- Stability of bodies of revolution relative to radial disturbances /Ob ustoychivosti tel vrashcheniya ot-nositel'no radial'nykh vozmushcheniy/.  
02 p0317 A69-11978

- The corona, oscillations, and radiation of a pulsar /Korona pul'sara, ego kolebaniya i izluchenie/.  
03 p0505 A69-13077

- Relativistic Astrophysics /Relativistskaia Astrofizika/.  
07 p1216 A69-18960

- Bose condensation and shock waves in a photon spectrum /Boze-kondensatsiya i udarnye volny v spektre fotonov/.  
09 p1546 A69-21574

- Phase equilibrium and dynamics of a gas undergoing volume heating and cooling /Fazovoe ravновesie i dinamika gaza pri ob'emnom nagrevanii i okhlazhdenii/.  
10 p1760 A69-23136

- Hot universe /Goriachaia vseleennaia/.  
11 p1953 A69-24352

- Hot cosmological model, formation of galaxies, inhomogeneities, and superdense bodies /Goriachaia kosmologicheskaya model', obrazovanie galaktik, neodnorodnosti i sverkhplotnye tela/.  
12 p2167 A69-27047

## Elements of Gasdynamics and the Classical Theory of Shock Waves.

13 p2246 A69-27639

## The corona of a pulsar - Its oscillation and radiation.

14 p2515 A69-28759

## The stability of solids of revolution with respect to radial perturbations.

15 p2680 A69-30260

## X-ray emission accompanying gas accretion by a neutron star /Rentgenovskoe izluchenie pri akkretsii gaza na neitronnuu zvezdu/.

15 p2686 A69-30535

## Recombination of hydrogen in the hot model of the universe.

15 p2690 A69-30734

## Shock waves and radiation.

18 p3230 A69-34926

## The cosmological constant and the theory of elementary particles.

20 p3606 A69-38013

## The hot universe /Goriachaia vseleennaia/.

21 p3795 A69-38401

## The interaction of matter and radiation in a hot-model universe.

21 p3797 A69-38536

## Equation of state of a neutral material and its fluctuations /Uravneniye sostoiianiya neutral'nogo veshchestva i fluktuatsii/.

21 p3771 A69-38995

## Motion of the ionization front with allowance for outflow of ionized gas /Dvizhenie ionizatsionnogo fronta s uchedom ottoka ionizovannogo gaza/.

21 p3771 A69-38997

## Distortions of the background radiation spectrum.

21 p3815 A69-39612

## Theory of the gravitational stability of a rotating cylinder /Teoriya gravitatsionnoi ustoychivosti vrashchayushchegosia tsilindra/.

22 p4032 A69-41017

## An open universe/ques/

23 p4221 A69-42391

## ZELENGUR, A. A.

- Displacement in a turbulent boundary layer on a previous surface during supercritical injection /Otsesnenie v turbulentnom pogranichnom sloe na pronitsaemoi poverkhnosti pri sverkhkriticheskom vduve/.  
13 p2245 A69-27385

## ZELENKA, J. S.

- Multiple-index holographic contouring.  
23 p4164 A69-41628

## ZELENKOV, V. E.

- Procedure of measuring radio-wave absorption in the ionosphere under rugged-terrain conditions /Otsesnenie izmereniya pogloshcheniya radiovoln v ionosfere v usloviyakh peresechennoi mestnosti/.  
02 p0207 A69-11669

- Altitude dependence of the drift of ionospheric discontinuities /Vysotnaia zavisimost' dreifa neodnorodnosti v ionosfere/.  
10 p1686 A69-23911

- Method of measuring radio wave absorption in the ionosphere in broken terrain.  
13 p2224 A69-28700

- Method of determining the parameters of ionospheric ionization inhomogeneities /Metodika opredeleniya parametrov neodnorodnosti ionizatsii ionosfery/.  
14 p2444 A69-29872

- Absorption measurement in the ionosphere by the A5 method /Izmerenie pogloshcheniya v ionosfere metodom A5/.  
17 p2968 A69-33994

## ZELENKOVA, I. A.

- Procedure of measuring radio-wave absorption in the ionosphere under rugged-terrain conditions /K metodike izmereniya pogloshcheniya radiovoln v ionosfere v usloviyakh peresechennoi mestnosti/.  
02 p0207 A69-11669

- Method of measuring radio wave absorption in the ionosphere in broken terrain.  
13 p2224 A69-28700

- Absorption measurement in the ionosphere by the A5 method /Izmerenie pogloshcheniya v ionosfere metodom A5/.  
17 p2968 A69-33994

## ZELENOVA, V. D.

- Investigation of the diffusion saturation of molybdenum and its alloys by nitrogen /Issledovanie difuzionnogo насыshcheniya molibdena i ego spлавov azotom/.  
18 p3158 A69-35288

## ZELENSKII, V. F.

- Sintered beryllium-base compositions. I.  
10 p1711 A69-23334

- Sintered beryllium-base compositions. II - Corrosion properties and possibilities of raising corrosion resistance in humid atmospheres.  
10 p1711 A69-23338

## ZELETENKEVICH, A. A.

- Equations of motion of the sensor element of a vertical gyroscope with electromagnetic compensation /Ob uravneniyakh dvizheniya chuvstvitel'nogo elementa girovertikal' s elektromagnitnoi korektsiei/.  
11 p1881 A69-24561

- Investigation of the influence of a maneuvering plant on a vertical gyro with electromagnet compensation /Issledovanie vliyaniya manevrirovaniya ob'ekta girovertikal' s elektromagnitnoi korektsiei/.  
23 p4163 A69-41553

## ZELEVINSKAIA, N. G.

- Comparison of experimental data on showers with energies of hundreds of Bev with characteristics of Monte-Carlo-simulated showers.  
13 p2330 A69-28374

## ZELEZNIK, F. J.

- Calculation of complex chemical equilibria.  
01 p0023 A69-10588

## ZELINSKAIA, M. R.

- Absolute measurements of radio-emission intensity of the discrete sources Cassiopeia- A and Cygnus-A at 30-60 cm wavelengths /Absolyutnye izmereniya intensivnosti radioizlucheniya diskretnykh istochnikov Kassiopieia-A i Lebed'-A na volnakh 30-60 cm/.  
19 p3428 A69-36876

## ZELISKO, T.

- On the transverse flexure of infinite strip containing infinite row of semicircular notches.  
05 p0842 A69-16643

- Stresses in an infinite strip under tension or bending and containing an infinite row of semicircular notches.  
05 p0843 A69-16644

## ZELIUKOVA, R. V.

- Investigation of the limiting damping characteristics of oscillations /Issledovanie predel'nykh kharakteristik zatukhaniya pri kolebaniyakh/.  
17 p3065 A69-33923

## ZELKIN, E. G.

- Antenna array synthesis by a differential equation technique /Sintez antenykh reshetok metodom differentsial'nogo uravneniya/.  
21 p3682 A69-39125

## ZELLER, A. F.

- Relation of kind of background flying to tactical pilots' accident potential.  
23 p4103 A69-41685

## ZELLER, E.

- Luminescence and chemical effects of solar protons incident upon the lunar surface.  
22 p4012 A69-40089

## ZELLER, E. J.

- The surface geochemistry of solid bodies in space.  
08 p1407 A69-20935
- Formation of organic compounds in solid bodies by solar and cosmic proton bombardment.  
19 p3414 A69-36114

## ZELLMER, D. L.

- Elastic deformation and the coefficient of friction.  
19 p3329 A69-36494

## ZELLMER, R.

- Proton-irradiation effects in primates.  
03 p0373 A69-13496

## ZEMAN, J. L.

- A comment on complex structural response to random vibrations.  
23 p4227 A69-41877

## ZEMANICK, P. P.

- Local heat transfer downstream of abrupt circular channel expansion. [ASME PAPER 69-HT-35]  
24 p4411 A69-43532

## ZEMBRZUSKI, M.

- Nonsteady oxygen diffusion in the coal-grain combustion process /O nieustaloney dyfuzji tlenu w procesie spalania ziarna węglaowego/.  
04 p0687 A69-15167

- Fundamentals of the theory of coal-grain combustion at a finite coefficient of air excess /Podstawy teorii spalania ziarna węglaowego przy skonczonej wartosci wspolczynnika nadmiaru powietrza/.  
04 p0687 A69-15168

## ZEMLIANSKII, B. A.

- Effect of the shape of the nose on hypersonic flow past thin blunt bodies at an angle of attack /Vliyaniya formy noska na giperzvukovoe obtekanie tonkikh prutiplennykh tel pod uglom ataki/.  
19 p3239 A69-36402



## ZEMPEL, R. E.

## ZEMPEL, R. E.

Experimental observation of transition of the hyper-sonic boundary layer.  
[AIAA PAPER 68-39] 09 p1482 A69-21943

## ZEMSKII, S. V.

Diffusion during high-temperature exposure of protective coatings on molybdenum /O diffuzii pri vysokotemperaturnoi sluzhbe zashchitnykh pokrytii na molibdene/. 19 p3345 A69-36156

## ZEMSKOV, G. G. V.

Structure and phase composition of silicide layers in niobium. 20 p3563 A69-37820

## ZEMSKOV, G. V.

Surface alloying of ZhS6-K alloy by three elements /Poverkhnostnoe legirovanie splava ZhS6-K tremia elementami/. 19 p3345 A69-36157

Heat resistance of ZhS6-K alloy subjected to multicomponent diffusion saturation /Zharostoiost' splava ZhS6-K posle mnogokomponentnogo diffuzionnogo nasyshcheniia/. 19 p3345 A69-36159

Silicon carbide coatings on graphite /Pokrytiia iz karbida kremniia na grafite/. 20 p3566 A69-37368

## ZEMSKOV, V. M.

Influence of high oxygen concentrations on animal organisms /Vliianie povyshennykh koncentratsii kisloroda na organizm zhivotnykh/. 05 p0709 A69-16512

The effect of high oxygen concentrations on the animal organism. 08 p1262 A69-19831

Effects of high oxygen concentrations on animals. 18 p3095 A69-34731

## ZEMTSOV, I. U. K.

Possibility of measuring the electron temperature on the basis of the line intensity ratio of beryllium-like ions /O vozmozhnosti izmereniia elektronnoi temperatury po otношенiiu intensivnosti linii berillipodobnykh ionov/. 14 p2496 A69-29789

## ZEMTSOVA, N. D.

Ageing of Fe-Ni-Ti alloys in the process of the reverse alpha-gamma martensitic transformation. 04 p0613 A69-14558

## ZENIN, A. A.

Measurement of the radiation from flames on a microcalorimeter /Izmerenie izlucheniia plamen mikrokalorimetrom/. 02 p0355 A69-12671

Effect of aluminum on the combustion of ammonium perchlorate and polyformaldehyde /Vliianie aluminia na gorenie perkhlorata ammonia s poliformal'-degidom/. 08 p1375 A69-20338

## ZENKEVICH, V. B.

Explosive magnetohydrodynamic generator with a superconducting magnetic system /Vzryvnoi magnitogidrodinamicheskii generator so sverkhprovodnitsheii magnitnoi sistemoi/. 14 p2393 A69-28911

## ZENKIN, O. V.

Analytical description of shells of complex geometrical shape /Ob analiticheskom opisaniio obolochek slozhnoi geometricheskoi formy/. 23 p4229 A69-41991

## ZENKOV, V. V.

Actinometric instruments on board Soviet meteorological satellites /Aktinometricheskaya apparatura sovetskikh meteorologicheskikh sputnikov zemli/. 06 p0929 A69-17977

## ZERLAUT, G. A.

The role of gaseous adsorption in thermal coatings degradation. [AIAA PAPER 69-1025] 22 p3923 A69-40395

## ZERNIKE, F.

Note on up-converter noise performance. 12 p2029 A69-26329

Accurate laser wavelength measurements in the infrared and far infrared using a Michelson interferometer. 17 p3006 A69-33405

## ZERNOW, L.

Bonding materials - Explosive bonding. [ASME PAPER 69-DE-47] 14 p2454 A69-28849

## ZET, GH.

Investigation of the propagation of Alfvén waves and magnetoacoustic waves in a system with helical symmetry /Studiul propagarii undelor Alfvén si a undelor magnetoacustice in sisteme cu simetrie elicoidală/. 01 p0130 A69-10742

## ZETKOV, G. A.

Zero mass-shift passive damper for the reduction of precession in a rotating space vehicle. 19 p3429 A69-35913

## ZETTLER, R. A.

Shot noise in silicon Schottky barrier diodes. 05 p0734 A69-16564

## ZETTWOOG, P.

Technological aspects of a test stand for MHD /Aspects technologiques et constructifs d'un banc d'essai pour MHD/. 10 p1673 A69-23474

Experimental results of MHD conversion using a rare gas /Resultats d'experiences de conversion MHD a gaz rare/. 10 p1738 A69-23475

## ZETZMANN, H. J.

All-weather landing /Allwetterlandung/. 10 p1722 A69-23698

## ZEVAKINA, R. A.

Ionospheric effect of the first large active region of the sun in the current cycle /March 21-25, 1966/. 03 p0512 A69-13517

Ionospheric disturbances after the proton flare of 7 July 1966. 10 p1684 A69-23784

## ZEVAKINAV, R. A.

Variation of N/h profiles during a positive perturbation /Izmenenie N/h-profiliei vo vremia polozhitel'nogo vozmushcheniia/. 17 p2967 A69-33986

## ZEYFANG, E.

Further investigations on low density Hall accelerators. [AIAA PAPER 69-281] 09 p1562 A69-21229

## ZEYTOUNIAN, R.

Study of an unsteadily developing thermal boundary layer - An incompressible fluid /Etude de la couche limite thermique en evolution instationnaire - Fluide incompressible/. 08 p1304 A69-20754

## ZEYTOUNIAN, R. KH.

Flows with simultaneous natural and forced convection /Ecoulement faisant intervenir a la fois convection naturelle et forcee/. 06 p1030 A69-17095

Calculation of the characteristic coefficients in the method of integral relations /Calcul des coefficients caracteristiques dans la methode des relations integrales/. 06 p0857 A69-17102

Wave phenomena in steady flows of an inviscid laminar fluid. I - Theoretical models /Phenomenes d'ondes dans les ecoulements stationnaires d'un fluide stratifie non visqueux. I - Modeles theoriques/. 19 p3240 A69-36474

## ZGORZELSKI, M.

Reaction rates and energy distributions during ionization and recombination processes in optically-thin plasmas. 10 p1731 A69-23437

## ZHABOTINSKII, M. E.

Liquid lasers /Opticheskie kvantovye generatory na zhidkostiakh/. 11 p1893 A69-24353

A gas laser using atmospheric air /Gazovyi lazer na atmosfernom vozdukh/. 11 p1895 A69-24625

A laser based on CO sub 2 formed chemically in an electrical discharge /Opticheskie kvantovyi generator na khimicheskii obrazovannom v elektricheskoi razriade CO sub 2/. 13 p2274 A69-28585

Energy exchange in uranyl-phosphate liquids and glasses /Peredacha energii v uranil-fosfatnykh zhidkostiakh i steklakh/. 14 p2485 A69-29034

Energy exchange between active centers in glass /Ob omene energii mezhdu aktivnymi tsentrami v stekle/. 15 p2632 A69-30053

## ZHADIN, G. P.

Buckling of the compressor blades of a gas turbine engine during hydraulic pellet jet working and the possibilities of eliminating it /Koroblenie lopatok kompres-

sora GTD pri gidrodobrestruinoi obrabotke i vozmozhnosti ego ustraneniia/. 21 p3731 A69-38879

## ZHADKO, I. P.

Anisotropy of the electrical conductivity in the near-contact area of isotropic semiconductors /Anizotropia elektroprovodnosti u prikontaktnii oblasti izotropnykh napivprovodnikov/. 05 p0808 A69-16216

Anisotropy of electrical conductivity in the vicinity of contacts in isotropic semiconductors. 20 p3584 A69-37786

## ZHADOVSKAIA, S. V.

Certain dynamic characteristics of the vestibular analyzer under the action of Coriolis forces /Nekotorye dinamicheskie pokazateli vestibuliarnogo analizatora pri deistvii uskorennia koriolisa/. 20 p3472 A69-37262

## ZHANABAEV, Z. ZH.

Heat transfer from a sphere in a free flow of finite width /Teplotodacha shara v svobodnom potoke konechnoi shiriny/. 21 p3855 A69-39849

## ZHANDAROV, A. M.

Smoothing and prediction of the orbital elements of artificial earth satellites by means of the stochastic approximation method. 01 p0158 A69-11319

## ZHARII, I. I.

Dirichlet problem for a Karman-type equation /Zadacha Dirikhle dlia uravnenii tipa Karmana/. 01 p0105 A69-10700

Certain problems of stability of a flexible shallow spherical shell /Nekotorye voprosy ustoiichivosti pologoi gibkoi sfericheskoi obolochki/. 11 p1976 A69-24763

## ZHARIKOV, V. I.

Laser frequency shift in gyrotropic crystals /Sdvig chastoty lazera v girotropnykh kristallakh/. 03 p0436 A69-13037

## ZHARIKOVA, G. S.

Man's thermal tolerance - A review of the literature. 10 p1645 A69-23494

## ZHARKOV, A. P.

Optical alignment of lasers with electrooptical Q-modulation. 12 p2107 A69-26589

A laser with an electrooptical quartz Q-modulator. 12 p2108 A69-26591

## ZHARKOV, V. N.

Theory of the figure of rotating planets in hydrostatic equilibrium /Teoria figury gidrostaticheskii ravnovesnykh vrashchaisushchikhsia planet/. 20 p3594 A69-37077

## ZHAROV, A. A.

Surface-barrier gold/gallium arsenide junctions /Poverkhnostno-bar'ernye perekhody zloto-arsenid galliia/. 01 p0138 A69-10432

## ZHAROV, S. G.

Maintenance of functional stability under complex experimental conditions by means of regular physical exercises. 08 p1262 A69-19931

## ZHAVORONKOV, N. M.

Liquid lasers /Opticheskie kvantovye generatory na zhidkostiakh/. 11 p1893 A69-24353

## ZHBAKOVA, A. V.

Aerodynamic characteristics of a plate at an angle of attack in a viscous hypersonic flow /Aerodinamicheskie kharakteristiki plastyiny pod uglom ataki v viazkom giperzvukovom potoke/. 11 p1820 A69-25471

## ZHDAN, V. Z.

Algorithm for calculating structurally orthotropic conical and cylindrical shells /Algoritmy rascheta konstruktivno-ortotropnykh konicheskikh i tsilindricheskikh obolochek/. 23 p4229 A69-42000

## ZHDANOV, G. B.

Concerning the role of isobar production processes in nuclear interactions of approximately 20 Gev protons. 13 p2303 A69-28373

## ZHDANOV, S. M.

Sintered beryllium-base compositions. I. 10 p1711 A69-23334

## ZHANOVA, I. U. Z.

Experimental investigation of the influence of small nitrogen impurities on the electron energy balance in an inert gas /Eksperimental'noe issledovanie vlianiia mal'kikh primesei azota na balans energii elektronov v inertnom gase/.  
10 p1732 A69-23442

## ZHANOVA, V. V.

Thermal properties of lithium niobate crystals.  
03 p0487 A69-13730

## ZHANOVICH, G. M.

Analysis of mixture compaction /Analiz pressovaniia smesi/.  
15 p2641 A69-31182

## ZHEBKOV, V. M.

A directional short-wave antenna for meteor studies /Napravleniia korotkovolnovaia antenna dlia issledovaniia meteorov/.  
17 p2939 A69-33903

## ZHEGULEV, V. S.

Photometric and spectral observations of planets in the range from 8 to 14  $\mu$  /Fotometricheskie i spektral'nye nabludeniia planet v diapazone 8-14  $\mu$ /.  
11 p1956 A69-24395

Photometric and spectroscopic observations of planets in the 8-14  $\mu$  range.  
24 p4390 A69-43785

## ZHELEZNIK, M. B.

Ionizational relaxation behind shock waves in air.  
05 p0746 A69-15891

## ZHELEZNIK, M. M.

Optimization of the directive gain of an antenna array subject to an additional condition /Optimizatsiia knd antennoi reshetki pri dopolnitel'nom uslovii/.  
05 p0728 A69-15652

Optimization of the directive gain of an antenna array with an auxiliary condition.  
16 p2762 A69-32509

## ZHELEZNIKOV, V. A.

Investigation of the characteristics of a CdTe laser with electronic excitation /Issledovanie kharakteristik kvantovogo generatora na CdTe pri elektronnom vzbuzhdenii/.  
13 p2272 A69-27896

## ZHELEZNIKOV, V. V.

Magnetic models of pulsars.  
01 p0149 A69-10269

Kinetic theory of the synchrotron instability of a system or relativistic electrons in plasma.  
04 p0635 A69-14555

Transfer of polarization of radiation in a magnetoactive cosmic plasma.  
05 p0805 A69-16650

On the equation of radiative transfer in a magnetoactive plasma.  
10 p1742 A69-24143

Concerning Fung's letter "Two methods of solving the radiative instability problem of a stream-plasma system in the kinetic regime."  
14 p2502 A69-29960

Coherent mechanisms of radio emission and magnetic models of pulsars.  
22 p4030 A69-40905

## ZHELEZOVSKII, B. E.

Calculation of the coupling constants of waves in a three-frequency parametric TWT amplifier /Raschet koefitsientov svyazi voln v trekhchastotnom parametricheskom LBU-usilitele/.  
11 p1844 A69-24446

## ZHELIKHOVSKAIA, E. N.

Nature of small etch pits in low-dislocation crystals of gallium arsenide /O prirode mal'kikh iamok travleniia v malodislotsionnikh kristallakh arsenida galliia/.  
11 p1937 A69-25029

## ZHELNOROVICH, V. A.

Variational principle and the equations of state for continuous media /Variatsionnyi printsip i uravneniia sostoiannia dlia sploshnykh sred/.  
12 p2131 A69-26972

## ZHELNOV, B. L.

Transverse instability of radiation in a laser /O poperechnoi neustoiichivosti izlucheniia v kvantovom generatore/.  
02 p0258 A69-12642

## ZHERDEV, I. U. V.

Thermooxidative degradation of various heat-resistant organosilicon binder resins.  
17 p2992 A69-33744

## ZHEREBIATEV, I. F.

Simulation of implicit difference schemes /Modelirovanie neiaivnykh raznostnykh skhem/.  
03 p0410 A69-13300

Calculation of temperature fields in multilayer cylindrical bodies /Raschet temperaturnykh polei v mnogosloinykh tsilindricheskikh telakh/.  
21 p3855 A69-39855

## ZHEREBTOSV, G. A.

Certain geophysical effects observed in Noril'sk during polar aurora /Nekotorye geofizicheskie iavleniia, nabludaemye v Noril'ske vo vremia poliarnykh sianii/.  
02 p0239 A69-11694

Some geophysical phenomena observed at Noril'sk during auroral displays.  
13 p2258 A69-28725

## ZHEREBTSOV, V. A.

Theory of a hot diffusion probe.  
02 p0247 A69-11569

## ZHESTKOV, B. E.

Flow mass measurement method for determining the gas stagnation temperature in a transition region /Raskhodnyi metod opredeleniia temperatury tormozheniia gaza v perekhodnoi oblasti/.  
24 p4408 A69-43492

## ZHEVLAKOV, G. N.

Existence of solutions for ordinary nonlinear differential equations with linear boundary conditions /O sushchestvovanii reshenii nelineinykh obyknovennykh differentsial'nykh uravnenii s lineinymi kraevymi usloviiami/.  
04 p0621 A69-14416

## ZHIDOVICH, A. I.

Heat transfer between an arc column and a wall of the discharge chamber of a vortex linear plasmatron /Teploobmen mezhdu dugovym stolbom i stenoi razriadnoi kamery vikhrevoogo lineinogo plazmatrona/.  
01 p0125 A69-10091

Plasmatron with a bilateral outflow and a variable electrode diameter /Plazmatron dvustoronnego istecheniia s peremennym diametrom elektrodov/.  
01 p0125 A69-10102

## ZHIGACHEV, L. I.

Parametric resonance in communicating vessels under variable vertical accelerations /Parametricheskii rezonans v soobshchayushchikhsia sosudakh pri vertikal'nykh peremennykh peregruzkakh/.  
14 p2432 A69-29628

## ZHILIAEV, B. E.

The space spectrum of convective instability.  
11 p1957 A69-24422

Toroidal stages in stellar evolution.  
12 p2173 A69-27174

## ZHILIAEV, I. U. V.

Photoluminescence of n-type epitaxial gallium arsenide films /Fotoluminesentsiia epitaksial'nykh sloev arsenida galliia n-tipa/.  
03 p0488 A69-13887

Photoluminescence of epitaxial n-type gallium arsenide films.  
11 p1939 A69-25688

## ZHILIN, V. G.

Turbulent heat transfer in the flow of an electrically conducting fluid through a circular tube in a longitudinal magnetic field /Teploobmen pri turbulentnom techenii elektroprovodnoi zhidkosti v krugloi trube v prodol'nom magnitnom pole/.  
09 p1621 A69-21590

Effect of a longitudinal magnetic field on velocity profile for turbulent flow in a circular pipe.  
11 p1922 A69-24234

## ZHINZHER, N. I.

Effects of damping on stability of elastic systems subjected to nonconservative forces.  
22 p4040 A69-39981

## ZHIRIAKOV, B. M.

Spectrum of an aluminum plasma excited by laser radiation /Spektr aluminievoy plazmy, vzbuzhdaemoi lazernym izlucheniem/.  
12 p2134 A69-26027

## ZHIRONKIN, A. G.

Certain metabolism characteristics in animals during a prolonged stay in a nitrogen- and helium-diluted hyperoxic atmosphere /Nekotorye pokazateli obmena veshchestv u zhivotnykh pri dlitel'nom prebyvanii v giperoksicheskoi atmosfere s azotom i geliemym razbavleniem/.  
17 p2906 A69-32932

## ZHITKEVICHUS, V.

Photometry of Nova Delphini 1967 /HR Del/ in the UPXYZVS system /Fotometriia Novoi Del'fina 1967 /HR Del/ v sisteme UPXYZVS/.  
19 p3425 A69-36563

## ZHITNIAIA, V. G.

Action of a concentrated force applied to the contour of a circular hole weakening a half-plane /Deistvie sosredotochennoi sily, prilozhennoi k konturu krugovogo otverstiia, oslabliaiushchego poluploskost'/.  
11 p1972 A69-24653

## ZHITNIK, I. A.

Follow-up system for aiming optical equipment at the sun.  
03 p0427 A69-12980

Preliminary results of investigations of solar X-ray emission by means of the satellite "Kosmos-166."  
07 p1210 A69-19614

## ZHIVOTOV, V. K.

Turbulent heating of a plasma in a toroidal system with current /Turbulentnyi nagrev plazmy v toroidal'noi sisteme s tokom/.  
11 p1935 A69-25752

Coupled Fabry-Perot interferometers in the microwave spectral range /Sviazannyye interferometry Fabri-Pero v mikrovolnovoi oblasti spektra/.  
22 p3947 A69-40800

## ZHIVOV, V. S.

Postimpact drift of an asynchronous gyroscope /O posleudarnom ukhode asinkhronnogo giroskopa/.  
19 p3311 A69-36192

## ZHLODKO, A. D.

Ion composition of the polar ionosphere.  
15 p2604 A69-31414

## ZHLUDKO, A. D.

Ion composition of the nighttime ionosphere /Ionnyi sostav nochnoi ionosfery/.  
02 p0239 A69-11686

Ion composition of the nighttime ionosphere.  
13 p2258 A69-28717

## ZHOLKEVSKAIA, S. V.

Dielectric mirrors for parametric light generators /Dielektricheskie zerkala dlia parametricheskikh generatortov sveta/.  
03 p0438 A69-13049

## ZHOLTIKOVA, T. V.

Influence of the conditions of growth in the method of zone melting without a crucible on the orientation, purity and perfection of tantalum single crystals.  
16 p2803 A69-32490

## ZHOLUD, V. V.

Application of X-ray diffraction topography to a study of deformed single-crystal structures /Zastosovnist' rentgeniv'skoi difraktsionnoi topografii pri vivchenii deformirovannykh struktur u monokristalakh/.  
21 p3742 A69-38583

## ZHONGOLOVICH, I. D.

Determination of the position of the earth's center of mass with the aid of satellites /Opredelenie polozheniia tsentra mass zemli s pomoshch'iu iskusstvennykh sputnikov/.  
12 p2068 A69-26425

Parabolic interpolation in a special case /Parabolicheskoe interpolirovanie v odnom chastnom sluchae/.  
12 p2121 A69-26434

## ZHOROV, G. A.

Radiation properties of type Kh18N9T stainless steel with heating in air.  
03 p0453 A69-14157

Influence of oxidation on the emissivity of molybdenum disilicide coatings /Vlianie okisleniia na izluchatel'nuu sposobnost' pokrytii iz disilidsida molibdena/.  
09 p1522 A69-21588

## ZHORZHELIN, I.

Certain results of optical studies of galaxies /Nekotorye rezul'taty opticheskikh issledovaniy galaktik/.  
12 p2170 A69-27063

## ZHOUCK, I. N.

The spectra of discrete radio sources at decametric wavelengths. I, II.  
18 p3200 A69-35134

## ZHOVNER, A. I.

Development of techniques for the production of nickel reinforced with mullite whiskers.  
05 p0782 A69-16794

## ZHUK, I. N.

Anomalies in the spectra of cosmic radioemission sources in the decameter band.  
06 p1004 A69-17538



## ZHUK, V. V.

## ZHUK, V. V.

The approximation of periodic functions by linear summation methods for Fourier series.  
11 p1908 A69-24697

## ZHUHKOVITSKII, E. M.

On the convective instability of a thermal boundary layer.  
07 p1241 A69-18696

## ZHUKOV, A. M.

Creep of EP-376 steel under slowly changing load.  
05 p0782 A69-16692

Plastic strains in the AK6 alloy in the case of simple and complex loading /Plasticheskie deformatsii splava AK6 pri prostom i slozhnom nagruzeniakh/.  
11 p1905 A69-24948

## ZHUKOV, A. P.

Measurements of some neutral components of the Arctic thermosphere.  
21 p3704 A69-38367

## ZHUKOV, E. G.

Reflection spectra of indium arsenide.  
06 p0979 A69-16995

## ZHUKOV, E. M.

Counting circuits with a tunnel diode chain /Schetnye skhemy s tsepkoi diodov/.  
14 p2419 A69-28921

## ZHUKOV, G. P.

International cooperation on the rescue of astronauts.  
06 p1042 A69-17033

On the question of interpretation of the term "peaceful use of outer space" contained in the Space Treaty.  
20 p3635 A69-37106

International cooperation on the rescue of astronauts.  
20 p3637 A69-37116

Tendencies and prospects of the development of space law.  
20 p3639 A69-37131

## ZHUKOV, L. V.

Globular clusters M3 and M5 /Sharovye skopleniia M3 i M5/.  
15 p2688 A69-30561

Correlation-spectral analysis of the periodicities of solar activity /Korrelatsionno-spektral'nyi analiz periodichnosti aktivnosti solntsa/.  
20 p3607 A69-38045

## ZHUKOV, O. P.

High-strength maraging steel N18K9M5T /MS 200/.  
04 p0615 A69-14645

## ZHUKOV, V. B.

Method of advanced potentials and antenna synthesis.  
03 p0408 A69-14131

## ZHUKOV, V. V.

Focusing of ion beams by a plasma lens.  
13 p2307 A69-27658

## ZHUKOVA, L. A.

Mixing of gas jets near a wall.  
21 p3785 A69-39102

## ZHUKOVA, L. I.

Dynamics of the elimination of certain products of metabolism in humans kept in isolation.  
10 p1646 A69-23508

## ZHUKOVA, T. P.

Relationship between auroral absorption and geomagnetic activity.  
12 p2071 A69-26706

## ZHUKOVSKII, V. V.

Spectrum-analytical characteristics of a plasma obtained by means of a laser in regular and quasi-stable regimes of emission /O spektral'no-analiticheskikh osobennostiakh plazmy, poluchennoi s pomoshch'iu OKG v reguliarnom i kvazistatsionarnom rezhimakh generatsii/.  
22 p3964 A69-40793

## ZHULEV, I. U. G.

Efficiency of a heat-removing triangular radiating fin subjected to weak aerodynamic heating /Effektivnost' teplootvodiashego treugol'nogo izluchaiushchego rebra, podverzhennogo slabomu aerodinamicheskomu nagrevu/.  
02 p0354 A69-12490

Efficiency of tubular radiation emitters of cosmic apparatus provided with a meteoric shield.  
05 p0846 A69-15897

Optimal systems for heat removal by radiation /A review/ /Optimal'nye sistemy otvoda tepla izlucheniem /obzor/.  
06 p1033 A69-17600

Study of a radiating system with conical heat removing projections /Issledovanie izluchatel'noi sistemy s konicheskimi teplootvodiaschimi shipami/.  
06 p1033 A69-17603

Radiating power of a screened tube in the presence of heat-conducting cross pieces between the tube and the screen.  
11 p1997 A69-24229

## ZHULIN, I. A.

Filament structure of magnetospheric currents /O voloknistoi strukture tokov v magnitosfere/.  
05 p0753 A69-16049

Magnetic field decay in the group 21034 during the proton flare period of July 1966.  
10 p1766 A69-23759

Filamentary structure of currents in the magnetosphere.  
20 p3532 A69-37958

## ZHULINA, E. M.

Seasonal variations in the position of the auroral absorption zone.  
06 p0920 A69-17728

Cyclic variations of auroral absorption and its relation to magnetic activity /Tsiklicheskie variatsii avroral'nogo pogloscheniia i ego sviaz' s magnitnoi aktivnost'iu/.  
17 p2968 A69-33991

Effect of a ring current on the position of the auroral absorption zone /Vliianie kol'tsevo go toka na polozhenie zony avroral'nogo pogloscheniia/.  
23 p4157 A69-41859

## ZHUMABAEV, B. T.

Ionospheric current systems for some international quiet days.  
03 p0423 A69-13518

## ZHUMARTBAEV, M. T.

Group properties of the equations of adiabatic motion of a medium in relativistic hydrodynamics /Grupovye svoistva uravnenii adiabatcheskogo dvizheniia sredi v relativistskoi gidrodinamike/.  
19 p3301 A69-36843

## ZHUNKOVSKII, G. L.

Vacuum carbidization of transition metals of elements of groups IV and V of the periodic table /Vakuunnaia karbidizatsiia perekhodnykh metallov IV i V grupp periodicheskoi sistemy elementov/.  
04 p0614 A69-14572

Vacuum carbidization of transition metals of groups IV and V.  
15 p2638 A69-30273

## ZHUPAKHIN, K. S.

Radar method of spiral scanning at a constant altitude /Radiolokatsionnyi metod spiral'nogo obzora postoiannoii vysoty/.  
03 p0459 A69-13286

Method for operational estimation of turbulent motions in clouds /O metodike operativnoi otsenki turbulentnykh dvizhenii v oblakakh/.  
03 p0459 A69-13289

## ZHURAKHOVSKII, V. A.

Nonlinear theory of a gyroresonance transverse wave tube /gyro-TWT/ /Neliniinaia teoriia girorezonansnoi lampy poperechnoi volny /giro-LPV/.  
07 p1107 A69-19159

## ZHURAKOVSKII, E. A.

X-ray emission K alpha band of carbon in titanium carbide, diamond, and graphite.  
06 p0946 A69-17545

X-ray emission K sub alpha-band of nitrogen in nitrides of group IV, V, and VI transition metals /Rentgenovskaia emissiionnaia K sub alpha-polosa azota v nitridakh perekhodnykh metallov IV, V i VI grupp/.  
22 p3974 A69-41118

## ZHURAVEL, V. I.

Duk-15TsLAM device for the automatic ultrasonic inspection of tube welds.  
18 p3137 A69-35111

## ZHURAVLEV, G. I.

Theory of heat resistance of ceramic coatings /K teorii termostoikosti keramicheskikh pokrytii/.  
20 p3565 A69-37359

## ZHURAVLEV, S. G.

Perturbation in the orbital elements of a synchronous satellite moving in the earth's noncentral field of gravity /Vozmushcheniia elementov orbity sinkhronnogo sputnika, dvigaiushchegosia v nentsentral'nom pole tiagotenii zemli/.  
14 p2521 A69-29466

## ZHURAVLEV, V. I.

Influence of synchronization inaccuracy on the signal-to-noise ratio during the reception of signals with

pseudonoise modulation /Vliianie netochnosti sinkhronizatsii na otnoshenie signal/shum pri prieme signalov s psevdoshumovoi moduliatsiei/.  
15 p2563 A69-30141

## ZHURAVLEV, V. N.

Propagation of thin plane jets of an ideal fluid over a curvilinear surface /Rasprostraneniie tonkikh ploskikh strui ideal'noi zhidkosti po krivolineinoi poverkhnosti/.  
19 p3296 A69-35815

## ZHURAVLEVA, R. B.

Electrical properties of the ionosphere in a variable field /Elektricheskie svoistva ionosfery v peremennom pole/.  
10 p1686 A69-23908

## ZHURAVSKII, V. R.

Calculation of axisymmetric supersonic flows past a cone /K raschetu osesimmetrichnogo obtekaniia konusa sverkhzvukovym potokom/.  
17 p2890 A69-33123

## ZHURBA, G. I.

Strength properties of welded joints in Kh 18N9T steel at very low temperatures.  
22 p3958 A69-41204

## ZHURKOV, S. N.

Common features in the failure of metals with different types of crystal lattice.  
08 p1328 A69-19793

High-strength polymer fibers /Vysokoprechnye polimernye volokna/.  
19 p3358 A69-35984

## ZHUROV, A. P.

Magneto-metallographic investigation of martensite transformation in stainless steels in connection with embrittlement during cold deformation.  
18 p3138 A69-35117

## ZHUZGOV, D. N.

Magnetic field investigation with interplanetary station "Venera-4".  
10 p1791 A69-24199

## ZHVALEV, V. F.

Problems of the interpretation of infrared cloud images transmitted by meteorological earth satellites /Voprosy interpretatsii infrakrasnykh izobrazhenii oblachnosti s meteorologicheskikh sputnikov zemli/.  
06 p0952 A69-17984

## ZHVANIA, B. P.

Excitation of standing ion-acoustic waves in a weakly ionized plasma /Vozbuzhdeniie stoiaichikh ionoakusticheskikh voln v slabioionizovannoi plazme/.  
02 p0292 A69-12555

Excitation of ion-acoustic standing waves in a weakly ionized plasma.  
15 p2658 A69-30252

## ZHVANIA, R. M.

Identification of extremal control plants using Chebyshev polynomials.  
11 p1861 A69-25713

## ZIATITSKII, V. A.

Average losses in a beam guide /finite nonideal correctors/.  
09 p1469 A69-22629

## ZIATSEV, V. V.

Magnetic models of pulsars.  
01 p0149 A69-10269

## ZICH, R.

Studies of self-focusing antennas for telecommunication satellites.  
08 p1289 A69-20970

The Laplace transform in problems of analysis and synthesis of linear arrays /La trasformata di Laplace nei problemi di analisi e sintesi delle schiere lineari/.  
09 p1532 A69-21600

The use of dyadic Green's functions in problems involving inhomogeneous media.  
17 p2924 A69-33837

## ZICHICI, A.

An underground search for leptonic quarks in the cosmic radiation.  
02 p0306 A69-11547

## ZIDAROV, D.

Estimate of the increases of the Newtonian potential and its derivatives /Otsenki na narastvaniata na niutonoviiia potentsial i na negovite proizvodni/.  
13 p2300 A69-28545

Representation of the secular variations of the earth's magnetic field in the form of changes in the field of optimum geomagnetic dipoles /Predstavlenie vekovykh variatsii magnitnogo polia zemli kak izmenenie polia optimal'nykh geomagnitnykh dipolei/.  
14 p2436 A69-29061

## ZIDARU, G.

Determination of trailing edge velocity and stagnation points for several isolated airfoils and for airfoil lattices /Opredelenie skorosti na vykhodnoi kromke i točki zastoia dlia nekotorykh izolirovannykh profilei ili v lineinoi profil'noi reshetke/.

05 p0697 A69-15880

Potential motion around a linear array of thin foils with small curvature, the direction of the array being normal to the profile chords /Mouvement potentiel autour du reseau lineaire de profils minces et a petite courbure, la direction du reseau etant normale aux cordes des profils/.

11 p1817 A69-24348

A plane row of thin slightly arched blades in a potential flow /Ebenes Gitter aus den duennen und schwach gewoelbten Profilen in der Potentialstroemung/.

21 p3696 A69-39243

## ZIEBA, S.

The Quiet Sun radiation at 810 mc/s during the minimum of solar activity in 1964.

22 p4010 A69-39989

## ZIEBLAND, H.

Experimental determinations of the thermal conductivity of fluids.

23 p4237 A69-41325

## ZIEBOLD, T. O.

The influence of nuclear radiation on pool-boiling heat transfer to liquid helium. [ASME PAPER 68-WA/PID-3]

05 p0791 A69-16164

## ZIECHECK, L. N.

The general design considerations for a wireless telemetry system in the medical diagnosis of humans.

19 p3261 A69-36269

## ZIEGEL, K. D.

Role of the interface in mechanical energy dissipation of composites.

10 p1794 A69-23037

## ZIEGLER, F.

Wave systems in a thin, straight, elastic composite rod consisting of three segments of different impedance /Wellensysteme in einem geraden duennen elastischen Verbundstab mit drei Segmenten verschiedener Impedanz/.

21 p3845 A69-39677

Mean waves in laminated random media.

22 p4040 A69-39979

## ZIEGLER, H.

Some developments in the theory of stability.

02 p0340 A69-11991

On the impingement of a supersonic jet on a flat plate.

08 p1252 A69-20841

Compatibility theorem of the plasticity theory and its application to spatially discontinuous fields /Der Verträglichkeitssatz der Plastizitätstheorie und seine Anwendung auf räumlich unstetige Felder/.

08 p1418 A69-20845

Prospects for the years 1970 to 1980 /Les perspectives des années 70 à 80/.

24 p4416 A69-42563

## ZIEGLER, R.

The tactical landing system of Saab 37 Viggen /Das taktische Landesystem der Saab 37 Viggen/.

16 p2735 A69-32057

## ZIELENBACH, J. W.

The mass of the Jupiter system from the motion of /48/ Doris.

16 p2863 A69-32403

## ZIELINSKI, A.

Theory of wave propagation at different group velocities in a parametric line /K teorii rasprostraneniia voln s raznymi gruppovymi skorostiami v parametricheskoi linii/.

16 p2805 A69-32254

## ZIELINSKI, J. B.

Short-period perturbations of satellite motion by the earth's gravitational field /Korotkoperiodicheskie vozmushcheniia dvizheniia iskusstvennykh sputnikov, vyzyaemye gravitatsionnym polem zemli/.

12 p2069 A69-26431

## ZIELKE, W.

Forced and self-excited oscillations in propellant lines. [ASME PAPER 69-FE-6]

20 p3586 A69-37987

## ZIEN, H. M.

Stability of three-dimensional laminar and turbulent shear layers.

22 p3932 A69-40893

## ZIEN, T.-F.

A class of three-dimensional, optimum hypersonic wings. [AIAA PAPER 68-158]

09 p1430 A69-21944

## ZIENKIEWICZ, O. C.

Application of finite elements to the solution of Helmholtz's equation.

03 p0404 A69-13598

Elasto-plastic solutions of engineering problems - "Initial stress", finite element approach.

15 p2706 A69-30433

The isoparametric finite element system - A new concept in finite element analysis.

21 p3732 A69-39314

## ZIEREP, J.

A similarity law for the influence of channel walls, valid for all flow velocities /Ein Ähnlichkeitsgesetz fuer den Kanalwandeneinfluss fuer alle Geschwindigkeitssbereiche/.

02 p0192 A69-12830

Transonic flow with heat input /Schallnahe Stroemungen mit Waermezufuhr/.

23 p4061 A69-42414

## ZIERLER, N.

Linear recurring sequences and error-correcting codes.

06 p0948 A69-17863

## ZIEROTT, G.

Combined adrenergic blockade in experimental hemorrhagic hypotension.

23 p4098 A69-42102

## ZIETZ, U.

The laminar flame speeds of propane-ammonia-air mixtures.

21 p3849 A69-38809

## ZIGANOV, N. P.

Investigation of the static electrification of aircraft /Issledovanie staticheskoi elektrizatsii samoletov/.

04 p0549 A69-15107

## ZIGMOND, M.

Failure of brain norepinephrine depletion to extinguish the daily rhythm in hepatic tyrosine transaminase activity.

05 p0707 A69-15582

Enzymatic conversion of norepinephrine to epinephrine by the brain.

10 p1644 A69-23303

## ZIGMOND, M. J.

Pharmacologic tools in autonomic nervous system research.

02 p0200 A69-12722

Hepatic tyrosine transaminase rhythm - Interaction of environmental lighting, food consumption and dietary protein content.

17 p2910 A69-33755

Olfactory bulb removal - Effects on brain norepinephrine.

22 p3871 A69-40055

## ZIIAKHANOV, U.

Certain properties of long indium antimonide diodes with a negative resistance section /Nekotorye svoistva dlennykh diodov iz antimonida indii s uchastkom otritsatel'nogo soprotivleniia/.

15 p2581 A69-31149

## ZIKA, J.

Inert gas diffusion in light metals /Edelgasdiffusion in Leichtmetallen/.

16 p2800 A69-31775

## ZIKOV, V. G.

Interaction between two plasmoids in the magnetic field of a divertor /Vzaemodiia dvokh plazmovikh zgustkiv u magnitnomu poli divortora/.

12 p2133 A69-25976

Interaction between plasma fluxes and a plasma cylinder in the magnetic field of a divertor /Vzaemodiia plazmovikh potokiv z plazmovim tsilindrom v magnitnomu poli divortora/.

12 p2134 A69-25977

Plasma capture in the divertor aperture in the case of asynchronous injection of two plasma streams /Zakhlopleniia plazmi v aperturu divortora pri asinkhronnoi inzhetsii dvokh plazmovikh potokiv/.

21 p3776 A69-38585

## ZILBERBERG, V. G.

Density of ceramic plasma coatings /Plotnost' keramicheskikh plazmennyykh pokrytii/.

12 p2118 A69-26258

Bonding strength of plasma coatings with the substrate /Prochnost' s'ispleeniia plazmennyykh pokrytii s osnovoi/.

15 p2630 A69-31189

## ZILITINKEVICH, S. S.

Determining the universal wind-velocity and temperature profiles in the atmospheric boundary layer.

02 p0274 A69-11447

The use of profile observations to calculate vertical turbulent fluxes in the atmospheric boundary layer.

10 p1682 A69-23325

On description of micro- and meso-scale phenomena in numerical models of the atmosphere.

19 p3363 A69-36500

## ZILOVA, T. K.

Determination of the allowance for the arbitrary yield point for sheet materials working under biaxial tensile load.

10 p1801 A69-23849

## ZIMAN, I. A.

Determination of spacecraft orientation from stellar photographs /Opredelenie orientatsii kosmicheskikh apparatov po snimkam zvezd/.

13 p2296 A69-27696

Determination of the photogrammetric parameters of cameras from photographs of stars /Opredelenie fotogrammetricheskikh parametrov fotokamer po snimkam zvezd/.

20 p3545 A69-38054

## ZIMIN, D. B.

Theory of switching scanning antennas.

05 p0729 A69-16082

## ZIMIN, E. P.

Experimental investigation of the influence of the combustion-product composition on the conductivity in the presence of a potassium additive /Eksperimental'noe issledovanie vliianiia sostava produktov sgoraniia na provodimost' pri nalichii dobavki kaliiia/.

06 p0870 A69-17908

The effect of an induced magnetic field on the magnetohydrodynamic flow of a compressible gas /O vliianii induktivirovannogo magnitnogo polia pri magnetogidrodinamicheskom techenii szhimaemogo gaza/.

14 p2500 A69-29905

## ZIMINA, L. N.

Heat-resistant alloys hardened by the Ni sub 3 Nb phase /Zharoprochnye splavy, uprochnennyye fazoi Ni sub 3 Nb/.

13 p2283 A69-28488

## ZIMKIN, I. N.

Anisotropy of the conduction band in CdSnAs sub 2 /Anizotropiia zony provodimosti v CdSnAs sub 2/.

03 p0488 A69-13888

The effect of laser radiation on metals /Vlianie izlucheniia OKG na metally/.

11 p1906 A69-25684

Anisotropy of the conduction band in CdSnAs sub 2.

11 p1939 A69-25689

## ZIMMER-GALLER, R.

The combustion of tungsten delay powders. [WSCI PAPER 68-19]

07 p1202 A69-18370

## ZIMMER, B.

Extinction of a solid-propellant motor by depressurization - Study by electrical analogy /L'extinction d'un propulseur a propergol solide par detente - Etude par analogie electrique/.

17 p3021 A69-33355

The extinction of solid propellant rocket motors by rapid depressurization - Study by electrical analogy /L'extinction d'un propulseur a propergol solide par detente - Etude par analogie electrique/.

18 p3184 A69-34637

## ZIMMER, F. C.

Development of the fixed-frequency topside-sounder satellite.

20 p3618 A69-37857

## ZIMMER, J.

A seismic refraction system for lunar use.

23 p4162 A69-41533

## ZIMMER, K. G.

Some recent studies in molecular radiobiology.

23 p4090 A69-41963

## ZIMMER, M. F.

Shock attenuation in and equation of state of a polyurethane.

16 p2828 A69-31810

## ZIMMER, W. J.

Partial prior information and shorter confidence intervals.

19 p3360 A69-36038

## ZIMMERL, O. F.

Small signal high frequency conductivity of GaAs.

10 p1747 A69-23694



## ZIMMERLE, D. F.

## ZIMMERLE, D. F.

A one-megahertz iteration rate DDA computer.  
17 p2934 A69-34073

## ZIMMERLI, U.

Dislocation-free single crystals of gallium arsenide /Einkristallines Galliumarsenid ohne Versetzungen/.  
02 p0296 A69-11792

## ZIMMERMAN, S. P.

Anomalous mesospheric temperatures observed at White Sands, New Mexico.  
15 p2601 A69-31376

## ZIMMERMAN, W.

Optimum integration of aircraft navigation systems.  
08 p1348 A69-21065  
Optimum integration of aircraft navigation systems.  
23 p4186 A69-42538

## ZIMMERMANN, B.

The role of visceral afferent pathways on vasopressin secretion and urinary excretory patterns during surgical stress.  
05 p0708 A69-15970

## ZIMMERMANN, H.

Electrooptical tracking devices /Elektro- optische Verzeichnungsmessgeraete/.  
05 p0763 A69-15986

## ZIMMERMANN, W.

Photoconduction in CdS crystals generated by a modulated electron beam.  
03 p0490 A69-13946

## ZIMNI, W.

Theoretical considerations and work in the development of a reentry flight-test vehicle /Ueberlegungen und Arbeiten zur Entwicklung eines Wiedereintrittsflugversuchskoerpers/.  
16 p2867 A69-31934

## ZIMNOCH, F. S.

Radiative lifetimes of excited electronic states in ionic-species of oxygen.  
13 p2301 A69-27452

## ZIMOGOROVA, N. S.

Photosensitivity spectra of GaP sub x As sub 1-x - GaAs n-a heterojunctions.  
02 p0294 A69-11630

Photoelectric properties of p-n junctions in silicon-doped gallium arsenide /Fotoelektricheskie svoystva p-n-perekhodov v arsenide gallia, legirovannom kremniem/.  
15 p2666 A69-30067

## ZIMOVEV, A. L.

Radio Control of Rocket Missiles and Space Vehicles /Radioupravlenie reaktivnymi snaryadami i kosmicheskimi apparatami/.  
20 p3574 A69-37232

## ZINCHENKO, G. N.

Velocity distribution of ions generated by high-vacuum ion sources.  
06 p0959 A69-16916

## ZINCHENKO, M. S.

Experimental verification of the theory of high-perveance three-electrode electron guns by simulation /Eksperimental'na perevirk teorii vysokoperveansnikh trielektrodnikh elektronikh garmat shliakhom modelivannia/.  
05 p0730 A69-16211

Calculation of the current flow coefficient of high-perveance three-electrode electron guns /Rozrakhunok koefitsienta strumoprokhodzhennia visokoperveansnikh trielektrodnikh elektronikh garmat/.  
11 p1849 A69-24911

## ZINCHENKO, V. F.

Effect of porosity and proportions of components on the thermal conductivity of glass-fiber reinforced plastics /Vliianie poristosti i otnositel'nogo soderzhaniia komponentov na teploprovodnost' stekloplastikov/.  
22 p3973 A69-40747

## ZINCHENKO, V. M.

Quantitative estimation of intergranular deformation of a nickel-titanium alloy during tension at a constant rate, within a wide range of temperatures /Kolichestvennaia otsenka mezherennoi deformatsii nikel'titanovogo splava pri rastizhenii s pastoiannoii skorosti v shirokom intervale temperatur/.  
12 p2113 A69-26044

## ZINDMAN, A. P.

Numerical solution of a boundary-value problem for asymmetrically strained structurally anisotropic shells of revolution /Chislennoe reshenie kraevoi zadachi dlia nesimmetrichnoi deformatsii konstruktivno anizotropnykh obolochek vrashcheniia/.  
01 p0165 A69-10088

## ZINETS, O. S.

Absorption of light with the formation of electron-hole complexes in semiconductors with band extrema at different quasi-momenta.  
06 p0978 A69-16901

Photoeffect in semiconductors at high illumination levels.  
07 p1148 A69-18690

## ZINGERY, W. L.

The induced-emission oscillator navigation sensor.  
19 p3369 A69-35795

## ZINKE, O. H.

High-temperature plasmas produced by exploding wires.  
01 p0129 A69-10667

## ZINKHAM, R. E.

Fracture toughness behavior of AlZnMgCu alloys /Das Bruchverhalten von AlZnMgCu-Legierungen/.  
16 p2800 A69-31780

Fracture behavior of aluminum alloys.  
17 p2989 A69-33555

Variations of mechanical properties, toughness and texture in two differently fabricated high strength aluminum alloy plates /7179-T6S1/.  
19 p3346 A69-36437

## ZINKY, W. R.

Holographic detection of submicron particles.  
04 p0596 A69-14292

## ZINN, B. T.

Solution of linear combustion instability problems using the Galerkin method.  
14 p2538 A69-29021

A theoretical study of nonlinear damping by Helmholtz resonators. [AIAA PAPER 69-481]  
16 p2844 A69-32719

## ZINN, J.

Motion of a newly formed plasma in a magnetic field.  
16 p2818 A69-31673

## ZINNER, R.

Statistics of blue objects near the North Pole of the Galaxy and a two-color diagram of the galactic halo /Statistika golubyykh ob'ektov okolo severnogo polisa galaktiki i dvukhtsvetnaia diagramma galakticheskogo halo/.  
12 p2168 A69-27054

## ZINO, S. A.

Effect of electrical polarization on electroluminescence brightness waves in zinc sulfide films /Vpliv elektrichnoi polarizatsii na kvilii iaskravosti elektroluminestsentsii v plivkakh sirchistogo tsinku/.  
05 p0807 A69-16213

Role of polarization effects in unsteady electroluminescent processes in ZnS-Mn films /Pro pol' polarizatsiinykh effektiv u nestatsionarnykh elektroluminestsentsnykh protsesakh u plivkakh ZnS,Mn/.  
05 p0807 A69-16214

## ZINOVEV, O. A.

Measurement of diffusion cross sections of slow electrons in inert gases by a microwave method.  
03 p0481 A69-14143

Single-band millimeter-wave amplitude modulator for phase meters with homodyne frequency conversion /Odnopolosnyi amplitudnyi modulator millimetrovogo diapazona voln dlia fazometrov s gomodinnyim preobrazovaniem chastoty/.  
04 p0577 A69-14850

Turbulent heating of a plasma in a toroidal system with current /Turbulentnyi nagrev plazmy v toroidal'noi sisteme s tokom/.  
11 p1935 A69-25752

Single-sideband amplitude modulator in the millimeter band for phaseometers with homodyne frequency conversion.  
15 p2575 A69-30242

## ZINOVEV, V. A.

Mars in 1967 /Mars v 1967 g./.  
12 p2154 A69-25823

## ZINOVEV, V. E.

Thermal diffusivity and thermal conductivity of palladium at high temperatures /Temperaturoprovodnost' i teploprovodnost' palladiia pri vysokikh temperaturakh/.  
15 p2636 A69-30045

Thermal diffusivity and conductivity of titanium at high temperatures.  
18 p3156 A69-34699

## ZINSMEISTER, G. E.

A semi-discrete approximate solution of the inverse problem of transient heat conduction. [ASME PAPER 68-WA/HT-26]  
05 p0848 A69-16127

## ZIOCK, K.

Pion capture in super 6 Li and super 7 Li, the formation of super 4 H, a search for super 5 H.  
12 p2132 A69-26296

Search for an excited state of the triton.  
12 p2132 A69-26297

## ZIOLKOWSKI, J.

Stress-strain state in a circular disk of constant thickness due to a thermal pulse on a delta alpha sector of the disk /Stan naprezen i przemieszczen w tarczy kolowej o stalej grubosci, wywolany impulsem cieplnym na wycinku tarczy delta alpha/.  
04 p0681 A69-15171

Evolution of close binaries and origin of Algol-type systems.  
08 p1395 A69-20633

Stress-strain state in a rotor wheel with a small number of radial side blades /Stan naprezen i odkształcen w kole wirnikowym z mala liczba bocznych lopatek promieniowych/.  
09 p1612 A69-21494

## ZIOLKOWSKI, K.

The correction of orbits of the lost minor planets - 457, 1038, 1161, 1297, and their ephemerides.  
05 p0829 A69-16704

## ZIRIN, H.

Abundance analyses from extreme-ultraviolet emission lines.  
02 p0327 A69-12719

The solar atmosphere.  
02 p0329 A69-12785

Mass motions in loops, sprays, surges, etc.  
06 p0994 A69-17438

Observations of stellar chromospheres using the He 10830 line.  
06 p1003 A69-17449

The solar flares of August 28 and 30, 1966.  
07 p1205 A69-19247

Two prominence eruptions and the problem of emission.  
17 p3023 A69-33053

The birth of active regions.  
19 p3403 A69-35967

## ZIRKER, J. B.

Emission line spectrum of the solar corona.  
19 p3422 A69-36217

## ZIRKIND, R.

Inversion techniques and their problems.  
06 p0957 A69-17618

## ZISER, V. E.

A "min B" magnetic trap /Magnitnaia lovushka s "min B"/.  
04 p0634 A69-14299

## ZISMAN, W. A.

Dry-film lubricants from molybdenum disulfide bonded with microfibrinous boehmite. [ASLE PAPER 68-LC-14]  
15 p2642 A69-30606

Surface chemistry of plastics reinforced by strong fibers.  
17 p2992 A69-33655

## ZISSIS, G.

Summary of radiometric principles.  
19 p3311 A69-36071

## ZISSIS, G. J.

Remote sensing.  
20 p3494 A69-37747

## ZITELLI, L. T.

Kilowatt CW klystron amplifiers at Ku and Ka bands.  
03 p0405 A69-13724

## ZIVI, S. M.

Holographic interferometry and pulsed laser holography.  
11 p1883 A69-24682

## ZLATKIN, L. B.

Existence of a diamond-like semiconductor in a glassy state /O sushchestvovanii almazopodobnogo poluprovodnika v stekloobraznom sostoianii/.  
10 p1747 A69-23963

## ZLOBEC, P.

The solar activity in 1967 from optical and radio observations of the Trieste Astronomical Observatory.  
16 p2858 A69-32206

## ZLOBIN, V.

A single-row system of circular jets in a bounded transverse flow /Odnoriadnaia sistema kruglykh strui v ogranichenom poperechnom potoke/.  
10 p1679 A69-23567

- Design model of a jet in a crosswind /O raschetnoi modeli strui v snosiashchem potoke/.  
18 p3124 A69-35149
- ZLOCHEVSKAIA, I. I.**  
Stability of the dislocation structure in nimonic-type alloys.  
04 p0615 A69-14636
- ZLOCHEVSKII, A. B.**  
Method for measuring the elastoplastic deformations in zones with high stress gradients by means of resistance wire strain gauges.  
04 p0671 A69-14433
- ZLOTNIK, E. IA.**  
Theory of the slowly changing component of solar radio emission. I.  
02 p0314 A69-11636  
The theory of the slowly changing component of solar radio emission. II.  
04 p0662 A69-15240
- ZLUNITSYNA, V. N.**  
Rectangular waveguide with transverse slots radiating into a plane-parallel region /Priamougol'nyi volnovod s poperechnymi shcheliami, izluchaiushchii v plosko-parallelnuiu oblast'/.  
23 p4124 A69-42037  
Propagation of electromagnetic waves along a plane metallic array with a shield and a dielectric /Rasprostraneniye elektromagnitnykh voln vdol'ploskoi metalicheskoi reshetki s ekranom i dielektrikom/.  
23 p4124 A69-42038
- ZMARZLY, F. E.**  
Experimental verification of specular reflection computer program, SPREC.  
[ATAA PAPER 69-65] 06 p1040 A69-18215
- ZMIEVSKAIA, G. I.**  
On determination of atmosphere parameters from drag data of the satellite Proton-2, its orientation being taken into account.  
15 p2602 A69-31392
- ZMII, V. I.**  
Influence of silicide coatings on the mechanical properties of molybdenum /Vliianie silitsidnykh pokrytiy na molibdene na ego mekhanicheskie svoystva/.  
02 p0264 A69-11883  
Effect of silicide coatings on the mechanical properties of molybdenum.  
18 p3156 A69-35043  
Influence of the conditions of formation of silicide layers on molybdenum on some of their properties /Vliianie usloviy polucheniia silitsidnykh sloev na molibdene na nekotorye ikh svoystva/.  
20 p3560 A69-37361
- ZMOROVICH, T. V.**  
Autonomy conditions for a sampled-data multivariable control system for the spectra of random processes.  
08 p1296 A69-20233
- ZMUDA, A. J.**  
Ionospheric and magnetic observations at 1000 kilometers during the geomagnetic storm and aurora of May 25-26, 1967.  
18 p3129 A69-34954
- ZMUIDZINAS, J. S.**  
Enhanced fluctuations in a magnetized plasma due to a degenerate ion-wave instability.  
08 p1366 A69-20750
- ZNACHKO, V. A.**  
Change in the functional state of the human organism during tests in chambers /Izmenenie funktsional'nogo sostoiianiia organizma cheloveka pri ispytaniakh v kamerakh/.  
03 p0377 A69-14202
- ZNAMENSKII, N. P.**  
Application of the method of integral equations for calculating round plates under an antisymmetrical load /Primeneniye metoda integral'nykh uravnenii dlia rascheta kruglykh platin na antisimmetrichnuu nagruzku/.  
22 p4047 A69-41168
- ZNAMENSKII, V. B.**  
Estimates of the maximum values of the inversion density and output power of a Ne-He laser, given optimal discharge parameters in a hollow cathode /Ob otsenkakh maksimal'nykh znachenii plotnosti inversii i moshchnosti generatsii Ne-He-OKG pri optimal'nykh parametrokh razriada v polom katode/.  
04 p0610 A69-14422
- ZNOJIL, V.**  
Frequency occurrence of small particles in meteor showers. I, II.  
01 p0154 A69-10872
- ZOBACHEV, N. M.**  
Soil-density meter-penetrator of the automatic lunar station Luna-13.  
03 p0430 A69-13424
- ZOCCHI, F.**  
Gas chromatographic analysis of hydrocarbons in methane in the part per billion range.  
03 p0382 A69-14115  
Analysis of methane in helium, hydrogen, and neon in the part per billion range.  
03 p0382 A69-14116
- ZOCHER, E.**  
Improved horn exciter with two wave modes for shallow paraboloid antennas /Verbesserte Horner-Reger mit zwei Wellentypen fuer flache Parabolantennen/.  
12 p2044 A69-27093
- ZOELLER, R.**  
Laboratory life test and inpile irradiation studies of cylindrical thermionic converters.  
14 p2399 A69-29199  
Post irradiation investigations of UO sub 2 - fueled thermionic emitters.  
14 p2481 A69-29200
- ZOERB, E. G.**  
Liquid fluidics controls flight suit temperature.  
02 p0202 A69-11923
- ZOEREN, M. V.**  
Circadian rhythm and performance.  
24 p4268 A69-43407
- ZOGRAF, O. N.**  
An example of an elliptic second-order equation with continuous coefficients for which the regularity conditions of a boundary point for the Dirichlet problem differ from similar conditions for the Laplace equation /Primer ellipticheskogo uravneniia vtorogo poriadka s nepreryvnymi koeffitsientami, dlia kotorogo uslovia reguliarnosti granichnoi tochki dlia zadachi Dirikhe otlichaiutsia ot analogichnykh uslovii dlia uravneniia Laplasa/.  
13 p2288 A69-27743
- ZOHA, M. S.**  
General equation for correction masses for dynamic balancing of a rotor supported on n-points.  
12 p2180 A69-26243
- ZOLDAN, G.**  
Direct and indirect measurements of differential parameters of transistors /Misure differenziali dei parametri differenziali dei transistori/.  
14 p2420 A69-29397
- ZOLOTAREV, I. D.**  
Passage of radio pulses with an exponential envelope through an n-stage resonant amplifier /Prokhozheniye radioimpul'sov s eksponentsial'noi ogibaushchei cherez n-kaskadnyi rezonansnyi uslitel'/.  
05 p0720 A69-16444  
Transmission of radio pulses with an exponential envelope through an n-stage tuned amplifier.  
16 p2753 A69-32476
- ZOLOTAREV, V. M.**  
Some remarks on multidimensional Bernstein-Kolmogorov-type inequalities.  
11 p1910 A69-25698
- ZOLOTARIUK, A. V.**  
Dispersion characteristics of a magnetized plasma waveguide /Dispersionnyye kharakteristiki zamagnichennogo plazmennogo volnovoda/.  
13 p2315 A69-28571
- ZOLOTOV, E. M.**  
Mechanism of optical generation in CaF sub 2 -Dy super 2 super plus /O mekhanizme opticheskoi generatsii CaF sub 2 -Dy super 2 super plus/.  
11 p1894 A69-24618
- ZOLOTOVITSKAIA, E. S.**  
Spectrographic determination of microimpurities in aluminum-yttrium garnets.  
10 p1747 A69-23843
- ZOLOTUKHIN, A. N.**  
Change in the functional state of the human organism during tests in chambers /Izmenenie funktsional'nogo sostoiianiia organizma cheloveka pri ispytaniakh v kamerakh/.  
03 p0377 A69-14202  
Changes in physiological functions during prolonged confinement in a closed restricted space.  
08 p1262 A69-19838  
Effect of a "fractional" regime of daily activity on the human organism under conditions of relative isolation /Vliianie na organizm cheloveka "drobnogo" rezhima sutochnoi deiatel'nosti v usloviakh otosnitel'noi izolatsii/.  
17 p2906 A69-32936
- ZONN, W.**  
On the number of double galaxies and separation of their components.  
07 p1214 A69-18663  
On the motion of the components of double galaxies.  
10 p1775 A69-23203  
On the frequencies of multiple systems of galaxies.  
12 p2156 A69-26222
- ZORICH, D. R.**  
Pyrolytic graphite coated composite materials.  
19 p3357 A69-35539
- ZORII, L. M.**  
Theory of stability for systems with distributed parameters /Do teorii stikosti sistem z rozpodilenimi parametrami/.  
06 p0956 A69-16822
- ZORIK, V. IA.**  
Theory of electrodynamic acceleration of a plasma in a high-current pulsed accelerator /K teorii elektrodinamicheskogo uskoreniiia plazmy v sil'notochnom impul'snom uskoritele/.  
21 p3778 A69-39548
- ZORN, J. C.**  
Residual gas analysis and leak detection by time-of-flight measurements on neutral metastable atoms and molecules.  
13 p2262 A69-28006  
Detection of metastable atoms and molecules with continuous channel electron multipliers.  
22 p3917 A69-41235
- ZORNBERG, E. I.**  
Magnetic breakdown in ferromagnetic nickel.  
15 p2668 A69-30687
- ZORNITZER, A.**  
Influence of season and heat on energy expenditure during rest and exercise.  
22 p3890 A69-40211
- ZOROWSKI, C. F.**  
Dynamic behavior of textile fibers and assemblies.  
04 p0619 A69-14686
- ZORSKI, H.**  
On the dynamic model of a dislocation in an elastic medium.  
17 p3053 A69-33020
- ZOSIMOV, V. V.**  
Measurement of the ion temperature in a rarefied multicomponent plasma /Izmerenie temperatury ionov v razrezhennoi mnogokomponentnoi plazme/.  
23 p4196 A69-41839
- ZOTEEV, A. I.**  
A method for the determination of controller parameters /Ob odnom iz metodov opredeleniia parametrov reguliatora/.  
21 p3723 A69-38887
- ZOTIN, V. K.**  
Influence of initial temperature on the propagation velocity of a flame in a turbulent flow of a homogeneous mixture.  
16 p2837 A69-32138  
Investigation of the dependences of combustion processes in a turbulent flow of a homogeneous mixture /Issledovanie zavisimosti protsessov goreniia v turbulentnom potoke odnorodnoi smesi/.  
17 p3069 A69-33140  
The problem of autoturbulence /K voprosu ob avtoturbulentnosti/.  
21 p3850 A69-38861
- ZOTKIN, I. T.**  
Geometry of the shock wave of the Tunguska meteorite /Geometriia udarnoi volny tungusskogo meteorita/.  
01 p0159 A69-11379  
Results of the work performed by the 1963 expedition aimed at studying the discovery site of the Chinghe meteorite /Itogi rabot ekspeditsii 1963 g. po izucheniiu mesta nakhodki meteorita Chinghe/.  
01 p0160 A69-11380
- ZOTOV, V. K.**  
Complex application of radar and satellite observations in the analysis of meso- and macroscale systems of clouds /Kompleksnoe ispol'zovanie radiolokatsionnykh i sputnikovykh nabludenii pri analize mezo- i makromasshtabnykh oblachnykh sistem/.  
13 p2294 A69-27853
- ZOTOV, V. V.**  
Trap mechanism of the isothermal drop of photocurrent in cadmium sulfide single crystals /Lovushchnyi mekhanizm izotermicheskogo spada fototoka monokristallov sul'fida kadmii/.  
08 p1374 A69-21187



## ZOTOVA, E. A.

Trapping mechanism of the isothermal decay of the photocurrent of cadmium sulphide single crystals.  
18 p3183 A69-35156

## ZOTOVA, E. A.

Investigation of a liquid-metal jet MHD generator /Issledovanie zhidkometallicheskogo struinogo MGD-generatora/.  
13 p2208 A69-27511

## ZOZULIA, L. P.

Substructural step-by-step transitions at the early stages of epitaxial growth of PbTe on NaCl.  
12 p2144 A69-26675

## ZOZULIA, V. B.

A wing with a laminar plastic profile /Krylo s laminarnym profilom iz plastika/.  
19 p3324 A69-35831

## ZOZULIA, V. D.

On the technique for calculating the operating time of self-lubricating bearings.  
15 p2618 A69-30281

## ZSARY, A.

Photoelasticity testing of the stress-gradient factor on notched tensile specimens.  
17 p3052 A69-32982

## ZSOLT, S.

Methods of measuring the strength of thermocompression joints /A termokompressioz koetesek szilard-saganak meresi modszerei/.  
15 p2573 A69-30081

## ZUBAREV, A. P.

Investigation of the air cooling systems of the turbine rotors of AI-20 engines /Issledovanie sistem vozdušnogo okhlazhdeniia rotorov turbin dvigatelei AI-20/.  
24 p4364 A69-43081

## ZUBAREV, I. G.

Laser based on Raman scattering in liquid nitrogen.  
09 p1520 A69-22533

Stimulated combination scattering of neodymium laser radiation in liquid nitrogen /Vynuzhdennoe kombinatsionnoe rasseianie izlucheniia neodimovogo lazera v zhidkom azote/.  
11 p1900 A69-25751

Interactions between semiconductors and intense light fluxes /Vzaimodeistvie poluprovodnikov s intensivnymi svetovymi potokami/.  
21 p3737 A69-39042

## ZUBAREV, T. N.

Output power pulsations in lasers /O pul'satsiakh moshnosti izlucheniia v lazerakh/.  
20 p3554 A69-37726

## ZUBAVIN, V. B.

Acceleration tolerance of man under low barometric pressure /Perenosimost' chelovekom uskorenii pri ponizhenno barometricheskom davlenii/.  
07 p1065 A69-18982

Blood circulation in the cerebral and surface vessels of the human head under the action of accelerations /Krovotokobraschenie v tserebral'nykh i poverkhnostnykh sosudakh golovy cheloveka pri deistvii uskorenii/.  
13 p2212 A69-28626

Human tolerance to acceleration at low barometric pressures.  
20 p3480 A69-38230

## ZUBCHANINOV, V. G.

Problem of instability of elastoplastic systems /K probleme neustoiichivosti uprugoplastichestskikh sistem/.  
18 p3217 A69-34596

## ZUBEK, J. P.

The effect of prolonged visual deprivation on various cutaneous and auditory measures.  
13 p2210 A69-28313

Behavioral and physiological changes during prolonged immobilization plus perceptual deprivation.  
24 p4256 A69-42554

## ZUBENKO, I. G.

Effect of the surface potential on noise and photoconductivity in p-type indium antimonide /Vliianie poverkhnostnogo potentsiala na shumy i fotoprovodimost' antimonida indii p-tipa/.  
24 p4362 A69-43738

## ZUBER, H.

Life at high temperatures /Das leben bei hoeherer Temperatur/.  
21 p3652 A69-38782

## ZUBER, I. E.

Monotonic stabilization of linear pulsed control systems.  
03 p0409 A69-12975

Feedback design for a monotonically stabilized sampled-data system /O strukture obratnykh svyazei monotonno stabilizirovannoi impul'snoi sistemy/.  
12 p2045 A69-25961

## ZUBIETA, M.

Sudden increases in cosmic ray intensity.  
14 p2514 A69-29773

## ZUBKOV, A. I.

Gas jet injection into a supersonic flow from orifices in the lateral surface of a body /Istечение газовых струй в сверхзвуковой поток из отверстий в боковой поверхности тела/.  
01 p0005 A69-10357

## ZUBKOVSKII, S. L.

Experimental investigation of the spectra of turbulent heat and momentum fluxes in the ground layer of the atmosphere /Eksperimental'noe issledovanie spektrov turbulentnykh potokov tepla i kolichstva dvizheniya v prizemnom sloe atmosfery/.  
15 p2649 A69-30648

## ZUBOV, B. V.

Observation of nonlinear absorption in certain organic substances /Nabliudenie nelineinogo pogloshcheniya v nekotorykh organicheskikh veshchestvakh/.  
03 p0439 A69-13055

## ZUBOV, V. I.

Contribution to stability theory /K teorii ustoiichivosti/.  
16 p2804 A69-32248

## ZUCCARO, J. J.

EEG sensing and transmitting system contained in a flight helmet.  
12 p2023 A69-26553

## ZUCHOWSKI, A.

A method of low-pass filter synthesis /O pewnej metodzie syntezy filtrów dolnoprzepustowych/.  
11 p1887 A69-25210

Certain problems of the scaling theory of measuring instruments /O pewnych problemach teorii podzialki przyzadow pomiarowych/.  
17 p2975 A69-33614

## ZUCKER, H.

Gain of antennas with random surface deviations.  
01 p0041 A69-10246

## ZUCKERBERG, H.

Exploitation of Space for Experimental Research, American Astronautical Society, Annual Meeting, 14th, Dedham, Mass., May 13-15, 1968, Proceedings.  
18 p3193 A69-43467

## ZUCKERMAN, B.

Microwave detection of interstellar formaldehyde.  
10 p1786 A69-24108

Detection of the super 2 pi 3/2, J equals 5/2 state of OH at 5-centimeter wavelength.  
13 p2335 A69-27312

Time variations in galactic OH emission sources.  
14 p2517 A69-29085

Conditions for microwave radiation from excited OH a-doublet states.  
18 p3185 A69-34292

Determinations of helium abundance from radiofrequency recombination lines.  
18 p3190 A69-34293

Detection of interstellar H sub 2 C super 13 O super 16.  
23 p4220 A69-42376

## ZUDANS, Z.

Survey of advanced structural design analysis techniques.  
[ASME PAPER 69-DE-13] 14 p2531 A69-28843

Analyses of asymmetric stiffened shell type structures by the finite element method. I - Flat rectangular elements.  
15 p2708 A69-30667

Analysis of asymmetric stiffened shell type structures by the finite element method. II - Six degree-of-freedom model.  
15 p2708 A69-30668

## ZUELLIG, W.

1.1/2 years of routine observations of vertical ozone distribution near Zuerich, Switzerland.  
16 p2787 A69-32635

## ZUERN, V.

The worldwide occurrence of geomagnetic pulsations of the type pc 4 /Zum weltweiten auftreten erdmagnetischer pulsationen vom typ pc 4/.  
22 p3937 A69-40422

## ZUEV, I. U. S.

Strength and Failure of Visco-elastic Materials.  
11 p1970 A69-24610

## ZUEV, V. A.

Gallium distribution in yttrium-iron garnet single crystals /Raspreделение galliia v monokristallakh ittriizhelezistogo granata/.  
13 p2321 A69-28002

## ZUEV, V. E.

Experimental investigation of attenuation of infrared radiation in the transparency windows of the atmosphere in the 1-2.5 mu region.  
05 p0760 A69-16695

Propagation of laser beams in scattering media.  
08 p1328 A69-21092

Calculation of the volume coefficients of the haze-induced attenuation of radiation in the wavelength range from 0.3 to 25 mu /Raschet ob'emnykh koeffitsientov oslableniia izlucheniia dymkami v diapazone dlin voln 0,3-25 mkm/.  
11 p1913 A69-25571

Transparency of the atmospheric boundary layer to laser emissions in the infrared region of the spectrum /Prozrachnost' prizemnogo sloia atmosfery dlia izlucheniia nekotorykh OKG v infrakrasnoi oblasti spektra/.  
12 p2028 A69-25957

## ZUEV, V. S.

Generation and amplification of high-intensity light pulses in neodymium glass.  
08 p1323 A69-19946

## ZUEVA, N. M.

The theory of electron plasma non-linear oscillations.  
18 p3180 A69-34703

## ZUGZDA, Y. D.

Fast changes of sunspot equilibrium conditions and solar flares.  
24 p4374 A69-43624

## ZUTHOFF, A. J.

The influence of trace element additions on the precipitation behaviour of industrial aluminum alloys /Die Beeinflussung des Ausscheidungsverhaltens technischer Aluminiumlegierungen durch Zusaetze von Spurenelementen/.  
16 p2801 A69-31783

## ZUK, J.

Numerical solutions for the flow and pressure fields in an idealized spiral grooved pumping seal. [ASLE FICF PREPRINT 30]  
15 p2619 A69-30481

## ZUKAS, E. G.

Metallurgical results from shock-loaded iron alloys applied to a meteorite.  
12 p2158 A69-26344

Effect of cracks on creep rate. II.  
20 p3620 A69-36965

## ZUKHBAIA, T. M.

Occurrence of chromosome rearrangements in the corneal epithelium of mice during prolonged general gamma irradiation /Voznikovenie khromosomnykh perestroek v epiteli rogovitsy myshei pri obshchem prolongirovannom gamma-oblucheni/.  
17 p2907 A69-32944

## ZUKOSKI, E. E.

Experiments in supersonic turbulent flow with large distributed surface injection.  
[AIAA PAPER 68-129] 24 p4304 A69-43581

Experimental and theoretical studies of electrothermal waves.  
24 p4359 A69-43645

## ZULEEG, R.

Temperature dependence of the saturation current of MOST's.  
10 p1743 A69-23175

## ZUMFT, W. G.

Mechanism of nitrate reduction in Chlorella.  
24 p4263 A69-43136

## ZUMOFF, J.

Fluorescence spectra of homogeneous and mixed europium complexes.  
01 p0024 A69-10893

## ZUMWALT, G. W.

Effects of wingtip-mounted propellers on wing lift and induced drag.  
24 p4250 A69-43713

## ZUMWALT, R. W.

Gas-liquid chromatography of protein amino acids - Separation factors.  
13 p2217 A69-28258

## ZUND, J. D.

Degenerate gravitational fields with twisting rays.  
17 p3004 A69-32832

- ZUNG, L. B.**  
A basic study of ignition of hypergolic liquid propellants.  
[WSCI PAPER 68-43] 06 p0983 A69-17792  
Flow induced in fluid-particle suspension by an infinite rotating disk.  
11 p1867 A69-24280
- ZURAN, J.**  
Antenna-system design of the ISIS-A scientific satellite.  
17 p2918 A69-33030
- ZURBRICK, J. R.**  
Controlling the electric field of low-frequency dielectric nondestructive testing devices.  
15 p2616 A69-31503
- ZUSMANOVICH, A. G.**  
Determination of the cosmic-ray modulation spectrum in interplanetary space.  
03 p0501 A69-13527  
Galactic and solar cosmic ray flux in relation to the conditions in interplanetary space /Potok galakticheskikh i solnechnykh kosmicheskikh luchej v zavisimosti ot uslovij v mezhplanetnom prostanstve/.  
10 p1758 A69-22833  
Cosmic ray anisotropy and Forbush effects during a solar activity minimum /Anizotropia kosmicheskikh luchej i efekty Forbusha v minimume solnechnoi aktivnosti/.  
10 p1758 A69-22835  
Effect of the sectoral structure of the interplanetary magnetic field on the cosmic ray intensity and geomagnetic field /Vlianie sektoral'noi struktury mezhplanetnogo magnitnogo polia na intensivnost' kosmicheskikh luchej i magnitnoe pole zemli/.  
10 p1769 A69-23905
- ZUZOLO, P.**  
Avionics and ECM system integration on military aircraft.  
[AIAA PAPER 69-822] 19 p3243 A69-35599
- ZVARA, J.**  
A landing approach guidance scheme for unpowered lifting vehicles.  
[AIAA PAPER 69-865] 21 p3763 A69-39391
- ZVEREV, A. I.**  
Microwaves are going solid.  
03 p0402 A69-12971  
Digital MTI radar filters.  
04 p0580 A69-15463
- ZVEREV, G. M.**  
Two-photon excitation of luminescence in ruby crystals.  
15 p2634 A69-30731
- ZVEREV, L. P.**  
Magnetic field effect on GaAs injection laser emission.  
19 p3387 A69-36529
- ZVEREVA, F. G.**  
High-frequency oscillations excited by the interaction between an electron beam and a plasma /O vysokochastotnykh kolebaniyakh vzbuzhdaemykh pri vzaimodeistvii elektronnoho puchka s plazmoi/.  
12 p2137 A69-26529
- ZVIAGINA, E. V.**  
Relative sizes of the largest bodies during the accumulation of planets.  
13 p2345 A69-27652  
Dwarfs in some close groups of galaxies.  
16 p2864 A69-32597
- ZVOKELJ, J.**  
Study of the influence of additive elements on the properties of 9 percent nickel steel /Etude de l'influence d'elements d'addition sur les proprietes de l'acier a 9 percent de nickel/.  
11 p1904 A69-24642
- ZWANZIGER, D.**  
Magnetic poles and energetic photon showers in cosmic rays.  
06 p0996 A69-17883
- ZWAS, G.**  
An iterative finite-difference method for hyperbolic systems.  
24 p4340 A69-43226
- ZWEBEN, C.**  
Tensile failure of fiber composites.  
[AIAA PAPER 68-173] 02 p0347 A69-12514  
A statistical theory of material strength with application to composite materials.  
[AIAA PAPER 69-123] 06 p1028 A69-18142
- ZWEIGBAUM, H.**  
Launch constraints.  
20 p3617 A69-37287
- ZWEIZIG, J. R.**  
EEG monitoring during the treatment of decompression illness /"bends"/.  
19 p3261 A69-36268  
A miniaturized telemetry device for the transmission of the electrical activity of single nerve cells in the brain.  
19 p3261 A69-36270  
Combined telephone and radiotelemetry of the EEG.  
21 p3664 A69-38978
- ZWENG, H. C.**  
Corneal damage thresholds for CO sub 2 laser radiation.  
11 p1830 A69-24844
- ZWERDLING, S.**  
A fast, high-responsivity bolometer detector for the very-far infrared.  
08 p1313 A69-20132
- ZWICK, E. B.**  
Dissolved gas and Helmholtz resonance in rocket injectors.  
12 p2148 A69-26806  
Gas effects in attitude control systems.  
[AIAA PAPER 69-434] 16 p2870 A69-32765  
Secondary power.  
19 p3255 A69-36323
- ZWICKER, H.**  
Evaluation of plasma parameters in optically thick plasmas.  
08 p1363 A69-20466
- ZWICKER, U.**  
Study of the effect of reaction diffusion and embrittlement on crack formation in titanium alloys at high temperatures /Untersuchung der Einwirkung einer Reaktionsdiffusion und Versproedung auf die Rissbildung von Titanlegierungen bei erhoehter Temperatur/.  
10 p1713 A69-23823  
Effect of deformation and aging on the mechanical properties and creep behavior of TiAl6V4 /Einfluss einer Verformung und Auslagerung auf die mechanischen Eigenschaften und das Kriechverhalten von TiAl6V4/.  
[DGLR-69-002] 23 p4177 A69-42163
- ZWICKY, F.**  
Morphology of galactic instability /Morfologiia neustoiichivosti galaktik/.  
12 p2163 A69-27019  
Physics and chemistry on the moon.  
18 p3112 A69-34235  
The 1968 Palomar supernova search.  
19 p3403 A69-35963
- ZWIRN, S.**  
Optical and radio telescopes on the lunar surface using LASSO.  
18 p3136 A69-34813
- ZWIRNER, W.**  
Quantitative analyses of chemiluminescence reactions in atmospheric gases /Quantitative Untersuchungen von Chemolumineszenzreaktionen in atmosphärischen Gasen/.  
08 p1309 A69-20454
- ZYBALOV, A. A.**  
Calibration of a dE/dx-counter by cosmic ray muons /Kalibrovka dE/dx-schetchika miunami kosmicheskogo izlucheniia/.  
21 p3724 A69-39075
- ZYBIN, I. U.**  
A method of autonomous navigation of artificial satellites /Ob odnom metode avtonomnoi navigatsii iskustvennykh sputnikov/.  
13 p2296 A69-27687
- ZYCH, A. D.**  
Upper limits for high-energy neutrons from two important solar flares.  
18 p3187 A69-34959  
Evidence for a point source of high energy cosmic gamma rays.  
24 p4365 A69-42606
- ZYZKOWSKI, M.**  
Optimal forms of thin-walled closed cross section of a beam, taking into account stability requirements /Optimale Formen des duennwandigen geschlossenen Querschnittes eines Balkens bei Beruecksichtigung von Stabilitaetsbedingungen/.  
02 p0340 A69-12054
- ZYKOV, G. A.**  
Electrical conductivity of thin gold films of different thicknesses /Elektroprovodnost' tonkikh plenok zolota raznoi tolshchiny/.  
12 p2143 A69-26459  
Influence of gases on the electrical conductivity of chromium, beryllium, nickel, gold, and germanium films of different thicknesses /Vlianie gazov na elektroprovodnost' plenok khroma, berillia, nikelia, zolota i germania razlichnoi tolshchiny/.  
12 p2143 A69-26460
- ZYKOV, V. G.**  
Motion and polarization interaction of a plasma stream in a magnetic multipole.  
08 p1370 A69-21015  
An investigation of the possibility of eliminating impurities in hydrogen plasmas by injection across an octupole magnetic field.  
08 p1370 A69-21016  
Investigation of the possibility of eliminating impurities from a hydrogen plasmoid by injecting it across an octupole magnetic field /Issledovanie vozmozhnosti ochistki ot primesei vodorodnogo plazmennogo sgustka pri inzhetsii poperek okupol'nogo magnitnogo polia/.  
24 p4358 A69-43474
- ZYRICHEV, N. A.**  
Generalization of the characteristics of a two-chamber electric-arc heater /Obobshchenie kharakteristik dvukhkamernogo elektrodugovogo podogrevatel'ia/.  
13 p2244 A69-28557
- ZYSINA-MOLOZHEN, L. M.**  
Development of a method for studying a boundary layer in a high-temperature gas /Razrabotka metoda issledovaniia pogranichnogo sloia v vysokotemperaturnom gase/.  
02 p0233 A69-12489  
Study of the influence of the temperature factor on the transition from a laminar to a turbulent flow regime in the boundary layer /Issledovanie vlianiia temperaturnogo faktora na perekhod ot laminarnogo k turbulentnomu rezhimu techeniia v pogranichnom sloe/.  
13 p2251 A69-28558
- ZYSZKOWSKI, W.**  
The transient temperature distribution in one-dimensional heat-conduction problems with nonlinear boundary conditions.  
[ASME PAPER 68-HT-6] 13 p2374 A69-27775  
On the variational principles for the heat conduction problem.  
16 p2877 A69-31872



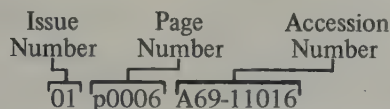


VOLUME 9

NUMBERS 1 - 24

Listed under each contract number is the IAA accession number preceded by the issue and page number, identifying the location of the abstract in *International Aerospace Abstracts*.

To Illustrate:



ACS P-771  
01 p0015 A69-10931

AF 04/201/-68-C-0200  
06 p1018 A69-18089

AF 04/611/-67-C-0011  
06 p1038 A69-18146 24 p4365 A69-43668

AF 04/611/-67-C-0043  
05 p0841 A69-16432

AF 04/611/-67-C-0055  
15 p2616 A69-31292

AF 04/611/-67-C-0056  
12 p2094 A69-26783

AF 04/611/-67-C-0059  
16 p2840 A69-32677

AF 04/611/-67-C-0074  
21 p3729 A69-38662

AF 04/611/-68-C-0045  
16 p2747 A69-32777

AF 04/611/-68-C-0067  
16 p2831 A69-32355

AF 04/611/-68-C-8803  
15 p2710 A69-30813

AF 04/611/-69-C-0015  
17 p3075 A69-34200

AF 04/611/-10388  
16 p2871 A69-31876

AF 04/611/-10545  
08 p1351 A69-20149

AF 04/611/-10919  
07 p1240 A69-18357

AF 04/611/-11385  
16 p2832 A69-32357

AF 04/611/-11388  
13 p2249 A69-28231

AF 04/611/-11398  
19 p3429 A69-35947

AF 04/611/-11406  
22 p3955 A69-40408

AF 04/611/-11541  
04 p0685 A69-14730

AF 04/611/-11646  
19 p3357 A69-35537

AF 04/647/-576  
16 p2869 A69-32729

AF 04/661/-9572  
02 p0348 A69-12605

AF 04/684/-992  
14 p2390 A69-29580

AF 04/694/-67-C-0020  
16 p2872 A69-31923

AF 04/694/-67-C-0051  
13 p2263 A69-28243

AF 04/694/-67-C-0052  
06 p0863 A69-18101 15 p2588 A69-30475

AF 04/694/-217  
09 p1510 A69-22352

AF 04/694/-220  
02 p0273 A69-12541

AF 04/694/-473  
23 p4060 A69-41502

AF 04/694/-687  
04 p0632 A69-14944

AF 04/694/-690  
23 p4113 A69-41692

AF 04/694/-791  
16 p2869 A69-32746

AF 04/694/-813  
16 p2872 A69-32012

AF 04/694/-856  
15 p2588 A69-30475

AF 04/694/-861  
12 p2060 A69-26817

AF 04/694/-890  
01 p0079 A69-10299

AF 04/694/-897  
09 p1448 A69-22314

AF 04/694/-913  
04 p0666 A69-15511 17 p2974 A69-33443

AF 04/694/-914  
09 p1482 A69-21945 23 p4059 A69-41891

AF 04/694/-916  
06 p1028 A69-18142 17 p2954 A69-33454

AF 04/694/-920  
16 p2769 A69-31874

AF 04/694/-952  
09 p1499 A69-22308

AF 04/694/-983  
23 p4113 A69-41692

AF 04/694/-990  
12 p2119 A69-26825

AF 04/694/-992  
02 p0189 A69-12523

AF 04/694/-1001  
01 p0127 A69-10339 03 p0483 A69-14255

AF 04/695/-67-C-0134  
07 p1226 A69-18323



# CONTRACT NUMBER INDEX

AF 04/695/-67-C-0158			07 p1202 A69-18363			AF 18/600/-993		
01	p0033	A69-11001	08	p1357	A69-20810	24	p4299	A69-42766
01	p0178	A69-11411	09	p1577	A69-21709	AF 18/600/-1138		
02	p0220	A69-12433	09	p1430	A69-21965	05	p0833	A69-15729
02	p0347	A69-12512	09	p1482	A69-21966	AF 19/604/-6170		
02	p0189	A69-12521	10	p1707	A69-22991	13	p2348	A69-27802
04	p0588	A69-14722	11	p1878	A69-25151	AF 19/608/-4953		
04	p0562	A69-15467	14	p2531	A69-28883	08	p1308	A69-20316
04	p0650	A69-15527	16	p2748	A69-32795	AF 19/628/-67-C-0008		
05	p0744	A69-15720	17	p2979	A69-32916	16	p2755	A69-32078
05	p0756	A69-16282	24	p4249	A69-43660	AF 19/628/-67-C-0038		
06	p0962	A69-17803				02	p0260	A69-12701
06	p1029	A69-18206				14	p2460	A69-29605
AF 04/695/-67-C-0197			12 p2058 A69-26420			18 p3133 A69-34263		
12	p2058	A69-26417	12 p2058 A69-26422					
12	p2058	A69-26418				AF 19/628/-67-C-0044		
AF 04/695/-68-C-0158						01	p0155	A69-10976
20	p3613	A69-38247				AF 19/628/-67-C-0069		
AF 04/695/-150						09	p1439	A69-21826
21	p3824	A69-39404				AF 19/628/-67-C-0075		
AF 04/695/-694						01	p0091	A69-10817
16	p2869	A69-32729				10	p1705	A69-23813
AF 04/695/-695						19 p3278 A69-36693		
14	p2534	A69-29030				23	p4171	A69-41392
AF 04/695/-746						AF 19/628/-67-C-0091		
13	p2225	A69-28201				14	p2403	A69-29251
AF 04/695/-997						AF 19/628/-67-C-0096		
16	p7869	A69-32729				17	p3010	A69-32915
AF 04/695/-1001						AF 19/628/-67-C-0147		
02	p0209	A69-12352	06	p1014	A69-17567	06	p0976	A69-16874
04	p0665	A69-14703	09	p1616	A69-21941	AF 19/628/-67-C-0166		
04	p0602	A69-15427	21	p3785	A69-39021	02	p0320	A69-12117
AF 04/701/-68-C-0032						03	p0514	A69-14007
11	p1817	A69-24281				05 p0754 A69-16263		
AF 04/701/-68-C-0036			16	p2770	A69-31889	05 p0755 A69-16266		
02	p0190	A69-12525				AF 19/628/-67-C-0182		
02	p0233	A69-12538	08	p1354	A69-20150	08	p1407	A69-20935
04	p0588	A69-14737	15	p2657	A69-31159	19 p3414 A69-36114		
06	p1037	A69-18086	15	p2657	A69-31160	AF 19/628/-67-C-0190		
06	p0930	A69-18099	18	p3176	A69-34790	16	p2754	A69-32569
06	p0914	A69-18115	21	p3669	A69-38759	AF 19/628/-67-C-0191		
AF 04/701/-68-C-0041						15	p2698	A69-31353
06	p0912	A69-18073				AF 19/628/-67-C-0196		
AF 04/701/-68-C-0110						16	p2781	A69-32320
14	p2414	A69-29511				AF 19/628/-67-C-0206		
AF 04/701/-68-C-0188						10	p1728	A69-23167
23	p4116	A69-41594				11 p1930 A69-25286		
AF 04/701/-68-C-0200						AF 19/628/-67-C-0229		
06	p0972	A69-18186	20	p3484	A69-37347	08	p1344	A69-19812
07	p1204	A69-18340	20	p3534	A69-38089	16 p2780 A69-32306		
12	p2104	A69-25986	21	p3819	A69-39017	AF 19/628/-67-C-0231		
12	p2092	A69-26476	21	p3837	A69-39028	07	p1217	A69-19240
12	p2059	A69-26816	21	p3686	A69-39371	AF 19/628/-67-C-0233		
14	p2509	A69-28935	23	p4131	A69-42537	22	p3899	A69-40014
16	p2877	A69-31896	24	p4401	A69-43097	AF 19/628/-67-C-0239		
17	p2952	A69-33435	24	p4368	A69-43177	23	p4115	A69-41584
18	p3100	A69-35475	24	p4310	A69-43179	AF 19/628/-67-C-0240		
20	p3514	A69-37226				07	p1225	A69-19772
AF 04/701/-68-C-0219						07	p1225	A69-19773
02	p0210	A69-12388				AF 19/628/-67-C-0241		
AF 04/701/-69-C-0118						24	p4251	A69-42714
24	p4360	A69-43697				AF 19/628/-67-C-0247		
AF 04/701/-69-C-0119						04	p0654	A69-14628
06	p0866	A69-18208	20	p3459	A69-37902	22 p3983 A69-40149		
AF 08/606/-67-C-0071						AF 19/628/-67-C-0250		
20	p3511	A69-37850				01	p0119	A69-10669
AF 08/606/-68-C-0046						AF 19/628/-67-C-0277		
15	p2653	A69-31164				08	p1307	A69-20183
						08	p1307	A69-20184
						09	p1576	A69-21708
						14	p2449	A69-29560
						16 p2851 A69-32618		
						16 p2852 A69-32619		
						18 p3186 A69-34808		

CONTRACT NUMBER INDEX

AF 19/628/-67-C-0301 01 p0076 A69-11232		AF 19/628/-2362 03 p0395 A69-13622	
AF 19/628/-67-C-0308 08 p1274 A69-20046	23 p4136 A69-41583	AF 19/628/-2398 18 p3116 A69-34456	
AF 19/628/-67-C-0327 06 p0927 A69-17698		AF 19/628/-2406 04 p0571 A69-14316	
AF 19/628/-67-C-0333 09 p1452 A69-21313		AF 19/628/-2758 08 p1272 A69-20017	
AF 19/628/-68-C-0008 10 p1729 A69-23424		AF 19/628/-2823 01 p0037 A69-10954	
AF 19/628/-68-C-0021 15 p2651 A69-30895		AF 19/628/-2829 16 p2776 A69-32091	19 p3302 A69-35993
AF 19/628/-68-C-0058 09 p1559 A69-22307	11 p1938 A69-25306	AF 19/628/-2936 07 p1129 A69-19502	
AF 19/628/-68-C-0072 14 p2423 A69-29753 20 p3494 A69-37841	20 p3494 A69-37842 21 p3675 A69-39283	AF 19/628/-3819 02 p0218 A69-12326 17 p2929 A69-33882	20 p3505 A69-37298 23 p4142 A69-42336
AF 19/628/-68-C-0084 19 p3314 A69-36598	23 p4164 A69-41626	AF 19/628/-3828 17 p3025 A69-34219	
AF 19/628/-68-C-0121 14 p2440 A69-29129		AF 19/628/-3858 07 p1128 A69-19359	09 p1577 A69-21711
AF 19/628/-68-C-0126 12 p2032 A69-26855 14 p2414 A69-29512	22 p3914 A69-40700	AF 19/628/-3877 13 p2343 A69-27627	
AF 19/628/-68-C-0169 02 p0299 A69-12402		AF 19/628/-3887 18 p3113 A69-34240	
AF 19/628/-68-C-0179 11 p1851 A69-25114		AF 19/628/-4055 06 p0927 A69-17698	
AF 19/628/-68-C-0180 20 p3507 A69-37847		AF 19/628/-4071 02 p0218 A69-12335	
AF 19/628/-68-C-0190 08 p1284 A69-20366		AF 19/628/-4082 02 p0243 A69-12007	
AF 19/628/-68-C-0233 01 p0124 A69-10919		AF 19/628/-4303 07 p1088 A69-18386	
AF 19/628/-68-C-0294 24 p4367 A69-43173		AF 19/628/-4324 01 p0033 A69-10973 17 p2925 A69-33842	17 p2925 A69-33844
AF 19/628/-68-C-0365 22 p3906 A69-40350	23 p4182 A69-41761	AF 19/628/-4332 07 p1225 A69-19770	07 p1225 A69-19771
AF 19/628/-69-C-0041 21 p3778 A69-39579 22 p4030 A69-40771	24 p4375 A69-42659	AF 19/628/-4382 16 p2818 A69-31671	
AF 19/628/-69-C-0076 07 p1107 A69-19448	22 p3984 A69-40478	AF 19/628/-4781 03 p0426 A69-14031	
AF 19/628/-69-C-0121 21 p3683 A69-39281		AF 19/628/-4783 07 p1126 A69-19039	
AF 19/628/-69-C-0123 14 p2414 A69-29512		AF 19/628/-4794 07 p1184 A69-19141	
AF 19/628/-69-C-0134 22 p3873 A69-40202		AF 19/628/-4804 07 p1088 A69-18386	
AF 19/628/-342 04 p0575 A69-14750		AF 19/628/-4884 05 p0719 A69-15929	
AF 19/628/-378 09 p1574 A69-21402		AF 19/628/-4924 01 p0110 A69-10689	
AF 19/628/-1691 06 p0888 A69-17512		AF 19/628/-4950 01 p0067 A69-10972	09 p1547 A69-21662
AF 19/628/-1695 02 p0244 A69-12397		AF 19/628/-4956 04 p0557 A69-14915	
AF 19/628/-1699 20 p3576 A69-37578		AF 19/628/-4984 02 p0218 A69-12326	
AF 19/628/-2350 05 p0758 A69-16412		AF 19/628/-4990 24 p4251 A69-42714	



CONTRACT NUMBER INDEX

AF 19/628/-5049 01 p0028 A69-10419	03 p0399 A69-13905	AF 29/600/-69-C-0011 24 p4261 A69-42709	
AF 19/628/-5052 07 p1144 A69-18252		AF 29/600/-5164 07 p1116 A69-18949	
AF 19/628/-5165 02 p0280 A69-11929 03 p0390 A69-13218 10 p1655 A69-23529	10 p1655 A69-23530 20 p3494 A69-37848	AF 29/600/-5192 07 p1116 A69-18949	
AF 19/628/-5517 04 p0592 A69-14653 04 p0627 A69-14914	17 p3023 A69-33158	AF 29/601/-67-C-0021 01 p0147 A69-11235	22 p4005 A69-40512
AF 19/628/-5543 02 p0290 A69-12400 07 p1128 A69-19359	18 p3130 A69-35189 22 p3873 A69-40202	AF 29/601/-67-C-0051 06 p0978 A69-16890	
AF 19/628/-5545 02 p0299 A69-12243	04 p0575 A69-14750	AF 29/601/-67-C-0053 24 p4401 A69-43098	
AF 19/628/-5552 11 p1953 A69-24335		AF 29/601/-68-C-0007 06 p0975 A69-16970	
AF 19/628/-5656 10 p1723 A69-23165		AF 29/601/-68-C-0052 15 p2657 A69-31265	
AF 19/628/-5707 20 p3574 A69-38092		AF 29/601/-6707 01 p0124 A69-10962	
AF 19/628/-5718 08 p1281 A69-20029 10 p1663 A69-23423	23 p4116 A69-41595	AF 29/601/-7038 01 p0147 A69-11235	
AF 19/628/-5720 06 p0918 A69-17494	14 p2440 A69-29124	AF 29/601/-7083 06 p0977 A69-16884	
AF 19/628/-5732 02 p0219 A69-12339		AF 29/601/-7215 04 p0671 A69-14414	
AF 19/628/-5750 01 p0140 A69-11254		AF/30-1/-3078 12 p2112 A69-25943	
AF 19/628/-5826 08 p1346 A69-20600 19 p3303 A69-36404	20 p3573 A69-38057	AF 30/602/-67-C-0054 04 p0573 A69-14343	
AF 19/628/-5832 03 p0475 A69-13146		AF 30/602/-67-C-0066 23 p4141 A69-42220	
AF 19/628/-5876 10 p1746 A69-23655		AF 30/602/-67-C-0109 09 p1466 A69-22452	
AF 19/628/-5879 12 p2029 A69-26251 12 p2032 A69-26855	20 p3506 A69-37834	AF 30/602/-67-C-0119 03 p0390 A69-13216	
AF 19/628/-5912 23 p4152 A69-41920		AF 30/602/-67-C-0120 12 p2038 A69-26056 12 p2041 A69-26630	13 p2234 A69-28073
AF 19/628/-5923 19 p3271 A69-36252		AF 30/602/-67-C-0136 04 p0576 A69-14758	
AF 19/628/-6066 13 p2316 A69-27628	22 p3993 A69-40729	AF 30/602/-67-C-0153 15 p2580 A69-31130	
AF 19/628/-6082 10 p1692 A69-23254		AF 30/602/-67-C-0164 15 p2611 A69-31033	
AF 19/629/-5552 19 p3408 A69-36086		AF 30/602/-68-C-0004 08 p1270 A69-19861	
AF 19/638/-68-C-0064 21 p3671 A69-38405		AF 30/602/-68-C-0022 09 p1476 A69-22784	
AF 19/638/-1730 23 p4194 A69-42208		AF 30/602/-68-C-0043 05 p0733 A69-16555 07 p1094 A69-18424	07 p1197 A69-18448 07 p1098 A69-18458
AF 19/682/-68-C-0245 08 p1361 A69-20145		AF 30/602/-68-C-0061 23 p4142 A69-42232	
AF 29/201/-7038 22 p4005 A69-40512		AF 30/602/-68-C-0086 12 p2040 A69-26473	
AF 29/600/-67-C-0009 08 p1263 A69-20174		AF 30/602/-68-C-0133 17 p2935 A69-32887	
		AF 30/602/-68-C-0286 04 p0566 A69-15342	
		AF 30/602/-69-C-0001 09 p1462 A69-21410	

CONTRACT NUMBER INDEX

AF 30/602/-2575 04 p0575 A69-14750				AF 33/615/-67-C-1150 21 p3689 A69-38656	
AF 30/602/-2636 12 p2040 A69-26473				AF 33/615/-67-C-1187 05 p0837 A69-16138	
AF 30/602/-3282 03 p0406 A69-13906	12 p2040	A69-26472		AF 33/615/-67-C-1190 10 p1804 A69-24150	
AF 30/602/-3360 03 p0395 A69-13627				AF 33/615/-67-C-1209 06 p0971 A69-18116	
AF 30/602/-3541 18 p3133 A69-34247				AF 33/615/-67-C-1238 22 p3906 A69-40346	
AF 30/602/-3569 02 p0299 A69-12240	07 p1197	A69-18467		AF 33/615/-67-C-1245 04 p0623 A69-14694	24 p4315 A69-43242
AF 30/602/-3595 04 p0575 A69-14750				10 p1725 A69-23309	
AF 30/602/-3724 11 p1836 A69-24985				AF 33/615/-67-C-1263 11 p1987 A69-25369	
AF 30/602/-3810 09 p1468 A69-22604				AF 33/615/-67-C-1268 09 p1561 A69-21223	09 p1570 A69-21985
AF 30/602/-3847 04 p0557 A69-14754	07 p1145	A69-18479		AF 33/615/-67-C-1284 11 p1929 A69-25265	
AF 30/602/-3946 03 p0395 A69-13627				AF 33/615/-67-C-1340 09 p1477 A69-21993	
AF 30/602/-3954 07 p1095 A69-18431				AF 33/615/-67-C-1348 12 p2138 A69-26631	
AF 30/602/-4003 02 p0217 A69-12149				AF 33/615/-67-C-1370 17 p2908 A69-33171	
AF 30/602/-4019 04 p0579 A69-15460				AF 33/615/-67-C-1376 06 p0942 A69-17225	
AF 30/602/-4134 04 p0562 A69-15476				AF 33/615/-67-C-1412 20 p3626 A69-37719	
AF 30/602/-4158 14 p2419 A69-28894				AF 33/615/-67-C-1433 17 p2943 A69-34132	23 p4141 A69-42221
AF 30/602/-4187 02 p0217 A69-12147				AF 33/615/-67-C-1441 10 p1709 A69-23071	
AF 33/600/-43026 16 p2790 A69-32079				AF 33/615/-67-C-1482 03 p0375 A69-14070	07 p1066 A69-19422
AF 33/612/-1696 06 p0939 A69-16942				06 p0874 A69-17837	
AF 33/614/-4177 03 p0395 A69-13623				AF 33/615/-67-C-1496 06 p0885 A69-17842	
AF 33/615/-67-C-1017 04 p0572 A69-14320	17 p2942	A69-34085		AF 33/615/-67-C-1548 14 p2514 A69-29949	24 p4335 A69-43451
AF 33/615/-67-C-1044 03 p0447 A69-13818				AF 33/615/-67-C-1549 13 p2267 A69-27284	
AF 33/615/-67-C-1061 03 p0444 A69-13310				AF 33/615/-67-C-1553 15 p2657 A69-30155	
AF 33/615/-67-C-1065 17 p2893 A69-33498	24 p4247	A69-43576		AF 33/615/-67-C-1581 17 p2947 A69-34135	
18 p3120 A69-34434				AF 33/615/-67-C-1639 01 p0039 A69-10189	
AF 33/615/-67-C-1081 04 p0553 A69-14908				AF 33/615/-67-C-1641 19 p3354 A69-35518	24 p4325 A69-43444
AF 33/615/-67-C-1094 09 p1522 A69-21501	09 p1522	A69-21503		24 p4323 A69-43426	
09 p1522 A69-21502				AF 33/615/-67-C-1661 13 p2364 A69-28229	23 p4227 A69-41882
AF 33/615/-67-C-1140 17 p2935 A69-32888	20 p3584	A69-38070		AF 33/615/-67-C-1662 17 p2950 A69-33248	
AF 33/615/-67-C-1141 09 p1478 A69-22380				AF 33/615/-67-C-1666 13 p2302 A69-28265	
AF 33/615/-67-C-1148 10 p1636 A69-23471				AF 33/615/-67-C-1681 21 p3819 A69-39013	
				AF 33/615/-67-C-1698 21 p3748 A69-39485	



# CONTRACT NUMBER INDEX

AF 33/615/-67-C-1718 21 p3748 A69-39485			
AF 33/615/-67-C-1754 09 p1622 A69-21905			
AF 33/615/-67-C-1767 06 p1029 A69-18216			
AF 33/615/-67-C-1814 10 p1694 A69-23368			
AF 33/615/-67-C-1817 01 p0040 A69-10195 01 p0041 A69-10201	04 p0572	A69-14323	
AF 33/615/-67-C-1819 09 p1563 A69-21230			
AF 33/615/-67-C-1822 20 p3465 A69-37706			
AF 33/615/-67-C-1850 20 p3548 A69-37216			
AF 33/615/-67-C-1863 19 p3369 A69-35793			
AF 33/615/-67-C-1895 11 p1938 A69-25307			
AF 33/615/-67-C-1899 09 p1478 A69-22380			
AF 33/615/-67-C-1900 06 p0936 A69-17900			
AF 33/615/-67-C-1912 17 p2917 A69-34033			
AF 33/615/-67-C-1928 13 p2207 A69-27502			
AF 33/615/-67-C-1949 23 p4173 A69-41631			
AF 33/615/-67-C-1981 14 p2418 A69-28890			
AF 33/615/-67-1180 23 p4234 A69-42451			
AF 33/615/-68-C-1020 01 p0080 A69-10605			
AF 33/615/-68-C-1030 08 p1358 A69-21010 08 p1358 A69-21011 12 p2131 A69-25984	20 p3578 A69-36937 24 p4304 A69-43578		
AF 33/615/-68-C-1033 16 p2843 A69-32700			
AF 33/615/-68-C-1052 19 p3342 A69-35812	21 p3749	A69-39598	
AF 33/615/-68-C-1055 18 p3114 A69-34408			
AF 33/615/-68-C-1082 17 p2942 A69-34093			
AF 33/615/-68-C-1164 19 p3250 A69-35686			
AF 33/615/-68-C-1167 07 p1071 A69-19430			
AF 33/615/-68-C-1168 08 p1300 A69-21174			
AF 33/615/-68-C-1175 24 p4272 A69-42850			
AF 33/615/-68-C-1184 17 p2892 A69-33468			
AF 33/615/-68-C-1203 18 p3212 A69-34383			
			AF 33/615/-68-C-1220 15 p2588 A69-30475
			AF 33/615/-68-C-1310 11 p1882 A69-24679
			AF 33/615/-68-C-1312 10 p1742 A69-22947
		17 p2942	A69-34120
			AF 33/615/-68-C-1536 17 p2943 A69-34122
			AF 33/615/-68-C-1548 22 p3906 A69-40346
			AF 33/615/-68-C-1688 14 p2418 A69-28890
			AF 33/615/-68-1435 24 p4276 A69-43273
			AF 33/615/-69-C-1033 20 p3570 A69-37168
			AF 33/615/-69-C-1048 19 p3377 A69-36184
		24 p4354	A69-43816
			AF 33/615/-69-C-1234 17 p3002 A69-34079
			AF 33/615/-69-C-1586 21 p3648 A69-39422
			AF 33/615/-1029 09 p1605 A69-22411
		09 p1605	A69-22412
			AF 33/615/-1080 22 p3950 A69-41227
		24 p4318	A69-42643
			AF 33/615/-1201 07 p1140 A69-19307
			AF 33/615/-1228 06 p1022 A69-17369
			AF 33/615/-1249 05 p0779 A69-15988
			AF 33/615/-1275 01 p0040 A69-10196
			AF 33/615/-1326 13 p2243 A69-28283
			AF 33/615/-1327 07 p1171 A69-19545
			AF 33/615/-1397 03 p0376 A69-14076
			AF 33/615/-1403 09 p1509 A69-22342
			AF 33/615/-1411 16 p2788 A69-31722 19 p3400 A69-35675
		23 p4215	A69-41879
			AF 33/615/-1526 21 p3819 A69-39013
			AF 33/615/-1530 21 p3785 A69-39212
			AF 33/615/-1602 10 p1796 A69-23075
			AF 33/615/-1644 05 p0783 A69-16236
			AF 33/615/-1656 20 p3490 A69-37646
			AF 33/615/-1719 06 p0942 A69-17225
			AF 33/615/-1747 05 p0711 A69-15802

CONTRACT NUMBER INDEX

AF 33/615/-1817 12 p2174 A69-26758		09 p1512 A69-22362	24 p4399 A69-42991
AF 33/615/-1863 12 p2092 A69-26478		AF 33/615/-3121 05 p0732 A69-16553	
AF 33/615/-1915 02 p0304 A69-12313	06 p0972 A69-18197	AF 33/615/-3124 13 p2273 A69-28464	
AF 33/615/-1951 07 p1094 A69-18423		AF 33/615/-3202 11 p1856 A69-25654	
AF 33/615/-2122 24 p4301 A69-43355		AF 33/615/-3216 08 p1281 A69-20015 08 p1281 A69-20018	11 p1850 A69-24977
AF 33/615/-2210 08 p1257 A69-20950		AF 33/615/-3238 15 p2619 A69-30482	
AF 33/615/-2274 07 p1184 A69-18911	23 p4115 A69-41586	AF 33/615/-3258 02 p0218 A69-12333	
AF 33/615/-2335 24 p4333 A69-43342		AF 33/615/-3294 17 p2902 A69-34026	19 p3245 A69-35655
AF 33/615/-2341 03 p0414 A69-13136		AF 33/615/-3311 17 p2908 A69-33171	
AF 33/615/-2348 10 p1700 A69-24070		AF 33/615/-3323 13 p2364 A69-28208	
AF 33/615/-2362 02 p0351 A69-12206		AF 33/615/-3370 06 p0880 A69-17089	
AF 33/615/-2399 14 p2508 A69-28875		AF 33/615/-3371 05 p0729 A69-15977	
AF 33/615/-2525 01 p0040 A69-10198 04 p0572 A69-14323	22 p3912 A69-40067	AF 33/615/-3378 15 p2711 A69-30872	22 p3955 A69-40404
AF 33/615/-2671 02 p0252 A69-11863		AF 33/615/-3411 08 p1298 A69-20856	10 p1667 A69-24058
AF 33/615/-2673 05 p0838 A69-16152		AF 33/615/-3413 10 p1637 A69-23473	
AF 33/615/-2713 19 p3320 A69-35556		AF 33/615/-3419 07 p1087 A69-19642	24 p4282 A69-42970
AF 33/615/-2766 22 p4049 A69-40266		AF 33/615/-3440 02 p0347 A69-12518	
AF 33/615/-2788 13 p2274 A69-27226	19 p3350 A69-36893	AF 33/615/-3466 02 p0218 A69-12333	
AF 33/615/-2828 01 p0083 A69-10914 15 p2622 A69-30605	15 p2622 A69-30608	AF 33/615/-3476 09 p1509 A69-22342	
AF 33/615/-2922 22 p3873 A69-40206		AF 33/615/-3513 12 p2112 A69-25945	
AF 33/615/-2963 06 p0882 A69-17643		AF 33/615/-3524 08 p1364 A69-20518	08 p1364 A69-20519
AF 33/615/-2976 16 p2823 A69-32466		AF 33/615/-3534 16 p2772 A69-32170	18 p3120 A69-34394
AF 33/615/-3046 05 p0769 A69-16232		AF 33/615/-3574 02 p0229 A69-12502	
AF 33/615/-3080 24 p4405 A69-43653		AF 33/615/-3583 04 p0591 A69-15504	
AF 33/615/-3100 11 p1882 A69-24679		AF 33/615/-3609 11 p1852 A69-25315	16 p2748 A69-31580
AF 33/615/-3104 06 p1033 A69-17559	09 p1621 A69-21442	AF 33/615/-3610 02 p0196 A69-12086	
AF 33/615/-3106 07 p1166 A69-19145		AF 33/615/-3657 06 p0869 A69-18157	
AF 33/615/-3110 05 p1028 A69-18159 07 p1159 A69-18722 08 p1339 A69-20500 08 p1341 A69-20512 09 p1611 A69-21479	09 p1530 A69-22320 09 p1509 A69-22341 12 p2185 A69-26821 16 p2803 A69-32150 20 p3626 A69-37762	AF 33/615/-3671 19 p3355 A69-35526	
		AF 33/615/-3673 21 p3819 A69-39013	
		AF 33/615/-3724 01 p0011 A69-11023	17 p2999 A69-33737



# CONTRACT NUMBER INDEX

AF 33/615/-3734  
14 p2508 A69-28875

AF 33/615/-3736  
17 p2900 A69-33520

AF 33/615/-3756  
19 p3434 A69-35660

AF 33/615/-3768  
11 p1858 A69-24937

AF 33/615/-3783  
19 p3319 A69-35551

AF 33/615/-3785  
11 p1867 A69-24280

AF 33/615/-3796  
01 p0171 A69-11263

AF 33/615/-3797  
08 p1273 A69-20025

AF 33/615/-3864  
01 p0095 A69-10610 13 p2280 A69-27766

AF 33/615/-3885  
21 p3679 A69-39603

AF 33/615/-3890  
07 p1088 A69-19707 10 p1645 A69-23385

AF 33/615/-3903  
13 p2230 A69-27679

AF 33/615/-3923  
06 p0907 A69-18110

AF 33/615/-3960  
24 p4276 A69-43326

AF 33/615/-5001  
19 p3346 A69-36436

AF 33/615/-5002  
18 p3172 A69-35013

AF 33/615/-5006  
01 p0092 A69-10059

AF 33/615/-5012  
03 p0476 A69-13159 06 p0865 A69-18200

AF 33/615/-5029  
17 p2902 A69-34032 •

AF 33/615/-5038  
21 p3662 A69-38728

AF 33/615/-5039  
01 p0169 A69-10639

AF 33/615/-5046  
08 p1341 A69-20515

AF 33/615/-5072  
01 p0140 A69-11254

AF 33/615/-5102  
01 p0040 A69-10196 01 p0040 A69-10197

AF 33/615/-5125  
21 p3819 A69-39013

AF 33/615/-5126  
10 p1714 A69-23977

AF 33/615/-5148  
23 p4172 A69-41397

AF 33/615/-5155  
06 p0914 A69-18132

AF 33/615/-5157  
10 p1672 A69-23266

AF 33/615/-5164  
06 p1038 A69-18178

AF 33/615/-5166  
09 p1527 A69-22510

AF 33/615/-5193  
13 p2279 A69-27760

AF 33/615/-5198  
07 p1170 A69-18724

AF 33/615/-5201  
10 p1795 A69-23063

AF 33/615/-5205  
20 p3505 A69-37342

AF 33/615/-5213  
16 p2874 A69-32160

AF 33/615/-5224  
19 p3250 A69-35683

AF 33/615/-5248  
05 p0776 A69-16331 12 p2108 A69-26636  
09 p1544 A69-21331

AF 33/615/-5257  
07 p1170 A69-18710 13 p2361 A69-27443  
07 p1170 A69-18713 13 p2364 A69-28208  
07 p1232 A69-18719 13 p2287 A69-28669  
12 p2189 A69-27162 13 p2371 A69-28678  
13 p2358 A69-27211 20 p3627 A69-37766  
13 p2361 A69-27442

AF 33/615/-5269  
13 p2307 A69-27501

AF 33/615/-5270  
19 p3318 A69-35541

AF 33/615/5275  
24 p4337 A69-43450

AF 33/615/-5278  
01 p0102 A69-10909

AF 33/615/-5306  
13 p2325 A69-28220

AF 33/615/-5313  
06 p1034 A69-17927 22 p4049 A69-40266

AF 33/615/-5318  
17 p2902 A69-34031

AF 33/615/-5331  
05 p0772 A69-16025

AF 33/615/-5357  
17 p2905 A69-34113

AF 33/615/-5370  
11 p1856 A69-25654

AF 33/615/-5389  
13 p2249 A69-28270

AF 33/615/-5433  
07 p1169 A69-19674

AF 33/615/-13573  
12 p2040 A69-26563

AF 33/616/-6079  
23 p4136 A69-41582

AF 33/616/-8378  
08 p1264 A69-20668

AF 33/657/-68-C-0380  
04 p0594 A69-15123

AF 33/657/-69-C-0178  
04 p0559 A69-15198

AF 33/657/-69-C-0420  
23 p4075 A69-42305 24 p4413 A69-43552

AF 33/657/-7380  
15 p2657 A69-30155

CONTRACT NUMBER INDEX

AF 33/657/-7868 22 p3927 A69-40490			AF 40/600/-1131 17 p2894 A69-33501		
AF 33/657/-7874 06 p1034 A69-17927	22 p4049	A69-40266	AF 40/600/-1161 09 p1477 A69-21970		
AF 33/657/-8302 03 p0532 A69-13319	24 p4316	A69-43583	AF 40/600/-1200 23 p4239 A69-41893		
AF 33/657/-8386 04 p0688 A69-15509			AF 41/608/-38704 21 p3764 A69-39412		
AF 33/657/-8673 06 p0911 A69-18041			AF 41/609/-67-001 24 p4256 A69-42624		
AF 33/657/-8860 13 p2249 A69-28270			AF 41/609/-68-C-0009 21 p3683 A69-39439		
AF 33/657/-9078 07 p1171 A69-19545			AF 41/609/-2684 22 p3872 A69-40201		
AF 33/657/-9248 10 p1700 A69-24070			AF 41/609/-2685 14 p2407 A69-29299		
AF 33/657/-10384 07 p1139 A69-18626			AF 41/609/-2897 23 p4102 A69-41679		
AF 33/657/-10474 11 p1850 A69-24977			AF 41/609/-2989 23 p4088 A69-41810		
AF 33/657/-10600 24 p4334 A69-43343			AF 41/609/-3039 07 p1071 A69-19133		
AF 33/657/-10787 08 p1258 A69-20956			AF 42/600/-68-C-2325 16 p2869 A69-32749		
AF 33/657/-10821 10 p1700 A69-24164			AF 44/609/-69-C-0023 24 p4249 A69-43694		
AF 33/657/-10835 02 p0202 A69-11952			AF 44/620/-67-C-0007 18 p3121 A69-34550		
AF 33/657/-11010 01 p0147 A69-11235	22 p4005	A69-40512	AF 44/620/-67-C-0019 04 p0676 A69-14741 13 p2368 A69-28348	13 p2368 A69-28349 15 p2705 A69-30429	
AF 33/657/-11028 10 p1700 A69-24070			AF 44/620/-67-C-0020 13 p2326 A69-27464		
AF 33/657/-11081 08 p1317 A69-21071			AF 44/620-67-C-0023 24 p4299 A69-42766		
AF 33/657/-11127 04 p0619 A69-15395			AF 44/620/-67-C-0026 09 p1460 A69-21393		
AF 33/657/-11185 07 p1102 A69-18875			AF 44/620/-67-C-0029 11 p1930 A69-25279		
AF 33/657/-11336 04 p0624 A69-15002			AF 44/620/-67-C-0044 05 p0698 A69-16078		
AF 33/657/-11347 07 p1088 A69-18386			AF 44/620/-67-C-0045 11 p1910 A69-25410 15 p2597 A69-31152	16 p2882 A69-32337 18 p3172 A69-34667	
AF 33/657/-11485 16 p2792 A69-32558			AF 44/620/-67-C-0062 09 p1580 A69-22269		
AF 33/657/-13703 04 p0594 A69-15123			AF 44/620/-67-C-0065 20 p3593 A69-38154		
AF 33/657/-14751 18 p3140 A69-34377			AF 44/620/-67-C-0068 06 p1034 A69-17791	06 p0983 A69-18118	
AF 39/602/-4164 13 p2230 A69-27678			AF 44/620/-67-C-0085 15 p2555 A69-31035		
AF 40/600/-67-C-0007 13 p2325 A69-28274	19 p3448	A69-36333	AF 44/620/-67-C-0095 17 p2917 A69-32918		
AF 40/600/-67-C-0010 16 p2877 A69-31844			AF 44/620/-67-C-0113 04 p0681 A69-15286		
AF 40/600/-69-C-0001 06 p0862 A69-18047 06 p0862 A69-18050 06 p0984 A69-18082 06 p0908 A69-18203 13 p2241 A69-28211 13 p2199 A69-28244 13 p2200 A69-28273	13 p2366 A69-28294 16 p2879 A69-32171 16 p2840 A69-32673 17 p2956 A69-33492 17 p2956 A69-33495 19 p3306 A69-35732 22 p3922 A69-40385		AF 44/620/-67-0045 22 p3860 A69-40540		
			AF 44/620/-68-C-0010 03 p0414 A69-13134 09 p1622 A69-22085	17 p3072 A69-33294 21 p3848 A69-38706	



# CONTRACT NUMBER INDEX

11 p1923 A69-24296	24 p4275 A69-43108	AF 49/638/-1267	
13 p2249 A69-28240	24 p4248 A69-43601	23 p4199 A69-41897	
16 p2830 A69-32347	24 p4415 A69-43670	AF 49/638/-1271	
16 p2832 A69-32360		11 p1818 A69-25283	
AF 44/620/-68-C-0014		AF 49/638/-1274	
23 p4082 A69-41446		17 p2896 A69-33600	18 p3123 A69-34923
AF 44/620/-68-C-0017		AF 49/638/-1276	
18 p3153 A69-35243		04 p0669 A69-14398	19 p3443 A69-36793
AF 44/620/-68-C-0018		AF 49/638/-1280	
04 p0588 A69-14733	23 p4060 A69-41912	15 p2717 A69-30791	
15 p0697 A69-15712		AF 49/638/-1285	
AF 44/620/-68-C-0020		24 p4359 A69-43645	
24 p4260 A69-42704		AF 49/638/-1290	
AF 44/620/-68-C-0021		24 p4402 A69-43107	
11 p1909 A69-25290		AF 49/638/-1303	
AF 44/620/-68-C-0022		06 p0927 A69-17701	
24 p4365 A69-43260		AF 49/638/-1314	
AF 44/620/-68-C-0023		10 p1668 A69-24145	10 p1807 A69-24182
01 p0050 A69-10238	09 p1474 A69-22440	10 p1806 A69-24173	10 p1808 A69-24183
01 p0051 A69-10441	14 p2416 A69-29549	AF 49/638/-1321	
02 p0224 A69-11961	18 p3111 A69-34678	02 p0293 A69-12782	02 p0329 A69-12794
09 p1533 A69-22436	21 p3687 A69-39460	02 p0329 A69-12787	07 p1216 A69-19204
AF 44/620/-68-C-0028		02 p0309 A69-12788	
06 p1009 A69-17962	09 p1607 A69-22432	AF 49/638/-1323	
08 p1398 A69-20777	11 p1958 A69-24592	09 p1600 A69-22198	
09 p1598 A69-22176	18 p3188 A69-35395	AF 49/638/-1328	
AF 44/620/-68-C-0051		06 p0863 A69-18068	
10 p1731 A69-23434	17 p3011 A69-33446	AF 49/638/-1335	
10 p1731 A69-23438		05 p0829 A69-16777	
AF 44/620/-68-C-0069		AF 49/638/-1345	
07 p1239 A69-18316		10 p1719 A69-23517	12 p2124 A69-26929
AF 44/620/-68-C-0075		AF 49/638/-1346	
08 p1380 A69-19784		01 p0126 A69-10226	11 p1930 A69-25278
AF 44/620/-69-A-0041		09 p1434 A69-21948	18 p3120 A69-34457
12 p2119 A69-26831		10 p1682 A69-23412	22 p3990 A69-40758
AF 44/620/-69-C-0011		AF 49/638/-1360	
10 p1709 A69-23055		04 p0676 A69-14708	
AF 44/620/-69-C-0019		AF 49/638/-1375	
24 p4367 A69-43006		06 p1009 A69-17962	11 p1958 A69-24592
AF 44/620/-69-C-0022		08 p1398 A69-20777	
17 p2950 A69-33248		AF 49/638/-1385	
AF 44/620/-69-C-0083		04 p0541 A69-14387	
18 p3186 A69-34316		AF 49/638/-1387	
AF 49/600/-69-C-0001		21 p3664 A69-38978	
13 p2199 A69-28224	17 p2954 A69-33458	AF 49/638/-1388	
AF 49/638/-32		07 p1123 A69-18806	14 p2450 A69-29570
02 p0353 A69-12319		AF 49/638/-1402	
AF 49/638/-401		02 p0209 A69-12347	04 p0557 A69-14752
24 p4299 A69-42766		04 p0570 A69-14310	17 p2928 A69-33872
AF 49/638/-527		04 p0571 A69-14317	23 p4191 A69-42148
14 p2501 A69-29953		AF 49/638/-1405	
AF 49/638/-842		06 p1037 A69-18100	19 p3393 A69-36814
24 p4383 A69-42945		AF 49/638/-1425	
AF 49/638/-1100		07 p1234 A69-19382	
04 p0594 A69-15123		AF 49/638/-1429	
AF 49/638/-1190		14 p2460 A69-29605	
14 p2488 A69-29927		AF 49/638/-1433	
AF 49/638/-1202		20 p3458 A69-37186	
21 p3783 A69-38799		AF 49/638/-1442	
AF 49/638/-1210		13 p2245 A69-27419	
04 p0635 A69-14702		AF 49/638/-1448	
AF 49/638/-1250		18 p3099 A69-34467	
06 p0982 A69-18235			

CONTRACT NUMBER INDEX

AF 49/638/-1474 21 p3684 A69-38431			AF 49/638/-1653 15 p2667 A69-30199		
AF 49/638/-1477 24 p4416 A69-43689			AF 49/638/-1654 03 p0532 A69-13122	10 p1651 A69-22939	
AF 49/638/-1483 11 p1930 A69-25276	13 p2312 A69-28221		AF 49/638/-1700 13 p2345 A69-27650		
AF 49/638/-1487 10 p1726 A69-23526			AF 49/638/-1708 01 p0121 A69-11202		
AF 49/638/-1489 21 p3783 A69-38799			AF 49/638/-1712 07 p1239 A69-18316		
AF 49/638/-1494 06 p0864 A69-18158			AF 49/638/-1725 14 p2428 A69-28876		
AF 49/638/-1517 04 p0623 A69-14694 17 p2920 A69-33622	21 p3754 A69-38432		AF 49/638/-1731 01 p0037 A69-10954		
AF 49/638/-1521 04 p0670 A69-14401			AF 49/638/-1996 06 p0868 A69-17899		
AF 49/638/-1527 09 p1606 A69-22418 18 p3186 A69-34295	24 p4376 A69-42661		AF 49/638/-5165 01 p0027 A69-10267		
AF 49/638/-1530 05 p0811 A69-15910			AF 51/052/-927 16 p2781 A69-32317	16 p2781 A69-32318	
AF 49/638/-1555 01 p0075 A69-11222 07 p1220 A69-19389 07 p1220 A69-19390 10 p1789 A69-24129	11 p1950 A69-24927 16 p2818 A69-31678 24 p4377 A69-42666		AF 61/052/-67-C-0007 12 p2116 A69-26913 12 p2116 A69-27134	23 p4178 A69-42360	
AF 49/638/-1557 13 p2324 A69-28218			AF 61/052/-67-C-0014 05 p0806 A69-16734	14 p2499 A69-29850	
AF 49/638/-01558 10 p1734 A69-23456			AF 61/052/-67-C-0025 19 p3300 A69-36784		
AF 49/638/-1578 16 p2819 A69-31690			AF 61/052/-67-C-0033 14 p2389 A69-29028		
AF 49/638/-1594 08 p1366 A69-20786			AF 61/052/-67-C-0070 06 p1010 A69-17971 11 p1946 A69-24590	22 p4019 A69-40290 22 p4019 A69-40291	
AF 49/638/-1600 09 p1452 A69-21314	17 p2944 A69-33624		AF 61/052/-68-C-0002 07 p1213 A69-18612		
AF 49/638/-1601 19 p3376 A69-36177			AF 61/052/-68-C-005 24 p4395 A69-42597		
AF 49/638/-1621 04 p0686 A69-14744 20 p3633 A69-37524	23 p4059 A69-41892		AF 61/052/-68-C-0012 05 p0795 A69-15661 08 p1355 A69-20207 08 p1343 A69-20827	09 p1542 A69-21624 23 p4193 A69-41452	
AF 49/638/-1623 02 p0190 A69-12549 06 p0915 A69-18223 16 p2747 A69-32701	18 p3083 A69-34403 23 p4060 A69-41908 24 p4248 A69-43579		AF 61/052/-68-C-0053 12 p2138 A69-26626		
AF 49/638/-1627 06 p0900 A69-17353			AF 61/052/-68-C-0062 07 p1199 A69-18903		
AF 49/638/-1629 09 p1482 A69-21945			AF 61/052/-68-C-0069 23 p4096 A69-42087		
AF 49/638/-1632 17 p2962 A69-33654	18 p3132 A69-35434		AF 61/052/-183 03 p0373 A69-13495	03 p0374 A69-13501	
AF 49/638/-1634 03 p0414 A69-13138 18 p3180 A69-34454	24 p4356 A69-43361		AF 61/052/-374 19 p3303 A69-36408		
AF 49/638/-1642 05 p0815 A69-16249 08 p1378 A69-20067	08 p1378 A69-20068 14 p2433 A69-28934		AF 61/052/-457 07 p1218 A69-19282		
AF 49/638/-1646 02 p0342 A69-12280			AF 61/052/-599 03 p0421 A69-13327		
AF 49/638/-1648 21 p3806 A69-39336			AF 61/052/-640 07 p1070 A69-18385		
			AF 61/052/-649 15 p2671 A69-31101		
			AF 61/052/-740 03 p0373 A69-13495		



# CONTRACT NUMBER INDEX

AF 61/052/-746 24 p4259 A69-42638		AF-AFOSR-62-414 14 p2471 A69-29950	22 p3975 A69-40453
AF 61/052/-780 03 p0455 A69-13374	04 p0649 A69-15130	AF-AFOSR-67-33 13 p2226 A69-27235	
AF 61/052/-781 02 p0276 A69-12700 09 p1487 A69-21621	15 p2598 A69-31319 15 p2600 A69-31367	AF-AFOSR-67-0672A 01 p0009 A69-10349	
AF 61/052/-808 07 p1209 A69-19454		AF-AFOSR-67-0766A 05 p0740 A69-16577	
AF 61/052/-829 13 p2344 A69-27648	13 p2345 A69-27653	AF-AFOSR-67-766/E/ 18 p3105 A69-34618	22 p3906 A69-40345
AF 61/052/-862 08 p1413 A69-20399 10 p1797 A69-23078	10 p1806 A69-24172	AF-AFOSR-67-1234 16 p2874 A69-32159	
AF 61/052/-869 02 p0309 A69-12744		AF-AFOSR-68-1346 04 p0624 A69-15005	
AF 61/052/-871 14 p2424 A69-29765		AF-AFOSR-68-1363 09 p1581 A69-22409 14 p2529 A69-29985	24 p4386 A69-43334
AF 61/052/-877 08 p1350 A69-19783		AF-AFOSR-68-1399 06 p0913 A69-18095	
AF 61/052/-881 01 p0177 A69-11405		AF-AFOSR-68-1401 08 p1385 A69-20061 09 p1599 A69-22193 14 p2518 A69-29131 14 p2518 A69-29132	15 p2692 A69-30773 16 p2852 A69-32817 19 p3403 A69-35964
AF 61/052/-882 13 p2344 A69-27648		AF-AFOSR-68-1442 11 p1969 A69-24338	
AF 61/052/-900 17 p2960 A69-33157	22 p3941 A69-40914	AF-AFOSR-68-1448 02 p0295 A69-11779	
AF 61/052/-906 09 p1488 A69-21664		AF-AFOSR-68-1450 06 p0897 A69-17700	
AF 61/052/-909 05 p0758 A69-16418		AF-AFOSR-68-1456 04 p0663 A69-15382	16 p2857 A69-32155
AF 61/052/-920 12 p2116 A69-27135	15 p2637 A69-30226	AF-AFOSR-68-1460A 04 p0595 A69-15425	
AF 61/052/-926 04 p0582 A69-15072	16 p2858 A69-32206	AF-AFOSR-68-1461 15 p2639 A69-30585	
AF 61/052/-947 23 p4093 A69-42069 23 p4094 A69-42074	23 p4094 A69-42075	AF-AFOSR-68-1471 05 p0794 A69-16363	05 p0794 A69-16364
AF 61/052/-948 19 p3416 A69-36125		AF-AFOSR-68-1476 14 p2533 A69-29022	
AF 61/052/-951 02 p0343 A69-12286 15 p2639 A69-30598	20 p3511 A69-37761	AF-AFOSR-68-1481 20 p3543 A69-37799	
AF 61/052/-952 08 p1395 A69-20634 11 p1962 A69-25113	22 p4013 A69-40123	AF-AFOSR-68-1488 04 p0560 A69-15214 08 p1364 A69-20519 20 p3552 A69-36994	24 p4284 A69-42721 24 p4281 A69-42722
AF 61/052/-954 01 p0171 A69-11072		AF-AFOSR-68-1494 19 p3383 A69-36445	
AF 61/052/-955 13 p2341 A69-27588		AF-AFOSR-68-1495 06 p0960 A69-17108	
AF 64/500/-9 18 p3125 A69-34252	22 p3941 A69-40913	AF-AFOSR-68-1498 15 p2668 A69-30685	
AF-AFOSR-1186-67 19 p3263 A69-36656		AF-AFOSR-68-1510 07 p1200 A69-19403	
AF-AFOSR-7-67 07 p1088 A69-19707	10 p1645 A69-23385	AF-AFOSR-68-1543 16 p2768 A69-31664	
AF-AFOSR-24-64 01 p0036 A69-10704		AF-AFOSR-68-1551 17 p2955 A69-33467	
AF-AFOSR-24-65 01 p0036 A69-10704	09 p1461 A69-22599	AF-AFOSR-68-1606 11 p1940 A69-24485	
AF-AFOSR-62-266 11 p1818 A69-25283		AF-AFOSR-69-1502 11 p1860 A69-25447	

CONTRACT NUMBER INDEX

AF-AFOSR-69-1648 21 p3812 A69-39518					
AF-AFOSR-69-1683 07 p1209 A69-19406					
AF-AFOSR-83-57 10 p1787 A69-24117					
AF-AFOSR-83-65 02 p0325 A69-12624 02 p0327 A69-12708	08 p1402	A69-20908			
AF-AFOSR-83-67 14 p2529 A69-29979 15 p2695 A69-30891 19 p3422 A69-36221	22 p4026 24 p4376	A69-40647 A69-42663			
AF-AFOSR-100-65 13 p2364 A69-28206					
AF-AFOSR-100-66 03 p0524 A69-13066	04 p0671	A69-14410			
AF-AFOSR-100-67 04 p0675 A69-14704 05 p0831 A69-15577 06 p1028 A69-18143	19 p3445 21 p3837 22 p4040	A69-36831 A69-39155 A69-39979			
AF-AFOSR-107-66 01 p0062 A69-11207					
AF-AFOSR-127-67 16 p2880 A69-32740					
AF-AFOSR-129-66 02 p0350 A69-11530					
AF-AFOSR-129-67 07 p1240 A69-18322 17 p2952 A69-33403	19 p3452	A69-36370			
AF-AFOSR-130-66 02 p0288 A69-12171					
AF-AFOSR-139-65 08 p1281 A69-20035	20 p3492	A69-37713			
AF-AFOSR-139-66 20 p3492 A69-37713					
AF-AFOSR-139-67 01 p0089 A69-10179 02 p0257 A69-12409 04 p0560 A69-15214 07 p1103 A69-18882	08 p1281 17 p2929 24 p4270	A69-20035 A69-33880 A69-42580			
AF-AFOSR-141-63 24 p4299 A69-42766					
AF-AFOSR-141-64 24 p4299 A69-42766					
AF-AFOSR-141-65 24 p4299 A69-42766					
AF-AFOSR-141-66 24 p4299 A69-42766					
AF-AFOSR-171-67 09 p1596 A69-22057 10 p1788 A69-24126	15 p2692	A69-30767			
AF-AFOSR-219-63 14 p2540 A69-29634					
AF-AFOSR-219-67 14 p2540 A69-29634					
AF-AFOSR-230-64 09 p1453 A69-21322					
AF-AFOSR-230-66 01 p0054 A69-11414					
AF-AFOSR-245-65 20 p3496 A69-37889					
			AF-AFOSR-252-67 12 p2132 A69-26246		
			AF-AFOSR-268-67 06 p0911 A69-17592		
			AF-AFOSR-269-65 07 p1200 A69-19219	07 p1075	A69-19483
			AF-AFOSR-287-66 11 p1925 A69-24311	16 p2768	A69-31664
			AF-AFOSR-290-63 21 p3720 A69-38597		
			AF-AFOSR-292-66 01 p0054 A69-11414		
			AF-AFOSR-319-66 04 p0649 A69-15442 09 p1576 A69-21707	10 p1766 14 p2514	A69-23762 A69-29773
			AF-AFOSR-330-66 06 p0961 A69-17140		
			AF-AFOSR-338-67 16 p2767 A69-31588		
			AF-AFOSR-365-66 18 p3176 A69-34452		
			AF-AFOSR-366-66 16 p2815 A69-31590		
			AF-AFOSR-368-67 03 p0466 A69-13388		
			AF-AFOSR-379-67 09 p1533 A69-22771		
			AF-AFOSR-390-67 05 p0773 A69-16284		
			AF-AFOSR-396-63 07 p1173 A69-18728	10 p1718	A69-22860
			AF-AFOSR-397-67 18 p3165 A69-34842		
			AF-AFOSR-413-68 21 p3713 A69-38526		
			AF-AFOSR-437-65 08 p1343 A69-20443		
			AF-AFOSR-440-67 04 p0600 A69-15026		
			AF-AFOSR-444-66 13 p2369 A69-28352	15 p2710	A69-30809
			AF-AFOSR-445-66 03 p0485 A69-13298	06 p0958	A69-17712
			AF-AFOSR-482-65 02 p0224 A69-11962	11 p1860	A69-25442
			AF-AFOSR-496-67 01 p0030 A69-10556		
			AF-AFOSR-496-68 08 p1373 A69-20861		
			AF-AFOSR-504-66 18 p3099 A69-34464		
			AF-AFOSR-506-64 18 p3176 A69-34465		
			AF-AFOSR-506-66 18 p3176 A69-34465		
			AF-AFOSR-526-64 11 p1829 A69-24737		
			AF-AFOSR-537-64 07 p1180 A69-18809		



# CONTRACT NUMBER INDEX

AF-AFOSR-538-68					
17 p3011	A69-33466				
AF-AFOSR-547-64					
11 p1872	A69-25132				
AF-AFOSR-557-67					
24 p4301	A69-43358				
AF-AFOSR-567-66					
06 p0927	A69-17707				
AF-AFOSR-603-64					
09 p1606	A69-22420				
AF-AFOSR-616-66					
04 p0592	A69-14654				
AF-AFOSR-626-65					
07 p1157	A69-19656				
AF-AFOSR-626-67					
07 p1157	A69-19656	21 p3735	A69-38598		
AF-AFOSR-631-67					
02 p0283	A69-11785	09 p1493	A69-21428		
AF-AFOSR-633-64					
15 p2639	A69-30585				
AF-AFOSR-669-67					
01 p0051	A69-10440	13 p2352	A69-27960		
06 p1006	A69-17569	21 p3757	A69-39664		
AF-AFOSR-669-67/9					
20 p3557	A69-36958				
AF-AFOSR-672-66					
11 p1872	A69-25130				
AF-AFOSR-672-67					
22 p3931	A69-40891				
AF-AFOSR-676-66					
12 p2149	A69-26475				
AF-AFOSR-684-67					
17 p2928	A69-33867				
AF-AFOSR-693-67					
02 p0224	A69-11963	11 p1909	A69-24886		
04 p0626	A69-15288	11 p1909	A69-25409		
05 p0740	A69-16599	11 p1861	A69-25452		
05 p0740	A69-16601	16 p2872	A69-31911		
07 p1115	A69-18514	17 p2994	A69-32844		
08 p1343	A69-20355	19 p3360	A69-36599		
10 p1718	A69-23038	21 p3754	A69-38429		
10 p1719	A69-23515	22 p3975	A69-41010		
10 p1721	A69-23642				
AF-AFOSR-697-67					
04 p0542	A69-14732				
AF-AFOSR-699-65					
04 p0581	A69-14571				
AF-AFOSR-699-67					
04 p0581	A69-14569	09 p1590	A69-21414		
05 p0738	A69-16179				
AF-AFOSR-712-65					
01 p0059	A69-10233				
AF-AFOSR-727-65					
03 p0380	A69-13462				
AF-AFOSR-731-65					
13 p2378	A69-28340				
AF-AFOSR-735-65					
13 p2271	A69-27399				
AF-AFOSR-749-65					
09 p1531	A69-21412	10 p1720	A69-23638		
10 p1720	A69-23637				
AF-AFOSR-766-66					
03 p0404	A69-13431				
AF-AFOSR-766-67					
05 p0738	A69-16173				
05 p0740	A69-16577				
06 p0947	A69-17361				
06 p0901	A69-17362				
11 p1858	A69-24935				
11 p1861	A69-25452				
AF-AFOSR-766-767					
20 p3509	A69-37142				
AF-AFOSR-783-67A					
12 p2072	A69-26745				
AF-AFOSR-785-65					
01 p0132	A69-11209				
AF-AFOSR-813-66					
05 p0835	A69-15872				
AF-AFOSR-813-67					
09 p1615	A69-21927	16 p2876	A69-32783		
AF-AFOSR-814-66					
05 p0788	A69-16481	21 p3685	A69-38726		
11 p1909	A69-24885	24 p4294	A69-43307		
AF-AFOSR-815-67					
22 p3989	A69-40196				
AF-AFOSR-818-66					
06 p0860	A69-17634				
AF-AFOSR-825-67A					
22 p3990	A69-40758				
AF-AFOSR-828-67					
06 p0861	A69-17640	19 p3361	A69-36758		
10 p1633	A69-24060	24 p4340	A69-42957		
13 p2199	A69-28214				
AF-AFOSR-843-67					
22 p3991	A69-41055				
AF-AFOSR-844-67					
08 p1359	A69-19984				
AF-AFOSR-855-65					
08 p1357	A69-20897				
AF-AFOSR-864-67					
09 p1492	A69-22756				
AF-AFOSR-883-67					
13 p2290	A69-28539	14 p2540	A69-29679		
AF-AFOSR-897-67					
12 p2191	A69-26788				
AF-AFOSR-903-67					
09 p1605	A69-22411	23 p4183	A69-42022		
10 p1789	A69-24133	23 p4219	A69-42373		
17 p3004	A69-32832				
AF-AFOSR-904-67					
14 p2411	A69-29108				
AF-AFOSR-915-67					
14 p2390	A69-29580				
AF-AFOSR-927-65					
16 p2829	A69-31995				
AF-AFOSR-931-66					
02 p0224	A69-11966	11 p1860	A69-25441		
AF-AFOSR-931-67					
02 p0224	A69-11967	12 p2052	A69-26503		
05 p0737	A69-15866	23 p4144	A69-41568		
AF-AFOSR-959-65					
13 p2324	A69-27364				
AF-AFOSR-962-67					
16 p2818	A69-31677				
AF-AFOSR-1016-68					
07 p1194	A69-19400				

CONTRACT NUMBER INDEX

AF-AFOSR-1023-66 05 p0711 A69-15802	21 p3679 A69-39603	AF-AFOSR-1256-67 16 p2832 A69-32659	
AF-AFOSR-1023-67 24 p4273 A69-42910		AF-AFOSR-1260-67 07 p1173 A69-18731	08 p1385 A69-20069
AF-AFOSR-1029-66 05 p0788 A69-16482 12 p2052 A69-26502	24 p4291 A69-43275	AF-AFOSR-1290-67 09 p1622 A69-21951 16 p2770 A69-31900 19 p3449 A69-36354	19 p3452 A69-36370 21 p3692 A69-38688
AF-AFOSR-1029-67 10 p1721 A69-23864		AF-AFOSR-1301-67 03 p0413 A69-13013	05 p0751 A69-16463
AF-AFOSR-1045-66 03 p0486 A69-13387		AF-AFOSR-1311-67 01 p0037 A69-10806	
AF-AFOSR-1047-66 18 p3164 A69-34614		AF-AFOSR-1314-67 23 p4153 A69-42314	
AF-AFOSR-1054-66 04 p0663 A69-15382	16 p2857 A69-32155	AF-AFOSR-1315-67 07 p1209 A69-19406	
AF-AFOSR-1057-66 01 p0166 A69-10232		AF-AFOSR-1324-67 21 p3735 A69-38598	
AF-AFOSR-1057-67 01 p0166 A69-10232		AF-AFOSR-1332-67 20 p3583 A69-37498	
AF-AFOSR-1076-66 04 p0580 A69-14386		AF-AFOSR-1333-67 06 p0902 A69-17405	
AF-AFOSR-1088-66 06 p1022 A69-17367		AF-EOAR-64-49 13 p2345 A69-27653	
AF-AFOSR-1090-66 02 p0233 A69-12534		AF-EOAR-65-74 22 p3984 A69-40477	
AF-AFOSR-1091-66 24 p4415 A69-43667	24 p4365 A69-43669	AF-EOAR-66-19 20 p3624 A69-37584	
AF-AFOSR-1101-66 16 p2770 A69-31880		AF-EOAR-66-34 23 p4084 A69-41468	
AF-AFOSR-1118-66 13 p2306 A69-27457	13 p2302 A69-27458	AF-EOAR-66-35 08 p1378 A69-20264	
AF-AFOSR-1122-67 21 p3757 A69-39565		AF-EOAR-66-38 05 p0743 A69-15578	
AF-AFOSR-1131-66 02 p0284 A69-12832		AF-EOAR-66-44 06 p1035 A69-17931	13 p2324 A69-28503
AF-AFOSR-1153-66 11 p1995 A69-25652		AF-EOAR-66-48 02 p0272 A69-12193	
AF-AFOSR-1156-66 03 p0485 A69-13297		AF-EOAR-67-10 06 p0861 A69-17638	
AF-AFOSR-1175-67 07 p1071 A69-19136		AF-EOAR-67-26 17 p3009 A69-34156	
AF-AFOSR-1183-67 07 p1206 A69-19269		AF-EOAR-67-32 08 p1365 A69-20552	15 p2658 A69-30173
AF-AFOSR-1186-67 14 p2535 A69-29366	22 p3874 A69-40216	AF-EOAR-67-33 01 p0043 A69-10563	
AF-AFOSR-1194-67 04 p0590 A69-15191 08 p1305 A69-20995	20 p3512 A69-36916	AF-EOAR-68-27 17 p3074 A69-33662	
AF-AFOSR-1198-67 01 p0105 A69-10734	12 p2034 A69-26752	ARPA NF-4539 20 p3601 A69-37501	
AF-AFOSR-1203-67 16 p2755 A69-32078		ARPA NF-5094 20 p3601 A69-37501	
AF-AFOSR-1226-67 04 p0676 A69-14705 09 p1616 A69-21977	19 p3446 A69-36836 24 p4405 A69-43654	ARPA SD-86 03 p0449 A69-13879 04 p0670 A69-14403 04 p0671 A69-14411	04 p0680 A69-14945 10 p1796 A69-23070 11 p1974 A69-24670
AF-AFOSR-1228-67 02 p0232 A69-12208		ARPA SD-88 03 p0449 A69-13880	
AF-AFOSR-1244-67 04 p0580 A69-14386		ARPA SD-90 08 p1313 A69-20132 10 p1746 A69-23655 15 p2635 A69-31238	15 p2635 A69-31239 17 p3007 A69-32838
AF-AFOSR-1244-67A 04 p0581 A69-14696			



# CONTRACT NUMBER INDEX

ARPA SD-91 04 p0685 A69-14720				AT/11-1/-1340 11 p1911 A69-24323			
ARPA SD-101 13 p2271 A69-27399				AT/11-1/-1344 16 p2742 A69-31864	20 p3479	A69-38001	
ARPA SD-131 02 p0257 A69-12615 13 p2270 A69-27193	16 p2796 A69-31704 22 p3997 A69-41236			AT/11-1/-1489 19 p3343 A69-35923			
ARPA SD-147 05 p0721 A69-16580				AT/11-1/-1537 20 p3496 A69-37889			
ARPA SD-183 16 p2848 A69-31968	23 p4114 A69-42214			AT/11-1/-1624 06 p0975 A69-16871	06 p0975	A69-16872	
AT/04-3/-115 23 p4112 A69-41339				AT/11-1/-1676 22 p3970 A69-40166			
AT/04-3/-167 09 p1539 A69-21253 09 p1441 A69-21835 09 p1442 A69-21841	14 p2453 A69-29220 18 p3170 A69-34313			AT/11-1/-1726 08 p1368 A69-20804			
AT/04-3/-189 09 p1558 A69-21810	14 p2399 A69-29195			AT/11-1/-1776 20 p3548 A69-37216			
AT/04-3/-326 07 p1189 A69-18657				AT/29-1/-1106 08 p1330 A69-20008 13 p2322 A69-28017	13 p2281	A69-28160	
AT/04-3/-326-PA-2 07 p1158 A69-18241				AT/29-2/-2062 24 p4349 A69-43191			
AT/04-3/-326-PA-8 08 p1368 A69-20805				AT/29-2/-2338 09 p1477 A69-22325			
AT/04-3/-427 08 p1405 A69-20927				AT/29-2/-2510 23 p4188 A69-42260			
AT/04-3/-701 01 p0141 A69-11256	13 p2241 A69-28085			AT/29-2/-2581 03 p0465 A69-13561 22 p3979 A69-40551	23 p4187	A69-42249	
AT/04-3/-771 09 p1558 A69-21810				AT/30-1/-1002 24 p4332 A69-43029			
AT/07-2/-1 12 p2115 A69-26616	19 p3352 A69-36904			AT/30-1/-1238 01 p0133 A69-11213 03 p0474 A69-13145 03 p0475 A69-13147 05 p0804 A69-16385 06 p0965 A69-17518 08 p1358 A69-19810 08 p1360 A69-19991 08 p1367 A69-20799 08 p1368 A69-20808 08 p1369 A69-20819 09 p1552 A69-22044 10 p1742 A69-24107 11 p1924 A69-24300	11 p1925 A69-24312 11 p1925 A69-24314 11 p1929 A69-25271 11 p1931 A69-25363 12 p2135 A69-26314 15 p2660 A69-30910 15 p2660 A69-30916 15 p2646 A69-31519 16 p2818 A69-31679 16 p2821 A69-32035 22 p3958 A69-41217 24 p4356 A69-43365		
AT/11-1/-34 08 p1403 A69-20914 08 p1407 A69-20937 09 p1493 A69-21428 12 p2138 A69-26625 15 p2690 A69-30732	18 p3179 A69-34440 19 p3410 A69-36093 21 p3776 A69-38711 23 p4198 A69-42419			AT/30-1/-1480 03 p0475 A69-13152 03 p0415 A69-13369 03 p0468 A69-13825 09 p1546 A69-21576	11 p1924 A69-24298 18 p3121 A69-34613 23 p4196 A69-41875		
AT/11-1/-68 23 p4194 A69-41596				AT/30-1/-1845 15 p2555 A69-30413			
AT/11-1/-113 11 p1910 A69-25411				AT/30-1/-1957 12 p2092 A69-26477			
AT/11-1/-382 03 p0516 A69-14082 05 p0819 A69-15623 07 p1224 A69-19710 15 p2681 A69-30325	17 p3034 A69-33584 19 p3413 A69-36107 19 p3414 A69-36117 20 p3602 A69-37535			AT/30-1/-2098 07 p1129 A69-19372 07 p1209 A69-19373 13 p2326 A69-27464	20 p3593 A69-38153 23 p4206 A69-42318		
AT/11-1/-383 14 p2409 A69-29093				AT/30-1/-2241 18 p3165 A69-34418	21 p3713	A69-38526	
AT/11-1/-535 18 p3179 A69-35489				AT/30-1/-2394 10 p1714 A69-23980	13 p2275	A69-27228	
AT/11-1/-1029 08 p1268 A69-21012				AT/30-1/-2653 03 p0373 A69-13492			
AT/11-1/-1057 08 p1407 A69-20935	19 p3414 A69-36114			AT/30-1/-2794 08 p1405 A69-20923			
AT/11-1/-1140 08 p1268 A69-21012							
AT/11-1/-1233 06 p0969 A69-17951	12 p2037 A69-25939						
AT/11-1/-1319 03 p0444 A69-13311							

CONTRACT NUMBER INDEX

AT/30-1/-2804 07 p1068 A69-19494				AT/40-1/-3443 03 p0456 A69-13555	18 p3163 A69-34329
AT/30-1/-3285 01 p0133 A69-11216				AT/40-1/-3458 15 p2660 A69-30915	
AT/30-1/-3535 04 p0630 A69-14800				AT/40-1/-3585 11 p1952 A69-24334	
AT/30-1/-3632 17 p3072 A69-33282				AT/40-1/-3677 06 p0974 A69-16863	
AT/30-1/-3634 19 p3341 A69-35540				AT/40-1/-3708 16 p2784 A69-32576	23 p4158 A69-42020
AT/30-1/-3706 01 p0024 A69-10928	13 p2210 A69-28257			AT/45-1/-1375 10 p1708 A69-22994	13 p2276 A69-27369
AT/30-1/-3719 07 p1167 A69-19265	21 p3743 A69-38735			AT/45-1/-1830 08 p1318 A69-19963	19 p3421 A69-36214
AT/30-1/-3724 08 p1329 A69-20007				11 p1913 A69-25436	21 p3712 A69-38518
AT/30-1/-3785 20 p3533 A69-38081				13 p2281 A69-28156	23 p4190 A69-42281
AT/30-1/-3799 19 p3264 A69-35974	19 p3265 A69-36376			AT/45-1/-1831 21 p3663 A69-38915	
AT/30-1/-3834 07 p1068 A69-19492	20 p3467 A69-37100			BNY-63864 20 p3619 A69-36951	
10 p1649 A69-23404	20 p3480 A69-38287			C-353-66/NRG/ 18 p3084 A69-34410	
19 p3257 A69-35975				CNES 65-024 15 p2605 A69-31423	
AT/30-1/-3874 09 p1439 A69-21821				CNES 65-260 15 p2605 A69-31423	
AT/30-1/-3927 07 p1196 A69-19768				CNES 67-208 15 p2605 A69-31423	
AT/30-1/-3942 16 p2819 A69-31682				COO-1674-14 14 p2489 A69-29995	
AT/30-1/-3943 15 p2661 A69-30922				CP-3632/66 17 p2936 A69-32890	
AT/30-1/-14800 16 p2784 A69-32576	23 p4158 A69-42020			CST-7537 10 p1765 A69-23749	
AT/30-3/-328 18 p3175 A69-34314				CWB-11210 20 p3570 A69-37404	
AT/30-3/-701 16 p2809 A69-31723				CWB-11269 18 p3167 A69-35084	
AT/40-1/-2098 22 p3987 A69-41043				DA-01-021-AMC-1309/Z/ 16 p2732 A69-31882	
AT/40-1/-2430 02 p0300 A69-12625				DA-01-021-AMC-9006/Y/ 24 p4341 A69-43295	
AT/40-1/-2598 24 p4355 A69-42686				DA-01-021-AMC-11359/Z/ 01 p0006 A69-10961	19 p3291 A69-35717
AT/40-1/-2670 08 p1404 A69-20918	08 p1404 A69-20919			DA-01-021-AMC-11536/Z/ 13 p2364 A69-28209	13 p2218 A69-28457
AT/40-1/-2690 05 p0796 A69-15747				DA-01-021-AMC-11805/Z/ 10 p1639 A69-23560	
AT/40-1/-2694 24 p4333 A69-43341				DA-01-021-AMC-12005/Z/ 09 p1496 A69-21934	23 p4113 A69-41692
AT/40-1/-2847 17 p2987 A69-33079				20 p3565 A69-37187	24 p4305 A69-43658
AT/40-1/-3108 05 p0778 A69-15755				DA-01-021-AMC-12346/Z/ 02 p0345 A69-12371	
AT/40-1/-3235 08 p1401 A69-20900				DA-01-021-AMC-12596/Z/ 02 p0304 A69-11899	
AT/40-1/-3262 01 p0093 A69-10063	09 p1499 A69-22302			DA-01-021-AMC-13094/Z/ 16 p2733 A69-32147	
AT/40-1/-3405 07 p1194 A69-19400				DA-01-021-AMC-13539/Z/ 24 p4359 A69-43644	



# CONTRACT NUMBER INDEX

DA-01-021-AMC-14441/Z/ 14 p2423 A69-29758					
DA-01-021-AMC-15611/Z/ 08 p1280 A69-20014					
DA-01-021-13094/Z/ 16 p2770 A69-31883					
DA-04-086-AMC-0212/R/ 23 p4126 A69-42229					
DA-04-200-AMC-659/Y/ 04 p0670 A69-14407 13 p2368 A69-28346	18 p3213 A69-34388 18 p3213 A69-34389				
DA-04-200-AMC-916/X/ 23 p4239 A69-41569					
DA-04-200-AMC-968/X/ 16 p2834 A69-32725					
DA-04-495-AMC-1691/A/ 23 p4059 A69-41884					
DA-04-495-ORD-18 16 p2878 A69-32000					
DA-12-006-AMC-266/X/ 24 p4330 A69-42735					
DA-18-001-AMC-745/X/ 13 p2367 A69-28300					
DA-18-001-AMC-748/X/ 04 p0640 A69-14452					
DA-18-001-AMC-1016/X/ 18 p3116 A69-34462					
DA-18-001-AMC-1133/X/ 16 p2874 A69-32164					
DA-19-066-AMC-286/X/ 01 p0078 A69-10132	10 p1695 A69-23544				
DA-28-017-AMC-3319/A/ 16 p2732 A69-31886					
DA-28-043-AMC-0001/E/ 13 p2220 A69-27938					
DA-28-043-AMC-00073/E/ 02 p0224 A69-11966	09 p1611 A69-22087				
DA-28-043-AMC-00099/E/ 03 p0428 A69-13106 05 p0794 A69-16587 07 p1152 A69-19062 12 p2130 A69-26313	12 p2149 A69-26315 21 p3769 A69-38578 23 p4220 A69-42378				
DA-28-043-AMC-00379/E/ 02 p0218 A69-12325					
DA-28-043-AMC-00394/E/ 05 p0731 A69-16244					
DA-28-043-AMC-00459/E/ 09 p1499 A69-22246					
DA-28-043-AMC-01207/E/ 14 p2413 A69-29493					
DA-28-043-AMC-01388/E/ 03 p0460 A69-13336					
DA-28-043-AMC-01444/E/ 01 p0030 A69-10631					
DA-28-043-AMC-01527/E/ 13 p2266 A69-27279					
DA-28-043-AMC-01630/E/ 02 p0221 A69-12470					
DA-28-043-AMC-01860/E/ 11 p1851 A69-24987					
DA-28-043-AMC-02041/E/ 07 p1189 A69-18657					
DA-28-043-AMC-02253/E/ 18 p3109 A69-35294					
DA-28-043-AMC-02290/E/ 02 p0212 A69-12816					
DA-28-043-AMC-02316/E/ 07 p1094 A69-18423					
DA-28-043-AMC-02411/E/ 04 p0603 A69-15473					
DA-28-043-AMC-02412/E/ 17 p3001 A69-33541	21 p3649 A69-39427				
DA-28-043-AMC-02523/S/ 04 p0575 A69-14753					
DA-28-043-AMC-02536/E/ 01 p0043 A69-10559 06 p0904 A69-17865 07 p1151 A69-19056 08 p1352 A69-20745	13 p2316 A69-27628 16 p2757 A69-31587 19 p3338 A69-36692 22 p3993 A69-40729				
DA-28-043-AMC-02563/E/ 10 p1657 A69-23865					
DA-28-043-AMC-02636/E/ 09 p1558 A69-21808					
DA-29-040-AMC-1293/R/ 07 p1082 A69-19119					
DA-29-043-AMC-02411/E/ 23 p4134 A69-42543					
DA-30-069-AMC-333/Y/ 03 p0406 A69-13829 06 p0972 A69-18191 07 p1100 A69-18645 13 p2232 A69-28061	17 p2893 A69-33487 18 p3103 A69-35098 21 p3851 A69-39292				
DA-30-069-507-ORD-2652 19 p3350 A69-36896					
DA-31-ORD-ARO/D/-124 21 p3735 A69-38598					
DA-31-124-ARO/D/-G739 24 p4321 A69-43338					
DA-31-124-ARO/D/-33 06 p0862 A69-18044 06 p0864 A69-18138 09 p1430 A69-21949	16 p2772 A69-32153 24 p4304 A69-43581				
DA-31-124-ARO/D/-59 06 p0887 A69-17463					
DA-31-124-ARO/D/-114 06 p0982 A69-18234	19 p3382 A69-36049				
DA-31-124-ARO/D/-124 07 p1157 A69-19656					
DA-31-124-ARO/D/-139 04 p0632 A69-14701 04 p0637 A69-15052 05 p0771 A69-15907 05 p0828 A69-16652 08 p1381 A69-19786 09 p1603 A69-22234 09 p1543 A69-22405	11 p1928 A69-25262 13 p2326 A69-27551 15 p2656 A69-31155 16 p2848 A69-31973 20 p3511 A69-38241 22 p4027 A69-40659				
DA-31-124-ARO/D/-223 02 p0204 A69-12602					
DA-31-124-ARO/D/-229 02 p0344 A69-12291					
DA-31-124-ARO/D/-251 01 p0169 A69-10765					
DA-31-124-ARO/D/-257 01 p0170 A69-10814 01 p0133 A69-11220	12 p2063 A69-25903 12 p2073 A69-26749				

CONTRACT NUMBER INDEX

01 p0077 A69-11239	14 p2435 A69-28965	DA-31-124-ARO/D/-468	
03 p0414 A69-13134	16 p2817 A69-31641	03 p0448 A69-13872	07 p1166 A69-19264
05 p0817 A69-13950	16 p2817 A69-31642		
06 p0992 A69-16651	16 p2870 A69-31809	DA-31-124-ARO/D/-471	
07 p1125 A69-17379	16 p2822 A69-32108	06 p0862 A69-18040	17 p2896 A69-34034
08 p1385 A69-18847	18 p3189 A69-35400		
08 p1385 A69-20069	19 p3446 A69-36836	DA-31-124-ARO/D/-478	
08 p1420 A69-20152	21 p3710 A69-38509	19 p3385 A69-36516	
08 p1354 A69-20205	21 p3713 A69-38528		
08 p1358 A69-21008	21 p3848 A69-38706	DA-31-124-ARO/D/-3863	
09 p1564 A69-21242	21 p3683 A69-39284	20 p3485 A69-36923	
09 p1452 A69-21319	22 p4023 A69-40516		
09 p1580 A69-22202	23 p4197 A69-42416	DA-36-034-AMC-0099/Z/	
11 p1923 A69-24296	23 p4197 A69-42418	21 p3819 A69-39013	
11 p1925 A69-24310	24 p4367 A69-43169		
		DA-36-039-AMC-02199/E/	
DA-31-124-ARO/D/-259		07 p1102 A69-18670	
13 p2200 A69-28500			
DA-31-124-ARO/D/-265		DA-36-039-AMC-02261/E/	
04 p0626 A69-15283		09 p1466 A69-22447	
DA-31-124-ARO/D/-269			
21 p3754 A69-38426		DA-36-039-AMC-03200/E/	
		03 p0389 A69-13191	
DA-31-124-ARO/D/-270			
02 p0281 A69-12133	11 p1861 A69-25452	DA-36-039-AMC-03203/E/	
07 p1115 A69-18514	16 p2872 A69-31911	14 p2418 A69-28892	
11 p1909 A69-25409		DA-36-039-AMC-03634/E/	
		09 p1510 A69-22350	
DA-31-124-ARO/D/-276			
18 p3121 A69-34787		DA-36-039-AMC-03703/E/	
		11 p1951 A69-25161	
DA-31-124-ARO/D/-311			
01 p0007 A69-11019		DA-36-039-SC-52654	
		13 p2220 A69-27938	
DA-31-124-ARO/D/-313			
15 p2591 A69-30906		DA-36-039-SC-78801	
		13 p2220 A69-27938	
DA-31-124-ARO/D/-316			
21 p3685 A69-38727		DA-36-039-SC-87341/E/	
		23 p4074 A69-42297	
DA-31-124-ARO/D/-328			
19 p3343 A69-35920		DA-36-124-ARO/D/-149	
		11 p1819 A69-25372	
DA-31-124-ARO/D/-340			
10 p1724 A69-23042	16 p2797 A69-32050	DA-44-009-AMC-479/T/	
		05 p0716 A69-16234	05 p0716 A69-16235
DA-31-124-ARO/D/-341			
07 p1152 A69-19062		DA-44-009-AMC-1552/T/	
		08 p1268 A69-20361	
DA-31-124-ARO/D/-349			
06 p0912 A69-18043	21 p3695 A69-39039	DA-44-009-AMC-1583/X/	
		13 p2268 A69-27367	
DA-31-124-ARO/D/-361			
09 p1540 A69-21894		DA-44-009-AMC-1756/T/	
		15 p2581 A69-31524	
DA-31-124-ARO/D/-385			
10 p1662 A69-23170		DA-44-009-ENG-4909	
		03 p0368 A69-13856	
DA-31-124-ARO/D/-403			
07 p1183 A69-19645		DA-44-099-AMC-479/T/	
		03 p0368 A69-13856	
DA-31-124-ARO/D/-440			
07 p1187 A69-19661	18 p3129 A69-34956	DA-44-177-AMC-141/T/	
		22 p3864 A69-40676	
DA-31-124-ARO/D/-443			
08 p1338 A69-20494		DA-44-177-AMC-173/T/	
		05 p0698 A69-16095	
DA-31-124-ARO/D/-444			
05 p0752 A69-16737		DA-44-177-AMC-182/T/	
		07 p1203 A69-18310	07 p1055 A69-19566
DA-31-124-ARO/D/-447			
07 p1186 A69-19446		DA-44-177-AMC-200/T/	
		18 p3084 A69-34406	
DA-31-124-ARO/D/-452			
20 p3517 A69-37994		DA-44-177-AMC-203/T/	
		17 p3059 A69-33506	
DA-31-124-ARO/D/-462			
01 p0106 A69-10930	16 p2773 A69-32379	DA-44-177-AMC-366/T/	
02 p0271 A69-11733	19 p3440 A69-36589	20 p3463 A69-37804	
08 p1343 A69-20355	21 p3685 A69-38433		
09 p1532 A69-21610	21 p3756 A69-39266	DA-44-177-AMC-379/T/	
11 p1909 A69-24886	24 p4340 A69-43228	18 p3087 A69-35217	
14 p2470 A69-28905			
		DA-44-177-AMC-387/T/	
DA-31-124-ARO/D/-464		06 p0982 A69-17190	
12 p2012 A69-26775			
		DA-44-177-AMC-438/T/	
		11 p1819 A69-25374	20 p3463 A69-37806



# CONTRACT NUMBER INDEX

DA-44-177-AMC-448/T/ 22 p3864 A69-40676		DA-AMC-18-035-80/A/ 13 p2379 A69-28456	
DA-44-188-ARO-1 04 p0621 A69-14362	04 p0563 A69-14421	DA-AMC-28-043-G20 11 p1874 A69-25381	
DA-49-46-XC-277 22 p3937 A69-40188		DA-AMC-28-043-64-G2 03 p0460 A69-13340	
DA-49-083-OSA-3050 04 p0566 A69-15343		DA-AMC-28-043-65-G20 11 p1886 A69-25088	
DA-49-083-OSA-3135 06 p0929 A69-18098		DA-ARO-49-092-G76 13 p2326 A69-27550	
DA-49-092-ARO-65 06 p0924 A69-17212		DA-ARO-49-092-G136 13 p2326 A69-27550	
DA-49-092-ARO-110 21 p3755 A69-38925		DA-ARO-49-092-65-G76 04 p0652 A69-14417	
DA-49-146-XZ-102 08 p1266 A69-20676		DA-ARO-49-092-65-G77 05 p0752 A69-15666	15 p2595 A69-30224
DA-49-146-XZ-124 08 p1267 A69-20683		DA-ARO/D/-31-G1008 18 p3218 A69-34623	
DA-49-146-XZ-462 18 p3231 A69-35242		DA-ARO/D/-31-124-G190 06 p0970 A69-18084 20 p3514 A69-37190	20 p3631 A69-37209
DA-49-146-XZ-467 08 p1276 A69-20798		DA-ARO/D/-31-124-G299 11 p1979 A69-24813	
DA-49-146-XZ-477 07 p1106 A69-19112		DA-ARO/D/-31-124-G481 18 p3119 A69-35229	
DA-49-146-XZ-486 08 p1276 A69-20798	11 p1924 A69-24302	DA-ARO/D/-31-124-G504 21 p3848 A69-38707	
DA-49-146-XZ-750 03 p0502 A69-14002		DA-ARO/D/-31-124-G563 07 p1173 A69-18728	
DA-49-186-AMC-114/D/ 16 p2768 A69-31687		DA-ARO/D/-31-124-G593 06 p0970 A69-18084 20 p3514 A69-37190	20 p3631 A69-37209
DA-49-186-AMC-166/X/ 22 p3896 A69-40738		DA-ARO/D/-31-124-G600 01 p0103 A69-10007	
DA-49-193-MD-2241 08 p1266 A69-20676		DA-ARO/D/-31-124-G646 16 p2753 A69-32394	20 p3505 A69-37298
DA-49-193-MD-2260 06 p0874 A69-17835		DA-ARO/D/-31-124-G688 01 p0164 A69-10057	
DA-49-193-MD-2436 09 p1515 A69-21430		DA-ARO/D/-31-124-G705 08 p1318 A69-21131 09 p1591 A69-21455	13 p2335 A69-27315 13 p2335 A69-27317
DA-49-193-MD-2437 09 p1515 A69-21430		DA-ARO/D/-31-124-G711 14 p2390 A69-29573	
DA-49-193-MD-2449 22 p3890 A69-40199		DA-ARO/D/-31-124-G724 04 p0570 A69-14308	
DA-49-193-MD-2632 02 p0203 A69-12214		DA-ARO/D/-31-124-G737 10 p1721 A69-23641	
DA-49-193-MD-2668 10 p1643 A69-23124		DA-ARO/D/-31-124-G747 16 p2830 A69-32344	21 p3848 A69-38707
DA-49-193-MD-2741 23 p4086 A69-41678		DA-ARO/D/-31-124-G809 18 p3119 A69-35229	
DA-49-193-MD-2910 13 p2210 A69-28486		DA-ARO/D/-31-124-G811 03 p0524 A69-13066	04 p0671 A69-14410
DA-49-193-MD-2978 24 p4271 A69-42644		DA-ARO/D/-31-124-G856 05 p0747 A69-16073	
DA-91-591-EUC-3099 09 p1536 A69-22166		DA-ARO/D/-31-124-G897 10 p1682 A69-23593	
DA-91-591-EUC-3874 09 p1467 A69-22581	17 p2920 A69-33418	DA-ARO/D/-31-124-G934 18 p3119 A69-35229	
DA-91-591-EVC-4085 13 p2371 A69-28675		DA-ARO/D/-31-124-G940 17 p3058 A69-33415	
DA-208-043-AMC-02536/E/ 09 p1470 A69-21317	09 p1452 A69-21319		

CONTRACT NUMBER INDEX

DA-ARO/D/-31-124-G965			
18 p3176 A69-34789			
DA-ARO/D/-31-124-G1008			
08 p1410 A69-19893	13 p2369	A69-28350	
DA-ARO/D/-49-092-65-G76			
07 p1215 A69-18819			
DAAB21-67-C-0836			
09 p1610 A69-22001			
DAAB05-67-C-2709			
01 p0089 A69-10119	07 p1148	A69-18857	
DAAB07-67-C-0093			
15 p2572 A69-30031			
DAAB07-67-C-0185			
10 p1640 A69-23995			
DAAB07-67-C-0199			
02 p0224 A69-11967	12 p2052	A69-26503	
04 p0636 A69-15020	17 p2952	A69-33325	
05 p0737 A69-15866	19 p3382	A69-36049	
06 p0982 A69-18234	23 p4144	A69-41568	
11 p1860 A69-25441	23 p4119	A69-41746	
DAAB07-67-C-0419			
06 p0977 A69-16886			
DAAB07-67-C-0478			
07 p1155 A69-19091			
DAAB07-67-C-0515			
02 p0217 A69-12149			
DAAB07-67-C-0540			
12 p2029 A69-26204			
DAAB07-67-C-0547			
04 p0573 A69-14331			
DAAB07-67-C-0671			
02 p0221 A69-12456			
DAAB07-68-C-0088			
13 p2233 A69-28065			
DAAB07-68-C-0093			
23 p4131 A69-42523			
DAAB07-68-C-0189			
23 p4141 A69-42226			
DAAB07-68-C-0206			
22 p3963 A69-40567			
DAAB07-68-C-0208			
17 p2980 A69-32959			
DAAB07-68-C-0296			
11 p1856 A69-25654			
DAAB07-69-C-0062			
20 p3573 A69-37910			
DAAD05-67-C-0138			
21 p3840 A69-39288			
DAAD05-69-C-0043			
21 p3689 A69-38656	23 p4234	A69-42451	
DAAD05-69-C-0053			
18 p3089 A69-35386			
DAAD05-69-E-0043			
24 p4397 A69-42756			
DAAD07-67-C-0264			
07 p1084 A69-19131			
DAAG06-68-0060			
19 p3383 A69-36447			
DAAG39-67-C-0019			
05 p0748 A69-16093	24 p4256	A69-43299	
DAAG39-67-C-0028			
06 p0974 A69-16864			22 p3997 A69-41226
DAAG39-68-C-0014			
19 p3276 A69-36485			
DAAG39-69-C-0036			
20 p3516 A69-37976			
DAAG46-67-C-0125/X/			
13 p2280 A69-28137			
DAAG46-67-C-0132/X/			
10 p1695 A69-23544			
DAAG46-67-C-0171			
20 p3556 A69-36952			
DAAG68-6-0060			
19 p3383 A69-36447			
DAAH01-67-C-0655			
13 p2218 A69-28457			
DAAH01-67-C-2522			
11 p1831 A69-24284			
DAAH01-68-C-0632			
13 p2218 A69-28457			
DAAH01-68-C-0645			
05 p0738 A69-16182			
DAAH01-68-C-2101			
17 p2955 A69-33480			
DAAJ02-67-C-0014			
08 p1321 A69-20732			
DAAJ02-67-C-0023			
18 p3090 A69-34322			
DAAJ02-67-C-0025			
07 p1055 A69-19566			
DAAJ02-67-C-0026			
09 p1513 A69-22515			
DAAJ02-67-C-0037			
09 p1513 A69-22485			
DAAJ02-67-C-0053			
05 p0812 A69-16142			
DAAJ02-67-C-0055			
17 p2901 A69-33548			
DAAJ02-67-C-0068			
18 p3089 A69-35234			
DAAJ02-67-C-0095			
20 p3463 A69-37806			
DAAJ02-67-C-0096			
18 p3089 A69-35233			
DAAJ02-67-C-0106			
05 p0698 A69-16095			
DAAJ02-68-C-0035			
06 p1028 A69-18181			
DAAJ02-68-C-0064			
18 p3087 A69-35219			
DAAK02-67-C-0080			
12 p2026 A69-25937			
DAAK02-67-C-0535			
02 p0243 A69-12012			
DAAK02-68-C-0086			
15 p2581 A69-31524			
DAAK02-68-C-0089			
12 p2097 A69-26990			14 p2448 A69-29533
DAAK02-68-C-0118			
10 p1697 A69-23870			



CONTRACT NUMBER INDEX

DAAK02-68-C-0160			
15 p2581 A69-31524			
DADA17-68-C-8064			
08 p1263 A69-20174			
DADA17-68-G-9249			
10 p1648 A69-23185			
DAHC01-68-C-0018			
07 p1168 A69-19598			
DAHC04-67-C-0008			
20 p3517 A69-37998			
DAHC04-67-C-0015			
12 p2190 A69-25948	17 p2997 A69-33499		
DAHC04-67-C-0023			
13 p2271 A69-27399	24 p4327 A69-42981		
DAHC04-67-C-0031			
07 p1102 A69-18874	07 p1104 A69-18886		
07 p1103 A69-18882			
DAHC04-67-C-0037			
03 p0509 A69-13358			
DAHC04-67-C-0044			
22 p3860 A69-40895			
DAHC04-67-C-0065			
17 p2891 A69-33445			
DAHC04-67-C-0070			
02 p0284 A69-12702	06 p0961 A69-17139		
DAHC04-68-C-0002			
19 p3279 A69-35600			
DAHC04-68-C-0003			
16 p2732 A69-31885			
DAHC04-68-C-0004			
07 p1051 A69-19557	08 p1253 A69-21030		
DAHC04-68-C-0006			
21 p3754 A69-38744			
DAHC04-68-C-0034			
15 p2598 A69-31316			
DAHC04-68-C-0039			
18 p3087 A69-35217			
DAHC04-69-C-0012			
06 p0902 A69-17405			
DAHC04-69-C-0015			
11 p1821 A69-25514			
DAHC04-69-C-0022			
22 p3963 A69-40566			
DAHC04-76-C-0053			
04 p0574 A69-14344			
DAHC15-67-C-0011			
06 p0912 A69-18056	12 p2063 A69-26969		
DAHC15-67-C-0062			
05 p0697 A69-15722	23 p4059 A69-41883		
DAHC15-67-C-0104			
05 p0776 A69-16327			
DAHC15-67-C-0141			
08 p1354 A69-20146	18 p3129 A69-34953		
16 p2770 A69-31888	24 p4302 A69-43359		
18 p3101 A69-34949			
DAHC15-67-C-0176			
19 p3343 A69-35921			
DAHC15-67-G2			
24 p4360 A69-42790			
DAHC15-68-C-0144			
16 p2777 A69-32183			
DAHC15-68-C-0365			
16 p2828 A69-31845			
DAHC19-67-G-0011			
01 p0071 A69-11163			
DAHC60-68-C-0019			
20 p3485 A69-36925			
DAHC60-69-C-0006			
13 p2263 A69-28282			
DAHC04-67-C-0070			
24 p4353 A69-43815			
DASA-01-69-C-0012			
21 p3847 A69-38473			
DASA ORDER 01-67-C-0019			
16 p2818 A69-31678			
DASA ORDER 01-69-C-0012			
21 p3847 A69-38473			
DASA ORDER 1105-8117-01			
14 p2415 A69-29519			
DCA-100-66-C-0098			
03 p0389 A69-13192			
DCA-100-67-C-0023			
03 p0388 A69-13178			
DI-14-01-0001-1435			
13 p2360 A69-27437			
DRB-0201-01			
23 p4224 A69-41876	24 p4388 A69-43649		
DRB-1601-26			
18 p3085 A69-34469			
DRB-2801-18			
07 p1124 A69-18824			
DRB-3801-41			
12 p2079 A69-25910			
DRB-3801-42			
09 p1468 A69-22590			
DRB-4003-04			
12 p2053 A69-26506			
DRB-5501-47			
07 p1201 A69-19464			
DRB-6801-37			
09 p1468 A69-22590	12 p2039 A69-26381		
DRB-9310-108			
17 p2910 A69-33751			
DRB-9425-08			
23 p4084 A69-41463	24 p4256 A69-42554		
DRB-9511-58			
20 p3497 A69-38108			
DRB-9530-39			
19 p3451 A69-36366			
DRB-9530-54			
18 p3176 A69-34465			
DRB-9550-19			
09 p1432 A69-22489			
DRB-9550-22			
17 p2957 A69-33602			
DRB-9550-38			
18 p3084 A69-34412			
DRB-9551-02			
16 p2815 A69-31590			
DRB-9551-13			
18 p3083 A69-34402			

CONTRACT NUMBER INDEX

DRB-9601-06 10 p1794 A69-22930	FA-64-WA-5143 01 p0010 A69-10455	
DRB-CD-813003 12 p2079 A69-25910	FA-66-WA-1442 22 p3976 A69-39927	
DRB-D-9511-37 20 p3535 A69-38194	FA-66-WA-1536 24 p4342 A69-42892	
DRB-G-4003-02 06 p0900 A69-17352	FA-66-WA-1566 18 p3097 A69-34325	
DRB-G-6801-37 02 p0218 A69-12327	FA-66-WA-1573 08 p1348 A69-21191	
DRB-G-9310-108 22 p3891 A69-40221	FA-67-WA-1632 07 p1105 A69-19111	
DRB-G-9511-41 03 p0426 A69-14251	FA-67-WA-1700 01 p0010 A69-10455	
DRB-G-9511-58 05 p0757 A69-16405	FA-67-WA-1753 20 p3507 A69-37840	
DRB-G-9550-17 01 p0127 A69-10341	FA-2021 17 p2908 A69-33007	
DRME-269/65 17 p2930 A69-33885	FR-28-043-J6-00495 22 p3876 A69-40264	
DRME-516/66 09 p1433 A69-22609	GS-14-08-0001-10654 13 p2260 A69-27607	
E-10-68/G/ 18 p3166 A69-34827	GS-14-08-0001-10848 12 p2097 A69-26986	
E-22-8-69/N/ 16 p2849 A69-31976	JPL-38380 21 p3794 A69-38380	
E-22-25-67/N/ 10 p1765 A69-23749	JPL-950056 05 p0730 A69-16242	
E-22-28-69/N/ 17 p3024 A69-33802	JPL-950403 07 p1124 A69-18834 16 p2774 A69-31985	19 p3284 A69-36675 22 p3938 A69-40501
E-22-88-67/N/ 12 p2032 A69-26858	JPL-950613 20 p3592 A69-38096	
E-22-113-67/N/ 01 p0084 A69-11052	JPL-950875 07 p1202 A69-19386	
E-22-113-68G 24 p4343 A69-43064	JPL-950996 04 p0683 A69-15508	
E-22-137-67/N/ 19 p3362 A69-36405	JPL-951111 21 p3828 A69-39770	
E-42-67/G/ 07 p1126 A69-19040	JPL-951225 09 p1438 A69-21814	
E-162-67/N/ 18 p3167 A69-35084	JPL-951331 24 p4249 A69-43665	
E-174-67/N/ 09 p1543 A69-22250	JPL-951520 21 p3794 A69-38380	
E-196-68 18 p3167 A69-35084	JPL-951563 22 p4004 A69-40504	
E-230-68/G/ 24 p4343 A69-42897	JPL-951661 04 p0684 A69-14357	17 p3071 A69-33271
ESRO 459/67-AA 19 p3250 A69-35687	JPL-951763 04 p0598 A69-14974	
ESSA-21-F-66-222-F-310-239 10 p1765 A69-23747	JPL-951770 09 p1440 A69-21831	
F19628-69-C-0106 14 p2440 A69-29124	JPL-951790 22 p4023 A69-40568	
FA-64-WA-4955 23 p4062 A69-41651	JPL-95185 09 p1597 A69-22089	
FA-64-WA-4960 23 p4062 A69-41651	JPL-951976 09 p1438 A69-21818	



CONTRACT NUMBER INDEX

JPL-952000 04 p0650 A69-14361	21 p3786 A69-39768	N00014-67-A-0094-0008 01 p0148 A69-10052 09 p1591 A69-21448 09 p1598 A69-22185 13 p2335 A69-27311	18 p3191 A69-34302 20 p3610 A69-38139 22 p4022 A69-40464 22 p4025 A69-40639
JPL-952150 17 p2904 A69-34088		N00014-67-A-0108-0002 23 p4220 A69-42378	
JPL-952166 21 p3800 A69-38675		N00014-67-A-0108-0004 17 p2961 A69-33284	
JPL-952217 09 p1438 A69-21814		N00014-67-A-0108-0008 24 p4341 A69-43235	
JPL-952249 06 p0974 A69-16867	24 p4360 A69-42647	N00014-67-A-0109 21 p3840 A69-39297	
JPL-952259 19 p3252 A69-35697		N00014-67-A-0109-0003 01 p0103 A69-10231 08 p1417 A69-20823	21 p3837 A69-39158 24 p4275 A69-43094
JPL-952312 04 p0556 A69-14429	07 p1078 A69-18859	N00014-67-A-0112-0003 19 p3446 A69-36834	
JPL-EW-473447 23 p4122 A69-41771		N00014-67-A-0112-0006 02 p0329 A69-12794	24 p4378 A69-42698
JSPS G-X-26 02 p0243 A69-12006	02 p0243 A69-12010	N00014-67-A-0112-0023 12 p2090 A69-26250	
KJ/G/7845/CB.2/66/ 13 p2272 A69-28191		N00014-67-A-0112-0115 10 p1722 A69-24069	
N0009-68-C-0307 21 p3648 A69-39418		N00014-67-A-0113-0002 09 p1440 A69-21830	
N00014-66-C-0027 23 p4230 A69-42129		N00014-67-A-0113-0004 09 p1608 A69-22689	
N00014-66-C-0037 18 p3120 A69-34379	18 p3213 A69-34384	N00014-67-A-0114-0114 22 p3940 A69-40538	
N00014-66-C-0050-A01 15 p2608 A69-30454		N00014-67-A-0117-0001 21 p3754 A69-38426	
N00014-66-C-0072 10 p1650 A69-23877		N00014-67-A-0126-0001 04 p0552 A69-14533	
N00014-66-C-0147 02 p0194 A69-11801		N00014-67-A-0163-0002 06 p0927 A69-17701	
N00014-66-C-0190 20 p3567 A69-38066		N00014-67-A-0191-0007 18 p3219 A69-34664	
N00014-66-C-0200 03 p0382 A69-13858		N00014-67-A-0204-0016 22 p3887 A69-41196	
N00014-66-C-0204 23 p4203 A69-42250		N00014-67-A-0204-0019 20 p3578 A69-38243	
N00014-66-C-0217 01 p0121 A69-11134	08 p1390 A69-20276	N00014-67-A-0210-001 12 p2181 A69-26396	
N00014-66-C-0241 07 p1126 A69-19039		N00014-67-A-0226 24 p4289 A69-42955	
N00014-66-00340 13 p2274 A69-27226		N00014-67-A-0226-0003 23 p4084 A69-41472	
N00014-67-A-0003 12 p2179 A69-26215	23 p4084 A69-41469	N00014-67-A-0226-0005 02 p0234 A69-12633 13 p2306 A69-27457	13 p2302 A69-27458 13 p2380 A69-28461
N0014-67-A-0007-0002 16 p2814 A69-31773		N00014-67-A-0239-0003 13 p2271 A69-27399	
N00014-67-A-011-0007 14 p2406 A69-29293		N00014-67-A-0298-0005 05 p0725 A69-16571 08 p1282 A69-20040 11 p1843 A69-25445	15 p2645 A69-31237 17 p2943 A69-32834 24 p4341 A69-43234
N00014-67-A-0077-0002 13 p2302 A69-27459		N00014-67-A-0298-0006 05 p0776 A69-16329 05 p0725 A69-16571 09 p1531 A69-21415 11 p1860 A69-25444 11 p1843 A69-25445 12 p2122 A69-26525	13 p2203 A69-28245 15 p2645 A69-31237 17 p2943 A69-32834 19 p3330 A69-35604 24 p4341 A69-43234 24 p4291 A69-43270
N00014-67-A-0077-0006 07 p1151 A69-19057 10 p1701 A69-22954	16 p2748 A69-32793		
N00014-67-A-0077-0007 23 p4218 A69-42326			
N00014-67-A-0094 10 p1787 A69-24114			

24 p4292 A69-43282	24 p4341 A69-43296	N00014-68-A-0140	
N00014-67-A-0298-0008		16 p2874 A69-32165	
05 p0725 A69-16571	17 p2943 A69-32834	N00014-68-A-0144	
11 p1843 A69-25445	24 p4341 A69-43234	15 p2621 A69-30494	
15 p2645 A69-31237		N00014-68-A-0149	
N00014-67-A-0305-0001		10 p1785 A69-24092	24 p4387 A69-43349
17 p2952 A69-33325		20 p3611 A69-38156	
N00014-67-A-0305-0002		N00014-68-A-0157	
04 p0559 A69-15209	08 p1274 A69-20044	20 p3572 A69-37908	
07 p1086 A69-19224	11 p1837 A69-25004	N00014-68-A-0159	
N00014-67-A-0305-0009		07 p1126 A69-19040	24 p4347 A69-43356
09 p1604 A69-22408		N00014-68-A-0162	
N00014-67-A-0305-0010		08 p1349 A69-21199	13 p2221 A69-27962
13 p2358 A69-27210		09 p1473 A69-22438	
N00014-67-A-0310-0001		N00014-68-A-0187	
02 p0243 A69-12006	23 p4157 A69-42018	13 p2365 A69-28287	
16 p2784 A69-32576		N00014-68-A-0216	
N00014-67-A-0310-0003		21 p3651 A69-38389	22 p3885 A69-40976
09 p1540 A69-22100	17 p3004 A69-32832	22 p3875 A69-40230	
N00014-67-A-0356-0003		N00014-68-C-0176	
05 p0738 A69-16175		16 p2860 A69-32232	
N00014-67-A-0377-0002		N00014-68-C-0247	
22 p3987 A69-41003		15 p2614 A69-31276	20 p3552 A69-37004
N00014-67-C-0140		N00014-68-C-0289	
07 p1205 A69-19247		22 p3892 A69-40357	
N00014-67-C-0215		N00014-68-C-0373	
16 p2863 A69-32396		19 p3255 A69-36680	
N00014-67-C-0218		N00014-68-C-0398	
01 p0102 A69-11262	08 p1339 A69-20496	07 p1226 A69-18329	
01 p0103 A69-11273	10 p1717 A69-24218	N00014-69-C-0027	
08 p1339 A69-20495	20 p3623 A69-37354	13 p2218 A69-27203	
N00014-67-C-0256		N00014-680141-0001	
12 p2185 A69-26818		24 p4303 A69-43537	
N00014-67-C-0264		N00016-66-C-0076-A-04	
07 p1152 A69-19064		12 p2053 A69-26507	
N00014-67-C-0266		N00017-67-C-2427	
07 p1201 A69-19647		13 p2380 A69-28463	
N00014-67-C-0272		N00017-67-C-2429	
23 p4115 A69-41562		06 p0983 A69-18151	
N00014-67-C-0290		N00019-67-C-0244	
15 p2693 A69-30782		22 p3906 A69-40348	
N00014-67-C-0327		N00019-67-C-0354	
05 p0772 A69-16025		01 p0103 A69-11268	
N00014-67-C-0466		N00019-67-C-0489	
21 p3663 A69-38899		09 p1510 A69-22350	
N00014-67-C-0477		N00019-67-C-0546	
02 p0224 A69-11743		23 p4074 A69-42294	
N00014-67-C-0478		N00019-67-C-0671	
03 p0443 A69-13119		02 p0220 A69-12450	
N00014-67-H-0112-0018		N00019-68-C-0075	
07 p1154 A69-19081		22 p3927 A69-40490	
N00014-67-0094-0008		N00019-68-C-0110	
12 p2153 A69-25805		14 p2392 A69-29495	
N00014-67-0225-0005		N00019-68-C-0233	
24 p4359 A69-43572		16 p2733 A69-32730	
N00014-67-0226-0005		N00019-68-C-0305	
17 p2955 A69-33481		17 p2934 A69-34074	
N00014-67-0310-0001		N00019-68-C-0475	
22 p3934 A69-39872		08 p1337 A69-20483	
N00014-68-A-0109-0005		N00024-67-C-1313	
11 p1908 A69-24881		15 p2573 A69-30032	



# CONTRACT NUMBER INDEX

N00024-68-1193 15 p2572 A69-31113				N62558-4297 13 p2302 A69-28196			
N00024-69-C-1070 19 p3312 A69-36278				NAS1-2973 10 p1768 A69-23778			
N00030-66-C-0186 16 p2874 A69-32158	23 p4234	A69-42413		NAS1-3629 08 p1420 A69-20148			
N-66-00-143 19 p3337 A69-36533				NAS1-3800 21 p3805 A69-39220			
N-66-34-327 19 p3337 A69-36533				NAS1-4623 22 p3914 A69-40698			
N115/0235/00124 01 p0177 A69-11405				NAS1-4738 10 p1641 A69-23039			
N00123-67-C-1187 03 p0487 A69-13639				NAS1-4902 13 p2274 A69-27226			
N00123-67-C-2939 07 p1232 A69-18718				NAS1-5199 10 p1753 A69-23561	16 p2844	A69-32723	
N123/60530/-51908A 15 p2613 A69-31272				NAS1-5209 09 p1574 A69-21402			
N123/60530/-55104A 15 p2613 A69-31272				NAS1-5277 09 p1447 A69-22552			
N00140-68-C-0447 17 p2931 A69-34115				NAS1-6013 22 p3997 A69-41214			
N00140-69-C-0270 23 p4137 A69-41775				NAS1-6342 14 p2393 A69-29880			
N140/624262/78155B 01 p0048 A69-11035				NAS1-6586 16 p2871 A69-31897			
N00156-67-C-2161 01 p0056 A69-11053				NAS1-6607 02 p0333 A69-11745	02 p0330	A69-12803	
N00156-67-C-2452 15 p2622 A69-30609				NAS1-6702 04 p0554 A69-15506	09 p1561	A69-21220	
N156-46083 10 p1714 A69-23981 10 p1715 A69-23982	10 p1715	A69-23983 10 p1715 A69-23984		NAS1-6714 11 p1991 A69-25515			
N00173-67-C-0280 17 p2979 A69-32914				NAS1-6813 24 p4394 A69-43301			
N189/181/-60723A/X/ 05 p0840 A69-16188				NAS1-7043 17 p2993 A69-33762			
N605/30/-68-C-1016 21 p3647 A69-39038				NAS1-7046 09 p1495 A69-21842			
N609/21/-7164 18 p3174 A69-35237				NAS1-7255 16 p2843 A69-32705			
N623/06/-60-C-0249 15 p2609 A69-30461				NAS1-7276 02 p0201 A69-11759			
N623/06/-1589 15 p2609 A69-30461				NAS1-7309 18 p3114 A69-34368	23 p4108	A69-41833	
N60530-67-C-0004 02 p0195 A69-12081				NAS1-7310 07 p1240 A69-18362			
N60921-67-C-0301 03 p0402 A69-12854				NAS1-7349 06 p1036 A69-18046			
N60921-68-C-0225 16 p2804 A69-32710				NAS1-7389 17 p3025 A69-34219			
N62269-3488 04 p0562 A69-15477				NAS1-7411 11 p1990 A69-25510			
N62306-69-C-0032 22 p3894 A69-40995				NAS1-7590 02 p0330 A69-12803 02 p0333 A69-11745	17 p3072 22 p3922	A69-33274 A69-40389	
N62306-2082 22 p3894 A69-40995				NAS1-7618 18 p3088 A69-35223			
N62558-4281 04 p0653 A69-14613				NAS1-7627 13 p2240 A69-27955			

CONTRACT NUMBER INDEX

NAS1-7850				NAS2-3662			
17 p2893	A69-33486			06 p0868	A69-18134		
NAS1-7897				NAS2-3664			
04 p0566	A69-15342			21 p3786	A69-39373		
NAS1-7976				NAS2-3719			
02 p0333	A69-11750	02 p0335	A69-12822	01 p0006	A69-11016		
02 p0331	A69-12821	17 p3072	A69-33274	NAS2-3769			
NAS1-8000				23 p4164	A69-41633		
24 p4412	A69-43548			NAS2-3772			
NAS1-8011				14 p2414	A69-29498		
21 p3819	A69-39210			NAS2-3793			
NAS1-8028				05 p0816	A69-16275	11 p1946	A69-24430
09 p1567	A69-21266			10 p1783	A69-23775	11 p1950	A69-25148
NAS1-8090				NAS2-3817			
09 p1563	A69-21232			17 p2914	A69-33293		
NAS1-8141				NAS2-3876			
22 p3938	A69-40503			14 p2433	A69-28934		
NAS1-8144/F/				NAS2-3921			
22 p3938	A69-40503			15 p2586	A69-30383		
NAS1-8150/F/				NAS2-4050			
22 p3938	A69-40503			21 p3762	A69-39386		
NAS1-8166				NAS2-4135			
22 p3923	A69-40395			19 p3402	A69-35937		
NAS1-8222				NAS2-4151			
13 p2380	A69-28463			07 p1057	A69-19577		
NAS1-57941				NAS2-4219			
01 p0039	A69-10172			23 p4059	A69-41890		
NAS2-1189				NAS2-4266			
23 p4076	A69-42541			17 p3071	A69-33269		
NAS2-1481				NAS2-4353			
07 p1069	A69-19501	12 p2022	A69-26372	17 p2991	A69-33273		
NAS2-1554				NAS2-4553			
12 p2020	A69-26557			19 p3401	A69-35916	21 p3686	A69-39370
NAS2-1558				NAS2-4582			
01 p0015	A69-10932			24 p4276	A69-43273		
NAS2-1756				NAS2-4673			
10 p1768	A69-23769			01 p0035	A69-11224		
NAS2-2282				NAS2-4882			
01 p0006	A69-11016			02 p0284	A69-12598		
NAS2-2503				NAS2-4963			
17 p2910	A69-33749	24 p4260	A69-42703	17 p2993	A69-33762		
NAS2-2738				NAS2-5006			
12 p2020	A69-26557	24 p4261	A69-42709	24 p4250	A69-43729		
NAS2-2824				NAS2-5015			
02 p0202	A69-11952			24 p4351	A69-43683		
NAS2-2839				NAS2-5153			
23 p4164	A69-41633			22 p4023	A69-40518		
NAS2-2928				NAS2-5168			
13 p2353	A69-28203			17 p2899	A69-33508		
NAS2-3129				NAS2-5242			
18 p3116	A69-34460			24 p4384	A69-43190		
NAS2-3164				NAS3-1438			
17 p3049	A69-33267			24 p4398	A69-42877		
NAS2-3410				NAS3-2121			
01 p0035	A69-11224			20 p3567	A69-38066		
NAS2-3636				NAS3-2555			
24 p4253	A69-43280	24 p4349	A69-43313	16 p2747	A69-32702		
NAS2-3649				NAS3-2572			
24 p4276	A69-43273			16 p2733	A69-32652		



# CONTRACT NUMBER INDEX

NAS3-4100 21 p3776 A69-38712				NAS3-10600 05 p0704 A69-15674	05 p0704 A69-15675
NAS3-4162 01 p0093 A69-10111				NAS3-10612 09 p1436 A69-21726	
NAS3-6287 05 p0785 A69-16491				NAS3-11120 09 p1438 A69-21815	
NAS3-6299 10 p1753 A69-23561				NAS3-11190 16 p2844 A69-32718	
NAS3-6465 01 p0093 A69-10111				NAS3-11199 16 p2846 A69-32778	
NAS3-7267 08 p1329 A69-20001				NAS3-11203 21 p3743 A69-38668	
NAS3-7270 18 p3140 A69-34380				NAS3-11210 16 p2840 A69-32674	
NAS3-7605 13 p2266 A69-27272	13 p2267 A69-27366			NAS3-11214 16 p2747 A69-32702	
NAS3-7609 05 p0768 A69-16131	15 p2620 A69-30487			NAS3-11230 24 p4362 A69-43128	
NAS3-7622 24 p4413 A69-43551				NAS3-11518 09 p1566 A69-21259	
NAS3-7624 05 p0706 A69-16231				NAS3-12010 16 p2741 A69-32720	
NAS3-7629 15 p2629 A69-30903				NAS3-12025 17 p3073 A69-33300	
NAS3-7630 16 p2789 A69-31815				NAS5-191 15 p2572 A69-31111	
NAS3-7950 16 p2741 A69-32720				NAS5-0441 23 p4070 A69-42254	
NAS3-7951 14 p2462 A69-29003	21 p3743 A69-38669			NAS5-1348 04 p0602 A69-15380	
NAS3-7963 16 p2767 A69-32717				NAS5-1386 02 p0245 A69-12718	
NAS3-7978 04 p0647 A69-15521				NAS5-1810 02 p0327 A69-12712	10 p1788 A69-24120
NAS3-7990 15 p2656 A69-31156 15 p2656 A69-31157	21 p3774 A69-38758			NAS5-2053 03 p0503 A69-14027	07 p1209 A69-19373
NAS3-8525 11 p1847 A69-24744 •				NAS5-2054 07 p1208 A69-19358	
NAS3-8704 06 p1027 A69-18074				NAS5-2071 02 p0309 A69-12740 07 p1206 A69-19251	09 p1579 A69-22182
NAS3-8711 24 p4348 A69-43239				NAS5-2131 11 p1878 A69-25153	16 p2774 A69-31981
NAS3-8907 13 p2312 A69-28221				NAS5-2133 08 p1378 A69-20067	08 p1378 A69-20068
NAS3-9375 22 p3979 A69-40548				NAS5-2222 07 p1206 A69-19249 09 p1579 A69-22181	20 p3589 A69-37555
NAS3-9418 05 p0812 A69-16140				NAS5-2503 16 p2792 A69-32558	
NAS3-9431 05 p0706 A69-16231				NAS5-2952 07 p1129 A69-19372	07 p1129 A69-19374
NAS3-9701 09 p1492 A69-21217				NAS5-3063 01 p0146 A69-11122	
NAS3-10280 16 p2741 A69-32747				NAS5-3092 05 p0754 A69-16257	
NAS3-10304 16 p2794 A69-32757				NAS5-3093 03 p0426 A69-14029	18 p3187 A69-34939
NAS3-10477 17 p2916 A69-33774				NAS5-3095 24 p4368 A69-43183	

CONTRACT NUMBER INDEX

NAS5-3097						NAS5-9298					
24 p4368	A69-43184					18 p3109	A69-34660				
NAS5-3098						NAS5-9313					
19 p3314	A69-36681					19 p3314	A69-36678				
NAS5-3176						NAS5-9315					
22 p4003	A69-40297					16 p2788	A69-32645				
NAS5-3177						NAS5-9317					
05 p0813	A69-15846	24 p4371	A69-43610			14 p2511	A69-28950	16 p2848	A69-31967		
20 p3593	A69-38166					NAS5-9352					
NAS5-3178						15 p2699	A69-31394				
09 p1579	A69-22172					NAS5-9444					
NAS5-3205						20 p3545	A69-37879				
09 p1579	A69-22173					NAS5-9471					
NAS5-3569						11 p1994	A69-25533				
20 p3593	A69-38154					NAS5-9521					
NAS5-3815						03 p0403	A69-13239	22 p3913	A69-40692		
02 p0217	A69-12151					NAS5-9523					
NAS5-9034						23 p4129	A69-42506				
06 p0976	A69-16879					NAS5-9542					
NAS5-9041						20 p3592	A69-38082				
20 p3593	A69-38154	24 p4366	A69-42688			NAS5-9561					
NAS5-9074						09 p1574	A69-21309				
14 p2449	A69-29565					NAS5-9570					
NAS5-9075						01 p0075	A69-11225	07 p1124	A69-18835		
09 p1582	A69-22746	24 p4373	A69-43619			07 p1123	A69-18343				
NAS5-9076						NAS5-9597					
05 p0824	A69-16252	11 p1950	A69-25146			07 p1229	A69-18350				
10 p1766	A69-23754	19 p3397	A69-36754			NAS5-9619					
10 p1768	A69-23768	22 p4004	A69-40504			18 p3137	A69-35101				
10 p1768	A69-23778					NAS5-9671					
NAS5-9077						18 p3137	A69-35101				
03 p0516	A69-14046	09 p1579	A69-22181			NAS5-9680					
05 p0815	A69-16253	20 p3609	A69-38078			04 p0572	A69-14328	12 p2044	A69-26977		
07 p1206	A69-19249					NAS5-9729					
NAS5-9078						19 p3273	A69-36263				
05 p0824	A69-16251					NAS5-9753-10					
NAS5-9079						11 p1989	A69-25502	21 p3819	A69-39211		
10 p1775	A69-23190					NAS5-9753-15					
NAS5-9085						21 p3819	A69-39211				
06 p0905	A69-17946	19 p3399	A69-35671			NAS5-9753-20					
18 p3109	A69-34660					07 p1228	A69-18346	24 p4394	A69-43291		
NAS5-9091						NAS5-9978					
03 p0516	A69-14046	07 p1206	A69-19249			24 p4247	A69-43575	24 p4305	A69-43664		
NAS5-9094						24 p4249	A69-43663				
22 p4007	A69-40775					NAS5-10006					
NAS5-9098						22 p3906	A69-40350				
24 p4306	A69-42693					NAS5-10022					
NAS5-9110						22 p3907	A69-40363				
13 p2302	A69-27459	16 p2814	A69-31773			NAS5-10101					
NAS5-9112						04 p0573	A69-14330	11 p1839	A69-25294		
04 p0599	A69-15022					NAS5-10239					
NAS5-9128						06 p0974	A69-16867	19 p3252	A69-35698		
15 p2699	A69-31396					19 p3252	A69-35697	24 p4360	A69-42647		
NAS5-9149						NAS5-10253					
02 p0194	A69-11801	04 p0551	A69-15315			07 p1227	A69-18334				
NAS5-9156						NAS5-10306					
14 p2449	A69-29565					06 p0976	A69-16879				
NAS5-9277						NAS5-10334					
09 p1610	A69-21987					12 p2075	A69-27003				
NAS5-9278						NAS5-10342					
04 p0592	A69-14681	19 p3315	A69-36683			21 p3786	A69-39754				
17 p2961	A69-33452	24 p4306	A69-42693								



# CONTRACT NUMBER INDEX

NAS5-10349					
02 p0305	A69-12375				
NAS5-10376					
07 p1229	A69-18350				
NAS5-10380					
21 p3785	A69-39212				
NAS5-10392					
07 p1135	A69-19199				
NAS5-10394					
09 p1560	A69-21212				
NAS5-10427					
07 p1106	A69-19112				
NAS5-10445					
19 p3251	A69-35688				
NAS5-10453					
07 p1227	A69-18334				
NAS5-10555					
07 p1081	A69-19101				
NAS5-10558					
01 p0040	A69-10193				
NAS5-10591					
23 p4128	A69-42503				
NAS5-10625					
22 p3938	A69-40503				
NAS5-10750					
19 p3402	A69-35961				
NAS5-10752					
24 p4384	A69-43197				
NAS5-11025					
08 p1354	A69-20205	15 p2657	A69-31265		
NAS5-11048					
06 p0905	A69-17946	18 p3110	A69-34676		
18 p3109	A69-34660	23 p4146	A69-42446		
NAS5-11054					
07 p1134	A69-19193				
NAS5-11057					
13 p2299	A69-28015				
NAS5-11063					
18 p3185	A69-34276				
NAS5-11075					
08 p1386	A69-20084				
NAS5-11082					
09 p1493	A69-21419				
NAS5-11150					
24 p4351	A69-43033				
NAS5-11163					
19 p3255	A69-36680				
NAS5-11164					
17 p3005	A69-33306				
NAS5-11513					
10 p1689	A69-22945	23 p4129	A69-42509		
NAS5-11542					
20 p3591	A69-38058	24 p4343	A69-42897		
NAS5-11543					
20 p3507	A69-37846				
NAS5-11571					
16 p2764	A69-31710				
NAS5-11596					
11 p1994	A69-25530				
NAS5-11617					
18 p3137	A69-35101				
NAS5-11618					
18 p3137	A69-35101				
NAS6-1061					
05 p0756	A69-16280	20 p3592	A69-38083		
12 p2079	A69-25904				
NAS7-100					
02 p0220	A69-12429	03 p0429	A69-13299		
02 p0211	A69-12442				
NAS7-101					
20 p3557	A69-36960	22 p4021	A69-40381		
NAS7-162					
19 p3351	A69-36897				
NAS7-275					
17 p2970	A69-32852				
NAS7-289					
19 p3383	A69-36447	22 p3997	A69-41226		
NAS7-340					
23 p4179	A69-41715				
NAS7-411					
19 p3394	A69-35944				
NAS7-426					
11 p1994	A69-25530				
NAS7-434					
04 p0606	A69-14798	15 p2620	A69-30484		
15 p2620	A69-30483	15 p2621	A69-30497		
NAS7-438					
06 p0983	A69-17792				
NAS7-445					
02 p0334	A69-12370				
NAS7-458					
16 p2846	A69-32768				
NAS7-473					
03 p0428	A69-13110				
NAS7-481					
06 p1039	A69-18182				
NAS7-488					
21 p3743	A69-38663				
NAS7-489					
08 p1332	A69-20359	19 p3352	A69-36902		
19 p3351	A69-36901				
NAS7-509					
02 p0354	A69-12528	04 p0542	A69-14723		
NAS7-514					
09 p1438	A69-21814				
NAS7-519					
18 p3184	A69-34873				
NAS7-540					
19 p3394	A69-35944				
NAS7-562					
02 p0303	A69-11897	02 p0304	A69-11899		
NAS7-564					
09 p1568	A69-21727	09 p1568	A69-21728		
NAS7-567					
12 p2118	A69-26784				
NAS7-573					
16 p2834	A69-32745				
NAS7-575					
09 p1569	A69-21874				

# CONTRACT NUMBER INDEX

NAS7-578	19 p3354	A69-35515			
NAS7-587	09 p1567	A69-21262			
NAS7-590	06 p1037	A69-18109			
NAS7-681	24 p4408	A69-43127			
NAS7-691	16 p2794	A69-32757			
NAS7-701	16 p2841	A69-32687			
NAS8-19	02 p0305	A69-12386	16 p2844	A69-32726	
	06 p0985	A69-18195	16 p2803	A69-32760	
	07 p1140	A69-18797	22 p3967	A69-39883	
	07 p1169	A69-19667			
NAS8-222	24 p4363	A69-42830			
NAS8-1400	09 p1478	A69-22378			
NAS8-1540	07 p1139	A69-18623	15 p2619	A69-30471	
	07 p1139	A69-18624			
NAS8-2117	07 p1228	A69-18338			
NAS8-2400	22 p3921	A69-40380			
NAS8-2451	10 p1807	A69-24179			
NAS8-2473	12 p2053	A69-26508			
NAS8-5231	08 p1282	A69-20041			
NAS8-5340	16 p2798	A69-31716			
NAS8-5352	05 p0717	A69-16497			
NAS8-5608	06 p0864	A69-18164	09 p1611	A69-22383	
NAS8-11234	05 p0847	A69-16119			
NAS8-11242	03 p0472	A69-13316	05 p0796	A69-15911	
NAS8-11260	08 p1252	A69-20841			
NAS8-11264	04 p0626	A69-15288	10 p1720	A69-23639	
NAS8-11274	04 p0569	A69-15462	24 p4292	A69-43283	
	18 p3111	A69-34687	24 p4293	A69-43302	
NAS8-11282	22 p3968	A69-39885			
NAS8-11302	24 p4301	A69-43289			
NAS8-11317	06 p1017	A69-17609			
NAS8-11482	03 p0361	A69-12990			
NAS8-11490	10 p1806	A69-24165			
NAS8-11523	15 p2617	A69-30100			
NAS8-11588	16 p2748	A69-31564			
NAS8-11678	13 p2267	A69-27281			
NAS8-14000	09 p1479	A69-22384			
NAS8-18008	02 p0225	A69-11970			
NAS8-18021	17 p3072	A69-33275			
NAS8-18053	12 p2174	A69-26782			
NAS8-18118	22 p3913	A69-40696	24 p4398	A69-42877	
NAS8-18120	11 p1861	A69-25452	21 p3826	A69-39642	
NAS8-18734	10 p1699	A69-23054			
NAS8-20025	11 p1990	A69-25506			
NAS8-20055	24 p4281	A69-42623			
NAS8-20073	15 p2614	A69-31276	21 p3696	A69-39232	
NAS8-20082	24 p4248	A69-43592			
NAS8-20084	20 p3613	A69-38248			
NAS8-20102	24 p4301	A69-43287			
NAS8-20104	11 p1909	A69-25290	11 p1861	A69-25453	
NAS8-20108	12 p2093	A69-26482			
NAS8-20112	10 p1805	A69-24162			
NAS8-20123	19 p3313	A69-36491			
NAS8-20124	24 p4323	A69-43417			
NAS8-20145	15 p2614	A69-31276			
NAS8-20154	08 p1282	A69-20041			
NAS8-20163	04 p0569	A69-15462			
NAS8-20165	16 p2869	A69-32753			
NAS8-20166	17 p2992	A69-33288			
NAS8-20220	07 p1073	A69-18375			
NAS8-20222	24 p4303	A69-43535			
NAS8-20256	08 p1317	A69-21072			
NAS8-20257	23 p4120	A69-41751			



# CONTRACT NUMBER INDEX

NAS8-20285 06 p0944 A69-17855				NAS8-21133 10 p1805 A69-24163			
NAS8-20290 22 p3921 A69-40378				NAS8-21153 17 p3049 A69-33267			
NAS8-20297 12 p2114 A69-26306	21 p3747 A69-39435			NAS8-21159 23 p4075 A69-42300			
NAS8-20298 06 p1037 A69-18119				NAS8-21165 07 p1139 A69-18624	15 p2619 A69-30471		
NAS8-20312 20 p3586 A69-37987				NAS8-21189 23 p4072 A69-42288			
NAS8-20321 16 p2733 A69-32751				NAS8-21196 12 p2103 A69-26622	19 p3319 A69-35554		
NAS8-20324 16 p2845 A69-32759				NAS8-21209 14 p2422 A69-29553			
NAS8-20329 09 p1616 A69-21979	11 p1989 A69-25499			NAS8-21210 15 p2701 A69-30396			
NAS8-20339 09 p1510 A69-22347				NAS8-21221 09 p1510 A69-22347			
NAS8-20350 04 p0577 A69-15025				NAS8-21259 16 p2833 A69-32691			
NAS8-20354 23 p4060 A69-41905				NAS8-21282 09 p1616 A69-21979	11 p1989 A69-25499		
NAS8-20411 17 p3049 A69-33267				NAS8-21392 06 p0884 A69-18079			
NAS8-20414 16 p2810 A69-32716				NAS8-21436 24 p4366 A69-42880			
NAS8-20553 04 p0591 A69-15504				NAS8-21447 09 p1569 A69-21879			
NAS8-20558 05 p0775 A69-16325				NAS8-21460 22 p3913 A69-40696 24 p4398 A69-42827	24 p4398 A69-42877		
NAS8-20570 02 p0280 A69-11924				NAS8-30148 17 p2992 A69-33288			
NAS8-20679 18 p3138 A69-35173				NAS9-150 12 p2012 A69-26789			
NAS8-20741 22 p3955 A69-40406				NAS9-417 22 p4037 A69-40555			
NAS8-20746 18 p3228 A69-34375				NAS9-753-20 21 p3821 A69-39350			
NAS8-20837 16 p2833 A69-32691				NAS9-996 19 p3398 A69-35616 22 p4020 A69-40321	22 p3907 A69-40361		
NAS8-21019 06 p1006 A69-17569	18 p3111 A69-34686			NAS9-1100 17 p3073 A69-33304	22 p3920 A69-40369		
NAS8-21023 18 p3206 A69-34369				NAS9-3410 07 p1102 A69-18875			
NAS8-21037 17 p3007 A69-33792				NAS9-3848 07 p1174 A69-19724			
NAS8-21044 17 p3032 A69-33276	17 p3033 A69-33285			NAS9-3966 10 p1644 A69-23314	20 p3482 A69-37622		
NAS8-21047 06 p1037 A69-18119				NAS9-4036 16 p2857 A69-32154	19 p3399 A69-35671		
NAS8-21062 02 p0279 A69-12365				NAS9-4065 08 p1291 A69-20984 08 p1279 A69-20990	21 p3822 A69-39375 21 p3824 A69-39417		
NAS8-21064 06 p1044 A69-18122	17 p2905 A69-34090			NAS9-4204 13 p2378 A69-28215			
NAS8-21074 22 p3923 A69-40395				NAS9-4358 11 p1940 A69-24905			
NAS8-21091 16 p2857 A69-32146				NAS9-4411 05 p0815 A69-16250	18 p3187 A69-34959		
NAS8-21130 21 p3804 A69-39024							

# CONTRACT NUMBER INDEX

NAS9-4518					
04 p0604	A69-15512				
NAS9-4548					
04 p0605	A69-14529				
NAS9-4640					
07 p1102	A69-18875				
NAS9-4810					
06 p1010	A69-18065	17 p3070	A69-33261		
10 p1672	A69-23277	19 p3401	A69-35916		
NAS9-4948					
17 p3007	A69-34158				
NAS9-4978					
07 p1067	A69-19432	23 p4108	A69-41832		
NAS9-5157					
02 p0265	A69-11895				
NAS9-5174					
11 p1871	A69-25124				
NAS9-5191					
16 p2778	A69-32192	23 p4131	A69-42525		
17 p3032	A69-33161	24 p4379	A69-42781		
23 p4133	A69-41762				
NAS9-5232					
14 p2409	A69-29300				
NAS9-5384					
06 p0962	A69-17819	24 p4341	A69-43230		
NAS9-5632					
23 p4162	A69-41533				
NAS9-5637					
11 p1828	A69-25457				
NAS9-5829					
23 p4162	A69-41533				
NAS9-5957					
19 p3425	A69-36421				
NAS9-6037					
02 p0313	A69-11482				
NAS9-6177					
16 p2794	A69-32757				
NAS9-6297					
02 p0244	A69-12568				
NAS9-6470					
18 p3093	A69-34780				
NAS9-6719					
06 p1038	A69-18149				
NAS9-6816					
12 p2174	A69-26797				
NAS9-6818					
02 p0345	A69-12389				
NAS9-6823					
03 p0429	A69-13211				
NAS9-6910					
03 p0375	A69-14070	07 p1066	A69-19422		
06 p0874	A69-17837				
NAS9-6963					
19 p3402	A69-35934	24 p4342	A69-43703		
20 p3595	A69-37173	24 p4386	A69-43281		
NAS9-6983					
02 p0265	A69-11895				
NAS9-7030					
24 p4367	A69-43176				
NAS9-7175					
11 p1835	A69-24692	11 p1835	A69-24695		
NAS9-7180					
07 p1067	A69-19432			23 p4108	A69-41832
NAS9-7313					
14 p2416	A69-29534				
NAS9-7805					
15 p2645	A69-31236			24 p4340	A69-42958
NAS9-7828					
14 p2413	A69-29488				
NAS9-7898					
23 p4210	A69-41344				
NAS9-7958					
22 p3896	A69-40488				
NAS9-7964					
06 p1038	A69-18179				
NAS9-8012					
22 p3934	A69-39890				
NAS9-8032					
24 p4385	A69-43215				
NAS9-8080					
20 p3523	A69-37518				
NAS9-8096					
20 p3602	A69-37537				
NAS9-8102					
24 p4310	A69-43216				
NAS9-8107					
04 p0654	A69-14633				
NAS9-8118					
17 p3070	A69-33259				
NAS9-8159					
17 p2914	A69-33303				
NAS9-8165					
20 p3584	A69-38125				
NAS9-9017					
23 p4216	A69-42202				
NAS9-9109					
24 p4272	A69-42850				
NAS9-18120					
21 p3685	A69-38726				
NAS9-20145					
20 p3552	A69-37004				
NAS10-1255					
04 p0646	A69-14477			04 p0646	A69-14478
NAS12-99					
21 p3763	A69-39391				
NAS12-104					
12 p2022	A69-25929				
NAS12-108					
21 p3856	A69-39133				
NAS12-114					
06 p0956	A69-18183			19 p3359	A69-35665
19 p3367	A69-35663			19 p3399	A69-35671
NAS12-115					
03 p0396	A69-13630				
NAS12-132					
24 p4286	A69-42761				
NAS12-500					
02 p0279	A69-12546				
NAS12-509					
11 p1839	A69-25298				



# CONTRACT NUMBER INDEX

NAS12-538 12 p2142 A69-25934	12 p2145 A69-26920	NASA ORDER R-06-012-010 14 p2415 A69-29519	
NAS12-544 10 p1743 A69-23169	17 p2936 A69-32894	NASA ORDER R-06-012-013 22 p3939 A69-40505	
NAS12-548 05 p0775 A69-16322		NASA ORDER R-09-022-030 22 p4027 A69-40659	
NAS12-550 19 p3370 A69-35953	21 p3764 A69-39408	NASA ORDER R-09-030-017 02 p1201 A69-11821	
NAS12-555 01 p0040 A69-10197		NASA ORDER R-10 17 p2913 A69-33009	23 p4082 A69-41447
NAS12-565 11 p1847 A69-24747	11 p1848 A69-24748	NASA ORDER R-18 01 p0068 A69-11113 15 p2594 A69-30019	16 p2774 A69-31987
NAS12-570 10 p1742 A69-22947		NASA ORDER R-21-009-004/013/ 01 p0146 A69-11123	24 p4368 A69-43184
NAS12-576 01 p0036 A69-10708		NASA ORDER R-45 14 p2464 A69-29400 22 p4050 A69-40625	22 p3970 A69-40633
NAS12-595 18 p3170 A69-35065		NASA ORDER R-93 17 p2908 A69-33178	
NAS12-597 21 p3756 A69-39497		NASA ORDER R-102 10 p1763 A69-23730	10 p1765 A69-23748
NAS12-606 06 p0965 A69-17488		NASA ORDER R-104 17 p2908 A69-33173	
NAS12-613 06 p1019 A69-18187	11 p1967 A69-25500	NASA ORDER R-104/1/ 09 p1597 A69-22088 10 p1723 A69-23164	10 p1760 A69-23411
NAS12-621 17 p2932 A69-34118		NASA ORDER R-104-2 17 p2910 A69-33748	
NAS12-628 07 p1177 A69-19552		NASA ORDER R-104-7 15 p2556 A69-31321	
NAS12-635 02 p0257 A69-12616	17 p2980 A69-33025	NASA ORDER R-104/10/ 10 p1723 A69-23164	
NAS12-639 23 p4145 A69-42230		NASA ORDER R-129 02 p1201 A69-11821	
NAS12-645 21 p3762 A69-39379		NASA ORDER R-137 05 p0715 A69-15982	
NAS12-654 12 p2055 A69-27097		NASA ORDER R-7493R 17 p3030 A69-33067	
NAS12-686 17 p2942 A69-34120		NASA ORDER SC-05-020-008 03 p0426 A69-14029	
NAS12-689 24 p4288 A69-42811		NASR-21 07 p1226 A69-18324 09 p1451 A69-21311	20 p3504 A69-36913
NAS12-2005 22 p3905 A69-40339		NASR-21/05/ 16 p2774 A69-31983	
NAS12-2008 22 p3963 A69-40567		NASR-45 01 p0176 A69-11146	
NAS12-2035 04 p0689 A69-15100		NASR-49/07/ 16 p2815 A69-32259	
NAS12-2039 07 p1177 A69-19552		NASR-49/14/ 08 p1341 A69-20514	
NASA ORDER H-2151A 09 p1521 A69-21399		NASR-49/15/ 12 p2119 A69-26813	
NASA ORDER PR-T-37785-6 06 p0880 A69-17089		NASR-49/24/ 16 p2825 A69-31696	22 p3937 A69-40188
NASA ORDER R-06-006-046 10 p1808 A69-23187 10 p1808 A69-23188	10 p1808 A69-23189	NASR-54/05/ 04 p0578 A69-15215 06 p0965 A69-17513	18 p3128 A69-34936 24 p4308 A69-43008
NASA ORDER R-06-012-006 03 p0503 A69-14017		NASR-54/06/ 02 p0202 A69-11951 02 p0212 A69-11998	21 p3807 A69-39342 21 p3765 A69-39414
NASA ORDER R-06-012-008 01 p0068 A69-11113 05 p0755 A69-16270 05 p0756 A69-16283	09 p1489 A69-21704 09 p1489 A69-21705 10 p1769 A69-23837		

# CONTRACT NUMBER INDEX

06 p1006 A69-17570	24 p4392 A69-42857		23 p4222 A69-42405
12 p2022 A69-25930	24 p4276 A69-43320		
21 p3807 A69-39339			NASW-366
NASR-54/07/			16 p2733 A69-32652
03 p0415 A69-13139	16 p2879 A69-32151		NASW-410
09 p1482 A69-21947			02 p0225 A69-11972
			17 p3033 A69-33291
NASR-54/08/			NASW-417
03 p0458 A69-13032	03 p0421 A69-13346		03 p0401 A69-14181
			19 p3430 A69-36034
NASR-65			21 p3815 A69-39585
07 p1127 A69-19261			21 p3815 A69-39587
NASR-65/04/			NASW-726
17 p3060 A69-33568			14 p2488 A69-29094
NASR-65/06/			NASW-729
01 p0153 A69-10823	21 p3805 A69-39224		17 p2951 A69-33252
21 p3761 A69-39205	24 p4381 A69-42866		NASW-767
			18 p3095 A69-34539
NASR-65/17/			NASW-812
08 p1406 A69-20934			16 p2745 A69-32447
NASR-65/26/			NASW-843
01 p0153 A69-10856			08 p1403 A69-20916
			08 p1404 A69-20917
NASR-86			NASW-847
05 p0815 A69-16254			04 p0587 A69-14509
NASR-94/06/			17 p3010 A69-33442
17 p3061 A69-33706			NASW-913
NASR-109			06 p1024 A69-17607
23 p4194 A69-42209			NASW-1138
			04 p0683 A69-15508
NASR-115			NASW-1146
06 p0880 A69-17209	24 p4278 A69-43396		09 p1565 A69-21251
			09 p1610 A69-21983
NASR-156			NASW-1168
01 p0111 A69-10696			21 p3689 A69-38594
NASR-164			NASW-1293
01 p0146 A69-11223	17 p2936 A69-33062		16 p2733 A69-32652
14 p2511 A69-28960			NASW-1377
NASR-179			02 p0347 A69-12514
02 p0320 A69-12114	18 p3129 A69-34956		NASW-1386
09 p1594 A69-21696			24 p4297 A69-42931
NASR-209			NASW-1394
05 p0756 A69-16274	20 p3592 A69-38083		10 p1807 A69-24177
NASR-215			NASW-1400
04 p0669 A69-14395			07 p1115 A69-18864
NASR-217			07 p1194 A69-19366
14 p2537 A69-29016	16 p2836 A69-31999		08 p1359 A69-19986
			NASW-1410
NASR-220			02 p0345 A69-12372
02 p0207 A69-12017	07 p1212 A69-18601		NASW-1417
NASR-231			10 p1652 A69-23527
06 p1007 A69-17575			NASW-1428
NASR-238			21 p3663 A69-38919
04 p0553 A69-14908			NASW-1438
NASR-242			22 p3913 A69-40696
13 p2259 A69-27205	23 p4167 A69-42189		NASW-1447
NASR-248			09 p1455 A69-21989
01 p0076 A69-11231	03 p0425 A69-14009		NASW-1503
NASR-249			07 p1228 A69-18341
02 p0217 A69-12150	10 p1773 A69-22960		NASW-1505
03 p0502 A69-14001			20 p3594 A69-38172
NASW-6			NASW-1513
16 p2878 A69-32000			20 p3582 A69-38236
NASW-7			NASW-1536
16 p2856 A69-31964	16 p2856 A69-31986		20 p3484 A69-38071
NASW-16			NASW-1555
22 p3967 A69-39883			09 p1501 A69-22688
NASW-184			24 p4366 A69-42688
02 p0313 A69-11485	18 p3191 A69-34305		



# CONTRACT NUMBER INDEX

NASW-1558						NGL-03-002-002			
11 p1828	A69-25460					04 p0655	A69-14667		
NASW-1580						NGL-03-002-019			
16 p2769	A69-31870					04 p0577	A69-14875		
NASW-1583						NGL-03-002-091			
20 p3594	A69-38172					04 p0655	A69-14667		
NASW-1586						NGL-03-002-136			
16 p2821	A69-31873					23 p4144	A69-41401		
NASW-1587						NGL-05-002-003			
18 p3084	A69-34416					20 p3609	A69-38060	21 p3815	A69-39586
NASW-1592						20 p3535	A69-38192	21 p3815	A69-39587
13 p2210	A69-28257					21 p3815	A69-39585	21 p3815	A69-39588
NASW-1594						NGL-05-002-007			
21 p3793	A69-38338					08 p1380	A69-20728	16 p2849	A69-32097
NASW-1598						08 p1318	A69-21131	18 p3186	A69-34299
01 p0035	A69-11224	14 p2513	A69-29115			09 p1591	A69-21455	18 p3191	A69-34318
03 p0479	A69-14020	16 p2848	A69-31971			09 p1604	A69-22401	21 p3799	A69-38650
NASW-1604						13 p2335	A69-27315	22 p4005	A69-40510
12 p2193	A69-27013					13 p2335	A69-27316	22 p4005	A69-40511
NASW-1612						13 p2335	A69-27317	24 p4368	A69-43183
23 p4189	A69-42269					NGL-05-002-012			
NASW-1634						02 p0284	A69-12702		
02 p0308	A69-12594					NGL-05-002-069			
13 p2326	A69-27570	20 p3594	A69-38172			08 p1393	A69-20581	23 p4212	A69-41613
NASW-1644						22 p3936	A69-40136		
09 p1570	A69-21981					NGL-05-003-003			
NASW-1666						01 p0024	A69-10905	15 p2608	A69-30428
11 p1828	A69-25460					13 p2337	A69-27533	23 p4212	A69-41619
NASW-1668						NGL-05-003-012			
17 p2894	A69-33502					06 p0961	A69-17139		
NASW-1682						NGL-05-003-016			
18 p3130	A69-35189					06 p0905	A69-17949	22 p3917	A69-40135
NASW-1684						NGL-05-003-017			
09 p1585	A69-21208					03 p0516	A69-14046	05 p0756	A69-16273
NASW-1700						05 p0815	A69-16253		
09 p1501	A69-22688	24 p4366	A69-42688			NGL-05-003-079			
NASW-1726						18 p3095	A69-34543	19 p3264	A69-35606
02 p0245	A69-12739	20 p3591	A69-38061			NGL-05-007-002			
NASW-1729						05 p0818	A69-15606	16 p2861	A69-32239
23 p4145	A69-42230					NGL-05-007-003			
NASW-1837						02 p0327	A69-12708	23 p4205	A69-41539
24 p4381	A69-42866					07 p1078	A69-18844		
NASW-1863						NGL-05-007-005			
22 p4018	A69-40268					02 p0317	A69-12020	14 p2526	A69-29881
NASW-1952						08 p1406	A69-20929	21 p3814	A69-39583
01 p0024	A69-10928					NGL-05-007-049			
NASW-70096						22 p3876	A69-40265		
08 p1359	A69-19986					NGL-05-007-065			
NATO G-200						16 p2856	A69-31964		
17 p2960	A69-33157	22 p3941	A69-40914			NGL-05-007-161			
NES/G/-44						20 p3552	A69-36995		
23 p4126	A69-42354					NGL-05-009-002			
NGL-01-002-001						18 p3198	A69-34823		
04 p0641	A69-14457	16 p2877	A69-31892			NGL-05-009-005			
06 p0885	A69-17885	24 p4415	A69-43590			19 p3406	A69-36073		
15 p2644	A69-30424	24 p4359	A69-43678			NGL-05-018-044			
NGL-02-002-003						20 p3579	A69-37346	24 p4293	A69-43294
12 p2153	A69-25805					NGL-05-020-232			
NGL-03-001-001						23 p4162	A69-41533		
05 p0825	A69-16301	15 p2681	A69-30416			NGL-05-020-250			
						19 p3265	A69-36288	20 p3485	A69-38262
						NGL-05-046-002			
						23 p4101	A69-41674		

# CONTRACT NUMBER INDEX

NGL-06-003-052			NGL-22-007-012		
16 p2788	A69-32645	23 p4113	A69-41616	12 p2187	A69-26842
19 p3315	A69-36682	24 p4310	A69-43186		
22 p4023	A69-40568			24 p4404	A69-43591
NGL-06-004-007			NGL-22-009-013		
08 p1354	A69-19809			09 p1470	A69-21317
NGL-07-002-002			NGL-22-009-014		
04 p0582	A69-14941			16 p2811	A69-31667
NGL-07-004-005			NGL-22-009-016		
01 p0045	A69-10719			09 p1600	A69-22206
NGL-09-010-030			NGL-22-009-019		
10 p1723	A69-23398	10 p1811	A69-23392	04 p0623	A69-14946
NGL-10-005-005				05 p0824	A69-16251
18 p3202	A69-35212			07 p1064	A69-18634
NGL-11-002-062				10 p1786	A69-24109
17 p2892	A69-33464			10 p1786	A69-24110
NGL-14-001-001				12 p2101	A69-25936
01 p0147	A69-11238	18 p3186	A69-34299	NGL-22-009-124	
01 p0147	A69-11243	18 p3186	A69-34300	06 p0903	A69-17406
03 p0507	A69-13150	21 p3778	A69-39579	NGL-22-009-156	
07 p1193	A69-19032	22 p3930	A69-40525	24 p4276	A69-43274
17 p3023	A69-33370	22 p4030	A69-40771	NGL-23-005-183	
NGL-14-001-005				05 p0796	A69-15715
21 p3791	A69-39502			NGL-24-005-008	
NGL-14-001-006				07 p1206	A69-19269
14 p2433	A69-28934			10 p1786	A69-24102
NGL-14-001-012				10 p1786	A69-24105
20 p3479	A69-38001			NGL-24-005-009	
NGL-15-003-002				01 p0076	A69-11231
21 p3801	A69-38761			NGL-24-005-063	
NGL-15-004-001				07 p1058	A69-18644
07 p1074	A69-18628	08 p1269	A69-21061	NGL-24-055-008	
08 p1269	A69-21059	21 p3751	A69-38789	12 p2171	A69-27092
08 p1269	A69-21060	23 p4113	A69-42019	NGL-26-008-006	
NGL-15-004-026				05 p0734	A69-16573
06 p0902	A69-17400	20 p3509	A69-37138	10 p1724	A69-23088
NGL-15-005-021				NGL-31-001-005	
15 p2671	A69-31538	20 p3601	A69-37501	06 p0971	A69-18140
19 p3418	A69-36136			09 p1563	A69-21234
NGL-16-001-002				09 p1564	A69-21243
03 p0502	A69-14004	07 p1208	A69-19358	NGL-31-001-007	
07 p1074	A69-18630	11 p1950	A69-25146	02 p0280	A69-11928
07 p1074	A69-18631			06 p0962	A69-17818
NGL-18-001-003				09 p1542	A69-21916
13 p2213	A69-28090	21 p3665	A69-39174	11 p1950	A69-24927
19 p3263	A69-36457	23 p4081	A69-41434	15 p2562	A69-30468
NGL-19-001-024				15 p2693	A69-30778
15 p2636	A69-30086	15 p2667	A69-30087	NGL-32-003-001	
NGL-19-005-005				03 p0517	A69-14233
18 p3196	A69-34690			11 p1964	A69-25406
NGL-20-006-001				NGL-33-010-005	
01 p0014	A69-10903			05 p0820	A69-15762
10 p1647	A69-24186	15 p2555	A69-30445	16 p2864	A69-32446
NGL-21-002-005				NGL-33-010-026	
15 p2661	A69-30919			13 p2342	A69-27600
NGL-21-002-008				NGL-33-015-066	
03 p0456	A69-13553	15 p2644	A69-30450	16 p2756	A69-31576
13 p2271	A69-27399	16 p2823	A69-32468	NGL-33-018-003	
NGL-21-002-033				01 p0024	A69-10933
04 p0631	A69-15189	18 p3188	A69-35005	03 p0485	A69-13293
10 p1786	A69-24108	20 p3597	A69-37334	03 p0485	A69-13294
13 p2335	A69-27312	23 p4220	A69-42376	04 p0640	A69-14449
NGL-22-002-012				04 p0564	A69-14883
03 p0530	A69-14065	07 p1236	A69-19473	04 p0555	A69-14884
				04 p0555	A69-14885
				04 p0620	A69-14886
				05 p0783	A69-15967
				07 p1159	A69-18627
				07 p1166	A69-19264
				NGL-33-022-090	
				20 p3641	A69-38282



# CONTRACT NUMBER INDEX

NGL-34-001-001  
06 p0904 A69-17941

NGL-36-004-014  
07 p1198 A69-18642

NGL-36-005-001  
01 p0014 A69-10860  
09 p1444 A69-21310  
17 p2910 A69-33750

NGL-39-004-001  
13 p2367 A69-28301

NGL-39-004-007  
06 p0939 A69-16944

NGL-39-004-15  
04 p0555 A69-14964

NGL-39-009-001  
20 p3516 A69-37986

NGL-39-009-008  
07 p1074 A69-19394

NGL-39-009-015  
10 p1716 A69-23036

NGL-39-011-002  
07 p1173 A69-18641

NGL-39-011-013  
23 p4151 A69-41544

NGL-40-002-009  
02 p0234 A69-12604

NGL-40-002-015  
04 p0626 A69-15288  
07 p1115 A69-18514

NGL-43-001-006  
04 p0633 A69-15231

NGL-43-001-021  
23 p4110 A69-42015

NGL-44-001-044  
04 p0677 A69-14742

NGL-44-004-001  
02 p0320 A69-12113  
03 p0469 A69-12923  
04 p0553 A69-14978  
05 p0756 A69-16283  
07 p1129 A69-19502  
08 p1356 A69-20742  
09 p1540 A69-22099  
09 p1491 A69-22153  
08 p1356 A69-20743  
09 p1605 A69-22411  
15 p2561 A69-30467  
16 p2857 A69-32098

NGL-44-005-084  
16 p2805 A69-32470

NGL-44-006-001  
01 p0092 A69-10060  
04 p0613 A69-14455  
05 p0810 A69-16565  
06 p0982 A69-18235  
07 p1073 A69-18374  
10 p1710 A69-23089

NGL-44-006-033  
16 p2802 A69-32338

NGL-45-003-019  
16 p2831 A69-32350

NGL-47-004-033  
04 p0632 A69-14966

NGL-47-005-014  
02 p0204 A69-12601

09 p1442 A69-22454

19 p3306 A69-35741

17 p2910 A69-33752  
17 p2910 A69-33756

06 p0939 A69-16945

22 p3993 A69-40719

22 p3622 A69-37229

17 p3033 A69-33369  
18 p3129 A69-34957  
20 p3534 A69-38090  
21 p3794 A69-38381  
22 p3934 A69-39872  
22 p3940 A69-40523  
22 p4024 A69-40580  
23 p4157 A69-42018  
23 p4158 A69-42020  
23 p4183 A69-42022  
23 p4219 A69-42373

18 p3164 A69-34685

13 p2279 A69-27763  
16 p2802 A69-32338  
20 p3584 A69-38191  
24 p4360 A69-42649  
24 p4334 A69-43413

NGL-48-002-004  
17 p2993 A69-34191

NGL-49-001-001  
20 p3479 A69-38073

NGL-50-002-001  
01 p0122 A69-10034  
01 p0122 A69-10284  
11 p0123 A69-10547  
01 p0123 A69-10681  
01 p0106 A69-10930  
04 p0554 A69-14859  
04 p0554 A69-14861  
04 p0632 A69-14866  
05 p0796 A69-15908  
07 p1184 A69-18288  
07 p1064 A69-18632  
07 p1064 A69-18636  
07 p1064 A69-18637

07 p1185 A69-19302  
07 p1186 A69-19395  
07 p1186 A69-19446  
07 p1174 A69-19495  
10 p1726 A69-23524  
12 p2120 A69-25913  
13 p2301 A69-27206  
14 p2471 A69-29921  
17 p3009 A69-34170  
18 p3178 A69-35476  
20 p3579 A69-37345  
24 p4351 A69-43810

NGR-01-005-008  
17 p3009 A69-34155

NGR-02-001-001  
05 p0755 A69-16271  
11 p1879 A69-25249  
13 p2252 A69-27532  
18 p3130 A69-35189

NGR-02-001-027  
05 p0756 A69-16360  
09 p1491 A69-22607

NGR-02-001-046  
02 p0245 A69-12738

NGR-03-001-033  
06 p1036 A69-18072

NGR-03-002-011  
17 p3026 A69-32837

NGR-03-002-017  
04 p0595 A69-14276  
04 p0595 A69-14278  
04 p0595 A69-14279  
07 p1184 A69-18643  
10 p1746 A69-23663  
13 p2301 A69-27454  
14 p2489 A69-29996

17 p3009 A69-34187  
17 p3009 A69-34188  
17 p3009 A69-34189  
18 p3177 A69-35012  
18 p3177 A69-35015  
18 p3178 A69-35413  
20 p3536 A69-36933

NGR-03-002-091  
01 p0051 A69-10441  
04 p0657 A69-14676  
06 p1008 A69-17808  
06 p1008 A69-17809

06 p1008 A69-17810  
06 p0928 A69-17811  
21 p3800 A69-38682  
21 p3800 A69-38683

NGR-03-002-155  
18 p3132 A69-35426

NGR-03-002-174  
21 p3800 A69-38676

NGR-03-041-001  
07 p1071 A69-19136

NGR-05-002-031  
14 p2406 A69-28870

NGR-05-002-034  
02 p0327 A69-12719  
07 p1205 A69-19247

17 p3023 A69-33053  
19 p3403 A69-35967

NGR-05-002-044  
09 p1596 A69-22047  
11 p1953 A69-24335

11 p1953 A69-24357

NGR-05-003-020  
03 p0370 A69-13461  
10 p1647 A69-24185  
10 p1647 A69-24188  
10 p1648 A69-24190  
11 p1921 A69-24294  
15 p2561 A69-30083

15 p2555 A69-30446  
22 p3895 A69-40050  
22 p3871 A69-40060  
22 p3896 A69-40435  
22 p3877 A69-40761  
23 p4113 A69-41491

NGR-05-003-068  
05 p0708 A69-15968

## CONTRACT NUMBER INDEX

NGR-05-003-089	05 p0708 A69-15968	10 p1644 A69-23306	NGR-05-007-169	22 p3935 A69-40052	
NGR-05-003-134	01 p0024 A69-10905	15 p2608 A69-30428	NGR-05-007-190	12 p2072 A69-26748	
	15 p2561 A69-30021		NGR-05-007-195	15 p2606 A69-30152	
NGR-05-003-143	24 p4284 A69-42719	24 p4281 A69-42722	NGR-05-008-005	03 p0469 A69-12922	
	24 p4284 A69-42721		NGR-05-009-004	17 p2975 A69-33747	
NGR-05-003-172	02 p0284 A69-12702		NGR-05-009-025	11 p1874 A69-25281	20 p3514 A69-37225
NGR-05-003-220	01 p0133 A69-11217	06 p0963 A69-17143			
	02 p0288 A69-12171	08 p1360 A69-19989	NGR-05-009-030	09 p1561 A69-21219	
NGR-05-003-230	01 p0077 A69-11236	14 p2517 A69-28957	NGR-05-009-043	19 p3278 A69-36716	
	04 p0665 A69-15532	20 p3592 A69-38098	NGR-05-009-059	07 p1130 A69-19643	
	11 p1958 A69-24429		NGR-05-009-075	01 p0077 A69-11239	21 p3713 A69-38528
NGR-05-003-243	08 p1373 A69-20991			12 p2063 A69-25903	22 p4023 A69-40516
NGR-05-003-285	24 p4415 A69-43594			16 p2817 A69-31642	23 p4197 A69-42418
NGR-05-003-302	23 p4212 A69-41619		NGR-05-009-076	07 p1125 A69-18847	21 p3683 A69-39284
NGR-05-004-008	10 p1641 A69-23041	22 p3874 A69-40214		16 p2817 A69-31641	23 p4197 A69-42416
	11 p1828 A69-25458		NGR-05-009-079	12 p2120 A69-25927	15 p2611 A69-31032
NGR-05-004-026	01 p0021 A69-11334			14 p2414 A69-29502	23 p4191 A69-42147
NGR-05-004-035	19 p3258 A69-36294	23 p4091 A69-42013	NGR-05-009-081	01 p0077 A69-11240	14 p2435 A69-28965
NGR-05-004-038	24 p4261 A69-42707			05 p0817 A69-16651	16 p2777 A69-32099
NGR-05-004-051	18 p3175 A69-34304			06 p0992 A69-17379	18 p3189 A69-35400
NGR-05-005-003	05 p0813 A69-15846	10 p1786 A69-24104		09 p1580 A69-22202	21 p3710 A69-38509
	09 p1591 A69-21452	10 p1786 A69-24106	NGR-05-010-035	12 p2073 A69-26749	24 p4367 A69-43169
	10 p1785 A69-24101	22 p4028 A69-40662			
NGR-05-005-004	09 p1591 A69-21452	20 p3610 A69-38143	NGR-05-010-035	22 p3935 A69-40052	
	09 p1604 A69-22271	20 p3610 A69-38144	NGR-05-017-010	17 p2994 A69-32848	18 p3112 A69-34689
	10 p1785 A69-24101	22 p4028 A69-40662		18 p3164 A69-34674	21 p3685 A69-38729
	10 p1786 A69-24104	23 p4219 A69-42374	NGR-05-017-017	06 p0903 A69-17409	
	10 p1786 A69-24106	24 p4375 A69-42609	NGR-05-017-100	06 p0905 A69-17950	
	20 p3610 A69-38142				
NGR-05-005-007	01 p0146 A69-11122		NGR-05-018-022	10 p1650 A69-23881	24 p4276 A69-43325
NGR-05-007-041	06 p0923 A69-16924			24 p4295 A69-43319	
NGR-05-007-046	03 p0508 A69-13175	09 p1608 A69-22745	NGR-05-018-044	01 p0076 A69-11230	16 p2769 A69-31869
	08 p1402 A69-20904	22 p4025 A69-40644		04 p0556 A69-14429	20 p3485 A69-36922
NGR-05-007-065	14 p2510 A69-28948	16 p2856 A69-31986		04 p0589 A69-14747	20 p3581 A69-38276
NGR-05-007-067	19 p3415 A69-36118			05 p0775 A69-16324	20 p3504 A69-38285
NGR-05-007-099	03 p0522 A69-14246	11 p1970 A69-24608		06 p0905 A69-17948	21 p3779 A69-38531
NGR-05-007-107	22 p3936 A69-40059			07 p1078 A69-18859	22 p3896 A69-40479
NGR-05-007-116	08 p1359 A69-19986	21 p3776 A69-38711		13 p2225 A69-28201	23 p4145 A69-42445
	18 p3179 A69-34440			13 p2248 A69-28210	
NGR-05-007-122	06 p0868 A69-18058		NGR-05-018-079	04 p0658 A69-14887	
			NGR-05-020-001	03 p0503 A69-14016	20 p3590 A69-37558
			NGR-05-020-004	07 p1075 A69-19484	18 p3134 A69-34541
		</			



CONTRACT NUMBER INDEX

NGR-05-020-007 03 p0522 A69-14100	21 p3804 A69-39020	NGR-06-003-052 20 p3591 A69-38061	
NGR-05-020-008 12 p2072 A69-26745		NGR-06-003-057 03 p0516 A69-14040 07 p1187 A69-19714 08 p1386 A69-20077	11 p1957 A69-24423 20 p3581 A69-38175 22 p4027 A69-40659
NGR-05-020-043 13 p2322 A69-28136	16 p2757 A69-31613	NGR-06-003-064 07 p1125 A69-18842	
NGR-05-020-091 04 p0637 A69-15051 09 p1548 A69-21935	18 p3228 A69-34459	NGR-06-003-069 20 p3612 A69-38167	
NGR-05-020-103 02 p0260 A69-12701 14 p2460 A69-29605	17 p2943 A69-34157 18 p3133 A69-34263	NGR-06-003-071 03 p0382 A69-13460	12 p2092 A69-26477
NGR-05-020-134 24 p4409 A69-43518		NGR-06-003-083 22 p3918 A69-41011	
NGR-05-020-137 01 p0023 A69-10291 04 p0553 A69-15304	22 p3898 A69-41078	NGR-06-004-006 08 p1356 A69-20740	17 p3008 A69-33000
NGR-05-020-168 08 p1263 A69-20374 21 p3650 A69-38323	23 p4080 A69-41404	NGR-06-004-060 12 p2072 A69-26738	20 p3534 A69-38094
NGR-05-020-209 19 p3429 A69-35958	19 p3259 A69-36832	NGR-07-004-028 11 p1997 A69-24285 11 p1929 A69-25266	15 p2661 A69-30922
NGR-05-020-223 02 p0204 A69-12602 04 p0553 A69-14692	07 p1069 A69-19726 21 p3693 A69-38703	NGR-07-004-034 02 p0241 A69-11807	
NGR-05-020-232 02 p0312 A69-11480		NGR-07-004-043 03 p0382 A69-13460	12 p2092 A69-26477
NGR-05-020-234 02 p0260 A69-12658 10 p1704 A69-23669	20 p3556 A69-38124	NGR-07-004-100 02 p0245 A69-12739 03 p0502 A69-14008	04 p0592 A69-14975 16 p2775 A69-32084
NGR-05-020-245 19 p3265 A69-36288 19 p3265 A69-36290	19 p3265 A69-36292	NGR-07-006-005 24 p4384 A69-43197	
NGR-05-020-250 19 p3265 A69-36289 19 p3265 A69-36291	19 p3265 A69-36293 20 p3579 A69-37495	NGR-07-009-001 13 p2263 A69-28084	
NGR-05-020-276 01 p0157 A69-11197		NGR-09-005-005 24 p4294 A69-43309	
NGR-05-020-288 14 p2434 A69-28958 16 p2774 A69-31981	18 p3187 A69-34939	NGR-09-005-025 09 p1566 A69-21258	
NGR-05-025-001 15 p2558 A69-30587		NGR-09-005-054 15 p2668 A69-30684	22 p3983 A69-40061
NGR-05-029-001 04 p0584 A69-14678		NGR-09-010-008 01 p0024 A69-10893	
NGR-05-035-003 10 p1642 A69-23119		NGR-09-010-053 24 p4404 A69-43602	
NGR-05-035-005 10 p1642 A69-23119		NGR-09-11-006 10 p1778 A69-23413	
NGR-05-061-004 13 p2216 A69-27618		NGR-09-015-002 14 p2520 A69-29374 15 p2571 A69-31337 15 p2571 A69-31338 15 p2600 A69-31355	15 p2600 A69-31362 15 p2699 A69-31381 17 p3038 A69-33724 24 p4351 A69-42763
NGR-005-063 17 p2944 A69-33742		NGR-09-015-023 08 p1382 A69-19818 09 p1600 A69-22200 12 p2171 A69-27145 20 p3614 A69-38256	20 p3615 A69-38257 20 p3615 A69-38258 20 p3615 A69-38259
NGR-05-117-190 24 p4306 A69-42692		NGR-09-015-047 09 p1607 A69-22427	
NGR-06-002-032 09 p1567 A69-21267		NGR-09-029-063 13 p2325 A69-27313	13 p2354 A69-28465
NGR-06-002-053 02 p0331 A69-12807		NGR-10-004-018 04 p0554 A69-15325	15 p2558 A69-31551
NGR-06-003-033 17 p3025 A69-32836 24 p4380 A69-42855	24 p4380 A69-42856	NGR-10-004-029 01 p0106 A69-10925 01 p0106 A69-10926 11 p1828 A69-25459	11 p1828 A69-25461 24 p4339 A69-42765

# CONTRACT NUMBER INDEX

NGR-10-005-008			NGR-14-005-002		
05 p0795	A69-15660	22 p3939	14 p2434	A69-28944	22 p3990
21 p3713	A69-38527	A69-40517			A69-40529
NGR-10-005-022			NGR-14-005-009		
10 p1651	A69-22937		07 p1190	A69-18919	07 p1107
					A69-19227
NGR-10-005-036			NGR-14-005-013		
24 p4406	A69-43692		14 p2439	A69-29111	18 p3128
			18 p3127	A69-34798	A69-34804
NGR-10-007-008			NGR-14-005-036		
07 p1074	A69-18633	12 p2026	04 p0684	A69-14357	
07 p1074	A69-18635	12 p2018			
10 p1641	A69-23035	21 p3651	NGR-14-005-043		
12 p2017	A69-25764	22 p3895	05 p0758	A69-16411	
12 p2018	A69-25776	22 p3896			
12 p2026	A69-25779	23 p4113	NGR-14-005-050		
		A69-41509	23 p4077	A69-41311	
NGR-10-007-010			NGR-14-005-103		
24 p4269	A69-42555		06 p0879	A69-17086	24 p4413
					A69-43549
NGR-10-007-054			NGR-14-005-107		
17 p3030	A69-33067	19 p3413	24 p4399	A69-42990	
		A69-36112			
NGR-11-001-009			NGR-14-005-111		
03 p0375	A69-13897	23 p4108	07 p1088	A69-19707	10 p1645
05 p0708	A69-15971	A69-41824			A69-23385
NGR-11-001-012			NGR-14-007-041		
12 p2018	A69-25775		02 p0282	A69-12703	17 p3032
			05 p0822	A69-15856	A69-33105
NGR-11-001-016			NGR-14-007-067		
06 p0873	A69-17018	12 p2018	05 p0836	A69-15875	19 p3446
12 p2018	A69-25773	15 p2554			A69-36835
12 p2018	A69-25774	20 p3478	NGR-14-007-071		
12 p2018	A69-25777	A69-37934	18 p3179	A69-34438	
NGR-11-002-020			NGR-14-012-004		
11 p1859	A69-24939		10 p1651	A69-23305	20 p3484
			10 p1651	A69-23307	A69-37485
NGR-11-002-083			19 p3264	A69-35971	20 p3484
14 p2538	A69-29021				A69-37486
NGR-11-002-085			NGR-14-012-012		
16 p2844	A69-32719		22 p3989	A69-40528	
NGR-12-001-001			NGR-15-004-026		
01 p0068	A69-11113		06 p0904	A69-17865	24 p4284
			09 p1470	A69-21317	A69-42723
NGR-12-001-011			NGR-15-004-028		
01 p0124	A69-10962	12 p2133	08 p1269	A69-21059	10 p1651
03 p0515	A69-14039	19 p3422	08 p1269	A69-21060	A69-23308
09 p1542	A69-22218	19 p3422	08 p1269	A69-21061	13 p2217
10 p1765	A69-23747	22 p4027			A69-28317
10 p1765	A69-23749	A69-40659			
NGR-12-001-012			NGR-15-005-021		
02 p0236	A69-11466		03 p0401	A69-13764	09 p1474
			03 p0490	A69-13923	A69-22443
NGR-12-001-020			06 p0891	A69-17357	11 p1842
23 p4088	A69-41810		06 p0900	A69-17358	A69-24934
			06 p0892	A69-17395	20 p3484
NGR-12-001-042			06 p0904	A69-17940	A69-37526
18 p3095	A69-34539				24 p4289
					A69-42955
NGR-12-001-046			NGR-15-005-22		
06 p0948	A69-17866	06 p0891	15 p2582	A69-30319	20 p3568
		A69-17867			A69-37999
NGR-12-001-053			NGR-15-005-087		
17 p2912	A69-34176		19 p3274	A69-36282	
NGR-14-001-010			NGR-15-008-004		
03 p0516	A69-14082	20 p3523	24 p4350	A69-43061	
07 p1224	A69-19710	20 p3602			
15 p2681	A69-30325	21 p3804	NGR-16-001-031		
17 p3034	A69-33584	A69-39200	06 p0879	A69-17012	24 p4262
			14 p2407	A69-29301	A69-42904
NGR-14-001-054			NGR-16-001-043		
20 p3612	A69-38161		01 p0133	A69-11214	09 p1488
			03 p0475	A69-13151	A69-21698
NGR-14-001-060			03 p0399	A69-14021	11 p1929
01 p0154	A69-10876		03 p0479	A69-14028	A69-25272
			08 p1359	A69-19982	16 p2817
NGR-14-001-128			08 p1368	A69-20806	A69-31669
20 p3601	A69-37517				20 p3533
					A69-38080
NGR-14-004-028			NGR-18-001-008		
24 p4301	A69-43355		22 p3872	A69-40201	22 p3938
					A69-40503
			NGR-18-001-017		
			03 p0523	A69-13020	





CONTRACT NUMBER INDEX

NGR-22-009-350	21 p3815 A69-39585	21 p3815 A69-39588	NGR-24-005-095	10 p1807 A69-24180	
	21 p3815 A69-39586		NGR-25-001-004	23 p4079 A69-41387	
NGR-22-010-012	22 p3918 A69-41016		NGR-25-001-006	23 p4079 A69-41386	
NGR-22-010-018	01 p0034 A69-11221		NGR-25-002-015	07 p1072 A69-19480	07 p1068 A69-19482
NGR-22-010-023	04 p0663 A69-15383	18 p3190 A69-34282	NGR-25-002-115	24 p4276 A69-43272	
	09 p1608 A69-22566		NGR-26-003-003	17 p2951 A69-33253	
NGR-22-010-025	09 p1608 A69-22566	18 p3190 A69-34282	NGR-26-003-037	09 p1471 A69-21328	
NGR-22-011-007	09 p1515 A69-21430	21 p3856 A69-39662	NGR-26-004-003	02 p0272 A69-12129	14 p2471 A69-29951
	18 p3111 A69-34680		NGR-26-004-011	13 p2217 A69-28258	13 p2217 A69-28260
NGR-22-012-006	03 p0376 A69-14081	19 p3258 A69-36449		13 p2217 A69-28259	13 p2217 A69-28315
NGR-22-024-001	01 p0154 A69-10877	13 p2288 A69-27564	NGR-26-004-021	08 p1263 A69-20173	10 p1643 A69-23126
	09 p1600 A69-22198	13 p2340 A69-27578		08 p1263 A69-20174	10 p1646 A69-23564
	09 p1607 A69-22431	24 p4376 A69-42664	NGR-26-004-025	10 p1643 A69-23122	
	13 p2338 A69-27561	24 p4376 A69-42665	NGR-26-008-001	21 p3787 A69-38327	
NGR-23-005-015	22 p3939 A69-40506		NGR-26-008-003	07 p1245 A69-19728	
NGR-23-005-094	18 p3132 A69-35409		NGR-27-007-068	15 p2645 A69-31237	
NGR-23-005-131	21 p3817 A69-39759		NGR-29-001-008	14 p2489 A69-29995	
NGR-23-005-171	01 p0037 A69-10954		NGR-29-001-016	02 p0242 A69-11868	21 p3772 A69-39241
NGR-23-005-201	11 p1828 A69-25464			02 p0230 A69-11869	
NGR-23-005-275	09 p1579 A69-22181		NGR-30-001-001	15 p2555 A69-30470	
NGR-23-005-320	14 p2518 A69-29122		NGR-30-001-011	09 p1577 A69-21714	14 p2434 A69-28947
NGR-23-005-329	21 p3807 A69-39339	21 p3765 A69-39414		11 p1923 A69-24293	
NGR-23-006-047	01 p0166 A69-10166	13 p2360 A69-27321	NGR-30-002-003	01 p0146 A69-11223	
NGR-23-006-047-01	13 p2360 A69-27321		NGR-30-002-010	14 p2434 A69-28947	
NGR-24-005-006	23 p4083 A69-41457	24 p4261 A69-42709	NGR-30-002-018	03 p0469 A69-12920	03 p0471 A69-13167
NGR-24-005-008	20 p3592 A69-38082		NGR-30-002-021	07 p1134 A69-19193	11 p1945 A69-24421
NGR-24-005-050	15 p2675 A69-30760	15 p2676 A69-30888	NGR-30-002-028	24 p4310 A69-43188	
NGR-24-005-054	21 p3669 A69-39333	21 p3662 A69-39535	NGR-30-004-013	11 p1991 A69-25513	
	21 p3661 A69-39534		NGR-31-001-001	09 p1602 A69-22227	
NGR-24-005-063	09 p1591 A69-21452	13 p2238 A69-27936	NGR-31-001-005	06 p0971 A69-18123	
	09 p1603 A69-22263	18 p3105 A69-34617	NGR-31-001-025	17 p2949 A69-33015	
	10 p1785 A69-24101	19 p3280 A69-36207	NGR-31-001-059	01 p0005 A69-10229	24 p4298 A69-42600
	10 p1786 A69-24102	21 p3669 A69-39333		13 p2364 A69-28207	
	10 p1786 A69-24104	22 p3917 A69-40572			
	10 p1786 A69-24105	24 p4293 A69-43293			
	10 p1786 A69-24106	24 p4247 A69-43555			
NGR-24-005-065	01 p0061 A69-11201	06 p0958 A69-17710			
	04 p0660 A69-15126	10 p1778 A69-23405			
NGR-24-005-091	20 p3518 A69-38234				





CONTRACT NUMBER INDEX

NGR-39-007-003  
03 p0516 A69-14082

NGR-39-007-007  
08 p1329 A69-20006  
10 p1707 A69-22986

NGR-39-007-011  
10 p1795 A69-23066  
11 p1975 A69-24672

NGR-39-007-025  
10 p1802 A69-24026  
11 p1974 A69-24669

NGR-39-008-008  
07 p1068 A69-19490

NGR-39-008-013  
03 p0516 A69-14083

NGR-39-008-014  
09 p1521 A69-21400

NGR-39-009-008  
06 p0872 A69-17013  
07 p1068 A69-19491  
07 p1068 A69-19492  
07 p1068 A69-19493  
07 p1068 A69-19494  
07 p1069 A69-19503  
07 p1069 A69-19505  
07 p1069 A69-19709

NGR-39-009-015  
01 p0015 A69-10921  
01 p0015 A69-10922  
01 p0015 A69-10923  
01 p0015 A69-10924  
05 p0716 A69-15973

NGR-39-009-032  
16 p2813 A69-32325

NGR-39-009-042  
07 p1201 A69-19648  
18 p3173 A69-35014

NGR-39-009-096  
20 p3485 A69-36923

NGR-39-009-134  
01 p0093 A69-10116

NGR-39-010-029  
23 p4134 A69-42543

NGR-39-010-087  
03 p0463 A69-13208

NGR-39-011-035  
07 p1187 A69-19661

NGR-39-087-001  
21 p3808 A69-39355

NGR-40-002-009  
02 p0205 A69-12721  
10 p1800 A69-23369  
17 p2951 A69-33256  
21 p3753 A69-39730

NGR-40-002-015  
02 p0224 A69-11963  
10 p1718 A69-23038  
10 p1719 A69-23515  
10 p1720 A69-23639  
10 p1721 A69-23642

NGR-40-002-027  
05 p0839 A69-16186

NGR-40-002-059  
11 p1997 A69-24286

NGR-41-001-016  
24 p4341 A69-43236

13 p2276 A69-27402  
13 p2277 A69-27406

22 p4046 A69-41041

12 p2179 A69-26216  
24 p4395 A69-42641

21 p3792 A69-38321

10 p1649 A69-23404  
19 p3257 A69-35973  
19 p3264 A69-35974  
19 p3257 A69-35975  
19 p3257 A69-35978  
19 p3265 A69-36376  
20 p3467 A69-37100  
20 p3480 A69-38287

05 p0716 A69-15974  
13 p2247 A69-28085  
15 p2598 A69-31316  
16 p2813 A69-32325

24 p4316 A69-43321

14 p2489 A69-29996

23 p4059 A69-41885  
23 p4197 A69-42415  
24 p4245 A69-43357  
24 p4359 A69-43646

11 p1909 A69-25409  
11 p1861 A69-25452  
16 p2872 A69-31911  
19 p3360 A69-36599  
21 p3754 A69-38429

13 p2362 A69-28121

22 p3988 A69-41187

NGR-41-002-003  
01 p0023 A69-10287

NGR-41-002-003-1  
02 p0206 A69-12723  
10 p1752 A69-23528  
14 p2410 A69-29922

NGR-43-001-021  
16 p2878 A69-31925  
17 p3073 A69-33297  
23 p4239 A69-41632

NGR-43-001-023  
05 p0750 A69-16166

NGR-44-001-010  
19 p3413 A69-36107

NGR-44-001-031  
22 p4044 A69-40559

NGR-44-001-044  
02 p0346 A69-12511

NGR-44-003-018  
10 p1641 A69-23045

NGR-44-003-031  
03 p0380 A69-13462

NGR-44-004-001  
03 p0515 A69-14010

NGR-44-004-026  
07 p1215 A69-18843  
14 p2434 A69-28941  
21 p3704 A69-38366

NGR-44-004-042  
10 p1789 A69-24133  
17 p3004 A69-32832  
23 p4183 A69-42022

NGR-44-004-076  
21 p3709 A69-38501

NGR-44-005-002  
22 p3934 A69-39890

NGR-44-005-022  
13 p2297 A69-27460  
18 p3188 A69-35190  
24 p4350 A69-43368

NGR-44-005-037  
24 p4340 A69-42891

NGR-44-005-039  
03 p0403 A69-13203  
20 p3492 A69-37710

NGR-44-005-042  
09 p1487 A69-21654

NGR-44-005-043  
18 p3113 A69-34238

NGR-44-006-003  
08 p1302 A69-19847  
20 p3598 A69-37419

NGR-44-006-012  
05 p0756 A69-16274

NGR-44-006-033  
04 p0649 A69-15387  
16 p2802 A69-32338  
18 p3186 A69-34295  
18 p3191 A69-34317  
24 p4376 A69-42661

NGR-44-006-063  
06 p0861 A69-17640

NGR-44-006-076  
05 p0754 A69-16258  
22 p3940 A69-40522  
24 p4309 A69-43171

NGR-44-006-089  
02 p0273 A69-12550  
09 p1531 A69-21416  
19 p3361 A69-36758  
20 p3515 A69-37532

NGR-44-007-006  
06 p0907 A69-17709  
09 p1474 A69-22440  
11 p1858 A69-24938  
13 p2286 A69-28004  
13 p2322 A69-28011  
18 p3111 A69-34678  
22 p3970 A69-40737



# CONTRACT NUMBER INDEX

NGR-44-009-018 07 p1069 A69-19501	12 p2022 A69-26372	NGR-50-002-044 09 p1579 A69-22173	
NGR-44-012-046 06 p1007 A69-17574 13 p2353 A69-28202	20 p3595 A69-37173	NGR-50-002-083 03 p0380 A69-13855 07 p1072 A69-19727	18 p3098 A69-34669
NGR-44-012-049 18 p3105 A69-34618		NGR-52-001-001 01 p0063 A69-10422 01 p0063 A69-10423 09 p1489 A69-21703	09 p1490 A69-21716 24 p4367 A69-43010
NGR-44-012-066 05 p0740 A69-16577 06 p0947 A69-17361 06 p0901 A69-17362 11 p1858 A69-24935	18 p3110 A69-34675 20 p3509 A69-37142 21 p3687 A69-39463	NGR-52-026-011 03 p0523 A69-12988	24 p4404 A69-43652
NGR-45-001-011 14 p2510 A69-28948 16 p2856 A69-31964 16 p2856 A69-31986	18 p3187 A69-34937 18 p3199 A69-34938 18 p3205 A69-35399	NGR-52-117-001 17 p2936 A69-32890	
NGR-45-003-029 22 p3974 A69-40760		NGT-05-007-019 07 p1220 A69-19388	
NGR-45-003-037 03 p0434 A69-13871		NGT-18-002-006 07 p1074 A69-19479	
NGR-45-003-041 24 p4301 A69-43287		NGT-22-004-003 15 p2555 A69-30413	
NGR-46-001-008 18 p3176 A69-35008		NGT-22-007-008 19 p3262 A69-36448	
NGR-46-001-0082 13 p2271 A69-27399		NGT-25-005-001 13 p2210 A69-28486	15 p2561 A69-30414
NGR-47-002-012 23 p4099 A69-42151		NGT-32-004-004 07 p1200 A69-19219	07 p1075 A69-19483
NGR-47-003-044 02 p0282 A69-11460		NGT-33-012-002 18 p3096 A69-35172	
NGR-47-004-006 22 p3895 A69-40103		NGT-37-002-002 07 p1201 A69-19478	
NGR-47-004-030 16 p2839 A69-32666		NHI G-7-F2-HE-23 22 p3885 A69-40976	
NGR-47-005-022 20 p3537 A69-37140		NHI G-834-01A1 22 p3885 A69-40976	
NGR-47-005-026 21 p3691 A69-39631		NIH 1-F3-6M-6755-01 19 p3265 A69-36292	
NGR-47-005-046 20 p3514 A69-37206		NIH 1-K3-NB-31-816 22 p3876 A69-40263	
NGR-47-005-050 10 p1805 A69-24160	18 p3212 A69-34382	NIH 1-KE-HE-25 23 p4097 A69-42094	
NGR-47-005-093 12 p2093 A69-26481		NIH 1-PO1-GM-14940-01 22 p3876 A69-40262	22 p3876 A69-40264
NGR-47-006-028 10 p1641 A69-23039	10 p1669 A69-23040	NIH 1-PO7-FR00257 18 p3134 A69-34537	
NGR-48-001-004 22 p3871 A69-40049		NIH 1-R01-HE-08519-05 23 p4082 A69-41442	
NGR-48-002-007 15 p2596 A69-30443		NIH 1-R01-MH-1565-01 21 p3653 A69-38900	
NGR-48-002-010 17 p2947 A69-34022		NIH 1-R01-NB-07547 24 p4263 A69-43117	
NGR-48-002-033 04 p0654 A69-14655 07 p1215 A69-18845	20 p3614 A69-38251 21 p3701 A69-38342	NIH 5-R-01 23 p4097 A69-42094	
NGR-48-002-035 18 p3119 A69-35229		NIH 5-T1-GM-913 01 p0106 A69-10925	
NGR-48-002-047 16 p2773 A69-32754		NIH 5-T1-HE-5446-09 23 p4082 A69-41442	
NGR-49-001-019 05 p0708 A69-15970		NIH 5-TI-GM-1106-04 17 p2911 A69-34171	
		NIH AM-04256 16 p2742 A69-31864	
		NIH AM-04257 07 p1075 A69-19496	19 p3265 A69-36288

CONTRACT NUMBER INDEX

09 p1448 A69-22551	23 p4114 A69-42214	NIH GM-11309	23 p4114 A69-42214
NIH AM-5401-06		NIH GM-11624-03	22 p3873 A69-40209
13 p2210 A69-28482		NIH GM-12158	03 p0370 A69-13461
NIH AM-08527		NIH GM-12179	01 p0014 A69-10903
24 p4279 A69-42712		NIH GM-12326	10 p1647 A69-24185
NIH AM-10202		22 p3895 A69-40050	
05 p0708 A69-15968		NIH GM-12932-04	23 p4113 A69-41491
NIH AM-11237	22 p3871 A69-40051	NIH GM-13031	10 p1669 A69-23040
10 p1644 A69-23303	22 p3871 A69-40055	NIH GM-13243	16 p2742 A69-31864
20 p3480 A69-38284		NIH GM-14221	10 p1644 A69-23304
NIH AM-11709		NIH GM-14481	24 p4280 A69-43051
10 p1644 A69-23303	22 p3871 A69-40054	NIH GM-145752-02	19 p3265 A69-36289
20 p3480 A69-38284	22 p3871 A69-40055	NIH GM-14633-02	11 p1910 A69-25411
22 p3871 A69-40051		NIH GM-14752-02	19 p3265 A69-36291
NIH AM-13037		NIH GM-16197-01	22 p3976 A69-41034
23 p4101 A69-41451		NIH GM-19418	24 p4279 A69-43799
NIH CA-03611		NIH GM-12179	10 p1647 A69-24186
01 p0015 A69-10931	24 p4280 A69-43051	NIH H-625	24 p4262 A69-42728
NIH CA-3611-11		NIH HD-0518	14 p2408 A69-29309
01 p0018 A69-11198		NIH HD-00674	23 p4082 A69-41442
NIH CA-07195		NIH HD-01907	22 p3876 A69-40263
07 p1069 A69-19497		NIH HD-02881	08 p1263 A69-20374
NIH CA-08290-03		23 p4080 A69-41404	
22 p3898 A69-41078		NIH HE-01253-15	24 p4270 A69-42579
NIH CA-08803		NIH HE-01624	22 p3877 A69-40761
10 p1641 A69-23045		NIH HE-02888-13	22 p3885 A69-40978
NIH DE-01764		NIH HE-5244	10 p1648 A69-24189
10 p1649 A69-23404		17 p2917 A69-34172	19 p3258 A69-36374
NIH FR-3		NIH HE-05678-02	06 p0883 A69-17843
17 p2910 A69-33749		NIH HE-5716	21 p3668 A69-39865
NIH FR-00018		NIH HE-06285	22 p3890 A69-40207
23 p4100 A69-42533	24 p4279 A69-43799	NIH HE-06313	24 p4261 A69-42727
NIH FR-00018-05			
07 p1139 A69-18796			
NIH FR-37			
24 p4258 A69-42633			
NIH FR-76			
10 p1648 A69-24189			
NIH FR-00126			
01 p0164 A69-10057	20 p3514 A69-37211		
NIH FR-145			
24 p4409 A69-43519			
NIH FR-00161			
21 p3668 A69-39866			
NIH FR-00165			
06 p0873 A69-17018	12 p2018 A69-25775		
12 p2018 A69-25773	12 p2018 A69-25778		
12 p2018 A69-25774	15 p2554 A69-30406		
NIH GM-01335			
22 p3878 A69-40838	22 p3883 A69-40876		
NIH GM-08522-05			
07 p1139 A69-18796			
NIH GM-08525-05			
13 p2217 A69-28315			
NIH GM-08525-06			
13 p2217 A69-28315			
NIH GM-09796			
22 p3871 A69-40057			
NIH GM-10093			
24 p4262 A69-42904			



CONTRACT NUMBER INDEX

NIH HE-07075 23 p4097 A69-42094				NIH MH-10532-01 10 p1641 A69-23039	
NIH HE-08262 21 p3653 A69-38903				NIH MH-10836 04 p0553 A69-14976	
NIH HE-08682 22 p3874 A69-40210				NIH MH-13259 08 p1263 A69-20374	
NIH HE-08781 02 p0200 A69-12479				NIH MH-14360-01 04 p0553 A69-14976	
NIH HE-09536 23 p4100 A69-42533	24 p4279	A69-43799		NIH NB-2B-5385-04 14 p2406 A69-29292	
NIH HE-09694 23 p4098 A69-42103				NIH NB-02038 06 p0873 A69-17018	15 p2554 A69-30406
NIH HE-09737 07 p1072 A69-19480				NIH NB-03451-04 14 p2406 A69-29292	
NIH HE-10234-03 22 p3887 A69-41190				NIH NB-03627 22 p3878 A69-40838	22 p3883 A69-40876
NIH HE-10258 21 p3663 A69-38914	21 p3655	A69-38917		NIH NB-03638-04 22 p3881 A69-40862	
NIH HE-10324 22 p3874 A69-40224				NIH NB-04985-03 05 p0711 A69-15802	
NIH HE-10539 17 p2917 A69-34172	19 p3258	A69-36374		NIH NB-05638-04 15 p2612 A69-31266	
NIH HE-10922 23 p4077 A69-41294				NIH NB-06151 22 p3871 A69-40159	
NIH HE-11307 21 p3668 A69-39865				NIH NB-06197 22 p3883 A69-40875	
NIH HE-11553 22 p3896 A69-40435				NIH NB-06354 03 p0369 A69-13359	22 p3884 A69-40887
NIH HE-11553-01 10 p1648 A69-24190				NIH NB-06542 22 p3871 A69-40055	
NIH HE-11553-02 15 p2561 A69-30083				NIH NB-06610 22 p3871 A69-40051	22 p3871 A69-40054
NIH HE-12015 21 p3663 A69-38914	21 p3655	A69-38917		NIH NB-07071-02 14 p2406 A69-28870	
NIH HE-31367 23 p4100 A69-42533				NIH NB-07512-01 22 p3876 A69-40264	
NIH M-4529 03 p0375 A69-13551 09 p1444 A69-21310 17 p2910 A69-33750	17 p2910 17 p2910	A69-33752 A69-33756		NIH NB-31242 22 p3879 A69-40842	
NIH MH-4529 01 p0014 A69-10860				NIH PH-00-511 01 p0062 A69-11207	
NIH MH-04737-06 07 p1064 A69-18634				NIH R-01-GM-1222 18 p3095 A69-34540	
NIH MH-4947 09 p1444 A69-21310				NIH RH-00499 10 p1641 A69-23045	
NIH MH-05673 15 p2555 A69-31035	22 p3876	A69-40263		NIH WP-00026 21 p3668 A69-39711	
NIH MH-6418 22 p3876 A69-40263				NLM 5-R01-LM-00334 04 p0553 A69-14908	
NIH MH-06723 22 p3876 A69-40263				NOBS-78823 22 p3955 A69-40460	
NIH MH-07603 16 p2741 A69-31555				NOBS-88567 10 p1804 A69-24149	
NIH MH-08359 02 p0200 A69-12724				NOBS-90329 19 p3322 A69-35577	
NIH MH-08552 24 p4261 A69-42708				NOBS-90475 10 p1804 A69-24152	
NIH MH-08819 10 p1644 A69-23304				NOBSR-93347 05 p0739 A69-16554	
				NOBSR-95009 02 p0221 A69-12455	





CONTRACT NUMBER INDEX

NONR-562/53/ 13 p2373	A69-27774			NONR-1228/32/ 08 p1329	A69-20000		
NONR-583/13/ 19 p3360	A69-35899			NONR-1228/34/ 04 p0668	A69-14392	10 p1798	A69-23148
NONR-609/47/ 21 p3689	A69-38596			04 p0675	A69-14685		
NONR-609/50/ 18 p3165	A69-34842			NONR-1509/06/ 03 p0502	A69-14004	10 p1768	A69-23778
NONR-609/51/ 16 p2817	A69-31668			03 p0503	A69-14013	16 p2849	A69-31988
NONR-610/06/ 02 p0338	A69-11720	17 p3053	A69-32986	03 p0399	A69-14021	20 p3533	A69-38080
11 p1974	A69-24669	21 p3840	A69-39293	07 p1204	A69-18836	22 p3938	A69-40503
NONR-610/09/ 01 p0098	A69-10766	19 p3349	A69-36888	07 p1208	A69-19358	22 p4004	A69-40504
15 p2640	A69-30815			09 p1488	A69-21698	24 p4368	A69-43184
NONR-656/27/ 02 p0268	A69-12407			10 p1766	A69-23754		
NONR-656/35/ 09 p1489	A69-21702	21 p3714	A69-38556	NONR-1575/03/ 22 p3865	A69-40808		
NONR-710/57/ 03 p0413	A69-12994			NONR-1818/00/ 13 p2217	A69-28134	13 p2217	A69-28135
NONR-710/58/ 08 p1405	A69-20925	24 p4385	A69-43217	NONR-1841/35/ 10 p1707	A69-22987		
NONR-710/60/ 05 p0816	A69-16365	15 p2675	A69-30760	NONR-1841/74/ 13 p2377	A69-28172		
05 p0816	A69-16366	15 p2676	A69-30888	NONR-1841/91/ 03 p0416	A69-13664		
NONR-710/66/ 23 p4182	A69-41913			NONR-1841/93/ 04 p0632	A69-15008	16 p2877	A69-31921
NONR-760/30/ 03 p0529	A69-13955	05 p0834	A69-15730	06 p0972	A69-18186	17 p2893	A69-33488
NONR-760/31/ 23 p4178	A69-42452			11 p1871	A69-25123		
NONR-815/03/ 02 p0208	A69-12021	20 p3572	A69-37908	NONR-1858/25/ 06 p0983	A69-18162		
NONR-839/34/ 02 p0354	A69-12504	06 p0865	A69-18173	NONR-1858/32/ 06 p0983	A69-18102		
NONR-839/38/ 04 p0557	A69-14752	17 p2924	A69-33838	NONR-1858/37/ 24 p4247	A69-43576		
04 p0637	A69-15046	19 p3307	A69-35749	NONR-1866/02/ 18 p3212	A69-34346		
06 p0915	A69-18223	21 p3675	A69-39283	NONR-1866/16/ 01 p0083	A69-11002	19 p3399	A69-35667
07 p1079	A69-18918	24 p4248	A69-43643	12 p2013	A69-26763		
NONR-839/40/FBM 18 p3223	A69-35174			NONR-1866/27/ 03 p0449	A69-13880		
NONR-969/03/ 14 p2407	A69-29298			NONR-1866/32/ 08 p1281	A69-20019		
NONR-988/14/ 07 p1126	A69-19040			NONR-1866/34/ 09 p1534	A69-22798		
NONR-1100/21/ 13 p2375	A69-27792			NONR-1866/48/ 09 p1601	A69-22208	18 p3116	A69-34449
NONR-1147/10/ 09 p1493	A69-21421	21 p3693	A69-38705	18 p3175	A69-34304		
21 p3693	A69-38704			NONR-1866/51/ 02 p0326	A69-12697		
NONR-1202/28/ 07 p1215	A69-18732			NONR-1866/52/ 22 p3893	A69-40839		
NONR-1224/23/ 03 p0499	A69-12942			NONR-2121/24/ 08 p1386	A69-20072	10 p1789	A69-24130
NONR-1224/44/ 12 p2098	A69-27007	20 p3493	A69-37743	NONR-2173/03/-10 22 p3938	A69-40448		
NONR-1224/61/ 10 p1785	A69-24098			NONR-2173/11/ 07 p1126	A69-19042		
				NONR-2173/11/M-7 17 p2981	A69-33160		
				NONR-2216/20/ 21 p3803	A69-38982		
				NONR-2216/24/ 08 p1354	A69-20151		

CONTRACT NUMBER INDEX

NONR-2216/29/ 03 p0414 A69-13015				NONR-4010/09/ 23 p4209 A69-41322	
NONR-2332/00/ 05 p0743 A69-16238				NONR-4010/13/ 12 p2029 A69-26203	
NONR-2342 15 p2619 A69-30472				NONR-4072/00/ 01 p0127 A69-10280	
NONR-3009/00/ 22 p3872 A69-40200				NONR-4073/00/ 22 p3926 A69-40437	
NONR-3010/01/ 02 p0244 A69-12397	14 p2440	A69-29129		NONR-4102/010 16 p2755 A69-31709	
NONR-3010/06/ 06 p0918 A69-17383				NONR-4162/00/ 03 p0434 A69-13868	
NONR-3185/00/ 08 p1273 A69-20023 18 p3101 A69-34797	19 p3283	A69-35931		NONR-4186/00/ 17 p2902 A69-34014	
NONR-3398/00/ 21 p3707 A69-38491	22 p3939	A69-40507		NONR-4291/00/ 17 p2918 A69-33002	
NONR-3446/01/ /X/ 07 p1106 A69-19112	19 p3271	A69-36253		NONR-4315/00/ 07 p1071 A69-19136	
NONR-3560/00/ 12 p2132 A69-26248				NONR-4449/00/ 13 p2364 A69-28205	
NONR-3623/00/ 18 p3113 A69-34240				NONR-4746/01/ 18 p3179 A69-34440	
NONR-3623/21/ 01 p0129 A69-10682				NONR-4752/00/ 24 p4285 A69-43062	
NONR-3656/12/ 24 p4279 A69-42712				NONR-4756 22 p3876 A69-40265	
NONR-3656/26/ 01 p0077 A69-11236 04 p0665 A69-15532 11 p1958 A69-24429	14 p2517 20 p3592	A69-28957 A69-38098		NONR-4756/01/ 07 p1194 A69-19366	21 p3776 A69-38711
NONR-3656/31/ 19 p3359 A69-35665				NONR-4798/00/ 03 p0398 A69-13904	
NONR-3656/32/ 16 p2798 A69-32603				NONR-4833/00/ 12 p2123 A69-26754	
NONR-3688/00/ 17 p2996 A69-33152				NONR-4837/00/ 06 p0976 A69-16876	
NONR-3722/00/ 11 p1842 A69-24904				NONR-4864/00/ 06 p0900 A69-17353	
NONR-3730/00/ 13 p2266 A69-27273				NONR-4952/00/ 06 p0875 A69-17844	
NONR-3731/00/ 18 p3214 A69-34392				NONR-4961/1/ 12 p2065 A69-26103	
NONR-3760/00/ 07 p1202 A69-18368	16 p2879	A69-32179		NONR-4984/00/ 17 p2916 A69-34012	
NONR-3776/00/ 05 p0826 A69-16462	10 p1720	A69-23639		NONR-5154/00/ 01 p0137 A69-10285	
NONR-3902/00/ 10 p1679 A69-23595				NONR-9010/11/ 13 p2297 A69-27634	
NONR-3908/00/ 22 p3973 A69-40736				NONR-22109/29/ 03 p0415 A69-13155	
NONR-3963/03/ 19 p3376 A69-36177				NONR-51027 01 p0166 A69-10227	
NONR-3985/06/ 02 p0343 A69-12285				NONR/G/-00011-66 12 p2152 A69-25797	
NONR-4010/02/ 11 p1871 A69-25125				NONR/G/-00012-66 04 p0552 A69-14533	
NONR-4010/03/ 02 p0203 A69-12212				NONR/G/-0025-66 15 p2693 A69-30781	
NONR-4010/05/ 18 p3123 A69-34922				NONR/G/-00030-66 04 p0552 A69-14533	
				NONR/G/-0046-65 15 p2693 A69-30781	



# CONTRACT NUMBER INDEX

WOSP-65023  
04 p0674 A69-14592

WOW-62-0604-C  
01 p0024 A69-10683  
01 p0146 A69-11123  
02 p0277 A69-11753  
03 p0395 A69-13625  
06 p0961 A69-17140  
07 p1227 A69-18337  
07 p1201 A69-19646  
11 p1929 A69-25267

WOW-62-0664-C  
02 p0219 A65-12343

WOW-64-0381-C  
09 p1510 A69-22350

WOW-64-0659-C  
16 p2879 A69-32002

WOW-65-0123-D  
05 p0698 A69-16092

WOW-65-0384-D  
06 p0939 A69-16943

WOW-65-0407-C  
09 p1510 A69-22350

WOW-65-0441-C  
09 p1510 A69-22350

WOW-66-0309-D  
19 p3351 A69-36897

WOW-66-0503-D  
15 p2629 A69-30902

NR-102-654  
14 p2407 A69-29296

NR-102-715  
21 p3650 A69-38323

NRC 67-3134  
15 p2645 A69-31235

NRC 115/697/867  
19 p3329 A69-36495

NRC A-4  
09 p1576 A69-21706

NRC A-118  
19 p3449 A69-36354

NRC A-1582  
04 p0674 A69-14589  
04 p0683 A69-15497

NRC A-1815  
02 p0339 A69-11988

NRC A-1937  
01 p0127 A69-10341

NRC A-1951  
14 p2440 A69-29124

NRC A-2026  
07 p1108 A69-19466

NRC A-2155  
03 p0483 A69-12852

NRC A-2176  
17 p2929 A69-33873

NRC A-2181  
10 p1791 A69-22935  
23 p4224 A69-41876

NRC A-2205  
19 p3304 A69-35603

NRC A-2754  
02 p0249 A69-12089

15 p2660 A69-30917  
16 p2849 A69-31984  
18 p3129 A69-34954  
19 p3294 A69-35752  
19 p3448 A69-35943  
20 p3592 A69-38096  
21 p3678 A69-39748  
24 p4368 A69-43184

20 p3567 A69-38066

19 p3240 A69-36419

20 p3567 A69-38066

23 p4087 A69-41791

23 p4080 A69-41404

21 p3692 A69-38688

09 p1615 A69-21922

13 p2363 A69-28124

24 p4388 A69-43649

20 p3465 A69-37984

15 p2554 A69-31301

NRC A-2783  
03 p0523 A69-12988

NRC A-2952  
10 p1673 A69-23342

NRC A-3125  
01 p0103 A69-10001

NRC A-3326  
02 p0218 A69-12327  
03 p0396 A69-13631

NRC A-3331  
20 p3537 A69-37067

NRC A-3341  
05 p0835 A69-15870

NRC A-3344  
08 p1303 A69-20269

NRC A-3347  
09 p1622 A69-21951

NRC A-3349  
21 p3692 A69-38688

NRC A-3382  
13 p2238 A69-28429

NRC A-3564  
06 p0918 A69-17381

NRC A-3808  
04 p0674 A69-14589

NRC A-3865  
09 p1576 A69-21706

NRC A-3940  
14 p2501 A69-29953

NRC A-3943  
09 p1576 A69-21706

NRC A-3951  
13 p2335 A69-27312

NRC A-4345  
15 p2645 A69-31024

NRC A-4632  
13 p2313 A69-28222

NRC A-4638  
13 p2313 A69-28222

NRC A-4753  
23 p4182 A69-41907

NRC A-5307  
09 p1615 A69-21924

NRC APB-74  
22 p3876 A69-40269

NSF 3183  
08 p1342 A69-20172

NSF AG-97  
23 p4161 A69-42439

NSF AG-1113  
23 p4161 A69-42439

NSF B-7-1438-R  
01 p0037 A69-10806

NSF C-403  
04 p0595 A69-15439

NSF C-515  
10 p1685 A69-23835

NSF G-1658  
24 p4311 A69-43218

24 p4404 A69-43652

18 p3085 A69-34469

09 p1468 A69-22590  
12 p2039 A69-26381

19 p3449 A69-36354

21 p3702 A69-38358

09 p1615 A69-21922

20 p3592 A69-38096

16 p2775 A69-37080

# CONTRACT NUMBER INDEX

NSF G-2296 14 p2417 A69-29755			NSF GA-485 01 p0156 A69-10977	08 p1391 A69-20516
NSF G-5250 05 p0833 A69-15729			NSF GA-487 20 p3592 A69-38082	
NSF G-10236 23 p4210 A69-41350			NSF GA-488 02 p0208 A69-12021	20 p3572 A69-37908
NSF G-11309 06 p0914 A69-18139 08 p1413 A69-20413	24 p4411 A69-43532		NSF GA-498 08 p1310 A69-20942	
NSF G-14298 17 p3034 A69-33584			NSF GA-505 05 p0755 A69-16271 14 p2513 A69-29123	21 p3710 A69-38504
NSF G-14770 12 p2066 A69-26134			NSF GA-522 16 p2850 A69-32308 20 p3589 A69-37556	22 p4005 A69-40509
NSF G-14807 17 p2956 A69-33598			NSF GA-533 16 p2850 A69-32308	
NSF G-18722 13 p2217 A69-28258 13 p2217 A69-28259	13 p2217 A69-28315		NSF GA-543 08 p1377 A69-19787	
NSF G-18985 07 p1176 A69-19035			NSF GA-548 20 p3572 A69-37907	
NSF G-19114 22 p4052 A69-41126			NSF GA-629X 03 p0461 A69-13342 07 p1126 A69-19043	13 p2290 A69-27391 18 p3166 A69-34828
NSF G-20297 10 p1785 A69-24098			NSF GA-641X 11 p1866 A69-24278	16 p2769 A69-31812
NSF G-20880 06 p0970 A69-18084 20 p3514 A69-37190	20 p3631 A69-37209		NSF GA-667 09 p1551 A69-22039	
NSF G-22296 04 p0575 A69-14751 07 p1245 A69-19728	14 p2445 A69-29884		NSF GA-668 08 p1305 A69-19815	
NSF G-22390 02 p0275 A69-12013	13 p2377 A69-28172		NSF GA-698 20 p3570 A69-37404	
NSF G-23791 22 p4015 A69-40153			NSF GA-701 08 p1345 A69-19813	
NSF G-24898 15 p2709 A69-30677			NSF GA-759 05 p0788 A69-15725	
NSF GA-39 15 p2594 A69-30019			NSF GA-761 16 p2809 A69-32602	
NSF GA-232 10 p1657 A69-23772			NSF GA-767 16 p2781 A69-32387	
NSF GA-326 02 p0235 A69-11428			NSF GA-771 03 p0479 A69-14028	
NSF GA-329 12 p2065 A69-26105			NSF GA-777 12 p2126 A69-26018	
NSF GA-333 08 p1308 A69-20316			NSF GA-780 09 p1494 A69-21640	
NSF GA-384 14 p2414 A69-29513			NSF GA-788 22 p3939 A69-40506	
NSF GA-400 03 p0460 A69-13335	22 p3938 A69-40446		NSF GA-798 05 p0753 A69-16247	
NSF GA-450 03 p0461 A69-13342 03 p0461 A69-13681	03 p0462 A69-13682		NSF GA-802 18 p3129 A69-34958	
NSF GA-463 07 p1176 A69-19041			NSF GA-816 08 p1356 A69-20743	
NSF GA-464 08 p1405 A69-20927			NSF GA-819 12 p2032 A69-26863	
NSF GA-472 05 p0816 A69-16281			NSF GA-830 02 p0243 A69-12006 02 p0243 A69-12010 16 p2784 A69-32576	22 p3934 A69-39872 23 p4157 A69-42018 23 p4158 A69-42020
NSF GA-484 18 p3130 A69-35187			NSF GA-837 16 p2781 A69-32320	



# CONTRACT NUMBER INDEX

NSF GA-841 07 p1175	A69-18947				NSF GA-1132 20 p3589	A69-37556			
NSF GA-849 03 p0414 08 p1382	A69-13015 A69-19887	11 p1869 16 p2855	A69-24892 A69-31658		NSF GA-1134 20 p3523	A69-37518			
NSF GA-868 05 p0757	A69-16408	18 p3128	A69-34801		NSF GA-1152 05 p0819	A69-15624			
NSF GA-872 03 p0532	A69-13012				NSF GA-1162 02 p0317 14 p2526	A69-12020 A69-29881	21 p3814	A69-39583	
NSF GA-878 07 p1128	A69-19370				NSF GA-1200 18 p3205	A69-35433			
NSF GA-888 04 p0592	A69-14654				NSF GA-1208 08 p1419	A69-19814			
NSF GA-889 18 p3131	A69-35193				NSF GA-1230 05 p0753	A69-16247			
NSF GA-900 22 p3977	A69-40733				NSF GA-1237 09 p1594	A69-21696	18 p3129	A69-34956	
NSF GA-906 01 p0110	A69-10690				NSF GA-1238 02 p0245	A69-12739	03 p0502	A69-14008	
NSF GA-909 05 p0825	A69-16301	19 p3417	A69-36130		NSF GA-1249 08 p1272 14 p2434	A69-20021 A69-28944	17 p2926 22 p3990	A69-33854 A69-40529	
NSF GA-914 23 p4210	A69-41350				NSF GA-1306 05 p0753	A69-16247			
NSF GA-918 22 p3939	A69-40514				NSF GA-1310X 07 p1126 08 p1344 15 p2595	A69-19037 A69-19812 A69-30219	16 p2780 22 p3938	A69-32306 A69-40446	
NSF GA-919 03 p0461	A69-13341	20 p3572	A69-37909		NSF GA-1313 05 p0753	A69-16247			
NSF GA-920 06 p0961	A69-17135				NSF GA-1317 22 p3939	A69-40514			
NSF GA-925 12 p2064	A69-26009				NSF GA-1319 01 p0077 04 p0665 11 p1958	A69-11236 A69-15532 A69-24429	14 p2517 20 p3592	A69-28957 A69-38098	
NSF GA-926 20 p3511	A69-38240				NSF GA-1333 03 p0509	A69-13358	07 p1078	A69-18844	
NSF GA-952 14 p2513	A69-29099				NSF GA-1341 14 p2516 14 p2440	A69-28952 A69-29130	15 p2700 22 p4024	A69-31437 A69-40580	
NSF GA-989 07 p1196 10 p1742	A69-19768 A69-24107	14 p2501	A69-29953		NSF GA-1347 20 p3602	A69-37537			
NSF GA-1007 08 p1345	A69-20300				NSF GA-1354 24 p4385	A69-43215			
NSF GA-1010 03 p0460	A69-13334	20 p3523	A69-37505		NSF GA-1370 02 p0244	A69-12568			
NSF GA-1019 03 p0460	A69-13336				NSF GA-1404 16 p2784 22 p3934	A69-32576 A69-39872	23 p4157 23 p4158	A69-42018 A69-42020	
NSF GA-1020 15 p2596	A69-30455				NSF GA-1446 16 p2802	A69-32338			
NSF GA-1023 11 p2003	A69-25354				NSF GA-1453 23 p4161	A69-42436			
NSF GA-1025 02 p0235 03 p0421	A69-11426 A69-13346	20 p3546	A69-38099		NSF GA-1456 09 p1489	A69-21702	21 p3714	A69-38556	
NSF GA-1073 09 p1596	A69-22047				NSF GA-1480 20 p3573	A69-37910			
NSF GA-1099 03 p0460 14 p2414	A69-13337 A69-29513	16 p2808	A69-32600		NSF GA-1481 07 p1183	A69-19650	18 p3174	A69-35245	
NSF GA-1113 05 p0816	A69-16281	16 p2779	A69-32196		NSF GA-1508 09 p1574	A69-21457	20 p3592	A69-38082	
NSF GA-1131 18 p3128	A69-34947								

CONTRACT NUMBER INDEX

NSF GA-1528 15 p2599 A69-31334				NSF GB-7764 23 p4101 A69-41451			
NSF GA-1551 08 p1356 A69-20742	08 p1356	A69-20743		NSF GB-7851 22 p3935 A69-40052			
NSF GA-1595X 12 p2061 A69-26013				NSF GB-7906 23 p4084 A69-41469	23 p4084	A69-41472	
NSF GA-1597 08 p1386 A69-20084				NSF GB-14976 03 p0372 A69-13489			
NSF GA-1661 22 p4004 A69-40307				NSF GB-18120 24 p4263 A69-43117			
NSF GA-3905 12 p2072 A69-26738				NSF GE-7919 08 p1281 A69-20033			
NSF GA-3922 09 p1591 A69-21454				NSF GF-168 03 p0460 A69-13340			
NSF GA-4302 19 p3304 A69-36869				NSF GF-237 02 p0243 A69-12006	23 p4157	A69-42018	
NSF GA-5246 04 p0594 A69-15129	05 p0758	A69-16413		02 p0243 A69-12010	23 p4158	A69-42020	
NSF GA-12400 15 p2599 A69-31334				16 p2784 A69-32576			
NSF GB-1426 13 p2217 A69-28258	13 p2217	A69-28259		NSF GF-245 06 p0966 A69-17524	16 p2819	A69-31684	
NSF GB-2595 22 p3880 A69-40849				NSF GF-255 01 p0110 A69-10693	24 p4342	A69-42895	
NSF GB-2706 22 p3880 A69-40849				NSF GF-271 16 p2808 A69-32600			
NSF GB-4104 22 p3876 A69-40263				NSF GF-289 17 p2994 A69-32844			
NSF GB-4108 11 p1828 A69-25462				NSF GJ-9 18 p3195 A69-34433			
NSF GB-4203 05 p0707 A69-15751				NSF GK-29 07 p1146 A69-18480			
NSF GB-4312 19 p3258 A69-36377				NSF GK-47 02 p0204 A69-12602			
NSF GB-4485 07 p1068 A69-19491	07 p1068	A69-19493		NSF GK-65 04 p0636 A69-15042			
NSF GB-4566 07 p1059 A69-18373				NSF GK-75 09 p1615 A69-21924			
NSF GB-4916 21 p3653 A69-38898				NSF GK-94 05 p0839 A69-16156	05 p0839	A69-16157	
NSF GB-5273 11 p1832 A69-25641				NSF GK-101 02 p0351 A69-12204			
NSF GB-5905 01 p0023 A69-10291	22 p3898	A69-41078		NSF GK-108 16 p2880 A69-32378			
04 p0553 A69-15304				NSF GK-144 05 p0725 A69-16472	12 p2051	A69-26201	
NSF GB-5947-01 24 p4263 A69-43117				NSF GK-181 01 p0134 A69-11407	17 p3012	A69-33497	
NSF GB-6263 10 p1644 A69-23184				NSF GK-191 17 p2979 A69-34137			
NSF GB-6546 16 p2742 A69-31864				NSF GK-002368 12 p2099 A69-27164			
NSF GB-6896 23 p4099 A69-42528				NSF GK-240 20 p3632 A69-37521			
NSF GB-6999 22 p3876 A69-40263				NSF GK-274 18 p3111 A69-34688			
NSF GB-7331 12 p2105 A69-26310				NSF GK-345 05 p0844 A69-15579			
NSF GB-7492 15 p2554 A69-30036				NSF GK-355 10 p1667 A69-24059			
				NSF GK-368 05 p0844 A69-16742			



# CONTRACT NUMBER INDEX

NSF GK-414 05 p0749 A69-16099				NSF GK-743 16 p2871 A69-31878			
NSF GK-437 01 p0045 A69-10720				NSF GK-748 07 p1233 A69-19176			
NSF GK-455 20 p3552 A69-36917				NSF GK-750 24 p4396 A69-42734			
NSF GK-461 04 p0551 A69-15314				NSF GK-761 12 p2108 A69-26636			
NSF GK-527 10 p1656 A69-23534				NSF GK-804 20 p3509 A69-37138			
NSF GK-534 04 p0586 A69-14356				NSF GK-811 16 p2764 A69-31710			
NSF GK-550 05 p0750 A69-16187				NSF GK-834 12 p2053 A69-26509			
NSF GK-554 01 p0121 A69-11202				NSF GK-835 07 p1064 A69-18634			
NSF GK-567 05 p0846 A69-16115				NSF GK-845 13 p2312 A69-28197			
NSF GK-569 02 p0225 A69-11996				NSF GK-875 05 p0721 A69-16572	18 p3101	A69-34788	
NSF GK-575 09 p1622 A69-21905				NSF GK-894 10 p1806 A69-24166			
NSF GK-577 21 p3853 A69-39672				NSF GK-899 04 p0682 A69-15301			
NSF GK-580 10 p1652 A69-23340 13 p2262 A69-28083	20 p3514	A69-37206		NSF GK-900 05 p0744 A69-15714			
NSF GK-587 17 p3067 A69-34144				NSF GK-904 24 p4359 A69-43644			
NSF GK-589 20 p3628 A69-37787				NSF GK-929 19 p3429 A69-35914			
NSF GK-608 11 p1983 A69-25019				NSF GK-967 02 p0224 A69-11963 05 p0740 A69-16599 05 p0740 A69-16601 07 p1115 A69-18514	09 p1474 10 p1719 17 p2994 22 p3975	A69-22441 A69-23515 A69-32844 A69-41010	
NSF GK-620 08 p1413 A69-20414				NSF GK-1007 07 p1126 A69-19039	24 p4359	A69-43646	
NSF GK-621 13 p2371 A69-27319				NSF GK-1013 06 p1023 A69-17508			
NSF GK-655 01 p0123 A69-10686	18 p3113	A69-34240		NSF GK-1043 01 p0092 A69-10055			
NSF GK-684 06 p1027 A69-18070 18 p3213 A69-34386	20 p3627	A69-37771		NSF GK-1051 08 p1319 A69-19995			
NSF GK-687 06 p1023 A69-17375	18 p3213	A69-34385		NSF GK-1053 08 p1270 A69-19854			
NSF GK-696 11 p1842 A69-24934				NSF GK-1065 02 p0349 A69-12798			
NSF GK-707 10 p1701 A69-24169				NSF GK-1070 16 p2819 A69-31685			
NSF GK-714 22 p3914 A69-40704				NSF GK-1075 03 p0390 A69-13215 03 p0392 A69-13248	06 p0888 19 p3277	A69-17531 A69-36488	
NSF GK-716 01 p0089 A69-10179 04 p0558 A69-15006 06 p0905 A69-17949	12 p2053 17 p2944	A69-26515 A69-33743		NSF GK-1095 01 p0041 A69-10203			
NSF GK-721 05 p0747 A69-16071				NSF GK-1112 09 p1545 A69-21441			
NSF GK-737 06 p1033 A69-17554				NSF GK-1127 10 p1708 A69-22993			
NSF GK-738 08 p1364 A69-20518	08 p1364	A69-20519		NSF GK-1146/I/ 18 p3105 A69-34618			

# CONTRACT NUMBER INDEX

NSF GK-1153 05 p0721 A69-16572	18 p3101 A69-34788	NSF GK-1466 04 p0675 A69-14595	
NSF GK-1165 11 p1931 A69-25363		NSF GK-1480 13 p2363 A69-28127	
NSF GK-1173 12 p2049 A69-26083		NSF GK-1515 03 p0419 A69-13950	
NSF GK-1202 04 p0637 A69-15052	20 p3511 A69-38241	NSF GK-1527 09 p1453 A69-21322	
NSF GK-1212 07 p1184 A69-19141		NSF GK-1528 09 p1456 A69-22459	19 p3274 A69-36283
NSF GK-1213 04 p0559 A69-15212		NSF GK-1529 02 p0351 A69-12052	
NSF GK-1233 11 p1836 A69-24985		NSF GK-1532 17 p2921 A69-33623	21 p3756 A69-39499
NSF GK-1238 13 p2229 A69-27675		NSF GK-1540 12 p2122 A69-26522	
NSF GK-1243 11 p1930 A69-25277	17 p3011 A69-33451	NSF GK-1547 06 p0902 A69-17398	
NSF GK-1250 05 p0764 A69-16170		NSF GK-1550 01 p0041 A69-10204	16 p2758 A69-31616
NSF GK-1251 02 p0347 A69-12517		14 p2420 A69-29459	18 p3109 A69-35293
NSF GK-1261 08 p1411 A69-20142		NSF GK-1582 06 p0969 A69-17951	
NSF GK-1263 06 p0965 A69-17488		NSF GK-1597 14 p2434 A69-28958	
NSF GK-1268 15 p2704 A69-30289		NSF GK-1599 12 p2185 A69-26822	
NSF GK-1280 15 p2709 A69-30679		NSF GK-1609 06 p0970 A69-17953	
NSF GK-1291 04 p0683 A69-15495		NSF GK-1610 09 p1503 A69-21443	
NSF GK-1297 05 p0847 A69-16121	24 p4411 A69-43534	NSF GK-1613 01 p0061 A69-11201	
11 p1998 A69-24460		NSF GK-1616 19 p3271 A69-36250	
NSF GK-1305 06 p1033 A69-17556		NSF GK-1621 06 p1023 A69-17374	
NSF GK-1323 05 p0738 A69-16185		NSF GK-1626 01 p0007 A69-11028	
NSF GK-1340 09 p1481 A69-21929		NSF GK-1636 24 p4339 A69-42816	
NSF GK-1366 04 p0566 A69-15347		NSF GK-1642 17 p3062 A69-33708	
NSF GK-1376 03 p0434 A69-13871		NSF GK-1652 11 p1866 A69-25275	
NSF GK-1391 03 p0478 A69-13803	03 p0478 A69-13804	NSF GK-1653 19 p3389 A69-36547	
NSF GK-1391X 03 p0475 A69-13146		NSF GK-1700 01 p0045 A69-10720	
NSF GK-1400 10 p1707 A69-22986	13 p2277 A69-27406	NSF GK-1737 20 p3518 A69-38234	
NSF GK-1404 04 p0669 A69-14397		NSF GK-1740 04 p0571 A69-14316	
NSF GK-1415 19 p3263 A69-36656	22 p3874 A69-40216	NSF GK-1745 01 p0177 A69-11403	
NSF GK-1439 01 p0029 A69-10555	06 p0902 A69-17405	NSF GK-1758 02 p0353 A69-12387	04 p0566 A69-15344
NSF GK-1458 04 p0590 A69-15274		NSF GK-1769 19 p3438 A69-36305	



# CONTRACT NUMBER INDEX

NSF GK-1831 04 p0671 A69-14415	12 p2179 A69-26212	NSF GK-2788 09 p1474 A69-22441	24 p4294 A69-43314
NSF GK-1833 04 p0596 A69-14391		NSF GK-2797 08 p1283 A69-20162	
NSF GK-1834-X 24 p4342 A69-43704		NSF GK-2813 17 p2949 A69-33013	
NSF GK-1838 01 p0061 A69-11201 07 p1121 A69-19475	14 p2540 A69-29679 16 p2768 A69-31591	NSF GK-3035 12 p2157 A69-26308	
NSF GK-1854 19 p3378 A69-36185	22 p3950 A69-41230	NSF GK-3072 09 p1606 A69-22423	18 p3191 A69-34306
NSF GK-1857 01 p0133 A69-11215		NSF GK-3129 16 p2841 A69-32689	
NSF GK-1875 10 p1797 A69-23077		NSF GK-3130 05 p0803 A69-16350	08 p1274 A69-20031
NSF GK-1879 05 p0788 A69-16481 11 p1861 A69-25452	21 p3685 A69-38726	NSF GK-3273 21 p3826 A69-39642	
NSF GK-1910 04 p0668 A69-14393		NSF GK-3370 16 p2757 A69-31587	
NSF GK-1934 10 p1705 A69-23815		NSF GK-3620 10 p1704 A69-23658	17 p2971 A69-32913
NSF GK-1963 03 p0533 A69-13951 05 p0744 A69-15719 14 p2430 A69-29575	17 p2971 A69-32901 24 p4316 A69-43527	NSF GK-10008 24 p4245 A69-43357	
NSF GK-1970 01 p0054 A69-11416 06 p0891 A69-17357 06 p0892 A69-17395 06 p0892 A69-17396	12 p2053 A69-26507 18 p3112 A69-35093 24 p4285 A69-43062	NSF GN-233 20 p3640 A69-38020	
NSF GK-1980 18 p3228 A69-34468		NSF GN-353 20 p3640 A69-38019	20 p3640 A69-38020
NSF GK-1984 20 p3581 A69-37306		NSF GN-594 20 p3640 A69-38020	
NSF GK-2119X 05 p0771 A69-15819		NSF GN-597 20 p3640 A69-38019	
NSF GK-2156 07 p1240 A69-18322		NSF GN-7480R 07 p1126 A69-19038	
NSF GK-2198 22 p4041 A69-40053		NSF GP-2-393 08 p1308 A69-20316	
NSF GK-2277 06 p0903 A69-17411	23 p4146 A69-42473	NSF GP-15-25 13 p2335 A69-27316	
NSF GK-2281 17 p3012 A69-33493		NSF GP-63-10 16 p2863 A69-32396	
NSF GK-2283 18 p3111 A69-34682	21 p3688 A69-39661	NSF GP-127 03 p0533 A69-13951 05 p0744 A69-15719 14 p2430 A69-29575	17 p2971 A69-32901 24 p4316 A69-43527
NSF GK-2311 10 p1655 A69-23422		NSF GP-133 21 p3852 A69-39432	
NSF GK-2339 23 p4119 A69-41746		NSF GP-165 01 p0033 A69-10973	
NSF GK-2381 21 p3722 A69-38793		NSF GP-408 23 p4210 A69-41350	
NSF GK-2568 04 p0611 A69-15023		NSF GP-539 08 p1405 A69-20927	
NSF GK-2581 07 p1115 A69-18858 08 p1368 A69-20803	16 p2819 A69-31683	NSF GP-540 06 p0918 A69-17383	
NSF GK-2645 06 p0903 A69-17406	24 p4293 A69-43303	NSF GP-579 01 p0133 A69-11213 01 p0075 A69-11222 02 p0327 A69-12712 03 p0474 A69-13145 03 p0475 A69-13147 06 p0962 A69-17818 07 p1220 A69-19390 08 p1367 A69-20799 08 p1368 A69-20808 09 p1600 A69-22200 10 p1742 A69-24107	11 p1924 A69-24300 11 p1929 A69-25271 15 p2693 A69-30778 15 p2693 A69-30780 15 p2661 A69-30921 15 p2646 A69-31519 16 p2818 A69-31679 16 p2821 A69-32035 18 p3120 A69-34434 22 p4015 A69-40154 22 p4027 A69-40654
NSF GK-2658 08 p1302 A69-19823	10 p1727 A69-22862		

CONTRACT NUMBER INDEX

10 p1788	A69-24120	22 p4028	A69-40661	NSF GP-2702		
10 p1788	A69-24124	22 p3986	A69-40723	23 p4226	A69-41572	
10 p1789	A69-24129			NSF GP-2717		
NSF GP-642				01 p0177	A69-11401	
18 p3195	A69-34429			NSF GP-2721		
NSF GP-700				15 p2595	A69-30214	
09 p1622	A69-21953			NSF GP-2894		
NSF GP-820				22 p4015	A69-40153	
18 p3165	A69-34418			NSF GP-2995		
NSF GP-846				06 p0892	A69-17884	
18 p3099	A69-34553			NSF GP-3070		
NSF GP-849		08 p1378	A69-20066	01 p0172	A69-11266	07 p1170 A69-18716
04 p0650	A69-15529			NSF GP-3074		
NSF GP-948				01 p0172	A69-11270	
09 p1481	A69-21920			NSF GP-3159		
NSF GP-962				09 p1492	A69-21418	
18 p3195	A69-34429			NSF GP-3193		
NSF GP-978				11 p1911	A69-24322	
05 p0747	A69-16068			NSF GP-3196		
NSF GP-980				12 p2064	A69-26008	16 p2788 A69-32645
12 p2141	A69-25783			NSF GP-3200		
NSF GP-984				11 p1975	A69-24672	
20 p3628	A69-37787			NSF GP-3201		
NSF GP-1088				06 p0900	A69-17351	
24 p4280	A69-43809			NSF GP-3232		
NSF GP-1169		19 p3440	A69-36637	22 p3993	A69-40719	
15 p2704	A69-30303			NSF GP-3331		
NSF GP-1338		13 p2342	A69-27600	03 p0515	A69-14039	
09 p1599	A69-22191			NSF GP-3460		
NSF GP-1358				19 p3360	A69-35899	
14 p2520	A69-29375			NSF GP-3488		
NSF GP-1511				09 p1606	A69-22418	
13 p2273	A69-28464			NSF GP-3497		
NSF GP-1522				15 p2692	A69-30774	20 p3611 A69-38156
06 p1033	A69-17554			NSF GP-3570		
NSF GP-1807				11 p1953	A69-24335	
22 p3936	A69-40059			NSF GP-3657		
NSF GP-1819		10 p1774	A69-22970	18 p3165	A69-34418	
03 p0518	A69-14250			NSF GP-3666		
NSF GP-2010		13 p2275	A69-27229	18 p3163	A69-34329	
11 p1969	A69-24414			NSF GP-3725		
NSF GP-2102		18 p3188	A69-35395	08 p1343	A69-20443	
09 p1598	A69-22176			NSF GP-3767		
NSF GP-2257				10 p1651	A69-22938	
02 p0236	A69-11465			NSF GP-3934		
NSF GP-2282				03 p0460	A69-13336	
03 p0461	A69-13681			NSF GP-3971		
NSF GP-2359				15 p2594	A69-30019	
10 p1805	A69-24154			NSF GP-4029		
NSF GP-2414		03 p0415	A69-13155	04 p0623	A69-14949	
02 p0276	A69-12699			NSF GP-4289		
NSF GP-2455				09 p1574	A69-21402	
02 p0244	A69-12568			NSF GP-4292		
NSF GP-2523				12 p2153	A69-25810	
02 p0236	A69-11466			NSF GP-4293		
NSF GP-2609				02 p0319	A69-12107	07 p1126 A69-19036
04 p0683	A69-15495			02 p0326	A69-12697	17 p2960 A69-33150
NSF GP-2657				03 p0508	A69-13347	21 p3811 A69-39511
05 p0778	A69-15757			NSF GP-4435		
				02 p0320	A69-12114	



# CONTRACT NUMBER INDEX

NSF GP-4454 02 p0288	A69-12171				NSF GP-5302 01 p0132	A69-11209			
NSF GP-4502 22 p4021	A69-40412				NSF GP-5309 01 p0155 05 p0819	A69-10976 A69-15624	20 p3602	A69-37537	
NSF GP-4572 14 p2430	A69-29362				NSF GP-5349 19 p3265	A69-36372	21 p3670	A69-39806	
NSF GP-4632 02 p0281	A69-12133				NSF GP-5404 05 p0816	A69-16281	16 p2779	A69-32196	
NSF GP-4689 16 p2808	A69-32600				NSF GP-5474 01 p0023	A69-10411			
NSF GP-4721 20 p3611	A69-38148				NSF GP-5506 12 p2066	A69-26110	16 p2778	A69-32191	
NSF GP-4724X 19 p3265	A69-36288				NSF GP-5539 22 p3938	A69-40448			
NSF GP-4742 07 p1220	A69-19392				NSF GP-5558 10 p1720	A69-23635			
NSF GP-4774 11 p1969	A69-24414				NSF GP-5564 03 p0499	A69-12945			
NSF GP-4815 19 p3385	A69-36515				NSF GP-5568 17 p3038	A69-33720			
NSF GP-4825 06 p1033 15 p2704	A69-17556 A69-30289	21 p3851	A69-38975		NSF GP-5572X1 15 p2648	A69-30222			
NSF GP-4859 23 p4211	A69-41377	23 p4223	A69-42475		NSF GP-5599 02 p0272	A69-12131			
NSF GP-4891 20 p3616	A69-38317				NSF GP-5611 21 p3714	A69-38556			
NSF GP-4921 04 p0590	A69-15191	21 p3693	A69-38752		NSF GP-5730 12 p2171	A69-27151			
NSF GP-4924X 19 p3265 19 p3265 19 p3265	A69-36289 A69-36290 A69-36291	19 p3265 19 p3265 20 p3579	A69-36292 A69-36293 A69-37495		NSF GP-5758 09 p1480	A69-21614			
NSF GP-4928 02 p0327	A69-12708	10 p1787	A69-24117		NSF GP-5791 13 p2327	A69-27596			
NSF GP-4984 14 p2529	A69-29982				NSF GP-5832 23 p4232	A69-42142	23 p4232	A69-42143	
NSF GP-4990 08 p1384 14 p2526	A69-20052 A69-29853	18 p3190 22 p4015	A69-34289 A69-40153		NSF GP-5882 03 p0530	A69-14066	24 p4397	A69-42750	
NSF GP-4999 04 p0656	A69-14669				NSF GP-5909 19 p3385	A69-36515			
NSF GP-5004 05 p0796	A69-15747				NSF GP-5962 18 p3164	A69-34614			
NSF GP-5020 24 p4406	A69-43701				NSF GP-5963 10 p1771	A69-22854			
NSF GP-5029 09 p1603	A69-22230				NSF GP-6077 19 p3422	A69-36221			
NSF GP-5059 12 p2121	A69-26365				NSF GP-6119 13 p2339	A69-27567			
NSF GP-5111 02 p0236	A69-11465				NSF GP-6174 09 p1606	A69-22420	18 p3191	A69-34298	
NSF GP-5114 05 p0796	A69-15747				NSF GP-6290 12 p2058 12 p2058	A69-26417 A69-26418	12 p2058 12 p2058	A69-26420 A69-26422	
NSF GP-5182 07 p1223	A69-19636	08 p1392	A69-20564		NSF GP-6310 02 p0325 21 p3799	A69-12593 A69-38645	24 p4376 24 p4384	A69-42662 A69-43197	
NSF GP-5246 21 p3706	A69-38484				NSF GP-6344 07 p1126	A69-19039			
NSF GP-5255 18 p3128	A69-34947				NSF GP-6374 04 p0653	A69-14625			
					NSF GP-6387 02 p0327	A69-12709	02 p0327	A69-12710	

## CONTRACT NUMBER INDEX

NSF GP-6428					NSF GP-7030				
04 p0653	A69-14625	23 p4211	A69-41377		08 p1380	A69-20775	13 p2339	A69-27573	
06 p1010	A69-17975	23 p4223	A69-42475		09 p1605	A69-22413	22 p4027	A69-40657	
12 p2156	A69-26210								
NSF GP-6438					NSF GP-7041				
21 p3668	A69-39864				04 p0626	A69-15288			
NSF GP-6448					NSF GP-7041X				
16 p2795	A69-31554				05 p0826	A69-16462			
NSF GP-6473					NSF GP-7086				
01 p0132	A69-11209				20 p3593	A69-38152	22 p4015	A69-40154	
NSF GP-6534					NSF GP-7091				
09 p1603	A69-22230				07 p1185	A69-19301			
NSF GP-6559					NSF GP-7109				
02 p0327	A69-12708	24 p4376	A69-42663		08 p1417	A69-20781			
10 p1787	A69-24117				NSF GP-7140				
NSF GP-6572					15 p2661	A69-30922	22 p3982	A69-40669	
22 p4014	A69-40129				NSF GP-7157				
NSF GP-6576					12 p2171	A69-27153			
09 p1596	A69-22053	09 p1604	A69-22408		NSF GP-7195				
NSF GP-6585					08 p1366	A69-20749			
18 p3199	A69-34928				NSF GP-7236				
NSF GP-6595					01 p0124	A69-10962	12 p2133	A69-26967	
03 p0471	A69-13169	13 p2338	A69-27560		NSF GP-7318				
07 p1224	A69-19713	15 p2693	A69-30777		01 p0164	A69-10057	20 p3514	A69-37211	
NSF GP-6623					NSF GP-7337				
14 p2520	A69-29375				14 p2517	A69-29085	18 p3190	A69-34293	
NSF GP-6631					NSF GP-7342				
18 p3164	A69-34840				10 p1771	A69-22854			
NSF GP-6655					NSF GP-7347				
09 p1430	A69-21944	21 p3696	A69-39296		14 p2470	A69-29360			
NSF GP-6692					NSF GP-7366				
10 p1773	A69-22963	22 p4021	A69-40436		15 p2655	A69-30309	22 p3987	A69-41004	
13 p2348	A69-27807				NSF GP-7382				
NSF GP-6724					09 p1533	A69-22796			
03 p0457	A69-13826	10 p1722	A69-24069		NSF GP-7389				
NSF GP-6736					12 p2063	A69-25808			
19 p3265	A69-36289	19 p3265	A69-36293		NSF GP-7409				
19 p3265	A69-36291				01 p0122	A69-10034	10 p1726	A69-23524	
NSF GP-6750					04 p0554	A69-14859	12 p2131	A69-25983	
01 p0148	A69-10051				05 p0796	A69-15908	18 p3178	A69-35476	
NSF GP-6771					07 p1185	A69-19302	20 p3579	A69-37345	
01 p0135	A69-10016				NSF GP-7415				
NSF GP-6773					03 p0515	A69-14039			
03 p0472	A69-13314	03 p0472	A69-13315		NSF GP-7422				
NSF GP-6810					12 p2124	A69-26932			
05 p0819	A69-15703	22 p4026	A69-40649		NSF GP-7424				
09 p1581	A69-22409				20 p3611	A69-38148	20 p3611	A69-38149	
NSF GP-6817					NSF GP-7457				
18 p3179	A69-34440	21 p3776	A69-38711		07 p1232	A69-19173	14 p2471	A69-29680	
NSF GP-6820					08 p1342	A69-20348			
14 p2410	A69-29282				NSF GP-7464				
NSF GP-6927					17 p3004	A69-32832			
10 p1788	A69-24124				NSF GP-7471				
NSF GP-6928					08 p1343	A69-20355	11 p1909	A69-25409	
09 p1605	A69-22415	23 p4217	A69-42316		11 p1909	A69-24886			
11 p1950	A69-25110				NSF GP-7482				
NSF GP-7001					12 p2154	A69-25814			
13 p2326	A69-27569				NSF GP-7525				
NSF GP-7008					12 p2153	A69-25810			
08 p1384	A69-20058	13 p2342	A69-27600		NSF GP-7538				
NSF GP-7011					01 p0103	A69-10006			
03 p0382	A69-13379				NSF GP-7553				
					10 p1781	A69-23673			





## CONTRACT NUMBER INDEX

NSF GP-9114				NSF GY-4460			
09 p1590 A69-21445	15 p2675 A69-30768			06 p1039 A69-18185			
09 p1602 A69-22228	19 p3413 A69-36108						
09 p1605 A69-22417	19 p3425 A69-36422			NSF GY-4620			
10 p1789 A69-24134	20 p3588 A69-37420			23 p4240 A69-42306			
10 p1790 A69-24137	20 p3610 A69-38140						
13 p2334 A69-27306	22 p3980 A69-40148			NSG-2-59			
13 p2334 A69-27307	22 p4029 A69-40763			04 p0558 A69-15006	21 p3756	A69-39499	
14 p2517 A69-29086	22 p3986 A69-40766			12 p2192 A69-26750			
15 p2691 A69-30765	23 p4194 A69-41596						
NSF GP-9135				NSG-05-003-050			
12 p2153 A69-25807	13 p2343 A69-27625			07 p1240 A69-18322			
NSF GP-9136				NSG-05-007-003			
08 p1393 A69-20569				02 p0325 A69-12624	24 p4353	A69-43815	
NSF GP-9150				NSG-05-018-002			
12 p2171 A69-27151				04 p0621 A69-15308	07 p1172	A69-19730	
NSF GP-9380				NSG-05-020-008			
21 p3773 A69-38476				14 p2434 A69-28958			
NSF GP-9433				NSG-6-59			
20 p3588 A69-37420	22 p3986 A69-40766			01 p0092 A69-10060	16 p2802	A69-32338	
22 p4029 A69-40763	23 p4194 A69-41596			06 p0982 A69-18235	22 p3994	A69-41053	
				07 p1073 A69-18374			
NSF GP-11855				NSG-17-002-042			
13 p2354 A69-28465				22 p3897 A69-41068			
NSF GP-87190				NSG-18-59			
05 p0806 A69-16736				13 p2359 A69-27261	13 p2362	A69-28122	
NSF GR-2581				NSG-21-002-010			
08 p1367 A69-20801				15 p2680 A69-30200			
NSF GR-7958				NSG-22-005-001			
21 p3754 A69-38426				01 p0015 A69-10931			
NSF GS-1346				NSG-24			
24 p4271 A69-42751				08 p1272 A69-20021	12 p2065	A69-26104	
NSF GU-9				11 p1837 A69-25004	17 p2926	A69-33854	
03 p0518 A69-14250	04 p0582 A69-14941			NSG-28-014			
NSF GU-894				15 p2721 A69-31069			
18 p3211 A69-34327				NSG-30-001-001			
NSF GU-1153				01 p0015 A69-10932			
08 p1302 A69-19847				NSG-30-60			
NSF GU-1533				03 p0503 A69-14016			
07 p1159 A69-18721				NSG-33-016-013			
NSF GU-1557				01 p0157 A69-11292	18 p3126	A69-34283	
02 p0211 A69-12448	04 p0637 A69-15046			NSG-39-012-001			
04 p0623 A69-14695				15 p2699 A69-31394			
NSF GU-1559				NSG-40-60			
23 p4122 A69-41771				01 p0132 A69-11205			
NSF GU-1978				NSG-43-60			
11 p1978 A69-24811				01 p0158 A69-11330			
NSF GU-2370				NSG-44-003-001			
23 p4100 A69-41444				01 p0015 A69-10904			
NSF GU-2921				NSG-48			



## CONTRACT NUMBER INDEX

[illegible]

CONTRACT NUMBER INDEX

05 p0816 A69-16279	22 p4005 A69-40512	NSG-306-63	
18 p3187 A69-34945		16 p2816 A69-31639	
NSG-252-62		NSG-309	
16 p2860 A69-32238		04 p0582 A69-14941	
NSG-254-62		NSG-313-63	
06 p0902 A69-17402	24 p4291 A69-43269	02 p0317 A69-12020	19 p3415 A69-36118
16 p2857 A69-32161		05 p0819 A69-15624	
NSG-259-62		NSG-316	
01 p0013 A69-10167	21 p3660 A69-39173	05 p0706 A69-16162	17 p3015 A69-32821
NSG-262-63		08 p1268 A69-20362	17 p3012 A69-33493
03 p0430 A69-13481		NSG-318	
NSG-269		02 p0327 A69-12713	20 p3593 A69-38166
02 p0320 A69-12113	08 p1356 A69-20743	05 p0813 A69-15846	24 p4371 A69-43610
03 p0469 A69-12923	09 p1496 A69-21936	09 p1603 A69-22263	
03 p0455 A69-13372	09 p1540 A69-22099	NSG-321	
03 p0455 A69-13374	15 p2561 A69-30467	03 p0511 A69-13467	17 p2975 A69-33747
03 p0515 A69-14010	18 p3164 A69-34615	08 p1407 A69-20937	19 p3410 A69-36093
07 p1125 A69-18946	21 p3794 A69-38381	08 p1309 A69-20940	
08 p1356 A69-20742		NSG-322	
NSG-269-62		08 p1407 A69-20937	17 p3009 A69-34190
02 p0243 A69-12006	09 p1540 A69-22100	08 p1309 A69-20940	19 p3406 A69-36073
02 p0243 A69-12010	09 p1605 A69-22411	NSG-324	
04 p0553 A69-14978	16 p2784 A69-32576	07 p1074 A69-19394	07 p1068 A69-19494
07 p1129 A69-19502	17 p3004 A69-32832	07 p1068 A69-19490	07 p1069 A69-19503
NSG-270-63		07 p1068 A69-19491	07 p1069 A69-19505
18 p3214 A69-34395		07 p1068 A69-19492	10 p1649 A69-23404
NSG-275-62		07 p1068 A69-19493	19 p3265 A69-36376
01 p0106 A69-10930	07 p1185 A69-19302	NSG-325	
01 p0122 A69-10034	07 p1186 A69-19395	12 p2129 A69-25982	
01 p0122 A69-10284	07 p1186 A69-19446	NSG-333	
01 p0123 A69-10681	07 p1174 A69-19495	01 p0110 A69-10693	21 p3757 A69-38370
01 p0124 A69-10688	10 p1726 A69-23524	NSG-334	
04 p0554 A69-14859	12 p2131 A69-25983	04 p0569 A69-15455	09 p1470 A69-21317
04 p0554 A69-14861	13 p2301 A69-27206	04 p0569 A69-15456	09 p1452 A69-21319
04 p0632 A69-14866	14 p2471 A69-29921	06 p0904 A69-17865	13 p2219 A69-27664
05 p0796 A69-15908	17 p3009 A69-34170	NSG-338	
06 p0960 A69-17112		01 p0014 A69-10903	15 p2555 A69-30445
NSG-281-62		10 p1647 A69-24186	
07 p1206 A69-19269	10 p1785 A69-24101	NSG-339	
08 p1380 A69-20632	10 p1786 A69-24102	07 p1074 A69-18628	08 p1269 A69-21061
08 p1380 A69-20638	10 p1786 A69-24104	08 p1269 A69-21059	10 p1651 A69-23308
09 p1591 A69-21452	10 p1786 A69-24105	08 p1269 A69-21060	13 p2217 A69-28317
09 p1603 A69-22263	10 p1786 A69-24106	NSG-341	
NSG-283		19 p3278 A69-36716	
01 p0076 A69-11234	22 p4004 A69-40305	NSG-342	
07 p1193 A69-19242		07 p1245 A69-19728	08 p1423 A69-21155
NSG-283-62		NSG-343	
06 p0884 A69-17114	13 p2301 A69-27455	04 p0621 A69-15308	07 p1172 A69-19730
NSG-286		05 p0717 A69-16493	
01 p0076 A69-11231	03 p0425 A69-14009	NSG-351	
NSG-286-63		05 p0738 A69-16177	
07 p1125 A69-18848		NSG-353	
NSG-291-62		06 p0970 A69-17953	21 p3777 A69-39455
19 p3415 A69-36120		NSG-354	
NSG-294-63		06 p0903 A69-17411	17 p2944 A69-33743
01 p0092 A69-10055	08 p1329 A69-20007	06 p0905 A69-17949	23 p4146 A69-42473
NSG-295-62		12 p2054 A69-26518	
01 p0019 A69-11342	23 p4081 A69-41440	NSG-356	
21 p3659 A69-39066		03 p0413 A69-12996	
NSG-298		NSG-357	
08 p1268 A69-21012	15 p2610 A69-30710	02 p0326 A69-12706	12 p2169 A69-27060
NSG-301		02 p0327 A69-12713	13 p2339 A69-27571
06 p0907 A69-18064		09 p1599 A69-22188	13 p2339 A69-27574
NSG-302-63		09 p1602 A69-22226	15 p2691 A69-30764
02 p0244 A69-12395	02 p0244 A69-12396	09 p1603 A69-22263	
NSG-304-63		NSG-359	
03 p0426 A69-14031	20 p3574 A69-38092	13 p2340 A69-27580	22 p3983 A69-40100
		18 p3176 A69-34446	22 p3985 A69-40664



## CONTRACT NUMBER INDEX

NSG-360  
03 p0428 A69-13106

NSG-361

01 p0134	A69-10011	05 p0774	A69-16318
03 p0473	A69-13907		

NSG-366				
03	p0516	A69-14082	19	p3413 A69-36107
05	p0819	A69-15623	20	p3523 A69-37518
07	p1224	A69-19710		

NSG-367  
22 p3926 A69-40437

NSG-368			
01	p0062	A69-11208	08 p1352 A69-20791
04	p0591	A69-15504	08 p1353 A69-20792
08	p1352	A69-20790	11 p1923 A69-24289

NSG-374  
17 p2911 A69-34 171

NSG-375  
01 p0015 A69-10931 24 p4280 A69-43051

NSG-375-54  
01 p0018 A69-11198

NSG-377

01 p0157	A69-11197	13 p2221	A69-27944
09 p1607	A69-22432		

MSG-377-3208  
01 p0105 A69-10734 12 p2034 A69-26752

**NSG-381**

03 p0382	A69-13858	06 p0885	A69-17885
05 p0738	A69-16182	14 p2423	A69-29758
05 p0740	A69-16597	15 p2644	A69-30424

NSG-386

03	p0503	A69-14027	09	p1493	A69-21419
05	p0824	A69-16251	09	p1579	A69-22173
07	p1129	A69-19372	20	p3593	A69-38153
07	p1209	A69-19373	22	p4003	A69-40302
07	p1129	A69-19374	23	p4206	A69-42318

MSG-387  
07 p1206 A69-19249

NSG-390  
01 p0015 A69-10904

NSG-394  
17 p3008 A69-33004

NSG-395

07 p1107	A69-19227	17 p2929	A69-33882
07 p1190	A69-18919	23 p4142	A69-42336

MSG-398

03	p0456	A69-13553	16	p2764	A69-31710
04	p0624	A69-15003	16	p2823	A69-32468
08	p1253	A69-20844	16	p2866	A69-32820
10	p1719	A69-23518	18	p3191	A69-34294
10	p1719	A69-23519	21	p3679	A69-39607
10	p1790	A69-24140	22	p4026	A69-40648
13	p2271	A69-27399	22	p3987	A69-41043
15	p2644	A69-30450			

NSG-399

01 p0157	A69-11292	19 p3417	A69-36130
15 p2681	A69-30416		

NSG-406  
05 p0756 A69-16360 09 p1491 A69-22607

NSG-409  
19 p3291 A69-35718

NSG-414

06	p0962	A69-17818	15	p2656	A69-31034
09	p1542	A69-21916	22	p4027	A69-40654
10	p1788	A69-24124	22	p3986	A69-40723
15	p2562	A69-30468			

NSG-416  
07 p1173 A69-18641

NSG-419  
09 p1600 A69-22206 14 p2414 A69-29514

NSG-423  
02 p0347 A69-12536

NSG-426				
09	p1579	A69-22173	16	p2856 A69-31986
09	p1601	A69-22207	16	p2849 A69-32097
09	p1604	A69-22401	18	p3186 A69-34299
16	p2856	A69-31964		

NSG-431  
13 p2248 A69-28212

NSG-432  
02 p0327 A69-12717

NSG-436			
01	p0115	A69-10018	09 p1601 A69-22210
01	p0120	A69-10858	14 p2470 A69-29451
02	p0315	A69-11836	15 p2690 A69-30732

NSG-437					
01	p0014	A69-10860	17	p2910	A69-33750
03	p0375	A69-13551	17	p2910	A69-33752
09	p1444	A69-21310	17	p2910	A69-33756

NSG-438

01 p0148	A69-10051	18 p3116	A69-34449
06 p0961	A69-17136	18 p3175	A69-34304
09 p1601	A69-22208	18 p3191	A69-34305
09 p1543	A69-22404		

NSG-441-63  
16 p2742 A69-31864

NSG-442  
03 p0472 A69-13317

NSG-443  
09 p1611 A69-22087

NSG-445

04 p0593	A69-15011	08 p1419	A69-19814
05 p0794	A69-16587	20 p3602	A69-37536

NSG-445/E/  
03 p0426 A69-14232 07 p1078 A69-18844

NSG-448  
02 p0218 A69-12328

NSG-450  
23 p4081 869-41436

NSG-453  
05 p0698 A69-16075

NSG-456  
23 p4081 869-41434

NSG-458  
04 00577 168-14875

NSG-466  
10 D1807 169-2417x

NSG-479

03 p0370	A69-13461	10 p1648	A69-24190
10 p1647	A69-24185	11 p1828	A69-25456
10 p1647	A69-24188		

NSG-484

17	p2993	A69-34 191	23	p4176	A69-41597
18	p3154	A69-34 272			

NSG-490  
24 04294 169-13315

NSG-495  
20 p3640 169-3802

NSG-496

01	p0133	A69-11217	10	p1773	A69-22960
02	p0327	A69-12709	13	p2349	A69-27819
02	p0327	A69-12710	15	p2720	A69-30596
03	p0502	A69-14001	15	p2555	A69-31035
03	p0502	A69-14006	16	p2755	A69-31709

CONTRACT NUMBER INDEX

05 p0791	A69-16164	20 p3592	A69-38068	NSG-589			
05 p0824	A69-16251	20 p3612	A69-38165	06 p0981	A69-18232	13 p2324	A69-28683
06 p1001	A69-17192	22 p3876	A69-40263	NSG-592			
07 p1064	A69-18634	22 p3876	A69-40264	16 p2881	A69-32767		
08 p1384	A69-20059	22 p3896	A69-40738	NSG-595			
08 p1265	A69-20685	22 p3879	A69-40843	07 p1063	A69-18629	13 p2210	A69-28482
08 p1304	A69-20783	23 p4209	A69-41319	10 p1648	A69-24189		
09 p1574	A69-21453	23 p4151	A69-41887	NSG-599			
09 p1587	A69-21308	24 p4410	A69-43524	01 p0076	A69-11233	05 p0795	A69-15660
09 p1607	A69-22432			NSG-601			
NSG-499				06 p0906	A69-17149		
02 p0319	A69-12105	12 p2067	A69-26333	NSG-603			
09 p1484	A69-21404	16 p2861	A69-32300	01 p0024	A69-10893		
12 p2155	A69-26019	18 p3126	A69-34283	NSG-605			
12 p2155	A69-26020	20 p3608	A69-38056	05 p0836	A69-15875	19 p3446	A69-36835
NSG-503				16 p2873	A69-32059		
13 p2340	A69-27579	22 p4026	A69-40652	NSG-606			
21 p3801	A69-38761			11 p1829	A69-24737		
NSG-511				NSG-609			
05 p0758	A69-16411	18 p3127	A69-34798	07 p1201	A69-19478		
12 p2073	A69-26861	18 p3128	A69-34804	NSG-617			
14 p2439	A69-29111			02 p0296	A69-11835		
NSG-518				NSG-618			
12 p2131	A69-26606	16 p2815	A69-32791	04 p0602	A69-15380	09 p1602	A69-22216
13 p2279	A69-27759	17 p2987	A69-33077	NSG-622			
13 p2280	A69-27767	18 p3111	A69-34688	19 p3350	A69-36894		
15 p2655	A69-30309	20 p3589	A69-37556	NSG-624			
16 p2850	A69-32308	22 p3987	A69-41004	01 p0147	A69-11227	14 p2434	A69-28947
NSG-525				05 p0753	A69-16256	24 p4310	A69-43188
02 p0235	A69-11426			NSG-625			
NSG-533				14 p2406	A69-28871	16 p2741	A69-31555
12 p2187	A69-26846	24 p4263	A69-43336	NSG-628			
NSG-538				03 p0470	A69-13161	03 p0471	A69-13166
01 p0146	A69-11122			NSG-632			
NSG-541				14 p2415	A69-29515		
13 p2352	A69-27903	19 p3278	A69-36716	NSG-644			
NSG-542				24 p4280	A69-43809		
01 p0093	A69-10063	07 p1081	A69-19105	NSG-646			
06 p1030	A69-17116	17 p3011	A69-33479	05 p0723	A69-16195	21 p3679	A69-39608
NSG-551				NSG-649			
23 p4215	A69-41896			03 p0485	A69-13298	15 p2668	A69-30685
NSG-553				06 p0958	A69-17712		
09 p1533	A69-22458	10 p1663	A69-23531	NSG-657			
09 p1457	A69-22460	21 p3673	A69-38923	01 p0044	A69-10628	11 p1817	A69-24288
09 p1458	A69-22471			05 p0848	A69-16128	11 p1874	A69-25357
NSG-555				06 p0861	A69-17637	11 p1991	A69-25512
16 p2757	A69-31613	19 p3381	A69-35681	NSG-659			
NSG-558				01 p0138	A69-10716	01 p0138	A69-10717
21 p3809	A69-39362			NSG-660			
NSG-559				18 p3132	A69-35409	21 p3787	A69-38357
03 p0530	A69-14065	18 p3212	A69-34346	NSG-663			
07 p1236	A69-19473	18 p3212	A69-34347	13 p2321	A69-28005		
11 p1978	A69-24811	24 p4405	A69-43656	NSG-670			
16 p2874	A69-32162			12 p2153	A69-25813	18 p3164	A69-34807
NSG-577				NSG-673			
10 p1650	A69-23879	24 p4276	A69-43274	05 p0756	A69-16274	20 p3592	A69-38083
21 p3662	A69-38728			NSG-676			
NSG-579				02 p0235	A69-11428	15 p2599	A69-31334
02 p0218	A69-12330			NSG-682			
NSG-580				02 p0204	A69-12601	18 p3212	A69-34382
17 p3026	A69-32837			10 p1805	A69-24160		
NSG-581							
12 p2041	A69-26628	14 p2445	A69-29884				
NSG-582							
16 p2788	A69-31722						
NSG-587							
15 p2621	A69-30496						



CONTRACT NUMBER INDEX

NSG-688	11 p1953	A69-24336	19 p3408	A69-36086	NSR-03-002-131	03 p0470	A69-13161	03 p0471	A69-13169
						03 p0471	A69-13162	03 p0507	A69-13170
NSG-689	07 p1074	A69-18633	12 p2026	A69-25779		03 p0471	A69-13163	03 p0507	A69-13171
	07 p1074	A69-18635	12 p2026	A69-25780		03 p0471	A69-13164	03 p0508	A69-13172
	12 p2017	A69-25764	12 p2018	A69-25781		03 p0471	A69-13165	03 p0508	A69-13173
	12 p2018	A69-25776				03 p0471	A69-13166	03 p0508	A69-13174
						03 p0471	A69-13167	03 p0508	A69-13175
						03 p0507	A69-13168		
NSG-690	05 p0815	A69-16249			NSR-05-003-100	02 p0325	A69-12593	24 p4376	A69-42662
NSG-692	02 p0200	A69-12724	21 p3680	A69-39663		21 p3799	A69-38645		
NSG-694	18 p3120	A69-34394	20 p3517	A69-37997	NSR-09-015-033	04 p0632	A69-14679	22 p3987	A69-41006
						11 p1921	A69-24416	22 p3987	A69-41007
						14 p2471	A69-29926		
NSG-695	04 p0631	A69-15189	19 p3313	A69-36492	NSR-12-001-019	02 p0236	A69-11465		
	05 p0797	A69-16368	20 p3603	A69-37554					
	12 p2146	A69-26206			NSR-16-001-025	20 p3533	A69-38080	21 p3714	A69-38550
NSG-702	07 p1240	A69-18322	18 p3180	A69-34455	NSR-17-004-003	15 p2610	A69-30710		
	17 p2952	A69-33403	19 p3452	A69-36370					
NSG-702-S-1/	02 p0350	A69-11530			NSR-22-009-129	15 p2679	A69-31529	21 p3788	A69-38648
NSG-703	02 p0329	A69-12794			NSR-22-009-138	05 p0711	A69-15802	21 p3679	A69-39603
						07 p1070	A69-18383		
NSG-704	18 p3095	A69-34543	19 p3264	A69-35606	NSR-22-009-288	23 p4151	A69-41887		
NSG-2357	02 p0325	A69-12591			NSR-22-014-001	04 p0555	A69-14888		
NSG-5860	20 p3593	A69-38145			NSR-31-001-150	09 p1585	A69-21207		
NSG-GP-7008	09 p1599	A69-22191			NSR-31-001-901	02 p0327	A69-12712	10 p1788	A69-24120
NSG/T/-27-02	05 p0748	A69-16091	17 p2954	A69-33457	NSR-33-009-029	16 p2770	A69-31907		
	14 p2430	A69-29444							
NSG/T/-49	18 p3111	A69-34688			NSR-33-009-045	07 p1184	A69-19164	08 p1355	A69-20735
NSG/T/-57	03 p0516	A69-14082			NSR-33-010-026	09 p1471	A69-21318	17 p2960	A69-33167
						14 p2450	A69-29639	20 p3605	A69-37800
NSG/T/-74	03 p0382	A69-13379				16 p2781	A69-32445	24 p4284	A69-42720
NSG/T/-88-01	01 p0103	A69-10007			NSR-33-110-026	17 p2960	A69-33167		
NSG/T/-89	22 p3873	A69-40208			NSR-36-008-028	06 p1027	A69-18061		
NSG/T/-90	08 p1353	A69-20793	11 p1969	A69-24338	NSR-39-080-001	17 p2994	A69-32843		
NSG/T/-105	03 p0456	A69-13555			NSR-44-004-029	14 p2510	A69-28942		
NSG/T/-117-2	09 p1481	A69-21910			NSR-44-004-041	23 p4223	A69-41763	23 p4133	A69-41764
NSG/T/-390	01 p0107	A69-11244			NSR-44-004-043	10 p1768	A69-23769		
NSG/T/-462	07 p1059	A69-18373			NSR-44-006-041	19 p3413	A69-36107		
NSR-02-001-035	04 p0594	A69-15129	05 p0758	A69-16413	NSR-44-006-061	05 p0819	A69-15623		
	05 p0753	A69-16247			NSR-52-112				

CONTRACT NUMBER INDEX

OSW-14-01-001-1246  
04 p0625 A69-15287

PD/41/03  
16 p2775 A69-32086

PD/81/014/AT  
21 p3852 A69-39592

PD/170/07  
11 p1992 A69-25520

PH-22-68-47  
22 p3896 A69-40488

PHS-1-FE-GM-35  
02 p0204 A69-12601

PHS-2-P02-AM-0557  
05 p0708 A69-15970

PHS-3-S03-RM-00009-01S1  
19 p3262 A69-36273

PHS-5-K6-GM-13981  
24 p4261 A69-42709

PHS-5-P07-FR-257  
21 p3664 A69-38978

PHS-5-P01-WB-06828  
22 p3884 A69-40883

PHS-5-R01-AM-04577  
05 p0708 A69-15970

PHS-5-SOL-FR-05566  
22 p3872 A69-40200

PHS-5-T-1-HE-5362  
21 p3655 A69-38916

PHS-5-T-2-5049  
21 p3655 A69-38916

PHS-06723  
22 p3882 A69-40867

PHS-AC-00518  
04 p0611 A69-15023

PHS-AI-00343-02  
22 p3873 A69-40206

PHS-AI-07902-02  
22 p3873 A69-40206

PHS-AM-04257  
15 p2561 A69-30407

PHS-AM-5401-06  
07 p1063 A69-18629

PHS-AM-05524  
22 p3872 A69-40200

PHS-AM-06323  
14 p2407 A69-29296

PHS-AM-10202  
10 p1644 A69-23314

PHS-AM-11237  
01 p0014 A69-10902  
02 p0200 A69-12722

PHS-AM-11709  
01 p0014 A69-10902  
02 p0200 A69-12722

PHS-AP-00323  
02 p0205 A69-12318

PHS-AP-00359-031  
19 p3362 A69-36406

PHS-B-02165  
22 p3883 A69-40874

PHS-CA-5-KG-GM-13981  
23 p4083 A69-41457

PHS-CA-050-98  
15 p2555 A69-30413

PHS-CA-05192  
06 p0874 A69-17837

PHS-CA-06519-03  
03 p0373 A69-13492

PHS-CA-07175  
03 p0372 A69-13489

PHS-CA-08702  
03 p0375 A69-14070

06 p0874 A69-17837

PHS-CA-08702-02  
07 p1066 A69-19422

PHS-CH-00024  
07 p1245 A69-19728

PHS-DE-02311  
22 p3887 A69-41193

22 p3887 A69-41195

PHS-DE-02731  
22 p3887 A69-41193

22 p3887 A69-41195

PHS-ES-00139  
07 p1059 A69-18373

PHS-FP-76  
19 p3258 A69-36374

PHS-FR-00129  
07 p1067 A69-19424

PHS-FR-00162  
22 p3873 A69-40206

PHS-FR-00165  
20 p3478 A69-37934

PHS-FR-00317  
18 p3099 A69-34553

PHS-GB-4485  
07 p1069 A69-19503

PHS-GM-409  
22 p3873 A69-40208

PHS-GM-05112  
01 p0015 A69-10921  
01 p0015 A69-10922

01 p0015 A69-10923  
01 p0015 A69-10924

PHS-GM-05472  
18 p3099 A69-34553

PHS-GM-09070-06  
22 p3873 A69-40203

PHS-GM-09352  
18 p3099 A69-34553

PHS-GM-10289  
08 p1267 A69-20683

PHS-GM-10985  
17 p2908 A69-33007

PHS-GM-11309  
15 p2561 A69-30407

PHS-GM-12179  
15 p2555 A69-30445

PHS-GM-12564  
22 p3873 A69-40205

PHS-GM-12882  
18 p3096 A69-35172

17 p2910 A69-33755

17 p2910 A69-33755



# CONTRACT NUMBER INDEX

PHS-GM-14659-02  
23 p4083 A69-41459

PHS-GM-15004  
24 p4262 A69-43059

PHS-GM-15311  
07 p1066 A69-19263

PHS-GM-15430-02  
22 p3873 A69-40203

PHS-GM-15889-01  
10 p1642 A69-23121

PHS-GM-15904-01  
23 p4077 A69-41296

PHS-GRSG-1-SOL-FR-05354  
22 p3889 A69-40058

PHS-H-3180  
23 p4078 A69-41364

PHS-H-4517  
23 p4077 A69-41293

PHS-H-06308  
14 p2407 A69-29301

PHS-H-7383  
17 p2908 A69-33007

PHS-HD-0518  
14 p2408 A69-29307

PHS-HD-03147  
22 p3887 A69-41193

PHS-HD-03268  
19 p3258 A69-36294

PHS-HD-03268-01  
23 p4091 A69-42013

PHS-HE-05-043  
24 p4259 A69-42636

PHS-HE-1106-01  
24 p4258 A69-42631

PHS-HE-1152  
22 p3874 A69-40216

PHS-HE-01920  
22 p3874 A69-40214

PHS-HE-03212  
22 p3887 A69-41189

PHS-HE-03966  
23 p4078 A69-41365

PHS-HE-04080  
22 p3873 A69-40206

PHS-HE-5125  
14 p2408 A69-29304

PHS-HE-5392  
21 p3655 A69-38916

PHS-HE-05435  
23 p4083 A69-41455

PHS-HE-5500  
23 p4078 A69-41365

PHS-HE-05741  
24 p4257 A69-42627

PHS-HE-06228  
22 p3873 A69-40206

PHS-HE-06285  
23 p4082 A69-41441

PHS-HE-06308  
22 p3873 A69-40206

22 p3887 A69-41195

23 p4085 A69-41673

23 p4082 A69-41445

PHS-HE-06352  
24 p4258 A69-42630

PHS-HE-06375  
12 p2019 A69-26131

PHS-HE-06423  
22 p3874 A69-40223

PHS-HE-06848-05  
14 p2407 A69-29298

PHS-HE-07188  
24 p4259 A69-42639

PHS-HE-07482  
24 p4259 A69-42639

PHS-HE-07762  
19 p3264 A69-36868

PHS-HE-08015  
24 p4257 A69-42627

PHS-HE-08465  
21 p3650 A69-38383

PHS-HE-08805  
24 p4258 A69-42630

PHS-HE-08886  
21 p3655 A69-38916

PHS-HE-09251  
01 p0058 A69-10228

PHS-HE-09681-02  
23 p4082 A69-41441

PHS-HE-09694  
22 p3878 A69-40785

PHS-HE-09773  
24 p4258 A69-42633

PHS-HE-10282  
23 p4084 A69-41461

PHS-HE-10328  
03 p0375 A69-14069

PHS-HE-10330  
17 p2908 A69-33007

PHS-HE-10401  
14 p2407 A69-29301

PHS-HE-11231-01  
23 p4082 A69-41441

PHS-HE-11493  
10 p1643 A69-23125

PHS-HE-11678  
24 p4276 A69-43272

PHS-HE-12164-01  
23 p4077 A69-41296

PHS-HE-12174  
21 p3650 A69-38383

PHS-HEO-8195  
21 p3667 A69-39606

PHS-HTS-5252  
12 p2019 A69-26131

PHS-MH-02456  
24 p4275 A69-43198

PHS-MH-03238-07  
22 p3876 A69-40269

PHS-MH-05204  
01 p0015 A69-10904

PHS-MH-06792  
07 p1064 A69-18632

07 p1064 A69-18637

CONTRACT NUMBER INDEX

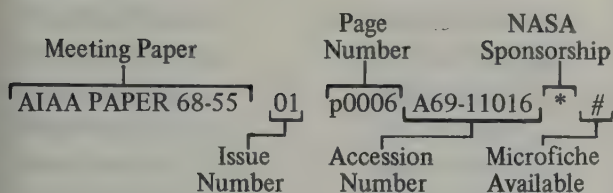
07 p1064	A69-18636				
PHS-MH-07534				PHS-UI-00014	
23 p4081	A69-41439			13 p2213	A69-28256
PHS-MH-07603				PHS-UI-00025-02	
14 p2406	A69-28871			17 p2913	A69-33008
PHS-MH-08748				PHS-UI-00413	
24 p4256	A69-42554			07 p1072	A69-19436
PHS-MH-12449				PRO-CP-67-823	
22 p3882	A69-40868			01 p0033	A69-10970
PHS-NB-02501				04 p0560	A69-15216
17 p2910	A69-33749			PRO-CP-68-823	
PHS-NB-02589				01 p0047	A69-10974
22 p3882	A69-40867			R-06-006-046	
PHS-NB-03752				08 p1353	A69-21009
07 p1064	A69-18634			R-09-038-002	
PHS-NB-04064-05				12 p2075	A69-26989
18 p3096	A69-35172			R-09-038-007	
PHS-NB-05163				12 p2098	A69-26993
22 p3882	A69-40870			RFF-18/4	
PHS-NB-05185				23 p4203	A69-41934
22 p3883	A69-40878			RFF-2017	
PHS-NB-05395				06 p0899	A69-17826
22 p3881	A69-40860			RFF-3007	
PHS-NB-06038				23 p4203	A69-41934
22 p3872	A69-40200			RFF-3010	
PHS-NB-06307				09 p1564	A69-21237
22 p3888	A69-41231			RFF-3013	
PHS-NB-06361				09 p1564	A69-21237
22 p3881	A69-40856			RFF-3024	
PHS-NB-06361-02				23 p4203	A69-41934
22 p3880	A69-40855			RFF-3025	
PHS-NB-06361-03				09 p1564	A69-21237
22 p3880	A69-40855			RFF-3034	
PHS-NB-06542				09 p1564	A69-21237
08 p1265	A69-20685			RFF-3046	
PHS-NB-07226-01				23 p4203	A69-41934
21 p3650	A69-38320			RFF-4014	
PHS-NB-07249				19 p3281	A69-35766
22 p3880	A69-40852	22 p3883	A69-40878	RFF-4024	
PHS-NB-07579				09 p1564	A69-21237
22 p3880	A69-40851	22 p3882	A69-40870	RNRCS T G-D-183-9	
PHS-NB-08091				02 p0309	A69-12744
22 p3881	A69-40859			SNSF G-NF-4040	
PHS-NU-0054				19 p3418	A69-36137
07 p1245	A69-19728			SNSF G-NF-4539	
PHS-OH-00225-03				19 p3418	A69-36137
23 p4082	A69-41442			SNSF G-NF-5094.2	
PHS-PH-43-66-944				19 p3418	A69-36137
15 p2616	A69-31291			SNSRC-2309-5	
PHS-RH-00499				17 p3041	A69-33815
23 p4083	A69-41455			SNSRC-2392-24	
PHS-T01-GM-225				08 p1309	A69-20578
14 p2407	A69-29301			SRC B/SR/3067	
PHS-T01-TM-1273-03				15 p2634	A69-30878
14 p2407	A69-29298			SRO 564	
PHS-T01-GM-225				06 p0966	A69-17523
14 p2407	A69-29301			SSF/8/-4	
PHS-T01-GM-1273-03				12 p2149	A69-26315
14 p2407	A69-29298				



# CONTRACT NUMBER INDEX

T-637-I-203		
02 p0220	A69-12435	
USAF CP-68-832		
14 p2415	A69-29519	
USDA 12-14-110-3159-20		
04 p0553	A69-14908	
USDC C-85-65		
08 p1373	A69-20858	
USDT C-85-65		
05 p0750	A69-16181	
VRA RD-1870-M		
02 p0204	A69-12601	
W-31-109-ENG-30		
02 p0351	A69-12202	
W-7405-ENG-26		
01 p0099	A69-11042	
W-7405-ENG-48		
09 p1481	A69-21910	
W-7405-ENG-92		
19 p3340	A69-35508	
W-7405-GEN-48		
09 p1448	A69-22314	
WBG-27		
04 p0592	A69-14654	13 p2290 A69-27636
WBG-30		
17 p2959	A69-33148	
WBG-34		
21 p3757	A69-38370	
WBG-52		
15 p2648	A69-30220	17 p2962 A69-33689
15 p2648	A69-30221	
WRK-49		
05 p0828	A69-16653	05 p0817 A69-16654
WRK-66		
09 p1489	A69-21712	20 p3533 A69-38086
WRK-125		
15 p2677	A69-31346	
WRK-153		
17 p2959	A69-32926	
WRK-161		
07 p1081	A69-19099	

To the right of each meeting paper or report number is the issue number of *International Aerospace Abstracts*, followed by the page number and the IAA accession number. The asterisk (\*) indicates NASA-supported work. When a number sign (#) is present, it indicates that the document is available on microfiche.



AAS PAPER 68-080	20	p3595	A69-37170 #
AAS PAPER 68-085	20	p3595	A69-37171 #
AAS PAPER 68-086	20	p3595	A69-37172**
AAS PAPER 68-089	20	p3595	A69-37174 #
AAS PAPER 68-090	20	p3595	A69-37175 #
AAS PAPER 68-095	21	p3804	A69-39201 #
AAS PAPER 68-098	20	p3595	A69-37176**
AAS PAPER 68-099	20	p3595	A69-37173**
AAS PAPER 68-102	21	p3804	A69-39203 #
AAS PAPER 68-105	21	p3805	A69-39221**
AAS PAPER 68-106	21	p3819	A69-39204 #
AAS PAPER 68-108	21	p3805	A69-39220**
AAS PAPER 68-109	21	p3761	A69-39205**
AAS PAPER 68-110	21	p3805	A69-39223 #
AAS PAPER 68-114	21	p3805	A69-39206 #
AAS PAPER 68-115	19	p3402	A69-35936 #
AAS PAPER 68-116	21	p3805	A69-39224**
AAS PAPER 68-117	21	p3805	A69-39207 #
AAS PAPER 68-122	19	p3402	A69-35937**
AAS PAPER 68-124	20	p3616	A69-37178 #
AAS PAPER 68-125	20	p3617	A69-37180 #
AAS PAPER 68-126	21	p3819	A69-39211**
AAS PAPER 68-128	21	p3674	A69-39202 #
AAS PAPER 68-130	20	p3595	A69-37179**
AAS PAPER 68-131	21	p3828	A69-39766**

AAS PAPER 68-134	19	p3402	A69-35938**
AAS PAPER 68-135	21	p3805	A69-39208**
AAS PAPER 68-138	21	p3819	A69-39210**
AAS PAPER 68-139	21	p3805	A69-39209 #
AAS PAPER 68-140	20	p3595	A69-37194 #
AAS PAPER 68-141	21	p3806	A69-39234 #
AAS PAPER 68-144	19	p3402	A69-35939**
AAS PAPER 68-145	21	p3761	A69-39222 #
AAS PAPER 68-148	19	p3402	A69-35951 #
AAS PAPER 68-150	21	p3820	A69-39225 #
AAS PAPER 68-151	19	p3429	A69-35950 #
AAS PAPER 68-182	02	p0311	A69-11467*
AAS PAPER 68-183	02	p0247	A69-11468*
AAS PAPER 68-184	02	p0311	A69-11469
AAS PAPER 68-185	02	p0311	A69-11470*
AAS PAPER 68-186	02	p0311	A69-11471*
AAS PAPER 68-187	02	p0311	A69-11472*
AAS PAPER 68-191	01	p0153	A69-10823*
AAS PAPER 68-192	02	p0311	A69-11473*
AAS PAPER 68-196	02	p0312	A69-11474
AAS PAPER 68-197	02	p0312	A69-11475*
AAS PAPER 68-198	02	p0312	A69-11476
AAS PAPER 68-199	02	p0312	A69-11477
AAS PAPER 68-202	02	p0312	A69-11478
AAS PAPER 68-204	02	p0312	A69-11479
AAS PAPER 68-205	02	p0312	A69-11480*
AAS PAPER 68-206	02	p0312	A69-11481*
AAS PAPER 68-207	02	p0313	A69-11482*
AAS PAPER 68-217	02	p0313	A69-11483
AAS PAPER 68-218	02	p0313	A69-11484
AAS PAPER 68-219	02	p0313	A69-11485*
AAS PAPER 68-220	02	p0313	A69-11486
AAS PAPER 69-036	24	p4379	A69-42825**
AAS PAPER 69-042	24	p4418	A69-42826 #
AAS PAPER 69-051	24	p4296	A69-42882 #
AAS PAPER 69-058	24	p4307	A69-42824 #
AAS PAPER 69-059	24	p4307	A69-42823**



# MEETING PAPER AND REPORT NUMBER INDEX

AAS PAPER 69-062	24 p4307 A69-42822 #	AAS PAPER 69-330	24 p4349 A69-42871*#
AAS PAPER 69-066	24 p4381 A69-42883*#	AAS PAPER 69-333	24 p4282 A69-42872 #
AAS PAPER 69-069	24 p4366 A69-42880*#	AAS PAPER 69-336	24 p4398 A69-42827*#
AAS PAPER 69-079	24 p4340 A69-42821 #	AAS PAPER 69-359	24 p4418 A69-42828*#
AAS PAPER 69-083	24 p4418 A69-42820*#	AAS PAPER 69-366	24 p4417 A69-42806 #
AAS PAPER 69-091	24 p4393 A69-42881 #	AAS PAPER 69-382	24 p4417 A69-42805 #
AAS PAPER 69-105	24 p4417 A69-42819 #	AAS PAPER 69-385	24 p4251 A69-42804 #
AAS PAPER 69-110	24 p4419 A69-42879 #	AAS PAPER 69-388	24 p4363 A69-42829 #
AAS PAPER 69-112	19 p3402 A69-35935*#	AAS PAPER 69-395	24 p4363 A69-42830*#
AAS PAPER 69-113	24 p4418 A69-42878 #	AAS PAPER 69-401	24 p4252 A69-42831*#
AAS PAPER 69-116	24 p4271 A69-42818 #	AAS PAPER 69-403	24 p4379 A69-42832 #
AAS PAPER 69-120	24 p4307 A69-42817*#	AAS PAPER 69-404	24 p4347 A69-42836 #
AAS PAPER 69-143	24 p4272 A69-42876*#	AAS PAPER 69-405	24 p4347 A69-42834 #
AAS PAPER 69-151	24 p4339 A69-42816 #	AAS PAPER 69-406	24 p4347 A69-42833 #
AAS PAPER 69-152	24 p4398 A69-42877*#	AAS PAPER 69-409	24 p4417 A69-42803 #
AAS PAPER 69-164	24 p4392 A69-42815 #	AAS PAPER 69-421	24 p4392 A69-42835*#
AAS PAPER 69-166A	24 p4417 A69-42814 #	AAS PAPER 69-438	24 p4319 A69-42802*#
AAS PAPER 69-173	24 p4393 A69-42873 #	AAS PAPER 69-464	24 p4272 A69-42843 #
AAS PAPER 69-180	24 p4379 A69-42813 #	AAS PAPER 69-465	24 p4416 A69-42801 #
AAS PAPER 69-204	24 p4417 A69-42812*#	AAS PAPER 69-469	24 p4272 A69-42848*#
AAS PAPER 69-207	24 p4381 A69-42874 #	AAS PAPER 69-470	24 p4272 A69-42847 #
AAS PAPER 69-208	24 p4296 A69-42875 #	AAS PAPER 69-472	24 p4272 A69-42846 #
AAS PAPER 69-236	24 p4288 A69-42811*#	AAS PAPER 69-473	24 p4272 A69-42845 #
AAS PAPER 69-238	24 p4319 A69-42854 #	AAS PAPER 69-478	24 p4296 A69-42884 #
AAS PAPER 69-241	24 p4380 A69-42855*#	AAS PAPER 69-483	24 p4307 A69-42837*#
AAS PAPER 69-242	24 p4380 A69-42856*#	AAS PAPER 69-486	24 p4380 A69-42844*#
AAS PAPER 69-244	24 p4392 A69-42857*#	AAS PAPER 69-491	24 p4392 A69-42838*#
AAS PAPER 69-254	24 p4313 A69-42858*#	AAS PAPER 69-492	24 p4380 A69-42839 #
AAS PAPER 69-255	24 p4313 A69-42859 #	AAS PAPER 69-494	24 p4380 A69-42840 #
AAS PAPER 69-258	24 p4380 A69-42860*#	AAS PAPER 69-500	24 p4418 A69-42853 #
AAS PAPER 69-282	24 p4313 A69-42861 #	AAS PAPER 69-501	24 p4380 A69-42852*#
AAS PAPER 69-286	24 p4379 A69-42810*#	AAS PAPER 69-516	24 p4272 A69-42850*#
AAS PAPER 69-288	24 p4381 A69-42862*#	AAS PAPER 69-517	24 p4272 A69-42841 #
AAS PAPER 69-290	24 p4381 A69-42863*#	AAS PAPER 69-518	24 p4392 A69-42842*#
AAS PAPER 69-291	24 p4381 A69-42864*#	AAS PAPER 69-520	24 p4392 A69-42849*#
AAS PAPER 69-292	24 p4417 A69-42809 #	AAS PAPER 69-522	24 p4418 A69-42851*#
AAS PAPER 69-305	24 p4364 A69-42865*#	ACS PAPER 15-C-68F	12 p2114 A69-26301*
AAS PAPER 69-320	24 p4381 A69-42866*#	ACS PAPER 93	05 p0716 A69-16234
AAS PAPER 69-321	24 p4392 A69-42867 #	ACS PAPER 94	05 p0716 A69-16235
AAS PAPER 69-322	24 p4381 A69-42868*#	AFCL-68-0212	01 p0033 A69-10970 #
AAS PAPER 69-323	24 p4252 A69-42869 #	AFCL-68-0375	04 p0560 A69-15216 #
AAS PAPER 69-325	24 p4418 A69-42870 #	AFCL-68-0505	01 p0124 A69-10919
AAS PAPER 69-326	24 p4252 A69-42808 #	AFCL-69-0038	18 p3100 A69-34232
AAS PAPER 69-329	24 p4417 A69-42807 #	AFCL-69-0059	02 p0244 A69-12397 #

MEETING PAPER AND REPORT NUMBER INDEX

AFCL-69-0082	18 p3101 A69-34803	AHS PAPER 200	07 p1052 A69-18869 #
AFCL-69-0097	06 p0918 A69-17494	AHS PAPER 202	20 p3463 A69-37805
AFCL-69-0289	10 p1729 A69-23424	AHS PAPER 206	20 p3463 A69-37806
AFCL-69-0291	12 p2065 A69-26104*	AHS PAPER 211	01 p0006 A69-10409 #
AFCL-69-0294	14 p2440 A69-29124	AHS PAPER 212	01 p0143 A69-10410 #
AFCL-69-0301	22 p3983 A69-40149	AHS PAPER 215	07 p1203 A69-18867 #
AFCL-69-0363	04 p0649 A69-15130	AHS PAPER 217	07 p1053 A69-18871 #
AFCL-69-0395	16 p2781 A69-32317	AHS PAPER 225	01 p0009 A69-10408 #
AFCL-69-0396	16 p2781 A69-32318	AHS PAPER 300	17 p2895 A69-33549 #
AGARDOGRAPH-111	08 p1264 A69-20669	AHS PAPER 301	17 p2901 A69-33548 #
AGARDOGRAPH-111	08 p1264 A69-20670	AHS PAPER 302	17 p2901 A69-33547 #
AGARDOGRAPH-111	08 p1264 A69-20671	AHS PAPER 303	17 p2901 A69-33546 #
AGARDOGRAPH-111	08 p1265 A69-20672	AHS PAPER 310	17 p2901 A69-33545 #
AGARDOGRAPH-111	08 p1266 A69-20673	AHS PAPER 311	17 p3002 A69-33544 #
AGARDOGRAPH-111	08 p1266 A69-20674	AHS PAPER 312	17 p2903 A69-33542 #
AGARDOGRAPH-111	08 p1265 A69-20675	AHS PAPER 313	17 p3001 A69-33543 #
AGARDOGRAPH-111	08 p1266 A69-20676	AHS PAPER 314	17 p3001 A69-33541 #
AGARDOGRAPH-111	08 p1266 A69-20677	AHS PAPER 315	17 p2920 A69-33535 #
AGARDOGRAPH-111	08 p1266 A69-20679	AHS PAPER 316	17 p2933 A69-33540 #
AGARDOGRAPH-111	08 p1267 A69-20681	AHS PAPER 320	17 p2895 A69-33539 #
AGARDOGRAPH-111	08 p1267 A69-20684	AHS PAPER 321	17 p2895 A69-33538
AGARDOGRAPH-114	08 p1291 A69-20981	AHS PAPER 322	17 p2895 A69-33536 #
AGARDOGRAPH-114	08 p1317 A69-20982	AHS PAPER 324	17 p2895 A69-33537
AGARDOGRAPH-114	08 p1291 A69-20983	AHS PAPER 325	17 p2894 A69-33534 #
AGARDOGRAPH-114	08 p1291 A69-20984*	AHS PAPER 326	17 p2894 A69-33533 #
AGARDOGRAPH-114	08 p1298 A69-20985	AHS PAPER 330	17 p2901 A69-33532 #
AGARDOGRAPH-114	08 p1291 A69-20986	AHS PAPER 331	17 p3022 A69-33530 #
AGARDOGRAPH-114	08 p1292 A69-20987	AHS PAPER 332	17 p2946 A69-33531 #
AGARDOGRAPH-114	08 p1278 A69-20988	AHS PAPER 333	17 p3021 A69-33529 #
AGARDOGRAPH-114	08 p1277 A69-20989	AHS PAPER 334	17 p2901 A69-33528 #
AGARDOGRAPH-114	08 p1279 A69-20990*	AHS PAPER 340	17 p2899 A69-33510 #
AGARDOGRAPH-114	08 p1292 A69-20991	AHS PAPER 340A	17 p2899 A69-33509 #
AGARDOGRAPH-114	08 p1292 A69-20992	AHS PAPER 341	17 p3059 A69-33506
AGARDOGRAPH-114	08 p1292 A69-20993	AHS PAPER 341A	17 p3059 A69-33505 #
AGARDOGRAPH-114	08 p1292 A69-20994	AHS PAPER 342	17 p3059 A69-33504 #
AGARDOGRAPH-118	08 p1257 A69-20949	AHS PAPER 342A	17 p3059 A69-33503
AGARDOGRAPH-118	08 p1257 A69-20950	AHS PAPER 343	17 p2899 A69-33508*#
AGARDOGRAPH-118	08 p1257 A69-20951	AHS PAPER 350	17 p2974 A69-33527
AGARDOGRAPH-118	08 p1257 A69-20952	AHS PAPER 351	17 p2900 A69-33526
AGARDOGRAPH-118	08 p1257 A69-20953*	AHS PAPER 352	17 p2915 A69-33525 #
AGARDOGRAPH-118	08 p1257 A69-20954	AHS PAPER 353	17 p2900 A69-33524 #
AGARDOGRAPH-118	08 p1257 A69-20955	AHS PAPER 354	17 p2900 A69-33523
AGARDOGRAPH-118	08 p1258 A69-20956	AHS PAPER 360	17 p2900 A69-33522
AGN-TP-229	10 p1699 A69-23051 #	AHS PAPER 361	17 p2946 A69-33521 #



# MEETING PAPER AND REPORT NUMBER INDEX

AHS PAPER 362	17 p2946 A69-33519 #	AIAA PAPER 68-17	16 p2766 A69-32167 #
AHS PAPER 363	17 p2900 A69-33520 #	AIAA PAPER 68-20	04 p0542 A69-14714**
AHS PAPER 370	17 p3060 A69-33518 #	AIAA PAPER 68-21	02 p0189 A69-12377 #
AHS PAPER 371	17 p3060 A69-33517 #	AIAA PAPER 68-25	04 p0604 A69-15512**
AHS PAPER 372	17 p3059 A69-33516 #	AIAA PAPER 68-26	13 p2222 A69-28216**
AHS PAPER 373	17 p2945 A69-33515 #	AIAA PAPER 68-30	02 p0282 A69-12503 #
AHS PAPER 374	17 p2900 A69-33514 #	AIAA PAPER 68-31	23 p4239 A69-41889**
AHS PAPER 375	17 p3059 A69-33513 #	AIAA PAPER 68-38	09 p1482 A69-21945 #
AHS PAPER 376	17 p2900 A69-33512 #	AIAA PAPER 68-39	09 p1482 A69-21943 #
AHS PAPER 378	17 p3059 A69-33511 #	AIAA PAPER 68-40	16 p2732 A69-31881**
AIAA PAPER 67-75	09 p1482 A69-21940 #	AIAA PAPER 68-41	16 p2770 A69-31888 #
AIAA PAPER 67-149	16 p2789 A69-31868**	AIAA PAPER 68-44	04 p0588 A69-14716**
AIAA PAPER 67-324	24 p4249 A69-43665**	AIAA PAPER 68-47	04 p0664 A69-15503**
AIAA PAPER 67-336	04 p0685 A69-14720 #	AIAA PAPER 68-55	01 p0006 A69-11016**
AIAA PAPER 67-391	12 p2148 A69-26759 #	AIAA PAPER 68-56	01 p0011 A69-11018 #
AIAA PAPER 67-397	01 p0010 A69-10636 #	AIAA PAPER 68-65	13 p2378 A69-28215**
AIAA PAPER 67-416	01 p0143 A69-11015 #	AIAA PAPER 68-66	16 p2732 A69-31887 #
AIAA PAPER 67-439	12 p2013 A69-26760 #	AIAA PAPER 68-67	23 p4059 A69-41883 #
AIAA PAPER 67-454	12 p2174 A69-26782**	AIAA PAPER 68-73	09 p1430 A69-21946 #
AIAA PAPER 67-478	21 p3769 A69-39751 #	AIAA PAPER 68-75	20 p3458 A69-37182 #
AIAA PAPER 67-479	23 p4239 A69-41893 #	AIAA PAPER 68-78	12 p2012 A69-26762**
AIAA PAPER 67-481	24 p4365 A69-43668 #	AIAA PAPER 68-79	12 p2012 A69-26761 #
AIAA PAPER 67-532	09 p1610 A69-21988 #	AIAA PAPER 68-81	13 p2248 A69-28212**
AIAA PAPER 67-535	09 p1610 A69-21986 #	AIAA PAPER 68-83	09 p1482 A69-21947**
AIAA PAPER 67-589	12 p2129 A69-26777 #	AIAA PAPER 68-86	04 p0635 A69-14702 #
AIAA PAPER 67-600	21 p3819 A69-39013 #	AIAA PAPER 68-87	02 p0291 A69-12505**
AIAA PAPER 67-620	04 p0629 A69-15501**	AIAA PAPER 68-94	23 p4215 A69-41879 #
AIAA PAPER 67-623	16 p2809 A69-31875 #	AIAA PAPER 68-97	02 p0189 A69-12522**
AIAA PAPER 67-644	04 p0586 A69-15502 #	AIAA PAPER 68-98	02 p0190 A69-12526 #
AIAA PAPER 67-657	13 p2312 A69-28219**	AIAA PAPER 68-100	16 p2732 A69-31882 #
AIAA PAPER 67-706	17 p2955 A69-33476**	AIAA PAPER 68-103	02 p0347 A69-12516**
AIAA PAPER 67-714	16 p2736 A69-32152 #	AIAA PAPER 68-108	04 p0676 A69-14706 #
AIAA PAPER 67-723	02 p0305 A69-12375**	AIAA PAPER 68-109	09 p1430 A69-21949 #
AIAA PAPER 67-728	13 p2325 A69-28220 #	AIAA PAPER 68-115	13 p2353 A69-28203**
AIAA PAPER 67-740	03 p0496 A69-13995	AIAA PAPER 68-121	04 p0554 A69-15506**
AIAA PAPER 67-752	01 p0006 A69-11014 #	AIAA PAPER 68-123	17 p2902 A69-34014 #
AIAA PAPER 67-878	02 p0334 A69-12367 #	AIAA PAPER 68-129	24 p4304 A69-43581 #
AIAA PAPER 67-911	01 p0037 A69-11024 #	AIAA PAPER 68-130	16 p2770 A69-31883 #
AIAA PAPER 67-955	21 p3839 A69-39216**	AIAA PAPER 68-132	16 p2770 A69-31880 #
AIAA PAPER 67-965	01 p0013 A69-11025 #	AIAA PAPER 68-134	16 p2821 A69-31873**
AIAA PAPER 67-988	13 p2225 A69-28201**	AIAA PAPER 68-135	16 p2772 A69-32153 #
AIAA PAPER 68-2	02 p0189 A69-12520**	AIAA PAPER 68-138	04 p0632 A69-14701 #
AIAA PAPER 68-10	01 p0007 A69-11027 #	AIAA PAPER 68-142	02 p0334 A69-12373**
AIAA PAPER 68-12	17 p2902 A69-34032 #	AIAA PAPER 68-143	02 p0346 A69-12508 #

MEETING PAPER AND REPORT NUMBER INDEX

AIAA PAPER 68-144	02 p0347 A69-12517 #	AIAA PAPER 68-360	12 p2059 A69-26766 #
AIAA PAPER 68-146	09 p1622 A69-21951 #	AIAA PAPER 68-361	11 p1819 A69-25373 #
AIAA PAPER 68-158	09 p1430 A69-21944 #	AIAA PAPER 68-366	09 p1570 A69-21957*#
AIAA PAPER 68-159	09 p1434 A69-21948*#	AIAA PAPER 68-367	09 p1477 A69-21993 #
AIAA PAPER 68-161	21 p3820 A69-39228*#	AIAA PAPER 68-371	09 p1477 A69-21960 #
AIAA PAPER 68-161	24 p4248 A69-43643 #	AIAA PAPER 68-371	09 p1477 A69-21961 #
AIAA PAPER 68-170	09 p1496 A69-21936*#	AIAA PAPER 68-375	13 p2241 A69-28211 #
AIAA PAPER 68-173	02 p0347 A69-12514*#	AIAA PAPER 68-377	13 p2242 A69-28213 #
AIAA PAPER 68-175	04 p0676 A69-14708 #	AIAA PAPER 68-395	12 p2059 A69-26769 #
AIAA PAPER 68-207	01 p0011 A69-11022 #	AIAA PAPER 68-398	17 p2947 A69-34024 #
AIAA PAPER 68-216	01 p0011 A69-11023 #	AIAA PAPER 68-399	17 p2947 A69-34022*#
AIAA PAPER 68-229	22 p3927 A69-40541 #	AIAA PAPER 68-401	24 p4298 A69-43714*#
AIAA PAPER 68-232	02 p0356 A69-12383 #	AIAA PAPER 68-402	17 p2947 A69-34023 #
AIAA PAPER 68-240	02 p0229 A69-12379*#	AIAA PAPER 68-403	02 p0250 A69-12392*#
AIAA PAPER 68-245	17 p2902 A69-34026 #	AIAA PAPER 68-407	04 p0604 A69-15514*#
AIAA PAPER 68-253	20 p3510 A69-37159 #	AIAA PAPER 68-412	21 p3678 A69-39762 #
AIAA PAPER 68-255	11 p1866 A69-25376 #	AIAA PAPER 68-430	12 p2041 A69-26786 #
AIAA PAPER 68-283	09 p1610 A69-21991*#	AIAA PAPER 68-432	09 p1455 A69-21989*#
AIAA PAPER 68-285	16 p2874 A69-32159 #	AIAA PAPER 68-437	09 p1442 A69-21990 #
AIAA PAPER 68-289	02 p0335 A69-12393 #	AIAA PAPER 68-439	04 p0579 A69-15367 #
AIAA PAPER 68-290	23 p4227 A69-41882 #	AIAA PAPER 68-445	22 p4036 A69-40543 #
AIAA PAPER 68-291	13 p2364 A69-28208 #	AIAA PAPER 68-447	09 p1610 A69-21983*#
AIAA PAPER 68-294	09 p1616 A69-21942 #	AIAA PAPER 68-449	21 p3674 A69-39019 #
AIAA PAPER 68-296	16 p2874 A69-32160 #	AIAA PAPER 68-454	21 p3674 A69-39226 #
AIAA PAPER 68-297	04 p0621 A69-15329 #	AIAA PAPER 68-456	21 p3817 A69-39757 #
AIAA PAPER 68-302	09 p1622 A69-21982*#	AIAA PAPER 68-465	04 p0646 A69-15505 #
AIAA PAPER 68-311	17 p2902 A69-34029 #	AIAA PAPER 68-471	13 p2295 A69-27247 #
AIAA PAPER 68-312	11 p1823 A69-25370 #	AIAA PAPER 68-487	12 p2094 A69-26771 #
AIAA PAPER 68-314	02 p0345 A69-12389*#	AIAA PAPER 68-504	12 p2118 A69-26784*#
AIAA PAPER 68-318	16 p2874 A69-32158 #	AIAA PAPER 68-507	03 p0450 A69-13910*#
AIAA PAPER 68-319	04 p0676 A69-14711 #	AIAA PAPER 68-512	02 p0345 A69-12371 #
AIAA PAPER 68-323	12 p2118 A69-26768 #	AIAA PAPER 68-516	04 p0552 A69-15322 #
AIAA PAPER 68-328	17 p3066 A69-34030 #	AIAA PAPER 68-519	04 p0646 A69-15510 #
AIAA PAPER 68-331	01 p0011 A69-11021 #	AIAA PAPER 68-530	21 p3786 A69-39217*#
AIAA PAPER 68-333	02 p0345 A69-12372*#	AIAA PAPER 68-532	12 p2191 A69-26788 #
AIAA PAPER 68-337	16 p2803 A69-32150 #	AIAA PAPER 68-543	09 p1570 A69-21985 #
AIAA PAPER 68-340	24 p4405 A69-43653 #	AIAA PAPER 68-550	17 p3022 A69-34019 #
AIAA PAPER 68-341	11 p1987 A69-25369 #	AIAA PAPER 68-552	21 p3785 A69-39212*#
AIAA PAPER 68-344	04 p0683 A69-15507*#	AIAA PAPER 68-553	21 p3786 A69-39754*#
AIAA PAPER 68-349	19 p3437 A69-35948 #	AIAA PAPER 68-560	12 p2017 A69-26770 #
AIAA PAPER 68-351	16 p2871 A69-31877 #	AIAA PAPER 68-564	17 p3022 A69-34021 #
AIAA PAPER 68-354	09 p1616 A69-21941 #	AIAA PAPER 68-576	02 p0229 A69-12385*#
AIAA PAPER 68-355	02 p0334 A69-12370*#	AIAA PAPER 68-580	17 p3022 A69-34018*#
AIAA PAPER 68-358	04 p0688 A69-15509 #	AIAA PAPER 68-581	20 p3585 A69-37151 #



# MEETING PAPER AND REPORT NUMBER INDEX

AIAA PAPER 68-585	19 p3394 A69-35945 #	AIAA PAPER 68-730	24 p4297 A69-43577 #
AIAA PAPER 68-589	21 p3768 A69-39026 #	AIAA PAPER 68-733	20 p3458 A69-37181 #
AIAA PAPER 68-590	09 p1539 A69-21984 #	AIAA PAPER 68-736	09 p1477 A69-22003 #
AIAA PAPER 68-591	21 p3769 A69-39752 #	AIAA PAPER 68-765	21 p3853 A69-39763 #
AIAA PAPER 68-594	20 p3461 A69-37152*#	AIAA PAPER 68-805	08 p1422 A69-20196 #
AIAA PAPER 68-604	04 p0591 A69-15516 #	AIAA PAPER 68-807	08 p1422 A69-20197 #
AIAA PAPER 68-610	21 p3768 A69-39219*#	AIAA PAPER 68-812	21 p3827 A69-39753*#
AIAA PAPER 68-612	19 p3371 A69-35942 #	AIAA PAPER 68-815	21 p3819 A69-39031*#
AIAA PAPER 68-614	09 p1570 A69-21981*#	AIAA PAPER 68-820	24 p4283 A69-43252 #
AIAA PAPER 68-617	09 p1570 A69-21978 #	AIAA PAPER 68-828	19 p3370 A69-35953*#
AIAA PAPER 68-627	19 p3429 A69-35947 #	AIAA PAPER 68-832	12 p2174 A69-26758 #
AIAA PAPER 68-629	09 p1442 A69-21980 #	AIAA PAPER 68-834	20 p3616 A69-37156*#
AIAA PAPER 68-630	02 p0232 A69-12382 #	AIAA PAPER 68-837	24 p4285 A69-43719 #
AIAA PAPER 68-631	21 p3785 A69-39025*#	AIAA PAPER 68-842	24 p4348 A69-43239*#
AIAA PAPER 68-635	20 p3631 A69-37188*#	AIAA PAPER 68-847	24 p4348 A69-43240 #
AIAA PAPER 68-636	20 p3585 A69-37150 #	AIAA PAPER 68-848	21 p3828 A69-39760*#
AIAA PAPER 68-637	12 p2014 A69-26767 #	AIAA PAPER 68-851	21 p3804 A69-39024*#
AIAA PAPER 68-639	17 p2902 A69-34028 #	AIAA PAPER 68-853	21 p3680 A69-39758 #
AIAA PAPER 68-641	17 p2957 A69-34015 #	AIAA PAPER 68-854	21 p3767 A69-39764*#
AIAA PAPER 68-642	13 p2244 A69-27246 #	AIAA PAPER 68-855	12 p2174 A69-26779 #
AIAA PAPER 68-644	19 p3448 A69-35943 #	AIAA PAPER 68-856	12 p2174 A69-26795*#
AIAA PAPER 68-649	17 p2896 A69-34020 #	AIAA PAPER 68-857	24 p4348 A69-43245*#
AIAA PAPER 68-657	19 p3394 A69-35944*#	AIAA PAPER 68-859	24 p4348 A69-43243 #
AIAA PAPER 68-664	23 p4059 A69-41890*#	AIAA PAPER 68-868	24 p4348 A69-43246*#
AIAA PAPER 68-668	23 p4059 A69-41892 #	AIAA PAPER 68-874	24 p4315 A69-43242 #
AIAA PAPER 68-669	20 p3514 A69-37184 #	AIAA PAPER 68-880	17 p2902 A69-34031 #
AIAA PAPER 68-671	23 p4059 A69-41891 #	AIAA PAPER 68-889	12 p2012 A69-26794 #
AIAA PAPER 68-672	20 p3458 A69-37185*#	AIAA PAPER 68-891	22 p3859 A69-40539 #
AIAA PAPER 68-673	23 p4060 A69-41902 #	AIAA PAPER 68-927	20 p3461 A69-37165 #
AIAA PAPER 68-675	09 p1431 A69-21992 #	AIAA PAPER 68-929	21 p3647 A69-39015*#
AIAA PAPER 68-683	24 p4304 A69-43578 #	AIAA PAPER 68-934	19 p3247 A69-35952*#
AIAA PAPER 68-685	24 p4360 A69-43697 #	AIAA PAPER 68-937	12 p2014 A69-26805 #
AIAA PAPER 68-693	23 p4151 A69-41887*#	AIAA PAPER 68-942	24 p4254 A69-43722 #
AIAA PAPER 68-698	24 p4249 A69-43675 #	AIAA PAPER 68-946	13 p2199 A69-28228 #
AIAA PAPER 68-706	13 p2313 A69-28232*#	AIAA PAPER 68-950	20 p3458 A69-37155*#
AIAA PAPER 68-708	24 p4359 A69-43644 #	AIAA PAPER 68-958	24 p4254 A69-43723 #
AIAA PAPER 68-709	24 p4359 A69-43572*#	AIAA PAPER 68-959	21 p3820 A69-39227 #
AIAA PAPER 68-712	22 p3979 A69-40548*#	AIAA PAPER 68-963	21 p3647 A69-39230 #
AIAA PAPER 68-713	13 p2249 A69-28231 #	AIAA PAPER 68-967	24 p4254 A69-43715*#
AIAA PAPER 68-714	24 p4359 A69-43570*#	AIAA PAPER 68-973	24 p4326 A69-43716 #
AIAA PAPER 68-720	23 p4059 A69-41886*#	AIAA PAPER 68-977	20 p3461 A69-37149 #
AIAA PAPER 68-723	12 p2094 A69-26783 #	AIAA PAPER 68-980	24 p4250 A69-43712 #
AIAA PAPER 68-727	24 p4316 A69-43571 #	AIAA PAPER 68-1008	12 p2012 A69-26789*#
AIAA PAPER 68-729	09 p1477 A69-21970 #	AIAA PAPER 68-1024	04 p0689 A69-14794 #

MEETING PAPER AND REPORT NUMBER INDEX

AIAA PAPER 68-1034	22 p3869 A69-40549 #	AIAA PAPER 69-1	06 p1039 A69-18196 #
AIAA PAPER 68-1037	20 p3586 A69-37153 #	AIAA PAPER 69-2	06 p0913 A69-18080 #
AIAA PAPER 68-1054	21 p3715 A69-39023*#	AIAA PAPER 69-3	06 p0985 A69-18124 #
AIAA PAPER 68-1054	03 p0512 A69-13699*#	AIAA PAPER 69-4	06 p0985 A69-18195*#
AIAA PAPER 68-1055	22 p4023 A69-40544*#	AIAA PAPER 69-5	06 p0862 A69-18048 #
AIAA PAPER 68-1059	12 p2174 A69-26797*#	AIAA PAPER 69-6	06 p0915 A69-18170 #
AIAA PAPER 68-1068	20 p3461 A69-37157 #	AIAA PAPER 69-7	06 p0913 A69-18095 #
AIAA PAPER 68-1072	12 p2059 A69-26773 #	AIAA PAPER 69-8	06 p0915 A69-18172 #
AIAA PAPER 68-1081	22 p4036 A69-40542*#	AIAA PAPER 69-9	06 p0912 A69-18075 #
AIAA PAPER 68-1082	19 p3429 A69-35949*#	AIAA PAPER 69-10	06 p0914 A69-18127 #
AIAA PAPER 68-1091	24 p4365 A69-43725 #	AIAA PAPER 69-11	06 p0915 A69-18213*#
AIAA PAPER 68-1094	12 p2174 A69-26804 #	AIAA PAPER 69-12	06 p0863 A69-18112 #
AIAA PAPER 68-1095	21 p3819 A69-39029 #	AIAA PAPER 69-14	06 p0997 A69-18160 #
AIAA PAPER 68-1101	20 p3573 A69-37160 #	AIAA PAPER 69-15	06 p0884 A69-18079*#
AIAA PAPER 68-1122	03 p0375 A69-13700*#	AIAA PAPER 69-17	06 p0884 A69-18202*#
AIAA PAPER 68-1139	22 p3927 A69-40547 #	AIAA PAPER 69-18	06 p0997 A69-18129 #
AIAA PAPER 68-1141	03 p0532 A69-13559 #	AIAA PAPER 69-19	06 p0996 A69-18113*#
AIAA PAPER 68-1142	03 p0519 A69-13558*#	AIAA PAPER 69-20	06 p0914 A69-18132 #
AIAA PAPER 68-1143	03 p0519 A69-13556*#	AIAA PAPER 69-21	06 p0869 A69-18144 #
AIAA PAPER 68-1144	03 p0521 A69-13673*#	AIAA PAPER 69-22	06 p1029 A69-18206 #
AIAA PAPER 68-1145	03 p0521 A69-13668 #	AIAA PAPER 69-23	06 p0862 A69-18040 #
AIAA PAPER 68-1145	24 p4394 A69-43250 #	AIAA PAPER 69-24	06 p1027 A69-18061*#
AIAA PAPER 68-1146	03 p0520 A69-13564*#	AIAA PAPER 69-25	06 p1036 A69-18072*#
AIAA PAPER 68-1146	21 p3828 A69-39761*#	AIAA PAPER 69-26	06 p1037 A69-18097 #
AIAA PAPER 68-1147	03 p0521 A69-13670*#	AIAA PAPER 69-27	06 p1039 A69-18211 #
AIAA PAPER 68-1148	03 p0412 A69-13672*#	AIAA PAPER 69-28	06 p1038 A69-18178 #
AIAA PAPER 68-1148	24 p4394 A69-43248*#	AIAA PAPER 69-29	06 p1039 A69-18205 #
AIAA PAPER 68-1150	03 p0520 A69-13565*#	AIAA PAPER 69-30	06 p1038 A69-18174 #
AIAA PAPER 68-1151	03 p0532 A69-13560 #	AIAA PAPER 69-31	06 p0915 A69-18223 #
AIAA PAPER 68-1151	24 p4414 A69-43567 #	AIAA PAPER 69-32	07 p1242 A69-19266 #
AIAA PAPER 68-1152	03 p0362 A69-13648 #	AIAA PAPER 69-33	06 p1038 A69-18146*#
AIAA PAPER 68-1153	04 p0686 A69-14873 #	AIAA PAPER 69-34	06 p0912 A69-18077 #
AIAA PAPER 68-1154	03 p0533 A69-13669 #	AIAA PAPER 69-35	06 p0913 A69-18094*#
AIAA PAPER 68-1155	03 p0416 A69-13674 #	AIAA PAPER 69-36	06 p0866 A69-18214 #
AIAA PAPER 68-1157	03 p0362 A69-13557 #	AIAA PAPER 69-37	06 p0865 A69-18167*#
AIAA PAPER 68-1158	03 p0362 A69-13566 #	AIAA PAPER 69-38	06 p0869 A69-18150 #
AIAA PAPER 68-1159	03 p0521 A69-13667*#	AIAA PAPER 69-39	06 p0913 A69-18103
AIAA PAPER 68-1162	03 p0521 A69-13671*#	AIAA PAPER 69-40	06 p0912 A69-18049 #
AIAA PAPER 68-1163	03 p0520 A69-13563 #	AIAA PAPER 69-43	06 p0915 A69-18180 #
AIAA PAPER 68-1164	03 p0520 A69-13562*#	AIAA PAPER 69-44	06 p0970 A69-18084 #
AIAA PAPER 68-1166	03 p0465 A69-13561 #	AIAA PAPER 69-45	06 p0971 A69-18091 #
AIAA PAPER 68-1166	22 p3979 A69-40551 #	AIAA PAPER 69-46	06 p0972 A69-18192 #
AIAA PAPER 68-8355	20 p3573 A69-37193*#	AIAA PAPER 69-47	06 p0972 A69-18186 #
AIAA PAPER 68-39016	21 p3851 A69-39016 #	AIAA PAPER 69-48	06 p0971 A69-18145*#



# MEETING PAPER AND REPORT NUMBER INDEX

AIAA PAPER 69-50	06 p1011 A69-18085 #	AIAA PAPER 69-94	06 p0930 A69-18099 #
AIAA PAPER 69-51	06 p1011 A69-18096**	AIAA PAPER 69-95	06 p1038 A69-18126**
AIAA PAPER 69-52	06 p1011 A69-18199 #	AIAA PAPER 69-96	06 p1039 A69-18212 #
AIAA PAPER 69-53	06 p1011 A69-18104**	AIAA PAPER 69-98	06 p1038 A69-18149**
AIAA PAPER 69-54	06 p1010 A69-18042**	AIAA PAPER 69-99	06 p1037 A69-18086 #
AIAA PAPER 69-55	06 p1027 A69-18070 #	AIAA PAPER 69-100	06 p1018 A69-18089 #
AIAA PAPER 69-56	06 p1029 A69-18193**	AIAA PAPER 69-101	06 p1018 A69-18156 #
AIAA PAPER 69-57	06 p1028 A69-18105 #	AIAA PAPER 69-102	06 p0862 A69-18039 #
AIAA PAPER 69-58	06 p1019 A69-18204**	AIAA PAPER 69-103	06 p1019 A69-18168 #
AIAA PAPER 69-59	06 p1028 A69-18143 #	AIAA PAPER 69-104	06 p1019 A69-18210**
AIAA PAPER 69-60	06 p0945 A69-18154**	AIAA PAPER 69-105	06 p1019 A69-18209**
AIAA PAPER 69-61	06 p0947 A69-18148 #	AIAA PAPER 69-106	06 p1037 A69-18087 #
AIAA PAPER 69-63	06 p0959 A69-18131 #	AIAA PAPER 69-107	06 p1039 A69-18185**
AIAA PAPER 69-64	06 p0959 A69-18125 #	AIAA PAPER 69-108	06 p0972 A69-18197 #
AIAA PAPER 69-65	06 p1040 A69-18215 #	AIAA PAPER 69-109	06 p0971 A69-18116 #
AIAA PAPER 69-66	06 p0914 A69-18115 #	AIAA PAPER 69-110	06 p0972 A69-18171**
AIAA PAPER 69-67	06 p0862 A69-18044 #	AIAA PAPER 69-111	06 p0985 A69-18175 #
AIAA PAPER 69-68	06 p0864 A69-18137 #	AIAA PAPER 69-112	06 p0971 A69-18140**
AIAA PAPER 69-69	06 p0864 A69-18164**	AIAA PAPER 69-113	06 p0971 A69-18123**
AIAA PAPER 69-70	06 p0864 A69-18158 #	AIAA PAPER 69-114	24 p4394 A69-43256**
AIAA PAPER 69-71	06 p0891 A69-18071 #	AIAA PAPER 69-114	06 p1018 A69-18108**
AIAA PAPER 69-72	06 p0956 A69-18136 #	AIAA PAPER 69-115	06 p1018 A69-18088 #
AIAA PAPER 69-72	07 p1177 A69-19179 #	AIAA PAPER 69-116	06 p1019 A69-18187**
AIAA PAPER 69-73	06 p0905 A69-18121 #	AIAA PAPER 69-117	24 p4301 A69-43259 #
AIAA PAPER 69-74	06 p0956 A69-18183**	AIAA PAPER 69-117	06 p0913 A69-18106 #
AIAA PAPER 69-75	06 p0868 A69-18058**	AIAA PAPER 69-118	06 p0872 A69-18147**
AIAA PAPER 69-76	06 p0956 A69-18081 #	AIAA PAPER 69-119	06 p1028 A69-18159 #
AIAA PAPER 69-77	06 p0905 A69-18092 #	AIAA PAPER 69-120	06 p1028 A69-18166 #
AIAA PAPER 69-78	06 p0971 A69-18128**	AIAA PAPER 69-121	06 p1027 A69-18069 #
AIAA PAPER 69-79	06 p0865 A69-18200 #	AIAA PAPER 69-122	06 p1029 A69-18216 #
AIAA PAPER 69-80	06 p0972 A69-18191 #	AIAA PAPER 69-123	06 p1028 A69-18142 #
AIAA PAPER 69-81	06 p0863 A69-18101 #	AIAA PAPER 69-124	06 p1011 A69-18090**
AIAA PAPER 69-82	06 p0915 A69-18190 #	AIAA PAPER 69-125	21 p3828 A69-39770**
AIAA PAPER 69-83	06 p1037 A69-18109**	AIAA PAPER 69-125	06 p1018 A69-18076**
AIAA PAPER 69-84	06 p0985 A69-18165 #	AIAA PAPER 69-126	06 p1010 A69-18065**
AIAA PAPER 69-85	06 p0984 A69-18082 #	AIAA PAPER 69-127	06 p1011 A69-18169 #
AIAA PAPER 69-86	06 p1037 A69-18119**	AIAA PAPER 69-128	06 p1018 A69-18107**
AIAA PAPER 69-87	06 p1036 A69-18054 #	AIAA PAPER 69-129	06 p1011 A69-18093 #
AIAA PAPER 69-88	06 p0983 A69-18118 #	AIAA PAPER 69-130	06 p0869 A69-18157 #
AIAA PAPER 69-89	06 p1028 A69-18133**	AIAA PAPER 69-131	06 p0868 A69-18134**
AIAA PAPER 69-90	06 p1027 A69-18074**	AIAA PAPER 69-132	06 p0863 A69-18062 #
AIAA PAPER 69-91	06 p1028 A69-18181 #	AIAA PAPER 69-133	06 p0862 A69-18050 #
AIAA PAPER 69-92	06 p1027 A69-18060 #	AIAA PAPER 69-134	06 p0864 A69-18161**
AIAA PAPER 69-93	06 p1029 A69-18194 #	AIAA PAPER 69-135	06 p0863 A69-18120 #

# MEETING PAPER AND REPORT NUMBER INDEX

AIAA PAPER 69-136	06 p0864 A69-18141 #	AIAA PAPER 69-179	06 p1036 A69-18083**
AIAA PAPER 69-137	06 p0913 A69-18078 #	AIAA PAPER 69-180	06 p1036 A69-18051 #
AIAA PAPER 69-138	06 p0911 A69-18041 #	AIAA PAPER 69-181	06 p0863 A69-18052**
AIAA PAPER 69-139	06 p0865 A69-18173 #	AIAA PAPER 69-182	11 p1940 A69-24907
AIAA PAPER 69-140	06 p0865 A69-18184**	AIAA PAPER 69-182	06 p1017 A69-18053 #
AIAA PAPER 69-141	06 p0866 A69-18208 #	AIAA PAPER 69-183	06 p0865 A69-18201 #
AIAA PAPER 69-142	09 p1560 A69-21900**	AIAA PAPER 69-184	06 p0908 A69-18207**
AIAA PAPER 69-143	06 p0885 A69-18111**	AIAA PAPER 69-185	06 p0914 A69-18135 #
AIAA PAPER 69-144	06 p0983 A69-18162 #	AIAA PAPER 69-186	06 p0863 A69-18068 #
AIAA PAPER 69-145	06 p1039 A69-18182**	AIAA PAPER 69-187	06 p0865 A69-18176**
AIAA PAPER 69-146	06 p0984 A69-18117**	AIAA PAPER 69-188	06 p0868 A69-18057 #
AIAA PAPER 69-147	06 p1037 A69-18114 #	AIAA PAPER 69-190	07 p1244 A69-19547 #
AIAA PAPER 69-148	06 p0947 A69-18155 #	AIAA PAPER 69-193	07 p1051 A69-19554 #
AIAA PAPER 69-149	06 p1038 A69-18179**	AIAA PAPER 69-194	07 p1055 A69-19566 #
AIAA PAPER 69-150	06 p0907 A69-18110 #	AIAA PAPER 69-195	07 p1055 A69-19563 #
AIAA PAPER 69-151	06 p1036 A69-18055**	AIAA PAPER 69-196	07 p1051 A69-19553 #
AIAA PAPER 69-152	06 p0929 A69-18098 #	AIAA PAPER 69-197	07 p1051 A69-19561 #
AIAA PAPER 69-154	06 p1044 A69-18122**	AIAA PAPER 69-198	07 p1056 A69-19567 #
AIAA PAPER 69-156	06 p1010 A69-18067 #	AIAA PAPER 69-199	07 p1055 A69-19555 #
AIAA PAPER 69-157	06 p0869 A69-18153 #	AIAA PAPER 69-200	07 p1056 A69-19571 #
AIAA PAPER 69-158	06 p0954 A69-18038**	AIAA PAPER 69-201	07 p1056 A69-19573 #
AIAA PAPER 69-159	06 p1018 A69-18066 #	AIAA PAPER 69-202	08 p1419 A69-21031 #
AIAA PAPER 69-160	06 p0912 A69-18073 #	AIAA PAPER 69-203	07 p1054 A69-19546**
AIAA PAPER 69-161	06 p0912 A69-18045 #	AIAA PAPER 69-204	07 p1054 A69-19548 #
AIAA PAPER 69-162	06 p0864 A69-18138 #	AIAA PAPER 69-205	07 p1055 A69-19559 #
AIAA PAPER 69-163	06 p0914 A69-18139 #	AIAA PAPER 69-206	07 p1057 A69-19577**
AIAA PAPER 69-164	24 p4386 A69-43261 #	AIAA PAPER 69-207	07 p1057 A69-19578 #
AIAA PAPER 69-164	24 p4306 A69-43685 #	AIAA PAPER 69-208	07 p1245 A69-19564 #
AIAA PAPER 69-164	06 p0914 A69-18163 #	AIAA PAPER 69-209	07 p1178 A69-19570 #
AIAA PAPER 69-165	06 p0912 A69-18043 #	AIAA PAPER 69-210	07 p1178 A69-19579 #
AIAA PAPER 69-166	06 p0907 A69-18189 #	AIAA PAPER 69-211	07 p1177 A69-19552**
AIAA PAPER 69-167	06 p1039 A69-18198 #	AIAA PAPER 69-212	07 p1056 A69-19574 #
AIAA PAPER 69-168	06 p0862 A69-18047 #	AIAA PAPER 69-213	07 p1054 A69-19549 #
AIAA PAPER 69-169	06 p0907 A69-18188 #	AIAA PAPER 69-214	07 p1237 A69-19576 #
AIAA PAPER 69-170	21 p3645 A69-39769 #	AIAA PAPER 69-215	07 p1237 A69-19569 #
AIAA PAPER 69-170	06 p0863 A69-18059 #	AIAA PAPER 69-216	07 p1056 A69-19575 #
AIAA PAPER 69-171	06 p0908 A69-18203 #	AIAA PAPER 69-217	07 p1055 A69-19558 #
AIAA PAPER 69-172	06 p1036 A69-18046**	AIAA PAPER 69-218	07 p1056 A69-19568 #
AIAA PAPER 69-173	06 p0983 A69-18151 #	AIAA PAPER 69-219	07 p1055 A69-19550 #
AIAA PAPER 69-174	06 p0912 A69-18056 #	AIAA PAPER 69-220	10 p1635 A69-24087 #
AIAA PAPER 69-175	06 p0983 A69-18152 #	AIAA PAPER 69-220	24 p4251 A69-42648
AIAA PAPER 69-176	06 p0983 A69-18102 #	AIAA PAPER 69-221	07 p1056 A69-19572 #
AIAA PAPER 69-177	06 p1036 A69-18063 #	AIAA PAPER 69-222	08 p1253 A69-21030 #
AIAA PAPER 69-178	06 p1037 A69-18100 #	AIAA PAPER 69-223	07 p1051 A69-19557 #



# MEETING PAPER AND REPORT NUMBER INDEX

AIAA PAPER 69-224	07 p1052 A69-19562 #	AIAA PAPER 69-269	09 p1560 A69-21215 #
AIAA PAPER 69-225	08 p1253 A69-21032 #	AIAA PAPER 69-270	09 p1565 A69-21252**
AIAA PAPER 69-226	07 p1121 A69-19565 #	AIAA PAPER 69-271	09 p1569 A69-21874**
AIAA PAPER 69-227	07 p1051 A69-19560 #	AIAA PAPER 69-272	09 p1492 A69-21217**
AIAA PAPER 69-228	07 p1051 A69-19551 #	AIAA PAPER 69-273	09 p1567 A69-21263**
AIAA PAPER 69-229	06 p0864 A69-18130 #	AIAA PAPER 69-274	09 p1565 A69-21250 #
AIAA PAPER 69-230	09 p1563 A69-21231**	AIAA PAPER 69-275	09 p1586 A69-21265 #
AIAA PAPER 69-231	09 p1566 A69-21254**	AIAA PAPER 69-276	09 p1568 A69-21727**
AIAA PAPER 69-232	09 p1562 A69-21225**	AIAA PAPER 69-277	09 p1543 A69-21264 #
AIAA PAPER 69-233	09 p1567 A69-21266**	AIAA PAPER 69-278	09 p1563 A69-21233**
AIAA PAPER 69-234	09 p1561 A69-21219**	AIAA PAPER 69-279	09 p1564 A69-21238 #
AIAA PAPER 69-235	09 p1566 A69-21255**	AIAA PAPER 69-280	09 p1562 A69-21228 #
AIAA PAPER 69-236	09 p1560 A69-21213**	AIAA PAPER 69-281	09 p1562 A69-21229 #
AIAA PAPER 69-237	09 p1565 A69-21246**	AIAA PAPER 69-282	09 p1563 A69-21235 #
AIAA PAPER 69-238	09 p1566 A69-21256**	AIAA PAPER 69-283	09 p1563 A69-21230 #
AIAA PAPER 69-239	09 p1564 A69-21240**	AIAA PAPER 69-284	09 p1564 A69-21237 #
AIAA PAPER 69-240	09 p1568 A69-21732 #	AIAA PAPER 69-285	09 p1565 A69-21247 #
AIAA PAPER 69-241	09 p1561 A69-21222 #	AIAA PAPER 69-286	09 p1567 A69-21267**
AIAA PAPER 69-242	09 p1563 A69-21236**	AIAA PAPER 69-287	09 p1566 A69-21257**
AIAA PAPER 69-243	09 p1564 A69-21239**	AIAA PAPER 69-288	09 p1565 A69-21248 #
AIAA PAPER 69-244	09 p1566 A69-21260 #	AIAA PAPER 69-292	09 p1569 A69-21875**
AIAA PAPER 69-245	09 p1566 A69-21259**	AIAA PAPER 69-293	09 p1561 A69-21223 #
AIAA PAPER 69-246	09 p1562 A69-21226 #	AIAA PAPER 69-294	09 p1563 A69-21232**
AIAA PAPER 69-247	09 p1565 A69-21251**	AIAA PAPER 69-296	09 p1560 A69-21212**
AIAA PAPER 69-248	09 p1561 A69-21216**	AIAA PAPER 69-297	24 p4365 A69-43238**
AIAA PAPER 69-249	09 p1538 A69-21249**	AIAA PAPER 69-297	09 p1561 A69-21218**
AIAA PAPER 69-250	09 p1539 A69-21253 #	AIAA PAPER 69-298	09 p1562 A69-21227 #
AIAA PAPER 69-251	09 p1586 A69-21245**	AIAA PAPER 69-299	09 p1564 A69-21241 #
AIAA PAPER 69-252	09 p1568 A69-21729 #	AIAA PAPER 69-300	09 p1569 A69-21880 #
AIAA PAPER 69-253	09 p1585 A69-21244**	AIAA PAPER 69-301	09 p1568 A69-21730 #
AIAA PAPER 69-254	09 p1569 A69-21879**	AIAA PAPER 69-302	09 p1569 A69-21876**
AIAA PAPER 69-255	09 p1561 A69-21220**	AIAA PAPER 69-303	10 p1753 A69-23362**
AIAA PAPER 69-256	09 p1560 A69-21214**	AIAA PAPER 69-304	09 p1562 A69-21224**
AIAA PAPER 69-257	09 p1569 A69-21878**	AIAA PAPER 69-305	09 p1478 A69-22377 #
AIAA PAPER 69-258	09 p1561 A69-21221**	AIAA PAPER 69-306	09 p1434 A69-22389 #
AIAA PAPER 69-259	09 p1569 A69-21877**	AIAA PAPER 69-307	09 p1478 A69-22382 #
AIAA PAPER 69-260	09 p1567 A69-21262**	AIAA PAPER 69-308	09 p1479 A69-22385 #
AIAA PAPER 69-261	09 p1567 A69-21261**	AIAA PAPER 69-308	22 p3927 A69-40552 #
AIAA PAPER 69-262	09 p1436 A69-21726**	AIAA PAPER 69-309	10 p1670 A69-23043 #
AIAA PAPER 69-263	09 p1568 A69-21728**	AIAA PAPER 69-310	09 p1479 A69-22388 #
AIAA PAPER 69-264	09 p1564 A69-21243**	AIAA PAPER 69-312	09 p1479 A69-22386 #
AIAA PAPER 69-265	09 p1566 A69-21258**	AIAA PAPER 69-314	09 p1478 A69-22380 #
AIAA PAPER 69-266	09 p1564 A69-21242 #	AIAA PAPER 69-315	09 p1434 A69-22379**
AIAA PAPER 69-267	09 p1563 A69-21234**	AIAA PAPER 69-316	09 p1434 A69-22391 #

MEETING PAPER AND REPORT NUMBER INDEX

AIAA PAPER 69-317	09 p1500 A69-22387 #	AIAA PAPER 69-367	13 p2366 A69-28299**
AIAA PAPER 69-318	09 p1611 A69-22383**	AIAA PAPER 69-368	13 p2367 A69-28300 #
AIAA PAPER 69-319	10 p1633 A69-23044 #	AIAA PAPER 69-369	13 p2367 A69-28301**
AIAA PAPER 69-321	09 p1478 A69-22378**	AIAA PAPER 69-370	13 p2367 A69-28302 #
AIAA PAPER 69-322	09 p1478 A69-22376 #	AIAA PAPER 69-371	13 p2367 A69-28303 #
AIAA PAPER 69-323	09 p1478 A69-22381 #	AIAA PAPER 69-372	13 p2367 A69-28304**
AIAA PAPER 69-324	09 p1479 A69-22384**	AIAA PAPER 69-375	13 p2367 A69-28305**
AIAA PAPER 69-325	09 p1479 A69-22390 #	AIAA PAPER 69-376	13 p2367 A69-28306 #
AIAA PAPER 69-326	07 p1055 A69-19556 #	AIAA PAPER 69-377	13 p2357 A69-28307**
AIAA PAPER 69-327	13 p2313 A69-28264**	AIAA PAPER 69-378	13 p2368 A69-28308 #
AIAA PAPER 69-328	13 p2200 A69-28263 #	AIAA PAPER 69-379	13 p2283 A69-28309 #
AIAA PAPER 69-330	13 p2242 A69-28266 #	AIAA PAPER 69-380	13 p2368 A69-28310 #
AIAA PAPER 69-331	13 p2242 A69-28267 #	AIAA PAPER 69-381	09 p1568 A69-21731**
AIAA PAPER 69-332	13 p2242 A69-28268 #	AIAA PAPER 69-386	15 p2590 A69-30476 #
AIAA PAPER 69-333	13 p2249 A69-28269 #	AIAA PAPER 69-387	15 p2591 A69-30477 #
AIAA PAPER 69-334	13 p2249 A69-28270 #	AIAA PAPER 69-397	15 p2591 A69-30478**
AIAA PAPER 69-335	13 p2242 A69-28271**	AIAA PAPER 69-416	15 p2550 A69-30480**
AIAA PAPER 69-336	13 p2242 A69-28272 #	AIAA PAPER 69-419	16 p2877 A69-31843 #
AIAA PAPER 69-337	13 p2200 A69-28273 #	AIAA PAPER 69-420	16 p2841 A69-32685 #
AIAA PAPER 69-338	13 p2325 A69-28274 #	AIAA PAPER 69-421	16 p2846 A69-32768**
AIAA PAPER 69-339	13 p2378 A69-28275 #	AIAA PAPER 69-422	19 p3394 A69-36300 #
AIAA PAPER 69-340	13 p2243 A69-28276 #	AIAA PAPER 69-423	16 p2804 A69-32710 #
AIAA PAPER 69-341	13 p2243 A69-28277 #	AIAA PAPER 69-424	16 p2844 A69-32723**
AIAA PAPER 69-342	13 p2243 A69-28278**	AIAA PAPER 69-425	16 p2832 A69-32653 #
AIAA PAPER 69-344	13 p2249 A69-28279 #	AIAA PAPER 69-427	16 p2734 A69-32769**
AIAA PAPER 69-345	13 p2249 A69-28280**	AIAA PAPER 69-428	16 p2733 A69-32731 #
AIAA PAPER 69-346	13 p2200 A69-28281**	AIAA PAPER 69-430	16 p2733 A69-32730 #
AIAA PAPER 69-347	13 p2263 A69-28282 #	AIAA PAPER 69-432	16 p2828 A69-31845 #
AIAA PAPER 69-348	13 p2243 A69-28283 #	AIAA PAPER 69-433	16 p2834 A69-32745**
AIAA PAPER 69-350	13 p2243 A69-28284 #	AIAA PAPER 69-434	16 p2870 A69-32765 #
AIAA PAPER 69-351	13 p2264 A69-28285 #	AIAA PAPER 69-435	16 p2846 A69-32776 #
AIAA PAPER 69-353	13 p2365 A69-28286 #	AIAA PAPER 69-436	16 p2747 A69-32777 #
AIAA PAPER 69-354	13 p2366 A69-28288**	AIAA PAPER 69-437	16 p2869 A69-32750 #
AIAA PAPER 69-355	13 p2365 A69-28287**	AIAA PAPER 69-438	16 p2834 A69-32704 #
AIAA PAPER 69-356	13 p2366 A69-28289 #	AIAA PAPER 69-439	16 p2882 A69-32654**
AIAA PAPER 69-357	13 p2366 A69-28290 #	AIAA PAPER 69-440	16 p2883 A69-32748 #
AIAA PAPER 69-358	13 p2264 A69-28291 #	AIAA PAPER 69-441	16 p2870 A69-32775 #
AIAA PAPER 69-359	13 p2366 A69-28292 #	AIAA PAPER 69-442	16 p2747 A69-32702**
AIAA PAPER 69-360	13 p2283 A69-28293 #	AIAA PAPER 69-443	16 p2839 A69-32666**
AIAA PAPER 69-361	13 p2366 A69-28294 #	AIAA PAPER 69-444	16 p2842 A69-32695 #
AIAA PAPER 69-363	13 p2366 A69-28295 #	AIAA PAPER 69-446	16 p2841 A69-32687**
AIAA PAPER 69-364	13 p2313 A69-28296**	AIAA PAPER 69-447	09 p1616 A69-21938 #
AIAA PAPER 69-365	13 p2357 A69-28297 #	AIAA PAPER 69-447	16 p2845 A69-32732**
AIAA-PAPER-69-366	13 p2213 A69-28298**	AIAA PAPER 69-448	16 p2733 A69-32684 #



# MEETING PAPER AND REPORT NUMBER INDEX

AIAA PAPER 69-449	16 p2843 A69-32700 #	AIAA PAPER 69-501	16 p2835 A69-32758 #
AIAA PAPER 69-450	16 p2773 A69-32754**	AIAA PAPER 69-502	16 p2834 A69-32752 #
AIAA PAPER 69-451	16 p2839 A69-32669**	AIAA PAPER 69-503	16 p2833 A69-32688 #
AIAA PAPER 69-452	16 p2841 A69-32690 #	AIAA PAPER 69-504	16 p2833 A69-32679 #
AIAA PAPER 69-453	16 p2841 A69-32683 #	AIAA PAPER 69-505	16 p2845 A69-32762**
AIAA PAPER 69-456	19 p3448 A69-36333 #	AIAA PAPER 69-506	16 p2846 A69-32778**
AIAA PAPER 69-457	16 p2881 A69-32767**	AIAA PAPER 69-507	16 p2829 A69-31848 #
AIAA PAPER 69-458	16 p2880 A69-32743 #	AIAA PAPER 69-507	16 p2835 A69-32772**
AIAA PAPER 69-460	16 p2880 A69-32650 #	AIAA PAPER 69-508	16 p2839 A69-32671**
AIAA PAPER 69-461	16 p2869 A69-32749 #	AIAA PAPER 69-509	16 p2844 A69-32718**
AIAA PAPER 69-463	16 p2734 A69-32766 #	AIAA PAPER 69-510	16 p2741 A69-32720**
AIAA PAPER 69-465	16 p2842 A69-32698 #	AIAA PAPER 69-511	16 p2810 A69-32712**
AIAA PAPER 69-466	16 p2795 A69-32763 #	AIAA PAPER 69-512	16 p2810 A69-31846 #
AIAA PAPER 69-468	16 p2838 A69-32657**	AIAA PAPER 69-513	16 p2810 A69-32656 #
AIAA PAPER 69-469	16 p2832 A69-32659 #	AIAA PAPER 69-514	19 p3372 A69-36301 #
AIAA PAPER 69-470	16 p2838 A69-32663 #	AIAA PAPER 69-515	18 p3170 A69-34809 #
AIAA PAPER 69-471	17 p3075 A69-34200 #	AIAA PAPER 69-516	16 p2767 A69-32664 #
AIAA PAPER 69-472	16 p2733 A69-32652**	AIAA PAPER 69-517	17 p2978 A69-33033 #
AIAA PAPER 69-473	16 p2844 A69-32726**	AIAA PAPER 69-518	16 p2833 A69-32665 #
AIAA PAPER 69-474	16 p2881 A69-32780**	AIAA PAPER 69-519	16 p2793 A69-31850 #
AIAA PAPER 69-475	16 p2810 A69-32716**	AIAA PAPER 69-520	16 p2795 A69-32779 #
AIAA PAPER 69-476	16 p2795 A69-32771 #	AIAA PAPER 69-522	16 p2843 A69-32711**
AIAA PAPER 69-477	16 p2811 A69-32728**	AIAA PAPER 69-523	16 p2843 A69-32703 #
AIAA PAPER 69-478	16 p2834 A69-32734 #	AIAA PAPER 69-524	16 p2838 A69-32662 #
AIAA PAPER 69-479	16 p2834 A69-32725 #	AIAA PAPER 69-525	16 p2841 A69-32686**
AIAA PAPER 69-480	16 p2834 A69-32736 #	AIAA PAPER 69-526	16 p2845 A69-32737**
AIAA PAPER 69-481	16 p2844 A69-32719**	AIAA PAPER 69-527	16 p2838 A69-32651 #
AIAA PAPER 69-483	16 p2841 A69-32689 #	AIAA PAPER 69-528	16 p2767 A69-32717**
AIAA PAPER 69-484	16 p2841 A69-32682 #	AIAA PAPER 69-529	16 p2868 A69-32713 #
AIAA PAPER 69-485	16 p2842 A69-32694 #	AIAA PAPER 69-531	16 p2833 A69-32691**
AIAA PAPER 69-486	16 p2842 A69-32697 #	AIAA PAPER 69-534	16 p2810 A69-32707 #
AIAA PAPER 69-487	16 p2840 A69-32676**	AIAA PAPER 69-535	16 p2810 A69-32660**
AIAA PAPER 69-488	16 p2843 A69-32706**	AIAA PAPER 69-537	16 p2747 A69-32701 #
AIAA PAPER 69-489	16 p2746 A69-32764 #	AIAA PAPER 69-538	16 p2843 A69-32705**
AIAA PAPER 69-491	16 p2839 A69-32667 #	AIAA PAPER 69-539	16 p2877 A69-31844 #
AIAA PAPER 69-492	16 p2767 A69-32727 #	AIAA PAPER 69-540	16 p2880 A69-32742 #
AIAA PAPER 69-493	19 p3394 A69-36299 #	AIAA PAPER 69-541	16 p2844 A69-32724 #
AIAA PAPER 69-494	16 p2845 A69-32735**	AIAA PAPER 69-542	16 p2843 A69-32699 #
AIAA PAPER 69-495	16 p2846 A69-32773 #	AIAA PAPER 69-543	16 p2841 A69-32681 #
AIAA PAPER 69-496	16 p2838 A69-32649 #	AIAA PAPER 69-544	16 p2792 A69-32692 #
AIAA PAPER 69-497	16 p2838 A69-32655 #	AIAA PAPER 69-545	16 p2735 A69-32756 #
AIAA PAPER 69-498	16 p2843 A69-32708**	AIAA PAPER 69-546	16 p2845 A69-32744**
AIAA PAPER 69-499	16 p2844 A69-32714**	AIAA PAPER 69-547	16 p2869 A69-32729 #
AIAA PAPER 69-500	16 p2833 A69-32661 #	AIAA PAPER 69-548	16 p2868 A69-32658**

# MEETING PAPER AND REPORT NUMBER INDEX

AIAA PAPER 69-549	16 p2845 A69-32759*#	AIAA PAPER 69-602	17 p3070 A69-33260 #
AIAA PAPER 69-550	18 p3140 A69-34414 #	AIAA PAPER 69-603	17 p3073 A69-33298 #
AIAA PAPER 69-551	18 p3140 A69-34415*#	AIAA PAPER 69-605	17 p3072 A69-33282 #
AIAA PAPER 69-552	16 p2741 A69-32747*#	AIAA PAPER 69-606	17 p3072 A69-33279 #
AIAA PAPER 69-553	16 p2840 A69-32678*#	AIAA PAPER 69-607	17 p3073 A69-33300*#
AIAA PAPER 69-554	16 p2811 A69-32761*#	AIAA PAPER 69-608	17 p3072 A69-33275*#
AIAA PAPER 69-555	16 p2867 A69-31849*#	AIAA PAPER 69-609	17 p3073 A69-33304*#
AIAA PAPER 69-556	16 p2811 A69-32739 #	AIAA PAPER 69-610	17 p3072 A69-33274*#
AIAA PAPER 69-559	16 p2880 A69-32740 #	AIAA PAPER 69-611	17 p3049 A69-33295 #
AIAA PAPER 69-561	16 p2833 A69-32680 #	AIAA PAPER 69-612	17 p3049 A69-33296 #
AIAA PAPER 69-562	16 p2880 A69-32741 #	AIAA PAPER 69-613	17 p3049 A69-33267*#
AIAA PAPER 69-563	16 p2834 A69-32722 #	AIAA PAPER 69-614	17 p3071 A69-33266 #
AIAA PAPER 69-564	16 p2869 A69-32733 #	AIAA PAPER 69-615	17 p3070 A69-33261*#
AIAA PAPER 69-565	16 p2865 A69-32770 #	AIAA PAPER 69-616	17 p2903 A69-33307 #
AIAA PAPER 69-566	16 p2870 A69-32755*#	AIAA PAPER 69-617	17 p2914 A69-33278 #
AIAA PAPER 69-567	16 p2868 A69-32721*#	AIAA PAPER 69-618	17 p3074 A69-33704 #
AIAA PAPER 69-568	16 p2842 A69-32693 #	AIAA PAPER 69-619	17 p2914 A69-33293*#
AIAA PAPER 69-569	16 p2842 A69-32696 #	AIAA PAPER 69-620	17 p2914 A69-33303*#
AIAA PAPER 69-570	16 p2733 A69-32751*#	AIAA PAPER 69-621	17 p2914 A69-33305 #
AIAA PAPER 69-571	16 p2869 A69-32753*#	AIAA PAPER 69-622	17 p3071 A69-33271*#
AIAA PAPER 69-572	16 p2731 A69-31847 #	AIAA PAPER 69-623	17 p3072 A69-33283 #
AIAA PAPER 69-573	16 p2840 A69-32677 #	AIAA PAPER 69-624	17 p3070 A69-33259*#
AIAA PAPER 69-574	16 p2870 A69-32774 #	AIAA PAPER 69-625	17 p3005 A69-33301 #
AIAA PAPER 69-575	16 p2869 A69-32746 #	AIAA PAPER 69-626	17 p3073 A69-33297*#
AIAA PAPER 69-578	16 p2845 A69-32738 #	AIAA PAPER 69-627	17 p3071 A69-33269*#
AIAA PAPER 69-579	16 p2767 A69-32715 #	AIAA PAPER 69-628	17 p3073 A69-33309*#
AIAA PAPER 69-580	16 p2839 A69-32670 #	AIAA PAPER 69-629	17 p3073 A69-33299*#
AIAA PAPER 69-582	16 p2839 A69-32668 #	AIAA PAPER 69-630	17 p3072 A69-33277 #
AIAA PAPER 69-583	16 p2794 A69-32757*#	AIAA PAPER 69-631	17 p3071 A69-33268 #
AIAA PAPER 69-585	16 p2803 A69-32760*#	AIAA PAPER 69-632	17 p3070 A69-33262 #
AIAA PAPER 69-588	17 p3071 A69-33265 #	AIAA PAPER 69-633	17 p3072 A69-33294 #
AIAA PAPER 69-589	17 p2961 A69-33284 #	AIAA PAPER 69-634	17 p2891 A69-33281*#
AIAA PAPER 69-590	17 p2973 A69-33286 #	AIAA PAPER 69-635	17 p2890 A69-33272*#
AIAA PAPER 69-591	17 p2961 A69-33292 #	AIAA PAPER 69-636	17 p3070 A69-33258*#
AIAA PAPER 69-592	17 p3071 A69-33263 #	AIAA PAPER 69-637	17 p2891 A69-33290*#
AIAA PAPER 69-593	17 p3033 A69-33302 #	AIAA PAPER 69-638	17 p3073 A69-33311 #
AIAA PAPER 69-594	17 p3033 A69-33287*#	AIAA PAPER 69-639	17 p2992 A69-33288*#
AIAA PAPER 69-595	17 p3033 A69-33291*#	AIAA PAPER 69-640	17 p2992 A69-33289 #
AIAA PAPER 69-596	17 p3033 A69-33308 #	AIAA PAPER 69-641	17 p2993 A69-33762*#
AIAA PAPER 69-597	17 p3032 A69-33276*#	AIAA PAPER 69-642	17 p2991 A69-33273*#
AIAA PAPER 69-598	17 p3033 A69-33285*#	AIAA PAPER 69-643	17 p3005 A69-33306*#
AIAA PAPER 69-599	17 p2973 A69-33264*#	AIAA PAPER 69-644	17 p3071 A69-33270*#
AIAA PAPER 69-600	17 p2973 A69-33280 #	AIAA PAPER 69-645	17 p2892 A69-33478*#
AIAA PAPER 69-601	17 p3010 A69-33310 #	AIAA PAPER 69-646	17 p2893 A69-33486*#



# MEETING PAPER AND REPORT NUMBER INDEX

AIAA PAPER 69-647	17 p2891 A69-33459**	AIAA PAPER 69-701	17 p2920 A69-33461 #
AIAA PAPER 69-648	17 p2893 A69-33496 #	AIAA PAPER 69-702	17 p3011 A69-33473 #
AIAA PAPER 69-649	17 p2892 A69-33468 #	AIAA PAPER 69-703	17 p3011 A69-33479**
AIAA PAPER 69-650	17 p2956 A69-33485 #	AIAA PAPER 69-704	17 p2953 A69-33453**
AIAA PAPER 69-652	17 p2892 A69-33464**	AIAA PAPER 69-705	17 p2954 A69-33455 #
AIAA PAPER 69-653	17 p2954 A69-33458 #	AIAA PAPER 69-707	17 p2953 A69-33448 #
AIAA PAPER 69-654	17 p2894 A69-33502**	AIAA PAPER 69-708	17 p2894 A69-33501 #
AIAA PAPER 69-655	17 p2892 A69-33469 #	AIAA PAPER 69-709	17 p2955 A69-33480 #
AIAA PAPER 69-656	17 p2893 A69-33498 #	AIAA PAPER 69-710	17 p2955 A69-33467 #
AIAA PAPER 69-657	17 p2892 A69-33465 #	AIAA PAPER 69-711	17 p2891 A69-33445 #
AIAA PAPER 69-658	17 p2893 A69-33490 #	AIAA PAPER 69-713	18 p3085 A69-34417 #
AIAA PAPER 69-660	17 p2945 A69-33471**	AIAA PAPER 69-714	17 p2894 A69-33500 #
AIAA PAPER 69-664	17 p2953 A69-33437**	AIAA PAPER 69-716	17 p2891 A69-33463**
AIAA PAPER 69-665	17 p2954 A69-33460 #	AIAA PAPER 69-717	17 p2952 A69-33435 #
AIAA PAPER 69-666	17 p2955 A69-33462**	AIAA PAPER 69-718	17 p2893 A69-33487 #
AIAA PAPER 69-667	17 p2954 A69-33457**	AIAA PAPER 69-719	18 p3084 A69-34416**
AIAA PAPER 69-668	17 p2893 A69-33491 #	AIAA PAPER 69-721	17 p2892 A69-33484 #
AIAA PAPER 69-669	17 p2954 A69-33456 #	AIAA PAPER 69-722	17 p3012 A69-33494 #
AIAA PAPER 69-670	17 p2945 A69-33449 #	AIAA PAPER 69-723	17 p3012 A69-33497 #
AIAA PAPER 69-671	17 p2997 A69-33499 #	AIAA PAPER 69-724	17 p2952 A69-33436**
AIAA PAPER 69-672	17 p2953 A69-33439 #	AIAA PAPER 69-725	17 p3012 A69-33493**
AIAA PAPER 69-673	17 p2893 A69-33488 #	AIAA PAPER 69-726	17 p3011 A69-33472 #
AIAA PAPER 69-676	17 p2961 A69-33452**	AIAA PAPER 69-727	17 p3004 A69-33483**
AIAA PAPER 69-678	17 p3021 A69-33444 #	AIAA PAPER 69-732	16 p2840 A69-32674**
AIAA PAPER 69-679	17 p2953 A69-33440 #	AIAA PAPER 69-733	16 p2839 A69-32672 #
AIAA PAPER 69-680	17 p2953 A69-33450 #	AIAA PAPER 69-734	16 p2846 A69-32781 #
AIAA PAPER 69-681	17 p2956 A69-33495 #	AIAA PAPER 69-737	18 p3083 A69-34402 #
AIAA PAPER 69-682	17 p2952 A69-33434 #	AIAA PAPER 69-738	18 p3083 A69-34404 #
AIAA PAPER 69-683	17 p2956 A69-33492 #	AIAA PAPER 69-739	18 p3083 A69-34401 #
AIAA PAPER 69-684	17 p2955 A69-33474**	AIAA PAPER 69-740	18 p3083 A69-34405 #
AIAA PAPER 69-685	17 p2956 A69-33489 #	AIAA PAPER 69-741	18 p3084 A69-34406 #
AIAA PAPER 69-686	17 p2953 A69-33441**	AIAA PAPER 69-742	18 p3084 A69-34407**
AIAA PAPER 69-687	17 p2955 A69-33470 #	AIAA PAPER 69-743	18 p3114 A69-34408 #
AIAA PAPER 69-688	17 p2954 A69-33454 #	AIAA PAPER 69-745	18 p3084 A69-34412 #
AIAA PAPER 69-689	17 p2955 A69-33481 #	AIAA PAPER 69-746	18 p3084 A69-34409 #
AIAA PAPER 69-692	17 p3011 A69-33446 #	AIAA PAPER 69-750	18 p3084 A69-34410 #
AIAA PAPER 69-693	17 p2945 A69-33447 #	AIAA PAPER 69-755	18 p3084 A69-34411 #
AIAA PAPER 69-694	17 p3074 A69-33477 #	AIAA PAPER 69-757	19 p3245 A69-35652 #
AIAA PAPER 69-695	17 p3010 A69-33442**	AIAA PAPER 69-758	19 p3248 A69-36295 #
AIAA PAPER 69-696	17 p3011 A69-33451 #	AIAA PAPER 69-759	19 p3245 A69-35661 #
AIAA PAPER 69-697	17 p3011 A69-33466 #	AIAA PAPER 69-760	19 p3434 A69-35660 #
AIAA PAPER 69-698	17 p3010 A69-33438**	AIAA PAPER 69-761	19 p3433 A69-35659 #
AIAA PAPER 69-699	17 p3011 A69-33475 #	AIAA PAPER 69-763	19 p3329 A69-36298 #
AIAA PAPER 69-700	17 p2974 A69-33443 #	AIAA PAPER 69-764	19 p3433 A69-35658 #

# MEETING PAPER AND REPORT NUMBER INDEX

AIAA PAPER 69-766	19 p3433 A69-35657*#	AIAA PAPER 69-822	19 p3243 A69-35599 #
AIAA PAPER 69-767	19 p3245 A69-35656 #	AIAA PAPER 69-823	16 p2840 A69-32675*#
AIAA PAPER 69-768	19 p3245 A69-35655 #	AIAA PAPER 69-826	16 p2741 A69-32709*#
AIAA PAPER 69-769	19 p3245 A69-35654 #	AIAA PAPER 69-827	16 p2840 A69-32673 #
AIAA PAPER 69-770	19 p3245 A69-35651 #	AIAA PAPER 69-828	19 p3243 A69-35598 #
AIAA PAPER 69-771	19 p3245 A69-35653 #	AIAA PAPER 69-830	19 p3248 A69-36296 #
AIAA PAPER 69-772	19 p3244 A69-35650 #	AIAA PAPER 69-831	07 p1228 A69-18345 #
AIAA PAPER 69-773	19 p3244 A69-35649*#	AIAA PAPER 69-832	21 p3821 A69-39363 #
AIAA PAPER 69-774	19 p3244 A69-35648*#	AIAA PAPER 69-833	21 p3821 A69-39364 #
AIAA PAPER 69-775	19 p3244 A69-35646 #	AIAA PAPER 69-834	21 p3822 A69-39365 #
AIAA PAPER 69-776	19 p3244 A69-35647 #	AIAA PAPER 69-835	21 p3761 A69-39366 #
AIAA PAPER 69-777	19 p3393 A69-35645 #	AIAA PAPER 69-836	21 p3732 A69-39367*#
AIAA PAPER 69-778	19 p3237 A69-35644*#	AIAA PAPER 69-837	21 p3761 A69-39368 #
AIAA PAPER 69-779	19 p3392 A69-35643 #	AIAA PAPER 69-838	21 p3761 A69-39369 #
AIAA PAPER 69-784	19 p3244 A69-35642 #	AIAA PAPER 69-840	21 p3686 A69-39371 #
AIAA PAPER 69-785	19 p3453 A69-35597 #	AIAA PAPER 69-841	21 p3762 A69-39372 #
AIAA PAPER 69-787	19 p3243 A69-35641 #	AIAA PAPER 69-842	21 p3765 A69-39429*#
AIAA PAPER 69-788	19 p3249 A69-35640 #	AIAA PAPER 69-843	21 p3786 A69-39373*#
AIAA PAPER 69-790	19 p3243 A69-35639*#	AIAA PAPER 69-844	21 p3822 A69-39374*#
AIAA PAPER 69-791	19 p3243 A69-35638 #	AIAA PAPER 69-845	21 p3822 A69-39375*#
AIAA PAPER 69-792	19 p3243 A69-35637 #	AIAA PAPER 69-846	21 p3822 A69-39376*#
AIAA PAPER 69-793	19 p3238 A69-36297 #	AIAA PAPER 69-847	21 p3762 A69-39377 #
AIAA PAPER 69-794	19 p3237 A69-35636*#	AIAA PAPER 69-848	21 p3762 A69-39378 #
AIAA PAPER 69-795	19 p3367 A69-35635 #	AIAA PAPER 69-849	21 p3765 A69-39424 #
AIAA PAPER 69-796	19 p3367 A69-35634 #	AIAA PAPER 69-850	21 p3765 A69-39426 #
AIAA PAPER 69-797	19 p3367 A69-35633 #	AIAA PAPER 69-851	21 p3762 A69-39379*#
AIAA PAPER 69-798	19 p3367 A69-35632 #	AIAA PAPER 69-852	21 p3686 A69-39380 #
AIAA PAPER 69-799	19 p3367 A69-35631 #	AIAA PAPER 69-853	21 p3687 A69-39381 #
AIAA PAPER 69-800	19 p3453 A69-35593 #	AIAA PAPER 69-854	21 p3822 A69-39382 #
AIAA PAPER 69-802	19 p3288 A69-35594 #	AIAA PAPER 69-855	21 p3822 A69-39383 #
AIAA PAPER 69-803	19 p3453 A69-35596 #	AIAA PAPER 69-856	21 p3823 A69-39384*#
AIAA PAPER 69-804	19 p3288 A69-35592 #	AIAA PAPER 69-857	21 p3823 A69-39385 #
AIAA PAPER 69-805	19 p3288 A69-35591 #	AIAA PAPER 69-858	21 p3762 A69-39386*#
AIAA PAPER 69-806	19 p3288 A69-35590 #	AIAA PAPER 69-859	21 p3725 A69-39387 #
AIAA PAPER 69-808	19 p3289 A69-35623 #	AIAA PAPER 69-860	21 p3690 A69-39388 #
AIAA PAPER 69-809	19 p3289 A69-35622 #	AIAA PAPER 69-861	21 p3762 A69-39389 #
AIAA PAPER 69-810	19 p3289 A69-35630 #	AIAA PAPER 69-863	21 p3690 A69-39423 #
AIAA PAPER 69-811	19 p3289 A69-35629 #	AIAA PAPER 69-864	21 p3762 A69-39390*#
AIAA PAPER 69-812	19 p3243 A69-35628 #	AIAA PAPER 69-865	21 p3763 A69-39391*#
AIAA PAPER 69-813	19 p3366 A69-35627 #	AIAA PAPER 69-866	21 p3725 A69-39392 #
AIAA PAPER 69-814	19 p3289 A69-35626 #	AIAA PAPER 69-867	21 p3823 A69-39393 #
AIAA PAPER 69-817	19 p3366 A69-35625 #	AIAA PAPER 69-868	21 p3809 A69-39394*#
AIAA PAPER 69-818	19 p3453 A69-35624*#	AIAA PAPER 69-869	21 p3763 A69-39395 #
AIAA PAPER 69-820	19 p3453 A69-35595 #	AIAA PAPER 69-870	21 p3763 A69-39396*#



# MEETING PAPER AND REPORT NUMBER INDEX

ATAA PAPER 69-871	21 p3675 A69-39397 #	ATAA PAPER 69-919	21 p3820 A69-39349 #
ATAA PAPER 69-871	21 p3786 A69-39867	ATAA PAPER 69-920	21 p3821 A69-39350**
ATAA PAPER 69-872	21 p3675 A69-39398 #	ATAA PAPER 69-921	21 p3821 A69-39351 #
ATAA PAPER 69-873	21 p3763 A69-39399 #	ATAA PAPER 69-922	21 p3821 A69-39353 #
ATAA PAPER 69-874	21 p3823 A69-39400 #	ATAA PAPER 69-923	21 p3821 A69-39354 #
ATAA PAPER 69-875	21 p3823 A69-39401 #	ATAA PAPER 69-924	21 p3809 A69-39362**
ATAA PAPER 69-876	21 p3824 A69-39402**	ATAA PAPER 69-925	21 p3808 A69-39352 #
ATAA PAPER 69-877	21 p3824 A69-39403**	ATAA PAPER 69-926	21 p3808 A69-39355**
ATAA PAPER 69-878	21 p3824 A69-39404 #	ATAA PAPER 69-927	21 p3761 A69-39356 #
ATAA PAPER 69-879	21 p3763 A69-39405**	ATAA PAPER 69-928	21 p3808 A69-39357 #
ATAA PAPER 69-880	21 p3763 A69-39406**	ATAA PAPER 69-929	21 p3809 A69-39358 #
ATAA PAPER 69-881	21 p3764 A69-39407 #	ATAA PAPER 69-931	21 p3809 A69-39359 #
ATAA PAPER 69-882	21 p3764 A69-39408**	ATAA PAPER 69-932	21 p3809 A69-39361**
ATAA PAPER 69-883	21 p3764 A69-39409**	ATAA PAPER 69-933	21 p3809 A69-39360 #
ATAA PAPER 69-884	21 p3764 A69-39411 #	ATAA PAPER 69-934	21 p3824 A69-39428 #
ATAA PAPER 69-885	21 p3764 A69-39410**	ATAA PAPER 69-935	21 p3649 A69-39427 #
ATAA PAPER 69-886	21 p3764 A69-39412**	ATAA PAPER 69-937	22 p4036 A69-40320 #
ATAA PAPER 69-887	21 p3647 A69-39413**	ATAA PAPER 69-938	22 p4020 A69-40321 #
ATAA PAPER 69-888	21 p3765 A69-39414**	ATAA PAPER 69-939	22 p3904 A69-40322 #
ATAA PAPER 69-890	21 p3678 A69-39415 #	ATAA PAPER 69-940	22 p3919 A69-40323**
ATAA PAPER 69-891	21 p3824 A69-39416 #	ATAA PAPER 69-941	22 p3917 A69-40324 #
ATAA PAPER 69-892	21 p3824 A69-39417**	ATAA PAPER 69-942	22 p3904 A69-40325 #
ATAA PAPER 69-893	21 p3648 A69-39425 #	ATAA PAPER 69-943	22 p3904 A69-40326 #
ATAA PAPER 69-894	21 p3648 A69-39418 #	ATAA PAPER 69-944	22 p3978 A69-40327**
ATAA PAPER 69-895	21 p3648 A69-39419 #	ATAA PAPER 69-945	22 p4036 A69-40328**
ATAA PAPER 69-896	21 p3648 A69-39420 #	ATAA PAPER 69-946	22 p3974 A69-40329 #
ATAA PAPER 69-897	21 p3648 A69-39421 #	ATAA PAPER 69-947	22 p3975 A69-40330 #
ATAA PAPER 69-898	21 p3648 A69-39422 #	ATAA PAPER 69-948	22 p4021 A69-40331 #
ATAA PAPER 69-899	21 p3761 A69-39334**	ATAA PAPER 69-950	22 p3975 A69-40332 #
ATAA PAPER 69-901	21 p3806 A69-39335 #	ATAA PAPER 69-951	22 p3975 A69-40333**
ATAA PAPER 69-902	21 p3761 A69-39348**	ATAA PAPER 69-952	22 p3904 A69-40334 #
ATAA PAPER 69-903	21 p3798 A69-38546**	ATAA PAPER 69-953	22 p3904 A69-40335**
ATAA PAPER 69-904	21 p3806 A69-39336 #	ATAA PAPER 69-954	22 p3905 A69-40336 #
ATAA PAPER 69-905	21 p3806 A69-39337**	ATAA PAPER 69-955	22 p3905 A69-40337 #
ATAA PAPER 69-906	21 p3807 A69-39338 #	ATAA PAPER 69-956	22 p3905 A69-40338 #
ATAA PAPER 69-907	21 p3807 A69-39339**	ATAA PAPER 69-957	22 p3905 A69-40339**
ATAA PAPER 69-908	21 p3807 A69-39340**	ATAA PAPER 69-960	22 p3905 A69-40341 #
ATAA PAPER 69-909	21 p3807 A69-39341 #	ATAA PAPER 69-961	22 p3978 A69-40342 #
ATAA PAPER 69-910	21 p3807 A69-39342**	ATAA PAPER 69-962	22 p3905 A69-40343 #
ATAA PAPER 69-911	21 p3807 A69-39343 #	ATAA PAPER 69-963	22 p3905 A69-40344**
ATAA PAPER 69-914	21 p3808 A69-39344 #	ATAA PAPER 69-964	22 p3906 A69-40345 #
ATAA PAPER 69-916	21 p3808 A69-39345 #	ATAA PAPER 69-965	22 p3906 A69-40346 #
ATAA PAPER 69-917	21 p3808 A69-39346**	ATAA PAPER 69-966	22 p3906 A69-40347**
ATAA PAPER 69-918	21 p3808 A69-39347 #	ATAA PAPER 69-967	22 p3906 A69-40348 #

# MEETING PAPER AND REPORT NUMBER INDEX

AIAA PAPER 69-968	22 p3906 A69-40349 #	AIAA PAPER 69-1026	22 p3924 A69-40396 #
AIAA PAPER 69-969	24 p4285 A69-43510 #	AIAA PAPER 69-1028	22 p3924 A69-40397**
AIAA PAPER 69-970	22 p3906 A69-40350**	AIAA PAPER 69-1029	22 p3924 A69-40398 #
AIAA PAPER 69-971	22 p3907 A69-40351 #	AIAA PAPER 69-1030	22 p3924 A69-40399 #
AIAA PAPER 69-974	22 p3907 A69-40354 #	AIAA PAPER 69-1031	22 p3926 A69-40437**
AIAA PAPER 69-975	22 p3999 A69-40355 #	AIAA PAPER 69-1032	22 p3924 A69-40400 #
AIAA PAPER 69-976	22 p3912 A69-40356 #	AIAA PAPER 69-1033	22 p3924 A69-40401**
AIAA PAPER 69-977	22 p3892 A69-40357 #	AIAA PAPER 69-1035	22 p3925 A69-40402 #
AIAA PAPER 69-978	22 p4052 A69-40358 #	AIAA PAPER 69-1036	22 p3925 A69-40403 #
AIAA PAPER 69-979	22 p4050 A69-40359**	AICHE PAPER 19C	09 p1446 A69-21931 #
AIAA PAPER 69-980	22 p3907 A69-40360**	AICHE PAPER 20	15 p2718 A69-31116*
AIAA PAPER 69-981	22 p3907 A69-40361**	AICHE PAPER 22D	08 p1256 A69-19848 #
AIAA PAPER 69-982	22 p3907 A69-40362 #	AICHE PAPER 25A	04 p0586 A69-14508 #
AIAA PAPER 69-983	22 p3907 A69-40363**	AICHE PAPER 25B	04 p0587 A69-14509**
AIAA PAPER 69-985	22 p3908 A69-40365 #	AICHE PAPER 25C	04 p0587 A69-14510**
AIAA PAPER 69-986	22 p3978 A69-40366 #	AICHE PAPER 31A	08 p1302 A69-19849 #
AIAA PAPER 69-987	22 p3908 A69-40367 #	AICHE PAPER 31F	08 p1302 A69-19847**
AIAA PAPER 69-988	22 p3978 A69-40368 #	AICHE PAPER 37A	17 p3017 A69-33668 #
AIAA PAPER 69-991	22 p3920 A69-40369**	AICHE PAPER 42C	10 p1800 A69-23369*
AIAA PAPER 69-992	22 p3893 A69-40370**	AICHE PAPER 42C	04 p0554 A69-14511 #
AIAA PAPER 69-993	22 p3893 A69-40371**	AIME PAPER S69-1	21 p3732 A69-39471
AIAA PAPER 69-995	22 p3920 A69-40373**	AIME PAPER S69-2	21 p3732 A69-39470
AIAA PAPER 69-996	22 p3920 A69-40374**	AIME PAPER S69-3	21 p3747 A69-39472
AIAA PAPER 69-997	22 p3920 A69-40375**	AIME PAPER S69-4	21 p3733 A69-39473
AIAA PAPER 69-998	22 p3920 A69-40376 #	AIME PAPER S69-6	20 p3564 A69-38197
AIAA PAPER 69-1001	22 p3921 A69-40377**	AOLR-69-1	11 p1889 A69-25394**
AIAA PAPER 69-1004	22 p3921 A69-40378**	ARL-68-0200	02 p0327 A69-12708*
AIAA PAPER 69-1005	22 p3921 A69-40379 #	ASA PAPER SVT2	15 p2713 A69-31143
AIAA PAPER 69-1006	22 p3921 A69-40380**	ASCE PAPER 739	09 p1616 A69-21928 #
AIAA PAPER 69-1007	22 p4021 A69-40381**	ASLE FICFS PREPRINT 15A	15 p2620 A69-30483*
AIAA PAPER 69-1009	22 p3921 A69-40382 #	ASLE FICFS PREPRINT 15B	15 p2620 A69-30484*
AIAA PAPER 69-1010	22 p3922 A69-40383**	ASLE FICFS PREPRINT 16	15 p2621 A69-30493
AIAA PAPER 69-1011	22 p3922 A69-40384 #	ASLE FICFS PREPRINT 17	15 p2621 A69-30499
AIAA PAPER 69-1012	22 p3922 A69-40385 #	ASLE FICFS PREPRINT 18	15 p2620 A69-30489
AIAA PAPER 69-1013	22 p3922 A69-40386**	ASLE FICFS PREPRINT 19	15 p2621 A69-30497*
AIAA PAPER 69-1015	22 p3922 A69-40387 #	ASLE FICFS PREPRINT 21	15 p2622 A69-30500
AIAA PAPER 69-1016	22 p3922 A69-40388 #	ASLE FICFS PREPRINT 22	15 p2620 A69-30486
AIAA PAPER 69-1017	22 p3922 A69-40389**	ASLE FICFS PREPRINT 23	15 p2620 A69-30491
AIAA PAPER 69-1018	22 p3923 A69-40390**	ASLE FICFS PREPRINT 24	15 p2621 A69-30498
AIAA PAPER 69-1020	22 p3923 A69-40391 #	ASLE FICFS PREPRINT 25	15 p2620 A69-30488
AIAA PAPER 69-1021	22 p3923 A69-40392**	ASLE FICFS PREPRINT 26	15 p2621 A69-30495
AIAA PAPER 69-1023	22 p3923 A69-40393**	ASLE FICFS PREPRINT 27	15 p2621 A69-30492*
AIAA PAPER 69-1024	22 p3923 A69-40394 #	ASLE FICFS PREPRINT 28	15 p2620 A69-30487*
AIAA PAPER 69-1025	22 p3923 A69-40395**	ASLE FICFS PREPRINT 29	15 p2620 A69-30490



# MEETING PAPER AND REPORT NUMBER INDEX

ASLE FICFS PREPRINT 30	15 p2619 A69-30481*	ASM PAPER D8-22.3	20 p3551 A69-38132
ASLE FICFS PREPRINT 31	15 p2621 A69-30496*	ASM PAPER D8-24.3	20 p3564 A69-38136
ASLE FICFS PREPRINT 32	15 p2619 A69-30482	ASM PAPER D8-24.4	07 p1169 A69-19669
ASLE FICFS PREPRINT 34	15 p2621 A69-30494	ASM PAPER D8-25.2	20 p3586 A69-38133
ASLE FICFS PREPRINT 40	15 p2620 A69-30485	ASM PAPER D8-25.4	07 p1172 A69-19670
ASLE PAPER 68-LC-2	07 p1141 A69-19310*	ASM PAPER D8-26.1	07 p1143 A69-19671
ASLE PAPER 68-LC-3	07 p1140 A69-19307	ASM PAPER D8-26.2	07 p1143 A69-19672
ASLE PAPER 68-LC-5	15 p2622 A69-30610*	ASM PAPER D8-26.4	07 p1143 A69-19673
ASLE PAPER 68-LC-7	15 p2622 A69-30609	ASM PAPER GG-8-3-3	21 p3745 A69-38929
ASLE PAPER 68-LC-10	15 p2622 A69-30608	ASM PAPER GG-8-6.2	07 p1169 A69-19674
ASLE PAPER 68-LC-11	15 p2622 A69-30605	ASM PAPER GG-8-9.4	07 p1169 A69-19675
ASLE PAPER 68-LC-13	21 p3731 A69-38763	ASM PAPER W9-4.2	21 p3729 A69-38659
ASLE PAPER 68-LC-14	15 p2642 A69-30606	ASM PAPER W9-8.2	21 p3729 A69-38660
ASLE PAPER 68-LC-15	07 p1140 A69-19308*	ASM PAPER W9-10.4	21 p3729 A69-38664
ASLE PAPER 68-LC-16	07 p1139 A69-18626	ASM PAPER W9-13.3	21 p3833 A69-38658
ASLE PAPER 68-LC-20	07 p1141 A69-19311	ASM PAPER W9-14.4	21 p3729 A69-38657 #
ASLE PAPER 68-LC-21	07 p1171 A69-19306	ASM PAPER W9-16.1	21 p3728 A69-38655
ASLE PAPER 68-LC-22	07 p1140 A69-19309	ASM PAPER W9-19.3	21 p3743 A69-38669*
ASLE PAPER 68-LC-23	15 p2642 A69-30607	ASM PAPER W9-20.1	21 p3751 A69-38670
ASLE PREPRINT 68AM 4A-2	01 p0083 A69-10914	ASM PAPER W9-20.4	21 p3730 A69-38671
ASLE PREPRINT 68AM 4B-4	13 p2267 A69-27366*	ASM PAPER W9-23.1	14 p2535 A69-29448
ASLE PREPRINT 68AM 5B-1	01 p0087 A69-10911	ASM PAPER W9-23.4	14 p2455 A69-29449
ASLE PREPRINT 68AM 6D-4	07 p1139 A69-18625	ASME PAPER WA/HT-9	05 p0846 A69-16117 #
ASLE PREPRINT 68AM 7C-2	01 p0087 A69-10912*	ASME PAPER 67-HT-78	13 p2374 A69-27778 #
ASLE PREPRINT 68AM 7C-3	07 p1139 A69-18623*	ASME PAPER 67-WA/HT-1	02 p0351 A69-12205 #
ASLE PREPRINT 68AM 7C-4	07 p1139 A69-18624*	ASME PAPER 67-WA/HT-30	02 p0351 A69-12201 #
ASLE PREPRINT 69AM 3C-2	15 p2619 A69-30472*	ASME PAPER 67-WA/HT-32	02 p0351 A69-12202 #
ASLE PREPRINT 69AM 5C-2	15 p2619 A69-30473	ASME PAPER 68-APM/AA	04 p0670 A69-14404 #
ASLE PREPRINT 69AM 5C-3	15 p2619 A69-30474	ASME PAPER 68-APM/BB	04 p0670 A69-14401 #
ASLE PREPRINT 69AM 6C-1	15 p2619 A69-30471*	ASME PAPER 68-APM/Y	04 p0670 A69-14402 #
ASM PAPER C7-2.3	04 p0604 A69-14525	ASME PAPER 68-APM/Z	04 p0586 A69-14388 #
ASM PAPER C7-2.4	04 p0604 A69-14524	ASME PAPER 68-DE-21	06 p0933 A69-17167 #
ASM PAPER C7-5.1	04 p0604 A69-14521	ASME PAPER 68-FE-5	05 p0747 A69-16068 #
ASM PAPER C7-5.4	04 p0604 A69-14522	ASME PAPER 68-FE-7	05 p0837 A69-16069 #
ASM PAPER D8-3.4	20 p3564 A69-38135	ASME PAPER 68-FE-9	05 p0748 A69-16077 #
ASM PAPER D8-5.2	07 p1142 A69-19663	ASME PAPER 68-FE-10	05 p0748 A69-16076 #
ASM PAPER D8-9.6	07 p1169 A69-19664	ASME PAPER 68-FE-11	05 p0748 A69-16074 #
ASM PAPER D8-9.7	07 p1169 A69-19665	ASME PAPER 68-FE-13	05 p0747 A69-16065 #
ASM PAPER D8-14.1	07 p1143 A69-19666*	ASME PAPER 68-FE-15	05 p0747 A69-16072*#
ASM PAPER D8-14.2	07 p1169 A69-19667*	ASME PAPER 68-FE-25	05 p0698 A69-16075*#
ASM PAPER D8-16.2	07 p1204 A69-19668	ASME PAPER 68-FE-26	05 p0747 A69-16066 #
ASM PAPER D8-16.3	20 p3551 A69-38137	ASME PAPER 68-FE-28	05 p0697 A69-16070 #
ASM PAPER D8-21.5	20 p3564 A69-38134	ASME PAPER 68-FE-31	05 p0698 A69-16078 #
ASM PAPER D8-22.2	20 p3551 A69-38131	ASME PAPER 68-FE-32	05 p0748 A69-16079 #

# MEETING PAPER AND REPORT NUMBER INDEX

ASME PAPER 68-GT-24	06 p0982 A69-17190 #	ASME PAPER 68-PVP-12	03 p0523 A69-12999 #
ASME PAPER 68-GT-38	19 p3240 A69-36420 #	ASME PAPER 68-PVP-15	03 p0523 A69-12997 #
ASME PAPER 68-GT-62	08 p1376 A69-19846 #	ASME PAPER 68-WA/APM-7	04 p0670 A69-14403 #
ASME PAPER 68-GT-63	06 p0984 A69-17187 #	ASME PAPER 68-WA/APM-8	13 p2362 A69-28121*#
ASME PAPER 68-HT-2	02 p0351 A69-12204 #	ASME PAPER 68-WA/APM-8	05 p0839 A69-16186*#
ASME PAPER 68-HT-4	02 p0352 A69-12209 #	ASME PAPER 68-WA/APM-10	04 p0668 A69-14392 #
ASME PAPER 68-HT-6	13 p2374 A69-27775 #	ASME PAPER 68-WA/APM-12	04 p0668 A69-14393 #
ASME PAPER 68-HT-10	02 p0232 A69-12208 #	ASME PAPER 68-WA/APM-13	04 p0586 A69-14390 #
ASME PAPER 68-HT-13	13 p2374 A69-27777 #	ASME PAPER 68-WA/APM-14	04 p0669 A69-14400 #
ASME PAPER 68-HT-16	13 p2374 A69-27776*#	ASME PAPER 68-WA/APM-15	04 p0669 A69-14396 #
ASME PAPER 68-HT-20	13 p2373 A69-27770 #	ASME PAPER 68-WA/APM-16	04 p0596 A69-14391 #
ASME PAPER 68-HT-21	13 p2373 A69-27774 #	ASME PAPER 68-WA/APM-17	04 p0669 A69-14395*#
ASME PAPER 68-HT-32	13 p2373 A69-27769 #	ASME PAPER 68-WA/APM-18	04 p0669 A69-14399 #
ASME PAPER 68-HT-35	13 p2374 A69-27780 #	ASME PAPER 68-WA/APM-20	04 p0541 A69-14387 #
ASME PAPER 68-HT-38	01 p0175 A69-10314 #	ASME PAPER 68-WA/APM-21	04 p0670 A69-14405 #
ASME PAPER 68-HT-39	13 p2373 A69-27771 #	ASME PAPER 68-WA/APM-22	04 p0669 A69-14398 #
ASME PAPER 68-HT-42	02 p0351 A69-12206 #	ASME PAPER 68-WA/APM-23	05 p0840 A69-16188 #
ASME PAPER 68-HT-43	13 p2373 A69-27772 #	ASME PAPER 68-WA/APM-24	04 p0541 A69-14389 #
ASME PAPER 68-HT-44	02 p0351 A69-12203 #	ASME PAPER 68-WA/APM-25	05 p0768 A69-16189 #
ASME PAPER 68-HT-47	13 p2374 A69-27779 #	ASME PAPER 68-WA/APM-26	04 p0669 A69-14394 #
ASME PAPER 68-LUB-10	15 p2628 A69-30901*#	ASME PAPER 68-WA/APM-27	04 p0669 A69-14397 #
ASME PAPER 68-LUBS-1	13 p2244 A69-27278 #	ASME PAPER 68-WA/AUT-1	05 p0738 A69-16185 #
ASME PAPER 68-LUBS-2	13 p2267 A69-27285 #	ASME PAPER 68-WA/AUT-2	05 p0706 A69-16184 #
ASME PAPER 68-LUBS-3	13 p2266 A69-27279 #	ASME PAPER 68-WA/AUT-3	05 p0738 A69-16183 #
ASME PAPER 68-LUBS-4	13 p2267 A69-27286 #	ASME PAPER 68-WA/AUT-4	05 p0738 A69-16182*#
ASME PAPER 68-LUBS-7	13 p2265 A69-27269 #	ASME PAPER 68-WA/AUT-7	05 p0750 A69-16181 #
ASME PAPER 68-LUBS-8	13 p2267 A69-27282 #	ASME PAPER 68-WA/AUT-8	05 p0738 A69-16180 #
ASME PAPER 68-LUBS-10	13 p2265 A69-27267 #	ASME PAPER 68-WA/AUT-9	05 p0738 A69-16179 #
ASME PAPER 68-LUBS-12	13 p2266 A69-27276 #	ASME PAPER 68-WA/AUT-12	05 p0706 A69-16178 #
ASME PAPER 68-LUBS-15	13 p2265 A69-27268*#	ASME PAPER 68-WA/AUT-14	05 p0830 A69-16134 #
ASME PAPER 68-LUBS-17	13 p2266 A69-27273 #	ASME PAPER 68-WA/AUT-15	05 p0738 A69-16177*#
ASME PAPER 68-LUBS-18	13 p2266 A69-27270 #	ASME PAPER 68-WA/AUT-16	05 p0706 A69-16176 #
ASME PAPER 68-LUBS-21	13 p2267 A69-27284*#	ASME PAPER 68-WA/AUT-17	05 p0738 A69-16175 #
ASME PAPER 68-LUBS-25	13 p2266 A69-27271*#	ASME PAPER 68-WA/AUT-18	05 p0706 A69-16174 #
ASME PAPER 68-LUBS-26	13 p2267 A69-27288 #	ASME PAPER 68-WA/AUT-19	05 p0738 A69-16173 #
ASME PAPER 68-LUBS-27	13 p2266 A69-27275 #	ASME PAPER 68-WA/DE-3	05 p0839 A69-16168 #
ASME PAPER 68-LUBS-30	13 p2267 A69-27287 #	ASME PAPER 68-WA/DE-4	13 p2360 A69-27420 #
ASME PAPER 68-LUBS-33	13 p2266 A69-27274 #	ASME PAPER 68-WA/DE-4	05 p0839 A69-16169 #
ASME PAPER 68-LUBS-35	13 p2266 A69-27280 #	ASME PAPER 68-WA/DE-5	05 p0764 A69-16170 #
ASME PAPER 68-LUBS-37	13 p2267 A69-27281*#	ASME PAPER 68-WA/DE-6	13 p2360 A69-27422*#
ASME PAPER 68-LUBS-38	13 p2266 A69-27272*#	ASME PAPER 68-WA/DE-6	05 p0839 A69-16171*#
ASME PAPER 68-LUBS-44	13 p2267 A69-27283 #	ASME PAPER 68-WA/DE-7	05 p0839 A69-16172 #
ASME PAPER 68-LUBS-45	13 p2266 A69-27277 #	ASME PAPER 68-WA/ENER-4	05 p0706 A69-16162*#
ASME PAPER 68-PVP-1	03 p0523 A69-12998 #	ASME PAPER 68-WA/ENER-5	05 p0848 A69-16161 #



# MEETING PAPER AND REPORT NUMBER INDEX

ASME PAPER 68-WA/FE-8	05 p0748 A69-16091**
ASME PAPER 68-WA/FE-8	14 p2430 A69-29444**
ASME PAPER 68-WA/FE-9	05 p0698 A69-16089 #
ASME PAPER 68-WA/FE-9	14 p2390 A69-29445 #
ASME PAPER 68-WA/FE-11	05 p0748 A69-16090**
ASME PAPER 68-WA/FE-11	14 p2430 A69-29446**
ASME PAPER 68-WA/FE-12	19 p3240 A69-36419 #
ASME PAPER 68-WA/FE-12	05 p0698 A69-16092 #
ASME PAPER 68-WA/FE-17	05 p0748 A69-16093 #
ASME PAPER 68-WA/FE-18	05 p0748 A69-16094 #
ASME PAPER 68-WA/FE-19	05 p0698 A69-16095 #
ASME PAPER 68-WA/FE-20	05 p0749 A69-16096 #
ASME PAPER 68-WA/FE-21	05 p0749 A69-16097 #
ASME PAPER 68-WA/FE-21	14 p2430 A69-29443 #
ASME PAPER 68-WA/FE-22	05 p0749 A69-16098 #
ASME PAPER 68-WA/FE-23	05 p0749 A69-16099 #
ASME PAPER 68-WA/FE-25	05 p0698 A69-16100 #
ASME PAPER 68-WA/FE-27	05 p0749 A69-16101 #
ASME PAPER 68-WA/FE-29	05 p0763 A69-16102 #
ASME PAPER 68-WA/FE-30	05 p0705 A69-16103 #
ASME PAPER 68-WA/FE-31	05 p0705 A69-16104 #
ASME PAPER 68-WA/FE-32	05 p0763 A69-16105**
ASME PAPER 68-WA/FE-33	05 p0812 A69-16106 #
ASME PAPER 68-WA/FE-34	05 p0749 A69-16107**
ASME PAPER 68-WA/FE-35	05 p0750 A69-16108 #
ASME PAPER 68-WA/FE-36	05 p0750 A69-16109 #
ASME PAPER 68-WA/FE-38	05 p0698 A69-16110 #
ASME PAPER 68-WA/FE-39	05 p0750 A69-16111**
ASME PAPER 68-WA/FE-45	05 p0698 A69-16112 #
ASME PAPER 68-WA/FE-46	05 p0750 A69-16113 #
ASME PAPER 68-WA/FM-2	05 p0763 A69-16135**
ASME PAPER 68-WA/FM-2	14 p2447 A69-29447**
ASME PAPER 68-WA/FM-4	05 p0699 A69-16114 #
ASME PAPER 68-WA/GT-1	05 p0848 A69-16137 #
ASME PAPER 68-WA/GT-2	05 p0837 A69-16138 #
ASME PAPER 68-WA/GT-3	05 p0837 A69-16139 #
ASME PAPER 68-WA/GT-5	05 p0812 A69-16140**
ASME PAPER 68-WA/GT-6	05 p0838 A69-16141 #
ASME PAPER 68-WA/GT-7	05 p0812 A69-16142 #
ASME PAPER 68-WA/GT-8	05 p0750 A69-16143 #
ASME PAPER 68-WA/GT-9	05 p0812 A69-16144 #
ASME PAPER 68-WA/GT-11	05 p0812 A69-16136**
ASME PAPER 68-WA/HT-4	05 p0846 A69-16115 #
ASME PAPER 68-WA/HT-5	13 p2374 A69-27781 #

ASME PAPER 68-WA/HT-5	05 p0846 A69-16116 #
ASME PAPER 68-WA/HT-10	05 p0803 A69-16118 #
ASME PAPER 68-WA/HT-12	05 p0847 A69-16119**
ASME PAPER 68-WA/HT-13	05 p0847 A69-16120 #
ASME PAPER 68-WA/HT-17	05 p0847 A69-16121 #
ASME PAPER 68-WA/HT-18	05 p0847 A69-16122**
ASME PAPER 68-WA/HT-20	05 p0847 A69-16123 #
ASME PAPER 68-WA/HT-20	17 p3068 A69-32902 #
ASME PAPER 68-WA/HT-21	05 p0847 A69-16124 #
ASME PAPER 68-WA/HT-22	05 p0847 A69-16125 #
ASME PAPER 68-WA/HT-24	05 p0847 A69-16126 #
ASME PAPER 68-WA/HT-26	05 p0848 A69-16127 #
ASME PAPER 68-WA/HT-37	05 p0848 A69-16128**
ASME PAPER 68-WA/LUB-1	05 p0768 A69-16129 #
ASME PAPER 68-WA/LUB-4	05 p0768 A69-16130 #
ASME PAPER 68-WA/LUB-4	24 p4320 A69-43035 #
ASME PAPER 68-WA/LUB-6	05 p0768 A69-16131**
ASME PAPER 68-WA/LUB-9	05 p0768 A69-16132 #
ASME PAPER 68-WA/LUB-10	05 p0768 A69-16133**
ASME PAPER 68-WA/MET-1	14 p2464 A69-29440 #
ASME PAPER 68-WA/MET-2	14 p2464 A69-29439 #
ASME PAPER 68-WA/MET-3	05 p0838 A69-16148 #
ASME PAPER 68-WA/MET-6	05 p0838 A69-16149 #
ASME PAPER 68-WA/MET-6	14 p2535 A69-29436 #
ASME PAPER 68-WA/MET-7	14 p2464 A69-29441 #
ASME PAPER 68-WA/MET-8	05 p0838 A69-16151 #
ASME PAPER 68-WA/MET-8	14 p2535 A69-29438 #
ASME PAPER 68-WA/MET-9	14 p2455 A69-29437 #
ASME PAPER 68-WA/MET-10	05 p0780 A69-16150 #
ASME PAPER 68-WA/MET-12	05 p0838 A69-16152 #
ASME PAPER 68-WA/MET-14	05 p0837 A69-16067 #
ASME PAPER 68-WA/MET-15	05 p0838 A69-16153 #
ASME PAPER 68-WA/MET-16	05 p0838 A69-16154 #
ASME PAPER 68-WA/MET-17	05 p0838 A69-16155 #
ASME PAPER 68-WA/MET-18	05 p0839 A69-16156 #
ASME PAPER 68-WA/MET-19	05 p0839 A69-16157 #
ASME PAPER 68-WA/MGT-2	05 p0850 A69-16145 #
ASME PAPER 68-WA/MGT-3	05 p0850 A69-16146 #
ASME PAPER 68-WA/PEM-2	05 p0743 A69-16147 #
ASME PAPER 68-WA/PID-2	13 p2203 A69-27421 #
ASME PAPER 68-WA/PID-2	05 p0706 A69-16163 #
ASME PAPER 68-WA/PID-3	05 p0791 A69-16164**
ASME PAPER 68-WA/PID-4	05 p0848 A69-16165 #
ASME PAPER 68-WA/PID-5	05 p0750 A69-16166**

# MEETING PAPER AND REPORT NUMBER INDEX

ASME PAPER 68-WA/PID-10	05 p0848 A69-16167 #	ASME PAPER 69-DE-8	14 p2393 A69-28855*#
ASME PAPER 68-WA/PROD-16	05 p0768 A69-16193 #	ASME PAPER 69-DE-9	14 p2453 A69-28839 #
ASME PAPER 68-WA/PROD-22	05 p0769 A69-16194 #	ASME PAPER 69-DE-10	14 p2461 A69-28842 #
ASME PAPER 68-WA/PTC-1	05 p0768 A69-16192 #	ASME PAPER 69-DE-13	14 p2531 A69-28843 #
ASME PAPER 68-WA/PVP-10	05 p0840 A69-16191 #	ASME PAPER 69-DE-27	14 p2454 A69-28854*#
ASME PAPER 68-WA/PVP-12	05 p0840 A69-16190 #	ASME PAPER 69-DE-36	14 p2454 A69-28841 #
ASME PAPER 68-WA/RP-6	05 p0783 A69-16160**	ASME PAPER 69-DE-37	14 p2531 A69-28846 #
ASME PAPER 68-WA/RP-7	05 p0783 A69-16159 #	ASME PAPER 69-DE-46	14 p2527 A69-29941
ASME PAPER 68-WA/SOL-1	19 p3255 A69-36418**	ASME PAPER 69-DE-47	14 p2454 A69-28849 #
ASME PAPER 68-WA/SOL-1	05 p0705 A69-16158**	ASME PAPER 69-DE-54	14 p2530 A69-28848**
ASME PAPER 69-APM-B	18 p3215 A69-34400 #	ASME PAPER 69-DE-56	14 p2427 A69-28844**
ASME PAPER 69-APM-7	18 p3213 A69-34385 #	ASME PAPER 69-DE-59	14 p2461 A69-28852 #
ASME PAPER 69-APM-10	18 p3213 A69-34386 #	ASME PAPER 69-DE-60	14 p2467 A69-28853 #
ASME PAPER 69-APM-11	18 p3213 A69-34387 #	ASME PAPER 69-DE-65	14 p2454 A69-28845 #
ASME PAPER 69-APM-12	18 p3213 A69-34388 #	ASME PAPER 69-DE-67	14 p2540 A69-28850 #
ASME PAPER 69-APM-13	18 p3213 A69-34389 #	ASME PAPER 69-FE-1	20 p3516 A69-37986**
ASME PAPER 69-APM-14	18 p3214 A69-34391 #	ASME PAPER 69-FE-6	20 p3586 A69-37987**
ASME PAPER 69-APM-15	18 p3213 A69-34390 #	ASME PAPER 69-FE-11	20 p3516 A69-37988 #
ASME PAPER 69-APM-16	18 p3214 A69-34392 #	ASME PAPER 69-FE-12	20 p3460 A69-37989 #
ASME PAPER 69-APM-19	18 p3120 A69-34394**	ASME PAPER 69-FE-13	21 p3643 A69-38601 #
ASME PAPER 69-APM-20	18 p3214 A69-34395**	ASME PAPER 69-FE-14	20 p3516 A69-37990 #
ASME PAPER 69-APM-22	18 p3214 A69-34396 #	ASME PAPER 69-FE-15	20 p3568 A69-37999**
ASME PAPER 69-APM-23	18 p3120 A69-34397 #	ASME PAPER 69-FE-16	20 p3517 A69-37991 #
ASME PAPER 69-APM-25	18 p3214 A69-34398**	ASME PAPER 69-FE-23	20 p3460 A69-37992 #
ASME PAPER 69-APM-26	18 p3214 A69-34399**	ASME PAPER 69-FE-24	20 p3517 A69-37998 #
ASME PAPER 69-APMW-3	24 p4275 A69-43108 #	ASME PAPER 69-FE-29	20 p3517 A69-37994 #
ASME PAPER 69-APMW-6	24 p4402 A69-43107 #	ASME PAPER 69-FE-33	20 p3460 A69-37993 #
ASME PAPER 69-APMW-7	24 p4402 A69-43105 #	ASME PAPER 69-FE-36	20 p3466 A69-37996 #
ASME PAPER 69-APMW-8	24 p4402 A69-43106 #	ASME PAPER 69-FE-43	20 p3517 A69-37995 #
ASME PAPER 69-APMW-9	24 p4402 A69-43104 #	ASME PAPER 69-FE-44	20 p3517 A69-38000 #
ASME PAPER 69-APMW-11	24 p4401 A69-43103 #	ASME PAPER 69-FE-47	20 p3517 A69-37997**
ASME PAPER 69-APMW-14	24 p4401 A69-43102 #	ASME PAPER 69-FE-48	20 p3516 A69-37978 #
ASME PAPER 69-APMW-15	24 p4401 A69-43101 #	ASME PAPER 69-FLCS-18	20 p3516 A69-37982 #
ASME PAPER 69-APMW-17	24 p4401 A69-43100 #	ASME PAPER 69-FLCS-19	20 p3465 A69-37981 #
ASME PAPER 69-APMW-19	24 p4245 A69-43099 #	ASME PAPER 69-FLCS-20	20 p3465 A69-37980 #
ASME PAPER 69-APMW-20	24 p4401 A69-43098 #	ASME PAPER 69-FLCS-21	20 p3466 A69-37985**
ASME PAPER 69-APMW-22	24 p4401 A69-43097 #	ASME PAPER 69-FLCS-22	20 p3516 A69-37976 #
ASME PAPER 69-APMW-23	24 p4401 A69-43096 #	ASME PAPER 69-FLCS-28	20 p3465 A69-37977 #
ASME PAPER 69-APMW-24	24 p4336 A69-43095 #	ASME PAPER 69-FLCS-30	20 p3516 A69-37979 #
ASME PAPER 69-APMW-25	24 p4275 A69-43094 #	ASME PAPER 69-FLCS-31	21 p3649 A69-38604 #
ASME PAPER 69-APMW-26	24 p4245 A69-43093**	ASME PAPER 69-FLCS-37	21 p3692 A69-38602 #
ASME PAPER 69-DE-1	14 p2453 A69-28838 #	ASME PAPER 69-FLCS-38	20 p3465 A69-37983 #
ASME PAPER 69-DE-5	14 p2453 A69-28837 #	ASME PAPER 69-FLCS-39	20 p3465 A69-37984 #
ASME PAPER 69-DE-7	14 p2454 A69-28840 #	ASME PAPER 69-FLCS-40	21 p3649 A69-38603 #



# MEETING PAPER AND REPORT NUMBER INDEX

ASME PAPER 69-PLCS-41	20 p3515 A69-37975*#	ASME PAPER 69-GT-104	09 p1501 A69-22522*#
ASME PAPER 69-GT-1	09 p1527 A69-22510 #	ASME PAPER 69-GT-107	09 p1619 A69-22523 #
ASME PAPER 69-GT-2	09 p1572 A69-22509 #	ASME PAPER 69-GT-114	09 p1531 A69-22520 #
ASME PAPER 69-GT-4	09 p1624 A69-22508 #	ASME PAPER 69-GT-115	09 p1572 A69-22525 #
ASME PAPER 69-GT-6	09 p1432 A69-22507*#	ASME PAPER 69-GT-119	09 p1572 A69-22524 #
ASME PAPER 69-GT-7	09 p1527 A69-22506 #	ASME PAPER 69-HT-A	24 p4316 A69-43527 #
ASME PAPER 69-GT-9	09 p1571 A69-22505 #	ASME PAPER 69-HT-C	24 p4410 A69-43526 #
ASME PAPER 69-GT-10	09 p1432 A69-22504 #	ASME PAPER 69-HT-D	24 p4410 A69-43525 #
ASME PAPER 69-GT-12	09 p1527 A69-22503 #	ASME PAPER 69-HT-E	24 p4410 A69-43524*#
ASME PAPER 69-GT-14	09 p1571 A69-22502 #	ASME PAPER 69-HT-G	24 p4410 A69-43522 #
ASME PAPER 69-GT-15	09 p1432 A69-22501	ASME PAPER 69-HT-H	24 p4303 A69-43523 #
ASME PAPER 69-GT-17	09 p1571 A69-22500 #	ASME PAPER 69-HT-1	24 p4414 A69-43564*#
ASME PAPER 69-GT-18	09 p1571 A69-22499 #	ASME PAPER 69-HT-3	24 p4414 A69-43563 #
ASME PAPER 69-GT-19	09 p1571 A69-22498 #	ASME PAPER 69-HT-4	24 p4414 A69-43562 #
ASME PAPER 69-GT-22	09 p1619 A69-22497 #	ASME PAPER 69-HT-6	24 p4413 A69-43553 #
ASME PAPER 69-GT-23	09 p1527 A69-22496 #	ASME PAPER 69-HT-7	24 p4304 A69-43561 #
ASME PAPER 69-GT-24	09 p1513 A69-22494 #	ASME PAPER 69-HT-8	24 p4414 A69-43560*#
ASME PAPER 69-GT-29	09 p1571 A69-22493	ASME PAPER 69-HT-9	24 p4304 A69-43559*#
ASME PAPER 69-GT-30	09 p1501 A69-22492 #	ASME PAPER 69-HT-10	24 p4413 A69-43558 #
ASME PAPER 69-GT-33	09 p1483 A69-22491 #	ASME PAPER 69-HT-12	24 p4304 A69-43557 #
ASME PAPER 69-GT-34	09 p1623 A69-22490 #	ASME PAPER 69-HT-13	24 p4303 A69-43556 #
ASME PAPER 69-GT-35	09 p1432 A69-22489 #	ASME PAPER 69-HT-14	24 p4247 A69-43555*#
ASME PAPER 69-GT-36	09 p1501 A69-22488 #	ASME PAPER 69-HT-15	24 p4413 A69-43554*#
ASME PAPER 69-GT-39	09 p1432 A69-22487 #	ASME PAPER 69-HT-16	24 p4413 A69-43552 #
ASME PAPER 69-GT-40	09 p1571 A69-22486 #	ASME PAPER 69-HT-17	24 p4413 A69-43551*#
ASME PAPER 69-GT-41	09 p1570 A69-22482 #	ASME PAPER 69-HT-18	24 p4412 A69-43548*#
ASME PAPER 69-GT-44	09 p1570 A69-22478 #	ASME PAPER 69-HT-19	24 p4413 A69-43550*#
ASME PAPER 69-GT-45	09 p1513 A69-22485 #	ASME PAPER 69-HT-20	24 p4413 A69-43549*#
ASME PAPER 69-GT-46	09 p1513 A69-22484 #	ASME PAPER 69-HT-21	24 p4412 A69-43547 #
ASME PAPER 69-GT-48	09 p1432 A69-22495*#	ASME PAPER 69-HT-22	24 p4412 A69-43546 #
ASME PAPER 69-GT-49	09 p1571 A69-22483 #	ASME PAPER 69-HT-23	24 p4412 A69-43545*#
ASME PAPER 69-GT-50	09 p1442 A69-22479 #	ASME PAPER 69-HT-24	24 p4412 A69-43544 #
ASME PAPER 69-GT-51	09 p1572 A69-22511 #	ASME PAPER 69-HT-25	24 p4412 A69-43543 #
ASME PAPER 69-GT-52	09 p1570 A69-22481 #	ASME PAPER 69-HT-26	24 p4412 A69-43542*#
ASME PAPER 69-GT-55	09 p1432 A69-22513 #	ASME PAPER 69-HT-27	24 p4412 A69-43541*#
ASME PAPER 69-GT-57	09 p1572 A69-22514 #	ASME PAPER 69-HT-28	24 p4411 A69-43540*#
ASME PAPER 69-GT-60	09 p1513 A69-22515 #	ASME PAPER 69-HT-29	24 p4411 A69-43531 #
ASME PAPER 69-GT-61	09 p1513 A69-22516 #	ASME PAPER 69-HT-30	24 p4411 A69-43529 #
ASME PAPER 69-GT-63	09 p1572 A69-22517 #	ASME PAPER 69-HT-33	24 p4247 A69-43530 #
ASME PAPER 69-GT-64	09 p1500 A69-22480 #	ASME PAPER 69-HT-34	24 p4410 A69-43528 #
ASME PAPER 69-GT-66	09 p1501 A69-22518 #	ASME PAPER 69-HT-35	24 p4411 A69-43532 #
ASME PAPER 69-GT-69	09 p1572 A69-22519 #	ASME PAPER 69-HT-37	24 p4411 A69-43533 #
ASME PAPER 69-GT-70	09 p1572 A69-22512 #	ASME PAPER 69-HT-38	24 p4411 A69-43534 #
ASME PAPER 69-GT-103	09 p1432 A69-22521*#	ASME PAPER 69-HT-44	24 p4409 A69-43517 #

# MEETING PAPER AND REPORT NUMBER INDEX

ASME PAPER 69-HT-50	24 p4410 A69-43521 #	ASME PAPER 69-VIBR-50	10 p1804 A69-24148 #
ASME PAPER 69-HT-52	24 p4409 A69-43520**	ASME PAPER 69-VIBR-51	10 p1804 A69-24153 #
ASME PAPER 69-HT-53	24 p4409 A69-43518**	ASME PAPER 69-VIBR-52	10 p1804 A69-24152 #
ASME PAPER 69-HT-54	24 p4303 A69-43539 #	ASME PAPER 69-VIBR-54	10 p1805 A69-24154 #
ASME PAPER 69-HT-56	24 p4303 A69-43538**	ASME PAPER 69-VIBR-55	10 p1700 A69-24147 #
ASME PAPER 69-HT-57	24 p4303 A69-43537 #	ASME PAPER 69-VIBR-56	10 p1804 A69-24146 #
ASME PAPER 69-HT-58	24 p4411 A69-43536 #	ASME PAPER 69-VIBR-57	10 p1804 A69-24151 #
ASME PAPER 69-HT-61	24 p4303 A69-43535**	ASME PAPER 69-VIBR-59	10 p1805 A69-24155 #
ASME PAPER 69-LUBS-3	18 p3213 A69-34384 #	ASME PAPER 69-VIBR-60	10 p1804 A69-24149 #
ASME PAPER 69-LUBS-5	18 p3212 A69-34383 #	ASME PAPER 69-VIBR-61	10 p1668 A69-24145 #
ASME PAPER 69-LUBS-8	18 p3212 A69-34382**	ASME PAPER 69-VIBR-62	10 p1805 A69-24156 #
ASME PAPER 69-LUBS-11	18 p3140 A69-34381**	ASME PAPER 69-VIBR-65	10 p1650 A69-24157 #
ASME PAPER 69-LUBS-16	18 p3140 A69-34380**	ASME PAPER 69-VIBR-68	10 p1805 A69-24158 #
ASME PAPER 69-LUBS-17	18 p3120 A69-34379 #	ASTME PAPER MR68-406	02 p0252 A69-11796
ASME PAPER 69-LUBS-18	18 p3140 A69-34378**	ASTME PAPER MR68-407	02 p0252 A69-11797
ASME PAPER 69-LUBS-20	18 p3140 A69-34377 #	ASTME PAPER MR68-418	02 p0252 A69-11798
ASME PAPER 69-VIBR-1	10 p1700 A69-24159 #	CIAA PAPER 68-1155	24 p4300 A69-43251 #
ASME PAPER 69-VIBR-2	10 p1805 A69-24160**	DGLR-69-002	23 p4177 A69-42163 #
ASME PAPER 69-VIBR-3	10 p1640 A69-24161 #	DGLR-69-003	23 p4170 A69-42162 #
ASME PAPER 69-VIBR-4	10 p1805 A69-24162**	DGLR-69-013	23 p4203 A69-42152 #
ASME PAPER 69-VIBR-5	10 p1805 A69-24163**	DGLR-69-014	23 p4202 A69-41929 #
ASME PAPER 69-VIBR-8	10 p1700 A69-24164 #	DGLR-69-017	23 p4202 A69-41930 #
ASME PAPER 69-VIBR-11	10 p1806 A69-24165**	DGLR-69-021	23 p4202 A69-41928 #
ASME PAPER 69-VIBR-12	10 p1806 A69-24167 #	DGLR-69-022	23 p4203 A69-41933 #
ASME PAPER 69-VIBR-13	10 p1806 A69-24166 #	DGLR-69-024A	23 p4202 A69-41924 #
ASME PAPER 69-VIBR-15	10 p1701 A69-24169 #	DGLR-69-024B	23 p4202 A69-41925 #
ASME PAPER 69-VIBR-17	10 p1804 A69-24150 #	DGLR-69-024C	23 p4202 A69-41926
ASME PAPER 69-VIBR-21	10 p1698 A69-24168 #	DGLR-69-024D	23 p4202 A69-41927 #
ASME PAPER 69-VIBR-23	10 p1806 A69-24170 #	DVL-780	10 p1802 A69-24020
ASME PAPER 69-VIBR-24	10 p1806 A69-24171 #	DVL-815	09 p1624 A69-22615
ASME PAPER 69-VIBR-25	10 p1806 A69-24173 #	DVL-831	10 p1754 A69-24022
ASME PAPER 69-VIBR-26	10 p1806 A69-24172 #	DVL-834	09 p1444 A69-21304
ASME PAPER 69-VIBR-32	10 p1806 A69-24174 #	DVL-843	03 p0416 A69-13665
ASME PAPER 69-VIBR-36	10 p1807 A69-24175 #	DVL-844	03 p0364 A69-13663*
ASME PAPER 69-VIBR-38	10 p1807 A69-24176**	DVL-847	04 p0553 A69-14811
ASME PAPER 69-VIBR-39	10 p1807 A69-24177**	DVL-848	04 p0597 A69-14831
ASME PAPER 69-VIBR-40	10 p1641 A69-24178 #	DVL-849	04 p0584 A69-14823
ASME PAPER 69-VIBR-41	10 p1807 A69-24179**	DVL-850	04 p0543 A69-14822
ASME PAPER 69-VIBR-42	10 p1807 A69-24180**	DVL-851	04 p0547 A69-14813
ASME PAPER 69-VIBR-43	10 p1807 A69-24181 #	DVL-852	04 p0548 A69-14827
ASME PAPER 69-VIBR-44	10 p1807 A69-24182 #	DVL-853	04 p0677 A69-14836
ASME PAPER 69-VIBR-45	10 p1808 A69-24183 #	DVL-855	10 p1647 A69-24021
ASME PAPER 69-VIBR-46	10 p1803 A69-24144 #	DVL-856	02 p0214 A69-11599
ASME PAPER 69-VIBR-49	10 p1808 A69-24184**	DVL-863	02 p0231 A69-12053 #



# MEETING PAPER AND REPORT NUMBER INDEX

DVL-865	11 p1889 A69-25682 #	IEEE PAPER B-4	14 p2457 A69-28927
DVL-871	06 p0858 A69-17242	IEEE PAPER B-11	07 p1157 A69-19485
DVL-875	07 p1188 A69-18277	IEEE PAPER C-2	07 p1150 A69-19049
DVL-895	02 p0220 A69-12435	IEEE PAPER C-5	07 p1150 A69-19050
DVL-896	10 p1809 A69-23644	IEEE PAPER C-6	07 p1150 A69-19051
DVL-899	15 p2656 A69-31102	IEEE PAPER C-8	05 p0774 A69-16310
DVL-902	09 p1482 A69-21971 #	IEEE PAPER D-7	07 p1200 A69-19052
DVL-903	09 p1617 A69-22011	IEEE PAPER E-12	05 p0774 A69-16311
ECS PAPER 7	08 p1268 A69-20361	IEEE PAPER F-1	07 p1133 A69-19053
ECS PAPER 8	03 p0368 A69-13856	IEEE PAPER F-5	05 p0808 A69-16312
ECS PAPER 15	05 p0706 A69-16231*	IEEE PAPER F-7	05 p0808 A69-16313
ECS PAPER 17	08 p1372 A69-20365	IEEE PAPER G-1	05 p0774 A69-16314
ECS PAPER 62	08 p1373 A69-21067	IEEE PAPER G-2	07 p1150 A69-19054
ECS PAPER 81	22 p3973 A69-40736	IEEE PAPER G-6	07 p1151 A69-19055*
ECS PAPER 84	03 p0382 A69-13858*	IEEE PAPER G-9	07 p1151 A69-19056
ECS PAPER 87	15 p2641 A69-31541	IEEE PAPER G-10	07 p1151 A69-19057
ECS PAPER 103	08 p1284 A69-20366	IEEE PAPER G-11	07 p1151 A69-19058
ECS PAPER 144	08 p1320 A69-20360	IEEE PAPER G-13	07 p1151 A69-19059
ECS PAPER 147	08 p1332 A69-20359*	IEEE PAPER G-15	07 p1151 A69-19061
ECS PAPER 170B	03 p0478 A69-13859	IEEE PAPER H-1	05 p0774 A69-16315
ECS PAPER 170D	05 p0812 A69-16233*	IEEE PAPER H-3	07 p1152 A69-19062
ECS PAPER 172	08 p1284 A69-20369	IEEE PAPER H-5	05 p0774 A69-16316
ECS PAPER 210	05 p0783 A69-16236	IEEE PAPER H-6	07 p1152 A69-19063
ECS PAPER 212	03 p0382 A69-13857	IEEE PAPER H-12	05 p0774 A69-16317
ECS PAPER 223	05 p0769 A69-16232	IEEE PAPER I-9	05 p0774 A69-16318*
ECS PAPER 306	08 p1314 A69-20367	IEEE PAPER J-1	07 p1152 A69-19064
ECS PAPER 330	15 p2562 A69-31540	IEEE PAPER J-3	07 p1152 A69-19065
ECS PAPER 335	20 p3466 A69-38069	IEEE PAPER J-5	05 p0720 A69-16319
ECS PAPER 413	08 p1332 A69-20363*	IEEE PAPER J-7	05 p0775 A69-16320
ECS PAPER 413	08 p1332 A69-20364*	IEEE PAPER K-5	07 p1152 A69-19066
IAEA PAPER CN-24/E-13	07 p1196 A69-19768 #	IEEE PAPER K-8	07 p1152 A69-19067
IAF PAPER SD-49	02 p0334 A69-11949	IEEE PAPER L-1	05 p0775 A69-16321
ICAS PAPER 68-05	11 p1822 A69-24463 #	IEEE PAPER L-4	05 p0775 A69-16322*
ICAS PAPER 68-23	24 p4254 A69-43717 #	IEEE PAPER L-12	07 p1152 A69-19068
ICAS PAPER 68-26	24 p4335 A69-43718*#	IEEE PAPER M-8	07 p1153 A69-19070
ICAS PAPER 68-38	17 p3061 A69-33589 #	IEEE PAPER M-70	07 p1153 A69-19069
ICAS PAPER 68-39	17 p2901 A69-33590 #	IEEE PAPER O-1	07 p1153 A69-19071
ICAS PAPER 68-41	11 p1966 A69-24750 #	IEEE PAPER O-11	07 p1153 A69-19072
ICAS PAPER 68-42	17 p2895 A69-33587 #	IEEE PAPER P-1	05 p0775 A69-16323*
IEEE PAPER A-2	05 p0773 A69-16307	IEEE PAPER P-3	05 p0775 A69-16324*
IEEE PAPER A-3	07 p1150 A69-19047	IEEE PAPER P-4	07 p1153 A69-19073
IEEE PAPER B-1	05 p0773 A69-16308	IEEE PAPER P-5	07 p1153 A69-19074
IEEE PAPER B-2	05 p0774 A69-16309	IEEE PAPER P-6	07 p1153 A69-19075
IEEE PAPER B-3	07 p1150 A69-19048	IEEE PAPER P-7	05 p0775 A69-16325*

# MEETING PAPER AND REPORT NUMBER INDEX

IEEE PAPER Q-1	07 p1153 A69-19076	IEEE PAPER 68-TP-74-COM	19 p3276 A69-36485
IEEE PAPER Q-5	07 p1154 A69-19077	IEEE PAPER 68-TP-350-COM	10 p1656 A69-23535
IEEE PAPER Q-6	07 p1154 A69-19078	IEEE PAPER 68-TP-382-COM	13 p2222 A69-28153
IEEE PAPER R-2	05 p0775 A69-16326	IEEE PAPER 69-TP-10-COM	19 p3277 A69-36488
IEEE PAPER R-5	07 p1154 A69-19079	IES PREPRINT 30	18 p3138 A69-35173*#
IEEE PAPER S-8	07 p1154 A69-19080	IME PAPER 1	12 p2146 A69-25790
IEEE PAPER S-9	07 p1154 A69-19081	IME PAPER 1	07 p1137 A69-18559
IEEE PAPER T-2	05 p0776 A69-16327	IME PAPER 2	12 p2146 A69-25788
IEEE PAPER T-5	07 p1154 A69-19082*	IME PAPER 2	07 p1138 A69-18566
IEEE PAPER T-6	07 p1154 A69-19083	IME PAPER 3	12 p2146 A69-25789
IEEE PAPER T-8	05 p0776 A69-16328	IME PAPER 3	07 p1138 A69-18563
IEEE PAPER T-9	07 p1155 A69-19084	IME PAPER 4	07 p1139 A69-18567
IEEE PAPER U-3	07 p1155 A69-19085	IME PAPER 5	12 p2147 A69-25794
IEEE PAPER U-7	12 p2106 A69-26322	IME PAPER 6	07 p1138 A69-18562
IEEE PAPER V-7	05 p0776 A69-16329	IME PAPER 7	12 p2146 A69-25787
IEEE PAPER V-9	07 p1155 A69-19086	IME PAPER 7	07 p1138 A69-18561
IEEE PAPER 1C-4	07 p1134 A69-19186*	IME PAPER 8	12 p2147 A69-25791
IEEE PAPER 2A-7	07 p1133 A69-19185*	IME PAPER 9	07 p1138 A69-18565
IEEE PAPER 2B-2	07 p1179 A69-19187*	IME PAPER 10	12 p2147 A69-25795
IEEE PAPER 2B-6	07 p1179 A69-19188	IME PAPER 10	07 p1138 A69-18564
IEEE PAPER 2D-5	07 p1134 A69-19189*	IME PAPER 11	07 p1137 A69-18558
IEEE PAPER 2D-6	07 p1059 A69-19190*	IME PAPER 12	12 p2147 A69-25796
IEEE PAPER 2.3	01 p0045 A69-10713	IME PAPER 12	07 p1137 A69-18560
IEEE PAPER 3A-3	07 p1134 A69-19191	IME PAPER 15	12 p2147 A69-25793
IEEE PAPER 3A-5	07 p1134 A69-19192*	IMPI PAPER A4	04 p0636 A69-14999
IEEE PAPER 3A-6	07 p1134 A69-19193*	IMPI PAPER D2	04 p0647 A69-15000*
IEEE PAPER 3A-7	07 p1134 A69-19194	IS-ERI-70	09 p1612 A69-21561 #
IEEE PAPER 3B-9	07 p1135 A69-19201	IS-ERI-71	24 p4285 A69-42984 #
IEEE PAPER 3C-1	07 p1230 A69-19195*	ISAS-428	06 p0986 A69-17024 #
IEEE PAPER 3C-2	07 p1134 A69-19196	ISAS-429	06 p0916 A69-17023 #
IEEE PAPER 3C-3	07 p1135 A69-19197	ISAS-430	06 p1029 A69-17025
IEEE PAPER 3C-4	07 p1135 A69-19198	ISAS-431	06 p1000 A69-17026
IEEE PAPER 3C-5	07 p1135 A69-19199*	ISAS-433	09 p1553 A69-22569 #
IEEE PAPER 3C-6	07 p1135 A69-19200	JHU-TR-15	10 p1788 A69-24121*
IEEE PAPER 3.3	09 p1461 A69-22562*	JPL-TR-32-1335	06 p1033 A69-17555*
IEEE PAPER 10.1	01 p0081 A69-10714*	JPL-TR-32-1340	02 p0220 A69-12429*
IEEE PAPER 10.2	01 p0081 A69-10715*	JPL-TR-32-1344	03 p0429 A69-13299*
IEEE PAPER 11.7	01 p0138 A69-10716*	JPL-TR-32-1345	02 p0211 A69-12442*
IEEE PAPER 11.8	01 p0138 A69-10717*	JPL-TR-32-1348	10 p1809 A69-23194*
IEEE PAPER 13.5	01 p0176 A69-10718*	JPL-TR-32-1351	06 p0922 A69-17805*#
IEEE PAPER 16.4	01 p0045 A69-10719*	JPL-TR-32-1358	08 p1312 A69-19850*
IEEE PAPER 17.11	01 p0045 A69-10720	JPL-TR-32-1364	02 p0229 A69-12374*#
IEEE PAPER 67-TP-1173-COM	10 p1655 A69-23532	JPL-TR-32-1368	11 p1832 A69-25640*
IEEE PAPER 67-TP-1178-COM	10 p1663 A69-23531*	JPL-TR-32-1376	11 p1923 A69-24291*#



# MEETING PAPER AND REPORT NUMBER INDEX

JPL-TR-32-1379	09 p1470 A69-22790*	ONERA-TP-652	03 p0419 A69-14111
JPL-TR-32-1390	13 p2263 A69-28199*	ONERA-TP-653	07 p1230 A69-18264
JPL-TR-32-1399	06 p1001 A69-17159**	ONERA-TP-656E	07 p1203 A69-18415 #
JPL-TR-32-1407	16 p2732 A69-31894**	ONERA-TP-657	07 p1052 A69-18414 #
JPL-TR-32-1442	17 p2946 A69-33658*	ONERA-TP-658	07 p1203 A69-18418 #
MPI PAPER DA-6	22 p3889 A69-40104	ONERA-TP-659F	07 p1050 A69-18417 #
NACE PAPER 49	08 p1320 A69-20599	ONERA-TP-661	16 p2802 A69-32204 #
NAL-TN-13	13 p2362 A69-28123 #	ONERA-TP-662	04 p0621 A69-15114
NAS-NRC PAPER D-1	22 p3998 A69-40631**	ONERA-TP-665	06 p0941 A69-17097 #
NAS-NRC PAPER D-3	22 p3998 A69-40620**	ONERA-TP-666	06 p0857 A69-17098 #
NAS-NRC PAPER D-5	22 p3970 A69-40633**	ONERA-TP-667	06 p1020 A69-17099 #
NAS-NRC PAPER F-5	22 p3998 A69-40626**	ONERA-TP-668	06 p0869 A69-17100 #
NAS-NRC PAPER H-1	22 p4051 A69-40628 #	ONERA-TP-669	05 p0699 A69-16340
NAS-NRC PAPER H-2	22 p3998 A69-40624 #	ONERA-TP-671	07 p1167 A69-19340
NAS-NRC PAPER H-3	22 p3947 A69-40630 #	ONERA-TP-673	07 p1167 A69-19339
NAS-NRC PAPER H-4	22 p3981 A69-40629 #	ONERA-TP-676	20 p3510 A69-37405
NAS-NRC PAPER H-5	22 p4050 A69-40623 #	ONERA-TP-677	08 p1303 A69-19878
NAS-NRC PAPER I-1	22 p4050 A69-40625**	ONERA-TP-678	16 p2733 A69-32258 #
NAS-NRC PAPER J-3	22 p3947 A69-40627 #	ONERA-TP-678	16 p2733 A69-32333 #
ONERA-TP-449	05 p0766 A69-16749 #	ONERA-TP-679	16 p2733 A69-32258 #
ONERA-TP-593	02 p0236 A69-11617 #	ONERA-TP-680	08 p1304 A69-20754
ONERA-TP-596	17 p2945 A69-33065	ONERA-TP-681	09 p1613 A69-21689
ONERA-TP-598	02 p0187 A69-11621 #	ONERA-TP-683	19 p3305 A69-35726
ONERA-TP-599	02 p0187 A69-11619 #	ONERA-TP-684	19 p3293 A69-35747
ONERA-TP-600	02 p0187 A69-11620 #	ONERA-TP-692	11 p1818 A69-24751 #
ONERA-TP-605	05 p0764 A69-16590	ONERA-TP-693	11 p1867 A69-24752 #
ONERA-TP-628	16 p2805 A69-32332 #	ONERA-TP-694	11 p1867 A69-24753 #
ONERA-TP-629	02 p0187 A69-11622 #	ONERA-TP-695	11 p1975 A69-24754 #
ONERA-TP-630	07 p1049 A69-18413 #	ONERA-TP-697	20 p3626 A69-37755 #
ONERA-TP-631	07 p1049 A69-18416 #	ONERA-TP-698	20 p3462 A69-37753 #
ONERA-TP-632	02 p0187 A69-11618 #	ONERA-TP-699	20 p3541 A69-37754 #
ONERA-TP-633	02 p0226 A69-11624 #	ONERA-TP-703	17 p3054 A69-33064
ONERA-TP-636	02 p0251 A69-11625 #	ONERA-TP-707	19 p3432 A69-36686
ONERA-TP-639	02 p0337 A69-11626 #	ONERA-TP-708	17 p2956 A69-33588 #
ONERA-TP-642	08 p1335 A69-19967	ONERA-TP-709	15 p2601 A69-31370 #
ONERA-TP-643	02 p0226 A69-11623 #	ONERA-TP-710	16 p2799 A69-31765
ONERA-TP-644	01 p0164 A69-10036	ONERA-TP-712	23 p4143 A69-42519
ONERA-TP-645	03 p0361 A69-12873 #	ONERA-TP-713	23 p4143 A69-42527
ONERA-TP-646	03 p0454 A69-12874 #	ONERA-TP-714	17 p2988 A69-33395
ONERA-TP-647	03 p0412 A69-12875 #	ONERA-TP-721	18 p3121 A69-34636 #
ONERA-TP-648	03 p0427 A69-12876 #	ONERA-TP-722	18 p3184 A69-34637 #
ONERA-TP-649	03 p0473 A69-12877 #	ONERA-TP-723	18 p3155 A69-34638 #
ONERA-TP-650	03 p0522 A69-12878 #	ONERA-TP-724	18 p3218 A69-34639 #
ONERA-TP-651	01 p0059 A69-10383	ONERA-TP-729	20 p3604 A69-37752 #

# MEETING PAPER AND REPORT NUMBER INDEX

ONERA-TP-731	17 p3001 A69-33220	SAE PAPER 680712	03 p0496 A69-13445
ONERA-TP-732	17 p3049 A69-33241	SAE PAPER 680714	03 p0380 A69-13443
ONERA-TP-738	19 p3299 A69-36649	SAE PAPER 680717	03 p0495 A69-13442
OSA PAPER WH-16	18 p3174 A69-35245 #	SAE PAPER 680718	03 p0379 A69-13441*
RAES PAPER 1	22 p4053 A69-40482 #	SAE PAPER 680721	03 p0433 A69-13448
RAES PAPER 3	22 p3927 A69-40484 #	SAE PAPER 680729	03 p0379 A69-13440
RAES PAPER 4	22 p3908 A69-40485 #	SAE PAPER 680733	03 p0366 A69-13439
RAES PAPER 6	22 p3946 A69-40487 #	SAE PAPER 680746	03 p0379 A69-13438*
RAES PAPER 7	22 p3896 A69-40488*#	SAE PAPER 680752	03 p0525 A69-13437
RAES PAPER 8	22 p3946 A69-40481 #	SAE PAPER 680753	03 p0525 A69-13436
RAES PAPER 9	22 p4053 A69-40489 #	SAE PAPER 690033	07 p1049 A69-18312
RAES PAPER 10	22 p3927 A69-40490 #	SAE PAPER 690034	07 p1203 A69-18311
RAES PAPER 11	22 p3863 A69-40491 #	SAE PAPER 690035	07 p1203 A69-18310
RAES PAPER 12	22 p3864 A69-40621 #	SAE PAPER 690062	07 p1058 A69-18309
RAES PAPER 13	22 p3999 A69-40492 #	SAE PAPER 690063	07 p1057 A69-18308
RAES PAPER 14	22 p3999 A69-40493 #	SAE PAPER 690100	07 p1158 A69-18307
RAES PAPER 15	22 p3863 A69-40494 #	SAE PAPER 690101	09 p1503 A69-21557
RAES PAPER 16	22 p4043 A69-40495	SAE PAPER 690102	09 p1503 A69-21558*
RAES PAPER 17	22 p3863 A69-40496 #	SAE PAPER 690103	09 p1522 A69-21556
RAES PAPER 18	22 p3859 A69-40497 #	SAE PAPER 690196	07 p1116 A69-18304
RAES PAPER 19	22 p3859 A69-40498 #	SAE PAPER 690197	07 p1239 A69-18303*
RAES PAPER 20	22 p4000 A69-40499 #	SAE PAPER 690198	07 p1239 A69-18302
RAES PAPER 21	22 p4000 A69-40622 #	SAE PAPER 690199	07 p1239 A69-18301
RAES PAPER 22	22 p4000 A69-40500 #	SAE PAPER 690201	07 p1178 A69-18306
SAE PAPER 680220	04 p0549 A69-14930*	SAE PAPER 690202	07 p1239 A69-18305*
SAE PAPER 680299	13 p2296 A69-28103	SAE PAPER 690205	24 p4255 A69-42889
SAE PAPER 680347	07 p1204 A69-19729 #	SAE PAPER 690265	07 p1130 A69-18313
SAE PAPER 680348	03 p0495 A69-13350	SAE PAPER 690266	09 p1494 A69-21555*
SAE PAPER 680632	08 p1321 A69-20732	SAE PAPER 690308	11 p1825 A69-24503
SAE PAPER 680642	03 p0444 A69-13458	SAE PAPER 690309	11 p1942 A69-24514
SAE PAPER 680643	03 p0453 A69-13457*	SAE PAPER 690310	11 p1942 A69-24513
SAE PAPER 680648	03 p0444 A69-13456	SAE PAPER 690311	11 p1941 A69-24512
SAE PAPER 680649	03 p0434 A69-13455	SAE PAPER 690313	11 p1822 A69-24511
SAE PAPER 680651	03 p0433 A69-13454	SAE PAPER 690316	11 p1890 A69-24510
SAE PAPER 680652	03 p0444 A69-13546	SAE PAPER 690318	15 p2617 A69-30089
SAE PAPER 680662	03 p0433 A69-13453	SAE PAPER 690319	15 p2617 A69-30093
SAE PAPER 680666	03 p0465 A69-13452	SAE PAPER 690320	15 p2549 A69-30090
SAE PAPER 680668	03 p0433 A69-13451	SAE PAPER 690321	11 p2004 A69-24509
SAE PAPER 680675	03 p0433 A69-13450	SAE PAPER 690323	11 p1822 A69-24515
SAE PAPER 680676	03 p0433 A69-13449	SAE PAPER 690325	11 p1941 A69-24508
SAE PAPER 680682	03 p0535 A69-13447	SAE PAPER 690326	11 p1890 A69-24507
SAE PAPER 680691	03 p0496 A69-13446	SAE PAPER 690327	11 p1833 A69-24506
SAE PAPER 680691	16 p2837 A69-32367	SAE PAPER 690328	11 p1829 A69-24488
SAE PAPER 680693	03 p0366 A69-13444	SAE PAPER 690329	11 p1825 A69-24505



# MEETING PAPER AND REPORT NUMBER INDEX

SAE PAPER 690330	11 p1829 A69-24504	SAE PAPER 690423	23 p4169 A69-41647
SAE PAPER 690331	11 p1941 A69-24494	SAE PAPER 690424	23 p4200 A69-41648
SAE PAPER 690332	11 p1824 A69-24501	SAE PAPER 690431	23 p4165 A69-41649
SAE PAPER 690333	11 p1822 A69-24500	SAE PAPER 690434	23 p4062 A69-41651
SAE PAPER 690334	11 p1825 A69-24502	SAE PAPER 690436	23 p4200 A69-41653
SAE PAPER 690335	11 p1829 A69-24493	SAE PAPER 690480	24 p4335 A69-43515
SAE PAPER 690336	11 p1822 A69-24492	SAWE PAPER 68-LC-1	18 p3148 A69-35003
SAE PAPER 690337	15 p2606 A69-30092	SAWE PAPER 68-LC-9	18 p3148 A69-35002
SAE PAPER 690338	11 p1914 A69-24499	SAWE PAPER 69-APM-17	18 p3214 A69-34393 *
SAE PAPER 690339	11 p1824 A69-24495	SAWE PAPER 730	18 p3221 A69-34895
SAE PAPER 690340	11 p1914 A69-24496	SAWE PAPER 731	18 p3221 A69-34894
SAE PAPER 690341	11 p1822 A69-24498	SAWE PAPER 732	18 p3221 A69-34893
SAE PAPER 690342	11 p1890 A69-24497	SAWE PAPER 734	18 p3221 A69-34892
SAE PAPER 690343	11 p1890 A69-24491	SAWE PAPER 736	18 p3220 A69-34891
SAE PAPER 690344	11 p1914 A69-24490	SAWE PAPER 737	18 p3118 A69-34890
SAE PAPER 690345	11 p1913 A69-24489	SAWE PAPER 738	18 p3220 A69-34888
SAE PAPER 690346	15 p2552 A69-30091	SAWE PAPER 739	18 p3118 A69-34889
SAE PAPER 690375	23 p4062 A69-41652*	SAWE PAPER 740	18 p3137 A69-34887
SAE PAPER 690376	23 p4063 A69-41671	SAWE PAPER 741	18 p3208 A69-34886
SAE PAPER 690377	23 p4147 A69-41670	SAWE PAPER 743	18 p3208 A69-34885
SAE PAPER 690378	23 p4062 A69-41654	SAWE PAPER 745	18 p3091 A69-34908
SAE PAPER 690380	23 p4201 A69-41668	SAWE PAPER 746	18 p3091 A69-34907
SAE PAPER 690381	23 p4201 A69-41667	SAWE PAPER 747	18 p3118 A69-34884
SAE PAPER 690386	23 p4200 A69-41655	SAWE PAPER 748	18 p3137 A69-34883
SAE PAPER 690387	23 p4200 A69-41656	SAWE PAPER 755	18 p3136 A69-34882
SAE PAPER 690388	23 p4201 A69-41666	SAWE PAPER 757	18 p3220 A69-34881
SAE PAPER 690390	23 p4201 A69-41665	SAWE PAPER 760	18 p3220 A69-34880
SAE PAPER 690391	23 p4201 A69-41664	SAWE PAPER 761	18 p3091 A69-34906
SAE PAPER 690393	23 p4186 A69-41663	SAWE PAPER 762	18 p3220 A69-34879
SAE PAPER 690399	23 p4147 A69-41661	SAWE PAPER 764	18 p3094 A69-34878
SAE PAPER 690402	23 p4147 A69-41660	SAWE PAPER 765	18 p3091 A69-34877
SAE PAPER 690403	23 p4201 A69-41659	SAWE PAPER 770	18 p3208 A69-34876
SAE PAPER 690405	23 p4201 A69-41658	SAWE PAPER 772	18 p3208 A69-34875
SAE PAPER 690407	23 p4185 A69-41657	SAWE PAPER 773	18 p3172 A69-34874
SAE PAPER 690409	23 p4200 A69-41637	SAWE PAPER 775	18 p3184 A69-34873*
SAE PAPER 690410	23 p4200 A69-41638	SAWE PAPER 776	18 p3208 A69-34872
SAE PAPER 690411	23 p4200 A69-41639	SAWE PAPER 777	18 p3208 A69-34871 *
SAE PAPER 690412	23 p4200 A69-41640	SAWE PAPER 781	18 p3091 A69-34870
SAE PAPER 690414	23 p4241 A69-41641	SAWE PAPER 782	18 p3091 A69-34905
SAE PAPER 690417	23 p4147 A69-41642	SAWE PAPER 783	18 p3091 A69-34869
SAE PAPER 690419	23 p4062 A69-41643	SAWE PAPER 784	18 p3090 A69-34868
SAE PAPER 690420	23 p4185 A69-41644	SAWE PAPER 790	18 p3220 A69-34867
SAE PAPER 690421	23 p4147 A69-41645	SAWE PAPER 791	18 p3220 A69-34866
SAE PAPER 690422	23 p4185 A69-41646	SAWE PAPER 792	18 p3118 A69-34865

MEETING PAPER AND REPORT NUMBER INDEX

SAWE PAPER 793	18 p3208 A69-34864*	UN PAPER 68-95205	01 p0113 A69-10514 #
SAWE PAPER 794	18 p3222 A69-34904	UN PAPER 68-95209	01 p0178 A69-10478 #
SAWE PAPER 795	18 p3107 A69-34863	UN PAPER 68-95213	01 p0109 A69-10513 #
SAWE PAPER 796	18 p3220 A69-34862	UN PAPER 68-95214	06 p1013 A69-17076 #
SAWE PAPER 797	18 p3208 A69-34903	UN PAPER 68-95226	01 p0113 A69-10520 #
SAWE PAPER 798	18 p3219 A69-34861	UN PAPER 68-95240	06 p0923 A69-17080 #
SAWE PAPER 799	18 p3107 A69-34860	UN PAPER 68-95247	01 p0112 A69-10461 #
SAWE PAPER 805	18 p3091 A69-34901	UN PAPER 68-95251	01 p0112 A69-10470 #
SAWE PAPER 806	18 p3091 A69-34902	UN PAPER 68-95260	01 p0144 A69-10477 #
SAWE PAPER 810	18 p3221 A69-34900	UN PAPER 68-95265	06 p0917 A69-17064 #
SAWE PAPER 811	18 p3221 A69-34899	UN PAPER 68-95268	01 p0150 A69-10476 #
SAWE PAPER 812	18 p3221 A69-34898	UN PAPER 68-95272	01 p0029 A69-10529 #
SAWE PAPER 813	18 p3221 A69-34897	UN PAPER 68-95280	01 p0043 A69-10481 #
SAWE PAPER 814	18 p3221 A69-34896	UN PAPER 68-95285	01 p0064 A69-10475 #
SBAC PAPER 4	20 p3549 A69-37445 #	UN PAPER 68-95286	06 p0886 A69-17066 #
SBAC PAPER 5	20 p3550 A69-37454 #	UN PAPER 68-95287	01 p0028 A69-10497 #
SBAC PAPER 7	20 p3550 A69-37449 #	UN PAPER 68-95291	01 p0180 A69-10519*#
SBAC PAPER 8	20 p3549 A69-37447 #	UN PAPER 68-95300	01 p0108 A69-10462 #
SBAC PAPER 9	20 p3549 A69-37448 #	UN PAPER 68-95305	01 p0112 A69-10469 #
SBAC PAPER 12	20 p3550 A69-37456 #	UN PAPER 68-95313	01 p0179 A69-10512*#
SBAC PAPER 13	20 p3550 A69-37455 #	UN PAPER 68-95317	06 p1043 A69-17068*#
SBAC PAPER 14	20 p3550 A69-37451 #	UN PAPER 68-95321	01 p0178 A69-10467*#
SBAC PAPER 15	20 p3550 A69-37452 #	UN PAPER 68-95333	01 p0064 A69-10487 #
SBAC PAPER 17	20 p3550 A69-37450 #	UN PAPER 68-95337	01 p0180 A69-10525*#
SBAC PAPER 18	20 p3550 A69-37453 #	UN PAPER 68-95345	01 p0014 A69-10486 #
SESA PAPER 1332	11 p1995 A69-25651	UN PAPER 68-95349	01 p0179 A69-10490 #
SESA PAPER 1348	09 p1617 A69-22013	UN PAPER 68-95350	01 p0109 A69-10483*#
SESA PAPER 1350	07 p1069 A69-19726*	UN PAPER 68-95355	06 p0887 A69-17078 #
SMPTE PAPER 104-17	04 p0596 A69-14359	UN PAPER 68-95363	01 p0113 A69-10479*#
SMPTE PAPER 104-20	04 p0596 A69-14360*	UN PAPER 68-95367	01 p0179 A69-10516*#
SMPTE PAPER 104-21	04 p0650 A69-14361*	UN PAPER 68-95377	01 p0065 A69-10528 #
SMPTE PAPER 105-71	12 p2078 A69-25771	UN PAPER 68-95381	01 p0150 A69-10480 #
SMPTE PAPER 105-72	12 p2078 A69-25772*	UN PAPER 68-95385	01 p0064 A69-10460 #
SMPTE PAPER 105-73	12 p2077 A69-25769	UN PAPER 68-95389	01 p0014 A69-10508 #
SMPTE PAPER 105-74	12 p2055 A69-25768*	UN PAPER 68-95393	01 p0065 A69-10504 #
SMPTE PAPER 105-78	12 p2078 A69-25770	UN PAPER 68-95397	01 p0108 A69-10463*#
SMPTE PAPER 105-79	12 p2077 A69-25767	UN PAPER 68-95401	01 p0178 A69-10489 #
SMPTE PREPRINT 101-91	07 p1116 A69-18949	UN PAPER 68-95405	01 p0109 A69-10484 #
SRCC-91	09 p1594 A69-21696*	UN PAPER 68-95413	01 p0179 A69-10506*#
TR-781-0	09 p1570 A69-22300 #	UN PAPER 68-95417	01 p0020 A69-10471 #
UN PAPER 68-05755	06 p0917 A69-17042 #	UN PAPER 68-95421	01 p0108 A69-10474*#
UN PAPER 68-07445	06 p0917 A69-17069 #	UN PAPER 68-95429	01 p0109 A69-10505 #
UN PAPER 68-10464	01 p0065 A69-10532 #	UN PAPER 68-95437	01 p0178 A69-10472*#
UN PAPER 68-11608	01 p0179 A69-10496 #	UN PAPER 68-95441	01 p0065 A69-10509 #



# MEETING PAPER AND REPORT NUMBER INDEX

UN PAPER 68-95445	01 p0161 A69-10465 #	UN PAPER 68-95789	01 p0064 A69-10459
UN PAPER 68-95450	01 p0054 A69-10522 #	UN PAPER 68-95793	01 p0065 A69-10523 #
UN PAPER 68-95451	01 p0108 A69-10458 #	UN PAPER 68-95797	01 p0080 A69-10531 #
UN PAPER 68-95455	01 p0028 A69-10493 #	UN PAPER 68-95809	01 p0179 A69-10515**
UN PAPER 68-95459	06 p0857 A69-17083 #	UN PAPER 68-95813	01 p0043 A69-10517 #
UN PAPER 68-95467	01 p0161 A69-10510 #	UN PAPER 68-95823	01 p0108 A69-10473 #
UN PAPER 68-95471	01 p0108 A69-10464 #	UN PAPER 68-95827	01 p0029 A69-10499 #
UN PAPER 68-95475	01 p0179 A69-10511 #	UN PAPER 68-95831	06 p0950 A69-17073 #
UN PAPER 68-95501	06 p0887 A69-17075 #	UN PAPER 68-95832	06 p0954 A69-17063 #
UN PAPER 68-95529	06 p0917 A69-17067 #	UN PAPER 68-95833	06 p1013 A69-17077 #
UN PAPER 68-95533	01 p0028 A69-10494 #	UN PAPER 68-95834	06 p0917 A69-17071 #
UN PAPER 68-95551	06 p1042 A69-17034 #	UN PAPER 68-95835	06 p1013 A69-17065 #
UN PAPER 68-95555	01 p0109 A69-10502 #	UN PAPER 68-95838	06 p0950 A69-17081 #
UN PAPER 68-95559	01 p0114 A69-10466 #	UN PAPER 68-95843	01 p0054 A69-10507 #
UN PAPER 68-95563	01 p0151 A69-10501 #	UN PAPER 68-95851	01 p0029 A69-10526 #
UN PAPER 68-95571	01 p0109 A69-10482 #	UN PAPER 68-95861	01 p0014 A69-10456 #
UN PAPER 68-95622	06 p1013 A69-17051 #	UN PAPER 68-95862	01 p0180 A69-10518 #
UN PAPER 68-95654	06 p0949 A69-17052 #	UN PAPER 68-95870	01 p0178 A69-10485 #
UN PAPER 68-95669	06 p1043 A69-17054 #	UN PAPER 68-95878	01 p0064 A69-10491**
UN PAPER 68-95693	06 p0949 A69-17058 #	UN PAPER 68-95887	01 p0113 A69-10521
UN PAPER 68-95711	06 p0950 A69-17070 #	UN PAPER 68-95903	06 p0950 A69-17062 #
UN PAPER 68-95713	06 p0949 A69-17029 #	UN PAPER 68-95912	06 p1043 A69-17059**
UN PAPER 68-95715	06 p0873 A69-17035 #	UN PAPER 68-96195	06 p0917 A69-17082 #
UN PAPER 68-95716	06 p0879 A69-17036 #	WERL-68-1C2-TAEC-P1	04 p0603 A69-15444 #
UN PAPER 68-95717	06 p1000 A69-17049 #	WSCI PAPER 67-13	02 p0352 A69-12311*
UN PAPER 68-95719	06 p1000 A69-17055 #	WSCI PAPER 68-7	11 p1942 A69-24906
UN PAPER 68-95729	06 p0873 A69-17061 #	WSCI PAPER 68-19	07 p1202 A69-18370 #
UN PAPER 68-95746	01 p0151 A69-10527 #	WSCI PAPER 68-20	07 p1241 A69-18367 #
UN PAPER 68-95750	01 p0028 A69-10495 #	WSCI PAPER 68-22	07 p1240 A69-18362**
UN PAPER 68-95751	01 p0028 A69-10492 #	WSCI PAPER 68-23	07 p1240 A69-18359 #
UN PAPER 68-95756	01 p0029 A69-10524 #	WSCI PAPER 68-24	07 p1241 A69-18366 #
UN PAPER 68-95759	06 p0950 A69-17060 #	WSCI PAPER 68-25	07 p1202 A69-18363 #
UN PAPER 68-95760	06 p0949 A69-17037 #	WSCI PAPER 68-26	07 p1241 A69-18369
UN PAPER 68-95763	06 p0916 A69-17038 #	WSCI PAPER 68-27	06 p1034 A69-17793 #
UN PAPER 68-95764	06 p1013 A69-17057 #	WSCI PAPER 68-28	06 p0969 A69-17794 #
UN PAPER 68-95768	06 p0986 A69-17031 #	WSCI PAPER 68-29	07 p1240 A69-18358 #
UN PAPER 68-95769	06 p1000 A69-17041 #	WSCI PAPER 68-30	07 p1240 A69-18357 #
UN PAPER 68-95771	06 p1013 A69-17044 #	WSCI PAPER 68-32	07 p1202 A69-18361
UN PAPER 68-95772	06 p0886 A69-17030 #	WSCI PAPER 68-33	07 p1203 A69-18365**
UN PAPER 68-95773	06 p0886 A69-17047 #	WSCI PAPER 68-34	07 p1202 A69-18364 #
UN PAPER 68-95774	06 p0949 A69-17039 #	WSCI PAPER 68-35	07 p1203 A69-18352 #
UN PAPER 68-95776	06 p0916 A69-17028 #	WSCI PAPER 68-36	07 p1201 A69-18354 #
UN PAPER 68-95778	06 p0879 A69-17040 #	WSCI PAPER 68-37	07 p1073 A69-18353
UN PAPER 68-95785	01 p0161 A69-10530	WSCI PAPER 68-38	06 p0885 A69-17795

MEETING PAPER AND REPORT NUMBER INDEX

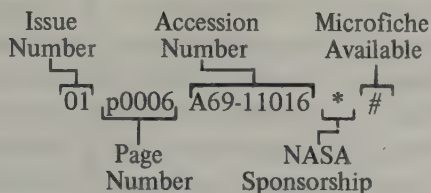
WSCI PAPER 68-39	07 p1202 A69-18368 #
WSCI PAPER 68-40	07 p1202 A69-18355 #
WSCI PAPER 68-41	07 p1240 A69-18356 #
WSCI PAPER 68-42	06 p1034 A69-17791 #
WSCI PAPER 68-43	06 p0983 A69-17792 #
WSCI PAPER 68-44	07 p1240 A69-18360 #
WSCI PAPER 68-45	07 p1073 A69-18315 #
WSCI PAPER 68-47	07 p1073 A69-18320 #
WSCI PAPER 68-48	07 p1239 A69-18321 #
WSCI PAPER 68-49	07 p1073 A69-18318 #
WSCI PAPER 68-50	07 p1073 A69-18319 #
WSCI PAPER 68-52	07 p1239 A69-18316 #
WSCI PAPER 68-53	07 p1240 A69-18322 #
WSCI PAPER 68-54	07 p1072 A69-18314
WSCI PAPER 69-1	16 p2830 A69-32342 #
WSCI PAPER 69-2	16 p2830 A69-32343 #
WSCI PAPER 69-3	16 p2830 A69-32344 #
WSCI PAPER 69-4	16 p2830 A69-32345 #
WSCI PAPER 69-5	16 p2830 A69-32346 #
WSCI PAPER 69-6	16 p2830 A69-32347 #
WSCI PAPER 69-7	16 p2830 A69-32348 #
WSCI PAPER 69-9	16 p2831 A69-32349 #
WSCI PAPER 69-10	16 p2831 A69-32350 #
WSCI PAPER 69-12	16 p2831 A69-32351 #
WSCI PAPER 69-13	16 p2831 A69-32353 #
WSCI PAPER 69-14	16 p2831 A69-32352 #
WSCI PAPER 69-16	16 p2831 A69-32354 #
WSCI PAPER 69-17	16 p2831 A69-32355 #
WSCI PAPER 69-18	16 p2831 A69-32356 #
WSCI PAPER 69-19	16 p2832 A69-32357 #
WSCI PAPER 69-20	16 p2832 A69-32358 #
WSCI PAPER 69-21	16 p2832 A69-32359 #
WSCI PAPER 69-22	16 p2832 A69-32360 #
WSCI PAPER 69-23	16 p2832 A69-32361 #





The list of IAA Accession numbers may be used to locate a specific item. Accession numbers are arranged in ascending order, and each is preceded by a number which identifies the issue of *International Aerospace Abstracts*, and the page number on which an accession is located. The asterisk (\*) indicates NASA-supported work. When a number sign (#) is present, it indicates that the document is available on microfiche.

To Illustrate:



01 p0103 A69-10001	01 p0160 A69-10032	01 p0093 A69-10063*	01 p0173 A69-10094 #	01 p0084 A69-10130
01 p0103 A69-10002	01 p0054 A69-10033	01 p0012 A69-10064	01 p0174 A69-10095 #	01 p0084 A69-10131
01 p0049 A69-10003*	01 p0122 A69-10034**	01 p0164 A69-10065 #	01 p0174 A69-10096 #	01 p0078 A69-10132
01 p0103 A69-10004	01 p0122 A69-10035**	01 p0058 A69-10066 #	01 p0174 A69-10097 #	01 p0165 A69-10133
01 p0103 A69-10005	01 p0164 A69-10036	01 p0035 A69-10067	01 p0038 A69-10098 #	01 p0149 A69-10134*
01 p0103 A69-10006	01 p0058 A69-10037	01 p0026 A69-10068 #	01 p0125 A69-10099 #	01 p0149 A69-10135*
01 p0103 A69-10007**	01 p0135 A69-10038	01 p0049 A69-10069 #	01 p0122 A69-10100*	01 p0062 A69-10136
01 p0173 A69-10008	01 p0078 A69-10039	01 p0038 A69-10070 #	01 p0005 A69-10101 #	01 p0062 A69-10137
01 p0134 A69-10009*	01 p0122 A69-10040	01 p0038 A69-10071 #	01 p0125 A69-10102 #	01 p0062 A69-10138
01 p0088 A69-10010	01 p0122 A69-10041	01 p0026 A69-10072 #	01 p0174 A69-10103 #	01 p0149 A69-10139
01 p0134 A69-10011*	01 p0148 A69-10042	01 p0078 A69-10073 #	01 p0174 A69-10104 #	01 p0135 A69-10140*
01 p0114 A69-10012*	01 p0144 A69-10043	01 p0038 A69-10074 #	01 p0089 A69-10105 #	01 p0023 A69-10141 #
01 p0134 A69-10013	01 p0101 A69-10044	01 p0038 A69-10075 #	01 p0174 A69-10106 #	01 p0058 A69-10142 #
01 p0135 A69-10014	01 p0115 A69-10045	01 p0164 A69-10076 #	01 p0174 A69-10107 #	01 p0058 A69-10143 #
01 p0125 A69-10015	01 p0148 A69-10046 #	01 p0173 A69-10077 #	01 p0101 A69-10108 #	01 p0175 A69-10144 #
01 p0135 A69-10016	01 p0135 A69-10047 #	01 p0164 A69-10078 #	01 p0084 A69-10109**	01 p0038 A69-10145
01 p0037 A69-10017	01 p0125 A69-10048 #	01 p0173 A69-10079 #	01 p0174 A69-10110**	01 p0008 A69-10146
01 p0115 A69-10018*	01 p0115 A69-10049 #	01 p0101 A69-10080 #	01 p0093 A69-10111**	01 p0009 A69-10147
01 p0115 A69-10019*	01 p0148 A69-10050	01 p0164 A69-10081 #	01 p0175 A69-10112**	01 p0093 A69-10148
01 p0115 A69-10020	01 p0148 A69-10051*	01 p0164 A69-10082 #	01 p0078 A69-10113**	01 p0054 A69-10149
01 p0084 A69-10021	01 p0148 A69-10052	01 p0164 A69-10083 #	01 p0165 A69-10114	01 p0078 A69-10150
01 p0147 A69-10022	01 p0148 A69-10053	01 p0165 A69-10084 #	01 p0165 A69-10115	01 p0160 A69-10151
01 p0077 A69-10023	01 p0148 A69-10054	01 p0165 A69-10085 #	01 p0093 A69-10116*	01 p0078 A69-10152
01 p0077 A69-10024*	01 p0092 A69-10055*	01 p0112 A69-10086 #	01 p0078 A69-10117	01 p0012 A69-10153
01 p0077 A69-10025	01 p0008 A69-10056	01 p0173 A69-10087 #	01 p0165 A69-10118	01 p0012 A69-10154
01 p0005 A69-10026	01 p0164 A69-10057	01 p0165 A69-10088 #	01 p0089 A69-10119	01 p0078 A69-10155
01 p0008 A69-10027	01 p0142 A69-10058	01 p0165 A69-10089 #	01 p0135 A69-10120	01 p0165 A69-10156
01 p0088 A69-10028	01 p0092 A69-10059	01 p0142 A69-10090 #	01 p0038 A69-10121	01 p0013 A69-10157 #
01 p0078 A69-10029	01 p0092 A69-10060*	01 p0125 A69-10091 #	01 p0038 A69-10122	01 p0009 A69-10158 #
01 p0008 A69-10030	01 p0093 A69-10061*	01 p0173 A69-10092 #	01 p0126 A69-10123*	01 p0005 A69-10159
01 p0160 A69-10031	01 p0093 A69-10062	01 p0173 A69-10093 #	01 p0148 A69-10124	01 p0058 A69-10160
			01 p0122 A69-10125*	01 p0005 A69-10161
			01 p0148 A69-10126 #	01 p0058 A69-10162
			01 p0149 A69-10127 #	01 p0126 A69-10163
			01 p0062 A69-10128 #	01 p0126 A69-10164
			01 p0062 A69-10129 #	01 p0115 A69-10165



## ACCESSION NUMBER INDEX

01 p0166 A69-10166*	01 p0050 A69-10211 #	01 p0136 A69-10256 #	01 p0166 A69-10301 #	01 p0128 A69-10346
01 p0013 A69-10167*	01 p0093 A69-10212 #	01 p0137 A69-10257 #	01 p0166 A69-10302 #	01 p0128 A69-10347 #
01 p0038 A69-10168	01 p0093 A69-10213 #	01 p0137 A69-10258 #	01 p0166 A69-10303 #	01 p0123 A69-10348 #
01 p0039 A69-10169	01 p0094 A69-10214 #	01 p0137 A69-10259 #	01 p0094 A69-10304 #	01 p0009 A69-10349 #
01 p0039 A69-10170	01 p0094 A69-10215 #	01 p0137 A69-10260 #	01 p0167 A69-10305 #	01 p0161 A69-10350 #
01 p0039 A69-10171	01 p0094 A69-10216 #	01 p0079 A69-10261 #	01 p0142 A69-10306 #	01 p0009 A69-10351 #
01 p0039 A69-10172*	01 p0079 A69-10217 #	01 p0166 A69-10262 #	01 p0059 A69-10307 #	01 p0080 A69-10352 #
01 p0039 A69-10173	01 p0079 A69-10218 #	01 p0115 A69-10263 #	01 p0059 A69-10308 #	01 p0137 A69-10353
01 p0039 A69-10174	01 p0054 A69-10219 #	01 p0104 A69-10264 #	01 p0142 A69-10309 #	01 p0050 A69-10354 #
01 p0039 A69-10175	01 p0079 A69-10220 #	01 p0104 A69-10265 #	01 p0012 A69-10310 #	01 p0050 A69-10355 #
01 p0135 A69-10176	01 p0079 A69-10221 #	01 p0149 A69-10266	01 p0112 A69-10311 #	01 p0116 A69-10356 #
01 p0026 A69-10177	01 p0090 A69-10222 #	01 p0027 A69-10267	01 p0085 A69-10312 #	01 p0005 A69-10357 #
01 p0026 A69-10178	01 p0107 A69-10223 #	01 p0149 A69-10268	01 p0094 A69-10313 #	01 p0080 A69-10358 #
01 p0089 A69-10179	01 p0027 A69-10224 #	01 p0149 A69-10269	01 p0175 A69-10314 #	01 p0168 A69-10359 #
01 p0089 A69-10180	01 p0058 A69-10225 #	01 p0149 A69-10270	01 p0104 A69-10315	01 p0063 A69-10360 #
01 p0089 A69-10181	01 p0126 A69-10226 #	01 p0149 A69-10271	01 p0104 A69-10316*	01 p0059 A69-10361
01 p0089 A69-10182	01 p0166 A69-10227*#	01 p0149 A69-10272	01 p0167 A69-10317*	01 p0006 A69-10362
01 p0089 A69-10183	01 p0058 A69-10228 #	01 p0150 A69-10273	01 p0080 A69-10318 #	01 p0128 A69-10363
01 p0089 A69-10184	01 p0005 A69-10229*#	01 p0063 A69-10274	01 p0042 A69-10319	01 p0128 A69-10364
01 p0135 A69-10185 #	01 p0175 A69-10230 #	01 p0063 A69-10275	01 p0042 A69-10320	01 p0138 A69-10365
01 p0136 A69-10186 #	01 p0103 A69-10231 #	01 p0126 A69-10276	01 p0137 A69-10321	01 p0175 A69-10366
01 p0126 A69-10187 #	01 p0166 A69-10232 #	01 p0126 A69-10277	01 p0042 A69-10322	01 p0094 A69-10367
01 p0039 A69-10188	01 p0059 A69-10233 #	01 p0126 A69-10278	01 p0167 A69-10323 #	01 p0085 A69-10368
01 p0039 A69-10189	01 p0166 A69-10234 #	01 p0127 A69-10279	01 p0167 A69-10324 #	01 p0085 A69-10369
01 p0039 A69-10190	01 p0104 A69-10235 #	01 p0127 A69-10280	01 p0167 A69-10325 #	01 p0150 A69-10370*
01 p0040 A69-10191	01 p0079 A69-10236	01 p0127 A69-10281	01 p0167 A69-10326 #	01 p0150 A69-10371
01 p0040 A69-10192	01 p0050 A69-10237	01 p0127 A69-10282	01 p0167 A69-10327 #	01 p0150 A69-10372
01 p0040 A69-10193*	01 p0050 A69-10238	01 p0127 A69-10283	01 p0167 A69-10328 #	01 p0150 A69-10373
01 p0040 A69-10194	01 p0050 A69-10239	01 p0122 A69-10284*	01 p0168 A69-10329 #	01 p0027 A69-10374 #
01 p0040 A69-10195	01 p0050 A69-10240	01 p0137 A69-10285	01 p0059 A69-10330 #	01 p0028 A69-10375 #
01 p0040 A69-10196	01 p0041 A69-10241	01 p0122 A69-10286*	01 p0175 A69-10331 #	01 p0028 A69-10376 #
01 p0040 A69-10197*	01 p0136 A69-10242	01 p0023 A69-10287*	01 p0059 A69-10332 #	01 p0050 A69-10377 #
01 p0040 A69-10198	01 p0041 A69-10243	01 p0023 A69-10288*	01 p0175 A69-10333 #	01 p0006 A69-10378 #
01 p0040 A69-10199	01 p0041 A69-10244	01 p0023 A69-10289*	01 p0137 A69-10334	01 p0006 A69-10379 #
01 p0041 A69-10200	01 p0136 A69-10245	01 p0123 A69-10290*	01 p0127 A69-10335	01 p0168 A69-10380 #
01 p0041 A69-10201	01 p0041 A69-10246	01 p0023 A69-10291*	01 p0127 A69-10336	01 p0090 A69-10381 #
01 p0041 A69-10202	01 p0042 A69-10247	01 p0054 A69-10292	01 p0127 A69-10337	01 p0059 A69-10382
01 p0041 A69-10203	01 p0027 A69-10248	01 p0079 A69-10293	01 p0059 A69-10338	01 p0059 A69-10383
01 p0041 A69-10204*	01 p0027 A69-10249	01 p0085 A69-10294	01 p0127 A69-10339	01 p0042 A69-10384
01 p0161 A69-10205 #	01 p0027 A69-10250	01 p0085 A69-10295	01 p0115 A69-10340	01 p0176 A69-10385
01 p0049 A69-10206 #	01 p0027 A69-10251	01 p0079 A69-10296	01 p0127 A69-10341	01 p0150 A69-10386
01 p0050 A69-10207 #	01 p0027 A69-10252	01 p0079 A69-10297	01 p0128 A69-10342	01 p0168 A69-10387
01 p0050 A69-10208 #	01 p0136 A69-10253 #	01 p0090 A69-10298	01 p0042 A69-10343	01 p0123 A69-10388
01 p0019 A69-10209 #	01 p0136 A69-10254 #	01 p0079 A69-10299	01 p0168 A69-10344	01 p0176 A69-10389
01 p0085 A69-10210 #	01 p0136 A69-10255 #	01 p0080 A69-10300	01 p0175 A69-10345	01 p0128 A69-10390

ACCESSION NUMBER INDEX

01 p0128 A69-10391	01 p0138 A69-10436 #	01 p0043 A69-10481 #	01 p0029 A69-10526 #	01 p0113 A69-10571 #
01 p0060 A69-10392	01 p0042 A69-10437	01 p0109 A69-10482 #	01 p0151 A69-10527 #	01 p0113 A69-10572 #
01 p0116 A69-10393	01 p0042 A69-10438	01 p0109 A69-10483*#	01 p0065 A69-10528 #	01 p0144 A69-10573 #
01 p0128 A69-10394	01 p0051 A69-10439	01 p0109 A69-10484 #	01 p0029 A69-10529 #	01 p0030 A69-10574 #
01 p0150 A69-10395	01 p0051 A69-10440	01 p0178 A69-10485 #	01 p0161 A69-10530	01 p0065 A69-10575 #
01 p0094 A69-10396 #	01 p0051 A69-10441*	01 p0014 A69-10486 #	01 p0080 A69-10531 #	01 p0151 A69-10576 #
01 p0085 A69-10397 #	01 p0051 A69-10442	01 p0064 A69-10487 #	01 p0065 A69-10532 #	01 p0152 A69-10577 #
01 p0108 A69-10398 #	01 p0116 A69-10443	01 p0095 A69-10488 #	01 p0151 A69-10533	01 p0152 A69-10578 #
01 p0168 A69-10399 #	01 p0144 A69-10444	01 p0178 A69-10489 #	01 p0085 A69-10534	01 p0152 A69-10579 #
01 p0006 A69-10400 #	01 p0150 A69-10445 #	01 p0179 A69-10490 #	01 p0086 A69-10535 #	01 p0152 A69-10580 #
01 p0168 A69-10401 #	01 p0064 A69-10446 #	01 p0064 A69-10491*#	01 p0086 A69-10536 #	01 p0030 A69-10581 #
01 p0060 A69-10402 #	01 p0064 A69-10447 #	01 p0028 A69-10492 #	01 p0086 A69-10537 #	01 p0080 A69-10582 #
01 p0176 A69-10403 #	01 p0010 A69-10448	01 p0028 A69-10493 #	01 p0086 A69-10538 #	01 p0014 A69-10583 #
01 p0138 A69-10404 #	01 p0019 A69-10449	01 p0028 A69-10494 #	01 p0109 A69-10539 #	01 p0014 A69-10584 #
01 p0009 A69-10405 #	01 p0019 A69-10450	01 p0028 A69-10495 #	01 p0090 A69-10540 #	01 p0161 A69-10585 #
01 p0085 A69-10406 #	01 p0019 A69-10451	01 p0179 A69-10496 #	01 p0010 A69-10541 #	01 p0144 A69-10586 #
01 p0168 A69-10407	01 p0010 A69-10452	01 p0028 A69-10497 #	01 p0080 A69-10542 #	01 p0152 A69-10587 #
01 p0009 A69-10408 #	01 p0112 A69-10453	01 p0151 A69-10498*#	01 p0065 A69-10543	01 p0023 A69-10588*
01 p0006 A69-10409 #	01 p0112 A69-10454	01 p0029 A69-10499 #	01 p0141 A69-10544	01 p0030 A69-10589 #
01 p0143 A69-10410 #	01 p0010 A69-10455	01 p0179 A69-10500 #	01 p0109 A69-10545	01 p0030 A69-10590 #
01 p0023 A69-10411	01 p0014 A69-10456 #	01 p0151 A69-10501 #	01 p0095 A69-10546 #	01 p0043 A69-10591 #
01 p0161 A69-10412 #	01 p0112 A69-10457 #	01 p0109 A69-10502 #	01 p0123 A69-10547*	01 p0030 A69-10592 #
01 p0060 A69-10413 #	01 p0108 A69-10458 #	01 p0161 A69-10503 #	01 p0065 A69-10548 #	01 p0043 A69-10593 #
01 p0009 A69-10414 #	01 p0064 A69-10459	01 p0065 A69-10504 #	01 p0065 A69-10549 #	01 p0012 A69-10594 #
01 p0009 A69-10415 #	01 p0064 A69-10460 #	01 p0109 A69-10505 #	01 p0029 A69-10550 #	01 p0101 A69-10595 #
01 p0168 A69-10416	01 p0112 A69-10461 #	01 p0179 A69-10506*#	01 p0029 A69-10551 #	01 p0035 A69-10596 #
01 p0042 A69-10417	01 p0108 A69-10462 #	01 p0054 A69-10507 #	01 p0151 A69-10552 #	01 p0066 A69-10597 #
01 p0042 A69-10418	01 p0108 A69-10463*#	01 p0014 A69-10508 #	01 p0051 A69-10553	01 p0066 A69-10598 #
01 p0028 A69-10419	01 p0108 A69-10464 #	01 p0065 A69-10509 #	01 p0029 A69-10554	01 p0066 A69-10599 #
01 p0028 A69-10420	01 p0161 A69-10465 #	01 p0161 A69-10510 #	01 p0029 A69-10555*	01 p0066 A69-10600 #
01 p0009 A69-10421 #	01 p0114 A69-10466 #	01 p0179 A69-10511 #	01 p0030 A69-10556*	01 p0095 A69-10601
01 p0063 A69-10422*	01 p0178 A69-10467*#	01 p0179 A69-10512*#	01 p0138 A69-10557*	01 p0138 A69-10602*
01 p0063 A69-10423*	01 p0178 A69-10468 #	01 p0109 A69-10513 #	01 p0043 A69-10558	01 p0095 A69-10603
01 p0063 A69-10424	01 p0112 A69-10469 #	01 p0113 A69-10514 #	01 p0043 A69-10559	01 p0095 A69-10604
01 p0063 A69-10425	01 p0112 A69-10470 #	01 p0179 A69-10515*#	01 p0043 A69-10560	01 p0080 A69-10605
01 p0063 A69-10426	01 p0020 A69-10471 #	01 p0179 A69-10516*#	01 p0129 A69-10561	01 p0012 A69-10606*
01 p0063 A69-10427	01 p0178 A69-10472*#	01 p0043 A69-10517 #	01 p0043 A69-10562	01 p0095 A69-10607
01 p0064 A69-10428	01 p0108 A69-10473 #	01 p0180 A69-10518 #	01 p0043 A69-10563	01 p0095 A69-10608*
01 p0080 A69-10429 #	01 p0108 A69-10474*#	01 p0180 A69-10519*#	01 p0043 A69-10564*	01 p0095 A69-10609
01 p0080 A69-10430 #	01 p0064 A69-10475 #	01 p0113 A69-10520 #	01 p0090 A69-10565	01 p0095 A69-10610
01 p0094 A69-10431 #	01 p0150 A69-10476 #	01 p0113 A69-10521	01 p0030 A69-10566	01 p0129 A69-10611 #
01 p0138 A69-10432 #	01 p0144 A69-10477 #	01 p0054 A69-10522 #	01 p0151 A69-10567 #	01 p0096 A69-10612*
01 p0128 A69-10433 #	01 p0178 A69-10478 #	01 p0065 A69-10523 #	01 p0151 A69-10568 #	01 p0096 A69-10613
01 p0138 A69-10434 #	01 p0113 A69-10479*#	01 p0029 A69-10524 #	01 p0161 A69-10569 #	01 p0096 A69-10614
01 p0116 A69-10435 #	01 p0150 A69-10480 #	01 p0180 A69-10525*#	01 p0151 A69-10570 #	01 p0060 A69-10615



# ACCESSION NUMBER INDEX

01 p0104 A69-10616	01 p0118 A69-10661	01 p0036 A69-10706	01 p0152 A69-10751 #	01 p0052 A69-10796 #
01 p0024 A69-10617	01 p0129 A69-10662	01 p0036 A69-10707	01 p0144 A69-10752 #	01 p0052 A69-10797 #
01 p0024 A69-10618*	01 p0129 A69-10663	01 p0036 A69-10708*	01 p0020 A69-10753 #	01 p0052 A69-10798 #
01 p0024 A69-10619*	01 p0118 A69-10664	01 p0036 A69-10709	01 p0145 A69-10754 #	01 p0052 A69-10799 #
01 p0123 A69-10620*	01 p0118 A69-10665	01 p0036 A69-10710*	01 p0046 A69-10755 #	01 p0052 A69-10800 #
01 p0043 A69-10621	01 p0090 A69-10666*	01 p0060 A69-10711	01 p0153 A69-10756 #	01 p0053 A69-10801 #
01 p0044 A69-10622	01 p0129 A69-10667	01 p0045 A69-10712	01 p0020 A69-10757 #	01 p0053 A69-10802 #
01 p0044 A69-10623	01 p0118 A69-10668	01 p0045 A69-10713	01 p0006 A69-10758 #	01 p0053 A69-10803 #
01 p0044 A69-10624	01 p0119 A69-10669	01 p0081 A69-10714*	01 p0061 A69-10759 #	01 p0053 A69-10804 #
01 p0044 A69-10625	01 p0119 A69-10670	01 p0081 A69-10715*	01 p0081 A69-10760 #	01 p0113 A69-10805 #
01 p0044 A69-10626	01 p0119 A69-10671	01 p0138 A69-10716*	01 p0162 A69-10761 #	01 p0037 A69-10806
01 p0044 A69-10627	01 p0119 A69-10672	01 p0138 A69-10717*	01 p0098 A69-10762	01 p0105 A69-10807
01 p0044 A69-10628*	01 p0119 A69-10673	01 p0176 A69-10718*	01 p0098 A69-10763	01 p0153 A69-10808
01 p0044 A69-10629	01 p0119 A69-10674	01 p0045 A69-10719*	01 p0169 A69-10764	01 p0169 A69-10809
01 p0030 A69-10630	01 p0120 A69-10675	01 p0045 A69-10720	01 p0169 A69-10765	01 p0169 A69-10810
01 p0030 A69-10631	01 p0120 A69-10676	01 p0105 A69-10721 #	01 p0098 A69-10766	01 p0169 A69-10811
01 p0045 A69-10632	01 p0120 A69-10677*	01 p0129 A69-10722 #	01 p0101 A69-10767	01 p0131 A69-10812
01 p0031 A69-10633	01 p0141 A69-10678	01 p0130 A69-10723 #	01 p0169 A69-10768	01 p0061 A69-10813
01 p0012 A69-10634 #	01 p0141 A69-10679	01 p0060 A69-10724 #	01 p0130 A69-10769 #	01 p0170 A69-10814
01 p0020 A69-10635 #	01 p0081 A69-10680	01 p0060 A69-10725 #	01 p0130 A69-10770 #	01 p0091 A69-10815 #
01 p0010 A69-10636 #	01 p0123 A69-10681*	01 p0105 A69-10726 #	01 p0130 A69-10771 #	01 p0120 A69-10816 #
01 p0169 A69-10637 #	01 p0129 A69-10682	01 p0105 A69-10727 #	01 p0130 A69-10772 #	01 p0091 A69-10817 #
01 p0169 A69-10638 #	01 p0024 A69-10683*	01 p0105 A69-10728 #	01 p0130 A69-10773 #	01 p0131 A69-10818 #
01 p0169 A69-10639 #	01 p0123 A69-10684	01 p0060 A69-10729 #	01 p0130 A69-10774 #	01 p0139 A69-10819 #
01 p0096 A69-10640	01 p0123 A69-10685	01 p0105 A69-10730 #	01 p0131 A69-10775 #	01 p0131 A69-10820 #
01 p0096 A69-10641	01 p0123 A69-10686	01 p0098 A69-10731 #	01 p0131 A69-10776 #	01 p0086 A69-10821 #
01 p0096 A69-10642	01 p0124 A69-10687*	01 p0045 A69-10732 #	01 p0131 A69-10777 #	01 p0081 A69-10822 #
01 p0097 A69-10643	01 p0124 A69-10688*	01 p0061 A69-10733 #	01 p0031 A69-10778 #	01 p0153 A69-10823*
01 p0097 A69-10644	01 p0110 A69-10689 #	01 p0105 A69-10734*	01 p0046 A69-10779 #	01 p0170 A69-10824 #
01 p0097 A69-10645	01 p0110 A69-10690 #	01 p0031 A69-10735	01 p0031 A69-10780 #	01 p0170 A69-10825 #
01 p0097 A69-10646	01 p0110 A69-10691 #	01 p0031 A69-10736	01 p0047 A69-10781 #	01 p0086 A69-10826
01 p0097 A69-10647	01 p0110 A69-10692 #	01 p0046 A69-10737	01 p0031 A69-10782 #	01 p0170 A69-10827 #
01 p0097 A69-10648	01 p0110 A69-10693*#	01 p0046 A69-10738	01 p0047 A69-10783 #	01 p0087 A69-10828 #
01 p0098 A69-10649	01 p0110 A69-10694 #	01 p0031 A69-10739	01 p0047 A69-10784 #	01 p0087 A69-10829 #
01 p0045 A69-10650	01 p0110 A69-10695*#	01 p0046 A69-10740	01 p0031 A69-10785 #	01 p0081 A69-10830
01 p0086 A69-10651 #	01 p0111 A69-10696*#	01 p0020 A69-10741	01 p0047 A69-10786 #	01 p0139 A69-10831 #
01 p0180 A69-10652 #	01 p0081 A69-10697 #	01 p0130 A69-10742 #	01 p0090 A69-10787 #	01 p0139 A69-10832 #
01 p0104 A69-10653 #	01 p0051 A69-10698 #	01 p0014 A69-10743	01 p0131 A69-10788 #	01 p0139 A69-10833 #
01 p0116 A69-10654	01 p0104 A69-10699 #	01 p0046 A69-10744	01 p0131 A69-10789 #	01 p0143 A69-10834
01 p0117 A69-10655	01 p0105 A69-10700 #	01 p0036 A69-10745 #	01 p0145 A69-10790 #	01 p0143 A69-10835
01 p0117 A69-10656	01 p0035 A69-10701	01 p0037 A69-10746 #	01 p0090 A69-10791 #	01 p0082 A69-10836
01 p0117 A69-10657	01 p0152 A69-10702	01 p0046 A69-10747 #	01 p0091 A69-10792 #	01 p0082 A69-10837*
01 p0117 A69-10658	01 p0035 A69-10703	01 p0046 A69-10748 #	01 p0051 A69-10793	01 p0082 A69-10838
01 p0117 A69-10659	01 p0036 A69-10704*	01 p0144 A69-10749 #	01 p0052 A69-10794 #	01 p0082 A69-10839
01 p0118 A69-10660	01 p0105 A69-10705	01 p0013 A69-10750 #	01 p0052 A69-10795 #	01 p0139 A69-10840

# ACCESSION NUMBER INDEX

01 p0091 A69-10841	01 p0032 A69-10886 #	01 p0015 A69-10931*	01 p0155 A69-10976	01 p0011 A69-11021 #
01 p0091 A69-10842	01 p0032 A69-10887 #	01 p0015 A69-10932*	01 p0156 A69-10977	01 p0011 A69-11022 #
01 p0091 A69-10843	01 p0092 A69-10888 #	01 p0024 A69-10933*	01 p0102 A69-10978	01 p0011 A69-11023 #
01 p0091 A69-10844*	01 p0139 A69-10889 #	01 p0140 A69-10934*	01 p0125 A69-10979*	01 p0037 A69-11024 #
01 p0091 A69-10845	01 p0082 A69-10890*	01 p0154 A69-10935	01 p0067 A69-10980	01 p0013 A69-11025 #
01 p0111 A69-10846	01 p0120 A69-10891	01 p0162 A69-10936	01 p0156 A69-10981	01 p0007 A69-11026 #
01 p0176 A69-10847*	01 p0082 A69-10892	01 p0162 A69-10937	01 p0145 A69-10982	01 p0007 A69-11027 #
01 p0111 A69-10848	01 p0024 A69-10893*	01 p0162 A69-10938	01 p0067 A69-10983	01 p0007 A69-11028 #
01 p0120 A69-10849	01 p0154 A69-10894 #	01 p0155 A69-10939	01 p0083 A69-10984	01 p0087 A69-11029 #
01 p0082 A69-10850	01 p0139 A69-10895 #	01 p0025 A69-10940	01 p0083 A69-10985	01 p0037 A69-11030
01 p0082 A69-10851	01 p0121 A69-10896	01 p0066 A69-10941	01 p0106 A69-10986	01 p0145 A69-11031 #
01 p0091 A69-10852	01 p0092 A69-10897	01 p0066 A69-10942	01 p0106 A69-10987	01 p0067 A69-11032 #
01 p0082 A69-10853	01 p0154 A69-10898	01 p0066 A69-10943	01 p0106 A69-10988	01 p0067 A69-11033 #
01 p0153 A69-10854	01 p0098 A69-10899	01 p0067 A69-10944	01 p0156 A69-10989 #	01 p0048 A69-11034
01 p0153 A69-10855	01 p0087 A69-10900	01 p0145 A69-10945	01 p0145 A69-10990 #	01 p0048 A69-11035
01 p0153 A69-10856*	01 p0124 A69-10901*	01 p0155 A69-10946	01 p0180 A69-10991	01 p0048 A69-11036
01 p0145 A69-10857	01 p0014 A69-10902*	01 p0015 A69-10947	01 p0125 A69-10992	01 p0034 A69-11037
01 p0120 A69-10858*	01 p0014 A69-10903*	01 p0016 A69-10948	01 p0061 A69-10993	01 p0048 A69-11038
01 p0124 A69-10859	01 p0015 A69-10904*	01 p0032 A69-10949	01 p0113 A69-10994	01 p0048 A69-11039
01 p0014 A69-10860*	01 p0024 A69-10905*	01 p0111 A69-10950	01 p0053 A69-10995	01 p0048 A69-11040
01 p0102 A69-10861*	01 p0176 A69-10906	01 p0067 A69-10951	01 p0106 A69-10996	01 p0048 A69-11041
01 p0066 A69-10862	01 p0102 A69-10907	01 p0032 A69-10952	01 p0111 A69-10997	01 p0099 A69-11042 #
01 p0180 A69-10863	01 p0087 A69-10908	01 p0016 A69-10953	01 p0047 A69-10998	01 p0055 A69-11043
01 p0170 A69-10864	01 p0102 A69-10909	01 p0037 A69-10954*	01 p0033 A69-10999	01 p0055 A69-11044 #
01 p0170 A69-10865	01 p0087 A69-10910	01 p0106 A69-10955 #	01 p0047 A69-11000*	01 p0055 A69-11045 #
01 p0170 A69-10866	01 p0087 A69-10911	01 p0106 A69-10956 #	01 p0033 A69-11001	01 p0083 A69-11046 #
01 p0106 A69-10867	01 p0087 A69-10912*	01 p0155 A69-10957 #	01 p0083 A69-11002*	01 p0056 A69-11047 #
01 p0010 A69-10868	01 p0102 A69-10913	01 p0098 A69-10958	01 p0048 A69-11003	01 p0011 A69-11048 #
01 p0010 A69-10869	01 p0083 A69-10914	01 p0121 A69-10959	01 p0083 A69-11004	01 p0111 A69-11049 #
01 p0153 A69-10870 #	01 p0102 A69-10915	01 p0124 A69-10960*	01 p0114 A69-11005*	01 p0083 A69-11050 #
01 p0153 A69-10871 #	01 p0061 A69-10916	01 p0006 A69-10961	01 p0048 A69-11006	01 p0084 A69-11051 #
01 p0154 A69-10872 #	01 p0054 A69-10917 #	01 p0124 A69-10962*	01 p0033 A69-11007	01 p0084 A69-11052 #
01 p0154 A69-10873 #	01 p0170 A69-10918	01 p0125 A69-10963	01 p0033 A69-11008	01 p0056 A69-11053 #
01 p0154 A69-10874 #	01 p0124 A69-10919	01 p0171 A69-10964 #	01 p0033 A69-11009	01 p0143 A69-11054 #
01 p0053 A69-10875 #	01 p0154 A69-10920	01 p0013 A69-10965	01 p0013 A69-11010	01 p0056 A69-11055 #
01 p0154 A69-10876*	01 p0015 A69-10921*	01 p0032 A69-10966	01 p0114 A69-11011	01 p0099 A69-11056 #
01 p0154 A69-10877*	01 p0015 A69-10922*	01 p0032 A69-10967 #	01 p0114 A69-11012	01 p0099 A69-11057 #
01 p0170 A69-10878 ■	01 p0015 A69-10923*	01 p0032 A69-10968 #	01 p0034 A69-11013	01 p0099 A69-11058 #
01 p0031 A69-10879 ■	01 p0015 A69-10924*	01 p0032 A69-10969*#	01 p0006 A69-11014 ■	01 p0141 A69-11059 #
01 p0031 A69-10880 #	01 p0106 A69-10925*	01 p0033 A69-10970 #	01 p0143 A69-11015 ■	01 p0099 A69-11060 #
01 p0031 A69-10881 #	01 p0106 A69-10926*	01 p0033 A69-10971 #	01 p0006 A69-11016*■	01 p0011 A69-11061 #
01 p0047 A69-10882 #	01 p0083 A69-10927*	01 p0067 A69-10972 #	01 p0006 A69-11017 ■	01 p0143 A69-11062 #
01 p0091 A69-10883 #	01 p0024 A69-10928*	01 p0033 A69-10973 #	01 p0011 A69-11018 ■	01 p0143 A69-11063 #
01 p0047 A69-10884 #	01 p0124 A69-10929*	01 p0047 A69-10974 #	01 p0007 A69-11019 ■	01 p0011 A69-11064
01 p0139 A69-10885 #	01 p0106 A69-10930*	01 p0033 A69-10975 #	01 p0007 A69-11020 #	01 p0156 A69-11065



# ACCESSION NUMBER INDEX

01 p0162 A69-11066	01 p0068 A69-11111	01 p0069 A69-11156	01 p0061 A69-11201*	01 p0092 A69-11246
01 p0011 A69-11067	01 p0068 A69-11112	01 p0070 A69-11157 #	01 p0121 A69-11202	01 p0134 A69-11247
01 p0092 A69-11068	01 p0068 A69-11113*	01 p0070 A69-11158 #	01 p0007 A69-11203	01 p0140 A69-11248
01 p0011 A69-11069	01 p0068 A69-11114	01 p0070 A69-11159 #	01 p0061 A69-11204	01 p0121 A69-11249
01 p0007 A69-11070	01 p0068 A69-11115	01 p0070 A69-11160 #	01 p0132 A69-11205*	01 p0180 A69-11250
01 p0171 A69-11071 #	01 p0068 A69-11116	01 p0070 A69-11161 #	01 p0132 A69-11206	01 p0180 A69-11251
01 p0171 A69-11072 #	01 p0131 A69-11117	01 p0070 A69-11162 #	01 p0062 A69-11207	01 p0140 A69-11252
01 p0016 A69-11073	01 p0068 A69-11118	01 p0071 A69-11163 #	01 p0062 A69-11208*	01 p0140 A69-11253
01 p0017 A69-11074*	01 p0146 A69-11119	01 p0071 A69-11164 #	01 p0132 A69-11209	01 p0140 A69-11254*
01 p0020 A69-11075	01 p0156 A69-11120	01 p0071 A69-11165 #	01 p0132 A69-11210	01 p0140 A69-11255
01 p0020 A69-11076	01 p0069 A69-11121	01 p0071 A69-11166 #	01 p0132 A69-11211	01 p0141 A69-11256
01 p0020 A69-11077	01 p0146 A69-11122*	01 p0071 A69-11167 #	01 p0133 A69-11212	01 p0121 A69-11257
01 p0021 A69-11078	01 p0146 A69-11123*	01 p0071 A69-11168 #	01 p0133 A69-11213	01 p0142 A69-11258
01 p0021 A69-11079	01 p0146 A69-11124	01 p0072 A69-11169	01 p0133 A69-11214*	01 p0171 A69-11259
01 p0021 A69-11080	01 p0069 A69-11125*	01 p0072 A69-11170 #	01 p0133 A69-11215	01 p0102 A69-11260
01 p0145 A69-11081	01 p0069 A69-11126	01 p0072 A69-11171 #	01 p0133 A69-11216	01 p0171 A69-11261
01 p0017 A69-11082	01 p0069 A69-11127	01 p0072 A69-11172 #	01 p0133 A69-11217*	01 p0102 A69-11262
01 p0017 A69-11083	01 p0146 A69-11128	01 p0072 A69-11173 #	01 p0133 A69-11218	01 p0171 A69-11263
01 p0017 A69-11084*	01 p0146 A69-11129	01 p0072 A69-11174 #	01 p0062 A69-11219*	01 p0171 A69-11264
01 p0017 A69-11085	01 p0107 A69-11130	01 p0073 A69-11175 #	01 p0133 A69-11220	01 p0172 A69-11265
01 p0017 A69-11086*	01 p0171 A69-11131	01 p0073 A69-11176 #	01 p0034 A69-11221*	01 p0172 A69-11266
01 p0018 A69-11087*	01 p0007 A69-11132	01 p0073 A69-11177 #	01 p0075 A69-11222	01 p0025 A69-11267
01 p0018 A69-11088	01 p0132 A69-11133	01 p0073 A69-11178 #	01 p0146 A69-11223*	01 p0103 A69-11268
01 p0018 A69-11089	01 p0121 A69-11134	01 p0073 A69-11179 #	01 p0035 A69-11224*	01 p0103 A69-11269
01 p0021 A69-11090*	01 p0176 A69-11135	01 p0018 A69-11180	01 p0075 A69-11225*	01 p0172 A69-11270
01 p0018 A69-11091*	01 p0156 A69-11136	01 p0073 A69-11181	01 p0075 A69-11226*	01 p0172 A69-11271
01 p0021 A69-11092	01 p0048 A69-11137	01 p0156 A69-11182 #	01 p0147 A69-11227*	01 p0172 A69-11272
01 p0021 A69-11093	01 p0048 A69-11138	01 p0156 A69-11183 #	01 p0157 A69-11228*	01 p0103 A69-11273
01 p0025 A69-11094	01 p0034 A69-11139	01 p0074 A69-11184 #	01 p0076 A69-11229	01 p0057 A69-11274 #
01 p0025 A69-11095	01 p0034 A69-11140	01 p0074 A69-11185 #	01 p0076 A69-11230*	01 p0057 A69-11275 #
01 p0162 A69-11096 #	01 p0034 A69-11141	01 p0074 A69-11186 #	01 p0076 A69-11231*	01 p0057 A69-11276 #
01 p0142 A69-11097 #	01 p0034 A69-11142	01 p0074 A69-11187 #	01 p0076 A69-11232	01 p0057 A69-11277 #
01 p0142 A69-11098 #	01 p0034 A69-11143	01 p0074 A69-11188 #	01 p0076 A69-11233*	01 p0008 A69-11278 #
01 p0142 A69-11099 #	01 p0056 A69-11144	01 p0075 A69-11189 #	01 p0076 A69-11234*	01 p0062 A69-11279
01 p0111 A69-11100 #	01 p0013 A69-11145	01 p0075 A69-11190 #	01 p0147 A69-11235*	01 p0011 A69-11280
01 p0162 A69-11101	01 p0176 A69-11146*	01 p0075 A69-11191 #	01 p0077 A69-11236*	01 p0077 A69-11281*#
01 p0163 A69-11102	01 p0163 A69-11147	01 p0157 A69-11192 #	01 p0077 A69-11237*	01 p0172 A69-11282
01 p0034 A69-11103	01 p0087 A69-11148	01 p0075 A69-11193 #	01 p0147 A69-11238*	01 p0035 A69-11283
01 p0163 A69-11104	01 p0087 A69-11149	01 p0092 A69-11194	01 p0077 A69-11239*	01 p0121 A69-11284*#
01 p0163 A69-11105	01 p0056 A69-11150	01 p0049 A69-11195	01 p0077 A69-11240*	01 p0025 A69-11285*
01 p0140 A69-11106	01 p0099 A69-11151	01 p0143 A69-11196	01 p0077 A69-11241	01 p0121 A69-11286
01 p0053 A69-11107	01 p0088 A69-11152	01 p0157 A69-11197*	01 p0147 A69-11242	01 p0134 A69-11287*
01 p0156 A69-11108	01 p0057 A69-11153	01 p0018 A69-11198*	01 p0147 A69-11243*	01 p0122 A69-11288*
01 p0140 A69-11109 #	01 p0057 A69-11154	01 p0132 A69-11199	01 p0107 A69-11244*#	01 p0157 A69-11289
01 p0068 A69-11110	01 p0088 A69-11155	01 p0132 A69-11200	01 p0140 A69-11245	01 p0134 A69-11290

# ACCESSION NUMBER INDEX

01 p0157 A69-11291	01 p0022 A69-11336 #	01 p0026 A69-11381 ■	02 p0235 A69-11426*	02 p0311 A69-11471*
01 p0157 A69-11292*	01 p0022 A69-11337 #	01 p0026 A69-11382 #	02 p0235 A69-11427	02 p0311 A69-11472*
01 p0012 A69-11293 #	01 p0018 A69-11338 #	01 p0160 A69-11383 #	02 p0235 A69-11428*	02 p0311 A69-11473*
01 p0100 A69-11294 #	01 p0019 A69-11339 #	01 p0160 A69-11384 #	02 p0235 A69-11429	02 p0312 A69-11474
01 p0100 A69-11295 #	01 p0019 A69-11340 #	01 p0160 A69-11385 #	02 p0236 A69-11430	02 p0312 A69-11475*
01 p0035 A69-11296	01 p0022 A69-11341	01 p0160 A69-11386 #	02 p0336 A69-11431	02 p0312 A69-11476
01 p0163 A69-11297	01 p0019 A69-11342*	01 p0160 A69-11387 #	02 p0293 A69-11432	02 p0312 A69-11477
01 p0008 A69-11298	01 p0019 A69-11343 #	01 p0160 A69-11388 #	02 p0236 A69-11433	02 p0312 A69-11478
01 p0008 A69-11299	01 p0022 A69-11344	01 p0035 A69-11389	02 p0273 A69-11434 #	02 p0312 A69-11479
01 p0057 A69-11300	01 p0022 A69-11345	01 p0049 A69-11390	02 p0273 A69-11435 #	02 p0312 A69-11480*
01 p0163 A69-11301	01 p0022 A69-11346 #	01 p0114 A69-11391 #	02 p0274 A69-11436 #	02 p0312 A69-11481*
01 p0122 A69-11302	01 p0022 A69-11347 #	01 p0180 A69-11392 #	02 p0274 A69-11437 #	02 p0313 A69-11482*
01 p0163 A69-11303	01 p0049 A69-11348	01 p0181 A69-11393 ■	02 p0274 A69-11438 #	02 p0313 A69-11483
01 p0157 A69-11304	01 p0037 A69-11349	01 p0013 A69-11394 ■	02 p0274 A69-11439 #	02 p0313 A69-11484
01 p0107 A69-11305	01 p0100 A69-11350	01 p0163 A69-11395*■	02 p0274 A69-11440 #	02 p0313 A69-11485*
01 p0157 A69-11306	01 p0100 A69-11351	01 p0013 A69-11396*■	02 p0274 A69-11441 #	02 p0313 A69-11486
01 p0134 A69-11307	01 p0100 A69-11352	01 p0101 A69-11397	02 p0274 A69-11442 #	02 p0313 A69-11487
01 p0134 A69-11308	01 p0100 A69-11353	01 p0088 A69-11398	02 p0274 A69-11443 #	02 p0197 A69-11488
01 p0147 A69-11309	01 p0101 A69-11354	01 p0088 A69-11399	02 p0274 A69-11444 #	02 p0200 A69-11489
01 p0147 A69-11310	01 p0172 A69-11355 #	01 p0088 A69-11400	02 p0274 A69-11445 #	02 p0197 A69-11490
01 p0158 A69-11311	01 p0057 A69-11356	01 p0177 A69-11401	02 p0274 A69-11446 #	02 p0197 A69-11491
01 p0158 A69-11312	01 p0114 A69-11357	01 p0177 A69-11402	02 p0274 A69-11447 #	02 p0197 A69-11492
01 p0177 A69-11313	01 p0172 A69-11358 #	01 p0177 A69-11403	02 p0274 A69-11448 #	02 p0197 A69-11493
01 p0084 A69-11314	01 p0054 A69-11359 #	01 p0177 A69-11404	02 p0274 A69-11449 #	02 p0197 A69-11494
01 p0084 A69-11315	01 p0008 A69-11360 #	01 p0177 A69-11405	02 p0206 A69-11450 #	02 p0197 A69-11495
01 p0021 A69-11316	01 p0049 A69-11361 #	01 p0177 A69-11406	02 p0236 A69-11451 #	02 p0197 A69-11496
01 p0018 A69-11317	01 p0049 A69-11362 #	01 p0134 A69-11407	02 p0236 A69-11452 #	02 p0197 A69-11497
01 p0158 A69-11318	01 p0101 A69-11363 #	01 p0177 A69-11408	02 p0212 A69-11453	02 p0197 A69-11498
01 p0158 A69-11319	01 p0107 A69-11364	01 p0177 A69-11409	02 p0310 A69-11454	02 p0197 A69-11499
01 p0147 A69-11320	01 p0107 A69-11365	01 p0178 A69-11410	02 p0310 A69-11455	02 p0197 A69-11500
01 p0147 A69-11321	01 p0107 A69-11366	01 p0178 A69-11411	02 p0204 A69-11456	02 p0198 A69-11501
01 p0158 A69-11322	01 p0159 A69-11367 #	01 p0160 A69-11412	02 p0310 A69-11457	02 p0198 A69-11502
01 p0147 A69-11323	01 p0025 A69-11368 #	01 p0049 A69-11413	02 p0311 A69-11458	02 p0198 A69-11503
01 p0088 A69-11324*	01 p0025 A69-11369 #	01 p0054 A69-11414	02 p0311 A69-11459	02 p0198 A69-11504
01 p0158 A69-11325	01 p0159 A69-11370 #	01 p0107 A69-11415	02 p0282 A69-11460*	02 p0198 A69-11505
01 p0158 A69-11326	01 p0159 A69-11371 #	01 p0054 A69-11416*	02 p0285 A69-11461 #	02 p0198 A69-11506
01 p0158 A69-11327	01 p0159 A69-11372 #	01 p0173 A69-11417	02 p0336 A69-11462 #	02 p0198 A69-11507
01 p0158 A69-11328	01 p0025 A69-11373 #	01 p0107 A69-11418	02 p0285 A69-11463 #	02 p0198 A69-11508
01 p0158 A69-11329	01 p0159 A69-11374 #	01 p0134 A69-11419	02 p0293 A69-11464 #	02 p0198 A69-11509
01 p0158 A69-11330*	01 p0159 A69-11375 #	01 p0141 A69-11420	02 p0236 A69-11465*	02 p0198 A69-11510
01 p0159 A69-11331	01 p0026 A69-11376 #	02 p0235 A69-11421	02 p0236 A69-11466*	02 p0200 A69-11511
01 p0172 A69-11332 #	01 p0026 A69-11377 #	02 p0305 A69-11422	02 p0311 A69-11467*	02 p0200 A69-11512
01 p0163 A69-11333	01 p0159 A69-11378 #	02 p0310 A69-11423	02 p0247 A69-11468*	02 p0198 A69-11513
01 p0021 A69-11334*	01 p0159 A69-11379 #	02 p0235 A69-11424	02 p0311 A69-11469	02 p0198 A69-11514
01 p0022 A69-11335*	01 p0160 A69-11380 #	02 p0235 A69-11425	02 p0311 A69-11470*	02 p0198 A69-11515



## ACCESSION NUMBER INDEX

02 p0200 A69-11516	02 p0337 A69-11561 #	02 p0206 A69-11606 #	02 p0188 A69-11651 #	02 p0239 A69-11696 #
02 p0200 A69-11517	02 p0337 A69-11562 #	02 p0206 A69-11607 #	02 p0251 A69-11652 #	02 p0240 A69-11697 #
02 p0285 A69-11518	02 p0230 A69-11563 #	02 p0255 A69-11608 #	02 p0271 A69-11653 #	02 p0240 A69-11698 #
02 p0301 A69-11519	02 p0223 A69-11564 #	02 p0206 A69-11609 #	02 p0337 A69-11654 #	02 p0240 A69-11699 #
02 p0302 A69-11520 #	02 p0223 A69-11565 #	02 p0214 A69-11610 #	02 p0236 A69-11655 #	02 p0240 A69-11700 #
02 p0302 A69-11521 #	02 p0223 A69-11566 #	02 p0255 A69-11611 #	02 p0306 A69-11656 #	02 p0283 A69-11701
02 p0302 A69-11522 #	02 p0285 A69-11567	02 p0214 A69-11612 #	02 p0306 A69-11657 #	02 p0255 A69-11702
02 p0226 A69-11523 #	02 p0285 A69-11568	02 p0214 A69-11613 #	02 p0306 A69-11658 #	02 p0283 A69-11703
02 p0302 A69-11524 #	02 p0247 A69-11569	02 p0214 A69-11614 #	02 p0306 A69-11659 #	02 p0286 A69-11704
02 p0302 A69-11525 #	02 p0285 A69-11570	02 p0337 A69-11615	02 p0237 A69-11660 #	02 p0280 A69-11705 #
02 p0349 A69-11526 #	02 p0285 A69-11571	02 p0230 A69-11616	02 p0206 A69-11661 #	02 p0286 A69-11706 #
02 p0349 A69-11527 #	02 p0286 A69-11572	02 p0236 A69-11617 #	02 p0237 A69-11662 #	02 p0286 A69-11707 #
02 p0303 A69-11528 #	02 p0286 A69-11573	02 p0187 A69-11618 #	02 p0237 A69-11663 #	02 p0240 A69-11708 #
02 p0303 A69-11529 #	02 p0283 A69-11574	02 p0187 A69-11619 #	02 p0237 A69-11664 #	02 p0350 A69-11709
02 p0350 A69-11530**	02 p0350 A69-11575	02 p0187 A69-11620 #	02 p0237 A69-11665 #	02 p0255 A69-11710
02 p0303 A69-11531 #	02 p0350 A69-11576	02 p0187 A69-11621 #	02 p0237 A69-11666 #	02 p0286 A69-11711
02 p0213 A69-11532	02 p0350 A69-11577	02 p0187 A69-11622 #	02 p0306 A69-11667 #	02 p0240 A69-11712
02 p0313 A69-11533 #	02 p0350 A69-11578	02 p0226 A69-11623 #	02 p0237 A69-11668 #	02 p0315 A69-11713
02 p0270 A69-11534	02 p0247 A69-11579	02 p0226 A69-11624 #	02 p0207 A69-11669 #	02 p0350 A69-11714
02 p0213 A69-11535	02 p0350 A69-11580	02 p0251 A69-11625 #	02 p0238 A69-11670 #	02 p0280 A69-11715
02 p0187 A69-11536	02 p0280 A69-11581	02 p0337 A69-11626 #	02 p0238 A69-11671 #	02 p0337 A69-11716
02 p0279 A69-11537	02 p0194 A69-11582	02 p0294 A69-11627	02 p0238 A69-11672 #	02 p0337 A69-11717
02 p0279 A69-11538	02 p0260 A69-11583	02 p0294 A69-11628	02 p0238 A69-11673 #	02 p0338 A69-11718
02 p0283 A69-11539	02 p0286 A69-11584	02 p0294 A69-11629	02 p0277 A69-11674 #	02 p0338 A69-11719
02 p0294 A69-11540	02 p0286 A69-11585	02 p0294 A69-11630	02 p0238 A69-11675 #	02 p0338 A69-11720
02 p0294 A69-11541	02 p0283 A69-11586	02 p0294 A69-11631	02 p0314 A69-11676 #	02 p0338 A69-11721
02 p0251 A69-11542	02 p0194 A69-11587	02 p0313 A69-11632	02 p0314 A69-11677 #	02 p0294 A69-11722 #
02 p0285 A69-11543	02 p0286 A69-11588 #	02 p0306 A69-11633	02 p0274 A69-11678 #	02 p0240 A69-11723 #
02 p0254 A69-11544	02 p0286 A69-11589 #	02 p0248 A69-11634	02 p0238 A69-11679 #	02 p0240 A69-11724 #
02 p0255 A69-11545	02 p0277 A69-11590 #	02 p0314 A69-11635	02 p0238 A69-11680 #	02 p0240 A69-11725 #
02 p0294 A69-11546	02 p0277 A69-11591 #	02 p0314 A69-11636	02 p0238 A69-11681 #	02 p0241 A69-11726 #
02 p0306 A69-11547	02 p0277 A69-11592 #	02 p0314 A69-11637	02 p0239 A69-11682 #	02 p0241 A69-11727 #
02 p0270 A69-11548 #	02 p0248 A69-11593 #	02 p0314 A69-11638	02 p0239 A69-11683 #	02 p0241 A69-11728 #
02 p0271 A69-11549 #	02 p0224 A69-11594 #	02 p0314 A69-11639	02 p0207 A69-11684 #	02 p0241 A69-11729 #
02 p0271 A69-11550 #	02 p0214 A69-11595 #	02 p0314 A69-11640	02 p0239 A69-11685 #	02 p0306 A69-11730 #
02 p0336 A69-11551 #	02 p0214 A69-11596	02 p0236 A69-11641	02 p0239 A69-11686 #	02 p0241 A69-11731 #
02 p0350 A69-11552 #	02 p0214 A69-11597	02 p0236 A69-11642	02 p0239 A69-11687 #	02 p0315 A69-11732 #
02 p0336 A69-11553 #	02 p0294 A69-11598	02 p0314 A69-11643	02 p0207 A69-11688 #	02 p0271 A69-11733
02 p0336 A69-11554 #	02 p0214 A69-11599	02 p0314 A69-11644	02 p0207 A69-11689 #	02 p0332 A69-11734
02 p0336 A69-11555 #	02 p0214 A69-11600	02 p0314 A69-11645	02 p0207 A69-11690 #	02 p0307 A69-11735
02 p0336 A69-11556 #	02 p0214 A69-11601 #	02 p0314 A69-11646	02 p0314 A69-11691 #	02 p0248 A69-11736
02 p0336 A69-11557 #	02 p0206 A69-11602 #	02 p0314 A69-11647	02 p0239 A69-11692 #	02 p0241 A69-11737
02 p0229 A69-11558 #	02 p0206 A69-11603 #	02 p0271 A69-11648 #	02 p0239 A69-11693 #	02 p0248 A69-11738
02 p0337 A69-11559 #	02 p0206 A69-11604 #	02 p0271 A69-11649 #	02 p0239 A69-11694 #	02 p0332 A69-11739
02 p0337 A69-11560 #	02 p0206 A69-11605 #	02 p0271 A69-11650 #	02 p0314 A69-11695 #	02 p0277 A69-11740

## ACCESSION NUMBER INDEX

02 p0248 A69-11741	02 p0295 A69-11786	02 p0287 A69-11831	02 p0287 A69-11876	02 p0228 A69-11921
02 p0333 A69-11742	02 p0295 A69-11787	02 p0287 A69-11832	02 p0215 A69-11877	02 p0228 A69-11922
02 p0224 A69-11743	02 p0286 A69-11788	02 p0255 A69-11833	02 p0296 A69-11878*	02 p0202 A69-11923
02 p0355 A69-11744	02 p0296 A69-11789	02 p0283 A69-11834	02 p0255 A69-11879	02 p0280 A69-11924**
02 p0333 A69-11745*	02 p0296 A69-11790	02 p0296 A69-11835*	02 p0297 A69-11880 #	02 p0256 A69-11925
02 p0333 A69-11746*	02 p0296 A69-11791	02 p0315 A69-11836*	02 p0297 A69-11881 #	02 p0256 A69-11926 #
02 p0338 A69-11747	02 p0296 A69-11792	02 p0279 A69-11837*	02 p0297 A69-11882 #	02 p0249 A69-11927
02 p0338 A69-11748	02 p0278 A69-11793	02 p0287 A69-11838	02 p0264 A69-11863 #	02 p0280 A69-11928**
02 p0338 A69-11749	02 p0269 A69-11794	02 p0261 A69-11839	02 p0265 A69-11864 #	02 p0280 A69-11929 #
02 p0333 A69-11750*	02 p0269 A69-11795	02 p0261 A69-11840 #	02 p0199 A69-11865*	02 p0275 A69-11930 #
02 p0351 A69-11751	02 p0252 A69-11796	02 p0261 A69-11841 #	02 p0192 A69-11866	02 p0249 A69-11931
02 p0252 A69-11752	02 p0252 A69-11797	02 p0262 A69-11842 #	02 p0228 A69-11867	02 p0287 A69-11932
02 p0277 A69-11753	02 p0252 A69-11798	02 p0262 A69-11843 #	02 p0356 A69-11868	02 p0215 A69-11933 #
02 p0355 A69-11754	02 p0307 A69-11799	02 p0262 A69-11844 #	02 p0192 A69-11869	02 p0287 A69-11934 #
02 p0226 A69-11755	02 p0255 A69-11800	02 p0262 A69-11845 #	02 p0351 A69-11890	02 p0256 A69-11935 #
02 p0227 A69-11756	02 p0194 A69-11801*	02 p0262 A69-11846 #	02 p0192 A69-11891	02 p0229 A69-11936 #
02 p0227 A69-11757	02 p0270 A69-11802	02 p0262 A69-11847 #	02 p0193 A69-11892	02 p0215 A69-11937
02 p0227 A69-11758	02 p0260 A69-11803	02 p0263 A69-11848 #	02 p0338 A69-11893	02 p0215 A69-11938
02 p0201 A69-11759*	02 p0252 A69-11804	02 p0263 A69-11849 #	02 p0339 A69-11894	02 p0215 A69-11939
02 p0227 A69-11760	02 p0333 A69-11805 #	02 p0263 A69-11850 #	02 p0265 A69-11895*	02 p0297 A69-11940
02 p0227 A69-11761	02 p0241 A69-11806*	02 p0263 A69-11851 #	02 p0265 A69-11896	02 p0297 A69-11941
02 p0194 A69-11762*	02 p0241 A69-11807*	02 p0263 A69-11852 #	02 p0303 A69-11897*	02 p0215 A69-11942
02 p0303 A69-11763	02 p0315 A69-11808	02 p0263 A69-11853 #	02 p0304 A69-11898	02 p0281 A69-11943
02 p0228 A69-11764*	02 p0296 A69-11809	02 p0263 A69-11854 #	02 p0304 A69-11899*	02 p0297 A69-11944
02 p0248 A69-11765	02 p0252 A69-11810	02 p0264 A69-11855 #	02 p0205 A69-11900*	02 p0287 A69-11945
02 p0252 A69-11766	02 p0252 A69-11811	02 p0264 A69-11856 #	02 p0315 A69-11901	02 p0215 A69-11946
02 p0228 A69-11767	02 p0230 A69-11812	02 p0264 A69-11857 #	02 p0242 A69-11902	02 p0215 A69-11947
02 p0248 A69-11768	02 p0207 A69-11813	02 p0264 A69-11858 #	02 p0242 A69-11903	02 p0297 A69-11948
02 p0201 A69-11769	02 p0260 A69-11814	02 p0264 A69-11859 #	02 p0242 A69-11904	02 p0334 A69-11949
02 p0198 A69-11770*	02 p0315 A69-11815	02 p0264 A69-11860 #	02 p0316 A69-11905	02 p0202 A69-11950*
02 p1201 A69-11771	02 p0280 A69-11816*	02 p0264 A69-11861 #	02 p0316 A69-11906	02 p0202 A69-11951*
02 p1201 A69-11772*	02 p0248 A69-11817 #	02 p0188 A69-11862 #	02 p0307 A69-11907	02 p0202 A69-11952*
02 p1201 A69-11773	02 p0275 A69-11818 #	02 p0252 A69-11863 #	02 p0316 A69-11908	02 p0202 A69-11953*
02 p1201 A69-11774	02 p0307 A69-11819 #	02 p0253 A69-11864 #	02 p0199 A69-11909	02 p0202 A69-11954*
02 p0230 A69-11775	02 p0307 A69-11820 #	02 p0202 A69-11865*	02 p0207 A69-11910	02 p0317 A69-11955 #
02 p0294 A69-11776	02 p1201 A69-11821*	02 p0199 A69-11866*	02 p0275 A69-11911	02 p0317 A69-11956 #
02 p0295 A69-11777	02 p0248 A69-11822	02 p0280 A69-11867	02 p0278 A69-11912	02 p0188 A69-11957 #
02 p0295 A69-11778	02 p0307 A69-11823	02 p0242 A69-11868*	02 p0228 A69-11913	02 p0317 A69-11958 #
02 p0295 A69-11779	02 p0315 A69-11824	02 p0230 A69-11869*	02 p0333 A69-11914	02 p0317 A69-11959 #
02 p0295 A69-11780	02 p0242 A69-11825*	02 p0230 A69-11870	02 p0193 A69-11915	02 p0339 A69-11960 #
02 p0215 A69-11781	02 p0260 A69-11826 #	02 p0287 A69-11871	02 p0333 A69-11916	02 p0224 A69-11961
02 p0269 A69-11782	02 p0199 A69-11827 #	02 p0242 A69-11872	02 p0333 A69-11917	02 p0224 A69-11962
02 p0295 A69-11783	02 p0199 A69-11828 #	02 p0205 A69-11873	02 p0228 A69-11918	02 p0224 A69-11963*
02 p0295 A69-11784	02 p0207 A69-11829 #	02 p0296 A69-11874	02 p0334 A69-11919	02 p0224 A69-11964*
02 p0283 A69-11785	02 p0286 A69-11830	02 p0296 A69-11875	02 p0228 A69-11920	02 p0278 A69-11965



# ACCESSION NUMBER INDEX

02 p0224 A69-11966	02 p0249 A69-12011 #	02 p0271 A69-12056 #	02 p0318 A69-12101	02 p0216 A69-12146
02 p0224 A69-11967	02 p0243 A69-12012	02 p0271 A69-12057 #	02 p0318 A69-12102 #	02 p0217 A69-12147
02 p0225 A69-11968	02 p0275 A69-12013	02 p0340 A69-12058 #	02 p0319 A69-12103 #	02 p0217 A69-12148
02 p0225 A69-11969	02 p0243 A69-12014	02 p0231 A69-12059 #	02 p0319 A69-12104**	02 p0217 A69-12149
02 p0225 A69-11970*	02 p0317 A69-12015*	02 p0271 A69-12060 #	02 p0319 A69-12105**	02 p0217 A69-12150*
02 p0225 A69-11971	02 p0317 A69-12016*	02 p0253 A69-12061	02 p0319 A69-12106**	02 p0217 A69-12151*
02 p0225 A69-11972*	02 p0207 A69-12017*	02 p0253 A69-12062 #	02 p0319 A69-12107 #	02 p0217 A69-12152
02 p0278 A69-11973	02 p0244 A69-12018*	02 p0266 A69-12063 #	02 p0319 A69-12108**	02 p0341 A69-12153
02 p0229 A69-11974	02 p0244 A69-12019	02 p0253 A69-12064 #	02 p0319 A69-12109**	02 p0213 A69-12154
02 p0225 A69-11975 #	02 p0317 A69-12020*	02 p0253 A69-12065 #	02 p0320 A69-12110 #	02 p0213 A69-12155*
02 p0188 A69-11976 #	02 p0208 A69-12021	02 p0193 A69-12066 #	02 p0320 A69-12111 #	02 p0232 A69-12156 #
02 p0339 A69-11977 #	02 p0307 A69-12022	02 p0193 A69-12067 #	02 p0320 A69-12112 #	02 p0272 A69-12157
02 p0317 A69-11978 #	02 p0317 A69-12023*	02 p0229 A69-12068 #	02 p0320 A69-12113**	02 p0308 A69-12158
02 p0230 A69-11979 #	02 p0265 A69-12024	02 p0253 A69-12069 #	02 p0320 A69-12114**	02 p0250 A69-12159
02 p0270 A69-11980 #	02 p0340 A69-12025	02 p0194 A69-12070	02 p0320 A69-12115**	02 p0253 A69-12160
02 p0351 A69-11981 #	02 p0225 A69-12026	02 p0195 A69-12071 #	02 p0320 A69-12116 #	02 p0270 A69-12161
02 p0199 A69-11982 #	02 p0216 A69-12027	02 p0231 A69-12072 #	02 p0320 A69-12117 #	02 p0266 A69-12162
02 p0271 A69-11983	02 p0216 A69-12028	02 p0195 A69-12073 #	02 p0321 A69-12118 #	02 p0272 A69-12163 #
02 p0339 A69-11984	02 p0216 A69-12029	02 p0195 A69-12074 #	02 p0298 A69-12119 #	02 p0272 A69-12164 #
02 p0193 A69-11985 #	02 p0298 A69-12030 #	02 p0231 A69-12075 #	02 p0199 A69-12120 #	02 p0321 A69-12165
02 p0188 A69-11986 #	02 p0298 A69-12031 #	02 p0195 A69-12076 #	02 p0202 A69-12121 #	02 p0196 A69-12166 #
02 p0231 A69-11987 #	02 p0288 A69-12032 #	02 p0231 A69-12077 #	02 p0200 A69-12122 #	02 p0288 A69-12167
02 p0339 A69-11988 #	02 p0340 A69-12033 #	02 p0195 A69-12078 #	02 p0203 A69-12123 #	02 p0288 A69-12168
02 p0339 A69-11989 #	02 p0271 A69-12034	02 p0195 A69-12079 #	02 p0266 A69-12124 #	02 p0288 A69-12169
02 p0339 A69-11990 #	02 p0340 A69-12035	02 p0195 A69-12080 #	02 p0266 A69-12125 #	02 p0288 A69-12170
02 p0340 A69-11991 #	02 p0340 A69-12036	02 p0195 A69-12081 #	02 p0266 A69-12126 #	02 p0288 A69-12171*
02 p0256 A69-11992	02 p0188 A69-12037	02 p0196 A69-12082 #	02 p0266 A69-12127 #	02 p0288 A69-12172
02 p0256 A69-11993	02 p0188 A69-12038	02 p0196 A69-12083 #	02 p0308 A69-12128*	02 p0289 A69-12173
02 p0297 A69-11994	02 p0298 A69-12039	02 p0196 A69-12084 #	02 p0272 A69-12129*	02 p0289 A69-12174
02 p0297 A69-11995	02 p0288 A69-12040	02 p0196 A69-12085 #	02 p0208 A69-12130	02 p0289 A69-12175
02 p0225 A69-11996	02 p0318 A69-12041	02 p0196 A69-12086 #	02 p0272 A69-12131	02 p0289 A69-12176
02 p0212 A69-11997	02 p0275 A69-12042	02 p0249 A69-12087 #	02 p0272 A69-12132	02 p0289 A69-12177
02 p0212 A69-11998*	02 p0308 A69-12043	02 p0249 A69-12088 #	02 p0281 A69-12133	02 p0244 A69-12178 #
02 p0256 A69-11999 #	02 p0340 A69-12044	02 p0249 A69-12089 #	02 p0188 A69-12134 #	02 p0281 A69-12179*
02 p0256 A69-12000 #	02 p0298 A69-12045	02 p0305 A69-12090 #	02 p0231 A69-12135 #	02 p0281 A69-12180*
02 p0265 A69-12001	02 p0298 A69-12046	02 p0249 A69-12091 #	02 p0272 A69-12136 #	02 p0283 A69-12181
02 p0265 A69-12002	02 p0298 A69-12047	02 p0308 A69-12092*	02 p0281 A69-12137 #	02 p0189 A69-12182 #
02 p0265 A69-12003	02 p0298 A69-12048	02 p0318 A69-12093	02 p0231 A69-12138 #	02 p0299 A69-12183 #
02 p0265 A69-12004	02 p0298 A69-12049	02 p0318 A69-12094	02 p0340 A69-12139 #	02 p0266 A69-12184 #
02 p0242 A69-12005	02 p0216 A69-12050	02 p0256 A69-12095	02 p0341 A69-12140 #	02 p0267 A69-12185
02 p0243 A69-12006*	02 p0216 A69-12051	02 p0216 A69-12096	02 p0231 A69-12141 #	02 p0267 A69-12186 #
02 p0243 A69-12007	02 p0351 A69-12052 #	02 p0216 A69-12097	02 p0270 A69-12142 #	02 p0267 A69-12187 #
02 p0243 A69-12008	02 p0231 A69-12053 #	02 p0298 A69-12098	02 p0288 A69-12143 #	02 p0267 A69-12188 #
02 p0243 A69-12009	02 p0340 A69-12054 #	02 p0298 A69-12099	02 p0216 A69-12144	02 p0267 A69-12189
02 p0243 A69-12010*	02 p0340 A69-12055 #	02 p0298 A69-12100	02 p0216 A69-12145	02 p0267 A69-12190

## ACCESSION NUMBER INDEX

02 p0268 A69-12191	02 p0289 A69-12236	02 p0343 A69-12281	02 p0218 A69-12326	02 p0345 A69-12371 #
02 p0268 A69-12192	02 p0289 A69-12237	02 p0343 A69-12282	02 p0218 A69-12327	02 p0345 A69-12372*#
02 p0272 A69-12193 #	02 p0278 A69-12238	02 p0343 A69-12283	02 p0218 A69-12328*	02 p0334 A69-12373*#
02 p0341 A69-12194 #	02 p0278 A69-12239	02 p0343 A69-12284	02 p0218 A69-12329	02 p0229 A69-12374*#
02 p0321 A69-12195 #	02 p0299 A69-12240	02 p0343 A69-12285	02 p0218 A69-12330*	02 p0305 A69-12375*#
02 p0281 A69-12196 #	02 p0283 A69-12241	02 p0343 A69-12286	02 p0208 A69-12331	02 p0334 A69-12376 #
02 p0341 A69-12197 #	02 p0289 A69-12242	02 p0268 A69-12287	02 p0209 A69-12332	02 p0189 A69-12377 #
02 p0341 A69-12198 #	02 p0299 A69-12243	02 p0344 A69-12288	02 p0218 A69-12333	02 p0189 A69-12378 #
02 p0281 A69-12199 #	02 p0299 A69-12244	02 p0344 A69-12289	02 p0209 A69-12334	02 p0229 A69-12379*#
02 p0289 A69-12200 #	02 p0256 A69-12245	02 p0344 A69-12290	02 p0218 A69-12335	02 p0345 A69-12380 #
02 p0351 A69-12201 #	02 p0217 A69-12246	02 p0344 A69-12291	02 p0209 A69-12336	02 p0275 A69-12381 #
02 p0351 A69-12202 #	02 p0250 A69-12247 #	02 p0344 A69-12292	02 p0219 A69-12337	02 p0232 A69-12382 #
02 p0351 A69-12203 #	02 p0250 A69-12248 #	02 p0344 A69-12293	02 p0219 A69-12338	02 p0356 A69-12383 #
02 p0351 A69-12204 #	02 p0273 A69-12249 #	02 p0344 A69-12294*	02 p0219 A69-12339	02 p0335 A69-12384*#
02 p0351 A69-12205 #	02 p0322 A69-12250 #	02 p0345 A69-12295	02 p0219 A69-12340	02 p0229 A69-12385*#
02 p0351 A69-12206 #	02 p0341 A69-12251 #	02 p0323 A69-12296	02 p0209 A69-12341	02 p0305 A69-12386*#
02 p0352 A69-12207 #	02 p0281 A69-12252 #	02 p0308 A69-12297	02 p0219 A69-12342	02 p0353 A69-12387 #
02 p0232 A69-12208 #	02 p0352 A69-12253 #	02 p0323 A69-12298	02 p0219 A69-12343	02 p0210 A69-12388 #
02 p0352 A69-12209 #	02 p0290 A69-12254 #	02 p0244 A69-12299*	02 p0219 A69-12344	02 p0345 A69-12389*#
02 p0232 A69-12210 #	02 p0352 A69-12255 #	02 p0323 A69-12300*	02 p0219 A69-12345	02 p0324 A69-12390*#
02 p0352 A69-12211 #	02 p0341 A69-12256 #	02 p0323 A69-12301	02 p0219 A69-12346	02 p0345 A69-12391 #
02 p0203 A69-12212 #	02 p0232 A69-12257 #	02 p0334 A69-12302*	02 p0209 A69-12347	02 p0250 A69-12392*#
02 p0203 A69-12213	02 p0341 A69-12258 #	02 p0324 A69-12303*	02 p0209 A69-12348	02 p0335 A69-12393 #
02 p0203 A69-12214	02 p0208 A69-12259	02 p0324 A69-12304*	02 p0290 A69-12349*	02 p0250 A69-12394 #
02 p0203 A69-12215	02 p0217 A69-12260	02 p0324 A69-12305	02 p0209 A69-12350	02 p0244 A69-12395*#
02 p0203 A69-12216*	02 p0217 A69-12261	02 p0226 A69-12306	02 p0290 A69-12351*	02 p0244 A69-12396*#
02 p0203 A69-12217	02 p0217 A69-12262	02 p0208 A69-12307	02 p0209 A69-12352	02 p0244 A69-12397 #
02 p0203 A69-12218	02 p0208 A69-12263	02 p0208 A69-12308	02 p0232 A69-12353 #	02 p0308 A69-12398*#
02 p0204 A69-12219	02 p0208 A69-12264	02 p0352 A69-12309	02 p0232 A69-12354 #	02 p0290 A69-12399*#
02 p0204 A69-12220	02 p0208 A69-12265	02 p0352 A69-12310	02 p0290 A69-12355 #	02 p0290 A69-12400 #
02 p0272 A69-12221 #	02 p0218 A69-12266	02 p0352 A69-12311*	02 p0244 A69-12356 #	02 p0345 A69-12401*#
02 p0272 A69-12222 #	02 p0322 A69-12267	02 p0304 A69-12312	02 p0268 A69-12357 #	02 p0299 A69-12402 #
02 p0272 A69-12223 #	02 p0322 A69-12268	02 p0304 A69-12313	02 p0256 A69-12358 #	02 p0290 A69-12403*#
02 p0321 A69-12224*	02 p0322 A69-12269	02 p0304 A69-12314	02 p0278 A69-12359	02 p0290 A69-12404 #
02 p0321 A69-12225*	02 p0322 A69-12270	02 p0304 A69-12315	02 p0278 A69-12360	02 p0268 A69-12405 #
02 p0321 A69-12226*	02 p0322 A69-12271*	02 p0352 A69-12316	02 p0278 A69-12361	02 p0281 A69-12406 #
02 p0321 A69-12227*	02 p0322 A69-12272*	02 p0353 A69-12317	02 p0279 A69-12362	02 p0268 A69-12407*#
02 p0225 A69-12228	02 p0323 A69-12273	02 p0205 A69-12318	02 p0279 A69-12363	02 p0299 A69-12408*#
02 p0341 A69-12229 #	02 p0323 A69-12274*	02 p0353 A69-12319	02 p0279 A69-12364	02 p0257 A69-12409 #
02 p0250 A69-12230	02 p0323 A69-12275	02 p0353 A69-12320	02 p0279 A69-12365*	02 p0257 A69-12410 #
02 p0250 A69-12231 #	02 p0281 A69-12276	02 p0353 A69-12321	02 p0250 A69-12366	02 p0250 A69-12411 #
02 p0334 A69-12232	02 p0342 A69-12277	02 p0205 A69-12322	02 p0334 A69-12367 #	02 p0189 A69-12412
02 p0305 A69-12233	02 p0342 A69-12278	02 p0353 A69-12323	02 p0270 A69-12368 #	02 p0253 A69-12413
02 p0232 A69-12234	02 p0342 A69-12279	02 p0353 A69-12324	02 p0334 A69-12369 #	02 p0250 A69-12414
02 p0289 A69-12235	02 p0342 A69-12280*	02 p0218 A69-12325	02 p0334 A69-12370*#	02 p0282 A69-12415



## ACCESSION NUMBER INDEX

02 p0251 A69-12416	02 p0212 A69-12461	02 p0291 A69-12506 #	02 p0284 A69-12551*	02 p0325 A69-12596
02 p0257 A69-12417	02 p0212 A69-12462	02 p0324 A69-12507 #	02 p0291 A69-12552 #	02 p0308 A69-12597
02 p0345 A69-12418 #	02 p0257 A69-12463	02 p0346 A69-12508 #	02 p0291 A69-12553 #	02 p0284 A69-12598*
02 p0346 A69-12419 #	02 p0205 A69-12464 #	02 p0346 A69-12509 #	02 p0292 A69-12554 #	02 p0299 A69-12599
02 p0346 A69-12420 #	02 p0205 A69-12465 #	02 p0346 A69-12510 #	02 p0292 A69-12555 #	02 p0325 A69-12600
02 p0346 A69-12421 #	02 p0283 A69-12466 #	02 p0346 A69-12511*#	02 p0292 A69-12556 #	02 p0204 A69-12601*
02 p0346 A69-12422 #	02 p0254 A69-12467	02 p0347 A69-12512 #	02 p0292 A69-12557 #	02 p0204 A69-12602*
02 p0290 A69-12423 #	02 p0221 A69-12468	02 p0347 A69-12513 #	02 p0292 A69-12558 #	02 p0205 A69-12603*
02 p0291 A69-12424 #	02 p0221 A69-12469	02 p0347 A69-12514*#	02 p0292 A69-12559 #	02 p0234 A69-12604*
02 p0196 A69-12425 #	02 p0221 A69-12470	02 p0347 A69-12515 #	02 p0257 A69-12560 #	02 p0348 A69-12605*
02 p0254 A69-12426 #	02 p0222 A69-12471	02 p0347 A69-12516*#	02 p0251 A69-12561 #	02 p0212 A69-12606
02 p0219 A69-12427	02 p0222 A69-12472	02 p0347 A69-12517 #	02 p0299 A69-12562 #	02 p0282 A69-12607
02 p0257 A69-12428	02 p0254 A69-12473	02 p0347 A69-12518 #	02 p0325 A69-12563 #	02 p0234 A69-12608
02 p0220 A69-12429*	02 p0222 A69-12474	02 p0347 A69-12519 #	02 p0325 A69-12564 #	02 p0348 A69-12609
02 p0210 A69-12430	02 p0222 A69-12475	02 p0189 A69-12520*#	02 p0299 A69-12565	02 p0348 A69-12610
02 p0210 A69-12431	02 p0356 A69-12476	02 p0189 A69-12521 #	02 p0273 A69-12566	02 p0354 A69-12611
02 p0210 A69-12432*	02 p0232 A69-12477	02 p0189 A69-12522*#	02 p0325 A69-12567	02 p0348 A69-12612
02 p0220 A69-12433	02 p0273 A69-12478	02 p0189 A69-12523 #	02 p0244 A69-12568*	02 p0257 A69-12613
02 p0251 A69-12434*	02 p0200 A69-12479*	02 p0189 A69-12524 #	02 p0245 A69-12569	02 p0257 A69-12614
02 p0220 A69-12435	02 p0346 A69-12480	02 p0190 A69-12525 #	02 p0190 A69-12570 #	02 p0257 A69-12615
02 p0210 A69-12436	02 p0291 A69-12481 #	02 p0190 A69-12526 #	02 p0190 A69-12571 #	02 p0257 A69-12616*
02 p0210 A69-12437	02 p0291 A69-12482 #	02 p0233 A69-12527 #	02 p0233 A69-12572 #	02 p0258 A69-12617*
02 p0210 A69-12438*	02 p0291 A69-12483 #	02 p0354 A69-12528*#	02 p0233 A69-12573 #	02 p0258 A69-12618
02 p0210 A69-12439	02 p0291 A69-12484 #	02 p0354 A69-12529 #	02 p0190 A69-12574 #	02 p0258 A69-12619
02 p0220 A69-12440	02 p0284 A69-12485 #	02 p0233 A69-12530 #	02 p0190 A69-12575 #	02 p0258 A69-12620
02 p0210 A69-12441	02 p0291 A69-12486 #	02 p0335 A69-12531 #	02 p0191 A69-12576 #	02 p0284 A69-12621*
02 p0211 A69-12442*	02 p0233 A69-12487 #	02 p0347 A69-12532*#	02 p0191 A69-12577 #	02 p0258 A69-12622
02 p0211 A69-12443	02 p0353 A69-12488 #	02 p0190 A69-12533 #	02 p0191 A69-12578 #	02 p0300 A69-12623
02 p0211 A69-12444	02 p0233 A69-12489 #	02 p0233 A69-12534 #	02 p0234 A69-12579 #	02 p0325 A69-12624*
02 p0211 A69-12445	02 p0354 A69-12490 #	02 p0233 A69-12535 #	02 p0191 A69-12580 #	02 p0300 A69-12625
02 p0211 A69-12446	02 p0354 A69-12491 #	02 p0347 A69-12536*#	02 p0234 A69-12581 #	02 p0192 A69-12626
02 p0211 A69-12447	02 p0213 A69-12492	02 p0229 A69-12537 #	02 p0234 A69-12582 #	02 p0254 A69-12627
02 p0211 A69-12448	02 p0324 A69-12493	02 p0233 A69-12538 #	02 p0234 A69-12583 #	02 p0354 A69-12628
02 p0220 A69-12449	02 p0305 A69-12494	02 p0348 A69-12539 #	02 p0191 A69-12584 #	02 p0284 A69-12629
02 p0220 A69-12450	02 p0324 A69-12495	02 p0348 A69-12540 #	02 p0191 A69-12585 #	02 p0300 A69-12630
02 p0220 A69-12451	02 p0204 A69-12496	02 p0273 A69-12541 #	02 p0191 A69-12586 #	02 p0300 A69-12631
02 p0220 A69-12452	02 p0204 A69-12497	02 p0348 A69-12542 #	02 p0191 A69-12587 #	02 p0258 A69-12632
02 p0220 A69-12453	02 p0204 A69-12498*	02 p0233 A69-12543 #	02 p0234 A69-12588 #	02 p0234 A69-12633 #
02 p0221 A69-12454	02 p0304 A69-12499	02 p0190 A69-12544 #	02 p0234 A69-12589 #	02 p0300 A69-12634 #
02 p0221 A69-12455	02 p0304 A69-12500	02 p0324 A69-12545*#	02 p0325 A69-12590	02 p0292 A69-12635 #
02 p0221 A69-12456	02 p0305 A69-12501 #	02 p0279 A69-12546*#	02 p0325 A69-12591*	02 p0282 A69-12636 #
02 p0221 A69-12457	02 p0229 A69-12502 #	02 p0354 A69-12547*#	02 p0325 A69-12592	02 p0258 A69-12637 #
02 p0221 A69-12458	02 p0282 A69-12503 #	02 p0354 A69-12548 #	02 p0325 A69-12593*	02 p0300 A69-12638 #
02 p0221 A69-12459	02 p0354 A69-12504 #	02 p0190 A69-12549 #	02 p0308 A69-12594*	02 p0292 A69-12639 #
02 p0211 A69-12460	02 p0291 A69-12505*#	02 p0273 A69-12550*#	02 p0308 A69-12595	02 p0326 A69-12640 #

## ACCESSION NUMBER INDEX

02 p0258 A69-12641 #	02 p0222 A69-12686 #	02 p0270 A69-12731	02 p0276 A69-12776	02 p0331 A69-12821*
02 p0258 A69-12642 #	02 p0260 A69-12687 #	02 p0226 A69-12732	02 p0277 A69-12777	02 p0335 A69-12822*
02 p0292 A69-12643 #	02 p0193 A69-12688 #	02 p0226 A69-12733	02 p0277 A69-12778	02 p0332 A69-12823
02 p0258 A69-12644 #	02 p0335 A69-12689 #	02 p0284 A69-12734	02 p0273 A69-12779 #	02 p0192 A69-12824
02 p0259 A69-12645 #	02 p0193 A69-12690 #	02 p0245 A69-12735	02 p0328 A69-12780	02 p0192 A69-12825
02 p0259 A69-12646 #	02 p0222 A69-12691 #	02 p0245 A69-12736	02 p0293 A69-12781	02 p0349 A69-12826
02 p0259 A69-12647 #	02 p0275 A69-12692 #	02 p0245 A69-12737	02 p0293 A69-12782	02 p0192 A69-12827
02 p0259 A69-12648 #	02 p0275 A69-12693 #	02 p0245 A69-12738*	02 p0293 A69-12783	02 p0235 A69-12828
02 p0300 A69-12649 #	02 p0245 A69-12694 #	02 p0245 A69-12739*	02 p0329 A69-12784	02 p0349 A69-12829
02 p0300 A69-12650	02 p0276 A69-12695 #	02 p0309 A69-12740*	02 p0329 A69-12785	02 p0192 A69-12830
02 p0301 A69-12651	02 p0276 A69-12696 #	02 p0246 A69-12741*	02 p0329 A69-12786	02 p0310 A69-12831
02 p0301 A69-12652	02 p0326 A69-12697 #	02 p0246 A69-12742	02 p0329 A69-12787	02 p0284 A69-12832
02 p0259 A69-12653	02 p0276 A69-12698 #	02 p0309 A69-12743	02 p0309 A69-12788	02 p0285 A69-12833*
02 p0259 A69-12654	02 p0276 A69-12699 #	02 p0309 A69-12744	02 p0293 A69-12789	02 p0223 A69-12834 #
02 p0259 A69-12655*	02 p0276 A69-12700 #	02 p0293 A69-12745	02 p0329 A69-12790	02 p0332 A69-12835 #
02 p0259 A69-12656	02 p0260 A69-12701*	02 p0282 A69-12746	02 p0329 A69-12791	02 p0332 A69-12836 #
02 p0260 A69-12657	02 p0284 A69-12702*	02 p0335 A69-12747	02 p0310 A69-12792	02 p0301 A69-12837 #
02 p0260 A69-12658*	02 p0282 A69-12703*	02 p0305 A69-12748	02 p0310 A69-12793	02 p0269 A69-12838 #
02 p0260 A69-12659	02 p0326 A69-12704	02 p0348 A69-12749	02 p0329 A69-12794*	02 p0223 A69-12839 #
02 p0301 A69-12660	02 p0326 A69-12705	02 p0268 A69-12750	02 p0197 A69-12795 #	02 p0282 A69-12840 #
02 p0301 A69-12661	02 p0326 A69-12706*	02 p0328 A69-12751	02 p0348 A69-12796	02 p0273 A69-12841 #
02 p0279 A69-12662	02 p0326 A69-12707*	02 p0328 A69-12752	02 p0349 A69-12797	02 p0293 A69-12842 #
02 p0326 A69-12663	02 p0327 A69-12708*	02 p0328 A69-12753	02 p0349 A69-12798	02 p0269 A69-12843 #
02 p0354 A69-12664	02 p0327 A69-12709*	02 p0309 A69-12754	02 p0349 A69-12799	02 p0260 A69-12844 #
02 p0197 A69-12665	02 p0327 A69-12710*	02 p0328 A69-12755	02 p0282 A69-12800 #	03 p0426 A69-12845 #
02 p0279 A69-12666	02 p0309 A69-12711	02 p0222 A69-12756	02 p0330 A69-12801	03 p0361 A69-12846 #
02 p0284 A69-12667 #	02 p0327 A69-12712*	02 p0222 A69-12757	02 p0330 A69-12802	03 p0412 A69-12847 #
02 p0354 A69-12668 #	02 p0327 A69-12713*	02 p0276 A69-12758	02 p0330 A69-12803*	03 p0412 A69-12848 #
02 p0355 A69-12669 #	02 p0309 A69-12714*	02 p0246 A69-12759	02 p0200 A69-12804*	03 p0427 A69-12849
02 p0355 A69-12670 #	02 p0309 A69-12715*	02 p0276 A69-12760	02 p0330 A69-12805	03 p0462 A69-12850
02 p0355 A69-12671 #	02 p0327 A69-12716	02 p0251 A69-12761	02 p0331 A69-12806	03 p0518 A69-12851
02 p0355 A69-12672 #	02 p0327 A69-12717*	02 p0246 A69-12762	02 p0331 A69-12807*	03 p0483 A69-12852
02 p0355 A69-12673 #	02 p0245 A69-12718*	02 p0269 A69-12763	02 p0247 A69-12808	03 p0401 A69-12853
02 p0305 A69-12674 #	02 p0327 A69-12719*	02 p0269 A69-12764	02 p0251 A69-12809	03 p0402 A69-12854
02 p0254 A69-12675 #	02 p0309 A69-12720*	02 p0301 A69-12765	02 p0247 A69-12810	03 p0519 A69-12855 #
02 p0356 A69-12676	02 p0205 A69-12721*	02 p0204 A69-12766	02 p0223 A69-12811	03 p0519 A69-12856 #
02 p0254 A69-12677	02 p0200 A69-12722*	02 p0246 A69-12767	02 p0223 A69-12812	03 p0504 A69-12857 #
02 p0254 A69-12678	02 p0206 A69-12723*	02 p0246 A69-12768	02 p0223 A69-12813	03 p0504 A69-12858 #
02 p0193 A69-12679 #	02 p0200 A69-12724*	02 p0246 A69-12769	02 p0213 A69-12814	03 p0369 A69-12859 #
02 p0326 A69-12680*	02 p0327 A69-12725	02 p0246 A69-12770	02 p0213 A69-12815	03 p0402 A69-12860
02 p0335 A69-12681	02 p0328 A69-12726	02 p0246 A69-12771	02 p0212 A69-12816	03 p0530 A69-12861
02 p0335 A69-12682	02 p0328 A69-12727*	02 p0247 A69-12772	02 p0212 A69-12817	03 p0530 A69-12862
02 p0260 A69-12683 #	02 p0245 A69-12728	02 p0251 A69-12773	02 p0331 A69-12818	03 p0531 A69-12863
02 p0222 A69-12684 #	02 p0328 A69-12729	02 p0234 A69-12774	02 p0331 A69-12819	03 p0531 A69-12864
02 p0301 A69-12685 #	02 p0328 A69-12730	02 p0247 A69-12775	02 p0331 A69-12820	03 p0522 A69-12865



# ACCESSION NUMBER INDEX

03 p0522 A69-12866	03 p0384 A69-12911	03 p0531 A69-12956 #	03 p0505 A69-13001	03 p0437 A69-13046 #
03 p0383 A69-12867	03 p0385 A69-12912	03 p0495 A69-12957 #	03 p0532 A69-13002*	03 p0438 A69-13047 #
03 p0408 A69-12868	03 p0385 A69-12913	03 p0413 A69-12958 #	03 p0505 A69-13003	03 p0438 A69-13048 #
03 p0427 A69-12869*	03 p0427 A69-12914	03 p0531 A69-12959 #	03 p0495 A69-13004	03 p0438 A69-13049 #
03 p0383 A69-12870	03 p0385 A69-12915	03 p0432 A69-12960 #	03 p0409 A69-13005	03 p0438 A69-13050 #
03 p0383 A69-12871*	03 p0408 A69-12916	03 p0432 A69-12961 #	03 p0402 A69-13006	03 p0438 A69-13051 #
03 p0383 A69-12872	03 p0483 A69-12917	03 p0432 A69-12962 #	03 p0402 A69-13007	03 p0438 A69-13052 #
03 p0361 A69-12873 #	03 p0385 A69-12918	03 p0433 A69-12963 #	03 p0402 A69-13008	03 p0438 A69-13053 #
03 p0454 A69-12874 #	03 p0420 A69-12919	03 p0519 A69-12964 #	03 p0433 A69-13009	03 p0439 A69-13054 #
03 p0412 A69-12875 #	03 p0469 A69-12920*	03 p0465 A69-12965 #	03 p0413 A69-13010 #	03 p0439 A69-13055 #
03 p0427 A69-12876 #	03 p0413 A69-12921	03 p0531 A69-12966 #	03 p0413 A69-13011 #	03 p0439 A69-13056 #
03 p0473 A69-12877 #	03 p0469 A69-12922*	03 p0361 A69-12967 #	03 p0532 A69-13012 #	03 p0439 A69-13057 #
03 p0522 A69-12878 #	03 p0469 A69-12923*	03 p0531 A69-12968 #	03 p0413 A69-13013 #	03 p0439 A69-13058 #
03 p0361 A69-12879 #	03 p0469 A69-12924*	03 p0427 A69-12969 #	03 p0532 A69-13014 #	03 p0439 A69-13059 #
03 p0427 A69-12880 #	03 p0473 A69-12925*	03 p0495 A69-12970 #	03 p0414 A69-13015 #	03 p0524 A69-13060
03 p0494 A69-12881	03 p0473 A69-12926	03 p0402 A69-12971	03 p0414 A69-13016 #	03 p0524 A69-13061
03 p0365 A69-12882	03 p0385 A69-12927	03 p0408 A69-12972	03 p0402 A69-13017	03 p0524 A69-13062
03 p0369 A69-12883	03 p0497 A69-12928	03 p0408 A69-12973	03 p0361 A69-13018	03 p0524 A69-13063
03 p0378 A69-12884	03 p0497 A69-12929 #	03 p0408 A69-12974	03 p0414 A69-13019	03 p0524 A69-13064
03 p0379 A69-12885	03 p0497 A69-12930 #	03 p0409 A69-12975	03 p0523 A69-13020*	03 p0524 A69-13065
03 p0365 A69-12886	03 p0497 A69-12931 #	03 p0409 A69-12976	03 p0524 A69-13021	03 p0524 A69-13066
03 p0494 A69-12887	03 p0497 A69-12932 #	03 p0409 A69-12977	03 p0455 A69-13022 #	03 p0409 A69-13067 #
03 p0495 A69-12888	03 p0498 A69-12933 #	03 p0402 A69-12978	03 p0483 A69-13023	03 p0519 A69-13068 #
03 p0494 A69-12889	03 p0498 A69-12934**	03 p0427 A69-12979	03 p0483 A69-13024	03 p0409 A69-13069 #
03 p0495 A69-12890	03 p0420 A69-12935 #	03 p0427 A69-12980	03 p0443 A69-13025	03 p0409 A69-13070 #
03 p0494 A69-12891	03 p0498 A69-12936 #	03 p0435 A69-12981	03 p0443 A69-13026	03 p0409 A69-13071 #
03 p0495 A69-12892	03 p0498 A69-12937 #	03 p0435 A69-12982	03 p0443 A69-13027	03 p0409 A69-13072 #
03 p0504 A69-12893	03 p0498 A69-12938 #	03 p0435 A69-12983	03 p0443 A69-13028	03 p0409 A69-13073*
03 p0442 A69-12894 #	03 p0498 A69-12939 #	03 p0435 A69-12984	03 p0443 A69-13029	03 p0367 A69-13074**
03 p0531 A69-12895 #	03 p0469 A69-12940 #	03 p0435 A69-12985	03 p0457 A69-13030 #	03 p0368 A69-13075**
03 p0494 A69-12896 #	03 p0498 A69-12941 #	03 p0442 A69-12986	03 p0458 A69-13031 #	03 p0368 A69-13076**
03 p0473 A69-12897 #	03 p0499 A69-12942 #	03 p0379 A69-12987**	03 p0458 A69-13032**	03 p0505 A69-13077 #
03 p0505 A69-12898 #	03 p0499 A69-12943 #	03 p0523 A69-12988**	03 p0458 A69-13033 #	03 p0499 A69-13078 #
03 p0505 A69-12899 #	03 p0499 A69-12944 #	03 p0531 A69-12989 #	03 p0435 A69-13034	03 p0500 A69-13079 #
03 p0365 A69-12900	03 p0499 A69-12945 #	03 p0361 A69-12990**	03 p0483 A69-13035 #	03 p0500 A69-13080 #
03 p0383 A69-12901	03 p0499 A69-12946 #	03 p0495 A69-12991 #	03 p0436 A69-13036 #	03 p0505 A69-13081 #
03 p0383 A69-12902	03 p0523 A69-12947	03 p0379 A69-12992 #	03 p0436 A69-13037 #	03 p0505 A69-13082 #
03 p0384 A69-12903	03 p0408 A69-12948 #	03 p0379 A69-12993*	03 p0436 A69-13038 #	03 p0506 A69-13083 #
03 p0384 A69-12904	03 p0413 A69-12949 #	03 p0413 A69-12994 #	03 p0437 A69-13039 #	03 p0506 A69-13084 #
03 p0384 A69-12905	03 p0366 A69-12950 #	03 p0523 A69-12995 #	03 p0437 A69-13040 #	03 p0506 A69-13085 #
03 p0384 A69-12906	03 p0523 A69-12951 #	03 p0413 A69-12996**	03 p0437 A69-13041 #	03 p0420 A69-13086 #
03 p0384 A69-12907	03 p0523 A69-12952 #	03 p0523 A69-12997 #	03 p0437 A69-13042 #	03 p0506 A69-13087 #
03 p0384 A69-12908	03 p0432 A69-12953 #	03 p0523 A69-12998 #	03 p0437 A69-13043 #	03 p0506 A69-13088 #
03 p0384 A69-12909	03 p0361 A69-12954 #	03 p0523 A69-12999 #	03 p0437 A69-13044 #	03 p0506 A69-13089 #
03 p0384 A69-12910	03 p0361 A69-12955 #	03 p0385 A69-13000	03 p0437 A69-13045 #	03 p0506 A69-13090 #

ACCESSION NUMBER INDEX

03 p0506 A69-13091 #	03 p0414 A69-13136	03 p0388 A69-13181	03 p0391 A69-13226	03 p0458 A69-13271 #
03 p0506 A69-13092 #	03 p0414 A69-13137*	03 p0388 A69-13182	03 p0403 A69-13227	03 p0458 A69-13272 #
03 p0507 A69-13093 #	03 p0414 A69-13138*	03 p0388 A69-13183*	03 p0400 A69-13228	03 p0459 A69-13273 #
03 p0420 A69-13094 #	03 p0415 A69-13139*	03 p0402 A69-13184	03 p0391 A69-13229	03 p0459 A69-13274 #
03 p0507 A69-13095 #	03 p0415 A69-13140	03 p0388 A69-13185	03 p0391 A69-13230	03 p0393 A69-13275 #
03 p0507 A69-13096 #	03 p0474 A69-13141	03 p0389 A69-13186	03 p0391 A69-13231	03 p0420 A69-13276 #
03 p0507 A69-13097	03 p0474 A69-13142	03 p0428 A69-13187	03 p0519 A69-13232	03 p0466 A69-13277 #
03 p0469 A69-13098*#	03 p0474 A69-13143	03 p0403 A69-13188	03 p0400 A69-13233	03 p0484 A69-13278 #
03 p0470 A69-13099*#	03 p0474 A69-13144	03 p0410 A69-13189	03 p0463 A69-13234	03 p0484 A69-13279 #
03 p0470 A69-13100*#	03 p0474 A69-13145	03 p0411 A69-13190	03 p0464 A69-13235	03 p0484 A69-13280 #
03 p0427 A69-13101	03 p0475 A69-13146	03 p0389 A69-13191	03 p0464 A69-13236	03 p0484 A69-13281 #
03 p0427 A69-13102	03 p0475 A69-13147	03 p0389 A69-13192	03 p0464 A69-13237	03 p0484 A69-13282 #
03 p0473 A69-13103	03 p0475 A69-13148	03 p0389 A69-13193	03 p0464 A69-13238	03 p0484 A69-13283 #
03 p0428 A69-13104*#	03 p0475 A69-13149	03 p0389 A69-13194	03 p0403 A69-13239*	03 p0484 A69-13284 #
03 p0439 A69-13105 #	03 p0507 A69-13150*	03 p0400 A69-13195	03 p0411 A69-13240*	03 p0459 A69-13285
03 p0428 A69-13106*#	03 p0475 A69-13151*	03 p0389 A69-13196	03 p0391 A69-13241	03 p0459 A69-13286 #
03 p0428 A69-13107*#	03 p0475 A69-13152	03 p0389 A69-13197	03 p0392 A69-13242*	03 p0459 A69-13287 #
03 p0428 A69-13108*#	03 p0475 A69-13153	03 p0390 A69-13198	03 p0400 A69-13243*	03 p0459 A69-13288 #
03 p0428 A69-13109*#	03 p0475 A69-13154	03 p0429 A69-13199	03 p0464 A69-13244	03 p0459 A69-13289 #
03 p0428 A69-13110*#	03 p0415 A69-13155	03 p0400 A69-13200	03 p0392 A69-13245	03 p0393 A69-13290 #
03 p0428 A69-13111	03 p0466 A69-13156	03 p0409 A69-13201	03 p0464 A69-13246	03 p0393 A69-13291 #
03 p0366 A69-13112 #	03 p0475 A69-13157	03 p0390 A69-13202*	03 p0464 A69-13247	03 p0484 A69-13292 #
03 p0474 A69-13113*#	03 p0475 A69-13158	03 p0403 A69-13203*	03 p0392 A69-13248	03 p0485 A69-13293*
03 p0474 A69-13114*#	03 p0476 A69-13159	03 p0390 A69-13204	03 p0392 A69-13249	03 p0485 A69-13294*
03 p0474 A69-13115*#	03 p0470 A69-13160*	03 p0390 A69-13205	03 p0392 A69-13250	03 p0485 A69-13295
03 p0428 A69-13116	03 p0470 A69-13161*	03 p0403 A69-13206	03 p0392 A69-13251	03 p0440 A69-13296
03 p0443 A69-13117	03 p0471 A69-13162	03 p0463 A69-13207	03 p0393 A69-13252*	03 p0485 A69-13297
03 p0484 A69-13118	03 p0471 A69-13163*	03 p0463 A69-13208*	03 p0403 A69-13253	03 p0485 A69-13298*
03 p0443 A69-13119	03 p0471 A69-13164*	03 p0411 A69-13209	03 p0393 A69-13254	03 p0429 A69-13299*
03 p0443 A69-13120	03 p0471 A69-13165	03 p0463 A69-13210	03 p0393 A69-13255	03 p0410 A69-13300 #
03 p0443 A69-13121	03 p0471 A69-13166*	03 p0429 A69-13211*	03 p0410 A69-13256	03 p0404 A69-13301
03 p0532 A69-13122	03 p0471 A69-13167*	03 p0463 A69-13212	03 p0455 A69-13257	03 p0440 A69-13302
03 p0443 A69-13123	03 p0507 A69-13168*	03 p0463 A69-13213	03 p0455 A69-13258	03 p0430 A69-13303
03 p0524 A69-13124 #	03 p0471 A69-13169	03 p0463 A69-13214*	03 p0455 A69-13259	03 p0393 A69-13304
03 p0368 A69-13125*#	03 p0507 A69-13170	03 p0390 A69-13215	03 p0508 A69-13260 #	03 p0420 A69-13305
03 p0368 A69-13126*#	03 p0507 A69-13171	03 p0390 A69-13216	03 p0429 A69-13261 #	03 p0476 A69-13306
03 p0368 A69-13127*#	03 p0508 A69-13172	03 p0403 A69-13217	03 p0404 A69-13262	03 p0525 A69-13307 #
03 p0465 A69-13128*#	03 p0508 A69-13173	03 p0390 A69-13218	03 p0429 A69-13263	03 p0444 A69-13308
03 p0465 A69-13129 #	03 p0508 A69-13174*	03 p0391 A69-13219	03 p0440 A69-13264	03 p0444 A69-13309
03 p0525 A69-13130 #	03 p0508 A69-13175*	03 p0400 A69-13220	03 p0440 A69-13265	03 p0444 A69-13310
03 p0465 A69-13131*#	03 p0385 A69-13176	03 p0429 A69-13221*	03 p0525 A69-13266	03 p0444 A69-13311
03 p0534 A69-13132	03 p0387 A69-13177	03 p0429 A69-13222*	03 p0458 A69-13267 #	03 p0444 A69-13312
03 p0532 A69-13133*#	03 p0388 A69-13178	03 p0391 A69-13223	03 p0458 A69-13268 #	03 p0400 A69-13313
03 p0414 A69-13134	03 p0388 A69-13179	03 p0500 A69-13224	03 p0429 A69-13269 #	03 p0472 A69-13314
03 p0466 A69-13135	03 p0388 A69-13180	03 p0500 A69-13225	03 p0458 A69-13270 #	03 p0472 A69-13315



# ACCESSION NUMBER INDEX

03 p0472 A69-13316*	03 p0379 A69-13361 #	03 p0362 A69-13406 #	03 p0433 A69-13451	03 p0373 A69-13496
03 p0472 A69-13317*	03 p0415 A69-13362	03 p0500 A69-13407	03 p0465 A69-13452	03 p0374 A69-13497*
03 p0381 A69-13318*	03 p0362 A69-13363	03 p0422 A69-13408 #	03 p0433 A69-13453	03 p0374 A69-13498*
03 p0532 A69-13319	03 p0455 A69-13364	03 p0461 A69-13409 #	03 p0433 A69-13454	03 p0374 A69-13499
03 p0485 A69-13320	03 p0440 A69-13365	03 p0422 A69-13410 #	03 p0434 A69-13455	03 p0374 A69-13500
03 p0472 A69-13321*	03 p0440 A69-13366	03 p0415 A69-13411	03 p0444 A69-13456	03 p0374 A69-13501
03 p0485 A69-13322 #	03 p0366 A69-13367*	03 p0476 A69-13412	03 p0453 A69-13457*	03 p0374 A69-13502
03 p0476 A69-13323 #	03 p0509 A69-13368	03 p0477 A69-13413	03 p0444 A69-13458	03 p0374 A69-13503*
03 p0430 A69-13324**	03 p0415 A69-13369	03 p0477 A69-13414	03 p0380 A69-13459 #	03 p0380 A69-13504
03 p0420 A69-13325	03 p0455 A69-13370*	03 p0486 A69-13415	03 p0382 A69-13460*	03 p0422 A69-13505 #
03 p0421 A69-13326	03 p0455 A69-13371	03 p0486 A69-13416	03 p0370 A69-13461*	03 p0422 A69-13506 #
03 p0421 A69-13327*	03 p0455 A69-13372*	03 p0366 A69-13417	03 p0380 A69-13462*	03 p0422 A69-13507 #
03 p0421 A69-13328*	03 p0455 A69-13373*	03 p0362 A69-13418	03 p0486 A69-13463	03 p0422 A69-13508 #
03 p0421 A69-13329	03 p0455 A69-13374*	03 p0415 A69-13419	03 p0472 A69-13464**	03 p0500 A69-13509 #
03 p0421 A69-13330	03 p0455 A69-13375*	03 p0511 A69-13420	03 p0511 A69-13465 #	03 p0461 A69-13510 #
03 p0485 A69-13331 #	03 p0394 A69-13376 #	03 p0410 A69-13421	03 p0411 A69-13466 #	03 p0422 A69-13511 #
03 p0459 A69-13332 #	03 p0421 A69-13377 #	03 p0466 A69-13422	03 p0511 A69-13467*	03 p0422 A69-13512 #
03 p0393 A69-13333 #	03 p0394 A69-13378 #	03 p0466 A69-13423	03 p0411 A69-13468 #	03 p0422 A69-13513 #
03 p0460 A69-13334 #	03 p0382 A69-13379*#	03 p0430 A69-13424	03 p0472 A69-13469*	03 p0422 A69-13514 #
03 p0460 A69-13335 #	03 p0476 A69-13380	03 p0430 A69-13425	03 p0370 A69-13470	03 p0422 A69-13515 #
03 p0460 A69-13336 #	03 p0476 A69-13381	03 p0440 A69-13426	03 p0404 A69-13471	03 p0423 A69-13516 #
03 p0460 A69-13337 #	03 p0476 A69-13382	03 p0511 A69-13427*	03 p0404 A69-13472	03 p0512 A69-13517 #
03 p0460 A69-13338 #	03 p0476 A69-13383	03 p0511 A69-13428	03 p0466 A69-13473	03 p0423 A69-13518 #
03 p0460 A69-13339 #	03 p0476 A69-13384	03 p0535 A69-13429	03 p0467 A69-13474	03 p0394 A69-13519 #
03 p0460 A69-13340 #	03 p0476 A69-13385	03 p0500 A69-13430	03 p0511 A69-13475	03 p0423 A69-13520 #
03 p0461 A69-13341 #	03 p0433 A69-13386	03 p0404 A69-13431	03 p0370 A69-13476*	03 p0394 A69-13521 #
03 p0461 A69-13342 #	03 p0486 A69-13387	03 p0368 A69-13432	03 p0371 A69-13477	03 p0394 A69-13522 #
03 p0461 A69-13343 #	03 p0466 A69-13388	03 p0369 A69-13433*	03 p0371 A69-13478	03 p0423 A69-13523 #
03 p0461 A69-13344 #	03 p0466 A69-13389	03 p0369 A69-13434*	03 p0371 A69-13479	03 p0423 A69-13524 #
03 p0461 A69-13345 #	03 p0509 A69-13390	03 p0511 A69-13435 #	03 p0371 A69-13480	03 p0500 A69-13525 #
03 p0421 A69-13346**	03 p0510 A69-13391	03 p0525 A69-13436	03 p0430 A69-13481*	03 p0501 A69-13526 #
03 p0508 A69-13347 #	03 p0411 A69-13392	03 p0525 A69-13437	03 p0371 A69-13482	03 p0501 A69-13527 #
03 p0508 A69-13348**	03 p0510 A69-13393	03 p0379 A69-13438*	03 p0372 A69-13483*	03 p0501 A69-13528 #
03 p0444 A69-13349	03 p0421 A69-13394	03 p0366 A69-13439	03 p0372 A69-13484*	03 p0423 A69-13529 #
03 p0495 A69-13350	03 p0519 A69-13395	03 p0379 A69-13440	03 p0372 A69-13485*	03 p0423 A69-13530 #
03 p0466 A69-13351	03 p0495 A69-13396	03 p0379 A69-13441*	03 p0372 A69-13486	03 p0423 A69-13531 #
03 p0466 A69-13352	03 p0510 A69-13397	03 p0495 A69-13442	03 p0372 A69-13487	03 p0423 A69-13532 #
03 p0394 A69-13353	03 p0394 A69-13398	03 p0380 A69-13443	03 p0372 A69-13488	03 p0423 A69-13533 #
03 p0430 A69-13354	03 p0430 A69-13399	03 p0366 A69-13444	03 p0372 A69-13489	03 p0423 A69-13534 #
03 p0500 A69-13355 #	03 p0379 A69-13400	03 p0496 A69-13445	03 p0373 A69-13490	03 p0423 A69-13535 #
03 p0509 A69-13356 #	03 p0511 A69-13401	03 p0496 A69-13446	03 p0373 A69-13491*	03 p0423 A69-13536 #
03 p0509 A69-13357 #	03 p0511 A69-13402*	03 p0535 A69-13447	03 p0373 A69-13492	03 p0423 A69-13537 #
03 p0509 A69-13358	03 p0456 A69-13403 #	03 p0433 A69-13448	03 p0373 A69-13493	03 p0423 A69-13538 #
03 p0369 A69-13359	03 p0466 A69-13404 #	03 p0433 A69-13449	03 p0373 A69-13494	03 p0423 A69-13539 #
03 p0369 A69-13360	03 p0456 A69-13405 #	03 p0433 A69-13450	03 p0373 A69-13495	03 p0424 A69-13540 #

# ACCESSION NUMBER INDEX

03 p0424 A69-13541 #	03 p0535 A69-13586 #	03 p0396 A69-13631 #	03 p0364 A69-13676	03 p0397 A69-13721*
03 p0424 A69-13542 #	03 p0520 A69-13587 #	03 p0424 A69-13632 #	03 p0367 A69-13677	03 p0397 A69-13722
03 p0424 A69-13543 #	03 p0535 A69-13588 #	03 p0362 A69-13633	03 p0405 A69-13678	03 p0405 A69-13723
03 p0424 A69-13544 #	03 p0366 A69-13589 #	03 p0430 A69-13634	03 p0412 A69-13679	03 p0405 A69-13724
03 p0430 A69-13545 #	03 p0535 A69-13590 #	03 p0486 A69-13635	03 p0430 A69-13680	03 p0397 A69-13725*
03 p0444 A69-13546	03 p0535 A69-13591 #	03 p0486 A69-13636	03 p0461 A69-13681 #	03 p0405 A69-13726
03 p0404 A69-13547 #	03 p0535 A69-13592 #	03 p0487 A69-13637	03 p0462 A69-13682 #	03 p0397 A69-13727
03 p0411 A69-13548 #	03 p0520 A69-13593 #	03 p0487 A69-13638	03 p0410 A69-13683	03 p0487 A69-13728
03 p0440 A69-13549 #	03 p0535 A69-13594 #	03 p0487 A69-13639	03 p0410 A69-13684	03 p0487 A69-13729
03 p0382 A69-13550*	03 p0536 A69-13595 #	03 p0487 A69-13640	03 p0410 A69-13685	03 p0487 A69-13730
03 p0375 A69-13551*	03 p0404 A69-13596 #	03 p0487 A69-13641	03 p0368 A69-13686	03 p0487 A69-13731
03 p0535 A69-13552 #	03 p0395 A69-13597	03 p0405 A69-13642	03 p0396 A69-13687	03 p0397 A69-13732
03 p0456 A69-13553*	03 p0404 A69-13598	03 p0366 A69-13643 #	03 p0512 A69-13688	03 p0406 A69-13733
03 p0456 A69-13554	03 p0467 A69-13599	03 p0521 A69-13644	03 p0512 A69-13689	03 p0525 A69-13734
03 p0456 A69-13555*	03 p0405 A69-13600	03 p0366 A69-13645	03 p0512 A69-13690	03 p0526 A69-13735 #
03 p0519 A69-13556**	03 p0456 A69-13601	03 p0366 A69-13646	03 p0512 A69-13691	03 p0526 A69-13736 #
03 p0362 A69-13557 #	03 p0456 A69-13602	03 p0461 A69-13647	03 p0512 A69-13692	03 p0456 A69-13737 #
03 p0519 A69-13558**	03 p0456 A69-13603	03 p0362 A69-13648 #	03 p0512 A69-13693	03 p0526 A69-13738 #
03 p0532 A69-13559 #	03 p0456 A69-13604	03 p0362 A69-13649	03 p0512 A69-13694	03 p0526 A69-13739 #
03 p0532 A69-13560 #	03 p0447 A69-13605	03 p0415 A69-13650 #	03 p0512 A69-13695	03 p0456 A69-13740 #
03 p0465 A69-13561 #	03 p0525 A69-13606 #	03 p0415 A69-13651 #	03 p0512 A69-13696	03 p0457 A69-13741 #
03 p0520 A69-13562**	03 p0525 A69-13607 #	03 p0416 A69-13652 #	03 p0465 A69-13697 #	03 p0527 A69-13742 #
03 p0520 A69-13563 #	03 p0525 A69-13608 #	03 p0363 A69-13653 #	03 p0434 A69-13698 #	03 p0527 A69-13743 #
03 p0520 A69-13564**	03 p0477 A69-13609 #	03 p0416 A69-13654 #	03 p0512 A69-13699**	03 p0457 A69-13744 #
03 p0520 A69-13565**	03 p0486 A69-13610	03 p0416 A69-13655 #	03 p0375 A69-13700**	03 p0527 A69-13745 #
03 p0362 A69-13566 #	03 p0395 A69-13611	03 p0416 A69-13656 #	03 p0396 A69-13701	03 p0527 A69-13746 #
03 p0445 A69-13567	03 p0447 A69-13612	03 p0363 A69-13657 #	03 p0396 A69-13702	03 p0467 A69-13747 #
03 p0445 A69-13568 #	03 p0447 A69-13613*	03 p0363 A69-13658 #	03 p0512 A69-13703 #	03 p0527 A69-13748 #
03 p0445 A69-13569 #	03 p0486 A69-13614	03 p0363 A69-13659 #	03 p0501 A69-13704 #	03 p0467 A69-13749 #
03 p0445 A69-13570 #	03 p0447 A69-13615	03 p0364 A69-13660 #	03 p0501 A69-13705 #	03 p0527 A69-13750 #
03 p0446 A69-13571 #	03 p0453 A69-13616*	03 p0424 A69-13661 #	03 p0431 A69-13706 #	03 p0501 A69-13751
03 p0446 A69-13572 #	03 p0447 A69-13617	03 p0364 A69-13662 #	03 p0396 A69-13707 #	03 p0501 A69-13752
03 p0446 A69-13573 #	03 p0486 A69-13618	03 p0364 A69-13663*	03 p0396 A69-13708 #	03 p0487 A69-13753
03 p0446 A69-13574 #	03 p0453 A69-13619	03 p0416 A69-13664	03 p0397 A69-13709 #	03 p0467 A69-13754
03 p0446 A69-13575 #	03 p0447 A69-13620	03 p0416 A69-13665	03 p0397 A69-13710 #	03 p0467 A69-13755
03 p0446 A69-13576 #	03 p0520 A69-13621 #	03 p0496 A69-13666	03 p0397 A69-13711 #	03 p0467 A69-13756
03 p0394 A69-13577	03 p0395 A69-13622 #	03 p0521 A69-13667**	03 p0477 A69-13712 #	03 p0488 A69-13757
03 p0394 A69-13578	03 p0395 A69-13623 #	03 p0521 A69-13668 #	03 p0477 A69-13713 #	03 p0533 A69-13758
03 p0410 A69-13579	03 p0405 A69-13624 #	03 p0533 A69-13669 #	03 p0477 A69-13714 #	03 p0468 A69-13759
03 p0404 A69-13580	03 p0395 A69-13625 #	03 p0521 A69-13670**	03 p0440 A69-13715 #	03 p0477 A69-13760
03 p0404 A69-13581	03 p0395 A69-13626 #	03 p0521 A69-13671**	03 p0440 A69-13716 #	03 p0488 A69-13761
03 p0486 A69-13582	03 p0395 A69-13627 #	03 p0412 A69-13672**	03 p0405 A69-13717 #	03 p0434 A69-13762
03 p0535 A69-13583 #	03 p0396 A69-13628 #	03 p0521 A69-13673**	03 p0467 A69-13718 #	03 p0401 A69-13763
03 p0520 A69-13584 #	03 p0396 A69-13629 #	03 p0416 A69-13674 #	03 p0397 A69-13719 #	03 p0401 A69-13764*
03 p0395 A69-13585 #	03 p0396 A69-13630**	03 p0367 A69-13675	03 p0434 A69-13720 #	03 p0401 A69-13765



# ACCESSION NUMBER INDEX

03 p0457 A69-13766	03 p0418 A69-13811 #	03 p0368 A69-13856	03 p0398 A69-13901	03 p0490 A69-13946 #
03 p0501 A69-13767	03 p0418 A69-13812 #	03 p0382 A69-13857	03 p0398 A69-13902	03 p0490 A69-13947 #
03 p0398 A69-13768	03 p0418 A69-13813 #	03 p0382 A69-13858*	03 p0522 A69-13903	03 p0435 A69-13948
03 p0513 A69-13769	03 p0418 A69-13814 #	03 p0478 A69-13859	03 p0398 A69-13904	03 p0419 A69-13949 #
03 p0513 A69-13770	03 p0418 A69-13815 #	03 p0468 A69-13860 #	03 p0399 A69-13905	03 p0419 A69-13950 #
03 p0513 A69-13771	03 p0418 A69-13816 #	03 p0468 A69-13861 #	03 p0406 A69-13906	03 p0533 A69-13951 #
03 p0513 A69-13772	03 p0447 A69-13817	03 p0468 A69-13862	03 p0473 A69-13907*	03 p0419 A69-13952 #
03 p0468 A69-13773	03 p0447 A69-13818	03 p0533 A69-13863 #	03 p0364 A69-13908 #	03 p0424 A69-13953 #
03 p0513 A69-13774	03 p0453 A69-13819	03 p0410 A69-13864 #	03 p0367 A69-13909 #	03 p0406 A69-13954
03 p0513 A69-13775*	03 p0453 A69-13820	03 p0457 A69-13865 #	03 p0450 A69-13910**	03 p0529 A69-13955
03 p0513 A69-13776*	03 p0454 A69-13821	03 p0468 A69-13866 #	03 p0367 A69-13911 #	03 p0533 A69-13956
03 p0521 A69-13777*	03 p0454 A69-13822	03 p0448 A69-13867	03 p0450 A69-13912	03 p0529 A69-13957
03 p0513 A69-13778	03 p0454 A69-13823	03 p0434 A69-13868	03 p0450 A69-13913	03 p0431 A69-13958
03 p0513 A69-13779	03 p0454 A69-13824	03 p0448 A69-13869	03 p0434 A69-13914	03 p0478 A69-13959 #
03 p0513 A69-13780	03 p0468 A69-13825 #	03 p0454 A69-13870	03 p0434 A69-13915	03 p0501 A69-13960 #
03 p0514 A69-13781*	03 p0457 A69-13826 #	03 p0434 A69-13871*	03 p0450 A69-13916	03 p0479 A69-13961 #
03 p0514 A69-13782	03 p0431 A69-13827	03 p0448 A69-13872	03 p0431 A69-13917	03 p0514 A69-13962
03 p0514 A69-13783	03 p0406 A69-13828	03 p0448 A69-13873	03 p0435 A69-13918	03 p0514 A69-13963
03 p0488 A69-13784 #	03 p0406 A69-13829	03 p0449 A69-13874	03 p0419 A69-13919 #	03 p0469 A69-13964
03 p0488 A69-13785 #	03 p0406 A69-13830	03 p0449 A69-13875	03 p0419 A69-13920 #	03 p0462 A69-13965 #
03 p0367 A69-13786 #	03 p0410 A69-13831	03 p0528 A69-13876	03 p0364 A69-13921 #	03 p0462 A69-13966 #
03 p0364 A69-13787 #	03 p0398 A69-13832	03 p0449 A69-13877	03 p0489 A69-13922	03 p0479 A69-13967
03 p0364 A69-13788 #	03 p0410 A69-13833	03 p0449 A69-13878	03 p0490 A69-13923*	03 p0479 A69-13968
03 p0412 A69-13789 #	03 p0478 A69-13834	03 p0449 A69-13879	03 p0528 A69-13924 #	03 p0419 A69-13969
03 p0367 A69-13790 #	03 p0418 A69-13835	03 p0449 A69-13880	03 p0490 A69-13925 #	03 p0533 A69-13970
03 p0434 A69-13791 #	03 p0478 A69-13836	03 p0450 A69-13881	03 p0528 A69-13926 #	03 p0491 A69-13971
03 p0417 A69-13792 #	03 p0478 A69-13837	03 p0450 A69-13882	03 p0528 A69-13927 #	03 p0479 A69-13972
03 p0477 A69-13793	03 p0478 A69-13838	03 p0450 A69-13883	03 p0528 A69-13928 #	03 p0529 A69-13973
03 p0477 A69-13794	03 p0412 A69-13839	03 p0533 A69-13884 #	03 p0528 A69-13929 #	03 p0406 A69-13974 #
03 p0417 A69-13795	03 p0478 A69-13840	03 p0488 A69-13885 #	03 p0431 A69-13930 #	03 p0407 A69-13975 #
03 p0417 A69-13796	03 p0478 A69-13841	03 p0488 A69-13886 #	03 p0462 A69-13931 #	03 p0407 A69-13976 #
03 p0417 A69-13797	03 p0412 A69-13842	03 p0488 A69-13887 #	03 p0462 A69-13932 #	03 p0407 A69-13977 #
03 p0528 A69-13798	03 p0478 A69-13843	03 p0488 A69-13888 #	03 p0424 A69-13933 #	03 p0407 A69-13978 #
03 p0528 A69-13799	03 p0441 A69-13844	03 p0489 A69-13889 #	03 p0501 A69-13934	03 p0407 A69-13979 #
03 p0494 A69-13800 #	03 p0441 A69-13845	03 p0489 A69-13890 #	03 p0514 A69-13935	03 p0407 A69-13980 #
03 p0477 A69-13801	03 p0478 A69-13846	03 p0489 A69-13891 #	03 p0424 A69-13936	03 p0407 A69-13981 #
03 p0398 A69-13802	03 p0441 A69-13847	03 p0489 A69-13892 #	03 p0454 A69-13937	03 p0441 A69-13982 #
03 p0478 A69-13803	03 p0441 A69-13848	03 p0489 A69-13893 #	03 p0406 A69-13938 #	03 p0407 A69-13983 #
03 p0478 A69-13804	03 p0478 A69-13849	03 p0489 A69-13894 #	03 p0399 A69-13939 #	03 p0407 A69-13984 #
03 p0472 A69-13805	03 p0431 A69-13850	03 p0489 A69-13895 #	03 p0490 A69-13940 #	03 p0407 A69-13985 #
03 p0424 A69-13806 #	03 p0431 A69-13851**	03 p0489 A69-13896 #	03 p0490 A69-13941 #	03 p0407 A69-13986 #
03 p0468 A69-13807 #	03 p0462 A69-13852**	03 p0375 A69-13897*	03 p0529 A69-13942 #	03 p0408 A69-13987 #
03 p0417 A69-13808	03 p0465 A69-13853 #	03 p0457 A69-13898 #	03 p0490 A69-13943 #	03 p0491 A69-13988
03 p0417 A69-13809 #	03 p0364 A69-13854 #	03 p0398 A69-13899 #	03 p0490 A69-13944 #	03 p0529 A69-13989
03 p0417 A69-13810 #	03 p0380 A69-13855*	03 p0398 A69-13900**	03 p0490 A69-13945 #	03 p0419 A69-13990

## ACCESSION NUMBER INDEX

03 p0365 A69-13991	03 p0515 A69-14036	03 p0376 A69-14081*	03 p0517 A69-14126*	03 p0492 A69-14171
03 p0419 A69-13992	03 p0515 A69-14037	03 p0516 A69-14082*	03 p0504 A69-14127	03 p0492 A69-14172
03 p0368 A69-13993	03 p0515 A69-14038	03 p0516 A69-14083*	03 p0517 A69-14128 #	03 p0492 A69-14173
03 p0496 A69-13994	03 p0515 A69-14039*	03 p0367 A69-14084	03 p0399 A69-14129	03 p0492 A69-14174
03 p0496 A69-13995	03 p0516 A69-14040*	03 p0431 A69-14085	03 p0399 A69-14130	03 p0441 A69-14175
03 p0496 A69-13996	03 p0516 A69-14041	03 p0522 A69-14086	03 p0408 A69-14131	03 p0492 A69-14176
03 p0441 A69-13997	03 p0516 A69-14042	03 p0534 A69-14087	03 p0399 A69-14132	03 p0492 A69-14177 #
03 p0479 A69-13998	03 p0516 A69-14043	03 p0536 A69-14088	03 p0408 A69-14133	03 p0401 A69-14178 #
03 p0451 A69-13999	03 p0516 A69-14044	03 p0530 A69-14089	03 p0480 A69-14134	03 p0401 A69-14179 #
03 p0451 A69-14000	03 p0516 A69-14045	03 p0530 A69-14090	03 p0480 A69-14135	03 p0401 A69-14180 #
03 p0502 A69-14001*	03 p0516 A69-14046*	03 p0496 A69-14091	03 p0480 A69-14136	03 p0401 A69-14181**
03 p0502 A69-14002	03 p0503 A69-14047	03 p0530 A69-14092	03 p0480 A69-14137	03 p0399 A69-14182
03 p0502 A69-14003	03 p0496 A69-14048	03 p0412 A69-14093*	03 p0480 A69-14138	03 p0493 A69-14183
03 p0502 A69-14004*	03 p0408 A69-14049	03 p0517 A69-14094 #	03 p0441 A69-14139	03 p0432 A69-14184
03 p0514 A69-14005*	03 p0479 A69-14050	03 p0517 A69-14095 #	03 p0441 A69-14140	03 p0441 A69-14185 #
03 p0502 A69-14006*	03 p0491 A69-14051	03 p0469 A69-14096 #	03 p0441 A69-14141	03 p0493 A69-14186
03 p0514 A69-14007	03 p0480 A69-14052 #	03 p0491 A69-14097	03 p0441 A69-14142	03 p0432 A69-14187
03 p0502 A69-14008*	03 p0491 A69-14053 #	03 p0426 A69-14098	03 p0481 A69-14143	03 p0441 A69-14188
03 p0425 A69-14009*	03 p0491 A69-14054 #	03 p0480 A69-14099	03 p0481 A69-14144	03 p0442 A69-14189**
03 p0515 A69-14010*	03 p0491 A69-14055 #	03 p0522 A69-14100*	03 p0481 A69-14145	03 p0493 A69-14190
03 p0425 A69-14011*	03 p0529 A69-14056	03 p0435 A69-14101 #	03 p0481 A69-14146	03 p0442 A69-14191
03 p0425 A69-14012*	03 p0480 A69-14057	03 p0365 A69-14102 #	03 p0473 A69-14147	03 p0376 A69-14192 #
03 p0503 A69-14013	03 p0480 A69-14058	03 p0365 A69-14103 #	03 p0481 A69-14148	03 p0376 A69-14193 #
03 p0503 A69-14014	03 p0491 A69-14059	03 p0367 A69-14104	03 p0534 A69-14149	03 p0376 A69-14194 #
03 p0503 A69-14015*	03 p0491 A69-14060	03 p0536 A69-14105	03 p0534 A69-14150	03 p0377 A69-14195 #
03 p0503 A69-14016*	03 p0426 A69-14061	03 p0517 A69-14106 #	03 p0432 A69-14151	03 p0377 A69-14196 #
03 p0503 A69-14017*	03 p0529 A69-14062	03 p0408 A69-14107	03 p0369 A69-14152	03 p0377 A69-14197 #
03 p0425 A69-14018	03 p0529 A69-14063	03 p0441 A69-14108 #	03 p0369 A69-14153	03 p0382 A69-14198 #
03 p0425 A69-14019	03 p0530 A69-14064	03 p0473 A69-14109**	03 p0369 A69-14154	03 p0381 A69-14199 #
03 p0479 A69-14020*	03 p0530 A69-14065*	03 p0536 A69-14110	03 p0481 A69-14155	03 p0481 A69-14200 #
03 p0399 A69-14021*	03 p0530 A69-14066	03 p0419 A69-14111	03 p0473 A69-14156	03 p0381 A69-14201 #
03 p0399 A69-14022	03 p0380 A69-14067	03 p0480 A69-14112	03 p0453 A69-14157	03 p0377 A69-14202 #
03 p0399 A69-14023	03 p0375 A69-14068	03 p0480 A69-14113	03 p0473 A69-14158	03 p0377 A69-14203 #
03 p0425 A69-14024	03 p0375 A69-14069	03 p0491 A69-14114	03 p0534 A69-14159	03 p0377 A69-14204 #
03 p0425 A69-14025	03 p0375 A69-14070*	03 p0382 A69-14115	03 p0481 A69-14160	03 p0377 A69-14205 #
03 p0426 A69-14026	03 p0375 A69-14071 #	03 p0382 A69-14116	03 p0534 A69-14161	03 p0378 A69-14206 #
03 p0503 A69-14027*	03 p0375 A69-14072*	03 p0451 A69-14117	03 p0369 A69-14162	03 p0378 A69-14207 #
03 p0479 A69-14028*	03 p0380 A69-14073 #	03 p0435 A69-14118 #	03 p0492 A69-14163	03 p0378 A69-14208 #
03 p0426 A69-14029*	03 p0381 A69-14074	03 p0452 A69-14119 #	03 p0492 A69-14164	03 p0378 A69-14209 #
03 p0426 A69-14030	03 p0376 A69-14075 #	03 p0452 A69-14120 #	03 p0441 A69-14165	03 p0378 A69-14210 #
03 p0426 A69-14031*	03 p0376 A69-14076 #	03 p0452 A69-14121 #	03 p0492 A69-14166	03 p0481 A69-14211 #
03 p0515 A69-14032 #	03 p0381 A69-14077	03 p0452 A69-14122 #	03 p0492 A69-14167	03 p0481 A69-14212 #
03 p0515 A69-14033 #	03 p0376 A69-14078	03 p0452 A69-14123 #	03 p0492 A69-14168	03 p0481 A69-14213 #
03 p0515 A69-14034	03 p0381 A69-14079*	03 p0452 A69-14124 #	03 p0492 A69-14169	03 p0482 A69-14214 #
03 p0515 A69-14035	03 p0376 A69-14080	03 p0462 A69-14125 #	03 p0492 A69-14170	03 p0482 A69-14215 #



# ACCESSION NUMBER INDEX

03 p0432 A69-14216 #	04 p0667 A69-14261 #	04 p0570 A69-14306	04 p0574 A69-14351	04 p0669 A69-14396 #
03 p0482 A69-14217 #	04 p0667 A69-14262 #	04 p0570 A69-14307	04 p0574 A69-14352	04 p0669 A69-14397 #
03 p0442 A69-14218 #	04 p0667 A69-14263 #	04 p0570 A69-14308	04 p0574 A69-14353	04 p0669 A69-14398 #
03 p0442 A69-14219 #	04 p0667 A69-14264 #	04 p0570 A69-14309	04 p0684 A69-14354	04 p0669 A69-14399 #
03 p0442 A69-14220 #	04 p0667 A69-14265 #	04 p0570 A69-14310	04 p0684 A69-14355	04 p0669 A69-14400 #
03 p0442 A69-14221 #	04 p0667 A69-14266 #	04 p0571 A69-14311	04 p0586 A69-14356	04 p0670 A69-14401 #
03 p0482 A69-14222 #	04 p0667 A69-14267 #	04 p0571 A69-14312	04 p0684 A69-14357*	04 p0670 A69-14402 #
03 p0517 A69-14223 #	04 p0667 A69-14268 #	04 p0571 A69-14313	04 p0621 A69-14358 #	04 p0670 A69-14403 #
03 p0504 A69-14224 #	04 p0667 A69-14269 #	04 p0571 A69-14314	04 p0596 A69-14359	04 p0670 A69-14404 #
03 p0493 A69-14225 #	04 p0665 A69-14270 #	04 p0571 A69-14315	04 p0596 A69-14360*	04 p0670 A69-14405 #
03 p0365 A69-14226 #	04 p0668 A69-14271 #	04 p0571 A69-14316	04 p0650 A69-14361*	04 p0586 A69-14406 #
03 p0482 A69-14227 #	04 p0668 A69-14272 #	04 p0571 A69-14317	04 p0621 A69-14362	04 p0670 A69-14407 #
03 p0482 A69-14228 #	04 p0668 A69-14273 #	04 p0571 A69-14318	04 p0650 A69-14363 #	04 p0670 A69-14408 #
03 p0381 A69-14229 #	04 p0586 A69-14274 #	04 p0572 A69-14319	04 p0648 A69-14364 #	04 p0586 A69-14409 #
03 p0457 A69-14230 #	04 p0668 A69-14275 #	04 p0572 A69-14320	04 p0651 A69-14365 #	04 p0671 A69-14410 #
03 p0517 A69-14231*	04 p0595 A69-14276*	04 p0572 A69-14321	04 p0651 A69-14366 #	04 p0671 A69-14411 #
03 p0426 A69-14232*	04 p0595 A69-14277	04 p0572 A69-14322	04 p0651 A69-14367 #	04 p0671 A69-14412 #
03 p0517 A69-14233*	04 p0595 A69-14278*	04 p0572 A69-14323	04 p0651 A69-14368 #	04 p0671 A69-14413 #
03 p0482 A69-14234 #	04 p0595 A69-14279*	04 p0556 A69-14324	04 p0651 A69-14369 #	04 p0671 A69-14414 #
03 p0504 A69-14235	04 p0596 A69-14280	04 p0572 A69-14325	04 p0651 A69-14370 #	04 p0671 A69-14415 #
03 p0504 A69-14236 #	04 p0596 A69-14281	04 p0572 A69-14326	04 p0648 A69-14371 #	04 p0621 A69-14416 #
03 p0483 A69-14237 #	04 p0555 A69-14282	04 p0572 A69-14327	04 p0651 A69-14372 #	04 p0652 A69-14417
03 p0420 A69-14238 #	04 p0556 A69-14283	04 p0572 A69-14328*	04 p0651 A69-14373 #	04 p0652 A69-14418
03 p0493 A69-14239*	04 p0596 A69-14284	04 p0573 A69-14329	04 p0648 A69-14374 #	04 p0652 A69-14419
03 p0493 A69-14240	04 p0609 A69-14285	04 p0573 A69-14330*	04 p0648 A69-14375 #	04 p0648 A69-14420
03 p0493 A69-14241*	04 p0609 A69-14286	04 p0573 A69-14331	04 p0584 A69-14376 #	04 p0563 A69-14421
03 p0493 A69-14242	04 p0609 A69-14287	04 p0573 A69-14332	04 p0651 A69-14377 #	04 p0610 A69-14422 #
03 p0494 A69-14243*	04 p0609 A69-14288	04 p0609 A69-14333	04 p0652 A69-14378 #	04 p0610 A69-14423 #
03 p0522 A69-14244	04 p0609 A69-14289	04 p0573 A69-14334	04 p0668 A69-14379 #	04 p0610 A69-14424 #
03 p0536 A69-14245	04 p0609 A69-14290*	04 p0639 A69-14335	04 p0668 A69-14380 #	04 p0610 A69-14425 #
03 p0522 A69-14246*	04 p0609 A69-14291	04 p0573 A69-14336	04 p0610 A69-14381 #	04 p0611 A69-14426 #
03 p0518 A69-14247	04 p0596 A69-14292	04 p0573 A69-14337	04 p0610 A69-14382 #	04 p0639 A69-14427 #
03 p0518 A69-14248	04 p0609 A69-14293	04 p0556 A69-14338	04 p0610 A69-14383 #	04 p0639 A69-14428 #
03 p0518 A69-14249	04 p0556 A69-14294	04 p0639 A69-14339	04 p0610 A69-14384 #	04 p0556 A69-14429*
03 p0518 A69-14250	04 p0630 A69-14295*	04 p0573 A69-14340	04 p0610 A69-14385 #	04 p0634 A69-14430
03 p0426 A69-14251	04 p0633 A69-14296	04 p0573 A69-14341	04 p0580 A69-14386	04 p0634 A69-14431
03 p0483 A69-14252	04 p0633 A69-14297 #	04 p0573 A69-14342	04 p0541 A69-14387 #	04 p0613 A69-14432
03 p0399 A69-14253	04 p0634 A69-14298 #	04 p0573 A69-14343	04 p0586 A69-14388 #	04 p0671 A69-14433
03 p0518 A69-14254	04 p0634 A69-14299 #	04 p0574 A69-14344	04 p0541 A69-14389 #	04 p0639 A69-14434
03 p0483 A69-14255	04 p0591 A69-14300 #	04 p0574 A69-14345	04 p0586 A69-14390 #	04 p0574 A69-14435
03 p0483 A69-14256*	04 p0556 A69-14301	04 p0609 A69-14346	04 p0596 A69-14391 #	04 p0639 A69-14436
03 p0494 A69-14257*	04 p0570 A69-14302	04 p0574 A69-14347	04 p0668 A69-14392 #	04 p0640 A69-14437
03 p0518 A69-14258*	04 p0570 A69-14303	04 p0574 A69-14348	04 p0668 A69-14393 #	04 p0640 A69-14438
03 p0518 A69-14259 #	04 p0570 A69-14304	04 p0610 A69-14349	04 p0669 A69-14394 #	04 p0611 A69-14439
03 p0378 A69-14260	04 p0570 A69-14305	04 p0574 A69-14350	04 p0669 A69-14395*#	04 p0613 A69-14440

# ACCESSION NUMBER INDEX

04 p0634 A69-14441	04 p0684 A69-14486 #	04 p0630 A69-14531 #	04 p0614 A69-14576 #	04 p0587 A69-14621 #
04 p0634 A69-14442	04 p0684 A69-14487 #	04 p0630 A69-14532 #	04 p0605 A69-14577 #	04 p0622 A69-14622 #
04 p0611 A69-14443 #	04 p0684 A69-14488 #	04 p0552 A69-14533	04 p0614 A69-14578 #	04 p0588 A69-14623 #
04 p0640 A69-14444*#	04 p0596 A69-14489 #	04 p0642 A69-14534	04 p0614 A69-14579 #	04 p0622 A69-14624 #
04 p0611 A69-14445 #	04 p0556 A69-14490 #	04 p0673 A69-14535	04 p0541 A69-14580	04 p0653 A69-14625
04 p0631 A69-14446*#	04 p0563 A69-14491 #	04 p0673 A69-14536	04 p0619 A69-14581	04 p0653 A69-14626*
04 p0640 A69-14447*#	04 p0556 A69-14492 #	04 p0584 A69-14537	04 p0605 A69-14582	04 p0654 A69-14627
04 p0613 A69-14448 #	04 p0580 A69-14493 #	04 p0597 A69-14538	04 p0646 A69-14583	04 p0654 A69-14628
04 p0640 A69-14449*#	04 p0673 A69-14494 #	04 p0674 A69-14539	04 p0642 A69-14584	04 p0654 A69-14629
04 p0640 A69-14450*#	04 p0673 A69-14495 #	04 p0605 A69-14540	04 p0619 A69-14585	04 p0654 A69-14630*
04 p0640 A69-14451*#	04 p0673 A69-14496 #	04 p0674 A69-14541	04 p0614 A69-14586	04 p0654 A69-14631*
04 p0640 A69-14452 #	04 p0673 A69-14497 #	04 p0587 A69-14542	04 p0605 A69-14587*#	04 p0654 A69-14632
04 p0634 A69-14453 #	04 p0685 A69-14498 #	04 p0652 A69-14543	04 p0674 A69-14588	04 p0654 A69-14633*
04 p0671 A69-14454	04 p0673 A69-14499 #	04 p0587 A69-14544	04 p0674 A69-14589	04 p0614 A69-14634
04 p0613 A69-14455*#	04 p0604 A69-14500 #	04 p0611 A69-14545	04 p0674 A69-14590	04 p0614 A69-14635
04 p0634 A69-14456*#	04 p0641 A69-14501	04 p0611 A69-14546	04 p0674 A69-14591	04 p0615 A69-14636
04 p0641 A69-14457*#	04 p0641 A69-14502	04 p0635 A69-14547	04 p0674 A69-14592	04 p0615 A69-14637
04 p0652 A69-14458	04 p0641 A69-14503	04 p0674 A69-14548	04 p0675 A69-14593	04 p0615 A69-14638
04 p0574 A69-14459 #	04 p0641 A69-14504	04 p0635 A69-14549	04 p0587 A69-14594	04 p0615 A69-14639
04 p0575 A69-14460 #	04 p0641 A69-14505	04 p0611 A69-14550	04 p0675 A69-14595	04 p0615 A69-14640
04 p0575 A69-14461 #	04 p0641 A69-14506	04 p0632 A69-14551	04 p0675 A69-14596	04 p0615 A69-14641
04 p0556 A69-14462 #	04 p0626 A69-14507 #	04 p0635 A69-14552	04 p0685 A69-14597	04 p0615 A69-14642
04 p0575 A69-14463 #	04 p0586 A69-14508 #	04 p0630 A69-14553	04 p0622 A69-14598	04 p0615 A69-14643
04 p0575 A69-14464 #	04 p0587 A69-14509*#	04 p0642 A69-14554	04 p0622 A69-14599	04 p0615 A69-14644
04 p0575 A69-14465 #	04 p0587 A69-14510*#	04 p0635 A69-14555	04 p0622 A69-14600	04 p0615 A69-14645
04 p0575 A69-14466 #	04 p0554 A69-14511 #	04 p0635 A69-14556	04 p0581 A69-14601 #	04 p0615 A69-14646
04 p0644 A69-14467	04 p0622 A69-14512 #	04 p0613 A69-14557	04 p0597 A69-14602 #	04 p0615 A69-14647
04 p0645 A69-14468*	04 p0622 A69-14513 #	04 p0613 A69-14558	04 p0597 A69-14603 #	04 p0616 A69-14648
04 p0552 A69-14469	04 p0563 A69-14514	04 p0613 A69-14559	04 p0597 A69-14604 #	04 p0616 A69-14649
04 p0552 A69-14470	04 p0563 A69-14515	04 p0605 A69-14560	04 p0597 A69-14605 #	04 p0616 A69-14650
04 p0645 A69-14471	04 p0563 A69-14516	04 p0605 A69-14561	04 p0605 A69-14606 #	04 p0616 A69-14651
04 p0645 A69-14472	04 p0604 A69-14517	04 p0674 A69-14562	04 p0606 A69-14607 #	04 p0563 A69-14652
04 p0645 A69-14473	04 p0604 A69-14518	04 p0630 A69-14563	04 p0587 A69-14608	04 p0592 A69-14653
04 p0645 A69-14474*	04 p0652 A69-14519*	04 p0652 A69-14564	04 p0587 A69-14609	04 p0592 A69-14654
04 p0645 A69-14475*	04 p0580 A69-14520	04 p0648 A69-14565 #	04 p0652 A69-14610	04 p0654 A69-14655*
04 p0671 A69-14476	04 p0604 A69-14521	04 p0648 A69-14566 #	04 p0653 A69-14611	04 p0654 A69-14656*
04 p0646 A69-14477*	04 p0604 A69-14522	04 p0581 A69-14567	04 p0653 A69-14612	04 p0655 A69-14657*
04 p0646 A69-14478*	04 p0604 A69-14523	04 p0581 A69-14568	04 p0653 A69-14613	04 p0655 A69-14658
04 p0646 A69-14479	04 p0604 A69-14524	04 p0581 A69-14569	04 p0653 A69-14614	04 p0655 A69-14659*
04 p0629 A69-14480*	04 p0604 A69-14525	04 p0581 A69-14570	04 p0653 A69-14615	04 p0592 A69-14660
04 p0646 A69-14481	04 p0604 A69-14526	04 p0581 A69-14571	04 p0622 A69-14616 #	04 p0592 A69-14661*
04 p0552 A69-14482	04 p0613 A69-14527	04 p0614 A69-14572 #	04 p0622 A69-14617 #	04 p0550 A69-14662
04 p0672 A69-14483	04 p0604 A69-14528	04 p0614 A69-14573 #	04 p0622 A69-14618 #	04 p0655 A69-14663
04 p0541 A69-14484 #	04 p0605 A69-14529*	04 p0614 A69-14574 #	04 p0685 A69-14619 #	04 p0655 A69-14664
04 p0541 A69-14485 #	04 p0688 A69-14530	04 p0614 A69-14575 #	04 p0587 A69-14620 #	04 p0655 A69-14665



## ACCESSION NUMBER INDEX

04 p0655 A69-14666	04 p0676 A69-14711 #	04 p0576 A69-14756	04 p0545 A69-14801	04 p0616 A69-14846
04 p0655 A69-14667*#	04 p0541 A69-14712 #	04 p0635 A69-14757	04 p0543 A69-14802	04 p0623 A69-14847
04 p0655 A69-14668	04 p0588 A69-14713 #	04 p0576 A69-14758	04 p0606 A69-14803	04 p0597 A69-14848 #
04 p0656 A69-14669*#	04 p0542 A69-14714*#	04 p0576 A69-14759	04 p0546 A69-14804	04 p0597 A69-14849 #
04 p0656 A69-14670 #	04 p0588 A69-14715 #	04 p0557 A69-14760	04 p0689 A69-14805	04 p0577 A69-14850 #
04 p0656 A69-14671*#	04 p0588 A69-14716*#	04 p0576 A69-14761	04 p0547 A69-14806	04 p0597 A69-14851 #
04 p0656 A69-14672*#	04 p0588 A69-14717 #	04 p0576 A69-14762	04 p0689 A69-14807	04 p0598 A69-14852 #
04 p0656 A69-14673*#	04 p0542 A69-14718 #	04 p0635 A69-14763 #	04 p0665 A69-14808	04 p0642 A69-14853 #
04 p0656 A69-14674*#	04 p0685 A69-14719*#	04 p0635 A69-14764 #	04 p0629 A69-14809	04 p0598 A69-14854 #
04 p0656 A69-14675*#	04 p0685 A69-14720 #	04 p0616 A69-14765 #	04 p0657 A69-14810	04 p0598 A69-14855 #
04 p0657 A69-14676*#	04 p0542 A69-14721 #	04 p0592 A69-14766	04 p0553 A69-14811	04 p0642 A69-14856 #
04 p0657 A69-14677*#	04 p0588 A69-14722 #	04 p0576 A69-14767	04 p0547 A69-14812	04 p0598 A69-14857 #
04 p0584 A69-14678*#	04 p0542 A69-14723*#	04 p0576 A69-14768	04 p0547 A69-14813	04 p0564 A69-14858*
04 p0632 A69-14679*	04 p0635 A69-14724 #	04 p0576 A69-14769	04 p0547 A69-14814	04 p0554 A69-14859*
04 p0642 A69-14680	04 p0676 A69-14725 #	04 p0576 A69-14770	04 p0547 A69-14815	04 p0646 A69-14860
04 p0592 A69-14681*	04 p0685 A69-14726 #	04 p0576 A69-14771	04 p0547 A69-14816	04 p0554 A69-14861*
04 p0648 A69-14682	04 p0588 A69-14727 #	04 p0576 A69-14772	04 p0548 A69-14817	04 p0555 A69-14862*
04 p0649 A69-14683	04 p0676 A69-14728 #	04 p0576 A69-14773	04 p0543 A69-14818	04 p0589 A69-14863
04 p0675 A69-14684	04 p0685 A69-14729 #	04 p0557 A69-14774	04 p0543 A69-14819	04 p0555 A69-14864
04 p0675 A69-14685	04 p0685 A69-14730 #	04 p0557 A69-14775	04 p0543 A69-14820	04 p0632 A69-14865
04 p0619 A69-14686	04 p0542 A69-14731 #	04 p0557 A69-14776	04 p0543 A69-14821	04 p0632 A69-14866*
04 p0675 A69-14687	04 p0542 A69-14732 #	04 p0557 A69-14777	04 p0543 A69-14822	04 p0544 A69-14867*#
04 p0630 A69-14688	04 p0588 A69-14733 #	04 p0577 A69-14778	04 p0584 A69-14823	04 p0544 A69-14868
04 p0657 A69-14689	04 p0685 A69-14734 #	04 p0611 A69-14779	04 p0548 A69-14824	04 p0678 A69-14869 #
04 p0626 A69-14690	04 p0542 A69-14735 #	04 p0577 A69-14780	04 p0548 A69-14825	04 p0678 A69-14870 #
04 p0606 A69-14691	04 p0685 A69-14736*#	04 p0577 A69-14781	04 p0657 A69-14826	04 p0598 A69-14871 #
04 p0553 A69-14692*	04 p0588 A69-14737 #	04 p0577 A69-14782	04 p0548 A69-14827	04 p0678 A69-14872 #
04 p0581 A69-14693	04 p0542 A69-14738 #	04 p0636 A69-14783	04 p0658 A69-14828	04 p0686 A69-14873 #
04 p0623 A69-14694	04 p0542 A69-14739 #	04 p0577 A69-14784	04 p0585 A69-14829	04 p0606 A69-14874
04 p0623 A69-14695	04 p0588 A69-14740*#	04 p0577 A69-14785	04 p0629 A69-14830	04 p0577 A69-14875*
04 p0581 A69-14696	04 p0676 A69-14741 #	04 p0577 A69-14786	04 p0597 A69-14831	04 p0598 A69-14876
04 p0582 A69-14697*	04 p0677 A69-14742*#	04 p0577 A69-14787	04 p0665 A69-14832	04 p0582 A69-14877
04 p0657 A69-14698	04 p0646 A69-14743 #	04 p0557 A69-14788	04 p0585 A69-14833	04 p0636 A69-14878
04 p0588 A69-14699	04 p0686 A69-14744 #	04 p0557 A69-14789	04 p0677 A69-14834	04 p0658 A69-14879
04 p0657 A69-14700	04 p0542 A69-14745 #	04 p0557 A69-14790	04 p0677 A69-14835	04 p0606 A69-14880
04 p0632 A69-14701 #	04 p0635 A69-14746 #	04 p0577 A69-14791	04 p0677 A69-14836	04 p0665 A69-14881
04 p0635 A69-14702 #	04 p0589 A69-14747*#	04 p0611 A69-14792	04 p0677 A69-14837	04 p0658 A69-14882 #
04 p0665 A69-14703 #	04 p0597 A69-14748 #	04 p0642 A69-14793	04 p0548 A69-14838	04 p0564 A69-14883*
04 p0675 A69-14704 #	04 p0575 A69-14749	04 p0689 A69-14794 #	04 p0677 A69-14839	04 p0555 A69-14884*
04 p0676 A69-14705 #	04 p0575 A69-14750	04 p0582 A69-14795	04 p0665 A69-14840	04 p0555 A69-14885*
04 p0676 A69-14706 #	04 p0575 A69-14751*	04 p0582 A69-14796	04 p0548 A69-14841	04 p0620 A69-14886*
04 p0676 A69-14707 #	04 p0557 A69-14752	04 p0582 A69-14797	04 p0677 A69-14842	04 p0658 A69-14887*
04 p0676 A69-14708 #	04 p0575 A69-14753	04 p0606 A69-14798*	04 p0616 A69-14843	04 p0555 A69-14888*
04 p0676 A69-14709 #	04 p0557 A69-14754	04 p0630 A69-14799*	04 p0620 A69-14844	04 p0544 A69-14889
04 p0676 A69-14710 #	04 p0582 A69-14755	04 p0630 A69-14800	04 p0606 A69-14845	04 p0678 A69-14890

## ACCESSION NUMBER INDEX

04 p0544 A69-14891	04 p0606 A69-14936	04 p0632 A69-14981 #	04 p0600 A69-15026 #	04 p0558 A69-15071 #
04 p0623 A69-14892	04 p0589 A69-14937	04 p0558 A69-14982 #	04 p0659 A69-15027	04 p0582 A69-15072 #
04 p0630 A69-14893	04 p0642 A69-14938 #	04 p0636 A69-14983 #	04 p0600 A69-15028*	04 p0558 A69-15073 #
04 p0678 A69-14894	04 p0617 A69-14939 #	04 p0636 A69-14984 #	04 p0600 A69-15029	04 p0558 A69-15074 #
04 p0589 A69-14895	04 p0617 A69-14940 #	04 p0686 A69-14985 #	04 p0600 A69-15030	04 p0593 A69-15075 #
04 p0623 A69-14896	04 p0582 A69-14941*#	04 p0686 A69-14986 #	04 p0627 A69-15031 #	04 p0617 A69-15076 #
04 p0544 A69-14897*	04 p0689 A69-14942 #	04 p0686 A69-14987 #	04 p0627 A69-15032 #	04 p0617 A69-15077 #
04 p0589 A69-14898	04 p0549 A69-14943 #	04 p0589 A69-14988 #	04 p0617 A69-15033	04 p0618 A69-15078 #
04 p0658 A69-14899	04 p0632 A69-14944	04 p0636 A69-14989 #	04 p0659 A69-15034 #	04 p0618 A69-15079 #
04 p0617 A69-14900 #	04 p0680 A69-14945	04 p0607 A69-14990 #	04 p0659 A69-15035 #	04 p0618 A69-15080 #
04 p0678 A69-14901 #	04 p0623 A69-14946*	04 p0632 A69-14991 #	04 p0660 A69-15036 #	04 p0618 A69-15081 #
04 p0678 A69-14902 #	04 p0623 A69-14947	04 p0686 A69-14992 #	04 p0660 A69-15037 #	04 p0550 A69-15082
04 p0679 A69-14903 #	04 p0623 A69-14948	04 p0686 A69-14993 #	04 p0660 A69-15038 #	04 p0583 A69-15083
04 p0631 A69-14904 #	04 p0623 A69-14949	04 p0589 A69-14994 #	04 p0660 A69-15039 #	04 p0627 A69-15084
04 p0679 A69-14905 #	04 p0624 A69-14950	04 p0598 A69-14995 #	04 p0660 A69-15040 #	04 p0627 A69-15085
04 p0679 A69-14906 #	04 p0624 A69-14951	04 p0589 A69-14996 #	04 p0585 A69-15041	04 p0627 A69-15086
04 p0679 A69-14907 #	04 p0620 A69-14952	04 p0659 A69-14997 #	04 p0636 A69-15042 #	04 p0627 A69-15087
04 p0553 A69-14908*	04 p0620 A69-14953	04 p0643 A69-14998 #	04 p0636 A69-15043 #	04 p0628 A69-15088
04 p0626 A69-14909*#	04 p0620 A69-14954	04 p0636 A69-14999	04 p0636 A69-15044 #	04 p0628 A69-15089
04 p0598 A69-14910 #	04 p0607 A69-14955	04 p0647 A69-15000*	04 p0637 A69-15045 #	04 p0628 A69-15090
04 p0626 A69-14911 #	04 p0620 A69-14956	04 p0590 A69-15001	04 p0637 A69-15046 #	04 p0593 A69-15091
04 p0626 A69-14912 #	04 p0621 A69-14957	04 p0624 A69-15002	04 p0637 A69-15047 #	04 p0638 A69-15092 #
04 p0626 A69-14913 #	04 p0658 A69-14958 #	04 p0624 A69-15003*	04 p0637 A69-15048 #	04 p0638 A69-15093 #
04 p0627 A69-14914 #	04 p0658 A69-14959 #	04 p0624 A69-15004	04 p0637 A69-15049 #	04 p0583 A69-15094
04 p0557 A69-14915 #	04 p0658 A69-14960 #	04 p0624 A69-15005	04 p0637 A69-15050 #	04 p0583 A69-15095
04 p0598 A69-14916*#	04 p0658 A69-14961 #	04 p0558 A69-15006*	04 p0637 A69-15051*#	04 p0583 A69-15096
04 p0558 A69-14917*#	04 p0659 A69-14962 #	04 p0624 A69-15007	04 p0637 A69-15052 #	04 p0624 A69-15097
04 p0585 A69-14918 #	04 p0659 A69-14963 #	04 p0632 A69-15008	04 p0578 A69-15053	04 p0624 A69-15098
04 p0558 A69-14919	04 p0555 A69-14964*	04 p0592 A69-15009	04 p0590 A69-15054	04 p0625 A69-15099
04 p0666 A69-14920 #	04 p0642 A69-14965*	04 p0659 A69-15010	04 p0590 A69-15055	04 p0689 A69-15100*#
04 p0666 A69-14921 #	04 p0632 A69-14966*	04 p0593 A69-15011*	04 p0600 A69-15056	04 p0593 A69-15101
04 p0679 A69-14922 #	04 p0624 A69-14967 #	04 p0666 A69-15012	04 p0544 A69-15057	04 p0593 A69-15102 #
04 p0679 A69-14923 #	04 p0680 A69-14968 #	04 p0599 A69-15013 #	04 p0631 A69-15058	04 p0593 A69-15103 #
04 p0679 A69-14924 #	04 p0624 A69-14969 #	04 p0599 A69-15014 #	04 p0631 A69-15059	04 p0600 A69-15104 #
04 p0679 A69-14925 #	04 p0589 A69-14970 #	04 p0599 A69-15015	04 p0637 A69-15060	04 p0593 A69-15105 #
04 p0679 A69-14926 #	04 p0577 A69-14971 #	04 p0599 A69-15016 #	04 p0660 A69-15061	04 p0600 A69-15106 #
04 p0680 A69-14927 #	04 p0607 A69-14972	04 p0599 A69-15017	04 p0549 A69-15062 #	04 p0549 A69-15107 #
04 p0680 A69-14928 #	04 p0607 A69-14973	04 p0599 A69-15018	04 p0550 A69-15063 #	04 p0549 A69-15108 #
04 p0680 A69-14929 #	04 p0598 A69-14974*	04 p0599 A69-15019*#	04 p0647 A69-15064 #	04 p0625 A69-15109 #
04 p0549 A69-14930*	04 p0592 A69-14975*	04 p0636 A69-15020 #	04 p0578 A69-15065 #	04 p0583 A69-15110
04 p0617 A69-14931 #	04 p0553 A69-14976*	04 p0599 A69-15021	04 p0558 A69-15066	04 p0583 A69-15111
04 p0617 A69-14932 #	04 p0659 A69-14977	04 p0599 A69-15022*#	04 p0582 A69-15067 #	04 p0583 A69-15112
04 p0617 A69-14933 #	04 p0553 A69-14978*	04 p0611 A69-15023 #	04 p0600 A69-15068 #	04 p0583 A69-15113
04 p0647 A69-14934	04 p0659 A69-14979*	04 p0600 A69-15024	04 p0578 A69-15069 #	04 p0621 A69-15114
04 p0627 A69-14935	04 p0689 A69-14980 #	04 p0577 A69-15025*#	04 p0578 A69-15070 #	04 p0601 A69-15115 #



## ACCESSION NUMBER INDEX

04 p0601 A69-15116 #	04 p0687 A69-15161 #	04 p0612 A69-15206 #	04 p0662 A69-15251	04 p0647 A69-15296
04 p0601 A69-15117 #	04 p0687 A69-15162 #	04 p0559 A69-15207	04 p0601 A69-15252	04 p0564 A69-15297
04 p0601 A69-15118 #	04 p0607 A69-15163 #	04 p0564 A69-15208	04 p0662 A69-15253	04 p0666 A69-15298*
04 p0601 A69-15119 #	04 p0687 A69-15164 #	04 p0559 A69-15209 #	04 p0643 A69-15254	04 p0551 A69-15299*
04 p0558 A69-15120 #	04 p0661 A69-15165 #	04 p0559 A69-15210 #	04 p0643 A69-15255	04 p0646 A69-15300
04 p0594 A69-15121	04 p0594 A69-15166 #	04 p0578 A69-15211 #	04 p0643 A69-15256	04 p0682 A69-15301
04 p0594 A69-15122	04 p0687 A69-15167 #	04 p0559 A69-15212 #	04 p0643 A69-15257	04 p0682 A69-15302
04 p0594 A69-15123	04 p0687 A69-15168 #	04 p0560 A69-15213 #	04 p0643 A69-15258	04 p0682 A69-15303
04 p0660 A69-15124	04 p0680 A69-15169 #	04 p0560 A69-15214 #	04 p0643 A69-15259	04 p0553 A69-15304*
04 p0594 A69-15125	04 p0681 A69-15170 #	04 p0578 A69-15215**	04 p0643 A69-15260	04 p0601 A69-15305 #
04 p0660 A69-15126*	04 p0681 A69-15171 #	04 p0560 A69-15216 #	04 p0643 A69-15261	04 p0628 A69-15306 #
04 p0633 A69-15127	04 p0681 A69-15172 #	04 p0578 A69-15217	04 p0643 A69-15262	04 p0595 A69-15307 #
04 p0660 A69-15128	04 p0612 A69-15173	04 p0607 A69-15218 #	04 p0643 A69-15263	04 p0621 A69-15308*
04 p0594 A69-15129*	04 p0638 A69-15174 #	04 p0607 A69-15219 #	04 p0643 A69-15264	04 p0551 A69-15309*
04 p0649 A69-15130	04 p0612 A69-15175 #	04 p0607 A69-15220 #	04 p0644 A69-15265	04 p0551 A69-15310*
04 p0625 A69-15131	04 p0612 A69-15176 #	04 p0590 A69-15221 #	04 p0644 A69-15266	04 p0626 A69-15311
04 p0625 A69-15132	04 p0618 A69-15177 #	04 p0564 A69-15222	04 p0644 A69-15267	04 p0551 A69-15312
04 p0625 A69-15133	04 p0618 A69-15178 #	04 p0625 A69-15223	04 p0644 A69-15268	04 p0551 A69-15313
04 p0583 A69-15134 #	04 p0550 A69-15179	04 p0608 A69-15224	04 p0644 A69-15269	04 p0551 A69-15314
04 p0583 A69-15135 #	04 p0550 A69-15180	04 p0579 A69-15225	04 p0644 A69-15270	04 p0551 A69-15315*
04 p0578 A69-15136 #	04 p0550 A69-15181	04 p0579 A69-15226	04 p0644 A69-15271	04 p0552 A69-15316
04 p0559 A69-15137 #	04 p0550 A69-15182	04 p0560 A69-15227	04 p0560 A69-15272	04 p0638 A69-15317
04 p0559 A69-15138 #	04 p0551 A69-15183	04 p0579 A69-15228	04 p0638 A69-15273 #	04 p0626 A69-15318*
04 p0583 A69-15139 #	04 p0585 A69-15184	04 p0601 A69-15229	04 p0590 A69-15274 #	04 p0579 A69-15319
04 p0559 A69-15140 #	04 p0551 A69-15185	04 p0560 A69-15230	04 p0625 A69-15275 #	04 p0579 A69-15320
04 p0643 A69-15141**	04 p0601 A69-15186	04 p0633 A69-15231*	04 p0590 A69-15276 #	04 p0644 A69-15321
04 p0661 A69-15142	04 p0549 A69-15187	04 p0625 A69-15232	04 p0638 A69-15277 #	04 p0552 A69-15322 #
04 p0661 A69-15143	04 p0687 A69-15188 #	04 p0625 A69-15233	04 p0590 A69-15278 #	04 p0585 A69-15323
04 p0661 A69-15144	04 p0631 A69-15189**	04 p0661 A69-15234	04 p0591 A69-15279 #	04 p0602 A69-15324
04 p0661 A69-15145	04 p0661 A69-15190 #	04 p0662 A69-15235	04 p0631 A69-15280	04 p0554 A69-15325*
04 p0628 A69-15146	04 p0590 A69-15191 #	04 p0662 A69-15236	04 p0687 A69-15281	04 p0662 A69-15326
04 p0661 A69-15147	04 p0638 A69-15192 #	04 p0662 A69-15237	04 p0591 A69-15282	04 p0649 A69-15327
04 p0661 A69-15148	04 p0638 A69-15193 #	04 p0662 A69-15238	04 p0681 A69-15283	04 p0662 A69-15328
04 p0628 A69-15149	04 p0638 A69-15194 #	04 p0638 A69-15239	04 p0544 A69-15284	04 p0621 A69-15329 #
04 p0649 A69-15150	04 p0681 A69-15195 #	04 p0662 A69-15240	04 p0595 A69-15285	04 p0552 A69-15330
04 p0612 A69-15151	04 p0681 A69-15196	04 p0649 A69-15241	04 p0681 A69-15286	04 p0608 A69-15331*
04 p0553 A69-15152	04 p0559 A69-15197	04 p0649 A69-15242	04 p0625 A69-15287	04 p0554 A69-15332*
04 p0686 A69-15153	04 p0559 A69-15198	04 p0662 A69-15243	04 p0626 A69-15288*	04 p0554 A69-15333*
04 p0680 A69-15154 #	04 p0578 A69-15199	04 p0662 A69-15244	04 p0681 A69-15289	04 p0564 A69-15334
04 p0680 A69-15155 #	04 p0681 A69-15200	04 p0662 A69-15245	04 p0682 A69-15290	04 p0565 A69-15335
04 p0618 A69-15156 #	04 p0643 A69-15201 #	04 p0594 A69-15246	04 p0682 A69-15291	04 p0565 A69-15336
04 p0661 A69-15157	04 p0618 A69-15202 #	04 p0595 A69-15247	04 p0682 A69-15292	04 p0565 A69-15337
04 p0628 A69-15158	04 p0590 A69-15203 #	04 p0601 A69-15248	04 p0682 A69-15293	04 p0565 A69-15338*
04 p0594 A69-15159	04 p0612 A69-15204 #	04 p0662 A69-15249	04 p0591 A69-15294	04 p0565 A69-15339
04 p0686 A69-15160	04 p0618 A69-15205 #	04 p0662 A69-15250	04 p0666 A69-15295	04 p0565 A69-15340

## ACCESSION NUMBER INDEX

04 p0565 A69-15341	04 p0663 A69-15386*	04 p0603 A69-15431	04 p0562 A69-15476	04 p0647 A69-15521**
04 p0566 A69-15342*	04 p0649 A69-15387*	04 p0603 A69-15432	04 p0562 A69-15477	04 p0666 A69-15522**
04 p0566 A69-15343	04 p0554 A69-15388**	04 p0603 A69-15433	04 p0629 A69-15478	04 p0664 A69-15523
04 p0566 A69-15344	04 p0618 A69-15389 #	04 p0633 A69-15434	04 p0689 A69-15479	04 p0664 A69-15524
04 p0566 A69-15345	04 p0619 A69-15390 #	04 p0591 A69-15435	04 p0608 A69-15480 #	04 p0664 A69-15525
04 p0566 A69-15346	04 p0619 A69-15391 #	04 p0633 A69-15436	04 p0608 A69-15481 #	04 p0664 A69-15526
04 p0566 A69-15347	04 p0619 A69-15392 #	04 p0595 A69-15437	04 p0608 A69-15482 #	04 p0650 A69-15527
04 p0567 A69-15348	04 p0682 A69-15393 #	04 p0664 A69-15438	04 p0608 A69-15483 #	04 p0650 A69-15528*
04 p0567 A69-15349	04 p0619 A69-15394	04 p0595 A69-15439	04 p0608 A69-15484 #	04 p0650 A69-15529*
04 p0567 A69-15350	04 p0619 A69-15395	04 p0649 A69-15440	04 p0608 A69-15485 #	04 p0650 A69-15530
04 p0567 A69-15351	04 p0663 A69-15396	04 p0664 A69-15441	04 p0549 A69-15486 #	04 p0650 A69-15531
04 p0567 A69-15352	04 p0687 A69-15397	04 p0649 A69-15442	04 p0591 A69-15487 #	04 p0665 A69-15532*
04 p0567 A69-15353	04 p0688 A69-15398	04 p0633 A69-15443	04 p0562 A69-15488	04 p0650 A69-15533
04 p0567 A69-15354	04 p0602 A69-15399	04 p0603 A69-15444 #	04 p0580 A69-15489	04 p0684 A69-15534 #
04 p0567 A69-15355	04 p0602 A69-15400	04 p0603 A69-15445	04 p0580 A69-15490	04 p0591 A69-15535 #
04 p0568 A69-15356	04 p0560 A69-15401	04 p0579 A69-15446	04 p0580 A69-15491	04 p0631 A69-15536 #
04 p0568 A69-15357	04 p0560 A69-15402	04 p0561 A69-15447	04 p0563 A69-15492	04 p0631 A69-15537 #
04 p0568 A69-15358	04 p0560 A69-15403	04 p0561 A69-15448	04 p0647 A69-15493	04 p0684 A69-15538 #
04 p0568 A69-15359	04 p0561 A69-15404	04 p0561 A69-15449	04 p0682 A69-15494	04 p0684 A69-15539 #
04 p0568 A69-15360	04 p0602 A69-15405	04 p0579 A69-15450	04 p0683 A69-15495	04 p0608 A69-15540
04 p0568 A69-15361	04 p0602 A69-15406	04 p0561 A69-15451	04 p0683 A69-15496	05 p0699 A69-15541
04 p0569 A69-15362	04 p0585 A69-15407	04 p0561 A69-15452	04 p0683 A69-15497	05 p0695 A69-15542
04 p0628 A69-15363	04 p0591 A69-15408	04 p0561 A69-15453	04 p0603 A69-15498	05 p0695 A69-15543
04 p0569 A69-15364	04 p0688 A69-15409	04 p0561 A69-15454	04 p0683 A69-15499	05 p0695 A69-15544
04 p0629 A69-15365	04 p0688 A69-15410	04 p0569 A69-15455*	04 p0683 A69-15500	05 p0700 A69-15545
04 p0569 A69-15366	04 p0591 A69-15411	04 p0569 A69-15456*	04 p0629 A69-15501**	05 p0695 A69-15546
04 p0579 A69-15367 #	04 p0544 A69-15412	04 p0569 A69-15457	04 p0586 A69-15502 #	05 p0700 A69-15547
04 p0638 A69-15368 #	04 p0682 A69-15413	04 p0562 A69-15458	04 p0664 A69-15503**	05 p0700 A69-15548
04 p0639 A69-15369 #	04 p0612 A69-15414	04 p0688 A69-15459	04 p0591 A69-15504**	05 p0695 A69-15549
04 p0639 A69-15370 #	04 p0613 A69-15415	04 p0579 A69-15460	04 p0646 A69-15505 #	05 p0701 A69-15550
04 p0639 A69-15371 #	04 p0549 A69-15416 #	04 p0584 A69-15461	04 p0554 A69-15506**	05 p0695 A69-15551
04 p0612 A69-15372 #	04 p0584 A69-15417 #	04 p0569 A69-15462*	04 p0683 A69-15507**	05 p0811 A69-15552
04 p0612 A69-15373 #	04 p0584 A69-15418 #	04 p0580 A69-15463	04 p0683 A69-15508**	05 p0811 A69-15553
04 p0612 A69-15374 #	04 p0584 A69-15419 #	04 p0584 A69-15464	04 p0688 A69-15509 #	05 p0696 A69-15554
04 p0612 A69-15375 #	04 p0549 A69-15420 #	04 p0631 A69-15465	04 p0646 A69-15510 #	05 p0811 A69-15555
04 p0560 A69-15376 #	04 p0664 A69-15421	04 p0664 A69-15466	04 p0666 A69-15511 #	05 p0743 A69-15556
04 p0602 A69-15377 #	04 p0649 A69-15422	04 p0562 A69-15467	04 p0604 A69-15512**	05 p0696 A69-15557*
04 p0602 A69-15378	04 p0688 A69-15423 #	04 p0586 A69-15468	04 p0688 A69-15513**	05 p0743 A69-15558
04 p0663 A69-15379	04 p0633 A69-15424*	04 p0580 A69-15469	04 p0604 A69-15514**	05 p0701 A69-15559
04 p0602 A69-15380*	04 p0595 A69-15425	04 p0562 A69-15470	04 p0683 A69-15515 #	05 p0789 A69-15560
04 p0663 A69-15381	04 p0602 A69-15426	04 p0580 A69-15471	04 p0591 A69-15516 #	05 p0696 A69-15561
04 p0663 A69-15382	04 p0602 A69-15427	04 p0569 A69-15472*	04 p0629 A69-15517 #	05 p0696 A69-15562
04 p0663 A69-15383*	04 p0602 A69-15428*	04 p0603 A69-15473	04 p0683 A69-15518 #	05 p0701 A69-15563*
04 p0663 A69-15384*	04 p0602 A69-15429	04 p0562 A69-15474	04 p0647 A69-15519 #	05 p0701 A69-15564
04 p0663 A69-15385	04 p0603 A69-15430	04 p0562 A69-15475	04 p0666 A69-15520 #	05 p0701 A69-15565*



## ACCESSION NUMBER INDEX

05 p0696 A69-15566	05 p0798 A69-15611	05 p0770 A69-15656 #	05 p0761 A69-15701 #	05 p0801 A69-15746 #
05 p0701 A69-15567	05 p0798 A69-15612	05 p0761 A69-15657 #	05 p0761 A69-15702 #	05 p0796 A69-15747
05 p0701 A69-15568*	05 p0760 A69-15613	05 p0806 A69-15658 #	05 p0819 A69-15703	05 p0718 A69-15748
05 p0696 A69-15569	05 p0798 A69-15614	05 p0736 A69-15659	05 p0770 A69-15704	05 p0718 A69-15749
05 p0701 A69-15570	05 p0799 A69-15615	05 p0795 A69-15660*#	05 p0723 A69-15705	05 p0718 A69-15750
05 p0702 A69-15571*	05 p0845 A69-15616	05 p0795 A69-15661 #	05 p0752 A69-15706	05 p0707 A69-15751
05 p0741 A69-15572*	05 p0795 A69-15617	05 p0795 A69-15662 #	05 p0696 A69-15707	05 p0777 A69-15752
05 p0741 A69-15573	05 p0744 A69-15618	05 p0795 A69-15663 #	05 p0697 A69-15708	05 p0778 A69-15753
05 p0741 A69-15574*	05 p0795 A69-15619	05 p0795 A69-15664*#	05 p0833 A69-15709	05 p0778 A69-15754
05 p0741 A69-15575*	05 p0761 A69-15620	05 p0744 A69-15665 #	05 p0833 A69-15710	05 p0778 A69-15755
05 p0849 A69-15576*	05 p0818 A69-15621	05 p0752 A69-15666 #	05 p0833 A69-15711	05 p0834 A69-15756
05 p0831 A69-15577	05 p0811 A69-15622*	05 p0741 A69-15667	05 p0697 A69-15712	05 p0778 A69-15757
05 p0743 A69-15578	05 p0819 A69-15623*	05 p0728 A69-15668	05 p0697 A69-15713	05 p0778 A69-15758
05 p0844 A69-15579	05 p0819 A69-15624*	05 p0728 A69-15669	05 p0744 A69-15714	05 p0778 A69-15759
05 p0831 A69-15580	05 p0819 A69-15625	05 p0728 A69-15670	05 p0796 A69-15715*	05 p0779 A69-15760
05 p0831 A69-15581	05 p0819 A69-15626	05 p0704 A69-15671	05 p0744 A69-15716 #	05 p0813 A69-15761
05 p0707 A69-15582*	05 p0716 A69-15627*	05 p0728 A69-15672	05 p0845 A69-15717 #	05 p0820 A69-15762*
05 p0769 A69-15583	05 p0819 A69-15628	05 p0741 A69-15673	05 p0744 A69-15718 #	05 p0761 A69-15763 #
05 p0770 A69-15584	05 p0799 A69-15629 #	05 p0704 A69-15674*	05 p0744 A69-15719 #	05 p0736 A69-15764 #
05 p0798 A69-15585	05 p0806 A69-15630 #	05 p0704 A69-15675*	05 p0744 A69-15720 #	05 p0767 A69-15765 #
05 p0798 A69-15586	05 p0770 A69-15631 #	05 p0704 A69-15676	05 p0788 A69-15721 #	05 p0737 A69-15766 #
05 p0760 A69-15587	05 p0791 A69-15632 #	05 p0707 A69-15677	05 p0697 A69-15722 #	05 p0792 A69-15767
05 p0818 A69-15588*#	05 p0799 A69-15633 #	05 p0744 A69-15678 #	05 p0792 A69-15723 #	05 p0792 A69-15768
05 p0818 A69-15589*#	05 p0717 A69-15634 #	05 p0831 A69-15679 #	05 p0745 A69-15724 #	05 p0793 A69-15769
05 p0760 A69-15590 #	05 p0717 A69-15635 #	05 p0831 A69-15680 #	05 p0788 A69-15725 #	05 p0801 A69-15770
05 p0760 A69-15591	05 p0717 A69-15636 #	05 p0849 A69-15681	05 p0833 A69-15726	05 p0793 A69-15771
05 p0760 A69-15592	05 p0717 A69-15637 #	05 p0792 A69-15682 #	05 p0833 A69-15727	05 p0745 A69-15772
05 p0791 A69-15593	05 p0727 A69-15638 #	05 p0792 A69-15683 #	05 p0833 A69-15728	05 p0793 A69-15773
05 p0791 A69-15594	05 p0727 A69-15639 #	05 p0831 A69-15684 #	05 p0833 A69-15729	05 p0761 A69-15774
05 p0811 A69-15595	05 p0718 A69-15640 #	05 p0831 A69-15685	05 p0834 A69-15730	05 p0793 A69-15775 #
05 p0811 A69-15596	05 p0727 A69-15641 #	05 p0832 A69-15686 #	05 p0834 A69-15731	05 p0793 A69-15776 #
05 p0791 A69-15597	05 p0727 A69-15642 #	05 p0832 A69-15687 #	05 p0834 A69-15732	05 p0793 A69-15777 #
05 p0791 A69-15598	05 p0727 A69-15643 #	05 p0832 A69-15688 #	05 p0761 A69-15733	05 p0793 A69-15778 #
05 p0831 A69-15599 #	05 p0728 A69-15644 #	05 p0832 A69-15689 #	05 p0799 A69-15734 #	05 p0793 A69-15779 #
05 p0743 A69-15600 #	05 p0770 A69-15645 #	05 p0832 A69-15690 #	05 p0799 A69-15735 #	05 p0745 A69-15780 #
05 p0818 A69-15601	05 p0799 A69-15646 #	05 p0832 A69-15691 #	05 p0800 A69-15736 #	05 p0801 A69-15781 #
05 p0818 A69-15602*	05 p0718 A69-15647 #	05 p0832 A69-15692 #	05 p0800 A69-15737 #	05 p0845 A69-15782 #
05 p0813 A69-15603	05 p0718 A69-15648 #	05 p0792 A69-15693	05 p0800 A69-15738 #	05 p0834 A69-15783 #
05 p0813 A69-15604*	05 p0718 A69-15649 #	05 p0806 A69-15694 #	05 p0800 A69-15739 #	05 p0834 A69-15784 #
05 p0813 A69-15605*	05 p0718 A69-15650 #	05 p0728 A69-15695 #	05 p0800 A69-15740 #	05 p0794 A69-15785 #
05 p0818 A69-15606*	05 p0761 A69-15651 #	05 p0792 A69-15696 #	05 p0800 A69-15741 #	05 p0745 A69-15786 #
05 p0818 A69-15607	05 p0728 A69-15652 #	05 p0799 A69-15697 #	05 p0800 A69-15742 #	05 p0801 A69-15787 #
05 p0760 A69-15608	05 p0718 A69-15653 #	05 p0819 A69-15698 #	05 p0800 A69-15743 #	05 p0801 A69-15788 #
05 p0717 A69-15609	05 p0728 A69-15654 #	05 p0770 A69-15699	05 p0801 A69-15744 #	05 p0802 A69-15789 #
05 p0798 A69-15610	05 p0718 A69-15655 #	05 p0770 A69-15700	05 p0801 A69-15745 #	05 p0794 A69-15790 #

## ACCESSION NUMBER INDEX

05 p0745 A69-15791*#	05 p0820 A69-15836	05 p0718 A69-15881 #	05 p0786 A69-15926	05 p0708 A69-15971*
05 p0834 A69-15792 #	05 p0820 A69-15837	05 p0786 A69-15882 #	05 p0786 A69-15927	05 p0767 A69-15972 #
05 p0745 A69-15793 #	05 p0762 A69-15838	05 p0742 A69-15883 #	05 p0786 A69-15928	05 p0716 A69-15973*
05 p0845 A69-15794 #	05 p0821 A69-15839	05 p0742 A69-15884 #	05 p0719 A69-15929	05 p0716 A69-15974*
05 p0834 A69-15795 #	05 p0762 A69-15840	05 p0702 A69-15885	05 p0802 A69-15930	05 p0802 A69-15975 #
05 p0802 A69-15796 #	05 p0821 A69-15841	05 p0737 A69-15886 #	05 p0836 A69-15931	05 p0767 A69-15976 #
05 p0845 A69-15797 #	05 p0821 A69-15842	05 p0737 A69-15887 #	05 p0719 A69-15932	05 p0729 A69-15977
05 p0835 A69-15798 #	05 p0821 A69-15843	05 p0737 A69-15888 #	05 p0723 A69-15933	05 p0729 A69-15978
05 p0752 A69-15799	05 p0821 A69-15844	05 p0802 A69-15889	05 p0711 A69-15934	05 p0779 A69-15979
05 p0753 A69-15800	05 p0813 A69-15845	05 p0745 A69-15890	05 p0712 A69-15935*#	05 p0719 A69-15980
05 p0741 A69-15801	05 p0813 A69-15846*	05 p0746 A69-15891	05 p0712 A69-15936 #	05 p0849 A69-15981*
05 p0711 A69-15802*	05 p0814 A69-15847	05 p0802 A69-15892	05 p0712 A69-15937 #	05 p0715 A69-15982*
05 p0742 A69-15803	05 p0814 A69-15848	05 p0796 A69-15893	05 p0712 A69-15938 #	05 p0708 A69-15983*
05 p0742 A69-15804	05 p0821 A69-15849	05 p0845 A69-15894	05 p0712 A69-15939 #	05 p0708 A69-15984*
05 p0737 A69-15805	05 p0821 A69-15850	05 p0845 A69-15895	05 p0707 A69-15940 #	05 p0763 A69-15985
05 p0737 A69-15806	05 p0821 A69-15851	05 p0845 A69-15896	05 p0707 A69-15941 #	05 p0763 A69-15986
05 p0835 A69-15807 #	05 p0822 A69-15852	05 p0846 A69-15897	05 p0712 A69-15942*#	05 p0850 A69-15987*
05 p0728 A69-15808 #	05 p0822 A69-15853	05 p0846 A69-15898	05 p0713 A69-15943 #	05 p0779 A69-15988
05 p0806 A69-15809	05 p0822 A69-15854*	05 p0762 A69-15899	05 p0713 A69-15944 #	05 p0780 A69-15989
05 p0771 A69-15810 #	05 p0822 A69-15855	05 p0762 A69-15900	05 p0713 A69-15945 #	05 p0780 A69-15990
05 p0771 A69-15811	05 p0822 A69-15856*	05 p0846 A69-15901	05 p0713 A69-15946 #	05 p0780 A69-15991
05 p0771 A69-15812	05 p0829 A69-15857	05 p0802 A69-15902	05 p0713 A69-15947 #	05 p0742 A69-15992*
05 p0771 A69-15813	05 p0822 A69-15858*	05 p0846 A69-15903	05 p0713 A69-15948 #	05 p0753 A69-15993
05 p0771 A69-15814 #	05 p0814 A69-15859	05 p0846 A69-15904	05 p0714 A69-15949 #	05 p0763 A69-15994
05 p0806 A69-15815 #	05 p0814 A69-15860	05 p0779 A69-15905	05 p0714 A69-15950 #	05 p0763 A69-15995
05 p0807 A69-15816 #	05 p0822 A69-15861	05 p0771 A69-15906	05 p0714 A69-15951 #	05 p0802 A69-15996
05 p0771 A69-15817 #	05 p0814 A69-15862	05 p0771 A69-15907	05 p0714 A69-15952 #	05 p0803 A69-15997
05 p0771 A69-15818	05 p0814 A69-15863	05 p0796 A69-15908*	05 p0714 A69-15953 #	05 p0803 A69-15998
05 p0771 A69-15819 #	05 p0812 A69-15864	05 p0796 A69-15909*	05 p0714 A69-15954 #	05 p0803 A69-15999
05 p0761 A69-15820 #	05 p0737 A69-15865	05 p0811 A69-15910*	05 p0723 A69-15955	05 p0807 A69-16000
05 p0807 A69-15821	05 p0737 A69-15866	05 p0796 A69-15911*	05 p0807 A69-15956 #	05 p0704 A69-16001
05 p0813 A69-15822 #	05 p0745 A69-15867	05 p0796 A69-15912	05 p0807 A69-15957 #	05 p0704 A69-16002
05 p0762 A69-15823 #	05 p0835 A69-15868	05 p0802 A69-15913	05 p0704 A69-15958 #	05 p0704 A69-16003
05 p0762 A69-15824 #	05 p0835 A69-15869	05 p0796 A69-15914*	05 p0807 A69-15959 #	05 p0704 A69-16004
05 p0762 A69-15825 #	05 p0835 A69-15870	05 p0716 A69-15915*	05 p0762 A69-15960 #	05 p0705 A69-16005
05 p0723 A69-15826 #	05 p0835 A69-15871	05 p0846 A69-15916	05 p0772 A69-15961 #	05 p0746 A69-16006
05 p0697 A69-15827	05 p0835 A69-15872	05 p0779 A69-15917	05 p0702 A69-15962	05 p0705 A69-16007
05 p0697 A69-15828	05 p0835 A69-15873	05 p0742 A69-15918	05 p0729 A69-15963	05 p0746 A69-16008
05 p0835 A69-15829	05 p0836 A69-15874	05 p0829 A69-15919	05 p0729 A69-15964	05 p0705 A69-16009
05 p0791 A69-15830	05 p0836 A69-15875*	05 p0829 A69-15920	05 p0729 A69-15965	05 p0705 A69-16010
05 p0779 A69-15831	05 p0836 A69-15876	05 p0830 A69-15921	05 p0707 A69-15966	05 p0705 A69-16011
05 p0779 A69-15832	05 p0836 A69-15877	05 p0762 A69-15922 #	05 p0783 A69-15967*	05 p0746 A69-16012
05 p0779 A69-15833	05 p0836 A69-15878	05 p0836 A69-15923 #	05 p0708 A69-15968*	05 p0836 A69-16013 #
05 p0820 A69-15834	05 p0829 A69-15879 #	05 p0786 A69-15924 #	05 p0708 A69-15969*	05 p0823 A69-16014 #
05 p0820 A69-15835	05 p0697 A69-15880 #	05 p0802 A69-15925 #	05 p0708 A69-15970*	05 p0823 A69-16015 #



# ACCESSION NUMBER INDEX

05 p0705 A69-16016 #	05 p0786 A69-16061 #	05 p0812 A69-16106 #	05 p0838 A69-16151 #	05 p0723 A69-16196
05 p0746 A69-16017 #	05 p0824 A69-16062 #	05 p0749 A69-16107**	05 p0838 A69-16152 #	05 p0840 A69-16197 #
05 p0746 A69-16018 #	05 p0837 A69-16063 #	05 p0750 A69-16108 #	05 p0838 A69-16153 #	05 p0840 A69-16198 #
05 p0746 A69-16019 #	05 p0837 A69-16064 #	05 p0750 A69-16109 #	05 p0838 A69-16154 #	05 p0840 A69-16199 #
05 p0746 A69-16020 #	05 p0747 A69-16065 #	05 p0698 A69-16110 #	05 p0838 A69-16155 #	05 p0840 A69-16200 #
05 p0746 A69-16021 #	05 p0747 A69-16066 #	05 p0750 A69-16111**	05 p0839 A69-16156 #	05 p0840 A69-16201 #
05 p0746 A69-16022 #	05 p0837 A69-16067 #	05 p0698 A69-16112 #	05 p0839 A69-16157 #	05 p0840 A69-16202 #
05 p0697 A69-16023 #	05 p0747 A69-16068 #	05 p0750 A69-16113 #	05 p0705 A69-16158**	05 p0841 A69-16203 #
05 p0702 A69-16024 #	05 p0837 A69-16069 #	05 p0699 A69-16114 #	05 p0783 A69-16159 #	05 p0841 A69-16204 #
05 p0772 A69-16025 #	05 p0697 A69-16070 #	05 p0846 A69-16115 #	05 p0783 A69-16160**	05 p0841 A69-16205 #
05 p0807 A69-16026 #	05 p0747 A69-16071 #	05 p0846 A69-16116 #	05 p0848 A69-16161 #	05 p0794 A69-16206 #
05 p0702 A69-16027 #	05 p0747 A69-16072**	05 p0846 A69-16117 #	05 p0706 A69-16162**	05 p0841 A69-16207 #
05 p0742 A69-16028 #	05 p0747 A69-16073 #	05 p0803 A69-16118 #	05 p0706 A69-16163 #	05 p0841 A69-16208 #
05 p0836 A69-16029	05 p0749 A69-16074 #	05 p0847 A69-16119**	05 p0791 A69-16164**	05 p0794 A69-16209 #
05 p0837 A69-16030	05 p0698 A69-16075**	05 p0847 A69-16120 #	05 p0848 A69-16165 #	05 p0729 A69-16210 #
05 p0753 A69-16031 #	05 p0748 A69-16076 #	05 p0847 A69-16121 #	05 p0750 A69-16166**	05 p0730 A69-16211 #
05 p0747 A69-16032 #	05 p0748 A69-16077 #	05 p0847 A69-16122**	05 p0848 A69-16167 #	05 p0803 A69-16212 #
05 p0823 A69-16033 #	05 p0698 A69-16078 #	05 p0847 A69-16123 #	05 p0839 A69-16168 #	05 p0807 A69-16213 #
05 p0747 A69-16034 #	05 p0748 A69-16079 #	05 p0847 A69-16124 #	05 p0839 A69-16169 #	05 p0807 A69-16214 #
05 p0837 A69-16035 #	05 p0780 A69-16080 #	05 p0847 A69-16125 #	05 p0764 A69-16170 #	05 p0808 A69-16215 #
05 p0823 A69-16036 #	05 p0729 A69-16081	05 p0847 A69-16126 #	05 p0839 A69-16171**	05 p0808 A69-16216 #
05 p0823 A69-16037 #	05 p0729 A69-16082	05 p0848 A69-16127 #	05 p0839 A69-16172 #	05 p0730 A69-16217 #
05 p0837 A69-16038 #	05 p0729 A69-16083	05 p0848 A69-16128**	05 p0738 A69-16173 #	05 p0719 A69-16218 #
05 p0747 A69-16039 #	05 p0729 A69-16084	05 p0768 A69-16129 #	05 p0706 A69-16174 #	05 p0719 A69-16219 #
05 p0697 A69-16040 #	05 p0729 A69-16085	05 p0768 A69-16130 #	05 p0738 A69-16175 #	05 p0730 A69-16220 #
05 p0823 A69-16041 #	05 p0719 A69-16086	05 p0768 A69-16131**	05 p0706 A69-16176 #	05 p0730 A69-16221 #
05 p0823 A69-16042 #	05 p0719 A69-16087	05 p0768 A69-16132 #	05 p0738 A69-16177**	05 p0730 A69-16222 #
05 p0823 A69-16043 #	05 p0729 A69-16088	05 p0768 A69-16133**	05 p0706 A69-16178 #	05 p0719 A69-16223 #
05 p0823 A69-16044 #	05 p0698 A69-16089 #	05 p0830 A69-16134 #	05 p0738 A69-16179 #	05 p0719 A69-16224 #
05 p0830 A69-16045 #	05 p0748 A69-16090**	05 p0763 A69-16135**	05 p0738 A69-16180 #	05 p0772 A69-16225
05 p0789 A69-16046 #	05 p0748 A69-16091**	05 p0812 A69-16136**	05 p0750 A69-16181 #	05 p0772 A69-16226
05 p0789 A69-16047 #	05 p0698 A69-16092 #	05 p0848 A69-16137 #	05 p0738 A69-16182**	05 p0772 A69-16227
05 p0803 A69-16048 #	05 p0748 A69-16093 #	05 p0837 A69-16138 #	05 p0738 A69-16183 #	05 p0772 A69-16228
05 p0753 A69-16049 #	05 p0748 A69-16094 #	05 p0837 A69-16139 #	05 p0706 A69-16184 #	05 p0772 A69-16229
05 p0753 A69-16050 #	05 p0698 A69-16095 #	05 p0812 A69-16140**	05 p0738 A69-16185 #	05 p0773 A69-16230
05 p0814 A69-16051 #	05 p0749 A69-16096 #	05 p0838 A69-16141 #	05 p0839 A69-16186**	05 p0706 A69-16231*
05 p0814 A69-16052 #	05 p0749 A69-16097 #	05 p0812 A69-16142 #	05 p0750 A69-16187	05 p0769 A69-16232
05 p0824 A69-16053 #	05 p0749 A69-16098 #	05 p0750 A69-16143 #	05 p0840 A69-16188 #	05 p0812 A69-16233*
05 p0763 A69-16054 #	05 p0749 A69-16099 #	05 p0812 A69-16144 #	05 p0768 A69-16189 #	05 p0716 A69-16234
05 p0763 A69-16055 #	05 p0698 A69-16100 #	05 p0850 A69-16145 #	05 p0840 A69-16190 #	05 p0716 A69-16235
05 p0830 A69-16056 #	05 p0749 A69-16101 #	05 p0850 A69-16146 #	05 p0840 A69-16191 #	05 p0783 A69-16236
05 p0815 A69-16057 #	05 p0763 A69-16102 #	05 p0743 A69-16147 #	05 p0768 A69-16192 #	05 p0706 A69-16237
05 p0753 A69-16058 #	05 p0705 A69-16103 #	05 p0838 A69-16148 #	05 p0768 A69-16193 #	05 p0743 A69-16238 #
05 p0824 A69-16059 #	05 p0705 A69-16104 #	05 p0838 A69-16149 #	05 p0769 A69-16194 #	05 p0769 A69-16239 #
05 p0824 A69-16060 #	05 p0763 A69-16105**	05 p0780 A69-16150 #	05 p0723 A69-16195*	05 p0730 A69-16240

# ACCESSION NUMBER INDEX

05 p0730 A69-16241	05 p0808 A69-16286	05 p0776 A69-16331	05 p0804 A69-16376	05 p0759 A69-16421
05 p0730 A69-16242*	05 p0808 A69-16287*#	05 p0776 A69-16332	05 p0809 A69-16377	05 p0786 A69-16422 #
05 p0731 A69-16243	05 p0773 A69-16288 ■	05 p0776 A69-16333	05 p0777 A69-16378	05 p0787 A69-16423 #
05 p0731 A69-16244	05 p0773 A69-16289	05 p0776 A69-16334	05 p0702 A69-16379	05 p0787 A69-16424 #
05 p0731 A69-16245	05 p0773 A69-16290	05 p0777 A69-16335	05 p0830 A69-16380*#	05 p0732 A69-16425 #
05 p0731 A69-16246	05 p0773 A69-16291 #	05 p0848 A69-16336	05 p0724 A69-16381	05 p0826 A69-16426 #
05 p0753 A69-16247*	05 p0773 A69-16292	05 p0848 A69-16337	05 p0724 A69-16382	05 p0826 A69-16427 #
05 p0824 A69-16248	05 p0773 A69-16293	05 p0764 A69-16338	05 p0724 A69-16383	05 p0797 A69-16428*
05 p0815 A69-16249*	05 p0731 A69-16294	05 p0797 A69-16339	05 p0724 A69-16384	05 p0784 A69-16429
05 p0815 A69-16250*	05 p0731 A69-16295	05 p0699 A69-16340	05 p0804 A69-16385	05 p0780 A69-16430
05 p0824 A69-16251*	05 p0719 A69-16296	05 p0739 A69-16341	05 p0739 A69-16386	05 p0780 A69-16431
05 p0824 A69-16252*	05 p0720 A69-16297	05 p0720 A69-16342	05 p0826 A69-16387 #	05 p0841 A69-16432
05 p0815 A69-16253*	05 p0732 A69-16298	05 p0732 A69-16343	05 p0826 A69-16388 #	05 p0841 A69-16433*
05 p0815 A69-16254*	05 p0850 A69-16299	05 p0720 A69-16344	05 p0826 A69-16389 #	05 p0784 A69-16434
05 p0815 A69-16255	05 p0850 A69-16300	05 p0720 A69-16345	05 p0816 A69-16390 #	05 p0842 A69-16435
05 p0753 A69-16256*	05 p0825 A69-16301	05 p0732 A69-16346	05 p0826 A69-16391 #	05 p0842 A69-16436
05 p0754 A69-16257*	05 p0825 A69-16302 #	05 p0732 A69-16347	05 p0702 A69-16392	05 p0780 A69-16437
05 p0754 A69-16258*	05 p0825 A69-16303 ■	05 p0739 A69-16348	05 p0702 A69-16393	05 p0842 A69-16438
05 p0815 A69-16259	05 p0743 A69-16304	05 p0739 A69-16349	05 p0703 A69-16394	05 p0826 A69-16439 #
05 p0754 A69-16260	05 p0732 A69-16305	05 p0803 A69-16350	05 p0699 A69-16395	05 p0826 A69-16440 #
05 p0754 A69-16261*	05 p0743 A69-16306	05 p0825 A69-16351	05 p0751 A69-16396	05 p0804 A69-16441
05 p0754 A69-16262	05 p0773 A69-16307	05 p0825 A69-16352	05 p0830 A69-16397	05 p0804 A69-16442
05 p0754 A69-16263	05 p0773 A69-16308	05 p0825 A69-16353	05 p0764 A69-16398	05 p0720 A69-16443 #
05 p0824 A69-16264*	05 p0774 A69-16309	05 p0825 A69-16354	05 p0841 A69-16399	05 p0720 A69-16444 #
05 p0754 A69-16265	05 p0774 A69-16310	05 p0816 A69-16355	05 p0812 A69-16400	05 p0720 A69-16445 #
05 p0755 A69-16266	05 p0774 A69-16311	05 p0825 A69-16356	05 p0756 A69-16401	05 p0781 A69-16446 #
05 p0755 A69-16267*	05 p0808 A69-16312	05 p0808 A69-16357*#	05 p0756 A69-16402	05 p0716 A69-16447 #
05 p0755 A69-16268*	05 p0808 A69-16313	05 p0808 A69-16358*#	05 p0757 A69-16403	05 p0781 A69-16448 #
05 p0755 A69-16269	05 p0774 A69-16314	05 p0707 A69-16359*#	05 p0757 A69-16404	05 p0787 A69-16449 #
05 p0755 A69-16270*	05 p0774 A69-16315	05 p0756 A69-16360*	05 p0757 A69-16405	05 p0794 A69-16450 #
05 p0755 A69-16271*	05 p0774 A69-16316	05 p0816 A69-16361*	05 p0757 A69-16406	05 p0787 A69-16451 #
05 p0756 A69-16272	05 p0774 A69-16317	05 p0825 A69-16362	05 p0757 A69-16407*	05 p0849 A69-16452 #
05 p0756 A69-16273*	05 p0774 A69-16318*	05 p0794 A69-16363	05 p0757 A69-16408	05 p0788 A69-16453 #
05 p0756 A69-16274*	05 p0720 A69-16319	05 p0794 A69-16364	05 p0757 A69-16409	05 p0751 A69-16454 #
05 p0816 A69-16275*	05 p0775 A69-16320	05 p0816 A69-16365	05 p0758 A69-16410	05 p0787 A69-16455 #
05 p0816 A69-16276	05 p0775 A69-16321	05 p0816 A69-16366	05 p0758 A69-16411*	05 p0787 A69-16456 #
05 p0756 A69-16277*	05 p0775 A69-16322*	05 p0764 A69-16367	05 p0758 A69-16412	05 p0787 A69-16457 #
05 p0825 A69-16278*	05 p0775 A69-16323*	05 p0797 A69-16368*	05 p0758 A69-16413*	05 p0804 A69-16458 #
05 p0816 A69-16279*	05 p0775 A69-16324*	05 p0841 A69-16369	05 p0758 A69-16414	05 p0904 A69-16459 #
05 p0756 A69-16280*	05 p0775 A69-16325*	05 p0804 A69-16370	05 p0758 A69-16415	05 p0804 A69-16460 #
05 p0816 A69-16281	05 p0775 A69-16326	05 p0777 A69-16371	05 p0758 A69-16416	05 p0849 A69-16461
05 p0756 A69-16282	05 p0776 A69-16327	05 p0809 A69-16372	05 p0758 A69-16417	05 p0826 A69-16462
05 p0756 A69-16283*	05 p0776 A69-16328	05 p0777 A69-16373	05 p0758 A69-16418	05 p0751 A69-16463
05 p0773 A69-16284 #	05 p0776 A69-16329	05 p0809 A69-16374	05 p0758 A69-16419	05 p0787 A69-16464
05 p0808 A69-16285	05 p0776 A69-16330	05 p0809 A69-16375	05 p0759 A69-16420	05 p0787 A69-16465



# ACCESSION NUMBER INDEX

05 p0827 A69-16466	05 p0709 A69-16511 #	05 p0733 A69-16556	05 p0740 A69-16601*	05 p0751 A69-16646 #
05 p0724 A69-16467	05 p0709 A69-16512 #	05 p0809 A69-16557	05 p0827 A69-16602	05 p0735 A69-16647 #
05 p0724 A69-16468	05 p0709 A69-16513 #	05 p0733 A69-16558	05 p0805 A69-16603	05 p0810 A69-16648 #
05 p0724 A69-16469	05 p0709 A69-16514 #	05 p0733 A69-16559	05 p0797 A69-16604	05 p0797 A69-16649 #
05 p0725 A69-16470	05 p0709 A69-16515 #	05 p0733 A69-16560	05 p0735 A69-16605	05 p0805 A69-16650
05 p0842 A69-16471	05 p0709 A69-16516 #	05 p0733 A69-16561	05 p0759 A69-16606	05 p0817 A69-16651*
05 p0725 A69-16472	05 p0709 A69-16517 #	05 p0733 A69-16562*	05 p0764 A69-16607	05 p0828 A69-16652
05 p0739 A69-16473	05 p0709 A69-16518 #	05 p0734 A69-16563	05 p0805 A69-16608	05 p0828 A69-16653
05 p0725 A69-16474	05 p0710 A69-16519 #	05 p0734 A69-16564	05 p0810 A69-16609	05 p0817 A69-16654
05 p0751 A69-16475	05 p0710 A69-16520 #	05 p0810 A69-16565	05 p0777 A69-16610	05 p0805 A69-16655
05 p0827 A69-16476*	05 p0710 A69-16521 #	05 p0734 A69-16566*	05 p0828 A69-16611	05 p0830 A69-16656
05 p0725 A69-16477	05 p0710 A69-16522 #	05 p0734 A69-16567	05 p0828 A69-16612	05 p0786 A69-16657
05 p0787 A69-16478	05 p0710 A69-16523 #	05 p0810 A69-16568	05 p0781 A69-16613	05 p0759 A69-16658
05 p0788 A69-16479	05 p0715 A69-16524 #	05 p0734 A69-16569	05 p0781 A69-16614	05 p0828 A69-16659
05 p0849 A69-16480	05 p0710 A69-16525 #	05 p0734 A69-16570	05 p0849 A69-16615	05 p0828 A69-16660
05 p0788 A69-16481	05 p0777 A69-16526 #	05 p0725 A69-16571*	05 p0782 A69-16616	05 p0721 A69-16661
05 p0788 A69-16482	05 p0827 A69-16527	05 p0721 A69-16572	05 p0735 A69-16617	05 p0828 A69-16662
05 p0788 A69-16483	05 p0812 A69-16528	05 p0734 A69-16573*	05 p0721 A69-16618	05 p0829 A69-16663
05 p0788 A69-16484	05 p0809 A69-16529*	05 p0734 A69-16574	05 p0721 A69-16619	05 p0764 A69-16664
05 p0784 A69-16485*	05 p0720 A69-16530 #	05 p0734 A69-16575	05 p0735 A69-16620	05 p0843 A69-16665
05 p0769 A69-16486*	05 p0721 A69-16531 #	05 p0810 A69-16576	05 p0735 A69-16621	05 p0735 A69-16666
05 p0784 A69-16487*	05 p0732 A69-16532 #	05 p0740 A69-16577*	05 p0715 A69-16622	05 p0740 A69-16667
05 p0785 A69-16488*	05 p0721 A69-16533 #	05 p0721 A69-16578	05 p0715 A69-16623	05 p0740 A69-16668
05 p0785 A69-16489	05 p0751 A69-16534	05 p0777 A69-16579	05 p0710 A69-16624	05 p0764 A69-16669
05 p0785 A69-16490*	05 p0804 A69-16535	05 p0721 A69-16580	05 p0710 A69-16625	05 p0740 A69-16670
05 p0785 A69-16491*	05 p0788 A69-16536 #	05 p0785 A69-16581	05 p0710 A69-16626	05 p0741 A69-16671
05 p0785 A69-16492	05 p0781 A69-16537 #	05 p0827 A69-16582	05 p0715 A69-16627	05 p0829 A69-16672
05 p0717 A69-16493*	05 p0769 A69-16538 #	05 p0740 A69-16583	05 p0715 A69-16628	05 p0699 A69-16673
05 p0785 A69-16494	05 p0769 A69-16539 #	05 p0725 A69-16584*	05 p0850 A69-16629	05 p0699 A69-16674
05 p0797 A69-16495	05 p0769 A69-16540 #	05 p0789 A69-16585 #	05 p0710 A69-16630	05 p0699 A69-16675
05 p0797 A69-16496*	05 p0781 A69-16541 #	05 p0804 A69-16586	05 p0711 A69-16631	05 p0751 A69-16676
05 p0717 A69-16497*	05 p0781 A69-16542 #	05 p0794 A69-16587	05 p0828 A69-16632	05 p0751 A69-16677
05 p0717 A69-16498*	05 p0842 A69-16543 #	05 p0740 A69-16588	05 p0759 A69-16633	05 p0752 A69-16678
05 p0781 A69-16499	05 p0739 A69-16544	05 p0810 A69-16589	05 p0759 A69-16634	05 p0797 A69-16679
05 p0781 A69-16500	05 p0739 A69-16545	05 p0764 A69-16590	05 p0828 A69-16635 #	05 p0843 A69-16680
05 p0751 A69-16501 #	05 p0777 A69-16546	05 p0721 A69-16591	05 p0789 A69-16636 #	05 p0843 A69-16681
05 p0842 A69-16502 #	05 p0809 A69-16547	05 p0721 A69-16592	05 p0789 A69-16637 #	05 p0843 A69-16682
05 p0830 A69-16503 #	05 p0809 A69-16548	05 p0827 A69-16593	05 p0759 A69-16638 #	05 p0843 A69-16683
05 p0764 A69-16504 #	05 p0804 A69-16549	05 p0734 A69-16594	05 p0759 A69-16639 #	05 p0765 A69-16684
05 p0703 A69-16505 #	05 p0777 A69-16550	05 p0827 A69-16595	05 p0789 A69-16640 #	05 p0794 A69-16685
05 p0827 A69-16506 #	05 p0809 A69-16551	05 p0827 A69-16596	05 p0759 A69-16641 #	05 p0765 A69-16686
05 p0809 A69-16507	05 p0809 A69-16552	05 p0740 A69-16597*	05 p0842 A69-16642 #	05 p0752 A69-16687
05 p0708 A69-16508 #	05 p0732 A69-16553	05 p0740 A69-16598*	05 p0842 A69-16643 #	05 p0752 A69-16688
05 p0708 A69-16509 #	05 p0739 A69-16554	05 p0740 A69-16599*	05 p0843 A69-16644 #	05 p0843 A69-16689
05 p0708 A69-16510 #	05 p0733 A69-16555	05 p0740 A69-16600	05 p0843 A69-16645 #	05 p0843 A69-16690

ACCESSION NUMBER INDEX

05 p0843 A69-16691	05 p0806 A69-16736	05 p0736 A69-16781	06 p1019 A69-16826 #	06 p0975 A69-16871
05 p0782 A69-16692	05 p0752 A69-16737	05 p0736 A69-16782	06 p1020 A69-16827 #	06 p0975 A69-16872
05 p0843 A69-16693	05 p0752 A69-16738	05 p0736 A69-16783	06 p0908 A69-16828 #	06 p0975 A69-16873
05 p0760 A69-16694 #	05 p0844 A69-16739	05 p0723 A69-16784	06 p0899 A69-16829 #	06 p0976 A69-16874
05 p0760 A69-16695 #	05 p0844 A69-16740	05 p0736 A69-16785	06 p0938 A69-16830 #	06 p0976 A69-16875
05 p0843 A69-16696	05 p0844 A69-16741	05 p0723 A69-16786	06 p0892 A69-16831	06 p0976 A69-16876
05 p0797 A69-16697	05 p0844 A69-16742*	05 p0736 A69-16787	06 p0915 A69-16832*	06 p0976 A69-16877*
05 p0798 A69-16698	05 p0735 A69-16743	05 p0723 A69-16788	06 p0997 A69-16833	06 p0976 A69-16878
05 p0805 A69-16699	05 p0752 A69-16744	05 p0777 A69-16789	06 p1040 A69-16834	06 p0976 A69-16879*
05 p0805 A69-16700	05 p0806 A69-16745 #	05 p0736 A69-16790	06 p1040 A69-16835	06 p0977 A69-16880
05 p0715 A69-16701	05 p0765 A69-16746	05 p0736 A69-16791	06 p1040 A69-16836*	06 p0977 A69-16881
05 p0735 A69-16702	05 p0765 A69-16747	05 p0810 A69-16792	06 p1040 A69-16837	06 p0956 A69-16882*
05 p0817 A69-16703 #	05 p0766 A69-16748 #	05 p0777 A69-16793	06 p1041 A69-16838	06 p0977 A69-16883
05 p0829 A69-16704 #	05 p0766 A69-16749 #	05 p0782 A69-16794	06 p1041 A69-16839	06 p0977 A69-16884
05 p0805 A69-16705	05 p0766 A69-16750 #	05 p0782 A69-16795	06 p1041 A69-16840	06 p0956 A69-16885*
05 p0805 A69-16706 #	05 p0766 A69-16751 #	05 p0782 A69-16796	06 p1041 A69-16841	06 p0977 A69-16886
05 p0715 A69-16707	05 p0735 A69-16752 #	05 p0782 A69-16797	06 p1041 A69-16842	06 p0977 A69-16887
05 p0765 A69-16708 #	05 p0736 A69-16753 #	05 p0782 A69-16798	06 p1041 A69-16843	06 p0899 A69-16888*
05 p0817 A69-16709	05 p0766 A69-16754 #	05 p0786 A69-16799	06 p1041 A69-16844	06 p0899 A69-16889
05 p0725 A69-16710	05 p0766 A69-16755*#	05 p0703 A69-16800	06 p1041 A69-16845	06 p0978 A69-16890
05 p0817 A69-16711	05 p0767 A69-16756 #	05 p0711 A69-16801*	06 p1042 A69-16846	06 p0978 A69-16891
05 p0817 A69-16712	05 p0725 A69-16757	05 p0810 A69-16802	06 p1042 A69-16847	06 p0922 A69-16892
05 p0843 A69-16713	05 p0726 A69-16758 #	05 p0810 A69-16803	06 p1042 A69-16848	06 p0947 A69-16893
05 p0817 A69-16714	05 p0743 A69-16759 #	05 p0844 A69-16804	06 p1042 A69-16849	06 p0886 A69-16894
05 p0817 A69-16715	05 p0726 A69-16760	05 p0810 A69-16805	06 p1042 A69-16850	06 p0886 A69-16895
05 p0789 A69-16716	05 p0726 A69-16761 #	05 p0811 A69-16806	06 p1042 A69-16851	06 p1029 A69-16896
05 p0850 A69-16717 #	05 p0722 A69-16762 #	05 p0782 A69-16807	06 p0997 A69-16852	06 p0978 A69-16897
05 p0850 A69-16718**	05 p0844 A69-16763 #	05 p0782 A69-16808	06 p0997 A69-16853 #	06 p0893 A69-16898
05 p0790 A69-16719 #	05 p0844 A69-16764 #	05 p0783 A69-16809	06 p0916 A69-16854 #	06 p0963 A69-16899
05 p0790 A69-16720 #	05 p0726 A69-16765 #	05 p0783 A69-16810	06 p0916 A69-16855 #	06 p0978 A69-16900
05 p0790 A69-16721 #	05 p0722 A69-16766 #	05 p0783 A69-16811	06 p0885 A69-16856 #	06 p0978 A69-16901
05 p0721 A69-16722 #	05 p0726 A69-16767 #	05 p0783 A69-16812	06 p1012 A69-16857 #	06 p0978 A69-16902
05 p0703 A69-16723 #	05 p0726 A69-16768 #	05 p0783 A69-16813	06 p0998 A69-16858 #	06 p0963 A69-16903
05 p0790 A69-16724 #	05 p0726 A69-16769 #	05 p0783 A69-16814	06 p1012 A69-16859 #	06 p0963 A69-16904
05 p0790 A69-16725 #	05 p0727 A69-16770 #	05 p0783 A69-16815	06 p0886 A69-16860 #	06 p0963 A69-16905
05 p0790 A69-16726*#	05 p0727 A69-16771 #	05 p0818 A69-16816	06 p0973 A69-16861	06 p0963 A69-16906
05 p0722 A69-16727 #	05 p0727 A69-16772 #	05 p0830 A69-16817	06 p0974 A69-16862	06 p0963 A69-16907
05 p0722 A69-16728 #	05 p0767 A69-16773	05 p0849 A69-16818	06 p0974 A69-16863	06 p0959 A69-16908
05 p0722 A69-16729 #	05 p0767 A69-16774 #	05 p0795 A69-16819 #	06 p0974 A69-16864	06 p0959 A69-16909
05 p0722 A69-16730 #	05 p0767 A69-16775 #	06 p0857 A69-16820 #	06 p0974 A69-16865	06 p0963 A69-16910
05 p0735 A69-16731 #	05 p0767 A69-16776 #	06 p0997 A69-16821 #	06 p0974 A69-16866*	06 p0963 A69-16911
05 p0741 A69-16732 #	05 p0829 A69-16777	06 p0956 A69-16822 #	06 p0974 A69-16867*	06 p0932 A69-16912
05 p0722 A69-16733 #	05 p0722 A69-16778	06 p0957 A69-16823 #	06 p0975 A69-16868	06 p0932 A69-16913
05 p0806 A69-16734	05 p0723 A69-16779	06 p0954 A69-16824 #	06 p0975 A69-16869	06 p0932 A69-16914
05 p0806 A69-16735	05 p0736 A69-16780	06 p0908 A69-16825 #	06 p0975 A69-16870	06 p0932 A69-16915



# ACCESSION NUMBER INDEX

06 p0959 A69-16916	06 p0878 A69-16961 #	06 p1000 A69-17006*	06 p1013 A69-17051 #	06 p0857 A69-17096 #
06 p0959 A69-16917	06 p0878 A69-16962 #	06 p1000 A69-17007	06 p0949 A69-17052 #	06 p0941 A69-17097 #
06 p0957 A69-16918	06 p0878 A69-16963 #	06 p0916 A69-17008*	06 p1013 A69-17053 #	06 p0857 A69-17098 #
06 p0960 A69-16919	06 p0878 A69-16964 #	06 p1000 A69-17009*	06 p1043 A69-17054 #	06 p1020 A69-17099 #
06 p0963 A69-16920	06 p0879 A69-16965 #	06 p0872 A69-17010	06 p1000 A69-17055 #	06 p0869 A69-17100 #
06 p0932 A69-16921	06 p0906 A69-16966 #	06 p0872 A69-17011*	06 p1043 A69-17056 #	06 p0986 A69-17101 #
06 p0960 A69-16922	06 p0998 A69-16967	06 p0879 A69-17012*	06 p1013 A69-17057 #	06 p0857 A69-17102 #
06 p0932 A69-16923	06 p0998 A69-16968 #	06 p0872 A69-17013	06 p0949 A69-17058 #	06 p0906 A69-17103 #
06 p0923 A69-16924**	06 p0998 A69-16969 #	06 p0872 A69-17014	06 p1043 A69-17059**	06 p0930 A69-17104 #
06 p0886 A69-16925 #	06 p1012 A69-16970 #	06 p0873 A69-17015	06 p0950 A69-17060 #	06 p0873 A69-17105*
06 p0923 A69-16926 #	06 p0999 A69-16971 #	06 p0873 A69-17016	06 p0873 A69-17061 #	06 p0960 A69-17106
06 p0932 A69-16927 #	06 p0999 A69-16972 #	06 p0873 A69-17017	06 p0950 A69-17062 #	06 p0960 A69-17107
06 p0906 A69-16928 #	06 p0999 A69-16973 #	06 p0873 A69-17018*	06 p0954 A69-17063 #	06 p0960 A69-17108
06 p0923 A69-16929 #	06 p0999 A69-16974 #	06 p0873 A69-17019	06 p0917 A69-17064 #	06 p0960 A69-17109
06 p0923 A69-16930 #	06 p0999 A69-16975 #	06 p0873 A69-17020	06 p1013 A69-17065 #	06 p0960 A69-17110
06 p0998 A69-16931*	06 p0999 A69-16976 #	06 p0908 A69-17021 #	06 p0886 A69-17066 #	06 p0908 A69-17111
06 p0923 A69-16932**	06 p0999 A69-16977 #	06 p0908 A69-17022 #	06 p0917 A69-17067 #	06 p0960 A69-17112*
06 p0923 A69-16933	06 p0999 A69-16978 #	06 p0916 A69-17023 #	06 p1043 A69-17068**	06 p0957 A69-17113*
06 p0886 A69-16934*	06 p0985 A69-16979 #	06 p0986 A69-17024 #	06 p0917 A69-17069 #	06 p0884 A69-17114*
06 p0893 A69-16935	06 p0985 A69-16980 #	06 p1029 A69-17025	06 p0950 A69-17070 #	06 p1030 A69-17115
06 p0893 A69-16936	06 p0985 A69-16981 #	06 p1000 A69-17026	06 p0917 A69-17071 #	06 p1030 A69-17116*
06 p0893 A69-16937	06 p1000 A69-16982 #	06 p0960 A69-17027*	06 p0886 A69-17072 #	06 p0979 A69-17117 #
06 p0893 A69-16938	06 p0986 A69-16983 #	06 p0916 A69-17028 #	06 p0950 A69-17073 #	06 p0933 A69-17118 #
06 p0893 A69-16939	06 p1000 A69-16984 #	06 p0949 A69-17029 #	06 p1001 A69-17074**	06 p0923 A69-17119 #
06 p0938 A69-16940	06 p0978 A69-16985	06 p0886 A69-17030 #	06 p0887 A69-17075 #	06 p0941 A69-17120
06 p0939 A69-16941	06 p0978 A69-16986	06 p0986 A69-17031 #	06 p1013 A69-17076 #	06 p0941 A69-17121
06 p0939 A69-16942	06 p0978 A69-16987	06 p0949 A69-17032 #	06 p1013 A69-17077 #	06 p0941 A69-17122
06 p0939 A69-16943	06 p0978 A69-16988	06 p1042 A69-17033 #	06 p0887 A69-17078 #	06 p0941 A69-17123
06 p0939 A69-16944*	06 p0978 A69-16989	06 p1042 A69-17034 #	06 p0963 A69-17079 #	06 p0945 A69-17124
06 p0939 A69-16945*	06 p0978 A69-16990	06 p0873 A69-17035 #	06 p0923 A69-17080 #	06 p0946 A69-17125
06 p0939 A69-16946	06 p0978 A69-16991	06 p0879 A69-17036 #	06 p0950 A69-17081 #	06 p0946 A69-17126
06 p0940 A69-16947	06 p0979 A69-16992	06 p0949 A69-17037 #	06 p0917 A69-17082 #	06 p1020 A69-17127
06 p0940 A69-16948	06 p0979 A69-16993	06 p0916 A69-17038 #	06 p0857 A69-17083 #	06 p1020 A69-17128
06 p0940 A69-16949	06 p0933 A69-16994	06 p0949 A69-17039 #	06 p0879 A69-17084	06 p1020 A69-17129
06 p0940 A69-16950	06 p0979 A69-16995	06 p0879 A69-17040 #	06 p0879 A69-17085	06 p0957 A69-17130
06 p0940 A69-16951	06 p0979 A69-16996	06 p1000 A69-17041 #	06 p0879 A69-17086*	06 p1020 A69-17131
06 p0877 A69-16952	06 p0979 A69-16997	06 p0917 A69-17042 #	06 p0880 A69-17087	06 p1020 A69-17132
06 p0877 A69-16953 #	06 p0979 A69-16998	06 p0886 A69-17043 #	06 p0880 A69-17088	06 p0908 A69-17133
06 p0877 A69-16954 #	06 p0979 A69-16999	06 p1013 A69-17044 #	06 p0880 A69-17089*	06 p0961 A69-17134*
06 p0877 A69-16955 #	06 p0857 A69-17000 #	06 p0886 A69-17045 #	06 p0960 A69-17090 #	06 p0961 A69-17135
06 p0877 A69-16956 #	06 p0930 A69-17001	06 p0945 A69-17046 #	06 p0866 A69-17091	06 p0961 A69-17136*
06 p0877 A69-16957 #	06 p1029 A69-17002 #	06 p0886 A69-17047 #	06 p0940 A69-17092 #	06 p0961 A69-17137*
06 p0878 A69-16958 #	06 p1029 A69-17003 #	06 p0949 A69-17048 #	06 p0930 A69-17093 #	06 p0961 A69-17138*
06 p0878 A69-16959 #	06 p0916 A69-17004	06 p1000 A69-17049 #	06 p0930 A69-17094 #	06 p0961 A69-17139*
06 p0878 A69-16960 #	06 p0949 A69-17005	06 p1042 A69-17050 #	06 p1030 A69-17095 #	06 p0961 A69-17140

# ACCESSION NUMBER INDEX

06 p0961 A69-17141*	06 p1022 A69-17186	06 p0943 A69-17231	06 p0988 A69-17276 #	06 p1003 A69-17321 #
06 p0957 A69-17142*	06 p0984 A69-17187 #	06 p0943 A69-17232	06 p0989 A69-17277 #	06 p1003 A69-17322 #
06 p0963 A69-17143*	06 p0931 A69-17188 #	06 p0869 A69-17233	06 p0989 A69-17278 #	06 p1003 A69-17323 #
06 p0887 A69-17144	06 p1030 A69-17189 #	06 p0943 A69-17234	06 p0989 A69-17279 #	06 p0992 A69-17324 #
06 p1020 A69-17145	06 p0982 A69-17190 #	06 p0943 A69-17235	06 p0989 A69-17280*#	06 p0909 A69-17325 #
06 p1021 A69-17146	06 p0962 A69-17191	06 p0943 A69-17236	06 p0989 A69-17281 #	06 p0964 A69-17326 #
06 p1021 A69-17147*#	06 p1001 A69-17192*	06 p0943 A69-17237	06 p0989 A69-17282 #	06 p0909 A69-17327 #
06 p1021 A69-17148 #	06 p0964 A69-17193 #	06 p0943 A69-17238	06 p0989 A69-17283 #	06 p0909 A69-17328 #
06 p0906 A69-17149*#	06 p0857 A69-17194 #	06 p1022 A69-17239	06 p0924 A69-17284 #	06 p0909 A69-17329 #
06 p0923 A69-17150	06 p1001 A69-17195	06 p0909 A69-17240	06 p0924 A69-17285 #	06 p0910 A69-17330 #
06 p0979 A69-17151	06 p0964 A69-17196 #	06 p1022 A69-17241	06 p0924 A69-17286 #	06 p0858 A69-17331 #
06 p0930 A69-17152	06 p0893 A69-17197 #	06 p0858 A69-17242	06 p0989 A69-17287 #	06 p0910 A69-17332 #
06 p0979 A69-17153	06 p1022 A69-17198 #	06 p0909 A69-17243	06 p0990 A69-17288 #	06 p0910 A69-17333 #
06 p0979 A69-17154	06 p0931 A69-17199	06 p0964 A69-17244	06 p0990 A69-17289 #	06 p0858 A69-17334 #
06 p0893 A69-17155	06 p0931 A69-17200	06 p0962 A69-17245	06 p0990 A69-17290 #	06 p0910 A69-17335 #
06 p0893 A69-17156	06 p0931 A69-17201	06 p0986 A69-17246	06 p0990 A69-17291 #	06 p0910 A69-17336 #
06 p0893 A69-17157	06 p0894 A69-17202	06 p0924 A69-17247	06 p0990 A69-17292 #	06 p0858 A69-17337 #
06 p1001 A69-17158 #	06 p0894 A69-17203	06 p0894 A69-17248	06 p0924 A69-17293 #	06 p0858 A69-17338 #
06 p1001 A69-17159*#	06 p0851 A69-17204	06 p0979 A69-17249	06 p0924 A69-17294 #	06 p0858 A69-17339 #
06 p1001 A69-17160 #	06 p0946 A69-17205 #	06 p0947 A69-17250*	06 p0925 A69-17295 #	06 p0858 A69-17340 #
06 p1001 A69-17161 #	06 p0946 A69-17206 #	06 p0964 A69-17251 #	06 p0925 A69-17296 #	06 p0858 A69-17341 #
06 p1001 A69-17162*#	06 p0909 A69-17207 #	06 p0933 A69-17252 #	06 p0925 A69-17297 #	06 p0910 A69-17342 #
06 p1001 A69-17163*#	06 p0880 A69-17208	06 p0964 A69-17253 #	06 p0990 A69-17298 #	06 p0859 A69-17343 #
06 p0924 A69-17164*#	06 p0880 A69-17209*	06 p0964 A69-17254 #	06 p0990 A69-17299 #	06 p0910 A69-17344 #
06 p0963 A69-17165	06 p0887 A69-17210	06 p0933 A69-17255 #	06 p0990 A69-17300 #	06 p0910 A69-17345 #
06 p0906 A69-17166	06 p0880 A69-17211	06 p0933 A69-17256 #	06 p0990 A69-17301 #	06 p0910 A69-17346 #
06 p0933 A69-17167 #	06 p0924 A69-17212	06 p0933 A69-17257 #	06 p0925 A69-17302 #	06 p0910 A69-17347 #
06 p0930 A69-17168 #	06 p0880 A69-17213	06 p0933 A69-17258 #	06 p0925 A69-17303 #	06 p0911 A69-17348 #
06 p0909 A69-17169	06 p0880 A69-17214	06 p0933 A69-17259 #	06 p0991 A69-17304 #	06 p1030 A69-17349 #
06 p1030 A69-17170	06 p0881 A69-17215*	06 p0934 A69-17260 #	06 p0991 A69-17305 #	06 p0899 A69-17350
06 p0869 A69-17171	06 p0894 A69-17216	06 p0980 A69-17261 #	06 p0991 A69-17306 #	06 p0900 A69-17351
06 p1001 A69-17172	06 p0894 A69-17217	06 p0934 A69-17262 #	06 p0991 A69-17307 #	06 p0900 A69-17352
06 p0887 A69-17173 #	06 p0894 A69-17218	06 p1002 A69-17263 #	06 p0991 A69-17308 #	06 p0900 A69-17353
06 p0964 A69-17174 #	06 p0894 A69-17219	06 p1002 A69-17264 #	06 p0991 A69-17309 #	06 p0900 A69-17354
06 p1021 A69-17175	06 p0891 A69-17220	06 p1002 A69-17265 #	06 p0991 A69-17310 #	06 p0900 A69-17355
06 p1021 A69-17176	06 p0894 A69-17221	06 p1013 A69-17266 #	06 p0992 A69-17311 #	06 p0887 A69-17356
06 p1021 A69-17177	06 p0941 A69-17222	06 p0957 A69-17267	06 p0992 A69-17312 #	06 p0891 A69-17357*
06 p1021 A69-17178	06 p0942 A69-17223	06 p0986 A69-17268	06 p0992 A69-17313 #	06 p0900 A69-17358*
06 p1021 A69-17179	06 p0942 A69-17224	06 p0988 A69-17269 #	06 p1002 A69-17314 #	06 p0900 A69-17359*
06 p1021 A69-17180	06 p0942 A69-17225	06 p0988 A69-17270 #	06 p1002 A69-17315 #	06 p0901 A69-17360
06 p1021 A69-17181	06 p0942 A69-17226	06 p0988 A69-17271 #	06 p1002 A69-17316 #	06 p0947 A69-17361*
06 p1021 A69-17182	06 p0942 A69-17227	06 p0988 A69-17272 #	06 p1002 A69-17317 #	06 p0901 A69-17362*
06 p0924 A69-17183	06 p0942 A69-17228	06 p0988 A69-17273 #	06 p0925 A69-17318 #	06 p0901 A69-17363
06 p1021 A69-17184	06 p0942 A69-17229	06 p0988 A69-17274 #	06 p1002 A69-17319 #	06 p0891 A69-17364
06 p0909 A69-17185	06 p0943 A69-17230	06 p0988 A69-17275 #	06 p1003 A69-17320 #	06 p1022 A69-17365 #



# ACCESSION NUMBER INDEX

06 p1022 A69-17366 #	06 p0903 A69-17411**	06 p0895 A69-17456 #	06 p0944 A69-17501	06 p0934 A69-17546
06 p1022 A69-17367	06 p1030 A69-17412	06 p0934 A69-17457 #	06 p0944 A69-17502	06 p0957 A69-17547
06 p1022 A69-17368	06 p1031 A69-17413	06 p0980 A69-17458 #	06 p0944 A69-17503	06 p0966 A69-17548
06 p1022 A69-17369	06 p1031 A69-17414	06 p0895 A69-17459 #	06 p0944 A69-17504	06 p0934 A69-17549
06 p1023 A69-17370	06 p1031 A69-17415	06 p0895 A69-17460 #	06 p0982 A69-17505	06 p0919 A69-17550
06 p1023 A69-17371	06 p1031 A69-17416	06 p0895 A69-17461 #	06 p1023 A69-17506	06 p0980 A69-17551
06 p1023 A69-17372	06 p1031 A69-17417	06 p0895 A69-17462 #	06 p1023 A69-17507 #	06 p1024 A69-17552
06 p1023 A69-17373	06 p1031 A69-17418	06 p0887 A69-17463 #	06 p1023 A69-17508	06 p0911 A69-17553
06 p1023 A69-17374	06 p1032 A69-17419	06 p0888 A69-17464 #	06 p1024 A69-17509	06 p1033 A69-17554
06 p1023 A69-17375	06 p1032 A69-17420	06 p0934 A69-17465 #	06 p1024 A69-17510	06 p1033 A69-17555*
06 p0943 A69-17376	06 p1032 A69-17421	06 p0934 A69-17466 #	06 p0918 A69-17511	06 p1033 A69-17556*
06 p0992 A69-17377	06 p0982 A69-17422	06 p0934 A69-17467 #	06 p0888 A69-17512	06 p1033 A69-17557
06 p0917 A69-17378	06 p1032 A69-17423	06 p0925 A69-17468	06 p0965 A69-17513*	06 p1033 A69-17558
06 p0992 A69-17379*	06 p1032 A69-17424	06 p0925 A69-17469	06 p0965 A69-17514	06 p1033 A69-17559
06 p0918 A69-17380*	06 p1032 A69-17425	06 p0859 A69-17470 #	06 p0965 A69-17515	06 p1004 A69-17560
06 p0918 A69-17381	06 p0992 A69-17426	06 p0957 A69-17471 #	06 p0965 A69-17516	06 p1005 A69-17561
06 p0925 A69-17382	06 p0993 A69-17427	06 p0895 A69-17472	06 p0965 A69-17517	06 p1005 A69-17562*
06 p0918 A69-17383	06 p0993 A69-17428	06 p0870 A69-17473	06 p0965 A69-17518	06 p1005 A69-17563
06 p0918 A69-17384	06 p0993 A69-17429	06 p0896 A69-17474	06 p0965 A69-17519	06 p1006 A69-17564
06 p0918 A69-17385	06 p0993 A69-17430	06 p0896 A69-17475	06 p0966 A69-17520	06 p1006 A69-17565
06 p1003 A69-17386	06 p0993 A69-17431	06 p0896 A69-17476	06 p0966 A69-17521	06 p1006 A69-17566
06 p0980 A69-17387*	06 p0994 A69-17432	06 p0896 A69-17477	06 p0966 A69-17522	06 p1014 A69-17567
06 p0906 A69-17388	06 p0994 A69-17433	06 p0896 A69-17478	06 p0966 A69-17523	06 p1014 A69-17568
06 p1003 A69-17389	06 p0994 A69-17434	06 p0964 A69-17479 #	06 p0966 A69-17524	06 p1006 A69-17569*
06 p1043 A69-17390 #	06 p0994 A69-17435	06 p0964 A69-17480 #	06 p1024 A69-17525	06 p1006 A69-17570*
06 p0918 A69-17391 #	06 p0994 A69-17436	06 p0926 A69-17481 #	06 p0931 A69-17526	06 p1014 A69-17571
06 p0947 A69-17392 #	06 p0994 A69-17437	06 p0965 A69-17482 #	06 p0946 A69-17527	06 p1006 A69-17572
06 p0947 A69-17393 #	06 p0994 A69-17438	06 p0888 A69-17483 #	06 p0946 A69-17528	06 p0954 A69-17573
06 p0901 A69-17394	06 p0995 A69-17439	06 p0896 A69-17484	06 p0931 A69-17529	06 p1007 A69-17574*
06 p0892 A69-17395**	06 p0995 A69-17440	06 p0896 A69-17485	06 p0946 A69-17530	06 p1007 A69-17575*
06 p0892 A69-17396 #	06 p0995 A69-17441	06 p0888 A69-17486	06 p0888 A69-17531	06 p0955 A69-17576
06 p0906 A69-17397 #	06 p0995 A69-17442	06 p0896 A69-17487	06 p0903 A69-17532	06 p0903 A69-17577*
06 p0902 A69-17398 #	06 p0995 A69-17443	06 p0965 A69-17488*	06 p0897 A69-17533 #	06 p1007 A69-17578
06 p0902 A69-17399 #	06 p0995 A69-17444	06 p0903 A69-17489	06 p1004 A69-17534	06 p0955 A69-17579
06 p0902 A69-17400**	06 p0995 A69-17445	06 p0897 A69-17490	06 p1004 A69-17535	06 p0955 A69-17580*
06 p0866 A69-17401 #	06 p0996 A69-17446	06 p0906 A69-17491 #	06 p0919 A69-17536	06 p1014 A69-17581
06 p0902 A69-17402**	06 p0996 A69-17447	06 p0859 A69-17492 #	06 p1004 A69-17537	06 p0859 A69-17582
06 p0902 A69-17403 #	06 p0996 A69-17448	06 p1003 A69-17493	06 p1004 A69-17538	06 p1014 A69-17583
06 p0902 A69-17404 #	06 p1003 A69-17449	06 p0918 A69-17494	06 p0903 A69-17539	06 p1014 A69-17584
06 p0902 A69-17405 #	06 p0887 A69-17450 #	06 p0948 A69-17495 #	06 p0926 A69-17540	06 p1015 A69-17585
06 p0903 A69-17406**	06 p0894 A69-17451 #	06 p0934 A69-17496 #	06 p0966 A69-17541	06 p1015 A69-17586
06 p0903 A69-17407 #	06 p0894 A69-17452 #	06 p0926 A69-17497 #	06 p0957 A69-17542	06 p0955 A69-17587
06 p0892 A69-17408**	06 p0895 A69-17453 #	06 p0911 A69-17498 #	06 p0897 A69-17543	06 p1015 A69-17588
06 p0903 A69-17409**	06 p0895 A69-17454 #	06 p0926 A69-17499 #	06 p0966 A69-17544	06 p0955 A69-17589*
06 p0947 A69-17410**	06 p0895 A69-17455 #	06 p0948 A69-17500 #	06 p0946 A69-17545	06 p0897 A69-17590

# ACCESSION NUMBER INDEX

06 p1015 A69-17591	06 p0860 A69-17636	06 p0934 A69-17681	06 p0920 A69-17726 #	06 p0935 A69-17771
06 p0911 A69-17592	06 p0861 A69-17637*	06 p0934 A69-17682	06 p1008 A69-17727 #	06 p0980 A69-17772*#
06 p0984 A69-17593	06 p0861 A69-17638	06 p0935 A69-17683	06 p0920 A69-17728 #	06 p0898 A69-17773*#
06 p0982 A69-17594	06 p0966 A69-17639	06 p1025 A69-17684 #	06 p0920 A69-17729 #	06 p0968 A69-17774
06 p0874 A69-17595	06 p0861 A69-17640*	06 p1025 A69-17685 #	06 p0920 A69-17730 #	06 p0968 A69-17775 #
06 p1015 A69-17596	06 p0861 A69-17641	06 p0935 A69-17686 #	06 p0920 A69-17731 #	06 p0935 A69-17776
06 p1016 A69-17597	06 p0881 A69-17642	06 p0927 A69-17687 #	06 p0920 A69-17732 #	06 p0936 A69-17777
06 p1007 A69-17598	06 p0882 A69-17643	06 p0927 A69-17688 #	06 p0996 A69-17733 #	06 p0936 A69-17778 #
06 p1007 A69-17599	06 p0882 A69-17644	06 p0927 A69-17689 #	06 p0920 A69-17734 #	06 p1025 A69-17779
06 p1033 A69-17600	06 p0874 A69-17645	06 p0927 A69-17690 #	06 p0920 A69-17735 #	06 p0911 A69-17780
06 p1007 A69-17601	06 p0874 A69-17646	06 p0927 A69-17691 #	06 p0921 A69-17736 #	06 p0911 A69-17781
06 p1016 A69-17602*	06 p0882 A69-17647	06 p0931 A69-17692 #	06 p0921 A69-17737 #	06 p0931 A69-17782
06 p1033 A69-17603	06 p0882 A69-17648*	06 p1007 A69-17693 #	06 p0967 A69-17738 #	06 p0968 A69-17783
06 p0870 A69-17604	06 p0874 A69-17649	06 p1008 A69-17694 #	06 p0921 A69-17739 #	06 p0968 A69-17784
06 p1017 A69-17605*	06 p0882 A69-17650	06 p1008 A69-17695 #	06 p0897 A69-17740 #	06 p0968 A69-17785
06 p1017 A69-17606*	06 p0888 A69-17651 #	06 p1008 A69-17696 #	06 p0996 A69-17741 #	06 p0948 A69-17786*
06 p1024 A69-17607*	06 p0888 A69-17652 #	06 p1008 A69-17697 #	06 p0921 A69-17742 #	06 p0950 A69-17787 #
06 p1024 A69-17608	06 p0889 A69-17653 #	06 p0927 A69-17698 #	06 p0921 A69-17743 #	06 p0950 A69-17788 #
06 p1017 A69-17609*	06 p0889 A69-17654 #	06 p0897 A69-17699 #	06 p0921 A69-17744 #	06 p0950 A69-17789 #
06 p1024 A69-17610	06 p0889 A69-17655 #	06 p0897 A69-17700 #	06 p0921 A69-17745 #	06 p0951 A69-17790 #
06 p1025 A69-17611	06 p0889 A69-17656 #	06 p0927 A69-17701 #	06 p0921 A69-17746 #	06 p1034 A69-17791 #
06 p0906 A69-17612	06 p0948 A69-17657 #	06 p0897 A69-17702	06 p0921 A69-17747 #	06 p0983 A69-17792*#
06 p1025 A69-17613	06 p0866 A69-17658	06 p0927 A69-17703 #	06 p0921 A69-17748 #	06 p1034 A69-17793 #
06 p1025 A69-17614	06 p0867 A69-17659	06 p0897 A69-17704	06 p0922 A69-17749 #	06 p0969 A69-17794 #
06 p1025 A69-17615	06 p0867 A69-17660	06 p0907 A69-17705*#	06 p0922 A69-17750 #	06 p0885 A69-17795
06 p0919 A69-17616	06 p0867 A69-17661	06 p0935 A69-17706 #	06 p0922 A69-17751 #	06 p0889 A69-17796
06 p0919 A69-17617*	06 p0867 A69-17662	06 p0927 A69-17707 #	06 p0922 A69-17752 #	06 p0898 A69-17797 #
06 p0957 A69-17618	06 p0955 A69-17663	06 p0897 A69-17708*#	06 p0889 A69-17753 #	06 p0889 A69-17798 #
06 p0950 A69-17619	06 p0867 A69-17664	06 p0907 A69-17709*#	06 p0996 A69-17754 #	06 p0890 A69-17799 #
06 p0926 A69-17620*	06 p0867 A69-17665	06 p0958 A69-17710*	06 p0922 A69-17755 #	06 p0890 A69-17800 #
06 p0926 A69-17621	06 p0867 A69-17666	06 p0967 A69-17711	06 p0967 A69-17756*#	06 p0898 A69-17801 #
06 p0888 A69-17622	06 p1043 A69-17667	06 p0958 A69-17712*	06 p0980 A69-17757 #	06 p0898 A69-17802 #
06 p0888 A69-17623	06 p0867 A69-17668	06 p0931 A69-17713 #	06 p0980 A69-17758 #	06 p0962 A69-17803 #
06 p1017 A69-17624	06 p0868 A69-17669	06 p0980 A69-17714	06 p0935 A69-17759 #	06 p1034 A69-17804*#
06 p0859 A69-17625	06 p0882 A69-17670	06 p0967 A69-17715 #	06 p0897 A69-17760 #	06 p0922 A69-17805*#
06 p1034 A69-17626	06 p1017 A69-17671	06 p0967 A69-17716 #	06 p0967 A69-17761 #	06 p0890 A69-17806
06 p0983 A69-17627	06 p1017 A69-17672*	06 p0967 A69-17717 #	06 p0898 A69-17762*#	06 p1008 A69-17807
06 p0984 A69-17628	06 p0966 A69-17673	06 p0967 A69-17718 #	06 p0968 A69-17763 #	06 p1008 A69-17808*#
06 p0984 A69-17629	06 p0958 A69-17674	06 p0861 A69-17719 #	06 p0968 A69-17764	06 p1008 A69-17809*#
06 p0984 A69-17630	06 p0958 A69-17675	06 p0919 A69-17720 #	06 p0898 A69-17765 #	06 p1008 A69-17810*#
06 p0984 A69-17631	06 p0958 A69-17676	06 p0919 A69-17721 #	06 p0968 A69-17766 #	06 p0928 A69-17811*#
06 p0860 A69-17632	06 p0958 A69-17677	06 p0919 A69-17722 #	06 p0935 A69-17767	06 p0861 A69-17812 #
06 p0860 A69-17633	06 p0926 A69-17678	06 p0919 A69-17723 #	06 p0935 A69-17768 #	06 p0911 A69-17813 #
06 p0860 A69-17634	06 p0926 A69-17679	06 p0919 A69-17724 #	06 p0935 A69-17769	06 p1034 A69-17814 #
06 p0860 A69-17635	06 p0934 A69-17680	06 p0920 A69-17725 #	06 p0980 A69-17770 #	06 p0861 A69-17815 #



## ACCESSION NUMBER INDEX

06 p0962 A69-17816*	06 p0890 A69-17861	06 p0969 A69-17906 #	06 p0969 A69-17951	06 p0953 A69-17996 #
06 p0962 A69-17817*	06 p0890 A69-17862*	06 p0969 A69-17907 #	06 p0970 A69-17952	06 p0954 A69-17997 #
06 p0962 A69-17818*	06 p0948 A69-17863	06 p0870 A69-17908 #	06 p0970 A69-17953*	06 p0954 A69-17998 #
06 p0962 A69-17819*	06 p0891 A69-17864	06 p0871 A69-17909 #	06 p0970 A69-17954	06 p0954 A69-17999 #
06 p0962 A69-17820*	06 p0904 A69-17865*	06 p0969 A69-17910 #	06 p0970 A69-17955	06 p0929 A69-18000 #
06 p0962 A69-17821	06 p0948 A69-17866*	06 p0871 A69-17911 #	06 p0970 A69-17956	06 p0954 A69-18001 #
06 p0963 A69-17822*	06 p0891 A69-17867*	06 p0871 A69-17912 #	06 p0970 A69-17957	06 p0936 A69-18002
06 p0898 A69-17823	06 p0948 A69-17868	06 p0969 A69-17913 #	06 p1008 A69-17958	06 p0936 A69-18003
06 p0890 A69-17824	06 p0892 A69-17869	06 p0871 A69-17914 #	06 p1009 A69-17959	06 p0937 A69-18004
06 p0899 A69-17825	06 p1034 A69-17870 #	06 p0969 A69-17915 #	06 p1009 A69-17960	06 p0937 A69-18005
06 p0899 A69-17826	06 p1044 A69-17871	06 p0871 A69-17916 #	06 p1009 A69-17961	06 p0937 A69-18006
06 p0899 A69-17827	06 p0945 A69-17872*	06 p0969 A69-17917 #	06 p1009 A69-17962	06 p0937 A69-18007
06 p0981 A69-17828	06 p0928 A69-17873	06 p0871 A69-17918 #	06 p1009 A69-17963	06 p0937 A69-18008
06 p0868 A69-17829	06 p0932 A69-17874	06 p0871 A69-17919 #	06 p1009 A69-17964	06 p0937 A69-18009
06 p0868 A69-17830	06 p0932 A69-17875	06 p0872 A69-17920 #	06 p1009 A69-17965	06 p0937 A69-18010
06 p1043 A69-17831 #	06 p0907 A69-17876	06 p0872 A69-17921 #	06 p1009 A69-17966	06 p0937 A69-18011
06 p1043 A69-17832 #	06 p0911 A69-17877	06 p0928 A69-17922 #	06 p1009 A69-17967	06 p0938 A69-18012
06 p0868 A69-17833 #	06 p0981 A69-17878 #	06 p0928 A69-17923 #	06 p1009 A69-17968	06 p1026 A69-18013
06 p0874 A69-17834 #	06 p0981 A69-17879 #	06 p0928 A69-17924 #	06 p1009 A69-17969	06 p1026 A69-18014 #
06 p0874 A69-17835	06 p0981 A69-17880 #	06 p0928 A69-17925 #	06 p1010 A69-17970	06 p1026 A69-18015 #
06 p0882 A69-17836 #	06 p0981 A69-17881 #	06 p1034 A69-17926	06 p1010 A69-17971	06 p1026 A69-18016 #
06 p0874 A69-17837*	06 p0936 A69-17882	06 p1034 A69-17927	06 p1010 A69-17972	06 p1026 A69-18017 #
06 p0874 A69-17838	06 p0996 A69-17883	06 p1035 A69-17928	06 p1010 A69-17973	06 p1026 A69-18018 #
06 p0875 A69-17839 #	06 p0892 A69-17884*	06 p1035 A69-17929	06 p1010 A69-17974	06 p1026 A69-18019 #
06 p0875 A69-17840	06 p0885 A69-17885*	06 p1035 A69-17930	06 p1010 A69-17975	06 p1027 A69-18020 #
06 p0883 A69-17841 #	06 p0904 A69-17886 #	06 p1035 A69-17931	06 p0951 A69-17976	06 p0875 A69-18021 #
06 p0885 A69-17842 #	06 p0949 A69-17887 #	06 p1035 A69-17932	06 p0929 A69-17977 #	06 p0875 A69-18022 #
06 p0883 A69-17843	06 p0959 A69-17888 #	06 p1035 A69-17933	06 p0929 A69-17978 #	06 p0876 A69-18023 #
06 p0875 A69-17844	06 p0949 A69-17889 #	06 p1035 A69-17934	06 p0929 A69-17979 #	06 p0876 A69-18024 #
06 p0883 A69-17845	06 p0928 A69-17890	06 p1035 A69-17935	06 p0929 A69-17980 #	06 p0883 A69-18025 #
06 p0875 A69-17846 #	06 p0981 A69-17891	06 p0885 A69-17936	06 p0929 A69-17981 #	06 p0876 A69-18026 #
06 p0883 A69-17847 #	06 p0981 A69-17892	06 p0885 A69-17937	06 p0951 A69-17982 #	06 p0983 A69-18027 #
06 p0875 A69-17848	06 p0981 A69-17893	06 p0956 A69-17938*	06 p0952 A69-17983 #	06 p0876 A69-18028 #
06 p0883 A69-17849	06 p0945 A69-17894 #	06 p0904 A69-17939*	06 p0952 A69-17984 #	06 p0884 A69-18029 #
06 p0875 A69-17850	06 p0945 A69-17895 #	06 p0904 A69-17940*	06 p0952 A69-17985 #	06 p0884 A69-18030 #
06 p0883 A69-17851	06 p0945 A69-17896 #	06 p0904 A69-17941*	06 p0952 A69-17986 #	06 p0876 A69-18031 #
06 p0944 A69-17852*	06 p0945 A69-17897 #	06 p0904 A69-17942	06 p0952 A69-17987 #	06 p0884 A69-18032 #
06 p0944 A69-17853*	06 p0932 A69-17898 #	06 p0904 A69-17943*	06 p0952 A69-17988 #	06 p0876 A69-18033 #
06 p0944 A69-17854	06 p0868 A69-17899	06 p1017 A69-17944	06 p0952 A69-17989 #	06 p0891 A69-18034 #
06 p0944 A69-17855*	06 p0936 A69-17900 #	06 p0905 A69-17945*	06 p0953 A69-17990 #	06 p0884 A69-18035 #
06 p0904 A69-17856	06 p0936 A69-17901*#	06 p0905 A69-17946*	06 p0953 A69-17991 #	06 p0884 A69-18036 #
06 p0932 A69-17857	06 p0928 A69-17902	06 p0905 A69-17947*	06 p0953 A69-17992 #	06 p0884 A69-18037 #
06 p0955 A69-17858	06 p0928 A69-17903	06 p0905 A69-17948*	06 p0953 A69-17993 #	06 p0954 A69-18038*#
06 p0956 A69-17859	06 p0928 A69-17904	06 p0905 A69-17949*	06 p0953 A69-17994	06 p0862 A69-18039 #
06 p0890 A69-17860	06 p0870 A69-17905	06 p0905 A69-17950*	06 p0953 A69-17995 #	06 p0862 A69-18040 #

## ACCESSION NUMBER INDEX

06 p0911 A69-18041 #	06 p1037 A69-18086 #	06 p0959 A69-18131 #	06 p0865 A69-18176**	06 p0938 A69-18221
06 p1010 A69-18042**	06 p1037 A69-18087 #	06 p0914 A69-18132 #	06 p0876 A69-18177*	06 p0959 A69-18222
06 p0912 A69-18043 #	06 p1018 A69-18088 #	06 p1028 A69-18133**	06 p1038 A69-18178 #	06 p0915 A69-18223 #
06 p0862 A69-18044 #	06 p1019 A69-18089 #	06 p0868 A69-18134**	06 p1038 A69-18179**	06 p0922 A69-18224
06 p0912 A69-18045 #	06 p1011 A69-18090**	06 p0914 A69-18135 #	06 p0915 A69-18180 #	06 p1012 A69-18225
06 p1036 A69-18046**	06 p0971 A69-18091 #	06 p0956 A69-18136 #	06 p1028 A69-18181 #	06 p1012 A69-18226
06 p0862 A69-18047 #	06 p0905 A69-18092 #	06 p0864 A69-18137 #	06 p1039 A69-18182**	06 p1012 A69-18227
06 p0862 A69-18048 #	06 p1011 A69-18093 #	06 p0864 A69-18138 #	06 p0956 A69-18183**	06 p0930 A69-18228 #
06 p0912 A69-18049 #	06 p0913 A69-18094**	06 p0914 A69-18139 #	06 p0865 A69-18184**	06 p0938 A69-18229 #
06 p0862 A69-18050 #	06 p0913 A69-18095 #	06 p0971 A69-18140**	06 p1039 A69-18185**	06 p0972 A69-18230 #
06 p1036 A69-18051 #	06 p1011 A69-18096**	06 p0864 A69-18141 #	06 p0972 A69-18186 #	06 p0938 A69-18231 #
06 p0863 A69-18052**	06 p1037 A69-18097 #	06 p1028 A69-18142 #	06 p1019 A69-18187**	06 p0981 A69-18232*
06 p1017 A69-18053 #	06 p0929 A69-18098 #	06 p1028 A69-18143 #	06 p0907 A69-18188 #	06 p0982 A69-18233*
06 p1036 A69-18054 #	06 p0930 A69-18099 #	06 p0869 A69-18144 #	06 p0907 A69-18189 #	06 p0982 A69-18234*
06 p1036 A69-18055**	06 p1037 A69-18100 #	06 p0971 A69-18145**	06 p0915 A69-18190 #	06 p0982 A69-18235*
06 p0912 A69-18056 #	06 p0863 A69-18101 #	06 p1038 A69-18146**	06 p0972 A69-18191 #	06 p0947 A69-18236
06 p0868 A69-18057 #	06 p0983 A69-18102 #	06 p0872 A69-18147**	06 p0972 A69-18192 #	06 p1019 A69-18237
06 p0868 A69-18058**	06 p0913 A69-18103	06 p0947 A69-18148 #	06 p1029 A69-18193**	06 p0876 A69-18238 #
06 p0863 A69-18059 #	06 p1011 A69-18104**	06 p1038 A69-18149**	06 p1029 A69-18194 #	06 p1012 A69-18239 #
06 p1027 A69-18060 #	06 p1028 A69-18105 #	06 p0869 A69-18150 #	06 p0985 A69-18195**	06 p1012 A69-18240 #
06 p1027 A69-18061**	06 p0913 A69-18106 #	06 p0983 A69-18151 #	06 p1039 A69-18196 #	07 p1158 A69-18241
06 p0863 A69-18062 #	06 p1018 A69-18107**	06 p0983 A69-18152 #	06 p0972 A69-18197 #	07 p1196 A69-18242
06 p1036 A69-18063 #	06 p1018 A69-18108**	06 p0869 A69-18153 #	06 p1039 A69-18198 #	07 p1196 A69-18243
06 p0907 A69-18064**	06 p1037 A69-18109**	06 p0945 A69-18154**	06 p1011 A69-18199 #	07 p1089 A69-18244
06 p1010 A69-18065**	06 p0907 A69-18110 #	06 p0947 A69-18155 #	06 p0865 A69-18200 #	07 p1130 A69-18245
06 p1018 A69-18066 #	06 p0885 A69-18111**	06 p1018 A69-18156 #	06 p0865 A69-18201 #	07 p1114 A69-18246
06 p1010 A69-18067 #	06 p0863 A69-18112 #	06 p0869 A69-18157 #	06 p0884 A69-18202**	07 p1089 A69-18247
06 p0863 A69-18068 #	06 p0996 A69-18113**	06 p0864 A69-18158 #	06 p0908 A69-18203 #	07 p1089 A69-18248 #
06 p1027 A69-18069 #	06 p1037 A69-18114 #	06 p1028 A69-18159 #	06 p1019 A69-18204**	07 p1089 A69-18249 #
06 p1027 A69-18070 #	06 p0914 A69-18115 #	06 p0997 A69-18160 #	06 p1039 A69-18205 #	07 p1143 A69-18250
06 p0891 A69-18071 #	06 p0971 A69-18116 #	06 p0864 A69-18161**	06 p1029 A69-18206 #	07 p1225 A69-18251
06 p1036 A69-18072**	06 p0984 A69-18117**	06 p0983 A69-18162 #	06 p0908 A69-18207**	07 p1144 A69-18252 #
06 p0912 A69-18073 #	06 p0983 A69-18118 #	06 p0914 A69-18163 #	06 p0866 A69-18208 #	07 p1122 A69-18253
06 p1027 A69-18074**	06 p1037 A69-18119**	06 p0864 A69-18164**	06 p1019 A69-18209**	07 p1052 A69-18254
06 p0912 A69-18075 #	06 p0863 A69-18120 #	06 p0985 A69-18165 #	06 p1019 A69-18210**	07 p1057 A69-18255
06 p1018 A69-18076**	06 p0905 A69-18121 #	06 p1028 A69-18166 #	06 p1039 A69-18211 #	07 p1089 A69-18256
06 p0912 A69-18077 #	06 p1044 A69-18122**	06 p0865 A69-18167**	06 p1039 A69-18212 #	07 p1130 A69-18257
06 p0913 A69-18078 #	06 p0971 A69-18123**	06 p1019 A69-18168 #	06 p0915 A69-18213**	07 p1130 A69-18258
06 p0884 A69-18079**	06 p0985 A69-18124 #	06 p1011 A69-18169 #	06 p0866 A69-18214 #	07 p1116 A69-18259
06 p0913 A69-18080 #	06 p0959 A69-18125 #	06 p0915 A69-18170 #	06 p1040 A69-18215 #	07 p1116 A69-18260
06 p0956 A69-18081 #	06 p1038 A69-18126**	06 p0972 A69-18171**	06 p1029 A69-18216 #	07 p1116 A69-18261
06 p0984 A69-18082 #	06 p0914 A69-18127 #	06 p0915 A69-18172 #	06 p0981 A69-18217	07 p1172 A69-18262 #
06 p1036 A69-18083**	06 p0971 A69-18128**	06 p0865 A69-18173 #	06 p0930 A69-18218	07 p1130 A69-18263
06 p0970 A69-18084 #	06 p0997 A69-18129 #	06 p1038 A69-18174 #	06 p0959 A69-18219	07 p1230 A69-18264
06 p1011 A69-18085 #	06 p0864 A69-18130 #	06 p0985 A69-18175 #	06 p0972 A69-18220	07 p1230 A69-18265 #



## ACCESSION NUMBER INDEX

07 p1239 A69-18266 #	07 p1203 A69-18311	07 p1240 A69-18356 #	07 p1144 A69-18401	07 p1196 A69-18446
07 p1188 A69-18267 #	07 p1049 A69-18312	07 p1240 A69-18357 #	07 p1158 A69-18402 #	07 p1097 A69-18447
07 p1196 A69-18268 #	07 p1130 A69-18313	07 p1240 A69-18358 #	07 p1231 A69-18403 #	07 p1197 A69-18448
07 p1231 A69-18269 #	07 p1072 A69-18314	07 p1240 A69-18359 #	07 p1180 A69-18404	07 p1097 A69-18449
07 p1175 A69-18270	07 p1073 A69-18315 #	07 p1240 A69-18360 #	07 p1131 A69-18405	07 p1097 A69-18450
07 p1052 A69-18271	07 p1239 A69-18316 #	07 p1202 A69-18361	07 p1211 A69-18406	07 p1197 A69-18451
07 p1072 A69-18272*	07 p1118 A69-18317*#	07 p1240 A69-18362*#	07 p1211 A69-18407	07 p1197 A69-18452
07 p1188 A69-18273	07 p1073 A69-18318 #	07 p1202 A69-18363 #	07 p1211 A69-18408	07 p1097 A69-18453
07 p1188 A69-18274	07 p1073 A69-18319 #	07 p1202 A69-18364 #	07 p1172 A69-18409	07 p1197 A69-18454
07 p1188 A69-18275	07 p1073 A69-18320 #	07 p1203 A69-18365*#	07 p1131 A69-18410	07 p1097 A69-18455
07 p1188 A69-18276	07 p1239 A69-18321 #	07 p1241 A69-18366 #	07 p1180 A69-18411	07 p1098 A69-18456
07 p1188 A69-18277	07 p1240 A69-18322*#	07 p1241 A69-18367 #	07 p1137 A69-18412	07 p1098 A69-18457
07 p1188 A69-18278	07 p1226 A69-18323 #	07 p1202 A69-18368 #	07 p1049 A69-18413 #	07 p1098 A69-18458
07 p1114 A69-18279	07 p1226 A69-18324*#	07 p1241 A69-18369	07 p1052 A69-18414 #	07 p1098 A69-18459
07 p1075 A69-18280	07 p1226 A69-18325 #	07 p1202 A69-18370 #	07 p1203 A69-18415 #	07 p1098 A69-18460
07 p1089 A69-18281	07 p1226 A69-18326 #	07 p1210 A69-18371	07 p1049 A69-18416 #	07 p1098 A69-18461
07 p1188 A69-18282	07 p1226 A69-18327 #	07 p1090 A69-18372	07 p1050 A69-18417 #	07 p1099 A69-18462
07 p1189 A69-18283	07 p1226 A69-18328*#	07 p1059 A69-18373*	07 p1203 A69-18418 #	07 p1099 A69-18463
07 p1090 A69-18284	07 p1226 A69-18329 #	07 p1073 A69-18374*	07 p1073 A69-18419*	07 p1099 A69-18464
07 p1144 A69-18285	07 p1227 A69-18330 #	07 p1073 A69-18375*	07 p1090 A69-18420	07 p1197 A69-18465
07 p1114 A69-18286	07 p1231 A69-18331*#	07 p1243 A69-18376	07 p1093 A69-18421	07 p1197 A69-18466
07 p1114 A69-18287	07 p1227 A69-18332 #	07 p1172 A69-18377	07 p1094 A69-18422	07 p1197 A69-18467
07 p1184 A69-18288*#	07 p1227 A69-18333 #	07 p1172 A69-18378	07 p1094 A69-18423	07 p1144 A69-18468
07 p1144 A69-18289 #	07 p1227 A69-18334*#	07 p1210 A69-18379	07 p1094 A69-18424*	07 p1144 A69-18469
07 p1114 A69-18290 #	07 p1227 A69-18335 #	07 p1069 A69-18380	07 p1094 A69-18425	07 p1144 A69-18470
07 p1114 A69-18291 #	07 p1227 A69-18336 #	07 p1088 A69-18381	07 p1094 A69-18426	07 p1144 A69-18471
07 p1090 A69-18292 #	07 p1227 A69-18337 #	07 p1114 A69-18382*	07 p1094 A69-18427	07 p1075 A69-18472
07 p1118 A69-18293 #	07 p1228 A69-18338*#	07 p1070 A69-18383*	07 p1095 A69-18428	07 p1145 A69-18473
07 p1090 A69-18294 #	07 p1228 A69-18339 #	07 p1070 A69-18384 #	07 p1095 A69-18429	07 p1145 A69-18474
07 p1122 A69-18295 #	07 p1204 A69-18340 #	07 p1070 A69-18385	07 p1095 A69-18430	07 p1145 A69-18475
07 p1122 A69-18296 #	07 p1228 A69-18341*#	07 p1088 A69-18386 #	07 p1095 A69-18431	07 p1145 A69-18476
07 p1122 A69-18297 #	07 p1228 A69-18342 #	07 p1088 A69-18387	07 p1095 A69-18432	07 p1145 A69-18477
07 p1196 A69-18298 #	07 p1123 A69-18343*#	07 p1070 A69-18388	07 p1095 A69-18433	07 p1145 A69-18478
07 p1118 A69-18299 #	07 p1228 A69-18344 #	07 p1058 A69-18389	07 p1096 A69-18434	07 p1145 A69-18479
07 p1130 A69-18300 #	07 p1228 A69-18345 #	07 p1210 A69-18390	07 p1096 A69-18435	07 p1146 A69-18480
07 p1239 A69-18301	07 p1228 A69-18346*#	07 p1204 A69-18391	07 p1114 A69-18436*	07 p1146 A69-18481
07 p1239 A69-18302	07 p1229 A69-18347 #	07 p1049 A69-18392	07 p1096 A69-18437	07 p1146 A69-18482*
07 p1239 A69-18303*	07 p1229 A69-18348 #	07 p1118 A69-18393	07 p1096 A69-18438	07 p1146 A69-18483
07 p1116 A69-18304	07 p1229 A69-18349 #	07 p1118 A69-18394	07 p1189 A69-18439	07 p1146 A69-18484
07 p1239 A69-18305*	07 p1229 A69-18350*#	07 p1049 A69-18395	07 p1096 A69-18440	07 p1131 A69-18485
07 p1178 A69-18306	07 p1229 A69-18351 #	07 p1118 A69-18396	07 p1096 A69-18441	07 p1146 A69-18486
07 p1158 A69-18307	07 p1203 A69-18352 #	07 p1049 A69-18397	07 p1096 A69-18442	07 p1147 A69-18487
07 p1057 A69-18308	07 p1073 A69-18353	07 p1049 A69-18398	07 p1097 A69-18443	07 p1147 A69-18488
07 p1058 A69-18309	07 p1201 A69-18354 #	07 p1090 A69-18399	07 p1196 A69-18444	07 p1189 A69-18489
07 p1203 A69-18310	07 p1202 A69-18355 #	07 p1090 A69-18400	07 p1097 A69-18445	07 p1184 A69-18490

# ACCESSION NUMBER INDEX

07 p1176 A69-18491	07 p1159 A69-18536 #	07 p1061 A69-18581 #	07 p1139 A69-18626	07 p1102 A69-18671
07 p1229 A69-18492	07 p1059 A69-18537 #	07 p1061 A69-18582 #	07 p1159 A69-18627*	07 p1102 A69-18672
07 p1075 A69-18493	07 p1131 A69-18538 #	07 p1061 A69-18583 #	07 p1074 A69-18628*	07 p1132 A69-18673
07 p1099 A69-18494	07 p1189 A69-18539 #	07 p1061 A69-18584 #	07 p1063 A69-18629*	07 p1077 A69-18674
07 p1172 A69-18495	07 p1118 A69-18540 #	07 p1062 A69-18585 #	07 p1074 A69-18630*	07 p1123 A69-18675
07 p1173 A69-18496	07 p1147 A69-18541 #	07 p1062 A69-18586 #	07 p1074 A69-18631*	07 p1132 A69-18676
07 p1173 A69-18497	07 p1147 A69-18542 #	07 p1062 A69-18587 #	07 p1064 A69-18632*	07 p1175 A69-18677
07 p1173 A69-18498	07 p1147 A69-18543 #	07 p1062 A69-18588 #	07 p1074 A69-18633*	07 p1244 A69-18678 #
07 p1173 A69-18499	07 p1211 A69-18544	07 p1062 A69-18589 #	07 p1064 A69-18634*	07 p1199 A69-18679
07 p1173 A69-18500	07 p1211 A69-18545	07 p1062 A69-18590 #	07 p1074 A69-18635*	07 p1199 A69-18680
07 p1231 A69-18501	07 p1212 A69-18546	07 p1062 A69-18591 #	07 p1064 A69-18636*	07 p1199 A69-18681
07 p1231 A69-18502	07 p1212 A69-18547 #	07 p1062 A69-18592 #	07 p1064 A69-18637*	07 p1199 A69-18682
07 p1211 A69-18503	07 p1212 A69-18548 #	07 p1063 A69-18593 #	07 p1077 A69-18638 #	07 p1199 A69-18683
07 p1189 A69-18504	07 p1180 A69-18549	07 p1063 A69-18594 #	07 p1100 A69-18639	07 p1199 A69-18684
07 p1198 A69-18505	07 p1052 A69-18550	07 p1063 A69-18595 #	07 p1131 A69-18640 #	07 p1148 A69-18685
07 p1198 A69-18506	07 p1131 A69-18551	07 p1063 A69-18596 #	07 p1173 A69-18641*	07 p1199 A69-18686
07 p1180 A69-18507	07 p1131 A69-18552 #	07 p1063 A69-18597 #	07 p1198 A69-18642*	07 p1199 A69-18687
07 p1189 A69-18508	07 p1076 A69-18553	07 p1063 A69-18598 #	07 p1184 A69-18643**	07 p1148 A69-18688
07 p1198 A69-18509	07 p1231 A69-18554	07 p1204 A69-18599	07 p1058 A69-18644*	07 p1199 A69-18689
07 p1076 A69-18510	07 p1100 A69-18555 #	07 p1212 A69-18600	07 p1100 A69-18645	07 p1148 A69-18690
07 p1198 A69-18511	07 p1100 A69-18556 #	07 p1212 A69-18601*	07 p1198 A69-18646	07 p1189 A69-18691
07 p1198 A69-18512	07 p1076 A69-18557 #	07 p1212 A69-18602	07 p1198 A69-18647	07 p1190 A69-18692
07 p1198 A69-18513	07 p1137 A69-18558	07 p1212 A69-18603	07 p1100 A69-18648	07 p1190 A69-18693
07 p1115 A69-18514*	07 p1137 A69-18559	07 p1213 A69-18604*	07 p1199 A69-18649	07 p1190 A69-18694
07 p1099 A69-18515 #	07 p1137 A69-18560	07 p1213 A69-18605*	07 p1101 A69-18650	07 p1190 A69-18695
07 p1211 A69-18516 #	07 p1138 A69-18561	07 p1213 A69-18606*	07 p1101 A69-18651	07 p1241 A69-18696
07 p1131 A69-18517 #	07 p1138 A69-18562	07 p1213 A69-18607*	07 p1101 A69-18652	07 p1190 A69-18697
07 p1076 A69-18518 #	07 p1138 A69-18563	07 p1213 A69-18608	07 p1101 A69-18653	07 p1118 A69-18698
07 p1076 A69-18519 #	07 p1138 A69-18564	07 p1213 A69-18609*	07 p1101 A69-18654	07 p1231 A69-18699
07 p1076 A69-18520 #	07 p1138 A69-18565	07 p1213 A69-18610	07 p1101 A69-18655	07 p1118 A69-18700
07 p1076 A69-18521 #	07 p1138 A69-18566	07 p1213 A69-18611	07 p1101 A69-18656	07 p1118 A69-18701
07 p1099 A69-18522 #	07 p1139 A69-18567	07 p1213 A69-18612	07 p1189 A69-18657	07 p1118 A69-18702
07 p1147 A69-18523 #	07 p1070 A69-18568 #	07 p1214 A69-18613	07 p1101 A69-18658	07 p1050 A69-18703
07 p1147 A69-18524 #	07 p1060 A69-18569 #	07 p1214 A69-18614	07 p1102 A69-18659	07 p1119 A69-18704
07 p1076 A69-18525 #	07 p1060 A69-18570 #	07 p1214 A69-18615*	07 p1102 A69-18660	07 p1119 A69-18705
07 p1099 A69-18526 #	07 p1060 A69-18571 #	07 p1214 A69-18616	07 p1052 A69-18661 #	07 p1215 A69-18706
07 p1076 A69-18527 #	07 p1060 A69-18572 #	07 p1100 A69-18617	07 p1214 A69-18662	07 p1050 A69-18707
07 p1189 A69-18528 #	07 p1060 A69-18573 #	07 p1100 A69-18618	07 p1214 A69-18663 #	07 p1241 A69-18708
07 p1100 A69-18529 #	07 p1060 A69-18574 #	07 p1198 A69-18619	07 p1214 A69-18664	07 p1244 A69-18709
07 p1147 A69-18530 #	07 p1060 A69-18575 #	07 p1198 A69-18620	07 p1214 A69-18665	07 p1170 A69-18710
07 p1147 A69-18531 #	07 p1060 A69-18576 #	07 p1100 A69-18621	07 p1214 A69-18666	07 p1231 A69-18711
07 p1158 A69-18532 #	07 p1061 A69-18577 #	07 p1100 A69-18622	07 p1214 A69-18667	07 p1170 A69-18712
07 p1159 A69-18533 #	07 p1061 A69-18578 #	07 p1139 A69-18623*	07 p1215 A69-18668	07 p1170 A69-18713
07 p1159 A69-18534 #	07 p1061 A69-18579 #	07 p1139 A69-18624*	07 p1077 A69-18669	07 p1232 A69-18714
07 p1159 A69-18535 #	07 p1061 A69-18580 #	07 p1139 A69-18625	07 p1102 A69-18670	07 p1170 A69-18715



## ACCESSION NUMBER INDEX

07 p1170 A69-18716	07 p1161 A69-18761 #	07 p1123 A69-18806 #	07 p1205 A69-18851	07 p1175 A69-18896 #
07 p1170 A69-18717	07 p1161 A69-18762 #	07 p1123 A69-18807 #	07 p1125 A69-18852	07 p1149 A69-18897 #
07 p1232 A69-18718	07 p1161 A69-18763 #	07 p1241 A69-18808 #	07 p1078 A69-18853	07 p1149 A69-18898 #
07 p1232 A69-18719	07 p1161 A69-18764 #	07 p1180 A69-18809 #	07 p1216 A69-18854 #	07 p1149 A69-18899 #
07 p1170 A69-18720	07 p1161 A69-18765 #	07 p1180 A69-18810 #	07 p1216 A69-18855 #	07 p1149 A69-18900
07 p1159 A69-18721	07 p1161 A69-18766 #	07 p1180 A69-18811 #	07 p1148 A69-18856	07 p1149 A69-18901
07 p1159 A69-18722	07 p1161 A69-18767 #	07 p1120 A69-18812 #	07 p1148 A69-18857	07 p1190 A69-18902 #
07 p1159 A69-18723	07 p1161 A69-18768 #	07 p1190 A69-18813 #	07 p1115 A69-18858	07 p1199 A69-18903 #
07 p1170 A69-18724	07 p1161 A69-18769 #	07 p1190 A69-18814 #	07 p1078 A69-18859*	07 p1149 A69-18904
07 p1232 A69-18725	07 p1162 A69-18770 #	07 p1180 A69-18815 #	07 p1102 A69-18860	07 p1104 A69-18905*#
07 p1171 A69-18726	07 p1162 A69-18771 #	07 p1123 A69-18816	07 p1102 A69-18861	07 p1165 A69-18906
07 p1171 A69-18727	07 p1162 A69-18772 #	07 p1123 A69-18817	07 p1102 A69-18862	07 p1070 A69-18907
07 p1173 A69-18728	07 p1162 A69-18773 #	07 p1123 A69-18818	07 p1148 A69-18863	07 p1149 A69-18908
07 p1173 A69-18729	07 p1162 A69-18774 #	07 p1215 A69-18819	07 p1115 A69-18864*	07 p1205 A69-18909
07 p1173 A69-18730	07 p1162 A69-18775 #	07 p1124 A69-18820	07 p1132 A69-18865	07 p1203 A69-18910
07 p1173 A69-18731	07 p1162 A69-18776 #	07 p1215 A69-18821	07 p1078 A69-18866	07 p1184 A69-18911
07 p1215 A69-18732	07 p1163 A69-18777 #	07 p1124 A69-18822	07 p1203 A69-18867 #	07 p1078 A69-18912
07 p1174 A69-18733	07 p1163 A69-18778 #	07 p1204 A69-18823	07 p1052 A69-18868 #	07 p1078 A69-18913
07 p1050 A69-18734	07 p1163 A69-18779 #	07 p1124 A69-18824	07 p1052 A69-18869 #	07 p1078 A69-18914
07 p1119 A69-18735	07 p1163 A69-18780 #	07 p1178 A69-18825*	07 p1053 A69-18870	07 p1125 A69-18915*
07 p1050 A69-18736	07 p1163 A69-18781 #	07 p1077 A69-18826	07 p1053 A69-18871 #	07 p1078 A69-18916
07 p1119 A69-18737	07 p1163 A69-18782 #	07 p1132 A69-18827*	07 p1053 A69-18872 #	07 p1132 A69-18917
07 p1119 A69-18738	07 p1163 A69-18783 #	07 p1077 A69-18828	07 p1132 A69-18873 #	07 p1079 A69-18918
07 p1050 A69-18739	07 p1163 A69-18784 #	07 p1077 A69-18829	07 p1102 A69-18874	07 p1190 A69-18919*
07 p1050 A69-18740	07 p1164 A69-18785 #	07 p1078 A69-18830	07 p1102 A69-18875*	07 p1079 A69-18920
07 p1050 A69-18741	07 p1164 A69-18786 #	07 p1078 A69-18831	07 p1103 A69-18876	07 p1241 A69-18921 #
07 p1050 A69-18742	07 p1164 A69-18787 #	07 p1215 A69-18832	07 p1103 A69-18877	07 p1050 A69-18922 #
07 p1119 A69-18743	07 p1164 A69-18788 #	07 p1204 A69-18833*	07 p1103 A69-18878	07 p1241 A69-18923 #
07 p1119 A69-18744	07 p1139 A69-18789 #	07 p1124 A69-18834*	07 p1103 A69-18879	07 p1241 A69-18924 #
07 p1119 A69-18745	07 p1164 A69-18790*	07 p1124 A69-18835*	07 p1103 A69-18880	07 p1149 A69-18925 #
07 p1119 A69-18746	07 p1164 A69-18791	07 p1204 A69-18836	07 p1103 A69-18881	07 p1242 A69-18926 #
07 p1119 A69-18747	07 p1165 A69-18792	07 p1124 A69-18837	07 p1103 A69-18882	07 p1181 A69-18927
07 p1119 A69-18748	07 p1165 A69-18793*	07 p1124 A69-18838*	07 p1103 A69-18883	07 p1181 A69-18928
07 p1119 A69-18749	07 p1139 A69-18794	07 p1124 A69-18839*	07 p1103 A69-18884	07 p1190 A69-18929
07 p1119 A69-18750	07 p1139 A69-18795 #	07 p1125 A69-18840	07 p1104 A69-18885	07 p1120 A69-18930
07 p1119 A69-18751	07 p1139 A69-18796 #	07 p1125 A69-18841	07 p1104 A69-18886	07 p1165 A69-18931 #
07 p1050 A69-18752	07 p1140 A69-18797*#	07 p1125 A69-18842*	07 p1104 A69-18887	07 p1171 A69-18932 #
07 p1050 A69-18753	07 p1140 A69-18798 #	07 p1215 A69-18843*	07 p1104 A69-18888	07 p1165 A69-18933 #
07 p1120 A69-18754	07 p1140 A69-18799 #	07 p1078 A69-18844*	07 p1115 A69-18889	07 p1232 A69-18934 #
07 p1050 A69-18755	07 p1148 A69-18800 #	07 p1215 A69-18845*	07 p1104 A69-18890	07 p1149 A69-18935 #
07 p1050 A69-18756	07 p1132 A69-18801 #	07 p1125 A69-18846	07 p1104 A69-18891	07 p1149 A69-18936 #
07 p1190 A69-18757	07 p1148 A69-18802 #	07 p1125 A69-18847*	07 p1104 A69-18892	07 p1150 A69-18937 #
07 p1077 A69-18758 #	07 p1148 A69-18803 #	07 p1125 A69-18848*	07 p1148 A69-18893	07 p1058 A69-18938
07 p1077 A69-18759 #	07 p1148 A69-18804 #	07 p1205 A69-18849	07 p1216 A69-18894	07 p1165 A69-18939
07 p1160 A69-18760	07 p1174 A69-18805 #	07 p1125 A69-18850	07 p1175 A69-18895 #	07 p1165 A69-18940

ACCESSION NUMBER INDEX

07 p1165 A69-18941	07 p1191 A69-18986 #	07 p1059 A69-19031 #	07 p1153 A69-19076	07 p1083 A69-19121
07 p1079 A69-18942	07 p1191 A69-18987 #	07 p1193 A69-19032*#	07 p1154 A69-19077	07 p1083 A69-19122*
07 p1064 A69-18943	07 p1191 A69-18988 #	07 p1181 A69-19033 #	07 p1154 A69-19078	07 p1083 A69-19123
07 p1079 A69-18944*	07 p1120 A69-18989 #	07 p1193 A69-19034	07 p1154 A69-19079	07 p1083 A69-19124*
07 p1175 A69-18945	07 p1120 A69-18990 #	07 p1176 A69-19035 #	07 p1154 A69-19080	07 p1083 A69-19125*
07 p1125 A69-18946*	07 p1242 A69-18991 #	07 p1126 A69-19036 #	07 p1154 A69-19081	07 p1229 A69-19126*
07 p1175 A69-18947	07 p1232 A69-18992 #	07 p1126 A69-19037 #	07 p1154 A69-19082*	07 p1106 A69-19127*
07 p1132 A69-18948	07 p1242 A69-18993 #	07 p1126 A69-19038 #	07 p1154 A69-19083	07 p1106 A69-19128
07 p1116 A69-18949	07 p1191 A69-18994 #	07 p1126 A69-19039 #	07 p1155 A69-19084	07 p1083 A69-19129
07 p1105 A69-18950	07 p1191 A69-18995 #	07 p1126 A69-19040 #	07 p1155 A69-19085	07 p1083 A69-19130*
07 p1058 A69-18951 #	07 p1191 A69-18996 #	07 p1176 A69-19041 #	07 p1155 A69-19086	07 p1084 A69-19131
07 p1242 A69-18952 #	07 p1120 A69-18997 #	07 p1126 A69-19042 #	07 p1155 A69-19087	07 p1084 A69-19132*
07 p1150 A69-18953 #	07 p1120 A69-18998 #	07 p1126 A69-19043 #	07 p1155 A69-19088	07 p1071 A69-19133
07 p1179 A69-18954*	07 p1120 A69-18999 #	07 p1120 A69-19044 #	07 p1155 A69-19089	07 p1084 A69-19134
07 p1053 A69-18955 #	07 p1181 A69-19000 #	07 p1176 A69-19045 #	07 p1155 A69-19090	07 p1176 A69-19135*
07 p1205 A69-18956	07 p1181 A69-19001 #	07 p1105 A69-19046	07 p1155 A69-19091	07 p1071 A69-19136*
07 p1181 A69-18957	07 p1181 A69-19002 #	07 p1150 A69-19047	07 p1079 A69-19092	07 p1133 A69-19137
07 p1191 A69-18958	07 p1115 A69-19003 #	07 p1150 A69-19048	07 p1105 A69-19093	07 p1216 A69-19138
07 p1205 A69-18959	07 p1174 A69-19004 #	07 p1150 A69-19049	07 p1080 A69-19094*	07 p1232 A69-19139
07 p1216 A69-18960	07 p1174 A69-19005 #	07 p1150 A69-19050	07 p1080 A69-19095	07 p1053 A69-19140
07 p1166 A69-18961 #	07 p1132 A69-19006 #	07 p1150 A69-19051	07 p1080 A69-19096	07 p1184 A69-19141
07 p1166 A69-18962 #	07 p1105 A69-19007 #	07 p1200 A69-19052	07 p1081 A69-19097*	07 p1193 A69-19142
07 p1244 A69-18963 #	07 p1105 A69-19008 #	07 p1133 A69-19053	07 p1081 A69-19098	07 p1115 A69-19143
07 p1176 A69-18964 #	07 p1199 A69-19009 #	07 p1150 A69-19054	07 p1081 A69-19099	07 p1166 A69-19144
07 p1176 A69-18965 #	07 p1200 A69-19010 #	07 p1151 A69-19055*	07 p1081 A69-19100	07 p1166 A69-19145
07 p1126 A69-18966 #	07 p1232 A69-19011 #	07 p1151 A69-19056	07 p1081 A69-19101*	07 p1106 A69-19146
07 p1244 A69-18967 #	07 p1058 A69-19012 #	07 p1151 A69-19057	07 p1140 A69-19102	07 p1084 A69-19147
07 p1140 A69-18968 #	07 p1200 A69-19013 #	07 p1151 A69-19058	07 p1105 A69-19103	07 p1115 A69-19148
07 p1053 A69-18969 #	07 p1191 A69-19014 #	07 p1151 A69-19059	07 p1133 A69-19104	07 p1084 A69-19149 #
07 p1071 A69-18970 #	07 p1192 A69-19015 #	07 p1151 A69-19060	07 p1081 A69-19105*	07 p1084 A69-19150 #
07 p1071 A69-18971 #	07 p1192 A69-19016 #	07 p1151 A69-19061	07 p1082 A69-19106	07 p1084 A69-19151 #
07 p1064 A69-18972 #	07 p1192 A69-19017 #	07 p1152 A69-19062	07 p1082 A69-19107*	07 p1106 A69-19152 #
07 p1064 A69-18973 #	07 p1192 A69-19018 #	07 p1152 A69-19063	07 p1082 A69-19108*	07 p1085 A69-19153 #
07 p1065 A69-18974 #	07 p1192 A69-19019 #	07 p1152 A69-19064	07 p1082 A69-19109*	07 p1085 A69-19154 #
07 p1065 A69-18975 #	07 p1192 A69-19020 #	07 p1152 A69-19065	07 p1105 A69-19110	07 p1107 A69-19155 #
07 p1065 A69-18976 #	07 p1192 A69-19021 #	07 p1152 A69-19066	07 p1105 A69-19111	07 p1107 A69-19156 #
07 p1065 A69-18977 #	07 p1192 A69-19022 #	07 p1152 A69-19067	07 p1106 A69-19112*	07 p1156 A69-19157 #
07 p1071 A69-18978 #	07 p1192 A69-19023 #	07 p1152 A69-19068	07 p1082 A69-19113	07 p1133 A69-19158 #
07 p1065 A69-18979 #	07 p1193 A69-19024 #	07 p1153 A69-19069	07 p1106 A69-19114	07 p1107 A69-19159 #
07 p1065 A69-18980 #	07 p1193 A69-19025 #	07 p1153 A69-19070	07 p1106 A69-19115	07 p1107 A69-19160 #
07 p1065 A69-18981 #	07 p1058 A69-19026 #	07 p1153 A69-19071	07 p1082 A69-19116	07 p1156 A69-19161 #
07 p1065 A69-18982 #	07 p1058 A69-19027 #	07 p1153 A69-19072	07 p1133 A69-19117	07 p1107 A69-19162 #
07 p1066 A69-18983 #	07 p1059 A69-19028 #	07 p1153 A69-19073	07 p1133 A69-19118	07 p1184 A69-19163
07 p1066 A69-18984 #	07 p1059 A69-19029 #	07 p1153 A69-19074	07 p1082 A69-19119	07 p1184 A69-19164*
07 p1191 A69-18985 #	07 p1193 A69-19030 #	07 p1153 A69-19075	07 p1106 A69-19120*	07 p1184 A69-19165*



## ACCESSION NUMBER INDEX

07 p1185 A69-19166	07 p1177 A69-19211	07 p1218 A69-19256	07 p1185 A69-19301 #	07 p1141 A69-19346
07 p1185 A69-19167	07 p1177 A69-19212*	07 p1127 A69-19257	07 p1185 A69-19302*#	07 p1117 A69-19347 #
07 p1193 A69-19168	07 p1177 A69-19213	07 p1127 A69-19258	07 p1185 A69-19303 #	07 p1117 A69-19348 #
07 p1185 A69-19169	07 p1177 A69-19214	07 p1135 A69-19259	07 p1156 A69-19304 #	07 p1233 A69-19349
07 p1107 A69-19170	07 p1166 A69-19215	07 p1066 A69-19260*	07 p1156 A69-19305	07 p1194 A69-19350
07 p1066 A69-19171	07 p1135 A69-19216	07 p1127 A69-19261*	07 p1171 A69-19306	07 p1207 A69-19351
07 p1232 A69-19172	07 p1116 A69-19217	07 p1218 A69-19262*	07 p1140 A69-19307	07 p1127 A69-19352
07 p1232 A69-19173	07 p1181 A69-19218 #	07 p1066 A69-19263	07 p1140 A69-19308*	07 p1207 A69-19353
07 p1200 A69-19174	07 p1200 A69-19219*	07 p1166 A69-19264*	07 p1140 A69-19309	07 p1127 A69-19354
07 p1233 A69-19175	07 p1174 A69-19220	07 p1167 A69-19265*	07 p1141 A69-19310*	07 p1208 A69-19355
07 p1233 A69-19176	07 p1216 A69-19221*	07 p1242 A69-19266 #	07 p1141 A69-19311	07 p1208 A69-19356
07 p1053 A69-19177 #	07 p1085 A69-19222	07 p1120 A69-19267	07 p1141 A69-19312 #	07 p1127 A69-19357
07 p1085 A69-19178 #	07 p1085 A69-19223	07 p1121 A69-19268	07 p1054 A69-19313 #	07 p1208 A69-19358*
07 p1177 A69-19179 #	07 p1086 A69-19224	07 p1206 A69-19269*	07 p1233 A69-19314	07 p1128 A69-19359
07 p1085 A69-19180 #	07 p1086 A69-19225	07 p1206 A69-19270	07 p1233 A69-19315	07 p1128 A69-19360*
07 p1085 A69-19181*#	07 p1107 A69-19226*	07 p1206 A69-19271	07 p1141 A69-19316	07 p1208 A69-19361
07 p1085 A69-19182	07 p1107 A69-19227*	07 p1206 A69-19272	07 p1167 A69-19317	07 p1208 A69-19362
07 p1193 A69-19183	07 p1086 A69-19228	07 p1218 A69-19273	07 p1116 A69-19318	07 p1208 A69-19363*
07 p1179 A69-19184	07 p1059 A69-19229	07 p1182 A69-19274	07 p1117 A69-19319	07 p1128 A69-19364*
07 p1133 A69-19185*	07 p1053 A69-19230	07 p1182 A69-19275	07 p1059 A69-19320	07 p1128 A69-19365*
07 p1134 A69-19186*	07 p1217 A69-19231 #	07 p1182 A69-19276	07 p1121 A69-19321	07 p1194 A69-19366*
07 p1179 A69-19187*	07 p1244 A69-19232	07 p1127 A69-19277	07 p1242 A69-19322	07 p1208 A69-19367
07 p1179 A69-19188	07 p1244 A69-19233	07 p1218 A69-19278 #	07 p1194 A69-19323	07 p1128 A69-19368
07 p1134 A69-19189*	07 p1244 A69-19234	07 p1218 A69-19279 #	07 p1194 A69-19324	07 p1128 A69-19369
07 p1059 A69-19190*	07 p1217 A69-19235	07 p1218 A69-19280 #	07 p1207 A69-19325	07 p1128 A69-19370
07 p1134 A69-19191	07 p1166 A69-19236	07 p1218 A69-19281 #	07 p1233 A69-19326	07 p1209 A69-19371
07 p1134 A69-19192*	07 p1217 A69-19237*	07 p1218 A69-19282 #	07 p1233 A69-19327	07 p1129 A69-19372*
07 p1134 A69-19193*	07 p1217 A69-19238	07 p1219 A69-19283 #	07 p1233 A69-19328	07 p1209 A69-19373*
07 p1134 A69-19194	07 p1217 A69-19239	07 p1219 A69-19284 #	07 p1121 A69-19329	07 p1129 A69-19374*
07 p1230 A69-19195*	07 p1217 A69-19240	07 p1219 A69-19285 #	07 p1121 A69-19330	07 p1209 A69-19375*
07 p1134 A69-19196	07 p1217 A69-19241	07 p1219 A69-19286 #	07 p1182 A69-19331	07 p1121 A69-19376
07 p1135 A69-19197	07 p1193 A69-19242*	07 p1053 A69-19287	07 p1156 A69-19332	07 p1234 A69-19377
07 p1135 A69-19198	07 p1217 A69-19243	07 p1054 A69-19288	07 p1156 A69-19333	07 p1234 A69-19378
07 p1135 A69-19199*	07 p1217 A69-19244	07 p1116 A69-19289	07 p1194 A69-19334	07 p1234 A69-19379
07 p1135 A69-19200	07 p1205 A69-19245	07 p1167 A69-19290	07 p1219 A69-19335	07 p1234 A69-19380
07 p1135 A69-19201	07 p1205 A69-19246	07 p1230 A69-19291	07 p1219 A69-19336	07 p1234 A69-19381
07 p1074 A69-19202	07 p1205 A69-19247*	07 p1230 A69-19292	07 p1220 A69-19337	07 p1234 A69-19382
07 p1074 A69-19203	07 p1205 A69-19248	07 p1230 A69-19293	07 p1127 A69-19338	07 p1235 A69-19383
07 p1216 A69-19204	07 p1206 A69-19249*	07 p1054 A69-19294 #	07 p1167 A69-19339	07 p1235 A69-19384
07 p1216 A69-19205	07 p1206 A69-19250	07 p1219 A69-19295 #	07 p1167 A69-19340	07 p1235 A69-19385
07 p1177 A69-19206	07 p1206 A69-19251*	07 p1219 A69-19296 #	07 p1141 A69-19341	07 p1202 A69-19386*
07 p1135 A69-19207	07 p1206 A69-19252	07 p1219 A69-19297 #	07 p1167 A69-19342	07 p1235 A69-19387
07 p1177 A69-19208*	07 p1217 A69-19253	07 p1121 A69-19298	07 p1167 A69-19343	07 p1220 A69-19388*
07 p1177 A69-19209	07 p1218 A69-19254	07 p1233 A69-19299	07 p1167 A69-19344	07 p1220 A69-19389
07 p1177 A69-19210	07 p1206 A69-19255	07 p1185 A69-19300 #	07 p1168 A69-19345	07 p1220 A69-19390

## ACCESSION NUMBER INDEX

07 p1220 A69-19391	07 p1072 A69-19436	07 p1068 A69-19481*	07 p1142 A69-19526 #	07 p1056 A69-19571 #
07 p1220 A69-19392	07 p1194 A69-19437	07 p1068 A69-19482*	07 p1142 A69-19527 #	07 p1056 A69-19572 #
07 p1221 A69-19393	07 p1195 A69-19438	07 p1075 A69-19483*	07 p1142 A69-19528 #	07 p1056 A69-19573 #
07 p1074 A69-19394*	07 p1141 A69-19439	07 p1075 A69-19484*	07 p1142 A69-19529 #	07 p1056 A69-19574 #
07 p1186 A69-19395*	07 p1235 A69-19440	07 p1157 A69-19485	07 p1111 A69-19530 #	07 p1056 A69-19575 #
07 p1129 A69-19396 #	07 p1235 A69-19441	07 p1108 A69-19486	07 p1111 A69-19531 #	07 p1237 A69-19576 #
07 p1242 A69-19397 #	07 p1235 A69-19442	07 p1108 A69-19487	07 p1171 A69-19532 #	07 p1057 A69-19577*#
07 p1156 A69-19398*	07 p1235 A69-19443	07 p1086 A69-19488	07 p1111 A69-19533 #	07 p1057 A69-19578 #
07 p1156 A69-19399*	07 p1235 A69-19444	07 p1242 A69-19489 #	07 p1117 A69-19534 #	07 p1178 A69-19579 #
07 p1194 A69-19400	07 p1236 A69-19445	07 p1068 A69-19490*	07 p1142 A69-19535 #	07 p1174 A69-19580
07 p1200 A69-19401	07 p1186 A69-19446*	07 p1068 A69-19491*	07 p1111 A69-19536 #	07 p1057 A69-19581 #
07 p1200 A69-19402	07 p1200 A69-19447	07 p1068 A69-19492*	07 p1111 A69-19537 #	07 p1113 A69-19582*
07 p1200 A69-19403	07 p1107 A69-19448	07 p1068 A69-19493*	07 p1112 A69-19538 #	07 p1221 A69-19583 #
07 p1221 A69-19404*	07 p1135 A69-19449	07 p1068 A69-19494*	07 p1112 A69-19539 #	07 p1221 A69-19584 #
07 p1221 A69-19405	07 p1107 A69-19450	07 p1174 A69-19495*	07 p1112 A69-19540	07 p1221 A69-19585 #
07 p1209 A69-19406	07 p1195 A69-19451	07 p1075 A69-19496*	07 p1054 A69-19541 #	07 p1222 A69-19586 #
07 p1121 A69-19407	07 p1168 A69-19452	07 p1069 A69-19497*	07 p1112 A69-19542 #	07 p1222 A69-19587 #
07 p1182 A69-19408	07 p1182 A69-19453	07 p1075 A69-19498*	07 p1112 A69-19543 #	07 p1222 A69-19588 #
07 p1182 A69-19409	07 p1209 A69-19454	07 p1075 A69-19499*	07 p1112 A69-19544 #	07 p1222 A69-19589 #
07 p1186 A69-19410	07 p1182 A69-19455	07 p1209 A69-19500	07 p1171 A69-19545	07 p1222 A69-19590 #
07 p1194 A69-19411	07 p1202 A69-19456 #	07 p1069 A69-19501*	07 p1054 A69-19546*#	07 p1136 A69-19591 #
07 p1156 A69-19412	07 p1236 A69-19457	07 p1129 A69-19502*	07 p1244 A69-19547 #	07 p1195 A69-19592
07 p1156 A69-19413	07 p1136 A69-19458	07 p1069 A69-19503*	07 p1054 A69-19548 #	07 p1157 A69-19593
07 p1157 A69-19414	07 p1236 A69-19459 #	07 p1136 A69-19504 #	07 p1054 A69-19549 #	07 p1157 A69-19594
07 p1194 A69-19415	07 p1236 A69-19460 #	07 p1069 A69-19505*	07 p1055 A69-19550 #	07 p1195 A69-19595
07 p1182 A69-19416	07 p1236 A69-19461 #	07 p1221 A69-19506	07 p1051 A69-19551 #	07 p1113 A69-19596
07 p1157 A69-19417	07 p1183 A69-19462*#	07 p1108 A69-19507	07 p1177 A69-19552*#	07 p1168 A69-19597
07 p1182 A69-19418	07 p1054 A69-19463 #	07 p1171 A69-19508 #	07 p1051 A69-19553 #	07 p1168 A69-19598
07 p1182 A69-19419	07 p1201 A69-19464	07 p1086 A69-19509 #	07 p1051 A69-19554 #	07 p1168 A69-19599
07 p1066 A69-19420 #	07 p1195 A69-19465	07 p1141 A69-19510 #	07 p1055 A69-19555 #	07 p1201 A69-19600
07 p1066 A69-19421	07 p1108 A69-19466	07 p1171 A69-19511 #	07 p1055 A69-19556 #	07 p1168 A69-19601
07 p1066 A69-19422*	07 p1136 A69-19467	07 p1086 A69-19512 #	07 p1051 A69-19557 #	07 p1168 A69-19602
07 p1071 A69-19423*	07 p1086 A69-19468	07 p1109 A69-19513 #	07 p1055 A69-19558 #	07 p1169 A69-19603
07 p1067 A69-19424	07 p1086 A69-19469	07 p1109 A69-19514	07 p1055 A69-19559 #	07 p1230 A69-19604
07 p1067 A69-19425*	07 p1236 A69-19470 #	07 p1136 A69-19515 #	07 p1051 A69-19560 #	07 p1087 A69-19605
07 p1067 A69-19426	07 p1236 A69-19471 #	07 p1136 A69-19516 #	07 p1051 A69-19561 #	07 p1178 A69-19606
07 p1071 A69-19427	07 p1174 A69-19472 #	07 p1109 A69-19517 #	07 p1052 A69-19562 #	07 p1178 A69-19607
07 p1067 A69-19428	07 p1236 A69-19473*#	07 p1087 A69-19518 #	07 p1055 A69-19563 #	07 p1230 A69-19608
07 p1067 A69-19429*	07 p1236 A69-19474 #	07 p1110 A69-19519 #	07 p1245 A69-19564 #	07 p1087 A69-19609
07 p1071 A69-19430 #	07 p1121 A69-19475 #	07 p1110 A69-19520 #	07 p1121 A69-19565 #	07 p1087 A69-19610
07 p1072 A69-19431	07 p1174 A69-19476 #	07 p1110 A69-19521 #	07 p1055 A69-19566 #	07 p1129 A69-19611
07 p1067 A69-19432*	07 p1195 A69-19477 #	07 p1110 A69-19522 #	07 p1056 A69-19567 #	07 p1129 A69-19612
07 p1067 A69-19433	07 p1201 A69-19478*	07 p1110 A69-19523 #	07 p1056 A69-19568 #	07 p1222 A69-19613
07 p1067 A69-19434	07 p1074 A69-19479*	07 p1111 A69-19524 #	07 p1237 A69-19569 #	07 p1210 A69-19614
07 p1068 A69-19435	07 p1072 A69-19480*	07 p1168 A69-19525 #	07 p1178 A69-19570 #	07 p1087 A69-19615



# ACCESSION NUMBER INDEX

07 p1243 A69-19616	07 p1187 A69-19661**	07 p1057 A69-19706 #	07 p1158 A69-19751	08 p1381 A69-19796 #
07 p1222 A69-19617	07 p1187 A69-19662 #	07 p1088 A69-19707*	07 p1158 A69-19752	08 p1358 A69-19797 #
07 p1069 A69-19618	07 p1142 A69-19663	07 p1224 A69-19708	07 p1158 A69-19753	08 p1302 A69-19798 #
07 p1210 A69-19619	07 p1169 A69-19664	07 p1069 A69-19709*	07 p1088 A69-19754	08 p1350 A69-19799 #
07 p1136 A69-19620	07 p1169 A69-19665	07 p1224 A69-19710*	07 p1088 A69-19755	08 p1381 A69-19800 #
07 p1087 A69-19621	07 p1143 A69-19666*	07 p1224 A69-19711	07 p1158 A69-19756	08 p1323 A69-19801
07 p1222 A69-19622 #	07 p1169 A69-19667*	07 p1224 A69-19712	07 p1115 A69-19757	08 p1323 A69-19802
07 p1183 A69-19623 #	07 p1204 A69-19668	07 p1224 A69-19713	07 p1115 A69-19758	08 p1279 A69-19803
07 p1223 A69-19624 #	07 p1169 A69-19669	07 p1187 A69-19714*	07 p1116 A69-19759	08 p1323 A69-19804
07 p1223 A69-19625 #	07 p1172 A69-19670	07 p1224 A69-19715*	07 p1158 A69-19760	08 p1358 A69-19805
07 p1223 A69-19626 #	07 p1143 A69-19671	07 p1210 A69-19716	07 p1137 A69-19761	08 p1371 A69-19806
07 p1223 A69-19627 #	07 p1143 A69-19672	07 p1225 A69-19717	07 p1169 A69-19762	08 p1318 A69-19807
07 p1129 A69-19628**	07 p1143 A69-19673	07 p1210 A69-19718	07 p1178 A69-19763	08 p1265 A69-19808
07 p1176 A69-19629 #	07 p1169 A69-19674	07 p1225 A69-19719	07 p1057 A69-19764*	08 p1354 A69-19809*
07 p1087 A69-19630	07 p1169 A69-19675	07 p1187 A69-19720	07 p1113 A69-19765	08 p1358 A69-19810
07 p1178 A69-19631	07 p1088 A69-19676 #	07 p1137 A69-19721	07 p1113 A69-19766	08 p1358 A69-19811
07 p1117 A69-19632	07 p1113 A69-19677 #	07 p1088 A69-19722	07 p1113 A69-19767	08 p1344 A69-19812
07 p1052 A69-19633	07 p1183 A69-19678 #	07 p1089 A69-19723	07 p1196 A69-19768 #	08 p1345 A69-19813
07 p1223 A69-19634 #	07 p1137 A69-19679 #	07 p1174 A69-19724*	07 p1225 A69-19769	08 p1419 A69-19814*
07 p1223 A69-19635**	07 p1183 A69-19680 #	07 p1072 A69-19725	07 p1225 A69-19770 #	08 p1305 A69-19815*
07 p1223 A69-19636 #	07 p1237 A69-19681 #	07 p1069 A69-19726*	07 p1225 A69-19771 #	08 p1270 A69-19816
07 p1223 A69-19637 #	07 p1237 A69-19682 #	07 p1072 A69-19727*	07 p1225 A69-19772 #	08 p1382 A69-19817
07 p1223 A69-19638 #	07 p1237 A69-19683 #	07 p1245 A69-19728*	07 p1225 A69-19773 #	08 p1382 A69-19818*
07 p1224 A69-19639 #	07 p1237 A69-19684 #	07 p1204 A69-19729 #	07 p1225 A69-19774 #	08 p1382 A69-19819
07 p1136 A69-19640	07 p1237 A69-19685 #	07 p1172 A69-19730*	07 p1075 A69-19775*	08 p1311 A69-19820
07 p1157 A69-19641**	07 p1237 A69-19686 #	07 p1143 A69-19731 #	07 p1239 A69-19776	08 p1311 A69-19821
07 p1087 A69-19642 #	07 p1238 A69-19687 #	07 p1243 A69-19732	07 p1137 A69-19777	08 p1410 A69-19822
07 p1130 A69-19643**	07 p1238 A69-19688 #	07 p1243 A69-19733	07 p1089 A69-19778	08 p1302 A69-19823
07 p1183 A69-19644**	07 p1238 A69-19689 #	07 p1243 A69-19734	07 p1113 A69-19779	08 p1306 A69-19824 #
07 p1183 A69-19645 #	07 p1238 A69-19690 #	07 p1122 A69-19735	07 p1113 A69-19780	08 p1306 A69-19825 #
07 p1201 A69-19646 #	07 p1238 A69-19691 #	07 p1195 A69-19736	08 p1353 A69-19781*	08 p1261 A69-19826
07 p1201 A69-19647 #	07 p1238 A69-19692 #	07 p1243 A69-19737	08 p1353 A69-19782*	08 p1261 A69-19827
07 p1201 A69-19648**	07 p1238 A69-19693 #	07 p1243 A69-19738	08 p1350 A69-19783	08 p1261 A69-19828
07 p1183 A69-19649**	07 p1238 A69-19694 #	07 p1179 A69-19739 #	08 p1380 A69-19784	08 p1265 A69-19829
07 p1183 A69-19650 #	07 p1238 A69-19695 #	07 p1137 A69-19740	08 p1381 A69-19785	08 p1262 A69-19830
07 p1186 A69-19651	07 p1143 A69-19696	07 p1089 A69-19741	08 p1381 A69-19786	08 p1262 A69-19831
07 p1195 A69-19652 #	07 p1117 A69-19697	07 p1158 A69-19742	08 p1377 A69-19787	08 p1262 A69-19832
07 p1224 A69-19653 #	07 p1117 A69-19698	07 p1158 A69-19743	08 p1353 A69-19788*	08 p1262 A69-19833
07 p1130 A69-19654 #	07 p1117 A69-19699	07 p1113 A69-19744	08 p1350 A69-19789	08 p1265 A69-19834
07 p1157 A69-19655 #	07 p1117 A69-19700	07 p1089 A69-19745*	08 p1377 A69-19790	08 p1262 A69-19835
07 p1157 A69-19656 #	07 p1230 A69-19701 #	07 p1088 A69-19746	08 p1381 A69-19791 #	08 p1265 A69-19836
07 p1186 A69-19657 #	07 p1143 A69-19702 #	07 p1195 A69-19747	08 p1381 A69-19792 #	08 p1262 A69-19837
07 p1187 A69-19658 #	07 p1143 A69-19703 #	07 p1196 A69-19748	08 p1328 A69-19793	08 p1262 A69-19838
07 p1187 A69-19659 #	07 p1057 A69-19704 #	07 p1196 A69-19749	08 p1381 A69-19794 #	08 p1262 A69-19839
07 p1187 A69-19660 #	07 p1057 A69-19705 #	07 p1196 A69-19750	08 p1381 A69-19795 #	08 p1262 A69-19840

## ACCESSION NUMBER INDEX

08 p1295 A69-19841	08 p1345 A69-19886	08 p1262 A69-19931	08 p1280 A69-19976	08 p1272 A69-20021*
08 p1422 A69-19842	08 p1382 A69-19887	08 p1263 A69-19932	08 p1280 A69-19977	08 p1273 A69-20022
08 p1377 A69-19843 #	08 p1267 A69-19888	08 p1263 A69-19933	08 p1280 A69-19978	08 p1273 A69-20023
08 p1359 A69-19844 #	08 p1350 A69-19889	08 p1263 A69-19934	08 p1296 A69-19979	08 p1273 A69-20024
08 p1278 A69-19845 #	08 p1410 A69-19890	08 p1263 A69-19935	08 p1324 A69-19980	08 p1273 A69-20025
08 p1376 A69-19846 #	08 p1328 A69-19891	08 p1265 A69-19936	08 p1280 A69-19981	08 p1273 A69-20026
08 p1302 A69-19847*#	08 p1410 A69-19892	08 p1263 A69-19937	08 p1359 A69-19982**	08 p1273 A69-20027
08 p1256 A69-19848 #	08 p1410 A69-19893	08 p1263 A69-19938	08 p1359 A69-19983 #	08 p1273 A69-20028
08 p1302 A69-19849 #	08 p1312 A69-19894	08 p1263 A69-19939	08 p1359 A69-19984 #	08 p1281 A69-20029
08 p1312 A69-19850*	08 p1383 A69-19895	08 p1263 A69-19940	08 p1359 A69-19985 #	08 p1273 A69-20030
08 p1270 A69-19851	08 p1383 A69-19896*	08 p1323 A69-19941	08 p1359 A69-19986**	08 p1274 A69-20031
08 p1270 A69-19852	08 p1377 A69-19897	08 p1323 A69-19942	08 p1359 A69-19987 #	08 p1281 A69-20032
08 p1295 A69-19853*	08 p1383 A69-19898	08 p1329 A69-19943	08 p1360 A69-19988**	08 p1281 A69-20033
08 p1270 A69-19854	08 p1383 A69-19899	08 p1323 A69-19944	08 p1360 A69-19989**	08 p1281 A69-20034
08 p1270 A69-19855	08 p1383 A69-19900	08 p1323 A69-19945	08 p1360 A69-19990 #	08 p1281 A69-20035
08 p1256 A69-19856	08 p1383 A69-19901*	08 p1323 A69-19946	08 p1360 A69-19991 #	08 p1282 A69-20036
08 p1270 A69-19857	08 p1377 A69-19902	08 p1324 A69-19947	08 p1306 A69-19992 #	08 p1282 A69-20037
08 p1270 A69-19858	08 p1253 A69-19903	08 p1351 A69-19948	08 p1272 A69-19993 #	08 p1282 A69-20038
08 p1270 A69-19859	08 p1267 A69-19904*	08 p1359 A69-19949	08 p1319 A69-19994	08 p1282 A69-20039
08 p1312 A69-19860	08 p1279 A69-19905 #	08 p1354 A69-19950	08 p1319 A69-19995	08 p1282 A69-20040
08 p1270 A69-19861	08 p1271 A69-19906 #	08 p1359 A69-19951	08 p1303 A69-19996	08 p1282 A69-20041*
08 p1347 A69-19862	08 p1408 A69-19907 #	08 p1351 A69-19952	08 p1375 A69-19997	08 p1282 A69-20042*
08 p1271 A69-19863	08 p1279 A69-19908	08 p1359 A69-19953	08 p1420 A69-19998	08 p1282 A69-20043
08 p1271 A69-19864	08 p1279 A69-19909	08 p1354 A69-19954	08 p1420 A69-19999	08 p1274 A69-20044
08 p1271 A69-19865	08 p1295 A69-19910	08 p1371 A69-19955	08 p1329 A69-20000	08 p1274 A69-20045*
08 p1306 A69-19866 #	08 p1371 A69-19911	08 p1279 A69-19956 #	08 p1329 A69-20001*	08 p1274 A69-20046
08 p1350 A69-19867	08 p1279 A69-19912	08 p1272 A69-19957 #	08 p1329 A69-20002	08 p1274 A69-20047
08 p1350 A69-19868 #	08 p1328 A69-19913	08 p1272 A69-19958 #	08 p1329 A69-20003	08 p1383 A69-20048
08 p1323 A69-19869 #	08 p1420 A69-19914	08 p1272 A69-19959 #	08 p1319 A69-20004	08 p1383 A69-20049
08 p1382 A69-19870 #	08 p1271 A69-19915	08 p1409 A69-19960 #	08 p1319 A69-20005	08 p1383 A69-20050
08 p1382 A69-19871 #	08 p1271 A69-19916 #	08 p1279 A69-19961 #	08 p1329 A69-20006*	08 p1383 A69-20051*
08 p1382 A69-19872 #	08 p1271 A69-19917 #	08 p1409 A69-19962 #	08 p1329 A69-20007*	08 p1384 A69-20052
08 p1382 A69-19873 #	08 p1271 A69-19918 #	08 p1318 A69-19963 #	08 p1330 A69-20008	08 p1377 A69-20053
08 p1382 A69-19874*#	08 p1271 A69-19919 #	08 p1318 A69-19964 #	08 p1330 A69-20009	08 p1384 A69-20054
08 p1302 A69-19875	08 p1271 A69-19920 #	08 p1318 A69-19965 #	08 p1330 A69-20010	08 p1384 A69-20055
08 p1251 A69-19876	08 p1278 A69-19921 #	08 p1319 A69-19966 #	08 p1330 A69-20011	08 p1384 A69-20056
08 p1420 A69-19877	08 p1296 A69-19922 #	08 p1335 A69-19967	08 p1330 A69-20012	08 p1384 A69-20057
08 p1303 A69-19878	08 p1296 A69-19923 #	08 p1312 A69-19968*	08 p1330 A69-20013	08 p1384 A69-20058
08 p1323 A69-19879	08 p1279 A69-19924 #	08 p1409 A69-19969	08 p1280 A69-20014	08 p1384 A69-20059*
08 p1359 A69-19880	08 p1272 A69-19925 #	08 p1278 A69-19970	08 p1281 A69-20015	08 p1385 A69-20060
08 p1382 A69-19881	08 p1272 A69-19926 #	08 p1278 A69-19971	08 p1281 A69-20016	08 p1385 A69-20061
08 p1420 A69-19882	08 p1262 A69-19927	08 p1280 A69-19972	08 p1272 A69-20017	08 p1385 A69-20062
08 p1371 A69-19883	08 p1262 A69-19928	08 p1280 A69-19973	08 p1281 A69-20018	08 p1385 A69-20063
08 p1306 A69-19884	08 p1262 A69-19929	08 p1280 A69-19974	08 p1281 A69-20019	08 p1420 A69-20064*
08 p1345 A69-19885	08 p1262 A69-19930	08 p1280 A69-19975	08 p1272 A69-20020	08 p1385 A69-20065



## ACCESSION NUMBER INDEX

08 p1378 A69-20066*	08 p1282 A69-20111	08 p1301 A69-20156	08 p1319 A69-20201 #	08 p1389 A69-20246 #
08 p1378 A69-20067*	08 p1274 A69-20112	08 p1421 A69-20157 #	08 p1371 A69-20202 #	08 p1313 A69-20247 #
08 p1378 A69-20068*	08 p1300 A69-20113 #	08 p1409 A69-20158 #	08 p1319 A69-20203	08 p1389 A69-20248 #
08 p1385 A69-20069	08 p1335 A69-20114	08 p1301 A69-20159 #	08 p1332 A69-20204*	08 p1389 A69-20249 #
08 p1385 A69-20070	08 p1254 A69-20115	08 p1409 A69-20160 #	08 p1354 A69-20205*	08 p1389 A69-20250 #
08 p1385 A69-20071	08 p1410 A69-20116	08 p1324 A69-20161	08 p1355 A69-20206*	08 p1389 A69-20251 #
08 p1386 A69-20072	08 p1351 A69-20117	08 p1283 A69-20162 #	08 p1355 A69-20207	08 p1313 A69-20252 #
08 p1386 A69-20073	08 p1387 A69-20118 #	08 p1324 A69-20163 #	08 p1355 A69-20208	08 p1389 A69-20253 #
08 p1386 A69-20074	08 p1387 A69-20119 #	08 p1313 A69-20164	08 p1355 A69-20209	08 p1389 A69-20254 #
08 p1386 A69-20075	08 p1313 A69-20120 #	08 p1313 A69-20165**	08 p1355 A69-20210	08 p1412 A69-20255 #
08 p1386 A69-20076	08 p1387 A69-20121 #	08 p1324 A69-20166	08 p1351 A69-20211 #	08 p1412 A69-20256 #
08 p1386 A69-20077*	08 p1387 A69-20122 #	08 p1301 A69-20167	08 p1361 A69-20212 #	08 p1412 A69-20257 #
08 p1312 A69-20078 #	08 p1313 A69-20123 #	08 p1254 A69-20168	08 p1361 A69-20213 #	08 p1314 A69-20258 #
08 p1360 A69-20079 #	08 p1361 A69-20124	08 p1254 A69-20169	08 p1313 A69-20214 #	08 p1412 A69-20259 #
08 p1360 A69-20080	08 p1303 A69-20125 #	08 p1301 A69-20170	08 p1335 A69-20215	08 p1307 A69-20260 #
08 p1312 A69-20081 #	08 p1283 A69-20126	08 p1422 A69-20171	08 p1387 A69-20216	08 p1308 A69-20261 #
08 p1360 A69-20082 #	08 p1274 A69-20127	08 p1342 A69-20172*	08 p1371 A69-20217	08 p1389 A69-20262 #
08 p1324 A69-20083 #	08 p1283 A69-20128	08 p1263 A69-20173*	08 p1388 A69-20218	08 p1389 A69-20263 #
08 p1386 A69-20084*#	08 p1283 A69-20129	08 p1263 A69-20174*	08 p1378 A69-20219	08 p1378 A69-20264 #
08 p1324 A69-20085 #	08 p1274 A69-20130	08 p1331 A69-20175 #	08 p1361 A69-20220	08 p1362 A69-20265 #
08 p1312 A69-20086 #	08 p1283 A69-20131	08 p1313 A69-20176 #	08 p1324 A69-20221	08 p1283 A69-20266
08 p1386 A69-20087 #	08 p1313 A69-20132	08 p1283 A69-20177 #	08 p1388 A69-20222	08 p1284 A69-20267
08 p1386 A69-20088 #	08 p1274 A69-20133*	08 p1313 A69-20178 #	08 p1388 A69-20223	08 p1342 A69-20268
08 p1386 A69-20089 #	08 p1345 A69-20134 #	08 p1268 A69-20179 #	08 p1378 A69-20224	08 p1303 A69-20269
08 p1387 A69-20090 #	08 p1283 A69-20135	08 p1306 A69-20180	08 p1283 A69-20225	08 p1303 A69-20270
08 p1387 A69-20091 #	08 p1387 A69-20136	08 p1306 A69-20181	08 p1275 A69-20226	08 p1303 A69-20271
08 p1387 A69-20092*#	08 p1330 A69-20137*	08 p1306 A69-20182	08 p1283 A69-20227	08 p1303 A69-20272
08 p1254 A69-20093 #	08 p1268 A69-20138	08 p1307 A69-20183	08 p1275 A69-20228	08 p1362 A69-20273
08 p1409 A69-20094 #	08 p1330 A69-20139	08 p1307 A69-20184	08 p1372 A69-20229	08 p1251 A69-20274
08 p1300 A69-20095 #	08 p1411 A69-20140	08 p1307 A69-20185	08 p1361 A69-20230	08 p1390 A69-20275
08 p1306 A69-20096	08 p1411 A69-20141	08 p1378 A69-20186	08 p1324 A69-20231	08 p1390 A69-20276
08 p1360 A69-20097	08 p1411 A69-20142	08 p1307 A69-20187	08 p1361 A69-20232	08 p1372 A69-20277
08 p1324 A69-20098	08 p1411 A69-20143	08 p1307 A69-20188	08 p1296 A69-20233	08 p1325 A69-20278
08 p1354 A69-20099	08 p1412 A69-20144	08 p1307 A69-20189	08 p1296 A69-20234	08 p1362 A69-20279
08 p1360 A69-20100	08 p1361 A69-20145	08 p1331 A69-20190*	08 p1278 A69-20235	08 p1362 A69-20280
08 p1420 A69-20101	08 p1354 A69-20146	08 p1331 A69-20191	08 p1296 A69-20236	08 p1308 A69-20281
08 p1330 A69-20102	08 p1361 A69-20147	08 p1331 A69-20192	08 p1388 A69-20237 #	08 p1325 A69-20282 #
08 p1312 A69-20103	08 p1420 A69-20148*	08 p1331 A69-20193	08 p1388 A69-20238 #	08 p1325 A69-20283 #
08 p1312 A69-20104	08 p1351 A69-20149	08 p1331 A69-20194	08 p1388 A69-20239 #	08 p1325 A69-20284 #
08 p1296 A69-20105	08 p1354 A69-20150	08 p1331 A69-20195	08 p1388 A69-20240 #	08 p1362 A69-20285 #
08 p1312 A69-20106	08 p1354 A69-20151 #	08 p1422 A69-20196 #	08 p1388 A69-20241 #	08 p1362 A69-20286 #
08 p1282 A69-20107	08 p1420 A69-20152	08 p1422 A69-20197 #	08 p1388 A69-20242 #	08 p1351 A69-20287 #
08 p1274 A69-20108	08 p1354 A69-20153*	08 p1254 A69-20198 #	08 p1388 A69-20243 #	08 p1332 A69-20288*
08 p1300 A69-20109	08 p1278 A69-20154	08 p1254 A69-20199 #	08 p1378 A69-20244 #	08 p1332 A69-20289
08 p1296 A69-20110	08 p1300 A69-20155	08 p1361 A69-20200 #	08 p1389 A69-20245 #	08 p1372 A69-20290

# ACCESSION NUMBER INDEX

08 p1325 A69-20291	08 p1336 A69-20336 #	08 p1285 A69-20381	08 p1362 A69-20426 #	08 p1326 A69-20471
08 p1308 A69-20292	08 p1390 A69-20337 #	08 p1285 A69-20382	08 p1362 A69-20427 #	08 p1364 A69-20472
08 p1275 A69-20293	08 p1375 A69-20338 #	08 p1314 A69-20383	08 p1285 A69-20428 #	08 p1316 A69-20473
08 p1284 A69-20294	08 p1375 A69-20339 #	08 p1314 A69-20384	08 p1309 A69-20429 #	08 p1316 A69-20474
08 p1284 A69-20295	08 p1375 A69-20340 #	08 p1314 A69-20385	08 p1275 A69-20430 #	08 p1316 A69-20475
08 p1284 A69-20296	08 p1375 A69-20341 #	08 p1336 A69-20386	08 p1325 A69-20431 #	08 p1364 A69-20476
08 p1296 A69-20297	08 p1375 A69-20342 #	08 p1336 A69-20387	08 p1275 A69-20432 #	08 p1364 A69-20477
08 p1345 A69-20298 #	08 p1375 A69-20343 #	08 p1390 A69-20388 #	08 p1275 A69-20433 #	08 p1336 A69-20478
08 p1345 A69-20299 #	08 p1421 A69-20344 #	08 p1390 A69-20389 #	08 p1314 A69-20434 #	08 p1337 A69-20479
08 p1345 A69-20300 #	08 p1421 A69-20345 #	08 p1390 A69-20390 #	08 p1275 A69-20435 #	08 p1337 A69-20480
08 p1296 A69-20301	08 p1319 A69-20346	08 p1308 A69-20391 #	08 p1325 A69-20436 #	08 p1337 A69-20481
08 p1297 A69-20302	08 p1342 A69-20347	08 p1390 A69-20392 #	08 p1351 A69-20437 #	08 p1337 A69-20482
08 p1297 A69-20303	08 p1342 A69-20348	08 p1390 A69-20393*#	08 p1351 A69-20438 #	08 p1337 A69-20483
08 p1256 A69-20304	08 p1342 A69-20349	08 p1390 A69-20394 #	08 p1333 A69-20439 #	08 p1337 A69-20484
08 p1256 A69-20305	08 p1342 A69-20350	08 p1391 A69-20395 #	08 p1333 A69-20440 #	08 p1414 A69-20485
08 p1332 A69-20306	08 p1413 A69-20351	08 p1391 A69-20396 #	08 p1251 A69-20441 #	08 p1338 A69-20486
08 p1314 A69-20307	08 p1342 A69-20352	08 p1278 A69-20397 #	08 p1346 A69-20442 #	08 p1414 A69-20487
08 p1308 A69-20308 #	08 p1343 A69-20353	08 p1301 A69-20398	08 p1343 A69-20443	08 p1338 A69-20488
08 p1345 A69-20309 #	08 p1362 A69-20354	08 p1413 A69-20399	08 p1315 A69-20444	08 p1338 A69-20489
08 p1308 A69-20310 #	08 p1343 A69-20355	08 p1285 A69-20400	08 p1414 A69-20445 #	08 p1338 A69-20490
08 p1346 A69-20311 #	08 p1297 A69-20356	08 p1413 A69-20401	08 p1333 A69-20446	08 p1338 A69-20491
08 p1346 A69-20312 #	08 p1297 A69-20357	08 p1413 A69-20402	08 p1333 A69-20447	08 p1338 A69-20492
08 p1346 A69-20313 #	08 p1297 A69-20358	08 p1266 A69-20403	08 p1333 A69-20448	08 p1414 A69-20493
08 p1346 A69-20314 #	08 p1332 A69-20359*	08 p1413 A69-20404	08 p1315 A69-20449	08 p1338 A69-20494
08 p1314 A69-20315 #	08 p1320 A69-20360	08 p1333 A69-20405	08 p1266 A69-20450 #	08 p1339 A69-20495
08 p1308 A69-20316	08 p1268 A69-20361	08 p1320 A69-20406	08 p1315 A69-20451 #	08 p1339 A69-20496
08 p1346 A69-20317 #	08 p1268 A69-20362*	08 p1320 A69-20407	08 p1315 A69-20452 #	08 p1254 A69-20497
08 p1308 A69-20318 #	08 p1332 A69-20363*	08 p1320 A69-20408	08 p1254 A69-20453 #	08 p1339 A69-20498
08 p1342 A69-20319 #	08 p1332 A69-20364*	08 p1320 A69-20409	08 p1309 A69-20454	08 p1316 A69-20499
08 p1342 A69-20320 #	08 p1372 A69-20365	08 p1320 A69-20410	08 p1315 A69-20455	08 p1339 A69-20500
08 p1351 A69-20321 #	08 p1284 A69-20366	08 p1320 A69-20411	08 p1391 A69-20456	08 p1339 A69-20501
08 p1251 A69-20322 #	08 p1314 A69-20367	08 p1413 A69-20412	08 p1409 A69-20457 #	08 p1339 A69-20502
08 p1303 A69-20323 #	08 p1284 A69-20368	08 p1413 A69-20413	08 p1254 A69-20458 #	08 p1340 A69-20503
08 p1412 A69-20324 #	08 p1284 A69-20369	08 p1413 A69-20414	08 p1256 A69-20459 #	08 p1340 A69-20504
08 p1325 A69-20325 #	08 p1275 A69-20370	08 p1297 A69-20415 #	08 p1372 A69-20460 #	08 p1340 A69-20505
08 p1303 A69-20326 #	08 p1303 A69-20371	08 p1297 A69-20416 #	08 p1298 A69-20461	08 p1340 A69-20506
08 p1412 A69-20327 #	08 p1372 A69-20372	08 p1314 A69-20417 #	08 p1363 A69-20462	08 p1340 A69-20507
08 p1412 A69-20328 #	08 p1332 A69-20373	08 p1297 A69-20418 #	08 p1363 A69-20463	08 p1340 A69-20508
08 p1412 A69-20329 #	08 p1263 A69-20374*	08 p1297 A69-20419 #	08 p1363 A69-20464	08 p1340 A69-20509*
08 p1335 A69-20330 #	08 p1320 A69-20375 #	08 p1278 A69-20420 #	08 p1363 A69-20465	08 p1340 A69-20510
08 p1335 A69-20331 #	08 p1314 A69-20376	08 p1298 A69-20421 #	08 p1363 A69-20466	08 p1341 A69-20511
08 p1335 A69-20332 #	08 p1390 A69-20377 #	08 p1298 A69-20422 #	08 p1315 A69-20467	08 p1341 A69-20512
08 p1335 A69-20333 #	08 p1379 A69-20378 #	08 p1391 A69-20423 #	08 p1315 A69-20468	08 p1341 A69-20513
08 p1412 A69-20334 #	08 p1284 A69-20379	08 p1275 A69-20424 #	08 p1315 A69-20469	08 p1341 A69-20514*
08 p1413 A69-20335 #	08 p1285 A69-20380	08 p1309 A69-20425 #	08 p1316 A69-20470	08 p1341 A69-20515



# ACCESSION NUMBER INDEX

08 p1391 A69-20516	08 p1392 A69-20561 #	08 p1376 A69-20606	08 p1396 A69-20651	08 p1397 A69-20696
08 p1364 A69-20517	08 p1392 A69-20562	08 p1393 A69-20607 #	08 p1255 A69-20652	08 p1397 A69-20697
08 p1364 A69-20518	08 p1392 A69-20563	08 p1393 A69-20608 #	08 p1255 A69-20653	08 p1397 A69-20698
08 p1364 A69-20519	08 p1392 A69-20564	08 p1394 A69-20609 #	08 p1255 A69-20654	08 p1380 A69-20699*
08 p1364 A69-20520	08 p1392 A69-20565	08 p1394 A69-20610 #	08 p1252 A69-20655	08 p1341 A69-20700
08 p1364 A69-20521*	08 p1392 A69-20566	08 p1379 A69-20611 #	08 p1376 A69-20656	08 p1397 A69-20701
08 p1365 A69-20522	08 p1392 A69-20567	08 p1379 A69-20612 #	08 p1347 A69-20657	08 p1416 A69-20702
08 p1251 A69-20523	08 p1393 A69-20568	08 p1379 A69-20613 #	08 p1415 A69-20658 #	08 p1252 A69-20703
08 p1414 A69-20524	08 p1393 A69-20569	08 p1379 A69-20614 #	08 p1343 A69-20659 #	08 p1304 A69-20704
08 p1414 A69-20525	08 p1393 A69-20570	08 p1316 A69-20615	08 p1415 A69-20660 #	08 p1416 A69-20705
08 p1414 A69-20526	08 p1326 A69-20571 #	08 p1355 A69-20616	08 p1415 A69-20661 #	08 p1343 A69-20706 #
08 p1414 A69-20527	08 p1393 A69-20572	08 p1316 A69-20617 #	08 p1415 A69-20662 #	08 p1304 A69-20707 #
08 p1414 A69-20528	08 p1393 A69-20573	08 p1394 A69-20618 #	08 p1343 A69-20663 #	08 p1351 A69-20708 #
08 p1320 A69-20529*#	08 p1333 A69-20574	08 p1394 A69-20619 #	08 p1415 A69-20664 #	08 p1416 A69-20709 #
08 p1391 A69-20530 #	08 p1334 A69-20575	08 p1394 A69-20620 #	08 p1415 A69-20665 #	08 p1304 A69-20710 #
08 p1379 A69-20531	08 p1334 A69-20576	08 p1394 A69-20621 #	08 p1415 A69-20666 #	08 p1304 A69-20711 #
08 p1379 A69-20532 #	08 p1334 A69-20577	08 p1394 A69-20622	08 p1263 A69-20667	08 p1347 A69-20712 #
08 p1379 A69-20533 #	08 p1309 A69-20578 #	08 p1394 A69-20623	08 p1264 A69-20668	08 p1252 A69-20713 #
08 p1379 A69-20534 #	08 p1393 A69-20579*#	08 p1394 A69-20624*	08 p1264 A69-20669	08 p1416 A69-20714 #
08 p1268 A69-20535*	08 p1309 A69-20580 #	08 p1394 A69-20625	08 p1264 A69-20670	08 p1327 A69-20715 #
08 p1343 A69-20536	08 p1393 A69-20581*#	08 p1422 A69-20626	08 p1264 A69-20671	08 p1421 A69-20716 #
08 p1343 A69-20537	08 p1320 A69-20582 #	08 p1376 A69-20627	08 p1265 A69-20672	08 p1301 A69-20717 #
08 p1326 A69-20538 #	08 p1409 A69-20583*#	08 p1423 A69-20628	08 p1266 A69-20673	08 p1256 A69-20718 #
08 p1326 A69-20539 #	08 p1422 A69-20584 #	08 p1423 A69-20629	08 p1266 A69-20674	08 p1255 A69-20719 #
08 p1326 A69-20540 #	08 p1421 A69-20585 #	08 p1423 A69-20630	08 p1265 A69-20675	08 p1255 A69-20720 #
08 p1372 A69-20541 #	08 p1276 A69-20586 #	08 p1415 A69-20631	08 p1266 A69-20676	08 p1252 A69-20721 #
08 p1326 A69-20542 #	08 p1409 A69-20587 #	08 p1380 A69-20632*	08 p1266 A69-20677	08 p1416 A69-20722 #
08 p1326 A69-20543 #	08 p1376 A69-20588 #	08 p1395 A69-20633	08 p1266 A69-20678	08 p1375 A69-20723 #
08 p1326 A69-20544 #	08 p1301 A69-20589 #	08 p1395 A69-20634	08 p1266 A69-20679	08 p1252 A69-20724 #
08 p1372 A69-20545 #	08 p1376 A69-20590 #	08 p1395 A69-20635	08 p1267 A69-20680	08 p1343 A69-20725
08 p1391 A69-20546 #	08 p1276 A69-20591 #	08 p1395 A69-20636	08 p1267 A69-20681	08 p1321 A69-20726
08 p1365 A69-20547 #	08 p1276 A69-20592 #	08 p1395 A69-20637	08 p1267 A69-20682	08 p1321 A69-20727
08 p1326 A69-20548 #	08 p1276 A69-20593 #	08 p1380 A69-20638*	08 p1267 A69-20683	08 p1380 A69-20728*
08 p1365 A69-20549 #	08 p1285 A69-20594 #	08 p1395 A69-20639	08 p1267 A69-20684	08 p1397 A69-20729*
08 p1365 A69-20550 #	08 p1285 A69-20595 #	08 p1395 A69-20640	08 p1265 A69-20685*	08 p1352 A69-20730
08 p1285 A69-20551	08 p1286 A69-20596 #	08 p1395 A69-20641	08 p1396 A69-20686*	08 p1346 A69-20731 #
08 p1365 A69-20552	08 p1276 A69-20597 #	08 p1396 A69-20642	08 p1372 A69-20687	08 p1321 A69-20732
08 p1365 A69-20553	08 p1347 A69-20598 #	08 p1380 A69-20643	08 p1397 A69-20688	08 p1423 A69-20733
08 p1285 A69-20554	08 p1320 A69-20599	08 p1396 A69-20644*	08 p1415 A69-20689	08 p1355 A69-20734*
08 p1285 A69-20555	08 p1346 A69-20600 #	08 p1380 A69-20645*	08 p1416 A69-20690	08 p1355 A69-20735*
08 p1333 A69-20556	08 p1341 A69-20601	08 p1396 A69-20646	08 p1252 A69-20691	08 p1356 A69-20736*
08 p1333 A69-20557*	08 p1347 A69-20602	08 p1421 A69-20647	08 p1416 A69-20692	08 p1356 A69-20737*
08 p1392 A69-20558 #	08 p1301 A69-20603	08 p1396 A69-20648	08 p1416 A69-20693	08 p1356 A69-20738*
08 p1392 A69-20559 #	08 p1251 A69-20604	08 p1396 A69-20649	08 p1397 A69-20694	08 p1356 A69-20739
08 p1392 A69-20560 #	08 p1276 A69-20605	08 p1396 A69-20650	08 p1397 A69-20695	08 p1356 A69-20740*

## ACCESSION NUMBER INDEX

08 p1356 A69-20741*	08 p1366 A69-20786	08 p1305 A69-20831	08 p1321 A69-20876	08 p1404 A69-20921
08 p1356 A69-20742*	08 p1366 A69-20787	08 p1344 A69-20832	08 p1302 A69-20877	08 p1404 A69-20922
08 p1356 A69-20743*	08 p1366 A69-20788	08 p1286 A69-20833	08 p1302 A69-20878	08 p1405 A69-20923
08 p1365 A69-20744	08 p1367 A69-20789	08 p1286 A69-20834 #	08 p1317 A69-20879	08 p1405 A69-20924
08 p1352 A69-20745*	08 p1352 A69-20790*	08 p1298 A69-20835 #	08 p1302 A69-20880	08 p1405 A69-20925
08 p1365 A69-20746	08 p1352 A69-20791*	08 p1286 A69-20836 #	08 p1327 A69-20881 #	08 p1405 A69-20926
08 p1357 A69-20747	08 p1353 A69-20792*	08 p1298 A69-20837 #	08 p1410 A69-20882 #	08 p1405 A69-20927
08 p1357 A69-20748	08 p1353 A69-20793*	08 p1286 A69-20838 #	08 p1302 A69-20883 #	08 p1405 A69-20928
08 p1366 A69-20749	08 p1367 A69-20794	08 p1286 A69-20839 #	08 p1277 A69-20884*	08 p1406 A69-20929*
08 p1366 A69-20750*	08 p1367 A69-20795*	08 p1305 A69-20840	08 p1298 A69-20885	08 p1406 A69-20930
08 p1352 A69-20751	08 p1367 A69-20796*	08 p1252 A69-20841*	08 p1369 A69-20886 #	08 p1406 A69-20931
08 p1417 A69-20752	08 p1367 A69-20797*	08 p1305 A69-20842	08 p1369 A69-20887 #	08 p1406 A69-20932
08 p1417 A69-20753	08 p1276 A69-20798	08 p1369 A69-20843	08 p1305 A69-20888 #	08 p1406 A69-20933
08 p1304 A69-20754	08 p1367 A69-20799	08 p1253 A69-20844*	08 p1287 A69-20889 #	08 p1406 A69-20934*
08 p1352 A69-20755	08 p1367 A69-20800	08 p1418 A69-20845	08 p1287 A69-20890 #	08 p1407 A69-20935
08 p1352 A69-20756	08 p1367 A69-20801	08 p1418 A69-20846	08 p1373 A69-20891*	08 p1407 A69-20936
08 p1421 A69-20757	08 p1368 A69-20802	08 p1422 A69-20847	08 p1398 A69-20892	08 p1407 A69-20937*
08 p1366 A69-20758	08 p1368 A69-20803	08 p1418 A69-20848	08 p1357 A69-20893	08 p1407 A69-20938
08 p1366 A69-20759	08 p1368 A69-20804	08 p1418 A69-20849	08 p1400 A69-20894	08 p1309 A69-20939
08 p1373 A69-20760	08 p1368 A69-20805	08 p1305 A69-20850	08 p1401 A69-20895	08 p1309 A69-20940*
08 p1397 A69-20761	08 p1368 A69-20806*	08 p1305 A69-20851	08 p1357 A69-20896	08 p1310 A69-20941
08 p1421 A69-20762 #	08 p1368 A69-20807*	08 p1334 A69-20852	08 p1357 A69-20897	08 p1310 A69-20942
08 p1334 A69-20763 #	08 p1368 A69-20808	08 p1321 A69-20853	08 p1401 A69-20898*	08 p1310 A69-20943
08 p1376 A69-20764 #	08 p1368 A69-20809*	08 p1309 A69-20854 #	08 p1401 A69-20899	08 p1310 A69-20944*
08 p1421 A69-20765 #	08 p1357 A69-20810	08 p1298 A69-20855	08 p1401 A69-20900	08 p1310 A69-20945*
08 p1321 A69-20766 #	08 p1304 A69-20811	08 p1298 A69-20856	08 p1401 A69-20901	08 p1310 A69-20946
08 p1366 A69-20767 #	08 p1304 A69-20812	08 p1276 A69-20857 #	08 p1401 A69-20902	08 p1311 A69-20947
08 p1327 A69-20768 #	08 p1304 A69-20813	08 p1373 A69-20858*	08 p1401 A69-20903*	08 p1256 A69-20948
08 p1380 A69-20769	08 p1357 A69-20814	08 p1373 A69-20859	08 p1402 A69-20904*	08 p1257 A69-20949
08 p1397 A69-20770*	08 p1369 A69-20815	08 p1286 A69-20860	08 p1402 A69-20905	08 p1257 A69-20950
08 p1397 A69-20771	08 p1369 A69-20816	08 p1373 A69-20861	08 p1402 A69-20906	08 p1257 A69-20951
08 p1397 A69-20772	08 p1369 A69-20817	08 p1286 A69-20862	08 p1402 A69-20907	08 p1257 A69-20952
08 p1398 A69-20773	08 p1369 A69-20818*	08 p1286 A69-20863	08 p1402 A69-20908	08 p1257 A69-20953*
08 p1398 A69-20774	08 p1369 A69-20819	08 p1373 A69-20864	08 p1402 A69-20909	08 p1257 A69-20954
08 p1380 A69-20775	08 p1369 A69-20820	08 p1286 A69-20865	08 p1403 A69-20910	08 p1257 A69-20955
08 p1398 A69-20776	08 p1417 A69-20821	08 p1373 A69-20866	08 p1403 A69-20911	08 p1258 A69-20956
08 p1398 A69-20777	08 p1417 A69-20822	08 p1321 A69-20867	08 p1403 A69-20912	08 p1287 A69-20957
08 p1347 A69-20778	08 p1417 A69-20823	08 p1423 A69-20868	08 p1403 A69-20913*	08 p1287 A69-20958
08 p1347 A69-20779	08 p1417 A69-20824	08 p1316 A69-20869	08 p1403 A69-20914	08 p1287 A69-20959
08 p1347 A69-20780	08 p1417 A69-20825	08 p1376 A69-20870	08 p1403 A69-20915	08 p1277 A69-20960
08 p1417 A69-20781	08 p1418 A69-20826	08 p1350 A69-20871	08 p1403 A69-20916*	08 p1288 A69-20961
08 p1252 A69-20782	08 p1343 A69-20827	08 p1347 A69-20872	08 p1404 A69-20917*	08 p1288 A69-20962
08 p1304 A69-20783*	08 p1344 A69-20828	08 p1317 A69-20873	08 p1404 A69-20918	08 p1288 A69-20963
08 p1357 A69-20784	08 p1344 A69-20829	08 p1327 A69-20874	08 p1404 A69-20919	08 p1288 A69-20964
08 p1304 A69-20785	08 p1344 A69-20830	08 p1317 A69-20875	08 p1404 A69-20920	08 p1288 A69-20965



# ACCESSION NUMBER INDEX

08 p1288 A69-20966	08 p1358 A69-21011	08 p1261 A69-21056	08 p1322 A69-21101 #	08 p1267 A69-21146
08 p1289 A69-20967	08 p1268 A69-21012*	08 p1334 A69-21057	08 p1292 A69-21102 #	08 p1408 A69-21147
08 p1289 A69-20968	08 p1370 A69-21013	08 p1334 A69-21058	08 p1322 A69-21103 #	08 p1299 A69-21148
08 p1289 A69-20969	08 p1370 A69-21014	08 p1269 A69-21059*	08 p1322 A69-21104 #	08 p1295 A69-21149
08 p1289 A69-20970	08 p1370 A69-21015	08 p1269 A69-21060*	08 p1292 A69-21105	08 p1371 A69-21150
08 p1289 A69-20971	08 p1370 A69-21016	08 p1269 A69-21061*	08 p1322 A69-21106 #	08 p1295 A69-21151
08 p1289 A69-20972	08 p1370 A69-21017	08 p1348 A69-21062 #	08 p1299 A69-21107 #	08 p1376 A69-21152
08 p1290 A69-20973	08 p1370 A69-21018	08 p1348 A69-21063 #	08 p1292 A69-21108 #	08 p1423 A69-21153
08 p1290 A69-20974	08 p1370 A69-21019	08 p1348 A69-21064 #	08 p1293 A69-21109 #	08 p1322 A69-21154
08 p1290 A69-20975	08 p1370 A69-21020	08 p1348 A69-21065 #	08 p1293 A69-21110 #	08 p1423 A69-21155*
08 p1290 A69-20976	08 p1327 A69-21021	08 p1348 A69-21066 #	08 p1293 A69-21111	08 p1344 A69-21156 #
08 p1290 A69-20977	08 p1317 A69-21022	08 p1373 A69-21067	08 p1293 A69-21112 #	08 p1344 A69-21157 #
08 p1290 A69-20978	08 p1327 A69-21023	08 p1299 A69-21068 #	08 p1293 A69-21113 #	08 p1311 A69-21158 #
08 p1290 A69-20979	08 p1327 A69-21024	08 p1299 A69-21069 #	08 p1293 A69-21114 #	08 p1311 A69-21159 #
08 p1291 A69-20980	08 p1370 A69-21025	08 p1299 A69-21070 #	08 p1294 A69-21115 #	08 p1408 A69-21160
08 p1291 A69-20981	08 p1311 A69-21026 #	08 p1317 A69-21071	08 p1294 A69-21116 #	08 p1255 A69-21161 #
08 p1317 A69-20982	08 p1258 A69-21027 #	08 p1317 A69-21072*	08 p1294 A69-21117 #	08 p1344 A69-21162 #
08 p1291 A69-20983	08 p1377 A69-21028 #	08 p1373 A69-21073 #	08 p1294 A69-21118 #	08 p1377 A69-21163 #
08 p1291 A69-20984*	08 p1410 A69-21029 #	08 p1419 A69-21074 #	08 p1294 A69-21119 #	08 p1253 A69-21164 #
08 p1298 A69-20985	08 p1253 A69-21030 #	08 p1370 A69-21075 #	08 p1294 A69-21120 #	08 p1295 A69-21165
08 p1291 A69-20986	08 p1419 A69-21031 #	08 p1327 A69-21076 #	08 p1294 A69-21121 #	08 p1295 A69-21166
08 p1292 A69-20987	08 p1253 A69-21032 #	08 p1277 A69-21077 #	08 p1295 A69-21122 #	08 p1277 A69-21167
08 p1278 A69-20988	08 p1317 A69-21033	08 p1374 A69-21078 #	08 p1423 A69-21123	08 p1299 A69-21168
08 p1277 A69-20989	08 p1258 A69-21034	08 p1370 A69-21079 #	08 p1423 A69-21124	08 p1299 A69-21169
08 p1279 A69-20990*	08 p1259 A69-21035*	08 p1277 A69-21080 #	08 p1407 A69-21125	08 p1299 A69-21170
08 p1292 A69-20991	08 p1259 A69-21036	08 p1374 A69-21081 #	08 p1341 A69-21126	08 p1300 A69-21171
08 p1292 A69-20992	08 p1259 A69-21037	08 p1374 A69-21082 #	08 p1253 A69-21127	08 p1300 A69-21172
08 p1292 A69-20993	08 p1259 A69-21038	08 p1374 A69-21083 #	08 p1371 A69-21128	08 p1300 A69-21173
08 p1292 A69-20994	08 p1259 A69-21039	08 p1374 A69-21084 #	08 p1269 A69-21129	08 p1300 A69-21174
08 p1305 A69-20995	08 p1259 A69-21040	08 p1317 A69-21085	08 p1407 A69-21130	08 p1300 A69-21175
08 p1422 A69-20996	08 p1260 A69-21041	08 p1317 A69-21086	08 p1318 A69-21131*	08 p1300 A69-21176
08 p1253 A69-20997	08 p1260 A69-21042	08 p1318 A69-21087*	08 p1407 A69-21132	08 p1419 A69-21177 #
08 p1369 A69-20998	08 p1260 A69-21043	08 p1327 A69-21088*	08 p1407 A69-21133	08 p1419 A69-21178 #
08 p1369 A69-20999	08 p1260 A69-21044	08 p1327 A69-21089	08 p1408 A69-21134	08 p1419 A69-21179 #
08 p1353 A69-21000	08 p1260 A69-21045	08 p1327 A69-21090	08 p1408 A69-21135	08 p1419 A69-21180 #
08 p1418 A69-21001	08 p1260 A69-21046	08 p1328 A69-21091	08 p1408 A69-21136	08 p1419 A69-21181 #
08 p1418 A69-21002	08 p1261 A69-21047	08 p1328 A69-21092	08 p1408 A69-21137	08 p1419 A69-21182 #
08 p1418 A69-21003	08 p1268 A69-21048	08 p1346 A69-21093	08 p1408 A69-21138	08 p1265 A69-21183
08 p1418 A69-21004	08 p1261 A69-21049	08 p1311 A69-21094	08 p1408 A69-21139	08 p1348 A69-21184 #
08 p1370 A69-21005 #	08 p1268 A69-21050	08 p1311 A69-21095	08 p1408 A69-21140	08 p1328 A69-21185 #
08 p1292 A69-21006	08 p1261 A69-21051	08 p1353 A69-21096	08 p1335 A69-21141	08 p1374 A69-21186 #
08 p1255 A69-21007	08 p1268 A69-21052	08 p1318 A69-21097*	08 p1318 A69-21142	08 p1374 A69-21187 #
08 p1358 A69-21008	08 p1269 A69-21053	08 p1321 A69-21098	08 p1255 A69-21143	08 p1328 A69-21188 #
08 p1353 A69-21009*	08 p1269 A69-21054	08 p1322 A69-21099 #	08 p1410 A69-21144	08 p1374 A69-21189 #
08 p1358 A69-21010	08 p1261 A69-21055	08 p1277 A69-21100 #	08 p1410 A69-21145	08 p1328 A69-21190 #

## ACCESSION NUMBER INDEX

08 p1348 A69-21191 #	09 p1563 A69-21236**	09 p1461 A69-21281 #	09 p1462 A69-21326	09 p1589 A69-21371 #
08 p1348 A69-21192 #	09 p1564 A69-21237 #	09 p1461 A69-21282 #	09 p1471 A69-21327**	09 p1589 A69-21372 #
08 p1349 A69-21193 #	09 p1564 A69-21238 #	09 p1461 A69-21283 #	09 p1471 A69-21328**	09 p1589 A69-21373 #
08 p1349 A69-21194 #	09 p1564 A69-21239**	09 p1450 A69-21284 #	09 p1544 A69-21329	09 p1589 A69-21374 #
08 p1349 A69-21195 #	09 p1564 A69-21240**	09 p1450 A69-21285	09 p1553 A69-21330	09 p1589 A69-21375 #
08 p1349 A69-21196 #	09 p1564 A69-21241 #	09 p1586 A69-21286 #	09 p1544 A69-21331 #	09 p1590 A69-21376 #
08 p1349 A69-21197 #	09 p1564 A69-21242 #	09 p1537 A69-21287 #	09 p1554 A69-21332 #	09 p1590 A69-21377 #
08 p1349 A69-21198 #	09 p1564 A69-21243**	09 p1451 A69-21288 #	09 p1514 A69-21333 #	09 p1590 A69-21378 #
08 p1349 A69-21199 #	09 p1585 A69-21244**	09 p1451 A69-21289 #	09 p1462 A69-21334	09 p1590 A69-21379 #
08 p1349 A69-21200 #	09 p1586 A69-21245**	09 p1451 A69-21290 #	09 p1544 A69-21335	09 p1590 A69-21380 #
09 p1584 A69-21201	09 p1565 A69-21246**	09 p1451 A69-21291 #	09 p1544 A69-21336	09 p1590 A69-21381 #
09 p1584 A69-21202**	09 p1565 A69-21247 #	09 p1451 A69-21292 #	09 p1554 A69-21337**	09 p1590 A69-21382 #
09 p1584 A69-21203 #	09 p1565 A69-21248 #	09 p1451 A69-21293 #	09 p1521 A69-21338	09 p1484 A69-21383 #
09 p1584 A69-21204**	09 p1538 A69-21249**	09 p1586 A69-21294 #	09 p1514 A69-21339	09 p1567 A69-21384 #
09 p1584 A69-21205 #	09 p1565 A69-21250 #	09 p1586 A69-21295 #	09 p1554 A69-21340 #	09 p1433 A69-21385 #
09 p1585 A69-21206**	09 p1565 A69-21251**	09 p1435 A69-21296 #	09 p1544 A69-21341	09 p1433 A69-21386 #
09 p1585 A69-21207**	09 p1565 A69-21252**	09 p1586 A69-21297 #	09 p1545 A69-21342 #	09 p1567 A69-21387 #
09 p1585 A69-21208**	09 p1539 A69-21253 #	09 p1586 A69-21298 #	09 p1545 A69-21343	09 p1502 A69-21388 #
09 p1585 A69-21209 #	09 p1566 A69-21254**	09 p1543 A69-21299 #	09 p1514 A69-21344	09 p1503 A69-21389
09 p1585 A69-21210 #	09 p1566 A69-21255**	09 p1543 A69-21300 #	09 p1521 A69-21345 #	09 p1521 A69-21390
09 p1585 A69-21211 #	09 p1566 A69-21256**	09 p1544 A69-21301 #	09 p1539 A69-21346	09 p1503 A69-21391
09 p1560 A69-21212**	09 p1566 A69-21257**	09 p1544 A69-21302 #	09 p1514 A69-21347 #	09 p1503 A69-21392*
09 p1560 A69-21213**	09 p1566 A69-21258**	09 p1433 A69-21303 #	09 p1545 A69-21348	09 p1460 A69-21393
09 p1560 A69-21214**	09 p1566 A69-21259**	09 p1444 A69-21304	09 p1515 A69-21349 #	09 p1492 A69-21394*
09 p1560 A69-21215 #	09 p1566 A69-21260 #	09 p1429 A69-21305 #	09 p1554 A69-21350**	09 p1590 A69-21395 #
09 p1561 A69-21216**	09 p1567 A69-21261**	09 p1587 A69-21306	09 p1554 A69-21351**	09 p1545 A69-21396 #
09 p1492 A69-21217**	09 p1567 A69-21262**	09 p1587 A69-21307*	09 p1611 A69-21352	09 p1574 A69-21397 #
09 p1561 A69-21218**	09 p1567 A69-21263**	09 p1587 A69-21308*	09 p1462 A69-21353**	09 p1492 A69-21398
09 p1561 A69-21219**	09 p1543 A69-21264 #	09 p1574 A69-21309*	09 p1515 A69-21354 #	09 p1521 A69-21399*
09 p1561 A69-21220**	09 p1586 A69-21265 #	09 p1444 A69-21310*	09 p1587 A69-21355 #	09 p1521 A69-21400*
09 p1561 A69-21221**	09 p1567 A69-21266**	09 p1451 A69-21311*	09 p1587 A69-21356 #	09 p1484 A69-21401
09 p1561 A69-21222 #	09 p1567 A69-21267**	09 p1452 A69-21312	09 p1587 A69-21357 #	09 p1574 A69-21402**
09 p1561 A69-21223 #	09 p1448 A69-21268	09 p1452 A69-21313	09 p1587 A69-21358 #	09 p1484 A69-21403 #
09 p1562 A69-21224**	09 p1537 A69-21269 #	09 p1452 A69-21314	09 p1587 A69-21359 #	09 p1484 A69-21404**
09 p1562 A69-21225**	09 p1449 A69-21270 #	09 p1452 A69-21315	09 p1588 A69-21360 #	09 p1534 A69-21405 #
09 p1562 A69-21226 #	09 p1449 A69-21271 #	09 p1452 A69-21316	09 p1588 A69-21361 #	09 p1538 A69-21406 #
09 p1562 A69-21227 #	09 p1608 A69-21272 #	09 p1470 A69-21317*	09 p1588 A69-21362 #	09 p1462 A69-21407
09 p1562 A69-21228 #	09 p1449 A69-21273 #	09 p1471 A69-21318*	09 p1588 A69-21363 #	09 p1462 A69-21408
09 p1562 A69-21229 #	09 p1449 A69-21274 #	09 p1452 A69-21319*	09 p1588 A69-21364 #	09 p1453 A69-21409
09 p1563 A69-21230 #	09 p1449 A69-21275 #	09 p1452 A69-21320	09 p1588 A69-21365 #	09 p1462 A69-21410
09 p1563 A69-21231**	09 p1450 A69-21276 #	09 p1452 A69-21321	09 p1588 A69-21366 #	09 p1462 A69-21411
09 p1563 A69-21232**	09 p1450 A69-21277 #	09 p1453 A69-21322	09 p1588 A69-21367 #	09 p1531 A69-21412
09 p1563 A69-21233**	09 p1450 A69-21278 #	09 p1544 A69-21323	09 p1589 A69-21368 #	09 p1531 A69-21413
09 p1563 A69-21234**	09 p1450 A69-21279 #	09 p1514 A69-21324	09 p1589 A69-21369 #	09 p1590 A69-21414*
09 p1563 A69-21235 #	09 p1450 A69-21280 #	09 p1462 A69-21325	09 p1589 A69-21370 #	09 p1531 A69-21415*



## ACCESSION NUMBER INDEX

09 p1531 A69-21416*	09 p1592 A69-21461	09 p1555 A69-21506 #	09 p1575 A69-21551 #	09 p1547 A69-21596 #
09 p1460 A69-21417	09 p1592 A69-21462*	09 p1516 A69-21507 #	09 p1486 A69-21552 #	09 p1480 A69-21597 #
09 p1492 A69-21418 #	09 p1592 A69-21463	09 p1556 A69-21508 #	09 p1487 A69-21553 #	09 p1575 A69-21598 #
09 p1493 A69-21419**	09 p1484 A69-21464	09 p1534 A69-21509 #	09 p1487 A69-21554 #	09 p1448 A69-21599 #
09 p1493 A69-21420 #	09 p1444 A69-21465	09 p1534 A69-21510 #	09 p1494 A69-21555*	09 p1532 A69-21600 #
09 p1493 A69-21421 #	09 p1444 A69-21466*	09 p1534 A69-21511 #	09 p1522 A69-21556	09 p1612 A69-21601 #
09 p1493 A69-21422	09 p1554 A69-21467 #	09 p1534 A69-21512	09 p1503 A69-21557	09 p1547 A69-21602 #
09 p1493 A69-21423**	09 p1554 A69-21468 #	09 p1535 A69-21513 #	09 p1503 A69-21558*	09 p1612 A69-21603 #
09 p1515 A69-21424 #	09 p1554 A69-21469 #	09 p1535 A69-21514 #	09 p1494 A69-21559 #	09 p1612 A69-21604 #
09 p1435 A69-21425 #	09 p1555 A69-21470 #	09 p1535 A69-21515 #	09 p1539 A69-21560	09 p1429 A69-21605 #
09 p1493 A69-21426 #	09 p1555 A69-21471 #	09 p1535 A69-21516 #	09 p1612 A69-21561 #	09 p1429 A69-21606 #
09 p1515 A69-21427 #	09 p1555 A69-21472 #	09 p1535 A69-21517 #	09 p1516 A69-21562 #	09 p1547 A69-21607 #
09 p1493 A69-21428 #	09 p1555 A69-21473 #	09 p1494 A69-21518 #	09 p1556 A69-21563 #	09 p1522 A69-21608
09 p1493 A69-21429 #	09 p1515 A69-21474 #	09 p1535 A69-21519 #	09 p1546 A69-21564 #	09 p1523 A69-21609
09 p1515 A69-21430**	09 p1555 A69-21475 #	09 p1535 A69-21520 #	09 p1546 A69-21565 #	09 p1532 A69-21610 #
09 p1545 A69-21431 #	09 p1555 A69-21476 #	09 p1574 A69-21521 #	09 p1546 A69-21566 #	09 p1612 A69-21611 #
09 p1545 A69-21432 #	09 p1462 A69-21477 #	09 p1575 A69-21522 #	09 p1593 A69-21567 #	09 p1532 A69-21612 #
09 p1621 A69-21433 #	09 p1555 A69-21478 #	09 p1575 A69-21523 #	09 p1593 A69-21568 #	09 p1547 A69-21613 #
09 p1515 A69-21434 #	09 p1611 A69-21479**	09 p1575 A69-21524 #	09 p1453 A69-21569 #	09 p1480 A69-21614 #
09 p1471 A69-21435 #	09 p1480 A69-21480**	09 p1453 A69-21525 #	09 p1453 A69-21570 #	09 p1556 A69-21615 #
09 p1471 A69-21436 #	09 p1611 A69-21481 #	09 p1453 A69-21526 #	09 p1546 A69-21571 #	09 p1593 A69-21616
09 p1471 A69-21437 #	09 p1611 A69-21482 #	09 p1453 A69-21527 #	09 p1593 A69-21572 #	09 p1609 A69-21617 #
09 p1515 A69-21438 #	09 p1612 A69-21483 #	09 p1484 A69-21528 #	09 p1556 A69-21573 #	09 p1609 A69-21618 #
09 p1476 A69-21439	09 p1592 A69-21484*	09 p1485 A69-21529 #	09 p1546 A69-21574 #	09 p1609 A69-21619 #
09 p1611 A69-21440	09 p1592 A69-21485*	09 p1485 A69-21530 #	09 p1516 A69-21575 #	09 p1593 A69-21620
09 p1545 A69-21441	09 p1522 A69-21486	09 p1485 A69-21531 #	09 p1546 A69-21576	09 p1487 A69-21621 #
09 p1621 A69-21442	09 p1515 A69-21487	09 p1485 A69-21532 #	09 p1546 A69-21577	09 p1542 A69-21622
09 p1503 A69-21443	09 p1515 A69-21488	09 p1485 A69-21533 #	09 p1556 A69-21578	09 p1542 A69-21623
09 p1453 A69-21444	09 p1568 A69-21489	09 p1485 A69-21534 #	09 p1541 A69-21579	09 p1542 A69-21624
09 p1590 A69-21445	09 p1555 A69-21490	09 p1485 A69-21535 #	09 p1471 A69-21580	09 p1542 A69-21625
09 p1591 A69-21446	09 p1493 A69-21491 #	09 p1485 A69-21536 #	09 p1593 A69-21581 #	09 p1516 A69-21626
09 p1591 A69-21447	09 p1494 A69-21492 #	09 p1486 A69-21537 #	09 p1593 A69-21582 #	09 p1532 A69-21627 #
09 p1591 A69-21448	09 p1545 A69-21493 #	09 p1486 A69-21538 #	09 p1609 A69-21583 #	09 p1532 A69-21628 #
09 p1591 A69-21449	09 p1612 A69-21494 #	09 p1494 A69-21539 #	09 p1546 A69-21584 #	09 p1613 A69-21629 #
09 p1591 A69-21450	09 p1621 A69-21495 #	09 p1592 A69-21540 #	09 p1546 A69-21585 #	09 p1613 A69-21630 #
09 p1591 A69-21451	09 p1528 A69-21496 #	09 p1575 A69-21541 #	09 p1546 A69-21586 #	09 p1613 A69-21631 #
09 p1591 A69-21452*	09 p1612 A69-21497 #	09 p1575 A69-21542 #	09 p1621 A69-21587 #	09 p1471 A69-21632
09 p1574 A69-21453*	09 p1433 A69-21498 #	09 p1453 A69-21543 #	09 p1522 A69-21588 #	09 p1487 A69-21633
09 p1591 A69-21454*	09 p1612 A69-21499 #	09 p1486 A69-21544 #	09 p1522 A69-21589 #	09 p1494 A69-21634
09 p1591 A69-21455*	09 p1592 A69-21500 #	09 p1486 A69-21545 #	09 p1621 A69-21590 #	09 p1487 A69-21635 #
09 p1592 A69-21456	09 p1522 A69-21501	09 p1486 A69-21546 #	09 p1480 A69-21591 #	09 p1487 A69-21636 #
09 p1574 A69-21457	09 p1522 A69-21502	09 p1486 A69-21547 #	09 p1435 A69-21592 #	09 p1487 A69-21637 #
09 p1592 A69-21458	09 p1522 A69-21503	09 p1486 A69-21548 #	09 p1547 A69-21593 #	09 p1462 A69-21638
09 p1574 A69-21459*	09 p1528 A69-21504	09 p1486 A69-21549 #	09 p1547 A69-21594 #	09 p1535 A69-21639 #
09 p1574 A69-21460*	09 p1545 A69-21505 #	09 p1575 A69-21550 #	09 p1547 A69-21595 #	09 p1494 A69-21640 #

# ACCESSION NUMBER INDEX

09 p1536 A69-21641 #	09 p1429 A69-21686	09 p1568 A69-21731*#	09 p1578 A69-21776 #	09 p1439 A69-21821
09 p1494 A69-21642**	09 p1480 A69-21687	09 p1568 A69-21732 #	09 p1472 A69-21777 #	09 p1439 A69-21822*
09 p1536 A69-21643 #	09 p1429 A69-21688	09 p1532 A69-21733 #	09 p1472 A69-21778 #	09 p1439 A69-21823*
09 p1494 A69-21644*#	09 p1613 A69-21689	09 p1480 A69-21734 #	09 p1472 A69-21779 #	09 p1439 A69-21824*
09 p1575 A69-21645*	09 p1429 A69-21690	09 p1480 A69-21735 #	09 p1472 A69-21780 #	09 p1558 A69-21825
09 p1576 A69-21646*	09 p1516 A69-21691	09 p1523 A69-21736 #	09 p1472 A69-21781 #	09 p1439 A69-21826
09 p1576 A69-21647*	09 p1557 A69-21692	09 p1557 A69-21737 #	09 p1460 A69-21782 #	09 p1439 A69-21827*
09 p1476 A69-21648	09 p1594 A69-21693	09 p1523 A69-21738 #	09 p1472 A69-21783 #	09 p1440 A69-21828*
09 p1538 A69-21649	09 p1488 A69-21694	09 p1523 A69-21739 #	09 p1472 A69-21784 #	09 p1440 A69-21829
09 p1476 A69-21650	09 p1594 A69-21695	09 p1523 A69-21740 #	09 p1472 A69-21785 #	09 p1440 A69-21830
09 p1495 A69-21651**	09 p1594 A69-21696*	09 p1614 A69-21741 #	09 p1472 A69-21786 #	09 p1440 A69-21831*
09 p1556 A69-21652*	09 p1594 A69-21697	09 p1516 A69-21742	09 p1473 A69-21787 #	09 p1440 A69-21832
09 p1487 A69-21653	09 p1488 A69-21698*	09 p1557 A69-21743	09 p1532 A69-21788 #	09 p1440 A69-21833
09 p1487 A69-21654*	09 p1576 A69-21699*	09 p1557 A69-21744	09 p1430 A69-21789 #	09 p1440 A69-21834
09 p1593 A69-21655	09 p1488 A69-21700	09 p1516 A69-21745	09 p1481 A69-21790 #	09 p1441 A69-21835
09 p1488 A69-21656	09 p1489 A69-21701	09 p1557 A69-21746	09 p1473 A69-21791 #	09 p1441 A69-21836
09 p1488 A69-21657	09 p1489 A69-21702	09 p1557 A69-21747	09 p1621 A69-21792 #	09 p1441 A69-21837
09 p1594 A69-21658	09 p1489 A69-21703*	09 p1557 A69-21748 #	09 p1430 A69-21793 #	09 p1441 A69-21838
09 p1488 A69-21659	09 p1489 A69-21704*	09 p1495 A69-21749 #	09 p1454 A69-21794 #	09 p1441 A69-21839
09 p1594 A69-21660	09 p1489 A69-21705*	09 p1557 A69-21750	09 p1454 A69-21795 #	09 p1441 A69-21840*
09 p1488 A69-21661*	09 p1576 A69-21706	09 p1539 A69-21751*#	09 p1517 A69-21796 #	09 p1442 A69-21841
09 p1547 A69-21662	09 p1576 A69-21707	09 p1539 A69-21752	09 p1490 A69-21797 #	09 p1495 A69-21842*
09 p1576 A69-21663	09 p1576 A69-21708	09 p1557 A69-21753*#	09 p1595 A69-21798 #	09 p1595 A69-21843*#
09 p1488 A69-21664	09 p1577 A69-21709	09 p1532 A69-21754 #	09 p1454 A69-21799*	09 p1455 A69-21844
09 p1594 A69-21665	09 p1489 A69-21710	09 p1454 A69-21755 #	09 p1454 A69-21800	09 p1463 A69-21845
09 p1594 A69-21666	09 p1577 A69-21711	09 p1594 A69-21756 #	09 p1454 A69-21801	09 p1463 A69-21846
09 p1480 A69-21667	09 p1489 A69-21712	09 p1595 A69-21757 #	09 p1503 A69-21802	09 p1455 A69-21847
09 p1548 A69-21668	09 p1489 A69-21713	09 p1495 A69-21758 #	09 p1436 A69-21803	09 p1455 A69-21848
09 p1556 A69-21669	09 p1577 A69-21714*	09 p1538 A69-21759 #	09 p1436 A69-21804	09 p1523 A69-21849
09 p1516 A69-21670	09 p1489 A69-21715*	09 p1609 A69-21760 #	09 p1463 A69-21805	09 p1528 A69-21850
09 p1495 A69-21671	09 p1490 A69-21716*	09 p1609 A69-21761 #	09 p1436 A69-21806	09 p1503 A69-21851
09 p1556 A69-21672	09 p1577 A69-21717	09 p1595 A69-21762 #	09 p1557 A69-21807*	09 p1528 A69-21852
09 p1548 A69-21673	09 p1539 A69-21718	09 p1532 A69-21763 #	09 p1558 A69-21808*	09 p1528 A69-21853
09 p1548 A69-21674	09 p1613 A69-21719	09 p1495 A69-21764 #	09 p1558 A69-21809	09 p1529 A69-21854
09 p1495 A69-21675	09 p1613 A69-21720	09 p1595 A69-21765 #	09 p1558 A69-21810	09 p1473 A69-21855
09 p1463 A69-21676	09 p1542 A69-21721*#	09 p1490 A69-21766 #	09 p1558 A69-21811*	09 p1473 A69-21856
09 p1613 A69-21677	09 p1614 A69-21722	09 p1577 A69-21767 #	09 p1437 A69-21812*	09 p1461 A69-21857
09 p1516 A69-21678	09 p1454 A69-21723 #	09 p1577 A69-21768 #	09 p1437 A69-21813*	09 p1473 A69-21858
09 p1454 A69-21679	09 p1463 A69-21724 #	09 p1577 A69-21769 #	09 p1438 A69-21814*	09 p1495 A69-21859
09 p1472 A69-21680	09 p1454 A69-21725 #	09 p1577 A69-21770 #	09 p1438 A69-21815*	09 p1442 A69-21860
09 p1454 A69-21681	09 p1436 A69-21726*#	09 p1490 A69-21771 #	09 p1438 A69-21816*	09 p1536 A69-21861 #
09 p1463 A69-21682	09 p1568 A69-21727*#	09 p1490 A69-21772 #	09 p1438 A69-21817*	09 p1490 A69-21862 #
09 p1548 A69-21683	09 p1568 A69-21728*#	09 p1577 A69-21773 #	09 p1438 A69-21818*	09 p1490 A69-21863 #
09 p1463 A69-21684	09 p1568 A69-21729 #	09 p1577 A69-21774 #	09 p1438 A69-21819*	09 p1536 A69-21864 #
09 p1613 A69-21685 #	09 p1568 A69-21730 #	09 p1609 A69-21775 #	09 p1438 A69-21820*	09 p1536 A69-21865 #



## ACCESSION NUMBER INDEX

09 p1536 A69-21866 #	09 p1495 A69-21911	09 p1616 A69-21956 #	09 p1610 A69-22001 #	09 p1552 A69-22046
09 p1536 A69-21867 #	09 p1504 A69-21912	09 p1570 A69-21957*#	09 p1455 A69-22002 #	09 p1596 A69-22047*
09 p1490 A69-21868 #	09 p1614 A69-21913	09 p1430 A69-21958 #	09 p1477 A69-22003 #	09 p1617 A69-22048
09 p1558 A69-21869	09 p1490 A69-21914	09 p1609 A69-21959 #	09 p1570 A69-22004 #	09 p1596 A69-22049
09 p1558 A69-21870	09 p1517 A69-21915	09 p1477 A69-21960 #	09 p1610 A69-22005 #	09 p1540 A69-22050
09 p1529 A69-21871	09 p1542 A69-21916*	09 p1477 A69-21961 #	09 p1483 A69-22006 #	09 p1491 A69-22051
09 p1523 A69-21872	09 p1536 A69-21917 #	09 p1548 A69-21962 #	09 p1617 A69-22007 #	09 p1596 A69-22052
09 p1523 A69-21873	09 p1490 A69-21918 #	09 p1548 A69-21963	09 p1477 A69-22008**	09 p1596 A69-22053
09 p1569 A69-21874*#	09 p1548 A69-21919*#	09 p1430 A69-21964 #	09 p1610 A69-22009 #	09 p1596 A69-22054
09 p1569 A69-21875*#	09 p1481 A69-21920 #	09 p1430 A69-21965 #	09 p1617 A69-22010	09 p1596 A69-22055*
09 p1569 A69-21876*#	09 p1615 A69-21921 #	09 p1482 A69-21966 #	09 p1617 A69-22011	09 p1596 A69-22056
09 p1569 A69-21877*#	09 p1615 A69-21922 #	09 p1482 A69-21967 #	09 p1496 A69-22012	09 p1596 A69-22057
09 p1569 A69-21878*#	09 p1615 A69-21923 #	09 p1482 A69-21968 #	09 p1617 A69-22013	09 p1578 A69-22058
09 p1569 A69-21879*#	09 p1615 A69-21924 #	09 p1595 A69-21969 #	09 p1496 A69-22014	09 p1596 A69-22059
09 p1569 A69-21880 #	09 p1615 A69-21925 #	09 p1477 A69-21970 #	09 p1548 A69-22015	09 p1597 A69-22060
09 p1539 A69-21881 #	09 p1615 A69-21926 #	09 p1482 A69-21971 #	09 p1549 A69-22016 #	09 p1523 A69-22061
09 p1540 A69-21882 #	09 p1615 A69-21927 #	09 p1430 A69-21972*#	09 p1549 A69-22017 #	09 p1570 A69-22062
09 p1614 A69-21883 #	09 p1616 A69-21928 #	09 p1430 A69-21973 #	09 p1549 A69-22018 #	09 p1504 A69-22063
09 p1614 A69-21884 #	09 p1481 A69-21929 #	09 p1431 A69-21974 #	09 p1550 A69-22019 #	09 p1434 A69-22064
09 p1614 A69-21885 #	09 p1463 A69-21930	09 p1533 A69-21975 #	09 p1550 A69-22020 #	09 p1504 A69-22065
09 p1614 A69-21886 #	09 p1446 A69-21931 #	09 p1482 A69-21976 #	09 p1550 A69-22021 #	09 p1504 A69-22066
09 p1614 A69-21887 #	09 p1473 A69-21932	09 p1616 A69-21977 #	09 p1550 A69-22022 #	09 p1524 A69-22067
09 p1481 A69-21888 #	09 p1455 A69-21933	09 p1570 A69-21978 #	09 p1550 A69-22023 #	09 p1529 A69-22068
09 p1481 A69-21889 #	09 p1496 A69-21934 #	09 p1616 A69-21979*#	09 p1550 A69-22024 #	09 p1524 A69-22069
09 p1614 A69-21890	09 p1548 A69-21935*#	09 p1442 A69-21980 #	09 p1550 A69-22025 #	09 p1529 A69-22070
09 p1540 A69-21891	09 p1496 A69-21936*#	09 p1570 A69-21981*#	09 p1550 A69-22026 #	09 p1529 A69-22071
09 p1609 A69-21892	09 p1595 A69-21937*#	09 p1622 A69-21982*#	09 p1550 A69-22027 #	09 p1524 A69-22072
09 p1461 A69-21893	09 p1616 A69-21938 #	09 p1610 A69-21983*#	09 p1496 A69-22028 #	09 p1504 A69-22073
09 p1540 A69-21894 #	09 p1616 A69-21939 #	09 p1539 A69-21984 #	09 p1496 A69-22029 #	09 p1536 A69-22074
09 p1523 A69-21895	09 p1482 A69-21940 #	09 p1570 A69-21985 #	09 p1496 A69-22030 #	09 p1434 A69-22075 #
09 p1463 A69-21896	09 p1616 A69-21941 #	09 p1610 A69-21986 #	09 p1496 A69-22031 #	09 p1617 A69-22076
09 p1455 A69-21897	09 p1616 A69-21942 #	09 p1610 A69-21987*#	09 p1551 A69-22032 #	09 p1431 A69-22077 #
09 p1614 A69-21898	09 p1482 A69-21943 #	09 p1610 A69-21988 #	09 p1551 A69-22033 #	09 p1617 A69-22078 #
09 p1481 A69-21899 #	09 p1430 A69-21944 #	09 p1455 A69-21989*#	09 p1551 A69-22034 #	09 p1517 A69-22079 #
09 p1560 A69-21900*#	09 p1482 A69-21945 #	09 p1442 A69-21990 #	09 p1551 A69-22035 #	09 p1517 A69-22080 #
09 p1434 A69-21901 #	09 p1430 A69-21946 #	09 p1610 A69-21991*#	09 p1551 A69-22036 #	09 p1540 A69-22081 #
09 p1481 A69-21902	09 p1482 A69-21947*#	09 p1431 A69-21992 #	09 p1551 A69-22037 #	09 p1455 A69-22082 #
09 p1621 A69-21903	09 p1434 A69-21948*#	09 p1477 A69-21993 #	09 p1551 A69-22038	09 p1540 A69-22083 #
09 p1622 A69-21904	09 p1430 A69-21949 #	09 p1595 A69-21994 #	09 p1551 A69-22039	09 p1597 A69-22084 #
09 p1622 A69-21905	09 p1482 A69-21950 #	09 p1483 A69-21995*#	09 p1551 A69-22040	09 p1622 A69-22085
09 p1622 A69-21906*	09 p1622 A69-21951 #	09 p1538 A69-21996 #	09 p1552 A69-22041	09 p1610 A69-22086
09 p1503 A69-21907	09 p1496 A69-21952 #	09 p1617 A69-21997 #	09 p1552 A69-22042	09 p1611 A69-22087*
09 p1446 A69-21908*#	09 p1622 A69-21953 #	09 p1610 A69-21998 #	09 p1552 A69-22043	09 p1597 A69-22088*
09 p1448 A69-21909*	09 p1622 A69-21954 #	09 p1483 A69-21999 #	09 p1552 A69-22044	09 p1597 A69-22089*
09 p1481 A69-21910*	09 p1616 A69-21955 #	09 p1431 A69-22000 #	09 p1552 A69-22045*	09 p1538 A69-22090

## ACCESSION NUMBER INDEX

09 p 1623 A69-22091	09 p 1524 A69-22136 #	09 p 1579 A69-22181*	09 p 1602 A69-22226*	09 p 1604 A69-22271*
09 p 1626 A69-22092	09 p 1524 A69-22137 #	09 p 1579 A69-22182*	09 p 1602 A69-22227*	09 p 1604 A69-22272
09 p 1517 A69-22093	09 p 1525 A69-22138 #	09 p 1598 A69-22183*	09 p 1602 A69-22228	09 p 1580 A69-22273
09 p 1463 A69-22094	09 p 1525 A69-22139 #	09 p 1598 A69-22184	09 p 1602 A69-22229*	09 p 1618 A69-22274 #
09 p 1617 A69-22095 #	09 p 1525 A69-22140 #	09 p 1598 A69-22185	09 p 1603 A69-22230	09 p 1431 A69-22275 #
09 p 1464 A69-22096 #	09 p 1525 A69-22141 #	09 p 1598 A69-22186	09 p 1580 A69-22231*	09 p 1499 A69-22276 #
09 p 1464 A69-22097 #	09 p 1525 A69-22142 #	09 p 1598 A69-22187	09 p 1580 A69-22232	09 p 1431 A69-22277 #
09 p 1623 A69-22098	09 p 1525 A69-22143 #	09 p 1599 A69-22188*	09 p 1603 A69-22233	09 p 1431 A69-22278 #
09 p 1540 A69-22099*#	09 p 1525 A69-22144 #	09 p 1599 A69-22189*	09 p 1603 A69-22234	09 p 1434 A69-22279 #
09 p 1540 A69-22100*#	09 p 1504 A69-22145 #	09 p 1599 A69-22190*	09 p 1431 A69-22235 #	09 p 1623 A69-22280 #
09 p 1497 A69-22101	09 p 1504 A69-22146 #	09 p 1599 A69-22191	09 p 1618 A69-22236 #	09 p 1526 A69-22281 #
09 p 1497 A69-22102 #	09 p 1526 A69-22147 #	09 p 1599 A69-22192	09 p 1431 A69-22237 #	09 p 1519 A69-22282*
09 p 1497 A69-22103 #	09 p 1526 A69-22148	09 p 1599 A69-22193	09 p 1618 A69-22238 #	09 p 1559 A69-22283*
09 p 1497 A69-22104 #	09 p 1504 A69-22149	09 p 1599 A69-22194	09 p 1618 A69-22239 #	09 p 1456 A69-22284 #
09 p 1497 A69-22105 #	09 p 1597 A69-22150*	09 p 1599 A69-22195	09 p 1499 A69-22240 #	09 p 1456 A69-22285 #
09 p 1497 A69-22106 #	09 p 1597 A69-22151	09 p 1599 A69-22196	09 p 1477 A69-22241 #	09 p 1456 A69-22286 #
09 p 1498 A69-22107 #	09 p 1578 A69-22152	09 p 1600 A69-22197	09 p 1537 A69-22242 #	09 p 1464 A69-22287 #
09 p 1498 A69-22108 #	09 p 1491 A69-22153*	09 p 1600 A69-22198*	09 p 1464 A69-22243 #	09 p 1519 A69-22288 #
09 p 1498 A69-22109 #	09 p 1597 A69-22154	09 p 1600 A69-22199*	09 p 1464 A69-22244 #	09 p 1519 A69-22289 #
09 p 1498 A69-22110 #	09 p 1597 A69-22155	09 p 1600 A69-22200*	09 p 1519 A69-22245 #	09 p 1456 A69-22290
09 p 1498 A69-22111 #	09 p 1597 A69-22156	09 p 1600 A69-22201	09 p 1499 A69-22246	09 p 1464 A69-22291
09 p 1498 A69-22112 #	09 p 1578 A69-22157	09 p 1580 A69-22202*	09 p 1504 A69-22247	09 p 1461 A69-22292
09 p 1464 A69-22113 #	09 p 1598 A69-22158	09 p 1580 A69-22203*	09 p 1542 A69-22248	09 p 1456 A69-22293
09 p 1473 A69-22114 #	09 p 1464 A69-22159	09 p 1600 A69-22204	09 p 1542 A69-22249*	09 p 1552 A69-22294
09 p 1455 A69-22115	09 p 1498 A69-22160	09 p 1600 A69-22205*	09 p 1543 A69-22250	09 p 1580 A69-22295
09 p 1456 A69-22116	09 p 1477 A69-22161	09 p 1600 A69-22206*	09 p 1552 A69-22251	09 p 1580 A69-22296*
09 p 1464 A69-22117	09 p 1518 A69-22162	09 p 1601 A69-22207*	09 p 1543 A69-22252	09 p 1537 A69-22297 #
09 p 1517 A69-22118	09 p 1491 A69-22163 #	09 p 1601 A69-22208*	09 p 1541 A69-22253	09 p 1537 A69-22298 #
09 p 1517 A69-22119	09 p 1491 A69-22164 #	09 p 1601 A69-22209*	09 p 1541 A69-22254	09 p 1537 A69-22299 #
09 p 1517 A69-22120	09 p 1536 A69-22165 #	09 p 1601 A69-22210*	09 p 1623 A69-22255	09 p 1570 A69-22300 #
09 p 1517 A69-22121	09 p 1536 A69-22166 #	09 p 1601 A69-22211*	09 p 1618 A69-22256 #	09 p 1504 A69-22301
09 p 1518 A69-22122	09 p 1578 A69-22167*	09 p 1601 A69-22212	09 p 1618 A69-22257 #	09 p 1499 A69-22302 #
09 p 1518 A69-22123	09 p 1578 A69-22168	09 p 1601 A69-22213	09 p 1533 A69-22258 #	09 p 1499 A69-22303 #
09 p 1518 A69-22124	09 p 1578 A69-22169*	09 p 1601 A69-22214	09 p 1618 A69-22259 #	09 p 1499 A69-22304 #
09 p 1518 A69-22125	09 p 1578 A69-22170	09 p 1602 A69-22215	09 p 1618 A69-22260 #	09 p 1529 A69-22305 #
09 p 1518 A69-22126	09 p 1578 A69-22171	09 p 1602 A69-22216*	09 p 1618 A69-22261 #	09 p 1499 A69-22306 #
09 p 1518 A69-22127	09 p 1579 A69-22172*	09 p 1602 A69-22217	09 p 1618 A69-22262 #	09 p 1559 A69-22307
09 p 1518 A69-22128	09 p 1579 A69-22173*	09 p 1542 A69-22218*	09 p 1603 A69-22263*	09 p 1499 A69-22308 #
09 p 1518 A69-22129	09 p 1579 A69-22174*	09 p 1623 A69-22219 #	09 p 1603 A69-22264*	09 p 1500 A69-22309 #
09 p 1518 A69-22130	09 p 1579 A69-22175	09 p 1623 A69-22220 #	09 p 1603 A69-22265	09 p 1500 A69-22310 #
09 p 1456 A69-22131	09 p 1598 A69-22176	09 p 1617 A69-22221 #	09 p 1603 A69-22266*	09 p 1500 A69-22311 #
09 p 1456 A69-22132	09 p 1598 A69-22177	09 p 1483 A69-22222 #	09 p 1603 A69-22267	09 p 1529 A69-22312 #
09 p 1498 A69-22133	09 p 1579 A69-22178	09 p 1602 A69-22223	09 p 1603 A69-22268	09 p 1448 A69-22313 #
09 p 1540 A69-22134 #	09 p 1579 A69-22179	09 p 1602 A69-22224	09 p 1580 A69-22269	09 p 1448 A69-22314 #
09 p 1524 A69-22135	09 p 1579 A69-22180	09 p 1602 A69-22225	09 p 1603 A69-22270	09 p 1448 A69-22315 #



# ACCESSION NUMBER INDEX

09 p1529 A69-22316 #	09 p1511 A69-22361 #	09 p1604 A69-22406	09 p1466 A69-22451	09 p1527 A69-22496 #
09 p1530 A69-22317 #	09 p1512 A69-22362 #	09 p1604 A69-22407	09 p1466 A69-22452	09 p1619 A69-22497 #
09 p1526 A69-22318 #	09 p1530 A69-22363 #	09 p1604 A69-22408	09 p1474 A69-22453	09 p1571 A69-22498 #
09 p1507 A69-22319 #	09 p1530 A69-22364 #	09 p1581 A69-22409	09 p1442 A69-22454*	09 p1571 A69-22499 #
09 p1530 A69-22320 #	09 p1530 A69-22365 #	09 p1605 A69-22410	09 p1466 A69-22455	09 p1571 A69-22500 #
09 p1530 A69-22321 #	09 p1531 A69-22366 #	09 p1605 A69-22411*	09 p1466 A69-22456	09 p1432 A69-22501
09 p1526 A69-22322 #	09 p1512 A69-22367 #	09 p1605 A69-22412	09 p1442 A69-22457	09 p1571 A69-22502 #
09 p1619 A69-22323 #	09 p1512 A69-22368 #	09 p1605 A69-22413	09 p1533 A69-22458*	09 p1527 A69-22503 #
09 p1500 A69-22324 #	09 p1512 A69-22369 #	09 p1605 A69-22414	09 p1456 A69-22459*	09 p1432 A69-22504 #
09 p1477 A69-22325 #	09 p1477 A69-22370 #	09 p1605 A69-22415	09 p1457 A69-22460*	09 p1571 A69-22505 #
09 p1526 A69-22326 #	09 p1512 A69-22371 #	09 p1605 A69-22416	09 p1457 A69-22461	09 p1527 A69-22506 #
09 p1530 A69-22327 #	09 p1527 A69-22372 #	09 p1605 A69-22417	09 p1457 A69-22462	09 p1432 A69-22507**
09 p1507 A69-22328 #	09 p1478 A69-22373 #	09 p1606 A69-22418	09 p1457 A69-22463	09 p1624 A69-22508 #
09 p1507 A69-22329 #	09 p1512 A69-22374	09 p1606 A69-22419	09 p1457 A69-22464	09 p1572 A69-22509 #
09 p1507 A69-22330 #	09 p1512 A69-22375*#	09 p1606 A69-22420*	09 p1457 A69-22465	09 p1527 A69-22510 #
09 p1507 A69-22331 #	09 p1478 A69-22376 #	09 p1606 A69-22421*	09 p1457 A69-22466	09 p1572 A69-22511 #
09 p1507 A69-22332 #	09 p1478 A69-22377 #	09 p1606 A69-22422	09 p1458 A69-22467	09 p1572 A69-22512 #
09 p1507 A69-22333 #	09 p1478 A69-22378*#	09 p1606 A69-22423	09 p1458 A69-22468	09 p1432 A69-22513 #
09 p1508 A69-22334 #	09 p1434 A69-22379*#	09 p1606 A69-22424	09 p1458 A69-22469	09 p1572 A69-22514 #
09 p1508 A69-22335 #	09 p1478 A69-22380 #	09 p1606 A69-22425	09 p1458 A69-22470	09 p1513 A69-22515 #
09 p1508 A69-22336 #	09 p1478 A69-22381 #	09 p1607 A69-22426*	09 p1458 A69-22471*	09 p1513 A69-22516 #
09 p1508 A69-22337 #	09 p1478 A69-22382 #	09 p1607 A69-22427*	09 p1458 A69-22472	09 p1572 A69-22517 #
09 p1508 A69-22338 #	09 p1611 A69-22383*#	09 p1607 A69-22428	09 p1458 A69-22473	09 p1501 A69-22518 #
09 p1508 A69-22339*#	09 p1479 A69-22384*#	09 p1607 A69-22429*	09 p1459 A69-22474	09 p1572 A69-22519 #
09 p1508 A69-22340 #	09 p1479 A69-22385 #	09 p1607 A69-22430*	09 p1519 A69-22475	09 p1531 A69-22520 #
09 p1509 A69-22341 #	09 p1479 A69-22386 #	09 p1607 A69-22431*	09 p1519 A69-22476	09 p1432 A69-22521*#
09 p1509 A69-22342 #	09 p1500 A69-22387 #	09 p1607 A69-22432*	09 p1459 A69-22477	09 p1501 A69-22522*#
09 p1509 A69-22343 #	09 p1479 A69-22388 #	09 p1465 A69-22433	09 p1570 A69-22478 #	09 p1619 A69-22523 #
09 p1509 A69-22344 #	09 p1434 A69-22389 #	09 p1500 A69-22434*	09 p1442 A69-22479 #	09 p1572 A69-22524 #
09 p1509 A69-22345 #	09 p1479 A69-22390 #	09 p1538 A69-22435	09 p1500 A69-22480 #	09 p1572 A69-22525 #
09 p1509 A69-22346 #	09 p1434 A69-22391 #	09 p1533 A69-22436	09 p1570 A69-22481 #	09 p1552 A69-22526
09 p1510 A69-22347*#	09 p1541 A69-22392	09 p1473 A69-22437	09 p1570 A69-22482 #	09 p1553 A69-22527
09 p1510 A69-22348 #	09 p1541 A69-22393	09 p1473 A69-22438	09 p1571 A69-22483 #	09 p1608 A69-22528
09 p1510 A69-22349 #	09 p1541 A69-22394	09 p1473 A69-22439	09 p1513 A69-22484 #	09 p1459 A69-22529
09 p1510 A69-22350 #	09 p1623 A69-22395	09 p1474 A69-22440*	09 p1513 A69-22485 #	09 p1581 A69-22530
09 p1510 A69-22351 #	09 p1464 A69-22396	09 p1474 A69-22441	09 p1571 A69-22486 #	09 p1519 A69-22531
09 p1510 A69-22352 #	09 p1552 A69-22397*	09 p1474 A69-22442	09 p1432 A69-22487 #	09 p1559 A69-22532
09 p1511 A69-22353 #	09 p1604 A69-22398	09 p1474 A69-22443*	09 p1501 A69-22488 #	09 p1520 A69-22533
09 p1511 A69-22354 #	09 p1527 A69-22399	09 p1466 A69-22444	09 p1432 A69-22489 #	09 p1442 A69-22534
09 p1511 A69-22355 #	09 p1483 A69-22400	09 p1519 A69-22445	09 p1623 A69-22490 #	09 p1443 A69-22535
09 p1511 A69-22356 #	09 p1604 A69-22401*	09 p1466 A69-22446	09 p1483 A69-22491 #	09 p1475 A69-22536
09 p1511 A69-22357 #	09 p1604 A69-22402	09 p1466 A69-22447	09 p1501 A69-22492 #	09 p1475 A69-22537
09 p1446 A69-22358 #	09 p1604 A69-22403	09 p1474 A69-22448	09 p1571 A69-22493	09 p1553 A69-22538
09 p1527 A69-22359 #	09 p1543 A69-22404*	09 p1533 A69-22449	09 p1513 A69-22494 #	09 p1553 A69-22539
09 p1511 A69-22360 #	09 p1543 A69-22405	09 p1474 A69-22450	09 p1432 A69-22495*#	09 p1444 A69-22540 #

## ACCESSION NUMBER INDEX

09 p1444 A69-22541	09 p1467 A69-22586	09 p1469 A69-22631	09 p1513 A69-22676	09 p1445 A69-22721
09 p1446 A69-22542*	09 p1467 A69-22587	09 p1469 A69-22632	09 p1476 A69-22677	09 p1447 A69-22722
09 p1446 A69-22543 #	09 p1468 A69-22588	09 p1469 A69-22633	09 p1476 A69-22678	09 p1445 A69-22723
09 p1444 A69-22544	09 p1468 A69-22589	09 p1459 A69-22634	09 p1520 A69-22679	09 p1445 A69-22724
09 p1444 A69-22545	09 p1468 A69-22590	09 p1459 A69-22635	09 p1520 A69-22680	09 p1445 A69-22725
09 p1447 A69-22546	09 p1475 A69-22591	09 p1520 A69-22636	09 p1520 A69-22681	09 p1445 A69-22726
09 p1447 A69-22547 #	09 p1468 A69-22592	09 p1435 A69-22637	09 p1520 A69-22682	09 p1445 A69-22727
09 p1445 A69-22548	09 p1459 A69-22593	09 p1483 A69-22638	09 p1520 A69-22683	09 p1446 A69-22728
09 p1447 A69-22549	09 p1468 A69-22594	09 p1459 A69-22639	09 p1520 A69-22684	09 p1446 A69-22729
09 p1447 A69-22550 #	09 p1538 A69-22595	09 p1459 A69-22640	09 p1520 A69-22685	09 p1448 A69-22730
09 p1448 A69-22551*	09 p1468 A69-22596	09 p1460 A69-22641	09 p1521 A69-22686	09 p1514 A69-22731
09 p1447 A69-22552*	09 p1434 A69-22597 #	09 p1460 A69-22642	09 p1521 A69-22687	09 p1528 A69-22732
09 p1445 A69-22553	09 p1501 A69-22598 #	09 p1469 A69-22643	09 p1501 A69-22688*	09 p1528 A69-22733
09 p1447 A69-22554	09 p1461 A69-22599*	09 p1469 A69-22644	09 p1608 A69-22689	09 p1479 A69-22734
09 p1445 A69-22555 #	09 p1475 A69-22600 #	09 p1460 A69-22645	09 p1537 A69-22690	09 p1480 A69-22735
09 p1447 A69-22556	09 p1468 A69-22601	09 p1559 A69-22646	09 p1502 A69-22691 #	09 p1443 A69-22736
09 p1445 A69-22557	09 p1468 A69-22602	09 p1559 A69-22647	09 p1502 A69-22692 #	09 p1443 A69-22737 #
09 p1467 A69-22558 #	09 p1468 A69-22603	09 p1559 A69-22648	09 p1625 A69-22693	09 p1443 A69-22738 #
09 p1467 A69-22559 #	09 p1468 A69-22604	09 p1559 A69-22649	09 p1625 A69-22694	09 p1443 A69-22739**
09 p1467 A69-22560 #	09 p1469 A69-22605	09 p1559 A69-22650	09 p1625 A69-22695	09 p1443 A69-22740 #
09 p1467 A69-22561 #	09 p1469 A69-22606	09 p1559 A69-22651	09 p1469 A69-22696	09 p1443 A69-22741 #
09 p1461 A69-22562*	09 p1491 A69-22607*	09 p1559 A69-22652	09 p1553 A69-22697	09 p1581 A69-22742
09 p1459 A69-22563 #	09 p1573 A69-22608 #	09 p1559 A69-22653	09 p1541 A69-22698	09 p1608 A69-22743 #
09 p1513 A69-22564 #	09 p1433 A69-22609 #	09 p1520 A69-22654	09 p1460 A69-22699	09 p1581 A69-22744 #
09 p1513 A69-22565 #	09 p1433 A69-22610 #	09 p1520 A69-22655	09 p1470 A69-22700	09 p1608 A69-22745**
09 p1608 A69-22566*	09 p1624 A69-22611	09 p1520 A69-22656	09 p1502 A69-22701 #	09 p1582 A69-22746**
09 p1475 A69-22567*	09 p1573 A69-22612	09 p1553 A69-22657	09 p1502 A69-22702 #	09 p1582 A69-22747 #
09 p1433 A69-22568 #	09 p1573 A69-22613	09 p1543 A69-22658	09 p1502 A69-22703 #	09 p1582 A69-22748 #
09 p1553 A69-22569 #	09 p1624 A69-22614	09 p1553 A69-22659	09 p1513 A69-22704 #	09 p1582 A69-22749 #
09 p1619 A69-22570	09 p1624 A69-22615	09 p1483 A69-22660	09 p1502 A69-22705 #	09 p1582 A69-22750 #
09 p1619 A69-22571 #	09 p1573 A69-22616	09 p1520 A69-22661	09 p1491 A69-22706 #	09 p1582 A69-22751 #
09 p1620 A69-22572 #	09 p1573 A69-22617	09 p1460 A69-22662	09 p1491 A69-22707 #	09 p1582 A69-22752 #
09 p1620 A69-22573 #	09 p1624 A69-22618	09 p1520 A69-22663	09 p1491 A69-22708 #	09 p1582 A69-22753 #
09 p1620 A69-22574 #	09 p1625 A69-22619	09 p1560 A69-22664	09 p1491 A69-22709 #	09 p1582 A69-22754 #
09 p1620 A69-22575 #	09 p1625 A69-22620	09 p1483 A69-22665	09 p1492 A69-22710 #	09 p1583 A69-22755 #
09 p1620 A69-22576 #	09 p1573 A69-22621	09 p1475 A69-22666	09 p1483 A69-22711 #	09 p1492 A69-22756 #
09 p1501 A69-22577	09 p1573 A69-22622	09 p1475 A69-22667	09 p1514 A69-22712 #	09 p1583 A69-22757 #
09 p1501 A69-22578	09 p1625 A69-22623	09 p1475 A69-22668	09 p1514 A69-22713	09 p1583 A69-22758 #
09 p1467 A69-22579	09 p1531 A69-22624	09 p1475 A69-22669	09 p1435 A69-22714	09 p1583 A69-22759 #
09 p1459 A69-22580	09 p1469 A69-22625	09 p1475 A69-22670	09 p1608 A69-22715 #	09 p1583 A69-22760 #
09 p1467 A69-22581	09 p1469 A69-22626	09 p1476 A69-22671	09 p1608 A69-22716 #	09 p1608 A69-22761 #
09 p1479 A69-22582	09 p1469 A69-22627	09 p1476 A69-22672	09 p1476 A69-22717 #	09 p1583 A69-22762 #
09 p1475 A69-22583	09 p1459 A69-22628	09 p1476 A69-22673	09 p1560 A69-22718 #	09 p1583 A69-22763**
09 p1475 A69-22584	09 p1469 A69-22629	09 p1476 A69-22674	09 p1443 A69-22719 #	09 p1583 A69-22764**
09 p1467 A69-22585	09 p1469 A69-22630	09 p1447 A69-22675	09 p1528 A69-22720 #	09 p1583 A69-22765**



## ACCESSION NUMBER INDEX

09 p1584 A69-22766*#	10 p1755 A69-22811 #	10 p1771 A69-22856 #	10 p1677 A69-22901 #	10 p1742 A69-22946*#
09 p1584 A69-22767*#	10 p1755 A69-22812 #	10 p1772 A69-22857 #	10 p1631 A69-22902 #	10 p1742 A69-22947*#
09 p1502 A69-22768 #	10 p1756 A69-22813 #	10 p1772 A69-22858 #	10 p1677 A69-22903 #	10 p1701 A69-22948
09 p1620 A69-22769 #	10 p1756 A69-22814 #	10 p1772 A69-22859 #	10 p1727 A69-22904 #	10 p1701 A69-22949
09 p1621 A69-22770 #	10 p1756 A69-22815 #	10 p1718 A69-22860	10 p1631 A69-22905 #	10 p1661 A69-22950
09 p1533 A69-22771 #	10 p1756 A69-22816 #	10 p1718 A69-22861	10 p1631 A69-22906 #	10 p1690 A69-22951
09 p1533 A69-22772 #	10 p1756 A69-22817 #	10 p1727 A69-22862	10 p1772 A69-22907 #	10 p1690 A69-22952
09 p1502 A69-22773	10 p1756 A69-22818 #	10 p1811 A69-22863*#	10 p1724 A69-22908 #	10 p1690 A69-22953 #
09 p1433 A69-22774	10 p1756 A69-22819 #	10 p1772 A69-22864 #	10 p1678 A69-22909 #	10 p1701 A69-22954*
09 p1435 A69-22775	10 p1756 A69-22820 #	10 p1772 A69-22865 #	10 p1631 A69-22910 #	10 p1727 A69-22955 #
09 p1626 A69-22776	10 p1757 A69-22821 #	10 p1791 A69-22866*#	10 p1632 A69-22911 #	10 p1773 A69-22956
09 p1626 A69-22777	10 p1757 A69-22822 #	10 p1772 A69-22867 #	10 p1632 A69-22912 #	10 p1773 A69-22957
09 p1435 A69-22778	10 p1757 A69-22823 #	10 p1772 A69-22868 #	10 p1632 A69-22913 #	10 p1773 A69-22958
09 p1435 A69-22779	10 p1757 A69-22824 #	10 p1760 A69-22869 #	10 p1632 A69-22914 #	10 p1773 A69-22959
09 p1484 A69-22780	10 p1757 A69-22825 #	10 p1772 A69-22870 #	10 p1808 A69-22915 #	10 p1773 A69-22960*
09 p1435 A69-22781	10 p1757 A69-22826 #	10 p1791 A69-22871 #	10 p1727 A69-22916 #	10 p1773 A69-22961
09 p1621 A69-22782	10 p1757 A69-22827 #	10 p1633 A69-22872	10 p1678 A69-22917 #	10 p1773 A69-22962
09 p1521 A69-22783	10 p1757 A69-22828 #	10 p1633 A69-22873	10 p1632 A69-22918 #	10 p1773 A69-22963
09 p1476 A69-22784	10 p1758 A69-22829 #	10 p1675 A69-22874	10 p1666 A69-22919 #	10 p1774 A69-22964
09 p1470 A69-22785	10 p1758 A69-22830 #	10 p1718 A69-22875 #	10 p1724 A69-22920 #	10 p1774 A69-22965*
09 p1470 A69-22786*	10 p1758 A69-22831 #	10 p1793 A69-22876 #	10 p1791 A69-22921 #	10 p1774 A69-22966
09 p1470 A69-22787*	10 p1758 A69-22832 #	10 p1723 A69-22877 #	10 p1666 A69-22922 #	10 p1774 A69-22967
09 p1470 A69-22788	10 p1758 A69-22833 #	10 p1718 A69-22878 #	10 p1791 A69-22923 #	10 p1774 A69-22968
09 p1470 A69-22789	10 p1758 A69-22834 #	10 p1718 A69-22879 #	10 p1724 A69-22924 #	10 p1774 A69-22969
09 p1470 A69-22790*	10 p1758 A69-22835 #	10 p1724 A69-22880 #	10 p1794 A69-22925 #	10 p1774 A69-22970
09 p1460 A69-22791	10 p1759 A69-22836 #	10 p1793 A69-22881 #	10 p1791 A69-22926 #	10 p1668 A69-22971
09 p1460 A69-22792	10 p1759 A69-22837 #	10 p1793 A69-22882 #	10 p1689 A69-22927 #	10 p1753 A69-22972 #
09 p1470 A69-22793	10 p1759 A69-22838 #	10 p1793 A69-22883 #	10 p1666 A69-22928 #	10 p1668 A69-22973 #
09 p1470 A69-22794	10 p1759 A69-22839 #	10 p1793 A69-22884 #	10 p1724 A69-22929 #	10 p1668 A69-22974 #
09 p1521 A69-22795	10 p1759 A69-22840 #	10 p1793 A69-22885 #	10 p1794 A69-22930 #	10 p1668 A69-22975 #
09 p1533 A69-22796	10 p1759 A69-22841 #	10 p1793 A69-22886 #	10 p1678 A69-22931 #	10 p1669 A69-22976 #
09 p1533 A69-22797	10 p1759 A69-22842 #	10 p1633 A69-22887 #	10 p1724 A69-22932 #	10 p1811 A69-22977 #
09 p1534 A69-22798	10 p1759 A69-22843 #	10 p1793 A69-22888 #	10 p1678 A69-22933 #	10 p1698 A69-22978 #
09 p1534 A69-22799	10 p1760 A69-22844 #	10 p1794 A69-22889 #	10 p1808 A69-22934 #	10 p1792 A69-22979 #
09 p1492 A69-22800	10 p1659 A69-22845 #	10 p1794 A69-22890 #	10 p1791 A69-22935 #	10 p1669 A69-22980 #
10 p1717 A69-22801	10 p1718 A69-22846 #	10 p1794 A69-22891 #	10 p1678 A69-22936 #	10 p1669 A69-22981 #
10 p1754 A69-22802 #	10 p1681 A69-22847 #	10 p1808 A69-22892 #	10 p1651 A69-22937*	10 p1669 A69-22982 #
10 p1681 A69-22803 #	10 p1792 A69-22848 #	10 p1631 A69-22893 #	10 p1651 A69-22938	10 p1635 A69-22983
10 p1681 A69-22804 #	10 p1792 A69-22849 #	10 p1677 A69-22894 #	10 p1651 A69-22939	10 p1652 A69-22984*
10 p1681 A69-22805 #	10 p1793 A69-22850 #	10 p1677 A69-22895 #	10 p1651 A69-22940*	10 p1698 A69-22985
10 p1681 A69-22806 #	10 p1771 A69-22851 #	10 p1677 A69-22896 #	10 p1794 A69-22941	10 p1707 A69-22986*
10 p1726 A69-22807 #	10 p1771 A69-22852 #	10 p1677 A69-22897 #	10 p1716 A69-22942	10 p1707 A69-22987
10 p1771 A69-22808 #	10 p1771 A69-22853 #	10 p1631 A69-22898 #	10 p1794 A69-22943	10 p1707 A69-22988
10 p1717 A69-22809	10 p1771 A69-22854 #	10 p1677 A69-22899 #	10 p1722 A69-22944 #	10 p1707 A69-22989
10 p1754 A69-22810	10 p1771 A69-22855 #	10 p1677 A69-22900 #	10 p1689 A69-22945*#	10 p1707 A69-22990*

# ACCESSION NUMBER INDEX

10 p1707 A69-22991	10 p1716 A69-23036*	10 p1797 A69-23081 #	10 p1643 A69-23126*	10 p1743 A69-23171*
10 p1708 A69-22992	10 p1794 A69-23037	10 p1797 A69-23082*#	10 p1651 A69-23127*	10 p1743 A69-23172*
10 p1708 A69-22993	10 p1718 A69-23038*	10 p1797 A69-23083 #	10 p1726 A69-23128 #	10 p1743 A69-23173*
10 p1708 A69-22994	10 p1641 A69-23039*	10 p1710 A69-23084 #	10 p1701 A69-23129 #	10 p1743 A69-23174
10 p1708 A69-22995	10 p1669 A69-23040*	10 p1710 A69-23085 #	10 p1728 A69-23130 #	10 p1743 A69-23175
10 p1708 A69-22996	10 p1641 A69-23041*	10 p1710 A69-23086 #	10 p1743 A69-23131 #	10 p1744 A69-23176
10 p1742 A69-22997 #	10 p1724 A69-23042 #	10 p1798 A69-23087 #	10 p1701 A69-23132 #	10 p1744 A69-23177
10 p1708 A69-22998 #	10 p1670 A69-23043 #	10 p1724 A69-23088*	10 p1653 A69-23133 #	10 p1744 A69-23178
10 p1708 A69-22999 #	10 p1633 A69-23044 #	10 p1710 A69-23089*	10 p1728 A69-23134 #	10 p1744 A69-23179
10 p1708 A69-23000 #	10 p1641 A69-23045*	10 p1727 A69-23090	10 p1701 A69-23135 #	10 p1648 A69-23180 #
10 p1742 A69-23001 #	10 p1698 A69-23046 #	10 p1727 A69-23091	10 p1760 A69-23136 #	10 p1648 A69-23181 #
10 p1743 A69-23002 #	10 p1698 A69-23047 #	10 p1727 A69-23092	10 p1728 A69-23137 #	10 p1774 A69-23182
10 p1748 A69-23003	10 p1699 A69-23048	10 p1727 A69-23093	10 p1701 A69-23138 #	10 p1775 A69-23183*
10 p1749 A69-23004	10 p1653 A69-23049 #	10 p1798 A69-23094	10 p1702 A69-23139 #	10 p1644 A69-23184
10 p1669 A69-23005	10 p1699 A69-23050*#	10 p1636 A69-23095	10 p1659 A69-23140	10 p1648 A69-23185
10 p1749 A69-23006	10 p1699 A69-23051 #	10 p1727 A69-23096	10 p1659 A69-23141	10 p1648 A69-23186*
10 p1749 A69-23007	10 p1794 A69-23052 #	10 p1727 A69-23097	10 p1659 A69-23142	10 p1808 A69-23187*#
10 p1749 A69-23008	10 p1699 A69-23053 #	10 p1727 A69-23098	10 p1659 A69-23143	10 p1808 A69-23188*#
10 p1750 A69-23009	10 p1699 A69-23054*#	10 p1727 A69-23099	10 p1662 A69-23144	10 p1808 A69-23189*#
10 p1750 A69-23010	10 p1709 A69-23055 #	10 p1727 A69-23100	10 p1722 A69-23145	10 p1775 A69-23190*#
10 p1750 A69-23011	10 p1709 A69-23056	10 p1727 A69-23101	10 p1798 A69-23146	10 p1775 A69-23191 #
10 p1750 A69-23012	10 p1795 A69-23057*#	10 p1636 A69-23102	10 p1798 A69-23147	10 p1653 A69-23192 #
10 p1651 A69-23013	10 p1709 A69-23058 #	10 p1636 A69-23103	10 p1798 A69-23148	10 p1653 A69-23193 #
10 p1750 A69-23014	10 p1795 A69-23059 #	10 p1653 A69-23104	10 p1798 A69-23149	10 p1809 A69-23194*
10 p1750 A69-23015	10 p1795 A69-23060 #	10 p1653 A69-23105	10 p1799 A69-23150	10 p1809 A69-23195
10 p1751 A69-23016	10 p1795 A69-23061 #	10 p1653 A69-23106	10 p1799 A69-23151	10 p1809 A69-23196
10 p1751 A69-23017	10 p1795 A69-23062 #	10 p1653 A69-23107	10 p1799 A69-23152	10 p1800 A69-23197
10 p1751 A69-23018	10 p1795 A69-23063 #	10 p1661 A69-23108	10 p1799 A69-23153	10 p1775 A69-23198 #
10 p1751 A69-23019	10 p1795 A69-23064 #	10 p1653 A69-23109	10 p1799 A69-23154	10 p1775 A69-23199 #
10 p1751 A69-23020	10 p1795 A69-23065 #	10 p1661 A69-23110	10 p1799 A69-23155 #	10 p1775 A69-23200 #
10 p1751 A69-23021	10 p1795 A69-23066*#	10 p1653 A69-23111	10 p1799 A69-23156 #	10 p1775 A69-23201 #
10 p1752 A69-23022	10 p1796 A69-23067 #	10 p1661 A69-23112	10 p1662 A69-23157 #	10 p1775 A69-23202 #
10 p1752 A69-23023	10 p1796 A69-23068 #	10 p1661 A69-23113	10 p1644 A69-23158*	10 p1775 A69-23203 #
10 p1752 A69-23024	10 p1796 A69-23069	10 p1653 A69-23114	10 p1724 A69-23159	10 p1775 A69-23204 #
10 p1752 A69-23025	10 p1796 A69-23070 #	10 p1662 A69-23115	10 p1702 A69-23160	10 p1776 A69-23205 #
10 p1669 A69-23026*	10 p1709 A69-23071 #	10 p1641 A69-23116*	10 p1681 A69-23161	10 p1718 A69-23206 #
10 p1635 A69-23027	10 p1796 A69-23072 #	10 p1642 A69-23117	10 p1774 A69-23162	10 p1718 A69-23207 #
10 p1753 A69-23028	10 p1709 A69-23073 #	10 p1642 A69-23118	10 p1681 A69-23163	10 p1718 A69-23208 #
10 p1792 A69-23029	10 p1709 A69-23074 #	10 p1642 A69-23119*	10 p1723 A69-23164*	10 p1678 A69-23209 #
10 p1635 A69-23030	10 p1796 A69-23075 #	10 p1642 A69-23120	10 p1723 A69-23165	10 p1776 A69-23210 #
10 p1635 A69-23031	10 p1710 A69-23076 #	10 p1642 A69-23121	10 p1710 A69-23166	10 p1702 A69-23211 #
10 p1635 A69-23032	10 p1797 A69-23077 #	10 p1643 A69-23122*	10 p1728 A69-23167	10 p1744 A69-23212 #
10 p1635 A69-23033	10 p1797 A69-23078 #	10 p1643 A69-23123	10 p1728 A69-23168	10 p1710 A69-23213 #
10 p1635 A69-23034	10 p1797 A69-23079 #	10 p1643 A69-23124	10 p1743 A69-23169*	10 p1776 A69-23214
10 p1641 A69-23035*	10 p1797 A69-23080 #	10 p1643 A69-23125	10 p1662 A69-23170	10 p1776 A69-23215



## ACCESSION NUMBER INDEX

10 p1776 A69-23216	10 p1671 A69-23261	10 p1644 A69-23306*	10 p1811 A69-23351	10 p1777 A69-23396
10 p1776 A69-23217	10 p1660 A69-23262	10 p1651 A69-23307*	10 p1811 A69-23352	10 p1777 A69-23397
10 p1776 A69-23218	10 p1671 A69-23263	10 p1651 A69-23308*	10 p1811 A69-23353	10 p1723 A69-23398*
10 p1776 A69-23219	10 p1660 A69-23264	10 p1725 A69-23309 #	10 p1673 A69-23354*	10 p1719 A69-23399
10 p1776 A69-23220	10 p1672 A69-23265	10 p1777 A69-23310 #	10 p1700 A69-23355	10 p1719 A69-23400
10 p1811 A69-23221	10 p1672 A69-23266	10 p1693 A69-23311 #	10 p1711 A69-23356 #	10 p1636 A69-23401
10 p1662 A69-23222	10 p1692 A69-23267	10 p1777 A69-23312 #	10 p1745 A69-23357*	10 p1636 A69-23402
10 p1633 A69-23223	10 p1672 A69-23268	10 p1777 A69-23313 #	10 p1745 A69-23358	10 p1716 A69-23403
10 p1690 A69-23224	10 p1660 A69-23269	10 p1644 A69-23314*	10 p1745 A69-23359	10 p1649 A69-23404*
10 p1690 A69-23225	10 p1660 A69-23270	10 p1681 A69-23315	10 p1745 A69-23360	10 p1778 A69-23405*
10 p1690 A69-23226	10 p1633 A69-23271	10 p1744 A69-23316	10 p1745 A69-23361	10 p1778 A69-23406
10 p1690 A69-23227	10 p1654 A69-23272	10 p1725 A69-23317	10 p1753 A69-23362**	10 p1729 A69-23407
10 p1691 A69-23228	10 p1633 A69-23273	10 p1662 A69-23318	10 p1666 A69-23363 #	10 p1729 A69-23408
10 p1691 A69-23229	10 p1634 A69-23274	10 p1662 A69-23319	10 p1632 A69-23364 #	10 p1778 A69-23409
10 p1691 A69-23230	10 p1693 A69-23275	10 p1693 A69-23320	10 p1719 A69-23365 #	10 p1682 A69-23410
10 p1691 A69-23231	10 p1693 A69-23276	10 p1744 A69-23321	10 p1678 A69-23366 #	10 p1760 A69-23411*
10 p1660 A69-23232	10 p1672 A69-23277*	10 p1745 A69-23322	10 p1679 A69-23367 #	10 p1682 A69-23412
10 p1691 A69-23233	10 p1672 A69-23278	10 p1745 A69-23323	10 p1694 A69-23368 #	10 p1778 A69-23413*
10 p1728 A69-23234	10 p1654 A69-23279*	10 p1745 A69-23324	10 p1800 A69-23369*	10 p1778 A69-23414*
10 p1678 A69-23235	10 p1654 A69-23280	10 p1682 A69-23325 #	10 p1652 A69-23370*	10 p1682 A69-23415
10 p1800 A69-23236	10 p1654 A69-23281	10 p1678 A69-23326 #	10 p1652 A69-23371*	10 p1655 A69-23416
10 p1728 A69-23237	10 p1636 A69-23282	10 p1682 A69-23327 #	10 p1700 A69-23372	10 p1655 A69-23417
10 p1728 A69-23238	10 p1672 A69-23283*	10 p1722 A69-23328 #	10 p1694 A69-23373*	10 p1682 A69-23418
10 p1728 A69-23239	10 p1660 A69-23284	10 p1745 A69-23329	10 p1700 A69-23374	10 p1655 A69-23419
10 p1800 A69-23240	10 p1672 A69-23285	10 p1745 A69-23330	10 p1711 A69-23375	10 p1663 A69-23420
10 p1800 A69-23241	10 p1673 A69-23286	10 p1745 A69-23331	10 p1644 A69-23376 #	10 p1663 A69-23421
10 p1800 A69-23242	10 p1673 A69-23287*	10 p1711 A69-23332	10 p1649 A69-23377 #	10 p1655 A69-23422
10 p1800 A69-23243	10 p1699 A69-23288	10 p1711 A69-23333	10 p1649 A69-23378 #	10 p1663 A69-23423
10 p1800 A69-23244	10 p1693 A69-23289	10 p1711 A69-23334	10 p1645 A69-23379 #	10 p1729 A69-23424
10 p1670 A69-23245	10 p1660 A69-23290	10 p1711 A69-23335	10 p1649 A69-23380 #	10 p1679 A69-23425 #
10 p1691 A69-23246	10 p1654 A69-23291	10 p1711 A69-23336	10 p1645 A69-23381 #	10 p1679 A69-23426 #
10 p1691 A69-23247	10 p1654 A69-23292	10 p1711 A69-23337	10 p1649 A69-23382 #	10 p1809 A69-23427 #
10 p1691 A69-23248	10 p1760 A69-23293 #	10 p1711 A69-23338	10 p1777 A69-23383	10 p1702 A69-23428 #
10 p1692 A69-23249	10 p1662 A69-23294 #	10 p1711 A69-23339	10 p1702 A69-23384 #	10 p1801 A69-23429 #
10 p1692 A69-23250	10 p1776 A69-23295 #	10 p1652 A69-23340**	10 p1645 A69-23385*	10 p1809 A69-23430 #
10 p1654 A69-23251	10 p1693 A69-23296 #	10 p1702 A69-23341 #	10 p1777 A69-23386 #	10 p1702 A69-23431 #
10 p1692 A69-23252	10 p1648 A69-23297 #	10 p1673 A69-23342	10 p1777 A69-23387 #	10 p1729 A69-23432 #
10 p1692 A69-23253	10 p1648 A69-23298 #	10 p1693 A69-23343	10 p1777 A69-23388 #	10 p1729 A69-23433
10 p1692 A69-23254	10 p1702 A69-23299 #	10 p1662 A69-23344	10 p1654 A69-23389	10 p1731 A69-23434 #
10 p1692 A69-23255	10 p1744 A69-23300 #	10 p1693 A69-23345 #	10 p1682 A69-23390	10 p1731 A69-23435 #
10 p1662 A69-23256	10 p1725 A69-23301 #	10 p1693 A69-23346	10 p1652 A69-23391*	10 p1731 A69-23436 #
10 p1692 A69-23257	10 p1699 A69-23302	10 p1702 A69-23347 #	10 p1811 A69-23392*	10 p1731 A69-23437 #
10 p1671 A69-23258	10 p1644 A69-23303*	10 p1694 A69-23348**	10 p1711 A69-23393	10 p1731 A69-23438 #
10 p1671 A69-23259	10 p1644 A69-23304*	10 p1800 A69-23349 #	10 p1716 A69-23394	10 p1731 A69-23439 #
10 p1671 A69-23260	10 p1651 A69-23305*	10 p1800 A69-23350 #	10 p1777 A69-23395	10 p1732 A69-23440 #

## ACCESSION NUMBER INDEX

10 p1732 A69-23441 #	10 p1638 A69-23486 #	10 p1663 A69-23531*	10 p1646 A69-23576	10 p1703 A69-23621
10 p1732 A69-23442 #	10 p1638 A69-23487 #	10 p1655 A69-23532	10 p1646 A69-23577	10 p1703 A69-23622
10 p1732 A69-23443 #	10 p1738 A69-23488 #	10 p1656 A69-23533	10 p1646 A69-23578	10 p1739 A69-23623
10 p1732 A69-23444 #	10 p1738 A69-23489 #	10 p1656 A69-23534	10 p1649 A69-23579	10 p1703 A69-23624
10 p1733 A69-23445 #	10 p1638 A69-23490 #	10 p1656 A69-23535	10 p1649 A69-23580	10 p1704 A69-23625
10 p1733 A69-23446 #	10 p1738 A69-23491 #	10 p1656 A69-23536	10 p1646 A69-23581	10 p1739 A69-23626
10 p1733 A69-23447 #	10 p1739 A69-23492 #	10 p1663 A69-23537	10 p1646 A69-23582	10 p1726 A69-23627
10 p1733 A69-23448 #	10 p1739 A69-23493 #	10 p1801 A69-23538 #	10 p1646 A69-23583	10 p1739 A69-23628
10 p1733 A69-23449 #	10 p1645 A69-23494	10 p1694 A69-23539 #	10 p1646 A69-23584	10 p1634 A69-23629
10 p1733 A69-23450 #	10 p1645 A69-23495	10 p1694 A69-23540	10 p1647 A69-23585	10 p1712 A69-23630 #
10 p1733 A69-23451 #	10 p1645 A69-23496	10 p1694 A69-23541	10 p1647 A69-23586	10 p1674 A69-23631 #
10 p1734 A69-23452 #	10 p1645 A69-23497	10 p1695 A69-23542	10 p1647 A69-23587	10 p1712 A69-23632
10 p1734 A69-23453 #	10 p1645 A69-23498	10 p1695 A69-23543	10 p1647 A69-23588	10 p1674 A69-23633 #
10 p1636 A69-23454 #	10 p1645 A69-23499	10 p1695 A69-23544	10 p1647 A69-23589	10 p1746 A69-23634*
10 p1734 A69-23455 #	10 p1645 A69-23500	10 p1695 A69-23545	10 p1647 A69-23590	10 p1720 A69-23635
10 p1734 A69-23456 #	10 p1645 A69-23501	10 p1695 A69-23546	10 p1647 A69-23591	10 p1720 A69-23636
10 p1734 A69-23457 #	10 p1646 A69-23502	10 p1695 A69-23547	10 p1647 A69-23592	10 p1720 A69-23637
10 p1636 A69-23458 #	10 p1716 A69-23503	10 p1695 A69-23548	10 p1682 A69-23593 #	10 p1720 A69-23638
10 p1734 A69-23459 #	10 p1649 A69-23504	10 p1696 A69-23549	10 p1720 A69-23594	10 p1720 A69-23639*
10 p1735 A69-23460 #	10 p1649 A69-23505	10 p1696 A69-23550	10 p1679 A69-23595	10 p1721 A69-23640
10 p1735 A69-23461 #	10 p1646 A69-23506	10 p1696 A69-23551	10 p1679 A69-23596	10 p1721 A69-23641
10 p1735 A69-23462 #	10 p1646 A69-23507	10 p1696 A69-23552	10 p1634 A69-23597 #	10 p1721 A69-23642*
10 p1735 A69-23463 #	10 p1646 A69-23508	10 p1638 A69-23553 #	10 p1634 A69-23598 #	10 p1680 A69-23643
10 p1735 A69-23464	10 p1649 A69-23509	10 p1638 A69-23554 #	10 p1634 A69-23599 #	10 p1809 A69-23644
10 p1736 A69-23465 #	10 p1646 A69-23510	10 p1638 A69-23555 #	10 p1700 A69-23600 #	10 p1801 A69-23645
10 p1737 A69-23466 #	10 p1703 A69-23511 #	10 p1639 A69-23556 #	10 p1634 A69-23601	10 p1780 A69-23646
10 p1737 A69-23467 #	10 p1703 A69-23512 #	10 p1679 A69-23557 #	10 p1811 A69-23602	10 p1725 A69-23647**
10 p1737 A69-23468 #	10 p1746 A69-23513*#	10 p1639 A69-23558 #	10 p1778 A69-23603 #	10 p1680 A69-23648
10 p1737 A69-23469 #	10 p1703 A69-23514 #	10 p1753 A69-23559 #	10 p1778 A69-23604 #	10 p1780 A69-23649
10 p1737 A69-23470 #	10 p1719 A69-23515*	10 p1639 A69-23560 #	10 p1778 A69-23605 #	10 p1739 A69-23650
10 p1636 A69-23471 #	10 p1719 A69-23516*	10 p1753 A69-23561*#	10 p1779 A69-23606 #	10 p1656 A69-23651 #
10 p1637 A69-23472 #	10 p1719 A69-23517	10 p1720 A69-23562 #	10 p1779 A69-23607 #	10 p1704 A69-23652
10 p1637 A69-23473 #	10 p1719 A69-23518*	10 p1720 A69-23563 #	10 p1779 A69-23608 #	10 p1809 A69-23653
10 p1673 A69-23474 #	10 p1719 A69-23519*	10 p1646 A69-23564*	10 p1779 A69-23609 #	10 p1704 A69-23654 #
10 p1738 A69-23475 #	10 p1719 A69-23520	10 p1746 A69-23565 #	10 p1666 A69-23610 #	10 p1746 A69-23655 #
10 p1637 A69-23476 #	10 p1719 A69-23521	10 p1663 A69-23566 #	10 p1682 A69-23611 #	10 p1704 A69-23656
10 p1673 A69-23477 #	10 p1746 A69-23522	10 p1679 A69-23567 #	10 p1779 A69-23612 #	10 p1656 A69-23657 #
10 p1673 A69-23478 #	10 p1652 A69-23523	10 p1679 A69-23568 #	10 p1779 A69-23613 #	10 p1704 A69-23658 #
10 p1738 A69-23479 #	10 p1726 A69-23524*#	10 p1679 A69-23569 #	10 p1779 A69-23614 #	10 p1739 A69-23659 #
10 p1637 A69-23480 #	10 p1726 A69-23525	10 p1778 A69-23570 #	10 p1780 A69-23615 #	10 p1739 A69-23660*#
10 p1637 A69-23481 #	10 p1726 A69-23526 #	10 p1663 A69-23571 #	10 p1780 A69-23616 #	10 p1656 A69-23661 #
10 p1674 A69-23482 #	10 p1652 A69-23527*#	10 p1703 A69-23572 #	10 p1760 A69-23617 #	10 p1740 A69-23662 #
10 p1638 A69-23483 #	10 p1752 A69-23528*#	10 p1746 A69-23573 #	10 p1703 A69-23618	10 p1746 A69-23663*#
10 p1638 A69-23484 #	10 p1655 A69-23529	10 p1746 A69-23574 #	10 p1703 A69-23619	10 p1663 A69-23664
10 p1723 A69-23485 #	10 p1655 A69-23530	10 p1646 A69-23575	10 p1711 A69-23620	10 p1712 A69-23665 #



# ACCESSION NUMBER INDEX

10 p1704 A69-23666 #	10 p1782 A69-23711	10 p1766 A69-23756	10 p1657 A69-23801	10 p1714 A69-23846
10 p1663 A69-23667	10 p1783 A69-23712	10 p1683 A69-23757	10 p1664 A69-23802	10 p1747 A69-23847
10 p1680 A69-23668	10 p1747 A69-23713	10 p1766 A69-23758	10 p1664 A69-23803	10 p1714 A69-23848
10 p1704 A69-23669*#	10 p1725 A69-23714	10 p1766 A69-23759	10 p1792 A69-23804	10 p1801 A69-23849
10 p1780 A69-23670	10 p1740 A69-23715	10 p1766 A69-23760	10 p1674 A69-23805	10 p1801 A69-23850
10 p1781 A69-23671	10 p1740 A69-23716	10 p1766 A69-23761	10 p1752 A69-23806	10 p1696 A69-23851
10 p1781 A69-23672	10 p1696 A69-23717	10 p1766 A69-23762	10 p1747 A69-23807 #	10 p1661 A69-23852
10 p1781 A69-23673*	10 p1680 A69-23718 #	10 p1767 A69-23763	10 p1704 A69-23808	10 p1661 A69-23853
10 p1781 A69-23674*	10 p1712 A69-23719	10 p1767 A69-23764	10 p1741 A69-23809	10 p1661 A69-23854
10 p1781 A69-23675	10 p1712 A69-23720	10 p1767 A69-23765	10 p1705 A69-23810	10 p1661 A69-23855
10 p1781 A69-23676	10 p1740 A69-23721 #	10 p1767 A69-23766*	10 p1705 A69-23811	10 p1685 A69-23856
10 p1781 A69-23677	10 p1740 A69-23722 #	10 p1767 A69-23767	10 p1705 A69-23812	10 p1665 A69-23857
10 p1781 A69-23678	10 p1740 A69-23723 #	10 p1768 A69-23768*	10 p1705 A69-23813	10 p1741 A69-23858
10 p1781 A69-23679*	10 p1740 A69-23724 #	10 p1768 A69-23769*	10 p1705 A69-23814	10 p1741 A69-23859
10 p1782 A69-23680	10 p1760 A69-23725	10 p1683 A69-23770*	10 p1705 A69-23815	10 p1657 A69-23860
10 p1782 A69-23681	10 p1762 A69-23726	10 p1768 A69-23771	10 p1666 A69-23816 #	10 p1639 A69-23861
10 p1782 A69-23682	10 p1762 A69-23727	10 p1657 A69-23772	10 p1664 A69-23817 #	10 p1657 A69-23862
10 p1782 A69-23683	10 p1762 A69-23728	10 p1783 A69-23773*	10 p1712 A69-23818	10 p1721 A69-23863
10 p1696 A69-23684	10 p1763 A69-23729	10 p1768 A69-23774	10 p1713 A69-23819	10 p1721 A69-23864
10 p1726 A69-23685	10 p1763 A69-23730*	10 p1783 A69-23775*	10 p1713 A69-23820	10 p1657 A69-23865*
10 p1674 A69-23686	10 p1763 A69-23731	10 p1683 A69-23776	10 p1713 A69-23821	10 p1674 A69-23866 #
10 p1801 A69-23687 #	10 p1763 A69-23732	10 p1683 A69-23777*	10 p1713 A69-23822	10 p1697 A69-23867
10 p1801 A69-23688 #	10 p1763 A69-23733	10 p1768 A69-23778*	10 p1713 A69-23823	10 p1697 A69-23868
10 p1809 A69-23689 #	10 p1783 A69-23734	10 p1683 A69-23779	10 p1684 A69-23824	10 p1697 A69-23869
10 p1680 A69-23690 #	10 p1763 A69-23735	10 p1683 A69-23780	10 p1684 A69-23825	10 p1697 A69-23870
10 p1721 A69-23691 #	10 p1763 A69-23736	10 p1684 A69-23781	10 p1684 A69-23826	10 p1697 A69-23871
10 p1656 A69-23692	10 p1763 A69-23737	10 p1684 A69-23782	10 p1769 A69-23827	10 p1649 A69-23872 #
10 p1664 A69-23693	10 p1764 A69-23738	10 p1684 A69-23783	10 p1684 A69-23828	10 p1665 A69-23873
10 p1747 A69-23694	10 p1764 A69-23739	10 p1684 A69-23784	10 p1685 A69-23829	10 p1661 A69-23874
10 p1716 A69-23695	10 p1764 A69-23740	10 p1768 A69-23785	10 p1685 A69-23830	10 p1665 A69-23875
10 p1782 A69-23696 #	10 p1764 A69-23741	10 p1768 A69-23786	10 p1685 A69-23831	10 p1665 A69-23876
10 p1782 A69-23697 #	10 p1764 A69-23742	10 p1769 A69-23787	10 p1685 A69-23832	10 p1650 A69-23877
10 p1722 A69-23698	10 p1764 A69-23743	10 p1680 A69-23788	10 p1685 A69-23833	10 p1650 A69-23878
10 p1740 A69-23699	10 p1764 A69-23744	10 p1680 A69-23789	10 p1685 A69-23834	10 p1650 A69-23879*
10 p1632 A69-23700 #	10 p1764 A69-23745	10 p1725 A69-23790	10 p1685 A69-23835	10 p1650 A69-23880*
10 p1723 A69-23701 #	10 p1765 A69-23746	10 p1740 A69-23791	10 p1685 A69-23836	10 p1650 A69-23881*
10 p1801 A69-23702 #	10 p1765 A69-23747*	10 p1747 A69-23792	10 p1769 A69-23837*	10 p1721 A69-23882
10 p1782 A69-23703 #	10 p1765 A69-23748*	10 p1783 A69-23793	10 p1634 A69-23838	10 p1666 A69-23883
10 p1723 A69-23704	10 p1765 A69-23749*	10 p1810 A69-23794	10 p1700 A69-23839	10 p1666 A69-23884
10 p1723 A69-23705	10 p1765 A69-23750	10 p1660 A69-23795	10 p1713 A69-23840 #	10 p1721 A69-23885
10 p1674 A69-23706	10 p1765 A69-23751	10 p1664 A69-23796	10 p1753 A69-23841	10 p1632 A69-23886
10 p1674 A69-23707	10 p1765 A69-23752	10 p1664 A69-23797	10 p1632 A69-23842	10 p1666 A69-23887
10 p1674 A69-23708	10 p1766 A69-23753*	10 p1664 A69-23798	10 p1747 A69-23843	10 p1666 A69-23888
10 p1680 A69-23709	10 p1766 A69-23754*	10 p1664 A69-23799	10 p1801 A69-23844	10 p1802 A69-23889
10 p1782 A69-23710	10 p1766 A69-23755	10 p1664 A69-23800	10 p1696 A69-23845	10 p1802 A69-23890

# ACCESSION NUMBER INDEX

10 p1754 A69-23891	10 p1688 A69-23936 #	10 p1714 A69-23981	10 p1802 A69-24026*	10 p1697 A69-24071
10 p1802 A69-23892	10 p1688 A69-23937 #	10 p1715 A69-23982	10 p1802 A69-24027	10 p1675 A69-24072
10 p1680 A69-23893	10 p1688 A69-23938 #	10 p1715 A69-23983	10 p1802 A69-24028	10 p1697 A69-24073
10 p1680 A69-23894 #	10 p1689 A69-23939 #	10 p1715 A69-23984	10 p1803 A69-24029	10 p1697 A69-24074
10 p1783 A69-23895 #	10 p1784 A69-23940 #	10 p1716 A69-23985	10 p1803 A69-24030	10 p1675 A69-24075
10 p1741 A69-23896 #	10 p1784 A69-23941 #	10 p1811 A69-23986	10 p1803 A69-24031	10 p1803 A69-24076 #
10 p1810 A69-23897 #	10 p1657 A69-23942 #	10 p1721 A69-23987 #	10 p1803 A69-24032	10 p1742 A69-24077 #
10 p1650 A69-23898 #	10 p1657 A69-23943 #	10 p1784 A69-23988	10 p1803 A69-24033	10 p1706 A69-24078 #
10 p1769 A69-23899 #	10 p1658 A69-23944 #	10 p1747 A69-23989*	10 p1784 A69-24034 #	10 p1706 A69-24079 #
10 p1769 A69-23900 #	10 p1741 A69-23945 #	10 p1639 A69-23990	10 p1784 A69-24035 #	10 p1706 A69-24080 #
10 p1769 A69-23901 #	10 p1741 A69-23946 #	10 p1639 A69-23991*	10 p1785 A69-24036 #	10 p1742 A69-24081 #
10 p1686 A69-23902 #	10 p1741 A69-23947 #	10 p1639 A69-23992	10 p1667 A69-24037	10 p1689 A69-24082 #
10 p1686 A69-23903 #	10 p1705 A69-23948 #	10 p1640 A69-23993*	10 p1667 A69-24038	10 p1706 A69-24083
10 p1769 A69-23904 #	10 p1705 A69-23949 #	10 p1640 A69-23994	10 p1667 A69-24039	10 p1659 A69-24084
10 p1769 A69-23905 #	10 p1658 A69-23950 #	10 p1640 A69-23995	10 p1667 A69-24040	10 p1810 A69-24085 #
10 p1770 A69-23906 #	10 p1658 A69-23951 #	10 p1640 A69-23996	10 p1667 A69-24041	10 p1697 A69-24086 #
10 p1770 A69-23907 #	10 p1658 A69-23952 #	10 p1640 A69-23997	10 p1721 A69-24042	10 p1635 A69-24087 #
10 p1686 A69-23908 #	10 p1658 A69-23953 #	10 p1640 A69-23998	10 p1803 A69-24043	10 p1700 A69-24088
10 p1686 A69-23909 #	10 p1658 A69-23954 #	10 p1640 A69-23999	10 p1715 A69-24044	10 p1785 A69-24089
10 p1686 A69-23910 #	10 p1658 A69-23955 #	10 p1770 A69-24000	10 p1717 A69-24045	10 p1785 A69-24090
10 p1686 A69-23911 #	10 p1705 A69-23956 #	10 p1784 A69-24001	10 p1667 A69-24046 #	10 p1785 A69-24091
10 p1686 A69-23912 #	10 p1658 A69-23957 #	10 p1697 A69-24002	10 p1665 A69-24047 #	10 p1785 A69-24092
10 p1657 A69-23913 #	10 p1784 A69-23958	10 p1705 A69-24003**	10 p1725 A69-24048	10 p1770 A69-24093
10 p1686 A69-23914 #	10 p1721 A69-23959 #	10 p1742 A69-24004	10 p1725 A69-24049	10 p1770 A69-24094
10 p1687 A69-23915 #	10 p1784 A69-23960 #	10 p1706 A69-24005**	10 p1785 A69-24050	10 p1770 A69-24095
10 p1687 A69-23916 #	10 p1741 A69-23961 #	10 p1747 A69-24006**	10 p1665 A69-24051	10 p1785 A69-24096
10 p1783 A69-23917 #	10 p1741 A69-23962 #	10 p1706 A69-24007	10 p1748 A69-24052	10 p1785 A69-24097
10 p1687 A69-23918 #	10 p1747 A69-23963 #	10 p1706 A69-24008 #	10 p1748 A69-24053	10 p1785 A69-24098
10 p1687 A69-23919 #	10 p1714 A69-23964 #	10 p1706 A69-24009**	10 p1715 A69-24054 #	10 p1785 A69-24099
10 p1687 A69-23920 #	10 p1747 A69-23965 #	10 p1706 A69-24010 #	10 p1715 A69-24055 #	10 p1785 A69-24100*
10 p1783 A69-23921 #	10 p1647 A69-23966 #	10 p1715 A69-24011 #	10 p1716 A69-24056 #	10 p1785 A69-24101*
10 p1783 A69-23922 #	10 p1722 A69-23967 #	10 p1715 A69-24012 #	10 p1667 A69-24057	10 p1786 A69-24102*
10 p1687 A69-23923 #	10 p1689 A69-23968 #	10 p1715 A69-24013 #	10 p1667 A69-24058	10 p1786 A69-24103*
10 p1770 A69-23924 #	10 p1689 A69-23969 #	10 p1810 A69-24014	10 p1667 A69-24059	10 p1786 A69-24104*
10 p1770 A69-23925 #	10 p1689 A69-23970 #	10 p1810 A69-24015	10 p1633 A69-24060	10 p1786 A69-24105*
10 p1687 A69-23926 #	10 p1725 A69-23971 #	10 p1810 A69-24016	10 p1658 A69-24061	10 p1786 A69-24106*
10 p1687 A69-23927 #	10 p1722 A69-23972 #	10 p1665 A69-24017	10 p1659 A69-24062	10 p1742 A69-24107
10 p1687 A69-23928 #	10 p1722 A69-23973 #	10 p1706 A69-24018	10 p1665 A69-24063	10 p1786 A69-24108*
10 p1688 A69-23929 #	10 p1714 A69-23974	10 p1784 A69-24019	10 p1659 A69-24064	10 p1786 A69-24109*
10 p1688 A69-23930 #	10 p1753 A69-23975	10 p1802 A69-24020	10 p1659 A69-24065	10 p1786 A69-24110*
10 p1688 A69-23931 #	10 p1681 A69-23976	10 p1647 A69-24021	10 p1665 A69-24066	10 p1770 A69-24111*
10 p1688 A69-23932 #	10 p1714 A69-23977	10 p1754 A69-24022	10 p1722 A69-24067 #	10 p1771 A69-24112*
10 p1657 A69-23933 #	10 p1716 A69-23978	10 p1753 A69-24023	10 p1674 A69-24068 #	10 p1787 A69-24113
10 p1688 A69-23934 #	10 p1714 A69-23979	10 p1802 A69-24024 #	10 p1722 A69-24069 #	10 p1787 A69-24114
10 p1688 A69-23935 #	10 p1714 A69-23980	10 p1802 A69-24025 #	10 p1700 A69-24070	10 p1787 A69-24115



## ACCESSION NUMBER INDEX

10 p1787 A69-24116	10 p1640 A69-24161 #	10 p1689 A69-24206	11 p1952 A69-24251	11 p1923 A69-24296 #
10 p1787 A69-24117	10 p1805 A69-24162**	10 p1698 A69-24207	11 p1952 A69-24252	11 p1923 A69-24297 #
10 p1787 A69-24118	10 p1805 A69-24163**	10 p1792 A69-24208	11 p1952 A69-24253	11 p1924 A69-24298 #
10 p1787 A69-24119	10 p1700 A69-24164 #	10 p1792 A69-24209	11 p1952 A69-24254	11 p1924 A69-24299 #
10 p1788 A69-24120*	10 p1806 A69-24165**	10 p1698 A69-24210 #	11 p1952 A69-24255	11 p1924 A69-24300 #
10 p1788 A69-24121*	10 p1806 A69-24166 #	10 p1707 A69-24211 #	11 p1879 A69-24256	11 p1924 A69-24301 #
10 p1788 A69-24122	10 p1806 A69-24167 #	10 p1698 A69-24212 #	11 p1952 A69-24257	11 p1924 A69-24302 #
10 p1788 A69-24123	10 p1698 A69-24168 #	10 p1707 A69-24213 #	11 p1952 A69-24258	11 p1924 A69-24303
10 p1788 A69-24124*	10 p1701 A69-24169 #	10 p1748 A69-24214 #	11 p1901 A69-24259 #	11 p1924 A69-24304 #
10 p1788 A69-24125*	10 p1806 A69-24170 #	10 p1665 A69-24215 #	11 p2003 A69-24260	11 p1924 A69-24305**
10 p1788 A69-24126	10 p1806 A69-24171 #	10 p1717 A69-24216	11 p1941 A69-24261	11 p1924 A69-24306
10 p1789 A69-24127	10 p1806 A69-24172 #	10 p1717 A69-24217	11 p1861 A69-24262	11 p1997 A69-24307
10 p1789 A69-24128	10 p1806 A69-24173 #	10 p1717 A69-24218	11 p1827 A69-24263	11 p1921 A69-24308 #
10 p1789 A69-24129	10 p1806 A69-24174 #	10 p1698 A69-24219	11 p1952 A69-24264	11 p1924 A69-24309
10 p1789 A69-24130	10 p1807 A69-24175 #	10 p1659 A69-24220	11 p1880 A69-24265	11 p1925 A69-24310 #
10 p1789 A69-24131*	10 p1807 A69-24176**	11 p1824 A69-24221	11 p1880 A69-24266	11 p1925 A69-24311 #
10 p1789 A69-24132*	10 p1807 A69-24177**	11 p1824 A69-24222	11 p1913 A69-24267 #	11 p1925 A69-24312 #
10 p1789 A69-24133*	10 p1641 A69-24178 #	11 p1824 A69-24223	11 p1901 A69-24268	11 p1925 A69-24313
10 p1789 A69-24134	10 p1807 A69-24179**	11 p1824 A69-24224	11 p1901 A69-24269 #	11 p1925 A69-24314 #
10 p1790 A69-24135	10 p1807 A69-24180**	11 p1922 A69-24225	11 p1901 A69-24270 #	11 p1925 A69-24315**
10 p1790 A69-24136	10 p1807 A69-24181 #	11 p1922 A69-24226	11 p1902 A69-24271 #	11 p1925 A69-24316
10 p1790 A69-24137	10 p1807 A69-24182 #	11 p1922 A69-24227	11 p1902 A69-24272 #	11 p1908 A69-24317
10 p1790 A69-24138	10 p1808 A69-24183 #	11 p1996 A69-24228	11 p1902 A69-24273 #	11 p1968 A69-24318 #
10 p1790 A69-24139	10 p1808 A69-24184**	11 p1997 A69-24229	11 p1902 A69-24274 #	11 p1925 A69-24319 #
10 p1790 A69-24140*	10 p1647 A69-24185*	11 p1997 A69-24230	11 p1902 A69-24275 #	11 p1945 A69-24320 #
10 p1790 A69-24141	10 p1647 A69-24186*	11 p1922 A69-24231	11 p1902 A69-24276 #	11 p1821 A69-24321 #
10 p1790 A69-24142	10 p1717 A69-24187*	11 p1922 A69-24232	11 p1889 A69-24277 #	11 p1911 A69-24322 #
10 p1742 A69-24143	10 p1647 A69-24188*	11 p1922 A69-24233	11 p1866 A69-24278 #	11 p1911 A69-24323 #
10 p1803 A69-24144 #	10 p1648 A69-24189*	11 p1922 A69-24234	11 p1867 A69-24279	11 p1925 A69-24324
10 p1668 A69-24145 #	10 p1648 A69-24190*	11 p1879 A69-24235	11 p1867 A69-24280 #	11 p1921 A69-24325
10 p1804 A69-24146 #	10 p1790 A69-24191	11 p1951 A69-24236	11 p1817 A69-24281 #	11 p1915 A69-24326
10 p1700 A69-24147 #	10 p1791 A69-24192	11 p1951 A69-24237	11 p1867 A69-24282 #	11 p1969 A69-24327
10 p1804 A69-24148 #	10 p1791 A69-24193	11 p1945 A69-24238	11 p1997 A69-24283**	11 p1880 A69-24328
10 p1804 A69-24149 #	10 p1792 A69-24194	11 p1951 A69-24239	11 p1831 A69-24284 #	11 p1941 A69-24329
10 p1804 A69-24150 #	10 p1792 A69-24195	11 p1922 A69-24240	11 p1997 A69-24285**	11 p1925 A69-24330
10 p1804 A69-24151 #	10 p1791 A69-24196	11 p1945 A69-24241	11 p1997 A69-24286**	11 p1862 A69-24331
10 p1804 A69-24152 #	10 p1792 A69-24197	11 p1951 A69-24242	11 p1920 A69-24287 #	11 p1935 A69-24332
10 p1804 A69-24153 #	10 p1792 A69-24198	11 p1945 A69-24243	11 p1817 A69-24288**	11 p1893 A69-24333
10 p1805 A69-24154 #	10 p1791 A69-24199	11 p1945 A69-24244	11 p1923 A69-24289**	11 p1952 A69-24334*
10 p1805 A69-24155 #	10 p1791 A69-24200	11 p1922 A69-24245	11 p1923 A69-24290	11 p1953 A69-24335*
10 p1805 A69-24156 #	10 p1771 A69-24201	11 p1951 A69-24246	11 p1923 A69-24291**	11 p1953 A69-24336*
10 p1650 A69-24157 #	10 p1791 A69-24202	11 p1951 A69-24247	11 p1923 A69-24292	11 p1890 A69-24337
10 p1805 A69-24158 #	10 p1689 A69-24203	11 p1952 A69-24248	11 p1923 A69-24293**	11 p1969 A69-24338*
10 p1700 A69-24159 #	10 p1689 A69-24204	11 p1952 A69-24249	11 p1921 A69-24294**	11 p1953 A69-24339
10 p1805 A69-24160**	10 p1742 A69-24205	11 p1952 A69-24250	11 p1923 A69-24295	11 p1843 A69-24340

## ACCESSION NUMBER INDEX

11 p 1843 A69-24341	11 p 1955 A69-24386 #	11 p 1893 A69-24431	11 p 1970 A69-24476	11 p 1946 A69-24521
11 p 1953 A69-24342	11 p 1945 A69-24387 #	11 p 1880 A69-24432	11 p 1940 A69-24477	11 p 1845 A69-24522
11 p 1893 A69-24343	11 p 1955 A69-24388 #	11 p 1880 A69-24433	11 p 1831 A69-24478	11 p 1825 A69-24523 #
11 p 1893 A69-24344 #	11 p 1955 A69-24389 #	11 p 1958 A69-24434	11 p 1998 A69-24479	11 p 1935 A69-24524
11 p 1915 A69-24345 #	11 p 1955 A69-24390 #	11 p 1844 A69-24435 #	11 p 1998 A69-24480	11 p 1970 A69-24525 #
11 p 1893 A69-24346 #	11 p 1955 A69-24391 #	11 p 1833 A69-24436 #	11 p 1940 A69-24481	11 p 1822 A69-24526 #
11 p 1829 A69-24347 #	11 p 1955 A69-24392 #	11 p 1844 A69-24437 #	11 p 1999 A69-24482	11 p 1911 A69-24527 #
11 p 1817 A69-24348 #	11 p 1955 A69-24393 #	11 p 1833 A69-24438 #	11 p 1940 A69-24483	11 p 1942 A69-24528 #
11 p 1969 A69-24349 #	11 p 1956 A69-24394 #	11 p 1833 A69-24439 #	11 p 1999 A69-24484	11 p 1833 A69-24529
11 p 1824 A69-24350 #	11 p 1956 A69-24395 #	11 p 1833 A69-24440 #	11 p 1940 A69-24485	11 p 1845 A69-24530
11 p 1953 A69-24351 #	11 p 1956 A69-24396 #	11 p 1844 A69-24441 #	11 p 1940 A69-24486	11 p 1965 A69-24531
11 p 1953 A69-24352 #	11 p 1956 A69-24397 #	11 p 1833 A69-24442 #	11 p 1999 A69-24487	11 p 1966 A69-24532
11 p 1893 A69-24353 #	11 p 1956 A69-24398 #	11 p 1833 A69-24443 #	11 p 1829 A69-24488	11 p 1999 A69-24533
11 p 1862 A69-24354	11 p 1956 A69-24399 #	11 p 1833 A69-24444 #	11 p 1913 A69-24489	11 p 1908 A69-24534 #
11 p 1867 A69-24355 #	11 p 1956 A69-24400 #	11 p 1844 A69-24445 #	11 p 1914 A69-24490	11 p 1915 A69-24535 #
11 p 1908 A69-24356 #	11 p 1956 A69-24401 #	11 p 1844 A69-24446 #	11 p 1890 A69-24491	11 p 1867 A69-24536 #
11 p 1953 A69-24357*	11 p 1957 A69-24402 #	11 p 1893 A69-24447 #	11 p 1822 A69-24492	11 p 1936 A69-24537 #
11 p 1953 A69-24358	11 p 1957 A69-24403 #	11 p 1844 A69-24448 #	11 p 1829 A69-24493	11 p 1903 A69-24538 #
11 p 1953 A69-24359	11 p 1957 A69-24404 #	11 p 1844 A69-24449 #	11 p 1941 A69-24494	11 p 1831 A69-24539 #
11 p 1954 A69-24360	11 p 1957 A69-24405 #	11 p 1844 A69-24450 #	11 p 1824 A69-24495	11 p 1829 A69-24540 #
11 p 1954 A69-24361 #	11 p 1957 A69-24406 #	11 p 1844 A69-24451 #	11 p 1914 A69-24496	11 p 1880 A69-24541
11 p 1954 A69-24362 #	11 p 1957 A69-24407 #	11 p 1894 A69-24452 #	11 p 1890 A69-24497	11 p 1825 A69-24542
11 p 1954 A69-24363 #	11 p 1862 A69-24408	11 p 1845 A69-24453 #	11 p 1822 A69-24498	11 p 1842 A69-24543
11 p 1954 A69-24364 #	11 p 1877 A69-24409 #	11 p 1894 A69-24454 #	11 p 1914 A69-24499	11 p 1834 A69-24544
11 p 1880 A69-24365 #	11 p 1945 A69-24410 #	11 p 1915 A69-24455 #	11 p 1822 A69-24500	11 p 1834 A69-24545
11 p 1925 A69-24366 #	11 p 1957 A69-24411 #	11 p 1997 A69-24456	11 p 1824 A69-24501	11 p 1857 A69-24546
11 p 1857 A69-24367 #	11 p 1969 A69-24412	11 p 1997 A69-24457*	11 p 1825 A69-24502	11 p 1834 A69-24547
11 p 1893 A69-24368 #	11 p 1969 A69-24413	11 p 1997 A69-24458	11 p 1825 A69-24503	11 p 1845 A69-24548
11 p 1902 A69-24369 #	11 p 1969 A69-24414	11 p 1998 A69-24459	11 p 1829 A69-24504	11 p 1857 A69-24549
11 p 1821 A69-24370	11 p 1969 A69-24415	11 p 1998 A69-24460	11 p 1825 A69-24505	11 p 1845 A69-24550
11 p 2004 A69-24371	11 p 1921 A69-24416*	11 p 1998 A69-24461	11 p 1833 A69-24506	11 p 1834 A69-24551
11 p 2004 A69-24372	11 p 1921 A69-24417	11 p 1941 A69-24462 #	11 p 1890 A69-24507	11 p 1834 A69-24552
11 p 2004 A69-24373	11 p 1921 A69-24418	11 p 1822 A69-24463 #	11 p 1941 A69-24508	11 p 1940 A69-24553
11 p 1969 A69-24374	11 p 1921 A69-24419	11 p 1822 A69-24464 #	11 p 2004 A69-24509	11 p 1999 A69-24554
11 p 1867 A69-24375	11 p 1915 A69-24420	11 p 1958 A69-24465	11 p 1890 A69-24510	11 p 1845 A69-24555 #
11 p 1880 A69-24376	11 p 1945 A69-24421*	11 p 1946 A69-24466*	11 p 1822 A69-24511	11 p 1857 A69-24556 #
11 p 1822 A69-24377	11 p 1957 A69-24422	11 p 1880 A69-24467	11 p 1941 A69-24512	11 p 1858 A69-24557 #
11 p 2004 A69-24378	11 p 1957 A69-24423*	11 p 1880 A69-24468	11 p 1942 A69-24513	11 p 1881 A69-24558 #
11 p 1954 A69-24379 #	11 p 1958 A69-24424	11 p 1925 A69-24469	11 p 1942 A69-24514	11 p 1881 A69-24559 #
11 p 1945 A69-24380 #	11 p 1958 A69-24425	11 p 1894 A69-24470 #	11 p 1822 A69-24515	11 p 1881 A69-24560 #
11 p 1954 A69-24381 #	11 p 1946 A69-24426	11 p 1894 A69-24471	11 p 1946 A69-24516 #	11 p 1881 A69-24561 #
11 p 1954 A69-24382 #	11 p 1946 A69-24427	11 p 1926 A69-24472	11 p 1903 A69-24517	11 p 1881 A69-24562 #
11 p 1954 A69-24383 #	11 p 1946 A69-24428	11 p 1998 A69-24473	11 p 1903 A69-24518	11 p 1834 A69-24563 #
11 p 1955 A69-24384 #	11 p 1958 A69-24429*	11 p 1940 A69-24474	11 p 1877 A69-24519	11 p 1877 A69-24564 #
11 p 1955 A69-24385 #	11 p 1946 A69-24430*	11 p 1998 A69-24475	11 p 1845 A69-24520	11 p 1845 A69-24565 #



## ACCESSION NUMBER INDEX

11 p1834 A69-24566 #	11 p1834 A69-24611 #	11 p1972 A69-24656 #	11 p1936 A69-24701	11 p1847 A69-24746
11 p1858 A69-24567 #	11 p1834 A69-24612 #	11 p1973 A69-24657 #	11 p1936 A69-24702 #	11 p1847 A69-24747*
11 p1858 A69-24568 #	11 p1846 A69-24613 #	11 p1973 A69-24658 #	11 p1937 A69-24703 #	11 p1848 A69-24748*
11 p1845 A69-24569 #	11 p1846 A69-24614 #	11 p1973 A69-24659 #	11 p1937 A69-24704 #	11 p1848 A69-24749
11 p1845 A69-24570 #	11 p1846 A69-24615 #	11 p1973 A69-24660 #	11 p1904 A69-24705 #	11 p1966 A69-24750 #
11 p1834 A69-24571 #	11 p1926 A69-24616 #	11 p1973 A69-24661 #	11 p1904 A69-24706 #	11 p1818 A69-24751 #
11 p1858 A69-24572 #	11 p1921 A69-24617 #	11 p1973 A69-24662 #	11 p1904 A69-24707 #	11 p1867 A69-24752 #
11 p1881 A69-24573	11 p1894 A69-24618 #	11 p1973 A69-24663 #	11 p1846 A69-24708	11 p1867 A69-24753 #
11 p1903 A69-24574	11 p1894 A69-24619 #	11 p1974 A69-24664 #	11 p1835 A69-24709	11 p1975 A69-24754 #
11 p1832 A69-24575	11 p1894 A69-24620 #	11 p1974 A69-24665 #	11 p1835 A69-24710	11 p1868 A69-24755 #
11 p1903 A69-24576	11 p1894 A69-24621 #	11 p1958 A69-24666	11 p1835 A69-24711	11 p1926 A69-24756 #
11 p1903 A69-24577	11 p1894 A69-24622 #	11 p1974 A69-24667	11 p1835 A69-24712	11 p1884 A69-24757 #
11 p1903 A69-24578	11 p1894 A69-24623 #	11 p1974 A69-24668	11 p1835 A69-24713	11 p1884 A69-24758 #
11 p1903 A69-24579	11 p1926 A69-24624 #	11 p1974 A69-24669*	11 p1835 A69-24714	11 p1915 A69-24759
11 p1858 A69-24580 #	11 p1895 A69-24625 #	11 p1974 A69-24670	11 p1895 A69-24715	11 p1916 A69-24760 #
11 p1970 A69-24581 #	11 p1846 A69-24626 #	11 p1975 A69-24671	11 p1895 A69-24716	11 p1916 A69-24761 #
11 p1915 A69-24582 #	11 p1817 A69-24627	11 p1975 A69-24672*	11 p1847 A69-24717	11 p1975 A69-24762 #
11 p1817 A69-24583	11 p1867 A69-24628	11 p1975 A69-24673	11 p1895 A69-24718	11 p1976 A69-24763 #
11 p1877 A69-24584	11 p1832 A69-24629	11 p1975 A69-24674	11 p1847 A69-24719	11 p1960 A69-24764 #
11 p1911 A69-24585	11 p1895 A69-24630	11 p1881 A69-24675	11 p1895 A69-24720	11 p1916 A69-24765 #
11 p1911 A69-24586	11 p1881 A69-24631	11 p1882 A69-24676	11 p1847 A69-24721	11 p1916 A69-24766 #
11 p1911 A69-24587	11 p1970 A69-24632	11 p1882 A69-24677	11 p1847 A69-24722	11 p1908 A69-24767 #
11 p1842 A69-24588	11 p1958 A69-24633 #	11 p1882 A69-24678	11 p1959 A69-24723	11 p1884 A69-24768 #
11 p1946 A69-24589	11 p1903 A69-24634 #	11 p1882 A69-24679	11 p1959 A69-24724 #	11 p1868 A69-24769 #
11 p1946 A69-24590	11 p1999 A69-24635 #	11 p1895 A69-24680	11 p1959 A69-24725 #	11 p1916 A69-24770
11 p1958 A69-24591	11 p1877 A69-24636 #	11 p1882 A69-24681	11 p1959 A69-24726 #	11 p1908 A69-24771 #
11 p1958 A69-24592	11 p1817 A69-24637 #	11 p1883 A69-24682	11 p1959 A69-24727 #	11 p1976 A69-24772 #
11 p1946 A69-24593	11 p1823 A69-24638 #	11 p1895 A69-24683	11 p1959 A69-24728 #	11 p1976 A69-24773 #
11 p1958 A69-24594	11 p1818 A69-24639 #	11 p1883 A69-24684	11 p1960 A69-24729 #	11 p1868 A69-24774 #
11 p1947 A69-24595	11 p1936 A69-24640 #	11 p1883 A69-24685	11 p1960 A69-24730 #	11 p1868 A69-24775 #
11 p1846 A69-24596	11 p1926 A69-24641 #	11 p1895 A69-24686	11 p1960 A69-24731 #	11 p1917 A69-24776 #
11 p1846 A69-24597	11 p1904 A69-24642	11 p1883 A69-24687	11 p1960 A69-24732 #	11 p1976 A69-24777 #
11 p1846 A69-24598	11 p1904 A69-24643	11 p1883 A69-24688	11 p1960 A69-24733 #	11 p1917 A69-24778 #
11 p1881 A69-24599 #	11 p1904 A69-24644	11 p1895 A69-24689	11 p1884 A69-24734 #	11 p1999 A69-24779 #
11 p1846 A69-24600	11 p1970 A69-24645	11 p1883 A69-24690	11 p1884 A69-24735 #	11 p1917 A69-24780 #
11 p1936 A69-24601	11 p1971 A69-24646 #	11 p1884 A69-24691	11 p1937 A69-24736 #	11 p1918 A69-24781 #
11 p1926 A69-24602 #	11 p1971 A69-24647 #	11 p1835 A69-24692*	11 p1829 A69-24737*	11 p1868 A69-24782 #
11 p1926 A69-24603 #	11 p1971 A69-24648 #	11 p1958 A69-24693*	11 p1832 A69-24738*	11 p1976 A69-24783 #
11 p1915 A69-24604 #	11 p1972 A69-24649 #	11 p1911 A69-24694	11 p1975 A69-24739	11 p1976 A69-24784 #
11 p1970 A69-24605	11 p1972 A69-24650 #	11 p1835 A69-24695*	11 p1847 A69-24740	11 p1918 A69-24785 #
11 p1970 A69-24606	11 p1972 A69-24651 #	11 p1908 A69-24696	11 p1896 A69-24741	11 p1918 A69-24786 #
11 p1867 A69-24607	11 p1972 A69-24652 #	11 p1908 A69-24697	11 p1907 A69-24742	11 p1918 A69-24787 #
11 p1970 A69-24608*	11 p1972 A69-24653 #	11 p1936 A69-24698	11 p1896 A69-24743	11 p1868 A69-24788 #
11 p1970 A69-24609	11 p1972 A69-24654 #	11 p1936 A69-24699	11 p1847 A69-24744*	11 p1908 A69-24789 #
11 p1970 A69-24610	11 p1972 A69-24655 #	11 p1936 A69-24700	11 p1847 A69-24745	11 p1868 A69-24790 #

## ACCESSION NUMBER INDEX

11 p1918 A69-24791 #	11 p1918 A69-24836*	11 p1908 A69-24881 #	11 p1921 A69-24926*	11 p1960 A69-24971 #
11 p1862 A69-24792	11 p1884 A69-24837	11 p1909 A69-24882	11 p1950 A69-24927*	11 p1961 A69-24972 #
11 p1976 A69-24793	11 p1884 A69-24838*	11 p1909 A69-24883	11 p1849 A69-24928	11 p1885 A69-24973 #
11 p1976 A69-24794 #	11 p1885 A69-24839*	11 p1868 A69-24884	11 p1891 A69-24929 #	11 p2000 A69-24974 #
11 p1830 A69-24795*#	11 p1896 A69-24840	11 p1909 A69-24885	11 p1891 A69-24930 #	11 p1982 A69-24975 #
11 p1830 A69-24796*#	11 p1896 A69-24841	11 p1909 A69-24886	11 p1891 A69-24931 #	11 p1850 A69-24976
11 p1830 A69-24797	11 p1896 A69-24842	11 p1869 A69-24887 #	11 p1892 A69-24932 #	11 p1850 A69-24977
11 p1890 A69-24798	11 p1830 A69-24843	11 p1869 A69-24888 #	11 p1905 A69-24933 #	11 p1836 A69-24978
11 p1890 A69-24799 #	11 p1830 A69-24844	11 p1869 A69-24889 #	11 p1842 A69-24934*	11 p1850 A69-24979
11 p1891 A69-24800 #	11 p1830 A69-24845	11 p1869 A69-24890 #	11 p1858 A69-24935*	11 p1850 A69-24980
11 p1977 A69-24801	11 p1885 A69-24846	11 p1869 A69-24891 #	11 p1858 A69-24936	11 p1850 A69-24981
11 p1977 A69-24802 #	11 p1885 A69-24847	11 p1869 A69-24892 #	11 p1858 A69-24937	11 p1850 A69-24982
11 p1977 A69-24803	11 p1885 A69-24848	11 p1869 A69-24893 #	11 p1858 A69-24938*	11 p1850 A69-24983
11 p1977 A69-24804	11 p1896 A69-24849	11 p1870 A69-24894 #	11 p1859 A69-24939*	11 p1850 A69-24984*
11 p1978 A69-24805	11 p1896 A69-24850*	11 p1926 A69-24895 #	11 p1980 A69-24940	11 p1836 A69-24985
11 p1978 A69-24806	11 p1877 A69-24851	11 p1891 A69-24896 #	11 p1981 A69-24941 #	11 p1851 A69-24986*
11 p1978 A69-24807	11 p1885 A69-24852	11 p1904 A69-24897 #	11 p1981 A69-24942 #	11 p1851 A69-24987
11 p1978 A69-24808	11 p1960 A69-24853	11 p1904 A69-24898 #	11 p1981 A69-24943 #	11 p1836 A69-24988
11 p1978 A69-24809	11 p1947 A69-24854	11 p1904 A69-24899 #	11 p1982 A69-24944 #	11 p1836 A69-24989
11 p1978 A69-24810	11 p1948 A69-24855	11 p1849 A69-24900 #	11 p1982 A69-24945 #	11 p1836 A69-24990
11 p1978 A69-24811*	11 p1948 A69-24856	11 p1862 A69-24901 #	11 p1982 A69-24946 #	11 p1851 A69-24991
11 p1979 A69-24812	11 p1948 A69-24857	11 p1885 A69-24902 #	11 p1982 A69-24947 #	11 p1836 A69-24992
11 p1979 A69-24813	11 p1948 A69-24858	11 p1885 A69-24903 #	11 p1905 A69-24948 #	11 p1836 A69-24993*
11 p1979 A69-24814*	11 p1948 A69-24859	11 p1842 A69-24904	11 p1982 A69-24949 #	11 p1851 A69-24994
11 p1979 A69-24815	11 p1949 A69-24860	11 p1940 A69-24905*	11 p1982 A69-24950 #	11 p1836 A69-24995*
11 p1979 A69-24816	11 p1949 A69-24861	11 p1942 A69-24906	11 p1870 A69-24951 #	11 p1836 A69-24996
11 p1979 A69-24817	11 p1949 A69-24862	11 p1940 A69-24907	11 p1835 A69-24952 #	11 p1851 A69-24997
11 p1979 A69-24818	11 p1949 A69-24863	11 p1999 A69-24908	11 p1835 A69-24953 #	11 p1851 A69-24998
11 p1980 A69-24819	11 p1949 A69-24864*	11 p1937 A69-24909 #	11 p1859 A69-24954 #	11 p1837 A69-24999
11 p1980 A69-24820	11 p1830 A69-24865	11 p1927 A69-24910 #	11 p1849 A69-24955 #	11 p1837 A69-25000
11 p1980 A69-24821	11 p1831 A69-24866	11 p1849 A69-24911 #	11 p1849 A69-24956 #	11 p1837 A69-25001
11 p1980 A69-24822	11 p1848 A69-24867	11 p1927 A69-24912 #	11 p1849 A69-24957 #	11 p1837 A69-25002
11 p1980 A69-24823	11 p1848 A69-24868	11 p1937 A69-24913 #	11 p1849 A69-24958 #	11 p1837 A69-25003
11 p1911 A69-24824	11 p1949 A69-24869	11 p1999 A69-24914 #	11 p1835 A69-24959 #	11 p1837 A69-25004*
11 p1912 A69-24825 #	11 p1825 A69-24870	11 p1937 A69-24915 #	11 p1835 A69-24960 #	11 p1870 A69-25005 #
11 p1912 A69-24826 #	11 p1825 A69-24871	11 p1927 A69-24916 #	11 p1849 A69-24961 #	11 p1870 A69-25006 #
11 p1912 A69-24827 #	11 p1825 A69-24872	11 p1905 A69-24917 #	11 p1905 A69-24962 #	11 p1870 A69-25007 #
11 p1912 A69-24828 #	11 p1848 A69-24873	11 p1927 A69-24918 #	11 p1905 A69-24963 #	11 p1870 A69-25008 #
11 p1912 A69-24829 #	11 p1848 A69-24874	11 p1885 A69-24919 #	11 p1859 A69-24964 #	11 p1870 A69-25009 #
11 p1912 A69-24830 #	11 p1862 A69-24875	11 p1937 A69-24920 #	11 p1859 A69-24965 #	11 p1870 A69-25010 #
11 p1913 A69-24831 #	11 p1826 A69-24876	11 p1905 A69-24921 #	11 p1849 A69-24966 #	11 p1862 A69-25011 #
11 p1913 A69-24832 #	11 p1896 A69-24877	11 p1905 A69-24922 #	11 p1859 A69-24967 #	11 p1862 A69-25012 #
11 p1884 A69-24833 #	11 p1832 A69-24878 #	11 p1827 A69-24923*	11 p1835 A69-24968 #	11 p1862 A69-25013 #
11 p1884 A69-24834	11 p1980 A69-24879 #	11 p1827 A69-24924	11 p1849 A69-24969 #	11 p1863 A69-25014 #
11 p1918 A69-24835*	11 p1832 A69-24880 #	11 p1891 A69-24925*	11 p1850 A69-24970 #	11 p1863 A69-25015 #



## ACCESSION NUMBER INDEX

11 p1863 A69-25016 #	11 p1864 A69-25061	11 p1961 A69-25106	11 p1878 A69-25151	11 p1899 A69-25196 #
11 p1871 A69-25017 #	11 p1864 A69-25062	11 p1961 A69-25107*	11 p1878 A69-25152	11 p1887 A69-25197 #
11 p1871 A69-25018 #	11 p1851 A69-25063	11 p1961 A69-25108	11 p1878 A69-25153*	11 p1899 A69-25198 #
11 p1983 A69-25019 #	11 p1842 A69-25064	11 p1961 A69-25109	11 p1878 A69-25154	11 p1887 A69-25199 #
11 p1983 A69-25020 #	11 p1864 A69-25065	11 p1950 A69-25110	11 p1878 A69-25155	11 p1852 A69-25200 #
11 p1892 A69-25021 #	11 p1842 A69-25066	11 p1962 A69-25111	11 p1878 A69-25156	11 p2001 A69-25201
11 p1983 A69-25022 #	11 p1864 A69-25067	11 p1962 A69-25112	11 p1879 A69-25157*	11 p1873 A69-25202
11 p1983 A69-25023 #	11 p1864 A69-25068	11 p1962 A69-25113	11 p1879 A69-25158	11 p1986 A69-25203
11 p1983 A69-25024 #	11 p1864 A69-25069	11 p1851 A69-25114	11 p1879 A69-25159	11 p1913 A69-25204
11 p1859 A69-25025 #	11 p1865 A69-25070	11 p1938 A69-25115	11 p1950 A69-25160	11 p1913 A69-25205
11 p1871 A69-25026 #	11 p1842 A69-25071	11 p1927 A69-25116	11 p1951 A69-25161	11 p1887 A69-25206 #
11 p1871 A69-25027 #	11 p1843 A69-25072	11 p1852 A69-25117	11 p1951 A69-25162*	11 p1887 A69-25207 #
11 p1818 A69-25028 #	11 p1865 A69-25073	11 p1852 A69-25118	11 p1909 A69-25163	11 p1887 A69-25208 #
11 p1937 A69-25029 #	11 p1865 A69-25074	11 p1826 A69-25119	11 p2000 A69-25164 #	11 p1887 A69-25209 #
11 p1938 A69-25030 #	11 p1865 A69-25075	11 p1962 A69-25120 ■	11 p1859 A69-25165 #	11 p1887 A69-25210 #
11 p1907 A69-25031 #	11 p1865 A69-25076	11 p1962 A69-25121 #	11 p1984 A69-25166	11 p1823 A69-25211
11 p1907 A69-25032 #	11 p1865 A69-25077	11 p1871 A69-25122	11 p1919 A69-25167 #	11 p1887 A69-25212
11 p1938 A69-25033 #	11 p1843 A69-25078	11 p1871 A69-25123 ■	11 p2000 A69-25168 #	11 p1887 A69-25213
11 p1897 A69-25034	11 p1865 A69-25079	11 p1871 A69-25124*■	11 p1984 A69-25169 #	11 p1866 A69-25214
11 p1885 A69-25035	11 p1866 A69-25080	11 p1871 A69-25125 ■	11 p1984 A69-25170 #	11 p1942 A69-25215
11 p1897 A69-25036	11 p1866 A69-25081*	11 p1872 A69-25126 #	11 p1984 A69-25171 #	11 p2004 A69-25216
11 p1897 A69-25037	11 p1843 A69-25082	11 p1872 A69-25127 #	11 p1985 A69-25172 #	11 p1927 A69-25217 #
11 p1897 A69-25038	11 p1866 A69-25083	11 p1922 A69-25128 #	11 p1985 A69-25173 #	11 p1927 A69-25218 #
11 p1897 A69-25039	11 p1961 A69-25084	11 p1872 A69-25129 #	11 p1985 A69-25174 #	11 p1927 A69-25219 #
11 p1837 A69-25040	11 p1914 A69-25085 #	11 p1872 A69-25130 #	11 p1985 A69-25175 #	11 p1888 A69-25220 #
11 p1886 A69-25041	11 p1851 A69-25086 #	11 p1872 A69-25131 #	11 p1985 A69-25176 #	11 p1928 A69-25221 #
11 p1886 A69-25042	11 p1886 A69-25087	11 p1872 A69-25132 #	11 p1985 A69-25177 #	11 p1928 A69-25222 #
11 p1898 A69-25043	11 p1886 A69-25088	11 p1872 A69-25133 #	11 p1985 A69-25178 #	11 p2001 A69-25223 #
11 p1918 A69-25044	11 p1886 A69-25089 #	11 p1873 A69-25134 #	11 p1919 A69-25179 #	11 p2001 A69-25224 #
11 p1898 A69-25045	11 p1983 A69-25090 #	11 p1873 A69-25135 ■	11 p1985 A69-25180 #	11 p1906 A69-25225 #
11 p1898 A69-25046	11 p1983 A69-25091 #	11 p1873 A69-25136*#	11 p1907 A69-25181 #	11 p1873 A69-25226 #
11 p1886 A69-25047	11 p1919 A69-25092 #	11 p1983 A69-25137 #	11 p1986 A69-25182 #	11 p1928 A69-25227 #
11 p1898 A69-25048	11 p1919 A69-25093 #	11 p1984 A69-25138 ■	11 p1905 A69-25183	11 p1873 A69-25228 #
11 p1938 A69-25049	11 p1837 A69-25094	11 p1873 A69-25139 ■	11 p1905 A69-25184	11 p2002 A69-25229 #
11 p1898 A69-25050	11 p1887 A69-25095	11 p1984 A69-25140 #	11 p2000 A69-25185 #	11 p1888 A69-25230 #
11 p1898 A69-25051	11 p2000 A69-25096	11 p1984 A69-25141 #	11 p2000 A69-25186 #	11 p2002 A69-25231 #
11 p1899 A69-25052	11 p1919 A69-25097	11 p1984 A69-25142 #	11 p2000 A69-25187 #	11 p1826 A69-25232 #
11 p1899 A69-25053	11 p1919 A69-25098	11 p1818 A69-25143	11 p2000 A69-25188 #	11 p2002 A69-25233 #
11 p1899 A69-25054	11 p1927 A69-25099	11 p1950 A69-25144*	11 p2000 A69-25189 #	11 p1928 A69-25234 #
11 p1899 A69-25055	11 p1927 A69-25100	11 p1962 A69-25145	11 p2001 A69-25190 #	11 p1928 A69-25235 #
11 p1899 A69-25056 #	11 p1887 A69-25101	11 p1950 A69-25146*	11 p2001 A69-25191 #	11 p1986 A69-25236
11 p1886 A69-25057 #	11 p1966 A69-25102	11 p1950 A69-25147	11 p2001 A69-25192 #	11 p1942 A69-25237
11 p1886 A69-25058 #	11 p1961 A69-25103 #	11 p1950 A69-25148*	11 p2001 A69-25193 #	11 p1907 A69-25238
11 p1863 A69-25059	11 p1961 A69-25104	11 p1950 A69-25149	11 p1941 A69-25194 #	11 p1938 A69-25239
11 p1864 A69-25060	11 p1961 A69-25105	11 p1878 A69-25150*	11 p2001 A69-25195 #	11 p1938 A69-25240

## ACCESSION NUMBER INDEX

11 p 1986 A69-25241*	11 p 1930 A69-25286 #	11 p 1966 A69-25331 #	11 p 1866 A69-25376 #	11 p 1951 A69-25421 #
11 p 1873 A69-25242	11 p 1930 A69-25287 #	11 p 1826 A69-25332 #	11 p 1819 A69-25377 #	11 p 1941 A69-25422
11 p 2002 A69-25243	11 p 1837 A69-25288	11 p 1986 A69-25333 #	11 p 1819 A69-25378**	11 p 1840 A69-25423
11 p 1986 A69-25244	11 p 1909 A69-25289 #	11 p 2002 A69-25334 #	11 p 1987 A69-25379 #	11 p 1819 A69-25424
11 p 1919 A69-25245	11 p 1909 A69-25290**	11 p 1942 A69-25335 #	11 p 1987 A69-25380 #	11 p 1820 A69-25425
11 p 1928 A69-25246	11 p 1909 A69-25291 #	11 p 2002 A69-25336 #	11 p 1874 A69-25381 #	11 p 1840 A69-25426
11 p 1837 A69-25247	11 p 1852 A69-25292 #	11 p 1942 A69-25337 #	11 p 1819 A69-25382 #	11 p 1889 A69-25427
11 p 1928 A69-25248 #	11 p 1892 A69-25293 #	11 p 2002 A69-25338 #	11 p 1823 A69-25383 #	11 p 1943 A69-25428
11 p 1879 A69-25249*	11 p 1839 A69-25294**	11 p 2002 A69-25339 #	11 p 1819 A69-25384 #	11 p 1874 A69-25429
11 p 1962 A69-25250	11 p 1839 A69-25295 #	11 p 1888 A69-25340 #	11 p 1819 A69-25385 #	11 p 1914 A69-25430
11 p 1962 A69-25251*	11 p 1839 A69-25296**	11 p 1892 A69-25341 #	11 p 1823 A69-25386 #	11 p 1866 A69-25431
11 p 1963 A69-25252	11 p 1839 A69-25297 #	11 p 1986 A69-25342 #	11 p 1823 A69-25387 #	11 p 1987 A69-25432
11 p 1963 A69-25253*	11 p 1839 A69-25298**	11 p 1823 A69-25343 #	11 p 1987 A69-25388	11 p 1966 A69-25433
11 p 1879 A69-25254	11 p 1839 A69-25299 #	11 p 1986 A69-25344 #	11 p 1906 A69-25389	11 p 1914 A69-25434
11 p 1928 A69-25255 #	11 p 1840 A69-25300 #	11 p 1987 A69-25345 #	11 p 1987 A69-25390	11 p 1889 A69-25435
11 p 1888 A69-25256 #	11 p 1840 A69-25301 #	11 p 1818 A69-25346 #	11 p 1853 A69-25391	11 p 1913 A69-25436
11 p 1963 A69-25257 #	11 p 2004 A69-25302 #	11 p 1942 A69-25347 #	11 p 1859 A69-25392	11 p 1919 A69-25437
11 p 1963 A69-25258 #	11 p 2004 A69-25303 #	11 p 1826 A69-25348 #	11 p 1853 A69-25393	11 p 1987 A69-25438
11 p 1963 A69-25259 #	11 p 2005 A69-25304 #	11 p 2005 A69-25349 #	11 p 1889 A69-25394**	11 p 1906 A69-25439 #
11 p 1922 A69-25260 #	11 p 2005 A69-25305 #	11 p 1853 A69-25350	11 p 1826 A69-25395	11 p 2003 A69-25440 #
11 p 1963 A69-25261 #	11 p 1938 A69-25306 #	11 p 1874 A69-25351 #	11 p 1826 A69-25396	11 p 1860 A69-25441
11 p 1928 A69-25262 #	11 p 1938 A69-25307 #	11 p 1874 A69-25352 #	11 p 1826 A69-25397	11 p 1860 A69-25442
11 p 1963 A69-25263 #	11 p 1888 A69-25308 #	11 p 2002 A69-25353 #	11 p 1827 A69-25398	11 p 1860 A69-25443*
11 p 1963 A69-25264 #	11 p 1840 A69-25309 #	11 p 2003 A69-25354 #	11 p 1827 A69-25399	11 p 1860 A69-25444*
11 p 1929 A69-25265 #	11 p 1888 A69-25310**	11 p 1818 A69-25355 #	11 p 1827 A69-25400	11 p 1843 A69-25445*
11 p 1929 A69-25266**	11 p 1888 A69-25311 #	11 p 1874 A69-25356 #	11 p 1963 A69-25401*	11 p 1966 A69-25446
11 p 1929 A69-25267 #	11 p 1840 A69-25312 #	11 p 1874 A69-25357**	11 p 1899 A69-25402	11 p 1860 A69-25447
11 p 1929 A69-25268 #	11 p 1840 A69-25313 #	11 p 1930 A69-25358	11 p 1964 A69-25403	11 p 1860 A69-25448*
11 p 1929 A69-25269**	11 p 1852 A69-25314 #	11 p 1931 A69-25359	11 p 1964 A69-25404	11 p 1860 A69-25449*
11 p 1929 A69-25270 #	11 p 1852 A69-25315 #	11 p 1931 A69-25360	11 p 1879 A69-25405	11 p 1860 A69-25450*
11 p 1929 A69-25271 #	11 p 1852 A69-25316 #	11 p 1931 A69-25361	11 p 1964 A69-25406*	11 p 1860 A69-25451
11 p 1929 A69-25272 #	11 p 1852 A69-25317 #	11 p 1931 A69-25362	11 p 1879 A69-25407 #	11 p 1861 A69-25452*
11 p 1930 A69-25273 #	11 p 1853 A69-25318 #	11 p 1931 A69-25363	11 p 1859 A69-25408	11 p 1861 A69-25453*
11 p 1930 A69-25274	11 p 1843 A69-25319 #	11 p 1931 A69-25364	11 p 1909 A69-25409*	11 p 1861 A69-25454
11 p 1866 A69-25275 #	11 p 1843 A69-25320 #	11 p 1931 A69-25365	11 p 1910 A69-25410	11 p 1861 A69-25455
11 p 1930 A69-25276**	11 p 1930 A69-25321 #	11 p 1931 A69-25366	11 p 1910 A69-25411	11 p 1828 A69-25456*
11 p 1930 A69-25277 #	11 p 1922 A69-25322 #	11 p 1987 A69-25367 #	11 p 1910 A69-25412	11 p 1828 A69-25457*
11 p 1930 A69-25278 #	11 p 1919 A69-25323**	11 p 1987 A69-25368 #	11 p 1964 A69-25413*	11 p 1828 A69-25458*
11 p 1930 A69-25279 #	11 p 1899 A69-25324 #	11 p 1987 A69-25369 #	11 p 1964 A69-25414 #	11 p 1828 A69-25459*
11 p 1874 A69-25280 #	11 p 1899 A69-25325 #	11 p 1823 A69-25370 #	11 p 1964 A69-25415 #	11 p 1828 A69-25460*
11 p 1874 A69-25281**	11 p 1986 A69-25326 #	11 p 1892 A69-25371 #	11 p 1964 A69-25416 #	11 p 1828 A69-25461
11 p 1874 A69-25282**	11 p 1966 A69-25327 #	11 p 1819 A69-25372 #	11 p 1964 A69-25417 #	11 p 1828 A69-25462
11 p 1818 A69-25283 #	11 p 1818 A69-25328 #	11 p 1819 A69-25373 #	11 p 1964 A69-25418 #	11 p 1831 A69-25463*
11 p 1879 A69-25284**	11 p 1966 A69-25329 #	11 p 1819 A69-25374 #	11 p 1951 A69-25419 #	11 p 1828 A69-25464*
11 p 1874 A69-25285	11 p 1966 A69-25330 #	11 p 1819 A69-25375 #	11 p 1965 A69-25420 #	11 p 1932 A69-25465 #



## ACCESSION NUMBER INDEX

11 p1875 A69-25466 #	11 p1991 A69-25511 #	11 p1933 A69-25556 #	11 p1994 A69-25601 #	11 p1827 A69-25646
11 p1875 A69-25467 #	11 p1991 A69-25512**	11 p1889 A69-25557 #	11 p1910 A69-25602 #	11 p1995 A69-25647
11 p1820 A69-25468 #	11 p1991 A69-25513**	11 p1876 A69-25558 #	11 p1994 A69-25603 #	11 p1907 A69-25648
11 p1820 A69-25469 #	11 p1821 A69-25514 #	11 p1876 A69-25559 #	11 p1994 A69-25604 #	11 p1995 A69-25649
11 p1820 A69-25470 #	11 p1991 A69-25515**	11 p1876 A69-25560 #	11 p1995 A69-25605 #	11 p1995 A69-25650
11 p1820 A69-25471 #	11 p1991 A69-25516 #	11 p1920 A69-25561	11 p1995 A69-25606 #	11 p1995 A69-25651
11 p1820 A69-25472 #	11 p1991 A69-25517 #	11 p1920 A69-25562	11 p1841 A69-25607	11 p1995 A69-25652
11 p1820 A69-25473 #	11 p1992 A69-25518 #	11 p1920 A69-25563	11 p1853 A69-25608	11 p1889 A69-25653
11 p1820 A69-25474 #	11 p1992 A69-25519 #	11 p1965 A69-25564	11 p1853 A69-25609	11 p1856 A69-25654
11 p1820 A69-25475 #	11 p1992 A69-25520 #	11 p1853 A69-25565 #	11 p1854 A69-25610	11 p1934 A69-25655 #
11 p1820 A69-25476 #	11 p1992 A69-25521**	11 p1934 A69-25566 #	11 p1854 A69-25611	11 p1831 A69-25656
11 p1821 A69-25477 #	11 p1910 A69-25522 #	11 p1934 A69-25567 #	11 p1854 A69-25612	11 p2003 A69-25657
11 p1821 A69-25478 #	11 p1992 A69-25523**	11 p1900 A69-25568 #	11 p1854 A69-25613	11 p1965 A69-25658
11 p1821 A69-25479 #	11 p1992 A69-25524**	11 p1900 A69-25569 #	11 p1854 A69-25614	11 p1856 A69-25659
11 p1875 A69-25480 #	11 p1993 A69-25525**	11 p1840 A69-25570 #	11 p1854 A69-25615	11 p1910 A69-25660
11 p1875 A69-25481 #	11 p1993 A69-25526 #	11 p1913 A69-25571 #	11 p1854 A69-25616	11 p1856 A69-25661
11 p1875 A69-25482 #	11 p1993 A69-25527 #	11 p1900 A69-25572 #	11 p1854 A69-25617	11 p1857 A69-25662
11 p1875 A69-25483 #	11 p1993 A69-25528 #	11 p1967 A69-25573	11 p1854 A69-25618	11 p1861 A69-25663
11 p1875 A69-25484 #	11 p1993 A69-25529 #	11 p1910 A69-25574 #	11 p1841 A69-25619	11 p1857 A69-25664
11 p1875 A69-25485 #	11 p1994 A69-25530**	11 p1906 A69-25575 #	11 p1855 A69-25620	11 p1857 A69-25665
11 p1875 A69-25486 #	11 p1994 A69-25531 #	11 p1934 A69-25576 #	11 p1855 A69-25621	11 p1857 A69-25666
11 p1875 A69-25487 #	11 p1994 A69-25532 #	11 p1906 A69-25577 #	11 p1855 A69-25622	11 p1892 A69-25667 #
11 p1876 A69-25488 #	11 p1994 A69-25533**	11 p1906 A69-25578 #	11 p1855 A69-25623	11 p1892 A69-25668 #
11 p1876 A69-25489 #	11 p1994 A69-25534**	11 p1841 A69-25579 #	11 p1841 A69-25624	11 p1892 A69-25669 #
11 p1876 A69-25490 #	11 p1932 A69-25535 #	11 p1900 A69-25580 #	11 p1855 A69-25625	11 p1892 A69-25670 #
11 p1932 A69-25491 #	11 p1932 A69-25536 #	11 p1900 A69-25581 #	11 p1855 A69-25626	11 p1824 A69-25671 #
11 p1988 A69-25492	11 p1932 A69-25537 #	11 p1943 A69-25582	11 p1855 A69-25627	11 p1824 A69-25672 #
11 p1989 A69-25493 #	11 p1932 A69-25538 #	11 p1821 A69-25583	11 p1855 A69-25628	11 p1995 A69-25673 #
11 p1989 A69-25494 #	11 p1932 A69-25539 #	11 p1943 A69-25584	11 p1855 A69-25629	11 p1832 A69-25674
11 p1989 A69-25495**	11 p1932 A69-25540 #	11 p1821 A69-25585	11 p1856 A69-25630	11 p1832 A69-25675*
11 p1989 A69-25496 #	11 p1933 A69-25541 #	11 p1943 A69-25586	11 p1856 A69-25631	11 p1861 A69-25676
11 p1967 A69-25497 #	11 p1933 A69-25542 #	11 p1943 A69-25587	11 p1856 A69-25632	11 p1857 A69-25677
11 p1967 A69-25498**	11 p1933 A69-25543 #	11 p1941 A69-25588	11 p1856 A69-25633	11 p1900 A69-25678
11 p1989 A69-25499**	11 p1933 A69-25544 #	11 p1944 A69-25589	11 p1841 A69-25634	11 p1907 A69-25679 #
11 p1967 A69-25500**	11 p1933 A69-25545 #	11 p1914 A69-25590	11 p1856 A69-25635	11 p1907 A69-25680 #
11 p1967 A69-25501**	11 p1933 A69-25546 #	11 p1914 A69-25591	11 p1856 A69-25636	11 p1995 A69-25681 #
11 p1989 A69-25502**	11 p1900 A69-25547 #	11 p1944 A69-25592	11 p1841 A69-25637	11 p1889 A69-25682 #
11 p1823 A69-25503 #	11 p1933 A69-25548 #	11 p1944 A69-25593	11 p1841 A69-25638	11 p1906 A69-25683 #
11 p1823 A69-25504 #	11 p1889 A69-25549 #	11 p1944 A69-25594	11 p1841 A69-25639	11 p1906 A69-25684 #
11 p1990 A69-25505 #	11 p1889 A69-25550 #	11 p1876 A69-25595	11 p1832 A69-25640*	11 p1906 A69-25685 #
11 p1990 A69-25506**	11 p1853 A69-25551 #	11 p2003 A69-25596	11 p1832 A69-25641*	11 p1938 A69-25686
11 p1990 A69-25507 #	11 p2003 A69-25552 #	11 p2003 A69-25597	11 p1831 A69-25642*	11 p1939 A69-25687
11 p1990 A69-25508 #	11 p1900 A69-25553 #	11 p1944 A69-25598	11 p1829 A69-25643*	11 p1939 A69-25688
11 p1990 A69-25509 #	11 p1933 A69-25554 #	11 p1944 A69-25599	11 p1965 A69-25644**	11 p1939 A69-25689
11 p1990 A69-25510**	11 p1965 A69-25555	11 p1965 A69-25600	11 p1827 A69-25645	11 p1939 A69-25690

# ACCESSION NUMBER INDEX

11 p 1939 A69-25691	11 p 1996 A69-25736 #	12 p 2018 A69-25781*	12 p 2111 A69-25826	12 p 2078 A69-25871 #
11 p 1939 A69-25692	11 p 1996 A69-25737 #	12 p 2063 A69-25782 #	12 p 2100 A69-25827	12 p 2078 A69-25872 #
11 p 1939 A69-25693	11 p 1996 A69-25738 #	12 p 2141 A69-25783*	12 p 2100 A69-25828	12 p 2128 A69-25873 #
11 p 1939 A69-25694	11 p 1877 A69-25739 #	12 p 2026 A69-25784*	12 p 2111 A69-25829	12 p 2078 A69-25874 #
11 p 1939 A69-25695	11 p 1935 A69-25740 #	12 p 2152 A69-25785	12 p 2100 A69-25830	12 p 2027 A69-25875 #
11 p 1939 A69-25696	11 p 1877 A69-25741 #	12 p 2146 A69-25786	12 p 2035 A69-25831 #	12 p 2027 A69-25876 #
11 p 1939 A69-25697	11 p 1920 A69-25742 #	12 p 2146 A69-25787	12 p 2035 A69-25832 #	12 p 2027 A69-25877 #
11 p 1910 A69-25698	11 p 1965 A69-25743 #	12 p 2146 A69-25788	12 p 2133 A69-25833	12 p 2154 A69-25878*
11 p 1910 A69-25699	11 p 1965 A69-25744 #	12 p 2146 A69-25789	12 p 2141 A69-25834	12 p 2016 A69-25879 #
11 p 1910 A69-25700	11 p 1920 A69-25745 #	12 p 2146 A69-25790	12 p 2035 A69-25835*	12 p 2061 A69-25880 #
11 p 1934 A69-25701	11 p 1920 A69-25746 #	12 p 2147 A69-25791	12 p 2175 A69-25836	12 p 2177 A69-25881 #
11 p 2003 A69-25702	11 p 1910 A69-25747 #	12 p 2147 A69-25792	12 p 2021 A69-25837	12 p 2027 A69-25882 #
11 p 1939 A69-25703	11 p 1920 A69-25748 #	12 p 2147 A69-25793	12 p 2021 A69-25838	12 p 2155 A69-25883 #
11 p 2003 A69-25704	11 p 1920 A69-25749 #	12 p 2147 A69-25794	12 p 2021 A69-25839	12 p 2061 A69-25884 #
11 p 1857 A69-25705	11 p 1900 A69-25750 #	12 p 2147 A69-25795	12 p 2021 A69-25840	12 p 2173 A69-25885 #
11 p 1939 A69-25706	11 p 1900 A69-25751 #	12 p 2147 A69-25796	12 p 2021 A69-25841	12 p 2061 A69-25886 #
11 p 1934 A69-25707	11 p 1935 A69-25752 #	12 p 2152 A69-25797	12 p 2022 A69-25842	12 p 2061 A69-25887 #
11 p 1934 A69-25708	11 p 1935 A69-25753 #	12 p 2152 A69-25798	12 p 2022 A69-25843	12 p 2061 A69-25888 #
11 p 1939 A69-25709	11 p 1901 A69-25754 #	12 p 2152 A69-25799*	12 p 2191 A69-25844	12 p 2061 A69-25889 #
11 p 1934 A69-25710	11 p 1877 A69-25755 #	12 p 2152 A69-25800	12 p 2100 A69-25845	12 p 2190 A69-25890 #
11 p 1861 A69-25711	11 p 1901 A69-25756 #	12 p 2152 A69-25801	12 p 2100 A69-25846 #	12 p 2155 A69-25891 #
11 p 1861 A69-25712	11 p 1935 A69-25757 #	12 p 2152 A69-25802	12 p 2101 A69-25847 #	12 p 2078 A69-25892 #
11 p 1861 A69-25713	11 p 1922 A69-25758 #	12 p 2153 A69-25803	12 p 2101 A69-25848 #	12 p 2124 A69-25893 #
11 p 1861 A69-25714	11 p 1935 A69-25759 #	12 p 2153 A69-25804	12 p 2192 A69-25849 #	12 p 2125 A69-25894 #
11 p 1934 A69-25715	11 p 1841 A69-25760 #	12 p 2153 A69-25805*	12 p 2176 A69-25850	12 p 2125 A69-25895 #
11 p 1861 A69-25716	12 p 2060 A69-25761	12 p 2153 A69-25806	12 p 2176 A69-25851 #	12 p 2079 A69-25896 #
11 p 1857 A69-25717	12 p 2189 A69-25762	12 p 2153 A69-25807	12 p 2111 A69-25852 #	12 p 2028 A69-25897 #
11 p 1967 A69-25718	12 p 2190 A69-25763	12 p 2063 A69-25808	12 p 2117 A69-25853 #	12 p 2028 A69-25898 #
11 p 1968 A69-25719*	12 p 2017 A69-25764*	12 p 2153 A69-25809	12 p 2011 A69-25854 #	12 p 2028 A69-25899 #
11 p 1968 A69-25720	12 p 2133 A69-25765 #	12 p 2153 A69-25810	12 p 2117 A69-25855 #	12 p 2035 A69-25900 #
11 p 1968 A69-25721	12 p 2133 A69-25766 #	12 p 2153 A69-25811	12 p 2111 A69-25856 #	12 p 2035 A69-25901 #
11 p 1968 A69-25722	12 p 2077 A69-25767	12 p 2153 A69-25812*	12 p 2176 A69-25857 #	12 p 2111 A69-25902
11 p 1945 A69-25723	12 p 2055 A69-25768*	12 p 2153 A69-25813*	12 p 2101 A69-25858 #	12 p 2063 A69-25903*
11 p 1914 A69-25724*	12 p 2077 A69-25769	12 p 2154 A69-25814	12 p 2101 A69-25859 #	12 p 2079 A69-25904*
11 p 1968 A69-25725	12 p 2078 A69-25770	12 p 2055 A69-25815 #	12 p 2176 A69-25860 #	12 p 2133 A69-25905
11 p 2005 A69-25726*	12 p 2078 A69-25771	12 p 2154 A69-25816 #	12 p 2176 A69-25861 #	12 p 2028 A69-25906
11 p 1934 A69-25727 #	12 p 2078 A69-25772*	12 p 2154 A69-25817 #	12 p 2014 A69-25862	12 p 2036 A69-25907
11 p 1934 A69-25728 #	12 p 2018 A69-25773**	12 p 2154 A69-25818 #	12 p 2015 A69-25863 #	12 p 2036 A69-25908
11 p 1876 A69-25729 #	12 p 2018 A69-25774**	12 p 2154 A69-25819 #	12 p 2015 A69-25864 #	12 p 2036 A69-25909
11 p 1996 A69-25730 #	12 p 2018 A69-25775*	12 p 2154 A69-25820 #	12 p 2015 A69-25865 #	12 p 2079 A69-25910
11 p 1910 A69-25731 #	12 p 2018 A69-25776*	12 p 2154 A69-25821 #	12 p 2015 A69-25866 #	12 p 2028 A69-25911
11 p 1996 A69-25732 #	12 p 2018 A69-25777*	12 p 2154 A69-25822 #	12 p 2015 A69-25867 #	12 p 2036 A69-25912
11 p 1996 A69-25733 #	12 p 2018 A69-25778*	12 p 2154 A69-25823 #	12 p 2016 A69-25868 #	12 p 2120 A69-25913
11 p 1996 A69-25734 #	12 p 2026 A69-25779*	12 p 2146 A69-25824	12 p 2016 A69-25869 #	12 p 2036 A69-25914
11 p 1996 A69-25735 #	12 p 2026 A69-25780*	12 p 2100 A69-25825	12 p 2127 A69-25870	12 p 2036 A69-25915



# ACCESSION NUMBER INDEX

12 p2036 A69-25916	12 p2045 A69-25961 #	12 p2178 A69-26006 #	12 p2038 A69-26051*	12 p2134 A69-26096 #
12 p2079 A69-25917	12 p2037 A69-25962 #	12 p2064 A69-26007 #	12 p2029 A69-26052	12 p2132 A69-26097*#
12 p2036 A69-25918	12 p2016 A69-25963 #	12 p2064 A69-26008 #	12 p2080 A69-26053 #	12 p2134 A69-26098
12 p2036 A69-25919	12 p2045 A69-25964 #	12 p2064 A69-26009 #	12 p2038 A69-26054	12 p2134 A69-26099
12 p2036 A69-25920	12 p2045 A69-25965 #	12 p2064 A69-26010 #	12 p2038 A69-26055	12 p2029 A69-26100
12 p2079 A69-25921	12 p2079 A69-25966 #	12 p2064 A69-26011 #	12 p2038 A69-26056	12 p2065 A69-26101*
12 p2120 A69-25922	12 p2045 A69-25967 #	12 p2064 A69-26012*#	12 p2080 A69-26057	12 p2065 A69-26102
12 p2104 A69-25923	12 p2079 A69-25968 #	12 p2061 A69-26013*#	12 p2045 A69-26058	12 p2065 A69-26103
12 p2036 A69-25924	12 p2101 A69-25969	12 p2125 A69-26014 #	12 p2045 A69-26059*	12 p2065 A69-26104*
12 p2028 A69-25925	12 p2101 A69-25970 #	12 p2125 A69-26015 #	12 p2046 A69-26060	12 p2065 A69-26105
12 p2133 A69-25926	12 p2102 A69-25971 #	12 p2126 A69-26016 #	12 p2046 A69-26061	12 p2065 A69-26106
12 p2120 A69-25927*	12 p2055 A69-25972 #	12 p2126 A69-26017 #	12 p2046 A69-26062	12 p2148 A69-26107
12 p2104 A69-25928	12 p2037 A69-25973 #	12 p2126 A69-26018 #	12 p2046 A69-26063	12 p2065 A69-26108
12 p2022 A69-25929*	12 p2129 A69-25974 #	12 p2155 A69-26019*#	12 p2046 A69-26064	12 p2065 A69-26109
12 p2022 A69-25930*	12 p2142 A69-25975 #	12 p2155 A69-26020*#	12 p2128 A69-26065	12 p2066 A69-26110
12 p2022 A69-25931	12 p2133 A69-25976 #	12 p2079 A69-26021 #	12 p2128 A69-26066	12 p2066 A69-26111
12 p2028 A69-25932	12 p2134 A69-25977 #	12 p2104 A69-26022 #	12 p2173 A69-26067	12 p2066 A69-26112
12 p2028 A69-25933*	12 p2142 A69-25978 #	12 p2104 A69-26023 #	12 p2013 A69-26068	12 p2142 A69-26113
12 p2142 A69-25934*	12 p2142 A69-25979 #	12 p2104 A69-26024 #	12 p2046 A69-26069	12 p2132 A69-26114
12 p2142 A69-25935	12 p2142 A69-25980 #	12 p2104 A69-26025 #	12 p2047 A69-26070	12 p2026 A69-26115
12 p2101 A69-25936*	12 p2134 A69-25981*#	12 p2029 A69-26026 #	12 p2129 A69-26071	12 p2132 A69-26116
12 p2026 A69-25937	12 p2129 A69-25982*#	12 p2134 A69-26027 #	12 p2047 A69-26072	12 p2011 A69-26117 #
12 p2036 A69-25938	12 p2131 A69-25983*#	12 p2104 A69-26028 #	12 p2048 A69-26073	12 p2013 A69-26118 #
12 p2037 A69-25939	12 p2131 A69-25984 #	12 p2104 A69-26029 #	12 p2048 A69-26074	12 p2128 A69-26119
12 p2037 A69-25940	12 p2131 A69-25985*#	12 p2104 A69-26030 #	12 p2048 A69-26075	12 p2134 A69-26120 #
12 p2034 A69-25941	12 p2104 A69-25986 #	12 p2105 A69-26031 #	12 p2048 A69-26076	12 p2129 A69-26121*
12 p2037 A69-25942	12 p2132 A69-25987	12 p2079 A69-26032 #	12 p2048 A69-26077	12 p2155 A69-26122 #
12 p2112 A69-25943	12 p2134 A69-25988 #	12 p2120 A69-26033 #	12 p2048 A69-26078	12 p2080 A69-26123
12 p2112 A69-25944*	12 p2018 A69-25989 #	12 p2178 A69-26034 #	12 p2048 A69-26079	12 p2113 A69-26124
12 p2112 A69-25945	12 p2129 A69-25990 #	12 p2120 A69-26035 #	12 p2049 A69-26080	12 p2113 A69-26125
12 p2013 A69-25946	12 p2117 A69-25991 #	12 p2112 A69-26036 #	12 p2049 A69-26081	12 p2126 A69-26126 #
12 p2061 A69-25947	12 p2177 A69-25992 #	12 p2112 A69-26037 #	12 p2049 A69-26082	12 p2080 A69-26127 #
12 p2190 A69-25948	12 p2177 A69-25993 #	12 p2112 A69-26038 #	12 p2049 A69-26083	12 p2173 A69-26128 #
12 p2028 A69-25949 #	12 p2177 A69-25994 #	12 p2112 A69-26039 #	12 p2049 A69-26084	12 p2155 A69-26129*#
12 p2125 A69-25950 #	12 p2177 A69-25995 #	12 p2112 A69-26040 #	12 p2049 A69-26085	12 p2018 A69-26130
12 p2125 A69-25951 #	12 p2177 A69-25996 #	12 p2113 A69-26041 #	12 p2050 A69-26086	12 p2019 A69-26131
12 p2064 A69-25952 #	12 p2178 A69-25997 #	12 p2113 A69-26042 #	12 p2050 A69-26087	12 p2066 A69-26132
12 p2061 A69-25953 #	12 p2178 A69-25998 #	12 p2113 A69-26043 #	12 p2050 A69-26088	12 p2066 A69-26133
12 p2125 A69-25954 #	12 p2178 A69-25999 #	12 p2113 A69-26044 #	12 p2050 A69-26089	12 p2066 A69-26134
12 p2125 A69-25955 #	12 p2178 A69-26000 #	12 p2113 A69-26045 #	12 p2050 A69-26090	12 p2080 A69-26135
12 p2125 A69-25956 #	12 p2178 A69-26001 #	12 p2037 A69-26046	12 p2050 A69-26091	12 p2082 A69-26136
12 p2028 A69-25957 #	12 p2178 A69-26002 #	12 p2079 A69-26047	12 p2051 A69-26092	12 p2082 A69-26137
12 p2177 A69-25958*	12 p2178 A69-26003 #	12 p2037 A69-26048	12 p2051 A69-26093	12 p2082 A69-26138
12 p2045 A69-25959 #	12 p2178 A69-26004 #	12 p2105 A69-26049	12 p2051 A69-26094	12 p2083 A69-26139
12 p2045 A69-25960 #	12 p2155 A69-26005	12 p2105 A69-26050	12 p2134 A69-26095 #	12 p2083 A69-26140

## ACCESSION NUMBER INDEX

12 p2083 A69-26141	12 p2089 A69-26186	12 p2157 A69-26231	12 p2135 A69-26276	12 p2106 A69-26321
12 p2083 A69-26142	12 p2089 A69-26187	12 p2066 A69-26232	12 p2062 A69-26277	12 p2106 A69-26322
12 p2083 A69-26143	12 p2089 A69-26188	12 p2157 A69-26233	12 p2052 A69-26278 #	12 p2106 A69-26323
12 p2083 A69-26144	12 p2089 A69-26189	12 p2157 A69-26234	12 p2052 A69-26279 #	12 p2106 A69-26324
12 p2083 A69-26145	12 p2089 A69-26190	12 p2022 A69-26235*	12 p2052 A69-26280 #	12 p2106 A69-26325
12 p2083 A69-26146	12 p2011 A69-26191	12 p2147 A69-26236	12 p2157 A69-26281 #	12 p2107 A69-26326
12 p2084 A69-26147	12 p2190 A69-26192	12 p2051 A69-26237	12 p2121 A69-26282 #	12 p2107 A69-26327
12 p2084 A69-26148	12 p2117 A69-26193	12 p2179 A69-26238	12 p2130 A69-26283	12 p2038 A69-26328
12 p2084 A69-26149	12 p2118 A69-26194	12 p2102 A69-26239	12 p2135 A69-26284	12 p2029 A69-26329
12 p2084 A69-26150	12 p2113 A69-26195	12 p2090 A69-26240	12 p2105 A69-26285	12 p2107 A69-26330*
12 p2084 A69-26151	12 p2089 A69-26196	12 p2102 A69-26241	12 p2130 A69-26286	12 p2038 A69-26331 #
12 p2084 A69-26152	12 p2090 A69-26197	12 p2062 A69-26242	12 p2062 A69-26287	12 p2091 A69-26332 #
12 p2084 A69-26153	12 p2120 A69-26198 #	12 p2180 A69-26243	12 p2011 A69-26288	12 p2067 A69-26333*#
12 p2085 A69-26154	12 p2120 A69-26199 #	12 p2051 A69-26244	12 p2011 A69-26289	12 p2157 A69-26334 #
12 p2085 A69-26155	12 p2121 A69-26200 #	12 p2130 A69-26245	12 p2102 A69-26290	12 p2157 A69-26335 #
12 p2085 A69-26156	12 p2051 A69-26201*	12 p2132 A69-26246 #	12 p2090 A69-26291	12 p2157 A69-26336 #
12 p2085 A69-26157	12 p2029 A69-26202	12 p2132 A69-26247 #	12 p2190 A69-26292	12 p2038 A69-26337 #
12 p2085 A69-26158	12 p2029 A69-26203	12 p2132 A69-26248 #	12 p2090 A69-26293	12 p2130 A69-26338 #
12 p2085 A69-26159	12 p2029 A69-26204*	12 p2090 A69-26249	12 p2142 A69-26294	12 p2180 A69-26339 #
12 p2085 A69-26160	12 p2155 A69-26205	12 p2090 A69-26250 #	12 p2066 A69-26295	12 p2118 A69-26340 .
12 p2085 A69-26161	12 p2148 A69-26206*	12 p2029 A69-26251 #	12 p2132 A69-26296*	12 p2157 A69-26341*
12 p2086 A69-26162	12 p2155 A69-26207	12 p2029 A69-26252 #	12 p2132 A69-26297*	12 p2158 A69-26342*
12 p2086 A69-26163	12 p2155 A69-26208	12 p2090 A69-26253	12 p2133 A69-26298	12 p2067 A69-26343
12 p2086 A69-26164	12 p2149 A69-26209	12 p2090 A69-26254	12 p2192 A69-26299*	12 p2158 A69-26344
12 p2086 A69-26165	12 p2156 A69-26210	12 p2090 A69-26255	12 p2019 A69-26300	12 p2067 A69-26345
12 p2086 A69-26166	12 p2179 A69-26211	12 p2113 A69-26256 #	12 p2114 A69-26301*	12 p2019 A69-26346 #
12 p2086 A69-26167	12 p2179 A69-26212	12 p2118 A69-26257 #	12 p2090 A69-26302	12 p2019 A69-26347 #
12 p2086 A69-26168	12 p2179 A69-26213	12 p2118 A69-26258 #	12 p2091 A69-26303	12 p2019 A69-26348 #
12 p2086 A69-26169	12 p2179 A69-26214	12 p2142 A69-26259 #	12 p2091 A69-26304	12 p2038 A69-26349
12 p2087 A69-26170	12 p2179 A69-26215	12 p2118 A69-26260 #	12 p2180 A69-26305	12 p2039 A69-26350
12 p2087 A69-26171	12 p2179 A69-26216*	12 p2118 A69-26261 #	12 p2114 A69-26306*	12 p2052 A69-26351
12 p2087 A69-26172	12 p2179 A69-26217	12 p2118 A69-26262 #	12 p2114 A69-26307	12 p2039 A69-26352
12 p2087 A69-26173	12 p2156 A69-26218 #	12 p2180 A69-26263 #	12 p2157 A69-26308	12 p2039 A69-26353
12 p2087 A69-26174	12 p2156 A69-26219 #	12 p2055 A69-26264 #	12 p2157 A69-26309	12 p2067 A69-26354 #
12 p2087 A69-26175	12 p2156 A69-26220 #	12 p2055 A69-26265*	12 p2105 A69-26310	12 p2067 A69-26355 #
12 p2087 A69-26176	12 p2149 A69-26221 #	12 p2016 A69-26266	12 p2105 A69-26311	12 p2013 A69-26356
12 p2088 A69-26177	12 p2156 A69-26222 #	12 p2180 A69-26267	12 p2130 A69-26312	12 p2147 A69-26357
12 p2088 A69-26178	12 p2156 A69-26223 #	12 p2180 A69-26268	12 p2130 A69-26313	12 p2012 A69-26358
12 p2088 A69-26179	12 p2156 A69-26224	12 p2180 A69-26269	12 p2135 A69-26314	12 p2180 A69-26359
12 p2088 A69-26180	12 p2156 A69-26225	12 p2180 A69-26270	12 p2149 A69-26315*	12 p2091 A69-26360
12 p2088 A69-26181	12 p2149 A69-26226	12 p2180 A69-26271	12 p2105 A69-26316	12 p2026 A69-26361
12 p2088 A69-26182	12 p2156 A69-26227	12 p2062 A69-26272	12 p2105 A69-26317	12 p2012 A69-26362
12 p2088 A69-26183	12 p2156 A69-26228	12 p2135 A69-26273	12 p2105 A69-26318	12 p2091 A69-26363
12 p2088 A69-26184	12 p2066 A69-26229	12 p2180 A69-26274	12 p2106 A69-26319	12 p2016 A69-26364
12 p2089 A69-26185	12 p2157 A69-26230	12 p2062 A69-26275	12 p2106 A69-26320	12 p2121 A69-26365 #



# ACCESSION NUMBER INDEX

12 p2121 A69-26366 #	12 p2057 A69-26411 #	12 p2143 A69-26456	12 p2052 A69-26501	12 p2093 A69-26546**
12 p2091 A69-26367 #	12 p2057 A69-26412 #	12 p2143 A69-26457 #	12 p2052 A69-26502	12 p2019 A69-26547*
12 p2091 A69-26368 #	12 p2057 A69-26413 #	12 p2143 A69-26458 #	12 p2052 A69-26503	12 p2019 A69-26548
12 p2091 A69-26369 #	12 p2057 A69-26414 #	12 p2143 A69-26459 #	12 p2052 A69-26504	12 p2023 A69-26549
12 p2102 A69-26370 #	12 p2058 A69-26415 #	12 p2143 A69-26460 #	12 p2053 A69-26505*	12 p2020 A69-26550 #
12 p2158 A69-26371*	12 p2058 A69-26416 #	12 p2062 A69-26461	12 p2053 A69-26506	12 p2020 A69-26551
12 p2022 A69-26372*	12 p2058 A69-26417 #	12 p2130 A69-26462	12 p2053 A69-26507	12 p2023 A69-26552 #
12 p2130 A69-26373 #	12 p2058 A69-26418 #	12 p2030 A69-26463	12 p2053 A69-26508*	12 p2023 A69-26553*
12 p2039 A69-26374	12 p2058 A69-26419 #	12 p2069 A69-26464	12 p2053 A69-26509	12 p2059 A69-26554
12 p2039 A69-26375	12 p2058 A69-26420 #	12 p2040 A69-26465	12 p2121 A69-26510	12 p2023 A69-26555
12 p2039 A69-26376	12 p2092 A69-26421 #	12 p2013 A69-26466 #	12 p2122 A69-26511	12 p2023 A69-26556
12 p2121 A69-26377	12 p2058 A69-26422 #	12 p2030 A69-26467	12 p2053 A69-26512	12 p2020 A69-26557*
12 p2039 A69-26378	12 p2092 A69-26423 #	12 p2121 A69-26468 #	12 p2122 A69-26513	12 p2024 A69-26558*
12 p2039 A69-26379	12 p2067 A69-26424	12 p2114 A69-26469	12 p2053 A69-26514	12 p2024 A69-26559
12 p2039 A69-26380	12 p2068 A69-26425 #	12 p2040 A69-26470	12 p2053 A69-26515	12 p2024 A69-26560
12 p2039 A69-26381	12 p2068 A69-26426 #	12 p2030 A69-26471	12 p2054 A69-26516*	12 p2024 A69-26561
12 p2052 A69-26382	12 p2068 A69-26427 #	12 p2040 A69-26472	12 p2054 A69-26517	12 p2020 A69-26562 #
12 p2030 A69-26383	12 p2068 A69-26428 #	12 p2040 A69-26473	12 p2054 A69-26518*	12 p2020 A69-26563 #
12 p2052 A69-26384	12 p2158 A69-26429 #	12 p2027 A69-26474	12 p2054 A69-26519	12 p2020 A69-26564 #
12 p2030 A69-26385	12 p2066 A69-26430 #	12 p2149 A69-26475	12 p2122 A69-26520	12 p2020 A69-26565 #
12 p2030 A69-26386	12 p2069 A69-26431 #	12 p2092 A69-26476 #	12 p2122 A69-26521	12 p2181 A69-26566 #
12 p2039 A69-26387	12 p2158 A69-26432 #	12 p2092 A69-26477**	12 p2122 A69-26522	12 p2034 A69-26567
12 p2030 A69-26388	12 p2069 A69-26433 #	12 p2092 A69-26478 #	12 p2122 A69-26523	12 p2040 A69-26568
12 p2030 A69-26389	12 p2121 A69-26434 #	12 p2040 A69-26479	12 p2122 A69-26524	12 p2102 A69-26569
12 p2030 A69-26390	12 p2158 A69-26435 #	12 p2092 A69-26480	12 p2122 A69-26525*	12 p2102 A69-26570
12 p2107 A69-26391 #	12 p2069 A69-26436 #	12 p2093 A69-26481**	12 p2136 A69-26526 #	12 p2102 A69-26571
12 p2107 A69-26392 #	12 p2069 A69-26437 #	12 p2093 A69-26482**	12 p2136 A69-26527 #	12 p2181 A69-26572 #
12 p2130 A69-26393 #	12 p2069 A69-26438 #	12 p2093 A69-26483	12 p2137 A69-26528 #	12 p2122 A69-26573 #
12 p2091 A69-26394 #	12 p2173 A69-26439 #	12 p2093 A69-26484 #	12 p2137 A69-26529 #	12 p2122 A69-26574 #
12 p2121 A69-26395**	12 p2069 A69-26440 #	12 p2030 A69-26485 #	12 p2031 A69-26530 #	12 p2070 A69-26575 #
12 p2181 A69-26396 #	12 p2158 A69-26441 #	12 p2040 A69-26486 #	12 p2137 A69-26531 #	12 p2126 A69-26576 #
12 p2135 A69-26397	12 p2069 A69-26442 #	12 p2031 A69-26487 #	12 p2137 A69-26532 #	12 p2070 A69-26577 #
12 p2135 A69-26398 #	12 p2174 A69-26443 #	12 p2040 A69-26488 #	12 p2137 A69-26533 #	12 p2126 A69-26578 #
12 p2135 A69-26399 #	12 p2174 A69-26444 #	12 p2040 A69-26489 #	12 p2137 A69-26534 #	12 p2126 A69-26579 #
12 p2135 A69-26400 #	12 p2158 A69-26445 #	12 p2023 A69-26490 #	12 p2137 A69-26535 #	12 p2126 A69-26580 #
12 p2136 A69-26401 #	12 p2174 A69-26446 #	12 p2023 A69-26491 #	12 p2137 A69-26536 #	12 p2126 A69-26581 #
12 p2136 A69-26402 #	12 p2149 A69-26447 #	12 p2023 A69-26492 #	12 p2137 A69-26537 #	12 p2070 A69-26582 #
12 p2136 A69-26403 #	12 p2159 A69-26448 #	12 p2023 A69-26493 #	12 p2138 A69-26538 #	12 p2093 A69-26583 #
12 p2136 A69-26404 #	12 p2059 A69-26449 #	12 p2019 A69-26494 #	12 p2138 A69-26539 #	12 p2070 A69-26584 #
12 p2136 A69-26405 #	12 p2092 A69-26450 #	12 p2114 A69-26495**	12 p2107 A69-26540 #	12 p2144 A69-26585 #
12 p2055 A69-26406	12 p2092 A69-26451 #	12 p2114 A69-26496**	12 p2107 A69-26541 #	12 p2144 A69-26586 #
12 p2056 A69-26407 #	12 p2142 A69-26452	12 p2016 A69-26497**	12 p2138 A69-26542 #	12 p2144 A69-26587 #
12 p2056 A69-26408 #	12 p2143 A69-26453 #	12 p2017 A69-26498**	12 p2133 A69-26543 #	12 p2107 A69-26588
12 p2056 A69-26409 #	12 p2114 A69-26454 #	12 p2059 A69-26499**	12 p2017 A69-26544 #	12 p2107 A69-26589
12 p2057 A69-26410 #	12 p2114 A69-26455 #	12 p2144 A69-26500**	12 p2017 A69-26545 #	12 p2093 A69-26590

ACCESSION NUMBER INDEX

12 p2108 A69-26591	12 p2108 A69-26636	12 p2149 A69-26681 #	12 p2182 A69-26726 #	12 p2094 A69-26771 #
12 p2108 A69-26592	12 p2108 A69-26637	12 p2149 A69-26682 #	12 p2123 A69-26727 #	12 p2129 A69-26772 #
12 p2108 A69-26593	12 p2109 A69-26638*	12 p2149 A69-26683 #	12 p2123 A69-26728 #	12 p2059 A69-26773 #
12 p2108 A69-26594	12 p2109 A69-26639	12 p2070 A69-26684 #	12 p2123 A69-26729 #	12 p2063 A69-26774 #
12 p2093 A69-26595	12 p2109 A69-26640	12 p2070 A69-26685 #	12 p2123 A69-26730 #	12 p2012 A69-26775 #
12 p2093 A69-26596	12 p2109 A69-26641	12 p2031 A69-26686 #	12 p2182 A69-26731	12 p2014 A69-26776 #
12 p2102 A69-26597	12 p2031 A69-26642	12 p2070 A69-26687 #	12 p2192 A69-26732	12 p2129 A69-26777 #
12 p2093 A69-26598	12 p2031 A69-26643	12 p2070 A69-26688 #	12 p2192 A69-26733	12 p2159 A69-26778 #
12 p2130 A69-26599	12 p2031 A69-26644	12 p2070 A69-26689 #	12 p2071 A69-26734	12 p2174 A69-26779 #
12 p2094 A69-26600	12 p2031 A69-26645	12 p2070 A69-26690 #	12 p2072 A69-26735	12 p2174 A69-26780*#
12 p2094 A69-26601	12 p2041 A69-26646	12 p2031 A69-26691 #	12 p2150 A69-26736*	12 p2190 A69-26781*#
12 p2062 A69-26602 #	12 p2109 A69-26647	12 p2070 A69-26692 #	12 p2150 A69-26737	12 p2174 A69-26782*#
12 p2138 A69-26603	12 p2041 A69-26648	12 p2070 A69-26693 #	12 p2072 A69-26738*	12 p2094 A69-26783 #
12 p2041 A69-26604 #	12 p2144 A69-26649	12 p2071 A69-26694 #	12 p2072 A69-26739*	12 p2118 A69-26784*#
12 p2123 A69-26605*#	12 p2031 A69-26650	12 p2071 A69-26695 #	12 p2072 A69-26740	12 p2190 A69-26785 #
12 p2131 A69-26606*#	12 p2031 A69-26651	12 p2071 A69-26696 #	12 p2072 A69-26741	12 p2041 A69-26786 #
12 p2123 A69-26607 #	12 p2109 A69-26652	12 p2094 A69-26697 #	12 p2150 A69-26742	12 p2148 A69-26787*#
12 p2123 A69-26608 #	12 p2054 A69-26653	12 p2149 A69-26698 #	12 p2150 A69-26743	12 p2191 A69-26788 #
12 p2181 A69-26609 #	12 p2182 A69-26654	12 p2031 A69-26699 #	12 p2150 A69-26744	12 p2012 A69-26789*#
12 p2181 A69-26610 #	12 p2182 A69-26655	12 p2071 A69-26700 #	12 p2072 A69-26745*	12 p2012 A69-26790 #
12 p2181 A69-26611 #	12 p2182 A69-26656	12 p2071 A69-26701 #	12 p2150 A69-26746	12 p2129 A69-26791 #
12 p2181 A69-26612 #	12 p2131 A69-26657	12 p2071 A69-26702 #	12 p2150 A69-26747	12 p2183 A69-26792 #
12 p2181 A69-26613 #	12 p2182 A69-26658	12 p2071 A69-26703 #	12 p2072 A69-26748*	12 p2191 A69-26793 #
12 p2181 A69-26614 #	12 p2182 A69-26659	12 p2032 A69-26704 #	12 p2073 A69-26749*	12 p2012 A69-26794 #
12 p2115 A69-26615 #	12 p2182 A69-26660	12 p2032 A69-26705 #	12 p2192 A69-26750*#	12 p2174 A69-26795*#
12 p2115 A69-26616	12 p2131 A69-26661	12 p2071 A69-26706 #	12 p2103 A69-26751 #	12 p2059 A69-26796*#
12 p2115 A69-26617	12 p2159 A69-26662	12 p2094 A69-26707	12 p2034 A69-26752*	12 p2174 A69-26797*#
12 p2108 A69-26618 #	12 p2159 A69-26663	12 p2138 A69-26708	12 p2123 A69-26753	12 p2012 A69-26798 #
12 p2159 A69-26619 #	12 p2159 A69-26664	12 p2138 A69-26709	12 p2123 A69-26754	12 p2063 A69-26799 #
12 p2144 A69-26620 #	12 p2159 A69-26665	12 p2138 A69-26710	12 p2182 A69-26755	12 p2012 A69-26800*#
12 p2102 A69-26621 #	12 p2159 A69-26666	12 p2138 A69-26711	12 p2146 A69-26756	12 p2148 A69-26801 #
12 p2103 A69-26622*#	12 p2159 A69-26667	12 p2139 A69-26712	12 p2190 A69-26757	12 p2063 A69-26802 #
12 p2103 A69-26623 #	12 p2062 A69-26668	12 p2139 A69-26713	12 p2174 A69-26758 #	12 p2191 A69-26803 #
12 p2062 A69-26624	12 p2012 A69-26669	12 p2133 A69-26714	12 p2148 A69-26759 #	12 p2174 A69-26804 #
12 p2138 A69-26625	12 p2054 A69-26670	12 p2109 A69-26715	12 p2013 A69-26760 #	12 p2014 A69-26805 #
12 p2138 A69-26626	12 p2012 A69-26671	12 p2109 A69-26716	12 p2012 A69-26761 #	12 p2148 A69-26806 #
12 p2041 A69-26627	12 p2062 A69-26672	12 p2123 A69-26717 #	12 p2012 A69-26762*#	12 p2183 A69-26807
12 p2041 A69-26628*	12 p2144 A69-26673	12 p2123 A69-26718 #	12 p2013 A69-26763*#	12 p2184 A69-26808
12 p2041 A69-26629	12 p2062 A69-26674	12 p2094 A69-26719 #	12 p2014 A69-26764 #	12 p2184 A69-26809
12 p2041 A69-26630	12 p2144 A69-26675	12 p2054 A69-26720 #	12 p2014 A69-26765 #	12 p2184 A69-26810
12 p2138 A69-26631	12 p2109 A69-26676	12 p2144 A69-26721 #	12 p2059 A69-26766 #	12 p2184 A69-26811
12 p2031 A69-26632	12 p2182 A69-26677	12 p2144 A69-26722 #	12 p2014 A69-26767 #	12 p2184 A69-26812
12 p2013 A69-26633	12 p2182 A69-26678	12 p2145 A69-26723 #	12 p2118 A69-26768 #	12 p2119 A69-26813*
12 p2108 A69-26634	12 p2182 A69-26679	12 p2145 A69-26724 #	12 p2059 A69-26769 #	12 p2119 A69-26814
12 p2108 A69-26635	12 p2149 A69-26680 #	12 p2145 A69-26725 #	12 p2017 A69-26770 #	12 p2191 A69-26815



# ACCESSION NUMBER INDEX

12 p2059 A69-26816	12 p2073 A69-26861*	12 p2109 A69-26906 #	12 p2073 A69-26951	12 p2075 A69-26996 #
12 p2060 A69-26817	12 p2032 A69-26862	12 p2110 A69-26907 #	12 p2151 A69-26952	12 p2075 A69-26997 #
12 p2185 A69-26818	12 p2032 A69-26863	12 p2110 A69-26908 #	12 p2151 A69-26953	12 p2075 A69-26998 #
12 p2185 A69-26819	12 p2041 A69-26864	12 p2110 A69-26909 #	12 p2073 A69-26954	12 p2098 A69-26999 #
12 p2185 A69-26820	12 p2033 A69-26865	12 p2110 A69-26910 #	12 p2074 A69-26955	12 p2098 A69-27000 #
12 p2185 A69-26821	12 p2033 A69-26866	12 p2116 A69-26911	12 p2033 A69-26956	12 p2033 A69-27001**
12 p2185 A69-26822	12 p2033 A69-26867	12 p2116 A69-26912 #	12 p2161 A69-26957	12 p2127 A69-27002 #
12 p2185 A69-26823	12 p2131 A69-26868	12 p2116 A69-26913 #	12 p2074 A69-26958	12 p2075 A69-27003**
12 p2186 A69-26824	12 p2063 A69-26869	12 p2188 A69-26914**	12 p2074 A69-26959	12 p2034 A69-27004**
12 p2119 A69-26825	12 p2145 A69-26870	12 p2188 A69-26915 #	12 p2074 A69-26960	12 p2098 A69-27005 #
12 p2103 A69-26826	12 p2139 A69-26871	12 p2116 A69-26916 #	12 p2074 A69-26961	12 p2098 A69-27006 #
12 p2175 A69-26827	12 p2014 A69-26872*	12 p2027 A69-26917	12 p2074 A69-26962	12 p2098 A69-27007 #
12 p2115 A69-26828	12 p2151 A69-26873	12 p2073 A69-26918	12 p2074 A69-26963	12 p2099 A69-27008 #
12 p2115 A69-26829	12 p2175 A69-26874*	12 p2054 A69-26919	12 p2075 A69-26964	12 p2099 A69-27009 #
12 p2115 A69-26830	12 p2175 A69-26875	12 p2145 A69-26920*	12 p2033 A69-26965*	12 p2099 A69-27010 #
12 p2119 A69-26831	12 p2187 A69-26876	12 p2160 A69-26921	12 p2054 A69-26966	12 p2076 A69-27011 #
12 p2119 A69-26832	12 p2042 A69-26877	12 p2175 A69-26922	12 p2133 A69-26967*	12 p2193 A69-27012**
12 p2186 A69-26833	12 p2042 A69-26878 #	12 p2044 A69-26923 #	12 p2094 A69-26968	12 p2193 A69-27013**
12 p2148 A69-26834	12 p2042 A69-26879 #	12 p2044 A69-26924 #	12 p2063 A69-26969	12 p2110 A69-27014
12 p2186 A69-26835	12 p2042 A69-26880 #	12 p2116 A69-26925 #	12 p2191 A69-26970	12 p2161 A69-27015
12 p2060 A69-26836*	12 p2042 A69-26881 #	12 p2188 A69-26926	12 p2124 A69-26971 #	12 p2163 A69-27016 #
12 p2103 A69-26837	12 p2042 A69-26882 #	12 p2191 A69-26927	12 p2131 A69-26972 #	12 p2163 A69-27017 #
12 p2186 A69-26838	12 p2043 A69-26883 #	12 p2188 A69-26928	12 p2021 A69-26973 #	12 p2163 A69-27018 #
12 p2186 A69-26839	12 p2043 A69-26884 #	12 p2124 A69-26929 #	12 p2094 A69-26974	12 p2163 A69-27019 #
12 p2186 A69-26840	12 p2043 A69-26885 #	12 p2124 A69-26930 #	12 p2096 A69-26975 #	12 p2163 A69-27020 #
12 p2186 A69-26841	12 p2043 A69-26886 #	12 p2127 A69-26931 #	12 p2033 A69-26976**	12 p2164 A69-27021 #
12 p2187 A69-26842*	12 p2043 A69-26887 #	12 p2124 A69-26932	12 p2044 A69-26977**	12 p2164 A69-27022 #
12 p2187 A69-26843	12 p2043 A69-26888 #	12 p2188 A69-26933	12 p2192 A69-26978**	12 p2164 A69-27023 #
12 p2175 A69-26844	12 p2043 A69-26889 #	12 p2060 A69-26934	12 p2096 A69-26979**	12 p2164 A69-27024 #
12 p2115 A69-26845	12 p2187 A69-26890	12 p2160 A69-26935	12 p2096 A69-26980 #	12 p2164 A69-27025 #
12 p2187 A69-26846*	12 p2124 A69-26891	12 p2151 A69-26936	12 p2096 A69-26981 #	12 p2164 A69-27026 #
12 p2119 A69-26847	12 p2124 A69-26892	12 p2161 A69-26937	12 p2075 A69-26982 #	12 p2164 A69-27027 #
12 p2187 A69-26848	12 p2175 A69-26893 #	12 p2120 A69-26938	12 p2096 A69-26983 #	12 p2165 A69-27028 #
12 p2120 A69-26849	12 p2017 A69-26894 #	12 p2060 A69-26939	12 p2192 A69-26984 #	12 p2165 A69-27029 #
12 p2017 A69-26850	12 p2160 A69-26895 #	12 p2060 A69-26940	12 p2097 A69-26985 #	12 p2165 A69-27030 #
12 p2145 A69-26851	12 p2160 A69-26896 #	12 p2161 A69-26941	12 p2097 A69-26986 #	12 p2165 A69-27031 #
12 p2160 A69-26852 #	12 p2160 A69-26897 #	12 p2161 A69-26942	12 p2097 A69-26987 #	12 p2165 A69-27032 #
12 p2160 A69-26853 #	12 p2127 A69-26898	12 p2151 A69-26943*	12 p2193 A69-26988 #	12 p2165 A69-27033 #
12 p2160 A69-26854 #	12 p2127 A69-26899 #	12 p2139 A69-26944	12 p2075 A69-26989**	12 p2165 A69-27034 #
12 p2032 A69-26855	12 p2127 A69-26900 #	12 p2151 A69-26945	12 p2097 A69-26990 #	12 p2166 A69-27035 #
12 p2032 A69-26856	12 p2127 A69-26901	12 p2073 A69-26946	12 p2097 A69-26991 #	12 p2166 A69-27036 #
12 p2032 A69-26857	12 p2188 A69-26902	12 p2073 A69-26947	12 p2098 A69-26992 #	12 p2166 A69-27037 #
12 p2032 A69-26858	12 p2094 A69-26903	12 p2151 A69-26948	12 p2098 A69-26993**	12 p2166 A69-27038 #
12 p2032 A69-26859	12 p2160 A69-26904 #	12 p2151 A69-26949*	12 p2193 A69-26994 #	12 p2166 A69-27039 #
12 p2032 A69-26860	12 p2109 A69-26905	12 p2033 A69-26950	12 p2098 A69-26995 #	12 p2166 A69-27040 #

## ACCESSION NUMBER INDEX

12 p2167 A69-27041 #	12 p2025 A69-27086 #	12 p2141 A69-27131 #	12 p2099 A69-27176	13 p2316 A69-27221
12 p2167 A69-27042 #	12 p2026 A69-27087	12 p2034 A69-27132	12 p2100 A69-27177 #	13 p2358 A69-27222
12 p2167 A69-27043 #	12 p2076 A69-27088 #	12 p2171 A69-27133	12 p2017 A69-27178 #	13 p2316 A69-27223
12 p2167 A69-27044 #	12 p2076 A69-27089 #	12 p2116 A69-27134	12 p2141 A69-27179	13 p2274 A69-27224
12 p2167 A69-27045 #	12 p2103 A69-27090 #	12 p2116 A69-27135	12 p2111 A69-27180	13 p2274 A69-27225
12 p2167 A69-27046 #	12 p2027 A69-27091 #	12 p2117 A69-27136	13 p2270 A69-27181	13 p2274 A69-27226*
12 p2167 A69-27047 #	12 p2171 A69-27092*	12 p2117 A69-27137	13 p2218 A69-27182	13 p2275 A69-27227
12 p2168 A69-27048 #	12 p2044 A69-27093	12 p2117 A69-27138	13 p2225 A69-27183	13 p2275 A69-27228
12 p2168 A69-27049*#	12 p2034 A69-27094	12 p2077 A69-27139	13 p2225 A69-27184	13 p2275 A69-27229
12 p2168 A69-27050 #	12 p2034 A69-27095	12 p2014 A69-27140	13 p2226 A69-27185	13 p2265 A69-27230
12 p2168 A69-27051*#	12 p2035 A69-27096	12 p2124 A69-27141	13 p2226 A69-27186	13 p2265 A69-27231*
12 p2168 A69-27052 #	12 p2055 A69-27097*	12 p2124 A69-27142	13 p2226 A69-27187	13 p2284 A69-27232
12 p2168 A69-27053 #	12 p2035 A69-27098	12 p2077 A69-27143	13 p2237 A69-27188	13 p2265 A69-27233
12 p2168 A69-27054 #	12 p2152 A69-27099	12 p2152 A69-27144*	13 p2334 A69-27189 #	13 p2358 A69-27234
12 p2169 A69-27055 #	12 p2188 A69-27100	12 p2171 A69-27145*	13 p2334 A69-27190 #	13 p2226 A69-27235
12 p2169 A69-27056 #	12 p2044 A69-27101	12 p2141 A69-27146	13 p2270 A69-27191 #	13 p2227 A69-27236
12 p2169 A69-27057 #	12 p2044 A69-27102	12 p2141 A69-27147	13 p2270 A69-27192	13 p2227 A69-27237
12 p2169 A69-27058 #	12 p2034 A69-27103	12 p2191 A69-27148	13 p2270 A69-27193 #	13 p2287 A69-27238
12 p2169 A69-27059 #	12 p2099 A69-27104 #	12 p2110 A69-27149 #	13 p2226 A69-27194	13 p2227 A69-27239
12 p2169 A69-27060*#	12 p2076 A69-27105 #	12 p2099 A69-27150	13 p2226 A69-27195 #	13 p2304 A69-27240
12 p2169 A69-27061 #	12 p2076 A69-27106*#	12 p2171 A69-27151	13 p2270 A69-27196	13 p2227 A69-27241
12 p2170 A69-27062 #	12 p2076 A69-27107 #	12 p2171 A69-27152	13 p2270 A69-27197	13 p2287 A69-27242
12 p2170 A69-27063 #	12 p2076 A69-27108 #	12 p2171 A69-27153	13 p2270 A69-27198 #	13 p2259 A69-27243
12 p2170 A69-27064 #	12 p2077 A69-27109 #	12 p2171 A69-27154	13 p2258 A69-27199	13 p2227 A69-27244
12 p2170 A69-27065 #	12 p2077 A69-27110 #	12 p2171 A69-27155	13 p2270 A69-27200 #	13 p2287 A69-27245
12 p2170 A69-27066 #	12 p2077 A69-27111 #	12 p2172 A69-27156	13 p2258 A69-27201	13 p2244 A69-27246 #
12 p2171 A69-27067 #	12 p2063 A69-27112	12 p2172 A69-27157	13 p2270 A69-27202	13 p2295 A69-27247 #
12 p2171 A69-27068 #	12 p2188 A69-27113	12 p2172 A69-27158*	13 p2218 A69-27203 #	13 p2218 A69-27248 #
12 p2110 A69-27069	12 p2063 A69-27114	12 p2172 A69-27159	13 p2270 A69-27204	13 p2224 A69-27249 #
12 p2044 A69-27070	12 p2189 A69-27115	12 p2172 A69-27160	13 p2259 A69-27205*	13 p2224 A69-27250 #
12 p2044 A69-27071	12 p2189 A69-27116	12 p2172 A69-27161	13 p2301 A69-27206*#	13 p2218 A69-27251 #
12 p2131 A69-27072	12 p2189 A69-27117	12 p2189 A69-27162	13 p2357 A69-27207 #	13 p2237 A69-27252 #
12 p2139 A69-27073	12 p2189 A69-27118	12 p2189 A69-27163	13 p2358 A69-27208*#	13 p2238 A69-27253 #
12 p2024 A69-27074	12 p2145 A69-27119	12 p2099 A69-27164	13 p2358 A69-27209 #	13 p2219 A69-27254 #
12 p2139 A69-27075	12 p2103 A69-27120	12 p2099 A69-27165	13 p2358 A69-27210 #	13 p2359 A69-27255 #
12 p2129 A69-27076	12 p2139 A69-27121	12 p2111 A69-27166 #	13 p2358 A69-27211 #	13 p2359 A69-27256 #
12 p2175 A69-27077	12 p2140 A69-27122 #	12 p2172 A69-27167	13 p2358 A69-27212 #	13 p2359 A69-27257 #
12 p2148 A69-27078	12 p2140 A69-27123 #	12 p2172 A69-27168	13 p2218 A69-27213 #	13 p2244 A69-27258 #
12 p2024 A69-27079	12 p2140 A69-27124 #	12 p2172 A69-27169	13 p2218 A69-27214 #	13 p2359 A69-27259
12 p2054 A69-27080	12 p2140 A69-27125 #	12 p2172 A69-27170	13 p2218 A69-27215 #	13 p2359 A69-27260
12 p2025 A69-27081	12 p2140 A69-27126 #	12 p2173 A69-27171	13 p2226 A69-27216 #	13 p2359 A69-27261*
12 p2025 A69-27082	12 p2140 A69-27127 #	12 p2173 A69-27172*	13 p2226 A69-27217 #	13 p2359 A69-27262
12 p2025 A69-27083	12 p2140 A69-27128 #	12 p2173 A69-27173	13 p2226 A69-27218 #	13 p2359 A69-27263
12 p2025 A69-27084	12 p2140 A69-27129 #	12 p2173 A69-27174	13 p2226 A69-27219 #	13 p2359 A69-27264
12 p2025 A69-27085	12 p2141 A69-27130 #	12 p2173 A69-27175	13 p2274 A69-27220	13 p2213 A69-27265*



## ACCESSION NUMBER INDEX

13 p2213 A69-27266*	13 p2335 A69-27311	13 p2209 A69-27356 #	13 p2276 A69-27401	13 p2199 A69-27446
13 p2265 A69-27267 #	13 p2335 A69-27312*	13 p2219 A69-27357 #	13 p2276 A69-27402*	13 p2336 A69-27447 #
13 p2265 A69-27268**	13 p2325 A69-27313*	13 p2336 A69-27358 #	13 p2276 A69-27403	13 p2336 A69-27448 #
13 p2265 A69-27269 #	13 p2335 A69-27314	13 p2355 A69-27359 #	13 p2277 A69-27404	13 p2336 A69-27449 #
13 p2266 A69-27270 #	13 p2335 A69-27315*	13 p2355 A69-27360 #	13 p2277 A69-27405	13 p2259 A69-27450
13 p2266 A69-27271**	13 p2335 A69-27316*	13 p2301 A69-27361	13 p2277 A69-27406*	13 p2297 A69-27451
13 p2266 A69-27272**	13 p2335 A69-27317*	13 p2301 A69-27362 #	13 p2277 A69-27407	13 p2301 A69-27452
13 p2266 A69-27273 #	13 p2371 A69-27318	13 p2301 A69-27363 #	13 p2277 A69-27408	13 p2301 A69-27453*
13 p2266 A69-27274 #	13 p2371 A69-27319	13 p2324 A69-27364 #	13 p2277 A69-27409	13 p2301 A69-27454*
13 p2266 A69-27275 #	13 p2359 A69-27320	13 p2267 A69-27365	13 p2278 A69-27410	13 p2301 A69-27455*
13 p2266 A69-27276 #	13 p2360 A69-27321*	13 p2267 A69-27366*	13 p2278 A69-27411	13 p2302 A69-27456
13 p2266 A69-27277 #	13 p2244 A69-27322	13 p2268 A69-27367	13 p2278 A69-27412	13 p2306 A69-27457
13 p2244 A69-27278 #	13 p2199 A69-27323	13 p2275 A69-27368	13 p2278 A69-27413	13 p2302 A69-27458
13 p2266 A69-27279 #	13 p2360 A69-27324	13 p2276 A69-27369	13 p2278 A69-27414	13 p2302 A69-27459*
13 p2266 A69-27280 #	13 p2305 A69-27325	13 p2276 A69-27370	13 p2278 A69-27415	13 p2297 A69-27460*
13 p2267 A69-27281**	13 p2244 A69-27326	13 p2276 A69-27371	13 p2278 A69-27416	13 p2306 A69-27461
13 p2267 A69-27282 #	13 p2244 A69-27327	13 p2360 A69-27372	13 p2278 A69-27417	13 p2361 A69-27462
13 p2267 A69-27283 #	13 p2227 A69-27328	13 p2381 A69-27373	13 p2245 A69-27418 #	13 p2337 A69-27463
13 p2267 A69-27284**	13 p2201 A69-27329	13 p2305 A69-27374	13 p2203 A69-27419 #	13 p2326 A69-27464
13 p2267 A69-27285 #	13 p2295 A69-27330	13 p2305 A69-27375	13 p2360 A69-27420 #	13 p2203 A69-27465 #
13 p2267 A69-27286 #	13 p2324 A69-27331	13 p2305 A69-27376	13 p2203 A69-27421 #	13 p2268 A69-27466 #
13 p2267 A69-27287 #	13 p2295 A69-27332	13 p2305 A69-27377	13 p2360 A69-27422**	13 p2271 A69-27467
13 p2267 A69-27288 #	13 p2324 A69-27333	13 p2245 A69-27378	13 p2227 A69-27423 #	13 p2284 A69-27468
13 p2297 A69-27289 #	13 p2296 A69-27334	13 p2305 A69-27379 #	13 p2259 A69-27424 #	13 p2284 A69-27469 #
13 p2359 A69-27290 #	13 p2296 A69-27335	13 p2245 A69-27380 #	13 p2259 A69-27425 #	13 p2316 A69-27470 #
13 p2359 A69-27291 #	13 p2381 A69-27336	13 p2297 A69-27381 #	13 p2224 A69-27426 #	13 p2284 A69-27471 #
13 p2275 A69-27292 #	13 p2239 A69-27337	13 p2360 A69-27382 #	13 p2224 A69-27427 #	13 p2285 A69-27472 #
13 p2316 A69-27293 #	13 p2381 A69-27338	13 p2371 A69-27383 #	13 p2259 A69-27428 #	13 p2372 A69-27473 #
13 p2201 A69-27294 #	13 p2287 A69-27339 #	13 p2245 A69-27384 #	13 p2259 A69-27429 #	13 p2203 A69-27474
13 p2201 A69-27295 #	13 p2201 A69-27340 #	13 p2245 A69-27385 #	13 p2259 A69-27430 #	13 p2245 A69-27475 #
13 p2334 A69-27296	13 p2360 A69-27341	13 p2305 A69-27386 #	13 p2259 A69-27431 #	13 p2260 A69-27476 #
13 p2304 A69-27297 #	13 p2355 A69-27342 #	13 p2305 A69-27387 #	13 p2259 A69-27432 #	13 p2245 A69-27477 #
13 p2304 A69-27298 #	13 p2275 A69-27343 #	13 p2306 A69-27388 #	13 p2381 A69-27433 #	13 p2278 A69-27478**
13 p2287 A69-27299 #	13 p2275 A69-27344 #	13 p2227 A69-27389	13 p2372 A69-27434 #	13 p2306 A69-27479 #
13 p2244 A69-27300 #	13 p2275 A69-27345 #	13 p2290 A69-27390 #	13 p2336 A69-27435 #	13 p2306 A69-27480 #
13 p2304 A69-27301 #	13 p2335 A69-27346	13 p2290 A69-27391 #	13 p2268 A69-27436 #	13 p2245 A69-27481 #
13 p2305 A69-27302 #	13 p2251 A69-27347 #	13 p2276 A69-27392	13 p2360 A69-27437 #	13 p2372 A69-27482 #
13 p2381 A69-27303	13 p2290 A69-27348 #	13 p2276 A69-27393	13 p2361 A69-27438**	13 p2372 A69-27483 #
13 p2219 A69-27304	13 p2252 A69-27349 #	13 p2238 A69-27394 #	13 p2361 A69-27439 #	13 p2205 A69-27484 #
13 p2334 A69-27305 #	13 p2326 A69-27350 #	13 p2238 A69-27395 #	13 p2361 A69-27440 #	13 p2205 A69-27485 #
13 p2334 A69-27306	13 p2326 A69-27351 #	13 p2238 A69-27396 #	13 p2361 A69-27441 #	13 p2372 A69-27486 #
13 p2334 A69-27307	13 p2336 A69-27352 #	13 p2219 A69-27397 #	13 p2361 A69-27442 #	13 p2205 A69-27487 #
13 p2334 A69-27308	13 p2336 A69-27353 #	13 p2271 A69-27398	13 p2361 A69-27443 #	13 p2205 A69-27488 #
13 p2334 A69-27309	13 p2336 A69-27354 #	13 p2271 A69-27399*	13 p2325 A69-27444	13 p2372 A69-27489 #
13 p2335 A69-27310	13 p2326 A69-27355 #	13 p2316 A69-27400*	13 p2355 A69-27445	13 p2246 A69-27490 #

# ACCESSION NUMBER INDEX

13 p2206 A69-27491 #	13 p2227 A69-27536 #	13 p2340 A69-27581	13 p2343 A69-27626	13 p2229 A69-27671
13 p2206 A69-27492 #	13 p2246 A69-27537 #	13 p2341 A69-27582 #	13 p2343 A69-27627	13 p2229 A69-27672
13 p2206 A69-27493 #	13 p2246 A69-27538 #	13 p2341 A69-27583*#	13 p2316 A69-27628*#	13 p2229 A69-27673
13 p2206 A69-27494 #	13 p2201 A69-27539 #	13 p2373 A69-27584 #	13 p2307 A69-27629 #	13 p2229 A69-27674
13 p2206 A69-27495 #	13 p2201 A69-27540 #	13 p2252 A69-27585 #	13 p2344 A69-27630	13 p2229 A69-27675
13 p2207 A69-27496 #	13 p2201 A69-27541 #	13 p2252 A69-27586 #	13 p2228 A69-27631	13 p2229 A69-27676
13 p2306 A69-27497 #	13 p2201 A69-27542 #	13 p2252 A69-27587 #	13 p2228 A69-27632	13 p2229 A69-27677
13 p2246 A69-27498 #	13 p2201 A69-27543 #	13 p2341 A69-27588 #	13 p2297 A69-27633	13 p2230 A69-27678
13 p2307 A69-27499 #	13 p2381 A69-27544 #	13 p2341 A69-27589 #	13 p2297 A69-27634 #	13 p2230 A69-27679
13 p2307 A69-27500 #	13 p2202 A69-27545 #	13 p2327 A69-27590 #	13 p2344 A69-27635	13 p2230 A69-27680
13 p2307 A69-27501 #	13 p2202 A69-27546 #	13 p2341 A69-27591 #	13 p2290 A69-27636 #	13 p2355 A69-27681 #
13 p2207 A69-27502 #	13 p2202 A69-27547 #	13 p2342 A69-27592 #	13 p2290 A69-27637 #	13 p2355 A69-27682 #
13 p2207 A69-27503*#	13 p2337 A69-27548	13 p2327 A69-27593*#	13 p2252 A69-27638 #	13 p2355 A69-27683 #
13 p2207 A69-27504 #	13 p2337 A69-27549	13 p2342 A69-27594 #	13 p2246 A69-27639	13 p2356 A69-27684 #
13 p2207 A69-27505 #	13 p2326 A69-27550	13 p2342 A69-27595 #	13 p2355 A69-27640 #	13 p2356 A69-27685 #
13 p2207 A69-27506 #	13 p2326 A69-27551	13 p2327 A69-27596 #	13 p2316 A69-27641 #	13 p2356 A69-27686 #
13 p2207 A69-27507 #	13 p2337 A69-27552	13 p2342 A69-27597 #	13 p2344 A69-27642	13 p2296 A69-27687 #
13 p2307 A69-27508 #	13 p2338 A69-27553*	13 p2342 A69-27598 #	13 p2344 A69-27643*	13 p2345 A69-27688 #
13 p2208 A69-27509 #	13 p2326 A69-27554*	13 p2342 A69-27599*#	13 p2344 A69-27644	13 p2345 A69-27689 #
13 p2208 A69-27510*#	13 p2338 A69-27555*	13 p2342 A69-27600*#	13 p2344 A69-27645	13 p2345 A69-27690 #
13 p2208 A69-27511 #	13 p2338 A69-27556	13 p2342 A69-27601 #	13 p2344 A69-27646	13 p2345 A69-27691 #
13 p2208 A69-27512 #	13 p2338 A69-27557	13 p2342 A69-27602 #	13 p2344 A69-27647	13 p2253 A69-27692 #
13 p2208 A69-27513 #	13 p2338 A69-27558	13 p2343 A69-27603 #	13 p2344 A69-27648	13 p2327 A69-27693 #
13 p2227 A69-27514 #	13 p2338 A69-27559	13 p2343 A69-27604 #	13 p2344 A69-27649*	13 p2253 A69-27694 #
13 p2287 A69-27515 #	13 p2338 A69-27560	13 p2239 A69-27605 #	13 p2345 A69-27650*	13 p2260 A69-27695 #
13 p2337 A69-27516	13 p2339 A69-27561*	13 p2260 A69-27606 #	13 p2345 A69-27651	13 p2296 A69-27696 #
13 p2337 A69-27517	13 p2339 A69-27562	13 p2260 A69-27607*#	13 p2345 A69-27652	13 p2219 A69-27697 #
13 p2337 A69-27518	13 p2339 A69-27563	13 p2252 A69-27608 #	13 p2345 A69-27653	13 p2346 A69-27698 #
13 p2252 A69-27519	13 p2288 A69-27564*	13 p2327 A69-27609 #	13 p2345 A69-27654	13 p2253 A69-27699 #
13 p2337 A69-27520*	13 p2339 A69-27565	13 p2225 A69-27610 #	13 p2271 A69-27655	13 p2327 A69-27700 #
13 p2268 A69-27521	13 p2339 A69-27566	13 p2307 A69-27611	13 p2271 A69-27656	13 p2219 A69-27701 #
13 p2227 A69-27522 #	13 p2339 A69-27567	13 p2260 A69-27612	13 p2271 A69-27657	13 p2356 A69-27702 #
13 p2246 A69-27523 #	13 p2339 A69-27568	13 p2208 A69-27613	13 p2307 A69-27658	13 p2346 A69-27703
13 p2199 A69-27524 #	13 p2326 A69-27569	13 p2252 A69-27614	13 p2316 A69-27659	13 p2346 A69-27704
13 p2288 A69-27525 #	13 p2326 A69-27570*	13 p2361 A69-27615 #	13 p2317 A69-27660	13 p2346 A69-27705
13 p2288 A69-27526 #	13 p2339 A69-27571*	13 p2240 A69-27616 #	13 p2271 A69-27661	13 p2346 A69-27706
13 p2288 A69-27527 #	13 p2327 A69-27572	13 p2225 A69-27617 #	13 p2298 A69-27662	13 p2346 A69-27707
13 p2381 A69-27528	13 p2339 A69-27573	13 p2216 A69-27618*#	13 p2298 A69-27663	13 p2346 A69-27708
13 p2381 A69-27529	13 p2339 A69-27574*	13 p2343 A69-27619	13 p2219 A69-27664*	13 p2346 A69-27709
13 p2381 A69-27530	13 p2340 A69-27575	13 p2343 A69-27620	13 p2219 A69-27665	13 p2346 A69-27710
13 p2224 A69-27531	13 p2340 A69-27576*	13 p2343 A69-27621	13 p2219 A69-27666 #	13 p2346 A69-27711
13 p2252 A69-27532*#	13 p2340 A69-27577	13 p2343 A69-27622	13 p2228 A69-27667	13 p2347 A69-27712
13 p2337 A69-27533*#	13 p2340 A69-27578*	13 p2343 A69-27623	13 p2228 A69-27668	13 p2347 A69-27713
13 p2271 A69-27534 #	13 p2340 A69-27579*	13 p2343 A69-27624	13 p2228 A69-27669	13 p2347 A69-27714
13 p2246 A69-27535 #	13 p2340 A69-27580*	13 p2343 A69-27625	13 p2228 A69-27670	13 p2347 A69-27715



## ACCESSION NUMBER INDEX

13 p2347 A69-27716	13 p2279 A69-27761	13 p2348 A69-27806	13 p2293 A69-27851 #	13 p2272 A69-27896 #
13 p2347 A69-27717	13 p2216 A69-27762*	13 p2348 A69-27807	13 p2294 A69-27852 #	13 p2318 A69-27897 #
13 p2347 A69-27718	13 p2279 A69-27763*	13 p2348 A69-27808	13 p2294 A69-27853 #	13 p2319 A69-27898 #
13 p2347 A69-27719	13 p2279 A69-27764	13 p2348 A69-27809	13 p2294 A69-27854 #	13 p2319 A69-27899 #
13 p2347 A69-27720	13 p2279 A69-27765	13 p2348 A69-27810	13 p2294 A69-27855 #	13 p2319 A69-27900 #
13 p2327 A69-27721	13 p2280 A69-27766	13 p2349 A69-27811	13 p2294 A69-27856 #	13 p2352 A69-27901
13 p2348 A69-27722	13 p2280 A69-27767	13 p2349 A69-27812	13 p2260 A69-27857 #	13 p2352 A69-27902
13 p2291 A69-27723	13 p2373 A69-27768 #	13 p2349 A69-27813	13 p2350 A69-27858 #	13 p2352 A69-27903
13 p2291 A69-27724 #	13 p2373 A69-27769 #	13 p2349 A69-27814	13 p2350 A69-27859 #	13 p2352 A69-27904
13 p2291 A69-27725 #	13 p2373 A69-27770 #	13 p2349 A69-27815	13 p2350 A69-27860 #	13 p2210 A69-27905
13 p2291 A69-27726 #	13 p2373 A69-27771 #	13 p2349 A69-27816	13 p2350 A69-27861 #	13 p2240 A69-27906*
13 p2291 A69-27727 #	13 p2373 A69-27772 #	13 p2349 A69-27817*	13 p2350 A69-27862 #	13 p2352 A69-27907*
13 p2291 A69-27728 #	13 p2373 A69-27773 #	13 p2349 A69-27818	13 p2351 A69-27863 #	13 p2352 A69-27908*
13 p2292 A69-27729 #	13 p2373 A69-27774 #	13 p2349 A69-27819*	13 p2351 A69-27864 #	13 p2210 A69-27909*
13 p2292 A69-27730 #	13 p2374 A69-27775 #	13 p2349 A69-27820	13 p2351 A69-27865 #	13 p2240 A69-27910
13 p2292 A69-27731 #	13 p2374 A69-27776*#	13 p2253 A69-27821*	13 p2351 A69-27866 #	13 p2272 A69-27911
13 p2292 A69-27732 #	13 p2374 A69-27777 #	13 p2350 A69-27822	13 p2351 A69-27867 #	13 p2352 A69-27912
13 p2292 A69-27733 #	13 p2374 A69-27778 #	13 p2350 A69-27823*	13 p2351 A69-27868 #	13 p2261 A69-27913
13 p2288 A69-27734	13 p2374 A69-27779 #	13 p2350 A69-27824	13 p2351 A69-27869 #	13 p2356 A69-27914
13 p2288 A69-27735	13 p2374 A69-27780 #	13 p2350 A69-27825	13 p2351 A69-27870 #	13 p2325 A69-27915
13 p2247 A69-27736	13 p2374 A69-27781 #	13 p2260 A69-27826 #	13 p2351 A69-27871 #	13 p2324 A69-27916
13 p2247 A69-27737	13 p2374 A69-27782 #	13 p2220 A69-27827 #	13 p2352 A69-27872 #	13 p2209 A69-27917
13 p2247 A69-27738	13 p2374 A69-27783 #	13 p2260 A69-27828 #	13 p2352 A69-27873 #	13 p2296 A69-27918
13 p2260 A69-27739	13 p2374 A69-27784*#	13 p2382 A69-27829	13 p2352 A69-27874 #	13 p2356 A69-27919
13 p2253 A69-27740	13 p2375 A69-27785*#	13 p2220 A69-27830	13 p2317 A69-27875 #	13 p2362 A69-27920
13 p2361 A69-27741 #	13 p2375 A69-27786 #	13 p2296 A69-27831	13 p2317 A69-27876 #	13 p2362 A69-27921 #
13 p2238 A69-27742 #	13 p2247 A69-27787 #	13 p2356 A69-27832*	13 p2230 A69-27877 #	13 p2288 A69-27922 #
13 p2288 A69-27743 #	13 p2375 A69-27788 #	13 p2356 A69-27833	13 p2317 A69-27878 #	13 p2238 A69-27923 #
13 p2361 A69-27744 #	13 p2375 A69-27789 #	13 p2382 A69-27834	13 p2317 A69-27879 #	13 p2288 A69-27924 #
13 p2298 A69-27745 #	13 p2375 A69-27790 #	13 p2280 A69-27835	13 p2317 A69-27880 #	13 p2289 A69-27925 #
13 p2247 A69-27746 #	13 p2375 A69-27791 #	13 p2202 A69-27836	13 p2317 A69-27881 #	13 p2209 A69-27926
13 p2356 A69-27747	13 p2375 A69-27792 #	13 p2202 A69-27837	13 p2230 A69-27882 #	13 p2280 A69-27927
13 p2381 A69-27748	13 p2375 A69-27793 #	13 p2362 A69-27838	13 p2317 A69-27883 #	13 p2230 A69-27928
13 p2220 A69-27749	13 p2375 A69-27794 #	13 p2292 A69-27839 #	13 p2318 A69-27884 #	13 p2254 A69-27929
13 p2382 A69-27750	13 p2375 A69-27795 #	13 p2292 A69-27840 #	13 p2318 A69-27885 #	13 p2240 A69-27930 #
13 p2220 A69-27751	13 p2298 A69-27796 #	13 p2293 A69-27841 #	13 p2318 A69-27886 #	13 p2202 A69-27931 #
13 p2253 A69-27752	13 p2302 A69-27797 #	13 p2293 A69-27842 #	13 p2230 A69-27887 #	13 p2240 A69-27932 #
13 p2253 A69-27753	13 p2292 A69-27798 #	13 p2293 A69-27843 #	13 p2271 A69-27888 #	13 p2225 A69-27933
13 p2327 A69-27754	13 p2317 A69-27799 #	13 p2293 A69-27844 #	13 p2318 A69-27889 #	13 p2294 A69-27934
13 p2328 A69-27755	13 p2210 A69-27800 #	13 p2293 A69-27845 #	13 p2318 A69-27890 #	13 p2268 A69-27935
13 p2328 A69-27756	13 p2348 A69-27801	13 p2293 A69-27846 #	13 p2318 A69-27891 #	13 p2238 A69-27936*
13 p2328 A69-27757	13 p2348 A69-27802	13 p2293 A69-27847 #	13 p2318 A69-27892 #	13 p2220 A69-27937
13 p2268 A69-27758	13 p2348 A69-27803	13 p2253 A69-27848 #	13 p2272 A69-27893 #	13 p2220 A69-27938
13 p2279 A69-27759*	13 p2348 A69-27804	13 p2253 A69-27849 #	13 p2318 A69-27894 #	13 p2209 A69-27939
13 p2279 A69-27760	13 p2348 A69-27805*	13 p2293 A69-27850 #	13 p2318 A69-27895 #	13 p2296 A69-27940

## ACCESSION NUMBER INDEX

13 p2220 A69-27941	13 p2285 A69-27986	13 p2310 A69-28031 #	13 p2240 A69-28076	13 p2362 A69-28121*#
13 p2220 A69-27942	13 p2285 A69-27987	13 p2310 A69-28032 #	13 p2240 A69-28077 #	13 p2362 A69-28122*#
13 p2261 A69-27943	13 p2286 A69-27988	13 p2310 A69-28033 #	13 p2241 A69-28078 #	13 p2362 A69-28123 #
13 p2221 A69-27944*	13 p2286 A69-27989	13 p2311 A69-28034 #	13 p2241 A69-28079 #	13 p2363 A69-28124 #
13 p2289 A69-27945	13 p2286 A69-27990	13 p2353 A69-28035 #	13 p2241 A69-28080 #	13 p2363 A69-28125 #
13 p2261 A69-27946*	13 p2319 A69-27991	13 p2299 A69-28036 #	13 p2241 A69-28081 #	13 p2363 A69-28126 #
13 p2240 A69-27947*	13 p2319 A69-27992 #	13 p2299 A69-28037 #	13 p2262 A69-28082	13 p2363 A69-28127 #
13 p2261 A69-27948*	13 p2319 A69-27993 #	13 p2322 A69-28038	13 p2262 A69-28083*#	13 p2363 A69-28128 #
13 p2261 A69-27949	13 p2320 A69-27994 #	13 p2203 A69-28039	13 p2263 A69-28084*#	13 p2299 A69-28129*#
13 p2261 A69-27950*	13 p2320 A69-27995 #	13 p2382 A69-28040 #	13 p2247 A69-28085*#	13 p2363 A69-28130 #
13 p2261 A69-27951*	13 p2320 A69-27996 #	13 p2382 A69-28041 #	13 p2241 A69-28086 #	13 p2248 A69-28131 #
13 p2261 A69-27952*	13 p2320 A69-27997 #	13 p2230 A69-28042	13 p2263 A69-28087 #	13 p2363 A69-28132 #
13 p2261 A69-27953	13 p2320 A69-27998 #	13 p2231 A69-28043	13 p2280 A69-28088 #	13 p2363 A69-28133 #
13 p2261 A69-27954	13 p2320 A69-27999 #	13 p2231 A69-28044	13 p2286 A69-28089*#	13 p2217 A69-28134
13 p2240 A69-27955*	13 p2320 A69-28000 #	13 p2231 A69-28045	13 p2213 A69-28090*#	13 p2217 A69-28135
13 p2261 A69-27956*	13 p2321 A69-28001 #	13 p2231 A69-28046*	13 p2213 A69-28091 #	13 p2322 A69-28136*
13 p2262 A69-27957*	13 p2321 A69-28002 #	13 p2231 A69-28047	13 p2382 A69-28092	13 p2280 A69-28137
13 p2262 A69-27958	13 p2298 A69-28003	13 p2231 A69-28048*	13 p2382 A69-28093	13 p2375 A69-28138
13 p2221 A69-27959	13 p2286 A69-28004*	13 p2232 A69-28049	13 p2382 A69-28094	13 p2376 A69-28139
13 p2352 A69-27960*	13 p2321 A69-28005*	13 p2268 A69-28050	13 p2383 A69-28095	13 p2376 A69-28140
13 p2221 A69-27961	13 p2262 A69-28006*	13 p2268 A69-28051 #	13 p2383 A69-28096	13 p2376 A69-28141
13 p2221 A69-27962	13 p2321 A69-28007*	13 p2268 A69-28052 #	13 p2383 A69-28097	13 p2376 A69-28142
13 p2221 A69-27963	13 p2321 A69-28008	13 p2269 A69-28053 #	13 p2383 A69-28098	13 p2376 A69-28143
13 p2307 A69-27964	13 p2321 A69-28009*	13 p2289 A69-28054	13 p2383 A69-28099	13 p2376 A69-28144
13 p2221 A69-27965	13 p2321 A69-28010	13 p2232 A69-28055*	13 p2383 A69-28100	13 p2377 A69-28145
13 p2308 A69-27966	13 p2322 A69-28011*	13 p2232 A69-28056	13 p2383 A69-28101	13 p2377 A69-28146
13 p2225 A69-27967 #	13 p2322 A69-28012*	13 p2232 A69-28057	13 p2241 A69-28102	13 p2377 A69-28147
13 p2225 A69-27968 #	13 p2322 A69-28013*	13 p2232 A69-28058	13 p2296 A69-28103	13 p2263 A69-28148
13 p2272 A69-27969 #	13 p2298 A69-28014	13 p2232 A69-28059	13 p2311 A69-28104 #	13 p2377 A69-28149
13 p2209 A69-27970 #	13 p2299 A69-28015*	13 p2232 A69-28060	13 p2311 A69-28105 #	13 p2213 A69-28150
13 p2202 A69-27971 #	13 p2299 A69-28016	13 p2232 A69-28061	13 p2311 A69-28106 #	13 p2377 A69-28151
13 p2202 A69-27972 #	13 p2322 A69-28017	13 p2221 A69-28062	13 p2311 A69-28107 #	13 p2377 A69-28152
13 p2202 A69-27973 #	13 p2322 A69-28018*	13 p2233 A69-28063	13 p2311 A69-28108 #	13 p2222 A69-28153
13 p2247 A69-27974*#	13 p2299 A69-28019	13 p2221 A69-28064	13 p2311 A69-28109 #	13 p2280 A69-28154
13 p2325 A69-27975 #	13 p2262 A69-28020*	13 p2233 A69-28065	13 p2311 A69-28110 #	13 p2281 A69-28155
13 p2296 A69-27976 #	13 p2308 A69-28021	13 p2233 A69-28066	13 p2312 A69-28111 #	13 p2281 A69-28156
13 p2362 A69-27977	13 p2308 A69-28022 #	13 p2233 A69-28067	13 p2312 A69-28112 #	13 p2297 A69-28157
13 p2247 A69-27978	13 p2309 A69-28023 #	13 p2233 A69-28068	13 p2312 A69-28113 #	13 p2281 A69-28158
13 p2308 A69-27979	13 p2309 A69-28024 #	13 p2233 A69-28069	13 p2272 A69-28114 #	13 p2353 A69-28159
13 p2262 A69-27980	13 p2309 A69-28025 #	13 p2233 A69-28070	13 p2272 A69-28115 #	13 p2281 A69-28160
13 p2254 A69-27981	13 p2309 A69-28026 #	13 p2233 A69-28071	13 p2272 A69-28116 #	13 p2281 A69-28161
13 p2285 A69-27982	13 p2309 A69-28027 #	13 p2233 A69-28072	13 p2312 A69-28117 #	13 p2282 A69-28162
13 p2230 A69-27983	13 p2309 A69-28028 #	13 p2234 A69-28073	13 p2312 A69-28118 #	13 p2282 A69-28163
13 p2285 A69-27984	13 p2310 A69-28029 #	13 p2221 A69-28074	13 p2362 A69-28119 #	13 p2282 A69-28164
13 p2285 A69-27985	13 p2310 A69-28030 #	13 p2222 A69-28075	13 p2362 A69-28120 #	13 p2282 A69-28165



## ACCESSION NUMBER INDEX

13 p2282 A69-28166	13 p2241 A69-28211 #	13 p2213 A69-28256	13 p2367 A69-28301**	13 p2368 A69-28346
13 p2282 A69-28167	13 p2248 A69-28212*#	13 p2210 A69-28257*	13 p2367 A69-28302 #	13 p2368 A69-28347
13 p2263 A69-28168	13 p2242 A69-28213 #	13 p2217 A69-28258*	13 p2367 A69-28303 #	13 p2368 A69-28348
13 p2353 A69-28169	13 p2199 A69-28214 #	13 p2217 A69-28259*	13 p2367 A69-28304**	13 p2368 A69-28349
13 p2248 A69-28170 #	13 p2378 A69-28215*#	13 p2217 A69-28260*	13 p2367 A69-28305**	13 p2369 A69-28350
13 p2248 A69-28171 #	13 p2222 A69-28216*#	13 p2254 A69-28261 #	13 p2367 A69-28306 #	13 p2369 A69-28351
13 p2377 A69-28172 #	13 p2378 A69-28217 #	13 p2234 A69-28262*	13 p2357 A69-28307**	13 p2369 A69-28352
13 p2248 A69-28173 #	13 p2324 A69-28218 #	13 p2200 A69-28263 #	13 p2368 A69-28308 #	13 p2369 A69-28353
13 p2248 A69-28174 #	13 p2312 A69-28219*#	13 p2313 A69-28264**	13 p2283 A69-28309 #	13 p2203 A69-28354
13 p2272 A69-28175 #	13 p2325 A69-28220 #	13 p2302 A69-28265 #	13 p2368 A69-28310 #	13 p2203 A69-28355
13 p2254 A69-28176 #	13 p2312 A69-28221*#	13 p2242 A69-28266 #	13 p2378 A69-28311 #	13 p2203 A69-28356
13 p2289 A69-28177	13 p2313 A69-28222 #	13 p2242 A69-28267 #	13 p2378 A69-28312 #	13 p2250 A69-28357
13 p2209 A69-28178	13 p2248 A69-28223 #	13 p2242 A69-28268 #	13 p2210 A69-28313	13 p2200 A69-28358
13 p2203 A69-28179	13 p2199 A69-28224 #	13 p2249 A69-28269 #	13 p2209 A69-28314 #	13 p2243 A69-28359
13 p2282 A69-28180	13 p2364 A69-28225 #	13 p2249 A69-28270 #	13 p2217 A69-28315*	13 p2200 A69-28360
13 p2269 A69-28181	13 p2242 A69-28226 #	13 p2242 A69-28271**	13 p2273 A69-28316 #	13 p2314 A69-28361
13 p2269 A69-28182	13 p2289 A69-28227 #	13 p2242 A69-28272 #	13 p2217 A69-28317*	13 p2289 A69-28362
13 p2269 A69-28183	13 p2199 A69-28228 #	13 p2200 A69-28273 #	13 p2289 A69-28318 #	13 p2379 A69-28363
13 p2269 A69-28184	13 p2364 A69-28229 #	13 p2325 A69-28274 #	13 p2289 A69-28319 #	13 p2314 A69-28364
13 p2363 A69-28185 #	13 p2364 A69-28230 #	13 p2378 A69-28275 #	13 p2250 A69-28320 #	13 p2314 A69-28365
13 p2363 A69-28186 #	13 p2249 A69-28231 #	13 p2243 A69-28276 #	13 p2286 A69-28321 #	13 p2273 A69-28366
13 p2299 A69-28187 #	13 p2313 A69-28232*#	13 p2243 A69-28277 #	13 p2368 A69-28322 #	13 p2328 A69-28367
13 p2282 A69-28188*	13 p2364 A69-28233 #	13 p2243 A69-28278**	13 p2269 A69-28323 #	13 p2302 A69-28368
13 p2283 A69-28189	13 p2324 A69-28234 #	13 p2249 A69-28279 #	13 p2218 A69-28324 #	13 p2303 A69-28369
13 p2263 A69-28190 #	13 p2249 A69-28235 #	13 p2249 A69-28280**	13 p2353 A69-28325 #	13 p2330 A69-28370
13 p2272 A69-28191 #	13 p2365 A69-28236 #	13 p2200 A69-28281*#	13 p2300 A69-28326 #	13 p2303 A69-28371
13 p2222 A69-28192 #	13 p2365 A69-28237 #	13 p2263 A69-28282 #	13 p2313 A69-28327 #	13 p2303 A69-28372
13 p2377 A69-28193	13 p2249 A69-28238 #	13 p2243 A69-28283 #	13 p2313 A69-28328 #	13 p2303 A69-28373
13 p2299 A69-28194	13 p2365 A69-28239 #	13 p2243 A69-28284 #	13 p2234 A69-28329 #	13 p2330 A69-28374
13 p2248 A69-28195 #	13 p2249 A69-28240 #	13 p2264 A69-28285 #	13 p2254 A69-28330 #	13 p2330 A69-28375
13 p2302 A69-28196 #	13 p2313 A69-28241**	13 p2365 A69-28286 #	13 p2323 A69-28331 #	13 p2303 A69-28376
13 p2312 A69-28197	13 p2313 A69-28242 #	13 p2365 A69-28287**	13 p2313 A69-28332 #	13 p2330 A69-28377
13 p2263 A69-28198	13 p2263 A69-28243 #	13 p2366 A69-28288**	13 p2254 A69-28333 #	13 p2330 A69-28378
13 p2263 A69-28199*	13 p2199 A69-28244 #	13 p2366 A69-28289 #	13 p2210 A69-28334 #	13 p2330 A69-28379
13 p2323 A69-28200	13 p2203 A69-28245**	13 p2366 A69-28290 #	13 p2250 A69-28335	13 p2303 A69-28380
13 p2225 A69-28201**	13 p2365 A69-28246 #	13 p2264 A69-28291 #	13 p2250 A69-28336	13 p2330 A69-28381
13 p2353 A69-28202*#	13 p2249 A69-28247 #	13 p2366 A69-28292 #	13 p2378 A69-28337	13 p2330 A69-28382
13 p2353 A69-28203**	13 p2365 A69-28248 #	13 p2283 A69-28293 #	13 p2378 A69-28338*	13 p2330 A69-28383
13 p2364 A69-28204 #	13 p2365 A69-28249 #	13 p2366 A69-28294 #	13 p2250 A69-28339	13 p2330 A69-28384
13 p2364 A69-28205 #	13 p2378 A69-28250 #	13 p2366 A69-28295 #	13 p2378 A69-28340	13 p2303 A69-28385
13 p2364 A69-28206 #	13 p2200 A69-28251 #	13 p2313 A69-28296**	13 p2379 A69-28341	13 p2330 A69-28386
13 p2364 A69-28207*#	13 p2365 A69-28252*#	13 p2357 A69-28297 #	13 p2379 A69-28342	13 p2331 A69-28387
13 p2364 A69-28208 #	13 p2325 A69-28253	13 p2213 A69-28298**	13 p2250 A69-28343	13 p2331 A69-28388
13 p2364 A69-28209 #	13 p2297 A69-28254	13 p2366 A69-28299*#	13 p2234 A69-28344	13 p2331 A69-28389
13 p2248 A69-28210*#	13 p2325 A69-28255	13 p2367 A69-28300 #	13 p2238 A69-28345	13 p2303 A69-28390

ACCESSION NUMBER INDEX

13 p2303 A69-28391	13 p2239 A69-28436 #	13 p2209 A69-28481 #	13 p2315 A69-28526 #	13 p2315 A69-28571 #
13 p2331 A69-28392	13 p2239 A69-28437 #	13 p2210 A69-28482*	13 p2264 A69-28527 #	13 p2236 A69-28572 #
13 p2331 A69-28393	13 p2264 A69-28438 #	13 p2289 A69-28483 #	13 p2369 A69-28528 #	13 p2236 A69-28573 #
13 p2331 A69-28394	13 p2218 A69-28439*	13 p2290 A69-28484 #	13 p2300 A69-28529 #	13 p2300 A69-28574 #
13 p2331 A69-28395	13 p2304 A69-28440 #	13 p2290 A69-28485 #	13 p2273 A69-28530 #	13 p2236 A69-28575 #
13 p2331 A69-28396	13 p2314 A69-28441 #	13 p2210 A69-28486*	13 p2236 A69-28531 #	13 p2236 A69-28576 #
13 p2331 A69-28397	13 p2314 A69-28442 #	13 p2283 A69-28487 #	13 p2210 A69-28532 #	13 p2315 A69-28577 #
13 p2331 A69-28398	13 p2314 A69-28443 #	13 p2283 A69-28488 #	13 p2214 A69-28533 #	13 p2237 A69-28578 #
13 p2303 A69-28399	13 p2314 A69-28444 #	13 p2283 A69-28489 #	13 p2239 A69-28534 #	13 p2273 A69-28579 #
13 p2331 A69-28400	13 p2314 A69-28445 #	13 p2283 A69-28490 #	13 p2239 A69-28535 #	13 p2274 A69-28580 #
13 p2331 A69-28401	13 p2314 A69-28446 #	13 p2283 A69-28491 #	13 p2239 A69-28536 #	13 p2323 A69-28581 #
13 p2331 A69-28402	13 p2250 A69-28447 #	13 p2294 A69-28492 #	13 p2225 A69-28537 #	13 p2237 A69-28582 #
13 p2332 A69-28403	13 p2315 A69-28448 #	13 p2255 A69-28493*#	13 p2236 A69-28538 #	13 p2237 A69-28583 #
13 p2332 A69-28404	13 p2315 A69-28449 #	13 p2294 A69-28494 #	13 p2290 A69-28539 #	13 p2316 A69-28584 #
13 p2332 A69-28405	13 p2300 A69-28450 #	13 p2354 A69-28495 #	13 p2255 A69-28540 #	13 p2274 A69-28585 #
13 p2332 A69-28406	13 p2315 A69-28451 #	13 p2250 A69-28496 #	13 p2255 A69-28541 #	13 p2237 A69-28586
13 p2332 A69-28407	13 p2379 A69-28452	13 p2380 A69-28497 #	13 p2255 A69-28542 #	13 p2214 A69-28587
13 p2332 A69-28408	13 p2379 A69-28453	13 p2251 A69-28498	13 p2255 A69-28543 #	13 p2214 A69-28588
13 p2332 A69-28409	13 p2379 A69-28454	13 p2251 A69-28499	13 p2333 A69-28544 #	13 p2325 A69-28589
13 p2332 A69-28410	13 p2379 A69-28455	13 p2200 A69-28500	13 p2300 A69-28545 #	13 p2215 A69-28590
13 p2332 A69-28411	13 p2379 A69-28456	13 p2200 A69-28501	13 p2236 A69-28546 #	13 p2215 A69-28591
13 p2303 A69-28412	13 p2218 A69-28457	13 p2357 A69-28502	13 p2236 A69-28547 #	13 p2211 A69-28592
13 p2303 A69-28413	13 p2315 A69-28458	13 p2324 A69-28503	13 p2380 A69-28548 #	13 p2211 A69-28593
13 p2303 A69-28414	13 p2380 A69-28459	13 p2354 A69-28504*	13 p2236 A69-28549 #	13 p2215 A69-28594
13 p2303 A69-28415	13 p2380 A69-28460 #	13 p2234 A69-28505 #	13 p2273 A69-28550 #	13 p2211 A69-28595
13 p2304 A69-28416	13 p2380 A69-28461 #	13 p2222 A69-28506 #	13 p2223 A69-28551 #	13 p2211 A69-28596
13 p2304 A69-28417	13 p2380 A69-28462*	13 p2234 A69-28507 #	13 p2223 A69-28552 #	13 p2215 A69-28597
13 p2304 A69-28418	13 p2380 A69-28463*	13 p2222 A69-28508 #	13 p2239 A69-28553 #	13 p2215 A69-28598
13 p2332 A69-28419	13 p2273 A69-28464	13 p2222 A69-28509 #	13 p2239 A69-28554 #	13 p2264 A69-28599
13 p2332 A69-28420	13 p2354 A69-28465*	13 p2234 A69-28510 #	13 p2315 A69-28555 #	13 p2369 A69-28600
13 p2332 A69-28421	13 p2294 A69-28466*	13 p2235 A69-28511 #	13 p2315 A69-28556 #	13 p2370 A69-28601
13 p2333 A69-28422	13 p2210 A69-28467	13 p2235 A69-28512 #	13 p2244 A69-28557 #	13 p2370 A69-28602
13 p2304 A69-28423	13 p2354 A69-28468	13 p2235 A69-28513 #	13 p2251 A69-28558 #	13 p2264 A69-28603
13 p2333 A69-28424	13 p2333 A69-28469	13 p2239 A69-28514 #	13 p2251 A69-28559 #	13 p2244 A69-28604
13 p2333 A69-28425	13 p2354 A69-28470	13 p2235 A69-28515 #	13 p2380 A69-28560 #	13 p2223 A69-28605
13 p2234 A69-28426	13 p2333 A69-28471	13 p2235 A69-28516 #	13 p2251 A69-28561 #	13 p2223 A69-28606
13 p2234 A69-28427	13 p2354 A69-28472	13 p2235 A69-28517 #	13 p2369 A69-28562 #	13 p2223 A69-28607
13 p2254 A69-28428	13 p2222 A69-28473	13 p2235 A69-28518 #	13 p2369 A69-28563 #	13 p2269 A69-28608
13 p2238 A69-28429	13 p2222 A69-28474	13 p2235 A69-28519 #	13 p2323 A69-28564 #	13 p2223 A69-28609
13 p2300 A69-28430	13 p2254 A69-28475	13 p2235 A69-28520 #	13 p2369 A69-28565 #	13 p2237 A69-28610
13 p2273 A69-28431 #	13 p2357 A69-28476 #	13 p2235 A69-28521 #	13 p2354 A69-28566	13 p2215 A69-28611 #
13 p2273 A69-28432 #	13 p2264 A69-28477 #	13 p2369 A69-28522 #	13 p2223 A69-28567 #	13 p2216 A69-28612 #
13 p2353 A69-28433 #	13 p2357 A69-28478 #	13 p2295 A69-28523 #	13 p2223 A69-28568 #	13 p2211 A69-28613 #
13 p2333 A69-28434 #	13 p2357 A69-28479 #	13 p2323 A69-28524 #	13 p2223 A69-28569 #	13 p2211 A69-28614 #
13 p2353 A69-28435 #	13 p2243 A69-28480	13 p2236 A69-28525 #	13 p2223 A69-28570 #	13 p2211 A69-28615 #



## ACCESSION NUMBER INDEX

13 p2212 A69-28616 #	13 p2269 A69-28661 #	13 p2257 A69-28706 #	14 p2424 A69-28751	14 p2482 A69-28796 #
13 p2212 A69-28617 #	13 p2265 A69-28662	13 p2355 A69-28707 #	14 p2424 A69-28752	14 p2433 A69-28797 #
13 p2212 A69-28618 #	13 p2265 A69-28663 #	13 p2355 A69-28708 #	14 p2424 A69-28753	14 p2445 A69-28798 #
13 p2216 A69-28619 #	13 p2300 A69-28664	13 p2295 A69-28709 #	14 p2456 A69-28754 #	14 p2482 A69-28799 #
13 p2216 A69-28620 #	13 p2370 A69-28665 #	13 p2257 A69-28710 #	14 p2456 A69-28755 #	14 p2482 A69-28800 #
13 p2216 A69-28621 #	13 p2301 A69-28666 #	13 p2257 A69-28711 #	14 p2456 A69-28756 #	14 p2389 A69-28801 #
13 p2212 A69-28622 #	13 p2286 A69-28667	13 p2257 A69-28712 #	14 p2456 A69-28757 #	14 p2428 A69-28802 #
13 p2212 A69-28623 #	13 p2286 A69-28668	13 p2257 A69-28713 #	14 p2456 A69-28758 #	14 p2428 A69-28803 #
13 p2212 A69-28624 #	13 p2287 A69-28669	13 p2258 A69-28714 #	14 p2515 A69-28759	14 p2531 A69-28804 #
13 p2212 A69-28625 #	13 p2287 A69-28670	13 p2224 A69-28715 #	14 p2509 A69-28760	14 p2531 A69-28805 #
13 p2212 A69-28626 #	13 p2283 A69-28671	13 p2258 A69-28716 #	14 p2509 A69-28761	14 p2531 A69-28806 #
13 p2216 A69-28627 #	13 p2370 A69-28672	13 p2258 A69-28717 #	14 p2509 A69-28762	14 p2531 A69-28807 #
13 p2212 A69-28628 #	13 p2371 A69-28673	13 p2258 A69-28718 #	14 p2515 A69-28763	14 p2531 A69-28808 #
13 p2370 A69-28629	13 p2371 A69-28674	13 p2224 A69-28719 #	14 p2515 A69-28764	14 p2531 A69-28809 #
13 p2370 A69-28630	13 p2371 A69-28675	13 p2224 A69-28720 #	14 p2515 A69-28765	14 p2531 A69-28810 #
13 p2380 A69-28631	13 p2269 A69-28676	13 p2224 A69-28721 #	14 p2515 A69-28766	14 p2424 A69-28811 #
13 p2251 A69-28632	13 p2287 A69-28677	13 p2355 A69-28722 #	14 p2515 A69-28767	14 p2482 A69-28812 #
13 p2251 A69-28633	13 p2371 A69-28678	13 p2258 A69-28723 #	14 p2433 A69-28768	14 p2482 A69-28813 #
13 p2370 A69-28634	13 p2371 A69-28679	13 p2258 A69-28724 #	14 p2515 A69-28769	14 p2482 A69-28814 #
13 p2333 A69-28635 #	13 p2287 A69-28680	13 p2258 A69-28725 #	14 p2515 A69-28770	14 p2428 A69-28815 #
13 p2216 A69-28636 #	13 p2304 A69-28681*	13 p2355 A69-28726 #	14 p2516 A69-28771	14 p2428 A69-28816 #
13 p2255 A69-28637 #	13 p2284 A69-28682*	13 p2258 A69-28727 #	14 p2516 A69-28772	14 p2410 A69-28817
13 p2357 A69-28638 #	13 p2324 A69-28683*	13 p2258 A69-28728 #	14 p2516 A69-28773	14 p2410 A69-28818
13 p2223 A69-28639 #	13 p2290 A69-28684 #	13 p2258 A69-28729 #	14 p2516 A69-28774	14 p2424 A69-28819
13 p2323 A69-28640 #	13 p2380 A69-28685 #	13 p2258 A69-28730 #	14 p2516 A69-28775	14 p2425 A69-28820
13 p2323 A69-28641 #	13 p2256 A69-28686 #	13 p2258 A69-28731 #	14 p2433 A69-28776	14 p2425 A69-28821
13 p2323 A69-28642 #	13 p2333 A69-28687 #	14 p2489 A69-28732	14 p2445 A69-28777 #	14 p2425 A69-28822
13 p2274 A69-28643 #	13 p2333 A69-28688 #	14 p2410 A69-28733	14 p2471 A69-28778 #	14 p2425 A69-28823
13 p2237 A69-28644 #	13 p2333 A69-28689 #	14 p2503 A69-28734	14 p2471 A69-28779 #	14 p2425 A69-28824
13 p2237 A69-28645 #	13 p2334 A69-28690 #	14 p2489 A69-28735	14 p2487 A69-28780 #	14 p2425 A69-28825
13 p2255 A69-28646	13 p2256 A69-28691 #	14 p2456 A69-28736	14 p2472 A69-28781 #	14 p2410 A69-28826
13 p2256 A69-28647 #	13 p2224 A69-28692 #	14 p2481 A69-28737	14 p2472 A69-28782 #	14 p2433 A69-28827
13 p2295 A69-28648 #	13 p2256 A69-28693 #	14 p2482 A69-28738	14 p2410 A69-28783 #	14 p2418 A69-28828
13 p2354 A69-28649 #	13 p2256 A69-28694 #	14 p2489 A69-28739	14 p2487 A69-28784 #	14 p2410 A69-28829
13 p2354 A69-28650 #	13 p2257 A69-28695 #	14 p2489 A69-28740	14 p2482 A69-28785 #	14 p2418 A69-28830
13 p2295 A69-28651 #	13 p2257 A69-28696 #	14 p2530 A69-28741	14 p2503 A69-28786	14 p2418 A69-28831
13 p2295 A69-28652 #	13 p2257 A69-28697 #	14 p2424 A69-28742	14 p2503 A69-28787	14 p2418 A69-28832
13 p2256 A69-28653 #	13 p2334 A69-28698 #	14 p2424 A69-28743	14 p2503 A69-28788	14 p2410 A69-28833
13 p2256 A69-28654 #	13 p2257 A69-28699 #	14 p2424 A69-28744	14 p2503 A69-28789	14 p2418 A69-28834
13 p2256 A69-28655 #	13 p2224 A69-28700 #	14 p2408 A69-28745	14 p2503 A69-28790	14 p2418 A69-28835
13 p2295 A69-28656 #	13 p2257 A69-28701 #	14 p2393 A69-28746	14 p2516 A69-28791 #	14 p2410 A69-28836
13 p2333 A69-28657 #	13 p2257 A69-28702 #	14 p2453 A69-28747	14 p2472 A69-28792 #	14 p2453 A69-28837 #
13 p2300 A69-28658 #	13 p2257 A69-28703 #	14 p2424 A69-28748	14 p2472 A69-28793 #	14 p2453 A69-28838 #
13 p2274 A69-28659	13 p2257 A69-28704 #	14 p2424 A69-28749	14 p2433 A69-28794 #	14 p2453 A69-28839 #
13 p2216 A69-28660 #	13 p2257 A69-28705 #	14 p2530 A69-28750	14 p2433 A69-28795 #	14 p2454 A69-28840 #

# ACCESSION NUMBER INDEX

14 p2454 A69-28841 #	14 p2509 A69-28886 #	14 p2457 A69-28931	14 p2462 A69-28976 #	14 p2538 A69-29021*
14 p2461 A69-28842 #	14 p2393 A69-28887 #	14 p2391 A69-28932	14 p2532 A69-28977 #	14 p2533 A69-29022
14 p2531 A69-28843 #	14 p2537 A69-28888 #	14 p2540 A69-28933	14 p2532 A69-28978 #	14 p2429 A69-29023*
14 p2427 A69-28844**	14 p2503 A69-28889	14 p2433 A69-28934*	14 p2532 A69-28979 #	14 p2533 A69-29024
14 p2454 A69-28845 #	14 p2418 A69-28890	14 p2509 A69-28935	14 p2532 A69-28980 #	14 p2533 A69-29025
14 p2531 A69-28846 #	14 p2418 A69-28891	14 p2510 A69-28936*	14 p2532 A69-28981 #	14 p2485 A69-29026
14 p2454 A69-28847 #	14 p2418 A69-28892	14 p2510 A69-28937	14 p2533 A69-28982 #	14 p2534 A69-29027
14 p2530 A69-28848**	14 p2457 A69-28893	14 p2510 A69-28938*	14 p2533 A69-28983 #	14 p2389 A69-29028
14 p2454 A69-28849 #	14 p2419 A69-28894	14 p2510 A69-28939*	14 p2533 A69-28984 #	14 p2427 A69-29029*
14 p2540 A69-28850 #	14 p2411 A69-28895	14 p2434 A69-28940	14 p2533 A69-28985 #	14 p2534 A69-29030
14 p2454 A69-28851 #	14 p2445 A69-28896 #	14 p2434 A69-28941*	14 p2537 A69-28986 #	14 p2389 A69-29031
14 p2461 A69-28852 #	14 p2428 A69-28897 #	14 p2510 A69-28942*	14 p2533 A69-28987 #	14 p2470 A69-29032 #
14 p2467 A69-28853 #	14 p2425 A69-28898 #	14 p2434 A69-28943	14 p2533 A69-28988 #	14 p2409 A69-29033
14 p2454 A69-28854**	14 p2445 A69-28899 #	14 p2434 A69-28944*	14 p2503 A69-28989 #	14 p2485 A69-29034 #
14 p2393 A69-28855**	14 p2428 A69-28900 #	14 p2434 A69-28945	14 p2504 A69-28990 #	14 p2490 A69-29035 #
14 p2482 A69-28856	14 p2516 A69-28901	14 p2510 A69-28946*	14 p2504 A69-28991 #	14 p2490 A69-29036 #
14 p2483 A69-28857 #	14 p2470 A69-28902	14 p2434 A69-28947*	14 p2504 A69-28992 #	14 p2505 A69-29037 #
14 p2483 A69-28858 #	14 p2470 A69-28903	14 p2510 A69-28948*	14 p2504 A69-28993 #	14 p2435 A69-29038
14 p2483 A69-28859 #	14 p2425 A69-28904	14 p2510 A69-28949*	14 p2504 A69-28994 #	14 p2534 A69-29039 #
14 p2484 A69-28860 #	14 p2470 A69-28905	14 p2511 A69-28950*	14 p2485 A69-28995 #	14 p2512 A69-29040 #
14 p2484 A69-28861 #	14 p2470 A69-28906	14 p2511 A69-28951	14 p2490 A69-28996 #	14 p2512 A69-29041 #
14 p2484 A69-28862 #	14 p2419 A69-28907 #	14 p2516 A69-28952	14 p2411 A69-28997 #	14 p2435 A69-29042 #
14 p2484 A69-28863 #	14 p2425 A69-28908 #	14 p2511 A69-28953*	14 p2490 A69-28998 #	14 p2435 A69-29043 #
14 p2484 A69-28864 #	14 p2425 A69-28909 #	14 p2511 A69-28954	14 p2457 A69-28999 #	14 p2512 A69-29044 #
14 p2484 A69-28865 #	14 p2489 A69-28910 #	14 p2434 A69-28955	14 p2428 A69-29000 #	14 p2512 A69-29045 #
14 p2516 A69-28866 #	14 p2393 A69-28911 #	14 p2511 A69-28956*	14 p2454 A69-29001**	14 p2512 A69-29046 #
14 p2516 A69-28867 #	14 p2467 A69-28912 #	14 p2517 A69-28957*	14 p2419 A69-29002	14 p2446 A69-29047 #
14 p2516 A69-28868	14 p2461 A69-28913 #	14 p2434 A69-28958*	14 p2462 A69-29003**	14 p2446 A69-29048 #
14 p2516 A69-28869*	14 p2508 A69-28914 #	14 p2435 A69-28959*	14 p2417 A69-29004**	14 p2435 A69-29049 #
14 p2406 A69-28870*	14 p2406 A69-28915 #	14 p2511 A69-28960*	14 p2504 A69-29005**	14 p2435 A69-29050 #
14 p2406 A69-28871*	14 p2406 A69-28916 #	14 p2511 A69-28961	14 p2504 A69-29006**	14 p2435 A69-29051 #
14 p2406 A69-28872	14 p2411 A69-28917 #	14 p2511 A69-28962	14 p2487 A69-29007**	14 p2436 A69-29052 #
14 p2485 A69-28873	14 p2419 A69-28918 #	14 p2512 A69-28963*	14 p2487 A69-29008**	14 p2436 A69-29053 #
14 p2445 A69-28874	14 p2445 A69-28919 #	14 p2512 A69-28964*	14 p2504 A69-29009**	14 p2436 A69-29054 #
14 p2508 A69-28875	14 p2425 A69-28920 #	14 p2435 A69-28965*	14 p2462 A69-29010**	14 p2436 A69-29055 #
14 p2428 A69-28876	14 p2419 A69-28921 #	14 p2512 A69-28966	14 p2429 A69-29011	14 p2436 A69-29056 #
14 p2428 A69-28877	14 p2445 A69-28922 #	14 p2435 A69-28967	14 p2537 A69-29012	14 p2436 A69-29057 #
14 p2410 A69-28878	14 p2446 A69-28923 #	14 p2512 A69-28968	14 p2429 A69-29013	14 p2436 A69-29058 #
14 p2427 A69-28879	14 p2446 A69-28924 #	14 p2428 A69-28969 #	14 p2427 A69-29014	14 p2436 A69-29059 #
14 p2411 A69-28880	14 p2446 A69-28925 #	14 p2537 A69-28970 #	14 p2429 A69-29015	14 p2436 A69-29060 #
14 p2411 A69-28881	14 p2457 A69-28926	14 p2537 A69-28971 #	14 p2537 A69-29016*	14 p2436 A69-29061 #
14 p2445 A69-28882**	14 p2457 A69-28927	14 p2532 A69-28972 #	14 p2389 A69-29017	14 p2437 A69-29062 #
14 p2531 A69-28883 #	14 p2457 A69-28928	14 p2532 A69-28973 #	14 p2446 A69-29018	14 p2437 A69-29063 #
14 p2531 A69-28884 #	14 p2457 A69-28929*	14 p2389 A69-28974 #	14 p2538 A69-29019	14 p2517 A69-29064 #
14 p2532 A69-28885 #	14 p2457 A69-28930	14 p2503 A69-28975 #	14 p2389 A69-29020	14 p2530 A69-29065 #



## ACCESSION NUMBER INDEX

14 p2513 A69-29066 #	14 p2439 A69-29111*	14 p2509 A69-29156	14 p2538 A69-29201 #	14 p2402 A69-29246 #
14 p2513 A69-29067 #	14 p2439 A69-29112	14 p2541 A69-29157	14 p2538 A69-29202 #	14 p2403 A69-29247 #
14 p2517 A69-29068 #	14 p2439 A69-29113	14 p2446 A69-29158 #	14 p2462 A69-29203 #	14 p2403 A69-29248 #
14 p2513 A69-29069 #	14 p2439 A69-29114	14 p2490 A69-29159 #	14 p2538 A69-29204 #	14 p2403 A69-29249 #
14 p2437 A69-29070 #	14 p2513 A69-29115*	14 p2457 A69-29160 #	14 p2538 A69-29205 #	14 p2403 A69-29250 #
14 p2437 A69-29071 #	14 p2439 A69-29116*	14 p2458 A69-29161 #	14 p2539 A69-29206 #	14 p2403 A69-29251 #
14 p2437 A69-29072 #	14 p2439 A69-29117*	14 p2458 A69-29162 #	14 p2539 A69-29207 #	14 p2403 A69-29252 #
14 p2437 A69-29073 #	14 p2439 A69-29118	14 p2458 A69-29163 #	14 p2539 A69-29208 #	14 p2403 A69-29253*#
14 p2437 A69-29074 #	14 p2440 A69-29119	14 p2458 A69-29164 #	14 p2462 A69-29209 #	14 p2404 A69-29254 #
14 p2411 A69-29075 #	14 p2440 A69-29120	14 p2458 A69-29165 #	14 p2462 A69-29210 #	14 p2404 A69-29255 #
14 p2437 A69-29076 #	14 p2518 A69-29121	14 p2458 A69-29166 #	14 p2454 A69-29211 #	14 p2404 A69-29256 #
14 p2437 A69-29077 #	14 p2518 A69-29122*	14 p2458 A69-29167 #	14 p2455 A69-29212 #	14 p2491 A69-29257 #
14 p2438 A69-29078 #	14 p2513 A69-29123*	14 p2458 A69-29168 #	14 p2539 A69-29213 #	14 p2404 A69-29258 #
14 p2438 A69-29079 #	14 p2440 A69-29124	14 p2458 A69-29169 #	14 p2467 A69-29214 #	14 p2491 A69-29259 #
14 p2438 A69-29080 #	14 p2440 A69-29125	14 p2505 A69-29170 #	14 p2467 A69-29215 #	14 p2491 A69-29260 #
14 p2438 A69-29081 #	14 p2440 A69-29126	14 p2485 A69-29171 #	14 p2400 A69-29216 #	14 p2404 A69-29261 #
14 p2438 A69-29082 #	14 p2440 A69-29127	14 p2394 A69-29172	14 p2462 A69-29217 #	14 p2505 A69-29262 #
14 p2446 A69-29083 #	14 p2440 A69-29128	14 p2397 A69-29173*#	14 p2539 A69-29218 #	14 p2505 A69-29263*#
14 p2446 A69-29084 #	14 p2440 A69-29129	14 p2397 A69-29174 #	14 p2463 A69-29219 #	14 p2505 A69-29264 #
14 p2517 A69-29085	14 p2440 A69-29130	14 p2397 A69-29175*#	14 p2463 A69-29220 #	14 p2505 A69-29265 #
14 p2517 A69-29086	14 p2518 A69-29131	14 p2397 A69-29176 #	14 p2505 A69-29221 #	14 p2506 A69-29266 #
14 p2517 A69-29087	14 p2518 A69-29132	14 p2398 A69-29177 #	14 p2400 A69-29222 #	14 p2506 A69-29267 #
14 p2517 A69-29088	14 p2518 A69-29133	14 p2419 A69-29178 #	14 p2539 A69-29223 #	14 p2506 A69-29268 #
14 p2517 A69-29089	14 p2518 A69-29134	14 p2398 A69-29179 #	14 p2400 A69-29224 #	14 p2506 A69-29269 #
14 p2517 A69-29090	14 p2519 A69-29135	14 p2398 A69-29180 #	14 p2400 A69-29225 #	14 p2506 A69-29270 #
14 p2517 A69-29091	14 p2519 A69-29136	14 p2398 A69-29181 #	14 p2400 A69-29226 #	14 p2506 A69-29271 #
14 p2409 A69-29092 #	14 p2519 A69-29137	14 p2480 A69-29182 #	14 p2400 A69-29227 #	14 p2506 A69-29272 #
14 p2409 A69-29093 #	14 p2519 A69-29138	14 p2480 A69-29183*#	14 p2401 A69-29228 #	14 p2507 A69-29273 #
14 p2488 A69-29094*#	14 p2519 A69-29139	14 p2509 A69-29184 #	14 p2401 A69-29229 #	14 p2507 A69-29274 #
14 p2488 A69-29095	14 p2425 A69-29140 #	14 p2480 A69-29185 #	14 p2401 A69-29230 #	14 p2507 A69-29275 #
14 p2517 A69-29096*	14 p2540 A69-29141 #	14 p2398 A69-29186*#	14 p2401 A69-29231 #	14 p2507 A69-29276 #
14 p2406 A69-29097	14 p2425 A69-29142 #	14 p2480 A69-29187 #	14 p2401 A69-29232 #	14 p2404 A69-29277 #
14 p2513 A69-29098	14 p2426 A69-29143 #	14 p2480 A69-29188 #	14 p2490 A69-29233 #	14 p2404 A69-29278 #
14 p2513 A69-29099	14 p2417 A69-29144 #	14 p2481 A69-29189*#	14 p2401 A69-29234 #	14 p2405 A69-29279 #
14 p2518 A69-29100	14 p2418 A69-29145 #	14 p2398 A69-29190 #	14 p2401 A69-29235 #	14 p2541 A69-29280
14 p2438 A69-29101	14 p2426 A69-29146 #	14 p2481 A69-29191 #	14 p2402 A69-29236 #	14 p2541 A69-29281
14 p2419 A69-29102	14 p2426 A69-29147 #	14 p2399 A69-29192 #	14 p2490 A69-29237 #	14 p2410 A69-29282
14 p2490 A69-29103	14 p2426 A69-29148 #	14 p2399 A69-29193 #	14 p2402 A69-29238 #	14 p2412 A69-29283
14 p2438 A69-29104	14 p2541 A69-29149	14 p2399 A69-29194 #	14 p2402 A69-29239 #	14 p2534 A69-29284
14 p2411 A69-29105	14 p2485 A69-29150	14 p2399 A69-29195 #	14 p2490 A69-29240 #	14 p2467 A69-29285
14 p2438 A69-29106	14 p2408 A69-29151	14 p2399 A69-29196 #	14 p2402 A69-29241 #	14 p2446 A69-29286
14 p2411 A69-29107	14 p2408 A69-29152*	14 p2399 A69-29197*#	14 p2402 A69-29242 #	14 p2467 A69-29287 #
14 p2411 A69-29108	14 p2541 A69-29153	14 p2481 A69-29198 #	14 p2491 A69-29243 #	14 p2463 A69-29288 #
14 p2438 A69-29109	14 p2392 A69-29154	14 p2399 A69-29199 #	14 p2402 A69-29244 #	14 p2430 A69-29289 #
14 p2439 A69-29110	14 p2541 A69-29155	14 p2481 A69-29200 #	14 p2491 A69-29245 #	14 p2406 A69-29290

ACCESSION NUMBER INDEX

14 p2406 A69-29291	14 p2491 A69-29336	14 p2441 A69-29381 #	14 p2412 A69-29426 #	14 p2409 A69-29471 #
14 p2406 A69-29292	14 p2488 A69-29337*	14 p2521 A69-29382 #	14 p2412 A69-29427 #	14 p2426 A69-29472 #
14 p2406 A69-29293	14 p2468 A69-29338	14 p2514 A69-29383 #	14 p2412 A69-29428 #	14 p2536 A69-29473 #
14 p2408 A69-29294	14 p2468 A69-29339	14 p2514 A69-29384 #	14 p2459 A69-29429	14 p2536 A69-29474 #
14 p2409 A69-29295	14 p2468 A69-29340	14 p2514 A69-29385 #	14 p2392 A69-29430	14 p2430 A69-29475 #
14 p2407 A69-29296	14 p2468 A69-29341	14 p2441 A69-29386 #	14 p2392 A69-29431	14 p2390 A69-29476 #
14 p2407 A69-29297	14 p2468 A69-29342	14 p2441 A69-29387 #	14 p2392 A69-29432	14 p2390 A69-29477 #
14 p2407 A69-29298	14 p2455 A69-29343	14 p2459 A69-29388 #	14 p2509 A69-29433*	14 p2426 A69-29478 #
14 p2407 A69-29299	14 p2455 A69-29344	14 p2459 A69-29389 #	14 p2530 A69-29434	14 p2536 A69-29479 #
14 p2409 A69-29300*	14 p2468 A69-29345	14 p2459 A69-29390 #	14 p2420 A69-29435	14 p2430 A69-29480 #
14 p2407 A69-29301*	14 p2469 A69-29346	14 p2459 A69-29391 #	14 p2535 A69-29436 #	14 p2530 A69-29481 #
14 p2407 A69-29302	14 p2469 A69-29347	14 p2459 A69-29392 #	14 p2455 A69-29437 #	14 p2413 A69-29482
14 p2407 A69-29303 #	14 p2455 A69-29348	14 p2420 A69-29393 #	14 p2535 A69-29438 #	14 p2413 A69-29483
14 p2408 A69-29304	14 p2459 A69-29349	14 p2420 A69-29394 #	14 p2464 A69-29439 #	14 p2478 A69-29484
14 p2408 A69-29305 #	14 p2507 A69-29350	14 p2412 A69-29395 #	14 p2464 A69-29440 #	14 p2413 A69-29485
14 p2426 A69-29306 #	14 p2440 A69-29351	14 p2420 A69-29396 #	14 p2464 A69-29441 #	14 p2479 A69-29486
14 p2408 A69-29307	14 p2492 A69-29352	14 p2420 A69-29397 #	14 p2464 A69-29442 #	14 p2479 A69-29487
14 p2541 A69-29308	14 p2418 A69-29353 #	14 p2420 A69-29398 #	14 p2430 A69-29443 #	14 p2413 A69-29488*
14 p2408 A69-29309	14 p2485 A69-29354 #	14 p2492 A69-29399 #	14 p2430 A69-29444**	14 p2413 A69-29489*
14 p2463 A69-29310 #	14 p2519 A69-29355 #	14 p2464 A69-29400*	14 p2390 A69-29445 #	14 p2479 A69-29490
14 p2463 A69-29311 #	14 p2519 A69-29356 #	14 p2470 A69-29401 #	14 p2430 A69-29446**	14 p2459 A69-29491
14 p2463 A69-29312 #	14 p2519 A69-29357 #	14 p2472 A69-29402 #	14 p2447 A69-29447**	14 p2479 A69-29492
14 p2463 A69-29313 #	14 p2485 A69-29358 #	14 p2447 A69-29403 #	14 p2535 A69-29448	14 p2413 A69-29493
14 p2464 A69-29314 #	14 p2535 A69-29359 #	14 p2447 A69-29404 #	14 p2455 A69-29449	14 p2420 A69-29494
14 p2412 A69-29315	14 p2470 A69-29360 #	14 p2472 A69-29405 #	14 p2486 A69-29450 #	14 p2392 A69-29495
14 p2419 A69-29316	14 p2535 A69-29361 #	14 p2472 A69-29406 #	14 p2470 A69-29451**	14 p2413 A69-29496
14 p2534 A69-29317	14 p2430 A69-29362 #	14 p2441 A69-29407 #	14 p2486 A69-29452	14 p2413 A69-29497
14 p2534 A69-29318	14 p2470 A69-29363 #	14 p2447 A69-29408 #	14 p2412 A69-29453 #	14 p2414 A69-29498*
14 p2534 A69-29319	14 p2535 A69-29364 #	14 p2447 A69-29409 #	14 p2471 A69-29454	14 p2479 A69-29499
14 p2485 A69-29320	14 p2535 A69-29365 #	14 p2535 A69-29410 #	14 p2521 A69-29455	14 p2414 A69-29500
14 p2513 A69-29321	14 p2535 A69-29366 #	14 p2469 A69-29411	14 p2539 A69-29456 #	14 p2414 A69-29501
14 p2464 A69-29322	14 p2470 A69-29367 #	14 p2469 A69-29412 #	14 p2405 A69-29457 #	14 p2414 A69-29502*
14 p2464 A69-29323	14 p2519 A69-29368 #	14 p2455 A69-29413 #	14 p2420 A69-29458	14 p2392 A69-29503 #
14 p2412 A69-29324	14 p2492 A69-29369 #	14 p2469 A69-29414 #	14 p2420 A69-29459*	14 p2392 A69-29504 #
14 p2419 A69-29325	14 p2519 A69-29370 #	14 p2469 A69-29415**	14 p2521 A69-29460 #	14 p2427 A69-29505 #
14 p2447 A69-29326	14 p2520 A69-29371 #	14 p2514 A69-29416 #	14 p2521 A69-29461 #	14 p2541 A69-29506 #
14 p2447 A69-29327	14 p2520 A69-29372 #	14 p2441 A69-29417 #	14 p2472 A69-29462 #	14 p2521 A69-29507 #
14 p2458 A69-29328	14 p2520 A69-29373 #	14 p2441 A69-29418 #	14 p2521 A69-29463 #	14 p2430 A69-29508 #
14 p2468 A69-29329	14 p2520 A69-29374 #	14 p2426 A69-29419 #	14 p2413 A69-29464 #	14 p2509 A69-29509 #
14 p2447 A69-29330	14 p2520 A69-29375 #	14 p2426 A69-29420 #	14 p2486 A69-29465 #	14 p2542 A69-29510 #
14 p2455 A69-29331	14 p2520 A69-29376 #	14 p2426 A69-29421 #	14 p2521 A69-29466 #	14 p2414 A69-29511
14 p2420 A69-29332	14 p2520 A69-29377 #	14 p2426 A69-29422 #	14 p2390 A69-29467 #	14 p2414 A69-29512
14 p2534 A69-29333	14 p2520 A69-29378 #	14 p2405 A69-29423 #	14 p2492 A69-29468 #	14 p2414 A69-29513
14 p2507 A69-29334	14 p2441 A69-29379 #	14 p2430 A69-29424 #	14 p2540 A69-29469	14 p2414 A69-29514*
14 p2491 A69-29335	14 p2441 A69-29380 #	14 p2412 A69-29425 #	14 p2486 A69-29470	14 p2415 A69-29515*



## ACCESSION NUMBER INDEX

14 p2415 A69-29516	14 p2449 A69-29561*#	14 p2431 A69-29606 #	14 p2465 A69-29651	14 p2392 A69-29696
14 p2447 A69-29517	14 p2449 A69-29562	14 p2431 A69-29607 #	14 p2508 A69-29652	14 p2392 A69-29697
14 p2415 A69-29518*	14 p2449 A69-29563 #	14 p2432 A69-29608 #	14 p2508 A69-29653	14 p2392 A69-29698
14 p2415 A69-29519*	14 p2449 A69-29564*#	14 p2492 A69-29609 #	14 p2508 A69-29654	14 p2392 A69-29699
14 p2448 A69-29520	14 p2449 A69-29565*#	14 p2492 A69-29610 #	14 p2508 A69-29655	14 p2393 A69-29700
14 p2415 A69-29521	14 p2449 A69-29566 #	14 p2432 A69-29611 #	14 p2508 A69-29656	14 p2479 A69-29701
14 p2415 A69-29522	14 p2450 A69-29567*#	14 p2432 A69-29612 #	14 p2427 A69-29657	14 p2393 A69-29702*
14 p2448 A69-29523	14 p2450 A69-29568 #	14 p2432 A69-29613 #	14 p2418 A69-29658	14 p2522 A69-29703
14 p2448 A69-29524	14 p2459 A69-29569	14 p2390 A69-29614 #	14 p2427 A69-29659	14 p2523 A69-29704 #
14 p2448 A69-29525	14 p2450 A69-29570 #	14 p2390 A69-29615 #	14 p2460 A69-29660	14 p2523 A69-29705 #
14 p2448 A69-29526	14 p2455 A69-29571 #	14 p2390 A69-29616 #	14 p2417 A69-29661	14 p2523 A69-29706 #
14 p2448 A69-29527	14 p2450 A69-29572	14 p2391 A69-29617 #	14 p2508 A69-29662	14 p2523 A69-29707 #
14 p2421 A69-29528	14 p2390 A69-29573 #	14 p2391 A69-29618 #	14 p2487 A69-29663	14 p2524 A69-29708 #
14 p2416 A69-29529	14 p2441 A69-29574 #	14 p2391 A69-29619 #	14 p2508 A69-29664	14 p2524 A69-29709 #
14 p2416 A69-29530	14 p2430 A69-29575 #	14 p2391 A69-29620 #	14 p2493 A69-29665	14 p2524 A69-29710 #
14 p2416 A69-29531*	14 p2431 A69-29576 #	14 p2391 A69-29621 #	14 p2508 A69-29666	14 p2524 A69-29711 #
14 p2448 A69-29532	14 p2431 A69-29577 #	14 p2391 A69-29622 #	14 p2508 A69-29667	14 p2524 A69-29712 #
14 p2448 A69-29533	14 p2431 A69-29578 #	14 p2432 A69-29623 #	14 p2487 A69-29668	14 p2524 A69-29713 #
14 p2416 A69-29534*	14 p2431 A69-29579 #	14 p2391 A69-29624 #	14 p2487 A69-29669	14 p2524 A69-29714 #
14 p2449 A69-29535	14 p2390 A69-29580 #	14 p2391 A69-29625 #	14 p2460 A69-29670	14 p2525 A69-29715 #
14 p2416 A69-29536*	14 p2431 A69-29581 #	14 p2432 A69-29626 #	14 p2460 A69-29671	14 p2525 A69-29716 #
14 p2421 A69-29537	14 p2450 A69-29582 #	14 p2432 A69-29627 #	14 p2461 A69-29672	14 p2525 A69-29717 #
14 p2405 A69-29538	14 p2422 A69-29583	14 p2432 A69-29628 #	14 p2493 A69-29673	14 p2525 A69-29718 #
14 p2427 A69-29539	14 p2521 A69-29584 #	14 p2509 A69-29629 #	14 p2461 A69-29674	14 p2442 A69-29719 #
14 p2416 A69-29540	14 p2521 A69-29585 #	14 p2530 A69-29630 #	14 p2522 A69-29675	14 p2514 A69-29720 #
14 p2421 A69-29541	14 p2521 A69-29586*#	14 p2522 A69-29631	14 p2432 A69-29676	14 p2525 A69-29721 #
14 p2421 A69-29542	14 p2486 A69-29587*#	14 p2408 A69-29632 #	14 p2432 A69-29677	14 p2525 A69-29722 #
14 p2421 A69-29543	14 p2522 A69-29588 #	14 p2486 A69-29633	14 p2433 A69-29678	14 p2472 A69-29723
14 p2421 A69-29544	14 p2522 A69-29589 #	14 p2540 A69-29634 #	14 p2540 A69-29679	14 p2473 A69-29724 #
14 p2421 A69-29545	14 p2522 A69-29590 #	14 p2486 A69-29635 #	14 p2471 A69-29680	14 p2442 A69-29725 #
14 p2421 A69-29546	14 p2417 A69-29591	14 p2492 A69-29636 #	14 p2465 A69-29681	14 p2442 A69-29726 #
14 p2421 A69-29547	14 p2481 A69-29592*	14 p2488 A69-29637 #	14 p2465 A69-29682	14 p2473 A69-29727 #
14 p2416 A69-29548	14 p2492 A69-29593 #	14 p2460 A69-29638	14 p2433 A69-29683 #	14 p2473 A69-29728 #
14 p2416 A69-29549	14 p2486 A69-29594 #	14 p2450 A69-29639*#	14 p2522 A69-29684	14 p2473 A69-29729 #
14 p2421 A69-29550	14 p2522 A69-29595 #	14 p2460 A69-29640	14 p2422 A69-29685	14 p2473 A69-29730 #
14 p2422 A69-29551	14 p2522 A69-29596 #	14 p2450 A69-29641	14 p2450 A69-29686 #	14 p2473 A69-29731 #
14 p2416 A69-29552	14 p2418 A69-29597 #	14 p2486 A69-29642*#	14 p2405 A69-29687 #	14 p2442 A69-29732 #
14 p2422 A69-29553*	14 p2536 A69-29598 #	14 p2493 A69-29643	14 p2417 A69-29688 #	14 p2442 A69-29733 #
14 p2422 A69-29554	14 p2471 A69-29599 #	14 p2460 A69-29644	14 p2530 A69-29689 #	14 p2473 A69-29734
14 p2422 A69-29555	14 p2450 A69-29600	14 p2460 A69-29645	14 p2493 A69-29690 #	14 p2474 A69-29735 #
14 p2417 A69-29556	14 p2459 A69-29601 #	14 p2507 A69-29646	14 p2493 A69-29691 #	14 p2474 A69-29736 #
14 p2422 A69-29557	14 p2460 A69-29602	14 p2486 A69-29647	14 p2493 A69-29692 #	14 p2474 A69-29737 #
14 p2449 A69-29558	14 p2460 A69-29603	14 p2460 A69-29648	14 p2493 A69-29693 #	14 p2474 A69-29738 #
14 p2422 A69-29559	14 p2460 A69-29604	14 p2493 A69-29649	14 p2493 A69-29694 #	14 p2474 A69-29739 #
14 p2449 A69-29560 #	14 p2460 A69-29605*#	14 p2464 A69-29650	14 p2494 A69-29695 #	14 p2475 A69-29740 #

## ACCESSION NUMBER INDEX

14 p2536 A69-29741	14 p2451 A69-29786 #	14 p2477 A69-29831 #	14 p2453 A69-29876 #	14 p2471 A69-29921*#
14 p2409 A69-29742 #	14 p2496 A69-29787 #	14 p2477 A69-29832 #	14 p2444 A69-29877*	14 p2410 A69-29922*#
14 p2536 A69-29743 #	14 p2496 A69-29798 #	14 p2478 A69-29833 #	14 p2526 A69-29878*	14 p2488 A69-29923*#
14 p2393 A69-29744 #	14 p2496 A69-29789 #	14 p2478 A69-29834 #	14 p2526 A69-29879	14 p2488 A69-29924*#
14 p2536 A69-29745 #	14 p2497 A69-29790 #	14 p2478 A69-29835 #	14 p2393 A69-29880*	14 p2508 A69-29925*#
14 p2537 A69-29746 #	14 p2497 A69-29791 #	14 p2478 A69-29836 #	14 p2526 A69-29881*	14 p2471 A69-29926*#
14 p2451 A69-29747 #	14 p2497 A69-29792 #	14 p2478 A69-29837 #	14 p2527 A69-29882*	14 p2488 A69-29927 #
14 p2537 A69-29748 #	14 p2497 A69-29793 #	14 p2442 A69-29838 #	14 p2444 A69-29883	14 p2410 A69-29928 #
14 p2465 A69-29749*	14 p2497 A69-29794 #	14 p2443 A69-29839 #	14 p2445 A69-29884*	14 p2465 A69-29929
14 p2525 A69-29750 #	14 p2497 A69-29795 #	14 p2478 A69-29840 #	14 p2445 A69-29885	14 p2466 A69-29930
14 p2422 A69-29751	14 p2497 A69-29796 #	14 p2526 A69-29841 #	14 p2508 A69-29886 #	14 p2466 A69-29931
14 p2422 A69-29752	14 p2497 A69-29797 #	14 p2498 A69-29842	14 p2461 A69-29887 #	14 p2466 A69-29932*
14 p2423 A69-29753	14 p2451 A69-29798 #	14 p2498 A69-29843	14 p2540 A69-29888 #	14 p2466 A69-29933
14 p2423 A69-29754	14 p2497 A69-29799 #	14 p2499 A69-29844	14 p2527 A69-29889	14 p2466 A69-29934
14 p2417 A69-29755*	14 p2451 A69-29800 #	14 p2499 A69-29845	14 p2465 A69-29890	14 p2466 A69-29935
14 p2423 A69-29756	14 p2451 A69-29801 #	14 p2433 A69-29846	14 p2465 A69-29891	14 p2469 A69-29936
14 p2423 A69-29757	14 p2452 A69-29802 #	14 p2499 A69-29847	14 p2456 A69-29892	14 p2466 A69-29937
14 p2423 A69-29758*	14 p2498 A69-29803 #	14 p2499 A69-29848	14 p2456 A69-29893	14 p2466 A69-29938
14 p2423 A69-29759	14 p2452 A69-29804 #	14 p2499 A69-29849	14 p2456 A69-29894	14 p2466 A69-29939
14 p2423 A69-29760	14 p2452 A69-29805 #	14 p2499 A69-29850	14 p2527 A69-29895 #	14 p2467 A69-29940
14 p2423 A69-29761	14 p2498 A69-29806 #	14 p2499 A69-29851	14 p2527 A69-29896 #	14 p2527 A69-29941
14 p2423 A69-29762	14 p2498 A69-29807 #	14 p2499 A69-29852	14 p2527 A69-29897 #	14 p2527 A69-29942
14 p2424 A69-29763	14 p2498 A69-29808 #	14 p2526 A69-29853	14 p2433 A69-29898 #	14 p2527 A69-29943
14 p2424 A69-29764	14 p2452 A69-29809 #	14 p2526 A69-29854	14 p2391 A69-29899 #	14 p2527 A69-29944
14 p2424 A69-29765	14 p2452 A69-29810 #	14 p2479 A69-29855	14 p2540 A69-29900 #	14 p2527 A69-29945
14 p2424 A69-29766	14 p2452 A69-29811 #	14 p2479 A69-29856	14 p2500 A69-29901 #	14 p2527 A69-29946*
14 p2494 A69-29767	14 p2452 A69-29812 #	14 p2479 A69-29857	14 p2500 A69-29902 #	14 p2528 A69-29947
14 p2427 A69-29768	14 p2498 A69-29813 #	14 p2480 A69-29858	14 p2500 A69-29903 #	14 p2514 A69-29948*
14 p2514 A69-29769	14 p2498 A69-29814 #	14 p2480 A69-29859	14 p2500 A69-29904 #	14 p2514 A69-29949
14 p2526 A69-29770	14 p2530 A69-29815	14 p2456 A69-29860	14 p2500 A69-29905 #	14 p2471 A69-29950
14 p2526 A69-29771	14 p2514 A69-29816	14 p2443 A69-29861	14 p2500 A69-29906 #	14 p2471 A69-29951*
14 p2526 A69-29772	14 p2481 A69-29817	14 p2417 A69-29862 #	14 p2500 A69-29907 #	14 p2453 A69-29952
14 p2514 A69-29773	14 p2475 A69-29818	14 p2499 A69-29863 #	14 p2500 A69-29908 #	14 p2501 A69-29953
14 p2471 A69-29774	14 p2476 A69-29819 #	14 p2500 A69-29864 #	14 p2501 A69-29909 #	14 p2501 A69-29954
14 p2494 A69-29775	14 p2476 A69-29820 #	14 p2443 A69-29865 #	14 p2501 A69-29910 #	14 p2501 A69-29955
14 p2496 A69-29776 #	14 p2476 A69-29821 #	14 p2443 A69-29866 #	14 p2405 A69-29911 #	14 p2502 A69-29956
14 p2451 A69-29777 #	14 p2476 A69-29822 #	14 p2444 A69-29867 #	14 p2405 A69-29912 #	14 p2502 A69-29957
14 p2451 A69-29778 #	14 p2476 A69-29823 #	14 p2444 A69-29868 #	14 p2405 A69-29913 #	14 p2502 A69-29958
14 p2461 A69-29779 #	14 p2476 A69-29824 #	14 p2444 A69-29869 #	14 p2405 A69-29914 #	14 p2502 A69-29959
14 p2496 A69-29780 #	14 p2477 A69-29825 #	14 p2444 A69-29870 #	14 p2501 A69-29915 #	14 p2502 A69-29960
14 p2451 A69-29781 #	14 p2477 A69-29826 #	14 p2444 A69-29871 #	14 p2456 A69-29916 #	14 p2528 A69-29961
14 p2461 A69-29782 #	14 p2477 A69-29827 #	14 p2444 A69-29872 #	14 p2501 A69-29917 #	14 p2528 A69-29962*
14 p2496 A69-29783 #	14 p2477 A69-29828 #	14 p2444 A69-29873 #	14 p2501 A69-29918 #	14 p2528 A69-29963
14 p2496 A69-29784 #	14 p2477 A69-29829 #	14 p2452 A69-29874 #	14 p2501 A69-29919 #	14 p2528 A69-29964
14 p2496 A69-29785 #	14 p2442 A69-29830 #	14 p2452 A69-29875 #	14 p2453 A69-29920 #	14 p2528 A69-29965



## ACCESSION NUMBER INDEX

14 p2528 A69-29966	15 p2679 A69-30011	15 p2666 A69-30056 #	15 p2643 A69-30101 #	15 p2564 A69-30146 #
14 p2515 A69-29967*	15 p2673 A69-30012	15 p2632 A69-30057 #	15 p2679 A69-30102 #	15 p2564 A69-30147 #
14 p2515 A69-29968	15 p2673 A69-30013	15 p2666 A69-30058 #	15 p2590 A69-30103 #	15 p2564 A69-30148 #
14 p2515 A69-29969	15 p2673 A69-30014*	15 p2633 A69-30059 #	15 p2657 A69-30104 #	15 p2564 A69-30149 #
14 p2528 A69-29970*	15 p2673 A69-30015	15 p2666 A69-30060 #	15 p2636 A69-30105 #	15 p2564 A69-30150 #
14 p2515 A69-29971*	15 p2674 A69-30016	15 p2666 A69-30061 #	15 p2618 A69-30106 #	15 p2606 A69-30151
14 p2453 A69-29972	15 p2593 A69-30017	15 p2573 A69-30062 #	15 p2646 A69-30107 #	15 p2606 A69-30152*
14 p2453 A69-29973	15 p2594 A69-30018	15 p2666 A69-30063 #	15 p2716 A69-30108 #	15 p2607 A69-30153*
14 p2528 A69-29974	15 p2594 A69-30019*	15 p2633 A69-30064 #	15 p2654 A69-30109 #	15 p2607 A69-30154
14 p2529 A69-29975	15 p2594 A69-30020	15 p2666 A69-30065 #	15 p2562 A69-30110*#	15 p2657 A69-30155
14 p2529 A69-29976	15 p2561 A69-30021*	15 p2666 A69-30066 #	15 p2582 A69-30111 #	15 p2607 A69-30156
14 p2529 A69-29977	15 p2716 A69-30022 #	15 p2666 A69-30067 #	15 p2582 A69-30112 #	15 p2590 A69-30157
14 p2529 A69-29978	15 p2657 A69-30023 #	15 p2667 A69-30068 #	15 p2573 A69-30113 #	15 p2703 A69-30158
14 p2529 A69-29979	15 p2582 A69-30024 #	15 p2552 A69-30069	15 p2573 A69-30114 #	15 p2646 A69-30159
14 p2487 A69-29980	15 p2665 A69-30025	15 p2703 A69-30070 #	15 p2562 A69-30115 #	15 p2646 A69-30160 #
14 p2433 A69-29981	15 p2632 A69-30026	15 p2582 A69-30071 #	15 p2562 A69-30116 #	15 p2679 A69-30161 #
14 p2529 A69-29982	15 p2657 A69-30027	15 p2552 A69-30072 #	15 p2573 A69-30117 #	15 p2646 A69-30162 #
14 p2529 A69-29983	15 p2594 A69-30028 #	15 p2547 A69-30073 #	15 p2573 A69-30118 #	15 p2647 A69-30163 #
14 p2529 A69-29984	15 p2594 A69-30029 #	15 p2547 A69-30074 #	15 p2574 A69-30119 #	15 p2647 A69-30164 #
14 p2529 A69-29985	15 p2594 A69-30030 #	15 p2716 A69-30075 #	15 p2562 A69-30120 #	15 p2647 A69-30165 #
14 p2487 A69-29986	15 p2572 A69-30031	15 p2667 A69-30076 #	15 p2633 A69-30121 #	15 p2647 A69-30166 #
14 p2530 A69-29987 #	15 p2573 A69-30032	15 p2562 A69-30077 #	15 p2574 A69-30122 #	15 p2607 A69-30167
14 p2410 A69-29988 #	15 p2573 A69-30033	15 p2667 A69-30078 #	15 p2582 A69-30123 #	15 p2574 A69-30168
14 p2502 A69-29989 #	15 p2552 A69-30034	15 p2633 A69-30079 #	15 p2582 A69-30124 #	15 p2564 A69-30169
14 p2502 A69-29990 #	15 p2573 A69-30035	15 p2654 A69-30080 #	15 p2574 A69-30125 #	15 p2565 A69-30170
14 p2502 A69-29991 #	15 p2554 A69-30036*	15 p2573 A69-30081 #	15 p2571 A69-30126 #	15 p2565 A69-30171
14 p2502 A69-29992 #	15 p2643 A69-30037	15 p2636 A69-30082	15 p2574 A69-30127 #	15 p2575 A69-30172
14 p2488 A69-29993 #	15 p2665 A69-30038 #	15 p2561 A69-30083*	15 p2574 A69-30128 #	15 p2658 A69-30173
14 p2489 A69-29994*	15 p2665 A69-30039 #	15 p2562 A69-30084 #	15 p2574 A69-30129 #	15 p2575 A69-30174
14 p2489 A69-29995*	15 p2665 A69-30040 #	15 p2719 A69-30085 #	15 p2574 A69-30130 #	15 p2575 A69-30175
14 p2489 A69-29996*	15 p2665 A69-30041 #	15 p2636 A69-30086*	15 p2574 A69-30131 #	15 p2575 A69-30176
14 p2489 A69-29997*	15 p2665 A69-30042 #	15 p2667 A69-30087*	15 p2574 A69-30132 #	15 p2565 A69-30177
14 p2502 A69-29998	15 p2666 A69-30043 #	15 p2650 A69-30088 #	15 p2563 A69-30133 #	15 p2575 A69-30178
14 p2503 A69-29999	15 p2666 A69-30044 #	15 p2617 A69-30089	15 p2563 A69-30134 #	15 p2565 A69-30179
14 p2503 A69-30000	15 p2636 A69-30045 #	15 p2549 A69-30090	15 p2563 A69-30135 #	15 p2575 A69-30180
15 p2589 A69-30001	15 p2679 A69-30046	15 p2552 A69-30091	15 p2563 A69-30136 #	15 p2575 A69-30181
15 p2589 A69-30002	15 p2716 A69-30047 #	15 p2606 A69-30092	15 p2563 A69-30137 #	15 p2575 A69-30182
15 p2590 A69-30003	15 p2590 A69-30048 #	15 p2617 A69-30093	15 p2563 A69-30138 #	15 p2565 A69-30183
15 p2716 A69-30004	15 p2590 A69-30049 #	15 p2562 A69-30094 #	15 p2574 A69-30139 #	15 p2565 A69-30184
15 p2672 A69-30005	15 p2703 A69-30050 #	15 p2594 A69-30095 #	15 p2563 A69-30140 #	15 p2561 A69-30185
15 p2679 A69-30006	15 p2632 A69-30051 #	15 p2595 A69-30096 #	15 p2563 A69-30141 #	15 p2719 A69-30186 #
15 p2673 A69-30007	15 p2606 A69-30052 #	15 p2617 A69-30097 #	15 p2563 A69-30142 #	15 p2558 A69-30187 #
15 p2593 A69-30008	15 p2632 A69-30053 #	15 p2617 A69-30098 #	15 p2564 A69-30143 #	15 p2680 A69-30188*#
15 p2673 A69-30009	15 p2716 A69-30054 #	15 p2617 A69-30099 #	15 p2564 A69-30144 #	15 p2549 A69-30189 #
15 p2679 A69-30010*	15 p2554 A69-30055 #	15 p2617 A69-30100*#	15 p2564 A69-30145 #	15 p2607 A69-30190 #

# ACCESSION NUMBER INDEX

15 p2595 A69-30191 #	15 p2575 A69-30236	15 p2618 A69-30281	15 p2552 A69-30326	15 p2585 A69-30371
15 p2647 A69-30192	15 p2658 A69-30237	15 p2638 A69-30282	15 p2618 A69-30327*	15 p2671 A69-30372
15 p2647 A69-30193	15 p2633 A69-30238	15 p2638 A69-30283	15 p2642 A69-30328	15 p2585 A69-30373
15 p2636 A69-30194 #	15 p2607 A69-30239	15 p2638 A69-30284	15 p2642 A69-30329	15 p2719 A69-30374
15 p2667 A69-30195 #	15 p2658 A69-30240	15 p2638 A69-30285	15 p2565 A69-30330	15 p2577 A69-30375
15 p2667 A69-30196 #	15 p2607 A69-30241	15 p2583 A69-30286	15 p2571 A69-30331 #	15 p2681 A69-30376*
15 p2667 A69-30197 #	15 p2575 A69-30242	15 p2644 A69-30287	15 p2566 A69-30332 #	15 p2659 A69-30377
15 p2655 A69-30198*	15 p2607 A69-30243	15 p2704 A69-30288	15 p2566 A69-30333 #	15 p2586 A69-30378
15 p2667 A69-30199*	15 p2607 A69-30244	15 p2704 A69-30289	15 p2566 A69-30334 #	15 p2716 A69-30379
15 p2680 A69-30200*	15 p2667 A69-30245	15 p2547 A69-30290	15 p2566 A69-30335 #	15 p2651 A69-30380
15 p2644 A69-30201 #	15 p2608 A69-30246	15 p2704 A69-30291	15 p2572 A69-30336 #	15 p2652 A69-30381
15 p2680 A69-30202 #	15 p2608 A69-30247	15 p2704 A69-30292	15 p2566 A69-30337 #	15 p2586 A69-30382*
15 p2652 A69-30203 #	15 p2667 A69-30248	15 p2651 A69-30293	15 p2575 A69-30338 #	15 p2586 A69-30383*
15 p2680 A69-30204 #	15 p2658 A69-30249	15 p2651 A69-30294	15 p2576 A69-30339 #	15 p2586 A69-30384
15 p2680 A69-30205 #	15 p2658 A69-30250	15 p2704 A69-30295	15 p2567 A69-30340 #	15 p2586 A69-30385
15 p2680 A69-30206 #	15 p2658 A69-30251	15 p2608 A69-30296	15 p2567 A69-30341 #	15 p2586 A69-30386
15 p2583 A69-30207	15 p2658 A69-30252	15 p2590 A69-30297	15 p2567 A69-30342 #	15 p2586 A69-30387*
15 p2583 A69-30208	15 p2658 A69-30253	15 p2658 A69-30298	15 p2567 A69-30343 #	15 p2587 A69-30388*
15 p2549 A69-30209 #	15 p2658 A69-30254	15 p2659 A69-30299	15 p2576 A69-30344 #	15 p2587 A69-30389
15 p2703 A69-30210 #	15 p2658 A69-30255	15 p2659 A69-30300	15 p2567 A69-30345 #	15 p2587 A69-30390*
15 p2703 A69-30211 #	15 p2658 A69-30256	15 p2575 A69-30301	15 p2572 A69-30346 #	15 p2587 A69-30391
15 p2637 A69-30212	15 p2633 A69-30257	15 p2549 A69-30302	15 p2567 A69-30347 #	15 p2587 A69-30392
15 p2637 A69-30213*	15 p2608 A69-30258	15 p2704 A69-30303	15 p2576 A69-30348 #	15 p2587 A69-30393
15 p2595 A69-30214	15 p2547 A69-30259	15 p2704 A69-30304	15 p2567 A69-30349 #	15 p2558 A69-30394*
15 p2595 A69-30215	15 p2680 A69-30260	15 p2550 A69-30305	15 p2576 A69-30350 #	15 p2587 A69-30395
15 p2647 A69-30216 #	15 p2680 A69-30261	15 p2704 A69-30306	15 p2576 A69-30351 #	15 p2701 A69-30396*
15 p2648 A69-30217 #	15 p2704 A69-30262	15 p2633 A69-30307	15 p2576 A69-30352 #	15 p2702 A69-30397
15 p2595 A69-30218 #	15 p2590 A69-30263	15 p2674 A69-30308	15 p2576 A69-30353 #	15 p2720 A69-30398
15 p2595 A69-30219 #	15 p2561 A69-30264	15 p2655 A69-30309*	15 p2576 A69-30354 #	15 p2588 A69-30399
15 p2648 A69-30220 #	15 p2658 A69-30265	15 p2618 A69-30310	15 p2705 A69-30355	15 p2619 A69-30400
15 p2648 A69-30221 #	15 p2637 A69-30266	15 p2561 A69-30311	15 p2584 A69-30356	15 p2720 A69-30401
15 p2648 A69-30222 #	15 p2637 A69-30267	15 p2642 A69-30312	15 p2585 A69-30357	15 p2720 A69-30402
15 p2595 A69-30223 #	15 p2637 A69-30268	15 p2618 A69-30313	15 p2585 A69-30358	15 p2588 A69-30403
15 p2595 A69-30224 #	15 p2637 A69-30269	15 p2719 A69-30314	15 p2618 A69-30359	15 p2588 A69-30404
15 p2637 A69-30225	15 p2637 A69-30270	15 p2618 A69-30315*	15 p2585 A69-30360	15 p2588 A69-30405*
15 p2637 A69-30226	15 p2637 A69-30271	15 p2618 A69-30316	15 p2585 A69-30361	15 p2554 A69-30406*
15 p2637 A69-30227	15 p2638 A69-30272	15 p2550 A69-30317	15 p2576 A69-30362	15 p2561 A69-30407*
15 p2618 A69-30228	15 p2638 A69-30273	15 p2550 A69-30318	15 p2705 A69-30363	15 p2588 A69-30408
15 p2549 A69-30229	15 p2638 A69-30274	15 p2582 A69-30319*	15 p2639 A69-30364	15 p2550 A69-30409
15 p2650 A69-30230	15 p2638 A69-30275	15 p2608 A69-30320 #	15 p2705 A69-30365	15 p2608 A69-30410 #
15 p2607 A69-30231	15 p2638 A69-30276	15 p2638 A69-30321	15 p2705 A69-30366	15 p2681 A69-30411
15 p2680 A69-30232	15 p2638 A69-30277	15 p2550 A69-30322	15 p2608 A69-30367	15 p2555 A69-30412*
15 p2680 A69-30233*	15 p2638 A69-30278	15 p2671 A69-30323 #	15 p2618 A69-30368	15 p2555 A69-30413*
15 p2633 A69-30234	15 p2638 A69-30279	15 p2681 A69-30324*	15 p2550 A69-30369*	15 p2561 A69-30414*
15 p2633 A69-30235	15 p2638 A69-30280	15 p2681 A69-30325*	15 p2585 A69-30370	15 p2716 A69-30415



## ACCESSION NUMBER INDEX

15 p2681 A69-30416*	15 p2609 A69-30461*	15 p2674 A69-30506 #	15 p2675 A69-30551 #	15 p2720 A69-30596*
15 p2705 A69-30417 #	15 p2558 A69-30462	15 p2682 A69-30507 #	15 p2688 A69-30552 #	15 p2689 A69-30597
15 p2595 A69-30418 #	15 p2550 A69-30463	15 p2682 A69-30508 #	15 p2688 A69-30553 #	15 p2639 A69-30598
15 p2705 A69-30419 #	15 p2639 A69-30464	15 p2683 A69-30509 #	15 p2675 A69-30554 #	15 p2639 A69-30599
15 p2681 A69-30420	15 p2717 A69-30465	15 p2674 A69-30510 #	15 p2688 A69-30555 #	15 p2671 A69-30600
15 p2674 A69-30421	15 p2642 A69-30466 #	15 p2683 A69-30511 #	15 p2688 A69-30556 #	15 p2582 A69-30601*
15 p2681 A69-30422	15 p2561 A69-30467*	15 p2683 A69-30512 #	15 p2688 A69-30557 #	15 p2667 A69-30602 #
15 p2681 A69-30423	15 p2562 A69-30468*	15 p2683 A69-30513 #	15 p2688 A69-30558 #	15 p2577 A69-30603 #
15 p2644 A69-30424*	15 p2609 A69-30469	15 p2683 A69-30514 #	15 p2688 A69-30559 #	15 p2622 A69-30604
15 p2644 A69-30425*	15 p2555 A69-30470*	15 p2683 A69-30515	15 p2688 A69-30560 #	15 p2622 A69-30605
15 p2720 A69-30426*	15 p2619 A69-30471*	15 p2684 A69-30516 #	15 p2688 A69-30561 #	15 p2642 A69-30606
15 p2588 A69-30427	15 p2619 A69-30472*	15 p2674 A69-30517 #	15 p2689 A69-30562 #	15 p2642 A69-30607
15 p2608 A69-30428*	15 p2619 A69-30473	15 p2684 A69-30518 #	15 p2689 A69-30563 #	15 p2622 A69-30608
15 p2705 A69-30429	15 p2619 A69-30474	15 p2684 A69-30519 #	15 p2689 A69-30564 #	15 p2622 A69-30609
15 p2706 A69-30430	15 p2588 A69-30475 #	15 p2684 A69-30520 #	15 p2689 A69-30565 #	15 p2622 A69-30610*
15 p2706 A69-30431	15 p2590 A69-30476 #	15 p2684 A69-30521 #	15 p2689 A69-30566 #	15 p2577 A69-30611
15 p2706 A69-30432	15 p2591 A69-30477 #	15 p2684 A69-30522 #	15 p2689 A69-30567 #	15 p2567 A69-30612
15 p2706 A69-30433	15 p2591 A69-30478*	15 p2685 A69-30523 #	15 p2689 A69-30568 #	15 p2577 A69-30613
15 p2706 A69-30434	15 p2550 A69-30479 #	15 p2685 A69-30524 #	15 p2639 A69-30569 #	15 p2577 A69-30614
15 p2706 A69-30435	15 p2550 A69-30480*	15 p2685 A69-30525 #	15 p2547 A69-30570 #	15 p2577 A69-30615
15 p2681 A69-30436 #	15 p2619 A69-30481*	15 p2685 A69-30526 #	15 p2547 A69-30571 #	15 p2582 A69-30616
15 p2682 A69-30437 #	15 p2619 A69-30482	15 p2685 A69-30527 #	15 p2689 A69-30572 #	15 p2568 A69-30617
15 p2682 A69-30438 #	15 p2620 A69-30483*	15 p2685 A69-30528 #	15 p2596 A69-30573 #	15 p2572 A69-30618
15 p2682 A69-30439 #	15 p2620 A69-30484*	15 p2685 A69-30529 #	15 p2596 A69-30574 #	15 p2568 A69-30619
15 p2608 A69-30440 #	15 p2620 A69-30485	15 p2685 A69-30530	15 p2717 A69-30575 #	15 p2577 A69-30620 #
15 p2588 A69-30441 #	15 p2620 A69-30486	15 p2686 A69-30531 #	15 p2547 A69-30576 #	15 p2707 A69-30621
15 p2561 A69-30442*	15 p2620 A69-30487*	15 p2686 A69-30532 #	15 p2648 A69-30577 #	15 p2690 A69-30622
15 p2596 A69-30443*	15 p2620 A69-30488	15 p2686 A69-30533 #	15 p2706 A69-30578 #	15 p2591 A69-30623
15 p2555 A69-30444*	15 p2620 A69-30489	15 p2686 A69-30534 #	15 p2707 A69-30579 #	15 p2596 A69-30624*
15 p2555 A69-30445*	15 p2620 A69-30490	15 p2686 A69-30535 #	15 p2707 A69-30580 #	15 p2707 A69-30625 #
15 p2555 A69-30446*	15 p2620 A69-30491	15 p2686 A69-30536 #	15 p2707 A69-30581 #	15 p2707 A69-30626 #
15 p2706 A69-30447	15 p2621 A69-30492*	15 p2686 A69-30537 #	15 p2707 A69-30582 #	15 p2577 A69-30627
15 p2652 A69-30448 #	15 p2621 A69-30493	15 p2686 A69-30538 #	15 p2547 A69-30583 #	15 p2568 A69-30628
15 p2644 A69-30449 #	15 p2621 A69-30494	15 p2687 A69-30539 #	15 p2642 A69-30584 #	15 p2668 A69-30629 #
15 p2644 A69-30450*	15 p2621 A69-30495	15 p2687 A69-30540 #	15 p2639 A69-30585	15 p2639 A69-30630 #
15 p2682 A69-30451	15 p2621 A69-30496*	15 p2687 A69-30541 #	15 p2639 A69-30586	15 p2640 A69-30631 #
15 p2608 A69-30452 #	15 p2621 A69-30497*	15 p2674 A69-30542 #	15 p2558 A69-30587*	15 p2640 A69-30632 #
15 p2558 A69-30453	15 p2621 A69-30498	15 p2687 A69-30543 #	15 p2720 A69-30588	15 p2640 A69-30633 #
15 p2608 A69-30454	15 p2621 A69-30499	15 p2687 A69-30544 #	15 p2589 A69-30589	15 p2578 A69-30634 #
15 p2596 A69-30455*	15 p2622 A69-30500	15 p2687 A69-30545 #	15 p2550 A69-30590	15 p2659 A69-30635 #
15 p2558 A69-30456*	15 p2682 A69-30501 #	15 p2655 A69-30546 #	15 p2639 A69-30591	15 p2578 A69-30636 #
15 p2609 A69-30457*	15 p2682 A69-30502 #	15 p2687 A69-30547 #	15 p2702 A69-30592	15 p2707 A69-30637 #
15 p2609 A69-30458	15 p2674 A69-30503 #	15 p2687 A69-30548 #	15 p2609 A69-30593	15 p2591 A69-30638 #
15 p2609 A69-30459	15 p2682 A69-30504 #	15 p2687 A69-30549 #	15 p2577 A69-30594	15 p2707 A69-30639 #
15 p2609 A69-30460	15 p2682 A69-30505	15 p2688 A69-30550 #	15 p2577 A69-30595	15 p2708 A69-30640 #

ACCESSION NUMBER INDEX

15 p2648 A69-30641 #	15 p2668 A69-30686**	15 p2634 A69-30731	15 p2693 A69-30776	15 p2624 A69-30821
15 p2596 A69-30642 #	15 p2668 A69-30687**	15 p2690 A69-30732*	15 p2693 A69-30777	15 p2624 A69-30822
15 p2596 A69-30643 #	15 p2668 A69-30688**	15 p2568 A69-30733	15 p2693 A69-30778*	15 p2624 A69-30823
15 p2648 A69-30644 #	15 p2669 A69-30689	15 p2690 A69-30734	15 p2693 A69-30779	15 p2625 A69-30824
15 p2648 A69-30645 #	15 p2651 A69-30690	15 p2690 A69-30735	15 p2693 A69-30780	15 p2625 A69-30825
15 p2648 A69-30646 #	15 p2651 A69-30691 #	15 p2634 A69-30736	15 p2693 A69-30781	15 p2625 A69-30826
15 p2649 A69-30647 #	15 p2558 A69-30692 #	15 p2690 A69-30737	15 p2693 A69-30782	15 p2625 A69-30827
15 p2649 A69-30648 #	15 p2555 A69-30693	15 p2691 A69-30738	15 p2693 A69-30783	15 p2625 A69-30828
15 p2649 A69-30649 #	15 p2690 A69-30694	15 p2702 A69-30739	15 p2693 A69-30784	15 p2625 A69-30829
15 p2596 A69-30650 #	15 p2675 A69-30695	15 p2691 A69-30740	15 p2694 A69-30785	15 p2625 A69-30830
15 p2596 A69-30651 #	15 p2690 A69-30696*	15 p2651 A69-30741	15 p2694 A69-30786	15 p2626 A69-30831
15 p2597 A69-30652 #	15 p2597 A69-30697	15 p2651 A69-30742	15 p2694 A69-30787	15 p2626 A69-30832
15 p2597 A69-30653 #	15 p2610 A69-30698	15 p2675 A69-30743	15 p2694 A69-30788	15 p2626 A69-30833
15 p2597 A69-30654 #	15 p2568 A69-30699	15 p2568 A69-30744	15 p2694 A69-30789*	15 p2626 A69-30834
15 p2649 A69-30655 #	15 p2675 A69-30700	15 p2597 A69-30745	15 p2717 A69-30790	15 p2626 A69-30835
15 p2644 A69-30656 #	15 p2552 A69-30701	15 p2691 A69-30746	15 p2717 A69-30791	15 p2626 A69-30836
15 p2644 A69-30657 #	15 p2671 A69-30702	15 p2691 A69-30747	15 p2591 A69-30792	15 p2627 A69-30837
15 p2708 A69-30658 #	15 p2551 A69-30703 #	15 p2691 A69-30748	15 p2578 A69-30793	15 p2627 A69-30838
15 p2708 A69-30659 #	15 p2622 A69-30704	15 p2709 A69-30749	15 p2568 A69-30794	15 p2627 A69-30839
15 p2652 A69-30660 #	15 p2622 A69-30705	15 p2691 A69-30750	15 p2568 A69-30795	15 p2627 A69-30840
15 p2708 A69-30661 #	15 p2690 A69-30706	15 p2568 A69-30751	15 p2568 A69-30796	15 p2627 A69-30841
15 p2708 A69-30662 #	15 p2659 A69-30707 #	15 p2610 A69-30752	15 p2578 A69-30797	15 p2627 A69-30842
15 p2708 A69-30663 #	15 p2633 A69-30708 #	15 p2555 A69-30753	15 p2578 A69-30798	15 p2627 A69-30843
15 p2644 A69-30664 #	15 p2610 A69-30709 #	15 p2555 A69-30754	15 p2659 A69-30799	15 p2627 A69-30844
15 p2708 A69-30665 #	15 p2610 A69-30710*	15 p2702 A69-30755	15 p2569 A69-30800	15 p2628 A69-30845
15 p2640 A69-30666 #	15 p2690 A69-30711	15 p2675 A69-30756	15 p2578 A69-30801	15 p2628 A69-30846
15 p2708 A69-30667	15 p2669 A69-30712	15 p2691 A69-30757	15 p2610 A69-30802	15 p2628 A69-30847
15 p2708 A69-30668	15 p2669 A69-30713	15 p2691 A69-30758	15 p2569 A69-30803	15 p2628 A69-30848
15 p2709 A69-30669	15 p2669 A69-30714	15 p2675 A69-30759*	15 p2578 A69-30804	15 p2628 A69-30849
15 p2690 A69-30670	15 p2669 A69-30715	15 p2675 A69-30760*	15 p2569 A69-30805	15 p2610 A69-30850
15 p2709 A69-30671	15 p2669 A69-30716	15 p2675 A69-30761	15 p2645 A69-30806	15 p2559 A69-30851
15 p2644 A69-30672	15 p2669 A69-30717	15 p2691 A69-30762	15 p2709 A69-30807	15 p2552 A69-30852
15 p2652 A69-30673 #	15 p2669 A69-30718	15 p2691 A69-30763	15 p2709 A69-30808	15 p2551 A69-30853
15 p2659 A69-30674 #	15 p2633 A69-30719	15 p2691 A69-30764*	15 p2710 A69-30809	15 p2694 A69-30854
15 p2709 A69-30675	15 p2669 A69-30720	15 p2691 A69-30765	15 p2640 A69-30810*	15 p2694 A69-30855
15 p2709 A69-30676	15 p2669 A69-30721	15 p2692 A69-30766*	15 p2710 A69-30811*	15 p2694 A69-30856
15 p2709 A69-30677*	15 p2578 A69-30722	15 p2692 A69-30767	15 p2710 A69-30812*	15 p2694 A69-30857
15 p2642 A69-30678	15 p2669 A69-30723	15 p2675 A69-30768	15 p2710 A69-30813	15 p2676 A69-30858
15 p2709 A69-30679	15 p2659 A69-30724	15 p2692 A69-30769*	15 p2642 A69-30814	15 p2610 A69-30859 #
15 p2609 A69-30680	15 p2633 A69-30725	15 p2692 A69-30770	15 p2640 A69-30815	15 p2652 A69-30860 #
15 p2609 A69-30681	15 p2655 A69-30726	15 p2692 A69-30771	15 p2622 A69-30816	15 p2710 A69-30861 #
15 p2610 A69-30682	15 p2634 A69-30727	15 p2692 A69-30772	15 p2624 A69-30817	15 p2717 A69-30862 #
15 p2668 A69-30683	15 p2659 A69-30728	15 p2692 A69-30773	15 p2624 A69-30818	15 p2645 A69-30863 #
15 p2668 A69-30684**	15 p2634 A69-30729	15 p2692 A69-30774	15 p2624 A69-30819	15 p2589 A69-30864
15 p2668 A69-30685**	15 p2634 A69-30730	15 p2692 A69-30775	15 p2624 A69-30820	15 p2589 A69-30865



# ACCESSION NUMBER INDEX

15 p2551 A69-30866	15 p2652 A69-30911	15 p2579 A69-30956 #	15 p2712 A69-31001	15 p2670 A69-31046 #
15 p2710 A69-30867	15 p2653 A69-30912	15 p2695 A69-30957 #	15 p2548 A69-31002 #	15 p2641 A69-31047 #
15 p2710 A69-30868	15 p2660 A69-30913**	15 p2720 A69-30958	15 p2629 A69-31003 #	15 p2670 A69-31048 #
15 p2710 A69-30869	15 p2660 A69-30914**	15 p2662 A69-30959 #	15 p2695 A69-31004 #	15 p2670 A69-31049 #
15 p2710 A69-30870	15 p2660 A69-30915 #	15 p2634 A69-30960 #	15 p2712 A69-31005 #	15 p2670 A69-31050 #
15 p2711 A69-30871	15 p2660 A69-30916 #	15 p2655 A69-30961 #	15 p2712 A69-31006 #	15 p2671 A69-31051
15 p2711 A69-30872	15 p2660 A69-30917 #	15 p2634 A69-30962 #	15 p2548 A69-31007 #	15 p2720 A69-31052
15 p2711 A69-30873	15 p2660 A69-30918 #	15 p2655 A69-30963 #	15 p2548 A69-31008 #	15 p2713 A69-31053 #
15 p2711 A69-30874	15 p2661 A69-30919**	15 p2662 A69-30964 #	15 p2592 A69-31009 #	15 p2592 A69-31054 #
15 p2634 A69-30875	15 p2661 A69-30920	15 p2662 A69-30965 #	15 p2592 A69-31010 #	15 p2664 A69-31055 #
15 p2659 A69-30876	15 p2661 A69-30921**	15 p2634 A69-30966 #	15 p2695 A69-31011 #	15 p2713 A69-31056 #
15 p2660 A69-30877	15 p2661 A69-30922**	15 p2635 A69-30967 #	15 p2551 A69-31012 #	15 p2592 A69-31057 #
15 p2634 A69-30878	15 p2661 A69-30923 #	15 p2662 A69-30968 #	15 p2712 A69-31013 #	15 p2592 A69-31058 #
15 p2694 A69-30879	15 p2661 A69-30924 #	15 p2720 A69-30969 #	15 p2712 A69-31014 #	15 p2583 A69-31059 #
15 p2610 A69-30880	15 p2661 A69-30925 #	15 p2662 A69-30970 #	15 p2712 A69-31015 #	15 p2552 A69-31060 #
15 p2611 A69-30881	15 p2661 A69-30926**	15 p2711 A69-30971 #	15 p2712 A69-31016 #	15 p2611 A69-31061
15 p2694 A69-30882	15 p2661 A69-30927**	15 p2643 A69-30972 #	15 p2712 A69-31017 #	15 p2670 A69-31062
15 p2695 A69-30883*	15 p2629 A69-30928 #	15 p2712 A69-30973 #	15 p2713 A69-31018 #	15 p2664 A69-31063 #
15 p2695 A69-30884	15 p2711 A69-30929	15 p2712 A69-30974 #	15 p2713 A69-31019 #	15 p2696 A69-31064 #
15 p2676 A69-30885	15 p2551 A69-30930 #	15 p2662 A69-30975 #	15 p2713 A69-31020 #	15 p2548 A69-31065 #
15 p2676 A69-30886*	15 p2671 A69-30931 #	15 p2662 A69-30976 #	15 p2629 A69-31021 #	15 p2718 A69-31066 #
15 p2676 A69-30887*	15 p2711 A69-30932 #	15 p2662 A69-30977 #	15 p2548 A69-31022 #	15 p2653 A69-31067 #
15 p2676 A69-30888*	15 p2591 A69-30933 #	15 p2662 A69-30978 #	15 p2548 A69-31023 #	15 p2721 A69-31068
15 p2676 A69-30889	15 p2717 A69-30934 #	15 p2663 A69-30979 #	15 p2645 A69-31024 #	15 p2721 A69-31069*
15 p2695 A69-30890	15 p2695 A69-30935 #	15 p2663 A69-30980 #	15 p2713 A69-31025 #	15 p2721 A69-31070
15 p2695 A69-30891	15 p2578 A69-30936 #	15 p2655 A69-30981 #	15 p2713 A69-31026 #	15 p2721 A69-31071
15 p2695 A69-30892	15 p2578 A69-30937 #	15 p2655 A69-30982 #	15 p2629 A69-31027 #	15 p2721 A69-31072
15 p2649 A69-30893 #	15 p2569 A69-30938 #	15 p2640 A69-30983 #	15 p2629 A69-31028 #	15 p2721 A69-31073*
15 p2649 A69-30894 #	15 p2569 A69-30939 #	15 p2640 A69-30984 #	15 p2611 A69-31029	15 p2721 A69-31074
15 p2651 A69-30895 #	15 p2653 A69-30940 #	15 p2640 A69-30985 #	15 p2570 A69-31030 #	15 p2579 A69-31075
15 p2597 A69-30896 #	15 p2597 A69-30941 #	15 p2592 A69-30986 #	15 p2656 A69-31031 #	15 p2580 A69-31076
15 p2649 A69-30897 #	15 p2634 A69-30942 #	15 p2717 A69-30987 #	15 p2611 A69-31032**	15 p2580 A69-31077
15 p2649 A69-30898 #	15 p2655 A69-30943 #	15 p2592 A69-30988 #	15 p2611 A69-31033 #	15 p2580 A69-31078
15 p2551 A69-30899 #	15 p2579 A69-30944 #	15 p2663 A69-30989 #	15 p2656 A69-31034**	15 p2589 A69-31079*
15 p2628 A69-30900 #	15 p2579 A69-30945 #	15 p2663 A69-30990 #	15 p2555 A69-31035**	15 p2702 A69-31080
15 p2628 A69-30901**	15 p2582 A69-30946 #	15 p2663 A69-30991 #	15 p2579 A69-31036	15 p2702 A69-31081
15 p2629 A69-30902 #	15 p2662 A69-30947 #	15 p2629 A69-30992 #	15 p2635 A69-31037	15 p2702 A69-31082
15 p2629 A69-30903**	15 p2569 A69-30948 #	15 p2663 A69-30993 #	15 p2635 A69-31038	15 p2702 A69-31083
15 p2711 A69-30904 #	15 p2569 A69-30949 #	15 p2663 A69-30994 #	15 p2579 A69-31039	15 p2702 A69-31084
15 p2591 A69-30905 #	15 p2569 A69-30950 #	15 p2663 A69-30995 #	15 p2669 A69-31040	15 p2702 A69-31085
15 p2591 A69-30906 #	15 p2579 A69-30951 #	15 p2664 A69-30996 #	15 p2579 A69-31041	15 p2702 A69-31086
15 p2591 A69-30907 #	15 p2569 A69-30952 #	15 p2656 A69-30997 #	15 p2572 A69-31042	15 p2611 A69-31087
15 p2717 A69-30908**	15 p2676 A69-30953 #	15 p2718 A69-30998 #	15 p2579 A69-31043	15 p2570 A69-31088
15 p2589 A69-30909	15 p2579 A69-30954 #	15 p2695 A69-30999	15 p2559 A69-31044*	15 p2572 A69-31089
15 p2660 A69-30910 #	15 p2570 A69-30955 #	15 p2555 A69-31000*	15 p2556 A69-31045*	15 p2651 A69-31090

## ACCESSION NUMBER INDEX

15 p2580 A69-31091	15 p2581 A69-31136	15 p2719 A69-31181 #	15 p2697 A69-31226 #	15 p2613 A69-31271
15 p2572 A69-31092	15 p2630 A69-31137	15 p2641 A69-31182 #	15 p2570 A69-31227 #	15 p2613 A69-31272
15 p2570 A69-31093	15 p2723 A69-31138	15 p2630 A69-31183 #	15 p2559 A69-31228	15 p2613 A69-31273
15 p2664 A69-31094	15 p2723 A69-31139	15 p2670 A69-31184 #	15 p2559 A69-31229	15 p2613 A69-31274
15 p2580 A69-31095	15 p2696 A69-31140	15 p2641 A69-31185 #	15 p2559 A69-31230	15 p2614 A69-31275
15 p2645 A69-31096	15 p2645 A69-31141	15 p2643 A69-31186 #	15 p2559 A69-31231	15 p2614 A69-31276*
15 p2713 A69-31097	15 p2570 A69-31142*	15 p2641 A69-31187 #	15 p2560 A69-31232	15 p2614 A69-31277*
15 p2589 A69-31098	15 p2713 A69-31143	15 p2643 A69-31188 #	15 p2560 A69-31233	15 p2614 A69-31278
15 p2696 A69-31099	15 p2714 A69-31144**	15 p2630 A69-31189 #	15 p2583 A69-31234	15 p2614 A69-31279*
15 p2664 A69-31100 #	15 p2592 A69-31145	15 p2719 A69-31190 #	15 p2645 A69-31235	15 p2614 A69-31280
15 p2671 A69-31101	15 p2611 A69-31146	15 p2714 A69-31191 #	15 p2645 A69-31236*	15 p2614 A69-31281
15 p2656 A69-31102	15 p2714 A69-31147**	15 p2653 A69-31192 #	15 p2645 A69-31237*	15 p2615 A69-31282
15 p2635 A69-31103	15 p2593 A69-31148	15 p2653 A69-31193 #	15 p2635 A69-31238*	15 p2615 A69-31283
15 p2635 A69-31104 #	15 p2581 A69-31149 #	15 p2653 A69-31194 #	15 p2635 A69-31239*	15 p2615 A69-31284
15 p2635 A69-31105 #	15 p2612 A69-31150*	15 p2653 A69-31195 #	15 p2581 A69-31240	15 p2615 A69-31285
15 p2635 A69-31106 #	15 p2696 A69-31151 #	15 p2714 A69-31196 #	15 p2723 A69-31241	15 p2615 A69-31286
15 p2611 A69-31107 #	15 p2597 A69-31152	15 p2714 A69-31197 #	15 p2723 A69-31242	15 p2553 A69-31287
15 p2635 A69-31108 #	15 p2718 A69-31153	15 p2714 A69-31198 #	15 p2670 A69-31243	15 p2615 A69-31288
15 p2713 A69-31109 #	15 p2656 A69-31154*	15 p2714 A69-31199 #	15 p2643 A69-31244	15 p2589 A69-31289
15 p2611 A69-31110 #	15 p2656 A69-31155	15 p2714 A69-31200 #	15 p2643 A69-31245	15 p2616 A69-31290
15 p2572 A69-31111*	15 p2656 A69-31156*	15 p2715 A69-31201 #	15 p2641 A69-31246	15 p2616 A69-31291
15 p2583 A69-31112*	15 p2656 A69-31157*	15 p2715 A69-31202 #	15 p2641 A69-31247	15 p2616 A69-31292
15 p2572 A69-31113	15 p2656 A69-31158	15 p2643 A69-31203 #	15 p2670 A69-31248	15 p2553 A69-31293
15 p2718 A69-31114	15 p2657 A69-31159	15 p2715 A69-31204 #	15 p2645 A69-31249	15 p2553 A69-31294
15 p2552 A69-31115	15 p2657 A69-31160	15 p2715 A69-31205 #	15 p2645 A69-31250	15 p2616 A69-31295
15 p2718 A69-31116*	15 p2593 A69-31161	15 p2696 A69-31206	15 p2697 A69-31251	15 p2583 A69-31296
15 p2718 A69-31117	15 p2612 A69-31162	15 p2598 A69-31207 #	15 p2697 A69-31252	15 p2553 A69-31297
15 p2671 A69-31118*	15 p2653 A69-31163**	15 p2670 A69-31208	15 p2697 A69-31253	15 p2553 A69-31298
15 p2721 A69-31119	15 p2653 A69-31164 #	15 p2672 A69-31209	15 p2598 A69-31254	15 p2553 A69-31299
15 p2722 A69-31120	15 p2653 A69-31165	15 p2630 A69-31210 #	15 p2598 A69-31255	15 p2554 A69-31300
15 p2722 A69-31121	15 p2696 A69-31166 #	15 p2649 A69-31211	15 p2697 A69-31256	15 p2554 A69-31301
15 p2629 A69-31122	15 p2553 A69-31167	15 p2650 A69-31212	15 p2697 A69-31257	15 p2616 A69-31302
15 p2559 A69-31123*	15 p2718 A69-31168 #	15 p2696 A69-31213	15 p2654 A69-31258 #	15 p2554 A69-31303
15 p2559 A69-31124	15 p2718 A69-31169 #	15 p2654 A69-31214	15 p2654 A69-31259 #	15 p2583 A69-31304
15 p2722 A69-31125	15 p2548 A69-31170	15 p2715 A69-31215	15 p2654 A69-31260 #	15 p2697 A69-31305**
15 p2722 A69-31126	15 p2551 A69-31171	15 p2715 A69-31216	15 p2646 A69-31261 #	15 p2556 A69-31306**
15 p2722 A69-31127	15 p2551 A69-31172	15 p2664 A69-31217	15 p2719 A69-31262 #	15 p2598 A69-31307 #
15 p2580 A69-31128	15 p2548 A69-31173 #	15 p2598 A69-31218	15 p2593 A69-31263 #	15 p2697 A69-31308 #
15 p2580 A69-31129	15 p2719 A69-31174 #	15 p2654 A69-31219	15 p2549 A69-31264 #	15 p2570 A69-31309**
15 p2580 A69-31130 #	15 p2548 A69-31175 #	15 p2549 A69-31220 #	15 p2657 A69-31265*	15 p2697 A69-31310 #
15 p2580 A69-31131	15 p2664 A69-31176 #	15 p2696 A69-31221	15 p2612 A69-31266*	15 p2570 A69-31311 #
15 p2580 A69-31132	15 p2664 A69-31177 #	15 p2570 A69-31222 #	15 p2612 A69-31267	15 p2571 A69-31312**
15 p2722 A69-31133	15 p2714 A69-31178 #	15 p2549 A69-31223 #	15 p2612 A69-31268	15 p2697 A69-31313 #
15 p2581 A69-31134	15 p2630 A69-31179 #	15 p2696 A69-31224 #	15 p2613 A69-31269*	15 p2676 A69-31314 #
15 p2722 A69-31135	15 p2612 A69-31180 #	15 p2556 A69-31225	15 p2613 A69-31270	15 p2556 A69-31315**



## ACCESSION NUMBER INDEX

15 p2598 A69-31316*	15 p2551 A69-31361 #	15 p2603 A69-31406 #	15 p2724 A69-31451 #	15 p2700 A69-31496
15 p2598 A69-31317 #	15 p2600 A69-31362**	15 p2603 A69-31407 #	15 p2724 A69-31452 #	15 p2678 A69-31497
15 p2723 A69-31318**	15 p2698 A69-31363 #	15 p2560 A69-31408 #	15 p2724 A69-31453 #	15 p2678 A69-31498
15 p2598 A69-31319 #	15 p2650 A69-31364 #	15 p2604 A69-31409 #	15 p2724 A69-31454 #	15 p2678 A69-31499
15 p2598 A69-31320 #	15 p2600 A69-31365 #	15 p2604 A69-31410 #	15 p2724 A69-31455 #	15 p2700 A69-31500 #
15 p2556 A69-31321**	15 p2698 A69-31366**	15 p2703 A69-31411 #	15 p2724 A69-31456 #	15 p2571 A69-31501 #
15 p2599 A69-31322 #	15 p2600 A69-31367 #	15 p2699 A69-31412 #	15 p2557 A69-31457 #	15 p2630 A69-31502
15 p2697 A69-31323 #	15 p2557 A69-31368 #	15 p2677 A69-31413 #	15 p2557 A69-31458 #	15 p2616 A69-31503
15 p2599 A69-31324 #	15 p2601 A69-31369 #	15 p2604 A69-31414 #	15 p2560 A69-31459**	15 p2630 A69-31504
15 p2556 A69-31325 #	15 p2601 A69-31370 #	15 p2604 A69-31415 #	15 p2560 A69-31460 #	15 p2631 A69-31505
15 p2599 A69-31326**	15 p2601 A69-31371 #	15 p2604 A69-31416 #	15 p2557 A69-31461 #	15 p2631 A69-31506
15 p2677 A69-31327 #	15 p2601 A69-31372 #	15 p2604 A69-31417 #	15 p2560 A69-31462 #	15 p2631 A69-31507
15 p2698 A69-31328 #	15 p2698 A69-31373 #	15 p2604 A69-31418 #	15 p2724 A69-31463 #	15 p2631 A69-31508*
15 p2677 A69-31329 #	15 p2601 A69-31374 #	15 p2700 A69-31419**	15 p2725 A69-31464 #	15 p2631 A69-31509
15 p2556 A69-31330**	15 p2601 A69-31375 #	15 p2604 A69-31420 #	15 p2725 A69-31465 #	15 p2617 A69-31510
15 p2698 A69-31331**	15 p2601 A69-31376 #	15 p2650 A69-31421 #	15 p2725 A69-31466 #	15 p2631 A69-31511
15 p2703 A69-31332 #	15 p2699 A69-31377 #	15 p2650 A69-31422 #	15 p2725 A69-31467 #	15 p2636 A69-31512
15 p2599 A69-31333 #	15 p2601 A69-31378 #	15 p2605 A69-31423 #	15 p2557 A69-31468 #	15 p2641 A69-31513
15 p2599 A69-31334**	15 p2602 A69-31379 #	15 p2571 A69-31424 #	15 p2557 A69-31469 #	15 p2632 A69-31514*
15 p2650 A69-31335 #	15 p2616 A69-31380 #	15 p2605 A69-31425 #	15 p2560 A69-31470 #	15 p2632 A69-31515
15 p2556 A69-31336**	15 p2699 A69-31381**	15 p2723 A69-31426 #	15 p2557 A69-31471 #	15 p2632 A69-31516
15 p2571 A69-31337**	15 p2602 A69-31382 #	15 p2723 A69-31427 #	15 p2560 A69-31472**	15 p2617 A69-31517
15 p2571 A69-31338**	15 p2602 A69-31383 #	15 p2723 A69-31428 #	15 p2725 A69-31473	15 p2593 A69-31518
15 p2641 A69-31339 #	15 p2602 A69-31384 #	15 p2723 A69-31429 #	15 p2636 A69-31474 #	15 p2646 A69-31519
15 p2698 A69-31340 #	15 p2602 A69-31385 #	15 p2723 A69-31430 #	15 p2715 A69-31475 #	15 p2632 A69-31520
15 p2698 A69-31341 #	15 p2602 A69-31386 #	15 p2723 A69-31431 #	15 p2719 A69-31476 #	15 p2581 A69-31521
15 p2599 A69-31342 #	15 p2602 A69-31387 #	15 p2724 A69-31432 #	15 p2654 A69-31477	15 p2652 A69-31522*
15 p2599 A69-31343 #	15 p2557 A69-31388 #	15 p2724 A69-31433 #	15 p2664 A69-31478	15 p2581 A69-31523
15 p2557 A69-31344 #	15 p2650 A69-31389 #	15 p2724 A69-31434 #	15 p2664 A69-31479	15 p2581 A69-31524
15 p2599 A69-31345 #	15 p2699 A69-31390 #	15 p2605 A69-31435 #	15 p2665 A69-31480	15 p2581 A69-31525
15 p2677 A69-31346 #	15 p2616 A69-31391 #	15 p2605 A69-31436 #	15 p2677 A69-31481	15 p2581 A69-31526
15 p2677 A69-31347 #	15 p2602 A69-31392 #	15 p2700 A69-31437 #	15 p2678 A69-31482	15 p2636 A69-31527
15 p2599 A69-31348 #	15 p2602 A69-31393 #	15 p2605 A69-31438 #	15 p2678 A69-31483	15 p2701 A69-31528
15 p2600 A69-31349 #	15 p2699 A69-31394**	15 p2605 A69-31439 #	15 p2678 A69-31484	15 p2679 A69-31529*
15 p2600 A69-31350 #	15 p2677 A69-31395 #	15 p2700 A69-31440 #	15 p2678 A69-31485	15 p2701 A69-31530*
15 p2600 A69-31351**	15 p2699 A69-31396**	15 p2605 A69-31441 #	15 p2571 A69-31486	15 p2701 A69-31531
15 p2600 A69-31352 #	15 p2603 A69-31397**	15 p2700 A69-31442**	15 p2593 A69-31487	15 p2701 A69-31532*
15 p2698 A69-31353**	15 p2603 A69-31398**	15 p2605 A69-31443 #	15 p2715 A69-31488 #	15 p2606 A69-31533*
15 p2557 A69-31354 #	15 p2603 A69-31399 #	15 p2560 A69-31444 #	15 p2593 A69-31489 #	15 p2701 A69-31534
15 p2600 A69-31355**	15 p2603 A69-31400 #	15 p2650 A69-31445 #	15 p2700 A69-31490	15 p2701 A69-31535
15 p2698 A69-31356**	15 p2603 A69-31401 #	15 p2606 A69-31446 #	15 p2678 A69-31491	15 p2701 A69-31536
15 p2677 A69-31357 #	15 p2603 A69-31402 #	15 p2677 A69-31447 #	15 p2700 A69-31492	15 p2606 A69-31537
15 p2600 A69-31358 #	15 p2603 A69-31403 #	15 p2606 A69-31448 #	15 p2700 A69-31493	15 p2671 A69-31538*
15 p2571 A69-31359 #	15 p2699 A69-31404**	15 p2606 A69-31449 #	15 p2657 A69-31494	15 p2558 A69-31539*
15 p2698 A69-31360 #	15 p2699 A69-31405**	15 p2724 A69-31450 #	15 p2654 A69-31495	15 p2562 A69-31540

# ACCESSION NUMBER INDEX

15 p2641 A69-31541	16 p2757 A69-31586*	16 p2734 A69-31631 #	16 p2818 A69-31676	16 p2811 A69-31721
15 p2672 A69-31542 #	16 p2757 A69-31587	16 p2881 A69-31632 #	16 p2818 A69-31677 #	16 p2788 A69-31722**
15 p2617 A69-31543 #	16 p2767 A69-31588**	16 p2816 A69-31633	16 p2818 A69-31678 #	16 p2809 A69-31723 #
15 p2651 A69-31544 #	16 p2768 A69-31589 #	16 p2825 A69-31634	16 p2818 A69-31679 #	16 p2828 A69-31724 #
15 p2703 A69-31545 #	16 p2815 A69-31590 #	16 p2816 A69-31635 #	16 p2819 A69-31680**	16 p2749 A69-31725**
15 p2715 A69-31546 #	16 p2768 A69-31591 #	16 p2816 A69-31636 #	16 p2819 A69-31681 #	16 p2866 A69-31726 #
15 p2665 A69-31547 #	16 p2731 A69-31592 #	16 p2816 A69-31637 #	16 p2819 A69-31682 #	16 p2750 A69-31727 #
15 p2701 A69-31548 #	16 p2731 A69-31593 #	16 p2816 A69-31638 #	16 p2819 A69-31683 #	16 p2793 A69-31728 #
15 p2716 A69-31549 #	16 p2853 A69-31594	16 p2816 A69-31639**	16 p2819 A69-31684 #	16 p2735 A69-31729 #
15 p2643 A69-31550 #	16 p2853 A69-31595	16 p2816 A69-31640 #	16 p2819 A69-31685 #	16 p2758 A69-31730 #
15 p2558 A69-31551*	16 p2846 A69-31596*	16 p2817 A69-31641**	16 p2768 A69-31686	16 p2877 A69-31731 #
16 p2746 A69-31552*	16 p2853 A69-31597	16 p2817 A69-31642**	16 p2768 A69-31687 #	16 p2835 A69-31732 #
16 p2852 A69-31553	16 p2853 A69-31598	16 p2817 A69-31643 #	16 p2876 A69-31688	16 p2828 A69-31733
16 p2795 A69-31554	16 p2853 A69-31599	16 p2817 A69-31644 #	16 p2819 A69-31689 #	16 p2736 A69-31734 #
16 p2741 A69-31555*	16 p2846 A69-31600 #	16 p2817 A69-31645 #	16 p2819 A69-31690 #	16 p2866 A69-31735 #
16 p2746 A69-31556	16 p2749 A69-31601 #	16 p2817 A69-31646 #	16 p2820 A69-31691 #	16 p2866 A69-31736 #
16 p2870 A69-31557 #	16 p2749 A69-31602 #	16 p2854 A69-31647	16 p2825 A69-31692 #	16 p2828 A69-31737 #
16 p2852 A69-31558 #	16 p2749 A69-31603 #	16 p2847 A69-31648	16 p2749 A69-31693 #	16 p2867 A69-31738 #
16 p2731 A69-31559 #	16 p2768 A69-31604	16 p2854 A69-31649	16 p2749 A69-31694**	16 p2765 A69-31739 #
16 p2792 A69-31560 #	16 p2731 A69-31605	16 p2854 A69-31650	16 p2825 A69-31695 #	16 p2870 A69-31740 #
16 p2793 A69-31561 #	16 p2816 A69-31606	16 p2854 A69-31651	16 p2825 A69-31696**	16 p2867 A69-31741 #
16 p2828 A69-31562 #	16 p2811 A69-31607	16 p2854 A69-31652	16 p2795 A69-31697 #	16 p2867 A69-31742 #
16 p2852 A69-31563**	16 p2795 A69-31608	16 p2854 A69-31653	16 p2796 A69-31698	16 p2768 A69-31743 #
16 p2748 A69-31564**	16 p2825 A69-31609	16 p2854 A69-31654	16 p2758 A69-31699 #	16 p2835 A69-31744 #
16 p2853 A69-31565 #	16 p2853 A69-31610	16 p2854 A69-31655	16 p2825 A69-31700 #	16 p2736 A69-31745 #
16 p2748 A69-31566	16 p2805 A69-31611	16 p2855 A69-31656	16 p2820 A69-31701	16 p2867 A69-31746 #
16 p2824 A69-31567 #	16 p2757 A69-31612	16 p2855 A69-31657	16 p2820 A69-31702	16 p2828 A69-31747 #
16 p2824 A69-31568 #	16 p2757 A69-31613*	16 p2855 A69-31658	16 p2749 A69-31703 #	16 p2810 A69-31748 #
16 p2824 A69-31569 #	16 p2757 A69-31614	16 p2855 A69-31659	16 p2796 A69-31704 #	16 p2835 A69-31749 #
16 p2795 A69-31570 #	16 p2757 A69-31615	16 p2855 A69-31660	16 p2796 A69-31705	16 p2765 A69-31750 #
16 p2824 A69-31571 #	16 p2758 A69-31616*	16 p2847 A69-31661	16 p2798 A69-31706**	16 p2765 A69-31751 #
16 p2824 A69-31572 #	16 p2825 A69-31617	16 p2855 A69-31662	16 p2820 A69-31707	16 p2820 A69-31752
16 p2824 A69-31573 #	16 p2758 A69-31618*	16 p2768 A69-31663 #	16 p2825 A69-31708	16 p2820 A69-31753
16 p2824 A69-31574 #	16 p2758 A69-31619	16 p2768 A69-31664 #	16 p2755 A69-31709*	16 p2813 A69-31754
16 p2824 A69-31575 #	16 p2853 A69-31620	16 p2768 A69-31665 #	16 p2764 A69-31710*	16 p2750 A69-31755
16 p2756 A69-31576*	16 p2804 A69-31621	16 p2817 A69-31666	16 p2876 A69-31711	16 p2758 A69-31756
16 p2756 A69-31577	16 p2853 A69-31622	16 p2811 A69-31667**	16 p2758 A69-31712	16 p2750 A69-31757
16 p2756 A69-31578	16 p2804 A69-31623	16 p2817 A69-31668 #	16 p2758 A69-31713	16 p2765 A69-31758
16 p2748 A69-31579	16 p2788 A69-31624	16 p2817 A69-31669**	16 p2793 A69-31714	16 p2734 A69-31759
16 p2748 A69-31580	16 p2811 A69-31625 #	16 p2788 A69-31670 #	16 p2749 A69-31715	16 p2809 A69-31760
16 p2756 A69-31581*	16 p2763 A69-31626 #	16 p2818 A69-31671 #	16 p2798 A69-31716*	16 p2867 A69-31761
16 p2749 A69-31582	16 p2749 A69-31627 #	16 p2818 A69-31672**	16 p2798 A69-31717	16 p2855 A69-31762
16 p2757 A69-31583	16 p2763 A69-31628 #	16 p2818 A69-31673 #	16 p2799 A69-31718	16 p2881 A69-31763
16 p2757 A69-31584	16 p2764 A69-31629 #	16 p2818 A69-31674	16 p2799 A69-31719	16 p2789 A69-31764
16 p2757 A69-31585	16 p2854 A69-31630**	16 p2818 A69-31675	16 p2826 A69-31720	16 p2799 A69-31765



# ACCESSION NUMBER INDEX

16 p2881 A69-31766	16 p2812 A69-31811 #	16 p2759 A69-31856	16 p2871 A69-31901 #	16 p2760 A69-31946
16 p2768 A69-31767 #	16 p2769 A69-31812 #	16 p2759 A69-31857	16 p2770 A69-31902 #	16 p2750 A69-31947
16 p2877 A69-31768 #	16 p2789 A69-31813 #	16 p2755 A69-31858	16 p2789 A69-31903 #	16 p2760 A69-31948
16 p2820 A69-31769 #	16 p2736 A69-31814	16 p2755 A69-31859	16 p2794 A69-31904 #	16 p2796 A69-31949 #
16 p2820 A69-31770 #	16 p2789 A69-31815*	16 p2755 A69-31860	16 p2872 A69-31905 #	16 p2856 A69-31950 #
16 p2789 A69-31771 #	16 p2765 A69-31816	16 p2759 A69-31861	16 p2872 A69-31906 #	16 p2878 A69-31951 #
16 p2796 A69-31772 #	16 p2867 A69-31817	16 p2750 A69-31862	16 p2770 A69-31907**	16 p2878 A69-31952 #
16 p2814 A69-31773**	16 p2793 A69-31818	16 p2759 A69-31863	16 p2770 A69-31908**	16 p2821 A69-31953 #
16 p2799 A69-31774	16 p2826 A69-31819	16 p2742 A69-31864*	16 p2770 A69-31909 #	16 p2878 A69-31954 #
16 p2800 A69-31775	16 p2821 A69-31820	16 p2747 A69-31865*	16 p2766 A69-31910 #	16 p2878 A69-31955 #
16 p2800 A69-31776	16 p2826 A69-31821	16 p2881 A69-31866	16 p2872 A69-31911**	16 p2771 A69-31956 #
16 p2800 A69-31777	16 p2796 A69-31822*	16 p2732 A69-31867 #	16 p2872 A69-31912**	16 p2878 A69-31957 #
16 p2800 A69-31778	16 p2825 A69-31823	16 p2789 A69-31868**	16 p2829 A69-31913 #	16 p2814 A69-31958 #
16 p2800 A69-31779	16 p2826 A69-31824	16 p2769 A69-31869**	16 p2736 A69-31914 #	16 p2771 A69-31959 #
16 p2800 A69-31780	16 p2826 A69-31825	16 p2769 A69-31870**	16 p2872 A69-31915 #	16 p2878 A69-31960 #
16 p2800 A69-31781	16 p2827 A69-31826	16 p2769 A69-31871 #	16 p2872 A69-31916 #	16 p2773 A69-31961
16 p2801 A69-31782	16 p2827 A69-31827	16 p2877 A69-31872 #	16 p2766 A69-31917**	16 p2847 A69-31962
16 p2801 A69-31783	16 p2855 A69-31828 #	16 p2821 A69-31873**	16 p2771 A69-31918 #	16 p2847 A69-31963*
16 p2801 A69-31784	16 p2870 A69-31829	16 p2769 A69-31874 #	16 p2766 A69-31919 #	16 p2856 A69-31964*
16 p2801 A69-31785	16 p2871 A69-31830	16 p2809 A69-31875 #	16 p2771 A69-31920 #	16 p2847 A69-31965
16 p2793 A69-31786	16 p2769 A69-31831	16 p2871 A69-31876 #	16 p2877 A69-31921 #	16 p2847 A69-31966
16 p2801 A69-31787	16 p2769 A69-31832	16 p2871 A69-31877 #	16 p2877 A69-31922 #	16 p2848 A69-31967*
16 p2793 A69-31788	16 p2821 A69-31833	16 p2871 A69-31878 #	16 p2872 A69-31923 #	16 p2848 A69-31968
16 p2801 A69-31789	16 p2731 A69-31834	16 p2871 A69-31879 #	16 p2812 A69-31924**	16 p2848 A69-31969
16 p2793 A69-31790	16 p2736 A69-31835	16 p2770 A69-31880 #	16 p2878 A69-31925**	16 p2848 A69-31970
16 p2801 A69-31791	16 p2812 A69-31836	16 p2732 A69-31881**	16 p2771 A69-31926 #	16 p2848 A69-31971*
16 p2814 A69-31792*	16 p2769 A69-31837	16 p2732 A69-31882 #	16 p2771 A69-31927 #	16 p2773 A69-31972
16 p2773 A69-31793	16 p2814 A69-31838	16 p2770 A69-31883 #	16 p2771 A69-31928 #	16 p2848 A69-31973
16 p2820 A69-31794	16 p2821 A69-31839	16 p2770 A69-31884 #	16 p2855 A69-31929 #	16 p2774 A69-31974*
16 p2820 A69-31795	16 p2796 A69-31840	16 p2732 A69-31885 #	16 p2746 A69-31930 #	16 p2848 A69-31975*
16 p2758 A69-31796	16 p2814 A69-31841 #	16 p2732 A69-31886 #	16 p2856 A69-31931 #	16 p2849 A69-31976*
16 p2821 A69-31797	16 p2789 A69-31842 #	16 p2732 A69-31887 #	16 p2881 A69-31932 #	16 p2750 A69-31977
16 p2796 A69-31798	16 p2877 A69-31843 #	16 p2770 A69-31888 #	16 p2789 A69-31933 #	16 p2750 A69-31978
16 p2796 A69-31799	16 p2877 A69-31844 #	16 p2770 A69-31889 #	16 p2867 A69-31934	16 p2774 A69-31979
16 p2847 A69-31800	16 p2828 A69-31845 #	16 p2835 A69-31890**	16 p2868 A69-31935	16 p2774 A69-31980
16 p2814 A69-31801	16 p2810 A69-31846 #	16 p2871 A69-31891 #	16 p2868 A69-31936	16 p2774 A69-31981*
16 p2796 A69-31802	16 p2731 A69-31847 #	16 p2877 A69-31892**	16 p2734 A69-31937	16 p2774 A69-31982
16 p2835 A69-31803 #	16 p2829 A69-31848 #	16 p2732 A69-31893 #	16 p2827 A69-31938	16 p2774 A69-31983*
16 p2803 A69-31804	16 p2867 A69-31849**	16 p2732 A69-31894**	16 p2759 A69-31939	16 p2849 A69-31984*
16 p2734 A69-31805 #	16 p2793 A69-31850 #	16 p2835 A69-31895 #	16 p2759 A69-31940	16 p2774 A69-31985*
16 p2803 A69-31806	16 p2759 A69-31851*	16 p2877 A69-31896 #	16 p2759 A69-31941	16 p2856 A69-31986*
16 p2747 A69-31807*	16 p2750 A69-31852	16 p2871 A69-31897**	16 p2760 A69-31942	16 p2774 A69-31987*
16 p2747 A69-31808*	16 p2750 A69-31853	16 p2871 A69-31898 #	16 p2760 A69-31943	16 p2849 A69-31988
16 p2870 A69-31809 #	16 p2759 A69-31854	16 p2871 A69-31899 #	16 p2760 A69-31944	16 p2774 A69-31989*
16 p2828 A69-31810	16 p2766 A69-31855	16 p2770 A69-31900 #	16 p2760 A69-31945*	16 p2849 A69-31990*

# ACCESSION NUMBER INDEX

16 p2836 A69-31991	16 p2821 A69-32036	16 p2775 A69-32081	16 p2732 A69-32126	16 p2879 A69-32171 #
16 p2829 A69-31992	16 p2821 A69-32037	16 p2849 A69-32082*	16 p2735 A69-32127	16 p2736 A69-32172 #
16 p2829 A69-31993	16 p2822 A69-32038	16 p2775 A69-32083*	16 p2772 A69-32128	16 p2772 A69-32173 #
16 p2836 A69-31994	16 p2822 A69-32039	16 p2775 A69-32084*	16 p2873 A69-32129	16 p2772 A69-32174 #
16 p2829 A69-31995	16 p2822 A69-32040	16 p2775 A69-32085	16 p2873 A69-32130	16 p2814 A69-32175 #
16 p2829 A69-31996*	16 p2822 A69-32041	16 p2775 A69-32086	16 p2873 A69-32131	16 p2874 A69-32176 #
16 p2829 A69-31997	16 p2827 A69-32042	16 p2775 A69-32087	16 p2873 A69-32132	16 p2857 A69-32177*#
16 p2836 A69-31998	16 p2797 A69-32043	16 p2849 A69-32088	16 p2873 A69-32133	16 p2772 A69-32178 #
16 p2836 A69-31999*	16 p2827 A69-32044	16 p2776 A69-32089	16 p2809 A69-32134	16 p2879 A69-32179 #
16 p2878 A69-32000*	16 p2849 A69-32045	16 p2776 A69-32090	16 p2736 A69-32135	16 p2802 A69-32180
16 p2836 A69-32001	16 p2822 A69-32046	16 p2776 A69-32091	16 p2837 A69-32136	16 p2777 A69-32181
16 p2879 A69-32002	16 p2760 A69-32047 #	16 p2857 A69-32092	16 p2837 A69-32137	16 p2777 A69-32182
16 p2771 A69-32003	16 p2812 A69-32048	16 p2776 A69-32093	16 p2837 A69-32138	16 p2777 A69-32183
16 p2837 A69-32004 #	16 p2812 A69-32049	16 p2776 A69-32094	16 p2837 A69-32139	16 p2778 A69-32184
16 p2734 A69-32005 #	16 p2797 A69-32050	16 p2776 A69-32095	16 p2879 A69-32140	16 p2778 A69-32185
16 p2794 A69-32006 #	16 p2802 A69-32051	16 p2776 A69-32096	16 p2879 A69-32141	16 p2778 A69-32186
16 p2734 A69-32007 #	16 p2849 A69-32052	16 p2849 A69-32097*	16 p2732 A69-32142	16 p2778 A69-32187*
16 p2742 A69-32008	16 p2812 A69-32053*	16 p2857 A69-32098*	16 p2873 A69-32143	16 p2778 A69-32188
16 p2856 A69-32009	16 p2809 A69-32054	16 p2777 A69-32099*	16 p2735 A69-32144	16 p2778 A69-32189
16 p2868 A69-32010	16 p2868 A69-32055	16 p2777 A69-32100	16 p2772 A69-32145	16 p2850 A69-32190
16 p2856 A69-32011	16 p2735 A69-32056	16 p2777 A69-32101	16 p2857 A69-32146**	16 p2778 A69-32191
16 p2872 A69-32012	16 p2735 A69-32057	16 p2850 A69-32102	16 p2733 A69-32147 #	16 p2778 A69-32192*
16 p2879 A69-32013	16 p2873 A69-32058	16 p2751 A69-32103	16 p2772 A69-32148 #	16 p2779 A69-32193
16 p2797 A69-32014	16 p2873 A69-32059*	16 p2777 A69-32104	16 p2772 A69-32149 #	16 p2779 A69-32194
16 p2760 A69-32015	16 p2873 A69-32060 #	16 p2751 A69-32105	16 p2803 A69-32150 #	16 p2779 A69-32195
16 p2827 A69-32016**	16 p2761 A69-32061 #	16 p2752 A69-32106	16 p2879 A69-32151**	16 p2779 A69-32196
16 p2760 A69-32017	16 p2804 A69-32062 #	16 p2777 A69-32107	16 p2736 A69-32152 #	16 p2779 A69-32197
16 p2797 A69-32018	16 p2873 A69-32063 #	16 p2822 A69-32108*	16 p2772 A69-32153 #	16 p2779 A69-32198
16 p2797 A69-32019	16 p2837 A69-32064 #	16 p2761 A69-32109	16 p2857 A69-32154**	16 p2764 A69-32199 #
16 p2766 A69-32020	16 p2822 A69-32065 #	16 p2812 A69-32110	16 p2857 A69-32155 #	16 p2736 A69-32200
16 p2735 A69-32021	16 p2771 A69-32066 #	16 p2790 A69-32111	16 p2857 A69-32156 #	16 p2814 A69-32201*
16 p2882 A69-32022	16 p2794 A69-32067 #	16 p2735 A69-32112	16 p2873 A69-32157 #	16 p2790 A69-32202
16 p2732 A69-32023	16 p2837 A69-32068	16 p2771 A69-32113	16 p2874 A69-32158 #	16 p2879 A69-32203 #
16 p2872 A69-32024	16 p2856 A69-32069	16 p2764 A69-32114	16 p2874 A69-32159 #	16 p2802 A69-32204 #
16 p2872 A69-32025	16 p2746 A69-32070	16 p2822 A69-32115	16 p2874 A69-32160 #	16 p2858 A69-32205 #
16 p2794 A69-32026	16 p2766 A69-32071	16 p2822 A69-32116	16 p2857 A69-32161**	16 p2858 A69-32206 #
16 p2750 A69-32027	16 p2837 A69-32072	16 p2822 A69-32117	16 p2874 A69-32162**	16 p2858 A69-32207 #
16 p2751 A69-32028 #	16 p2735 A69-32073	16 p2822 A69-32118	16 p2874 A69-32163 #	16 p2858 A69-32208 #
16 p2751 A69-32029 #	16 p2856 A69-32074	16 p2797 A69-32119	16 p2874 A69-32164 #	16 p2790 A69-32209 #
16 p2751 A69-32030 #	16 p2735 A69-32075 #	16 p2797 A69-32120	16 p2874 A69-32165 #	16 p2858 A69-32210 #
16 p2751 A69-32031 #	16 p2790 A69-32076 #	16 p2797 A69-32121	16 p2874 A69-32166 #	16 p2858 A69-32211 #
16 p2751 A69-32032 #	16 p2790 A69-32077 #	16 p2797 A69-32122	16 p2766 A69-32167 #	16 p2858 A69-32212 #
16 p2873 A69-32033 #	16 p2755 A69-32078	16 p2752 A69-32123	16 p2772 A69-32168 #	16 p2850 A69-32213 #
16 p2775 A69-32034 #	16 p2790 A69-32079	16 p2790 A69-32124	16 p2879 A69-32169 #	16 p2858 A69-32214 #
16 p2821 A69-32035	16 p2775 A69-32080	16 p2790 A69-32125	16 p2772 A69-32170 #	16 p2858 A69-32215 #



## ACCESSION NUMBER INDEX

16 p2858 A69-32216 #	16 p2861 A69-32261*	16 p2780 A69-32306	16 p2831 A69-32351 #	16 p2863 A69-32396
16 p2790 A69-32217 #	16 p2827 A69-32262*	16 p2780 A69-32307	16 p2831 A69-32352 #	16 p2863 A69-32397
16 p2859 A69-32218 #	16 p2805 A69-32263	16 p2850 A69-32308*	16 p2831 A69-32353 #	16 p2863 A69-32398
16 p2859 A69-32219 #	16 p2806 A69-32264 #	16 p2862 A69-32309*	16 p2831 A69-32354 #	16 p2863 A69-32399
16 p2859 A69-32220 #	16 p2806 A69-32265 #	16 p2780 A69-32310	16 p2831 A69-32355 #	16 p2863 A69-32400*
16 p2859 A69-32221 #	16 p2806 A69-32266 #	16 p2780 A69-32311	16 p2831 A69-32356 #	16 p2863 A69-32401
16 p2859 A69-32222 #	16 p2807 A69-32267 #	16 p2747 A69-32312*	16 p2832 A69-32357 #	16 p2863 A69-32402
16 p2859 A69-32223 #	16 p2807 A69-32268 #	16 p2780 A69-32313	16 p2832 A69-32358*	16 p2863 A69-32403*
16 p2859 A69-32224 #	16 p2807 A69-32269 #	16 p2780 A69-32314*	16 p2832 A69-32359 #	16 p2863 A69-32404
16 p2790 A69-32225 #	16 p2807 A69-32270 #	16 p2850 A69-32315*	16 p2832 A69-32360 #	16 p2736 A69-32405
16 p2791 A69-32226 #	16 p2807 A69-32271 #	16 p2781 A69-32316	16 p2832 A69-32361 #	16 p2737 A69-32406*
16 p2791 A69-32227 #	16 p2807 A69-32272 #	16 p2781 A69-32317	16 p2813 A69-32362 #	16 p2737 A69-32407
16 p2859 A69-32228	16 p2807 A69-32273 #	16 p2781 A69-32318	16 p2761 A69-32363 #	16 p2738 A69-32408
16 p2859 A69-32229	16 p2779 A69-32274 #	16 p2781 A69-32319	16 p2752 A69-32364 #	16 p2738 A69-32409
16 p2860 A69-32230	16 p2779 A69-32275 #	16 p2781 A69-32320	16 p2823 A69-32365 #	16 p2738 A69-32410
16 p2860 A69-32231	16 p2779 A69-32276 #	16 p2850 A69-32321*	16 p2805 A69-32366	16 p2738 A69-32411
16 p2860 A69-32232	16 p2808 A69-32277 #	16 p2850 A69-32322	16 p2837 A69-32367	16 p2738 A69-32412
16 p2860 A69-32233	16 p2808 A69-32278 #	16 p2761 A69-32323*	16 p2808 A69-32368	16 p2738 A69-32413
16 p2860 A69-32234	16 p2791 A69-32279 #	16 p2791 A69-32324*	16 p2767 A69-32369	16 p2738 A69-32414
16 p2860 A69-32235	16 p2791 A69-32280 #	16 p2813 A69-32325*	16 p2815 A69-32370	16 p2739 A69-32415
16 p2860 A69-32236	16 p2791 A69-32281 #	16 p2791 A69-32326*	16 p2862 A69-32371 #	16 p2739 A69-32416
16 p2860 A69-32237	16 p2791 A69-32282	16 p2766 A69-32327	16 p2862 A69-32372 #	16 p2739 A69-32417
16 p2860 A69-32238*	16 p2791 A69-32283	16 p2766 A69-32328	16 p2862 A69-32373 #	16 p2739 A69-32418
16 p2861 A69-32239*	16 p2813 A69-32284	16 p2882 A69-32329	16 p2862 A69-32374 #	16 p2739 A69-32419
16 p2861 A69-32240*	16 p2813 A69-32285	16 p2766 A69-32330	16 p2862 A69-32375 #	16 p2739 A69-32420
16 p2861 A69-32241	16 p2813 A69-32286	16 p2882 A69-32331	16 p2862 A69-32376 #	16 p2740 A69-32421
16 p2804 A69-32242 #	16 p2875 A69-32287	16 p2805 A69-32332 #	16 p2797 A69-32377	16 p2740 A69-32422
16 p2823 A69-32243 #	16 p2875 A69-32288	16 p2733 A69-32333 #	16 p2880 A69-32378 #	16 p2740 A69-32423
16 p2874 A69-32244 #	16 p2875 A69-32289	16 p2876 A69-32334	16 p2773 A69-32379 #	16 p2740 A69-32424
16 p2874 A69-32245 #	16 p2803 A69-32290	16 p2882 A69-32335	16 p2802 A69-32380	16 p2740 A69-32425
16 p2875 A69-32246 #	16 p2875 A69-32291	16 p2882 A69-32336	16 p2851 A69-32381 #	16 p2740 A69-32426
16 p2812 A69-32247 #	16 p2875 A69-32292	16 p2882 A69-32337	16 p2797 A69-32382 #	16 p2740 A69-32427
16 p2804 A69-32248 #	16 p2875 A69-32293	16 p2802 A69-32338*	16 p2752 A69-32383	16 p2773 A69-32428 #
16 p2875 A69-32249 #	16 p2875 A69-32294	16 p2802 A69-32339	16 p2752 A69-32384	16 p2767 A69-32429 #
16 p2875 A69-32250 #	16 p2875 A69-32295	16 p2802 A69-32340	16 p2808 A69-32385	16 p2882 A69-32430*
16 p2804 A69-32251 #	16 p2876 A69-32296	16 p2802 A69-32341	16 p2764 A69-32386	16 p2741 A69-32431
16 p2804 A69-32252 #	16 p2794 A69-32297	16 p2830 A69-32342 #	16 p2781 A69-32387	16 p2794 A69-32432
16 p2804 A69-32253 #	16 p2876 A69-32298	16 p2830 A69-32343*	16 p2752 A69-32388	16 p2794 A69-32433
16 p2805 A69-32254 #	16 p2764 A69-32299	16 p2830 A69-32344 #	16 p2752 A69-32389	16 p2876 A69-32434
16 p2875 A69-32255 #	16 p2861 A69-32300*	16 p2830 A69-32345*	16 p2752 A69-32390	16 p2746 A69-32435
16 p2764 A69-32256 #	16 p2861 A69-32301	16 p2830 A69-32346 #	16 p2752 A69-32391	16 p2802 A69-32436
16 p2861 A69-32257	16 p2779 A69-32302	16 p2830 A69-32347 #	16 p2752 A69-32392	16 p2753 A69-32437 #
16 p2733 A69-32258 #	16 p2780 A69-32303	16 p2830 A69-32348 #	16 p2753 A69-32393	16 p2753 A69-32438 #
16 p2815 A69-32259*	16 p2850 A69-32304	16 p2831 A69-32349 #	16 p2753 A69-32394	16 p2753 A69-32439 #
16 p2809 A69-32260 #	16 p2780 A69-32305	16 p2831 A69-32350*	16 p2862 A69-32395	16 p2764 A69-32440 #

# ACCESSION NUMBER INDEX

16 p2765 A69-32441 *	16 p2753 A69-32486 #	16 p2783 A69-32531 #	16 p2784 A69-32576*#	16 p2852 A69-32621
16 p2761 A69-32442 #	16 p2782 A69-32487 #	16 p2783 A69-32532 #	16 p2784 A69-32577 #	16 p2785 A69-32622
16 p2765 A69-32443 #	16 p2808 A69-32488 #	16 p2783 A69-32533 #	16 p2762 A69-32578 #	16 p2785 A69-32623
16 p2745 A69-32444	16 p2782 A69-32489 #	16 p2792 A69-32534 #	16 p2763 A69-32579 #	16 p2785 A69-32624
16 p2781 A69-32445*	16 p2803 A69-32490	16 p2864 A69-32535 #	16 p2763 A69-32580	16 p2785 A69-32625
16 p2864 A69-32446*	16 p2803 A69-32491	16 p2851 A69-32536 #	16 p2763 A69-32581	16 p2785 A69-32626
16 p2745 A69-32447*	16 p2754 A69-32492	16 p2851 A69-32537 #	16 p2763 A69-32582	16 p2786 A69-32627
16 p2745 A69-32448	16 p2762 A69-32493	16 p2754 A69-32538 #	16 p2798 A69-32583	16 p2786 A69-32628
16 p2798 A69-32449 #	16 p2754 A69-32494	16 p2783 A69-32539 #	16 p2763 A69-32584	16 p2786 A69-32629
16 p2761 A69-32450 #	16 p2754 A69-32495	16 p2783 A69-32540 #	16 p2755 A69-32585	16 p2786 A69-32630
16 p2864 A69-32451 #	16 p2762 A69-32496	16 p2783 A69-32541 #	16 p2763 A69-32586	16 p2786 A69-32631
16 p2781 A69-32452 #	16 p2762 A69-32497	16 p2784 A69-32542 #	16 p2864 A69-32587	16 p2786 A69-32632
16 p2781 A69-32453 #	16 p2762 A69-32498	16 p2784 A69-32543 #	16 p2813 A69-32588	16 p2786 A69-32633
16 p2808 A69-32454 #	16 p2762 A69-32499	16 p2784 A69-32544 #	16 p2813 A69-32589	16 p2786 A69-32634
16 p2808 A69-32455 #	16 p2762 A69-32500	16 p2851 A69-32545 #	16 p2823 A69-32590	16 p2787 A69-32635
16 p2782 A69-32456 #	16 p2762 A69-32501	16 p2851 A69-32546 #	16 p2813 A69-32591	16 p2787 A69-32636
16 p2782 A69-32457 #	16 p2798 A69-32502	16 p2784 A69-32547 #	16 p2864 A69-32592	16 p2792 A69-32637
16 p2782 A69-32458 #	16 p2823 A69-32503	16 p2784 A69-32548 #	16 p2864 A69-32593	16 p2787 A69-32638
16 p2782 A69-32459 #	16 p2762 A69-32504	16 p2784 A69-32549 #	16 p2864 A69-32594	16 p2787 A69-32639
16 p2782 A69-32460 #	16 p2754 A69-32505	16 p2765 A69-32550	16 p2864 A69-32595	16 p2787 A69-32640
16 p2782 A69-32461 #	16 p2762 A69-32506	16 p2756 A69-32551	16 p2864 A69-32596	16 p2792 A69-32641
16 p2782 A69-32462 #	16 p2754 A69-32507	16 p2756 A69-32552	16 p2864 A69-32597	16 p2792 A69-32642
16 p2767 A69-32463 #	16 p2791 A69-32508	16 p2792 A69-32553	16 p2865 A69-32598	16 p2787 A69-32643
16 p2815 A69-32464	16 p2762 A69-32509	16 p2756 A69-32554	16 p2865 A69-32599	16 p2787 A69-32644
16 p2782 A69-32465	16 p2754 A69-32510	16 p2756 A69-32555	16 p2808 A69-32600 #	16 p2788 A69-32645*
16 p2823 A69-32466	16 p2762 A69-32511	16 p2827 A69-32556	16 p2809 A69-32601 #	16 p2788 A69-32646
16 p2823 A69-32467	16 p2754 A69-32512	16 p2762 A69-32557	16 p2809 A69-32602 #	16 p2788 A69-32647
16 p2823 A69-32468*	16 p2798 A69-32513	16 p2792 A69-32558*	16 p2798 A69-32603	16 p2788 A69-32648
16 p2823 A69-32469	16 p2792 A69-32514	16 p2762 A69-32559	16 p2824 A69-32604	16 p2838 A69-32649 #
16 p2805 A69-32470*	16 p2827 A69-32515	16 p2794 A69-32560	16 p2746 A69-32605	16 p2880 A69-32650 #
16 p2761 A69-32471	16 p2851 A69-32516 #	16 p2868 A69-32561	16 p2798 A69-32606	16 p2838 A69-32651 #
16 p2753 A69-32472	16 p2851 A69-32517 #	16 p2762 A69-32562	16 p2798 A69-32607	16 p2733 A69-32652*#
16 p2753 A69-32473	16 p2851 A69-32518 #	16 p2823 A69-32563	16 p2837 A69-32608	16 p2832 A69-32653 #
16 p2753 A69-32474	16 p2851 A69-32519 #	16 p2823 A69-32564	16 p2865 A69-32609	16 p2882 A69-32654*#
16 p2753 A69-32475	16 p2754 A69-32520 #	16 p2784 A69-32565	16 p2755 A69-32610	16 p2838 A69-32655 #
16 p2753 A69-32476	16 p2754 A69-32521 #	16 p2851 A69-32566	16 p2824 A69-32611	16 p2810 A69-32656 #
16 p2761 A69-32477	16 p2754 A69-32522 #	16 p2747 A69-32567 #	16 p2784 A69-32612	16 p2838 A69-32657*#
16 p2753 A69-32478	16 p2783 A69-32523 #	16 p2754 A69-32568	16 p2784 A69-32613	16 p2868 A69-32658*#
16 p2761 A69-32479	16 p2783 A69-32524 #	16 p2754 A69-32569	16 p2755 A69-32614	16 p2832 A69-32659 #
16 p2798 A69-32480	16 p2783 A69-32525 #	16 p2773 A69-32570	16 p2785 A69-32615	16 p2810 A69-32660*#
16 p2813 A69-32481	16 p2783 A69-32526 #	16 p2864 A69-32571	16 p2851 A69-32616	16 p2833 A69-32661 #
16 p2827 A69-32482	16 p2783 A69-32527 #	16 p2803 A69-32572	16 p2785 A69-32617	16 p2838 A69-32662 #
16 p2765 A69-32483	16 p2783 A69-32528 #	16 p2794 A69-32573	16 p2851 A69-32618	16 p2838 A69-32663 #
16 p2765 A69-32484	16 p2783 A69-32529 #	16 p2815 A69-32574	16 p2852 A69-32619	16 p2767 A69-32664 #
16 p2765 A69-32485	16 p2783 A69-32530 #	16 p2754 A69-32575	16 p2852 A69-32620	16 p2833 A69-32665 #



# ACCESSION NUMBER INDEX

16 p2839 A69-32666**	16 p2843 A69-32711**	16 p2735 A69-32756 *	16 p2865 A69-32801	17 p2934 A69-32846
16 p2839 A69-32667 *	16 p2810 A69-32712**	16 p2794 A69-32757**	16 p2865 A69-32802	17 p2917 A69-32847
16 p2839 A69-32668 *	16 p2868 A69-32713 *	16 p2835 A69-32758 *	16 p2865 A69-32803*	17 p2994 A69-32848*
16 p2839 A69-32669**	16 p2844 A69-32714**	16 p2845 A69-32759**	16 p2865 A69-32804	17 p2935 A69-32849
16 p2839 A69-32670 *	16 p2767 A69-32715 *	16 p2803 A69-32760**	16 p2852 A69-32805	17 p2979 A69-32850
16 p2839 A69-32671**	16 p2810 A69-32716**	16 p2811 A69-32761**	16 p2852 A69-32806*	17 p2944 A69-32851 *
16 p2839 A69-32672 *	16 p2767 A69-32717**	16 p2845 A69-32762**	16 p2865 A69-32807	17 p2970 A69-32852**
16 p2840 A69-32673 *	16 p2844 A69-32718**	16 p2795 A69-32763 *	16 p2865 A69-32808	17 p2970 A69-32853**
16 p2840 A69-32674**	16 p2844 A69-32719**	16 p2746 A69-32764 *	16 p2748 A69-32809	17 p2977 A69-32854**
16 p2840 A69-32675**	16 p2741 A69-32720**	16 p2870 A69-32765 *	16 p2746 A69-32810*	17 p2970 A69-32855**
16 p2840 A69-32676**	16 p2868 A69-32721**	16 p2734 A69-32766 *	16 p2865 A69-32811*	17 p2970 A69-32856
16 p2840 A69-32677 *	16 p2834 A69-32722 *	16 p2881 A69-32767**	16 p2866 A69-32812	17 p3026 A69-32857
16 p2840 A69-32678**	16 p2844 A69-32723**	16 p2846 A69-32768**	16 p2866 A69-32813	17 p3026 A69-32858
16 p2833 A69-32679 *	16 p2844 A69-32724 *	16 p2734 A69-32769**	16 p2866 A69-32814	17 p3026 A69-32859
16 p2833 A69-32680 *	16 p2834 A69-32725 *	16 p2865 A69-32770 *	16 p2866 A69-32815	17 p3026 A69-32860*
16 p2841 A69-32681 *	16 p2844 A69-32726**	16 p2795 A69-32771 *	16 p2866 A69-32816	17 p3026 A69-32861
16 p2841 A69-32682 *	16 p2767 A69-32727 *	16 p2835 A69-32772**	16 p2852 A69-32817	17 p2996 A69-32862
16 p2841 A69-32683 *	16 p2811 A69-32728**	16 p2846 A69-32773 *	16 p2866 A69-32818	17 p2958 A69-32863
16 p2733 A69-32684 *	16 p2869 A69-32729 *	16 p2870 A69-32774 *	16 p2852 A69-32819	17 p3022 A69-32864
16 p2841 A69-32685 *	16 p2733 A69-32730 *	16 p2870 A69-32775 *	16 p2866 A69-32820*	17 p3010 A69-32865
16 p2841 A69-32686**	16 p2733 A69-32731 *	16 p2846 A69-32776 *	17 p3015 A69-32821*	17 p3010 A69-32866
16 p2841 A69-32687**	16 p2845 A69-32732**	16 p2747 A69-32777 *	17 p3015 A69-32822*	17 p3026 A69-32867
16 p2833 A69-32688 *	16 p2869 A69-32733 *	16 p2846 A69-32778**	17 p2969 A69-32823	17 p3027 A69-32868 *
16 p2841 A69-32689 *	16 p2834 A69-32734 *	16 p2795 A69-32779 *	17 p3015 A69-32824*	17 p2959 A69-32869 *
16 p2841 A69-32690 *	16 p2845 A69-32735**	16 p2881 A69-32780**	17 p3009 A69-32825 *	17 p2959 A69-32870 *
16 p2833 A69-32691**	16 p2834 A69-32736 *	16 p2846 A69-32781 *	17 p2979 A69-32826 *	17 p3027 A69-32871 *
16 p2792 A69-32692 *	16 p2845 A69-32737**	16 p2788 A69-32782 *	17 p3009 A69-32827 *	17 p3027 A69-32872 *
16 p2842 A69-32693 *	16 p2845 A69-32738 *	16 p2876 A69-32783	17 p2979 A69-32828 *	17 p3027 A69-32873 *
16 p2842 A69-32694 *	16 p2811 A69-32739 *	16 p2876 A69-32784	17 p2889 A69-32829	17 p3027 A69-32874 *
16 p2842 A69-32695 *	16 p2880 A69-32740 *	16 p2876 A69-32785	17 p3016 A69-32830	17 p3028 A69-32875 *
16 p2842 A69-32696 *	16 p2880 A69-32741 *	16 p2876 A69-32786	17 p2993 A69-32831*	17 p3028 A69-32876 *
16 p2842 A69-32697 *	16 p2880 A69-32742 *	16 p2792 A69-32787	17 p3004 A69-32832*	17 p3028 A69-32877 *
16 p2842 A69-32698 *	16 p2880 A69-32743 *	16 p2746 A69-32788	17 p2984 A69-32833 *	17 p3028 A69-32878 *
16 p2843 A69-32699 *	16 p2845 A69-32744**	16 p2813 A69-32789	17 p2943 A69-32834*	17 p2959 A69-32879 *
16 p2843 A69-32700 *	16 p2834 A69-32745**	16 p2763 A69-32790	17 p2994 A69-32835	17 p3028 A69-32880 *
16 p2747 A69-32701 *	16 p2869 A69-32746 *	16 p2815 A69-32791**	17 p3025 A69-32836*	17 p2970 A69-32881 *
16 p2747 A69-32702**	16 p2741 A69-32747**	16 p2828 A69-32792**	17 p3026 A69-32837*	17 p2970 A69-32882 *
16 p2843 A69-32703 *	16 p2883 A69-32748 *	16 p2748 A69-32793 *	17 p3007 A69-32838*	17 p2970 A69-32883 *
16 p2834 A69-32704 *	16 p2869 A69-32749 *	16 p2815 A69-32794**	17 p2969 A69-32839	17 p2970 A69-32884 *
16 p2843 A69-32705**	16 p2869 A69-32750 *	16 p2748 A69-32795 *	17 p3075 A69-32840	17 p3007 A69-32885*
16 p2843 A69-32706**	16 p2733 A69-32751**	16 p2795 A69-32796 *	17 p3075 A69-32841	17 p2935 A69-32886
16 p2810 A69-32707 *	16 p2834 A69-32752 *	16 p2741 A69-32797 *	17 p2994 A69-32842	17 p2935 A69-32887
16 p2843 A69-32708**	16 p2869 A69-32753**	16 p2741 A69-32798 *	17 p2994 A69-32843*	17 p2935 A69-32888
16 p2741 A69-32709**	16 p2773 A69-32754**	16 p2741 A69-32799 *	17 p2994 A69-32844	17 p2935 A69-32889*
16 p2804 A69-32710 *	16 p2870 A69-32755**	16 p2755 A69-32800	17 p2948 A69-32845	17 p2936 A69-32890*

## ACCESSION NUMBER INDEX

17 p2971 A69-32891*	17 p2906 A69-32936 #	17 p3052 A69-32981 #	17 p2980 A69-33026	17 p3030 A69-33071
17 p2936 A69-32892	17 p2906 A69-32937 #	17 p3052 A69-32982 #	17 p2980 A69-33027	17 p2972 A69-33072
17 p2936 A69-32893*	17 p2907 A69-32938 #	17 p3052 A69-32983 #	17 p2918 A69-33028	17 p2986 A69-33073
17 p2936 A69-32894*	17 p2907 A69-32939 #	17 p3052 A69-32984 #	17 p2918 A69-33029	17 p2987 A69-33074
17 p2936 A69-32895	17 p2912 A69-32940 #	17 p2986 A69-32985 #	17 p2918 A69-33030	17 p2987 A69-33075
17 p2936 A69-32896	17 p2912 A69-32941 #	17 p3053 A69-32986 #	17 p2918 A69-33031	17 p2987 A69-33076
17 p2971 A69-32897	17 p2907 A69-32942 #	17 p3053 A69-32987 #	17 p2936 A69-33032	17 p2987 A69-33077*
17 p2971 A69-32898	17 p2912 A69-32943 #	17 p3053 A69-32988 #	17 p2978 A69-33033 #	17 p2987 A69-33078
17 p2944 A69-32899*	17 p2907 A69-32944 #	17 p3053 A69-32989 #	17 p2918 A69-33034 #	17 p2987 A69-33079
17 p3028 A69-32900	17 p3004 A69-32945*	17 p3068 A69-32990 #	17 p3022 A69-33035 #	17 p3005 A69-33080
17 p2971 A69-32901 #	17 p3045 A69-32946 #	17 p3068 A69-32991 #	17 p2996 A69-33036 #	17 p2972 A69-33081
17 p3068 A69-32902 #	17 p2945 A69-32947 #	17 p2889 A69-32992 #	17 p2971 A69-33037 #	17 p2972 A69-33082
17 p2984 A69-32903	17 p2991 A69-32948 #	17 p2949 A69-32993 #	17 p2972 A69-33038 #	17 p2919 A69-33083
17 p2985 A69-32904	17 p2978 A69-32949 #	17 p2889 A69-32994 #	17 p2903 A69-33039 #	17 p2972 A69-33084*
17 p2985 A69-32905	17 p2889 A69-32950 #	17 p2889 A69-32995 #	17 p3029 A69-33040 #	17 p2972 A69-33085*
17 p2985 A69-32906	17 p2948 A69-32951	17 p3068 A69-32996 #	17 p3076 A69-33041	17 p2919 A69-33086*
17 p2985 A69-32907	17 p2986 A69-32952	17 p3029 A69-32997 #	17 p3054 A69-33042	17 p2972 A69-33087
17 p2985 A69-32908	17 p3004 A69-32953 #	17 p2949 A69-32998 #	17 p2972 A69-33043	17 p2981 A69-33088
17 p2985 A69-32909	17 p3005 A69-32954	17 p2949 A69-32999 #	17 p3054 A69-33044	17 p2972 A69-33089
17 p2986 A69-32910	17 p3051 A69-32955 #	17 p3008 A69-33000*#	17 p3029 A69-33045*	17 p2981 A69-33090
17 p2986 A69-32911	17 p3051 A69-32956 #	17 p2996 A69-33001*#	17 p3029 A69-33046	17 p2981 A69-33091
17 p2986 A69-32912	17 p2980 A69-32957	17 p2918 A69-33002	17 p3029 A69-33047	17 p2973 A69-33092
17 p2971 A69-32913	17 p2980 A69-32958	17 p3008 A69-33003	17 p3029 A69-33048	17 p2973 A69-33093
17 p2979 A69-32914	17 p2980 A69-32959	17 p3008 A69-33004*	17 p3022 A69-33049	17 p3054 A69-33094 #
17 p3010 A69-32915	17 p2991 A69-32960	17 p2959 A69-33005 #	17 p3029 A69-33050	17 p3045 A69-33095
17 p2979 A69-32916	17 p3051 A69-32961 #	17 p2959 A69-33006 #	17 p3029 A69-33051	17 p3031 A69-33096
17 p2994 A69-32917*	17 p2949 A69-32962 #	17 p2908 A69-33007	17 p3029 A69-33052	17 p3031 A69-33097
17 p2917 A69-32918	17 p3075 A69-32963	17 p2913 A69-33008	17 p3023 A69-33053*	17 p3031 A69-33098
17 p2917 A69-32919	17 p3075 A69-32964	17 p2913 A69-33009*	17 p3023 A69-33054	17 p3031 A69-33099
17 p2971 A69-32920	17 p3075 A69-32965	17 p2903 A69-33010	17 p3023 A69-33055	17 p3031 A69-33100
17 p2980 A69-32921	17 p3068 A69-32966 #	17 p3029 A69-33011 #	17 p3030 A69-33056	17 p3031 A69-33101
17 p3028 A69-32922	17 p2907 A69-32967	17 p2980 A69-33012 #	17 p3030 A69-33057	17 p3031 A69-33102
17 p3051 A69-32923 #	17 p2907 A69-32968	17 p2949 A69-33013	17 p3023 A69-33058	17 p3032 A69-33103
17 p2959 A69-32924	17 p2912 A69-32969*	17 p3068 A69-33014	17 p3030 A69-33059*	17 p3032 A69-33104
17 p2959 A69-32925	17 p2912 A69-32970*	17 p2949 A69-33015*	17 p3030 A69-33060	17 p3032 A69-33105*
17 p2959 A69-32926	17 p3028 A69-32971	17 p3010 A69-33016 #	17 p3030 A69-33061	17 p2932 A69-33106*#
17 p2918 A69-32927	17 p2907 A69-32972	17 p3053 A69-33017 #	17 p2936 A69-33062*#	17 p2973 A69-33107*#
17 p2971 A69-32928	17 p2908 A69-32973	17 p3053 A69-33018 #	17 p3054 A69-33063	17 p2932 A69-33108*#
17 p2906 A69-32929 #	17 p3076 A69-32974	17 p3053 A69-33019 #	17 p3054 A69-33064	17 p3005 A69-33109 #
17 p2906 A69-32930 #	17 p3051 A69-32975	17 p3053 A69-33020 #	17 p2945 A69-33065	17 p2981 A69-33110 #
17 p2906 A69-32931 #	17 p3052 A69-32976 #	17 p3054 A69-33021 #	17 p2918 A69-33066	17 p2981 A69-33111 #
17 p2906 A69-32932 #	17 p3052 A69-32977 #	17 p2971 A69-33022 #	17 p3030 A69-33067*	17 p2981 A69-33112 #
17 p2912 A69-32933 #	17 p3052 A69-32978 #	17 p2949 A69-33023 #	17 p3023 A69-33068	17 p2973 A69-33113 #
17 p2906 A69-32934 #	17 p3052 A69-32979 #	17 p3015 A69-33024	17 p3030 A69-33069	17 p2973 A69-33114 #
17 p2906 A69-32935 #	17 p3052 A69-32980 #	17 p2980 A69-33025*	17 p3030 A69-33070	17 p2981 A69-33115 #



## ACCESSION NUMBER INDEX

17 p2981 A69-33116 #	17 p3032 A69-33161**	17 p2897 A69-33206	17 p2890 A69-33251	17 p3049 A69-33296 #
17 p2981 A69-33117 #	17 p2919 A69-33162 #	17 p2897 A69-33207 #	17 p2951 A69-33252*	17 p3073 A69-33297**
17 p3008 A69-33118*	17 p2997 A69-33163 #	17 p2897 A69-33208 #	17 p2951 A69-33253*	17 p3073 A69-33298 #
17 p2932 A69-33119 #	17 p2960 A69-33164 #	17 p2897 A69-33209 #	17 p2951 A69-33254	17 p3073 A69-33299**
17 p2933 A69-33120 #	17 p3032 A69-33165 #	17 p2897 A69-33210	17 p2951 A69-33255	17 p3073 A69-33300**
17 p3054 A69-33121	17 p2960 A69-33166 #	17 p2897 A69-33211 #	17 p2951 A69-33256*	17 p3005 A69-33301 #
17 p2889 A69-33122 #	17 p2960 A69-33167**	17 p2897 A69-33212 #	17 p2951 A69-33257*	17 p3033 A69-33302 #
17 p2890 A69-33123 #	17 p2913 A69-33168	17 p2898 A69-33213 #	17 p3070 A69-33258**	17 p2914 A69-33303**
17 p2949 A69-33124 #	17 p2913 A69-33169	17 p2898 A69-33214 #	17 p3070 A69-33259**	17 p3073 A69-33304**
17 p2890 A69-33125 #	17 p2908 A69-33170	17 p2898 A69-33215 #	17 p3070 A69-33260 #	17 p2914 A69-33305 #
17 p3068 A69-33126 #	17 p2908 A69-33171*	17 p3017 A69-33216 #	17 p3070 A69-33261**	17 p3005 A69-33306**
17 p3055 A69-33127 #	17 p2913 A69-33172	17 p3018 A69-33217 #	17 p3070 A69-33262 #	17 p2903 A69-33307 #
17 p3055 A69-33128 #	17 p2908 A69-33173*	17 p3018 A69-33218 #	17 p3071 A69-33263 #	17 p3033 A69-33308 #
17 p3055 A69-33129 #	17 p2913 A69-33174 #	17 p3045 A69-33219	17 p2973 A69-33264**	17 p3073 A69-33309**
17 p3055 A69-33130 #	17 p2913 A69-33175	17 p3001 A69-33220	17 p3071 A69-33265 #	17 p3010 A69-33310 #
17 p3055 A69-33131 #	17 p2908 A69-33176	17 p3001 A69-33221	17 p3071 A69-33266 #	17 p3073 A69-33311 #
17 p3017 A69-33132 #	17 p2913 A69-33177	17 p3001 A69-33222	17 p3049 A69-33267**	17 p2891 A69-33312
17 p3069 A69-33133 #	17 p2908 A69-33178*	17 p3046 A69-33223	17 p3071 A69-33268 #	17 p2952 A69-33313
17 p3069 A69-33134 #	17 p2909 A69-33179*	17 p3046 A69-33224	17 p3071 A69-33269**	17 p3005 A69-33314
17 p3069 A69-33135 #	17 p2909 A69-33180 #	17 p3047 A69-33225	17 p3071 A69-33270**	17 p2981 A69-33315
17 p3069 A69-33136 #	17 p2909 A69-33181 #	17 p3047 A69-33226	17 p3071 A69-33271**	17 p3058 A69-33316
17 p3069 A69-33137 #	17 p2914 A69-33182	17 p3047 A69-33227	17 p2890 A69-33272**	17 p3058 A69-33317
17 p3069 A69-33138 #	17 p2909 A69-33183	17 p3005 A69-33228	17 p2991 A69-33273**	17 p2891 A69-33318
17 p3069 A69-33139 #	17 p2909 A69-33184	17 p3047 A69-33229	17 p3072 A69-33274**	17 p2898 A69-33319
17 p3069 A69-33140 #	17 p2914 A69-33185	17 p3047 A69-33230	17 p3072 A69-33275**	17 p2919 A69-33320
17 p3069 A69-33141 #	17 p2909 A69-33186	17 p3047 A69-33231	17 p3032 A69-33276**	17 p3023 A69-33321
17 p3070 A69-33142 #	17 p2914 A69-33187	17 p3048 A69-33232	17 p3072 A69-33277 #	17 p2973 A69-33322 #
17 p2994 A69-33143 #	17 p2997 A69-33188 #	17 p3048 A69-33233	17 p2914 A69-33278 #	17 p3005 A69-33323
17 p3001 A69-33144 #	17 p3032 A69-33189 #	17 p3048 A69-33234	17 p3072 A69-33279 #	17 p2974 A69-33324**
17 p2919 A69-33145 #	17 p3056 A69-33190	17 p2945 A69-33235	17 p2973 A69-33280 #	17 p2952 A69-33325
17 p2919 A69-33146 #	17 p3056 A69-33191 #	17 p3018 A69-33236	17 p2891 A69-33281**	17 p3018 A69-33326 #
17 p2937 A69-33147 #	17 p3056 A69-33192 #	17 p3048 A69-33237	17 p3072 A69-33282 #	17 p3018 A69-33327 #
17 p2959 A69-33148 #	17 p3057 A69-33193 #	17 p3048 A69-33238	17 p3072 A69-33283 #	17 p3018 A69-33328
17 p2960 A69-33149 #	17 p3057 A69-33194 #	17 p3048 A69-33239	17 p2961 A69-33284 #	17 p3018 A69-33329 #
17 p2960 A69-33150 #	17 p3057 A69-33195 #	17 p3048 A69-33240	17 p3033 A69-33285**	17 p2978 A69-33330 #
17 p2950 A69-33151 #	17 p3057 A69-33196 #	17 p3049 A69-33241	17 p2973 A69-33286 #	17 p3018 A69-33331 #
17 p2996 A69-33152 #	17 p3057 A69-33197 #	17 p2898 A69-33242	17 p3033 A69-33287**	17 p3019 A69-33332 #
17 p2997 A69-33153 #	17 p3057 A69-33198 #	17 p3049 A69-33243	17 p2992 A69-33288**	17 p3019 A69-33333
17 p2997 A69-33154 #	17 p3057 A69-33199 #	17 p3049 A69-33244	17 p2992 A69-33289 #	17 p2978 A69-33334 #
17 p2960 A69-33155**	17 p2950 A69-33200 #	17 p2890 A69-33245 #	17 p2891 A69-33290**	17 p3019 A69-33335 #
17 p2960 A69-33156**	17 p3058 A69-33201 #	17 p2890 A69-33246 #	17 p3033 A69-33291**	17 p3019 A69-33336
17 p2960 A69-33157 #	17 p3058 A69-33202 #	17 p2950 A69-33247*	17 p2961 A69-33292 #	17 p3019 A69-33337 #
17 p3023 A69-33158 #	17 p3058 A69-33203 #	17 p2950 A69-33248	17 p2914 A69-33293**	17 p3019 A69-33338 #
17 p3032 A69-33159**	17 p3058 A69-33204 #	17 p2950 A69-33249*	17 p3072 A69-33294 #	17 p3017 A69-33339 #
17 p2981 A69-33160 #	17 p2994 A69-33205	17 p2890 A69-33250	17 p3049 A69-33295 #	17 p3019 A69-33340

ACCESSION NUMBER INDEX

17 p3019 A69-33341	17 p2909 A69-33386 #	17 p2978 A69-33431 #	17 p2955 A69-33476**	17 p2946 A69-33521 #
17 p3004 A69-33342 #	17 p3008 A69-33387	17 p2992 A69-33432	17 p3074 A69-33477 #	17 p2900 A69-33522
17 p3019 A69-33343 #	17 p3008 A69-33388	17 p2988 A69-33433	17 p2892 A69-33478**	17 p2900 A69-33523
17 p3020 A69-33344 #	17 p2937 A69-33389	17 p2952 A69-33434 #	17 p3011 A69-33479**	17 p2900 A69-33524 #
17 p3020 A69-33345 #	17 p2982 A69-33390	17 p2952 A69-33435 #	17 p2955 A69-33480 #	17 p2915 A69-33525 #
17 p3020 A69-33346 #	17 p2994 A69-33391 #	17 p2952 A69-33436**	17 p2955 A69-33481 #	17 p2900 A69-33526 #
17 p3020 A69-33347 #	17 p2997 A69-33392 #	17 p2953 A69-33437**	17 p2944 A69-33482	17 p2974 A69-33527 #
17 p3020 A69-33348 #	17 p3073 A69-33393	17 p3010 A69-33438**	17 p3004 A69-33483**	17 p2901 A69-33528 #
17 p3017 A69-33349 #	17 p2919 A69-33394	17 p2953 A69-33439 #	17 p2892 A69-33484 #	17 p3021 A69-33529 #
17 p3020 A69-33350 #	17 p2988 A69-33395	17 p2953 A69-33440 #	17 p2956 A69-33485 #	17 p3022 A69-33530 #
17 p2974 A69-33351 #	17 p3034 A69-33396	17 p2953 A69-33441**	17 p2893 A69-33486**	17 p2946 A69-33531 #
17 p3020 A69-33352 #	17 p3050 A69-33397 #	17 p3010 A69-33442**	17 p2893 A69-33487 #	17 p2901 A69-33532 #
17 p3017 A69-33353 #	17 p2920 A69-33398	17 p2974 A69-33443 #	17 p2893 A69-33488 #	17 p2894 A69-33533 #
17 p3020 A69-33354	17 p2982 A69-33399	17 p3021 A69-33444 #	17 p2956 A69-33489 #	17 p2894 A69-33534 #
17 p3021 A69-33355 #	17 p2974 A69-33400	17 p2891 A69-33445 #	17 p2893 A69-33490 #	17 p2920 A69-33535 #
17 p2898 A69-33356 #	17 p2974 A69-33401	17 p3011 A69-33446 #	17 p2893 A69-33491 #	17 p2895 A69-33536 #
17 p3021 A69-33357 #	17 p2961 A69-33402 #	17 p2945 A69-33447 #	17 p2956 A69-33492 #	17 p2895 A69-33537
17 p3021 A69-33358 #	17 p2952 A69-33403**	17 p2953 A69-33448 #	17 p3012 A69-33493**	17 p2895 A69-33538
17 p3021 A69-33359 #	17 p2995 A69-33404 #	17 p2945 A69-33449 #	17 p3012 A69-33494 #	17 p2895 A69-33539 #
17 p3021 A69-33360 #	17 p3006 A69-33405**	17 p2953 A69-33450 #	17 p2956 A69-33495 #	17 p2933 A69-33540 #
17 p3021 A69-33361 #	17 p2982 A69-33406**	17 p3011 A69-33451 #	17 p2893 A69-33496 #	17 p3001 A69-33541 #
17 p2898 A69-33362	17 p3034 A69-33407 #	17 p2961 A69-33452**	17 p3012 A69-33497 #	17 p2903 A69-33542 #
17 p2899 A69-33363	17 p3058 A69-33408	17 p2953 A69-33453**	17 p2893 A69-33498 #	17 p3001 A69-33543 #
17 p2914 A69-33364	17 p3006 A69-33409**	17 p2954 A69-33454 #	17 p2997 A69-33499 #	17 p3002 A69-33544 #
17 p2915 A69-33365	17 p3074 A69-33410 #	17 p2954 A69-33455 #	17 p2894 A69-33500 #	17 p2901 A69-33545 #
17 p2919 A69-33366	17 p3034 A69-33411 #	17 p2954 A69-33456 #	17 p2894 A69-33501 #	17 p2901 A69-33546 #
17 p2899 A69-33367	17 p3034 A69-33412 #	17 p2954 A69-33457**	17 p2894 A69-33502**	17 p2901 A69-33547 #
17 p2915 A69-33368	17 p3034 A69-33413 #	17 p2954 A69-33458 #	17 p3059 A69-33503	17 p2901 A69-33548 #
17 p3033 A69-33369*	17 p3034 A69-33414 #	17 p2891 A69-33459**	17 p3059 A69-33504 #	17 p2895 A69-33549 #
17 p3023 A69-33370*	17 p3058 A69-33415	17 p2954 A69-33460 #	17 p3059 A69-33505 #	17 p2988 A69-33550
17 p2919 A69-33371*	17 p2961 A69-33416 #	17 p2920 A69-33461 #	17 p3059 A69-33506	17 p2988 A69-33551
17 p2987 A69-33372 #	17 p2961 A69-33417 #	17 p2955 A69-33462**	17 p2899 A69-33507 #	17 p2988 A69-33552
17 p2992 A69-33373 #	17 p2920 A69-33418	17 p2891 A69-33463**	17 p2899 A69-33508**	17 p2988 A69-33553
17 p2978 A69-33374**	17 p2945 A69-33419	17 p2892 A69-33464**	17 p2899 A69-33509 #	17 p2989 A69-33554
17 p2987 A69-33375 #	17 p2920 A69-33420	17 p2892 A69-33465 #	17 p2899 A69-33510 #	17 p2989 A69-33555
17 p2978 A69-33376 #	17 p2982 A69-33421	17 p3011 A69-33466 #	17 p3059 A69-33511 #	17 p2989 A69-33556
17 p2978 A69-33377 #	17 p2920 A69-33422	17 p2955 A69-33467 #	17 p2900 A69-33512 #	17 p2989 A69-33557
17 p3024 A69-33378	17 p2945 A69-33423 #	17 p2892 A69-33468 #	17 p3059 A69-33513 #	17 p2989 A69-33558
17 p3033 A69-33379	17 p3001 A69-33424 #	17 p2892 A69-33469 #	17 p2900 A69-33514 #	17 p3060 A69-33559
17 p2899 A69-33380	17 p2974 A69-33425 #	17 p2955 A69-33470 #	17 p2945 A69-33515 #	17 p3060 A69-33560
17 p2899 A69-33381	17 p3050 A69-33426 #	17 p2945 A69-33471**	17 p3059 A69-33516 #	17 p3060 A69-33561
17 p2961 A69-33382	17 p2903 A69-33427 #	17 p3011 A69-33472 #	17 p3060 A69-33517 #	17 p3060 A69-33562
17 p2952 A69-33383 #	17 p3050 A69-33428 #	17 p3011 A69-33473 #	17 p3060 A69-33518 #	17 p3060 A69-33563*
17 p2909 A69-33384 #	17 p2974 A69-33429 #	17 p2955 A69-33474**	17 p2946 A69-33519 #	17 p2989 A69-33564
17 p2915 A69-33385 #	17 p3058 A69-33430 #	17 p3011 A69-33475 #	17 p2900 A69-33520 #	17 p2989 A69-33565



# ACCESSION NUMBER INDEX

17 p2989 A69-33566*	17 p3035 A69-33611	17 p2979 A69-33656	17 p3050 A69-33701	17 p2910 A69-33746*
17 p2990 A69-33567	17 p2961 A69-33612	17 p2917 A69-33657	17 p2975 A69-33702	17 p2975 A69-33747*
17 p3060 A69-33568*	17 p2975 A69-33613	17 p2946 A69-33658*	17 p2979 A69-33703	17 p2910 A69-33748*
17 p3061 A69-33569	17 p2975 A69-33614 #	17 p2946 A69-33659	17 p3074 A69-33704 #	17 p2910 A69-33749*
17 p2990 A69-33570 #	17 p2975 A69-33615 #	17 p2992 A69-33660	17 p3061 A69-33705	17 p2910 A69-33750*
17 p2982 A69-33571 #	17 p2995 A69-33616 #	17 p2910 A69-33661	17 p3061 A69-33706*	17 p2910 A69-33751
17 p2937 A69-33572 #	17 p2995 A69-33617 #	17 p3074 A69-33662	17 p3061 A69-33707	17 p2910 A69-33752*
17 p2903 A69-33573 #	17 p2995 A69-33618	17 p2904 A69-33663	17 p3062 A69-33708	17 p3008 A69-33753*
17 p2990 A69-33574	17 p2996 A69-33619 #	17 p3037 A69-33664*	17 p2933 A69-33709*	17 p3016 A69-33754*
17 p2956 A69-33575	17 p3035 A69-33620 #	17 p2975 A69-33665 #	17 p2996 A69-33710*	17 p2910 A69-33755*
17 p2895 A69-33576	17 p2933 A69-33621*	17 p3061 A69-33666	17 p3062 A69-33711	17 p2910 A69-33756*
17 p2909 A69-33577 #	17 p2920 A69-33622	17 p3061 A69-33667	17 p2962 A69-33712 #	17 p2999 A69-33757
17 p3006 A69-33578 #	17 p2921 A69-33623	17 p3017 A69-33668 #	17 p3062 A69-33713 #	17 p3000 A69-33758 #
17 p3034 A69-33579 #	17 p2944 A69-33624*	17 p2975 A69-33669	17 p2957 A69-33714 #	17 p3000 A69-33759 #
17 p3024 A69-33580 #	17 p2921 A69-33625	17 p2975 A69-33670	17 p3062 A69-33715 #	17 p3000 A69-33760 #
17 p3024 A69-33581 #	17 p2944 A69-33626*	17 p2921 A69-33671	17 p3062 A69-33716 #	17 p3000 A69-33761 #
17 p2937 A69-33582 #	17 p3035 A69-33627 #	17 p2921 A69-33672	17 p2896 A69-33717 #	17 p2993 A69-33762**
17 p2937 A69-33583 #	17 p2937 A69-33628	17 p2921 A69-33673	17 p3062 A69-33718 #	17 p3024 A69-33763
17 p3034 A69-33584*	17 p2921 A69-33629	17 p3006 A69-33674*	17 p2957 A69-33719 #	17 p2957 A69-33764 #
17 p3034 A69-33585	17 p3015 A69-33630 #	17 p2937 A69-33675	17 p3038 A69-33720	17 p3008 A69-33765*
17 p3034 A69-33586	17 p3015 A69-33631 #	17 p2990 A69-33676 #	17 p3038 A69-33721	17 p3039 A69-33766
17 p2895 A69-33587 #	17 p2982 A69-33632 #	17 p3061 A69-33677 #	17 p3038 A69-33722	17 p2946 A69-33767
17 p2956 A69-33588 #	17 p2982 A69-33633 #	17 p2962 A69-33678	17 p3038 A69-33723	17 p2946 A69-33768
17 p3061 A69-33589 #	17 p3035 A69-33634	17 p3006 A69-33679	17 p3038 A69-33724	17 p3000 A69-33769
17 p2901 A69-33590 #	17 p3036 A69-33635	17 p3074 A69-33680	17 p3038 A69-33725	17 p2915 A69-33770
17 p2895 A69-33591 #	17 p3036 A69-33636	17 p3074 A69-33681	17 p3038 A69-33726	17 p2915 A69-33771
17 p2920 A69-33592 #	17 p3036 A69-33637	17 p2915 A69-33682	17 p3038 A69-33727	17 p2915 A69-33772
17 p2975 A69-33593 #	17 p3036 A69-33638	17 p3006 A69-33683	17 p3039 A69-33728	17 p2916 A69-33773
17 p2975 A69-33594 #	17 p3036 A69-33639	17 p3017 A69-33684	17 p3039 A69-33729	17 p2916 A69-33774
17 p3061 A69-33595 #	17 p3037 A69-33640	17 p2921 A69-33685*	17 p3039 A69-33730	17 p2911 A69-33775
17 p2975 A69-33596 #	17 p3037 A69-33641	17 p2982 A69-33686	17 p3039 A69-33731	17 p2911 A69-33776
17 p2895 A69-33597 #	17 p3037 A69-33642	17 p2982 A69-33687	17 p2998 A69-33732	17 p3000 A69-33777
17 p2956 A69-33598 #	17 p3037 A69-33643	17 p2979 A69-33688 #	17 p2998 A69-33733	17 p3000 A69-33778
17 p2957 A69-33599 #	17 p3037 A69-33644	17 p2962 A69-33689 #	17 p2998 A69-33734	17 p2962 A69-33779
17 p2896 A69-33600 #	17 p3037 A69-33645	17 p2997 A69-33690 #	17 p2999 A69-33735	17 p3074 A69-33780**
17 p2957 A69-33601 #	17 p3037 A69-33646	17 p2997 A69-33691 #	17 p2999 A69-33736	17 p2937 A69-33781**
17 p2957 A69-33602 #	17 p2992 A69-33647 #	17 p3038 A69-33692*	17 p2999 A69-33737	17 p3016 A69-33782**
17 p3022 A69-33603 #	17 p2901 A69-33648 #	17 p2922 A69-33693 #	17 p2999 A69-33738	17 p3016 A69-33783**
17 p3022 A69-33604 #	17 p2979 A69-33649 #	17 p2983 A69-33694 #	17 p2999 A69-33739*	17 p2937 A69-33784
17 p3022 A69-33605 #	17 p2990 A69-33650	17 p2983 A69-33695 #	17 p2999 A69-33740*	17 p2938 A69-33785**
17 p2896 A69-33606 #	17 p2917 A69-33651*	17 p2922 A69-33696 #	17 p3006 A69-33741	17 p3016 A69-33786**
17 p3024 A69-33607	17 p3037 A69-33652	17 p3050 A69-33697	17 p2944 A69-33742*	17 p3016 A69-33787**
17 p3034 A69-33608	17 p3037 A69-33653*	17 p3050 A69-33698	17 p2944 A69-33743*	17 p3016 A69-33788**
17 p3035 A69-33609	17 p2962 A69-33654*	17 p3050 A69-33699	17 p2992 A69-33744 #	17 p2946 A69-33789 #
17 p3035 A69-33610	17 p2992 A69-33655	17 p3050 A69-33700	17 p2933 A69-33745**	17 p3016 A69-33790**

# ACCESSION NUMBER INDEX

17 p3016 A69-33791**	17 p2924 A69-33836 #	17 p2929 A69-33881 #	17 p2947 A69-33926 #	17 p2983 A69-33971 #
17 p3007 A69-33792**	17 p2924 A69-33837 #	17 p2929 A69-33882**	17 p3065 A69-33927 #	17 p2983 A69-33972 #
17 p2996 A69-33793 #	17 p2924 A69-33838 #	17 p2983 A69-33883 #	17 p2947 A69-33928 #	17 p2983 A69-33973 #
17 p3000 A69-33794	17 p2924 A69-33839 #	17 p2930 A69-33884 #	17 p3065 A69-33929 #	17 p2984 A69-33974 #
17 p3022 A69-33795	17 p2925 A69-33840 #	17 p2930 A69-33885 #	17 p2904 A69-33930 #	17 p3007 A69-33975 #
17 p3039 A69-33796	17 p2925 A69-33841 #	17 p2930 A69-33886 #	17 p2976 A69-33931 #	17 p3075 A69-33976 #
17 p3050 A69-33797	17 p2925 A69-33842 #	17 p2930 A69-33887 #	17 p2990 A69-33932 #	17 p2965 A69-33977
17 p3039 A69-33798 #	17 p2925 A69-33843 #	17 p2930 A69-33888 #	17 p2990 A69-33933 #	17 p2966 A69-33978 #
17 p3039 A69-33799	17 p2925 A69-33844 #	17 p2930 A69-33889 #	17 p2991 A69-33934 #	17 p2966 A69-33979 #
17 p3040 A69-33800 #	17 p2925 A69-33845 #	17 p2930 A69-33890 #	17 p3065 A69-33935 #	17 p2966 A69-33980 #
17 p3040 A69-33801 #	17 p2925 A69-33846 #	17 p2976 A69-33891 #	17 p3065 A69-33936 #	17 p2966 A69-33981 #
17 p3024 A69-33802 #	17 p2926 A69-33847 #	17 p2930 A69-33892 #	17 p2993 A69-33937 #	17 p2966 A69-33982 #
17 p3024 A69-33803 #	17 p2926 A69-33848 #	17 p2938 A69-33893	17 p3065 A69-33938 #	17 p2966 A69-33983 #
17 p3024 A69-33804 #	17 p2926 A69-33849 #	17 p3041 A69-33894 #	17 p2991 A69-33939 #	17 p2967 A69-33984 #
17 p3024 A69-33805 #	17 p2926 A69-33850**	17 p2930 A69-33895 #	17 p2991 A69-33940 #	17 p2967 A69-33985 #
17 p3024 A69-33806 #	17 p2926 A69-33851 #	17 p2962 A69-33896 #	17 p2993 A69-33941 #	17 p2967 A69-33986 #
17 p3025 A69-33807 #	17 p2926 A69-33852 #	17 p3041 A69-33897 #	17 p2993 A69-33942 #	17 p2967 A69-33987 #
17 p3040 A69-33808 #	17 p2926 A69-33853 #	17 p2976 A69-33898 #	17 p3066 A69-33943 #	17 p2967 A69-33988 #
17 p3040 A69-33809 #	17 p2926 A69-33854**	17 p2938 A69-33899 #	17 p3066 A69-33944 #	17 p2967 A69-33989 #
17 p3040 A69-33810 #	17 p2927 A69-33855 #	17 p2939 A69-33900 #	17 p3066 A69-33945 #	17 p2967 A69-33990 #
17 p3040 A69-33811 #	17 p2927 A69-33856 #	17 p2939 A69-33901 #	17 p3066 A69-33946 #	17 p2968 A69-33991 #
17 p3041 A69-33812 #	17 p2976 A69-33857 #	17 p2939 A69-33902 #	17 p2991 A69-33947 #	17 p2968 A69-33992 #
17 p3041 A69-33813 #	17 p2927 A69-33858 #	17 p2939 A69-33903 #	17 p3066 A69-33948 #	17 p2968 A69-33993 #
17 p3041 A69-33814 #	17 p2927 A69-33859 #	17 p2939 A69-33904 #	17 p2962 A69-33949	17 p2968 A69-33994 #
17 p3041 A69-33815 #	17 p2927 A69-33860 #	17 p2939 A69-33905 #	17 p2963 A69-33950 #	17 p2968 A69-33995 #
17 p3041 A69-33816 #	17 p2927 A69-33861 #	17 p2939 A69-33906 #	17 p2963 A69-33951 #	17 p2968 A69-33996 #
17 p3012 A69-33817	17 p2927 A69-33862 #	17 p2931 A69-33907 #	17 p2963 A69-33952 #	17 p2968 A69-33997 #
17 p3012 A69-33818 #	17 p2927 A69-33863 #	17 p2931 A69-33908 #	17 p2963 A69-33953 #	17 p2969 A69-33998 #
17 p3013 A69-33819 #	17 p2927 A69-33864 #	17 p2939 A69-33909 #	17 p2963 A69-33954 #	17 p2969 A69-33999 #
17 p3013 A69-33820 #	17 p2928 A69-33865 #	17 p2931 A69-33910 #	17 p2963 A69-33955 #	17 p2969 A69-34000 #
17 p3013 A69-33821 #	17 p2928 A69-33866 #	17 p2931 A69-33911 #	17 p2963 A69-33956 #	17 p2969 A69-34001 #
17 p3013 A69-33822 #	17 p2928 A69-33867 #	17 p3062 A69-33912	17 p2964 A69-33957 #	17 p2969 A69-34002 #
17 p3013 A69-33823 #	17 p2928 A69-33868 #	17 p3007 A69-33913 #	17 p2964 A69-33958 #	17 p2911 A69-34003
17 p3013 A69-33824 #	17 p2928 A69-33869 #	17 p3007 A69-33914 #	17 p2964 A69-33959 #	17 p2916 A69-34004
17 p3013 A69-33825 #	17 p2928 A69-33870 #	17 p3064 A69-33915 #	17 p2964 A69-33960 #	17 p2916 A69-34005 #
17 p3014 A69-33826	17 p2928 A69-33871 #	17 p3064 A69-33916 #	17 p2964 A69-33961 #	17 p2916 A69-34006 #
17 p3014 A69-33827 #	17 p2928 A69-33872 #	17 p3064 A69-33917 #	17 p2964 A69-33962 #	17 p2947 A69-34007
17 p3014 A69-33828 #	17 p2929 A69-33873 #	17 p3064 A69-33918 #	17 p2964 A69-33963 #	17 p2911 A69-34008
17 p3014 A69-33829 #	17 p2929 A69-33874 #	17 p3064 A69-33919 #	17 p2964 A69-33964 #	17 p2911 A69-34009
17 p3014 A69-33830 #	17 p2929 A69-33875 #	17 p3064 A69-33920 #	17 p2965 A69-33965 #	17 p2916 A69-34010
17 p3015 A69-33831 #	17 p2938 A69-33876 #	17 p3064 A69-33921 #	17 p2965 A69-33966 #	17 p2916 A69-34011
17 p2922 A69-33832	17 p2929 A69-33877 #	17 p3065 A69-33922 #	17 p2983 A69-33967 #	17 p2916 A69-34012 #
17 p2924 A69-33833 #	17 p2929 A69-33878 #	17 p3065 A69-33923 #	17 p2983 A69-33968 #	17 p2911 A69-34013
17 p2924 A69-33834 #	17 p2996 A69-33879 #	17 p3065 A69-33924 #	17 p2983 A69-33969 #	17 p2902 A69-34014 #
17 p2924 A69-33835 #	17 p2929 A69-33880 #	17 p2946 A69-33925 #	17 p2983 A69-33970 #	17 p2957 A69-34015 #



# ACCESSION NUMBER INDEX

17 p2957 A69-34016 #	17 p2933 A69-34061	17 p3003 A69-34106	17 p2958 A69-34151	17 p3003 A69-34196 #
17 p2902 A69-34017**	17 p2976 A69-34062	17 p3003 A69-34107	17 p2958 A69-34152	17 p3067 A69-34197 #
17 p3022 A69-34018**	17 p2976 A69-34063	17 p2905 A69-34108*	17 p3007 A69-34153	17 p3077 A69-34198 #
17 p3022 A69-34019 #	17 p2977 A69-34064	17 p2905 A69-34109	17 p3009 A69-34154	17 p3045 A69-34199 #
17 p2896 A69-34020 #	17 p3077 A69-34065	17 p2977 A69-34110	17 p3009 A69-34155**	17 p3075 A69-34200 #
17 p3022 A69-34021 #	17 p2902 A69-34066	17 p3050 A69-34111	17 p3009 A69-34156 #	17 p3004 A69-34201
17 p2947 A69-34022**	17 p2904 A69-34067	17 p2905 A69-34112	17 p2943 A69-34157**	17 p3077 A69-34202
17 p2947 A69-34023 #	17 p2904 A69-34068	17 p2905 A69-34113	17 p3007 A69-34158**	17 p2948 A69-34203
17 p2947 A69-34024 #	17 p2904 A69-34069	17 p2942 A69-34114	17 p2977 A69-34159	17 p3004 A69-34204
17 p2896 A69-34025 #	17 p2904 A69-34070	17 p2931 A69-34115	17 p2977 A69-34160	17 p3077 A69-34205
17 p2902 A69-34026 #	17 p2931 A69-34071	17 p2977 A69-34116	17 p2984 A69-34161 #	17 p2948 A69-34206
17 p2902 A69-34027 #	17 p2977 A69-34072	17 p2931 A69-34117	17 p2932 A69-34162 #	17 p3004 A69-34207
17 p2902 A69-34028 #	17 p2934 A69-34073	17 p2932 A69-34118*	17 p2984 A69-34163 #	17 p2948 A69-34208
17 p2902 A69-34029 #	17 p2934 A69-34074	17 p2932 A69-34119	17 p3043 A69-34164	17 p2948 A69-34209
17 p3066 A69-34030 #	17 p2934 A69-34075	17 p2942 A69-34120*	17 p3043 A69-34165	17 p2948 A69-34210
17 p2902 A69-34031 #	17 p2934 A69-34076	17 p2942 A69-34121	17 p3043 A69-34166	17 p3067 A69-34211
17 p2902 A69-34032 #	17 p3002 A69-34077	17 p2943 A69-34122	17 p3044 A69-34167	17 p2948 A69-34212
17 p2917 A69-34033 #	17 p3002 A69-34078	17 p2934 A69-34123	17 p3025 A69-34168*	17 p2958 A69-34213
17 p2896 A69-34034 #	17 p3002 A69-34079	17 p2934 A69-34124	17 p2993 A69-34169*	17 p2903 A69-34214 #
17 p2896 A69-34035 #	17 p3002 A69-34080	17 p2943 A69-34125	17 p3009 A69-34170*	17 p2948 A69-34215 #
17 p2896 A69-34036 #	17 p2977 A69-34081	17 p3077 A69-34126	17 p2911 A69-34171*	17 p2903 A69-34216 #
17 p2896 A69-34037 #	17 p2941 A69-34082	17 p3077 A69-34127	17 p2917 A69-34172*	17 p3051 A69-34217
17 p3066 A69-34038 #	17 p2942 A69-34083	17 p2902 A69-34128	17 p3044 A69-34173 #	17 p2932 A69-34218
17 p3076 A69-34039	17 p2942 A69-34084	17 p3077 A69-34129	17 p3044 A69-34174 #	17 p3025 A69-34219*
17 p3076 A69-34040	17 p2942 A69-34085	17 p3077 A69-34130	17 p3044 A69-34175 #	17 p2932 A69-34220
17 p3076 A69-34041	17 p2942 A69-34086	17 p2943 A69-34131	17 p2912 A69-34176*	17 p3045 A69-34221 #
17 p3076 A69-34042	17 p2904 A69-34087	17 p2943 A69-34132	17 p3044 A69-34177 #	17 p3045 A69-34222 #
17 p3041 A69-34043	17 p2904 A69-34088*	17 p2947 A69-34133	17 p3044 A69-34178 #	17 p3045 A69-34223 #
17 p3043 A69-34044*	17 p2905 A69-34089	17 p2943 A69-34134	17 p3044 A69-34179 #	17 p3025 A69-34224 #
17 p3076 A69-34045*	17 p2905 A69-34090*	17 p2947 A69-34135	17 p3044 A69-34180 #	17 p3025 A69-34225 #
17 p2984 A69-34046	17 p2905 A69-34091	17 p2947 A69-34136	17 p3044 A69-34181 #	17 p3025 A69-34226 #
17 p2958 A69-34047	17 p2911 A69-34092	17 p2979 A69-34137	17 p3044 A69-34182 #	17 p3025 A69-34227 #
17 p3066 A69-34048	17 p2942 A69-34093	17 p3067 A69-34138	17 p3044 A69-34183 #	17 p2958 A69-34228
17 p2976 A69-34049	17 p2911 A69-34094 #	17 p3067 A69-34139	17 p2917 A69-34184*	17 p2958 A69-34229
17 p3066 A69-34050	17 p2911 A69-34095	17 p3043 A69-34140	17 p3045 A69-34185*	17 p3068 A69-34230
17 p2958 A69-34051	17 p3002 A69-34096	17 p3043 A69-34141	17 p2991 A69-34186*	18 p3125 A69-34231
17 p3066 A69-34052	17 p3002 A69-34097	17 p3075 A69-34142	17 p3009 A69-34187**	18 p3100 A69-34232
17 p3067 A69-34053	17 p3002 A69-34098	17 p3067 A69-34143 #	17 p3009 A69-34188**	18 p3100 A69-34233
17 p2958 A69-34054	17 p3003 A69-34099	17 p3067 A69-34144 #	17 p3009 A69-34189*	18 p3112 A69-34234
17 p3025 A69-34055	17 p3003 A69-34100	17 p2958 A69-34145 #	17 p3009 A69-34190*	18 p3112 A69-34235
17 p2939 A69-34056	17 p3003 A69-34101	17 p3067 A69-34146 #	17 p2993 A69-34191*	18 p3189 A69-34236
17 p2976 A69-34057	17 p2931 A69-34102	17 p3067 A69-34147 #	17 p2902 A69-34192 #	18 p3113 A69-34237
17 p2976 A69-34058	17 p2917 A69-34103	17 p3067 A69-34148 #	17 p2896 A69-34193 #	18 p3113 A69-34238*
17 p2933 A69-34059	17 p3003 A69-34104	17 p3067 A69-34149 #	17 p2906 A69-34194 #	18 p3113 A69-34239
17 p2933 A69-34060	17 p3003 A69-34105	17 p2984 A69-34150 #	17 p2903 A69-34195 #	18 p3113 A69-34240

# ACCESSION NUMBER INDEX

18 p3113 A69-34241	18 p3190 A69-34286	18 p3211 A69-34331	18 p3100 A69-34376 #	18 p3127 A69-34421**
18 p3189 A69-34242	18 p3190 A69-34287	18 p3105 A69-34332	18 p3140 A69-34377 #	18 p3114 A69-34422
18 p3113 A69-34243	18 p3190 A69-34288*	18 p3206 A69-34333	18 p3140 A69-34378**	18 p3134 A69-34423
18 p3133 A69-34244	18 p3190 A69-34289	18 p3133 A69-34334	18 p3120 A69-34379 #	18 p3194 A69-34424
18 p3154 A69-34245	18 p3190 A69-34290	18 p3133 A69-34335	18 p3140 A69-34380**	18 p3194 A69-34425
18 p3119 A69-34246 #	18 p3190 A69-34291	18 p3133 A69-34336*	18 p3140 A69-34381**	18 p3195 A69-34426
18 p3133 A69-34247	18 p3185 A69-34292	18 p3126 A69-34337	18 p3212 A69-34382**	18 p3195 A69-34427
18 p3125 A69-34248	18 p3190 A69-34293	18 p3133 A69-34338	18 p3212 A69-34383 #	18 p3195 A69-34428
18 p3125 A69-34249*	18 p3191 A69-34294*	18 p3134 A69-34339	18 p3213 A69-34384 #	18 p3195 A69-34429
18 p3125 A69-34250	18 p3186 A69-34295*	18 p3090 A69-34340	18 p3213 A69-34385 #	18 p3195 A69-34430
18 p3100 A69-34251	18 p3186 A69-34296	18 p3211 A69-34341 #	18 p3213 A69-34386 #	18 p3195 A69-34431
18 p3125 A69-34252	18 p3191 A69-34297*	18 p3211 A69-34342 #	18 p3213 A69-34387 #	18 p3195 A69-34432
18 p3100 A69-34253	18 p3191 A69-34298	18 p3211 A69-34343 #	18 p3213 A69-34388 #	18 p3195 A69-34433
18 p3125 A69-34254	18 p3186 A69-34299*	18 p3211 A69-34344	18 p3213 A69-34389 #	18 p3120 A69-34434 #
18 p3125 A69-34255	18 p3186 A69-34300*	18 p3212 A69-34345	18 p3213 A69-34390 #	18 p3085 A69-34435
18 p3126 A69-34256	18 p3186 A69-34301*	18 p3212 A69-34346*	18 p3214 A69-34391 #	18 p3127 A69-34436 #
18 p3126 A69-34257	18 p3191 A69-34302	18 p3212 A69-34347*	18 p3214 A69-34392 #	18 p3179 A69-34437**
18 p3126 A69-34258	18 p3191 A69-34303	18 p3182 A69-34348 #	18 p3214 A69-34393 #	18 p3179 A69-34438**
18 p3210 A69-34259	18 p3175 A69-34304*	18 p3182 A69-34349 #	18 p3120 A69-34394**	18 p3179 A69-34439**
18 p3119 A69-34260	18 p3191 A69-34305*	18 p3108 A69-34350	18 p3214 A69-34395**	18 p3179 A69-34440**
18 p3179 A69-34261	18 p3191 A69-34306	18 p3165 A69-34351	18 p3214 A69-34396 #	18 p3120 A69-34441**
18 p3211 A69-34262 #	18 p3154 A69-34307 #	18 p3212 A69-34352 #	18 p3120 A69-34397 #	18 p3134 A69-34442**
18 p3133 A69-34263**	18 p3133 A69-34308	18 p3212 A69-34353 #	18 p3214 A69-34398**	18 p3099 A69-34443**
18 p3151 A69-34264	18 p3133 A69-34309	18 p3212 A69-34354 #	18 p3214 A69-34399**	18 p3114 A69-34444
18 p3133 A69-34265 #	18 p3092 A69-34310	18 p3168 A69-34355	18 p3215 A69-34400 #	18 p3115 A69-34445
18 p3160 A69-34266 #	18 p3231 A69-34311 #	18 p3093 A69-34356	18 p3083 A69-34401 #	18 p3176 A69-34446**
18 p3100 A69-34267	18 p3097 A69-34312	18 p3151 A69-34357	18 p3083 A69-34402 #	18 p3116 A69-34447
18 p3113 A69-34268	18 p3170 A69-34313	18 p3126 A69-34358	18 p3083 A69-34403 #	18 p3116 A69-34448
18 p3105 A69-34269	18 p3175 A69-34314	18 p3192 A69-34359	18 p3083 A69-34404 #	18 p3116 A69-34449**
18 p3139 A69-34270 #	18 p3227 A69-34315*	18 p3193 A69-34360	18 p3083 A69-34405 #	18 p3171 A69-34450
18 p3100 A69-34271 #	18 p3186 A69-34316	18 p3193 A69-34361*	18 p3084 A69-34406 #	18 p3116 A69-34451 #
18 p3154 A69-34272*	18 p3191 A69-34317*	18 p3193 A69-34362*	18 p3084 A69-34407**	18 p3176 A69-34452 #
18 p3154 A69-34273	18 p3191 A69-34318*	18 p3193 A69-34363*	18 p3114 A69-34408 #	18 p3116 A69-34453 #
18 p3181 A69-34274*	18 p3192 A69-34319	18 p3193 A69-34364	18 p3084 A69-34409 #	18 p3180 A69-34454 #
18 p3185 A69-34275	18 p3192 A69-34320	18 p3127 A69-34365*	18 p3084 A69-34410 #	18 p3180 A69-34455**
18 p3185 A69-34276*	18 p3192 A69-34321	18 p3193 A69-34366*	18 p3084 A69-34411 #	18 p3116 A69-34456 #
18 p3100 A69-34277	18 p3090 A69-34322	18 p3193 A69-34367	18 p3084 A69-34412 #	18 p3120 A69-34457 #
18 p3185 A69-34278	18 p3090 A69-34323	18 p3114 A69-34368*	18 p3194 A69-34413 #	18 p3134 A69-34458
18 p3161 A69-34279	18 p3097 A69-34324	18 p3206 A69-34369*	18 p3140 A69-34414 #	18 p3228 A69-34459**
18 p3099 A69-34280 #	18 p3097 A69-34325	18 p3194 A69-34370	18 p3140 A69-34415**	18 p3116 A69-34460**
18 p3126 A69-34281	18 p3211 A69-34326	18 p3206 A69-34371	18 p3084 A69-34416**	18 p3099 A69-34461 #
18 p3190 A69-34282*	18 p3211 A69-34327*	18 p3227 A69-34372	18 p3085 A69-34417 #	18 p3116 A69-34462 #
18 p3126 A69-34283*	18 p3163 A69-34328	18 p3134 A69-34373	18 p3165 A69-34418 #	18 p3183 A69-34463
18 p3126 A69-34284*	18 p3163 A69-34329	18 p3194 A69-34374*	18 p3166 A69-34419	18 p3099 A69-34464 #
18 p3190 A69-34285	18 p3163 A69-34330	18 p3228 A69-34375*	18 p3166 A69-34420 #	18 p3176 A69-34465 #



# ACCESSION NUMBER INDEX

18 p3228 A69-34466	18 p3146 A69-34511	18 p3134 A69-34556 #	18 p3218 A69-34601 #	18 p3196 A69-34646
18 p3099 A69-34467 #	18 p3146 A69-34512	18 p3135 A69-34557 #	18 p3218 A69-34602 #	18 p3196 A69-34647
18 p3228 A69-34468 #	18 p3146 A69-34513	18 p3135 A69-34558 #	18 p3218 A69-34603 #	18 p3127 A69-34648
18 p3085 A69-34469	18 p3146 A69-34514	18 p3135 A69-34559 #	18 p3117 A69-34604 #	18 p3233 A69-34649
18 p3117 A69-34470 #	18 p3147 A69-34515	18 p3135 A69-34560 #	18 p3161 A69-34605	18 p3155 A69-34650
18 p3085 A69-34471	18 p3147 A69-34516	18 p3135 A69-34561 #	18 p3099 A69-34606 #	18 p3155 A69-34651 #
18 p3120 A69-34472	18 p3147 A69-34517	18 p3171 A69-34562 #	18 p3154 A69-34607 #	18 p3155 A69-34652 #
18 p3085 A69-34473	18 p3232 A69-34518	18 p3171 A69-34563 #	18 p3161 A69-34608 #	18 p3182 A69-34653
18 p3085 A69-34474 #	18 p3207 A69-34519*	18 p3171 A69-34564 #	18 p3161 A69-34609 #	18 p3148 A69-34654
18 p3121 A69-34475	18 p3207 A69-34520	18 p3172 A69-34565 #	18 p3161 A69-34610 #	18 p3233 A69-34655
18 p3140 A69-34476	18 p3090 A69-34521	18 p3215 A69-34566 #	18 p3148 A69-34611 #	18 p3090 A69-34656 #
18 p3142 A69-34477	18 p3100 A69-34522	18 p3215 A69-34567 #	18 p3148 A69-34612 #	18 p3105 A69-34657
18 p3097 A69-34478	18 p3151 A69-34523	18 p3215 A69-34568 #	18 p3121 A69-34613	18 p3106 A69-34658 #
18 p3142 A69-34479	18 p3105 A69-34524	18 p3215 A69-34569 #	18 p3164 A69-34614	18 p3106 A69-34659 #
18 p3142 A69-34480	18 p3108 A69-34525	18 p3215 A69-34570 #	18 p3164 A69-34615*	18 p3109 A69-34660*#
18 p3143 A69-34481	18 p3147 A69-34526	18 p3216 A69-34571 #	18 p3233 A69-34616	18 p3218 A69-34661 #
18 p3143 A69-34482	18 p3195 A69-34527	18 p3216 A69-34572 #	18 p3105 A69-34617*	18 p3229 A69-34662 #
18 p3143 A69-34483	18 p3117 A69-34528	18 p3216 A69-34573 #	18 p3105 A69-34618*	18 p3106 A69-34663 #
18 p3143 A69-34484	18 p3207 A69-34529	18 p3216 A69-34574 #	18 p3148 A69-34619	18 p3219 A69-34664 #
18 p3231 A69-34485	18 p3117 A69-34530	18 p3216 A69-34575 #	18 p3151 A69-34620	18 p3106 A69-34665 #
18 p3143 A69-34486	18 p3147 A69-34531	18 p3216 A69-34576 #	18 p3101 A69-34621	18 p3219 A69-34666*#
18 p3117 A69-34487	18 p3109 A69-34532	18 p3216 A69-34577 #	18 p3099 A69-34622	18 p3172 A69-34667 #
18 p3143 A69-34488	18 p3229 A69-34533	18 p3216 A69-34578 #	18 p3218 A69-34623	18 p3127 A69-34668 #
18 p3144 A69-34489	18 p3121 A69-34534 #	18 p3216 A69-34579 #	18 p3218 A69-34624	18 p3098 A69-34669*#
18 p3144 A69-34490	18 p3215 A69-34535 #	18 p3217 A69-34580 #	18 p3101 A69-34625	18 p3085 A69-34670 #
18 p3144 A69-34491	18 p3196 A69-34536 #	18 p3217 A69-34581 #	18 p3218 A69-34626	18 p3109 A69-34671
18 p3144 A69-34492	18 p3134 A69-34537*	18 p3207 A69-34582 #	18 p3172 A69-34627	18 p3110 A69-34672
18 p3144 A69-34493	18 p3232 A69-34538 #	18 p3184 A69-34583 #	18 p3207 A69-34628	18 p3110 A69-34673
18 p3144 A69-34494	18 p3095 A69-34539*	18 p3109 A69-34584 #	18 p3207 A69-34629	18 p3164 A69-34674*
18 p3145 A69-34495	18 p3085 A69-34540*	18 p3135 A69-34585 #	18 p3196 A69-34630	18 p3110 A69-34675*
18 p3232 A69-34496	18 p3134 A69-34541*	18 p3135 A69-34586 #	18 p3196 A69-34631	18 p3110 A69-34676*
18 p3145 A69-34497	18 p3232 A69-34542	18 p3135 A69-34587 #	18 p3155 A69-34632	18 p3207 A69-34677
18 p3145 A69-34498	18 p3095 A69-34543*	18 p3172 A69-34588 #	18 p3155 A69-34633	18 p3111 A69-34678*
18 p3108 A69-34499	18 p3215 A69-34544 #	18 p3172 A69-34589 #	18 p3155 A69-34634	18 p3111 A69-34679*
18 p3145 A69-34500	18 p3147 A69-34545 #	18 p3172 A69-34590 #	18 p3135 A69-34635 #	18 p3111 A69-34680*
18 p3206 A69-34501	18 p3147 A69-34546 #	18 p3172 A69-34591 #	18 p3121 A69-34636 #	18 p3090 A69-34681
18 p3145 A69-34502	18 p3147 A69-34547 #	18 p3217 A69-34592 #	18 p3184 A69-34637 #	18 p3111 A69-34682*
18 p3145 A69-34503	18 p3148 A69-34548 #	18 p3217 A69-34593 #	18 p3155 A69-34638 #	18 p3168 A69-34683
18 p3232 A69-34504	18 p3215 A69-34549	18 p3217 A69-34594 #	18 p3218 A69-34639 #	18 p3207 A69-34684
18 p3232 A69-34505	18 p3121 A69-34550	18 p3217 A69-34595 #	18 p3136 A69-34640 #	18 p3164 A69-34685*
18 p3232 A69-34506	18 p3196 A69-34551*	18 p3217 A69-34596 #	18 p3136 A69-34641 #	18 p3111 A69-34686*
18 p3145 A69-34507	18 p3233 A69-34552*	18 p3217 A69-34597 #	18 p3218 A69-34642 #	18 p3111 A69-34687*
18 p3146 A69-34508	18 p3099 A69-34553*	18 p3217 A69-34598 #	18 p3186 A69-34643	18 p3111 A69-34688*
18 p3117 A69-34509*	18 p3171 A69-34554 #	18 p3217 A69-34599 #	18 p3196 A69-34644*	18 p3112 A69-34689*
18 p3146 A69-34510	18 p3134 A69-34555 #	18 p3218 A69-34600 #	18 p3196 A69-34645	18 p3196 A69-34690*

# ACCESSION NUMBER INDEX

18 p3136 A69-34691*	18 p3096 A69-34736	18 p3093 A69-34781	18 p3101 A69-34826 #	18 p3208 A69-34871 #
18 p3095 A69-34692	18 p3096 A69-34737	18 p3093 A69-34782	18 p3166 A69-34827 #	18 p3208 A69-34872
18 p3196 A69-34693 #	18 p3096 A69-34738	18 p3093 A69-34783	18 p3166 A69-34828 #	18 p3184 A69-34873*
18 p3166 A69-34694	18 p3096 A69-34739	18 p3121 A69-34784	18 p3167 A69-34829 #	18 p3172 A69-34874
18 p3090 A69-34695	18 p3096 A69-34740	18 p3219 A69-34785	18 p3122 A69-34830 #	18 p3208 A69-34875
18 p3161 A69-34696	18 p3096 A69-34741	18 p3121 A69-34786	18 p3093 A69-34831 #	18 p3208 A69-34876
18 p3161 A69-34697	18 p3096 A69-34742	18 p3121 A69-34787	18 p3219 A69-34832 #	18 p3091 A69-34877
18 p3156 A69-34698	18 p3098 A69-34743	18 p3101 A69-34788	18 p3118 A69-34833 #	18 p3094 A69-34878
18 p3156 A69-34699	18 p3096 A69-34744	18 p3176 A69-34789	18 p3219 A69-34834 #	18 p3220 A69-34879
18 p3136 A69-34700	18 p3197 A69-34745	18 p3176 A69-34790	18 p3229 A69-34835 #	18 p3220 A69-34880
18 p3164 A69-34701 #	18 p3197 A69-34746	18 p3093 A69-34791 #	18 p3229 A69-34836 #	18 p3220 A69-34881
18 p3164 A69-34702 #	18 p3197 A69-34747	18 p3208 A69-34792 #	18 p3230 A69-34837 #	18 p3136 A69-34882
18 p3180 A69-34703 #	18 p3197 A69-34748	18 p3208 A69-34793 #	18 p3106 A69-34838	18 p3137 A69-34883
18 p3196 A69-34704 #	18 p3197 A69-34749	18 p3117 A69-34794 #	18 p3161 A69-34839	18 p3118 A69-34884
18 p3086 A69-34705 #	18 p3197 A69-34750	18 p3198 A69-34795 #	18 p3164 A69-34840	18 p3208 A69-34885
18 p3164 A69-34706 #	18 p3197 A69-34751	18 p3219 A69-34796 #	18 p3164 A69-34841	18 p3208 A69-34886
18 p3164 A69-34707 #	18 p3197 A69-34752	18 p3101 A69-34797	18 p3165 A69-34842	18 p3137 A69-34887
18 p3086 A69-34708 #	18 p3197 A69-34753	18 p3127 A69-34798*	18 p3168 A69-34843	18 p3220 A69-34888
18 p3219 A69-34709 #	18 p3197 A69-34754	18 p3127 A69-34799	18 p3168 A69-34844	18 p3118 A69-34889
18 p3121 A69-34710	18 p3197 A69-34755	18 p3127 A69-34800	18 p3169 A69-34845	18 p3118 A69-34890
18 p3229 A69-34711	18 p3198 A69-34756	18 p3128 A69-34801	18 p3106 A69-34846	18 p3220 A69-34891
18 p3229 A69-34712	18 p3198 A69-34757	18 p3108 A69-34802*	18 p3107 A69-34847	18 p3221 A69-34892
18 p3229 A69-34713	18 p3198 A69-34758	18 p3101 A69-34803	18 p3169 A69-34848	18 p3221 A69-34893
18 p3093 A69-34714	18 p3198 A69-34759	18 p3128 A69-34804*	18 p3169 A69-34849	18 p3221 A69-34894
18 p3156 A69-34715	18 p3198 A69-34760	18 p3168 A69-34805	18 p3169 A69-34850	18 p3221 A69-34895
18 p3180 A69-34716	18 p3198 A69-34761	18 p3168 A69-34806	18 p3169 A69-34851	18 p3221 A69-34896
18 p3152 A69-34717	18 p3198 A69-34762	18 p3164 A69-34807*#	18 p3169 A69-34852	18 p3221 A69-34897
18 p3152 A69-34718	18 p3198 A69-34763	18 p3186 A69-34808	18 p3169 A69-34853	18 p3221 A69-34898
18 p3156 A69-34719	18 p3198 A69-34764	18 p3170 A69-34809 #	18 p3169 A69-34854	18 p3221 A69-34899
18 p3182 A69-34720	18 p3198 A69-34765	18 p3101 A69-34810	18 p3169 A69-34855*	18 p3221 A69-34900
18 p3196 A69-34721	18 p3198 A69-34766	18 p3108 A69-34811	18 p3170 A69-34856	18 p3091 A69-34901
18 p3197 A69-34722	18 p3198 A69-34767	18 p3122 A69-34812 #	18 p3170 A69-34857	18 p3091 A69-34902
18 p3197 A69-34723	18 p3198 A69-34768	18 p3136 A69-34813	18 p3170 A69-34858	18 p3208 A69-34903
18 p3197 A69-34724	18 p3198 A69-34769	18 p3168 A69-34814	18 p3170 A69-34859	18 p3222 A69-34904
18 p3197 A69-34725	18 p3176 A69-34770	18 p3166 A69-34815 #	18 p3107 A69-34860	18 p3091 A69-34905
18 p3197 A69-34726	18 p3127 A69-34771	18 p3166 A69-34816 #	18 p3219 A69-34861	18 p3091 A69-34906
18 p3095 A69-34727	18 p3121 A69-34772	18 p3166 A69-34817 #	18 p3220 A69-34862	18 p3091 A69-34907
18 p3095 A69-34728	18 p3229 A69-34773	18 p3128 A69-34818 #	18 p3107 A69-34863	18 p3091 A69-34908
18 p3095 A69-34729	18 p3208 A69-34774	18 p3086 A69-34819	18 p3208 A69-34864*	18 p3222 A69-34909 #
18 p3095 A69-34730	18 p3208 A69-34775	18 p3152 A69-34820	18 p3118 A69-34865	18 p3086 A69-34910 #
18 p3095 A69-34731	18 p3208 A69-34776	18 p3098 A69-34821	18 p3220 A69-34866	18 p3122 A69-34911 #
18 p3096 A69-34732	18 p3136 A69-34777	18 p3166 A69-34822 #	18 p3220 A69-34867	18 p3199 A69-34912 #
18 p3096 A69-34733	18 p3136 A69-34778	18 p3198 A69-34823*	18 p3090 A69-34868	18 p3199 A69-34913 #
18 p3096 A69-34734	18 p3136 A69-34779	18 p3199 A69-34824	18 p3091 A69-34869	18 p3199 A69-34914 #
18 p3096 A69-34735	18 p3093 A69-34780*	18 p3166 A69-34825 #	18 p3091 A69-34870	18 p3112 A69-34915



## ACCESSION NUMBER INDEX

18 p3122 A69-34916	18 p3102 A69-34961 #	18 p3188 A69-35006*	18 p3086 A69-35051 #	18 p3107 A69-35096 #
18 p3122 A69-34917	18 p3129 A69-34962 #	18 p3176 A69-35007*	18 p3165 A69-35052 #	18 p3103 A69-35097 #
18 p3122 A69-34918	18 p3102 A69-34963 #	18 p3176 A69-35008*	18 p3123 A69-35053 #	18 p3103 A69-35098 #
18 p3123 A69-34919*	18 p3102 A69-34964 #	18 p3177 A69-35009*	18 p3181 A69-35054 #	18 p3107 A69-35099**
18 p3123 A69-34920	18 p3102 A69-34965 #	18 p3172 A69-35010	18 p3233 A69-35055	18 p3167 A69-35100 #
18 p3123 A69-34921	18 p3102 A69-34966 #	18 p3172 A69-35011	18 p3094 A69-35056 #	18 p3137 A69-35101**
18 p3123 A69-34922	18 p3102 A69-34967 #	18 p3177 A69-35012**	18 p3130 A69-35057 #	18 p3108 A69-35102 #
18 p3123 A69-34923	18 p3118 A69-34968 #	18 p3172 A69-35013 #	18 p3208 A69-35058 #	18 p3130 A69-35103 #
18 p3123 A69-34924	18 p3187 A69-34969 #	18 p3173 A69-35014**	18 p3234 A69-35059**	18 p3236 A69-35104**
18 p3086 A69-34925	18 p3130 A69-34970 #	18 p3177 A69-35015**	18 p3103 A69-35060 #	18 p3236 A69-35105**
18 p3230 A69-34926	18 p3102 A69-34971 #	18 p3152 A69-35016	18 p3098 A69-35061 #	18 p3183 A69-35106*
18 p3222 A69-34927	18 p3130 A69-34972 #	18 p3180 A69-35017 #	18 p3094 A69-35062 #	18 p3183 A69-35107*
18 p3199 A69-34928	18 p3092 A69-34973 #	18 p3173 A69-35018 #	18 p3118 A69-35063 #	18 p3185 A69-35108*
18 p3182 A69-34929	18 p3222 A69-34974 #	18 p3156 A69-35019	18 p3118 A69-35064 #	18 p3137 A69-35109
18 p3180 A69-34930	18 p3222 A69-34975 #	18 p3156 A69-35020	18 p3170 A69-35065**	18 p3137 A69-35110
18 p3184 A69-34931 #	18 p3222 A69-34976 #	18 p3223 A69-35021	18 p3234 A69-35066 #	18 p3137 A69-35111
18 p3137 A69-34932 #	18 p3222 A69-34977 #	18 p3182 A69-35022	18 p3208 A69-35067**	18 p3137 A69-35112
18 p3092 A69-34933	18 p3222 A69-34978 #	18 p3152 A69-35023	18 p3107 A69-35068 #	18 p3138 A69-35113
18 p3186 A69-34934	18 p3223 A69-34979 #	18 p3180 A69-35024	18 p3108 A69-35069 #	18 p3138 A69-35114
18 p3128 A69-34935*	18 p3223 A69-34980 #	18 p3180 A69-35025	18 p3234 A69-35070	18 p3138 A69-35115
18 p3128 A69-34936*	18 p3094 A69-34981 #	18 p3152 A69-35026	18 p3230 A69-35071 #	18 p3138 A69-35116
18 p3187 A69-34937*	18 p3092 A69-34982 #	18 p3181 A69-35027	18 p3181 A69-35072 #	18 p3138 A69-35117
18 p3199 A69-34938*	18 p3184 A69-34983 #	18 p3173 A69-35028 #	18 p3230 A69-35073 #	18 p3086 A69-35118
18 p3187 A69-34939*	18 p3230 A69-34984 #	18 p3173 A69-35029 #	18 p3094 A69-35074 #	18 p3230 A69-35119
18 p3187 A69-34940	18 p3184 A69-34985 #	18 p3173 A69-35030 #	18 p3170 A69-35075 #	18 p3124 A69-35120
18 p3199 A69-34941*	18 p3086 A69-34986 #	18 p3173 A69-35031 #	18 p3235 A69-35076 #	18 p3231 A69-35121
18 p3128 A69-34942	18 p3184 A69-34987 #	18 p3123 A69-35032 #	18 p3235 A69-35077**	18 p3231 A69-35122
18 p3128 A69-34943	18 p3230 A69-34988 #	18 p3181 A69-35033 #	18 p3236 A69-35078**	18 p3231 A69-35123
18 p3187 A69-34944	18 p3092 A69-34989 #	18 p3230 A69-35034 #	18 p3148 A69-35079 #	18 p3152 A69-35124
18 p3187 A69-34945*	18 p3123 A69-34990 #	18 p3223 A69-35035 #	18 p3223 A69-35080 #	18 p3177 A69-35125
18 p3187 A69-34946	18 p3094 A69-34991 #	18 p3223 A69-35036 #	18 p3148 A69-35081 #	18 p3152 A69-35126
18 p3128 A69-34947*	18 p3184 A69-34992 #	18 p3173 A69-35037 #	18 p3118 A69-35082 #	18 p3173 A69-35127
18 p3128 A69-34948*	18 p3200 A69-34993	18 p3181 A69-35038 #	18 p3210 A69-35083 #	18 p3103 A69-35128
18 p3101 A69-34949	18 p3200 A69-34994*	18 p3181 A69-35039 #	18 p3167 A69-35084 #	18 p3149 A69-35129
18 p3102 A69-34950	18 p3187 A69-34995	18 p3181 A69-35040 #	18 p3098 A69-35085 #	18 p3200 A69-35130 #
18 p3129 A69-34951*	18 p3200 A69-34996	18 p3182 A69-35041	18 p3236 A69-35086**	18 p3200 A69-35131 #
18 p3199 A69-34952*	18 p3200 A69-34997 #	18 p3182 A69-35042	18 p3210 A69-35087 #	18 p3200 A69-35132 #
18 p3129 A69-34953	18 p3223 A69-34998 #	18 p3156 A69-35043	18 p3103 A69-35088 #	18 p3200 A69-35133 #
18 p3129 A69-34954*	18 p3086 A69-34999 #	18 p3156 A69-35044	18 p3103 A69-35089 #	18 p3200 A69-35134 #
18 p3129 A69-34955*	18 p3208 A69-35000 #	18 p3181 A69-35045	18 p3094 A69-35090**	18 p3138 A69-35135 #
18 p3129 A69-34956*	18 p3156 A69-35001	18 p3182 A69-35046	18 p3210 A69-35091 #	18 p3236 A69-35136 #
18 p3129 A69-34957*	18 p3148 A69-35002	18 p3182 A69-35047	18 p3210 A69-35092 #	18 p3092 A69-35137 #
18 p3129 A69-34958	18 p3148 A69-35003	18 p3182 A69-35048	18 p3112 A69-35093 #	18 p3092 A69-35138 #
18 p3187 A69-34959*	18 p3176 A69-35004*	18 p3165 A69-35049 #	18 p3210 A69-35094**	18 p3185 A69-35139
18 p3102 A69-34960 #	18 p3188 A69-35005*	18 p3165 A69-35050 #	18 p3107 A69-35095 #	18 p3109 A69-35140 #

ACCESSION NUMBER INDEX

18 p3201 A69-35141*#	18 p3130 A69-35186	18 p3088 A69-35231 #	18 p3132 A69-35276	18 p3224 A69-35321 #
18 p3201 A69-35142	18 p3130 A69-35187	18 p3089 A69-35232 #	18 p3165 A69-35277	18 p3175 A69-35322 #
18 p3201 A69-35143	18 p3130 A69-35188	18 p3089 A69-35233 #	18 p3165 A69-35278	18 p3175 A69-35323 #
18 p3201 A69-35144	18 p3130 A69-35189*	18 p3089 A69-35234 #	18 p3149 A69-35279	18 p3175 A69-35324 #
18 p3210 A69-35145 #	18 p3188 A69-35190*	18 p3236 A69-35235	18 p3139 A69-35280	18 p3231 A69-35325 #
18 p3173 A69-35146 #	18 p3131 A69-35191	18 p3236 A69-35236	18 p3174 A69-35281	18 p3124 A69-35326 #
18 p3173 A69-35147 #	18 p3201 A69-35192*	18 p3174 A69-35237	18 p3210 A69-35282 #	18 p3224 A69-35327 #
18 p3130 A69-35148 #	18 p3131 A69-35193	18 p3177 A69-35238	18 p3202 A69-35283 #	18 p3139 A69-35328 #
18 p3124 A69-35149 #	18 p3131 A69-35194	18 p3177 A69-35239*	18 p3202 A69-35284 #	18 p3202 A69-35329 #
18 p3231 A69-35150 #	18 p3131 A69-35195 #	18 p3177 A69-35240	18 p3124 A69-35285 #	18 p3202 A69-35330 #
18 p3149 A69-35151 #	18 p3131 A69-35196 #	18 p3152 A69-35241	18 p3174 A69-35286	18 p3203 A69-35331 #
18 p3138 A69-35152 #	18 p3173 A69-35197 #	18 p3231 A69-35242	18 p3149 A69-35287 #	18 p3203 A69-35332 #
18 p3156 A69-35153 #	18 p3152 A69-35198 #	18 p3153 A69-35243	18 p3158 A69-35288 #	18 p3203 A69-35333 #
18 p3152 A69-35154	18 p3103 A69-35199 #	18 p3185 A69-35244	18 p3149 A69-35289 #	18 p3203 A69-35334 #
18 p3183 A69-35155	18 p3104 A69-35200 #	18 p3174 A69-35245 #	18 p3202 A69-35290	18 p3132 A69-35335 #
18 p3183 A69-35156	18 p3174 A69-35201 #	18 p3157 A69-35246 #	18 p3096 A69-35291*	18 p3203 A69-35336 #
18 p3152 A69-35157	18 p3104 A69-35202 #	18 p3157 A69-35247 #	18 p3153 A69-35292 #	18 p3203 A69-35337 #
18 p3183 A69-35158	18 p3201 A69-35203	18 p3157 A69-35248 #	18 p3109 A69-35293*	18 p3167 A69-35338 #
18 p3152 A69-35159	18 p3188 A69-35204*	18 p3157 A69-35249 #	18 p3109 A69-35294	18 p3167 A69-35339 #
18 p3183 A69-35160 #	18 p3201 A69-35205	18 p3157 A69-35250 #	18 p3124 A69-35295	18 p3132 A69-35340 #
18 p3109 A69-35161 #	18 p3201 A69-35206	18 p3157 A69-35251 #	18 p3224 A69-35296	18 p3167 A69-35341 #
18 p3109 A69-35162 #	18 p3201 A69-35207	18 p3157 A69-35252 #	18 p3224 A69-35297	18 p3104 A69-35342 #
18 p3201 A69-35163 #	18 p3188 A69-35208	18 p3157 A69-35253 #	18 p3174 A69-35298	18 p3167 A69-35343 #
18 p3201 A69-35164 #	18 p3202 A69-35209	18 p3157 A69-35254 #	18 p3139 A69-35299	18 p3224 A69-35344
18 p3098 A69-35165 #	18 p3202 A69-35210	18 p3138 A69-35255 #	18 p3224 A69-35300	18 p3132 A69-35345 #
18 p3177 A69-35166*	18 p3202 A69-35211	18 p3153 A69-35256 #	18 p3097 A69-35301 #	18 p3203 A69-35346 #
18 p3086 A69-35167 #	18 p3202 A69-35212*	18 p3153 A69-35257 #	18 p3097 A69-35302 #	18 p3203 A69-35347 #
18 p3223 A69-35168 #	18 p3188 A69-35213	18 p3153 A69-35258 #	18 p3098 A69-35303 #	18 p3203 A69-35348*#
18 p3086 A69-35169 #	18 p3202 A69-35214	18 p3153 A69-35259 #	18 p3097 A69-35304 #	18 p3204 A69-35349 #
18 p3124 A69-35170 #	18 p3202 A69-35215	18 p3158 A69-35260 #	18 p3098 A69-35305 #	18 p3204 A69-35350 #
18 p3223 A69-35171 #	18 p3087 A69-35216	18 p3158 A69-35261 #	18 p3153 A69-35306	18 p3204 A69-35351 #
18 p3096 A69-35172*	18 p3087 A69-35217 #	18 p3158 A69-35262 #	18 p3153 A69-35307	18 p3162 A69-35352 #
18 p3138 A69-35173*#	18 p3087 A69-35218 #	18 p3183 A69-35263 #	18 p3104 A69-35308	18 p3162 A69-35353 #
18 p3223 A69-35174 #	18 p3087 A69-35219 #	18 p3104 A69-35264 #	18 p3224 A69-35309 #	18 p3162 A69-35354 #
18 p3185 A69-35175*#	18 p3087 A69-35220 #	18 p3104 A69-35265 #	18 p3231 A69-35310 #	18 p3162 A69-35355 #
18 p3095 A69-35176*#	18 p3088 A69-35221	18 p3167 A69-35266	18 p3174 A69-35311 #	18 p3162 A69-35356 #
18 p3149 A69-35177*#	18 p3088 A69-35222*#	18 p3183 A69-35267 #	18 p3165 A69-35312 #	18 p3225 A69-35357 #
18 p3171 A69-35178*#	18 p3088 A69-35223*#	18 p3183 A69-35268 #	18 p3165 A69-35313 #	18 p3225 A69-35358 #
18 p3177 A69-35179*#	18 p3088 A69-35224	18 p3089 A69-35269 #	18 p3224 A69-35314 #	18 p3162 A69-35359 #
18 p3171 A69-35180*#	18 p3119 A69-35225 #	18 p3124 A69-35270 #	18 p3181 A69-35315 #	18 p3162 A69-35360 #
18 p3171 A69-35181*#	18 p3088 A69-35226	18 p3138 A69-35271	18 p3174 A69-35316 #	18 p3225 A69-35361 #
18 p3156 A69-35182*#	18 p3119 A69-35227	18 p3149 A69-35272	18 p3174 A69-35317 #	18 p3149 A69-35362 #
18 p3149 A69-35183*#	18 p3119 A69-35228*#	18 p3162 A69-35273	18 p3224 A69-35318 #	18 p3163 A69-35363 #
18 p3157 A69-35184*#	18 p3119 A69-35229*#	18 p3131 A69-35274*	18 p3224 A69-35319 #	18 p3163 A69-35364 #
18 p3103 A69-35185	18 p3119 A69-35230 #	18 p3132 A69-35275	18 p3175 A69-35320 #	18 p3163 A69-35365 #



# ACCESSION NUMBER INDEX

18 p3163 A69-35366 #	18 p3150 A69-35411	18 p3151 A69-35456 #	19 p3315 A69-35501	19 p3280 A69-35546
18 p3225 A69-35367 #	18 p3150 A69-35412	18 p3104 A69-35457	19 p3340 A69-35502	19 p3281 A69-35547
18 p3225 A69-35368 #	18 p3178 A69-35413*	18 p3112 A69-35458 #	19 p3353 A69-35503*	19 p3281 A69-35548
18 p3225 A69-35369 #	18 p3205 A69-35414 #	18 p3226 A69-35459 #	19 p3340 A69-35504*	19 p3281 A69-35549
18 p3225 A69-35370 #	18 p3189 A69-35415**	18 p3089 A69-35460 #	19 p3353 A69-35505	19 p3428 A69-35550
18 p3225 A69-35371 #	18 p3158 A69-35416	18 p3089 A69-35461 #	19 p3340 A69-35506	19 p3319 A69-35551
18 p3225 A69-35372 #	18 p3158 A69-35417	18 p3226 A69-35462 #	19 p3318 A69-35507	19 p3319 A69-35552
18 p3226 A69-35373 #	18 p3150 A69-35418	18 p3226 A69-35463 #	19 p3340 A69-35508	19 p3319 A69-35553
18 p3226 A69-35374 #	18 p3150 A69-35419	18 p3092 A69-35464 #	19 p3340 A69-35509	19 p3319 A69-35554*
18 p3226 A69-35375 #	18 p3150 A69-35420	18 p3104 A69-35465 #	19 p3318 A69-35510*	19 p3320 A69-35555*
18 p3226 A69-35376 #	18 p3158 A69-35421	18 p3092 A69-35466 #	19 p3318 A69-35511	19 p3320 A69-35556
18 p3226 A69-35377 #	18 p3150 A69-35422	18 p3092 A69-35467 #	19 p3353 A69-35512	19 p3320 A69-35557
18 p3139 A69-35378 #	18 p3150 A69-35423	18 p3139 A69-35468 #	19 p3354 A69-35513	19 p3320 A69-35558
18 p3226 A69-35379 #	18 p3095 A69-35424	18 p3206 A69-35469	19 p3354 A69-35514	19 p3320 A69-35559
18 p3226 A69-35380 #	18 p3150 A69-35425	18 p3206 A69-35470 #	19 p3354 A69-35515*	19 p3357 A69-35560
18 p3124 A69-35381 #	18 p3132 A69-35426**	18 p3206 A69-35471	19 p3354 A69-35516	19 p3320 A69-35561
18 p3184 A69-35382 #	18 p3139 A69-35427 #	18 p3160 A69-35472	19 p3354 A69-35517	19 p3320 A69-35562
18 p3124 A69-35383 #	18 p3139 A69-35428 #	18 p3154 A69-35473	19 p3354 A69-35518	19 p3321 A69-35563
18 p3124 A69-35384 #	18 p3150 A69-35429 #	18 p3178 A69-35474	19 p3354 A69-35519	19 p3321 A69-35564
18 p3089 A69-35385 #	18 p3151 A69-35430 #	18 p3100 A69-35475 #	19 p3355 A69-35520	19 p3321 A69-35565
18 p3089 A69-35386 #	18 p3151 A69-35431 #	18 p3178 A69-35476**	19 p3355 A69-35521*	19 p3357 A69-35566
18 p3125 A69-35387 #	18 p3151 A69-35432 #	18 p3183 A69-35477**	19 p3355 A69-35522	19 p3321 A69-35567
18 p3204 A69-35388	18 p3205 A69-35433	18 p3179 A69-35478**	19 p3340 A69-35523*	19 p3321 A69-35568
18 p3204 A69-35389	18 p3132 A69-35434*	18 p3151 A69-35479	19 p3340 A69-35524	19 p3341 A69-35569
18 p3204 A69-35390	18 p3205 A69-35435*	18 p3139 A69-35480	19 p3355 A69-35525	19 p3321 A69-35570
18 p3204 A69-35391	18 p3205 A69-35436*	18 p3163 A69-35481	19 p3355 A69-35526	19 p3322 A69-35571
18 p3188 A69-35392	18 p3205 A69-35437 #	18 p3189 A69-35482	19 p3355 A69-35527	19 p3341 A69-35572
18 p3204 A69-35393	18 p3205 A69-35438 #	18 p3175 A69-35483	19 p3356 A69-35528	19 p3341 A69-35573
18 p3205 A69-35394	18 p3206 A69-35439 #	18 p3104 A69-35484	19 p3356 A69-35529*	19 p3322 A69-35574
18 p3188 A69-35395	18 p3097 A69-35440 #	18 p3105 A69-35485	19 p3356 A69-35530	19 p3322 A69-35575
18 p3188 A69-35396	18 p3189 A69-35441 #	18 p3105 A69-35486	19 p3288 A69-35531	19 p3322 A69-35576
18 p3189 A69-35397	18 p3158 A69-35442	18 p3181 A69-35487	19 p3356 A69-35532	19 p3322 A69-35577
18 p3189 A69-35398	18 p3158 A69-35443 #	18 p3179 A69-35488*	19 p3356 A69-35533	19 p3323 A69-35578
18 p3205 A69-35399*	18 p3158 A69-35444 #	18 p3179 A69-35489*	19 p3356 A69-35534	19 p3323 A69-35579
18 p3189 A69-35400*	18 p3159 A69-35445 #	18 p3206 A69-35490 #	19 p3264 A69-35535	19 p3323 A69-35580
18 p3178 A69-35401	18 p3159 A69-35446 #	18 p3227 A69-35491 #	19 p3357 A69-35536*	19 p3323 A69-35581
18 p3175 A69-35402 #	18 p3159 A69-35447	18 p3227 A69-35492 #	19 p3357 A69-35537	19 p3323 A69-35582
18 p3231 A69-35403 #	18 p3159 A69-35448 #	18 p3139 A69-35493 #	19 p3318 A69-35538*	19 p3341 A69-35583
18 p3178 A69-35404 #	18 p3159 A69-35449 #	18 p3227 A69-35494 #	19 p3357 A69-35539	19 p3323 A69-35584
18 p3099 A69-35405 #	18 p3159 A69-35450 #	18 p3154 A69-35495	19 p3341 A69-35540	19 p3433 A69-35585
18 p3178 A69-35406 #	18 p3159 A69-35451	18 p3154 A69-35496	19 p3318 A69-35541	19 p3357 A69-35586
18 p3153 A69-35407 #	18 p3160 A69-35452 #	18 p3181 A69-35497	19 p3341 A69-35542	19 p3433 A69-35587
18 p3154 A69-35408 #	18 p3160 A69-35453 #	18 p3163 A69-35498 #	19 p3319 A69-35543	19 p3324 A69-35588
18 p3132 A69-35409*	18 p3160 A69-35454 #	18 p3132 A69-35499*	19 p3433 A69-35544	19 p3324 A69-35589
18 p3205 A69-35410*	18 p3160 A69-35455 #	19 p3288 A69-35500 #	19 p3319 A69-35545	19 p3288 A69-35590 #

ACCESSION NUMBER INDEX

19 p3288 A69-35591 #	19 p3237 A69-35636**	19 p3381 A69-35681*	19 p3305 A69-35726	19 p3342 A69-35771
19 p3288 A69-35592 #	19 p3243 A69-35637 #	19 p3382 A69-35682	19 p3305 A69-35727	19 p3342 A69-35772
19 p3453 A69-35593 #	19 p3243 A69-35638 #	19 p3250 A69-35683	19 p3292 A69-35728	19 p3434 A69-35773
19 p3288 A69-35594 #	19 p3243 A69-35639**	19 p3382 A69-35684	19 p3305 A69-35729	19 p3358 A69-35774
19 p3453 A69-35595 #	19 p3249 A69-35640 #	19 p3250 A69-35685	19 p3305 A69-35730*	19 p3342 A69-35775
19 p3453 A69-35596 #	19 p3243 A69-35641 #	19 p3250 A69-35686*	19 p3306 A69-35731	19 p3358 A69-35776
19 p3453 A69-35597 #	19 p3244 A69-35642 #	19 p3250 A69-35687	19 p3306 A69-35732 #	19 p3434 A69-35777
19 p3243 A69-35598 #	19 p3392 A69-35643 #	19 p3251 A69-35688*	19 p3306 A69-35733	19 p3342 A69-35778
19 p3243 A69-35599 #	19 p3237 A69-35644**	19 p3251 A69-35689	19 p3292 A69-35734	19 p3429 A69-35779 #
19 p3279 A69-35600	19 p3393 A69-35645 #	19 p3251 A69-35690	19 p3292 A69-35735	19 p3360 A69-35780 #
19 p3330 A69-35601 #	19 p3244 A69-35646 #	19 p3251 A69-35691*	19 p3306 A69-35736	19 p3281 A69-35781
19 p3330 A69-35602 #	19 p3244 A69-35647 #	19 p3251 A69-35692*	19 p3292 A69-35737	19 p3454 A69-35782 #
19 p3304 A69-35603 #	19 p3244 A69-35648**	19 p3251 A69-35693	19 p3292 A69-35738*	19 p3282 A69-35783 #
19 p3330 A69-35604 #	19 p3244 A69-35649**	19 p3251 A69-35694*	19 p3306 A69-35739	19 p3282 A69-35784 #
19 p3259 A69-35605	19 p3244 A69-35650 #	19 p3252 A69-35695	19 p3293 A69-35740	19 p3282 A69-35785 #
19 p3264 A69-35606*	19 p3245 A69-35651 #	19 p3382 A69-35696	19 p3306 A69-35741*	19 p3282 A69-35786 #
19 p3397 A69-35607	19 p3245 A69-35652 #	19 p3252 A69-35697*	19 p3306 A69-35742	19 p3282 A69-35787 #
19 p3397 A69-35608	19 p3245 A69-35653 #	19 p3252 A69-35698*	19 p3293 A69-35743	19 p3382 A69-35788**
19 p3397 A69-35609	19 p3245 A69-35654 #	19 p3252 A69-35699	19 p3293 A69-35744*	19 p3368 A69-35789
19 p3397 A69-35610	19 p3245 A69-35655 #	19 p3252 A69-35700	19 p3307 A69-35745	19 p3368 A69-35790**
19 p3397 A69-35611	19 p3245 A69-35656 #	19 p3252 A69-35701*	19 p3293 A69-35746	19 p3368 A69-35791**
19 p3397 A69-35612*	19 p3433 A69-35657**	19 p3253 A69-35702*	19 p3293 A69-35747	19 p3368 A69-35792**
19 p3397 A69-35613	19 p3433 A69-35658 #	19 p3253 A69-35703	19 p3307 A69-35748	19 p3369 A69-35793 #
19 p3398 A69-35614	19 p3433 A69-35659 #	19 p3253 A69-35704*	19 p3307 A69-35749	19 p3307 A69-35794 #
19 p3398 A69-35615*	19 p3434 A69-35660 #	19 p3253 A69-35705	19 p3307 A69-35750	19 p3369 A69-35795 #
19 p3398 A69-35616*	19 p3245 A69-35661 #	19 p3253 A69-35706	19 p3293 A69-35751	19 p3307 A69-35796**
19 p3359 A69-35617 #	19 p3398 A69-35662	19 p3253 A69-35707	19 p3294 A69-35752	19 p3267 A69-35797 #
19 p3372 A69-35618 #	19 p3367 A69-35663*	19 p3253 A69-35708	19 p3294 A69-35753	19 p3279 A69-35798**
19 p3266 A69-35619 #	19 p3368 A69-35664	19 p3254 A69-35709	19 p3294 A69-35754	19 p3369 A69-35799 #
19 p3237 A69-35620 #	19 p3359 A69-35665*	19 p3254 A69-35710	19 p3294 A69-35755 #	19 p3369 A69-35800 #
19 p3296 A69-35621 #	19 p3398 A69-35666	19 p3254 A69-35711	19 p3296 A69-35756 #	19 p3369 A69-35801**
19 p3289 A69-35622 #	19 p3399 A69-35667*	19 p3254 A69-35712	19 p3401 A69-35757 #	19 p3369 A69-35802**
19 p3289 A69-35623 #	19 p3399 A69-35668	19 p3254 A69-35713	19 p3401 A69-35758 #	19 p3370 A69-35803**
19 p3453 A69-35624**	19 p3399 A69-35669	19 p3289 A69-35714	19 p3379 A69-35759 #	19 p3379 A69-35804
19 p3366 A69-35625 #	19 p3399 A69-35670	19 p3291 A69-35715*	19 p3330 A69-35760 #	19 p3279 A69-35805
19 p3289 A69-35626 #	19 p3399 A69-35671*	19 p3291 A69-35716	19 p3296 A69-35761 #	19 p3285 A69-35806
19 p3366 A69-35627 #	19 p3400 A69-35672	19 p3291 A69-35717	19 p3296 A69-35762 #	19 p3382 A69-35807
19 p3243 A69-35628 #	19 p3400 A69-35673	19 p3291 A69-35718*	19 p3266 A69-35763	19 p3307 A69-35808 #
19 p3289 A69-35629 #	19 p3400 A69-35674	19 p3304 A69-35719	19 p3281 A69-35764	19 p3401 A69-35809 #
19 p3289 A69-35630 #	19 p3400 A69-35675	19 p3291 A69-35720*	19 p3281 A69-35765	19 p3279 A69-35810 #
19 p3367 A69-35631 #	19 p3400 A69-35676	19 p3305 A69-35721	19 p3281 A69-35766	19 p3342 A69-35811
19 p3367 A69-35632 #	19 p3400 A69-35677	19 p3291 A69-35722*	19 p3266 A69-35767	19 p3342 A69-35812
19 p3367 A69-35633 #	19 p3249 A69-35678	19 p3292 A69-35723	19 p3266 A69-35768	19 p3246 A69-35813
19 p3367 A69-35634 #	19 p3381 A69-35679	19 p3305 A69-35724*	19 p3302 A69-35769 #	19 p3237 A69-35814 #
19 p3367 A69-35635 #	19 p3381 A69-35680	19 p3292 A69-35725	19 p3361 A69-35770 #	19 p3296 A69-35815 #



## ACCESSION NUMBER INDEX

19 p3297 A69-35816 #	19 p3297 A69-35861 #	19 p3372 A69-35906	19 p3402 A69-35951 #	19 p3267 A69-35996*
19 p3247 A69-35817 #	19 p3330 A69-35862	19 p3372 A69-35907	19 p3247 A69-35952**	19 p3267 A69-35997
19 p3247 A69-35818 #	19 p3331 A69-35863 #	19 p3372 A69-35908	19 p3370 A69-35953**	19 p3283 A69-35998
19 p3393 A69-35819 #	19 p3331 A69-35864 #	19 p3308 A69-35909	19 p3238 A69-35954 #	19 p3324 A69-35999
19 p3297 A69-35820 #	19 p3331 A69-35865 #	19 p3247 A69-35910	19 p3279 A69-35955 #	19 p3370 A69-36000
19 p3379 A69-35821 #	19 p3331 A69-35866 #	19 p3375 A69-35911	19 p3402 A69-35956**	19 p3430 A69-36001*
19 p3308 A69-35822 #	19 p3332 A69-35867 #	19 p3401 A69-35912	19 p3254 A69-35957 #	19 p3326 A69-36002
19 p3372 A69-35823 #	19 p3308 A69-35868 #	19 p3429 A69-35913	19 p3429 A69-35958**	19 p3327 A69-36003
19 p3393 A69-35824 #	19 p3332 A69-35869 #	19 p3429 A69-35914	19 p3238 A69-35959 #	19 p3394 A69-36004
19 p3308 A69-35825 #	19 p3332 A69-35870 #	19 p3401 A69-35915	19 p3238 A69-35960 #	19 p3454 A69-36005
19 p3282 A69-35826 #	19 p3332 A69-35871 #	19 p3401 A69-35916*	19 p3402 A69-35961**	19 p3454 A69-36006
19 p3434 A69-35827 #	19 p3332 A69-35872 #	19 p3429 A69-35917	19 p3402 A69-35962	19 p3454 A69-36007
19 p3434 A69-35828 #	19 p3332 A69-35873 #	19 p3429 A69-35918	19 p3403 A69-35963	19 p3455 A69-36008
19 p3434 A69-35829 #	19 p3332 A69-35874 #	19 p3342 A69-35919	19 p3403 A69-35964	19 p3430 A69-36009
19 p3358 A69-35830 #	19 p3333 A69-35875 #	19 p3343 A69-35920	19 p3403 A69-35965	19 p3430 A69-36010
19 p3324 A69-35831 #	19 p3333 A69-35876 #	19 p3343 A69-35921	19 p3403 A69-35966*	19 p3247 A69-36011
19 p3324 A69-35832 #	19 p3333 A69-35877 #	19 p3343 A69-35922	19 p3403 A69-35967*	19 p3254 A69-36012
19 p3324 A69-35833 #	19 p3333 A69-35878 #	19 p3343 A69-35923	19 p3403 A69-35968	19 p3327 A69-36013
19 p3259 A69-35834 #	19 p3333 A69-35879 #	19 p3343 A69-35924	19 p3403 A69-35969	19 p3327 A69-36014
19 p3435 A69-35835	19 p3333 A69-35880 #	19 p3343 A69-35925	19 p3403 A69-35970	19 p3430 A69-36015
19 p3297 A69-35836	19 p3333 A69-35881 #	19 p3344 A69-35926	19 p3264 A69-35971*	19 p3430 A69-36016
19 p3297 A69-35837	19 p3334 A69-35882 #	19 p3344 A69-35927	19 p3257 A69-35972	19 p3247 A69-36017
19 p3297 A69-35838	19 p3334 A69-35883 #	19 p3344 A69-35928	19 p3257 A69-35973*	19 p3255 A69-36018
19 p3380 A69-35839	19 p3334 A69-35884 #	19 p3267 A69-35929	19 p3264 A69-35974*	19 p3283 A69-36019
19 p3401 A69-35840	19 p3334 A69-35885 #	19 p3267 A69-35930	19 p3257 A69-35975*	19 p3283 A69-36020
19 p3435 A69-35841	19 p3334 A69-35886 #	19 p3283 A69-35931	19 p3257 A69-35976*	19 p3283 A69-36021
19 p3435 A69-35842 #	19 p3401 A69-35887	19 p3267 A69-35932*	19 p3302 A69-35977*	19 p3294 A69-36022*
19 p3435 A69-35843 #	19 p3285 A69-35888	19 p3283 A69-35933	19 p3257 A69-35978*	19 p3295 A69-36023
19 p3436 A69-35844 #	19 p3286 A69-35889 #	19 p3402 A69-35934**	19 p3454 A69-35979	19 p3261 A69-36024
19 p3436 A69-35845 #	19 p3286 A69-35890 #	19 p3402 A69-35935**	19 p3454 A69-35980	19 p3261 A69-36025
19 p3436 A69-35846 #	19 p3286 A69-35891 #	19 p3402 A69-35936 #	19 p3448 A69-35981 #	19 p3261 A69-36026
19 p3436 A69-35847 #	19 p3286 A69-35892 #	19 p3402 A69-35937**	19 p3334 A69-35982 #	19 p3248 A69-36027
19 p3436 A69-35848 #	19 p3372 A69-35893 #	19 p3402 A69-35938**	19 p3344 A69-35983 #	19 p3359 A69-36028*
19 p3358 A69-35849 #	19 p3260 A69-35894	19 p3402 A69-35939**	19 p3358 A69-35984 #	19 p3280 A69-36029
19 p3436 A69-35850 #	19 p3260 A69-35895 #	19 p3267 A69-35940**	19 p3375 A69-35985	19 p3284 A69-36030
19 p3238 A69-35851 #	19 p3260 A69-35896 #	19 p3394 A69-35941**	19 p3260 A69-35986	19 p3327 A69-36031
19 p3297 A69-35852 #	19 p3260 A69-35897 #	19 p3371 A69-35942 #	19 p3260 A69-35987	19 p3437 A69-36032
19 p3297 A69-35853 #	19 p3260 A69-35898 #	19 p3448 A69-35943 #	19 p3286 A69-35988 #	19 p3437 A69-36033*
19 p3448 A69-35854 #	19 p3360 A69-35899	19 p3394 A69-35944**	19 p3437 A69-35989 #	19 p3430 A69-36034*
19 p3448 A69-35855 #	19 p3267 A69-35900	19 p3394 A69-35945 #	19 p3280 A69-35990	19 p3455 A69-36035
19 p3308 A69-35856 #	19 p3358 A69-35901 #	19 p3394 A69-35946 #	19 p3308 A69-35991	19 p3327 A69-36036
19 p3308 A69-35857 #	19 p3358 A69-35902 #	19 p3429 A69-35947 #	19 p3283 A69-35992	19 p3431 A69-36037
19 p3436 A69-35858 #	19 p3358 A69-35903 #	19 p3437 A69-35948 #	19 p3302 A69-35993	19 p3360 A69-36038
19 p3285 A69-35859 #	19 p3294 A69-35904	19 p3429 A69-35949**	19 p3309 A69-35994	19 p3327 A69-36039
19 p3360 A69-35860 #	19 p3308 A69-35905	19 p3429 A69-35950 #	19 p3309 A69-35995	19 p3327 A69-36040

## ACCESSION NUMBER INDEX

19 p3328 A69-36041	19 p3408 A69-36086*	19 p3417 A69-36131	19 p3376 A69-36176 #	19 p3422 A69-36221 #
19 p3394 A69-36042	19 p3409 A69-36087	19 p3417 A69-36132*	19 p3376 A69-36177**	19 p3422 A69-36222 #
19 p3284 A69-36043	19 p3409 A69-36088	19 p3417 A69-36133	19 p3377 A69-36178 #	19 p3423 A69-36223 #
19 p3455 A69-36044	19 p3409 A69-36089	19 p3418 A69-36134	19 p3377 A69-36179 #	19 p3423 A69-36224 #
19 p3382 A69-36045*	19 p3409 A69-36090*	19 p3418 A69-36135	19 p3377 A69-36180 #	19 p3379 A69-36225 #
19 p3334 A69-36046	19 p3409 A69-36091*	19 p3418 A69-36136*	19 p3377 A69-36181 #	19 p3423 A69-36226 #
19 p3334 A69-36047	19 p3410 A69-36092	19 p3418 A69-36137	19 p3377 A69-36182**	19 p3423 A69-36227 #
19 p3335 A69-36048*	19 p3410 A69-36093*	19 p3418 A69-36138	19 p3377 A69-36183 #	19 p3423 A69-36228 #
19 p3382 A69-36049*	19 p3410 A69-36094	19 p3419 A69-36139	19 p3377 A69-36184 #	19 p3423 A69-36229 #
19 p3383 A69-36050*	19 p3410 A69-36095	19 p3419 A69-36140	19 p3378 A69-36185**	19 p3423 A69-36230 #
19 p3309 A69-36051	19 p3410 A69-36096	19 p3419 A69-36141	19 p3378 A69-36186 #	19 p3423 A69-36231 #
19 p3375 A69-36052	19 p3411 A69-36097	19 p3419 A69-36142	19 p3378 A69-36187 #	19 p3424 A69-36232 #
19 p3373 A69-36053	19 p3411 A69-36098	19 p3298 A69-36143 #	19 p3378 A69-36188 #	19 p3424 A69-36233 #
19 p3373 A69-36054	19 p3411 A69-36099	19 p3437 A69-36144 #	19 p3378 A69-36189 #	19 p3424 A69-36234 #
19 p3373 A69-36055	19 p3411 A69-36100	19 p3419 A69-36145	19 p3378 A69-36190 #	19 p3424 A69-36235 #
19 p3373 A69-36056	19 p3411 A69-36101	19 p3255 A69-36146	19 p3286 A69-36191 #	19 p3424 A69-36236 #
19 p3373 A69-36057	19 p3412 A69-36102	19 p3344 A69-36147	19 p3311 A69-36192 #	19 p3268 A69-36237
19 p3268 A69-36058	19 p3412 A69-36103	19 p3437 A69-36148	19 p3311 A69-36193 #	19 p3270 A69-36238
19 p3309 A69-36059	19 p3412 A69-36104	19 p3448 A69-36149 #	19 p3311 A69-36194 #	19 p3270 A69-36239
19 p3309 A69-36060	19 p3412 A69-36105	19 p3268 A69-36150	19 p3311 A69-36195 #	19 p3270 A69-36240
19 p3310 A69-36061	19 p3412 A69-36106	19 p3344 A69-36151 #	19 p3311 A69-36196 #	19 p3270 A69-36241
19 p3310 A69-36062	19 p3413 A69-36107*	19 p3328 A69-36152 #	19 p3311 A69-36197 #	19 p3270 A69-36242*
19 p3310 A69-36063	19 p3413 A69-36108	19 p3344 A69-36153 #	19 p3335 A69-36198 #	19 p3257 A69-36243
19 p3310 A69-36064	19 p3413 A69-36109	19 p3345 A69-36154 #	19 p3360 A69-36199	19 p3261 A69-36244
19 p3310 A69-36065	19 p3413 A69-36110	19 p3328 A69-36155	19 p3360 A69-36200	19 p3270 A69-36245
19 p3310 A69-36066	19 p3311 A69-36111	19 p3345 A69-36156 #	19 p3437 A69-36201 #	19 p3270 A69-36246*
19 p3335 A69-36067	19 p3413 A69-36112*	19 p3345 A69-36157 #	19 p3373 A69-36202 #	19 p3271 A69-36247
19 p3310 A69-36068	19 p3414 A69-36113	19 p3328 A69-36158 #	19 p3438 A69-36203 #	19 p3271 A69-36248
19 p3311 A69-36069	19 p3414 A69-36114	19 p3345 A69-36159 #	19 p3373 A69-36204 #	19 p3271 A69-36249
19 p3335 A69-36070	19 p3414 A69-36115	19 p3328 A69-36160 #	19 p3303 A69-36205 #	19 p3271 A69-36250
19 p3311 A69-36071	19 p3414 A69-36116	19 p3328 A69-36161 #	19 p3312 A69-36206 #	19 p3271 A69-36251*
19 p3403 A69-36072	19 p3414 A69-36117	19 p3345 A69-36162 #	19 p3280 A69-36207*	19 p3271 A69-36252
19 p3406 A69-36073*	19 p3415 A69-36118*	19 p3268 A69-36163	19 p3359 A69-36208*	19 p3271 A69-36253
19 p3406 A69-36074*	19 p3415 A69-36119	19 p3383 A69-36164 #	19 p3419 A69-36209*	19 p3272 A69-36254*
19 p3406 A69-36075	19 p3415 A69-36120*	19 p3335 A69-36165 #	19 p3393 A69-36210	19 p3272 A69-36255
19 p3406 A69-36076	19 p3295 A69-36121	19 p3335 A69-36166 #	19 p3420 A69-36211	19 p3272 A69-36256
19 p3407 A69-36077	19 p3415 A69-36122	19 p3383 A69-36167 #	19 p3421 A69-36212 #	19 p3272 A69-36257
19 p3407 A69-36078	19 p3359 A69-36123	19 p3257 A69-36168 #	19 p3421 A69-36213 #	19 p3455 A69-36258*
19 p3407 A69-36079	19 p3415 A69-36124	19 p3257 A69-36169 #	19 p3421 A69-36214 #	19 p3312 A69-36259*
19 p3407 A69-36080	19 p3416 A69-36125	19 p3238 A69-36170	19 p3422 A69-36215 #	19 p3272 A69-36260
19 p3408 A69-36081	19 p3416 A69-36126	19 p3375 A69-36171	19 p3422 A69-36216**	19 p3272 A69-36261
19 p3408 A69-36082	19 p3416 A69-36127	19 p3238 A69-36172 #	19 p3422 A69-36217**	19 p3272 A69-36262*
19 p3408 A69-36083	19 p3416 A69-36128	19 p3376 A69-36173 #	19 p3396 A69-36218**	19 p3273 A69-36263*
19 p3408 A69-36084	19 p3416 A69-36129*	19 p3376 A69-36174 #	19 p3422 A69-36219**	19 p3273 A69-36264
19 p3408 A69-36085	19 p3417 A69-36130*	19 p3376 A69-36175 #	19 p3422 A69-36220 #	19 p3280 A69-36265*



# ACCESSION NUMBER INDEX

19 p3273 A69-36266	19 p3239 A69-36311 #	19 p3450 A69-36356	19 p3239 A69-36401 #	19 p3383 A69-36446*#
19 p3273 A69-36267*	19 p3438 A69-36312 #	19 p3450 A69-36357	19 p3239 A69-36402 #	19 p3383 A69-36447*#
19 p3261 A69-36268	19 p3438 A69-36313 #	19 p3450 A69-36358	19 p3240 A69-36403 #	19 p3262 A69-36448*
19 p3261 A69-36269	19 p3275 A69-36314	19 p3450 A69-36359	19 p3303 A69-36404 #	19 p3258 A69-36449*
19 p3261 A69-36270	19 p3280 A69-36315	19 p3336 A69-36360	19 p3362 A69-36405*#	19 p3262 A69-36450
19 p3262 A69-36271	19 p3370 A69-36316	19 p3450 A69-36361	19 p3362 A69-36406 #	19 p3263 A69-36451
19 p3262 A69-36272	19 p3370 A69-36317	19 p3298 A69-36362	19 p3303 A69-36407 #	19 p3263 A69-36452 #
19 p3262 A69-36273	19 p3262 A69-36318	19 p3450 A69-36363	19 p3303 A69-36408 #	19 p3263 A69-36453
19 p3273 A69-36274	19 p3345 A69-36319	19 p3451 A69-36364	19 p3303 A69-36409 #	19 p3258 A69-36454 #
19 p3273 A69-36275	19 p3346 A69-36320	19 p3451 A69-36365	19 p3362 A69-36410 #	19 p3258 A69-36455
19 p3274 A69-36276	19 p3395 A69-36321	19 p3451 A69-36366	19 p3396 A69-36411 #	19 p3258 A69-36456 #
19 p3274 A69-36277	19 p3395 A69-36322	19 p3451 A69-36367	19 p3275 A69-36412 #	19 p3263 A69-36457*
19 p3312 A69-36278	19 p3255 A69-36323	19 p3451 A69-36368	19 p3275 A69-36413 #	19 p3259 A69-36458*
19 p3274 A69-36279	19 p3438 A69-36324	19 p3451 A69-36369	19 p3313 A69-36414	19 p3259 A69-36459
19 p3274 A69-36280*	19 p3438 A69-36325	19 p3452 A69-36370*	19 p3380 A69-36415 #	19 p3456 A69-36460*
19 p3274 A69-36281	19 p3295 A69-36326	19 p3452 A69-36371 #	19 p3337 A69-36416	19 p3263 A69-36461
19 p3274 A69-36282*	19 p3295 A69-36327	19 p3265 A69-36372*	19 p3313 A69-36417 #	19 p3263 A69-36462
19 p3274 A69-36283	19 p3275 A69-36328	19 p3360 A69-36373 #	19 p3255 A69-36418*#	19 p3263 A69-36463
19 p3312 A69-36284	19 p3431 A69-36329*	19 p3258 A69-36374*	19 p3240 A69-36419 #	19 p3431 A69-36464*
19 p3312 A69-36285	19 p3455 A69-36330	19 p3312 A69-36375*	19 p3240 A69-36420 #	19 p3431 A69-36465
19 p3275 A69-36286	19 p3455 A69-36331	19 p3265 A69-36376*	19 p3425 A69-36421*	19 p3374 A69-36466 #
19 p3359 A69-36287*	19 p3455 A69-36332	19 p3258 A69-36377	19 p3425 A69-36422	19 p3380 A69-36467 #
19 p3265 A69-36288*	19 p3448 A69-36333 #	19 p3312 A69-36378*	19 p3425 A69-36423	19 p3374 A69-36468 #
19 p3265 A69-36289*	19 p3424 A69-36334	19 p3425 A69-36379	19 p3379 A69-36424*#	19 p3374 A69-36469 #
19 p3265 A69-36290*	19 p3424 A69-36335*	19 p3438 A69-36380	19 p3276 A69-36425	19 p3439 A69-36470
19 p3265 A69-36291*	19 p3424 A69-36336*	19 p3313 A69-36381	19 p3276 A69-36426	19 p3295 A69-36471
19 p3265 A69-36292*	19 p3425 A69-36337*	19 p3275 A69-36382	19 p3276 A69-36427	19 p3240 A69-36472
19 p3265 A69-36293*	19 p3425 A69-36338*	19 p3379 A69-36383 #	19 p3303 A69-36428	19 p3240 A69-36473
19 p3258 A69-36294*	19 p3275 A69-36339 #	19 p3298 A69-36384 #	19 p3303 A69-36429	19 p3240 A69-36474
19 p3248 A69-36295 #	19 p3275 A69-36340 #	19 p3298 A69-36385 #	19 p3425 A69-36430	19 p3299 A69-36475
19 p3248 A69-36296 #	19 p3335 A69-36341 #	19 p3298 A69-36386 #	19 p3276 A69-36431	19 p3439 A69-36476 #
19 p3238 A69-36297 #	19 p3335 A69-36342 #	19 p3239 A69-36387 #	19 p3286 A69-36432	19 p3439 A69-36477 #
19 p3329 A69-36298 #	19 p3336 A69-36343 #	19 p3298 A69-36388 #	19 p3284 A69-36433	19 p3439 A69-36478 #
19 p3394 A69-36299 #	19 p3336 A69-36344 #	19 p3298 A69-36389 #	19 p3276 A69-36434	19 p3383 A69-36479 #
19 p3394 A69-36300 #	19 p3336 A69-36345 #	19 p3299 A69-36390 #	19 p3346 A69-36435*	19 p3384 A69-36480 #
19 p3372 A69-36301 #	19 p3336 A69-36346 #	19 p3299 A69-36391 #	19 p3346 A69-36436	19 p3384 A69-36481 #
19 p3345 A69-36302 #	19 p3336 A69-36347 #	19 p3452 A69-36392 #	19 p3346 A69-36437	19 p3276 A69-36482
19 p3345 A69-36303 #	19 p3336 A69-36348 #	19 p3299 A69-36393 #	19 p3439 A69-36438	19 p3380 A69-36483
19 p3380 A69-36304 #	19 p3336 A69-36349 #	19 p3299 A69-36394 #	19 p3439 A69-36439	19 p3303 A69-36484
19 p3438 A69-36305 #	19 p3336 A69-36350 #	19 p3239 A69-36395 #	19 p3346 A69-36440*#	19 p3276 A69-36485
19 p3438 A69-36306 #	19 p3448 A69-36351	19 p3239 A69-36396 #	19 p3380 A69-36441	19 p3276 A69-36486*
19 p3373 A69-36307 #	19 p3449 A69-36352	19 p3239 A69-36397 #	19 p3380 A69-36442 #	19 p3277 A69-36487*
19 p3438 A69-36308 #	19 p3449 A69-36353	19 p3239 A69-36398 #	19 p3359 A69-36443*#	19 p3277 A69-36488
19 p3298 A69-36309 #	19 p3449 A69-36354	19 p3248 A69-36399 #	19 p3337 A69-36444	19 p3313 A69-36489*#
19 p3373 A69-36310 #	19 p3449 A69-36355	19 p3239 A69-36400 #	19 p3383 A69-36445*#	19 p3313 A69-36490*#

## ACCESSION NUMBER INDEX

19 p3313 A69-36491*#	19 p3387 A69-36536 #	19 p3439 A69-36581 #	19 p3314 A69-36626 #	19 p3366 A69-36671 #
19 p3313 A69-36492*#	19 p3338 A69-36537 #	19 p3313 A69-36582 #	19 p3427 A69-36627 #	19 p3366 A69-36672 #
19 p3313 A69-36493	19 p3338 A69-36538 #	19 p3426 A69-36583	19 p3427 A69-36628 #	19 p3366 A69-36673 #
19 p3329 A69-36494	19 p3387 A69-36539 #	19 p3374 A69-36584 #	19 p3432 A69-36629 #	19 p3432 A69-36674*
19 p3329 A69-36495	19 p3387 A69-36540	19 p3440 A69-36585 #	19 p3396 A69-36630 #	19 p3284 A69-36675*
19 p3362 A69-36496	19 p3388 A69-36541 #	19 p3440 A69-36586 #	19 p3396 A69-36631 #	19 p3284 A69-36676*
19 p3362 A69-36497 #	19 p3388 A69-36542 #	19 p3299 A69-36587 #	19 p3396 A69-36632 #	19 p3284 A69-36677
19 p3363 A69-36498 #	19 p3388 A69-36543 #	19 p3440 A69-36588	19 p3432 A69-36633 #	19 p3314 A69-36678*
19 p3363 A69-36499 #	19 p3388 A69-36544 #	19 p3440 A69-36589	19 p3314 A69-36634	19 p3314 A69-36679
19 p3363 A69-36500 #	19 p3389 A69-36545 #	19 p3240 A69-36590	19 p3346 A69-36635	19 p3255 A69-36680*
19 p3363 A69-36501 #	19 p3389 A69-36546 #	19 p3277 A69-36591 #	19 p3440 A69-36636	19 p3314 A69-36681*
19 p3363 A69-36502 #	19 p3389 A69-36547 #	19 p3284 A69-36592 #	19 p3440 A69-36637	19 p3315 A69-36682
19 p3363 A69-36503 #	19 p3389 A69-36548 #	19 p3278 A69-36593 #	19 p3440 A69-36638	19 p3315 A69-36683*
19 p3364 A69-36504 #	19 p3389 A69-36549 #	19 p3284 A69-36594 #	19 p3361 A69-36639 #	19 p3295 A69-36684
19 p3364 A69-36505 #	19 p3389 A69-36550 #	19 p3278 A69-36595 #	19 p3361 A69-36640 #	19 p3440 A69-36685 #
19 p3364 A69-36506 #	19 p3389 A69-36551 #	19 p3278 A69-36596 #	19 p3392 A69-36641 #	19 p3432 A69-36686
19 p3364 A69-36507 #	19 p3390 A69-36552 #	19 p3278 A69-36597 #	19 p3304 A69-36642 #	19 p3432 A69-36687
19 p3364 A69-36508 #	19 p3390 A69-36553 #	19 p3314 A69-36598 #	19 p3295 A69-36643	19 p3456 A69-36688
19 p3364 A69-36509 #	19 p3390 A69-36554 #	19 p3360 A69-36599*#	19 p3396 A69-36644	19 p3248 A69-36689
19 p3365 A69-36510 #	19 p3390 A69-36555 #	19 p3361 A69-36600	19 p3286 A69-36645	19 p3338 A69-36690
19 p3303 A69-36511	19 p3390 A69-36556 #	19 p3240 A69-36601 #	19 p3361 A69-36646	19 p3338 A69-36691
19 p3304 A69-36512	19 p3390 A69-36557 #	19 p3380 A69-36602 #	19 p3299 A69-36647	19 p3338 A69-36692
19 p3384 A69-36513	19 p3391 A69-36558 #	19 p3381 A69-36603 #	19 p3299 A69-36648	19 p3278 A69-36693
19 p3385 A69-36514 #	19 p3391 A69-36559 #	19 p3379 A69-36604 #	19 p3299 A69-36649	19 p3338 A69-36694
19 p3385 A69-36515 #	19 p3391 A69-36560 #	19 p3338 A69-36605 #	19 p3240 A69-36650	19 p3339 A69-36695
19 p3385 A69-36516 #	19 p3391 A69-36561 #	19 p3391 A69-36606 #	19 p3287 A69-36651	19 p3339 A69-36696
19 p3385 A69-36517 #	19 p3425 A69-36562 #	19 p3391 A69-36607 #	19 p3427 A69-36652	19 p3339 A69-36697
19 p3385 A69-36518 #	19 p3425 A69-36563 #	19 p3391 A69-36608 #	19 p3370 A69-36653 #	19 p3339 A69-36698
19 p3385 A69-36519 #	19 p3426 A69-36564 #	19 p3391 A69-36609 #	19 p3280 A69-36654 #	19 p3315 A69-36699
19 p3385 A69-36520 #	19 p3426 A69-36565 #	19 p3392 A69-36610 #	19 p3374 A69-36655	19 p3371 A69-36700
19 p3386 A69-36521 #	19 p3426 A69-36566 #	19 p3392 A69-36611 #	19 p3263 A69-36656 #	19 p3278 A69-36701
19 p3386 A69-36522 #	19 p3277 A69-36567 #	19 p3427 A69-36612 #	19 p3440 A69-36657 #	19 p3278 A69-36702
19 p3386 A69-36523 #	19 p3277 A69-36568 #	19 p3427 A69-36613 #	19 p3300 A69-36658 #	19 p3371 A69-36703
19 p3386 A69-36524 #	19 p3277 A69-36569 #	19 p3370 A69-36614 #	19 p3427 A69-36659	19 p3371 A69-36704
19 p3386 A69-36525 #	19 p3284 A69-36570 #	19 p3431 A69-36615 #	19 p3392 A69-36660	19 p3371 A69-36705
19 p3386 A69-36526 #	19 p3277 A69-36571 #	19 p3431 A69-36616 #	19 p3278 A69-36661 #	19 p3395 A69-36706
19 p3337 A69-36527 #	19 p3329 A69-36572 #	19 p3431 A69-36617 #	19 p3287 A69-36662 #	19 p3296 A69-36707
19 p3337 A69-36528 #	19 p3396 A69-36573 #	19 p3427 A69-36618 #	19 p3287 A69-36663 #	19 p3285 A69-36708
19 p3387 A69-36529 #	19 p3426 A69-36574 #	19 p3370 A69-36619 #	19 p3287 A69-36664 #	19 p3287 A69-36709
19 p3387 A69-36530 #	19 p3426 A69-36575 #	19 p3432 A69-36620 #	19 p3287 A69-36665 #	19 p3255 A69-36710
19 p3337 A69-36531 #	19 p3426 A69-36576 #	19 p3396 A69-36621 #	19 p3280 A69-36666 #	19 p3255 A69-36711 #
19 p3387 A69-36532 #	19 p3426 A69-36577 #	19 p3314 A69-36622 #	19 p3365 A69-36667	19 p3256 A69-36712 #
19 p3337 A69-36533 #	19 p3426 A69-36578 #	19 p3304 A69-36623 #	19 p3365 A69-36668 #	19 p3256 A69-36713 #
19 p3337 A69-36534 #	19 p3426 A69-36579 #	19 p3304 A69-36624 #	19 p3366 A69-36669 #	19 p3256 A69-36714 #
19 p3337 A69-36535 #	19 p3365 A69-36580	19 p3427 A69-36625 #	19 p3366 A69-36670 #	19 p3256 A69-36715 #



# ACCESSION NUMBER INDEX

19 p3278 A69-36716 #	19 p3432 A69-36761 #	19 p3444 A69-36806	19 p3447 A69-36851	19 p3350 A69-36896
19 p3256 A69-36717 #	19 p3241 A69-36762 #	19 p3428 A69-36807	19 p3447 A69-36852	19 p3351 A69-36897*
19 p3256 A69-36718 #	19 p3287 A69-36763	19 p3444 A69-36808	19 p3302 A69-36853	19 p3351 A69-36898
19 p3441 A69-36719	19 p3279 A69-36764	19 p3242 A69-36809	19 p3447 A69-36854	19 p3351 A69-36899
19 p3300 A69-36720	19 p3315 A69-36765	19 p3301 A69-36810	19 p3248 A69-36855	19 p3351 A69-36900
19 p3241 A69-36721	19 p3339 A69-36766	19 p3445 A69-36811	19 p3447 A69-36856 #	19 p3351 A69-36901*
19 p3452 A69-36722	19 p3248 A69-36767 #	19 p3445 A69-36812	19 p3447 A69-36857 #	19 p3352 A69-36902*
19 p3329 A69-36723	19 p3329 A69-36768 #	19 p3361 A69-36813	19 p3447 A69-36858 #	19 p3352 A69-36903
19 p3287 A69-36724	19 p3256 A69-36769 #	19 p3393 A69-36814	19 p3447 A69-36859	19 p3352 A69-36904*
19 p3452 A69-36725	19 p3395 A69-36770 #	19 p3301 A69-36815	19 p3447 A69-36860	19 p3352 A69-36905*
19 p3315 A69-36726	19 p3441 A69-36771	19 p3445 A69-36816	19 p3447 A69-36861	19 p3352 A69-36906
19 p3392 A69-36727	19 p3381 A69-36772	19 p3361 A69-36817	19 p3447 A69-36862	19 p3353 A69-36907
19 p3427 A69-36728	19 p3381 A69-36773	19 p3301 A69-36818	19 p3256 A69-36863	19 p3353 A69-36908
19 p3265 A69-36729	19 p3361 A69-36774	19 p3242 A69-36819 #	19 p3256 A69-36864	19 p3433 A69-36909
19 p3266 A69-36730	19 p3300 A69-36775	19 p3242 A69-36820 #	19 p3248 A69-36865	20 p3619 A69-36910
19 p3392 A69-36731*	19 p3443 A69-36776	19 p3456 A69-36821 #	19 p3371 A69-36866	20 p3619 A69-36911
19 p3266 A69-36732	19 p3300 A69-36777	19 p3456 A69-36822 #	19 p3264 A69-36867	20 p3581 A69-36912
19 p3392 A69-36733	19 p3241 A69-36778	19 p3339 A69-36823	19 p3264 A69-36868	20 p3504 A69-36913*
19 p3371 A69-36734 #	19 p3241 A69-36779	19 p3315 A69-36824	19 p3304 A69-36869	20 p3504 A69-36914
19 p3371 A69-36735	19 p3241 A69-36780	19 p3339 A69-36825	19 p3302 A69-36870 #	20 p3630 A69-36915
19 p3371 A69-36736 #	19 p3443 A69-36781	19 p3445 A69-36826	19 p3302 A69-36871 #	20 p3512 A69-36916
19 p3374 A69-36737 #	19 p3241 A69-36782	19 p3445 A69-36827	19 p3395 A69-36872 #	20 p3552 A69-36917
19 p3285 A69-36738 #	19 p3242 A69-36783	19 p3445 A69-36828	19 p3329 A69-36873 #	20 p3460 A69-36918
19 p3287 A69-36739 #	19 p3300 A69-36784	19 p3445 A69-36829	19 p3296 A69-36874 #	20 p3461 A69-36919
19 p3287 A69-36740 #	19 p3300 A69-36785	19 p3445 A69-36830	19 p3428 A69-36875 #	20 p3461 A69-36920
19 p3347 A69-36741 #	19 p3443 A69-36786	19 p3445 A69-36831	19 p3428 A69-36876 #	20 p3547 A69-36921
19 p3347 A69-36742 #	19 p3300 A69-36787	19 p3259 A69-36832*	19 p3285 A69-36877 #	20 p3485 A69-36922*
19 p3347 A69-36743 #	19 p3301 A69-36788	19 p3446 A69-36833	19 p3285 A69-36878 #	20 p3485 A69-36923*
19 p3441 A69-36744 #	19 p3452 A69-36789	19 p3446 A69-36834	19 p3279 A69-36879 #	20 p3633 A69-36924
19 p3441 A69-36745 #	19 p3443 A69-36790	19 p3446 A69-36835*	19 p3339 A69-36880 #	20 p3485 A69-36925
19 p3259 A69-36746	19 p3301 A69-36791	19 p3446 A69-36836	19 p3279 A69-36881 #	20 p3569 A69-36926**
19 p3263 A69-36747	19 p3443 A69-36792	19 p3428 A69-36837	19 p3428 A69-36882 #	20 p3461 A69-36927
19 p3329 A69-36748	19 p3443 A69-36793	19 p3453 A69-36838 #	19 p3347 A69-36883	20 p3519 A69-36928
19 p3395 A69-36749	19 p3443 A69-36794	19 p3301 A69-36839 #	19 p3348 A69-36884	20 p3536 A69-36929
19 p3432 A69-36750	19 p3242 A69-36795	19 p3266 A69-36840 #	19 p3349 A69-36885	20 p3536 A69-36930*
19 p3441 A69-36751 #	19 p3444 A69-36796	19 p3428 A69-36841 #	19 p3349 A69-36886	20 p3536 A69-36931*
19 p3374 A69-36752 #	19 p3242 A69-36797	19 p3301 A69-36842 #	19 p3349 A69-36887	20 p3536 A69-36932
19 p3241 A69-36753 #	19 p3444 A69-36798	19 p3301 A69-36843 #	19 p3349 A69-36888	20 p3536 A69-36933**
19 p3397 A69-36754*	19 p3301 A69-36799	19 p3453 A69-36844 #	19 p3349 A69-36889	20 p3578 A69-36934**
19 p3339 A69-36755	19 p3242 A69-36800	19 p3302 A69-36845 #	19 p3349 A69-36890	20 p3483 A69-36935**
19 p3279 A69-36756	19 p3444 A69-36801	19 p3446 A69-36846 #	19 p3350 A69-36891	20 p3483 A69-36936
19 p3395 A69-36757	19 p3452 A69-36802	19 p3446 A69-36847 #	19 p3350 A69-36892	20 p3578 A69-36937 #
19 p3361 A69-36758*	19 p3444 A69-36803	19 p3248 A69-36848	19 p3350 A69-36893	20 p3619 A69-36938
19 p3241 A69-36759 #	19 p3444 A69-36804	19 p3456 A69-36849	19 p3350 A69-36894*	20 p3565 A69-36939
19 p3395 A69-36760 #	19 p3444 A69-36805	19 p3296 A69-36850	19 p3350 A69-36895	20 p3565 A69-36940

## ACCESSION NUMBER INDEX

20 p3619 A69-36941	20 p3569 A69-36986 #	20 p3520 A69-37031 #	20 p3621 A69-37076 #	20 p3637 A69-37121 #
20 p3565 A69-36942	20 p3569 A69-36987 #	20 p3520 A69-37032 #	20 p3594 A69-37077 #	20 p3638 A69-37122 #
20 p3485 A69-36943 #	20 p3567 A69-36988 #	20 p3587 A69-37033 #	20 p3487 A69-37078 #	20 p3638 A69-37123 #
20 p3585 A69-36944 #	20 p3509 A69-36989 #	20 p3520 A69-37034 #	20 p3594 A69-37079 #	20 p3638 A69-37124 #
20 p3536 A69-36945 #	20 p3513 A69-36990 #	20 p3520 A69-37035 #	20 p3621 A69-37080	20 p3638 A69-37125 #
20 p3497 A69-36946*	20 p3631 A69-36991 #	20 p3587 A69-37036 #	20 p3513 A69-37081	20 p3638 A69-37126 #
20 p3498 A69-36947*	20 p3567 A69-36992 #	20 p3520 A69-37037 #	20 p3585 A69-37082	20 p3638 A69-37127**
20 p3567 A69-36948	20 p3457 A69-36993 #	20 p3520 A69-37038 #	20 p3559 A69-37083	20 p3638 A69-37128 #
20 p3619 A69-36949	20 p3552 A69-36994	20 p3521 A69-37039 #	20 p3457 A69-37084	20 p3638 A69-37129 #
20 p3498 A69-36950	20 p3552 A69-36995*	20 p3521 A69-37040 #	20 p3548 A69-37085	20 p3639 A69-37130 #
20 p3619 A69-36951	20 p3620 A69-36996	20 p3587 A69-37041 #	20 p3513 A69-37086	20 p3639 A69-37131 #
20 p3556 A69-36952	20 p3620 A69-36997	20 p3587 A69-37042 #	20 p3513 A69-37087	20 p3639 A69-37132**
20 p3547 A69-36953	20 p3620 A69-36998	20 p3521 A69-37043 #	20 p3631 A69-37088	20 p3639 A69-37133 #
20 p3556 A69-36954	20 p3464 A69-36999	20 p3587 A69-37044 #	20 p3457 A69-37089	20 p3639 A69-37134 #
20 p3557 A69-36955	20 p3620 A69-37000	20 p3587 A69-37045 #	20 p3513 A69-37090	20 p3639 A69-37135
20 p3557 A69-36956*	20 p3620 A69-37001	20 p3587 A69-37046 #	20 p3513 A69-37091	20 p3595 A69-37136*
20 p3557 A69-36957	20 p3620 A69-37002	20 p3521 A69-37047 #	20 p3513 A69-37092	20 p3582 A69-37137
20 p3557 A69-36958	20 p3498 A69-37003	20 p3486 A69-37048 #	20 p3513 A69-37093	20 p3509 A69-37138*
20 p3557 A69-36959	20 p3552 A69-37004*	20 p3521 A69-37049 #	20 p3513 A69-37094	20 p3509 A69-37139*
20 p3557 A69-36960*	20 p3536 A69-37005	20 p3521 A69-37050 #	20 p3631 A69-37095	20 p3537 A69-37140*
20 p3557 A69-36961	20 p3537 A69-37006	20 p3521 A69-37051 #	20 p3631 A69-37096	20 p3509 A69-37141
20 p3558 A69-36962	20 p3537 A69-37007	20 p3486 A69-37052 #	20 p3631 A69-37097	20 p3509 A69-37142*
20 p3558 A69-36963	20 p3537 A69-37008	20 p3521 A69-37053 #	20 p3458 A69-37098 #	20 p3509 A69-37143
20 p3619 A69-36964	20 p3504 A69-37009 #	20 p3521 A69-37054 #	20 p3458 A69-37099 #	20 p3498 A69-37144
20 p3620 A69-36965*	20 p3486 A69-37010 #	20 p3522 A69-37055 #	20 p3467 A69-37100*	20 p3464 A69-37145
20 p3558 A69-36966	20 p3486 A69-37011 #	20 p3522 A69-37056 #	20 p3484 A69-37101*	20 p3487 A69-37146
20 p3552 A69-36967 #	20 p3575 A69-37012 #	20 p3522 A69-37057 #	20 p3634 A69-37102	20 p3505 A69-37147
20 p3558 A69-36968 #	20 p3582 A69-37013 #	20 p3522 A69-37058 #	20 p3635 A69-37103 #	20 p3559 A69-37148
20 p3582 A69-36969 #	20 p3558 A69-37014 #	20 p3522 A69-37059 #	20 p3635 A69-37104 #	20 p3461 A69-37149 #
20 p3552 A69-36970 #	20 p3558 A69-37015 #	20 p3522 A69-37060 #	20 p3635 A69-37105 #	20 p3585 A69-37150 #
20 p3485 A69-36971 #	20 p3559 A69-37016 #	20 p3522 A69-37061 #	20 p3635 A69-37106 #	20 p3585 A69-37151 #
20 p3519 A69-36972 #	20 p3552 A69-37017 #	20 p3620 A69-37062	20 p3635 A69-37107 #	20 p3461 A69-37152**
20 p3513 A69-36973 #	20 p3594 A69-37018 #	20 p3513 A69-37063	20 p3635 A69-37108 #	20 p3586 A69-37153 #
20 p3483 A69-36974 #	20 p3594 A69-37019 #	20 p3621 A69-37064	20 p3636 A69-37109 #	20 p3461 A69-37154**
20 p3565 A69-36975 #	20 p3594 A69-37020 #	20 p3457 A69-37065	20 p3636 A69-37110 #	20 p3458 A69-37155**
20 p3558 A69-36976 #	20 p3519 A69-37021 #	20 p3547 A69-37066	20 p3636 A69-37111 #	20 p3616 A69-37156**
20 p3630 A69-36977 #	20 p3519 A69-37022 #	20 p3537 A69-37067	20 p3636 A69-37112 #	20 p3461 A69-37157 #
20 p3631 A69-36978 #	20 p3486 A69-37023 #	20 p3547 A69-37068*	20 p3636 A69-37113 #	20 p3548 A69-37158 #
20 p3565 A69-36979 #	20 p3486 A69-37024 #	20 p3504 A69-37069*	20 p3636 A69-37114 #	20 p3510 A69-37159 #
20 p3536 A69-36980 #	20 p3519 A69-37025 #	20 p3504 A69-37070	20 p3637 A69-37115 #	20 p3573 A69-37160 #
20 p3457 A69-36981 #	20 p3519 A69-37026 #	20 p3487 A69-37071	20 p3637 A69-37116 #	20 p3573 A69-37161 #
20 p3513 A69-36982 #	20 p3486 A69-37027 #	20 p3568 A69-37072	20 p3637 A69-37117 #	20 p3537 A69-37162 #
20 p3519 A69-36983 #	20 p3486 A69-37028 #	20 p3621 A69-37073	20 p3637 A69-37118 #	20 p3458 A69-37163 #
20 p3569 A69-36984 #	20 p3520 A69-37029 #	20 p3575 A69-37074	20 p3637 A69-37119 #	20 p3537 A69-37164 #
20 p3569 A69-36985 #	20 p3520 A69-37030 #	20 p3509 A69-37075 #	20 p3637 A69-37120 #	20 p3461 A69-37165 #



# ACCESSION NUMBER INDEX

20 p3461 A69-37166 #	20 p3514 A69-37211 #	20 p3471 A69-37256 #	20 p3548 A69-37301	20 p3579 A69-37346**
20 p3621 A69-37167 #	20 p3575 A69-37212 #	20 p3471 A69-37257 #	20 p3538 A69-37302 #	20 p3484 A69-37347 #
20 p3570 A69-37168 #	20 p3622 A69-37213 #	20 p3471 A69-37258 #	20 p3553 A69-37303 #	20 p3579 A69-37348**
20 p3458 A69-37169 #	20 p3631 A69-37214 #	20 p3472 A69-37259 #	20 p3575 A69-37304 #	20 p3570 A69-37349 #
20 p3595 A69-37170 #	20 p3632 A69-37215 #	20 p3472 A69-37260 #	20 p3579 A69-37305	20 p3522 A69-37350 #
20 p3595 A69-37171 #	20 p3548 A69-37216 #	20 p3472 A69-37261	20 p3581 A69-37306	20 p3523 A69-37351 #
20 p3595 A69-37172**	20 p3585 A69-37217 #	20 p3472 A69-37262 #	20 p3579 A69-37307	20 p3462 A69-37352
20 p3595 A69-37173**	20 p3595 A69-37218 #	20 p3472 A69-37263 #	20 p3596 A69-37308 #	20 p3639 A69-37353
20 p3595 A69-37174 #	20 p3632 A69-37219 #	20 p3472 A69-37264 #	20 p3596 A69-37309 #	20 p3623 A69-37354
20 p3595 A69-37175 #	20 p3622 A69-37220 #	20 p3472 A69-37265 #	20 p3596 A69-37310 #	20 p3640 A69-37355
20 p3595 A69-37176**	20 p3622 A69-37221 #	20 p3472 A69-37266 #	20 p3596 A69-37311 #	20 p3553 A69-37356 #
20 p3616 A69-37177 #	20 p3579 A69-37222 #	20 p3473 A69-37267 #	20 p3596 A69-37312 #	20 p3559 A69-37357
20 p3616 A69-37178 #	20 p3622 A69-37223 #	20 p3473 A69-37268 #	20 p3570 A69-37313 #	20 p3560 A69-37358 #
20 p3595 A69-37179**	20 p3586 A69-37224**	20 p3473 A69-37269 #	20 p3596 A69-37314 #	20 p3565 A69-37359 #
20 p3617 A69-37180 #	20 p3514 A69-37225**	20 p3481 A69-37270 #	20 p3596 A69-37315 #	20 p3538 A69-37360 #
20 p3458 A69-37181 #	20 p3514 A69-37226 #	20 p3481 A69-37271 #	20 p3596 A69-37316 #	20 p3560 A69-37361 #
20 p3458 A69-37182 #	20 p3538 A69-37227**	20 p3481 A69-37272 #	20 p3596 A69-37317 #	20 p3560 A69-37362 #
20 p3514 A69-37183 #	20 p3515 A69-37228 #	20 p3481 A69-37273 #	20 p3575 A69-37318 #	20 p3548 A69-37363 #
20 p3514 A69-37184 #	20 p3622 A69-37229**	20 p3481 A69-37274 #	20 p3597 A69-37319 #	20 p3549 A69-37364 #
20 p3458 A69-37185**	20 p3467 A69-37230	20 p3473 A69-37275 #	20 p3538 A69-37320	20 p3549 A69-37365 #
20 p3458 A69-37186 #	20 p3622 A69-37231	20 p3481 A69-37276 #	20 p3464 A69-37321	20 p3560 A69-37366 #
20 p3565 A69-37187 #	20 p3574 A69-37232	20 p3473 A69-37277 #	20 p3576 A69-37322 #	20 p3566 A69-37367 #
20 p3631 A69-37188**	20 p3570 A69-37233	20 p3481 A69-37278 #	20 p3576 A69-37323	20 p3566 A69-37368 #
20 p3581 A69-37189 #	20 p3596 A69-37234	20 p3583 A69-37279*	20 p3568 A69-37324 #	20 p3566 A69-37369 #
20 p3514 A69-37190 #	20 p3487 A69-37235	20 p3583 A69-37280*	20 p3622 A69-37325 #	20 p3561 A69-37370 #
20 p3617 A69-37191 #	20 p3586 A69-37236	20 p3461 A69-37281	20 p3622 A69-37326 #	20 p3566 A69-37371 #
20 p3617 A69-37192 #	20 p3464 A69-37237	20 p3622 A69-37282	20 p3623 A69-37327 #	20 p3566 A69-37372 #
20 p3573 A69-37193**	20 p3459 A69-37238	20 p3487 A69-37283	20 p3548 A69-37328 #	20 p3561 A69-37373 #
20 p3595 A69-37194 #	20 p3487 A69-37239	20 p3487 A69-37284	20 p3548 A69-37329 #	20 p3549 A69-37374 #
20 p3621 A69-37195 #	20 p3467 A69-37240	20 p3488 A69-37285	20 p3559 A69-37330	20 p3561 A69-37375 #
20 p3458 A69-37196 #	20 p3469 A69-37241 #	20 p3488 A69-37286	20 p3597 A69-37331	20 p3561 A69-37376 #
20 p3617 A69-37197**	20 p3469 A69-37242 #	20 p3617 A69-37287*	20 p3587 A69-37332	20 p3498 A69-37377
20 p3631 A69-37198**	20 p3469 A69-37243 #	20 p3464 A69-37288	20 p3597 A69-37333	20 p3499 A69-37378
20 p3621 A69-37199 #	20 p3469 A69-37244 #	20 p3505 A69-37289*	20 p3597 A69-37334*	20 p3499 A69-37379
20 p3568 A69-37200 #	20 p3470 A69-37245 #	20 p3632 A69-37290*	20 p3597 A69-37335 #	20 p3500 A69-37380
20 p3621 A69-37201 #	20 p3470 A69-37246 #	20 p3565 A69-37291	20 p3597 A69-37336 #	20 p3500 A69-37381
20 p3595 A69-37202 #	20 p3470 A69-37247 #	20 p3498 A69-37292	20 p3597 A69-37337 #	20 p3500 A69-37382
20 p3595 A69-37203 #	20 p3470 A69-37248 #	20 p3505 A69-37293	20 p3597 A69-37338 #	20 p3500 A69-37383
20 p3575 A69-37204 #	20 p3470 A69-37249 #	20 p3548 A69-37294	20 p3481 A69-37339 #	20 p3500 A69-37384*
20 p3575 A69-37205 #	20 p3470 A69-37250 #	20 p3488 A69-37295	20 p3617 A69-37340 #	20 p3500 A69-37385*
20 p3514 A69-37206**	20 p3470 A69-37251 #	20 p3553 A69-37296*	20 p3597 A69-37341	20 p3501 A69-37386
20 p3621 A69-37207 #	20 p3471 A69-37252 #	20 p3538 A69-37297	20 p3505 A69-37342	20 p3501 A69-37387
20 p3514 A69-37208**	20 p3471 A69-37253 #	20 p3505 A69-37298	20 p3583 A69-37343*	20 p3501 A69-37388
20 p3631 A69-37209 #	20 p3471 A69-37254 #	20 p3505 A69-37299*	20 p3484 A69-37344 #	20 p3501 A69-37389
20 p3622 A69-37210 #	20 p3471 A69-37255 #	20 p3538 A69-37300**	20 p3579 A69-37345**	20 p3501 A69-37390

# ACCESSION NUMBER INDEX

20 p3501 A69-37391	20 p3539 A69-37436	20 p3600 A69-37481 #	20 p3484 A69-37526*	20 p3590 A69-37571
20 p3502 A69-37392	20 p3539 A69-37437	20 p3600 A69-37482 #	20 p3459 A69-37527	20 p3604 A69-37572*
20 p3502 A69-37393	20 p3459 A69-37438 #	20 p3600 A69-37483 #	20 p3617 A69-37528	20 p3604 A69-37573*
20 p3502 A69-37394	20 p3515 A69-37439 #	20 p3600 A69-37484 #	20 p3602 A69-37529*	20 p3590 A69-37574*
20 p3502 A69-37395	20 p3576 A69-37440 #	20 p3484 A69-37485*	20 p3602 A69-37530	20 p3604 A69-37575
20 p3502 A69-37396	20 p3585 A69-37441	20 p3484 A69-37486*	20 p3623 A69-37531	20 p3523 A69-37576
20 p3502 A69-37397	20 p3568 A69-37442 #	20 p3588 A69-37487	20 p3515 A69-37532*	20 p3473 A69-37577*
20 p3502 A69-37398	20 p3462 A69-37443	20 p3588 A69-37488*	20 p3640 A69-37533	20 p3576 A69-37578 #
20 p3503 A69-37399	20 p3588 A69-37444	20 p3600 A69-37489*	20 p3602 A69-37534	20 p3568 A69-37579**
20 p3503 A69-37400	20 p3549 A69-37445 #	20 p3523 A69-37490*	20 p3602 A69-37535*	20 p3623 A69-37580
20 p3505 A69-37401	20 p3549 A69-37446 #	20 p3600 A69-37491 #	20 p3602 A69-37536*	20 p3576 A69-37581
20 p3503 A69-37402	20 p3549 A69-37447 #	20 p3601 A69-37492**	20 p3602 A69-37537*	20 p3624 A69-37582
20 p3503 A69-37403	20 p3549 A69-37448 #	20 p3601 A69-37493 #	20 p3523 A69-37538*	20 p3515 A69-37583
20 p3570 A69-37404 #	20 p3550 A69-37449 #	20 p3601 A69-37494 #	20 p3602 A69-37539	20 p3624 A69-37584
20 p3510 A69-37405	20 p3550 A69-37450 #	20 p3579 A69-37495**	20 p3588 A69-37540	20 p3576 A69-37585
20 p3553 A69-37406	20 p3550 A69-37451 #	20 p3484 A69-37496**	20 p3603 A69-37541	20 p3624 A69-37586
20 p3464 A69-37407	20 p3550 A69-37452 #	20 p3580 A69-37497**	20 p3603 A69-37542	20 p3624 A69-37587
20 p3576 A69-37408	20 p3550 A69-37453 #	20 p3583 A69-37498**	20 p3588 A69-37543	20 p3624 A69-37588
20 p3597 A69-37409	20 p3550 A69-37454 #	20 p3580 A69-37499**	20 p3588 A69-37544	20 p3624 A69-37589
20 p3588 A69-37410	20 p3550 A69-37455 #	20 p3580 A69-37500**	20 p3539 A69-37545	20 p3625 A69-37590
20 p3597 A69-37411	20 p3550 A69-37456 #	20 p3601 A69-37501*	20 p3603 A69-37546	20 p3625 A69-37591
20 p3598 A69-37412	20 p3550 A69-37457 #	20 p3583 A69-37502*	20 p3539 A69-37547	20 p3625 A69-37592
20 p3523 A69-37413	20 p3488 A69-37458	20 p3601 A69-37503	20 p3603 A69-37548	20 p3459 A69-37593
20 p3598 A69-37414	20 p3488 A69-37459	20 p3601 A69-37504	20 p3589 A69-37549	20 p3515 A69-37594
20 p3538 A69-37415	20 p3505 A69-37460	20 p3523 A69-37505	20 p3589 A69-37550	20 p3482 A69-37595
20 p3561 A69-37416	20 p3488 A69-37461	20 p3570 A69-37506	20 p3589 A69-37551*	20 p3625 A69-37596
20 p3574 A69-37417	20 p3598 A69-37462 #	20 p3571 A69-37507	20 p3589 A69-37552	20 p3561 A69-37597
20 p3583 A69-37418	20 p3598 A69-37463 #	20 p3601 A69-37508	20 p3589 A69-37553	20 p3566 A69-37598
20 p3598 A69-37419*	20 p3598 A69-37464 #	20 p3571 A69-37509	20 p3603 A69-37554*	20 p3561 A69-37599
20 p3588 A69-37420	20 p3598 A69-37465 #	20 p3601 A69-37510	20 p3589 A69-37555*	20 p3625 A69-37600
20 p3459 A69-37421	20 p3598 A69-37466 #	20 p3539 A69-37511	20 p3589 A69-37556*	20 p3625 A69-37601
20 p3510 A69-37422	20 p3599 A69-37467 #	20 p3539 A69-37512	20 p3589 A69-37557	20 p3473 A69-37602
20 p3462 A69-37423	20 p3599 A69-37468 #	20 p3462 A69-37513	20 p3590 A69-37558*	20 p3464 A69-37603 #
20 p3598 A69-37424	20 p3599 A69-37469 #	20 p3574 A69-37514	20 p3603 A69-37559	20 p3617 A69-37604 #
20 p3598 A69-37425	20 p3599 A69-37470 #	20 p3462 A69-37515	20 p3603 A69-37560*	20 p3539 A69-37605 #
20 p3570 A69-37426 #	20 p3599 A69-37471 #	20 p3539 A69-37516*	20 p3603 A69-37561	20 p3553 A69-37606 #
20 p3570 A69-37427 #	20 p3599 A69-37472 #	20 p3601 A69-37517*	20 p3603 A69-37562	20 p3553 A69-37607 #
20 p3538 A69-37428 #	20 p3588 A69-37473 #	20 p3523 A69-37518*	20 p3604 A69-37563	20 p3553 A69-37608 #
20 p3538 A69-37429 #	20 p3599 A69-37474 #	20 p3632 A69-37519	20 p3604 A69-37564	20 p3554 A69-37609 #
20 p3598 A69-37430	20 p3599 A69-37475 #	20 p3632 A69-37520	20 p3604 A69-37565	20 p3583 A69-37610 #
20 p3576 A69-37431	20 p3599 A69-37476 #	20 p3632 A69-37521	20 p3523 A69-37566	20 p3554 A69-37611 #
20 p3579 A69-37432	20 p3599 A69-37477 #	20 p3632 A69-37522	20 p3473 A69-37567*	20 p3474 A69-37612
20 p3553 A69-37433	20 p3588 A69-37478 #	20 p3632 A69-37523	20 p3590 A69-37568	20 p3475 A69-37613
20 p3549 A69-37434	20 p3600 A69-37479 #	20 p3633 A69-37524	20 p3590 A69-37569	20 p3475 A69-37614
20 p3623 A69-37435	20 p3600 A69-37480 #	20 p3539 A69-37525	20 p3604 A69-37570	20 p3475 A69-37615



## ACCESSION NUMBER INDEX

20 p3476 A69-37616*	20 p3526 A69-37661 #	20 p3465 A69-37706	20 p3562 A69-37751	20 p3529 A69-37796
20 p3476 A69-37617*	20 p3526 A69-37662 #	20 p3492 A69-37707	20 p3604 A69-37752 #	20 p3529 A69-37797
20 p3476 A69-37618*	20 p3526 A69-37663 #	20 p3492 A69-37708	20 p3462 A69-37753 #	20 p3543 A69-37798
20 p3476 A69-37619	20 p3526 A69-37664 #	20 p3550 A69-37709	20 p3541 A69-37754 #	20 p3543 A69-37799
20 p3477 A69-37620	20 p3526 A69-37665 #	20 p3492 A69-37710*	20 p3626 A69-37755 #	20 p3605 A69-37800*
20 p3482 A69-37621	20 p3526 A69-37666 #	20 p3492 A69-37711	20 p3462 A69-37756 #	20 p3543 A69-37801
20 p3482 A69-37622*	20 p3526 A69-37667 #	20 p3506 A69-37712	20 p3462 A69-37757 #	20 p3543 A69-37802
20 p3477 A69-37623*	20 p3527 A69-37668 #	20 p3492 A69-37713	20 p3626 A69-37758	20 p3544 A69-37803
20 p3477 A69-37624	20 p3527 A69-37669 #	20 p3617 A69-37714	20 p3626 A69-37759	20 p3463 A69-37804
20 p3477 A69-37625	20 p3527 A69-37670 #	20 p3493 A69-37715	20 p3626 A69-37760	20 p3463 A69-37805
20 p3477 A69-37626	20 p3527 A69-37671 #	20 p3618 A69-37716	20 p3511 A69-37761	20 p3463 A69-37806
20 p3478 A69-37627	20 p3527 A69-37672 #	20 p3506 A69-37717	20 p3626 A69-37762	20 p3463 A69-37807
20 p3478 A69-37628	20 p3527 A69-37673 #	20 p3633 A69-37718	20 p3627 A69-37763	20 p3463 A69-37808
20 p3478 A69-37629	20 p3527 A69-37674 #	20 p3626 A69-37719	20 p3627 A69-37764	20 p3463 A69-37809
20 p3510 A69-37630	20 p3528 A69-37675 #	20 p3482 A69-37720	20 p3627 A69-37765	20 p3494 A69-37810
20 p3488 A69-37631	20 p3590 A69-37676 #	20 p3482 A69-37721	20 p3627 A69-37766	20 p3544 A69-37811
20 p3489 A69-37632	20 p3491 A69-37677 #	20 p3554 A69-37722 #	20 p3627 A69-37767	20 p3544 A69-37812
20 p3489 A69-37633	20 p3528 A69-37678 #	20 p3554 A69-37723 #	20 p3627 A69-37768	20 p3544 A69-37813
20 p3489 A69-37634	20 p3528 A69-37679 #	20 p3506 A69-37724 #	20 p3567 A69-37769	20 p3580 A69-37814
20 p3489 A69-37635	20 p3491 A69-37680 #	20 p3554 A69-37725 #	20 p3627 A69-37770	20 p3544 A69-37815
20 p3489 A69-37636	20 p3528 A69-37681 #	20 p3554 A69-37726 #	20 p3627 A69-37771	20 p3544 A69-37816
20 p3540 A69-37637	20 p3528 A69-37682 #	20 p3554 A69-37727 #	20 p3562 A69-37772	20 p3544 A69-37817
20 p3489 A69-37638	20 p3528 A69-37683 #	20 p3540 A69-37728 #	20 p3627 A69-37773	20 p3580 A69-37818
20 p3489 A69-37639	20 p3590 A69-37684 #	20 p3554 A69-37729 #	20 p3628 A69-37774	20 p3562 A69-37819
20 p3540 A69-37640	20 p3528 A69-37685 #	20 p3555 A69-37730 #	20 p3628 A69-37775	20 p3563 A69-37820
20 p3490 A69-37641	20 p3528 A69-37686 #	20 p3555 A69-37731*#	20 p3628 A69-37776	20 p3605 A69-37821
20 p3490 A69-37642	20 p3529 A69-37687 #	20 p3583 A69-37732*#	20 p3628 A69-37777	20 p3605 A69-37822
20 p3490 A69-37643	20 p3503 A69-37688 #	20 p3540 A69-37733*#	20 p3541 A69-37778	20 p3581 A69-37823
20 p3490 A69-37644	20 p3491 A69-37689 #	20 p3493 A69-37734	20 p3506 A69-37779	20 p3605 A69-37824
20 p3490 A69-37645	20 p3529 A69-37690 #	20 p3493 A69-37735	20 p3567 A69-37780	20 p3605 A69-37825
20 p3490 A69-37646	20 p3529 A69-37691 #	20 p3540 A69-37736	20 p3562 A69-37781	20 p3605 A69-37826
20 p3490 A69-37647	20 p3492 A69-37692 #	20 p3540 A69-37737	20 p3562 A69-37782	20 p3590 A69-37827
20 p3490 A69-37648	20 p3510 A69-37693 #	20 p3540 A69-37738	20 p3506 A69-37783	20 p3580 A69-37828
20 p3491 A69-37649	20 p3571 A69-37694	20 p3540 A69-37739	20 p3581 A69-37784	20 p3605 A69-37829
20 p3491 A69-37650	20 p3571 A69-37695 #	20 p3541 A69-37740	20 p3584 A69-37785	20 p3606 A69-37830
20 p3491 A69-37651	20 p3571 A69-37696 #	20 p3493 A69-37741	20 p3584 A69-37786	20 p3606 A69-37831
20 p3491 A69-37652	20 p3571 A69-37697 #	20 p3493 A69-37742	20 p3628 A69-37787 #	20 p3568 A69-37832
20 p3625 A69-37653 #	20 p3572 A69-37698 #	20 p3493 A69-37743	20 p3604 A69-37788 #	20 p3568 A69-37833
20 p3523 A69-37654	20 p3572 A69-37699 #	20 p3577 A69-37744	20 p3605 A69-37789 #	20 p3506 A69-37834*
20 p3525 A69-37655 #	20 p3572 A69-37700 #	20 p3483 A69-37745	20 p3541 A69-37790	20 p3506 A69-37835
20 p3525 A69-37656 #	20 p3492 A69-37701	20 p3541 A69-37746	20 p3542 A69-37791	20 p3506 A69-37836
20 p3525 A69-37657 #	20 p3505 A69-37702	20 p3494 A69-37747	20 p3542 A69-37792	20 p3507 A69-37837
20 p3525 A69-37658 #	20 p3574 A69-37703	20 p3567 A69-37748	20 p3542 A69-37793	20 p3494 A69-37838
20 p3459 A69-37659 #	20 p3510 A69-37704*	20 p3562 A69-37749	20 p3542 A69-37794	20 p3507 A69-37839*
20 p3525 A69-37660 #	20 p3492 A69-37705	20 p3562 A69-37750	20 p3543 A69-37795	20 p3507 A69-37840

## ACCESSION NUMBER INDEX

20 p3494 A69-37841	20 p3495 A69-37886	20 p3563 A69-37931	20 p3516 A69-37976 #	20 p3640 A69-38021
20 p3494 A69-37842	20 p3531 A69-37887*	20 p3496 A69-37932	20 p3465 A69-37977 #	20 p3640 A69-38022*
20 p3494 A69-37843	20 p3531 A69-37888*	20 p3606 A69-37933 #	20 p3516 A69-37978 #	20 p3640 A69-38023
20 p3507 A69-37844	20 p3496 A69-37889*	20 p3478 A69-37934*	20 p3516 A69-37979 #	20 p3584 A69-38024
20 p3494 A69-37845	20 p3531 A69-37890	20 p3496 A69-37935	20 p3465 A69-37980 #	20 p3563 A69-38025
20 p3507 A69-37846*	20 p3496 A69-37891	20 p3508 A69-37936	20 p3465 A69-37981 #	20 p3580 A69-38026
20 p3507 A69-37847	20 p3496 A69-37892*	20 p3508 A69-37937	20 p3516 A69-37982 #	20 p3629 A69-38027
20 p3494 A69-37848	20 p3531 A69-37893*	20 p3508 A69-37938	20 p3465 A69-37983 #	20 p3629 A69-38028
20 p3495 A69-37849	20 p3532 A69-37894	20 p3508 A69-37939	20 p3465 A69-37984 #	20 p3551 A69-38029
20 p3511 A69-37850	20 p3532 A69-37895	20 p3555 A69-37940	20 p3466 A69-37985**	20 p3496 A69-38030 #
20 p3495 A69-37851	20 p3532 A69-37896*	20 p3584 A69-37941	20 p3516 A69-37986**	20 p3629 A69-38031 #
20 p3495 A69-37852	20 p3532 A69-37897	20 p3508 A69-37942	20 p3586 A69-37987**	20 p3606 A69-38032 #
20 p3495 A69-37853	20 p3532 A69-37898	20 p3508 A69-37943	20 p3516 A69-37988 #	20 p3606 A69-38033 #
20 p3495 A69-37854	20 p3532 A69-37899	20 p3508 A69-37944	20 p3460 A69-37989 #	20 p3591 A69-38034 #
20 p3529 A69-37855*	20 p3508 A69-37900	20 p3508 A69-37945	20 p3516 A69-37990 #	20 p3607 A69-38035 #
20 p3618 A69-37856	20 p3545 A69-37901	20 p3496 A69-37946	20 p3517 A69-37991 #	20 p3607 A69-38036 #
20 p3618 A69-37857	20 p3459 A69-37902 #	20 p3496 A69-37947	20 p3460 A69-37992 #	20 p3607 A69-38037 #
20 p3618 A69-37858	20 p3545 A69-37903	20 p3555 A69-37948	20 p3460 A69-37993 #	20 p3607 A69-38038 #
20 p3507 A69-37859	20 p3496 A69-37904	20 p3555 A69-37949	20 p3517 A69-37994 #	20 p3607 A69-38039 #
20 p3503 A69-37860	20 p3496 A69-37905	20 p3555 A69-37950	20 p3517 A69-37995 #	20 p3607 A69-38040 #
20 p3507 A69-37861	20 p3572 A69-37906 #	20 p3606 A69-37951	20 p3466 A69-37996 #	20 p3607 A69-38041 #
20 p3508 A69-37862	20 p3572 A69-37907 #	20 p3606 A69-37952	20 p3517 A69-37997**	20 p3591 A69-38042 #
20 p3529 A69-37863	20 p3572 A69-37908 #	20 p3606 A69-37953	20 p3517 A69-37998 #	20 p3591 A69-38043 #
20 p3529 A69-37864*	20 p3572 A69-37909 #	20 p3618 A69-37954	20 p3568 A69-37999**	20 p3607 A69-38044 #
20 p3495 A69-37865*	20 p3573 A69-37910 #	20 p3574 A69-37955	20 p3517 A69-38000 #	20 p3607 A69-38045 #
20 p3504 A69-37866	20 p3465 A69-37911 #	20 p3574 A69-37956	20 p3479 A69-38001*	20 p3608 A69-38046 #
20 p3530 A69-37867*	20 p3618 A69-37912 #	20 p3581 A69-37957	20 p3563 A69-38002*	20 p3608 A69-38047 #
20 p3530 A69-37868	20 p3508 A69-37913 #	20 p3532 A69-37958	20 p3555 A69-38003	20 p3608 A69-38048 #
20 p3530 A69-37869	20 p3511 A69-37914 #	20 p3532 A69-37959	20 p3555 A69-38004	20 p3608 A69-38049 #
20 p3530 A69-37870	20 p3628 A69-37915 #	20 p3532 A69-37960	20 p3582 A69-38005	20 p3608 A69-38050 #
20 p3530 A69-37871	20 p3511 A69-37916	20 p3591 A69-37961	20 p3582 A69-38006	20 p3608 A69-38051 #
20 p3530 A69-37872	20 p3633 A69-37917 #	20 p3591 A69-37962	20 p3517 A69-38007	20 p3608 A69-38052 #
20 p3530 A69-37873	20 p3628 A69-37918 #	20 p3606 A69-37963	20 p3591 A69-38008	20 p3608 A69-38053 #
20 p3495 A69-37874	20 p3460 A69-37919 #	20 p3545 A69-37964	20 p3555 A69-38009	20 p3545 A69-38054 #
20 p3531 A69-37875	20 p3577 A69-37920 #	20 p3545 A69-37965	20 p3555 A69-38010	20 p3545 A69-38055 #
20 p3544 A69-37876*	20 p3633 A69-37921 #	20 p3618 A69-37966	20 p3555 A69-38011	20 p3608 A69-38056**
20 p3544 A69-37877*	20 p3628 A69-37922 #	20 p3591 A69-37967	20 p3582 A69-38012	20 p3573 A69-38057 #
20 p3544 A69-37878*	20 p3577 A69-37923 #	20 p3533 A69-37968	20 p3606 A69-38013	20 p3591 A69-38058**
20 p3545 A69-37879*	20 p3586 A69-37924 #	20 p3606 A69-37969	20 p3555 A69-38014	20 p3573 A69-38059**
20 p3590 A69-37880*	20 p3515 A69-37925 #	20 p3591 A69-37970	20 p3584 A69-38015	20 p3609 A69-38060**
20 p3545 A69-37881	20 p3580 A69-37926 #	20 p3606 A69-37971	20 p3580 A69-38016	20 p3591 A69-38061**
20 p3531 A69-37882*	20 p3640 A69-37927	20 p3460 A69-37972 #	20 p3606 A69-38017	20 p3609 A69-38062 #
20 p3531 A69-37883	20 p3463 A69-37928	20 p3479 A69-37973 #	20 p3591 A69-38018	20 p3563 A69-38063
20 p3531 A69-37884	20 p3545 A69-37929	20 p3629 A69-37974 #	20 p3640 A69-38019	20 p3574 A69-38064
20 p3495 A69-37885	20 p3563 A69-37930	20 p3515 A69-37975**	20 p3640 A69-38020*	20 p3584 A69-38065



# ACCESSION NUMBER INDEX

20 p3567 A69-38066*	20 p3563 A69-38111 #	20 p3611 A69-38156	20 p3556 A69-38201	20 p3564 A69-38246
20 p3555 A69-38067	20 p3629 A69-38112 #	20 p3577 A69-38157	20 p3518 A69-38202	20 p3613 A69-38247
20 p3592 A69-38068*	20 p3629 A69-38113 #	20 p3611 A69-38158	20 p3518 A69-38203	20 p3613 A69-38248*
20 p3466 A69-38069	20 p3629 A69-38114 #	20 p3612 A69-38159	20 p3518 A69-38204	20 p3613 A69-38249*
20 p3584 A69-38070	20 p3551 A69-38115 #	20 p3612 A69-38160	20 p3613 A69-38205	20 p3613 A69-38250*
20 p3484 A69-38071*	20 p3641 A69-38116 #	20 p3612 A69-38161*	20 p3630 A69-38206	20 p3614 A69-38251*
20 p3466 A69-38072*	20 p3618 A69-38117*#	20 p3612 A69-38162	20 p3630 A69-38207	20 p3614 A69-38252
20 p3479 A69-38073*	20 p3586 A69-38118*#	20 p3612 A69-38163*	20 p3508 A69-38208	20 p3614 A69-38253
20 p3568 A69-38074 #	20 p3574 A69-38119 #	20 p3612 A69-38164	20 p3586 A69-38209	20 p3614 A69-38254*
20 p3629 A69-38075 #	20 p3573 A69-38120*#	20 p3612 A69-38165*	20 p3556 A69-38210	20 p3614 A69-38255*
20 p3533 A69-38076 #	20 p3581 A69-38121 #	20 p3593 A69-38166*	20 p3518 A69-38211	20 p3614 A69-38256*
20 p3609 A69-38077	20 p3556 A69-38122 #	20 p3612 A69-38167*	20 p3569 A69-38212	20 p3615 A69-38257*
20 p3609 A69-38078*	20 p3546 A69-38123 #	20 p3613 A69-38168	20 p3633 A69-38213	20 p3615 A69-38258*
20 p3497 A69-38079	20 p3556 A69-38124*#	20 p3594 A69-38169	20 p3564 A69-38214	20 p3615 A69-38259*
20 p3533 A69-38080*	20 p3584 A69-38125*#	20 p3577 A69-38170	20 p3584 A69-38215	20 p3615 A69-38260
20 p3533 A69-38081	20 p3563 A69-38126	20 p3577 A69-38171*	20 p3585 A69-38216	20 p3535 A69-38261*
20 p3592 A69-38082*	20 p3564 A69-38127 #	20 p3594 A69-38172*	20 p3630 A69-38217	20 p3485 A69-38262*
20 p3592 A69-38083*	20 p3460 A69-38128 #	20 p3613 A69-38173*	20 p3483 A69-38218	20 p3567 A69-38263
20 p3533 A69-38084*	20 p3630 A69-38129 #	20 p3613 A69-38174	20 p3483 A69-38219	20 p3480 A69-38264*
20 p3533 A69-38085*	20 p3497 A69-38130	20 p3581 A69-38175*	20 p3479 A69-38220	20 p3480 A69-38265*
20 p3533 A69-38086	20 p3551 A69-38131	20 p3633 A69-38176	20 p3479 A69-38221	20 p3483 A69-38266
20 p3534 A69-38087*	20 p3551 A69-38132	20 p3466 A69-38177	20 p3479 A69-38222	20 p3551 A69-38267
20 p3534 A69-38088*	20 p3586 A69-38133	20 p3466 A69-38178	20 p3479 A69-38223	20 p3551 A69-38268
20 p3534 A69-38089	20 p3564 A69-38134	20 p3466 A69-38179	20 p3479 A69-38224	20 p3512 A69-38269
20 p3534 A69-38090*	20 p3564 A69-38135	20 p3466 A69-38180	20 p3479 A69-38225	20 p3512 A69-38270
20 p3534 A69-38091	20 p3564 A69-38136	20 p3511 A69-38181*	20 p3483 A69-38226	20 p3512 A69-38271*
20 p3574 A69-38092*	20 p3551 A69-38137	20 p3511 A69-38182	20 p3479 A69-38227	20 p3546 A69-38272 #
20 p3534 A69-38093	20 p3609 A69-38138	20 p3467 A69-38183	20 p3479 A69-38228	20 p3585 A69-38273 #
20 p3534 A69-38094*	20 p3610 A69-38139	20 p3467 A69-38184	20 p3480 A69-38229	20 p3575 A69-38274*
20 p3609 A69-38095*	20 p3610 A69-38140	20 p3467 A69-38185	20 p3480 A69-38230	20 p3546 A69-38275
20 p3592 A69-38096*	20 p3610 A69-38141	20 p3467 A69-38186	20 p3480 A69-38231	20 p3581 A69-38276*
20 p3545 A69-38097	20 p3610 A69-38142*	20 p3535 A69-38187	20 p3480 A69-38232	20 p3485 A69-38277*
20 p3592 A69-38098*	20 p3610 A69-38143*	20 p3535 A69-38188	20 p3546 A69-38233	20 p3618 A69-38278
20 p3546 A69-38099	20 p3610 A69-38144*	20 p3497 A69-38189	20 p3518 A69-38234*#	20 p3512 A69-38279
20 p3535 A69-38100*	20 p3593 A69-38145*	20 p3467 A69-38190	20 p3578 A69-38235*#	20 p3512 A69-38280
20 p3592 A69-38101	20 p3610 A69-38146	20 p3584 A69-38191*#	20 p3582 A69-38236*#	20 p3619 A69-38281
20 p3609 A69-38102*	20 p3611 A69-38147	20 p3535 A69-38192*	20 p3518 A69-38237 #	20 p3641 A69-38282*
20 p3592 A69-38103	20 p3611 A69-38148	20 p3546 A69-38193*#	20 p3511 A69-38238 #	20 p3480 A69-38283 #
20 p3593 A69-38104	20 p3611 A69-38149	20 p3535 A69-38194	20 p3511 A69-38239 #	20 p3480 A69-38284*
20 p3609 A69-38105	20 p3611 A69-38150	20 p3577 A69-38195	20 p3511 A69-38240 #	20 p3504 A69-38285*
20 p3535 A69-38106	20 p3611 A69-38151*	20 p3578 A69-38196	20 p3511 A69-38241 #	20 p3485 A69-38286*
20 p3593 A69-38107	20 p3593 A69-38152*	20 p3564 A69-38197	20 p3582 A69-38242*#	20 p3480 A69-38287*
20 p3497 A69-38108	20 p3593 A69-38153*	20 p3546 A69-38198 #	20 p3578 A69-38243 #	20 p3567 A69-38288
20 p3593 A69-38109	20 p3593 A69-38154*	20 p3630 A69-38199	20 p3582 A69-38244*#	20 p3551 A69-38289
20 p3563 A69-38110 #	20 p3611 A69-38155	20 p3578 A69-38200	20 p3582 A69-38245*#	20 p3564 A69-38290 #

## ACCESSION NUMBER INDEX

20 p3630 A69-38291 #	21 p3701 A69-38336	21 p3794 A69-38381*	21 p3754 A69-38426	21 p3796 A69-38471
20 p3578 A69-38292 #	21 p3793 A69-38337	21 p3769 A69-38382	21 p3832 A69-38427	21 p3796 A69-38472
20 p3569 A69-38293 #	21 p3793 A69-38338*	21 p3650 A69-38383	21 p3750 A69-38428	21 p3847 A69-38473
20 p3569 A69-38294 #	21 p3793 A69-38339	21 p3650 A69-38384	21 p3754 A69-38429*	21 p3796 A69-38474
20 p3509 A69-38295 #	21 p3671 A69-38340	21 p3650 A69-38385	21 p3684 A69-38430	21 p3796 A69-38475
20 p3518 A69-38296 #	21 p3793 A69-38341*	21 p3651 A69-38386	21 p3684 A69-38431	21 p3773 A69-38476
20 p3615 A69-38297 #	21 p3701 A69-38342*	21 p3651 A69-38387	21 p3754 A69-38432	21 p3796 A69-38477
20 p3615 A69-38298 #	21 p3793 A69-38343	21 p3662 A69-38388*	21 p3685 A69-38433	21 p3796 A69-38478
20 p3615 A69-38299 #	21 p3719 A69-38344	21 p3651 A69-38389	21 p3775 A69-38434	21 p3796 A69-38479*
20 p3535 A69-38300 #	21 p3701 A69-38345	21 p3651 A69-38390	21 p3672 A69-38435	21 p3797 A69-38480
20 p3616 A69-38301 #	21 p3702 A69-38346	21 p3719 A69-38391	21 p3672 A69-38436	21 p3797 A69-38481
20 p3616 A69-38302 #	21 p3702 A69-38347	21 p3646 A69-38392	21 p3734 A69-38437	21 p3705 A69-38482
20 p3616 A69-38303 #	21 p3793 A69-38348	21 p3646 A69-38393	21 p3735 A69-38438 #	21 p3706 A69-38483
20 p3616 A69-38304 #	21 p3702 A69-38349	21 p3681 A69-38394	21 p3643 A69-38439	21 p3706 A69-38484*
20 p3616 A69-38305 #	21 p3787 A69-38350*	21 p3681 A69-38395	21 p3795 A69-38440	21 p3707 A69-38485
20 p3546 A69-38306 #	21 p3787 A69-38351	21 p3773 A69-38396	21 p3795 A69-38441 #	21 p3707 A69-38486
20 p3497 A69-38307 #	21 p3787 A69-38352	21 p3734 A69-38397	21 p3847 A69-38442 #	21 p3707 A69-38487
20 p3547 A69-38308 #	21 p3702 A69-38353	21 p3734 A69-38398	21 p3795 A69-38443 #	21 p3707 A69-38488
20 p3547 A69-38309 #	21 p3702 A69-38354	21 p3734 A69-38399	21 p3681 A69-38444 #	21 p3707 A69-38489
20 p3547 A69-38310 #	21 p3702 A69-38355	21 p3795 A69-38400	21 p3691 A69-38445 #	21 p3707 A69-38490*
20 p3551 A69-38311	21 p3671 A69-38356	21 p3795 A69-38401 #	21 p3719 A69-38446 #	21 p3707 A69-38491
20 p3547 A69-38312	21 p3787 A69-38357*	21 p3719 A69-38402 #	21 p3832 A69-38447 #	21 p3708 A69-38492
20 p3551 A69-38313	21 p3702 A69-38358	21 p3795 A69-38403	21 p3847 A69-38448 #	21 p3708 A69-38493
20 p3497 A69-38314	21 p3787 A69-38359	21 p3719 A69-38404 #	21 p3784 A69-38449 #	21 p3708 A69-38494
20 p3497 A69-38315	21 p3703 A69-38360	21 p3671 A69-38405	21 p3681 A69-38450	21 p3708 A69-38495
20 p3518 A69-38316 #	21 p3703 A69-38361	21 p3671 A69-38406	21 p3685 A69-38451 #	21 p3708 A69-38496
20 p3616 A69-38317*#	21 p3703 A69-38362	21 p3734 A69-38407	21 p3685 A69-38452 #	21 p3708 A69-38497
20 p3518 A69-38318 #	21 p3703 A69-38363	21 p3734 A69-38408	21 p3685 A69-38453 #	21 p3709 A69-38498
20 p3519 A69-38319 #	21 p3703 A69-38364*	21 p3672 A69-38409	21 p3735 A69-38454 #	21 p3709 A69-38499
21 p3650 A69-38320	21 p3704 A69-38365	21 p3681 A69-38410	21 p3847 A69-38455	21 p3709 A69-38500
21 p3792 A69-38321*	21 p3704 A69-38366*	21 p3758 A69-38411 #	21 p3751 A69-38456	21 p3709 A69-38501*
21 p3650 A69-38322	21 p3704 A69-38367	21 p3651 A69-38412 #	21 p3643 A69-38457	21 p3709 A69-38502
21 p3650 A69-38323*	21 p3704 A69-38368	21 p3831 A69-38413	21 p3768 A69-38458	21 p3709 A69-38503*
21 p3757 A69-38324	21 p3704 A69-38369	21 p3831 A69-38414 #	21 p3728 A69-38459	21 p3710 A69-38504*
21 p3719 A69-38325	21 p3757 A69-38370*	21 p3831 A69-38415 #	21 p3646 A69-38460	21 p3710 A69-38505
21 p3734 A69-38326	21 p3758 A69-38371	21 p3831 A69-38416 #	21 p3728 A69-38461	21 p3710 A69-38506
21 p3787 A69-38327*	21 p3704 A69-38372	21 p3832 A69-38417 #	21 p3728 A69-38462	21 p3710 A69-38507
21 p3760 A69-38328	21 p3646 A69-38373	21 p3832 A69-38418 #	21 p3685 A69-38463	21 p3710 A69-38508*
21 p3719 A69-38329	21 p3705 A69-38374*	21 p3832 A69-38419 #	21 p3691 A69-38464	21 p3710 A69-38509*
21 p3662 A69-38330	21 p3705 A69-38375	21 p3689 A69-38420	21 p3832 A69-38465*	21 p3711 A69-38510
21 p3773 A69-38331*#	21 p3671 A69-38376	21 p3847 A69-38421	21 p3832 A69-38466	21 p3711 A69-38511
21 p3691 A69-38332 #	21 p3794 A69-38377*	21 p3742 A69-38422	21 p3795 A69-38467	21 p3711 A69-38512
21 p3691 A69-38333	21 p3794 A69-38378	21 p3779 A69-38423 #	21 p3795 A69-38468	21 p3711 A69-38513
21 p3698 A69-38334	21 p3794 A69-38379*	21 p3779 A69-38424 #	21 p3795 A69-38469	21 p3711 A69-38514
21 p3671 A69-38335	21 p3794 A69-38380*	21 p3668 A69-38425	21 p3795 A69-38470	21 p3711 A69-38515



# ACCESSION NUMBER INDEX

21 p3712 A69-38516	21 p3715 A69-38561	21 p3720 A69-38606 #	21 p3735 A69-38651	21 p3721 A69-38696 #
21 p3712 A69-38517	21 p3715 A69-38562	21 p3784 A69-38607 #	21 p3743 A69-38652	21 p3721 A69-38697 #
21 p3712 A69-38518	21 p3720 A69-38563 #	21 p3785 A69-38608 #	21 p3672 A69-38653 #	21 p3722 A69-38698 #
21 p3712 A69-38519	21 p3775 A69-38564 #	21 p3692 A69-38609 #	21 p3644 A69-38654 #	21 p3722 A69-38699 #
21 p3712 A69-38520	21 p3776 A69-38565 #	21 p3692 A69-38610 #	21 p3728 A69-38655	21 p3800 A69-38700 #
21 p3774 A69-38521	21 p3715 A69-38566 #	21 p3692 A69-38611 #	21 p3689 A69-38656	21 p3801 A69-38701 #
21 p3712 A69-38522	21 p3728 A69-38567*	21 p3780 A69-38612 #	21 p3729 A69-38657 #	21 p3801 A69-38702 #
21 p3713 A69-38523	21 p3769 A69-38568 #	21 p3728 A69-38613 #	21 p3833 A69-38658	21 p3693 A69-38703**
21 p3713 A69-38524	21 p3833 A69-38569 #	21 p3742 A69-38614 #	21 p3729 A69-38659	21 p3693 A69-38704 #
21 p3713 A69-38525	21 p3833 A69-38570 #	21 p3751 A69-38615 #	21 p3729 A69-38660	21 p3693 A69-38705 #
21 p3713 A69-38526	21 p3833 A69-38571 #	21 p3743 A69-38616 #	21 p3729 A69-38661	21 p3848 A69-38706 #
21 p3713 A69-38527*	21 p3760 A69-38572 #	21 p3728 A69-38617 #	21 p3729 A69-38662	21 p3848 A69-38707 #
21 p3713 A69-38528*	21 p3691 A69-38573 #	21 p3760 A69-38618 #	21 p3743 A69-38663*	21 p3776 A69-38708
21 p3714 A69-38529	21 p3833 A69-38574 #	21 p3720 A69-38619 #	21 p3729 A69-38664	21 p3776 A69-38709 #
21 p3681 A69-38530*	21 p3833 A69-38575 #	21 p3760 A69-38620	21 p3730 A69-38665	21 p3776 A69-38710
21 p3779 A69-38531*	21 p3754 A69-38576	21 p3818 A69-38621 #	21 p3730 A69-38666**	21 p3776 A69-38711**
21 p3751 A69-38532	21 p3651 A69-38577*	21 p3855 A69-38622 #	21 p3730 A69-38667	21 p3776 A69-38712**
21 p3751 A69-38533*	21 p3769 A69-38578*	21 p3720 A69-38623 #	21 p3743 A69-38668*	21 p3777 A69-38713**
21 p3797 A69-38534	21 p3779 A69-38579 #	21 p3720 A69-38624 #	21 p3743 A69-38669*	21 p3834 A69-38714 #
21 p3797 A69-38535	21 p3779 A69-38580 #	21 p3721 A69-38625 #	21 p3751 A69-38670	21 p3834 A69-38715 #
21 p3797 A69-38536	21 p3735 A69-38581 #	21 p3798 A69-38626 #	21 p3730 A69-38671	21 p3834 A69-38716 #
21 p3797 A69-38537	21 p3735 A69-38582 #	21 p3721 A69-38627 #	21 p3730 A69-38672	21 p3834 A69-38717 #
21 p3797 A69-38538	21 p3742 A69-38583 #	21 p3798 A69-38628 #	21 p3730 A69-38673	21 p3834 A69-38718 #
21 p3797 A69-38539	21 p3776 A69-38584 #	21 p3799 A69-38629 #	21 p3799 A69-38674	21 p3834 A69-38719 #
21 p3798 A69-38540	21 p3776 A69-38585 #	21 p3721 A69-38630 #	21 p3800 A69-38675**	21 p3693 A69-38720 #
21 p3788 A69-38541*	21 p3769 A69-38586 #	21 p3721 A69-38631 #	21 p3800 A69-38676**	21 p3834 A69-38721 #
21 p3798 A69-38542	21 p3788 A69-38587 #	21 p3721 A69-38632	21 p3800 A69-38677**	21 p3834 A69-38722 #
21 p3769 A69-38543	21 p3672 A69-38588 #	21 p3848 A69-38633 #	21 p3800 A69-38678**	21 p3835 A69-38723 #
21 p3798 A69-38544	21 p3774 A69-38589 #	21 p3848 A69-38634 #	21 p3770 A69-38679 #	21 p3835 A69-38724 #
21 p3798 A69-38545	21 p3735 A69-38590 #	21 p3848 A69-38635 #	21 p3800 A69-38680**	21 p3835 A69-38725 #
21 p3798 A69-38546**	21 p3720 A69-38591 #	21 p3643 A69-38636 #	21 p3800 A69-38681	21 p3685 A69-38726*
21 p3788 A69-38547	21 p3720 A69-38592**	21 p3643 A69-38637 #	21 p3800 A69-38682**	21 p3685 A69-38727
21 p3720 A69-38548	21 p3689 A69-38593**	21 p3848 A69-38638 #	21 p3800 A69-38683**	21 p3662 A69-38728*
21 p3714 A69-38549	21 p3689 A69-38594**	21 p3721 A69-38639 #	21 p3692 A69-38684 #	21 p3685 A69-38729*
21 p3714 A69-38550*	21 p3689 A69-38595 #	21 p3751 A69-38640 #	21 p3692 A69-38685 #	21 p3743 A69-38730
21 p3691 A69-38551	21 p3689 A69-38596 #	21 p3848 A69-38641 #	21 p3692 A69-38686 #	21 p3646 A69-38731
21 p3751 A69-38552*	21 p3720 A69-38597 #	21 p3848 A69-38642 #	21 p3644 A69-38687 #	21 p3646 A69-38732
21 p3714 A69-38553	21 p3735 A69-38598	21 p3643 A69-38643 #	21 p3692 A69-38688 #	21 p3647 A69-38733 #
21 p3714 A69-38554	21 p3788 A69-38599	21 p3833 A69-38644 #	21 p3646 A69-38689 #	21 p3760 A69-38734 #
21 p3714 A69-38555	21 p3798 A69-38600*	21 p3799 A69-38645*	21 p3644 A69-38690 #	21 p3743 A69-38735
21 p3714 A69-38556*	21 p3643 A69-38601 #	21 p3799 A69-38646	21 p3776 A69-38691	21 p3744 A69-38736
21 p3714 A69-38557	21 p3692 A69-38602 #	21 p3799 A69-38647*	21 p3693 A69-38692	21 p3744 A69-38737
21 p3672 A69-38558	21 p3649 A69-38603 #	21 p3788 A69-38648*	21 p3735 A69-38693	21 p3744 A69-38738
21 p3715 A69-38559	21 p3649 A69-38604 #	21 p3799 A69-38649	21 p3735 A69-38694	21 p3744 A69-38739*
21 p3715 A69-38560	21 p3798 A69-38605 #	21 p3799 A69-38650*	21 p3735 A69-38695	21 p3744 A69-38740

# ACCESSION NUMBER INDEX

21 p3744 A69-38741	21 p3652 A69-38786	21 p3835 A69-38831 #	21 p3752 A69-38876 #	21 p3656 A69-38921
21 p3681 A69-38742	21 p3652 A69-38787	21 p3723 A69-38832 #	21 p3731 A69-38877 #	21 p3656 A69-38922
21 p3672 A69-38743	21 p3801 A69-38788	21 p3780 A69-38833 #	21 p3731 A69-38878 #	21 p3673 A69-38923*
21 p3754 A69-38744	21 p3751 A69-38789*	21 p3694 A69-38834 #	21 p3731 A69-38879 #	21 p3803 A69-38924
21 p3754 A69-38745	21 p3652 A69-38790	21 p3694 A69-38835 #	21 p3731 A69-38880 #	21 p3755 A69-38925
21 p3678 A69-38746	21 p3652 A69-38791	21 p3715 A69-38836 #	21 p3731 A69-38881 #	21 p3755 A69-38926*
21 p3754 A69-38747	21 p3663 A69-38792	21 p3758 A69-38837 #	21 p3835 A69-38882 #	21 p3836 A69-38927
21 p3770 A69-38748	21 p3722 A69-38793*	21 p3653 A69-38838 #	21 p3770 A69-38883 #	21 p3785 A69-38928
21 p3693 A69-38749	21 p3722 A69-38794	21 p3770 A69-38839 #	21 p3686 A69-38884 #	21 p3745 A69-38929
21 p3693 A69-38750	21 p3736 A69-38795	21 p3791 A69-38840 #	21 p3723 A69-38885 #	21 p3752 A69-38930
21 p3754 A69-38751	21 p3770 A69-38796	21 p3723 A69-38841 #	21 p3686 A69-38886 #	21 p3836 A69-38931
21 p3693 A69-38752	21 p3722 A69-38797	21 p3802 A69-38842 #	21 p3723 A69-38887 #	21 p3752 A69-38932
21 p3755 A69-38753	21 p3669 A69-38798	21 p3802 A69-38843 #	21 p3723 A69-38888 #	21 p3752 A69-38933
21 p3690 A69-38754 #	21 p3783 A69-38799	21 p3803 A69-38844 #	21 p3723 A69-38889 #	21 p3752 A69-38934
21 p3672 A69-38755	21 p3669 A69-38800	21 p3647 A69-38845 #	21 p3760 A69-38890 #	21 p3836 A69-38935
21 p3673 A69-38756	21 p3669 A69-38801	21 p3849 A69-38846 #	21 p3686 A69-38891 #	21 p3745 A69-38936
21 p3673 A69-38757	21 p3849 A69-38802	21 p3685 A69-38847 #	21 p3695 A69-38892 #	21 p3745 A69-38937
21 p3774 A69-38758*	21 p3849 A69-38803	21 p3803 A69-38848 #	21 p3647 A69-38893 #	21 p3731 A69-38938
21 p3669 A69-38759	21 p3849 A69-38804	21 p3694 A69-38849 #	21 p3690 A69-38894*	21 p3723 A69-38939
21 p3774 A69-38760*	21 p3669 A69-38805	21 p3770 A69-38850 #	21 p3653 A69-38895	21 p3736 A69-38940
21 p3801 A69-38761*	21 p3849 A69-38806	21 p3723 A69-38851 #	21 p3690 A69-38896*	21 p3736 A69-38941
21 p3801 A69-38762	21 p3669 A69-38807	21 p3760 A69-38852 #	21 p3653 A69-38897	21 p3736 A69-38942
21 p3731 A69-38763	21 p3849 A69-38808	21 p3770 A69-38853 #	21 p3653 A69-38898	21 p3836 A69-38943
21 p3801 A69-38764 #	21 p3849 A69-38809	21 p3694 A69-38854 #	21 p3663 A69-38899	21 p3774 A69-38944
21 p3855 A69-38765	21 p3783 A69-38810	21 p3770 A69-38855 #	21 p3653 A69-38900	21 p3736 A69-38945
21 p3722 A69-38766	21 p3788 A69-38811	21 p3770 A69-38856 #	21 p3653 A69-38901	21 p3724 A69-38946
21 p3693 A69-38767 #	21 p3789 A69-38812**	21 p3818 A69-38857 #	21 p3663 A69-38902	21 p3736 A69-38947
21 p3694 A69-38768 #	21 p3801 A69-38813 #	21 p3849 A69-38858 #	21 p3653 A69-38903	21 p3736 A69-38948
21 p3722 A69-38769 #	21 p3789 A69-38814 #	21 p3850 A69-38859 #	21 p3654 A69-38904	21 p3736 A69-38949
21 p3694 A69-38770 #	21 p3789 A69-38815 #	21 p3850 A69-38860 #	21 p3654 A69-38905	21 p3731 A69-38950*
21 p3694 A69-38771 #	21 p3789 A69-38816 #	21 p3850 A69-38861 #	21 p3654 A69-38906	21 p3850 A69-38951*
21 p3849 A69-38772 #	21 p3789 A69-38817 #	21 p3695 A69-38862 #	21 p3654 A69-38907	21 p3745 A69-38952 #
21 p3835 A69-38773	21 p3789 A69-38818 #	21 p3850 A69-38863 #	21 p3654 A69-38908	21 p3745 A69-38953 #
21 p3780 A69-38774 #	21 p3802 A69-38819 #	21 p3850 A69-38864 #	21 p3654 A69-38909	21 p3745 A69-38954 #
21 p3673 A69-38775 #	21 p3790 A69-38820 #	21 p3785 A69-38865 #	21 p3655 A69-38910	21 p3745 A69-38955 #
21 p3678 A69-38776 #	21 p3790 A69-38821 #	21 p3850 A69-38866 #	21 p3655 A69-38911	21 p3746 A69-38956 #
21 p3682 A69-38777 #	21 p3790 A69-38822 #	21 p3774 A69-38867 #	21 p3655 A69-38912	21 p3746 A69-38957 #
21 p3673 A69-38778 #	21 p3790 A69-38823 #	21 p3835 A69-38868 #	21 p3655 A69-38913	21 p3746 A69-38958 #
21 p3685 A69-38779 #	21 p3802 A69-38824 #	21 p3744 A69-38869 #	21 p3663 A69-38914	21 p3746 A69-38959 #
21 p3651 A69-38780	21 p3802 A69-38825 #	21 p3731 A69-38870 #	21 p3663 A69-38915	21 p3755 A69-38960 #
21 p3736 A69-38781	21 p3802 A69-38826 #	21 p3744 A69-38871 #	21 p3655 A69-38916	21 p3695 A69-38961 #
21 p3652 A69-38782	21 p3790 A69-38827 #	21 p3835 A69-38872 #	21 p3655 A69-38917	21 p3736 A69-38962 #
21 p3652 A69-38783	21 p3802 A69-38828 #	21 p3855 A69-38873 #	21 p3655 A69-38918	21 p3770 A69-38963 #
21 p3652 A69-38784	21 p3723 A69-38829 #	21 p3855 A69-38874 #	21 p3663 A69-38919*	21 p3850 A69-38964 #
21 p3758 A69-38785	21 p3835 A69-38830 #	21 p3745 A69-38875 #	21 p3664 A69-38920	21 p3656 A69-38965 #



# ACCESSION NUMBER INDEX

21 p3669 A69-38966	21 p3851 A69-39011 #	21 p3658 A69-39056 #	21 p3696 A69-39101	21 p3738 A69-39146
21 p3732 A69-38967	21 p3673 A69-39012 #	21 p3658 A69-39057 #	21 p3785 A69-39102	21 p3756 A69-39147
21 p3664 A69-38968	21 p3819 A69-39013 #	21 p3658 A69-39058 #	21 p3785 A69-39103	21 p3756 A69-39148
21 p3664 A69-38969 #	21 p3644 A69-39014 #	21 p3664 A69-39059 #	21 p3785 A69-39104	21 p3756 A69-39149
21 p3664 A69-38970 #	21 p3647 A69-39015*#	21 p3665 A69-39060 #	21 p3755 A69-39105 #	21 p3756 A69-39150
21 p3664 A69-38971 #	21 p3851 A69-39016 #	21 p3659 A69-39061 #	21 p3771 A69-39106 #	21 p3756 A69-39151
21 p3695 A69-38972	21 p3819 A69-39017 #	21 p3659 A69-39062 #	21 p3755 A69-39107 #	21 p3746 A69-39152
21 p3803 A69-38973*	21 p3674 A69-39018 #	21 p3659 A69-39063 #	21 p3771 A69-39108 #	21 p3752 A69-39153
21 p3851 A69-38974	21 p3674 A69-39019 #	21 p3659 A69-39064 #	21 p3771 A69-39109 #	21 p3690 A69-39154
21 p3851 A69-38975	21 p3804 A69-39020*#	21 p3686 A69-39065	21 p3758 A69-39110 #	21 p3837 A69-39155
21 p3656 A69-38976	21 p3785 A69-39021 #	21 p3659 A69-39066*	21 p3758 A69-39111 #	21 p3837 A69-39156
21 p3656 A69-38977	21 p3804 A69-39022 #	21 p3781 A69-39067 #	21 p3758 A69-39112 #	21 p3837 A69-39157
21 p3664 A69-38978	21 p3715 A69-39023*#	21 p3737 A69-39068 #	21 p3759 A69-39113 #	21 p3837 A69-39158
21 p3656 A69-38979	21 p3804 A69-39024*#	21 p3781 A69-39069 #	21 p3759 A69-39114 #	21 p3837 A69-39159
21 p3803 A69-38980*	21 p3785 A69-39025*#	21 p3781 A69-39070 #	21 p3759 A69-39115 #	21 p3746 A69-39160
21 p3803 A69-38981*	21 p3768 A69-39026 #	21 p3746 A69-39071 #	21 p3716 A69-39116 #	21 p3746 A69-39161
21 p3803 A69-38982	21 p3649 A69-39027 #	21 p3781 A69-39072 #	21 p3759 A69-39117 #	21 p3746 A69-39162
21 p3669 A69-38983*	21 p3837 A69-39028 #	21 p3724 A69-39073 #	21 p3738 A69-39118 #	21 p3747 A69-39163
21 p3836 A69-38984	21 p3819 A69-39029 #	21 p3724 A69-39074 #	21 p3759 A69-39119 #	21 p3644 A69-39164
21 p3836 A69-38985	21 p3724 A69-39030 #	21 p3724 A69-39075 #	21 p3755 A69-39120	21 p3777 A69-39165 #
21 p3664 A69-38986	21 p3819 A69-39031*#	21 p3724 A69-39076 #	21 p3674 A69-39121 #	21 p3838 A69-39166 #
21 p3647 A69-38987	21 p3819 A69-39032 #	21 p3724 A69-39077 #	21 p3682 A69-39122 #	21 p3856 A69-39167
21 p3836 A69-38988	21 p3819 A69-39033 #	21 p3738 A69-39078 #	21 p3674 A69-39123 #	21 p3659 A69-39168*
21 p3732 A69-38989	21 p3664 A69-39034 #	21 p3738 A69-39079 #	21 p3682 A69-39124 #	21 p3665 A69-39169
21 p3682 A69-38990	21 p3695 A69-39035 #	21 p3804 A69-39080 #	21 p3682 A69-39125 #	21 p3665 A69-39170*
21 p3737 A69-38991 #	21 p3804 A69-39036 #	21 p3752 A69-39081 #	21 p3682 A69-39126 #	21 p3665 A69-39171
21 p3737 A69-38992 #	21 p3851 A69-39037 #	21 p3674 A69-39082 #	21 p3781 A69-39127 #	21 p3660 A69-39172
21 p3673 A69-38993 #	21 p3647 A69-39038 #	21 p3851 A69-39083	21 p3682 A69-39128 #	21 p3660 A69-39173*
21 p3803 A69-38994 #	21 p3695 A69-39039 #	21 p3644 A69-39084	21 p3674 A69-39129 #	21 p3665 A69-39174*
21 p3771 A69-38995 #	21 p3644 A69-39040 #	21 p3771 A69-39085	21 p3674 A69-39130 #	21 p3660 A69-39175
21 p3737 A69-38996 #	21 p3737 A69-39041 #	21 p3696 A69-39086	21 p3738 A69-39131 #	21 p3660 A69-39176*
21 p3771 A69-38997 #	21 p3737 A69-39042 #	21 p3771 A69-39087	21 p3756 A69-39132	21 p3660 A69-39177
21 p3737 A69-38998 #	21 p3780 A69-39043 #	21 p3837 A69-39088	21 p3856 A69-39133*	21 p3660 A69-39178 #
21 p3737 A69-38999 #	21 p3780 A69-39044 #	21 p3837 A69-39089	21 p3781 A69-39134	21 p3660 A69-39179
21 p3715 A69-39000	21 p3780 A69-39045 #	21 p3785 A69-39090	21 p3781 A69-39135	21 p3665 A69-39180
21 p3695 A69-39001 #	21 p3780 A69-39046 #	21 p3696 A69-39091	21 p3781 A69-39136	21 p3665 A69-39181
21 p3755 A69-39002 #	21 p3780 A69-39047 #	21 p3851 A69-39092	21 p3781 A69-39137	21 p3666 A69-39182
21 p3836 A69-39003 #	21 p3781 A69-39048 #	21 p3785 A69-39093	21 p3782 A69-39138	21 p3772 A69-39183 #
21 p3771 A69-39004 #	21 p3656 A69-39049	21 p3785 A69-39094	21 p3686 A69-39139	21 p3838 A69-39184 #
21 p3836 A69-39005 #	21 p3657 A69-39050 #	21 p3696 A69-39095	21 p3738 A69-39140	21 p3838 A69-39185 #
21 p3647 A69-39006 #	21 p3657 A69-39051 #	21 p3644 A69-39096	21 p3782 A69-39141	21 p3838 A69-39186 #
21 p3695 A69-39007 #	21 p3657 A69-39052 #	21 p3732 A69-39097	21 p3782 A69-39142	21 p3838 A69-39187 #
21 p3755 A69-39008 #	21 p3658 A69-39053 #	21 p3647 A69-39098	21 p3782 A69-39143	21 p3838 A69-39188 #
21 p3771 A69-39009 #	21 p3658 A69-39054 #	21 p3644 A69-39099	21 p3782 A69-39144	21 p3838 A69-39189 #
21 p3695 A69-39010 #	21 p3658 A69-39055 #	21 p3724 A69-39100	21 p3682 A69-39145	21 p3838 A69-39190 #

ACCESSION NUMBER INDEX

21 p3838 A69-39191 #	21 p3753 A69-39236**	21 p3683 A69-39281	21 p3747 A69-39326 #	21 p3686 A69-39371 #
21 p3839 A69-39192 #	21 p3644 A69-39237**	21 p3675 A69-39282	21 p3725 A69-39327 #	21 p3762 A69-39372 #
21 p3752 A69-39193 #	21 p3774 A69-39238	21 p3675 A69-39283	21 p3845 A69-39328 #	21 p3786 A69-39373**
21 p3839 A69-39194 #	21 p3774 A69-39239	21 p3683 A69-39284*	21 p3845 A69-39329 #	21 p3822 A69-39374**
21 p3839 A69-39195 #	21 p3782 A69-39240	21 p3675 A69-39285	21 p3806 A69-39330*	21 p3822 A69-39375**
21 p3839 A69-39196 #	21 p3772 A69-39241*	21 p3725 A69-39286	21 p3806 A69-39331	21 p3822 A69-39376**
21 p3839 A69-39197 #	21 p3782 A69-39242 #	21 p3840 A69-39287	21 p3661 A69-39332	21 p3762 A69-39377 #
21 p3839 A69-39198 #	21 p3696 A69-39243 #	21 p3840 A69-39288	21 p3669 A69-39333*	21 p3762 A69-39378 #
21 p3839 A69-39199 #	21 p3716 A69-39244 #	21 p3851 A69-39289	21 p3761 A69-39334**	21 p3762 A69-39379**
21 p3804 A69-39200*	21 p3675 A69-39245 #	21 p3806 A69-39290	21 p3806 A69-39335 #	21 p3686 A69-39380 #
21 p3804 A69-39201 #	21 p3724 A69-39246 #	21 p3851 A69-39291 #	21 p3806 A69-39336 #	21 p3687 A69-39381 #
21 p3674 A69-39202 #	21 p3716 A69-39247 #	21 p3851 A69-39292 #	21 p3806 A69-39337**	21 p3822 A69-39382 #
21 p3804 A69-39203 #	21 p3716 A69-39248 #	21 p3840 A69-39293 #	21 p3807 A69-39338 #	21 p3822 A69-39383 #
21 p3819 A69-39204 #	21 p3791 A69-39249 #	21 p3772 A69-39294 #	21 p3807 A69-39339**	21 p3823 A69-39384**
21 p3761 A69-39205**	21 p3716 A69-39250 #	21 p3696 A69-39295 #	21 p3807 A69-39340**	21 p3823 A69-39385 #
21 p3805 A69-39206 #	21 p3682 A69-39251 #	21 p3696 A69-39296 #	21 p3807 A69-39341 #	21 p3762 A69-39386**
21 p3805 A69-39207 #	21 p3791 A69-39252 #	21 p3840 A69-39297	21 p3807 A69-39342**	21 p3725 A69-39387 #
21 p3805 A69-39208**	21 p3791 A69-39253 #	21 p3840 A69-39298	21 p3807 A69-39343 #	21 p3690 A69-39388 #
21 p3805 A69-39209 #	21 p3716 A69-39254	21 p3840 A69-39299	21 p3808 A69-39344 #	21 p3762 A69-39389 #
21 p3819 A69-39210**	21 p3856 A69-39255 #	21 p3840 A69-39300	21 p3808 A69-39345 #	21 p3762 A69-39390**
21 p3819 A69-39211**	21 p3820 A69-39256 #	21 p3840 A69-39301	21 p3808 A69-39346**	21 p3763 A69-39391**
21 p3785 A69-39212**	21 p3716 A69-39257 #	21 p3842 A69-39302 #	21 p3808 A69-39347 #	21 p3725 A69-39392 #
21 p3805 A69-39213 #	21 p3806 A69-39258 #	21 p3842 A69-39303 #	21 p3761 A69-39348**	21 p3823 A69-39393 #
21 p3819 A69-39214 #	21 p3759 A69-39259**	21 p3732 A69-39304 #	21 p3820 A69-39349 #	21 p3809 A69-39394**
21 p3805 A69-39215**	21 p3820 A69-39260 #	21 p3842 A69-39305 #	21 p3821 A69-39350**	21 p3763 A69-39395 #
21 p3839 A69-39216**	21 p3820 A69-39261 #	21 p3842 A69-39306 #	21 p3821 A69-39351 #	21 p3763 A69-39396**
21 p3786 A69-39217**	21 p3717 A69-39262 #	21 p3842 A69-39307 #	21 p3808 A69-39352 #	21 p3675 A69-39397 #
21 p3820 A69-39218 #	21 p3717 A69-39263 #	21 p3842 A69-39308 #	21 p3821 A69-39353 #	21 p3675 A69-39398 #
21 p3768 A69-39219**	21 p3683 A69-39264	21 p3842 A69-39309 #	21 p3821 A69-39354 #	21 p3763 A69-39399 #
21 p3805 A69-39220**	21 p3756 A69-39265	21 p3843 A69-39310 #	21 p3808 A69-39355**	21 p3823 A69-39400 #
21 p3805 A69-39221**	21 p3756 A69-39266	21 p3843 A69-39311 #	21 p3761 A69-39356 #	21 p3823 A69-39401 #
21 p3761 A69-39222 #	21 p3661 A69-39267 #	21 p3843 A69-39312 #	21 p3808 A69-39357 #	21 p3824 A69-39402**
21 p3805 A69-39223 #	21 p3666 A69-39268	21 p3843 A69-39313 #	21 p3809 A69-39358 #	21 p3824 A69-39403**
21 p3805 A69-39224**	21 p3666 A69-39269	21 p3732 A69-39314 #	21 p3809 A69-39359 #	21 p3824 A69-39404 #
21 p3820 A69-39225 #	21 p3666 A69-39270	21 p3843 A69-39315 #	21 p3809 A69-39360 #	21 p3763 A69-39405**
21 p3674 A69-39226 #	21 p3661 A69-39271	21 p3843 A69-39316 #	21 p3809 A69-39361**	21 p3763 A69-39406**
21 p3820 A69-39227 #	21 p3661 A69-39272	21 p3844 A69-39317 #	21 p3809 A69-39362**	21 p3764 A69-39407 #
21 p3820 A69-39228**	21 p3666 A69-39273	21 p3844 A69-39318 #	21 p3821 A69-39363 #	21 p3764 A69-39408**
21 p3805 A69-39229**	21 p3661 A69-39274	21 p3844 A69-39319 #	21 p3821 A69-39364 #	21 p3764 A69-39409**
21 p3647 A69-39230 #	21 p3666 A69-39275	21 p3844 A69-39320 #	21 p3822 A69-39365 #	21 p3764 A69-39410**
21 p3839 A69-39231 #	21 p3661 A69-39276	21 p3844 A69-39321 #	21 p3761 A69-39366 #	21 p3764 A69-39411 #
21 p3696 A69-39232**	21 p3661 A69-39277	21 p3844 A69-39322 #	21 p3732 A69-39367**	21 p3764 A69-39412**
21 p3820 A69-39233 #	21 p3661 A69-39278	21 p3747 A69-39323 #	21 p3761 A69-39368 #	21 p3647 A69-39413**
21 p3806 A69-39234 #	21 p3675 A69-39279	21 p3725 A69-39324 #	21 p3761 A69-39369 #	21 p3765 A69-39414**
21 p3786 A69-39235**	21 p3717 A69-39280	21 p3844 A69-39325 #	21 p3686 A69-39370**	21 p3678 A69-39415 #



# ACCESSION NUMBER INDEX

21 p3824 A69-39416 #	21 p3739 A69-39461	21 p3791 A69-39506*	21 p3740 A69-39551 #	21 p3852 A69-39596
21 p3824 A69-39417**	21 p3677 A69-39462	21 p3791 A69-39507	21 p3740 A69-39552 #	21 p3852 A69-39597
21 p3648 A69-39418 #	21 p3687 A69-39463*	21 p3811 A69-39508	21 p3740 A69-39553 #	21 p3749 A69-39598
21 p3648 A69-39419 #	21 p3782 A69-39464*	21 p3811 A69-39509	21 p3741 A69-39554 #	21 p3733 A69-39599 #
21 p3648 A69-39420 #	21 p3677 A69-39465	21 p3811 A69-39510	21 p3677 A69-39555 #	21 p3749 A69-39600 #
21 p3648 A69-39421 #	21 p3772 A69-39466	21 p3811 A69-39511	21 p3782 A69-39556 #	21 p3679 A69-39601
21 p3648 A69-39422 #	21 p3775 A69-39467*	21 p3677 A69-39512	21 p3775 A69-39557 #	21 p3679 A69-39602
21 p3690 A69-39423 #	21 p3775 A69-39468*	21 p3772 A69-39513	21 p3783 A69-39558 #	21 p3679 A69-39603*
21 p3765 A69-39424 #	21 p3810 A69-39469*	21 p3811 A69-39514*	21 p3783 A69-39559 #	21 p3679 A69-39604*
21 p3648 A69-39425 #	21 p3732 A69-39470	21 p3811 A69-39515	21 p3783 A69-39560 #	21 p3684 A69-39605
21 p3765 A69-39426 #	21 p3732 A69-39471	21 p3811 A69-39516	21 p3783 A69-39561 #	21 p3667 A69-39606
21 p3649 A69-39427 #	21 p3747 A69-39472	21 p3812 A69-39517*	21 p3753 A69-39562 #	21 p3679 A69-39607*
21 p3824 A69-39428 #	21 p3733 A69-39473	21 p3812 A69-39518	21 p3684 A69-39563	21 p3679 A69-39608*
21 p3765 A69-39429**	21 p3824 A69-39474	21 p3812 A69-39519	21 p3741 A69-39564	21 p3680 A69-39609
21 p3852 A69-39430	21 p3852 A69-39475	21 p3812 A69-39520	21 p3757 A69-39565 #	21 p3815 A69-39610
21 p3696 A69-39431	21 p3845 A69-39476	21 p3813 A69-39521*	21 p3677 A69-39566	21 p3815 A69-39611
21 p3852 A69-39432*	21 p3777 A69-39477	21 p3813 A69-39522*	21 p3792 A69-39567	21 p3815 A69-39612
21 p3852 A69-39433*	21 p3782 A69-39478 #	21 p3759 A69-39523	21 p3814 A69-39568*	21 p3792 A69-39613
21 p3747 A69-39434*	21 p3777 A69-39479 #	21 p3757 A69-39524	21 p3814 A69-39569	21 p3792 A69-39614
21 p3747 A69-39435*	21 p3777 A69-39480 #	21 p3813 A69-39525	21 p3814 A69-39570	21 p3792 A69-39615
21 p3747 A69-39436	21 p3777 A69-39481 #	21 p3749 A69-39526	21 p3814 A69-39571	21 p3815 A69-39616*
21 p3676 A69-39437	21 p3778 A69-39482 #	21 p3696 A69-39527	21 p3792 A69-39572	21 p3662 A69-39617
21 p3683 A69-39438	21 p3649 A69-39483 #	21 p3717 A69-39528	21 p3778 A69-39573	21 p3772 A69-39618 #
21 p3683 A69-39439	21 p3747 A69-39484	21 p3670 A69-39529	21 p3778 A69-39574	21 p3684 A69-39619 #
21 p3666 A69-39440	21 p3748 A69-39485	21 p3649 A69-39530	21 p3741 A69-39575	21 p3772 A69-39620 #
21 p3666 A69-39441	21 p3783 A69-39486	21 p3814 A69-39531	21 p3814 A69-39576	21 p3772 A69-39621 #
21 p3667 A69-39442	21 p3784 A69-39487	21 p3687 A69-39532	21 p3717 A69-39577	21 p3816 A69-39622 #
21 p3667 A69-39443	21 p3748 A69-39488	21 p3825 A69-39533	21 p3696 A69-39578 #	21 p3749 A69-39623 #
21 p3667 A69-39444	21 p3784 A69-39489	21 p3661 A69-39534*	21 p3778 A69-39579*	21 p3726 A69-39624 #
21 p3738 A69-39445	21 p3748 A69-39490	21 p3662 A69-39535*	21 p3726 A69-39580**	21 p3670 A69-39625 #
21 p3738 A69-39446	21 p3748 A69-39491	21 p3757 A69-39536 #	21 p3856 A69-39581*	21 p3816 A69-39626 #
21 p3739 A69-39447	21 p3748 A69-39492	21 p3757 A69-39537 #	21 p3772 A69-39582**	21 p3662 A69-39627 #
21 p3725 A69-39448	21 p3749 A69-39493	21 p3757 A69-39538 #	21 p3814 A69-39583*	21 p3825 A69-39628
21 p3687 A69-39449	21 p3749 A69-39494	21 p3739 A69-39539 #	21 p3814 A69-39584*	21 p3825 A69-39629 #
21 p3676 A69-39450*	21 p3733 A69-39495	21 p3739 A69-39540 #	21 p3815 A69-39585*	21 p3667 A69-39630 #
21 p3676 A69-39451*	21 p3753 A69-39496	21 p3739 A69-39541 #	21 p3815 A69-39586*	21 p3691 A69-39631**
21 p3683 A69-39452*	21 p3756 A69-39497*	21 p3739 A69-39542 #	21 p3815 A69-39587*	21 p3768 A69-39632 #
21 p3683 A69-39453*	21 p3778 A69-39498	21 p3725 A69-39543 #	21 p3815 A69-39588*	21 p3680 A69-39633 #
21 p3684 A69-39454*	21 p3756 A69-39499*	21 p3740 A69-39544 #	21 p3741 A69-39589	21 p3825 A69-39634 #
21 p3777 A69-39455*	21 p3756 A69-39500	21 p3740 A69-39545 #	21 p3784 A69-39590	21 p3825 A69-39635
21 p3677 A69-39456	21 p3810 A69-39501	21 p3740 A69-39546 #	21 p3670 A69-39591	21 p3765 A69-39636 #
21 p3739 A69-39457*	21 p3791 A69-39502*	21 p3778 A69-39547 #	21 p3852 A69-39592	21 p3826 A69-39637 #
21 p3678 A69-39458	21 p3810 A69-39503	21 p3778 A69-39548 #	21 p3784 A69-39593	21 p3826 A69-39638 #
21 p3677 A69-39459	21 p3810 A69-39504	21 p3740 A69-39549 #	21 p3852 A69-39594	21 p3826 A69-39639 #
21 p3687 A69-39460	21 p3810 A69-39505	21 p3740 A69-39550 #	21 p3852 A69-39595	21 p3765 A69-39640 #

# ACCESSION NUMBER INDEX

21 p3826 A69-39641 #	21 p3856 A69-39686	21 p3717 A69-39731	21 p3726 A69-39776 #	21 p3818 A69-39821 #
21 p3826 A69-39642*#	21 p3857 A69-39687	21 p3718 A69-39732	21 p3727 A69-39777	21 p3818 A69-39822 #
21 p3687 A69-39643 #	21 p3857 A69-39688	21 p3718 A69-39733*	21 p3727 A69-39778	21 p3767 A69-39823 #
21 p3766 A69-39644	21 p3826 A69-39689	21 p3718 A69-39734	21 p3742 A69-39779 #	21 p3768 A69-39824 #
21 p3766 A69-39645 #	21 p3857 A69-39690	21 p3718 A69-39735	21 p3742 A69-39780 #	21 p3829 A69-39825 #
21 p3766 A69-39646*#	21 p3827 A69-39691*	21 p3684 A69-39736	21 p3742 A69-39781 #	21 p3768 A69-39826 #
21 p3766 A69-39647 #	21 p3857 A69-39692	21 p3670 A69-39737*	21 p3727 A69-39782	21 p3645 A69-39827 #
21 p3767 A69-39648 #	21 p3827 A69-39693	21 p3670 A69-39738*	21 p3668 A69-39783	21 p3829 A69-39828 #
21 p3767 A69-39649 #	21 p3827 A69-39694	21 p3670 A69-39739	21 p3727 A69-39784	21 p3829 A69-39829 #
21 p3767 A69-39650 #	21 p3827 A69-39695*	21 p3775 A69-39740*#	21 p3817 A69-39785	21 p3727 A69-39830 #
21 p3767 A69-39651 #	21 p3857 A69-39696	21 p3726 A69-39741	21 p3727 A69-39786	21 p3768 A69-39831 #
21 p3767 A69-39652 #	21 p3650 A69-39697	21 p3742 A69-39742 #	21 p3749 A69-39787 #	21 p3829 A69-39832 #
21 p3759 A69-39653 #	21 p3697 A69-39698	21 p3697 A69-39743 #	21 p3750 A69-39788 #	21 p3830 A69-39833 #
21 p3680 A69-39654 #	21 p3753 A69-39699*	21 p3733 A69-39744 #	21 p3750 A69-39789 #	21 p3830 A69-39834 #
21 p3717 A69-39655 #	21 p3684 A69-39700	21 p3853 A69-39745 #	21 p3645 A69-39790 #	21 p3830 A69-39835 #
21 p3717 A69-39656 #	21 p3667 A69-39701	21 p3779 A69-39746 #	21 p3698 A69-39791 #	21 p3830 A69-39836 #
21 p3772 A69-39657 #	21 p3726 A69-39702 #	21 p3718 A69-39747*	21 p3668 A69-39792 #	21 p3773 A69-39837 #
21 p3760 A69-39658 #	21 p3853 A69-39703 #	21 p3678 A69-39748	21 p3645 A69-39793 #	21 p3830 A69-39838 #
21 p3760 A69-39659 #	21 p3688 A69-39704*#	21 p3718 A69-39749	21 p3779 A69-39794 #	21 p3830 A69-39839 #
21 p3687 A69-39660*	21 p3742 A69-39705 #	21 p3726 A69-39750	21 p3846 A69-39795 #	21 p3773 A69-39840 #
21 p3688 A69-39661*	21 p3670 A69-39706*#	21 p3769 A69-39751 #	21 p3846 A69-39796 #	21 p3853 A69-39841
21 p3856 A69-39662*	21 p3853 A69-39707 #	21 p3769 A69-39752 #	21 p3846 A69-39797 #	21 p3750 A69-39842 #
21 p3680 A69-39663*	21 p3662 A69-39708 #	21 p3827 A69-39753*#	21 p3733 A69-39798 #	21 p3854 A69-39843 #
21 p3757 A69-39664	21 p3845 A69-39709	21 p3786 A69-39754*#	21 p3753 A69-39799 #	21 p3854 A69-39844 #
21 p3775 A69-39665*	21 p3749 A69-39710	21 p3827 A69-39755 #	21 p3753 A69-39800 #	21 p3698 A69-39845 #
21 p3773 A69-39666	21 p3668 A69-39711	21 p3688 A69-39756*#	21 p3775 A69-39801 #	21 p3854 A69-39846 #
21 p3644 A69-39667	21 p3662 A69-39712	21 p3817 A69-39757 #	21 p3645 A69-39802 #	21 p3645 A69-39847 #
21 p3678 A69-39668	21 p3846 A69-39713 #	21 p3680 A69-39758 #	21 p3846 A69-39803 #	21 p3645 A69-39848 #
21 p3741 A69-39669	21 p3846 A69-39714 #	21 p3817 A69-39759*#	21 p3733 A69-39804 #	21 p3855 A69-39849 #
21 p3697 A69-39670	21 p3846 A69-39715 #	21 p3828 A69-39760*#	21 p3733 A69-39805 #	21 p3698 A69-39850 #
21 p3853 A69-39671	21 p3650 A69-39716 #	21 p3828 A69-39761*#	21 p3670 A69-39806*	21 p3680 A69-39851 #
21 p3853 A69-39672	21 p3645 A69-39717 #	21 p3678 A69-39762 #	21 p3678 A69-39807 #	21 p3680 A69-39852 #
21 p3697 A69-39673	21 p3786 A69-39718 #	21 p3853 A69-39763 #	21 p3792 A69-39808 #	21 p3855 A69-39853 #
21 p3697 A69-39674*	21 p3733 A69-39719 #	21 p3767 A69-39764*#	21 p3753 A69-39809	21 p3680 A69-39854 #
21 p3697 A69-39675	21 p3733 A69-39720 #	21 p3691 A69-39765 #	21 p3846 A69-39810	21 p3855 A69-39855 #
21 p3845 A69-39676	21 p3816 A69-39721	21 p3828 A69-39766*#	21 p3727 A69-39811	21 p3727 A69-39856 #
21 p3845 A69-39677	21 p3816 A69-39722 #	21 p3828 A69-39767 #	21 p3846 A69-39812	21 p3688 A69-39857 #
21 p3845 A69-39678	21 p3816 A69-39723 #	21 p3786 A69-39768*#	21 p3847 A69-39813	21 p3786 A69-39858 #
21 p3773 A69-39679	21 p3816 A69-39724 #	21 p3645 A69-39769 #	21 p3750 A69-39814	21 p3847 A69-39859 #
21 p3697 A69-39680	21 p3817 A69-39725 #	21 p3828 A69-39770*#	21 p3734 A69-39815	21 p3688 A69-39860 #
21 p3853 A69-39681	21 p3817 A69-39726 #	21 p3773 A69-39771*#	21 p3828 A69-39816	21 p3688 A69-39861 #
21 p3726 A69-39682	21 p3817 A69-39727 #	21 p3792 A69-39772	21 p3817 A69-39817 #	21 p3688 A69-39862 #
21 p3741 A69-39683	21 p3817 A69-39728 #	21 p3718 A69-39773 #	21 p3829 A69-39818 #	21 p3689 A69-39863 #
21 p3741 A69-39684	21 p3697 A69-39729	21 p3719 A69-39774	21 p3818 A69-39819 #	21 p3668 A69-39864
21 p3741 A69-39685	21 p3753 A69-39730*	21 p3726 A69-39775	21 p3818 A69-39820 #	21 p3668 A69-39865



# ACCESSION NUMBER INDEX

21 p3668 A69-39866*	22 p4038 A69-39911	22 p3911 A69-39956	22 p4001 A69-40001 #	22 p3911 A69-40046
21 p3786 A69-39867	22 p4038 A69-39912 #	22 p3972 A69-39957 #	22 p4002 A69-40002 #	22 p3944 A69-40047 #
21 p3779 A69-39868	22 p4039 A69-39913 #	22 p3959 A69-39958 #	22 p3862 A69-40003 #	22 p3895 A69-40048**
21 p3698 A69-39869 #	22 p4039 A69-39914 #	22 p3919 A69-39959	22 p3977 A69-40004 #	22 p3871 A69-40049**
21 p3750 A69-39870	22 p4039 A69-39915 #	22 p4040 A69-39960 #	22 p3862 A69-40005 #	22 p3895 A69-40050**
22 p3870 A69-39871*	22 p4039 A69-39916 #	22 p3862 A69-39961 #	22 p3999 A69-40006 #	22 p3871 A69-40051**
22 p3934 A69-39872*	22 p4039 A69-39917 #	22 p3862 A69-39962 #	22 p3977 A69-40007 #	22 p3935 A69-40052**
22 p3894 A69-39873*	22 p4039 A69-39918 #	22 p3978 A69-39963 #	22 p4036 A69-40008 #	22 p4041 A69-40053 #
22 p3977 A69-39874 #	22 p3997 A69-39919	22 p3934 A69-39964*	22 p3911 A69-40009	22 p3871 A69-40054**
22 p3978 A69-39875	22 p3919 A69-39920	22 p4008 A69-39965*	22 p3911 A69-40010	22 p3871 A69-40055**
22 p3966 A69-39876	22 p3903 A69-39921*	22 p3934 A69-39966	22 p3911 A69-40011	22 p3895 A69-40056**
22 p3966 A69-39877	22 p3999 A69-39922	22 p3935 A69-39967	22 p3959 A69-40012	22 p3871 A69-40057 #
22 p3966 A69-39878	22 p3903 A69-39923	22 p4035 A69-39968*	22 p4041 A69-40013	22 p3889 A69-40058 #
22 p3967 A69-39879	22 p4039 A69-39924 #	22 p3899 A69-39969	22 p3899 A69-40014	22 p3936 A69-40059**
22 p3967 A69-39880	22 p3929 A69-39925 #	22 p3935 A69-39970*	22 p3929 A69-40015	22 p3871 A69-40060*
22 p3967 A69-39881	22 p3943 A69-39926 #	22 p3935 A69-39971	22 p3943 A69-40016 #	22 p3983 A69-40061*
22 p3967 A69-39882	22 p3976 A69-39927 #	22 p3899 A69-39972	22 p3959 A69-40017 #	22 p3968 A69-40062
22 p3967 A69-39883*	22 p3977 A69-39928**	22 p4036 A69-39973 #	22 p3960 A69-40018 #	22 p3968 A69-40063
22 p3967 A69-39884	22 p3977 A69-39929**	22 p3943 A69-39974	22 p3943 A69-40019**	22 p4041 A69-40064 #
22 p3968 A69-39885*	22 p4052 A69-39930	22 p3959 A69-39975	22 p3944 A69-40020**	22 p3859 A69-40065 #
22 p3968 A69-39886	22 p3862 A69-39931	22 p3979 A69-39976	22 p3952 A69-40021	22 p3988 A69-40066 #
22 p3968 A69-39887	22 p3862 A69-39932	22 p3935 A69-39977	22 p3952 A69-40022	22 p3912 A69-40067
22 p3968 A69-39888	22 p3862 A69-39933	22 p4040 A69-39978	22 p3952 A69-40023	22 p3912 A69-40068
22 p4008 A69-39889*	22 p3862 A69-39934	22 p4040 A69-39979	22 p3952 A69-40024	22 p3969 A69-40069 #
22 p3934 A69-39890*	22 p4040 A69-39935	22 p4040 A69-39980	22 p3952 A69-40025	22 p3969 A69-40070 #
22 p3928 A69-39891 #	22 p4008 A69-39936	22 p4040 A69-39981	22 p3953 A69-40026	22 p3969 A69-40071 #
22 p3929 A69-39892 #	22 p4040 A69-39937	22 p4009 A69-39982	22 p3953 A69-40027	22 p3969 A69-40072 #
22 p3929 A69-39893 #	22 p4040 A69-39938	22 p4001 A69-39983 #	22 p3953 A69-40028	22 p3969 A69-40073 #
22 p3979 A69-39894 #	22 p3934 A69-39939 #	22 p4009 A69-39984 #	22 p3953 A69-40029	22 p3969 A69-40074 #
22 p4038 A69-39895 #	22 p3869 A69-39940	22 p4010 A69-39985 #	22 p3953 A69-40030	22 p3969 A69-40075 #
22 p4038 A69-39896 #	22 p3909 A69-39941	22 p4010 A69-39986 #	22 p3953 A69-40031	22 p3944 A69-40076
22 p3974 A69-39897 #	22 p3909 A69-39942	22 p4001 A69-39987 #	22 p3953 A69-40032	22 p3945 A69-40077
22 p3895 A69-39898	22 p4049 A69-39943	22 p4001 A69-39988 #	22 p3954 A69-40033	22 p3945 A69-40078
22 p3992 A69-39899	22 p4049 A69-39944	22 p4010 A69-39989 #	22 p3954 A69-40034	22 p3945 A69-40079
22 p4008 A69-39900	22 p3909 A69-39945	22 p4010 A69-39990 #	22 p3954 A69-40035	22 p4041 A69-40080
22 p3959 A69-39901 #	22 p3910 A69-39946	22 p4010 A69-39991 #	22 p3954 A69-40036	22 p3972 A69-40081
22 p4038 A69-39902 #	22 p3910 A69-39947	22 p4010 A69-39992 #	22 p3954 A69-40037	22 p3945 A69-40082
22 p4038 A69-39903 #	22 p3999 A69-39948	22 p4010 A69-39993 #	22 p3954 A69-40038	22 p4011 A69-40083
22 p3998 A69-39904	22 p3910 A69-39949	22 p4001 A69-39994 #	22 p3944 A69-40039 #	22 p4012 A69-40084
22 p3999 A69-39905	22 p3903 A69-39950	22 p4011 A69-39995 #	22 p3935 A69-40040 #	22 p4012 A69-40085
22 p3889 A69-39906	22 p3903 A69-39951	22 p4001 A69-39996 #	22 p3863 A69-40041 #	22 p4012 A69-40086*
22 p3951 A69-39907	22 p3910 A69-39952	22 p3943 A69-39997 #	22 p3944 A69-40042 #	22 p4012 A69-40087
22 p4038 A69-39908	22 p3910 A69-39953	22 p4011 A69-39998 #	22 p4011 A69-40043**	22 p4012 A69-40088
22 p4035 A69-39909	22 p3910 A69-39954	22 p3943 A69-39999 #	22 p3944 A69-40044 #	22 p4012 A69-40089
22 p4035 A69-39910	22 p3911 A69-39955	22 p3943 A69-40000 #	22 p3944 A69-40045	22 p4002 A69-40090*

# ACCESSION NUMBER INDEX

22 p4002 A69-40091	22 p3936 A69-40136*	22 p3936 A69-40181	22 p3874 A69-40226	22 p3876 A69-40271 #
22 p4002 A69-40092	22 p3936 A69-40137	22 p3936 A69-40182	22 p3875 A69-40227	22 p3892 A69-40272 #
22 p4002 A69-40093	22 p3903 A69-40138 #	22 p3937 A69-40183	22 p3875 A69-40228 #	22 p3892 A69-40273 #
22 p4002 A69-40094	22 p3903 A69-40139 #	22 p3937 A69-40184*	22 p3875 A69-40229	22 p4003 A69-40274 #
22 p4003 A69-40095	22 p3904 A69-40140 #	22 p4018 A69-40185	22 p3875 A69-40230	22 p3876 A69-40275 #
22 p4013 A69-40096	22 p3945 A69-40141	22 p3984 A69-40186*	22 p3974 A69-40231 #	22 p4052 A69-40276
22 p4013 A69-40097	22 p4014 A69-40142 #	22 p3980 A69-40187	22 p3904 A69-40232	22 p3877 A69-40277 #
22 p4049 A69-40098	22 p3859 A69-40143 #	22 p3937 A69-40188*	22 p3919 A69-40233	22 p3877 A69-40278 #
22 p3983 A69-40099	22 p4041 A69-40144 #	22 p3960 A69-40189	22 p3960 A69-40234	22 p3877 A69-40279 #
22 p3983 A69-40100*	22 p3863 A69-40145 #	22 p3960 A69-40190	22 p3945 A69-40235	22 p3877 A69-40280 #
22 p3983 A69-40101	22 p4014 A69-40146	22 p3919 A69-40191*	22 p3954 A69-40236	22 p3892 A69-40281 #
22 p3988 A69-40102*	22 p4014 A69-40147	22 p3989 A69-40192	22 p3955 A69-40237	22 p3892 A69-40282 #
22 p3895 A69-40103*	22 p3980 A69-40148	22 p3989 A69-40193	22 p3960 A69-40238	22 p3877 A69-40283 #
22 p3889 A69-40104	22 p3983 A69-40149	22 p4018 A69-40194	22 p3961 A69-40239	22 p3892 A69-40284 #
22 p3980 A69-40105 #	22 p4015 A69-40150	22 p3989 A69-40195	22 p3961 A69-40240	22 p3877 A69-40285 #
22 p3980 A69-40106 #	22 p4015 A69-40151	22 p3989 A69-40196	22 p3892 A69-40241	22 p4019 A69-40286
22 p3980 A69-40107 #	22 p4015 A69-40152	22 p3981 A69-40197	22 p3961 A69-40242	22 p4019 A69-40287
22 p3980 A69-40108 #	22 p4015 A69-40153	22 p3872 A69-40198 #	22 p3961 A69-40243	22 p4019 A69-40288
22 p3980 A69-40109 #	22 p4015 A69-40154	22 p3890 A69-40199	22 p3945 A69-40244	22 p4019 A69-40289
22 p3929 A69-40110 #	22 p4015 A69-40155	22 p3872 A69-40200	22 p3981 A69-40245 #	22 p4019 A69-40290
22 p3929 A69-40111 #	22 p3984 A69-40156	22 p3872 A69-40201*	22 p3961 A69-40246 #	22 p4019 A69-40291
22 p3929 A69-40112 #	22 p3984 A69-40157	22 p3873 A69-40202 #	22 p3899 A69-40247 #	22 p4019 A69-40292
22 p4041 A69-40113 #	22 p3889 A69-40158	22 p3873 A69-40203	22 p3981 A69-40248 #	22 p4019 A69-40293
22 p4041 A69-40114 #	22 p3871 A69-40159	22 p3890 A69-40204	22 p3869 A69-40249 #	22 p4019 A69-40294
22 p4036 A69-40115 #	22 p3872 A69-40160	22 p3873 A69-40205	22 p3899 A69-40250 #	22 p4020 A69-40295
22 p3917 A69-40116 #	22 p3872 A69-40161	22 p3873 A69-40206	22 p3946 A69-40251 #	22 p4003 A69-40296
22 p3929 A69-40117 #	22 p3872 A69-40162	22 p3890 A69-40207	22 p3978 A69-40252 #	22 p4003 A69-40297*
22 p3930 A69-40118 #	22 p3890 A69-40163*	22 p3873 A69-40208*	22 p3946 A69-40253 #	22 p4003 A69-40298
22 p4013 A69-40119	22 p3969 A69-40164	22 p3873 A69-40209	22 p3869 A69-40254 #	22 p4020 A69-40299
22 p4013 A69-40120	22 p3969 A69-40165	22 p3874 A69-40210	22 p3989 A69-40255 #	22 p4003 A69-40300*
22 p4013 A69-40121	22 p3970 A69-40166	22 p3890 A69-40211	22 p3989 A69-40256 #	22 p4003 A69-40301
22 p4013 A69-40122	22 p4041 A69-40167 #	22 p3890 A69-40212 #	22 p3912 A69-40257 #	22 p4003 A69-40302*
22 p4013 A69-40123	22 p3945 A69-40168 #	22 p3890 A69-40213	22 p3912 A69-40258 #	22 p4004 A69-40303
22 p4013 A69-40124*	22 p3980 A69-40169	22 p3874 A69-40214*	22 p3875 A69-40259 #	22 p4020 A69-40304*
22 p4014 A69-40125	22 p3936 A69-40170	22 p3891 A69-40215	22 p3912 A69-40260 #	22 p4004 A69-40305*
22 p4014 A69-40126	22 p4042 A69-40171 #	22 p3874 A69-40216	22 p3875 A69-40261	22 p4020 A69-40306
22 p4014 A69-40127	22 p4015 A69-40172	22 p3891 A69-40217 #	22 p3876 A69-40262	22 p4004 A69-40307*
22 p4014 A69-40128	22 p4017 A69-40173	22 p3891 A69-40218	22 p3876 A69-40263*	22 p4004 A69-40308
22 p4014 A69-40129	22 p4017 A69-40174	22 p3891 A69-40219	22 p3876 A69-40264*	22 p3946 A69-40309
22 p3868 A69-40130*	22 p4017 A69-40175	22 p3891 A69-40220	22 p3876 A69-40265*	22 p4042 A69-40310 #
22 p3868 A69-40131	22 p4017 A69-40176	22 p3891 A69-40221	22 p4049 A69-40266	22 p4042 A69-40311 #
22 p3868 A69-40132	22 p4017 A69-40177	22 p3891 A69-40222 #	22 p4018 A69-40267	22 p4042 A69-40312
22 p3869 A69-40133	22 p4018 A69-40178	22 p3874 A69-40223	22 p4018 A69-40268*	22 p4042 A69-40313 #
22 p3869 A69-40134	22 p4018 A69-40179	22 p3874 A69-40224	22 p3876 A69-40269	22 p3946 A69-40314 #
22 p3917 A69-40135*	22 p3936 A69-40180	22 p3874 A69-40225 #	22 p4018 A69-40270	22 p4042 A69-40315 #



## ACCESSION NUMBER INDEX

22 p3961 A69-40316	22 p3907 A69-40361**	22 p3955 A69-40406**	22 p4050 A69-40451	22 p3863 A69-40496 *
22 p4020 A69-40317 *	22 p3907 A69-40362 *	22 p3955 A69-40407 *	22 p4042 A69-40452	22 p3859 A69-40497 *
22 p3895 A69-40318 *	22 p3907 A69-40363**	22 p3955 A69-40408 *	22 p3975 A69-40453	22 p3859 A69-40498 *
22 p4020 A69-40319 *	22 p3908 A69-40364 *	22 p3937 A69-40409 *	22 p4042 A69-40454 *	22 p4000 A69-40499 *
22 p4036 A69-40320 *	22 p3908 A69-40365 *	22 p4021 A69-40410 *	22 p4043 A69-40455 *	22 p4000 A69-40500 *
22 p4020 A69-40321 *	22 p3978 A69-40366 *	22 p4021 A69-40411 *	22 p4043 A69-40456 *	22 p3938 A69-40501*
22 p3904 A69-40322 *	22 p3908 A69-40367 *	22 p4021 A69-40412 *	22 p4050 A69-40457 *	22 p3938 A69-40502
22 p3919 A69-40323**	22 p3978 A69-40368 *	22 p4021 A69-40413 *	22 p4043 A69-40458 *	22 p3938 A69-40503*
22 p3917 A69-40324 *	22 p3920 A69-40369**	22 p3869 A69-40414	22 p4043 A69-40459 *	22 p4004 A69-40504*
22 p3904 A69-40325 *	22 p3893 A69-40370**	22 p3961 A69-40415	22 p3955 A69-40460	22 p3939 A69-40505*
22 p3904 A69-40326 *	22 p3893 A69-40371**	22 p3981 A69-40416	22 p3956 A69-40461	22 p3939 A69-40506*
22 p3978 A69-40327**	22 p3920 A69-40372**	22 p3961 A69-40417	22 p3956 A69-40462	22 p3939 A69-40507
22 p4036 A69-40328**	22 p3920 A69-40373**	22 p3984 A69-40418	22 p4022 A69-40463 *	22 p4005 A69-40508*
22 p3974 A69-40329 *	22 p3920 A69-40374**	22 p3992 A69-40419*	22 p4022 A69-40464 *	22 p4005 A69-40509*
22 p3975 A69-40330 *	22 p3920 A69-40375**	22 p3992 A69-40420*	22 p4022 A69-40465 *	22 p4005 A69-40510*
22 p4021 A69-40331 *	22 p3920 A69-40376 *	22 p4021 A69-40421 *	22 p4022 A69-40466 *	22 p4005 A69-40511*
22 p3975 A69-40332 *	22 p3921 A69-40377**	22 p3937 A69-40422 *	22 p4022 A69-40467 *	22 p4005 A69-40512*
22 p3975 A69-40333**	22 p3921 A69-40378**	22 p3937 A69-40423 *	22 p4022 A69-40468 *	22 p4005 A69-40513
22 p3904 A69-40334 *	22 p3921 A69-40379 *	22 p3925 A69-40424	22 p4022 A69-40469 *	22 p3939 A69-40514
22 p3904 A69-40335**	22 p3921 A69-40380**	22 p4052 A69-40425	22 p4022 A69-40470 *	22 p3939 A69-40515*
22 p3905 A69-40336 *	22 p4021 A69-40381**	22 p4052 A69-40426	22 p4023 A69-40471 *	22 p4023 A69-40516*
22 p3905 A69-40337 *	22 p3921 A69-40382 *	22 p3863 A69-40427	22 p4023 A69-40472 *	22 p3939 A69-40517*
22 p3905 A69-40338 *	22 p3922 A69-40383**	22 p3925 A69-40428	22 p3962 A69-40473 *	22 p4023 A69-40518*
22 p3905 A69-40339**	22 p3922 A69-40384 *	22 p3925 A69-40429	22 p3962 A69-40474 *	22 p4005 A69-40519
22 p3905 A69-40340 *	22 p3922 A69-40385 *	22 p3863 A69-40430	22 p3981 A69-40475 *	22 p4005 A69-40520
22 p3905 A69-40341 *	22 p3922 A69-40386**	22 p3926 A69-40431	22 p3962 A69-40476 *	22 p3940 A69-40521
22 p3978 A69-40342 *	22 p3922 A69-40387 *	22 p3926 A69-40432	22 p3984 A69-40477	22 p3940 A69-40522*
22 p3905 A69-40343 *	22 p3922 A69-40388 *	22 p3926 A69-40433	22 p3984 A69-40478	22 p3940 A69-40523*
22 p3905 A69-40344**	22 p3922 A69-40389**	22 p4053 A69-40434	22 p3896 A69-40479*	22 p4023 A69-40524**
22 p3906 A69-40345 *	22 p3923 A69-40390**	22 p3896 A69-40435*	22 p3956 A69-40480	22 p3930 A69-40525**
22 p3906 A69-40346 *	22 p3923 A69-40391 *	22 p4021 A69-40436	22 p3946 A69-40481 *	22 p4006 A69-40526**
22 p3906 A69-40347**	22 p3923 A69-40392**	22 p3926 A69-40437**	22 p4053 A69-40482 *	22 p4006 A69-40527
22 p3906 A69-40348 *	22 p3923 A69-40393**	22 p3946 A69-40438 *	22 p4053 A69-40483 *	22 p3989 A69-40528**
22 p3906 A69-40349 *	22 p3923 A69-40394 *	22 p3946 A69-40439 *	22 p3927 A69-40484 *	22 p3990 A69-40529**
22 p3906 A69-40350**	22 p3923 A69-40395**	22 p3962 A69-40440 *	22 p3908 A69-40485 *	22 p3984 A69-40530**
22 p3907 A69-40351 *	22 p3924 A69-40396 *	22 p3926 A69-40441 *	22 p3946 A69-40486 *	22 p3930 A69-40531
22 p3919 A69-40352**	22 p3924 A69-40397**	22 p4042 A69-40442 *	22 p3946 A69-40487 *	22 p3962 A69-40532 *
22 p3907 A69-40353 *	22 p3924 A69-40398 *	22 p4042 A69-40443 *	22 p3896 A69-40488**	22 p3899 A69-40533 *
22 p3907 A69-40354 *	22 p3924 A69-40399 *	22 p3926 A69-40444 *	22 p4053 A69-40489 *	22 p3940 A69-40534
22 p3999 A69-40355 *	22 p3924 A69-40400 *	22 p3938 A69-40445	22 p3927 A69-40490 *	22 p3977 A69-40535
22 p3912 A69-40356 *	22 p3924 A69-40401**	22 p3938 A69-40446	22 p3863 A69-40491 *	22 p3940 A69-40536
22 p3892 A69-40357 *	22 p3925 A69-40402 *	22 p4004 A69-40447	22 p3999 A69-40492 *	22 p3940 A69-40537
22 p4052 A69-40358 *	22 p3925 A69-40403 *	22 p3938 A69-40448	22 p3999 A69-40493 *	22 p3940 A69-40538
22 p4050 A69-40359**	22 p3955 A69-40404 *	22 p4022 A69-40449*	22 p3863 A69-40494 *	22 p3859 A69-40539 *
22 p3907 A69-40360**	22 p3955 A69-40405**	22 p4050 A69-40450	22 p4043 A69-40495	22 p3860 A69-40540 *

## ACCESSION NUMBER INDEX

22 p3927 A69-40541 #	22 p3864 A69-40586 #	22 p3998 A69-40631*#	22 p3864 A69-40676	22 p3985 A69-40721*#
22 p4036 A69-40542*#	22 p3927 A69-40587 #	22 p3998 A69-40632*#	22 p3973 A69-40677 #	22 p3986 A69-40722
22 p4036 A69-40543 #	22 p3864 A69-40588 #	22 p3970 A69-40633*#	22 p3900 A69-40678	22 p3986 A69-40723*#
22 p4023 A69-40544*#	22 p4006 A69-40589 #	22 p3970 A69-40634 #	22 p3900 A69-40679	22 p3986 A69-40724 #
22 p4043 A69-40545 #	22 p3927 A69-40590 #	22 p3956 A69-40635 #	22 p3900 A69-40680	22 p3896 A69-40725 #
22 p4043 A69-40546 #	22 p3869 A69-40591 #	22 p3970 A69-40636 #	22 p3900 A69-40681	22 p3986 A69-40726
22 p3927 A69-40547 #	22 p4000 A69-40592 #	22 p3869 A69-40637 #	22 p3900 A69-40682 #	22 p3896 A69-40727*#
22 p3979 A69-40548*#	22 p4000 A69-40593 #	22 p3970 A69-40638 #	22 p3930 A69-40683	22 p3993 A69-40728
22 p3869 A69-40549 #	22 p4000 A69-40594 #	22 p4025 A69-40639	22 p3931 A69-40684	22 p3993 A69-40729*
22 p4036 A69-40550*#	22 p3927 A69-40595 #	22 p4025 A69-40640	22 p4051 A69-40685	22 p3993 A69-40730*
22 p3979 A69-40551 #	22 p3990 A69-40596 #	22 p4006 A69-40641*	22 p3931 A69-40686	22 p3928 A69-40731
22 p3927 A69-40552 #	22 p3860 A69-40597 #	22 p4006 A69-40642	22 p3931 A69-40687	22 p3977 A69-40732 #
22 p3997 A69-40553 #	22 p4044 A69-40598 #	22 p4006 A69-40643*	22 p3931 A69-40688	22 p3977 A69-40733
22 p4050 A69-40554 #	22 p4044 A69-40599 #	22 p4025 A69-40644*	22 p4028 A69-40689 #	22 p3869 A69-40734
22 p4037 A69-40555*#	22 p4044 A69-40600 #	22 p4025 A69-40645	22 p3964 A69-40690 #	22 p3970 A69-40735
22 p4023 A69-40556 #	22 p3963 A69-40601 #	22 p4025 A69-40646	22 p3913 A69-40691	22 p3973 A69-40736
22 p3930 A69-40557 #	22 p3992 A69-40602 #	22 p4026 A69-40647*	22 p3913 A69-40692*	22 p3970 A69-40737*
22 p4050 A69-40558 #	22 p3963 A69-40603 #	22 p4026 A69-40648*	22 p3913 A69-40693	22 p3896 A69-40738*
22 p4044 A69-40559*#	22 p3992 A69-40604 #	22 p4026 A69-40649	22 p3913 A69-40694	22 p3918 A69-40739 #
22 p3962 A69-40560	22 p3993 A69-40605 #	22 p4026 A69-40650*	22 p3913 A69-40695	22 p3973 A69-40740 #
22 p3962 A69-40561	22 p3912 A69-40606 #	22 p4026 A69-40651	22 p3913 A69-40696*	22 p4044 A69-40741 #
22 p3962 A69-40562	22 p3993 A69-40607 #	22 p4026 A69-40652*	22 p3913 A69-40697*	22 p4044 A69-40742 #
22 p3963 A69-40563	22 p3964 A69-40608 #	22 p4026 A69-40653	22 p3914 A69-40698*	22 p3973 A69-40743 #
22 p3963 A69-40564	22 p4024 A69-40609 #	22 p4027 A69-40654*	22 p3908 A69-40699	22 p4045 A69-40744 #
22 p3963 A69-40565	22 p4024 A69-40610 #	22 p4027 A69-40655*	22 p3914 A69-40700	22 p3973 A69-40745 #
22 p3963 A69-40566	22 p4024 A69-40611 #	22 p4027 A69-40656	22 p3914 A69-40701*	22 p3973 A69-40746 #
22 p3963 A69-40567*	22 p4025 A69-40612 #	22 p4027 A69-40657	22 p3914 A69-40702	22 p3973 A69-40747 #
22 p4023 A69-40568*	22 p4025 A69-40613 #	22 p4027 A69-40658	22 p3914 A69-40703*	22 p3974 A69-40748 #
22 p3941 A69-40569	22 p4025 A69-40614 #	22 p4027 A69-40659*	22 p3914 A69-40704	22 p4045 A69-40749 #
22 p4023 A69-40570*	22 p3899 A69-40615 #	22 p4027 A69-40660	22 p3915 A69-40705	22 p4045 A69-40750 #
22 p3975 A69-40571	22 p3917 A69-40616 #	22 p4028 A69-40661	22 p3915 A69-40706	22 p3994 A69-40751 #
22 p3917 A69-40572*	22 p3900 A69-40617 #	22 p4028 A69-40662*	22 p3915 A69-40707	22 p3994 A69-40752 #
22 p3975 A69-40573*	22 p3930 A69-40618 #	22 p4028 A69-40663*	22 p4053 A69-40708	22 p3982 A69-40753 #
22 p3992 A69-40574*#	22 p4044 A69-40619 #	22 p3985 A69-40664*	22 p4053 A69-40709	22 p4028 A69-40754 #
22 p3985 A69-40575*#	22 p3998 A69-40620*#	22 p3985 A69-40665*	22 p3931 A69-40710	22 p4028 A69-40755 #
22 p4024 A69-40576	22 p3864 A69-40621 #	22 p3985 A69-40666	22 p3931 A69-40711	22 p4029 A69-40756 #
22 p4006 A69-40577*	22 p4000 A69-40622 #	22 p3981 A69-40667	22 p4051 A69-40712	22 p4029 A69-40757 #
22 p4024 A69-40578	22 p4050 A69-40623 #	22 p3985 A69-40668	22 p4051 A69-40713	22 p3990 A69-40758
22 p4024 A69-40579	22 p3998 A69-40624 #	22 p3982 A69-40669	22 p3990 A69-40714	22 p3986 A69-40759*
22 p4024 A69-40580*	22 p4050 A69-40625*#	22 p3947 A69-40670	22 p3985 A69-40715	22 p3974 A69-40760*
22 p4024 A69-40581	22 p3998 A69-40626*#	22 p3956 A69-40671	22 p4028 A69-40716	22 p3877 A69-40761*
22 p4024 A69-40582	22 p3947 A69-40627 #	22 p3928 A69-40672	22 p3941 A69-40717	22 p4029 A69-40762*
22 p3927 A69-40583 #	22 p4051 A69-40628 #	22 p3928 A69-40673	22 p3941 A69-40718	22 p4029 A69-40763
22 p3930 A69-40584 #	22 p3981 A69-40629 #	22 p3978 A69-40674	22 p3993 A69-40719*#	22 p4029 A69-40764
22 p3930 A69-40585 #	22 p3947 A69-40630 #	22 p3979 A69-40675	22 p3993 A69-40720*#	22 p4029 A69-40765



## ACCESSION NUMBER INDEX

22 p3986 A69-40766	22 p3865 A69-40811 #	22 p3881 A69-40856	22 p4030 A69-40901	22 p4032 A69-40946 #
22 p4029 A69-40767*	22 p3865 A69-40812 #	22 p3881 A69-40857	22 p4030 A69-40902	22 p4032 A69-40947 #
22 p4029 A69-40768*	22 p3865 A69-40813*#	22 p3881 A69-40858	22 p4007 A69-40903	22 p3901 A69-40948 #
22 p4029 A69-40769	22 p4045 A69-40814 #	22 p3881 A69-40859	22 p4030 A69-40904	22 p3901 A69-40949 #
22 p4030 A69-40770*	22 p4037 A69-40815 #	22 p3881 A69-40860	22 p4030 A69-40905	22 p3901 A69-40950 #
22 p4030 A69-40771*	22 p3866 A69-40816 #	22 p3881 A69-40861	22 p4030 A69-40906	22 p3916 A69-40951 #
22 p4030 A69-40772*	22 p3866 A69-40817 #	22 p3881 A69-40862	22 p4031 A69-40907	22 p3916 A69-40952 #
22 p4007 A69-40773	22 p3866 A69-40818 #	22 p3947 A69-40863 #	22 p4031 A69-40908	22 p3916 A69-40953 #
22 p4030 A69-40774	22 p3860 A69-40819 #	22 p3947 A69-40864	22 p4031 A69-40909	22 p3901 A69-40954 #
22 p4007 A69-40775*	22 p4045 A69-40820 #	22 p3991 A69-40865	22 p4031 A69-40910	22 p3901 A69-40955 #
22 p3877 A69-40776	22 p4045 A69-40821 #	22 p3998 A69-40866	22 p4031 A69-40911	22 p3918 A69-40956 #
22 p3975 A69-40777	22 p3956 A69-40822	22 p3882 A69-40867	22 p4031 A69-40912	22 p3918 A69-40957 #
22 p3931 A69-40778 #	22 p3956 A69-40823	22 p3882 A69-40868	22 p3941 A69-40913	22 p3916 A69-40958 #
22 p3878 A69-40779	22 p3956 A69-40824	22 p3882 A69-40869	22 p3941 A69-40914	22 p3947 A69-40959 #
22 p3915 A69-40780	22 p3957 A69-40825	22 p3882 A69-40870	22 p4007 A69-40915	22 p3916 A69-40960 #
22 p3896 A69-40781*	22 p4045 A69-40826	22 p3882 A69-40871	22 p4007 A69-40916	22 p3941 A69-40961 #
22 p3971 A69-40782	22 p3957 A69-40827	22 p3882 A69-40872	22 p3941 A69-40917	22 p3916 A69-40962 #
22 p3986 A69-40783*	22 p3957 A69-40828	22 p3882 A69-40873	22 p3957 A69-40918 #	22 p3916 A69-40963 #
22 p3893 A69-40784	22 p3957 A69-40829	22 p3883 A69-40874	22 p3971 A69-40919 #	22 p3965 A69-40964 #
22 p3878 A69-40785	22 p3957 A69-40830	22 p3883 A69-40875	22 p3860 A69-40920 #	22 p3965 A69-40965 #
22 p3893 A69-40786	22 p3957 A69-40831	22 p3883 A69-40876	22 p4051 A69-40921 #	22 p3885 A69-40966 #
22 p3893 A69-40787	22 p3957 A69-40832	22 p3883 A69-40877	22 p3941 A69-40922	22 p4046 A69-40967 #
22 p3990 A69-40788 #	22 p3971 A69-40833	22 p3883 A69-40878	22 p3900 A69-40923	22 p4046 A69-40968 #
22 p3990 A69-40789 #	22 p3878 A69-40834	22 p3883 A69-40879	22 p3965 A69-40924	22 p4046 A69-40969 #
22 p3990 A69-40790 #	22 p3878 A69-40835	22 p3883 A69-40880	22 p3900 A69-40925	22 p4051 A69-40970 #
22 p3990 A69-40791 #	22 p3878 A69-40836	22 p3883 A69-40881	22 p3860 A69-40926 #	22 p3897 A69-40971
22 p3878 A69-40792	22 p3878 A69-40837	22 p3883 A69-40882	22 p3932 A69-40927 #	22 p3957 A69-40972
22 p3964 A69-40793 #	22 p3878 A69-40838	22 p3884 A69-40883	22 p3932 A69-40928 #	22 p3971 A69-40973
22 p3964 A69-40794 #	22 p3893 A69-40839	22 p3884 A69-40884	22 p4001 A69-40929 #	22 p3885 A69-40974*
22 p3964 A69-40795 #	22 p3879 A69-40840	22 p3884 A69-40885	22 p3900 A69-40930 #	22 p3885 A69-40975
22 p3964 A69-40796 #	22 p3879 A69-40841	22 p3884 A69-40886	22 p3932 A69-40931 #	22 p3885 A69-40976
22 p3964 A69-40797 #	22 p3879 A69-40842	22 p3884 A69-40887	22 p3897 A69-40932*	22 p3885 A69-40977
22 p3964 A69-40798 #	22 p3879 A69-40843*	22 p3884 A69-40888	22 p3994 A69-40933 #	22 p3885 A69-40978
22 p3982 A69-40799 #	22 p3879 A69-40844	22 p3884 A69-40889	22 p3915 A69-40934	22 p3894 A69-40979
22 p3947 A69-40800 #	22 p3879 A69-40845	22 p3897 A69-40890	22 p3915 A69-40935 #	22 p3897 A69-40980
22 p3965 A69-40801 #	22 p3879 A69-40846	22 p3931 A69-40891 #	22 p3908 A69-40936 #	22 p4032 A69-40981
22 p3971 A69-40802	22 p3879 A69-40847	22 p3931 A69-40892 #	22 p3915 A69-40937 #	22 p4032 A69-40982
22 p3864 A69-40803	22 p3880 A69-40848	22 p3932 A69-40893 #	22 p3947 A69-40938 #	22 p4032 A69-40983
22 p3864 A69-40804 #	22 p3880 A69-40849	22 p3932 A69-40894 #	22 p3932 A69-40939 #	22 p3897 A69-40984
22 p4053 A69-40805 #	22 p3880 A69-40850	22 p3860 A69-40895 #	22 p3933 A69-40940 #	22 p3948 A69-40985
22 p3865 A69-40806 #	22 p3880 A69-40851	22 p3860 A69-40896 #	22 p3866 A69-40941 #	22 p3948 A69-40986
22 p3865 A69-40807*#	22 p3880 A69-40852	22 p3932 A69-40897 #	22 p4031 A69-40942 #	22 p3941 A69-40987
22 p3865 A69-40808 #	22 p3880 A69-40853	22 p4007 A69-40898	22 p4031 A69-40943 #	22 p3942 A69-40988
22 p3870 A69-40809 #	22 p3880 A69-40854	22 p3971 A69-40899	22 p4032 A69-40944 #	22 p3948 A69-40989*
22 p3865 A69-40810 #	22 p3880 A69-40855	22 p4045 A69-40900	22 p4032 A69-40945 #	22 p3948 A69-40990

## ACCESSION NUMBER INDEX

22 p3949 A69-40991	22 p3991 A69-41036	22 p4047 A69-41081 #	22 p4052 A69-41126	22 p4047 A69-41171 #
22 p3949 A69-40992	22 p3976 A69-41037	22 p3972 A69-41082 #	22 p3866 A69-41127	22 p3966 A69-41172 #
22 p3942 A69-40993	22 p4037 A69-41038	22 p3972 A69-41083 #	22 p4054 A69-41128 #	22 p3997 A69-41173 #
22 p3949 A69-40994	22 p3974 A69-41039	22 p4033 A69-41084 #	22 p3867 A69-41129 #	22 p4034 A69-41174 #
22 p3894 A69-40995	22 p4046 A69-41040	22 p4033 A69-41085 #	22 p4054 A69-41130 #	22 p3886 A69-41175 #
22 p3949 A69-40996	22 p4046 A69-41041*	22 p4033 A69-41086 #	22 p4054 A69-41131 #	22 p3992 A69-41176 #
22 p3949 A69-40997*	22 p3994 A69-41042 #	22 p3979 A69-41087 #	22 p3867 A69-41132 #	22 p3861 A69-41177 #
22 p3949 A69-40998	22 p3987 A69-41043*	22 p4033 A69-41088 #	22 p3867 A69-41133 #	22 p3861 A69-41178 #
22 p3950 A69-40999	22 p3988 A69-41044*	22 p4037 A69-41089 #	22 p3867 A69-41134 #	22 p3861 A69-41179 #
22 p3950 A69-41000	22 p3988 A69-41045*	22 p4037 A69-41090 #	22 p3867 A69-41135 #	22 p3934 A69-41180 #
22 p3982 A69-41001	22 p3928 A69-41046 #	22 p4037 A69-41091 #	22 p4054 A69-41136 #	22 p3934 A69-41181 #
22 p3987 A69-41002	22 p3861 A69-41047 #	22 p4033 A69-41092 #	22 p3928 A69-41137 #	22 p4047 A69-41182 #
22 p3987 A69-41003*	22 p4037 A69-41048 #	22 p4007 A69-41093 #	22 p3894 A69-41138 #	22 p4048 A69-41183 #
22 p3987 A69-41004*	22 p4046 A69-41049 #	22 p3901 A69-41094 #	22 p3928 A69-41139*#	22 p3861 A69-41184 #
22 p3987 A69-41005*	22 p4037 A69-41050 #	22 p3942 A69-41095 #	22 p3867 A69-41140 #	22 p4048 A69-41185 #
22 p3987 A69-41006*	22 p3919 A69-41051 #	22 p4008 A69-41096 #	22 p3867 A69-41141 #	22 p3979 A69-41186 #
22 p3987 A69-41007*	22 p3991 A69-41052 #	22 p3942 A69-41097 #	22 p4054 A69-41142 #	22 p3988 A69-41187*#
22 p3991 A69-41008	22 p3994 A69-41053*	22 p3942 A69-41098 #	22 p3868 A69-41143*#	22 p4052 A69-41188
22 p3918 A69-41009*	22 p4007 A69-41054	22 p4034 A69-41099 #	22 p4054 A69-41144 #	22 p3887 A69-41189
22 p3975 A69-41010*	22 p3991 A69-41055	22 p4034 A69-41100 #	22 p3868 A69-41145 #	22 p3887 A69-41190*
22 p3918 A69-41011*	22 p3992 A69-41056	22 p4047 A69-41101 #	22 p3894 A69-41146 #	22 p3887 A69-41191 #
22 p3918 A69-41012	22 p4007 A69-41057	22 p4037 A69-41102 #	22 p3901 A69-41147 #	22 p3887 A69-41192
22 p3918 A69-41013*	22 p4033 A69-41058*#	22 p3942 A69-41103 #	22 p4054 A69-41148 #	22 p3887 A69-41193
22 p3975 A69-41014*	22 p4033 A69-41059 #	22 p4008 A69-41104 #	22 p4054 A69-41149 #	22 p3887 A69-41194
22 p4032 A69-41015	22 p4046 A69-41060 #	22 p4034 A69-41105 #	22 p3894 A69-41150 #	22 p3887 A69-41195
22 p3918 A69-41016*	22 p4046 A69-41061 #	22 p4034 A69-41106 #	22 p3868 A69-41151 #	22 p3887 A69-41196
22 p4032 A69-41017 #	22 p4047 A69-41062 #	22 p4034 A69-41107 #	22 p3965 A69-41152	22 p4048 A69-41197
22 p3982 A69-41018 #	22 p3982 A69-41063 #	22 p3933 A69-41108 #	22 p3988 A69-41153	22 p4048 A69-41198
22 p3982 A69-41019 #	22 p4047 A69-41064 #	22 p3992 A69-41109 #	22 p3988 A69-41154	22 p4048 A69-41199
22 p3901 A69-41020 #	22 p4033 A69-41065 #	22 p3976 A69-41110 #	22 p3994 A69-41155	22 p4034 A69-41200 #
22 p3991 A69-41021 #	22 p3885 A69-41066 #	22 p3957 A69-41111 #	22 p3995 A69-41156 #	22 p3919 A69-41201
22 p3991 A69-41022 #	22 p3886 A69-41067 #	22 p4034 A69-41112 #	22 p3995 A69-41157 #	22 p3894 A69-41202
22 p3933 A69-41023 #	22 p3897 A69-41068*	22 p3886 A69-41113 #	22 p3995 A69-41158 #	22 p3958 A69-41203 #
22 p3861 A69-41024 #	22 p3897 A69-41069*	22 p3861 A69-41114 #	22 p3995 A69-41159 #	22 p3958 A69-41204 #
22 p3861 A69-41025 #	22 p3898 A69-41070*	22 p3950 A69-41115 #	22 p3996 A69-41160 #	22 p4035 A69-41205*
22 p4051 A69-41026 #	22 p3898 A69-41071*	22 p3965 A69-41116 #	22 p3996 A69-41161 #	22 p4035 A69-41206
22 p3933 A69-41027 #	22 p3898 A69-41072*	22 p3965 A69-41117 #	22 p3996 A69-41162 #	22 p4035 A69-41207
22 p3933 A69-41028 #	22 p3898 A69-41073*	22 p3974 A69-41118 #	22 p3996 A69-41163 #	22 p4008 A69-41208
22 p3933 A69-41029 #	22 p3898 A69-41074	22 p4051 A69-41119 #	22 p3996 A69-41164 #	22 p4035 A69-41209
22 p3933 A69-41030 #	22 p3898 A69-41075*	22 p3942 A69-41120 #	22 p3996 A69-41165 #	22 p4035 A69-41210*
22 p3974 A69-41031 #	22 p3886 A69-41076*	22 p3886 A69-41121 #	22 p3996 A69-41166 #	22 p4035 A69-41211
22 p3971 A69-41032 #	22 p3886 A69-41077*	22 p3886 A69-41122 #	22 p3997 A69-41167 #	22 p3974 A69-41212
22 p3971 A69-41033 #	22 p3898 A69-41078*	22 p4047 A69-41123 #	22 p4047 A69-41168 #	22 p3887 A69-41213
22 p3976 A69-41034	22 p3972 A69-41079 #	22 p3976 A69-41124 #	22 p3934 A69-41169 #	22 p3997 A69-41214*
22 p3976 A69-41035	22 p3972 A69-41080 #	22 p3965 A69-41125	22 p3958 A69-41170 #	22 p3958 A69-41215



# ACCESSION NUMBER INDEX

22 p3950 A69-41216*	22 p3958 A69-41261	23 p4154 A69-41306 #	23 p4211 A69-41351*	23 p4172 A69-41396
22 p3958 A69-41217	22 p3958 A69-41262 #	23 p4168 A69-41307	23 p4135 A69-41352	23 p4172 A69-41397
22 p3902 A69-41218	22 p3958 A69-41263 #	23 p4168 A69-41308	23 p4135 A69-41353	23 p4172 A69-41398
22 p3966 A69-41219	22 p3959 A69-41264 #	23 p4168 A69-41309	23 p4135 A69-41354	23 p4172 A69-41399
22 p3902 A69-41220	22 p3959 A69-41265 #	23 p4168 A69-41310	23 p4114 A69-41355 #	23 p4172 A69-41400
22 p3902 A69-41221	22 p3959 A69-41266 #	23 p4077 A69-41311*	23 p4114 A69-41356 #	23 p4144 A69-41401*
22 p3950 A69-41222	22 p3983 A69-41267 #	23 p4077 A69-41312	23 p4190 A69-41357*	23 p4079 A69-41402
22 p3902 A69-41223	22 p4048 A69-41268 #	23 p4078 A69-41313	23 p4238 A69-41358	23 p4080 A69-41403
22 p3916 A69-41224*	22 p3888 A69-41269 #	23 p4078 A69-41314 #	23 p4114 A69-41359	23 p4080 A69-41404*
22 p3902 A69-41225	22 p3888 A69-41270 #	23 p4078 A69-41315	23 p4114 A69-41360	23 p4080 A69-41405
22 p3997 A69-41226**	22 p3888 A69-41271 #	23 p4078 A69-41316	23 p4135 A69-41361	23 p4080 A69-41406*
22 p3950 A69-41227 #	22 p3888 A69-41272 #	23 p4078 A69-41317	23 p4114 A69-41362	23 p4225 A69-41407 #
22 p3917 A69-41228**	22 p3888 A69-41273 #	23 p4154 A69-41318	23 p4195 A69-41363 #	23 p4180 A69-41408 #
22 p3950 A69-41229 #	22 p3888 A69-41274 #	23 p4209 A69-41319*	23 p4078 A69-41364	23 p4181 A69-41409 #
22 p3950 A69-41230**	22 p3889 A69-41275 #	23 p4162 A69-41320	23 p4078 A69-41365	23 p4181 A69-41410 #
22 p3888 A69-41231 #	22 p4048 A69-41276 #	23 p4209 A69-41321*	23 p4238 A69-41366	23 p4181 A69-41411 #
22 p3950 A69-41232**	22 p4048 A69-41277 #	23 p4209 A69-41322	23 p4154 A69-41367	23 p4168 A69-41412 #
22 p3951 A69-41233	22 p4049 A69-41278 #	23 p4236 A69-41323	23 p4180 A69-41368	23 p4168 A69-41413 #
22 p3917 A69-41234	22 p4049 A69-41279 #	23 p4237 A69-41324	23 p4057 A69-41369	23 p4168 A69-41414 #
22 p3917 A69-41235**	22 p4049 A69-41280 #	23 p4237 A69-41325	23 p4061 A69-41370	23 p4062 A69-41415 #
22 p3997 A69-41236 #	23 p4207 A69-41281 #	23 p4237 A69-41326	23 p4057 A69-41371 #	23 p4162 A69-41416 #
22 p3870 A69-41237 #	23 p4208 A69-41282 #	23 p4237 A69-41327	23 p4057 A69-41372**	23 p4168 A69-41417 #
22 p3870 A69-41238	23 p4208 A69-41283 #	23 p4237 A69-41328	23 p4146 A69-41373 #	23 p4169 A69-41418 #
22 p3870 A69-41239	23 p4208 A69-41284 #	23 p4237 A69-41329	23 p4058 A69-41374 #	23 p4169 A69-41419 #
22 p3870 A69-41240	23 p4208 A69-41285 #	23 p4238 A69-41330	23 p4062 A69-41375 #	23 p4225 A69-41420 #
22 p3870 A69-41241	23 p4208 A69-41286 #	23 p4175 A69-41331	23 p4150 A69-41376 #	23 p4225 A69-41421 #
22 p3870 A69-41242	23 p4208 A69-41287 #	23 p4238 A69-41332	23 p4211 A69-41377	23 p4225 A69-41422 #
22 p3870 A69-41243	23 p4208 A69-41288 #	23 p4238 A69-41333	23 p4192 A69-41378 #	23 p4225 A69-41423 #
22 p3988 A69-41244	23 p4208 A69-41289 #	23 p4150 A69-41334	23 p4193 A69-41379 #	23 p4225 A69-41424 #
22 p3951 A69-41245	23 p4208 A69-41290 #	23 p4150 A69-41335	23 p4079 A69-41380 #	23 p4225 A69-41425 #
22 p3951 A69-41246	23 p4076 A69-41291 #	23 p4238 A69-41336	23 p4079 A69-41381 #	23 p4112 A69-41426
22 p3951 A69-41247	23 p4077 A69-41292 #	23 p4204 A69-41337*	23 p4079 A69-41382 #	23 p4080 A69-41427
22 p3951 A69-41248	23 p4077 A69-41293	23 p4112 A69-41338*	23 p4079 A69-41383 #	23 p4080 A69-41428
22 p3902 A69-41249	23 p4077 A69-41294	23 p4112 A69-41339*	23 p4135 A69-41384	23 p4080 A69-41429
22 p3902 A69-41250	23 p4100 A69-41295*	23 p4209 A69-41340	23 p4195 A69-41385	23 p4080 A69-41430
22 p3908 A69-41251	23 p4077 A69-41296	23 p4154 A69-41341*	23 p4079 A69-41386*	23 p4081 A69-41431
22 p3902 A69-41252	23 p4240 A69-41297	23 p4154 A69-41342*	23 p4079 A69-41387*	23 p4081 A69-41432
22 p3979 A69-41253	23 p4175 A69-41298 #	23 p4209 A69-41343	23 p4211 A69-41388*	23 p4081 A69-41433
22 p3917 A69-41254	23 p4175 A69-41299 #	23 p4210 A69-41344*	23 p4171 A69-41389*	23 p4081 A69-41434*
22 p3909 A69-41255	23 p4077 A69-41300	23 p4210 A69-41345	23 p4171 A69-41390	23 p4238 A69-41435
22 p3951 A69-41256	23 p4209 A69-41301	23 p4210 A69-41346	23 p4171 A69-41391	23 p4081 A69-41436*
22 p3951 A69-41257	23 p4135 A69-41302 #	23 p4210 A69-41347	23 p4171 A69-41392	23 p4100 A69-41437
22 p3903 A69-41258	23 p4100 A69-41303 #	23 p4210 A69-41348	23 p4171 A69-41393	23 p4081 A69-41438
22 p3983 A69-41259**	23 p4240 A69-41304 #	23 p4210 A69-41349	23 p4172 A69-41394	23 p4081 A69-41439
22 p3976 A69-41260**	23 p4154 A69-41305 #	23 p4210 A69-41350	23 p4172 A69-41395	23 p4081 A69-41440*

# ACCESSION NUMBER INDEX

23 p4082 A69-41441	23 p4115 A69-41486 #	23 p4115 A69-41531	23 p4115 A69-41576	23 p4164 A69-41621*
23 p4082 A69-41442	23 p4211 A69-41487 #	23 p4154 A69-41532	23 p4241 A69-41577	23 p4213 A69-41622
23 p4100 A69-41443	23 p4211 A69-41488 #	23 p4162 A69-41533*	23 p4199 A69-41578	23 p4213 A69-41623*
23 p4100 A69-41444	23 p4211 A69-41489 #	23 p4176 A69-41534	23 p4058 A69-41579	23 p4164 A69-41624
23 p4082 A69-41445	23 p4211 A69-41490 #	23 p4226 A69-41535 #	23 p4136 A69-41580	23 p4164 A69-41625
23 p4082 A69-41446	23 p4113 A69-41491*	23 p4212 A69-41536	23 p4136 A69-41581*	23 p4164 A69-41626
23 p4082 A69-41447*	23 p4172 A69-41492	23 p4226 A69-41537 #	23 p4136 A69-41582	23 p4164 A69-41627
23 p4083 A69-41448	23 p4172 A69-41493	23 p4195 A69-41538 #	23 p4136 A69-41583	23 p4164 A69-41628
23 p4101 A69-41449 #	23 p4101 A69-41494	23 p4205 A69-41539**	23 p4115 A69-41584	23 p4173 A69-41629
23 p4101 A69-41450 #	23 p4101 A69-41495	23 p4198 A69-41540	23 p4115 A69-41585	23 p4173 A69-41630
23 p4101 A69-41451*	23 p4173 A69-41496	23 p4176 A69-41541 #	23 p4115 A69-41586	23 p4173 A69-41631
23 p4193 A69-41452	23 p4173 A69-41497	23 p4198 A69-41542 #	23 p4116 A69-41587	23 p4239 A69-41632*
23 p4101 A69-41453	23 p4197 A69-41498**	23 p4162 A69-41543**	23 p4116 A69-41588*	23 p4164 A69-41633*
23 p4083 A69-41454	23 p4198 A69-41499	23 p4151 A69-41544**	23 p4136 A69-41589*	23 p4155 A69-41634*
23 p4083 A69-41455*	23 p4173 A69-41500	23 p4198 A69-41545	23 p4137 A69-41590*	23 p4174 A69-41635
23 p4083 A69-41456	23 p4150 A69-41501 #	23 p4196 A69-41546 #	23 p4137 A69-41591	23 p4165 A69-41636
23 p4083 A69-41457*	23 p4175 A69-41502	23 p4146 A69-41547 #	23 p4116 A69-41592	23 p4200 A69-41637
23 p4083 A69-41458	23 p4175 A69-41503	23 p4198 A69-41548**	23 p4116 A69-41593	23 p4200 A69-41638
23 p4083 A69-41459	23 p4176 A69-41504	23 p4163 A69-41549**	23 p4116 A69-41594	23 p4200 A69-41639
23 p4084 A69-41460	23 p4176 A69-41505	23 p4163 A69-41550 #	23 p4116 A69-41595	23 p4200 A69-41640
23 p4084 A69-41461	23 p4176 A69-41506	23 p4163 A69-41551 #	23 p4194 A69-41596 #	23 p4241 A69-41641
23 p4084 A69-41462	23 p4176 A69-41507	23 p4163 A69-41552 #	23 p4176 A69-41597*	23 p4147 A69-41642
23 p4084 A69-41463	23 p4176 A69-41508	23 p4163 A69-41553 #	23 p4177 A69-41598	23 p4062 A69-41643
23 p4101 A69-41464	23 p4113 A69-41509*	23 p4163 A69-41554 #	23 p4169 A69-41599	23 p4185 A69-41644
23 p4084 A69-41465	23 p4181 A69-41510 #	23 p4169 A69-41555 #	23 p4085 A69-41600*	23 p4147 A69-41645
23 p4084 A69-41466	23 p4193 A69-41511	23 p4163 A69-41556 #	23 p4116 A69-41601	23 p4185 A69-41646
23 p4084 A69-41467	23 p4193 A69-41512 #	23 p4163 A69-41557 #	23 p4116 A69-41602	23 p4169 A69-41647
23 p4084 A69-41468	23 p4151 A69-41513 #	23 p4136 A69-41558 #	23 p4146 A69-41603 #	23 p4200 A69-41648
23 p4084 A69-41469	23 p4193 A69-41514 #	23 p4136 A69-41559 #	23 p4117 A69-41604	23 p4165 A69-41649
23 p4084 A69-41470	23 p4195 A69-41515 #	23 p4198 A69-41560	23 p4117 A69-41605	23 p4165 A69-41650
23 p4101 A69-41471	23 p4195 A69-41516 #	23 p4155 A69-41561 #	23 p4137 A69-41606	23 p4062 A69-41651
23 p4084 A69-41472	23 p4195 A69-41517 #	23 p4115 A69-41562 #	23 p4239 A69-41607 #	23 p4062 A69-41652*
23 p4085 A69-41473	23 p4113 A69-41518 #	23 p4155 A69-41563 #	23 p4181 A69-41608 #	23 p4200 A69-41653
23 p4226 A69-41474 #	23 p4113 A69-41519 #	23 p4198 A69-41564 #	23 p4196 A69-41609 #	23 p4062 A69-41654
23 p4175 A69-41475	23 p4194 A69-41520 #	23 p4173 A69-41565 #	23 p4058 A69-41610	23 p4200 A69-41655
23 p4175 A69-41476	23 p4226 A69-41521 #	23 p4173 A69-41566 #	23 p4212 A69-41611*	23 p4200 A69-41656
23 p4211 A69-41477*	23 p4183 A69-41522 #	23 p4163 A69-41567	23 p4212 A69-41612	23 p4185 A69-41657
23 p4162 A69-41478	23 p4183 A69-41523 #	23 p4144 A69-41568	23 p4212 A69-41613*	23 p4201 A69-41658
23 p4085 A69-41479	23 p4181 A69-41524 #	23 p4239 A69-41569	23 p4212 A69-41614	23 p4201 A69-41659
23 p4204 A69-41480 #	23 p4151 A69-41525 #	23 p4115 A69-41570	23 p4212 A69-41615	23 p4147 A69-41660
23 p4204 A69-41481 #	23 p4151 A69-41526 #	23 p4190 A69-41571	23 p4113 A69-41616*	23 p4147 A69-41661
23 p4204 A69-41482 #	23 p4151 A69-41527 #	23 p4226 A69-41572	23 p4212 A69-41617*	23 p4185 A69-41662
23 p4204 A69-41483 #	23 p4135 A69-41528	23 p4085 A69-41573 #	23 p4164 A69-41618*	23 p4186 A69-41663
23 p4204 A69-41484 #	23 p4169 A69-41529	23 p4085 A69-41574 #	23 p4212 A69-41619*	23 p4201 A69-41664
23 p4204 A69-41485 #	23 p4162 A69-41530	23 p4190 A69-41575**	23 p4146 A69-41620*	23 p4201 A69-41665



## ACCESSION NUMBER INDEX

23 p4201 A69-41666	23 p4179 A69-41711 #	23 p4120 A69-41756	23 p4223 A69-41801	23 p4214 A69-41846 #
23 p4201 A69-41667	23 p4227 A69-41712 #	23 p4120 A69-41757*	23 p4106 A69-41802	23 p4156 A69-41847 #
23 p4201 A69-41668	23 p4058 A69-41713 #	23 p4120 A69-41758*	23 p4087 A69-41803*	23 p4205 A69-41848 #
23 p4117 A69-41669 #	23 p4227 A69-41714 #	23 p4121 A69-41759*	23 p4087 A69-41804	23 p4156 A69-41849 #
23 p4147 A69-41670	23 p4179 A69-41715*	23 p4121 A69-41760	23 p4088 A69-41805	23 p4206 A69-41850 #
23 p4063 A69-41671	23 p4213 A69-41716	23 p4182 A69-41761	23 p4106 A69-41806	23 p4206 A69-41851 #
23 p4177 A69-41672	23 p4213 A69-41717	23 p4133 A69-41762*	23 p4107 A69-41807	23 p4165 A69-41852 #
23 p4085 A69-41673	23 p4064 A69-41718	23 p4223 A69-41763*	23 p4088 A69-41808	23 p4156 A69-41853 #
23 p4101 A69-41674*	23 p4239 A69-41719	23 p4133 A69-41764*	23 p4107 A69-41809	23 p4206 A69-41854 #
23 p4102 A69-41675*	23 p4213 A69-41720	23 p4121 A69-41765	23 p4088 A69-41810*	23 p4206 A69-41855 #
23 p4102 A69-41676	23 p4155 A69-41721	23 p4103 A69-41766	23 p4107 A69-41811	23 p4156 A69-41856 #
23 p4085 A69-41677	23 p4181 A69-41722 #	23 p4121 A69-41767	23 p4107 A69-41812	23 p4157 A69-41857 #
23 p4086 A69-41678	23 p4181 A69-41723 #	23 p4121 A69-41768	23 p4088 A69-41813	23 p4157 A69-41858 #
23 p4102 A69-41679*	23 p4213 A69-41724 #	23 p4133 A69-41769*	23 p4088 A69-41814	23 p4157 A69-41859 #
23 p4102 A69-41680	23 p4198 A69-41725 #	23 p4121 A69-41770 #	23 p4088 A69-41815	23 p4157 A69-41860 #
23 p4102 A69-41681 #	23 p4196 A69-41726 #	23 p4122 A69-41771*	23 p4089 A69-41816	23 p4123 A69-41861 #
23 p4102 A69-41682	23 p4058 A69-41727 #	23 p4122 A69-41772	23 p4089 A69-41817	23 p4214 A69-41862 #
23 p4102 A69-41683	23 p4117 A69-41728 #	23 p4122 A69-41773	23 p4107 A69-41818	23 p4157 A69-41863 #
23 p4103 A69-41684 #	23 p4165 A69-41729 #	23 p4122 A69-41774	23 p4063 A69-41819	23 p4157 A69-41864 #
23 p4103 A69-41685	23 p4214 A69-41730 #	23 p4137 A69-41775	23 p4107 A69-41820	23 p4214 A69-41865 #
23 p4086 A69-41686	23 p4181 A69-41731 #	23 p4165 A69-41776	23 p4108 A69-41821	23 p4157 A69-41866 #
23 p4086 A69-41687	23 p4165 A69-41732 #	23 p4122 A69-41777	23 p4089 A69-41822	23 p4157 A69-41867 #
23 p4086 A69-41688	23 p4174 A69-41733 #	23 p4137 A69-41778	23 p4089 A69-41823	23 p4165 A69-41868 #
23 p4103 A69-41689	23 p4117 A69-41734	23 p4137 A69-41779	23 p4108 A69-41824*	23 p4166 A69-41869 #
23 p4086 A69-41690	23 p4132 A69-41735*	23 p4122 A69-41780	23 p4089 A69-41825 #	23 p4109 A69-41870
23 p4151 A69-41691 #	23 p4132 A69-41736*	23 p4138 A69-41781	23 p4108 A69-41826	23 p4109 A69-41871
23 p4113 A69-41692 #	23 p4133 A69-41737*	23 p4241 A69-41782	23 p4108 A69-41827	23 p4227 A69-41872
23 p4113 A69-41693 #	23 p4118 A69-41738*	23 p4103 A69-41783	23 p4108 A69-41828	23 p4138 A69-41873 #
23 p4151 A69-41694 #	23 p4133 A69-41739*	23 p4105 A69-41784	23 p4089 A69-41829	23 p4174 A69-41874 #
23 p4058 A69-41695	23 p4137 A69-41740	23 p4105 A69-41785	23 p4063 A69-41830	23 p4196 A69-41875 #
23 p4196 A69-41696	23 p4119 A69-41741	23 p4105 A69-41786	23 p4089 A69-41831	23 p4224 A69-41876 #
23 p4213 A69-41697	23 p4119 A69-41742	23 p4086 A69-41787	23 p4108 A69-41832*	23 p4227 A69-41877 #
23 p4213 A69-41698	23 p4137 A69-41743	23 p4086 A69-41788	23 p4108 A69-41833*	23 p4214 A69-41878 #
23 p4213 A69-41699	23 p4119 A69-41744	23 p4214 A69-41789	23 p4214 A69-41834 #	23 p4215 A69-41879 #
23 p4165 A69-41700	23 p4119 A69-41745*	23 p4087 A69-41790 #	23 p4205 A69-41835 #	23 p4182 A69-41880 #
23 p4205 A69-41701 #	23 p4119 A69-41746	23 p4087 A69-41791	23 p4205 A69-41836 #	23 p4227 A69-41881 #
23 p4226 A69-41702 #	23 p4119 A69-41747	23 p4106 A69-41792	23 p4205 A69-41837 #	23 p4227 A69-41882 #
23 p4226 A69-41703 #	23 p4119 A69-41748	23 p4062 A69-41793	23 p4205 A69-41838 #	23 p4059 A69-41883 #
23 p4191 A69-41704 #	23 p4133 A69-41749	23 p4106 A69-41794	23 p4196 A69-41839 #	23 p4059 A69-41884 #
23 p4226 A69-41705 #	23 p4120 A69-41750	23 p4087 A69-41795	23 p4155 A69-41840 #	23 p4059 A69-41885*
23 p4227 A69-41706 #	23 p4120 A69-41751*	23 p4106 A69-41796	23 p4155 A69-41841 #	23 p4059 A69-41886*
23 p4227 A69-41707 #	23 p4120 A69-41752*	23 p4087 A69-41797	23 p4155 A69-41842 #	23 p4151 A69-41887*
23 p4227 A69-41708 #	23 p4137 A69-41753	23 p4087 A69-41798	23 p4156 A69-41843 #	23 p4152 A69-41888 #
23 p4058 A69-41709 #	23 p4133 A69-41754	23 p4106 A69-41799	23 p4156 A69-41844 #	23 p4239 A69-41889*
23 p4147 A69-41710 #	23 p4120 A69-41755*	23 p4106 A69-41800*	23 p4156 A69-41845 #	23 p4059 A69-41890*

## ACCESSION NUMBER INDEX

23 p4059 A69-41891 #	23 p4138 A69-41936 #	23 p4110 A69-41981 #	23 p4186 A69-42026 #	23 p4094 A69-42071
23 p4059 A69-41892 #	23 p4138 A69-41937 #	23 p4110 A69-41982 #	23 p4186 A69-42027 #	23 p4094 A69-42072
23 p4239 A69-41893 #	23 p4138 A69-41938 #	23 p4110 A69-41983 #	23 p4123 A69-42028 #	23 p4094 A69-42073
23 p4199 A69-41894 #	23 p4138 A69-41939 #	23 p4110 A69-41984 #	23 p4123 A69-42029 #	23 p4094 A69-42074
23 p4147 A69-41895 #	23 p4138 A69-41940 #	23 p4110 A69-41985 #	23 p4124 A69-42030 #	23 p4094 A69-42075
23 p4215 A69-41896*#	23 p4123 A69-41941 #	23 p4228 A69-41986 #	23 p4124 A69-42031 #	23 p4095 A69-42076
23 p4199 A69-41897 #	23 p4123 A69-41942 #	23 p4228 A69-41987 #	23 p4124 A69-42032 #	23 p4095 A69-42077
23 p4059 A69-41898 #	23 p4123 A69-41943 #	23 p4228 A69-41988 #	23 p4124 A69-42033 #	23 p4095 A69-42078
23 p4059 A69-41899 #	23 p4139 A69-41944 #	23 p4228 A69-41989 #	23 p4124 A69-42034 #	23 p4111 A69-42079
23 p4060 A69-41900*#	23 p4139 A69-41945 #	23 p4229 A69-41990 #	23 p4124 A69-42035 #	23 p4095 A69-42080
23 p4182 A69-41901 #	23 p4139 A69-41946 #	23 p4229 A69-41991 #	23 p4124 A69-42036 #	23 p4111 A69-42081
23 p4060 A69-41902 #	23 p4139 A69-41947 #	23 p4229 A69-41992 #	23 p4124 A69-42037 #	23 p4224 A69-42082
23 p4152 A69-41903 #	23 p4139 A69-41948 #	23 p4179 A69-41993 #	23 p4124 A69-42038 #	23 p4095 A69-42083
23 p4152 A69-41904 #	23 p4123 A69-41949 #	23 p4179 A69-41994 #	23 p4139 A69-42039 #	23 p4095 A69-42084
23 p4060 A69-41905*#	23 p4123 A69-41950 #	23 p4166 A69-41995 #	23 p4125 A69-42040 #	23 p4166 A69-42085
23 p4060 A69-41906 #	23 p4123 A69-41951 #	23 p4166 A69-41996 #	23 p4125 A69-42041 #	23 p4095 A69-42086
23 p4182 A69-41907 #	23 p4169 A69-41952 #	23 p4229 A69-41997 #	23 p4139 A69-42042 #	23 p4096 A69-42087
23 p4060 A69-41908 #	23 p4144 A69-41953 #	23 p4229 A69-41998 #	23 p4125 A69-42043 #	23 p4096 A69-42088
23 p4201 A69-41909 #	23 p4134 A69-41954 #	23 p4229 A69-41999 #	23 p4139 A69-42044 #	23 p4096 A69-42089
23 p4060 A69-41910 #	23 p4109 A69-41955 #	23 p4229 A69-42000 #	23 p4139 A69-42045 #	23 p4096 A69-42090
23 p4228 A69-41911 #	23 p4144 A69-41956 #	23 p4229 A69-42001 #	23 p4125 A69-42046 #	23 p4096 A69-42091
23 p4060 A69-41912 #	23 p4144 A69-41957 #	23 p4230 A69-42002 #	23 p4125 A69-42047 #	23 p4096 A69-42092
23 p4182 A69-41913 #	23 p4145 A69-41958 #	23 p4230 A69-42003 #	23 p4140 A69-42048 #	23 p4097 A69-42093
23 p4228 A69-41914*#	23 p4182 A69-41959 #	23 p4230 A69-42004 #	23 p4140 A69-42049 #	23 p4097 A69-42094
23 p4060 A69-41915 #	23 p4182 A69-41960 #	23 p4230 A69-42005 #	23 p4091 A69-42050	23 p4097 A69-42095
23 p4228 A69-41916 #	23 p4239 A69-41961 #	23 p4179 A69-42006 #	23 p4110 A69-42051 #	23 p4097 A69-42096
23 p4060 A69-41917 #	23 p4090 A69-41962	23 p4169 A69-42007 #	23 p4091 A69-42052 #	23 p4097 A69-42097
23 p4060 A69-41918 #	23 p4090 A69-41963	23 p4215 A69-42008 #	23 p4092 A69-42053 #	23 p4097 A69-42098
23 p4239 A69-41919 #	23 p4090 A69-41964	23 p4215 A69-42009 #	23 p4110 A69-42054 #	23 p4098 A69-42099
23 p4152 A69-41920 #	23 p4090 A69-41965	23 p4215 A69-42010 #	23 p4092 A69-42055 #	23 p4098 A69-42100
23 p4224 A69-41921 #	23 p4090 A69-41966	23 p4166 A69-42011 #	23 p4111 A69-42056 #	23 p4098 A69-42101
23 p4201 A69-41922*#	23 p4091 A69-41967	23 p4206 A69-42012 #	23 p4092 A69-42057 #	23 p4098 A69-42102
23 p4228 A69-41923 #	23 p4060 A69-41968	23 p4091 A69-42013*	23 p4111 A69-42058 #	23 p4098 A69-42103
23 p4202 A69-41924 #	23 p4166 A69-41969	23 p4091 A69-42014*	23 p4134 A69-42059	23 p4098 A69-42104
23 p4202 A69-41925 #	23 p4228 A69-41970	23 p4110 A69-42015*	23 p4092 A69-42060	23 p4098 A69-42105
23 p4202 A69-41926	23 p4228 A69-41971	23 p4091 A69-42016	23 p4092 A69-42061	23 p4098 A69-42106
23 p4202 A69-41927 #	23 p4182 A69-41972	23 p4110 A69-42017*	23 p4092 A69-42062	23 p4230 A69-42107
23 p4202 A69-41928 #	23 p4182 A69-41973	23 p4157 A69-42018*	23 p4093 A69-42063	23 p4152 A69-42108
23 p4202 A69-41929 #	23 p4183 A69-41974	23 p4113 A69-42019*	23 p4093 A69-42064	23 p4152 A69-42109
23 p4202 A69-41930 #	23 p4152 A69-41975	23 p4158 A69-42020*	23 p4093 A69-42065	23 p4061 A69-42110
23 p4203 A69-41931 #	23 p4109 A69-41976 #	23 p4091 A69-42021*	23 p4093 A69-42066	23 p4125 A69-42111
23 p4203 A69-41932 #	23 p4109 A69-41977 #	23 p4183 A69-42022*	23 p4093 A69-42067	23 p4215 A69-42112
23 p4203 A69-41933 #	23 p4109 A69-41978 #	23 p4186 A69-42023 #	23 p4093 A69-42068	23 p4215 A69-42113
23 p4203 A69-41934 #	23 p4109 A69-41979 #	23 p4183 A69-42024 #	23 p4093 A69-42069	23 p4206 A69-42114*
23 p4138 A69-41935 #	23 p4109 A69-41980 #	23 p4186 A69-42025 #	23 p4094 A69-42070	23 p4215 A69-42115



# ACCESSION NUMBER INDEX

23 p4215 A69-42116	23 p4177 A69-42161 #	23 p4194 A69-42206*#	23 p4187 A69-42251	23 p4074 A69-42296
23 p4158 A69-42117	23 p4170 A69-42162 #	23 p4194 A69-42207	23 p4069 A69-42252	23 p4074 A69-42297
23 p4099 A69-42118	23 p4177 A69-42163 #	23 p4194 A69-42208 #	23 p4069 A69-42253*	23 p4074 A69-42298
23 p4099 A69-42119	23 p4233 A69-42164 #	23 p4194 A69-42209*#	23 p4070 A69-42254*	23 p4075 A69-42299
23 p4147 A69-42120	23 p4177 A69-42165	23 p4195 A69-42210	23 p4187 A69-42255	23 p4075 A69-42300*
23 p4148 A69-42121	23 p4170 A69-42166	23 p4184 A69-42211 #	23 p4187 A69-42256*	23 p4075 A69-42301*
23 p4148 A69-42122	23 p4196 A69-42167 #	23 p4177 A69-42212 #	23 p4187 A69-42257	23 p4075 A69-42302*
23 p4148 A69-42123	23 p4111 A69-42168	23 p4111 A69-42213 #	23 p4188 A69-42258	23 p4075 A69-42303*
23 p4149 A69-42124	23 p4099 A69-42169	23 p4114 A69-42214*	23 p4170 A69-42259	23 p4190 A69-42304
23 p4230 A69-42125	23 p4158 A69-42170	23 p4140 A69-42215	23 p4188 A69-42260	23 p4075 A69-42305
23 p4125 A69-42126	23 p4158 A69-42171	23 p4111 A69-42216	23 p4188 A69-42261	23 p4240 A69-42306
23 p4149 A69-42127	23 p4158 A69-42172	23 p4126 A69-42217	23 p4188 A69-42262	23 p4240 A69-42307
23 p4149 A69-42128	23 p4158 A69-42173	23 p4126 A69-42218	23 p4188 A69-42263*	23 p4076 A69-42308
23 p4230 A69-42129	23 p4158 A69-42174	23 p4141 A69-42219	23 p4188 A69-42264	23 p4076 A69-42309
23 p4231 A69-42130*	23 p4158 A69-42175	23 p4141 A69-42220	23 p4189 A69-42265	23 p4216 A69-42310
23 p4149 A69-42131	23 p4158 A69-42176	23 p4141 A69-42221	23 p4189 A69-42266*	23 p4197 A69-42311 #
23 p4231 A69-42132*	23 p4184 A69-42177	23 p4141 A69-42222	23 p4070 A69-42267	23 p4197 A69-42312 #
23 p4231 A69-42133*	23 p4206 A69-42178	23 p4126 A69-42223	23 p4189 A69-42268	23 p4152 A69-42313 #
23 p4149 A69-42134	23 p4191 A69-42179	23 p4141 A69-42224	23 p4189 A69-42269*	23 p4153 A69-42314 #
23 p4231 A69-42135	23 p4166 A69-42180	23 p4141 A69-42225	23 p4189 A69-42270	23 p4174 A69-42315*#
23 p4149 A69-42136	23 p4166 A69-42181	23 p4141 A69-42226	23 p4070 A69-42271	23 p4217 A69-42316 #
23 p4150 A69-42137	23 p4166 A69-42182	23 p4145 A69-42227	23 p4070 A69-42272*	23 p4217 A69-42317 #
23 p4231 A69-42138	23 p4167 A69-42183	23 p4142 A69-42228	23 p4142 A69-42273	23 p4206 A69-42318*#
23 p4231 A69-42139	23 p4167 A69-42184	23 p4126 A69-42229	23 p4070 A69-42274	23 p4207 A69-42319 #
23 p4232 A69-42140	23 p4167 A69-42185	23 p4145 A69-42230*	23 p4070 A69-42275*	23 p4217 A69-42320 #
23 p4232 A69-42141	23 p4125 A69-42186*	23 p4170 A69-42231	23 p4239 A69-42276	23 p4217 A69-42321 #
23 p4232 A69-42142	23 p4174 A69-42187*	23 p4142 A69-42232	23 p4071 A69-42277	23 p4218 A69-42322 #
23 p4232 A69-42143	23 p4140 A69-42188	23 p4142 A69-42233	23 p4071 A69-42278*	23 p4218 A69-42323 #
23 p4232 A69-42144	23 p4167 A69-42189*	23 p4063 A69-42234	23 p4071 A69-42279*	23 p4218 A69-42324 #
23 p4232 A69-42145*	23 p4191 A69-42190*	23 p4142 A69-42235	23 p4071 A69-42280*	23 p4218 A69-42325*#
23 p4134 A69-42146	23 p4216 A69-42191*	23 p4064 A69-42236	23 p4190 A69-42281	23 p4218 A69-42326 #
23 p4191 A69-42147*#	23 p4174 A69-42192*	23 p4067 A69-42237	23 p4071 A69-42282	23 p4219 A69-42327 #
23 p4191 A69-42148 #	23 p4174 A69-42193	23 p4068 A69-42238	23 p4072 A69-42283	23 p4219 A69-42328 #
23 p4191 A69-42149*#	23 p4191 A69-42194*	23 p4068 A69-42239	23 p4072 A69-42284*	23 p4219 A69-42329 #
23 p4191 A69-42150*#	23 p4099 A69-42195	23 p4068 A69-42240*	23 p4072 A69-42285	23 p4192 A69-42330 #
23 p4099 A69-42151*	23 p4174 A69-42196 #	23 p4068 A69-42241	23 p4072 A69-42286	23 p4192 A69-42331 #
23 p4203 A69-42152 #	23 p4196 A69-42197	23 p4068 A69-42242	23 p4072 A69-42287	23 p4192 A69-42332 #
23 p4224 A69-42153 #	23 p4167 A69-42198	23 p4068 A69-42243	23 p4072 A69-42288*	23 p4219 A69-42333 #
23 p4179 A69-42154 #	23 p4167 A69-42199	23 p4069 A69-42244*	23 p4073 A69-42289*	23 p4167 A69-42334
23 p4179 A69-42155 #	23 p4216 A69-42200	23 p4186 A69-42245	23 p4073 A69-42290	23 p4192 A69-42335
23 p4180 A69-42156 #	23 p4216 A69-42201	23 p4186 A69-42246	23 p4073 A69-42291*	23 p4142 A69-42336*
23 p4170 A69-42157 #	23 p4216 A69-42202*	23 p4069 A69-42247	23 p4073 A69-42292*	23 p4233 A69-42337
23 p4180 A69-42158 #	23 p4216 A69-42203*	23 p4069 A69-42248	23 p4073 A69-42293*	23 p4143 A69-42338 #
23 p4177 A69-42159	23 p4194 A69-42204*#	23 p4187 A69-42249*	23 p4074 A69-42294	23 p4240 A69-42339 #
23 p4180 A69-42160	23 p4194 A69-42205 #	23 p4203 A69-42250	23 p4074 A69-42295	23 p4192 A69-42340 #

## ACCESSION NUMBER INDEX

23 p4233 A69-42341 #	23 p4221 A69-42386	23 p4127 A69-42431	23 p4223 A69-42476 #	23 p4131 A69-42521
23 p4233 A69-42342 #	23 p4221 A69-42387	23 p4160 A69-42432	23 p4183 A69-42477 #	23 p4131 A69-42522*
23 p4170 A69-42343 #	23 p4221 A69-42388	23 p4160 A69-42433	23 p4223 A69-42478 #	23 p4131 A69-42523
23 p4111 A69-42344 #	23 p4126 A69-42389*	23 p4160 A69-42434	23 p4199 A69-42479 #	23 p4134 A69-42524*
23 p4159 A69-42345 #	23 p4221 A69-42390	23 p4161 A69-42435	23 p4235 A69-42480 #	23 p4131 A69-42525*
23 p4153 A69-42346 #	23 p4221 A69-42391	23 p4161 A69-42436	23 p4235 A69-42481 #	23 p4134 A69-42526*
23 p4233 A69-42347 #	23 p4221 A69-42392	23 p4161 A69-42437	23 p4183 A69-42482 #	23 p4143 A69-42527
23 p4233 A69-42348 #	23 p4222 A69-42393	23 p4161 A69-42438*	23 p4171 A69-42483 #	23 p4099 A69-42528
23 p4061 A69-42349 #	23 p4222 A69-42394*	23 p4161 A69-42439	23 p4236 A69-42484 #	23 p4236 A69-42529
23 p4233 A69-42350 #	23 p4234 A69-42395	23 p4161 A69-42440	23 p4236 A69-42485 #	23 p4236 A69-42530
23 p4061 A69-42351 #	23 p4224 A69-42396	23 p4161 A69-42441	23 p4184 A69-42486 #	23 p4171 A69-42531
23 p4233 A69-42352 #	23 p4234 A69-42397	23 p4162 A69-42442	23 p4184 A69-42487 #	23 p4144 A69-42532
23 p4143 A69-42353	23 p4153 A69-42398	23 p4112 A69-42443	23 p4184 A69-42488 #	23 p4100 A69-42533
23 p4126 A69-42354	23 p4153 A69-42399	23 p4112 A69-42444	23 p4184 A69-42489 #	23 p4063 A69-42534
23 p4126 A69-42355	23 p4234 A69-42400	23 p4145 A69-42445*	23 p4184 A69-42490 #	23 p4146 A69-42535*
23 p4153 A69-42356 #	23 p4222 A69-42401 #	23 p4146 A69-42446*	23 p4184 A69-42491 #	23 p4144 A69-42536*
23 p4177 A69-42357	23 p4222 A69-42402 #	23 p4146 A69-42447	23 p4185 A69-42492 #	23 p4131 A69-42537
23 p4178 A69-42358	23 p4192 A69-42403 #	23 p4150 A69-42448	23 p4185 A69-42493 #	23 p4186 A69-42538
23 p4170 A69-42359	23 p4222 A69-42404*#	23 p4178 A69-42449	23 p4185 A69-42494 #	23 p4186 A69-42539
23 p4178 A69-42360	23 p4222 A69-42405*#	23 p4178 A69-42450	23 p4236 A69-42495	23 p4131 A69-42540
23 p4178 A69-42361	23 p4207 A69-42406 #	23 p4234 A69-42451	23 p4236 A69-42496	23 p4076 A69-42541*
23 p4178 A69-42362	23 p4061 A69-42407	23 p4178 A69-42452	23 p4207 A69-42497	23 p4076 A69-42542
23 p4099 A69-42363	23 p4153 A69-42408	23 p4222 A69-42453	23 p4207 A69-42498	23 p4134 A69-42543*
23 p4112 A69-42364	23 p4234 A69-42409	23 p4063 A69-42454 #	23 p4207 A69-42499	23 p4131 A69-42544
23 p4112 A69-42365	23 p4153 A69-42410	23 p4235 A69-42455 #	23 p4127 A69-42500	23 p4132 A69-42545
23 p4112 A69-42366	23 p4061 A69-42411	23 p4224 A69-42456	23 p4128 A69-42501*	23 p4132 A69-42546*
23 p4224 A69-42367	23 p4234 A69-42412	23 p4223 A69-42457	23 p4128 A69-42502*	23 p4132 A69-42547
23 p4145 A69-42368 #	23 p4234 A69-42413	23 p4225 A69-42458	23 p4128 A69-42503*	23 p4132 A69-42548
23 p4145 A69-42369 #	23 p4061 A69-42414	23 p4167 A69-42459	23 p4128 A69-42504	23 p4132 A69-42549*
23 p4145 A69-42370 #	23 p4197 A69-42415*#	23 p4235 A69-42460	23 p4128 A69-42505	24 p4295 A69-42550
23 p4145 A69-42371 #	23 p4197 A69-42416*#	23 p4235 A69-42461	23 p4129 A69-42506*	24 p4375 A69-42551 #
23 p4183 A69-42372 #	23 p4222 A69-42417*#	23 p4235 A69-42462	23 p4129 A69-42507*	24 p4375 A69-42552 #
23 p4219 A69-42373*	23 p4197 A69-42418*#	23 p4235 A69-42463	23 p4129 A69-42508*	24 p4330 A69-42553
23 p4219 A69-42374*	23 p4198 A69-42419*	23 p4235 A69-42464	23 p4129 A69-42509*	24 p4256 A69-42554
23 p4219 A69-42375*	23 p4143 A69-42420	23 p4235 A69-42465	23 p4129 A69-42510*	24 p4269 A69-42555*
23 p4220 A69-42376*	23 p4234 A69-42421	23 p4240 A69-42466	23 p4129 A69-42511	24 p4375 A69-42556*
23 p4220 A69-42377*	23 p4159 A69-42422	23 p4199 A69-42467 #	23 p4130 A69-42512	24 p4279 A69-42557*
23 p4220 A69-42378*	23 p4159 A69-42423	23 p4199 A69-42468 #	23 p4130 A69-42513*	24 p4311 A69-42558 #
23 p4220 A69-42379*	23 p4127 A69-42424	23 p4199 A69-42469 #	23 p4130 A69-42514*	24 p4395 A69-42559 #
23 p4220 A69-42380	23 p4127 A69-42425	23 p4180 A69-42470 #	23 p4130 A69-42515	24 p4243 A69-42560 #
23 p4220 A69-42381	23 p4160 A69-42426	23 p4180 A69-42471 #	23 p4099 A69-42516	24 p4416 A69-42561
23 p4207 A69-42382*	23 p4160 A69-42427	23 p4183 A69-42472	23 p4143 A69-42517	24 p4250 A69-42562
23 p4220 A69-42383	23 p4160 A69-42428*	23 p4146 A69-42473*	23 p4143 A69-42518	24 p4416 A69-42563
23 p4220 A69-42384	23 p4160 A69-42429	23 p4171 A69-42474	23 p4143 A69-42519	24 p4250 A69-42564
23 p4221 A69-42385	23 p4160 A69-42430	23 p4223 A69-42475	23 p4130 A69-42520	24 p4250 A69-42565



# ACCESSION NUMBER INDEX

24 p4363 A69-42566	24 p4281 A69-42611	24 p4296 A69-42656	24 p4259 A69-42701	24 p4397 A69-42746 #
24 p4296 A69-42567	24 p4281 A69-42612 #	24 p4375 A69-42657*	24 p4260 A69-42702	24 p4299 A69-42747 #
24 p4280 A69-42568	24 p4327 A69-42613	24 p4375 A69-42658*	24 p4260 A69-42703*	24 p4349 A69-42748 #
24 p4363 A69-42569	24 p4327 A69-42614	24 p4375 A69-42659*	24 p4260 A69-42704	24 p4397 A69-42749 #
24 p4254 A69-42570 #	24 p4312 A69-42615	24 p4376 A69-42660*	24 p4260 A69-42705*	24 p4397 A69-42750 #
24 p4255 A69-42571 #	24 p4312 A69-42616	24 p4376 A69-42661*	24 p4260 A69-42706*	24 p4271 A69-42751
24 p4311 A69-42572	24 p4281 A69-42617	24 p4376 A69-42662*	24 p4261 A69-42707*	24 p4271 A69-42752
24 p4312 A69-42573	24 p4298 A69-42618	24 p4376 A69-42663*	24 p4261 A69-42708	24 p4312 A69-42753 #
24 p4270 A69-42574	24 p4286 A69-42619 #	24 p4376 A69-42664*	24 p4261 A69-42709*	24 p4312 A69-42754 #
24 p4270 A69-42575	24 p4281 A69-42620	24 p4376 A69-42665*	24 p4318 A69-42710 #	24 p4312 A69-42755*#
24 p4327 A69-42576	24 p4284 A69-42621*	24 p4377 A69-42666*	24 p4251 A69-42711 #	24 p4397 A69-42756 #
24 p4312 A69-42577	24 p4281 A69-42622	24 p4365 A69-42667*	24 p4279 A69-42712*	24 p4318 A69-42757
24 p4270 A69-42578	24 p4281 A69-42623*	24 p4363 A69-42668	24 p4279 A69-42713*	24 p4312 A69-42758 #
24 p4270 A69-42579	24 p4256 A69-42624	24 p4296 A69-42669	24 p4251 A69-42714 #	24 p4360 A69-42759*
24 p4270 A69-42580	24 p4257 A69-42625	24 p4288 A69-42670 #	24 p4395 A69-42715 #	24 p4360 A69-42760
24 p4243 A69-42581 #	24 p4257 A69-42626	24 p4288 A69-42671 #	24 p4244 A69-42716 #	24 p4286 A69-42761*
24 p4243 A69-42582 #	24 p4257 A69-42627	24 p4284 A69-42672 #	24 p4299 A69-42717 #	24 p4339 A69-42762*
24 p4243 A69-42583 #	24 p4257 A69-42628	24 p4349 A69-42673	24 p4244 A69-42718 #	24 p4351 A69-42763*
24 p4243 A69-42584 #	24 p4257 A69-42629*	24 p4299 A69-42674	24 p4284 A69-42719*	24 p4313 A69-42764*
24 p4298 A69-42585 #	24 p4258 A69-42630	24 p4354 A69-42675	24 p4284 A69-42720*	24 p4339 A69-42765*
24 p4243 A69-42586 #	24 p4258 A69-42631	24 p4354 A69-42676	24 p4284 A69-42721*	24 p4299 A69-42766 #
24 p4298 A69-42587 #	24 p4258 A69-42632	24 p4342 A69-42677	24 p4281 A69-42722*	24 p4397 A69-42767
24 p4407 A69-42588 #	24 p4258 A69-42633	24 p4255 A69-42678	24 p4284 A69-42723*	24 p4313 A69-42768
24 p4407 A69-42589 #	24 p4258 A69-42634	24 p4339 A69-42679 #	24 p4261 A69-42724	24 p4318 A69-42769
24 p4395 A69-42590 #	24 p4258 A69-42635	24 p4306 A69-42680 #	24 p4261 A69-42725	24 p4397 A69-42770
24 p4395 A69-42591 #	24 p4259 A69-42636	24 p4377 A69-42681	24 p4261 A69-42726	24 p4398 A69-42771
24 p4395 A69-42592 #	24 p4259 A69-42637	24 p4377 A69-42682*#	24 p4261 A69-42727	24 p4398 A69-42772
24 p4395 A69-42593 #	24 p4259 A69-42638	24 p4355 A69-42683 #	24 p4262 A69-42728	24 p4398 A69-42773
24 p4395 A69-42594 #	24 p4259 A69-42639	24 p4355 A69-42684 #	24 p4262 A69-42729	24 p4318 A69-42774
24 p4339 A69-42595 #	24 p4327 A69-42640	24 p4355 A69-42685 #	24 p4396 A69-42730	24 p4398 A69-42775
24 p4298 A69-42596 #	24 p4395 A69-42641*	24 p4355 A69-42686 #	24 p4396 A69-42731	24 p4318 A69-42776
24 p4395 A69-42597 #	24 p4318 A69-42642	24 p4366 A69-42687 #	24 p4396 A69-42732	24 p4416 A69-42777
24 p4298 A69-42598 #	24 p4318 A69-42643	24 p4366 A69-42688*#	24 p4280 A69-42733*	24 p4416 A69-42778
24 p4354 A69-42599 #	24 p4271 A69-42644	24 p4378 A69-42689 #	24 p4396 A69-42734	24 p4251 A69-42779
24 p4298 A69-42600*#	24 p4354 A69-42645	24 p4378 A69-42690 #	24 p4330 A69-42735	24 p4363 A69-42780 #
24 p4330 A69-42601	24 p4339 A69-42646 #	24 p4378 A69-42691 #	24 p4331 A69-42736	24 p4379 A69-42781*#
24 p4270 A69-42602	24 p4360 A69-42647*	24 p4306 A69-42692*#	24 p4396 A69-42737	24 p4379 A69-42782 #
24 p4270 A69-42603	24 p4251 A69-42648	24 p4306 A69-42693*#	24 p4396 A69-42738	24 p4271 A69-42783
24 p4270 A69-42604	24 p4360 A69-42649*	24 p4355 A69-42694*#	24 p4396 A69-42739	24 p4271 A69-42784
24 p4271 A69-42605	24 p4349 A69-42650	24 p4366 A69-42695 #	24 p4397 A69-42740	24 p4379 A69-42785*
24 p4365 A69-42606*	24 p4299 A69-42651	24 p4355 A69-42696 #	24 p4281 A69-42741	24 p4331 A69-42786
24 p4286 A69-42607	24 p4327 A69-42652	24 p4378 A69-42697 #	24 p4282 A69-42742	24 p4363 A69-42787
24 p4365 A69-42608	24 p4296 A69-42653	24 p4378 A69-42698 #	24 p4282 A69-42743	24 p4280 A69-42788
24 p4375 A69-42609*	24 p4296 A69-42654	24 p4378 A69-42699 #	24 p4286 A69-42744	24 p4327 A69-42789 #
24 p4375 A69-42610*	24 p4296 A69-42655	24 p4271 A69-42700	24 p4282 A69-42745	24 p4360 A69-42790*#

## ACCESSION NUMBER INDEX

24 p4351 A69-42791**	24 p4347 A69-42836 #	24 p4393 A69-42881 #	24 p4335 A69-42926	24 p4350 A69-42971 #
24 p4339 A69-42792*	24 p4307 A69-42837**	24 p4296 A69-42882 #	24 p4382 A69-42927	24 p4314 A69-42972 #
24 p4339 A69-42793	24 p4392 A69-42838**	24 p4381 A69-42883**	24 p4382 A69-42928	24 p4314 A69-42973
24 p4351 A69-42794	24 p4380 A69-42839 #	24 p4296 A69-42884 #	24 p4382 A69-42929*	24 p4360 A69-42974 #
24 p4251 A69-42795	24 p4380 A69-42840 #	24 p4319 A69-42885 #	24 p4419 A69-42930*	24 p4314 A69-42975
24 p4251 A69-42796	24 p4272 A69-42841 #	24 p4319 A69-42886 #	24 p4297 A69-42931*	24 p4314 A69-42976
24 p4251 A69-42797	24 p4392 A69-42842**	24 p4381 A69-42887*	24 p4319 A69-42932	24 p4289 A69-42977
24 p4391 A69-42798	24 p4272 A69-42843 #	24 p4262 A69-42888*	24 p4335 A69-42933	24 p4282 A69-42978
24 p4251 A69-42799	24 p4380 A69-42844**	24 p4255 A69-42889	24 p4382 A69-42934	24 p4282 A69-42979
24 p4255 A69-42800	24 p4272 A69-42845 #	24 p4382 A69-42890*	24 p4382 A69-42935*	24 p4314 A69-42980 #
24 p4416 A69-42801 #	24 p4272 A69-42846 #	24 p4340 A69-42891*	24 p4383 A69-42936	24 p4327 A69-42981 #
24 p4319 A69-42802**	24 p4272 A69-42847 #	24 p4342 A69-42892 #	24 p4252 A69-42937	24 p4350 A69-42982 #
24 p4417 A69-42803 #	24 p4272 A69-42848**	24 p4342 A69-42893**	24 p4319 A69-42938	24 p4273 A69-42983**
24 p4251 A69-42804 #	24 p4392 A69-42849**	24 p4342 A69-42894**	24 p4331 A69-42939	24 p4285 A69-42984 #
24 p4417 A69-42805 #	24 p4272 A69-42850**	24 p4342 A69-42895**	24 p4331 A69-42940	24 p4383 A69-42985 #
24 p4417 A69-42806 #	24 p4418 A69-42851**	24 p4343 A69-42896**	24 p4319 A69-42941	24 p4327 A69-42986 #
24 p4417 A69-42807 #	24 p4380 A69-42852**	24 p4343 A69-42897**	24 p4320 A69-42942	24 p4282 A69-42987 #
24 p4252 A69-42808 #	24 p4418 A69-42853 #	24 p4313 A69-42898 #	24 p4320 A69-42943	24 p4399 A69-42988 #
24 p4417 A69-42809 #	24 p4319 A69-42854 #	24 p4313 A69-42899*	24 p4350 A69-42944*	24 p4399 A69-42989 #
24 p4379 A69-42810**	24 p4380 A69-42855**	24 p4286 A69-42900	24 p4383 A69-42945	24 p4399 A69-42990**
24 p4288 A69-42811**	24 p4380 A69-42856**	24 p4286 A69-42901	24 p4289 A69-42946	24 p4399 A69-42991**
24 p4417 A69-42812**	24 p4392 A69-42857**	24 p4252 A69-42902	24 p4262 A69-42947 #	24 p4314 A69-42992 #
24 p4379 A69-42813 #	24 p4313 A69-42858**	24 p4331 A69-42903	24 p4262 A69-42948 #	24 p4361 A69-42993 #
24 p4417 A69-42814 #	24 p4313 A69-42859 #	24 p4262 A69-42904*	24 p4289 A69-42949 #	24 p4361 A69-42994 #
24 p4392 A69-42815 #	24 p4380 A69-42860**	24 p4307 A69-42905*	24 p4289 A69-42950 #	24 p4361 A69-42995 #
24 p4339 A69-42816 #	24 p4313 A69-42861 #	24 p4286 A69-42906 #	24 p4289 A69-42951 #	24 p4273 A69-42996 #
24 p4307 A69-42817**	24 p4381 A69-42862**	24 p4284 A69-42907 #	24 p4285 A69-42952 #	24 p4252 A69-42997
24 p4271 A69-42818 #	24 p4381 A69-42863**	24 p4419 A69-42908 #	24 p4289 A69-42953 #	24 p4320 A69-42998*
24 p4417 A69-42819 #	24 p4381 A69-42864**	24 p4273 A69-42909	24 p4383 A69-42954	24 p4383 A69-42999
24 p4418 A69-42820**	24 p4364 A69-42865**	24 p4273 A69-42910*	24 p4289 A69-42955*	24 p4314 A69-43000
24 p4340 A69-42821 #	24 p4381 A69-42866**	24 p4252 A69-42911 #	24 p4383 A69-42956	24 p4308 A69-43001
24 p4307 A69-42822 #	24 p4392 A69-42867 #	24 p4398 A69-42912	24 p4340 A69-42957	24 p4383 A69-43002*
24 p4307 A69-42823**	24 p4381 A69-42868**	24 p4343 A69-42913	24 p4340 A69-42958*	24 p4367 A69-43003*
24 p4307 A69-42824 #	24 p4252 A69-42869 #	24 p4407 A69-42914	24 p4340 A69-42959*	24 p4308 A69-43004
24 p4379 A69-42825**	24 p4418 A69-42870 #	24 p4407 A69-42915	24 p4244 A69-42960*	24 p4314 A69-43005
24 p4418 A69-42826 #	24 p4349 A69-42871**	24 p4407 A69-42916	24 p4383 A69-42961 #	24 p4367 A69-43006
24 p4398 A69-42827**	24 p4282 A69-42872 #	24 p4407 A69-42917	24 p4383 A69-42962	24 p4308 A69-43007
24 p4418 A69-42828**	24 p4393 A69-42873 #	24 p4299 A69-42918	24 p4332 A69-42963	24 p4308 A69-43008*
24 p4363 A69-42829 #	24 p4381 A69-42874 #	24 p4319 A69-42919 #	24 p4366 A69-42964 #	24 p4308 A69-43009
24 p4363 A69-42830**	24 p4296 A69-42875 #	24 p4408 A69-42920 #	24 p4307 A69-42965 #	24 p4367 A69-43010*
24 p4252 A69-42831**	24 p4272 A69-42876**	24 p4382 A69-42921 #	24 p4343 A69-42966 #	24 p4308 A69-43011
24 p4379 A69-42832 #	24 p4398 A69-42877**	24 p4382 A69-42922 #	24 p4399 A69-42967 #	24 p4309 A69-43012
24 p4347 A69-42833 #	24 p4418 A69-42878 #	24 p4355 A69-42923 #	24 p4308 A69-42968 #	24 p4350 A69-43013
24 p4347 A69-42834 #	24 p4419 A69-42879 #	24 p4327 A69-42924 #	24 p4308 A69-42969 #	24 p4273 A69-43014
24 p4392 A69-42835**	24 p4366 A69-42880**	24 p4331 A69-42925	24 p4282 A69-42970 #	24 p4273 A69-43015



## ACCESSION NUMBER INDEX

24 p4274 A69-43016	24 p4350 A69-43061*	24 p4402 A69-43106 #	24 p4345 A69-43151	24 p4384 A69-43196*
24 p4274 A69-43017	24 p4285 A69-43062	24 p4402 A69-43107 #	24 p4345 A69-43152	24 p4384 A69-43197*
24 p4274 A69-43018	24 p4343 A69-43063 #	24 p4275 A69-43108 #	24 p4346 A69-43153	24 p4275 A69-43198
24 p4274 A69-43019	24 p4343 A69-43064 #	24 p4286 A69-43109	24 p4346 A69-43154*	24 p4315 A69-43199 #
24 p4274 A69-43020	24 p4344 A69-43065 #	24 p4287 A69-43110	24 p4346 A69-43155	24 p4283 A69-43200
24 p4274 A69-43021	24 p4344 A69-43066*#	24 p4253 A69-43111 #	24 p4346 A69-43156	24 p4263 A69-43201
24 p4274 A69-43022*	24 p4327 A69-43067	24 p4321 A69-43112 #	24 p4346 A69-43157	24 p4368 A69-43202*
24 p4275 A69-43023	24 p4328 A69-43068	24 p4253 A69-43113 #	24 p4346 A69-43158	24 p4321 A69-43203
24 p4299 A69-43024	24 p4300 A69-43069 #	24 p4344 A69-43114 #	24 p4328 A69-43159 #	24 p4287 A69-43204
24 p4262 A69-43025	24 p4244 A69-43070 #	24 p4283 A69-43115	24 p4328 A69-43160 #	24 p4287 A69-43205
24 p4315 A69-43026	24 p4244 A69-43071 #	24 p4275 A69-43116	24 p4328 A69-43161 #	24 p4332 A69-43206
24 p4283 A69-43027	24 p4400 A69-43072 #	24 p4263 A69-43117	24 p4315 A69-43162 #	24 p4332 A69-43207 #
24 p4361 A69-43028	24 p4300 A69-43073 #	24 p4275 A69-43118	24 p4328 A69-43163 #	24 p4332 A69-43208 #
24 p4332 A69-43029	24 p4364 A69-43074 #	24 p4350 A69-43119*#	24 p4328 A69-43164 #	24 p4336 A69-43209 #
24 p4332 A69-43030	24 p4300 A69-43075 #	24 p4393 A69-43120*#	24 p4328 A69-43165 #	24 p4336 A69-43210 #
24 p4332 A69-43031	24 p4255 A69-43076 #	24 p4361 A69-43121*#	24 p4315 A69-43166 #	24 p4336 A69-43211 #
24 p4399 A69-43032	24 p4255 A69-43077 #	24 p4356 A69-43122*#	24 p4384 A69-43167	24 p4333 A69-43212 #
24 p4351 A69-43033*#	24 p4408 A69-43078 #	24 p4352 A69-43123*#	24 p4283 A69-43168	24 p4384 A69-43213*
24 p4335 A69-43034 #	24 p4300 A69-43079 #	24 p4352 A69-43124*#	24 p4367 A69-43169*	24 p4385 A69-43214*
24 p4320 A69-43035 #	24 p4408 A69-43080 #	24 p4352 A69-43125*#	24 p4309 A69-43170	24 p4385 A69-43215*
24 p4297 A69-43036 #	24 p4364 A69-43081 #	24 p4321 A69-43126*#	24 p4309 A69-43171*	24 p4310 A69-43216*
24 p4343 A69-43037	24 p4364 A69-43082 #	24 p4408 A69-43127*#	24 p4309 A69-43172*	24 p4385 A69-43217
24 p4320 A69-43038	24 p4400 A69-43083 #	24 p4362 A69-43128*#	24 p4367 A69-43173	24 p4311 A69-43218
24 p4352 A69-43039	24 p4297 A69-43084 #	24 p4287 A69-43129 #	24 p4309 A69-43174*	24 p4385 A69-43219
24 p4383 A69-43040*	24 p4253 A69-43085 #	24 p4287 A69-43130 #	24 p4367 A69-43175*	24 p4368 A69-43220*
24 p4297 A69-43041 #	24 p4400 A69-43086 #	24 p4340 A69-43131	24 p4367 A69-43176*	24 p4263 A69-43221*
24 p4364 A69-43042 #	24 p4400 A69-43087 #	24 p4393 A69-43132 #	24 p4368 A69-43177	24 p4369 A69-43222*
24 p4419 A69-43043 #	24 p4244 A69-43088 #	24 p4393 A69-43133 #	24 p4368 A69-43178	24 p4385 A69-43223
24 p4297 A69-43044*#	24 p4300 A69-43089 #	24 p4285 A69-43134	24 p4310 A69-43179	24 p4385 A69-43224
24 p4393 A69-43045 #	24 p4364 A69-43090 #	24 p4352 A69-43135	24 p4310 A69-43180	24 p4263 A69-43225
24 p4252 A69-43046 #	24 p4321 A69-43091 #	24 p4263 A69-43136	24 p4310 A69-43181*	24 p4340 A69-43226
24 p4419 A69-43047 #	24 p4253 A69-43092 #	24 p4384 A69-43137	24 p4310 A69-43182	24 p4340 A69-43227
24 p4367 A69-43048	24 p4245 A69-43093*#	24 p4289 A69-43138	24 p4368 A69-43183*	24 p4340 A69-43228
24 p4352 A69-43049*	24 p4275 A69-43094 #	24 p4283 A69-43139	24 p4368 A69-43184*	24 p4341 A69-43229
24 p4384 A69-43050 #	24 p4336 A69-43095 #	24 p4287 A69-43140	24 p4368 A69-43185	24 p4341 A69-43230*
24 p4280 A69-43051*	24 p4401 A69-43096 #	24 p4321 A69-43141	24 p4310 A69-43186*	24 p4341 A69-43231*
24 p4399 A69-43052 #	24 p4401 A69-43097 #	24 p4253 A69-43142	24 p4368 A69-43187	24 p4336 A69-43232 #
24 p4400 A69-43053 #	24 p4401 A69-43098 #	24 p4315 A69-43143	24 p4310 A69-43188*	24 p4402 A69-43233 #
24 p4400 A69-43054 #	24 p4245 A69-43099 #	24 p4344 A69-43144	24 p4310 A69-43189	24 p4341 A69-43234*
24 p4400 A69-43055 #	24 p4401 A69-43100 #	24 p4345 A69-43145	24 p4384 A69-43190*	24 p4341 A69-43235*
24 p4400 A69-43056 #	24 p4401 A69-43101 #	24 p4345 A69-43146	24 p4349 A69-43191	24 p4341 A69-43236*
24 p4244 A69-43057 #	24 p4401 A69-43102 #	24 p4309 A69-43147	24 p4315 A69-43192*	24 p4300 A69-43237 #
24 p4253 A69-43058 #	24 p4401 A69-43103 #	24 p4309 A69-43148	24 p4352 A69-43193	24 p4365 A69-43238*#
24 p4262 A69-43059	24 p4402 A69-43104 #	24 p4345 A69-43149	24 p4353 A69-43194	24 p4348 A69-43239*#
24 p4320 A69-43060	24 p4402 A69-43105 #	24 p4345 A69-43150	24 p4384 A69-43195*	24 p4348 A69-43240 #

# ACCESSION NUMBER INDEX

24 p4315 A69-43241*#	24 p4292 A69-43286	24 p4288 A69-43331	24 p4277 A69-43376 #	24 p4334 A69-43421
24 p4315 A69-43242 #	24 p4301 A69-43287*	24 p4350 A69-43332	24 p4277 A69-43377 #	24 p4336 A69-43422
24 p4348 A69-43243 #	24 p4301 A69-43288	24 p4283 A69-43333	24 p4266 A69-43378 #	24 p4336 A69-43423
24 p4348 A69-43244 #	24 p4301 A69-43289*	24 p4386 A69-43334 #	24 p4266 A69-43379 #	24 p4337 A69-43424
24 p4348 A69-43245*#	24 p4292 A69-43290	24 p4386 A69-43335 #	24 p4266 A69-43380 #	24 p4323 A69-43425
24 p4348 A69-43246*#	24 p4394 A69-43291*	24 p4263 A69-43336*	24 p4266 A69-43381 #	24 p4323 A69-43426
24 p4393 A69-43247 #	24 p4348 A69-43292	24 p4333 A69-43337	24 p4277 A69-43382 #	24 p4334 A69-43427
24 p4394 A69-43248*#	24 p4293 A69-43293*	24 p4321 A69-43338	24 p4277 A69-43383 #	24 p4323 A69-43428
24 p4245 A69-43249 #	24 p4293 A69-43294*	24 p4333 A69-43339	24 p4267 A69-43384 #	24 p4403 A69-43429
24 p4394 A69-43250 #	24 p4341 A69-43295	24 p4333 A69-43340	24 p4267 A69-43385 #	24 p4324 A69-43430
24 p4300 A69-43251 #	24 p4341 A69-43296*	24 p4333 A69-43341	24 p4277 A69-43386 #	24 p4324 A69-43431
24 p4283 A69-43252 #	24 p4348 A69-43297	24 p4333 A69-43342	24 p4267 A69-43387 #	24 p4324 A69-43432
24 p4408 A69-43253 #	24 p4255 A69-43298	24 p4334 A69-43343	24 p4267 A69-43388 #	24 p4324 A69-43433
24 p4385 A69-43254*#	24 p4256 A69-43299	24 p4361 A69-43344*	24 p4277 A69-43389 #	24 p4324 A69-43434
24 p4297 A69-43255 #	24 p4256 A69-43300	24 p4361 A69-43345*	24 p4277 A69-43390 #	24 p4324 A69-43435
24 p4394 A69-43256*#	24 p4394 A69-43301*	24 p4386 A69-43346	24 p4277 A69-43391 #	24 p4324 A69-43436
24 p4300 A69-43257 #	24 p4293 A69-43302*	24 p4386 A69-43347	24 p4278 A69-43392 #	24 p4325 A69-43437
24 p4385 A69-43258 #	24 p4293 A69-43303*	24 p4386 A69-43348	24 p4278 A69-43393 #	24 p4325 A69-43438
24 p4301 A69-43259 #	24 p4293 A69-43304*	24 p4387 A69-43349	24 p4278 A69-43394*#	24 p4325 A69-43439
24 p4365 A69-43260 #	24 p4293 A69-43305	24 p4387 A69-43350*	24 p4278 A69-43395 #	24 p4325 A69-43440
24 p4386 A69-43261 #	24 p4294 A69-43306*	24 p4387 A69-43351	24 p4278 A69-43396*#	24 p4325 A69-43441
24 p4315 A69-43262*#	24 p4294 A69-43307	24 p4387 A69-43352	24 p4267 A69-43397 #	24 p4334 A69-43442
24 p4402 A69-43263 #	24 p4294 A69-43308*	24 p4387 A69-43353	24 p4278 A69-43398 #	24 p4403 A69-43443
24 p4386 A69-43264*#	24 p4294 A69-43309*	24 p4301 A69-43354	24 p4267 A69-43399 #	24 p4325 A69-43444
24 p4369 A69-43265 #	24 p4256 A69-43310	24 p4301 A69-43355*#	24 p4267 A69-43400 #	24 p4325 A69-43445
24 p4336 A69-43266 #	24 p4283 A69-43311	24 p4347 A69-43356 #	24 p4268 A69-43401 #	24 p4337 A69-43446
24 p4289 A69-43267	24 p4348 A69-43312*	24 p4245 A69-43357*#	24 p4268 A69-43402 #	24 p4337 A69-43447
24 p4255 A69-43268	24 p4349 A69-43313*	24 p4301 A69-43358 #	24 p4268 A69-43403 #	24 p4326 A69-43448
24 p4291 A69-43269*	24 p4294 A69-43314	24 p4302 A69-43359 #	24 p4268 A69-43404 #	24 p4334 A69-43449
24 p4291 A69-43270*	24 p4294 A69-43315*	24 p4302 A69-43360 #	24 p4268 A69-43405 #	24 p4337 A69-43450
24 p4291 A69-43271	24 p4295 A69-43316*	24 p4356 A69-43361 #	24 p4268 A69-43406 #	24 p4335 A69-43451
24 p4276 A69-43272*	24 p4295 A69-43317*	24 p4356 A69-43362	24 p4268 A69-43407 #	24 p4326 A69-43452*
24 p4276 A69-43273*	24 p4295 A69-43318*	24 p4356 A69-43363 #	24 p4278 A69-43408 #	24 p4337 A69-43453
24 p4276 A69-43274*	24 p4295 A69-43319*	24 p4356 A69-43364*#	24 p4268 A69-43409 #	24 p4337 A69-43454
24 p4291 A69-43275	24 p4276 A69-43320*	24 p4356 A69-43365 #	24 p4269 A69-43410 #	24 p4338 A69-43455
24 p4291 A69-43276	24 p4316 A69-43321*	24 p4356 A69-43366	24 p4269 A69-43411 #	24 p4338 A69-43456
24 p4394 A69-43277	24 p4316 A69-43322	24 p4302 A69-43367*#	24 p4269 A69-43412 #	24 p4338 A69-43457
24 p4394 A69-43278	24 p4276 A69-43323	24 p4350 A69-43368*#	24 p4334 A69-43413*	24 p4326 A69-43458
24 p4253 A69-43279*	24 p4341 A69-43324*#	24 p4263 A69-43369	24 p4269 A69-43414 #	24 p4326 A69-43459
24 p4253 A69-43280*	24 p4276 A69-43325*	24 p4265 A69-43370 #	24 p4365 A69-43415*#	24 p4338 A69-43460
24 p4386 A69-43281*	24 p4276 A69-43326	24 p4265 A69-43371 #	24 p4321 A69-43416	24 p4403 A69-43461
24 p4292 A69-43282*	24 p4328 A69-43327	24 p4265 A69-43372*#	24 p4323 A69-43417*	24 p4403 A69-43462
24 p4292 A69-43283*	24 p4287 A69-43328	24 p4266 A69-43373 #	24 p4323 A69-43418	24 p4338 A69-43463
24 p4292 A69-43284*	24 p4287 A69-43329	24 p4266 A69-43374 #	24 p4323 A69-43419	24 p4338 A69-43464
24 p4292 A69-43285*	24 p4288 A69-43330	24 p4266 A69-43375 #	24 p4323 A69-43420	24 p4326 A69-43465



## ACCESSION NUMBER INDEX

24 p4326 A69-43466 #	24 p4409 A69-43511*#	24 p4303 A69-43556 #	24 p4248 A69-43601 #	24 p4359 A69-43646*#
24 p4356 A69-43467	24 p4409 A69-43512*	24 p4304 A69-43557 #	24 p4404 A69-43602*#	24 p4359 A69-43647 #
24 p4357 A69-43468 #	24 p4280 A69-43513*	24 p4413 A69-43558 #	24 p4369 A69-43603	24 p4317 A69-43648 #
24 p4357 A69-43469 #	24 p4269 A69-43514*	24 p4304 A69-43559*#	24 p4370 A69-43604	24 p4388 A69-43649 #
24 p4357 A69-43470 #	24 p4335 A69-43515	24 p4414 A69-43560*#	24 p4370 A69-43605	24 p4388 A69-43650 #
24 p4358 A69-43471 #	24 p4409 A69-43516*#	24 p4304 A69-43561 #	24 p4370 A69-43606	24 p4404 A69-43651 #
24 p4358 A69-43472 #	24 p4409 A69-43517 #	24 p4414 A69-43562 #	24 p4371 A69-43607	24 p4404 A69-43652*#
24 p4358 A69-43473 #	24 p4409 A69-43518*#	24 p4414 A69-43563 #	24 p4371 A69-43608	24 p4405 A69-43653 #
24 p4358 A69-43474 #	24 p4409 A69-43519 #	24 p4414 A69-43564*#	24 p4371 A69-43609*	24 p4405 A69-43654 #
24 p4358 A69-43475 #	24 p4409 A69-43520*#	24 p4269 A69-43565*	24 p4371 A69-43610*	24 p4405 A69-43655 #
24 p4358 A69-43476 #	24 p4410 A69-43521 #	24 p4316 A69-43566	24 p4371 A69-43611	24 p4405 A69-43656*#
24 p4245 A69-43477 #	24 p4410 A69-43522 #	24 p4414 A69-43567 #	24 p4371 A69-43612	24 p4405 A69-43657 #
24 p4302 A69-43478 #	24 p4303 A69-43523 #	24 p4363 A69-43568 #	24 p4372 A69-43613	24 p4305 A69-43658 #
24 p4245 A69-43479 #	24 p4410 A69-43524*#	24 p4414 A69-43569 #	24 p4372 A69-43614	24 p4249 A69-43659 #
24 p4302 A69-43480 #	24 p4410 A69-43525 #	24 p4359 A69-43570*#	24 p4372 A69-43615	24 p4249 A69-43660 #
24 p4245 A69-43481 #	24 p4410 A69-43526 #	24 p4316 A69-43571 #	24 p4372 A69-43616	24 p4253 A69-43661*#
24 p4246 A69-43482 #	24 p4316 A69-43527 #	24 p4359 A69-43572*#	24 p4372 A69-43617	24 p4254 A69-43662*#
24 p4246 A69-43483 #	24 p4410 A69-43528 #	24 p4403 A69-43573 #	24 p4373 A69-43618	24 p4249 A69-43663*#
24 p4246 A69-43484 #	24 p4411 A69-43529 #	24 p4403 A69-43574 #	24 p4373 A69-43619*	24 p4305 A69-43664*#
24 p4246 A69-43485 #	24 p4247 A69-43530 #	24 p4247 A69-43575*#	24 p4373 A69-43620*	24 p4249 A69-43665*#
24 p4302 A69-43486 #	24 p4411 A69-43531 #	24 p4247 A69-43576 #	24 p4373 A69-43621*	24 p4362 A69-43666*#
24 p4302 A69-43487 #	24 p4411 A69-43532 #	24 p4297 A69-43577 #	24 p4374 A69-43622	24 p4415 A69-43667 #
24 p4408 A69-43488 #	24 p4411 A69-43533 #	24 p4304 A69-43578 #	24 p4374 A69-43623	24 p4365 A69-43668 #
24 p4408 A69-43489 #	24 p4411 A69-43534 #	24 p4248 A69-43579 #	24 p4374 A69-43624	24 p4365 A69-43669 #
24 p4246 A69-43490 #	24 p4303 A69-43535*#	24 p4304 A69-43580 #	24 p4374 A69-43625	24 p4415 A69-43670 #
24 p4351 A69-43491 #	24 p4411 A69-43536 #	24 p4304 A69-43581 #	24 p4387 A69-43626	24 p4405 A69-43671*#
24 p4408 A69-43492 #	24 p4303 A69-43537 #	24 p4248 A69-43582 #	24 p4404 A69-43627 #	24 p4405 A69-43672 #
24 p4246 A69-43493 #	24 p4303 A69-43538*#	24 p4316 A69-43583 #	24 p4404 A69-43628 #	24 p4415 A69-43673 #
24 p4246 A69-43494 #	24 p4303 A69-43539 #	24 p4304 A69-43584*#	24 p4404 A69-43629 #	24 p4306 A69-43674 #
24 p4246 A69-43495 #	24 p4411 A69-43540*#	24 p4387 A69-43585 #	24 p4297 A69-43630 #	24 p4249 A69-43675 #
24 p4247 A69-43496 #	24 p4412 A69-43541*#	24 p4304 A69-43586 #	24 p4305 A69-43631 #	24 p4306 A69-43676 #
24 p4247 A69-43497 #	24 p4412 A69-43542*#	24 p4305 A69-43587 #	24 p4305 A69-43632 #	24 p4249 A69-43677 #
24 p4247 A69-43498 #	24 p4412 A69-43543 #	24 p4248 A69-43588*#	24 p4305 A69-43633 #	24 p4359 A69-43678*#
24 p4247 A69-43499 #	24 p4412 A69-43544 #	24 p4297 A69-43589 #	24 p4387 A69-43634 #	24 p4349 A69-43679 #
24 p4302 A69-43500 #	24 p4412 A69-43545*#	24 p4415 A69-43590*#	24 p4374 A69-43635 #	24 p4415 A69-43680*#
24 p4303 A69-43501 #	24 p4412 A69-43546 #	24 p4404 A69-43591*#	24 p4388 A69-43636 #	24 p4249 A69-43681 #
24 p4311 A69-43502	24 p4412 A69-43547 #	24 p4248 A69-43592*#	24 p4415 A69-43637 #	24 p4256 A69-43682 #
24 p4328 A69-43503	24 p4412 A69-43548*#	24 p4404 A69-43593 #	24 p4388 A69-43638 #	24 p4351 A69-43683*#
24 p4311 A69-43504	24 p4413 A69-43549*#	24 p4415 A69-43594*#	24 p4388 A69-43639 #	24 p4306 A69-43684 #
24 p4311 A69-43505	24 p4413 A69-43550*#	24 p4415 A69-43595 #	24 p4388 A69-43640 #	24 p4306 A69-43685 #
24 p4347 A69-43506	24 p4413 A69-43551*#	24 p4305 A69-43596 #	24 p4388 A69-43641 #	24 p4249 A69-43686 #
24 p4316 A69-43507	24 p4413 A69-43552 #	24 p4305 A69-43597 #	24 p4248 A69-43642 #	24 p4416 A69-43687 #
24 p4311 A69-43508	24 p4413 A69-43553 #	24 p4248 A69-43598 #	24 p4248 A69-43643 #	24 p4405 A69-43688 #
24 p4347 A69-43509	24 p4413 A69-43554*#	24 p4338 A69-43599 #	24 p4359 A69-43644 #	24 p4416 A69-43689 #
24 p4285 A69-43510 #	24 p4247 A69-43555*#	24 p4415 A69-43600*#	24 p4359 A69-43645 #	24 p4388 A69-43690*#

## ACCESSION NUMBER INDEX

24 p4298 A69-43691 #	24 p4362 A69-43736 #	24 p4390 A69-43781
24 p4406 A69-43692*#	24 p4362 A69-43737 #	24 p4390 A69-43782
24 p4359 A69-43693*#	24 p4362 A69-43738 #	24 p4390 A69-43783
24 p4249 A69-43694 #	24 p4288 A69-43739 #	24 p4390 A69-43784
24 p4256 A69-43695*#	24 p4329 A69-43740 #	24 p4390 A69-43785
24 p4406 A69-43696 #	24 p4374 A69-43741	24 p4390 A69-43786
24 p4360 A69-43697 #	24 p4389 A69-43742*	24 p4390 A69-43787
24 p4353 A69-43698 #	24 p4311 A69-43743	24 p4390 A69-43788
24 p4406 A69-43699 #	24 p4389 A69-43744	24 p4390 A69-43789
24 p4353 A69-43700*#	24 p4389 A69-43745	24 p4391 A69-43790
24 p4406 A69-43701	24 p4389 A69-43746	24 p4391 A69-43791
24 p4342 A69-43702	24 p4389 A69-43747	24 p4391 A69-43792
24 p4342 A69-43703*	24 p4360 A69-43748	24 p4391 A69-43793
24 p4342 A69-43704	24 p4353 A69-43749	24 p4391 A69-43794
24 p4279 A69-43705 #	24 p4269 A69-43750*	24 p4391 A69-43795
24 p4295 A69-43706 #	24 p4329 A69-43751	24 p4391 A69-43796
24 p4317 A69-43707 #	24 p4329 A69-43752	24 p4391 A69-43797
24 p4317 A69-43708 #	24 p4329 A69-43753	24 p4279 A69-43798
24 p4406 A69-43709 #	24 p4329 A69-43754	24 p4279 A69-43799
24 p4250 A69-43710 #	24 p4329 A69-43755	24 p4279 A69-43800
24 p4389 A69-43711 #	24 p4329 A69-43756	24 p4407 A69-43801
24 p4250 A69-43712 #	24 p4329 A69-43757	24 p4335 A69-43802
24 p4250 A69-43713 #	24 p4351 A69-43758*	24 p4391 A69-43803
24 p4298 A69-43714*#	24 p4317 A69-43759	24 p4391 A69-43804
24 p4254 A69-43715*#	24 p4317 A69-43760	24 p4318 A69-43805
24 p4326 A69-43716 #	24 p4317 A69-43761	24 p4351 A69-43806
24 p4254 A69-43717 #	24 p4330 A69-43762	24 p4353 A69-43807 #
24 p4335 A69-43718*#	24 p4317 A69-43763	24 p4353 A69-43808 #
24 p4295 A69-43719 #	24 p4317 A69-43764	24 p4280 A69-43809*#
24 p4347 A69-43720*#	24 p4288 A69-43765	24 p4351 A69-43810*#
24 p4254 A69-43721 #	24 p4330 A69-43766	24 p4280 A69-43811 #
24 p4254 A69-43722 #	24 p4330 A69-43767	24 p4353 A69-43812*#
24 p4254 A69-43723 #	24 p4330 A69-43768	24 p4280 A69-43813*#
24 p4306 A69-43724 #	24 p4389 A69-43769	24 p4280 A69-43814*#
24 p4365 A69-43725 #	24 p4375 A69-43770	24 p4353 A69-43815*
24 p4250 A69-43726 #	24 p4389 A69-43771	24 p4354 A69-43816
24 p4254 A69-43727 #	24 p4389 A69-43772	24 p4354 A69-43817*
24 p4254 A69-43728 #	24 p4389 A69-43773	24 p4354 A69-43818*
24 p4250 A69-43729*#	24 p4390 A69-43774	
24 p4406 A69-43730 #	24 p4390 A69-43775	
24 p4406 A69-43731 #	24 p4390 A69-43776	
24 p4406 A69-43732 #	24 p4375 A69-43777	
24 p4407 A69-43733 #	24 p4390 A69-43778	
24 p4362 A69-43734 #	24 p4390 A69-43779	
24 p4362 A69-43735 #	24 p4390 A69-43780	





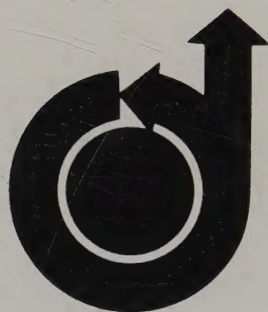












**AIAA TECHNICAL INFORMATION SERVICE**

750 THIRD AVENUE

NEW YORK, N. Y. 10017